

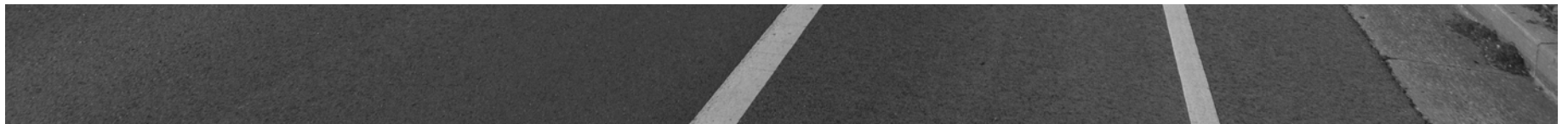


CONNECT FRANKLIN

MULTIMODAL MAJOR THOROUGHFARE PLAN
SPRING 2016



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TENNESSEE



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ACKNOWLEDGMENTS

The *Connect Franklin: A Comprehensive Transportation Network Plan* would not have been possible without the tremendous input, feedback, and expertise of the City of Franklin leadership and staff. We would also like to give a special thank you to the many residents who generously devoted their time and thoughts in the hopes of building a stronger and more vibrant community.

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Michael Orr
Scott Harrison

Consultant Team



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1 INTRODUCTION

The City of Franklin embarked on the update of their 2010 Major Thoroughfare Plan into a Comprehensive Transportation Network Plan (CTNP). The plan was started in 2014, when the City hired a consultant to update the plan. The City desired a completely comprehensive transportation plan that included not only roadway components, but transit, bicycle and pedestrian facilities, and linkages with land use.

The City of Franklin is the ninth largest and the fastest growing city in the State of Tennessee with approximately 66,335 people in 2014. The City is expected to continue this fast-paced growth over the next several years with an estimated population of approximately 134,000 people in 2040. This growth will have a significant impact on the entire transportation network. The City recognizes that they do not have the revenue to build out the entire roadway system and therefore need to look at alternatives in the development of sites, as well as other non-vehicular options.

The 2040 CTNP provides a responsible guide for maintaining and improving the current transportation system and identifies priority

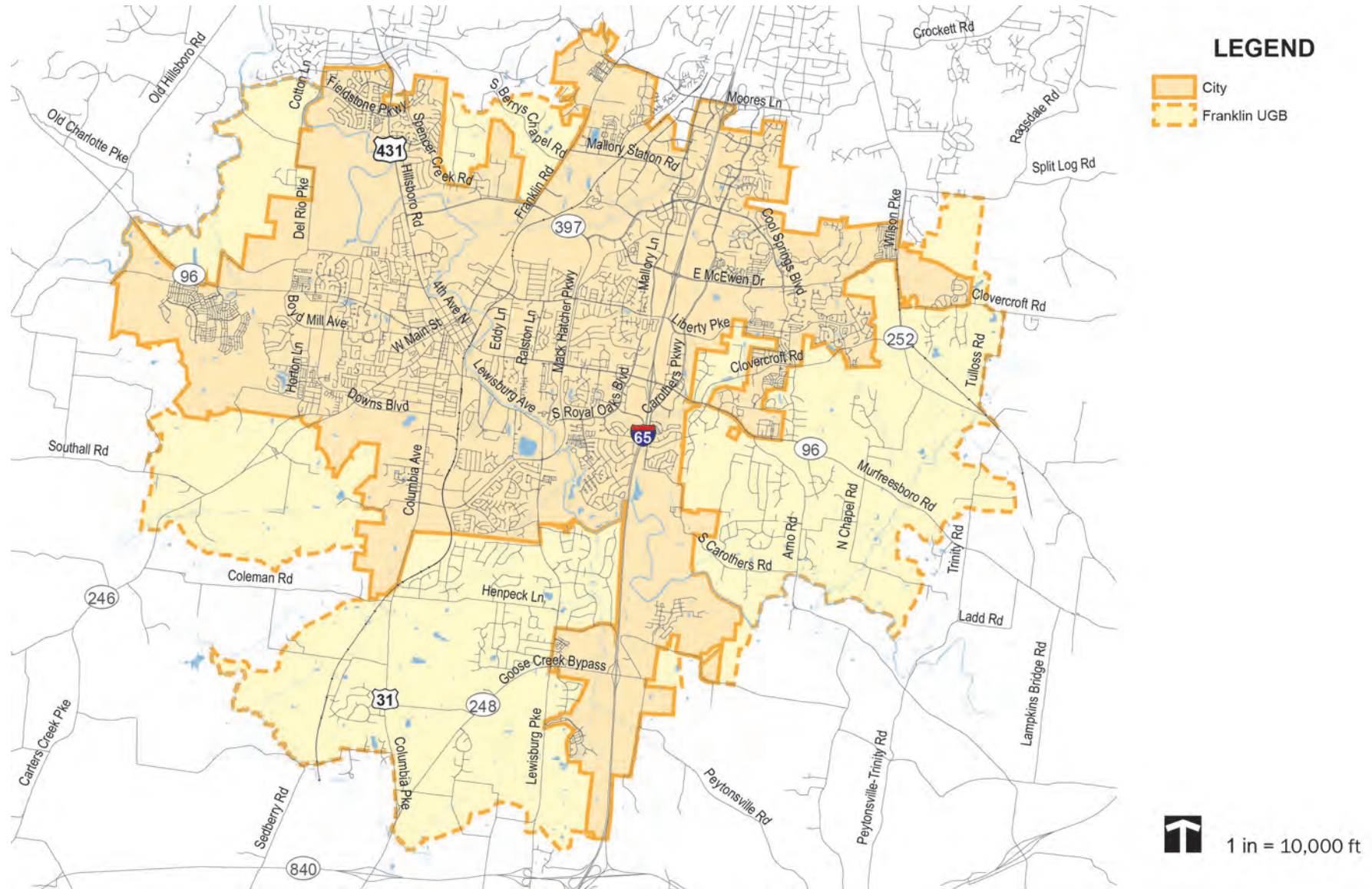
transportation investments. The recommended investments in this plan total approximately 1.3 Billion dollars (in current dollars). The investment priorities in the 2040 CTNP are based on conservative estimates of construction over the next twenty-five years. The projects have been allocated by priority, including short, medium and long term.

STUDY AREA

The City of Franklin is the County seat of Williamson County and is located approximately 15 miles south of Nashville, TN. The City covers an approximately area of 41 square miles, and serves a population of 66,335, according to the City's 2014 special census. The Urban Growth Boundary (UGB) includes an additional 34 square miles. Both the City limits and UGB are depicted on Figure 1.1 on the following page.

1 INTRODUCTION

FIGURE 1.1: STUDY AREA MAP



CITY OF FRANKLIN VISION

The City of Franklin established its vision through a 2013 strategic plan process for the city called *FranklinForward*. The following paragraph is the vision of the community:

Franklin will continually strive to be a community of choice for individuals, families, and businesses to grow and prosper through an excellent quality of life supported by exceptional, responsive and cost-effective city services. Our public service values include transparency in stewardship of public resources, accountability and integrity and emphasis on results that improve the community.

The City has four key strategic themes:

- **A safe, clean and livable city**

Having a safe, clean, and livable city is a primary requisite for our citizens, and they are supportive of the means necessary to assure the idyllic, yet progressive character of Franklin. Residents want to live healthier, sustainable lives and will support services that deliver high standards. Franklin takes pride in the professionalism and quality of our police, fire, and emergency response teams. We understand the importance of code enforcement as a means of precluding declining and unsafe neighborhoods and business districts. The City recognizes its role as a steward of the environment as we deliver essential services while preserving the natural beauty of the community

- **An effective and fiscally sound city government providing high-quality service**

Franklin citizens have high expectations for their government. As the city continues to grow, it must remain vigilant in the prudent management of taxpayer funds by continuously working to improve the quality, efficiency, and cost effectiveness of services demanded by its citizens. The pace of technological change and innovation in our world is accelerating, and the City depends on the expertise and

creativity of its employees to integrate new ideas and tools that will improve service delivery and operational efficiency while maintaining the sense of personal touch our citizens have come to expect. The City of Franklin understands that in this era of rapid change, the need for knowledgeable, active, and engaged employees is greater than ever. Building and retaining a skilled, adaptable, and diverse workforce requires the City to recruit qualified employees and provide competitive salaries and benefits along with opportunities for ongoing training and professional development in order to meet future needs. Employees will be encouraged to become adaptable, take initiative and keep their skills current through organization-wide initiatives and individual development. They will also need to continue to build their ability to serve our increasingly diverse community.

- **Quality of life experiences**

Franklin citizens are proud of their community. They want it to remain among the best places to live in the United States—a place envied for its engaging quality of life. People are invested in their neighborhoods as well as in the city. They willingly volunteer, participate, and support the many activities, recreational pursuits, and special events that bring them together as a community. Franklin’s rapidly growing and increasingly diverse population, both in age and ethnicity, is both a strength as well as a challenge to the vision of our city. Our citizens understand the importance of ensuring that everyone who works within our community is able to live within our community. A critical part of sustaining our unique sense of inclusiveness is ensuring that a range of housing options is available for varying income and demographic groups. As our boundaries expand, the efficient and effective varieties of land uses—residential, commercial, open space, and institutional—are critical components for sustaining our vibrant community. Our citizens are concerned that traffic congestion is increasing everywhere—on major streets and in neighborhoods. They would like a functional transportation system, more bicycle

1 INTRODUCTION

and pedestrian connections between residential neighborhoods and shopping districts or employment centers, and better transit options, not only within the city but connecting the greater metropolitan region.

Sustainable growth and economic prosperity.

Franklin has a heritage of economic stability, defying many of the struggles faced in other communities and the nation. This heritage is a result of a dedication to sustainable growth through thoughtful public policy decisions and well-managed developments. The community values the diversity of high-quality and high-worth places—the mix of suburban and downtown shopping districts that serve the community’s needs and are magnets for out-of-town visitors; a vibrant corporate and office environment that is the home to industry-leading businesses of all sizes; well-designed and maintained parks and recreational gathering places that also focus on historical, cultural, or natural attributes; and opportunities to pursue a wide range of activities without leaving the community. City leaders also understand the importance of having a self-sustaining economic engine that through collaboration and partnership with both private and public entities supports efforts that attract, retain, and create quality jobs to ensure a diverse economic base, a resilient and growing tax base, and thriving neighborhoods.

A series of goals has been established to guide the City’s progress as a community. Specific, measurable objectives have also been identified that help the City staff measure performance and gauge success. Together, the strategic plan, goals and objectives bring added focus to the City’s work and to the direction provided in the budget process.



Maintaining the high quality of life already established in Franklin will require continued investment in the transportation system.

PURPOSE OF THE COMPREHENSIVE TRANSPORTATION NETWORK PLAN

The City of Franklin’s Comprehensive Transportation Network Plan contains recommendations for the City of Franklin and its Urban Growth Boundary (UGB) through 2040. This plan is to be used as a tool to help evaluate and ensure that the future projects are prioritized with available resources based on the direction of future growth and redevelopment.

Franklin will have a diverse transportation network that promotes, provides, and supports safe and efficient mobility choices for all, including driving, public transit, walking, and biking. This plan addresses multi-modal access and availability within those boundaries and linked transportation and land uses in an area wide transit framework that

includes both expanded transit and bicycle and pedestrian facilities. The transportation goals include:

- Improve mobility, accessibility and transportation alternatives to provide for the safe and efficient movement of people and goods;
- Safe, efficient and convenient movement of people and goods within the City and its UGB by integrating land uses, circulation routes and transportation facilities;
- Implement industry accepted best practices in transportation planning and transit oriented planning and ensure they are in conformance with the Regional Travel Demand Model developed by the Nashville Area Metropolitan Planning Organization (MPO); and
- Implement a smart growth policy that promotes sustainable economic development, maintains the character throughout the city, and improves health and safety by increasing the amount of recreation and open space.

The City of Franklin recognizes the importance of strengthening the community through improved traffic flow, transportation network connections, transit, and pedestrian and bicycle facilities. Increased function and efficiency within an improved and sustainable environment can encourage the use of non-automotive modes, promote economic development and reduce the need for costly roadway expansion.

PLAN ORGANIZATION

Chapter 1: Introduction focuses on setting the stage for the plan. It sets the context, provides the vision of the City, and explains the purpose of the Comprehensive Transportation Network Plan.

Chapter 2: Public Involvement summarizes the transportation public engagement process.

Chapter 3: Streets is the main chapter that focuses on the vehicular transportation element of the entire city. It discusses the existing roadway

network, the results of the traffic demand model and summarizes the proposed projects and local street plans for Carters Creek Pike and Old Carters Creek Pike, Wilson Pike and Columbia Road.

Chapter 4: Bicycle and Pedestrian focuses on the non-vehicular aspect of the City's transportation network. The chapter focuses on how the City can increase and enhance its bicycle and pedestrian network. Discussion includes the types of facilities, existing conditions, deficiencies, proposed facilities and design suggestions.

Chapter 5: Transit is about incorporating the Cool Springs Multi-Modal Transportation Network Study into the CTNP and looking at ways to expand it further into the city as a viable alternative to vehicular travel. This chapter summarizes the goals, existing conditions, proposed expansion and future transit and land use considerations.

Chapter 6: Implementation discusses how the City is to implement the plan. It provides for the next immediate actions including adoption, interpretation, monitoring and updating the plan, plan amendment process, fiscal considerations, project prioritization and policy recommendations.

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2 PUBLIC INVOLVEMENT

The best community planning efforts are those that have life long after the plan has been adopted. Community endorsement does not happen without a strategy to identify, involve and energize stakeholders. To ensure that the Franklin Comprehensive Transportation Network Plan considered issues important to City residents, three public involvement efforts were employed to gather community feedback. One-on-one stakeholder interviews, public workshops, and online citizen engagement were facilitated to assist in identifying the strengths, weaknesses and opportunities related to Franklin's transportation system.

STAKEHOLDER INTERVIEWS

One-on-one interviews were conducted with the members of the Franklin Board of Mayor and Aldermen (BOMA). Four of the eight Alderman serve as an elected representative of one of the four City wards; the other four Aldermen are elected at-large. By interviewing each Alderman, the representative needs of each section of the community was heard.

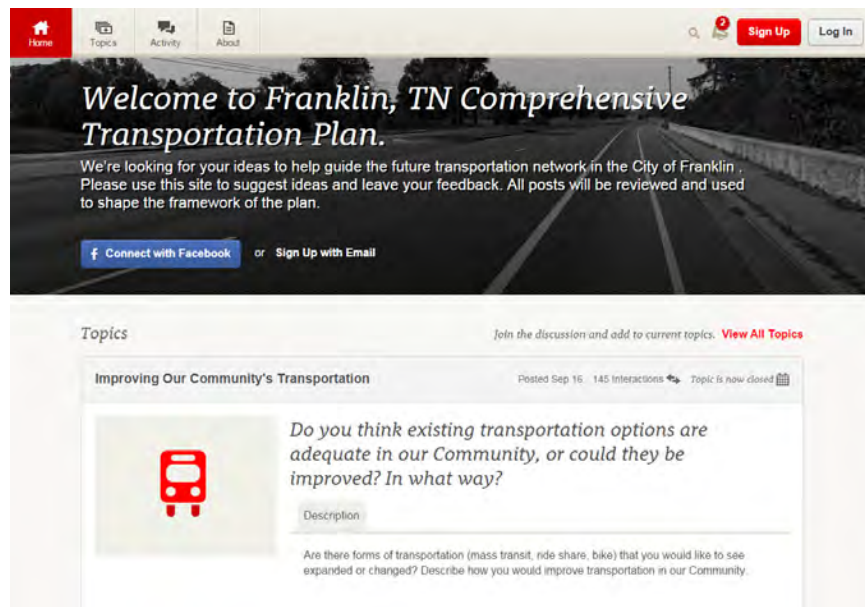


Attendees of the Community Workshop, held on October 22, 2014, participated in issue identification and visioning exercises.

2 PUBLIC INVOLVEMENT

Additionally, Dr. Ken Moore, Mayor of Franklin, was interviewed during this process.

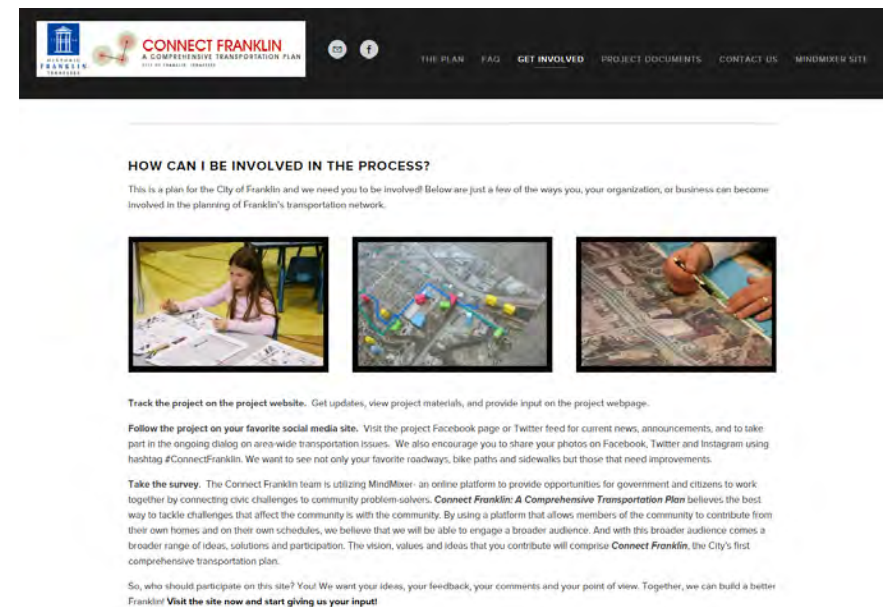
The stakeholder interviews were used to gather information on land use, growth, transit systems, bicycle and pedestrian amenities, roadway infrastructure and future transportation projects. Interviews were held in May and June of 2014. Each stakeholder meeting lasted approximately 45 minutes and was conducted with a conversational format in order to gather information. Interviews were recorded, summarized and presented to City staff and to the general public to help enhance decisions based on community input. A written summary was provided to the public via the online discussion forum.



The MindMixer social media platform allowed for on-going feedback using a discussion forum and series of facilitated questions.

WEBSITE & SOCIAL MEDIA

As part of the planning process, the City hosted an Online Discussion Forum using the MySidewalk (former called MindMixer) platform to identify community needs and innovative approaches to improve Franklin's transportation network in a comprehensive way. The forum was created using a static project website which housed general project information, documents and contact information, and an interactive online portal that allowed for participant engagement. This ongoing, "24/7" dialogue helped to guide the plan's findings and recommendations by soliciting input from citizens who do not typically attend or voice opinions at traditional public meetings. Approximately 140 citizens participated on the website creating over 800 interactions and over 6,000 unique page views. This forum also complemented other



The project website included information about the plan process, draft documents, and links to the MindMixer and other social media pages.

PUBLIC INVOLVEMENT 2



The cross section exercise asked residents to design their ideal street given a limited right-of-way width.

engagement activities, including Facebook and Twitter, by providing an outlet to continue ongoing conversations. The interactive site was organized as a series of question prompts, introduced at various points during the planning process.

COMMUNITY WORKSHOP

One public workshop was held for residents to participate in helping shape the overall vision and plan. The meeting was advertised throughout the community by utilizing a city-wide press release, targeted email invitations and the City’s social media sites.

The public workshop was conducted on Wednesday October 22, 2014 at Franklin City Hall. This public workshop was an opportunity for City staff, residents and visitors to review the existing condition information

gathered to date, comment on the preliminary population and employment projections and help identify areas of concern regarding the transportation and multi-modal networks. Multiple stations were available to both display information and gather feedback and suggestions from meeting attendees. Following the public workshop, the information and participation exercises were posted to the project’s Online Discussion Forum in an effort to gain additional comments,



Attendees could sign up and create a MindMixer account at the workshop.

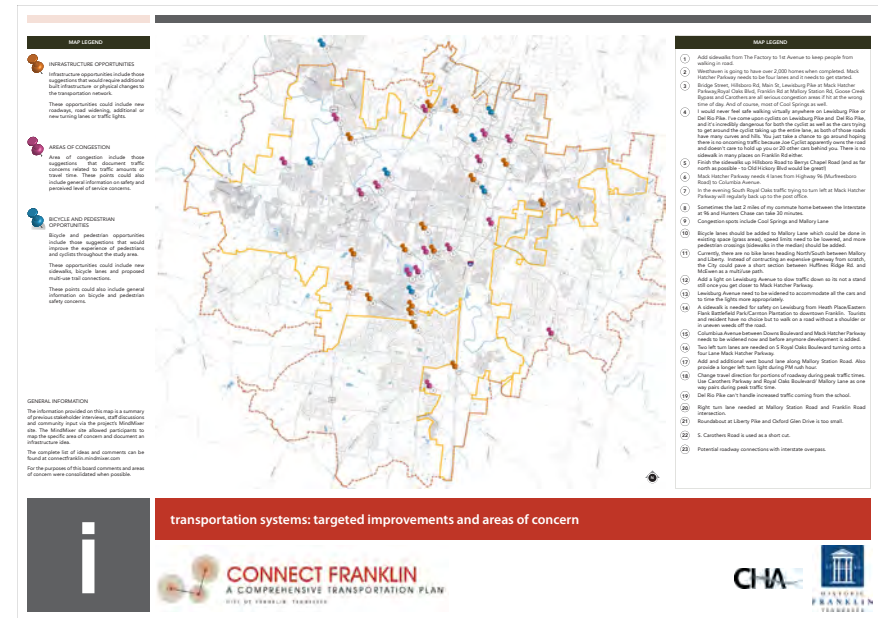
2 PUBLIC INVOLVEMENT

suggestions and ideas.

PUBLIC PERCEPTIONS

Together, the three outreach strategies provided a unique interpretation of the City's transportation network, the desired future amenities and the characteristics that Franklin residents associate with the city itself. The residents of Franklin agree that the current street network does not meet the existing or future transportation demands of the city. Many of the concerns, which were brought-up by the residents on the MySidewalk site, had to deal with current congestion problems seen on many of the main thoroughfares. Many residents believe that these congestion problems exist as a result of the infrastructure in Franklin failing to grow as quickly as new development. Along with these areas of congestion, residents expressed concern about limited connectivity between neighborhoods and local areas of interest. Many neighborhood streets do not provide adequate connectivity, and many neighborhoods have a singular entry/exit road for the entire development. Along with connectivity at a neighborhood level, the residents were able to identify areas of opportunity for new road infrastructure, new traffic signals, additional turn lanes and road widening projects.

To further promote the exceptional quality of life that currently exists in the City of Franklin, many residents are in favor of building and further developing bicycle and pedestrian infrastructure. The residents of Franklin are aware of the positive effects that come from investing in alternative modes of transportation in their community. Although a large portion of Franklin's residents are advocates for bicycle infrastructure, the general consensus among residents is that the existing congestion problems on the main thoroughfares need to have a higher priority than new bike infrastructure. Residents also stated that they did not want to implement bicycle infrastructure that would further increase congestion on roads by removing needed vehicular lanes. Many residents have also expressed their desire to have recreational trails that connect neighborhoods and major economic, cultural, and political nodes throughout the city. When



A summary of comments gathered to date was presented at the Community Workshop with the opportunity for additional input.

this bicycle and pedestrian infrastructure is developed, residents have advocated that safety and aesthetic factors be considered to ensure a safe and beautiful bicycle and pedestrian system.

The residents of Franklin, when surveyed, had some great ideas for viable mass transit in their community. Along with bicycle and pedestrian infrastructure improvements, there is still room for more transit options to further alleviate congestion on the roads and to give residents an alternative mode of transportation. Several residents suggested that the City utilize and further expand on the existing regional transit system. A number of residents voiced their skepticism about a large scale transit system being implemented in their community. To counter their skepticism, many residents suggested alternatives to a larger transit system. Most of these alternatives were various shuttle bus routes that

could transport individuals throughout the community.

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3 STREETS

In order to determine an accurate baseline for traffic operations within the study area, a detailed traffic inventory was conducted. The analysis included an inventory of the study area's roadways to determine functional classification, number of lanes, approximate lane widths, overall right-of-way width and availability for future facility expansion. In addition to the physical inventory and analysis conducted for the City's vehicular network, a series of public engagement tools were utilized to determine areas of concern by City leaders, residents and visitors. Together, the existing conditions data and qualitative analysis were used to create a benchmark for the base year of 2015.

EXISTING ROADWAY NETWORK

FUNCTIONAL CLASSIFICATION

The existing transportation facilities in the Franklin study area are each classified according to the amount of access and mobility the roadway provides. These classifications primarily provide different levels of

emphasis in regard to traffic movement versus direct access to property. Listed below are the primary roadway classifications used in the study area. Figure 3.1 depicts the existing functional classification network.

Freeways and Expressways

Such streets are used to handle high traffic speeds and volumes. These street classifications emphasize traffic movement while restricting private access to adjacent land. All freeways and expressways in the city are anticipated to be designed, owned and maintained by the Tennessee Department of Transportation (TDOT). Interstate 65 and Mack Hatcher Parkway (SR-397) functions as the only freeways and expressways in the study area.

Arterial Streets

Arterial streets are intended to primarily serve moderate to high traffic speeds and volumes within and through the city. Arterial streets may provide some access to abutting property, but only as it is incidental to the primary functional responsibility of travel service for major traffic movements. Arterial streets are classified as either Major Arterials or Minor Arterials depending upon expected traffic usage and adjoining

3 STREETS

property access.

Collector Streets

Collector streets are intended to primarily serve slow to moderate traffic speeds and volumes and to distribute traffic from the arterials throughout the city to arterials, other collectors and local streets. Collector streets should provide both land access and traffic circulation within residential, commercial and industrial areas. Collector streets will be classified as either Major Collectors or Minor Collectors, depending upon expected traffic usage and adjoining property access. Major Collector streets may have limited driveway access to maintain the street’s ability to achieve a safer and efficient traffic flow.

Local Streets

Local streets are intended to primarily serve slow speeds and volumes and to provide access to abutting lands and connections to the higher

street classifications. Local streets are to be planned so that future urban expansion will not require the conversion and reclassification of local streets to collector or arterial streets. Local streets may be commercial, industrial or residential, depending upon the type and extent of the development they serve. Due to topographic or other constraints, local streets may be terminated, where necessary, by a cul-de-sac.

Currently, the City uses the above roadway classifications as an organizing element for the application of typical street features and amenities. The existing *Franklin Transportation & Street Technical Standards* document illustrates the application of traditional roadway features, such as right-of-way, travel lanes, median width, and bicycle and pedestrian amenities by roadway classification. These typical cross sections are then used as a guide for roadway planning.

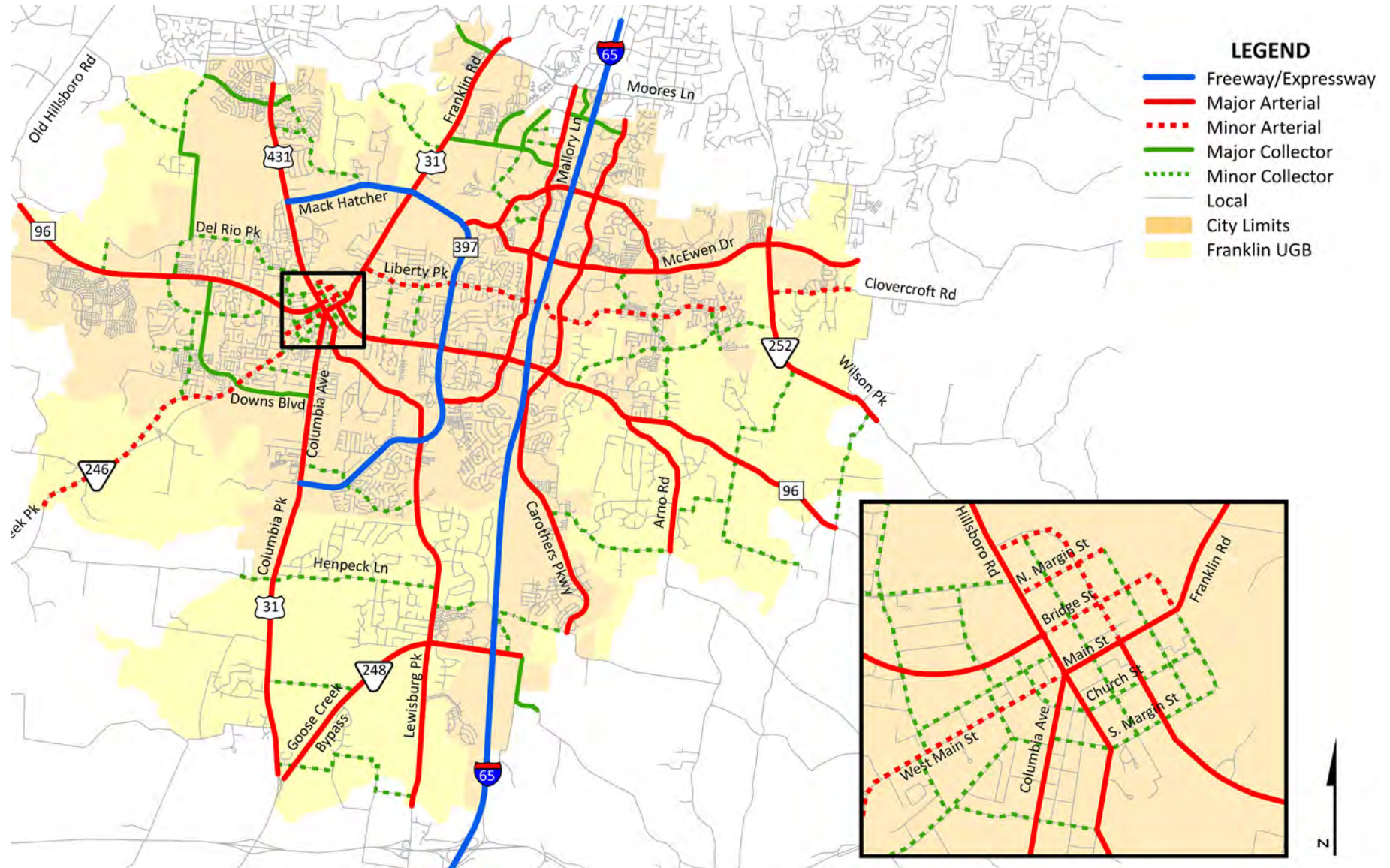


State Route 96 (Murfreesboro Road) is an example of a principal arterial street.



McEwen Drive is currently classified as a major arterial. As development continues and future upgrades occur, it may be re-classified to an arterial.

FIGURE 3.1: EXISTING FUNCTIONAL CLASSIFICATION



3 STREETS

DEFICIENCIES AND CAPACITY ANALYSIS

Understanding the role each street plays in the overall transportation system allows for an evaluation of those streets that are deficient in fulfilling their intended function. Population and employment numbers, commuting patterns, and functional classification all have an impact on traffic volumes and subsequent levels of service (LOS). A LOS system is used to characterize those driving conditions that motorists routinely experience and recognize; it measures traffic conditions and motorists' perceptions. The individual LOS is described by factors such as speed, travel time, freedom to maneuver, traffic interruptions, driver comfort and convenience. For this plan, LOS was documented using a travel demand model approach, as well as a series of public engagement techniques, aimed at identifying areas that lack connectivity, areas of increased congestion and areas that pose safety concerns.

When surveyed, City leaders and residents agreed that the current transportation network does not meet the existing needs, nor will it meet the future transportation demands currently projected for the City. Through facilitated discussions, interviews and online engagement, a perceived transportation issues map was developed that identified specific areas of concern, as well as areas of opportunity for future infrastructure development. Figure 3.2, is a graphic summary of the community input. Comments and areas of concern have been consolidated when possible.

In order to corroborate the findings from the community, to perform a more detailed analysis of the current situation and to project future conditions, a series of LOS maps were created, using the project's travel demand model.

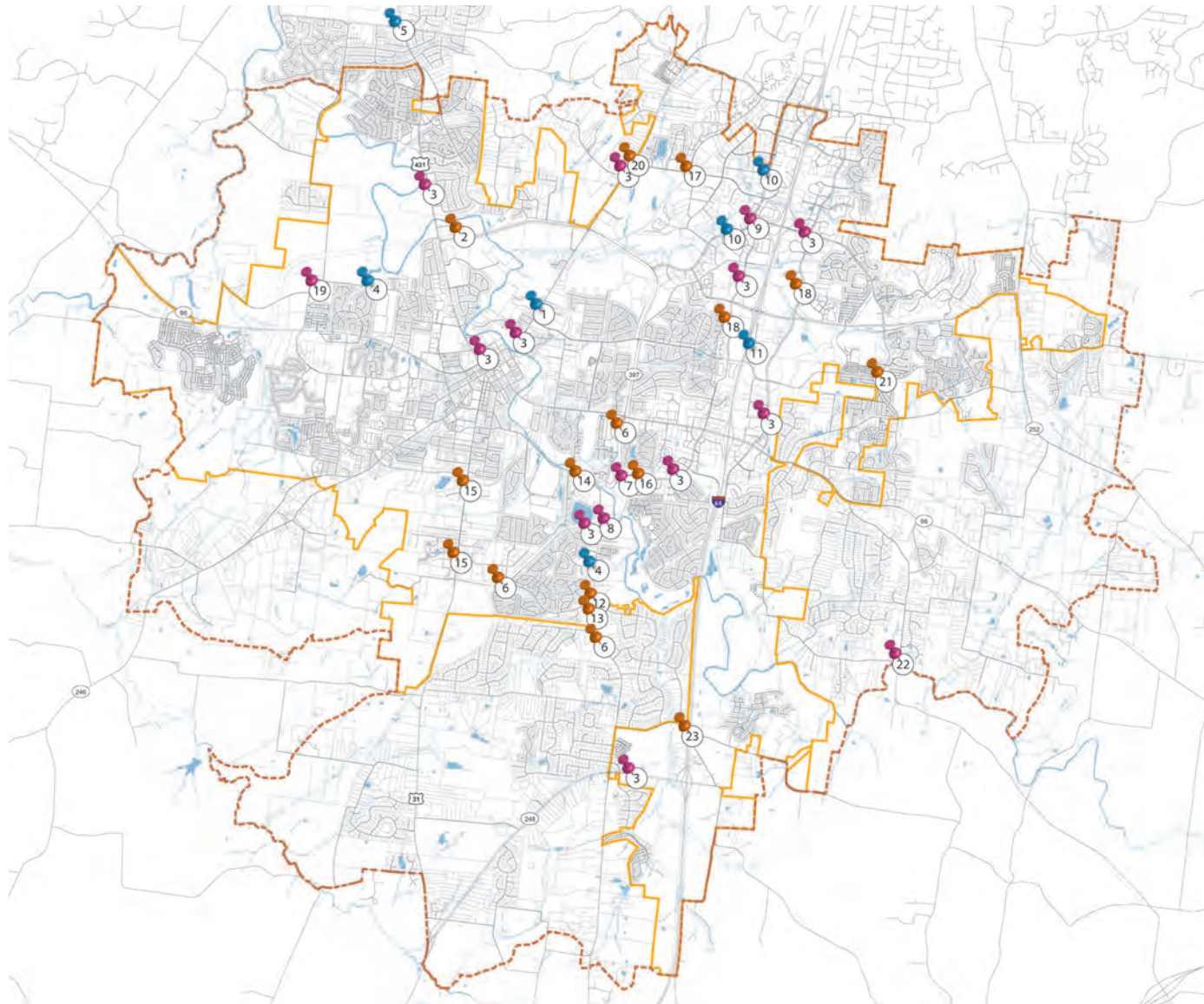
These maps utilize six LOS categories which are commonly defined by a letter designation from "A" to "F," similar to a report card, with LOS "A" representing the best operating conditions and LOS "F" depicting the worst.

FIGURE 3.2 KEY

- 1 Add sidewalks from The Factory to 1st Avenue to keep people from walking in the road.
- 2 Mack Hatcher Parkway needs to be four lanes to accommodate Westhaven growth.
- 3 Bridge Street, Hillsboro Rd, Main St, Lewisburg Pike at Mack Hatcher Parkway, Royal Oaks Blvd, Franklin Rd, Cool Springs, Goose Creek Bypass, and Carothers are all congested.
- 4 Unsafe for bicyclists and pedestrians on Lewisburg Pike or Del Rio Pike. Cyclists can then create safety issues for cars trying to pass. There is no sidewalk in many places on Franklin Rd either.
- 5 Finish the sidewalks up Hillsboro Road to Berrys Chapel Road.
- 6 Mack Hatcher Parkway needs 4 lanes from Highway 96 to Columbia Avenue.
- 7 South Royal Oaks traffic turning left at Mack Hatcher Parkway will back up to the post office.
- 8 The last 2 miles of my commute from Interstate at 96 and Hunters Chase can take 30 minutes.
- 9 Congestion spots include Cool Springs and Mallory Lane.
- 10 Bicycle lanes should be added to Mallory Lane, speed limits need to be lowered, and more pedestrian crossings (sidewalks in the median) should be added.
- 11 Currently, there are no bike lanes heading North/South between Mallory and Liberty. Instead of constructing an expensive greenway from scratch, the City could pave a short section between Huffines Ridge Rd. and McEwen as a multi-use path.
- 12 Add a light on Lewisburg Avenue to slow traffic down so its not at a stand still once you get closer to Mack Hatcher Parkway.
- 13 Lewisburg Avenue needs to be widened and the lights timed more appropriately.
- 14 A sidewalk is needed for safety on Lewisburg from Heath Place/Eastern Flank Battlefield Park/ Carnton Plantation to downtown Franklin.
- 15 Columbia Avenue between Downs Boulevard and Mack Hatcher Parkway needs to be widened now and before anymore development is added.
- 16 Two left turn lanes are needed on S Royal Oaks Boulevard turning onto a four Lane Mack Hatcher Parkway.
- 17 Add an additional west bound lane along Mallory Station Road.
- 18 Change travel direction for portions of roadway during peak traffic times. Use Carothers Parkway and Royal Oaks Boulevard/ Mallory Lane as one way pairs during peak traffic time.
- 19 Del Rio Pike can't handle increased traffic coming from the school.
- 20 Right turn lane needed at Mallory Station Road and Franklin Road intersection.
- 21 Roundabout at Liberty Pike and Oxford Glen Drive is too small.
- 22 S. Carothers Road is used as a short cut.
- 23 Potential roadway connections with interstate overpass.

NOTE: These comments were made as part of the public outreach and may not represent views of the City of Franklin or consultant team.

FIGURE 3.2: TRANSPORTATION ISSUES & OPPORTUNITIES



INFRASTRUCTURE OPPORTUNITIES

Infrastructure opportunities include those suggestions that would require additional built infrastructure or physical changes to the transportation network.

These opportunities could include new roadways, road widening, additional or new turning lanes or traffic lights.



AREAS OF CONGESTION

Areas of congestion include those suggestions that document traffic concerns related to traffic amounts or travel time. These points could also include general information on safety and perceived level of service concerns.



BICYCLE AND PEDESTRIAN OPPORTUNITIES

Bicycle and pedestrian opportunities include those suggestions that would improve the experience of pedestrians and cyclists throughout the study area.

These opportunities could include new sidewalks, bicycle lanes and proposed multi-use trail connections.

These points could also include general information on bicycle and pedestrian safety concerns.

3 STREETS

“LOS A” is the best operating condition, with a free flow, in which there is little or no restriction on speed or maneuverability. At intersections, there is little or no delay.

“LOS B” represents a condition of stable traffic flow, but speeds are slower. Short traffic delays occur at intersections.

“LOS C” is still a condition of stable flow. However, most drivers are less able to drive at the speeds at which they feel comfortable, and they find it difficult to change lanes or pass other vehicles. Intersections experience average traffic delays.

“LOS D” approaches unstable flow. Operating speeds are tolerable to the driver, but are subject to considerable and sudden variation. Freedom to maneuver is limited, and driving comfort is low, as the probability of accidents has increased. Long traffic delays are experienced at intersections.

“LOS E” represents a maximum roadway capacity for vehicles. Traffic is unstable, speeds and ease of driving fluctuate, and drivers have little ability to select speed or maneuverability. Driving comfort is low, and accident potential is high. Vehicles are close together, and speeds can fluctuate quickly. Very long traffic delays are experienced at intersections.

“LOS F” is the worst operating condition. Speed and rate of traffic flow may drop to zero for short time periods. Extreme delays are experienced at intersections. This may cause severe congestion, affecting other adjacent roadways.

TRAVEL DEMAND MODEL

The City of Franklin’s new Travel Demand Model, which was used to create the level of service maps is essentially a more detailed version of the Nashville Area Metropolitan Planning Organization’s (NAMPO’s) regional travel demand model (TDM) within the city limits. The extra detail is attributed to the inclusion of smaller, sub-regional city roads, and the addition of the future projects, not currently identified in NAMPO’s 2040 regional model.

Using the NAMPO’s travel demand model as a base for Franklin’s model, allows the City to achieve an improved connection to the regional model. It also provides for streamlined incorporation of city projects into the federally adopted regional travel model.

The NAMPO’s 2040 regional model began development in the summer of 2013 and will be one of the tools used to update the NAMPO’s 2040 Regional Transportation Plan. The model will also be used to support many of the NAMPO’s sub-regional studies and other planning initiatives. As is usually the case with model updates, the NAMPO’s model contains a variety of new features when compared to previous versions. Not only does it include a new graphic user interface, the model also includes the following enhancements:

- An all-road network
- A population synthesizer
- A vehicle-ownership model
- New trip purposes
- An integrated mode-choice model
- A destination-choice model for passenger trips
- A freight model

It should be noted that, at the time the City’s Comprehensive Network Transportation Plan commenced, NAMPO staff was still making final touches to their model. Therefore, the model version used for this

study (May, 2014), may not be the most current version. For a more comprehensive description of NAMPO’s model enhancements, refer to the Travel Demand Model Development and User’s Manual - which can be obtained by contacting NAMPO staff.

MODEL YEARS

The table below provides a list of model runs used to provide a basis for initial roadway network analysis and to help foster discussion on future-year projects. The years listed below are consistent with the NAMPO’s regional model years.

Base Year	Existing + Committed (E+C)	Future Years
2010	2015	2020
	2040	2030
		2040

Base Year Networks models are used to compare model results with historic traffic counts. It also helps to calibrate and validate the model. In other words, the Base Year model is the foundation for future year model networks (i.e., 2020, 2030, and 2040). Therefore, if something changes in the base year network, that change will need to be added to all future year networks.

Existing + Committed Networks are base year networks (existing) plus the addition of imminent projects (committed). Committed projects, in other words, include projects that are far enough along in the development stage that there is an almost 100% likelihood of its completion. In most cases, committed projects have some amount of construction funding programed at the time of the travel model development, so there is a low probability that these projects would not be built. Figures 3.3 and 3.4 depict LOS for the existing street network for the AM and PM peak times, respectively.

The purpose of E+C networks is to answer the question, “What would our transportation network look like in the future if we finished our

committed projects and then stopped building?” In other words, as population and employment continue to grow, E+C networks help identify the location of network deficiencies and predict how far in the future these deficiencies will begin. Figures 3.5 and 3.6 depict how the street network would function in terms of LOS in 2040 if no additional roadway improvements were made to accommodate projected employment and population growth.

Future Year Networks are a combination of the base year network and proposed projects. Based on the analysis of the E+C networks, projects are added to the existing network to address the deficiencies shown in the E+C network. As previously eluded to, these deficiencies will appear at different times during the Plan’s timeframe - so it is important to incorporate (or prioritize) these new projects in the appropriate horizon year.



Although Carothers Parkway (Long Lane to Falcon Creek) was under construction during the planning process, it was included in the model for the 2015 planning year because of its eminent opening.

3 STREETS

FIGURE 3.3: 2015 EXISTING + COMMITTED AM LOS

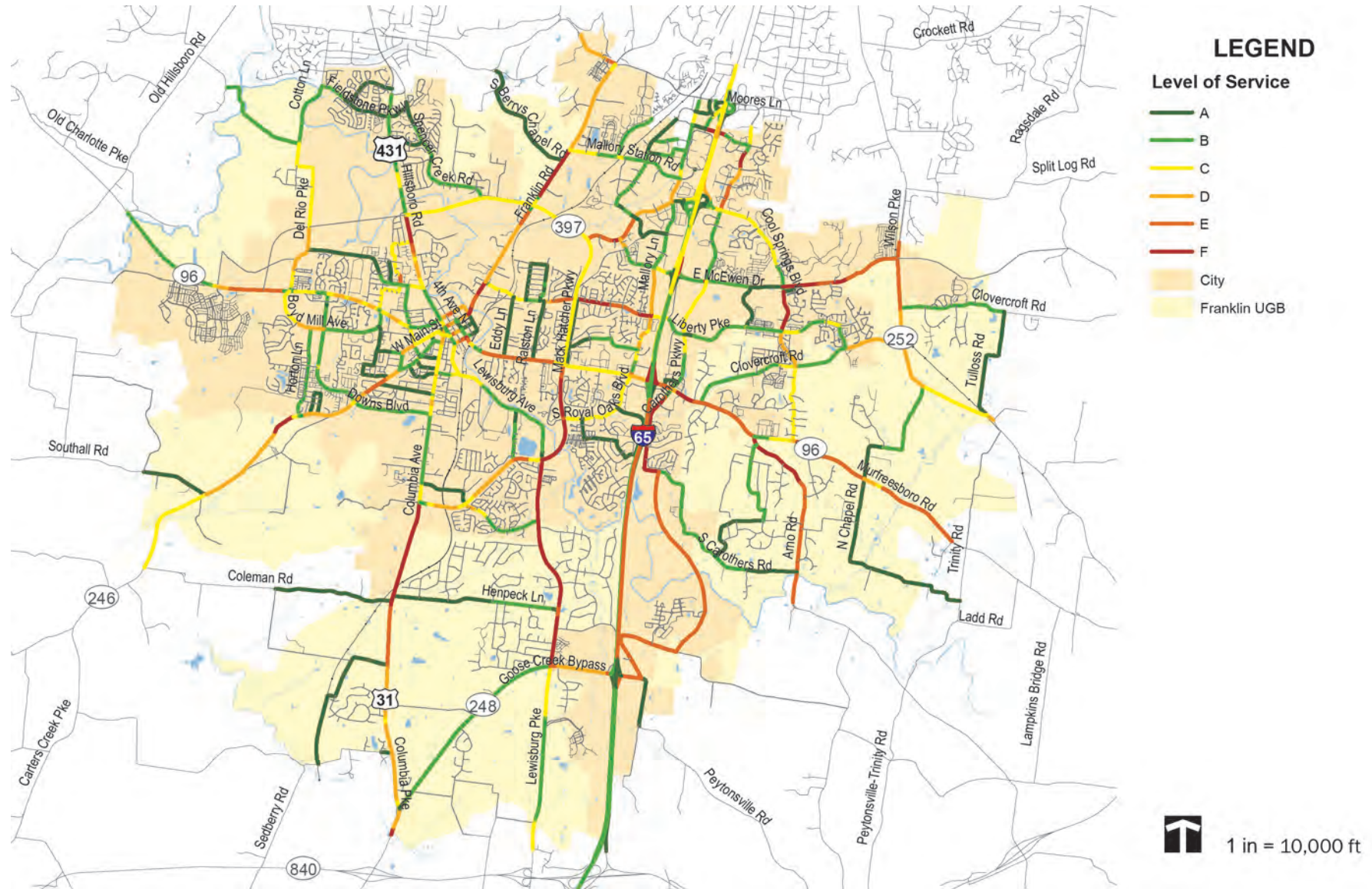
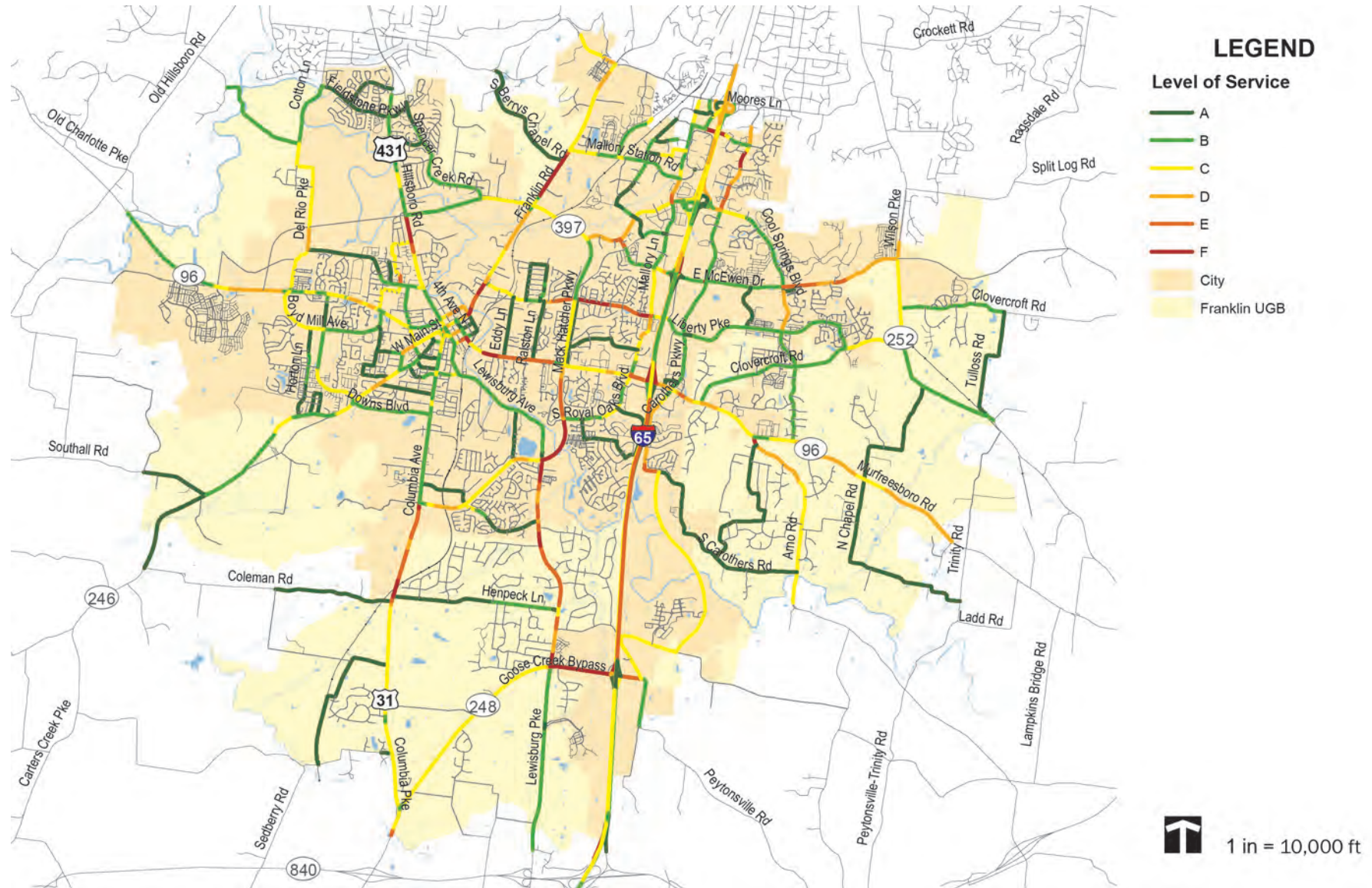


FIGURE 3.4: 2015 EXISTING + COMMITTED PM LOS



3 STREETS

FIGURE 3.5: 2040 EXISTING + COMMITTED AM LOS

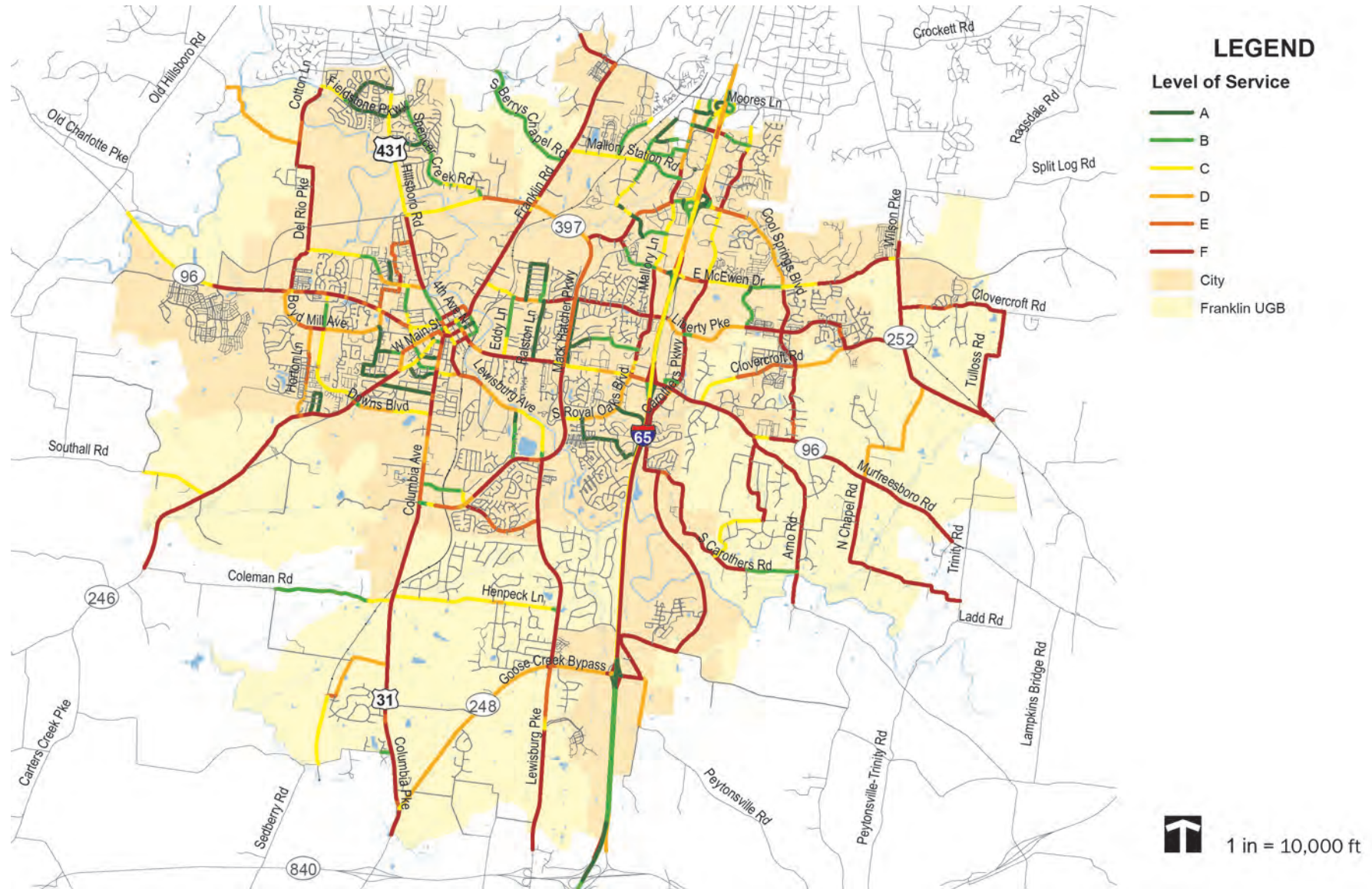
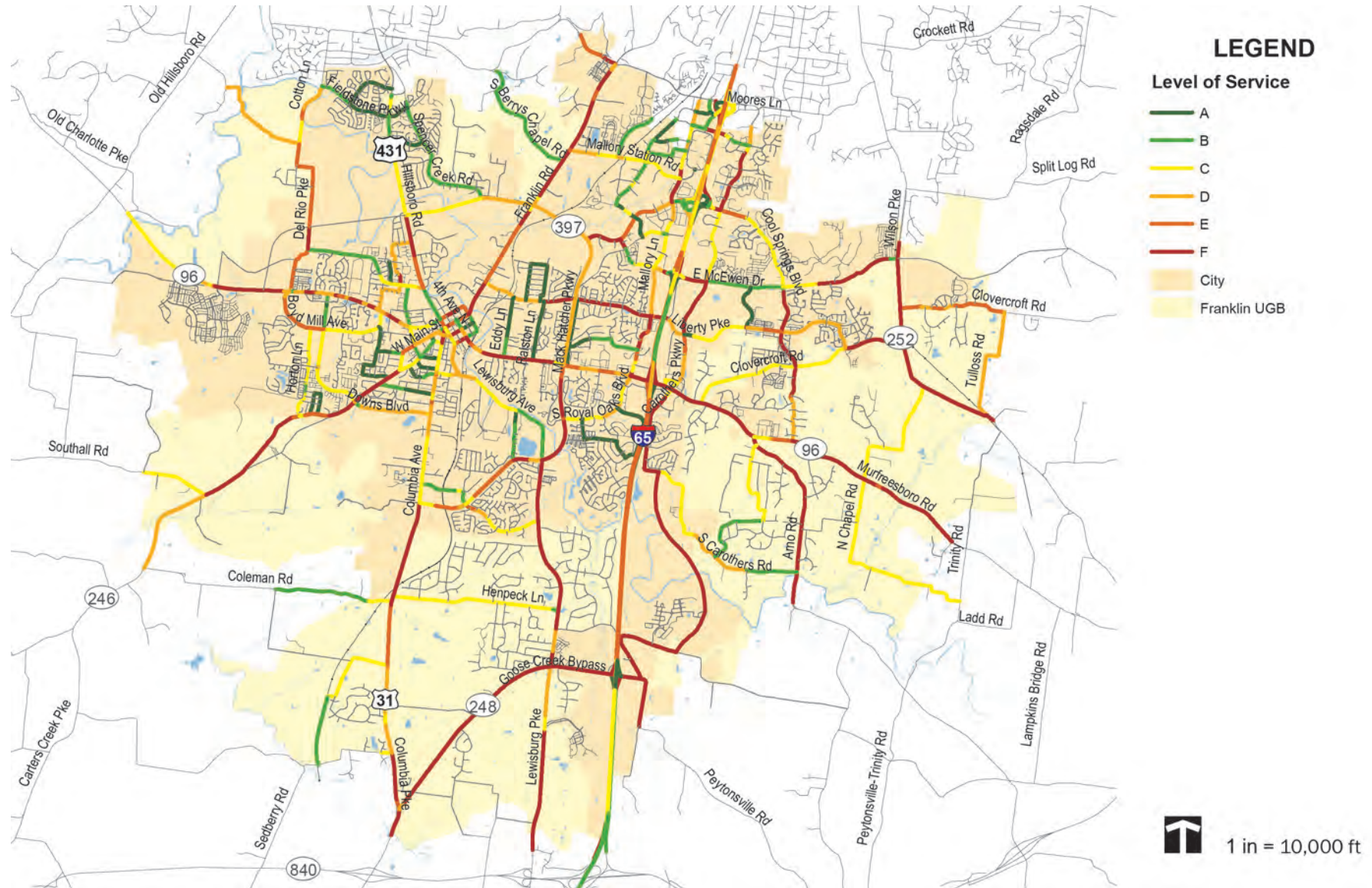


FIGURE 3.6: 2040 EXISTING + COMMITTED PM LOS



3 STREETS

RECOMMENDED IMPROVEMENTS

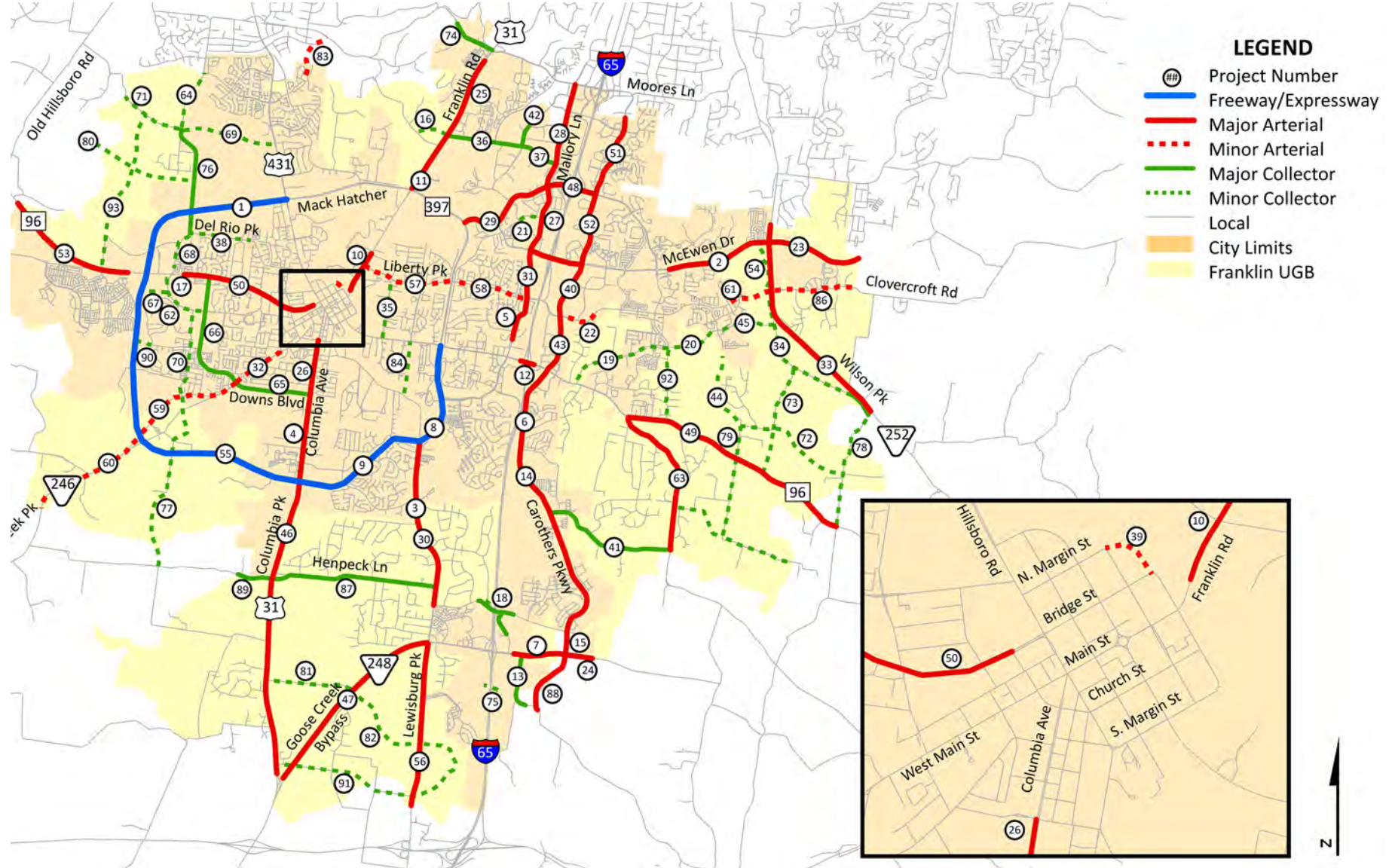
The following sections identify roadway improvements recommended in the short, medium, and long term. For the purposes of this plan, the timeframes are established as:

- Short Term – Proposed for Completion by 2020
- Medium Term – Proposed for Completion by 2030
- Long Term – Proposed for Completion by 2040

These improvements are recommended as a result of discussions with City staff, input gathered from the public engagement process, existing conditions data, and analysis of the traffic model. The projects are meant to address existing traffic deficiencies in the short term and additional traffic volumes as a result of continued population and employment growth within the City of Franklin and its Urban Growth Boundary. The level of service (LOS) maps on the following pages depict the anticipated street network function in the future, given projected growth and planned improvements. For example, the 2020 Proposed Network AM LOS map shows an anticipated roadway network that includes completion of all of the projects identified as short term, based on the number of vehicle trips that will be generated by the projected population and employment in 2020. Maps are presented for each planning horizon year (2020, 2030, and 2040) for both the AM and PM peak times.

A summary table is included for each timeframe, short, medium, and long, that includes the roadway, project extents, and segment length. Some streets are separated into one or more pieces that would be undertaken individually. Additionally, some streets may be improved or initially built to one design in the short term and upgraded, as an additional project, in the medium or long term. Planning level cost estimates, as well as additional project details such as functional classification and the inclusion of bicycle and pedestrian facilities, are included for each project in Appendix 1: Project Sheets.

FIGURE 3.7: PROPOSED ROADWAY PROJECTS REFERENCE MAP (SHORT, MEDIUM, AND LONG TERM)

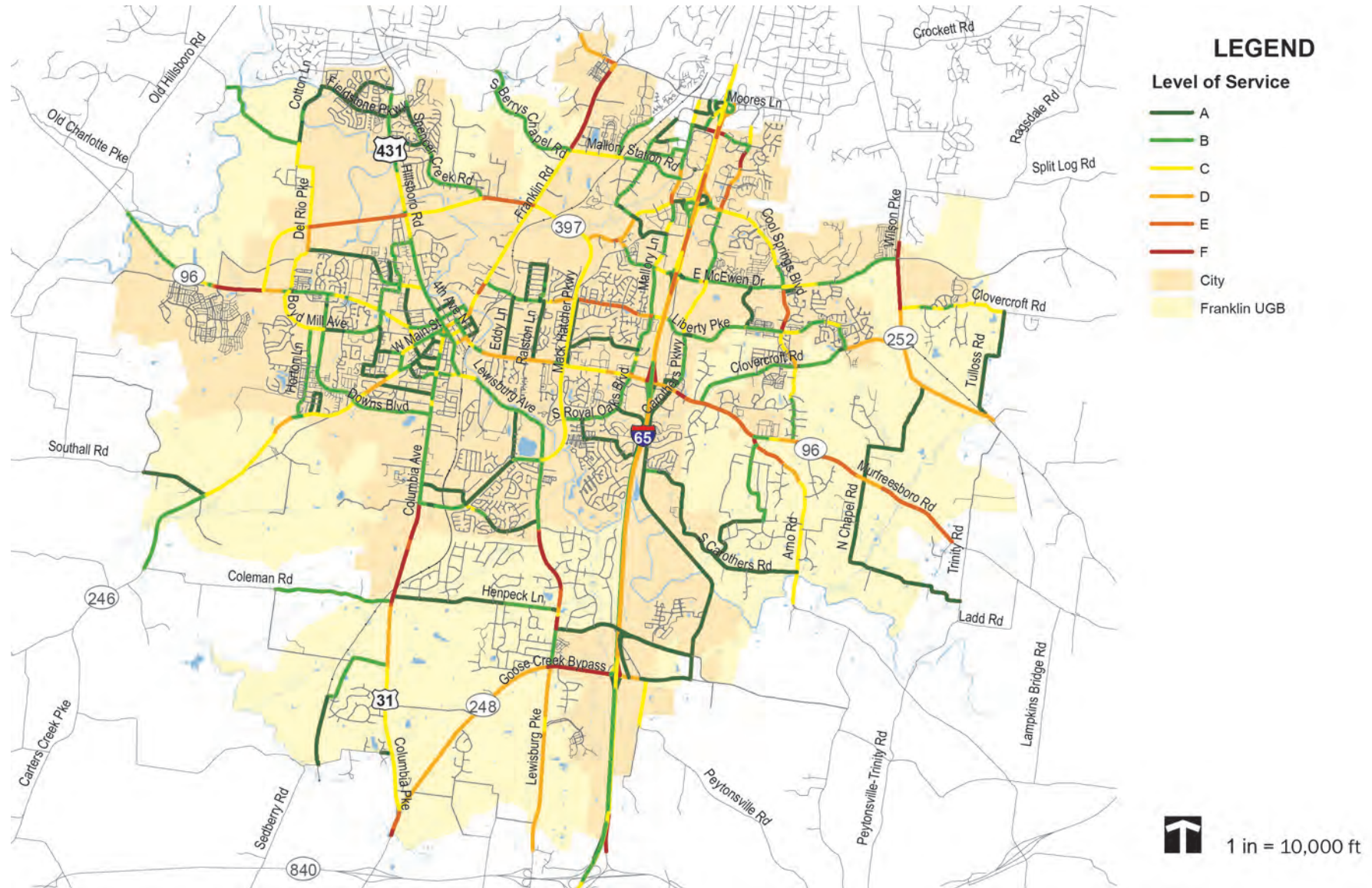


3 STREETS

TABLE 3.1: 2020 (SHORT TERM) PROPOSED PROJECTS

Project Number	Roadway	To	From	Length (Miles)
1	Mack Hatcher Parkway (SR-397)	Highway 96 West (SR-96W)	Hillsboro Road (SR-106/US-431)	2.64
2	East McEwen Drive	Cool Springs Boulevard	Wilson Pike (SR-252)	1.38
3	Lewisburg Pike (SR-106/US-431)	Holly Hill Drive	Mack Hatcher Parkway (SR-397)	0.86
4	Columbia Avenue (SR-6/US-31)	Mack Hatcher Parkway (SR-397)	Downs Boulevard	1.15
5	North Royal Oaks Boulevard	Lakeview Drive	Liberty Pike	0.60
6	Carothers Parkway	South Carothers Road	Murfreesboro Road (SR-96)	1.14
7	Goose Creek Bypass (SR-248) Extension	Existing Peytonsville Road	Carothers Parkway (Future Extension)	0.68
8	Mack Hatcher Parkway (SR-397)	Polk Place Drive	Murfreesboro Road (SR-96)	1.74
9	Mack Hatcher Parkway (SR-397)	Columbia Avenue (SR-6/US-31)	Polk Place Drive	1.46
10	Franklin Road (SR-6/US-31)	Harpeth River Bridge	Harpeth Industrial Court	0.56
11	Franklin Road (SR-6/US-31)	Mack Hatcher Parkway (SR-397)	Mallory Station	0.84
12	Murfreesboro Road (SR-96)	Western I-65 Ramp	Eastern I-65 Ramp	0.25
13	Peytonsville Road	Pratt Lane	Goose Creek Bypass (SR-248) (Future Extension)	0.74
14	Carothers Parkway	Long Lane	South Carothers Road	2.73
15	Carothers Parkway	Long Lane	Goose Creek Bypass (SR-248) (Future Extension)	0.31
16	South Berrys Chapel Road Realignment	South Berrys Chapel Road	Mallory Station Road	0.47
17	Boyd Mill Avenue	Highway 96 West (SR-96W)	Franklin Green Parkway	0.48
18	I-65 Overpass	Old Peytonsville Road	Long Lane	0.70
19	Clovercroft Road	Murfreesboro Road (SR-96)	Oxford Glen Drive	1.40
20	Clovercroft Road	Oxford Glen Drive	Market Street	0.72
21	Jordan Road	Aspen Grove Drive	Mallory Lane	0.32
22	Liberty Pike	Carothers Parkway	Columbia State Community College	0.32

FIGURE 3.8: 2020 PROPOSED NETWORK AM LOS



3 STREETS

FIGURE 3.9: 2020 PROPOSED NETWORK PM LOS

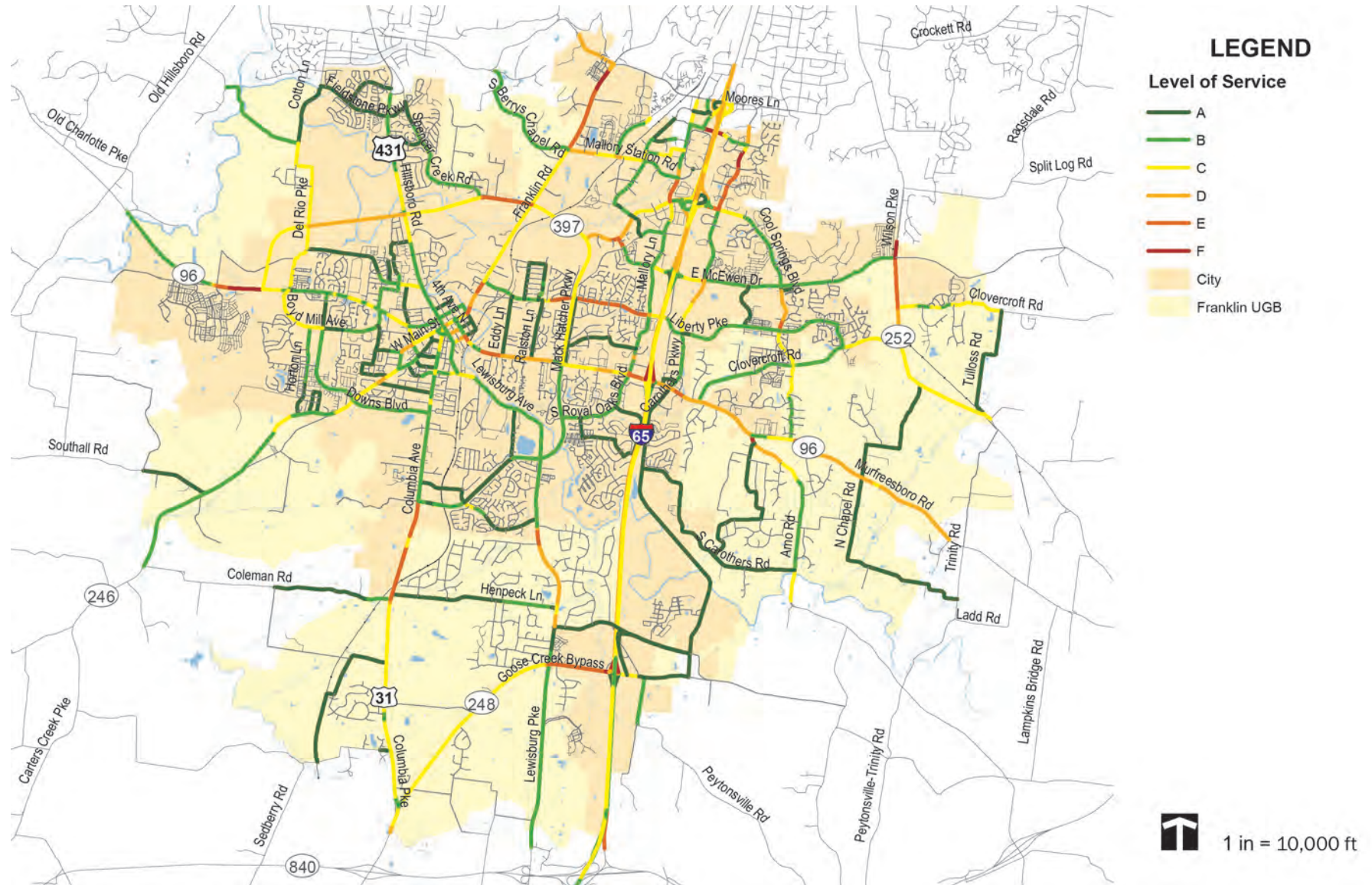


TABLE 3.2: 2030 (MEDIUM TERM) PROPOSED PROJECTS

Project Number	Roadway	To	From	Length (Miles)
23	East McEwen Drive	Wilson Pike (SR-252)	Eastern City Limits	1.25
24	Goose Creek Bypass (SR-248) Extension	Carothers Parkway (Future Extension)	Long Lane	0.36
25	Franklin Road (SR-6/US-31)	Mallory Station Road	Davenport Blvd	1.10
26	Columbia Avenue (SR-6/US-31)	Downs Boulevard	Fowlkes Street	0.73
27	Mallory Lane	Mallory Station Road	West McEwen Drive	1.22
28	Mallory Lane	Mallory Station Road	Moore's Lane (SR-441)	1.08
29	Cool Springs Boulevard	Mack Hatcher Parkway (SR-397)	Mallory Lane	1.31
30	Lewisburg Pike (SR-106/US-431)	Old Peytonsville Road	Holly Hill Drive	1.37
31	Mallory Lane	Liberty Pike	West McEwen Drive	0.64
32	West Main Street (SR-246)	Downs Boulevard	Natchez Street	0.72
33	Wilson Pike (SR-252) Realignment	Trinity Road	East McEwen Drive	2.98
34	(Old/Existing) Wilson Pike	Trinity Road	Liberty Pike (Future Extension)	2.29
35	Eddy Lane	Murfreesboro Road (SR-96)	Liberty Pike	0.78
36	Mallory Station Road	Franklin Road (SR-6/US-31)	Seaboard Lane	0.99
37	Mallory Station Road	Seaboard Lane	Mallory Lane	0.52
38	Del Rio Pike	Carlisle Lane	Poplar Grove Elementary School	0.81
39	1st Avenue North	Bridge Street	North Margin Street	0.17
40	Carothers Parkway	Liberty Pike	East McEwen Drive	0.76
41	South Carothers Road	Carothers Parkway	Arno Road	1.79
42	Seaboard Lane	Mallory Station Road	Crossroads Boulevard	0.29
43	Carothers Parkway	Murfreesboro Road (SR-96)	Liberty Pike	0.75
44	Market Street Extension	North Chapel Road (Future Extension)	Amelia Park Subdivision	1.07
45	Clovercroft Road	Market Street	(Old/Existing) Wilson Pike	0.77

3 STREETS

FIGURE 3.10: 2030 PROPOSED NETWORK AM LOS

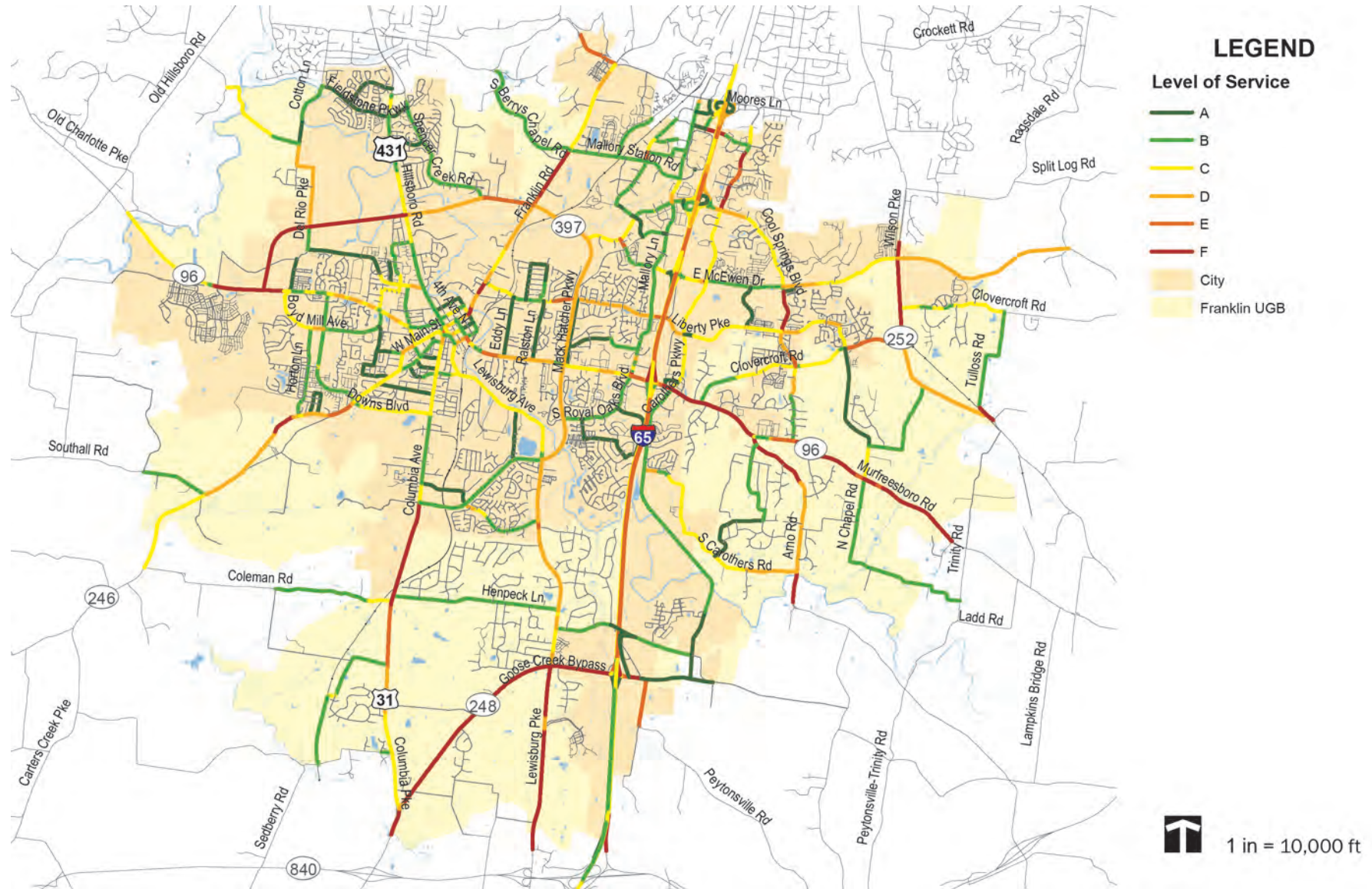
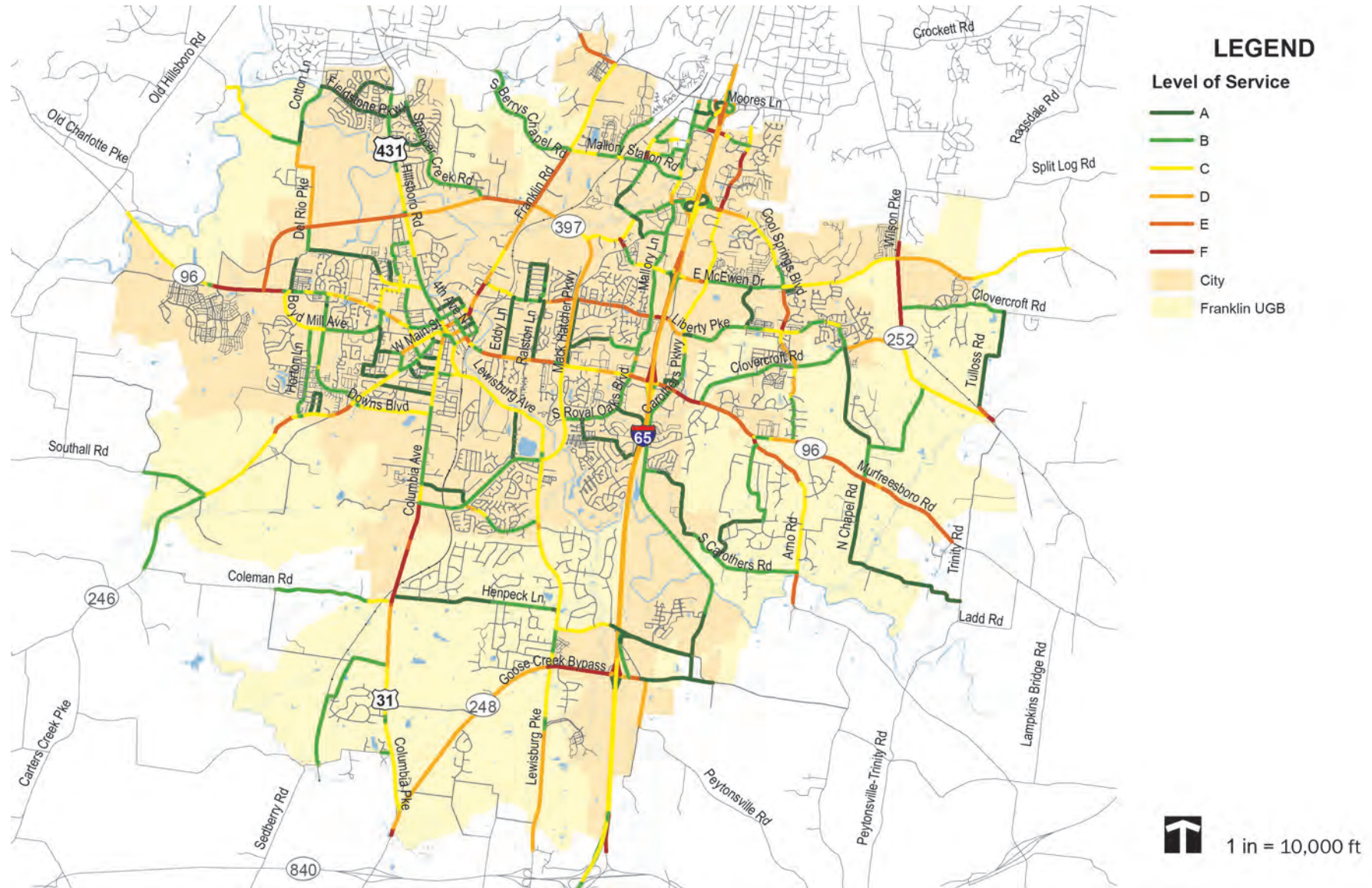


FIGURE 3.11: 2030 PROPOSED NETWORK PM LOS



3 STREETS

TABLE 3.3: 2040 (LONG TERM) PROPOSED PROJECTS

Project Number	Roadway	To	From	Length (Miles)
46	Columbia Pike (SR-6/US-31)	Goose Creek Bypass (SR-248)	Mack Hatcher Parkway (SR-397)	3.89
47	Goose Creek Bypass (SR-248)	Columbia Pike (SR-6/US-31)	Lewisburg Pike (SR-106/US-431)	2.66
48	Cool Springs Boulevard	Mallory Lane	Carothers Parkway	0.63
49	Murfreesboro Road (SR-96)	Arno Road	Trinity Road	2.75
50	Highway 96 West (SR-96W)	Carlisle Lane	7th Avenue North	1.80
51	Carothers Parkway	Cool Springs Boulevard	Bakers Bridge Avenue	1.11
52	Carothers Parkway	East McEwen Drive	Cool Springs Boulevard	0.96
53	Highway 96 West (SR-96W)	Old Hillsboro Road (SR-46)	Mack Hatcher Parkway (SR-397)	1.79
54	(Old/Existing) Wilson Pike Extension	Liberty Pike Extension	East McEwen Drive	0.71
55	Mack Hatcher Parkway (SR-397)	Highway 96 West (SR-96W)	Columbia Avenue (SR-6/US-31)	4.17
56	Lewisburg Pike (SR-106/US-431)	McLemore Road	Goose Creek Bypass (SR-248)	2.13
57	Liberty Pike	Franklin Road (SR-6/US-31)	Mack Hatcher Parkway (SR-397)	1.20
58	Liberty Pike	Mack Hatcher Parkway (SR-397)	Mallory Lane	0.97
59	Carters Creek Pike (SR-246)	Mack Hatcher Parkway (SR-397) (Future SW Quadrant)	Downs Boulevard	1.54
60	Carters Creek Pike (SR-246)	Southwest Urban Growth Boundary	Mack Hatcher Parkway (SR-397) (Future SW Quadrant)	1.66
61	Liberty Pike Extension	Terminus of Existing Liberty Pike	Wilson Pike (SR-252)	0.60
62	Boyd Mill Avenue	Franklin Green Parkway	Downs Boulevard	0.38
63	Arno Road	South Carothers Road	Murfreesboro Road (SR-96)	2.04
64	Cotton Lane	Del Rio Pike	Fieldstone Parkway	0.84
65	Downs Boulevard	West Main Street (SR-246)	Columbia Avenue (SR-6/US-31)	1.01
66	Downs Boulevard	Murfreesboro Road (SR-96)	West Main Street (SR-246)	1.70
67	Boyd Mill Avenue Connector	Mack Hatcher Parkway (SR-397)	Boyd Mill Avenue	0.34
68	Carlisle Lane	Stone Mill Lane	Del Rio Pike	0.55
69	New Roadway	Cotton Lane	Hillsboro Road (SR-106/US-431)	1.27
70	Horton Lane	West Main Street (SR-246)	Boyd Mill Avenue	1.18
71	Del Rio Pike	Old Hillsboro Road (SR-46)	Cotton Lane	0.88

TABLE 3.3: 2040 (LONG TERM) PROPOSED PROJECTS, CONTINUED

Project Number	Roadway	To	From	Length (Miles)
72	North Chapel Road	Existing Western 90 degree curve	Wilson Pike (SR-252)	1.58
73	New Road (Existing North Chapel Road)	Murfreesboro Road (SR-96)	Wilson Pike (SR-252)	1.47
74	Lynnwood Way	Northwest Urban Growth Boundary	Franklin Road (SR-6/US-431)	0.61
75	Chadwell/Reams Fleming Overpass	Berry Farms - Chadwell	Berry Farms - Reams-Fleming	0.24
76	Del Rio Pike	Carlisle Lane	Cotton Lane	1.45
77	Horton Lane Extension	Carters Creek Pike (SR-246)	Coleman Road	2.44
78	Trinity Road	Murfreesboro Road (SR-96)	Wilson Pike (SR-252)	1.64
79	North Chapel Road (Future Market Street)	Murfreesboro Road (SR-96)	Existing Western 90 degree curve	0.41
80	New Roadway	Old Hillsboro Road (SR-46)	Del Rio Pike	1.41
81	Snowbird Hollow Road	Columbia Pike (SR-6/US-31)	Goose Creek Bypass (SR-248)	1.14
82	Snowbird Hollow Road	Goose Creek Bypass (SR-248)	Lewisburg Pike (SR-106/US-431)	1.26
83	Fieldstone Parkway Extension	Bexley Park Drive	South Berrys Chapel Road	0.71
84	Ralston Lane	Murfreesboro Road (SR-96)	Lewisburg Pike (SR-106/US-431)	0.72
85	McLemore Road Extension	Lewisburg Pike (SR-106/US-431)	Lewisburg Pike (SR-106/US-431)	1.35
86	Clovercroft Road	Wilson Pike (SR-252)	Eastern City Limits	1.11
87	Henpeck Lane	Columbia Pike (SR-6/US-431)	Lewisburg Pike (SR-106/US-431)	2.16
88	Carothers Parkway (South Extension)	Goose Creek Bypass (SR-248) (Future Extension)	Peytonsville Road	0.90
89	Coleman Road	Columbia Pike (SR-6/US-31)	Western Urban Growth Boundary	0.47
90	Willowsprings Boulevard Extension	Mack Hatcher Parkway (SR-397)	Existing Willowsprings Boulevard	0.74
91	McLemore Road	Goose Creek Bypass (SR-248)	Lewisburg Pike (SR-106/US-431)	1.67
92	Oxford Glen Drive	Murfreesboro Road	Clovercroft Road	0.93
93	New Roadway	Old Charlotte Pike	Del Rio Pike	1.69

3 STREETS

FIGURE 3.12: 2040 PROPOSED NETWORK AM LOS

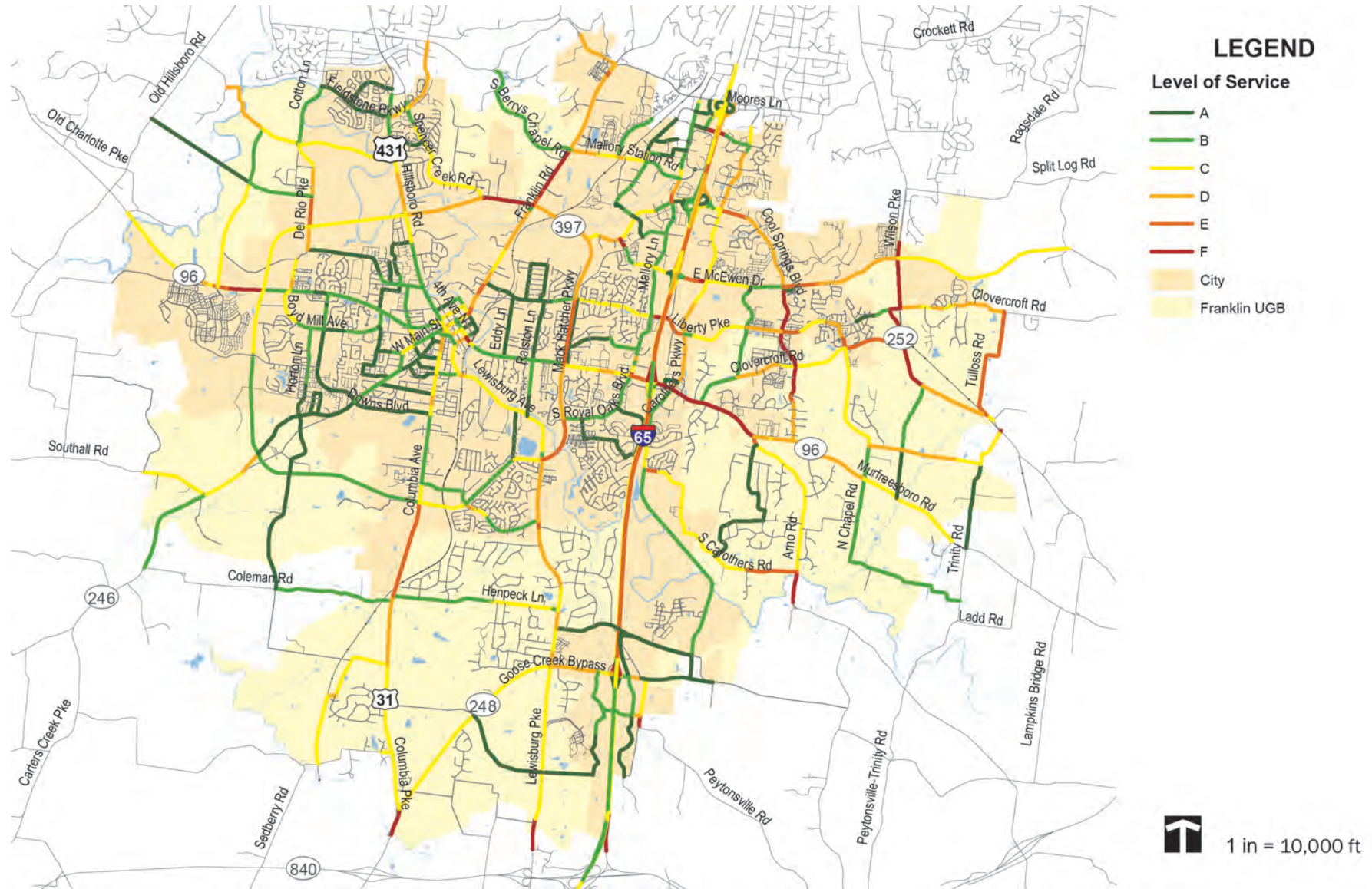
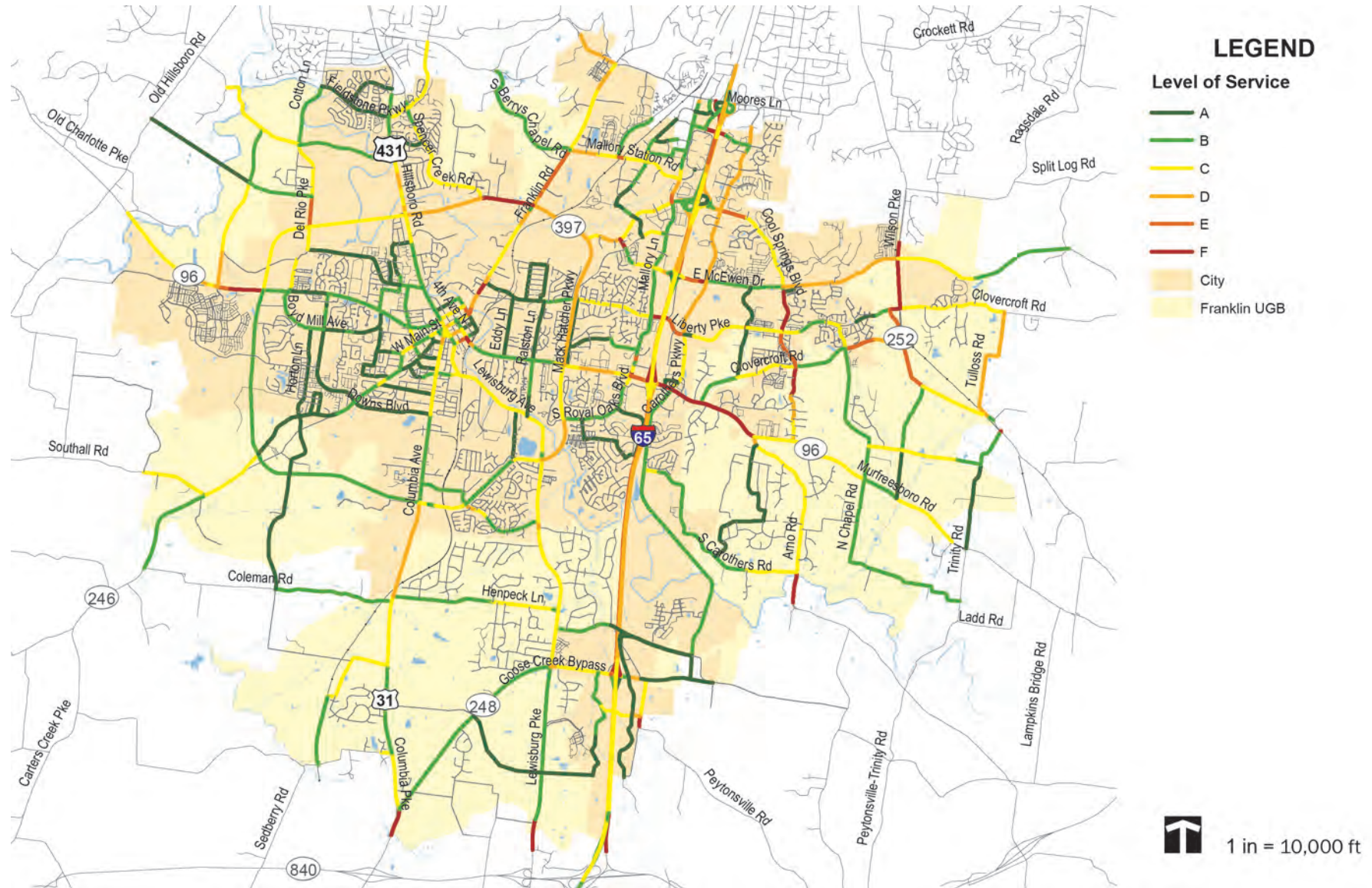
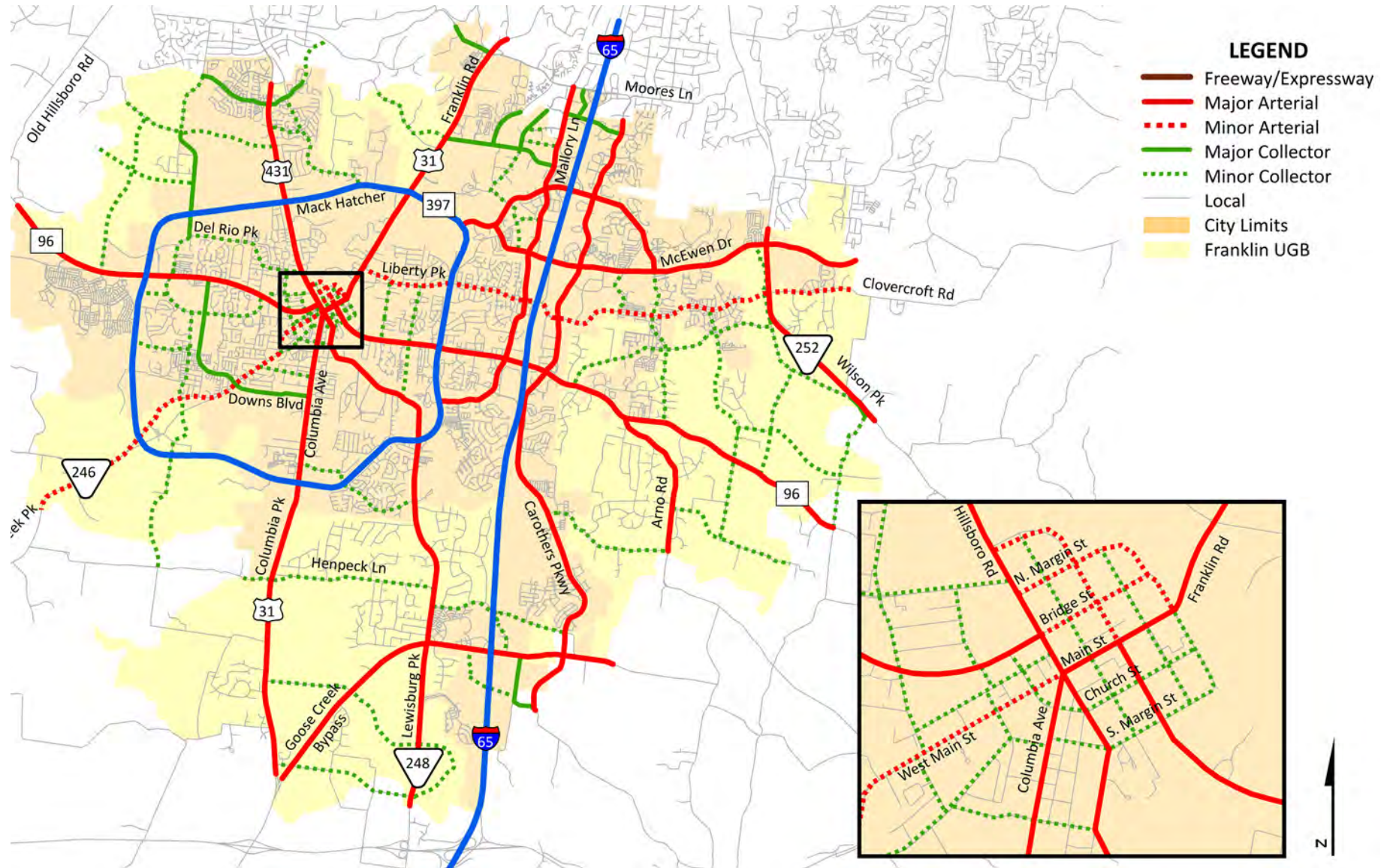


FIGURE 3.13: 2040 PROPOSED NETWORK PM LOS



3 STREETS

FIGURE 3.14: PROPOSED ROADWAY CLASSIFICATION



TYPICAL SECTIONS

Cross section designs for roadways vary according to the desired capacity and level of service, bicycle and pedestrian facilities, and other design elements such as medians, turn lanes, and landscape plantings. Therefore, universal standards for the design of every thoroughfare are not practical, as each roadway section must be individually analyzed and its cross section determined based on existing conditions and available right-of-way. The following typical sections are presented as a guide when designing new roadways. They represent an ideal cross section given new construction or the ability to obtain adequate right-of-way for expansions and reconstructions.

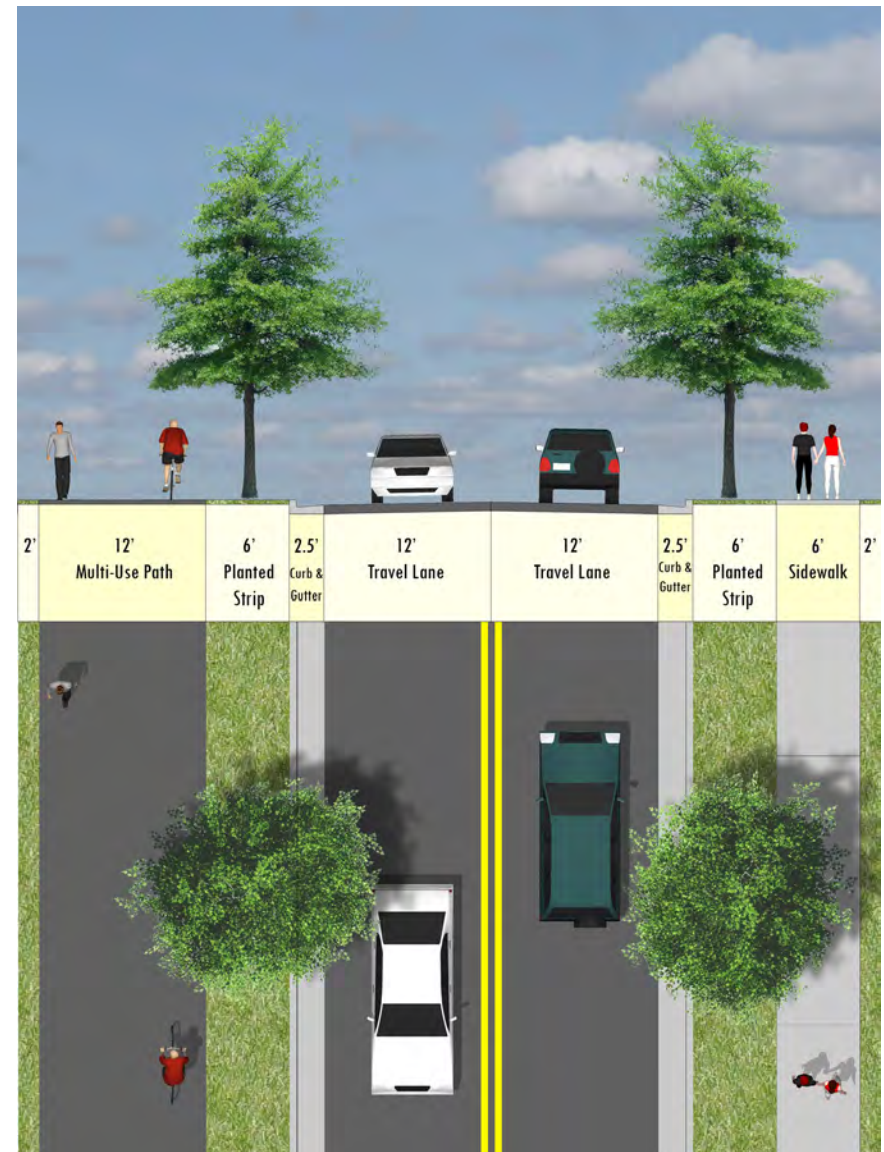
Where limited right-of-way exists, specific cross sections should be developed to meet the needs of that project. For all projects proposed in this plan, adequate right-of-way should be protected or acquired for the recommended cross sections. Recommended design standards relating to grades, sight distances, degree of curve, and other considerations for thoroughfares should be based on the most recent version of the Franklin Transportation & Street Technical Standards. The following typical sections are proposed:

- 2 Two-lane Sections – 63 to 67 feet in width (Minor Collectors Only)
- 2 Three-lane Sections – 75 to 79 feet in width (Minor Collectors Only)
- 6 Four-lane Sections – 122 to 126 (Major Collectors), 128 to 132 (Minor Arterials) and 132 to 136 (Major Arterials)

The width of the planted median included in the four-lane sections will vary depending on functional classification. The following median widths are proposed:

- Major Arterial – 40 feet
- Minor Arterial – 36 feet
- Major Collectors – 30 feet

FIGURE 3.15: 2 LANE - 63' SECTION



3 STREETS

FIGURE 3.16: 2 LANE - 67' SECTION

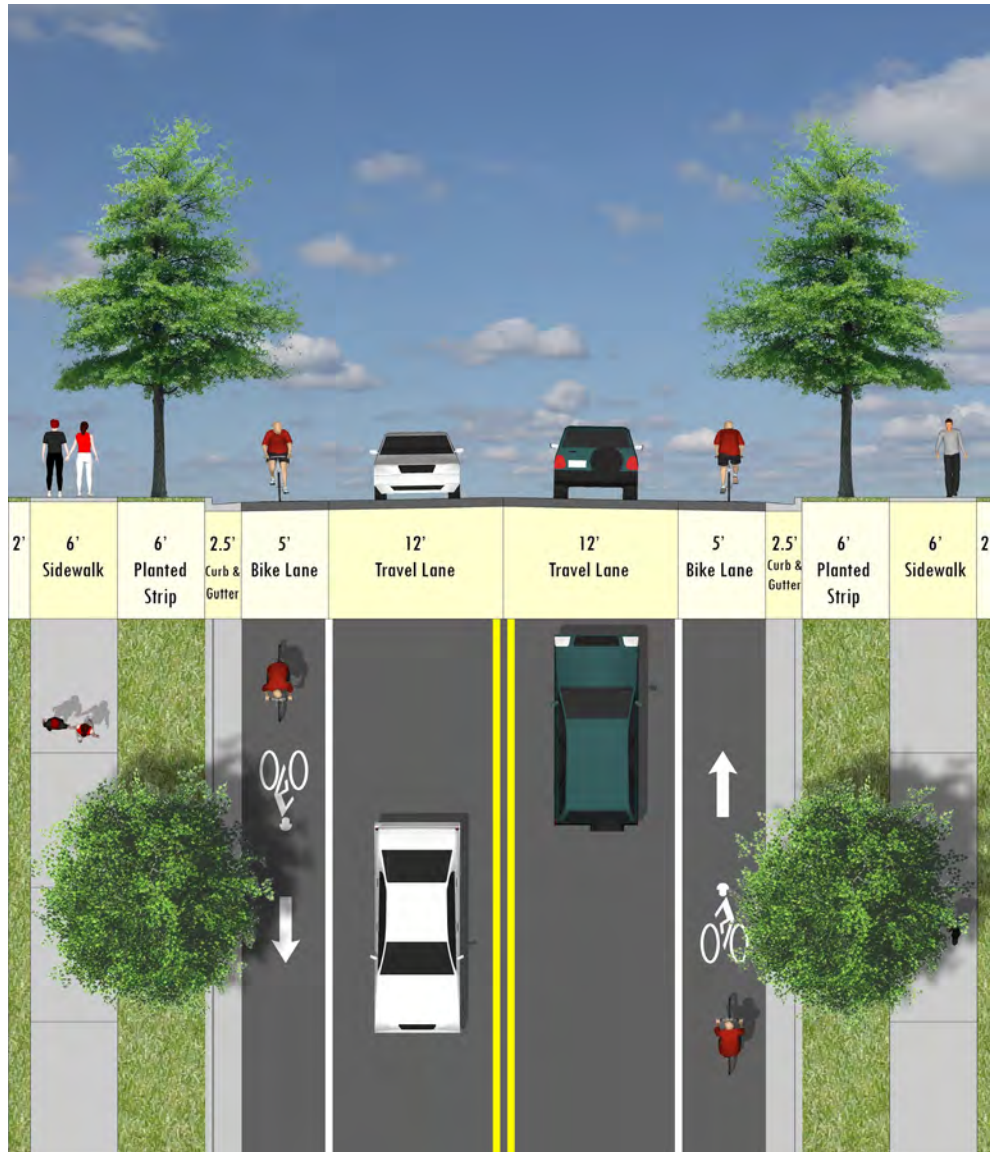
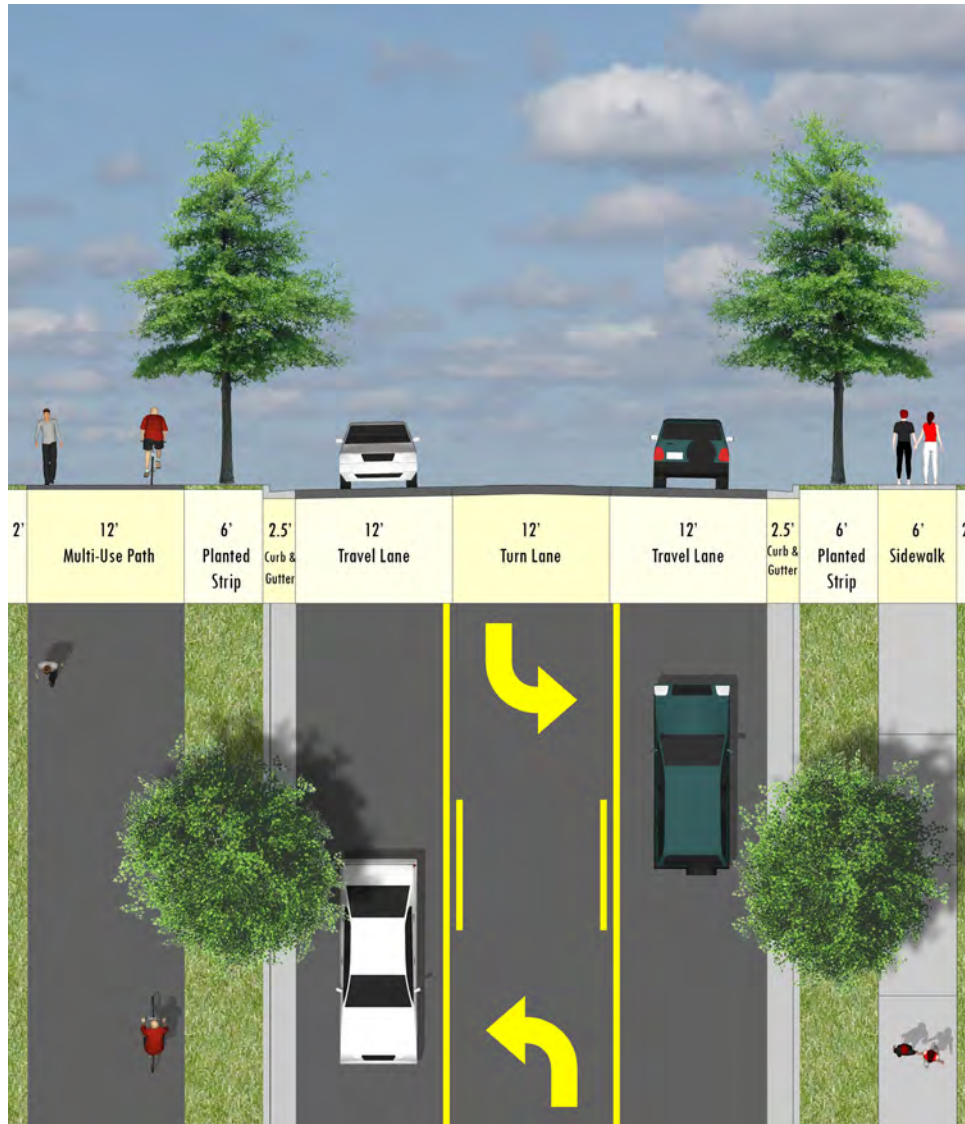


FIGURE 3.17: 3 LANE - 75' SECTION



3 STREETS

FIGURE 3.18: 3 LANE - 79' SECTION

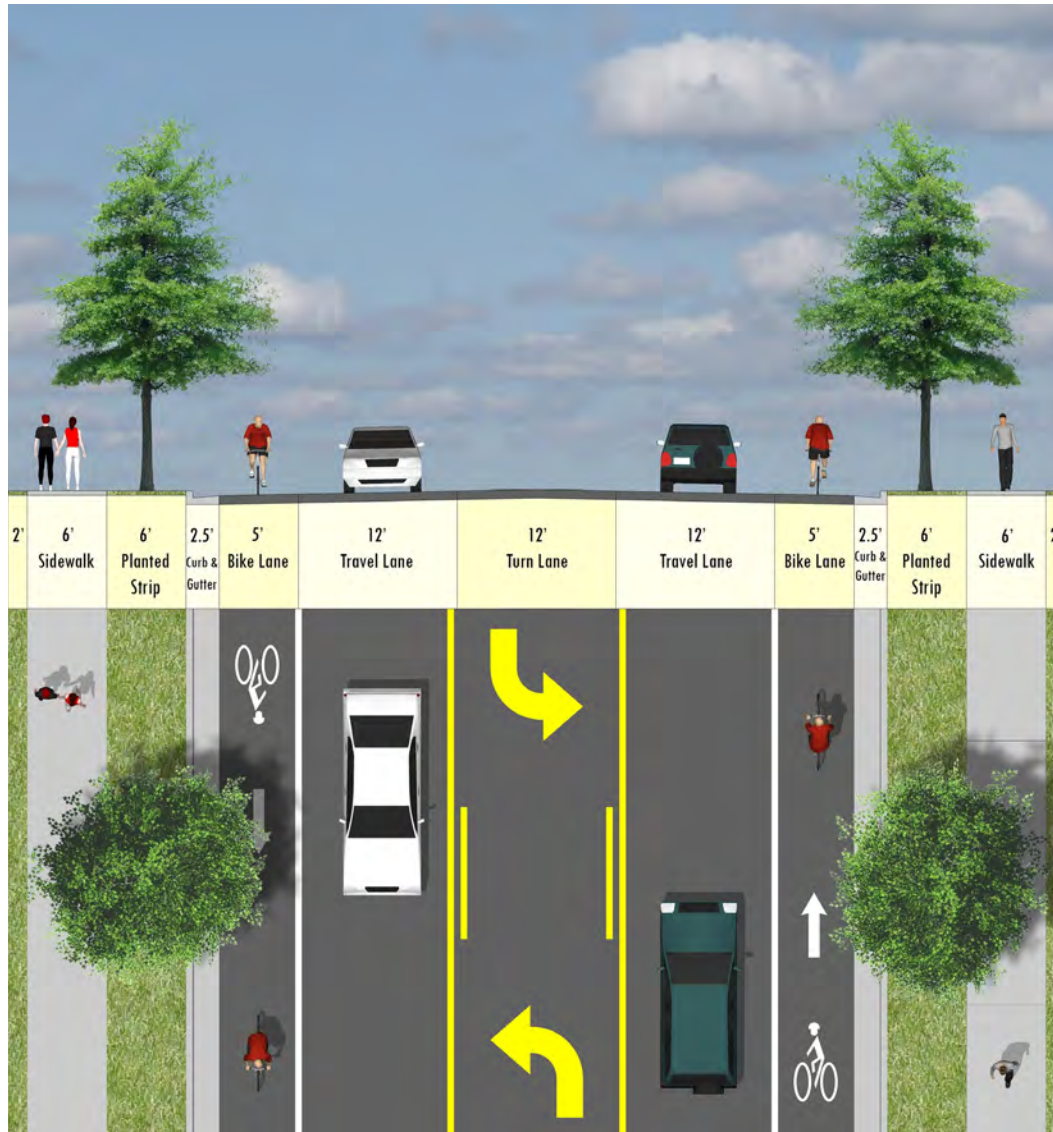
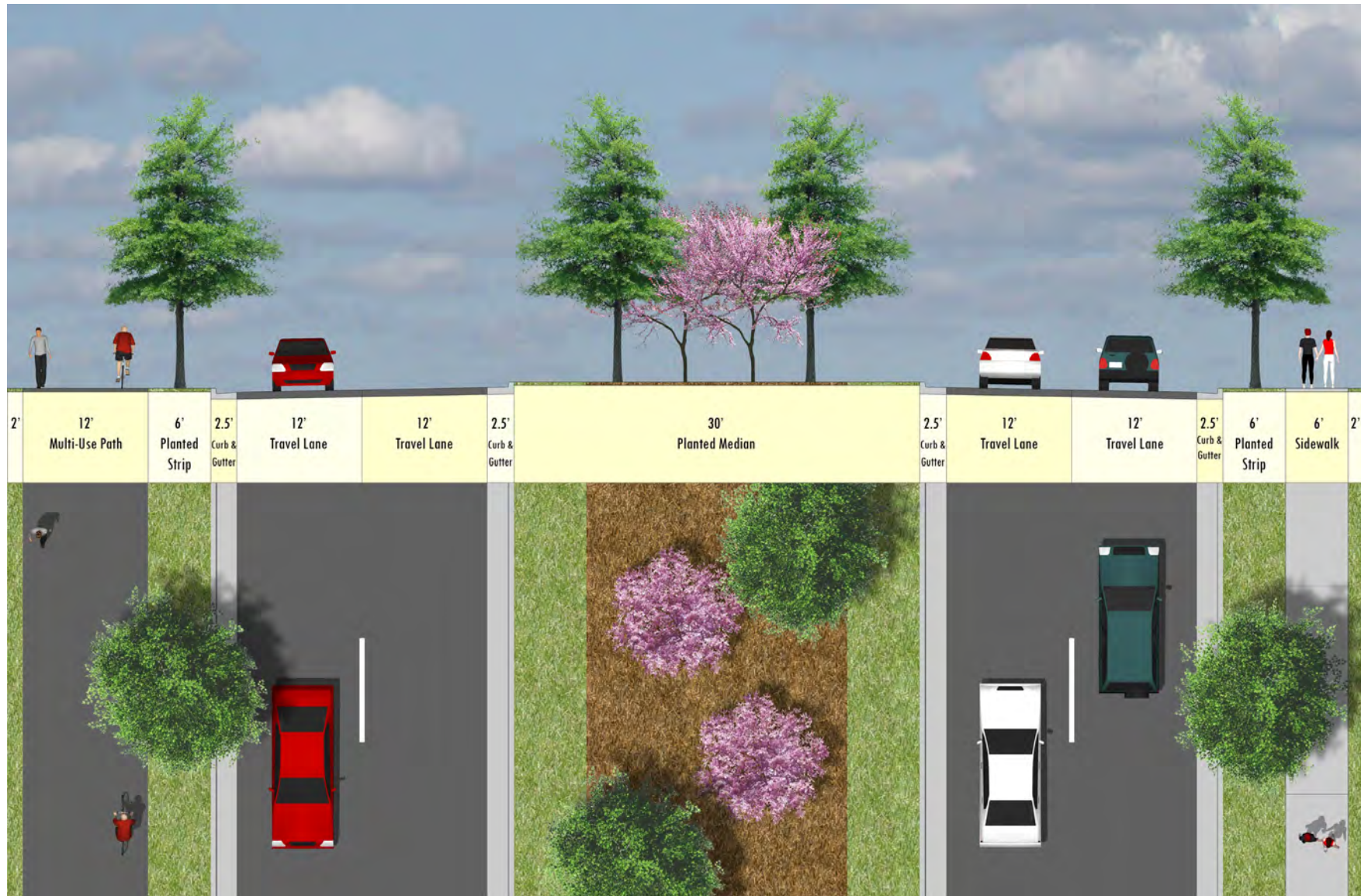


FIGURE 3.19: 4 LANE - 122' SECTION



3 STREETS

FIGURE 3.20: 4 LANE - 126' SECTION

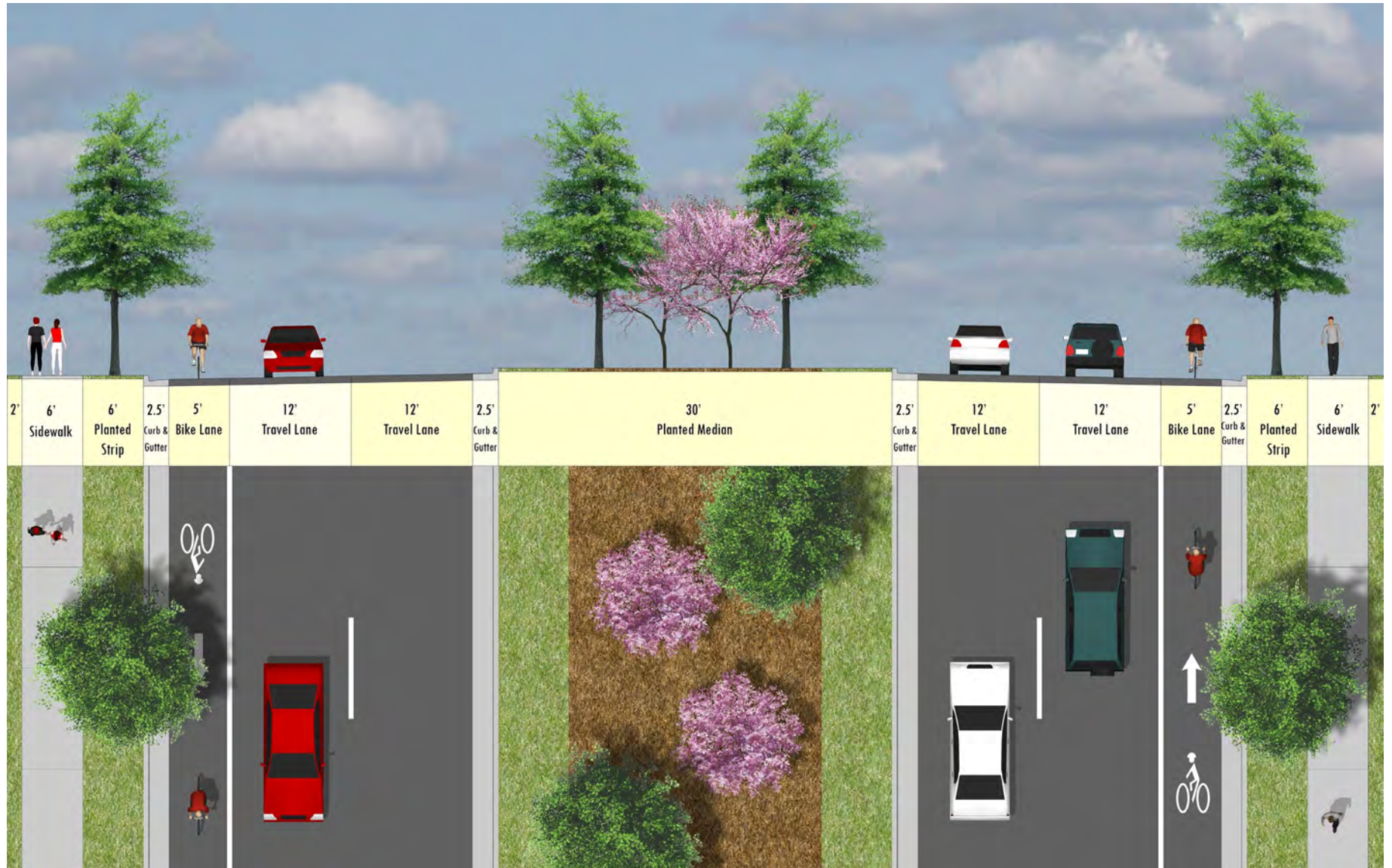
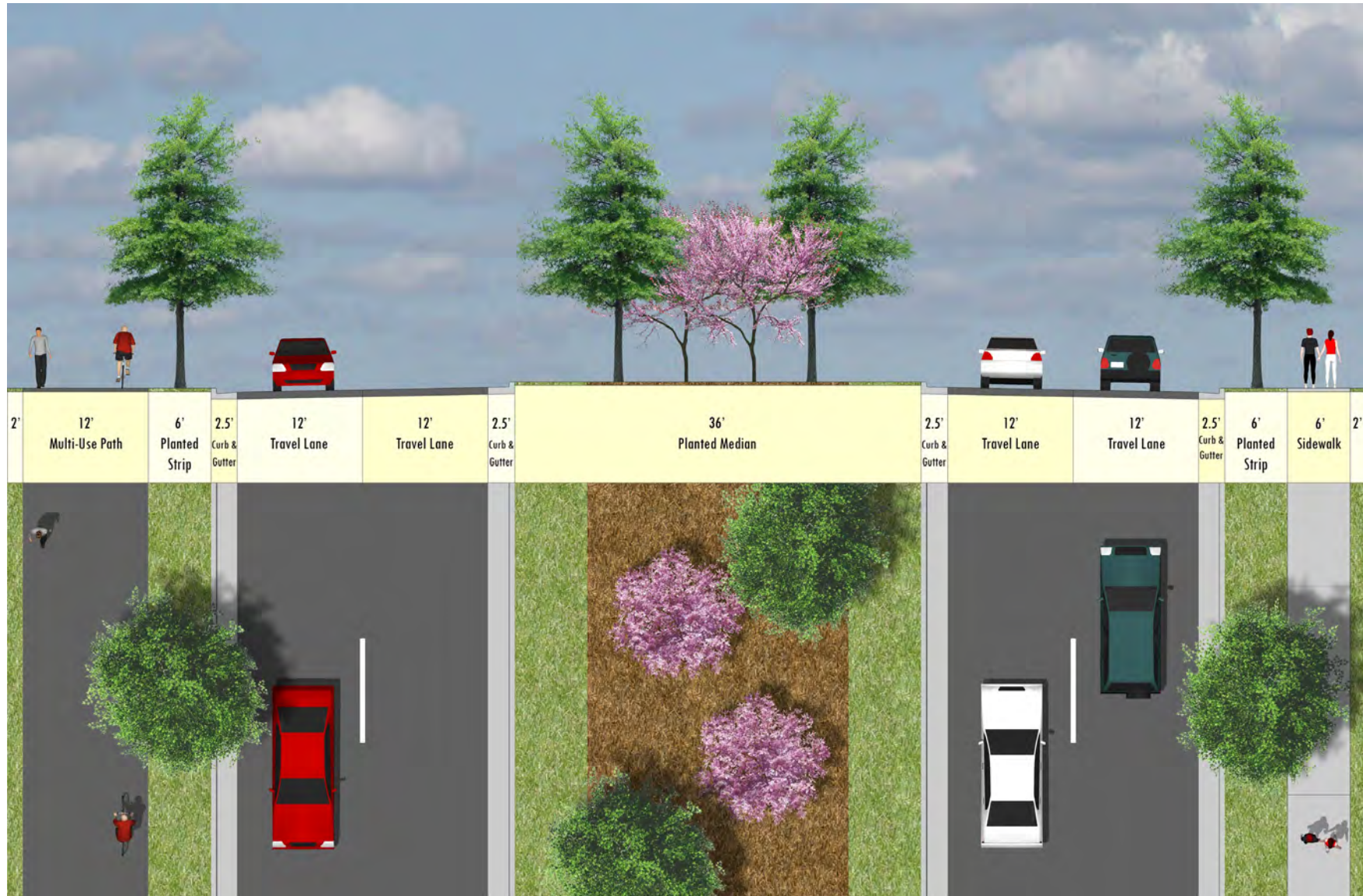


FIGURE 3.21: 4 LANE - 128' SECTION



3 STREETS

FIGURE 3.22: 4 LANE - 132' SECTION

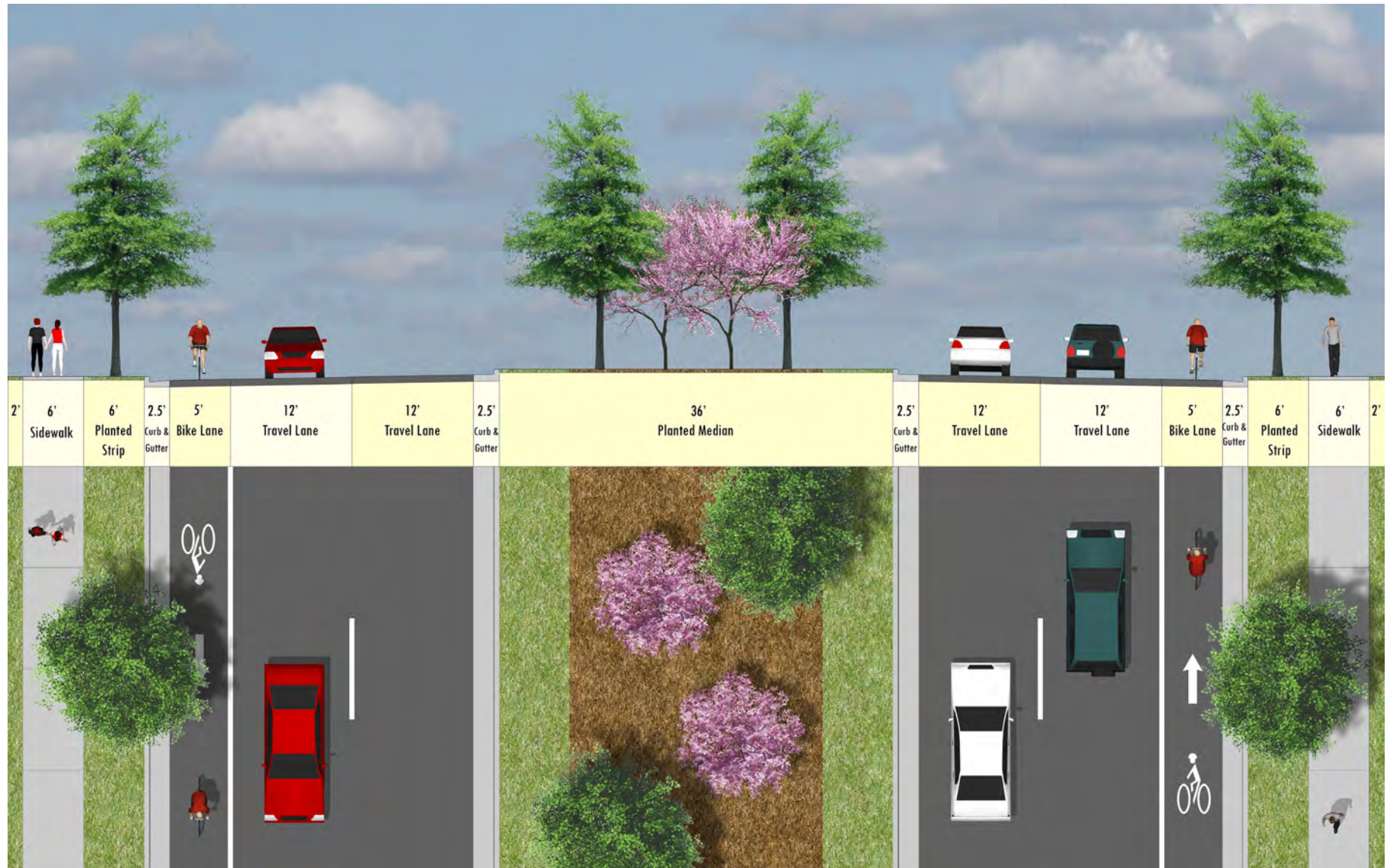
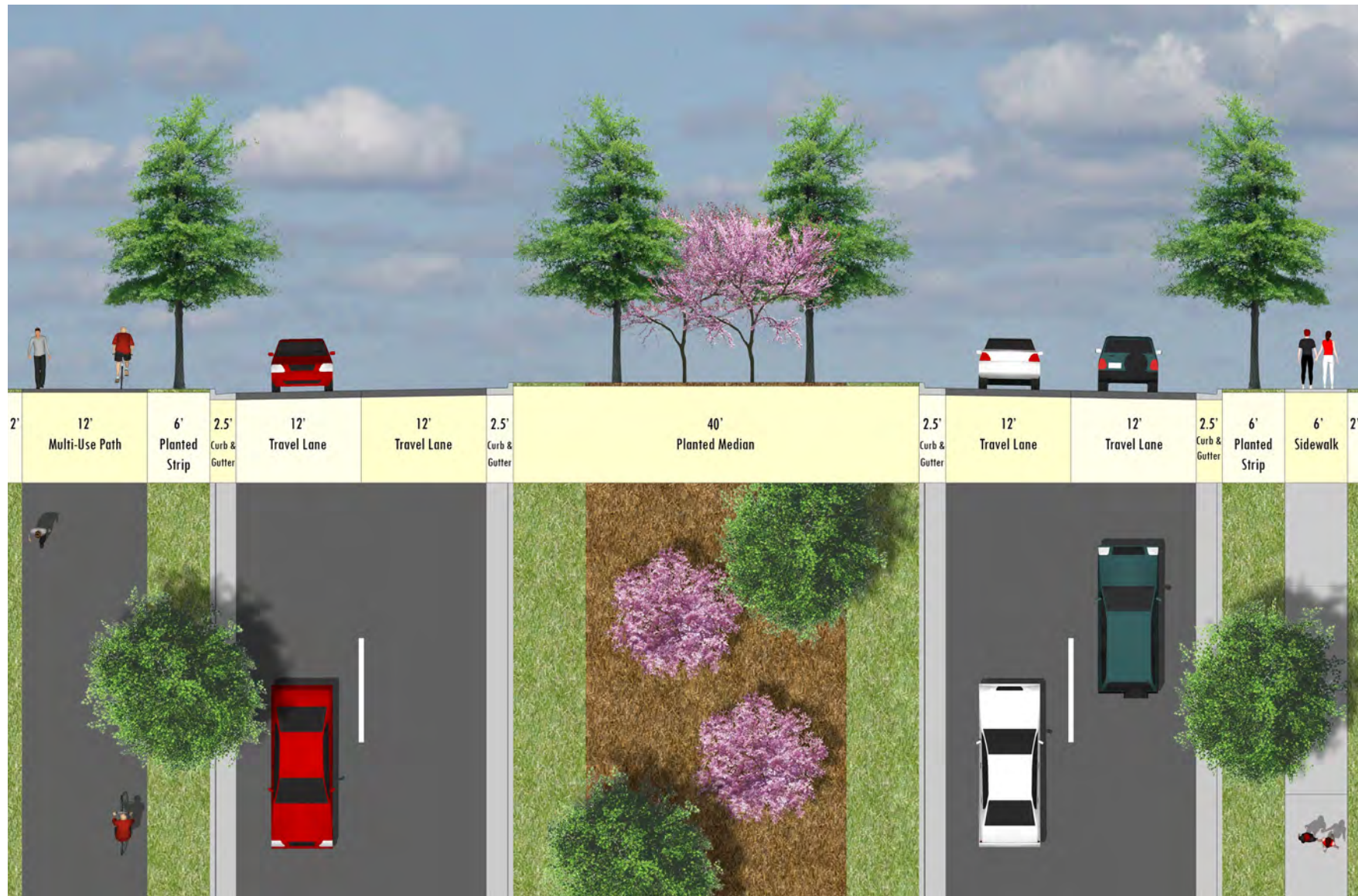
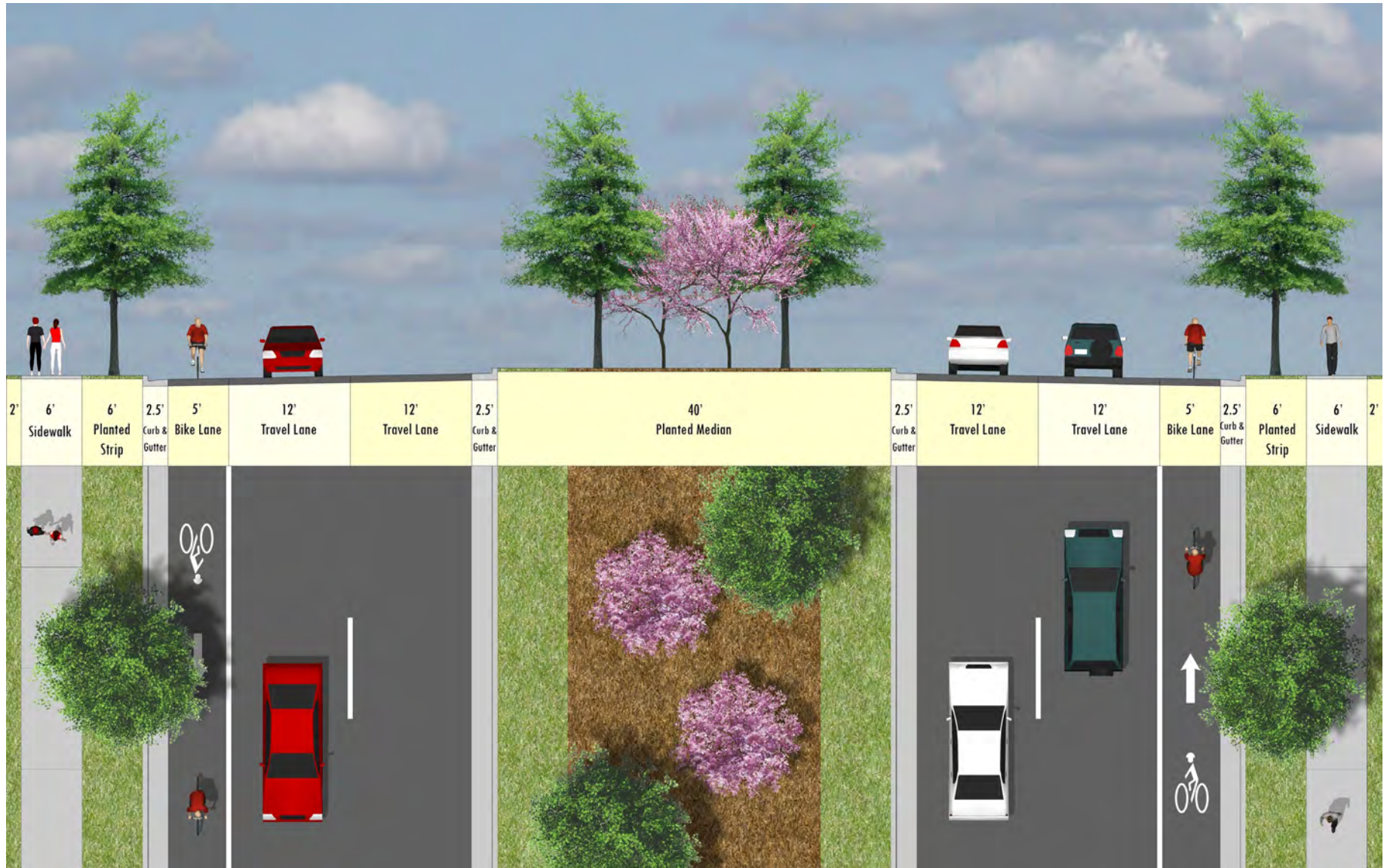


FIGURE 3.23: 4 LANE - 132' SECTION



3 STREETS

FIGURE 3.24: 4 LANE - 136' SECTION



LOCAL NETWORK PLANS

During the planning process, several areas of the City were repeatedly mentioned as having traffic safety concerns. These non-capacity issues are addressed in more detail below. Solutions to the Wilson Pike (SR-252) one-lane tunnels and the Carters Creek Pike (SR-246) and Old Carters Creek Pike intersections are included in the recommended project lists. The Columbia Avenue Local Network plan is not included in the recommended project list because it involves the construction or improvement of all local roads that were below the scale of the TDM.

WILSON PIKE (SR-252) ONE-LANE TUNNELS

Projects 33, 34, 54

The Wilson Pike Local Network Plan involves improvements to Wilson Pike (SR 252), which is located in the far eastern portion of Franklin. This section of Wilson Pike parallels a CSX railroad line. In two locations a one-lane tunnel under the railroad is utilized for Wilson Pike traffic. This situation is not ideal from an operations or safety standpoint, and will only worsen as development continues to push east away from the center of Franklin.

The proposed solution is to construct a new roadway between the two tunnels, eliminating the need for the tunnels completely. This new roadway (Project 33) would extend approximately 1.38 miles and should be constructed immediately adjacent to the railroad right-of-way to avoid remnant parcels. The initial construction would be a two-lane roadway, although future widening to four lanes should be expected and potentially considered during right-of-way acquisition.

In addition to the new roadway, two other projects are proposed to connect the existing network to the new Wilson Pike location. Project 54 would extend existing Wilson Pike west of the railroad tracks to the north, crossing the railroad tracks at-grade and intersecting Clovercroft Road, ultimately connecting to the exiting Wilson Pike alignment. Project

34 would extend existing Wilson Pike west of the railroad tracks to the south to intersect Trinity Road, south of the existing railroad crossing. Both segments would be two lane roadways and the lengths would be approximately 0.39 and 0.33 miles long, respectively.

The projects can be programmed separately, as the existing tunnels could remain useful after the relocation of Wilson Pike to the east of the railroad tracks. The Wilson Pike relocation should be pursued in the medium term timeframe. The projected cost of the Wilson Pike relocation is \$31,533,333. After the relocation of Wilson Pike, the two connector roadways can be placed in the long term timeframe, within the next 10-15 years. The northern segment is anticipated to cost \$5,700,000, while the southern segment is anticipated to be \$12,400,000.

3 STREETS

FIGURE 3.25: WILSON PIKE LOCAL NETWORK PLAN - OVERALL

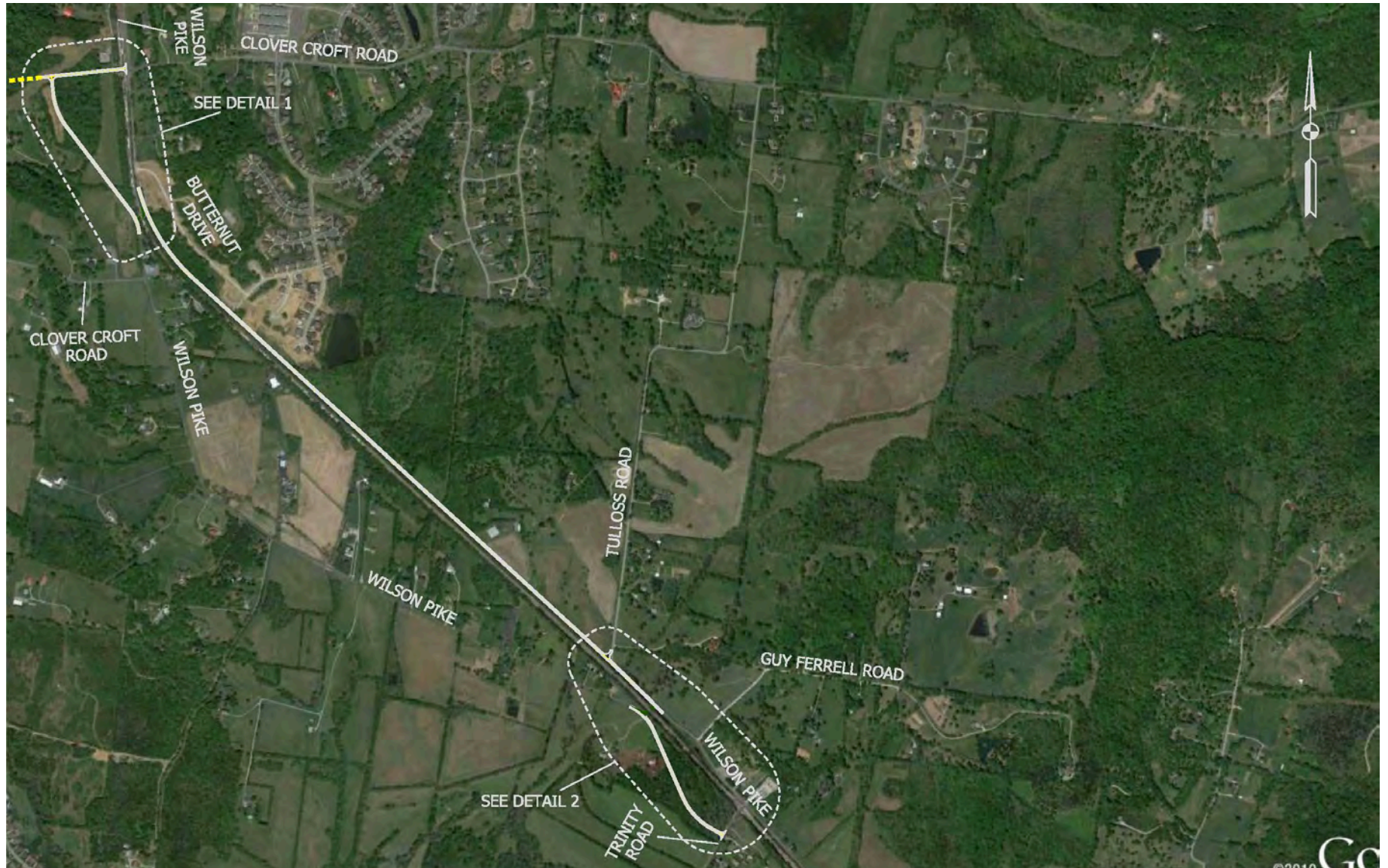
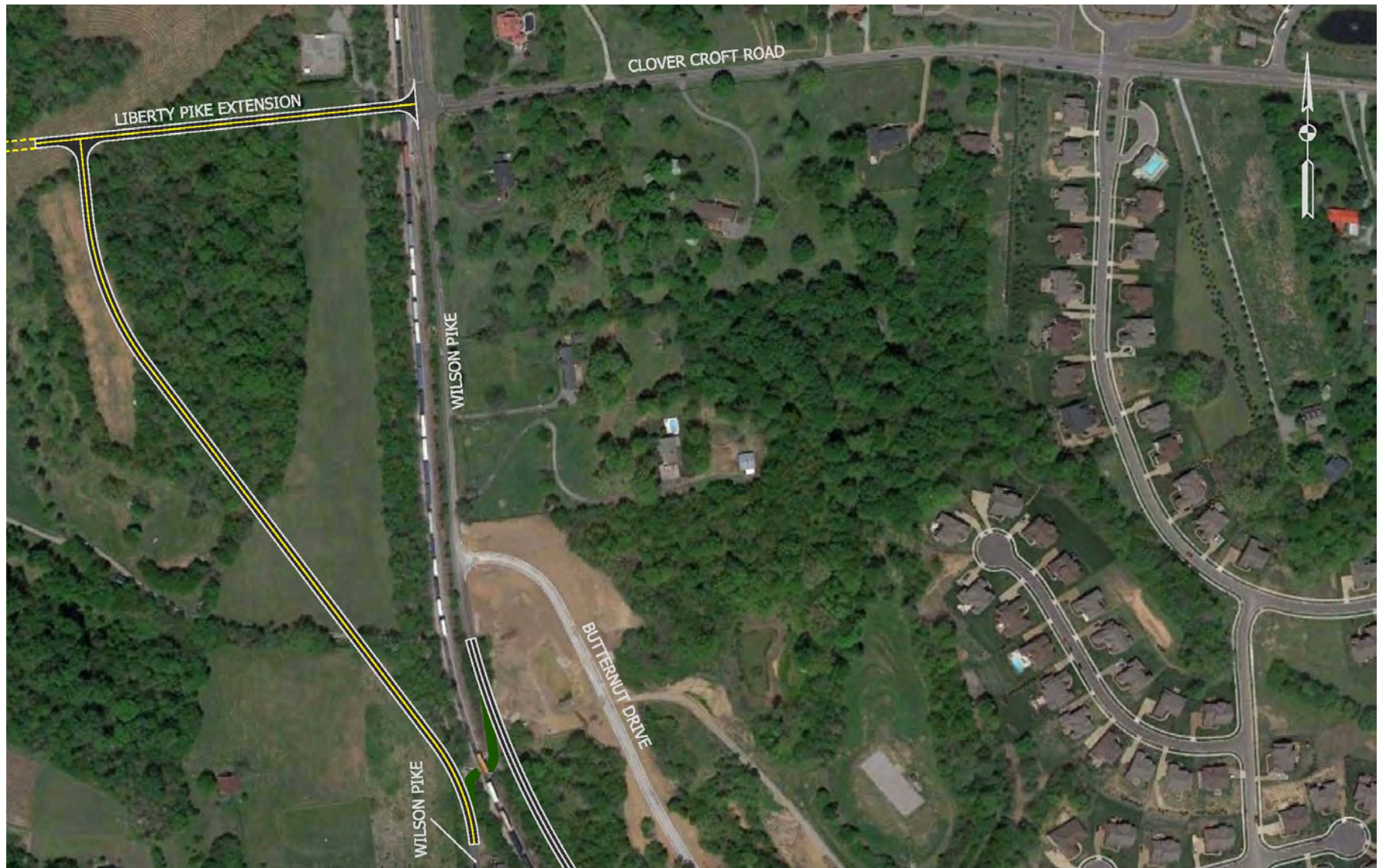


FIGURE 3.26: WILSON PIKE LOCAL NETWORK PLAN - DETAIL 1



3 STREETS

FIGURE 3.27: WILSON PIKE LOCAL NETWORK PLAN - DETAIL 2



COLUMBIA AVENUE LOCAL NETWORK PLAN

Along Columbia Avenue, between Downs Boulevard and Mack Hatcher Parkway, several local roadways exist that only connects to Columbia Avenue. These roadways intersect relatively closely to each other, creating safety issues with vehicles turning from the side streets onto Columbia Avenue. Additionally, the traffic volumes along Columbia Avenue create operational issues for these side streets during peak hours.

In order to improve operations through the corridor, it is proposed to construct a network of local roadways that parallel Columbia Avenue, to connect the existing local roadways and to create additional access points to the network, other than Columbia Avenue. These roadways can be constructed as development and redevelopment occurs in the area, or individual roadways can be constructed to ease congestion issues as needs arise. For Example, the construction of a short connection between Century Court and Beasley Drive is currently underway. This connection will allow motorists on unsignalized Beaseley Drive to access Columbia Avenue via the signalized intersection of Century Court and Columbia Avenue.

3 STREETS

FIGURE 3.28: COLUMBIA AVENUE LOCAL NETWORK PLAN



CARTERS CREEK PIKE (SR-246) AND OLD CARTERS CREEK PIKE

The Carters Creek Local Network Plan involves improvements to two intersections of Carters Creek Pike and Old Carters Creek Pike, which are located in the far southwestern portion of Franklin. The two roadways have very acute angle of intersection, limiting sight distance and causing safety concerns for motorists.

The proposed solution is to construct a new connector roadway beginning at Old Carters Creek Pike and Carters Creek Pike and Horton Lane. The length of this new roadway is approximately 1,000 feet. A cul-de-sac would be constructed at the eastern intersection of Carters Creek Pike and Old Carters Creek Pike, thus eliminating the existing, substandard intersection.

In addition to the new roadway and eastern cul-de-sac, an additional project would construct a cul-de-sac at the western intersection of Carters Creek Pike and Old Carters Creek Pike. This project does not have to be tied to the eastern intersection improvements, but should be completed within a reasonably short timeframe for route continuity and driver expectation.

Both projects should be pursued in the long term. Each project is expected to cost \$1,700,000.

3 STREETS

FIGURE 3.29: CARTERS CREEK LOCAL NETWORK PLAN - OVERALL



FIGURE 3.30: CARTERS CREEK LOCAL NETWORK PLAN - DETAIL 1



3 STREETS

FIGURE 3.31: CARTERS CREEK LOCAL NETWORK PLAN - DETAIL 2



FIGURE 3.32: CARTERS CREEK LOCAL NETWORK PLAN - DETAIL 3



3 STREETS

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BICYCLE AND PEDESTRIAN

Bicycling and walking are not merely a health or recreational activity, but rather a lifestyle choice. Bicycling and walking are self-powered options that provide a real alternative for transportation needs. Although current transportation planning focuses primarily on motor vehicles, incorporating alternative means of transportation, particularly bicycling and pedestrian traffic, has the potential to improve the City's transportation system for all users.

Based on the desire to increase connectivity and to create more walkable developments, the City is gaining momentum in working with developers to create more destinations for walking and biking such as Ovation, Westhaven, Berry Farms, Historic Downtown Franklin and The Factory. As the City continues to invest in bike lanes and multi-use paths, the opportunity exists for all residents to take better advantage of this bicycle-pedestrian network as a mode of travel to and from various destinations in the City.

FIVE E'S OF BICYCLE & PEDESTRIAN PLANNING

The collective projects and programs recommended for Franklin can be grouped into one or more of the following interrelated components.

Engineering: Engineering refers to the network of pathways that must be planned, designed, and constructed.

Education: Once the pathways are in place, cyclists and pedestrians must be made aware of the location and proper use of designated facilities as well as the destinations they connect.

Encouragement: People need to be encouraged to bicycle and walk to validate public investment and reap the benefits described above.

Enforcement: To ensure safety of all users and the long-term sustainability of the bicycle and pedestrian system, the formal and informal "rules of the road" must be enforced.

Evaluation: A regular review of the bicycle and pedestrian network

4 BICYCLE AND PEDESTRIAN

should include an assessment of cycling and walking activity, safety analysis, and ways the community continues to work to improve these numbers.

TYPES OF BICYCLE AND PEDESTRIAN FACILITIES

As roads become more congested, elected officials and City staff seek better ways to move people from place to place. Because roads cannot be expanded infinitely, facilities such as bikeways, sidewalks, and transit are important to foster multi-modal transportation options.

A combination of bicycle and pedestrian facility types are recommended to create a complete system that accommodates users of all ages, skill levels, and abilities. These facilities, along with sample pictures and design recommendations, are defined on the following pages. It is important to note that best practices and design specifications change



Existing bicycle lane on Hillsboro Road.

over time, and current minimum and/or recommended standards may change in the future. In all cases, the final design of each segment of a facility will vary based on site conditions and constraints. These guidelines are tools, and the application of these recommendations requires the judgment of a qualified design professional. Even when the specific guideline cannot be fully met, the Engineering Department or designer should attempt to find a solution that best meets the vision, goals, and objectives of this plan. All designs should be consistent with American Association of State Highway and Transportation Officials (AASHTO), Tennessee Department of Transportation (TDOT), and the Manual on Uniform Traffic Control Devices (MUTCD) standards.

The following is a list of references and sources used to develop the design recommendations for the City of Franklin. These documents provide a greater detail of information, and most are updated regularly to reflect current best practice.

- Guide for the Development of Bicycle Facilities, Fourth Edition. 2012. American Association of State Highway and Transportation Officials, Washington, DC.
- Guide for the Planning, Design, and Operation of Pedestrian Facilities, First Edition. 2004. American Association of State Highway and Transportation Officials, Washington, DC.
- NACTO Urban Bikeway Design Guide, Second Edition. 2014. National Association of City Transportation Officials, Washington DC.
- Designing Walkable Urban Thoroughfares: A Context Sensitive Approach. 2010. Institute of Transportation Engineers, Washington DC.
- Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition with Revisions 1 and 2. U.S. Department of Transportation, Federal Highway Administration, Washington, DC.
- 2010 ADA Standards for Accessible Design. United States Department of Justice.



New sidewalks are recommended to be a minimum of 6 feet wide.

SIDEWALKS

Sidewalks are the backbone of the pedestrian network. They are the most common pedestrian facility in both urban and suburban settings. They are typically constructed out of concrete and range from five to eight feet in width. Sidewalks are most commonly located within the public right-of-way between the roadway edge and the property line and are grade separated from the adjacent roadway with a curb. Current best practices recommend sidewalks be a minimum of 6 feet wide. Sidewalks should include curb ramps, appropriate intersection and mid-block crossing treatments and safety enhancements such as raised crosswalks, pedestrian refuge islands and curb extensions to allow for safe and convenient roadway crossing for pedestrians.

Design Recommendations:

- Sidewalks should be accessible to all users and designed according to ADA standards.
- Two people should be able to walk side-by-side or pass each other comfortably.
- Sidewalks should be obstruction free. Common obstructions include sign posts, utility and signal poles, mailboxes, fire hydrants, and street furniture.
- Sidewalks should be graded to prevent standing water.
- Sidewalk users should feel secure and safe from adjacent vehicular traffic.
- Where parking is present next to a sidewalk, additional width may be necessary to mitigate the effects of vehicle encroachment.
- The sidewalk surface should be smooth and continuous.
- Decorative concrete and pavers can be used to improve aesthetics and increase visibility at conflict points.
- Landscape planting strips and street trees should be included where possible to provide a buffer between the sidewalk and adjacent travel lanes.

BIKEWAYS

Bikeways are the portion of a roadway that has been designated by striping and pavement markings for the exclusive use of bicyclists. Conventionally, a bike lane is located along the outside of the travel lane, between the travel lane and the curb or parking lane. Bike lanes allow cyclists to ride at a comfortable speed without interfering with automobile traffic. Bike lanes help make drivers aware of bicyclists' right to the street and facilitate predictable behavior and movements between cyclists and motorists.

4 BICYCLE AND PEDESTRIAN



A buffered bicycle lane includes additional designated space separating the bicycle lane from the vehicle travel lane.

Where space allows or higher vehicle travel speeds are present, buffered bike lanes provide an additional buffer space separating the bicycle lane from the adjacent travel or parking lane. Bikeways should include appropriate intersection and mid-block crossing treatments to allow for safe and convenient roadway crossing for cyclists. The preferred type of on-street facility depends on the roadway classification and characteristics. Several types of on-street facilities can be used in conjunction with each other to create a well-developed bicycle network.

Design Recommendations:

- The minimum recommended bike lane width is 5 feet.
- Bicycle lane word and/or symbol and arrow markings should be

used to define the bike lane.

- A solid, 6-inch white lane line should be used to separate the vehicle travel lane from the bike lane.
- Through bike lanes should not be positioned to the right of a right turn lane.
- When placed next to parking, a solid, 4-inch white lane line should be used to distinguish the bike lane from the parking lane.
- Bicycle-friendly drainage inlets and utility covers should be used if they encroach into the bike lane.
- Lane striping should be dashed and the bike lane painted to enhance visibility through high traffic merging areas.
- “Bike Lane” signs should be posted prior to the beginning of a marked bike lane.
- For buffered bicycle lanes, the buffer should be at least 2 feet wide.

MULTI-USE PATHS

Multi-use paths are paved pathways that are designed to accommodate pedestrians, cyclists and other non-motorized activities, such as skateboarding or roller blading. Like sidewalks, multi-use paths are typically located within the public right-of-way and should be buffered from the adjacent travel lanes with a landscape strip and/or vertical separation (i.e. curb).

Where multi-use pathways are adjacent to the roadway, appropriate buffer space should be provided in accordance with applicable Federal, State, and local guidelines. Where multi-use paths cross a roadway, they should include appropriate intersection or mid-block crossing treatments to allow for safe and convenient roadway crossing for users of the paths.

Special consideration must be given to multi-use path design because they can result in situations where a portion of the bicycle traffic may

BICYCLE AND PEDESTRIAN 4

ride against the flow of automobile traffic. Despite possible conflicts created by contra-flow bicycle traffic, multi-use paths are recommended as part of Franklin's system to provide facilities for cyclists who may not be comfortable using on-road facilities. It should also be noted that the presence of a multi-use path does not prevent any user from riding in the travel lanes. Multi-use paths are recommended in situations where one or more of the following may exist:

- The adjacent roadway has high traffic volumes or high vehicular speeds.
- Bicycle and pedestrian use is expected to be high.
- The side path is used to connect other facilities primary facilities.
- The side path can be designed with few roadway and driveway crossings.
- The side path can be terminated with safe transition to another path or on-street facility.

Design Recommendations:

- 12 feet is the minimum recommended width in most situations.
- A minimum 6-foot buffer should be used to separate the path from the adjacent roadway. In areas where a 6-foot buffer cannot be accommodated, a minimum 42-inch high physical barrier should be installed.
- A total clear width of 5 feet is recommended on both sides of the path with a minimum clear width of 3 feet.
- If the clear width is less than 5 feet and one of the following conditions is present, a physical barrier should be provided:
 - The slope is 3:1 or steeper and the drop-off is at least six feet
 - The slope is 2:1 or steeper and the drop-off is at least four feet
 - The slope is 1:1 or steeper and the drop-off is at least two feet



Multi-use paths accommodate both pedestrians and bicycles.

- Vertical clearance of 10 feet is recommended with 8 feet being the minimum.
- Where possible, provide separate bicycle and pedestrian ways to reduce conflicts.
- Where possible, provide an adjacent soft surface path for runners.
- The path should be constructed to a standard that allows maintenance vehicles without causing damage to the facility.
- The path should start/stop with convenient and controlled access to and from the street system.
- The side path should comply with ADA guidelines.

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CYCLE TRACK

A cycle track is a bicycle facility that combines the user experience of a side path with the on-street infrastructure of a conventional bike lane. Cycle tracks are physically separated from vehicular traffic and are distinct from the sidewalk. Cycle tracks may be one-way or two-way and either at street level or sidewalk level. If at street level, the cycle track may be separated from the travel lane by a raised median, curb, bollards, or the on-street parking lane. If at sidewalk level, different pavement treatment and sometime planting strips are used to separate the cycle track from the sidewalk. Cycle tracks can be attractive to a wide range of riders because of the physical separation from the travel lanes.



This two-lane cycle track is buffered from the adjacent road with a raised curb and bollards.

Design Recommendations:

- Cycle tracks should be a minimum of 7 feet if one-way and 12 feet if a two-way facility.
- If the cycle track is a two-way facility, a center line should be striped to separate traffic.
- Bicycle lane word, symbol, and/or arrow markings should be placed at the beginning of the cycle track and periodically along the facility.
- If the cycle track is parking protected, parking should be prohibited near the intersection to improve rider visibility.
- Color, yield lines, and “Yield to Bikes” signs should be used to identify conflict areas.
- At minor street crossings, the height of the cycle track should be maintained, requiring automobiles to cross over the facility.
- At major intersections, the cycle track can be dropped to a bicycle lane to increase rider visibility and aid in the transition to a travel lane to accommodate bicycle turning movements.
- Another option to accommodate left-turning cyclists from a cycle track is referred to as the “Copenhagen Left.” In this scenario, cyclists approaching an intersection make a right turn into the intersecting street, positioning themselves in front of stopped cars. The bicyclists can then go straight across the road they were on during the next signal phase. For this to be successful, motorists must not be allowed to turn right on red.

SHARROW

Sharrows or Shared Lane Markings are made up of a bicycle symbol and two chevrons. They are used to indicate a shared lane environment where both bicycles and automobiles may be present. Sharrows alert motorists to the potential for cyclists and reinforce the legitimacy of bicycle traffic in the travel lane. They are commonly used in cases where a roadway cannot accommodate a dedicated, striped bicycle lane.

Design Recommendations:

- Sharrows should conform to current MUTCD practice.
- Sharrows should not be used on shoulders or in designated bike lanes.
- When being used to bridge discontinuous bicycle facilities or on high volume streets, sharrows markings should be placed more frequently, 50 to 100 feet. On lower volume roads, sharrows may be spaced up to 250 feet or more.
- Sharrow markings should be placed in the center of the travel lane to minimize wear and promote single file travel.
- For wayfinding purposes, the chevrons may be oriented to direct bicyclists along discontinuous routes.



A sharrow symbol on a residential street.

SIGNED BICYCLE ROUTE

Signed bicycle routes are streets or roads that are safe for use by both bicycle and vehicles without a designated facility. As the name implies, signed bicycle routes are indicated exclusively by signage, not a dedicated portion of the roadway pavement. They can provide key connections to destinations and trails where additional separation is not possible. Signed bike routes are most often used in rural settings.

Design Recommendations:

- Bicyclists share a travel lane with motorists.
- Signed routes should be developed strategically, indicating to

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bicyclists that there are advantages to the signed route versus other nearby roadways.

- Should be used to connect other on-road facilities and off-street paths.
- Signed routes should be established on roads that are high demand corridors for bicyclists.
- In rural settings, signed routes may be on roadways without a curb and gutter. In more urban and suburban settings, signed routes may be used where traffic speeds and volumes are relatively low.



“Share the Road” signage along a bicycle route.

GREENWAY

Greenways are similar to multi-use paths in that they are 10 to 14-foot wide, paved facilities designed to accommodate both pedestrians and bicycles. Whereas multi-use paths are generally located within the public right-of-way, greenways are usually located along natural features, rail lines, or utility corridors. They have many of the same design considerations as multi-use paths but generally have fewer road crossings and therefore fewer conflict points.

Design Recommendations

- 12 feet is the minimum recommended width in most situations.
- Path alignment should be carefully considered to protect existing natural features.
- Because greenways do not follow established roadways, crossings may frequently occur mid-block or away from intersections. Additional consideration must be given to greenway crossings. Active crossing treatments may include median refuge islands, flashing beacons, and in-pavement flashers.
- A total clear width of 5 feet is recommended on both sides of the path with a minimum clear width of 3 feet.
- If the clear width is less than 5 feet and one of the following conditions is present, a physical barrier should be provided:
 - The slope is 3:1 or steeper and the drop-off is at least six feet
 - The slope is 2:1 or steeper and the drop-off is at least four feet
 - The slope is 1:1 or steeper and the drop-off is at least two feet
- Vertical clearance of 10 feet is recommended with 8 feet being the minimum.
- Where possible, provide separate bicycle and pedestrian ways to reduce conflicts.



An example of a greenway utilizing an abandoned rail corridor.

- Where possible, provide an adjacent soft surface path for runners.
- The path should be constructed to a standard that allows maintenance vehicles without causing damage to the facility.
- The greenway path should comply with ADA guidelines.

ANCILLARY BICYCLE FACILITIES AND AMENITIES

These features include bicycle racks and other storage provisions, bicycle racks on buses, amenities at transit stops, and bicycle-friendly drainage inlets. These should be incorporated into upgraded roadways, trails and multi-use paths and warrant design considerations as part of that process.



Ancillary bicycle infrastructure includes items such as racks and bicycle-friendly drainage inlets.

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EXISTING FACILITIES

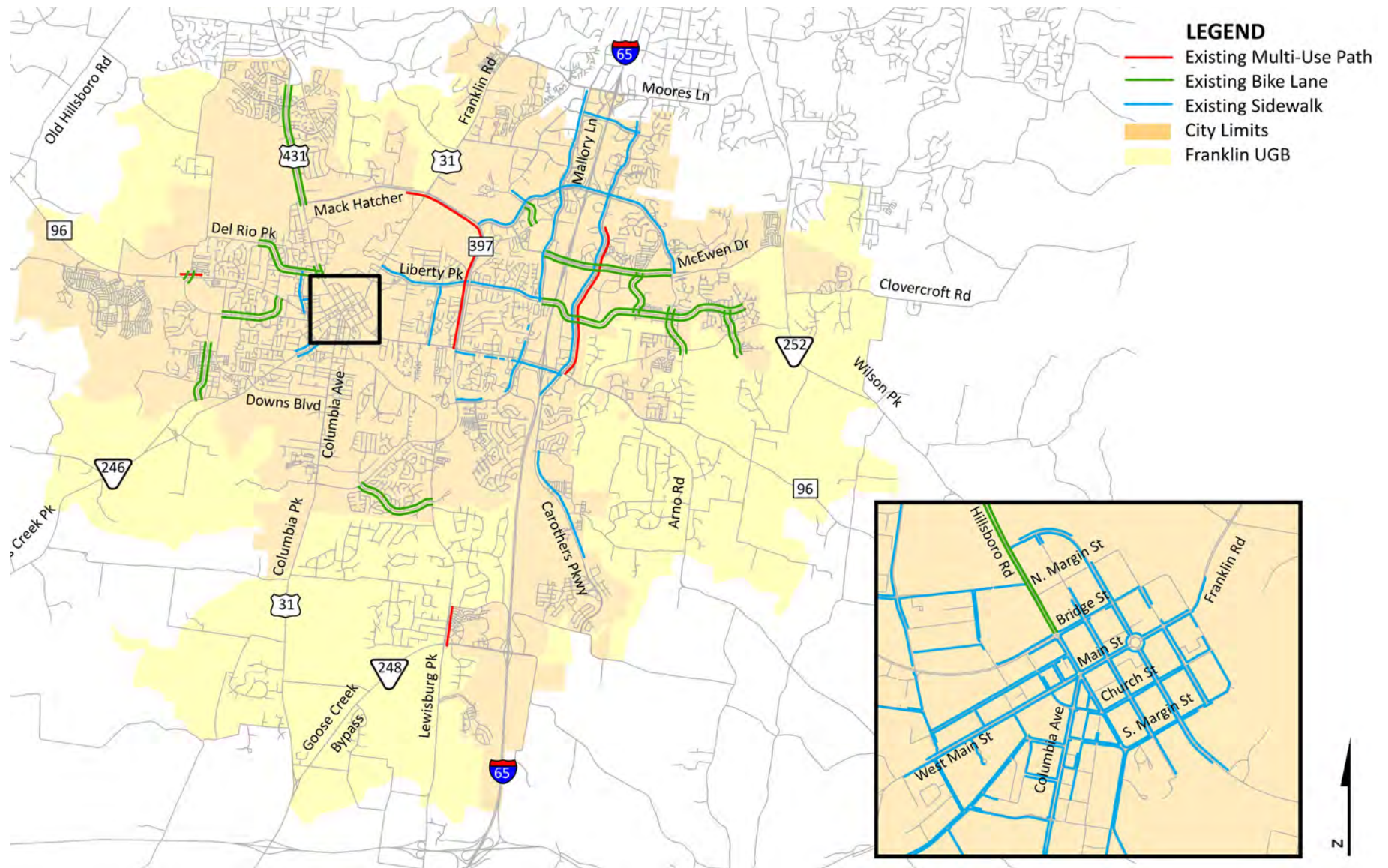
The assessment of existing walkway, bikeway, and multi-use path facilities was conducted using two primary sources of information. The first set of information reviewed was the Greenways and Trails Master Plan (GTMP) that was completed in 2015 for the City of Franklin Parks and Recreation Department. The second set of information reviewed was existing facilities and proposed project information provided by staff and Franklin’s GIS system. The proposed project information in particular was reviewed for concurrency between the GTMP and CTNP. The focus of the assessment was to provide a set of projects that close gaps in the proposed bikeway and walkway network and ensure consistency in project development between the CTNP and the GTMP.

The GTMP focused mainly on off-street facilities but does include some on-street facilities, such as on-street bikeways and multi-use paths adjacent to roadways. The assessment included a review of the GTMP to identify on-street facilities and, where needed, to include them for programming in the CTNP.

The CTNP focuses exclusively on roadways and on-street improvements, such as intersection enhancements. The existing on-street network of walkways, bikeways, and multi-use paths was reviewed using GIS data as well as data from the GTMP to assess the on-street walkway and bikeway network.

Bicycle and pedestrian networks are slowly becoming an integral component of Franklin’s transportation system, because they provide multiple benefits such as improved public health, increased safety, greater quality of life and access to employment and recreation opportunities. The City currently maintains 28.72 miles of bike lanes and 36.8 miles of trails, 8.3 miles of multi-use path and 149.73 miles of sidewalks.

FIGURE 4.1: EXISTING BIKE LANES AND MULTI-USE PATHS



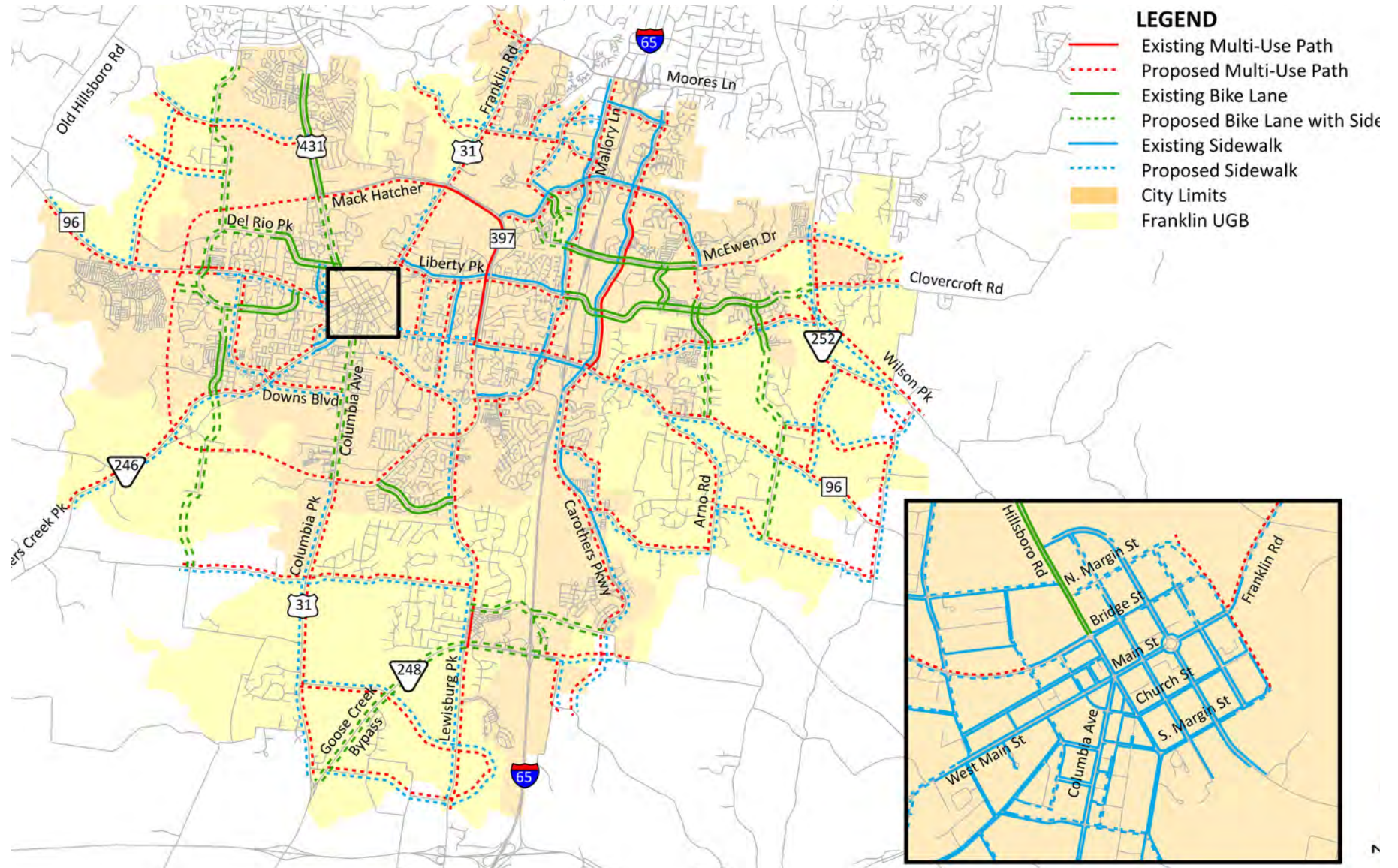
4 BICYCLE AND PEDESTRIAN

PROPOSED FACILITIES

Based on the assessment of available information, 36 new projects were identified. Also, two intersections were identified as needing more focus to ensure adequate transitions between walkway, bikeway, and multi-use path facilities. In total, 142 projects are identified to include a sidewalk, bikeway, or multi-use trail facility. When completed, these projects will provide a complete and connected network for people to walk and bike along major roadways in Franklin.

The map on the following page presents the recommended bicycle and pedestrian network for the City of Franklin. The recommendations on the map represent both short-term and long-term projects to be completed, as resources and funding becomes available, or when roadway projects are being designed, repaved or widened. This map is not meant to be static, rather it should evolve over time as land uses and conditions change. Every transportation project and new development should be evaluated for bicycle and pedestrian, with operations and facilities designed and constructed as appropriate.

FIGURE 4.2: PROPOSED BIKE LANES, MULTI-USE PATHS, AND SIDEWALKS



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ADDITIONAL DESIGN CONSIDERATIONS

INTERSECTIONS

Most conflicts between roadway users occur at intersections, where travelers cross each other's path. For pedestrians and bicyclists, conflicts are exacerbated due to their greater vulnerability, lesser size, and reduced visibility. Principles of good intersection design are:

- Clearly defined spaces and travel paths for different modes
- Legibility in symbols, markings, and signs for all modes
- Corners should be clear of obstructions
- All corner features should meet standards for accessibility and universal design
- Intersections should be adequately lighted
- Pedestrian crossing distances should be minimized wherever possible

Additionally, smaller curb radii are generally better for pedestrians. A tight curb radius creates more space for pedestrians, shortens crossing distances, and requires vehicles to slow more as they turn the corner. However, curb radii must be kept at sizes sufficient to accommodate emergency vehicles and other designated uses.

Crosswalks are used to direct pedestrians through intersections; they are discussed in further detail below. Similarly, bicycle pavement markings should be used to guide cyclists through intersections and across driveways. There are a number of different marking strategies to direct cyclists, to reinforce that bicyclists have priority over turning vehicles, and to notify motorists of travel paths.

Dotted lines measuring 2 feet in length with 2 to 6-foot spacing should be used to guide bicycles through an intersection. The bicycle lane width crossing through the intersection should match the width and positioning of the leading bike lane. Where two-way paths cross an intersection, markings should be included to indicate the two-way nature

of the facility. Chevrons, shared-lane markings, and colored pavement may be used to increase visibility of the facility through the intersection.

Where right-turn lanes are present, the bike lane or cycle track should be placed between the right-most through lane and the right-turn lane. Referred to as a bike lane pocket, motorists are required to yield to cyclists through the conflict area. Dotted lines and colored pavement are used to accentuate the conflict area. Dropping the bike lane altogether is not recommended and should only be done when the bike lane cannot be accommodated through the intersection. Where insufficient right-of-way exists, a shared bicycle/right-turn lane may be provided. In this configuration, a dashed bike lane is provided within



This highly visible stamped crosswalk also incorporates trail system identity.

BICYCLE AND PEDESTRIAN 4

the left side of a dedicated right-turn lane. Shared bicycle/right-turn lanes encourage turning motorists to yield to bicyclists but may not be appropriate at intersections with high turn volumes.

Roundabouts are becoming increasingly popular design solutions for intersections because of potential congestion reductions, more continuous traffic flow, and lower severity. Single-lane roundabouts can generally be navigated by cyclists with little difficulty. Multi-lane roundabouts, however, may create safety problems because of conflicts at entrances and exits. In both cases, bike lanes should not be located within the circulatory roadway of roundabouts. Bike lanes should normally be terminated 100 feet before the entrance to the roundabout. By terminating the bike lane, cyclists are cued to merge into the travel lane. However, some cyclists may not be comfortable navigating the roundabout in the travel lane. Common practice is to provide ramps from the bike lane onto the adjacent sidewalk or side path. Cyclists can then navigate around the roundabout as a pedestrian. In situations where bicycle facilities and roundabouts intersect, detailed analysis and engineering will be required. Also, an educational campaign to educate motorists and cyclists of proper behavior at the roundabout can greatly increase safety for all users.

CROSSWALKS

Just as it is important for people to be able to safely walk along sidewalk and multi-use paths, people must be able to safely cross streets. Crossing a street should be easy, safe, convenient, and comfortable. A number of tools are available to improve safety and make crossing easier.

Crosswalks are used to assist pedestrians in crossing streets and to help alert motorists to their possible presence. Crosswalks legally exist at intersections whether they are marked or not, unless the pedestrian crossing is specifically prohibited. At non-intersections, crosswalk markings are used to legally establish a crosswalk. Parallel striping is the most basic type of crosswalk marking. Continental or ladder crosswalk markings provide greater visibility of the crossing location.

Current MUTCD standards state that the longitudinal lines should be 12 to 24 inches wide and separated by gaps of 12 to 60 inches. Typically, 24 inch striping and 24 inch gaps are considered appropriate. The design of the lines and gaps should avoid the wheel paths if possible, and the gap between the lines should not exceed 2.5 times the width of longitudinal lines. More recently, decorative, embedded crosswalk markings have become popular because of their high visibility and ability to incorporate branding and system identity in the design. In these cases, the thermoplastic markings are embedded flush or slightly recessed in the asphalt surface rather than applied to the top. It is possible that dirt and dust may settle more easily in these crosswalks. While this is not a serious problem, it should be considered for future



Curb extensions or “bump-outs” are used to shorten the crossing distance and can be used for aesthetics and stormwater capture.

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maintenance programming.

In developing a complete and connected pedestrian and bicycle system, crosswalks should not be isolated to intersections. Appropriate locations for marked crosswalks are:

- All signalized intersections
- Crossings near transit facilities
- Trail, path and greenway crossings
- Near land uses that generate high pedestrian volumes
- Along school walking routes



A Rectangular Rapid Flashing Beacon creates a more visible crosswalk.

- Where there is a preferred crossing location due to sight distance
- Higher visibility crosswalk treatments are beneficial where pedestrian volumes are expected to be higher and/or pedestrian vulnerability is increased. This includes school zones, mid-block crossings, and at unsignalized intersections. It is important to note that at unsignalized intersections where vehicular speeds exceed 40 miles per hour, marked crosswalks alone should not be used.

High Visibility Crosswalk Techniques

Raised crosswalk or raised intersection: Raised crosswalks and intersections can eliminate grade changes for pedestrians and give them greater visibility in the crosswalk. These treatments should only be used in areas where a special emphasis on pedestrians is needed. In all cases, detectable warnings must be used to alert people with vision impairments that they are entering the roadway. Additionally, raised crosswalks and medians should not have adverse impacts on emergency response routes.

Rectangular Rapid Flashing Beacon (RRFB): Flashing beacons call attention to the pedestrian crossing and are generally activated by pedestrian push button or a pedestrian detection device. Once activated, the beacon produces an irregular flashing pattern for a prescribed length of time. RRFBs are merely a warning device, not a traffic control device. RRFBs are useful at mid-block crossings but should not be installed at intersections controlled by stop sign or traffic control signals.

In-street signs: In-street “Stop for Pedestrians” signs are plastic, paddle signs placed in the center of the roadway at uncontrolled crosswalk locations. The purpose of in-street signage is to increase the awareness of crossing facilities at uncontrolled intersections and mid-block crossings.

Pedestrian Hybrid Beacon: A Pedestrian Hybrid Beacon is a combination of a beacon flasher and a traffic control signal for marked crosswalks. When a pedestrian presses the button to

BICYCLE AND PEDESTRIAN 4

activate the beacon, approaching drivers see a flashing yellow light indicating that they should slow down and be prepared to stop for a pedestrian. The flashing yellow light is followed by a solid yellow period, and then solid red, requiring drivers to stop at a marked line, very similar to a typical traffic signal controlled intersection. Once the solid red light has been established, a “walk” signal is illuminated, indicating safe crossing for the pedestrian. After a prescribed crossing time, a “don’t walk” signal is indicated and the solid red light for motorists changes to a flashing red. During this period, the motorist is required to remain stopped until the crosswalk is clear of pedestrians. Pedestrian Hybrid Beacons should only be used at mid-block crossings.



Utility poles in the sidewalk create significant barriers to accessibility.

ADA ACCESSIBILITY

In general, sidewalks should be free of obstructions and provide adequate passing space. Sidewalk grading should be smooth and without breaks. At intersections, every sidewalk should include a curb ramp with a contrasting, detectable warning and a clear landing at the top of the ramp. The ramp width should be a minimum of 3 feet and have a minimum slope of 5%, a maximum slope of 8.3%, and a cross slope of no more than 2%.

Detectable warnings are often in the form of raised tactile devices. Raised tactile devices alert people with visual impairments to changes in the pedestrian environment. They are often used at:

- The edge of depressed corners
- The border of raised crosswalks and intersections
- The base of curb ramps
- The border of medians

Contrast between the raised tactile devices and the surrounding pavement is important. Color contrast also alerts the devices to people with low vision.

All new sidewalks and sidewalk reconstructions should contain ADA compliant curb ramps. Existing curb ramps that are not compliant should be replaced as resources become available.

4 BICYCLE AND PEDESTRIAN

STREETSCAPE

The goal of adding street trees is not simply to add to the overall number of trees in the community but also to increase the tree canopy and shade bicycle and pedestrian facilities. Benefits of street trees include:

- Improved air quality by absorbing carbon dioxide and producing oxygen.
- Slow and capture stormwater, increasing infiltration and evapotranspiration and slowing runoff.
- Creating shade to lower temperature and to create a more pleasant pedestrian experience.
- Enhanced neighborhood aesthetics.
- Creating a vertical buffer between facility users and motor vehicles.
- Provide cover, food, and habitat for wildlife.

Understory landscaping refers to the landscape elements under the tree canopy in planting areas within the right-of-way. Understory landscaping compliments and supports street trees, reduces impervious coverage, provides areas for groundwater infiltration, provides a buffer between pedestrian ways and travel lanes, and can improve streetscape aesthetics.

These landscape elements should be incorporated with roadway design and stormwater management systems to maximize ecological benefits. Bioretention facilities, vegetated swales, and other best management practices should be incorporated into new roadway construction and existing roadway reconstruction.

SITE FURNISHINGS

Amenities and site furnishings along the bicycle and pedestrian network can make facilities more inviting to users. These amenities should be selected and located to provide convenience to facility users while not impeding on access and function of the facility. Additionally, site furnishings and amenities should be sensitive to the surrounding context



Street trees and other landscape plantings provide numerous benefits, such as improved air quality, stormwater capture, and wildlife habitat.

and ongoing maintenance requirements.

Benches: Providing seating along routes and at key viewpoints allows people of all ages and abilities to use bicycle and pedestrian facilities by ensuring places to rest along the way. Benches and other site furnishings should be selected and placed in accordance with ADA requirements and any other City standards. Maintenance agreements should be established for any furnishings that will be placed on private property.

Trash receptacles: Trash receptacles should be placed at access points to side paths and greenways and strategic locations along pedestrian routes. Co-located trash receptacles and benches is

BICYCLE AND PEDESTRIAN 4



Benches, pedestrian-scaled lighting, and other furnishings can make facilities more inviting to users.

often good practice. A trash pick-up schedule should be established. If trash cannot be picked-up on a regular basis, it is often better to not have a receptacle.

Water Fountains: Water fountains can make bicycle and pedestrian facilities more user-friendly. Some water fountains are designed with special spouts and bowls for pets as well. Key access points and travel routes through parks are good locations for water fountains.

Lighting: Appropriately scaled lighting can improve the safety and visibility of bicycle and pedestrian facilities. Light fixtures can help to define the buffer between the sidewalk and the street or between

a cycle track and adjacent pedestrian facility. Future provision of lighting will need to be evaluated based on the availability of right-of-way, utilities, and capital. Often, greenways do not include lighting to enforce a “dawn to dusk” usage policy. Lighting can represent a significant cost in bicycle and pedestrian projects and should be used in areas of maximum benefit. While lighting can be beneficial along multi-use paths and greenways, these benefits must be balanced against effects on wildlife habitat. Considerations and discussions about lighting should include:

- Fixture durability
- Lighting/timing control system
- Long-term maintenance
- Compatibility with existing City lighting
- Fixture height, spacing, and shielding
- Compatibility with surrounding uses

Bicycle parking: Providing bicycle parking is essential to a successful bicycle network. In addition to reducing theft, the availability of designated bike parking can prevent the use of signposts, parking meters, trees, and fences as locking locations. Bikes locked to these items may interfere with bicycle and pedestrian traffic flow or make the facility inaccessible to persons with disabilities.

Secure bicycle parking should be included at all public facilities. Additionally, the provision of bicycle parking should be incorporated into the zoning ordinance and development review process. Guidelines for the location of bicycle parking include:

- Easy access from the street and/or bicycle facility
- Protection from motor vehicle travel ways and parking areas
- Visible and easy to locate

4 BICYCLE AND PEDESTRIAN

- Out of the way of pedestrian traffic and building access
- Near areas where bicycle facilities end and transition to pedestrian only areas
- Covered areas are recommended for longer periods of bicycle parking

Bollards: Bollards are posts, which can be used to block vehicle access to bicycle and pedestrian facilities. Bollard design can incorporate mile markers and directional signs as well as lighting. Clearance of 5 feet should be provided between bollards to allow entry by wheelchair users and bikes with trailers. Because bollards are obstructions in the facility travel way, they should be used with careful consideration. Areas where bollards are appropriate include where there is a higher likelihood of motor vehicles driving onto paths or where public open spaces abut trail and greenway facilities.

The intent of these recommendations is to provide clear direction concerning site furnishings for the bicycle and pedestrian system and to promote consistent and predictable use of signage, lighting, and furnishings. The recommendations presented are preferred. However, furnishings and materials may vary slightly by location and over time due to unique site opportunities and constraints.

WAYFINDING

The ability to successfully navigate the City of Franklin bicycle and pedestrian system will increase user comfort and accessibility. Preliminary wayfinding signage was developed with guidance from City staff. This package of signage can be used to indicate the name of the facility, location of destinations, direction of travel, and distance to destinations. Signage can help users become familiar with the bicycle and pedestrian system and identify the most appropriate route to get to their destination. Additionally, signage can play a safety role in alerting motorists to the presence of a bicycle and/or pedestrian facility.

Signs are typically placed at the origin of routes and at key locations along the route, including decision points and intersections with other facilities. With all signage, it is important that it is kept in readable condition. Signs should be inspected regularly and replaced as needed.

The City of Franklin should undertake a branding and wayfinding initiative to create a comprehensive bike and pedestrian program. This wayfinding package should include gateway and route signs, which incorporate system maps into their design. Trail identity signage can be used along routes to identify facility names and travel directions. Miscellaneous signage could include minor route maps, traffic control signs (stop, yield, etc.), and mile markers.



Wayfinding signs can help users become more familiar with the bicycle and pedestrian system and identify the most appropriate route to a destination.

OTHER GENERAL PRINCIPLES

Proactively consider the potential bicycle/pedestrian link when planning for transportation programs needs.

Bicycle and pedestrian initiatives have typically been pushed by interest groups, rather than evolving as part of a rational, comprehensive planning process that sees biking and walking as an integral link to the overall transportation system. This plan is trying to change that perception. These linkages apply not only to connections between residential areas and activity centers, but also in relation to regional transit systems and in the design of activity centers themselves, so that they can support access and circulation by modes other than just private vehicles.

Direct scarce resources toward settings with the greatest payoff.

Implementation in other communities indicates that certain factors help explain where bicycle and walking initiatives are likely to be of greatest benefit. These include settings where travel distances are relatively short between residential areas and key trip attractors, an area that is not as automobile centric, areas where there are high concentrations of people under 40 (such as university communities), and where there already exists compatible infrastructure which can be modified into appropriate facilities. Areas where automobile travel is difficult due to localized congestion or crowded and expensive parking facilities also represent good potential, so long as the congestion does not present a safety threat to bike or pedestrian travel.

Funding

Funding for bicycle/pedestrian improvements can come from a dedicated source. However, it more often exists as either a separate commitment from a developer, as part of the overall development, or as part of the upgrades to the street network.

Place emphasis on conventional facilities.

Despite the intellectual appeal of bicycle and walking facilities that double as recreational trails, evidence suggests that less exotic options such as sidewalks and bike lanes along arterials are probably just as or more effective and may cost much less. For commuting, would-be bike/walk patrons are more likely to be interested in an efficient, direct path with acceptable safety levels, than one which is isolated and attractive but that does not go where they want it to go. Nevertheless, if park trails and bike paths are in existence or are planned, their recreational use may well lead to spillover to greater levels of commuting.

Consider linkages which promote continuity.

In many urban areas where systems of bike trails, paths, or walkways exist, they may fall short in that there are significant gaps in the network by which activities are connected. For example, a regional system of bike paths/trails may simply not be connected to particular sectors of the metropolitan area because of missing links. Similarly, pedestrian paths may be blocked, truncated, or made circuitous by natural or man-made obstacles.

Think in terms of packages of actions.

Empirical evidence suggests that no one strategy looms as paramount in the decision to bike or walk. Obviously, safety is an issue, as is having a secure place to park one's bicycle, or having a place to shower and change at the end of a long and strenuous trip, or in extreme weather. It appears more practical and promising if strategies to enhance biking and walking are not done piecemeal, but as part of a carefully-thought-through program of actions or improvements, where each of the major impediments/barriers is diminished in some way.

Consider the linkage with transit.

While higher percentages of commuters using biking or walking can offer significant benefits, their potential for addressing congestion and improving air quality may be greater if bicycling and walking are

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given higher attention as supporting modes by connecting with transit for longer trips. This means careful thought and design of transit stations, the ability to attract substantial numbers of users from local neighborhoods by walking or biking, rather than by cars. It also means working within the local planning process to promote linkages between transit and the community, via path/sidewalk connections as well as avoiding conflicts with traffic. It also requires attention to inter-system connections, meaning secure bike rack/locker areas for cyclists, shelters and adequate lighting.

Seek private sector involvement and support.

Developers play an important role in the potential for bike/pedestrian use in the design of buildings and subdivisions, in terms of the location of buildings relative to streets, other buildings, services, and transit. Development review procedures can and have been used successfully to force higher design standards in regards to the incorporation of bike/pedestrian/transit usage. Similarly, employers can increase attention to bike/walk use through provision of bike facilities, showers and changing facilities.

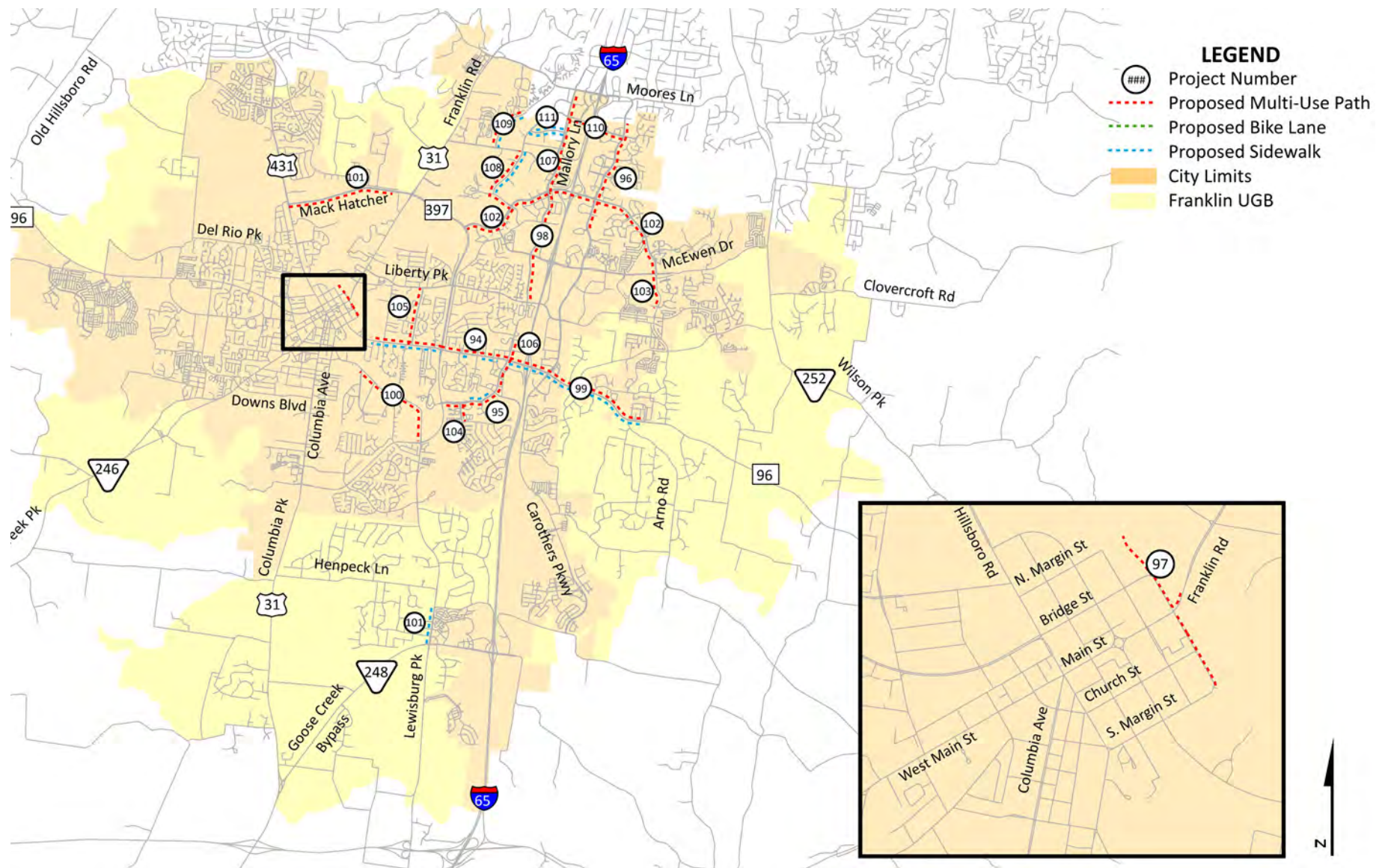
Provide marketing and education.

Assuming strategies can be implemented that will materially enhance the environment for biking or walking, then it will be important to notify the public of the changes and their potential benefit from seeking the use of the options. These efforts should be monitored and evaluated, with a collection of appropriate data, to determine the effectiveness of technical, policy, or marketing and informational approaches for future planning and programming efforts. In the long-term, the ultimate potential of biking and walking depends on major alterations to current development trends, planning procedures, funding programs, and preferences that are conditioned on current experience. Until these more fundamental changes occur, the measures listed above should dramatically increase the use and contribution available from these neglected, time-honored modes of travel.

RECOMMENDED IMPROVEMENTS

The following map and table identify bicycle and pedestrian improvements recommended in the short, medium, and long term. These projects are identified separately from the roadway recommendation in Chapter 3, because they do not include the traveled way.

FIGURE 4.3: PROPOSED BICYCLE AND PEDESTRIAN PROJECTS



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TABLE 4.1: PROPOSED BICYCLE AND PEDESTRIAN PROJECTS

	Project Number	Roadway	To	From	Length (Miles)
SHORT	94	Murfreesboro Road (SR-96)	Mack Hatcher Parkway (SR-397)	Interstate 65	1.20
	95	South Royal Oaks Blvd	Mack Hatcher Parkway (SR397)	Murfreesboro Road (SR-96)	1.30
	96	Carothers Parkway	Northern Nissan Access	Northern City Limits	1.30
	97	1st Ave	South Margin Street	N. Margin Street	0.49
	98	Mallory Lane	Liberty Pike	Cool Springs Blvd.	1.55
	99	Murfreesboro Road (SR-96)	Interstate 65	Hurstbourne Park Blvd	1.80
	100	Lewisburg Pike	Mack Hatcher Parkway (SR-397)	Eastern Flank Battlefield Park	1.40
	101	Mack Hatcher Parkway (SR-397)	Hillsboro Road (SR-106/US-431)	Franklin Road (SR-6/US-31)	1.53
	102	Cool Springs Blvd	Mack Hatcher Parkway (SR-397)	Interstate 65	1.80
	103	Oxford Glen Drive	Daylily Drive	East McEwen Drive	0.58
MEDIUM	104	Forest Crossing Blvd	Stonegate Drive	South Royal Oaks Blvd	0.25
	105	Ralston Lane	Murfreesboro Road (SR-96)	Liberty Pike	0.77
	106	North Royal Oaks Blvd	Murfreesboro Road (SR-96)	Lakeview Drive	0.28
	107	Mallory Lane	Cool Springs Blvd	Moores Lane	1.45
LONG	108	Seaboard Ln and Aspen Grove Drive	Cool Springs Blvd	Mallory Station Road	1.00
	109	General George Patton Drive	Mallory Station Road	Northern City Limits	0.60
	110	Bakers Bridge Avenue	Mallory Lane	Carothers Parkway	0.75
	111	Crossroads Blvd	Seaboard Lane	Southgate Court	0.25

5 TRANSIT

The City of Franklin has both internal City transit and regional transit. In order to ensure integration into future transportation plans, and as a consideration of future development, an analysis of existing transit and recommendations should be implemented as a part of the overall CTNP.

Franklin's transit service is managed and operated by The TMA Group for the Franklin Transit Authority. Overall, Franklin Transit provides good service to much of the City's geographical footprint. However, projected employment and residential growth clearly indicates that the Franklin Transit Authority can play a larger role within the City's multi-modal network through:

- Creating a system wide transit plan to complement the recently completed Cool Springs Multimodal Transportation Network Study (CSMTNS).
- Servicing additional residential areas, especially developments such as Westhaven.
- Lengthening hours of service to accommodate second shift workers and improve resident mobility options.
- Partnering with area employers, social service agencies and others to promote transit and the various multi-modal options to travel between home and work.
- Improving commuter service to better accommodate people commuting into or out of Franklin.
- Incorporating transit into transportation infrastructure to ensure that bus operations are understood and incorporated as part of development and roadway planning.
- Increasing technology use to enhance transit and multi-modal transportation capabilities.

5 TRANSIT

EXISTING FACILITIES

The Franklin Transit Authority commissioned the CSMNS to focus on multi-modal transportation goals for the Cool Springs area which include the following:

- GOAL 1: Provide Alternative Transit Solutions to Serve and Attract More Riders
- GOAL 2: Encourage Multi-Modal Transportation Options
- GOAL 3: Identify Transit Funding Strategies
- GOAL 4: Partner with Employers to Promote Multi-Modal Options to Get to Work
- GOAL 5: Encourage Best Practices in the City of Franklin

LOCAL TRANSIT: FIXED ROUTE & ON-DEMAND SERVICE

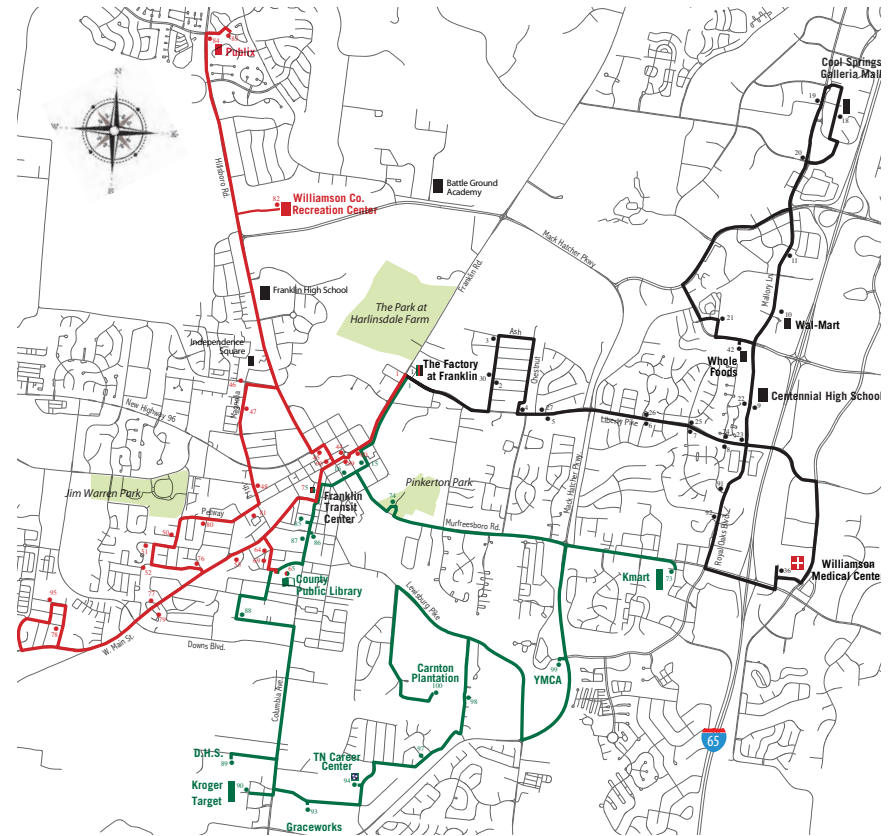
Fixed route service is provided throughout the City of Franklin, including the Cool Springs area. All transit vehicles are ADA accessible.

West Bound Route – key service areas include: The Factory at Franklin, Downtown Franklin, Williamson County Public Library, Natchez Street, West Meade, Shawnee, Fieldstone Farms, and Independence Square. Operation hours are Mon-Fri: 6:00am to 5:00pm and Sat 8:00am to 5:00pm

East Bound Route – key service areas include: The Factory at Franklin, Sycamore, Liberty Pike, Williamson Medical Center, Centennial High School, Wal-Mart, Cool Springs Galleria, Mallory Lane, Dwell Apartments/McEwen, and Whole Foods. Operation hours are Monday-Friday 7:00am to 6:00pm and Sat 9:00am to 6:00pm.

South Bound Route – key service areas include: Franklin’s Antique District, Historic Carter House, Lotz House, Carrton Plantation, Pinkerton Park, Williamson County Library, Department of Human

FIGURE 5.1: EXISTING TRANSIT ROUTES



Services, Graceworks, Parkway Commons, Franklin Family Y.M.C.A., and Watson Glen Shopping Center. Operation hours are Mon-Fri 8:00am to 4:00pm

Transit On Demand (TODD) is also offered and is scheduled on a first-come, first-serve basis with priority given to ADA eligible individuals. TODD is a pre-arranged, curb-to-curb pick-up and drop-off service that also provides all-day, same-day access to

Franklin’s Fixed Route Service.

TMA also provides the VanStar regional commuter vanpool program, which serves the Middle Tennessee region, including employers, property managers and commuters.

REGIONAL TRANSIT: EXISTING RTA FRANKLIN/ BRENTWOOD EXPRESS

The Regional Transportation Authority provides two express routes that serve the City of Franklin

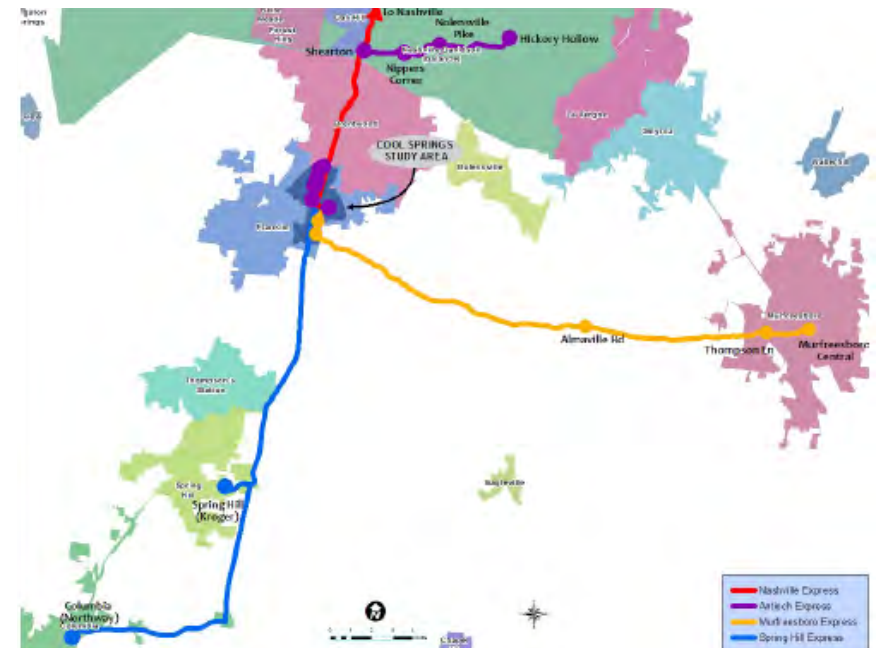
- Route 91X – Franklin/Nashville Express Commuter Bus Service - Franklin Transit provides connecting local service to 91X
- Route 95X – Spring Hill/Nashville Express Commuter Bus Service

EXISTING LAND USE

A key component to transit success is its incorporation with land use and land use planning. Key land use principles discussed included:

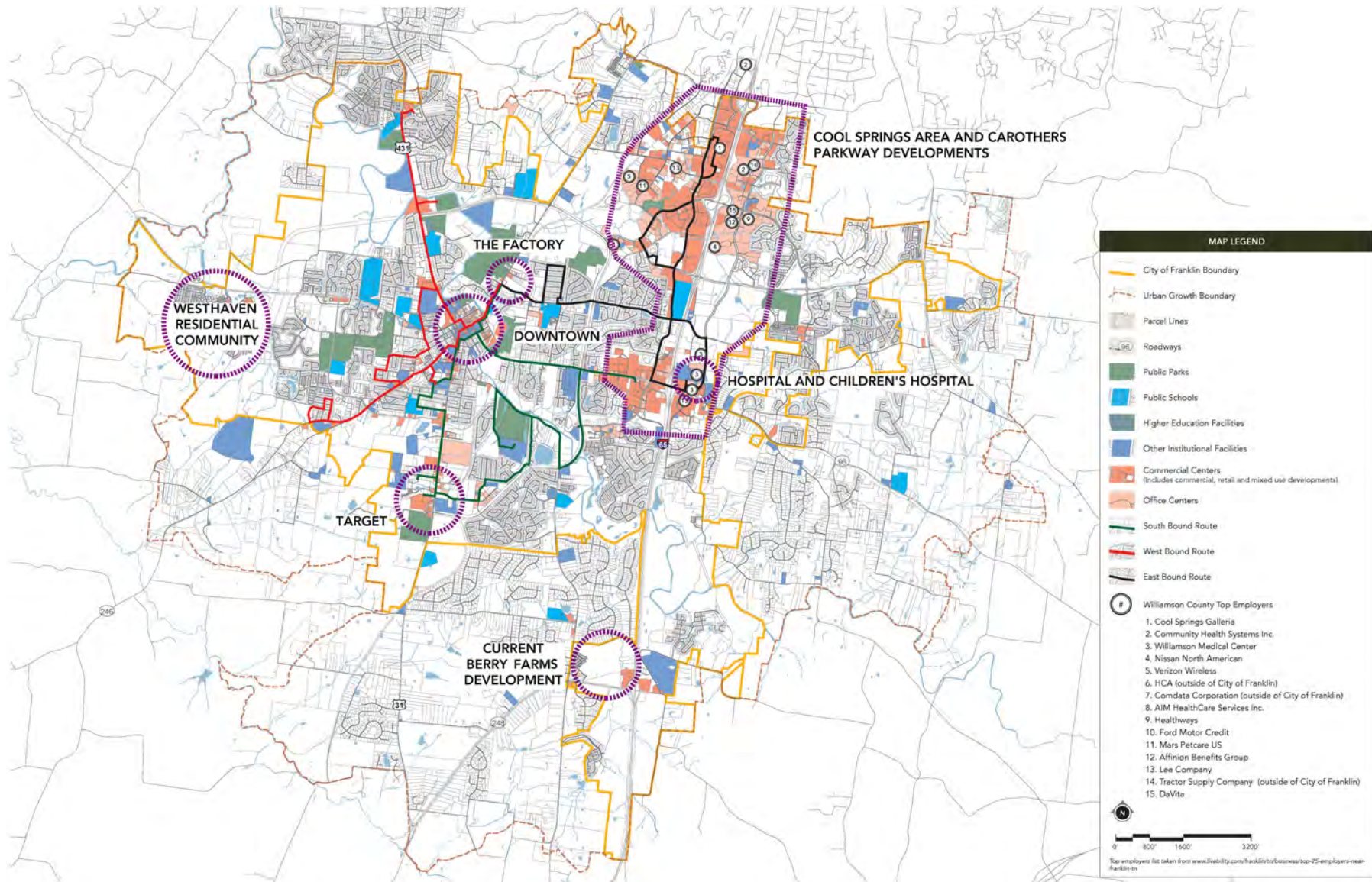
- Transit currently serves most of the City’s key activity centers
 - The Factory
 - Downtown Franklin
 - The Williamson Medical Center and surrounding medical facilities including: Rolling Hills Hospital, Vanderbilt Children’s Clinic and numerous specialty surgical and medical facilities
 - Parkway Commons
 - Cool Springs Galleria
- Land use planning and approvals can better incorporate transit planning (such as the Westhaven development); a lack of planning has created developments that warrant but lack transit

FIGURE 5.2: EXISTING RTA EXPRESS



5 TRANSIT

FIGURE 5.3: EXISTING ACTIVITY CENTERS



DEFICIENCIES AND CONNECTIVITY ISSUES

Deficiencies and connectivity issues were identified with the help of City staff, TMA staff and TMA's Cool Springs multi-modal plan consultant. The Franklin Transit Authority provides good transit service with the following limitations:

- Current bus facility is too small to store and park vehicles.
- Current transit routes do not service many residential areas.
- Access to and from bus stops lack accessible accommodations. Sidewalks are not available in the majority of areas.
- There has been a transit focus in the Cool Springs area, but more is needed for Carothers Parkway.
- Transit can improve with better coordination and integration with the City's transportation infrastructure.

FUTURE FACILITIES

As the following maps indicate, Franklin is projected to grow significantly over the next twenty years, especially within the Cool Springs / Carothers Parkway areas. This includes residential, commercial and retail expansion, as illustrated by the following figures.

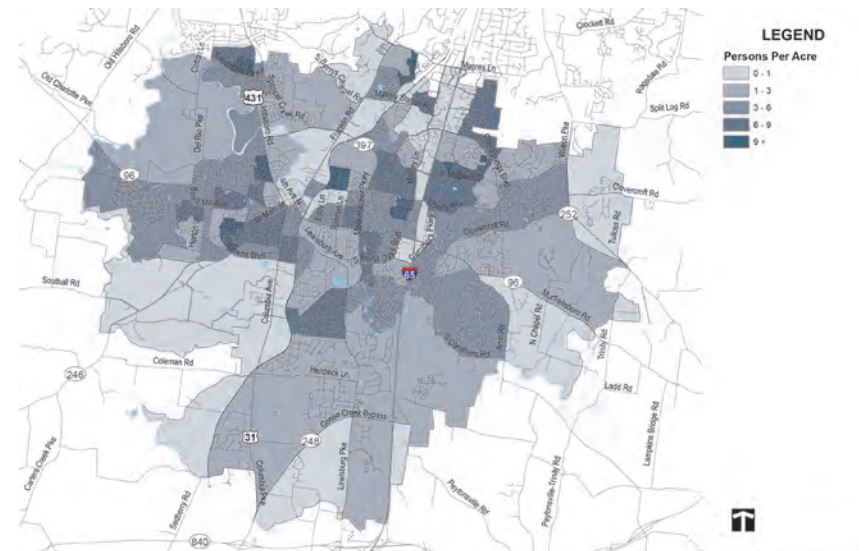
Furthermore, the CSMTNS projects significant job growth in the Cool Springs / Carothers Parkway area. This projected growth clearly indicates that the City is wise to incorporate transit into the City's transportation planning. This is underscored by the list of planned and projected new activity centers within the City.

Overall, the City and the Franklin Transit Authority should establish a formal partnership to improve the communication regarding future transportation decisions. This partnership should take the elements included in this plan and the components of the CSMTNS to build upon

FIGURE 5.4: 2015 POPULATION DENSITY



FIGURE 5.5: 2040 POPULATION DENSITY



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FIGURE 5.6: 2015 EMPLOYMENT DENSITY

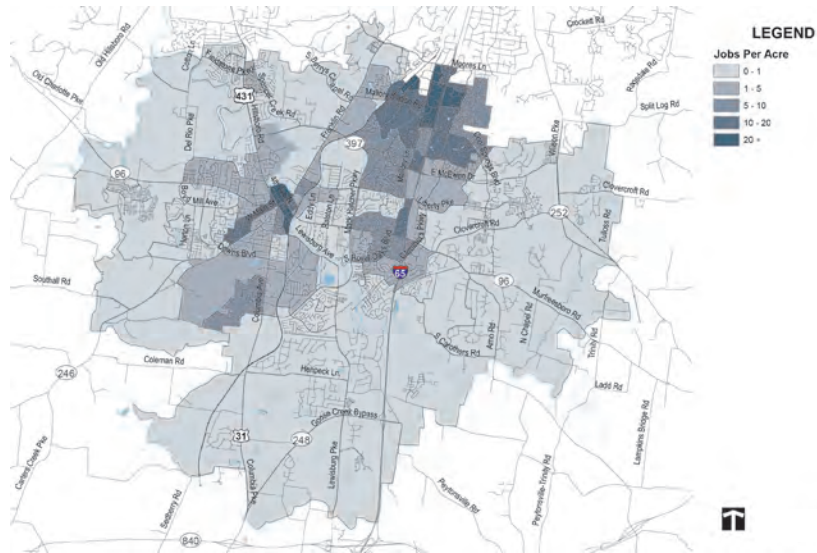
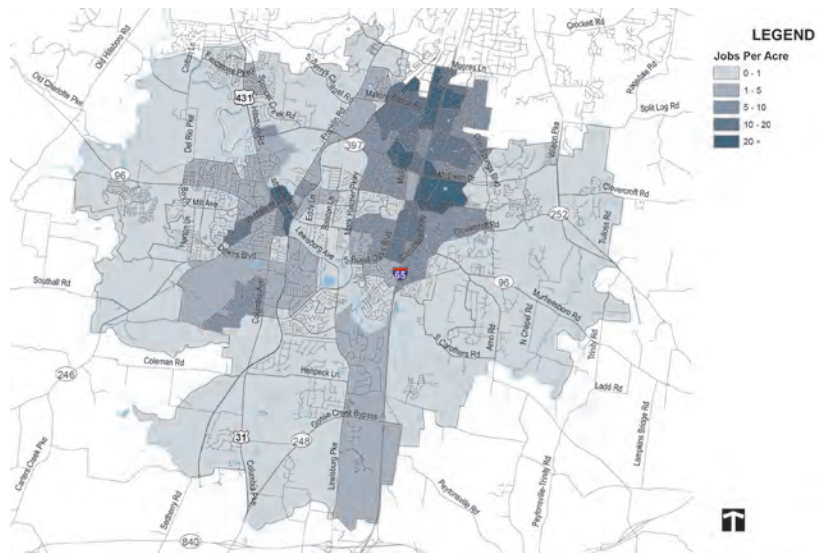


FIGURE 5.7: 2040 EMPLOYMENT DENSITY



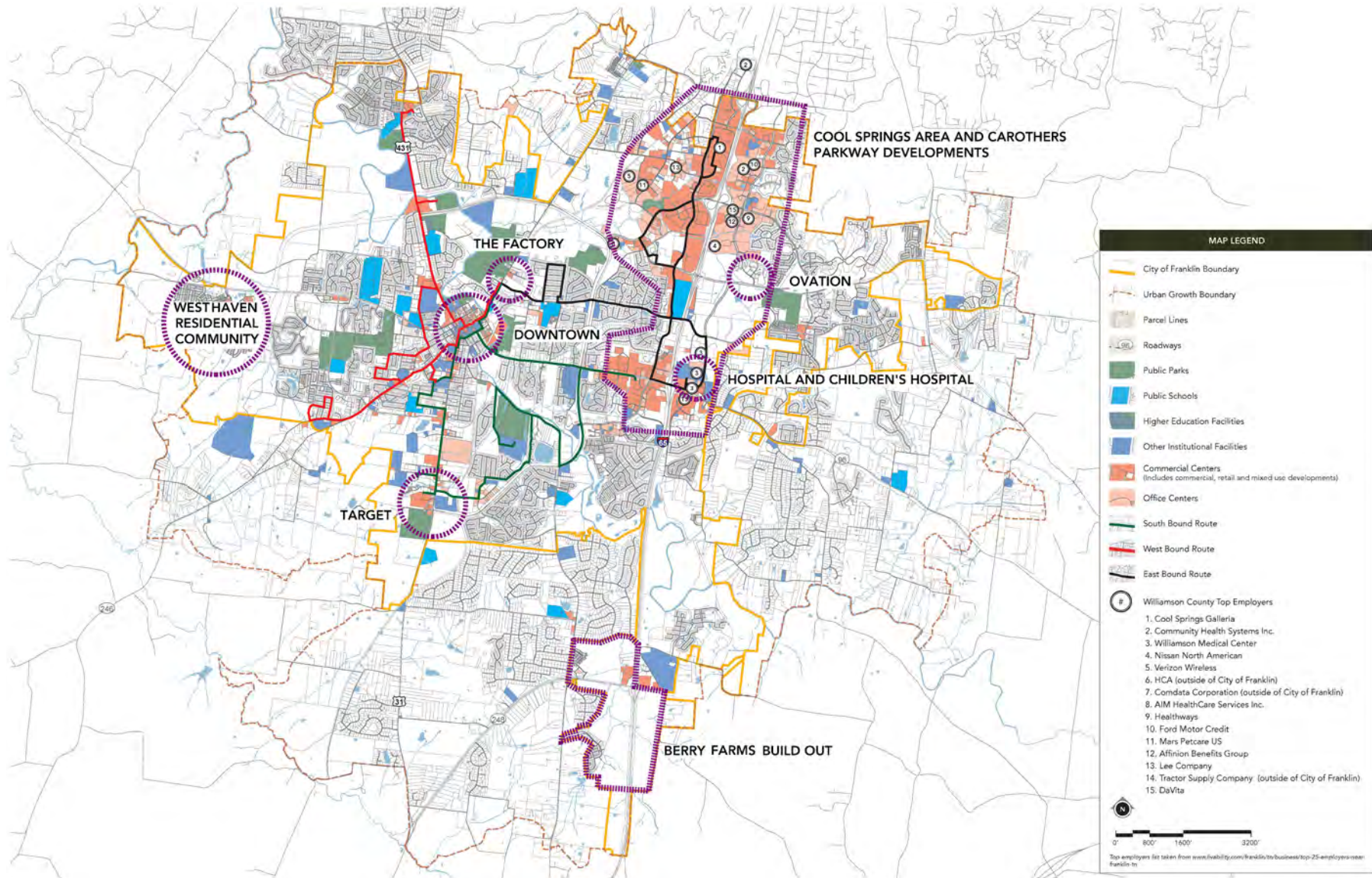
and create a long range transit plan. In that planning process, the partnership should engage the business community, riders, citizens and other key stakeholders to work together to incorporate the entire city and region into a comprehensive transit plan moving forward.

PLANNED AND PROJECTED ACTIVITY CENTERS

The following map notes the planned and projected future activity centers, which indicates significant expansion of the Cool Springs area, Berry Farms, Westhaven and the Ovation development.

As all of the above maps indicate, the Franklin Transit Authority will need to adapt and grow to meet the projected population changes and service the projected activity centers. To do so, the following transit operations and multi-modal approaches are recommended.

FIGURE 5.8: FUTURE ACTIVITY CENTERS



5 TRANSIT

FUTURE TRANSIT / LAND USE CONSIDERATIONS

- Transit system should be an integral part of retail developments in new retail centers such as Berry Farms and Ovation. Multi-modal transportation options will improve resident and visitor access to all of the City's retail areas, especially Cool Springs Galleria. The Galleria will need to become more competitive which could include offering more transportation options for visitors.
- More vehicles getting across town quickly and access both sides of I-65.
- Understand future gathering places throughout the city and provide transit amenities to these areas
- Provide access to downtown from other areas in the city, especially hotels in the Cool Springs area.
- More developments should consider internal shuttle service. Currently, Ovation is primed to connect to the local transit system with private shuttles.

FUTURE TRANSIT OPERATIONS AND INFRASTRUCTURE OPTIONS

(NOTE: The CSMTNS also recommended many of these items)

- Tie-in with local and regional higher education colleges, universities and community colleges. An example is a potential tie-in with Columbia State Community College for transit commuting services. The campus service could then connect to Ovation by an internal road.
- Service Carothers Parkway: An opportunity to better service the Carothers Parkway area is to utilize park and ride locations at anchoring points along Carothers parkway. Then, create private shuttles that deliver people to specific developments and office locations.
- Develop a Carothers station that utilizes the same concept as

downtown, just more modern.

- Serve the Berry Farms area when complete will be larger than Cool Springs. Offering routes that accommodate those residents and employees will be needed.
- Expanding routes within the next 10 years
 - Lewisburg Pike to Murfreesboro Road (SR-96) - connect higher density neighborhoods
 - Columbia Avenue
 - Mack Hatcher Parkway (SR-397) express bus that could then transition to light rail
 - Provide more route options to access the Williamson Medical Center
 - There will always be a need for small-scale on-demand transit.
- Tie transit routes to current and future affordable housing, which will require additional equipment and people to serve these connections.
- Incorporate access to and from bus stops. Continue efforts to accommodate accessibility, vehicle size, routes and the types of disabled rider service. Provide facilities that are comfortable for seniors.
- Connect to Antioch and Brentwood regional routes
- Establishing reverse commute options on an express bus system is necessary. Local systems do not connect to the express bus system. Look at employer led shuttle services to expand services. Would like to strive for hourly service to the West End/downtown area in Nashville and connectivity to the airport.
- Examine a central transit lane within the roadway corridor, providing faster route times and promoting safer roads and streets. This approach will also require a robust community engagement effort to educate the public regarding the benefits of a dedicated transit

lane.

- An attractive, efficient and affordable system.
- Clear visual cues to distinguish safe areas for bikes, buses and transit.
- Shelters at all transit stops, incorporate solar lighting (to minimize infrastructure expenses), and install technology systems to give real time information to passengers.
- Utilize Flex Routes, which allow a route to “flex” within a predetermined area in response to rider requests, avoiding some of the requirements applied to a fixed route.
- Add or create an additional circulator routes that tie into the fixed route system.
- Create a transit lane along Murfreesboro Road (SR-96) that could be expanded as the city grows.
- Build a new downtown bus facility and a Cool Springs Transit Center.
 - The goal is to connect downtown and the Cool Springs/ Carothers Parkway area to the rest of the city and region.
 - Connect with regional transit; bike-share, car share, car pool, van pool and park & ride lots.
 - Connections with activity centers – retail , residential and commercial.
 - A facility that includes dining, retail services, bathrooms and other amenities.
- Traffic signal priority on existing and proposed major transit routes (Mallory Lane, Carothers Parkway and Murfreesboro Road (SR-96) to downtown Franklin.
- Technology
 - Real time transit arrival/departure displays
 - Mobile technology

- Environmentally friendly buses
- Improved route identification
- Bus pull in/out on major roads to aid rider access and safety
- Bike racks at major stations and stops
- Co-locate transit routes/facilities at schools to share land and space. Also take advantage of the key groups that are already traveling to the schools.
- Improve pedestrian infrastructure that connects the entire city. Other improvements include:
 - Improve walk signal timing to allow time to safely cross streets.
 - Usable sidewalks that connect with transit stops and stations
 - Connections to the City’s proposed greenway system
 - Wayfinding signs for transit, bike, car share, retail and local interest areas
- Expand emergency ride home benefit to all transit and vanpool riders, regardless of status.

FUTURE REGIONAL TRANSIT

These recommendations were contained in the CSMTNS, which recommended implementation once the fixed route and circulator route changes/additions were well established. The City of Franklin should assist the Franklin Transit Authority in implementing these recommendations.

- Establish additional Park and Ride Lots to serve existing 91X service
- Create additional express routes servicing Murfreesboro, Springs Hill and Antioch
- Establish all day service and reverse commute.

5 TRANSIT

FUNDING

There are a number of Federal programs that, together with local matching funds, have been used to fund transit capital and operations spending. However, with the reduction of available Federal funding, transit systems now need to seek other potential funding sources.

Our experience is that the City, the Franklin Transit Authority, local businesses, foundations and others work collaboratively on a mix of financing that can sustain the recommended improvements and changes. Although available Federal funding has been reduced, many new Federal programs favor funding scenarios, where local community and regional sources work together in terms of planning and funding transportation improvements.

Potential public-private approaches include:

- Value Capture and Impact Fees – The CSMTNS recommends that the City should either dedicate a portion of this fee to transit improvements in the area, or add an additional fee for such improvements.
- Tax Allocation District - In Georgia, this approach has been used to assist a number of communities to capture the increase real estate valuation made possible from public improvements.
- Dedicated Real Estate Tax - The CSMTNS recommends that the City could dedicate a certain portion of property taxes, within a newly created Cool Springs Special Service Area, toward a transit fund. This could be done through a “value capture” mechanism, whereby a certain portion of a tax increase, which is related to an increase in property value, goes into the fund. The same mechanism could be used for retail sales taxes in the area.
- Realty and Mortgage Transfer Tax - The CSMTNS recommends this as a good way in capturing the value unlocked by the addition of a robust transit system to the Cool Springs area. This approach, given

the current boom in housing construction and sales in Williamson County, would have great potential in funding transit.

- Vehicle Sticker User Fees - The CSMTNS recommends the City establish a vehicle sticker that has the potential to create an additional \$1.1 million (assuming a \$50 fee) for personal vehicles registered in the City, or \$3.1 million for personal vehicles registered in Williamson County.
- Community Improvement Districts – Tennessee allows local areas to establish a CID to essentially “self-tax” by adding a CID tax levy to district area real estate taxes. This approach uses the CID “self-taxes” to leverage State and Federal resources. These CIDs have been very successful in creating funding for road, van pool, and other similar transportation infrastructure improvements.

CONCLUSIONS

Communities across the United States and throughout the world have recognized that providing attractive multi-modal transportation options improves both economic vitality and environmental benefits, through the reduced use of single occupant vehicles. As noted in the overview, following immediate actions are recommended to continue the incorporation of the Franklin Transit Authority as a part of the City’s overall multi-modal transportation planning and operations.

- City of Franklin / Franklin Transit Authority Partnership: The City is to be commended in its inclusive approach to this CTNP study. To continue this relationship, we recommend that the City and Franklin Transit Authority establish a formal partnership. This partnership can improve the communication to help transit be seen as a key component in all future transportation decisions. This includes all design, traffic and mobility studies, land-use, transportation improvement, and development decisions.
- Franklin Transit Authority System Plan: The Cool Springs Multi-modal Transportation Network Study was an excellent first step that

brought forward many good recommendations for improving transit service within the Cool Springs / Carothers Parkway area. We recommend that the Franklin Transit Authority, the City, the business community, riders, citizens and other key stakeholders work together to incorporate the entire City and region into a comprehensive transit plan moving forward.

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6 IMPLEMENTATION

Compared to implementation, preparing the Comprehensive Transportation Network Plan is relatively uncomplicated. The real challenge comes in translating a plan's vision, goals, and recommendations into the day-to-day operations and actions of City government. The main purpose of the City of Franklin's Transportation Plan Update is to implement its recommendations.

When the City determines how to implement the CTNP's recommendations, it is important to continuously consider the integrity of the planning process, the community's values, the City's resources and the importance of a particular project in the overall transportation vision. A plan is a community's future. It is the collective will and road map for the future. It is a community's duty to find ways to give it life that keep it true to the vision and maintain its integrity.

The CTNP is comprehensive for a reason – because everything in a living community is interconnected – and it must be implemented in a way that treats its components as part of a whole. The plan takes great care to provide recommendations within the context of that basic reality.

With these thoughts in mind, this chapter is meant to help the community adopt, implement and update the CTNP and make it available to the public.

ADOPTION

The City must prepare a resolution to adopt its transportation plan to ensure that it promotes the public health, safety, morals and convenience, and for the sake of efficiency and economy. Historically, the City of Franklin Board of Mayor and Alderman (BOMA) has approved a resolution recommending approval of the Transportation Plan to the Franklin Municipal Planning Commission. The Franklin Municipal Planning Commission then holds a public hearing and passes a resolution adopting the Transportation Plan. The approved Transportation Plan then needs to be recorded at the County Register of Deeds office. If residents are actively involved throughout the planning process, the public hearing should go smoothly. Using a resolution,

6 IMPLEMENTATION

the local government formally adopts the plan – by a simple majority vote. The procedures for adopting a plan are described in Tennessee Code Annotated, Title 13, Chapter 4, Part 2, and Section 13-4-202 (TCA 13.4.2.13-4-202). Even with a well-designed planning process, a community may lack consensus on certain issues or, in the worst case, may not have enough support to adopt a plan. In that case, the City may choose:

- Setup a committee to work through the remaining issues. The committee should have balanced representation from all sides of the issues in dispute and a definite timeline for reporting its recommendations.
- Recommend further study of the issues with a clear timeline. Through additional study, participants may discover new information that will help them develop a consensus.
- If the community is extremely divided on an issue, it may be necessary to bring in a professional facilitator or a mediator to help it find a solution. Sometimes a community must make tough choices and move on.

INTERPRETATION

The CTNP should serve as Franklin’s guide for public and private transportation project development throughout the City. The long range goals, objectives, and recommendations, along with the supporting maps, are intended to guide decisions towards Franklin’s collective vision of the future. Members of City staff, Franklin Municipal Planning Commission (FMPC) and the Board of Mayor and Aldermen (BOMA) should interpret the goals, objectives and recommendations as long-term and deliberately broad vision. The FMPC and the BOMA should keep in mind that this plan reflects the community’s values. City officials cannot expect to control all circumstances. However, the spirit of this plan should be adhered to in order to ensure that the community’s values are

maintained. The project listing, on the other hand, is intended to direct the day-to-day decisions concerning more specific and task oriented activities. Each time the BOMA reviews the transportation priorities, they should interpret the project list by saying, “given our long-term goals and changing community conditions, these are the projects that we want to complete in the short-term and long-term, and this is how we plan to accomplish them.” Interpreting the plan in this way will enable the members of both the FMPC and the BOMA to justify their decisions regarding proposed development or redevelopment in Franklin, as it relates to the transportation component of the project.

When a new annexation, rezoning, planned unit development (PUD), subdivision or site plan review request is filed with the Planning & Sustainability Department, City staff should review and evaluate the application against the Land Use Plan, the CTNP, and the City’s ordinances to provide a staff report, with a formal recommendation, to the FMPC regarding its findings.

CAPITAL IMPROVEMENT PLAN

The CTNP covers a broad variety of issues and subject matters and includes both policy decisions and projects. In order to implement the plan and projects, the City should continue to complete a Capital Investment Plan (CIP). The CIP is a planning document that covers a timeframe of five to ten years, is updated annually and implements the CTNP by providing the necessary funding for short-range infrastructure and capital investment projects. The document provides guidance and planning for capital improvements throughout the city and allocates financial resources to various community needs and requests. The document states the BOMA’s prioritization of the financial resources available for capital project spending by identifying which projects should be included, when they should be constructed and how they will be financed.

In order to update the City’s CIP, the Engineering Department should

update the current CIP with the projects listed in the CTNP. The CIP represents the City's tentative commitment to comply with the plan, unless circumstances or priorities change in the future. The commitment is more certain in the first year of the CIP and becomes increasingly more tenuous in subsequent years. Nevertheless, the CIP should be used as the City's present plan and priority over the next five to ten years.

Once the CIP is updated with the information contained in the approved CTNP, City staff should prioritize the projects and develop a rolling strategy for moving these items forward. This information should be shared with and approved by the BOMA, since they are responsible for the City's budget. It will be important that this is completed prior to City budgeting time in order to ensure adequate funding is in place. Even though the CIP is a planning document, it should not be an automatic authorization of the construction of projects, due to the procurement process and the allocation of resources.

MONITORING & UPDATE

A planning process does not have a defined beginning and end. It is an on-going process that responds to new information and circumstances and incorporates changing conditions into decisions. Circumstances that may change include physical conditions of infrastructure, economic climate, the natural environment, and social and community goals.

Once the plan is adopted, it will need to be revised from time to time to ensure that it stays consistent and relevant to current conditions. It is best that the City continue in the same partnership manner it has to undertake the creation of this plan.

Periodically and prior to preparing the annual City operating budget, City staff should undertake an assessment that documents the impacts of the project implementation activities. This could be accomplished with preparing the update to that year's CIP.

A major transportation plan update for a community like Franklin

should occur approximately every 5 years, or sooner, depending on the conditions within the community. The purpose of the plan update is to re-evaluate the goals, policies, and projects contained within this plan (noting those to change and those to remove), and to develop new policies, if necessary, to make sure that this plan is effective. Additionally, it will be necessary to update the travel demand model, especially when significant development changes occur.

The plan update process is further described in the next section.

PLAN AMENDMENT PROCESS

Due to funding requirements, it is important to keep the CTNP current. Plan amendments should be considered when the overall vision and goals still remain, but changes in projects and policies are needed. This process should be undertaken when changes are needed due to specific redevelopment, or modifications to a specific road segment. An amendment should be considered only when it will not change the overall vision or goals. The amendment would be in accordance to TCA 13.4.2.13-4-202 series and occur as follows:

- The Board of Mayor and Aldermen would approve a resolution recommending approval of any amendments to the FMPC.
- The FMPC would give notice for a public hearing for an amendment to the CTNP in accordance with TCA.
- The FMPC would approve a resolution adopting the plan.
- Amendments shall be recorded at the County Register of Deeds Office.

FISCAL CONSIDERATIONS

The implementation of the CTNP will require the City's financial commitment and support to carry out the policies and achieve the

6 IMPLEMENTATION

vision and goals set forth herein. These financial commitments should include existing programs and policies the City currently has in place. Although it is the City’s intent to administer this plan with the current financial resources available, monies may need to be set aside in future budgets to carry out some of the recommended actions. The adoption of the CTNP does not authorize expenditures for its implementation. The BOMA, in accordance with State statutes and City policies, may authorize the financial resources to implement the plan.

In some cases, funding may be available from outside sources. When opportunities become available and make sense financially, the City should seek these funds through Federal, State or local grants, loans and other financial resources. In order to take advantage of these resources, it is important for the City to keep their plan and CIP updated.

PROJECT PRIORITIZATION

This plan is a 20 year document. Therefore, not all of the recommendations can and should be implemented at one time. The purpose of this section is to summarize the projects and policy recommendations.

During this process, the projects were broken into three time frames; short term (0 to 5 years), medium term (5 to 15 years), and long term (15 to 20 years). In the appendix, project sheets have been developed that highlight each project identified in this plan. The project sheets provide an overview of the identified project. There are three sections that contain key information about the project including project overview, project character, and project specifics. The project overview includes the overall cost, time frame and project driver. The project character includes functional classification, segment length, existing lanes, proposed lanes and right-of-way acquisition. Finally, project specifics include all the pertinent information about the project including lane width, median, center turn lane, curb and gutter, parking, pedestrian facility, bicycle facility, bicycle route and transit facility. All of the project cut sheets are located in the appendix.

POLICY RECOMMENDATIONS

The following proposed policy changes should serve as guidance to City staff when reviewing development plans against the recommendations of this plan. In general, any development plans should adhere to the following transportation policy recommendations. Additionally, these policies should be used in updating the City’s zoning and subdivision control ordinance.

CONTROLLED ACCESS

In a traditional, unmanaged development pattern, each development requests its own curb cuts to access an adjacent roadway. The amount of entry and exit points often creates congestion on the roadway as people are constantly attempting to turn into or out of an adjacent property. Franklin has seen these issues in many places throughout the City. Implementing controlled access will limit the number of entry and exit points onto major arterials and collectors, which will smooth traffic flow, reduce the number of accidents, and provide for safer intersections that can often be stop controlled, signalized or managed with roundabouts in appropriate locations. This strategy can also include the use of “right in, right out” access points. A desirable alternative to the many different curb cuts on these arterials and collectors would be to group these multiple access points into single entrances that would serve many buildings. In some cases, this may include combining existing entrances and/or encouraging new businesses to use existing curb cuts. With special signage and landscaping, this initiative could enhance the character of the corridors while improving traffic flow and easing access to properties. Removal of these conflict points reduces the number of accidents at an intersection by preventing motorists from unsafe maneuvers in order to turn left while also reducing the traffic volume at major intersections by providing a second point of entry. The City of Franklin should adopt an access control strategy in order to maximize the use of its existing roadway system while also enhancing the safety of the City.

What Is Access Management?

Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway. It also involves roadway design applications, such as median treatments and auxiliary lanes, and the appropriate spacing of traffic signals (Access Management Manual, Transportation Research Board, 2003).

Definition & Purpose of Access Management

The purpose of access management is to provide vehicular access to land development in a manner that preserves the safety and efficiency of the transportation system (Access Management Manual, Transportation Research Board, 2003). Access management plays a critical role in the establishment of a well-functioning roadway, and is especially important when building new roads.

Access management involves the physical layout, operations and institutional control of a roadway. The City should continue a proactive approach to access management by incorporating these concepts from the beginning of project development. Unfortunately, that is not always the case. In fact, it is typical for access management to be considered only when problems occur on an existing roadway. By that time, the most effective strategies are difficult, if not impossible, to implement.

The City has an opportunity with the number of new roadways to ensure that access management principles can be applied as the roadway is being designed. This represents an enormous opportunity for developing an access management plan that will best suit the needs of the roadway without the constraints of an existing roadway.

However, there are still many existing roadways in the City. Each time new development is proposed, the Engineering staff should provide recommendations to the Planning and Sustainability Department regarding the type of access management.

Four fundamental elements of access management drive virtually all decisions regarding project design. They are as follows:

- Functional Classification
- Location / Alignment
- Roadway Cross Section
- Access Locations and Control

The relationship of each of these key elements to the access management plan is reviewed in the following sections, followed by a section describing implementation strategies.

Functional Classification

Functional classification refers to a roadway's primary purpose. With the exception of fully controlled access freeway facilities, all roadways serve some combination of through travel and access to property. Roadways that are primarily intended for traffic service (typically for longer trips) are referred to as arterials. Those intended primarily for access to abutting land use are local streets. Collector roadways link local streets with arterials and often serve balanced demands for travel and access to property.

In many ways, the functional classification system for a network of roadways is analogous to a tree, with the arterials serving as the trunk, the collectors serving as the branches, and local streets serving as the twigs that tie directly with the leaves (representing individual land parcels).

Identifying the functional classification of a roadway is an important step in development because it drives many decisions regarding the physical needs of the facility, including lane requirements, appropriate design standards, cross section elements, right-of-way, and access management components. Functional classification should be defined in the context of the overall roadway network to provide a balanced system that meets both travel and access requirements.

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Location / Alignment

Once the functional classification of a roadway is identified, the next defining element is its location and alignment. The location and alignment of the roadway is important because it determines access to various properties. As the City determines re-alignments of existing roadways and alignments of new roadways it is important to consider how it meets up with existing roadways, provides access to parcels and the incorporation of other non-vehicular options.

Cross Section

The cross section establishes the right-of-way width necessary to accommodate the roadway and all of its associated features. These features include the number of travel and auxiliary lanes, pavement edge treatments/ drainage, pedestrian features, utilities, landscape/ buffers, and space for future expansion (as appropriate). All of these features must be considered in establishing the overall right-of-way for the roadway.

Access Control

The fourth major item to consider in initial development is access control. It is just as important to effective operations as the location and cross section of the roadway. As with alignment and cross section, access control is a significant engineering factor in facility design. More importantly, access control is a regulatory issue that requires coordination among departments and continual vigilance to insure that overall roadway operations are not compromised.

There are a number of design factors to consider with respect to access control, including the following: traffic signal spacing, driveway layouts and design, driveway offsets and spacing, and shared access opportunities. The relationship of these design factors to access control is presented in the following sections.

Traffic Signal Spacing:

Unless a decision is made to provide full access control, signalized intersections are likely to determine the level of service and quality of overall roadway operations. At an isolated intersection, the level of service of a roadway is determined directly by the traffic signal. Where intersections are spaced a mile apart or less, roadway capacity is determined by how well the traffic signals operate as a system.

The coordination of adjacent traffic signals is straightforward in concept. The signals must operate on the same cycle length, with offsets timed to match the arrival of vehicles from the upstream intersection. Cycle length is the total time allocated to all signal phases. Offsets are the points in time during the cycle that each phase changes. Pre-timed traffic signals repeat a cycle of a set length with fixed offsets, and the relationship between intersections is maintained through each cycle. More sophisticated systems may vary the cycle length, but for a given travel speed, the relationship between offsets of adjacent intersections is held constant to maintain progressive flow.

The coordination of traffic signals is easy on a one-way street. Timing patterns are developed to provide a “band” of green time based on a specific travel speed. Signal coordination becomes more complex for two-way operations since the optimal pattern in one direction may not work in the other direction. Generally, two-way progression can only be established where signalized intersections are evenly spaced. In fact, irregular spacing of intersections can make two-way progression mathematically impossible. For that reason, identifying major intersections or entry points to optimize traffic signal operations may be the most important access strategy of all in early planning for arterial roadways.

Driveway Location and Design:

In order to maintain the integrity of overall operations of a roadway, signalized access points should be allowed only at locations that fit with optimal spacing of traffic signals for progression. If other access points are allowed, crossing of the median should not be allowed and they should not be signalized. In most cases, major developments should only be allowed to access the major arterial or collector at intersections at appropriate locations within the traffic signal system.

Permitting Requirements/ Development Issues: Driveway design standards should be adopted that provide appropriate tapers to accommodate the vehicles being served. Acceleration and deceleration lanes may be desirable at some locations, as indicated in traffic impact studies for specific developments.

ENCOURAGE CROSS EASEMENTS BETWEEN PARKING LOTS

Grouping entrances provides access from one business to another without the use of the main roadway. There are many areas in Cool Springs that do not have access between businesses. They are served by an excessive number of curb cuts. Typically, parking lots have been created for each of these businesses and individual curb cuts have been provided. The connection of parking lots and the creation of frontage roads (where feasible) and the internal connection of parking lots would maintain access between properties while enhancing the flow of traffic.

MANAGE BUSINESS SIGNAGE

Excess signage along arterials is a major problem in many communities. While signage is the primary means for a business to promote itself and serves as wayfinding for the motorist, often the number, size and style of signage can distract and mesmerize motorists traveling down a corridor and negatively impact the identity of an area. To positively

impact the character in an area, a desired style and look should be established, as demonstrated in the identity recommendations outlined earlier in this chapter. By establishing a unique identity, standards can be implemented that regulate height, size, style and arrangement of signage. This would enhance the visual aesthetics of the corridors, provide clear direction for motorists, and provide a unifying element for varying land uses.

INCREASE OF SIDEWALKS/MULTI-USE PATHS

The addition of sidewalks and/or multi-use paths along arterial, collector and local roadways would encourage pedestrian and bicycle movement within neighborhoods and subdivisions. These could be used as a secondary layer of pedestrian pathway management, providing the ability to travel from a neighborhood to an activity center without the safety issues associated with the use of heavily traveled roadways. All new subdivisions as well as major commercial, office and industrial centers should be required to install sidewalks or paths that will interconnect into the proposed pathway, trail and greenway network. This should be accomplished through the zoning and subdivision ordinances.

INSTITUTE TRAFFIC CALMING MEASURES

Traffic calming measures should be analyzed and applied to neighborhood or subdivision streets as warranted. Measures could include speed bumps, roundabouts, medians, textured pavements, rumble strips, raised crosswalks, and other special features. Traffic calming measures could help retain the residential nature of neighborhood streets by discouraging high operating speeds and non-local traffic.

IMPROVE CONNECTIONS/ACCESS

One of the traffic issues within Franklin has been the lack of connections between subdivisions, which causes increased congestion. The design of residential subdivisions has changed over the years. The size of lots, styles of houses, right-of-way configurations, and community amenities

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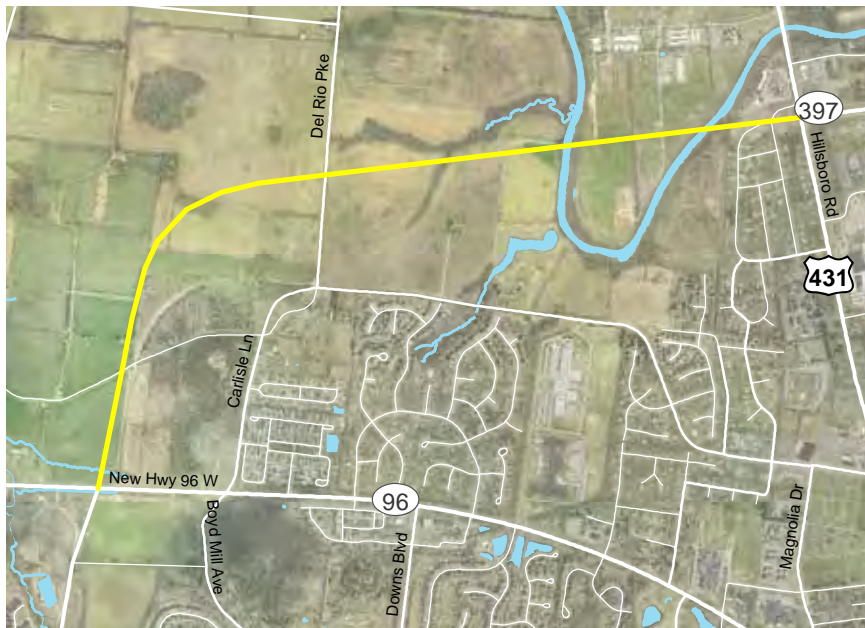
have been a function of subdivision regulations and the zoning ordinance. Curb cuts for newer subdivisions should align with those of older, adjacent developments where feasible and subdivisions should connect. Neighborhood streets should be extended to intersect with other local streets to improve neighborhood connections and access, and those streets should align with one another. This will be especially important in the northwestern, southern and far eastern areas of the City where a significant amount of residential development is projected for the future.

A1 PROJECT SHEETS

1

MACK HATCHER PARKWAY (SR-397) HIGHWAY 96 WEST (SR-96W) TO HILLSBORO ROAD (SR-106/US-431)

The project is the extension of Mack Hatcher Parkway (SR-397) on the northwest side of the City. Mack Hatcher Parkway is a limited access facility and is classified as a freeway/expressway and is a new two lane roadway to connected Highway 96 West (SR-96W) to Hillsboro Road (SR-106/US-431). This roadway is important to complete the northern section of Mack Hatcher for the City. It is also necessary for the continued build-out of West Haven and will serve additional residential development in the area between Hillsboro Road and Highway 96 West. This segment currently does not have a LOS since it is not constructed, but the projected 2040 LOS after improvements is C.



PROJECT OVERVIEW	
OVERALL COST:	\$34,700,000
TIME FRAME:	Short
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Expressway / Freeway
SEGMENT LENGTH:	2.64 miles
EXISTING LANES:	0
PROPOSED LANES:	2 (Future 4 Lane)
PROPOSED RIGHT OF WAY:	250 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No (Future - Yes)
CURB & GUTTER:	No
PARKING:	No
PEDESTRIAN FACILITY:	Multi-Use Trail (South Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

EAST MCEWEN DRIVE

COOL SPRINGS BOULEVARD TO WILSON PIKE (SR-252)

2

PROJECT OVERVIEW	
OVERALL COST:	\$26,428,800
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.38 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Multi-Use Trail (South Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

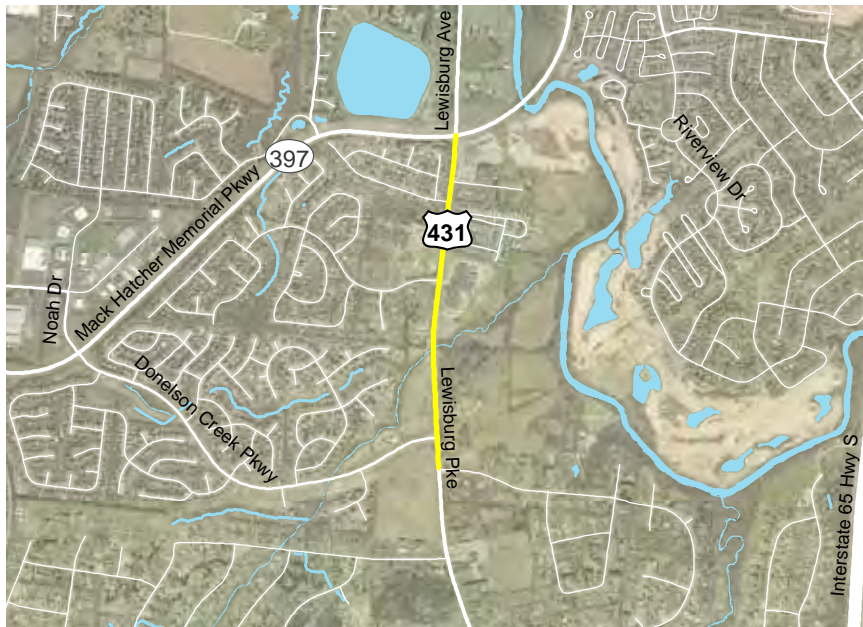
This project is a widening of major arterial East McEwen Drive from Cools Springs Boulevard to Wilson Pike (SR-252). The widening of this road from 2 to 4 lanes is necessary to handle the increased traffic from the Cool Springs Area moving away from the City. This segment currently has a 2015 LOS of D and E in different parts. The projected 2040 LOS after improvements is D.



3

LEWISBURG PIKE (SR-106/US-431) HOLLY HILL DRIVE TO MACK HATCHER PARKWAY (SR-397)

The project is a widening from 2 lanes to 4 lanes along Lewisburg Pike from Mack Hatcher Parkway (SR-397) to Holly Hill Drive. The widening of this major arterial is necessary to continue to support access to Mack Hatcher from surrounding neighborhoods. The 2015 LOS is E and F, with the LOS F located closest to the intersection of Mack Hatcher and Lewisburg Pike. The 2040 projected LOS after improvements is C.



PROJECT OVERVIEW	
OVERALL COST:	\$12,720,000
TIME FRAME:	Short
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.86 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

COLUMBIA AVENUE (SR-6/US-31) MACK HATCHER PARKWAY (SR-397) TO DOWNS BOULEVARD

4

PROJECT OVERVIEW	
OVERALL COST:	\$24,140,000
TIME FRAME:	Short
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.15 miles
EXISTING LANES:	3
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	136 feet

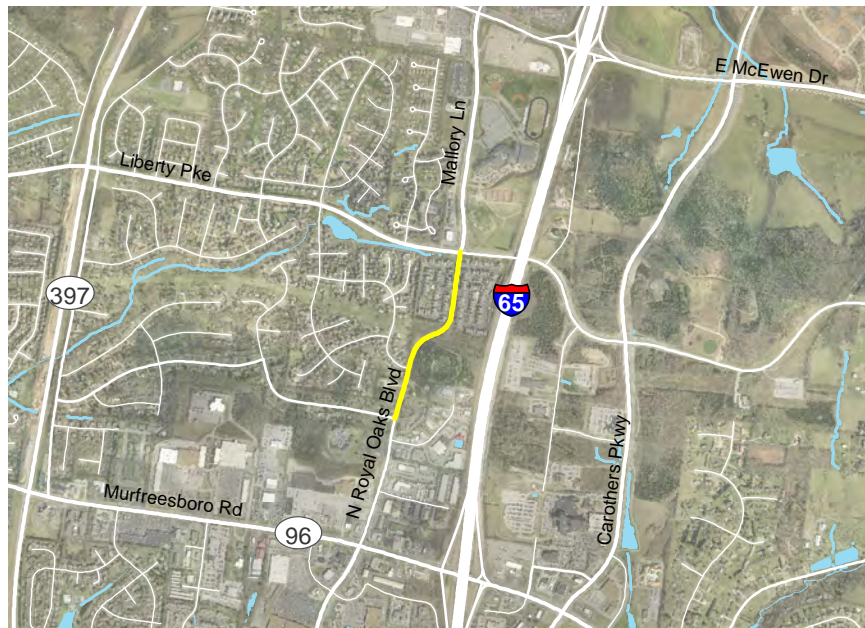
PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East and West Side)
BICYCLE FACILITY:	Bike-lane (East and West Side)
TRANSIT FACILITY:	Yes

Major arterial Columbia Avenue (SR-6/US-31) is proposed to be widened from 3 to 5 lanes from Downs Boulevard to Mack Hatcher Parkway (SR-397). This projects provides a key link from the south side of Franklin into the Downtown. This area accesses heavy commercial and manufacturing areas within the City and the road must be able to handle truck traffic. The 2015 LOS is B. The 2040 projects LOS after improvements remains unchanged.



5 NORTH ROYAL OAKS BOULEVARD LAKEVIEW DRIVE TO LIBERTY PIKE

Royals Oaks Boulevard is a major arterial roadway within the City. It runs parallel to I-65 and provides critical access onto I-65 from Murfreesboro Road (SR-96W) and McEwen Drive. The roadway is to be widened from 2 to 4 lanes from Liberty Pike to Lakeview Drive. The 2015 LOS is C and D in various places. The 2040 project LOS after improvements is B.



PROJECT OVERVIEW	
OVERALL COST:	\$8,688,400
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.60 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	Yes

CAROTHERS PARKWAY

SOUTH CAROTHERS ROAD TO MURFREESBORO ROAD (SR-96)

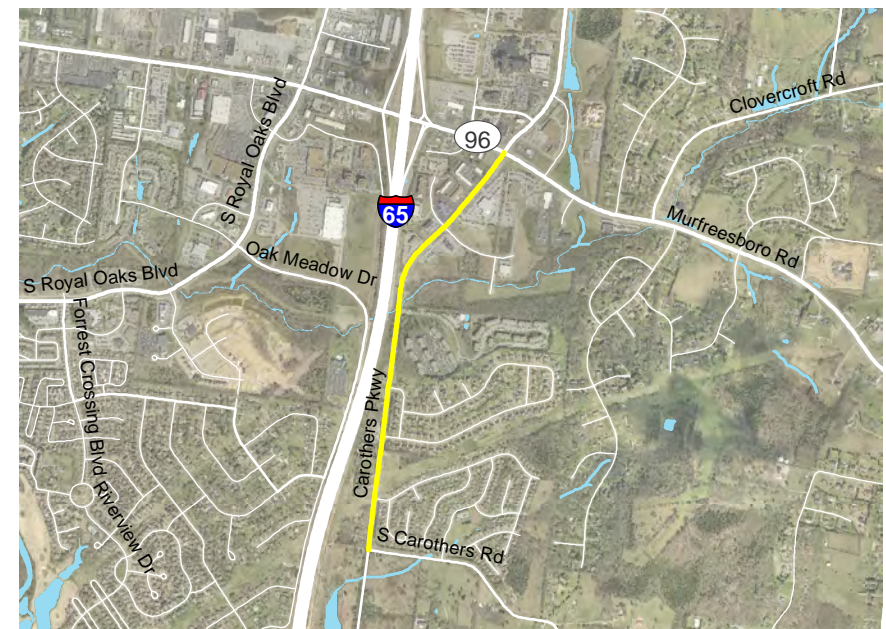
6

PROJECT OVERVIEW	
OVERALL COST:	\$16,676,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.14 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	Yes

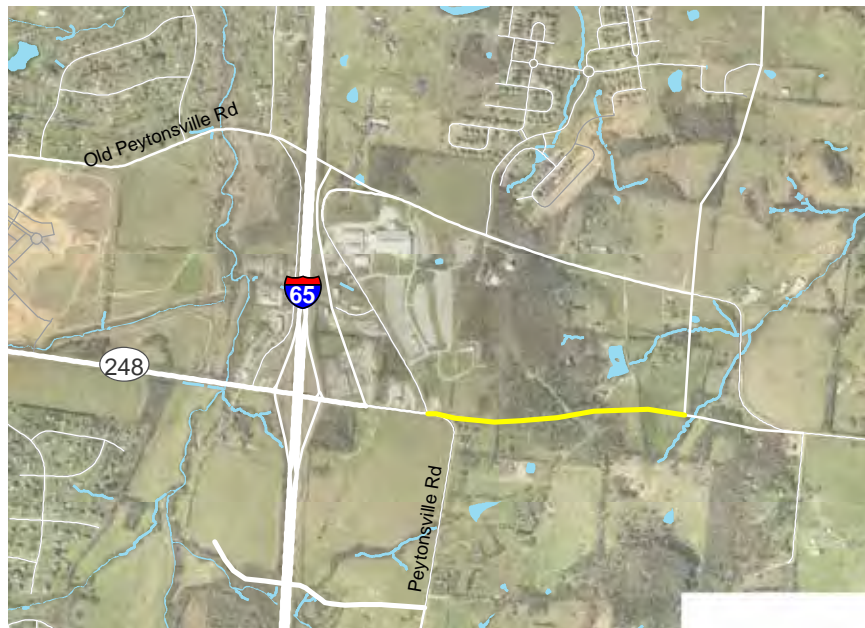
This project is a widening of Carothers Parkway from Murfreesboro Road (SR-96W) to South Carothers Road. The widening takes the road from 2 to 4 lanes. The widening of Carothers Parkway provides greater north-south access that parallels I-65. There are existing neighborhoods, retail and office that is well served by the widening. This segments' 2015 LOS is C, but the projected 2040 LOS after improvements is B.



7

GOOSE CREEK BYPASS (SR-248) EXTENSION EXISTING PEYTONSVILLE ROAD TO CAROTHERS PARKWAY (FUTURE EXTENSION)

This project is a new 4 lane road. It is an extension of the Goose Creek Bypass (SR-248) from Carothers Parkway (Future Extension) to Existing Peytonsville Road. The project would complete a connection between two major arterials. This connection is important to provide additional east-west access with the development of new residential in the southeast quadrant of the City. The 2015 LOS is D and E. The projected 2040 LOS after improvements is B.



PROJECT OVERVIEW	
OVERALL COST:	\$12,100,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin / Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.68 miles
EXISTING LANES:	0
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	Yes

MACK HATCHER PARKWAY (SR-397) POLK PLACE DRIVE TO MURFREESBORO ROAD (SR-96)

8

PROJECT OVERVIEW	
OVERALL COST:	\$33,000,000
TIME FRAME:	Short
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Expressway / Freeway
SEGMENT LENGTH:	1.74 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	250 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Multi-Use Trail (Northwest Side)
BICYCLE FACILITY:	Multi-Use Trail (Northwest Side)
TRANSIT FACILITY:	No

This project is a widening from 2 to 4 lanes on Mack Hatcher Parkway (SR-397) from Murfreesboro Road (SR-96) to Polk Place Drive. The segment on the southeast side of downtown is a heavily travelled corridor due to its connection to Murfreesboro and Royal Oaks Boulevard and adjacent neighborhoods. The 2015 LOS is F and E. The LOS F is the section from Royal Oaks Boulevard to Lewisburg Pike. The projected 2040 LOS after improvements is D (from Royal Oaks Boulevard to Lewisburg Pike and C from Murfreesboro to Royal Oaks Boulevard).



9

MACK HATCHER PARKWAY (SR-397) COLUMBIA AVENUE (SR-6/US-31) TO POLK PLACE DRIVE

The project is the widening of Mack Hatcher Parkway (SR-397) from 2 to 4 lanes from Columbia Avenue (SR-6/US-31) to Polk Place Drive. This south section is an important east-west connection between Columbia Pike and Lewisburg Pike. It provide access to residential areas. The 2015 LOS is C and D. The projected 2040 LOS after improvements is B and C.



PROJECT OVERVIEW

OVERALL COST:	\$20,604,000
TIME FRAME:	Short
PROJECT DRIVER:	TDOT

PROJECT CHARACTER

FUNCTIONAL CLASSIFICATION:	Expressway / Freeway
SEGMENT LENGTH:	1.46 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	250 feet

PROJECT SPECIFICS

LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Multi-Use Trail (North Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

FRANKLIN ROAD (SR-6/US-31)

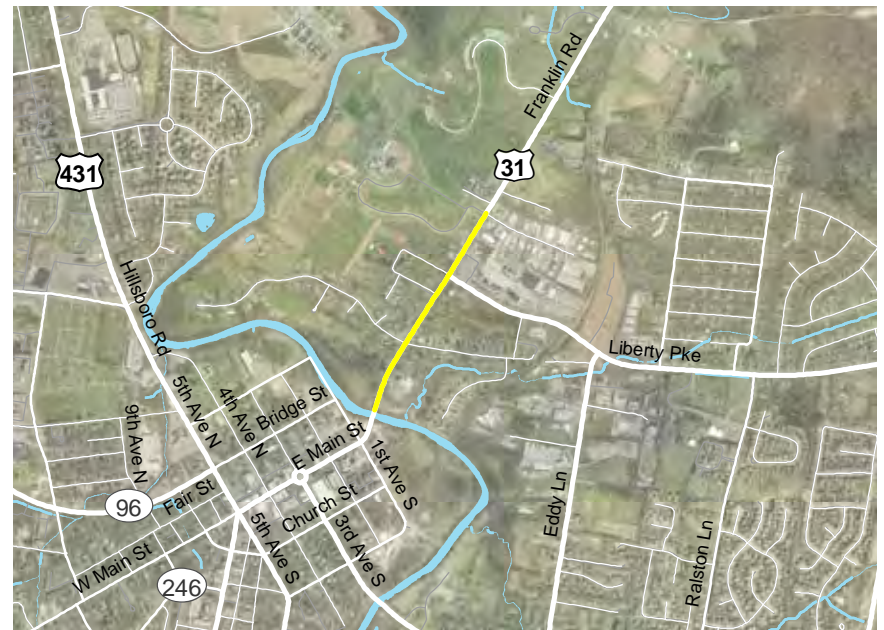
HARPETH RIVER BRIDGE TO HARPETH INDUSTRIAL COURT

PROJECT OVERVIEW	
OVERALL COST:	\$14,340,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.56 miles
EXISTING LANES:	2-3
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	128 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	Yes

The widening of Franklin Road (SR-6/US-31) from 2 to 3 lanes is necessary as it's a key connection from downtown across the river and out of town. The widening would begin at the Harpeth River Bridge and end at Harpeth Industrial Court. Franklin Road is a major arterial that leads people into and out of town. The 2015 LOS is F and D. The 2040 LOS after improvements does not change.



FRANKLIN ROAD (SR-6/US-31)

MACK HATCHER PARKWAY (SR-397) TO MALLORY STATION ROAD

Major arterial widening of Franklin Road (SR-6/US-31) from Mallory Station to Mack Hatcher (SR-397). This road will be widened from 2 to 4 lanes. This widening is an extension of project 10 where the section of road just north of Mack Hatcher is a key connection point to lead residents to neighborhoods in the northwest side of the City. The 2015 LOS is F. The 2040 LOS after improvements changes slightly to a LOS of D and E.



PROJECT OVERVIEW	
OVERALL COST:	\$11,902,000
TIME FRAME:	Short
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.84 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

MURFREESBORO ROAD (SR-96) WESTERN I-65 RAMP TO EASTERN I-65 RAMP

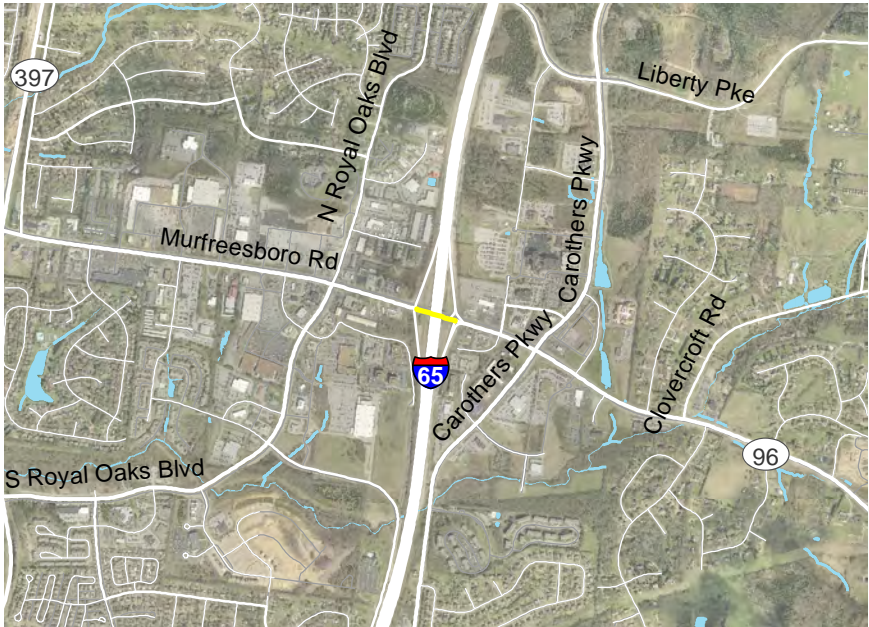
12

This project is a TDOT lead project of the widening of the bridge to 10 lanes. This widening is Murfreesboro Road (SR-96) from the Western I-65 ramp to the Eastern I-65 ramp. This intersection is a key intersection to move residents and employees onto the interstate system to go to north to Nashville or south to Spring Hill. The 2015 LOS is E, as this is one of the heavily used intersections to access the interstate. The 2040 LOS after improvements changes slightly to a LOS of D.

PROJECT OVERVIEW	
OVERALL COST:	\$14,300,000
TIME FRAME:	Short
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.25 miles
EXISTING LANES:	6
PROPOSED LANES:	10
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No



13 PEYTONSVILLE ROAD

PRATT LANE TO GOOSE CREEK BYPASS (SR-248)

This project is to bring Peytonsville Road up to the City’s current standards. This would be from the Goose Creek Bypass future extension (SR-248) to Pratt Lane. It is anticipated that there will be future mixed use growth in this area and a road to City standards is needed to handle the traffic. The 2015 LOS is B. The 2040 LOS after improvements changes slightly to a LOS of C.



PROJECT OVERVIEW	
OVERALL COST:	\$10,300,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	0.74 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	122 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	Yes

CAROTHERS PARKWAY 14

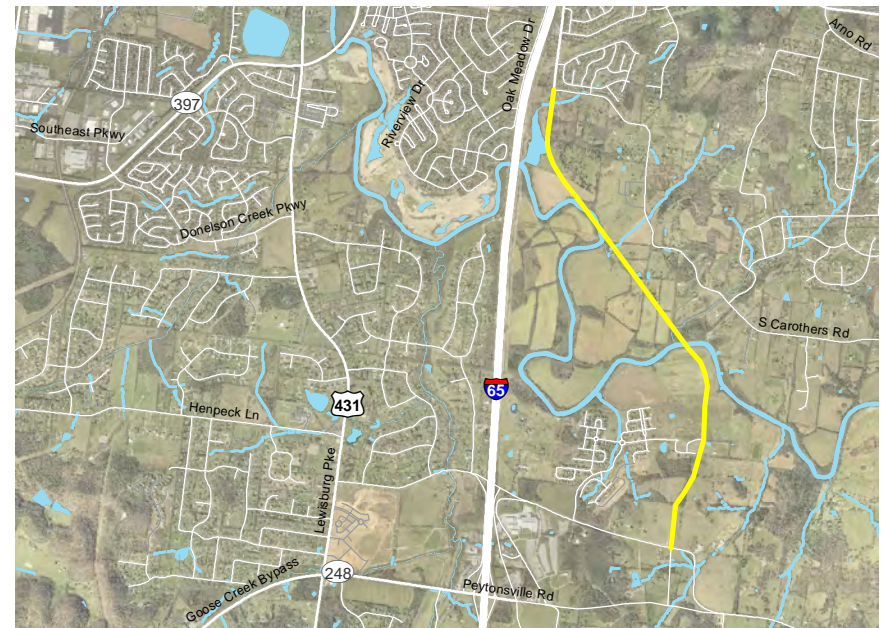
LONG LANE TO SOUTH CAROTHERS ROAD

PROJECT OVERVIEW	
OVERALL COST:	\$9,435,629
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	2.73 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	Yes

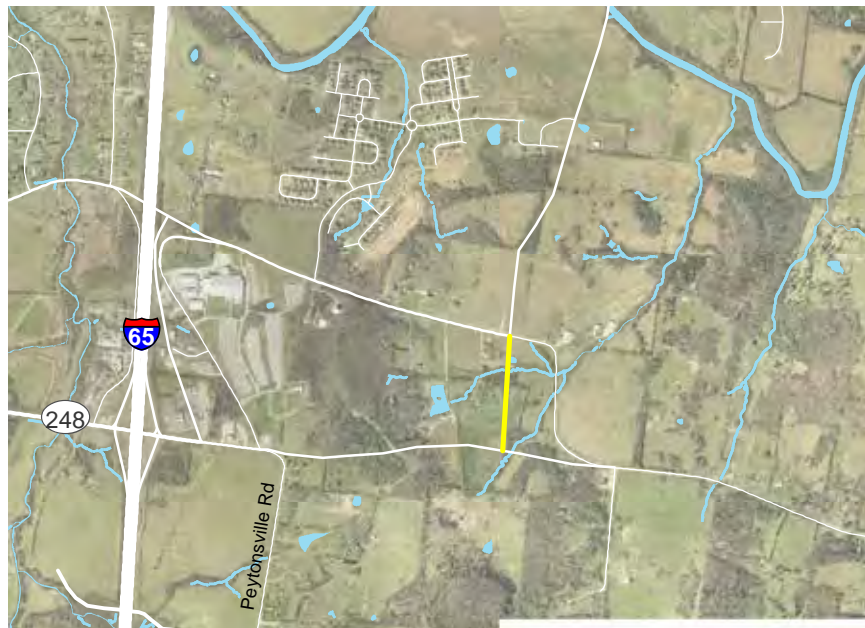
Carothers Parkway a major arterial, will be widening from 2 to 4 lanes from South Carothers Road to Long Lane. This road is typically used for residents living in the area to get to other parts of the City without using the interstate. In the future, more residential development is expected and with the improvements in other areas of Carothers, a widening will be necessary. This segment has a 2015 LOS of B. The 2040 LOS after improvements changes to a LOS B.



15 CAROTHERS PARKWAY

LONG LANE TO GOOSE CREEK BYPASS (SR-248) (FUTURE EXTENSION)

A new road is proposed on Carothers Parkway, a major arterial. The new road would connect Long Lane to the future extension of Goose Creek Bypass (SR-248) and would be a 4 lane road. This improvement is critical to the north/south connection along Carothers Parkway to allow travels to cross the entire east side of the City without having to use I-65. There is no 2015 LOS since the road does not exist. The 2040 LOS after improvements is an A.



PROJECT OVERVIEW	
OVERALL COST:	\$5,172,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.31 miles
EXISTING LANES:	0
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	Yes

SOUTH BERRYS CHAPEL ROAD REALIGNMENT

SOUTH BERRYS CHAPEL ROAD TO MALLORY STATION ROAD

PROJECT OVERVIEW	
OVERALL COST:	\$5,300,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.47 miles
EXISTING LANES:	2
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

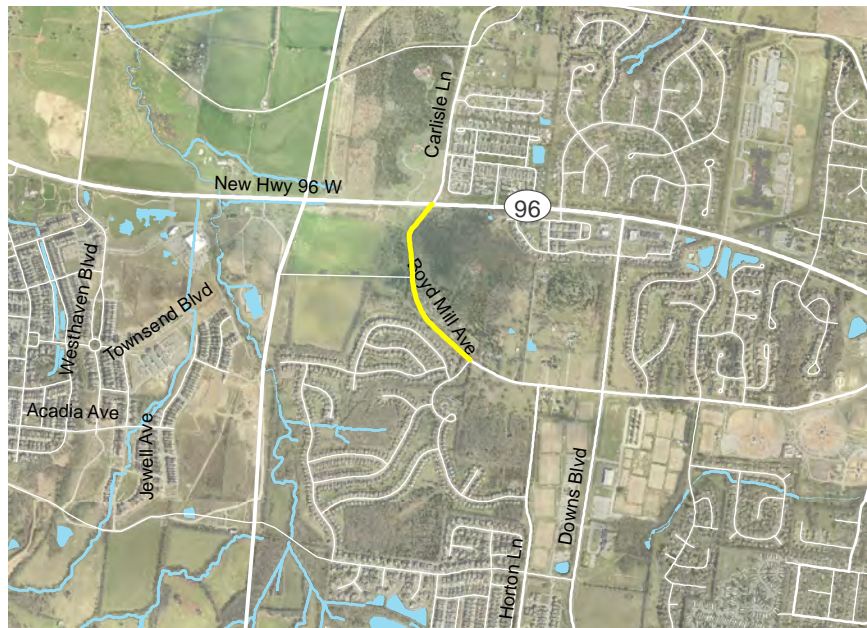
This project is a realignment at the intersection of South Berry’s Chapel Road and Mallory Station Road. South Berry’s Chapel is a minor collector. This alignment will cut down on cross traffic left hand turns onto S. Berry’s Chapel Road and ease congestion out of the City. At the current intersection of S. Berry’s Chapel Road and Franklin Road the 2015 LOS is A. The current intersection of Mallory Station Road and Franklin Road is C. The new 2040 LOS after the improvements changes to a B and C, respectively.



17 BOYD MILL AVENUE

HIGHWAY 96 WEST (SR-96W) TO FRANKLIN GREEN PARKWAY

Boyd Mill Avenue is a major collector that needs to be upgraded to City standards. The upgrade will occur from Highway 96 West (SR-96W) and Franklin Green Parkway. Boyd Mill is a key residential roadway that moves residents from their neighborhood to Highway 96 so they can access the larger network and get through the City or to the interstate. The 2015 LOS is C. The 2040 LOS after improvements changes the LOS to B.



PROJECT OVERVIEW	
OVERALL COST:	\$3,300,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.48 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East and West Side)
BICYCLE FACILITY:	Bike-lane (East and West Side)
TRANSIT FACILITY:	No

I-65 OVERPASS

OLD PEYTONSVILLE ROAD TO LONG LANE

18

PROJECT OVERVIEW	
OVERALL COST:	\$12,790,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.70 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North and South Side)
BICYCLE FACILITY:	Bike-lane (North and South Side)
TRANSIT FACILITY:	No

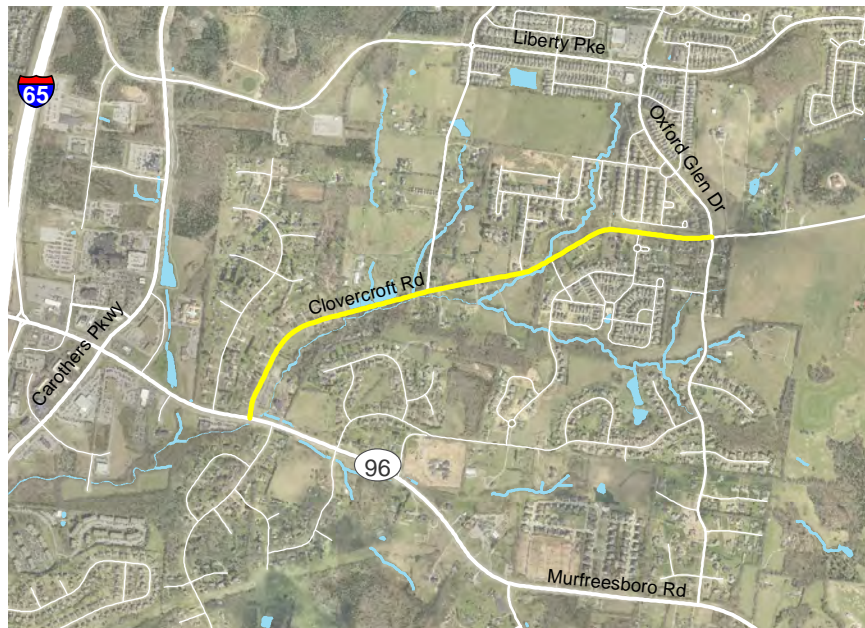
This project is a creation of a new overpass from Old Peytonsville Road to Long Lane. This project would provide another access point across the interstate south of the City. This would allow easier access from the west side to the east side of the City. This will be especially important as this area develops out with more mixed use development. This segment does not have a LOS in 2015 because it does not exist. The 2040 LOS after improvements is a LOS A.



19 CLOVERCROFT ROAD

MURFREESBORO ROAD (SR-96) TO OXFORD GLEN DRIVE

Clovercroft Road is proposed to be upgraded to City standards from Murfreesboro Road (SR-96) to Oxford Glen Drive. This is a key section of road that connects neighborhoods to Murfreesboro Road and to Oxford Glen which provides connects into the Cool Springs area. The 2015 LOS is B. The 2040 LOS after improvements from Oxford Glen Dr to John Williams Road is LOS C and from John Williams Road to Murfreesboro Road is LOS B.



PROJECT OVERVIEW	
OVERALL COST:	\$15,200,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.40 miles
EXISTING LANES:	2
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

CLOVERCROFT ROAD

OXFORD GLEN DRIVE TO MARKET STREET

20

PROJECT OVERVIEW	
OVERALL COST:	\$7,800,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.72 miles
EXISTING LANES:	2
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

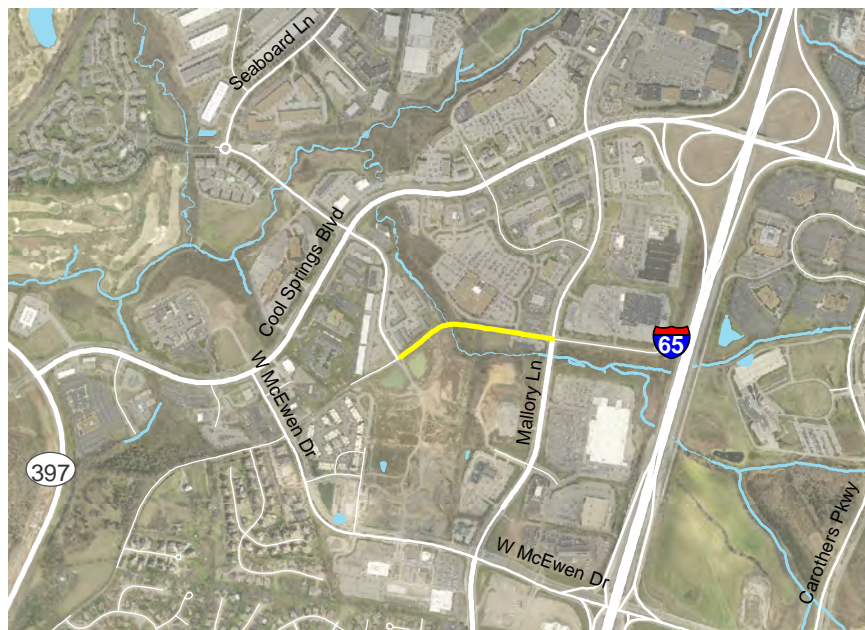
Minor collector, Clovercroft Road will be upgraded to City standards from Oxford Glen Drive to Market Street. This road serves a relatively undeveloped area to the south. With future development over time, this roadway will need to be upgraded to City standards to provide the pedestrian amenities for future development. The 2015 LOS is B. The 2040 LOS after improvements does not change.



21 JORDAN ROAD

ASPEN GROVE DRIVE TO MALLORY LANE

Jordan Road, a minor collector will be widened from 2 to 3 lanes from Aspen Grove Drive to Mallory Lane. A turn lane is needed to help the flow of traffic with retail development and intensity in this area. This segment has a 2015 LOS of B. The 2040 LOS after improvements changes slightly to a LOS of B and C. The LOS of C is the segment closer to Mallory Lane.



PROJECT OVERVIEW	
OVERALL COST:	\$2,062,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.32 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

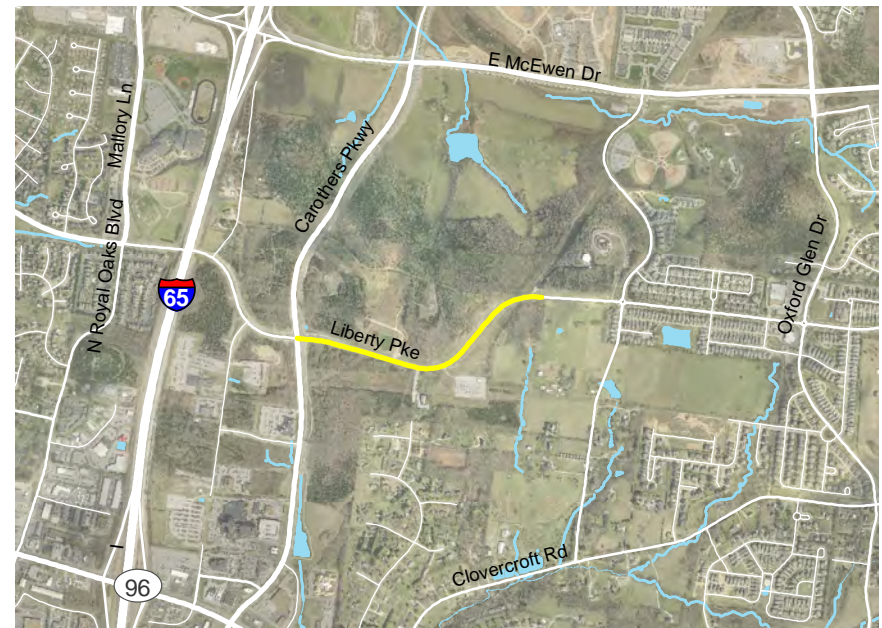
CAROTHERS PARKWAY TO COLUMBIA STATE COMMUNITY COLLEGE

PROJECT OVERVIEW	
OVERALL COST:	\$4,500,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	0.32 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	Yes

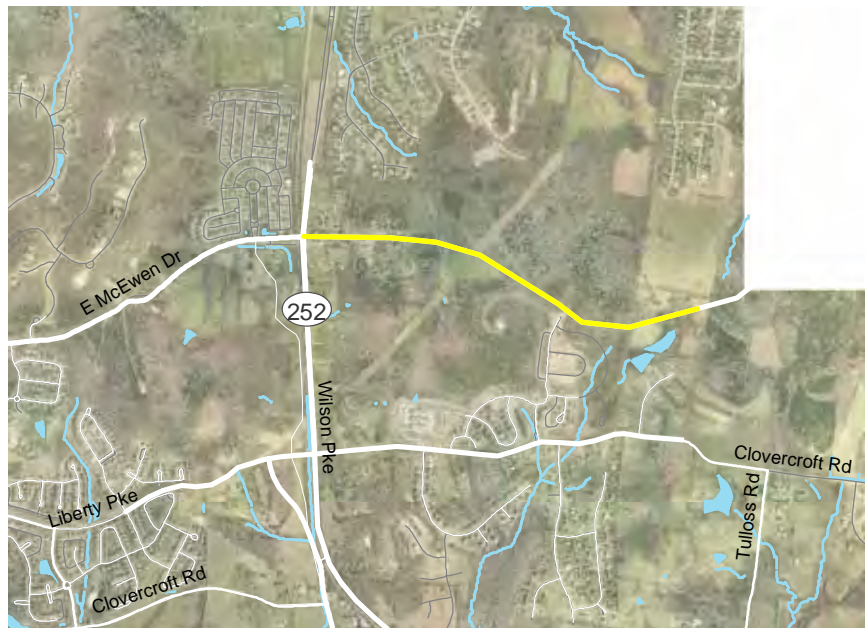
This project is the widening of Liberty Pike from 2 to 4 lanes. This minor arterial will be widened from Carothers Parkway to Columbia State Community College. This is a key connection point to both Carothers Parkway which can be taken to either McEwen or Murfreesboro Road to access I-65. This roadway also connects under I-65 for access to the west side of the City. The 2015 LOS is B. The 2040 LOS after improvements changes slightly to a LOS C.



23 EAST MCEWEN DRIVE

WILSON PIKE (SR-252) TO EASTERN CITY LIMITS

Creation of a new major arterial from Wilson Pike (SR-252) to the Eastern City Limits. East McEwen Drive will be a 2 lane roadway. This new roadway provides a critical east-west access point from the eastern side of the County into Franklin. There was no LOS on the map as this was considered a local road in 2015. In 2040, the LOS service becomes a C out to the current urban growth boundary and then a LOS B beyond.



PROJECT OVERVIEW	
OVERALL COST:	\$12,587,800
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.25 miles
EXISTING LANES:	0
PROPOSED LANES:	2 (Future 4 Lanes)
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

GOOSE CREEK BYPASS (SR-248) EXTENSION

CAROTHERS PARKWAY (FUTURE EXTENSION) TO LONG LANE

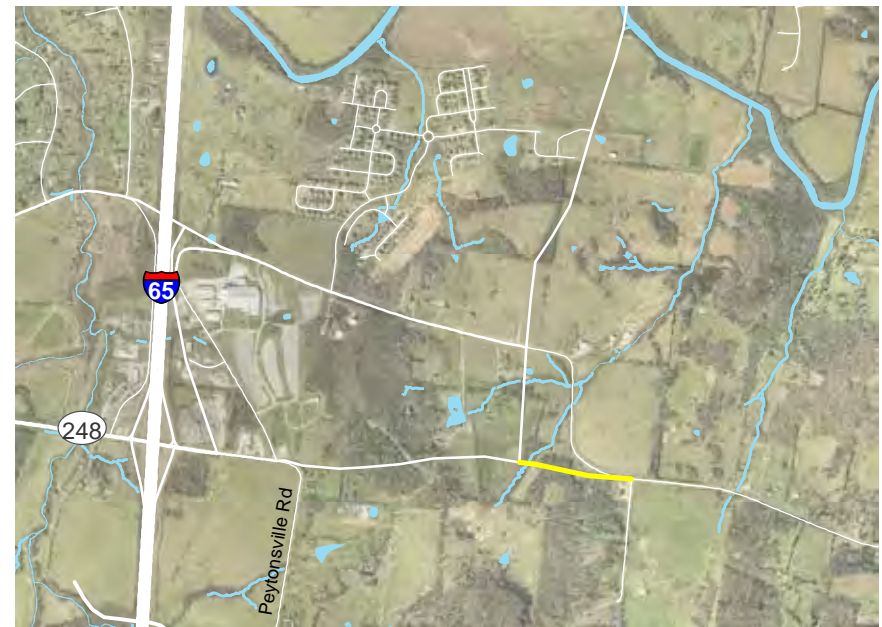
24

PROJECT OVERVIEW	
OVERALL COST:	\$5,700,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.36 miles
EXISTING LANES:	0
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

The Goose Creek Bypass (SR-248) is an extension from the future extension of Carothers Parkway to Long Lane. This major arterial will be a 4 lane roadway. This small segment helps to finish out the transportation network on the southeast side of the City. This area has been identified for future mixed use growth in the City. There is no 2015 LOS as this road doesn't exist. The 2040 LOS after the roadway is build is a LOS A.



25 FRANKLIN ROAD (SR-6/US-31) MALLORY STATION TO DAVENPORT BLVD

Widening of Franklin Road (SR-6/US-31) from 2 to 4 lanes from Davenport Boulevard to Mallory Station. Franklin Road is a major arterial and is a critical roadway to move traffic into and out of the City. Because of this heavy traffic, the improvement is needed. The 2015 LOS is C from Mallory Station Road to Country Road and then changes to a LOS D. The 2040 LOS after the widening does not change the LOS.



PROJECT OVERVIEW	
OVERALL COST:	\$15,500,000
TIME FRAME:	Medium
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.10 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk & (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

COLUMBIA AVENUE (SR-6/US-31) 26

DOWNS BOULEVARD TO FOWLKES STREET

PROJECT OVERVIEW	
OVERALL COST:	\$7,500,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.73 miles
EXISTING LANES:	2
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	Yes

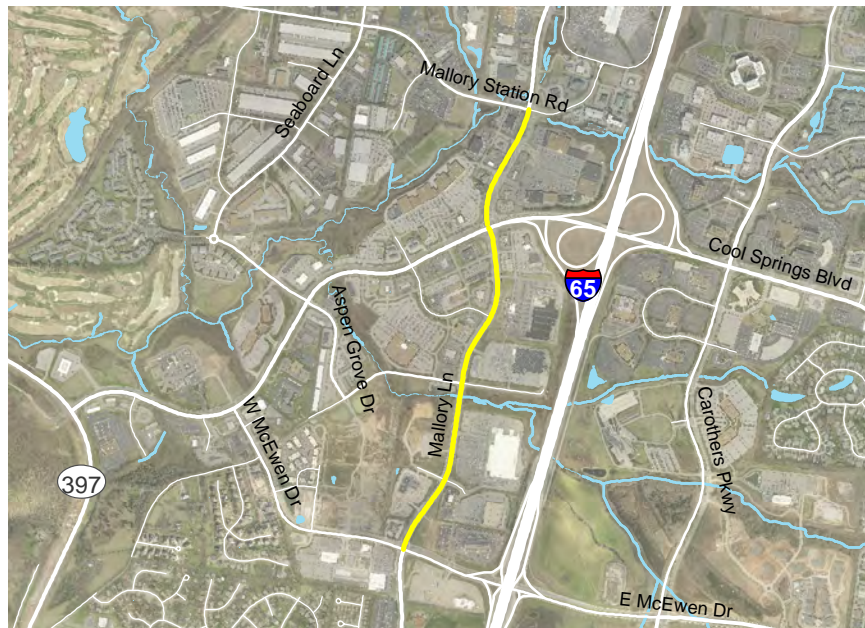
Columbia Avenue (SR-6/US31), a major arterial will be widened from 2 to 3 lanes from Fowlkes Street to Downs Boulevard. This roadway is an important part of the Downtown grid network. Columbia Avenue is one of the major corridors used to get downtown so it carries both car and truck traffic. The 2015 LOS is generally a B except for a few key intersections, which are a C. The 2040 LOS after improvements change to a LOS C likely due to the completion of Mack Hatcher. With the improvements to Columbia Avenue and access from Mack Hatcher from the southwest side of the City, this becomes a more direct route and therefore more congested.



27 MALLORY LANE

MALLORY STATION ROAD TO WEST MCEWEN DRIVE

Mallory Lane is a key east-west connector that runs parallel to I-65. It is an economic corridor connecting residents and employees to retail, services and jobs. Mallory Lane is proposed to be widened from 4 to 6 lanes. The widening on this major arterial would occur between Mallory Station Road and West McEwen Drive. The 2015 LOS is a C and D from Mallory Station Road to Cool Springs Boulevard and a LOS to McEwen. The 2040 LOS after improvements changes the LOS to a B through this entire corridor from Mallory Station Road to McEwen Drive.



PROJECT OVERVIEW	
OVERALL COST:	\$11,950,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.22 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	Yes

MALLORY LANE 28

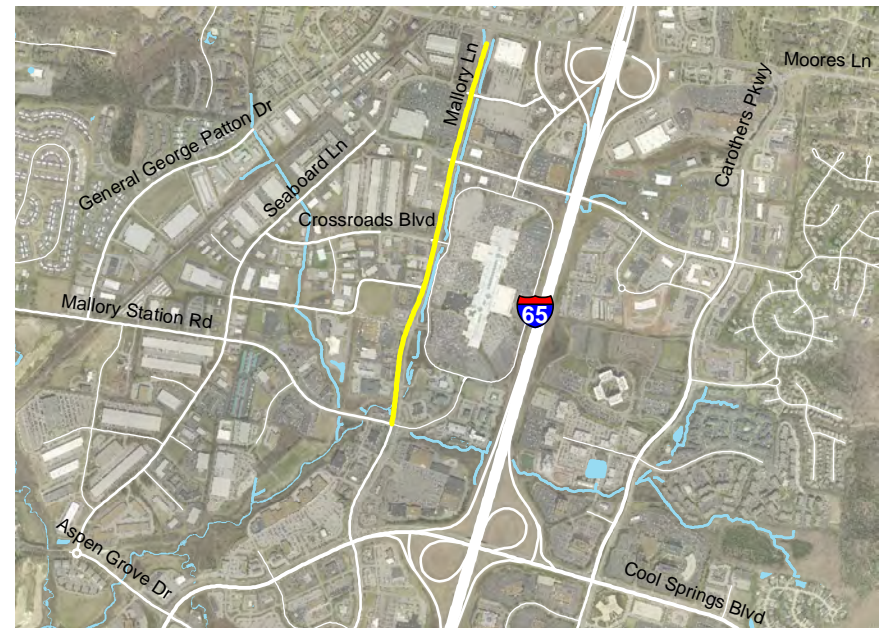
MALLORY STATION ROAD TO MOORES LANE (SR-441)

PROJECT OVERVIEW	
OVERALL COST:	\$10,550,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.08 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	Yes

This project is a continuation of project number 27. This would widen the northern portion of Mallory Lane to 6 lanes from Mallory Station Road to Moores Lane (SR-441). This major arterial provides access to Cool Springs Galleria and other adjacent retail shops and services. This is a heavily traveled roadway from people outside of Franklin in addition to the residents. The 2015 LOS is B and C at some intersections. The 2040 LOS after improvements changes the LOS to a B through this entire corridor from.



29 COOL SPRINGS BOULEVARD

MACK HATCHER PARKWAY (SR-397) TO MALLORY LANE

Cools Springs Boulevard is a major arterial that moves traffic into the City’s retail and employment center. Therefore, as traffic has continued to increase, widening of the road from 4 to 6 lanes from Mack Hatcher Parkway (SR-397) to Mallory Lane is necessary to handle the increased traffic. The 2015 LOS is C and D. However, even after the 2040 LOS after improvements there is little change in the LOS.



PROJECT OVERVIEW	
OVERALL COST:	\$12,850,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.31 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	Yes

LEWISBURG PIKE (SR-106/US-431) 30

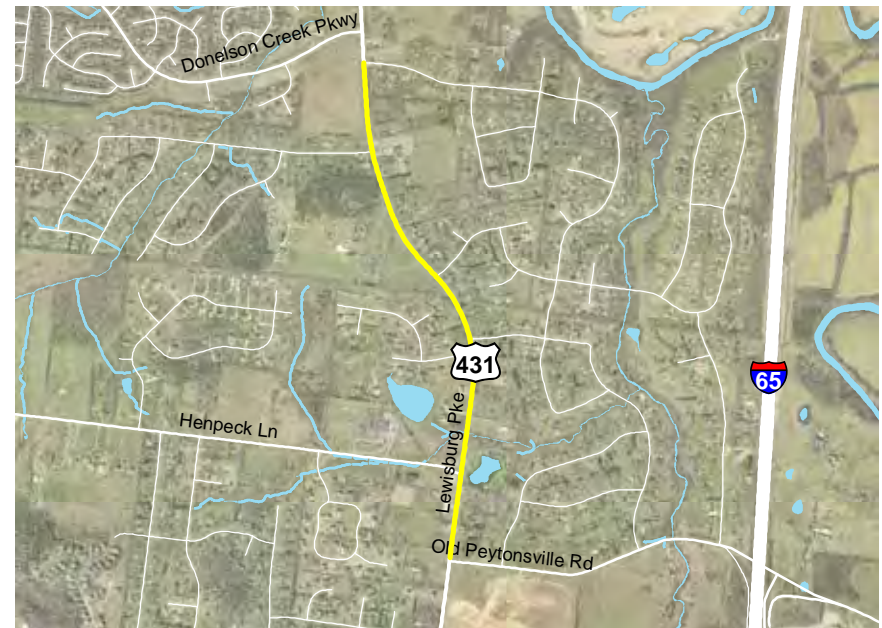
OLD PEYTONSVILLE ROAD TO HOLLY HILL DRIVE

PROJECT OVERVIEW	
OVERALL COST:	\$19,400,000
TIME FRAME:	Medium
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.37 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

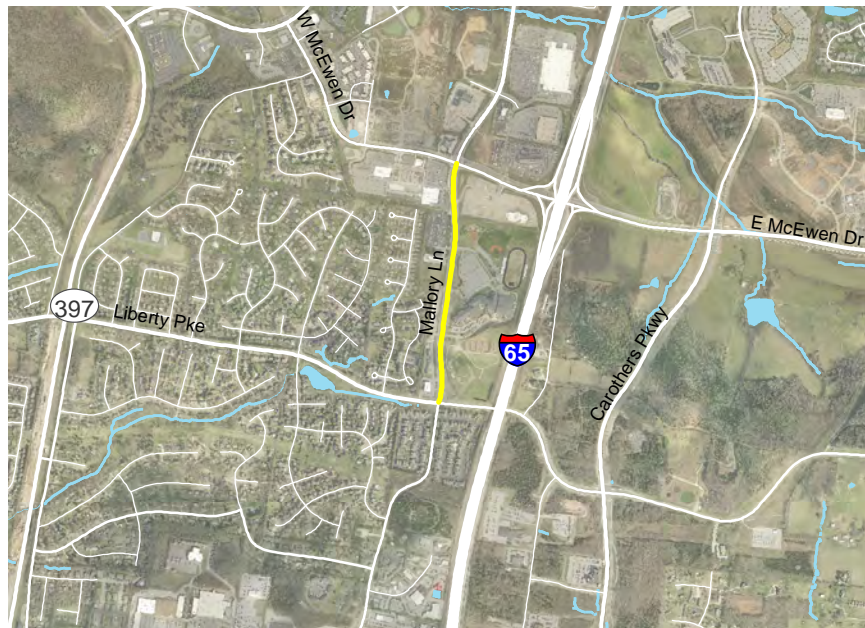
This project is the widening of major arterial, Lewisburg Pike (SR-106/US-431) from 2 to 4 lanes from Old Peytonsville Road to Holly Hill Drive. Lewisburg Pike is the other major north-south corridor that travelers use to access the downtown and retail and jobs in the Cool Springs Area. As the south continues to develop out with residential, this will be a key corridor. The 2015 LOS is E, with LOS F and most intersections with neighborhood roads. The 2040 LOS after improvements change the LOS to a C.



31 MALLORY LANE

LIBERTY PIKE TO WEST MCEWEN DRIVE

Mallory Lane is a major arterial carrying traffic from residential areas south into the Cools Springs Area on the west side of I-65. The road will be widened from 2 to 4 lanes. This segment has a 2015 LOS of C. The 2040 LOS after improvements changes to a LOS B.



PROJECT OVERVIEW	
OVERALL COST:	\$6,250,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.64 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	Yes

WEST MAIN STREET (SR-246) 32

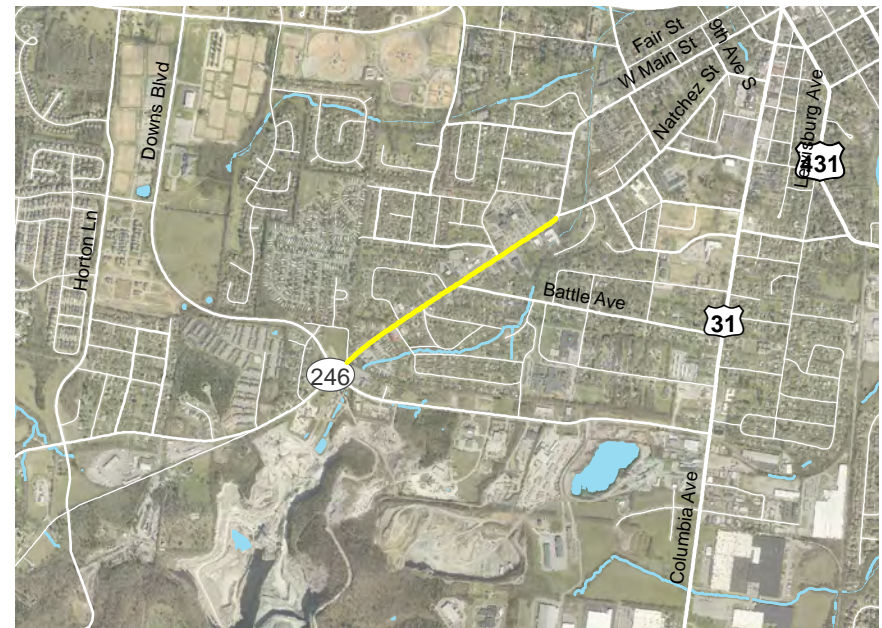
DOWNS BOULEVARD TO NATCHEZ STREET

PROJECT OVERVIEW	
OVERALL COST:	\$7,400,000
TIME FRAME:	Medium
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	0.72 miles
EXISTING LANES:	2
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	128 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	Yes

West Main street is a heavy commercial and industrial corridor on the southwest side of the City. This minor arterial contains heavy truck traffic and vehicles. The road will be widened to 3 lanes to add a turn lane to help the flow of traffic. The 2015 LOS is C from Natchez Street to Battle Avenue and a D from Battle Avenue to Downs Boulevard. The 2040 LOS after improvements is a B, except at the intersection of West Main Street and Battle Avenue, which remains a C.



33 WILSON PIKE (SR-252) REALIGNMENT

TRINITY ROAD TO EAST MCEWEN DRIVE

TDOT has a plan for a new Wilson Pike Road between East McEwen Drive and Trinity Road. This would be a new two lane road that would address the issues of the two one-lane viaduct entrances on each end of Wilson Pike. There is no 2015 LOS as this is a new road. The 2040 LOS after the construction of this new road is a LOS F from Clovercroft to McEwen and a LOS C from Clovercroft South.



PROJECT OVERVIEW	
OVERALL COST:	\$31,533,333
TIME FRAME:	Medium
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	2.98 miles
EXISTING LANES:	0
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

(OLD/EXISTING) WILSON PIKE 34

TRINITY ROAD TO LIBERTY PIKE (FUTURE EXTENSION)

PROJECT OVERVIEW	
OVERALL COST:	\$12,400,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	2.29 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	No

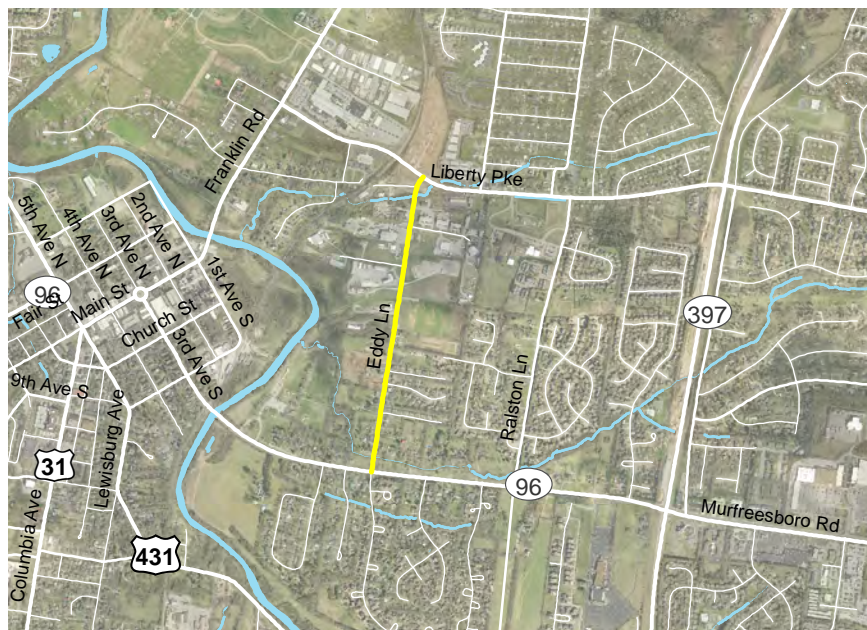
This project is a separate option to project 33 or could be completed to enhance connections on the west side of the railroad tracks depending on how this side of the City develops out. This is a City of Franklin led projects where a future extension of Liberty Pike would be created to tie into and connect both Clovercroft Road, North Chapel Road and Trinity Road, utilizing existing road networks. This would be a 3 lane roadway. The 2015 LOS is C from Liberty Pike to Clovercroft Road and LOS B from Clovercroft to Trinity. The 2040 LOS after improvements changes slightly to a LOS of D and C, respectively.



35 EDDY LANE

MURFREESBORO ROAD (SR-96) TO LIBERTY PIKE

This widening project will help to enhance connections between Liberty Pike and Murfreesboro Road moving residential out to arterial roads that can handle and move the traffic. This would be a widening from 2 to 3 lanes to help the flow of traffic on Eddy Lane. This segment has a 2015 LOS of A. The 2040 LOS after improvements remains unchanged.



PROJECT OVERVIEW	
OVERALL COST:	\$8,000,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.78 miles
EXISTING LANES:	2
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	No

MALLORY STATION ROAD 36

FRANKLIN ROAD (SR-6/US-31) TO SEABOARD LANE

PROJECT OVERVIEW	
OVERALL COST:	\$13,600,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	0.99 miles
EXISTING LANES:	3
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	122 feet

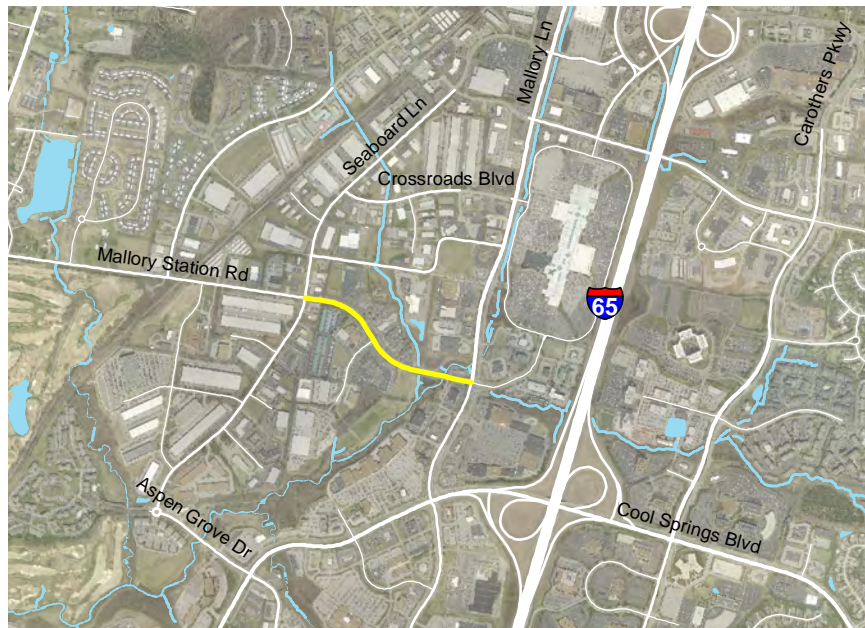
PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

Mallory Station road will be widened to 4 lanes between Franklin Road and Seaboard Lane. This major collector provides a key connection to Franklin Road to access the Downtown or travel to the north to Brentwood. Mallory Station Road is a main commercial corridor that leads to the Cool Springs Area. The 2015 LOS is C from Franklin to General George Patton Drive and a B from General George Patton Drive to Seaboard Lane. The 2040 LOS after improvements changes slightly from to a LOS of D and C, respectively.



37 MALLORY STATION ROAD SEABOARD LANE TO MALLORY LANE

Project 37 is a companion project to project 36. This improvement will complete the widening of Mallory Station Road to 4 lanes from Seaboard Lane to Mallory Lane. Mallory Station Road is a key connection from the Cool Springs Galleria west to travel to the downtown via Franklin Road or to travel to Brentwood using the local network. This segment has a 2015 LOS of B. The 2040 LOS after improvements changes slightly to a LOS of C.



PROJECT OVERVIEW	
OVERALL COST:	\$7,100,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	0.52 miles
EXISTING LANES:	3
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	122 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

DEL RIO PIKE 38

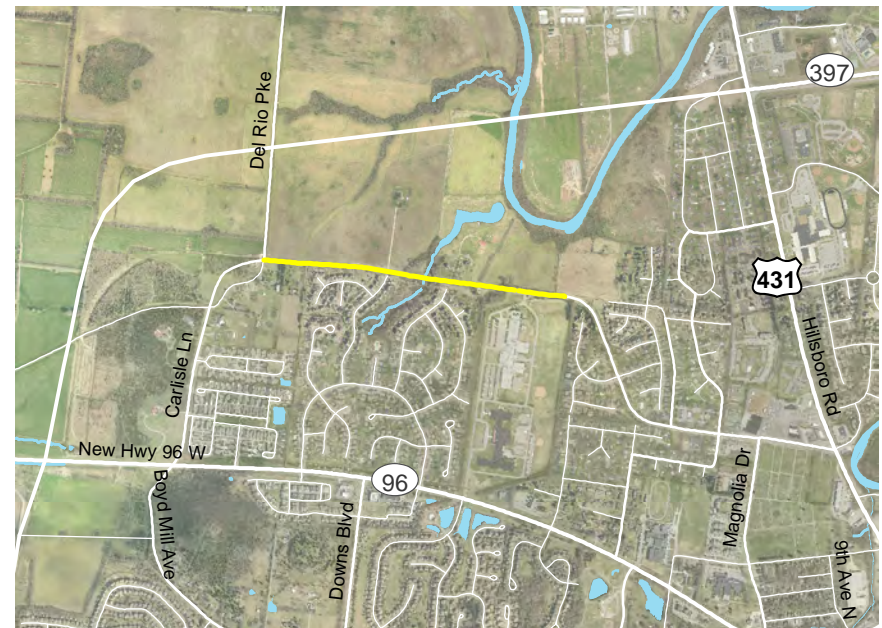
CARLISLE LANE TO POPLAR GROVE ELEMENTARY SCHOOL

PROJECT OVERVIEW	
OVERALL COST:	\$5,700,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin / Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.81 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

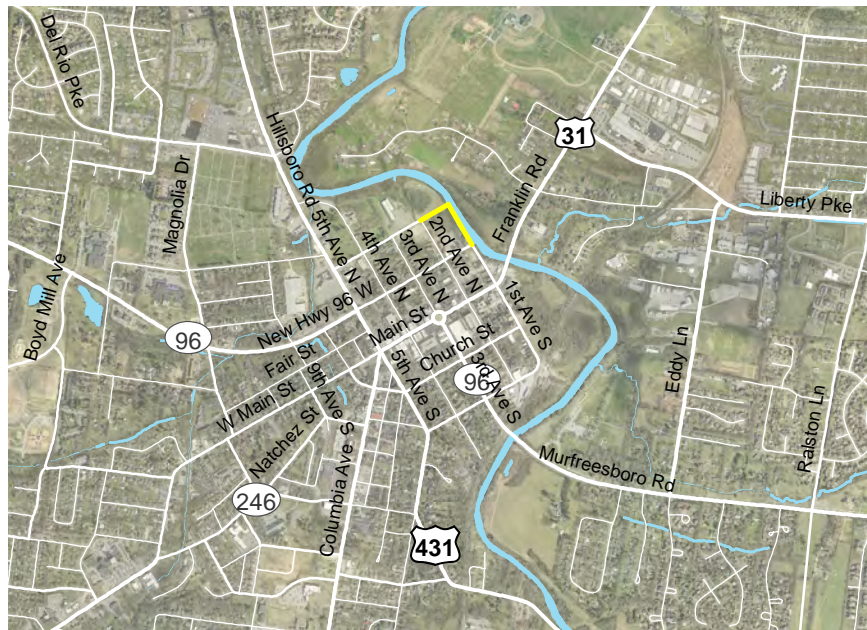
Del Rio Pike is proposed to be upgraded to current standards between Carlisle Lane and Poplar Grove Elementary School. This will include upgrading the pedestrian network to connect the nearby neighborhoods to the school. The 2015 LOS is A and does not change in 2040.



39 1ST AVENUE NORTH

BRIDGE STREET TO NORTH MARGIN STREET

This project is an improvement to the Downtown core of Franklin. This would be the creation of a new 2 lane road to connect 1st Avenue North between Bridge Street and North Margin Street. This road will complete the Downtown network and will provide another option to maneuver around the Downtown. There is no 2015 LOS as this is a new road. The 2040 LOS after the construction of the new road is LOS B.



PROJECT OVERVIEW	
OVERALL COST:	\$2,500,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	0.17 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	Yes
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

CAROTHERS PARKWAY 40

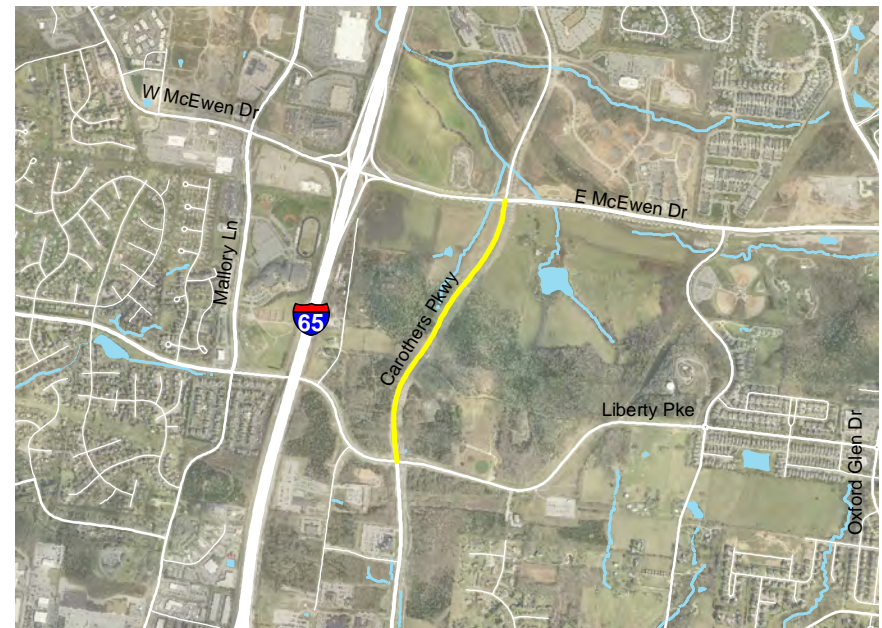
LIBERTY PIKE TO EAST MCEWEN DRIVE

PROJECT OVERVIEW	
OVERALL COST:	\$7,400,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.76 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

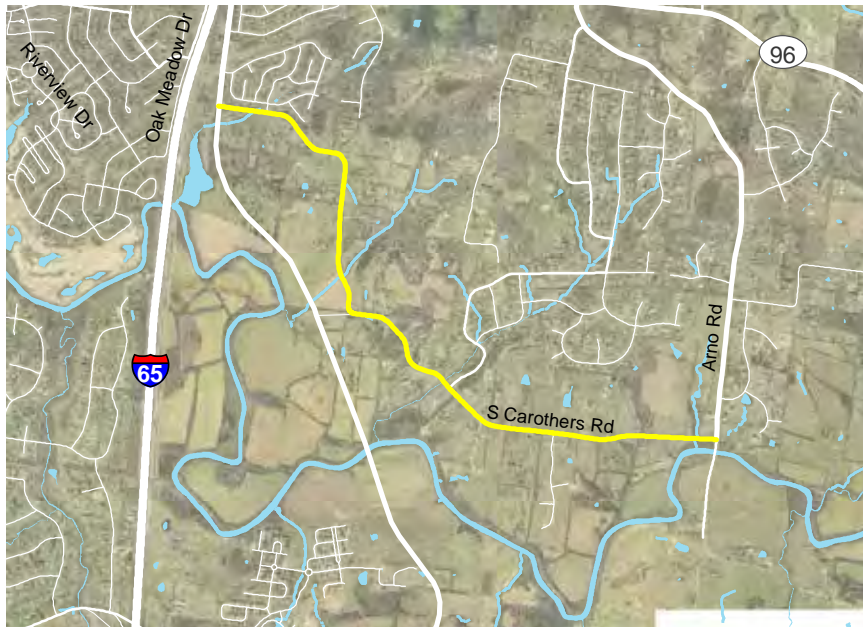
PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	Yes

Carothers Parkway, a major arterial, will be widened to 6 lanes between Liberty Pike and East McEwen Drive. Carothers Parkway is a major collector that moves people from the south areas of the City into the employment areas. There is still some land to develop in this area and it is projected to be employment uses. The 2015 LOS is a B. The 2040 LOS after improvements changes the road to a LOS D due to the increase in jobs and people in this area.



41 SOUTH CAROTHERS ROAD CAROTHERS PARKWAY TO ARNO ROAD

South Carothers Road will be upgraded to City standards. This roadway is a connection between Carothers Parkway and Arno Road. This upgrade will help the flow of increased traffic from Carothers to the east. This segment has a 2015 LOS of A. The 2040 LOS after improvements changes slightly to LOS B.



PROJECT OVERVIEW	
OVERALL COST:	\$12,200,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.79 miles
EXISTING LANES:	2
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

SEABOARD LANE 42

MALLORY STATION ROAD TO CROSSROADS BOULEVARD

PROJECT OVERVIEW	
OVERALL COST:	\$4,200,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	0.29 miles
EXISTING LANES:	3
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	122 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

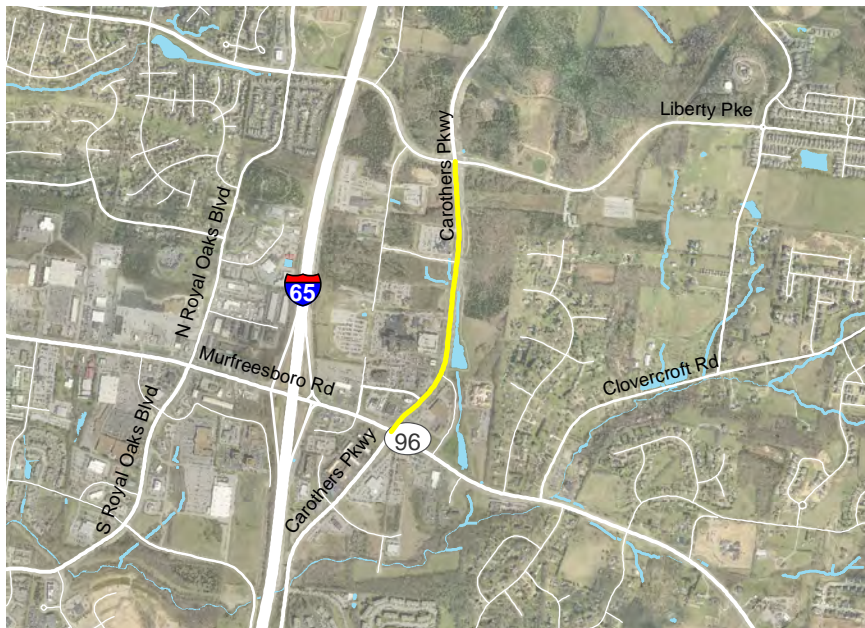
Seaboard Lane will be upgraded to City standards. This commercial corridor provides access from Crossroads Boulevard to Mallory Station Road. This upgrade will help the flow of increased traffic into the larger Cool Springs area. The 2015 LOS is B. The 2040 LOS after improvements changes slightly to LOS B and does not change after upgrading the road by 2040.



43 CAROTHERS PARKWAY

MURFREESBORO ROAD (SR-96) TO LIBERTY PIKE

Carothers Parkway will be widened to 6 lanes from Murfreesboro Road to Liberty Pike. Carothers Parkway is a major collector that runs parallel to I-65 and provides access from the north side of the City to the south side. The City will have upgraded the majority of this road by 2040 in order to handle the increased traffic along this corridor. The 2015 LOS is B. The 2040 LOS after improvements will change to a C due to new development which will increase density of commercial, retail and office and support more people coming to this area.



PROJECT OVERVIEW	
OVERALL COST:	\$7,200,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.75 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	Yes

MARKET STREET EXTENSION

NORTH CHAPEL ROAD (FUTURE EXTENSION) TO AMELIA PARK SUBDIVISION

44

PROJECT OVERVIEW	
OVERALL COST:	\$8,700,000
TIME FRAME:	Medium
PROJECT DRIVER:	Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.07 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

This project is a new 2 lane road to connect Amelia Park Subdivision and the future extension of North Chapel Road will be driven by development in the area. This connection will provide access to land that is currently not developed and proposed to be additional neighborhoods in the future. Because this is a new road there is not a 2015 LOS. The 2040 LOS after the new road is built is a LOS of B.



45 CLOVERCROFT ROAD

MARKET STREET TO (OLD/EXISTING) WILSON PIKE

Clovercroft, a minor collector, will be upgraded to City standards from Market Street to Old/Existing connection of Wilson Pike. This roadway needs to be upgraded due to future residential development in the area proposed for the future. The 2015 LOS is C. The 2040 LOS after the upgrade changes to an E from Market to the 2015 City limits and a D to Wilson Pike. As the area changes, this roadway will need to be examined in the future to determine if other improvements will be needed.



PROJECT OVERVIEW	
OVERALL COST:	\$5,500,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.77 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

COLUMBIA PIKE (SR-6/US-31) GOOSE CREEK BYPASS (SR-248) TO MACK HATCHER PARKWAY (SR-397)

46

PROJECT OVERVIEW	
OVERALL COST:	\$55,000,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

Columbia Pike, a major arterial, will be widened to 4 lanes from Mack Hatcher Parkway (SR-397) to Goose Creek Bypass (SR-248). Columbia Pike is one of two major north-south corridors that provide access into the south side of Downtown and the southwest side of the City. The 2015 LOS is D, E and F at various points in the corridor. The 2040 LOS after improvements is a consistent LOS D through this entire segment.

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	3.89 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	136 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Sides)
BICYCLE FACILITY:	Multi-use Trail (East Side)
TRANSIT FACILITY:	No



47 GOOSE CREEK BYPASS (SR-248) COLUMBIA PIKE (SR-6/US-31) TO LEWISBURG PIKE (SR-106/US-431)

Goose Creek Bypass (SR-248) a key east-west connection will be widened to 4 lanes. This improvement will occur from Columbia Pike (SR-6/US-31) to Lewisburg Pike (SR-106-US 431). This widening will support the future proposed residential development in the southern part of the City. This segment has a 2015 LOS of C. The 2040 LOS after improvements changes to a LOS B.



PROJECT OVERVIEW	
OVERALL COST:	\$37,600,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	2.66 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike Lanes (Both Sides)
TRANSIT FACILITY:	No

COOL SPRINGS BOULEVARD

MALLORY LANE TO CAROTHERS PARKWAY

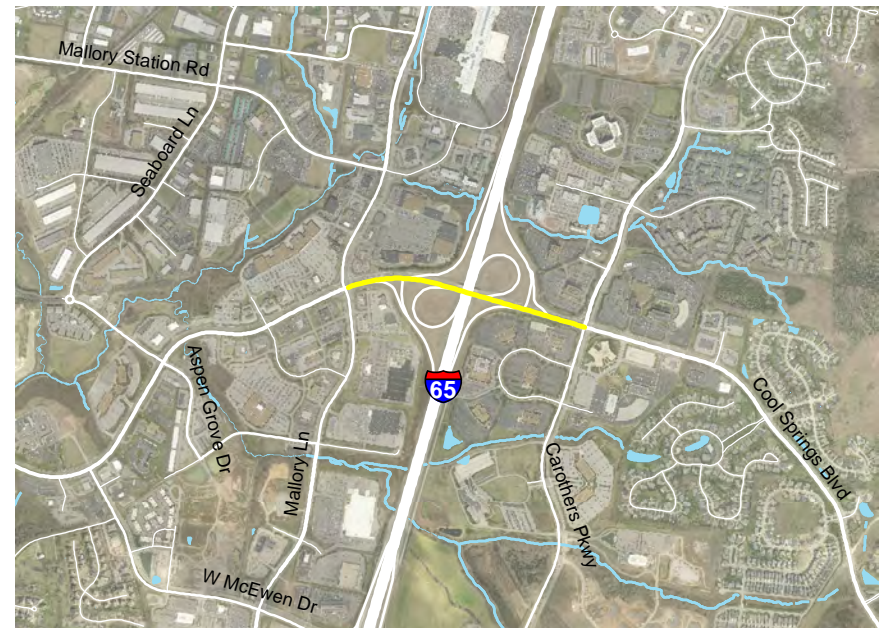
48

Widening of Cool Springs Boulevard from Mallory Lane to Carothers Parkway. This major arterial will be widened from 4 to 6 lanes. Cool Springs Boulevard is a key corridor that connects higher density residential to jobs and retail areas. This area is heavily traveled from Carothers Parkway to Mallory Lane as well as off of I-65. The 2015 LOS is B and will not change after the improvements in 2040.

PROJECT OVERVIEW	
OVERALL COST:	\$15,100,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

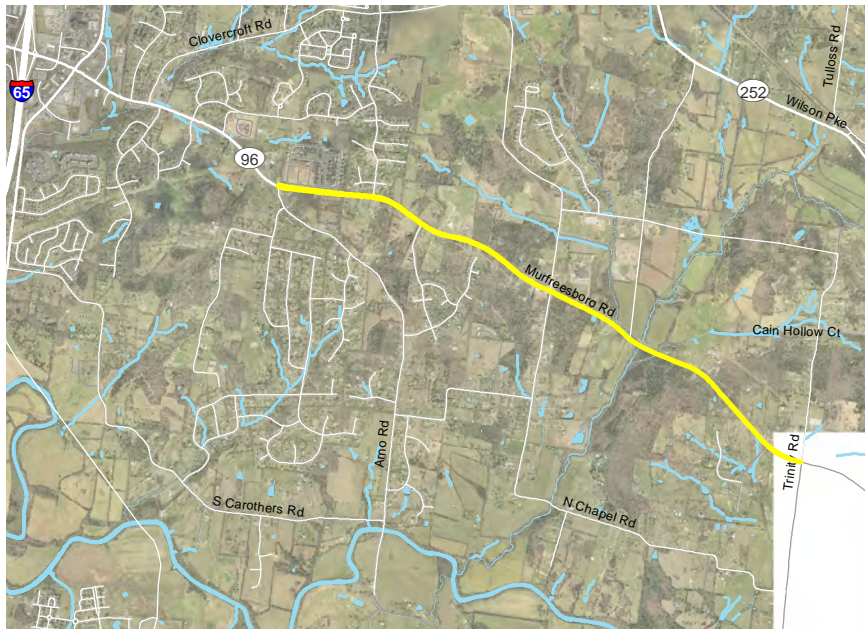
PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.63 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No



49 MURFREESBORO ROAD (SR-96) ARNO ROAD TO TRINITY ROAD

Murfreesboro Road (SR-96) will be widened to 4 lanes between Arno Road and Trinity Road. This major arterial is a primary east-west route through the City. The purpose of this widening is to help facilitate additional traffic in 2040. This segment has a 2015 LOS of D with a small segment having a LOS of C around the intersection of North Chapel Road and Murfreesboro Road. The 2040 LOS after this widening is LOS C from Arno Road to North Chapel Road and from Wilson Pike to Trinity. The section from North Chapel Road to Wilson Pike is a LOS B.



PROJECT OVERVIEW	
OVERALL COST:	\$38,800,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	2.75 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

HIGHWAY 96 WEST (SR-96W) 50

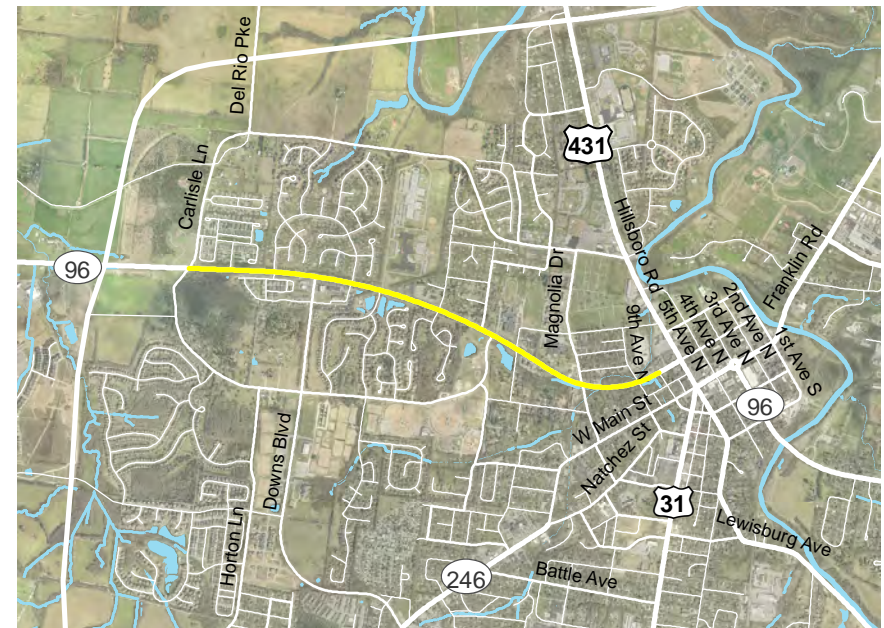
CARLISLE LANE TO 7TH AVENUE NORTH

PROJECT OVERVIEW	
OVERALL COST:	\$25,400,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.80 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

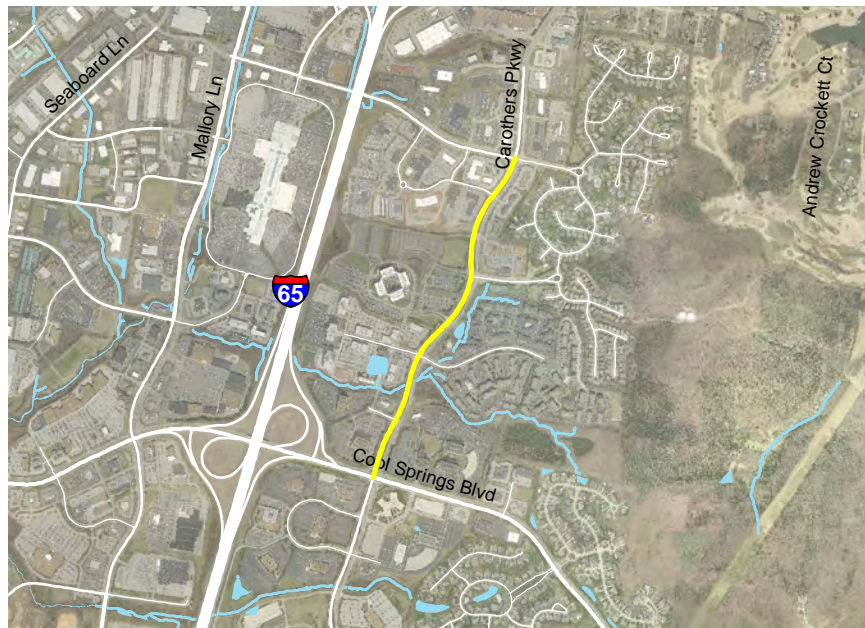
Highway 96 West (SR-96W) from Carlisle Lane to 7th Avenue North will be widened to 4 lanes. This major arterial traverses from the west side neighborhoods into the Downtown. As the west side of the City continues to develop with residential, this corridor will continue to be heavily traveled. The 2015 LOS is a B, C and D in various locations throughout this corridor. The 2040 LOS after this widening changes the LOS to a B.



51 CAROTHERS PARKWAY

COOL SPRINGS BOULEVARD TO BAKERS BRIDGE AVENUE

The section of Carothers Parkway will be widened to 6 lanes similar to other segments of Carothers Parkway. This section of the major arterial will be widened from Bakers Bridge Avenue to Cool Springs Boulevard. This is a key north-south corridor that accesses the employment areas within the City. The 2015 LOS is D, E and F in various locations throughout this segment. The 2040 LOS after improvements changes to a consistent LOS D. The slight improvement versus a drastic improvement is because this area will still see growth over the next 20 years. This area still has room to have increased density for both employment and retail uses. Therefore, the LOS will not improve drastically without some form of mass transit.



PROJECT OVERVIEW	
OVERALL COST:	\$11,400,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.11 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	Yes

CAROTHERS PARKWAY 52

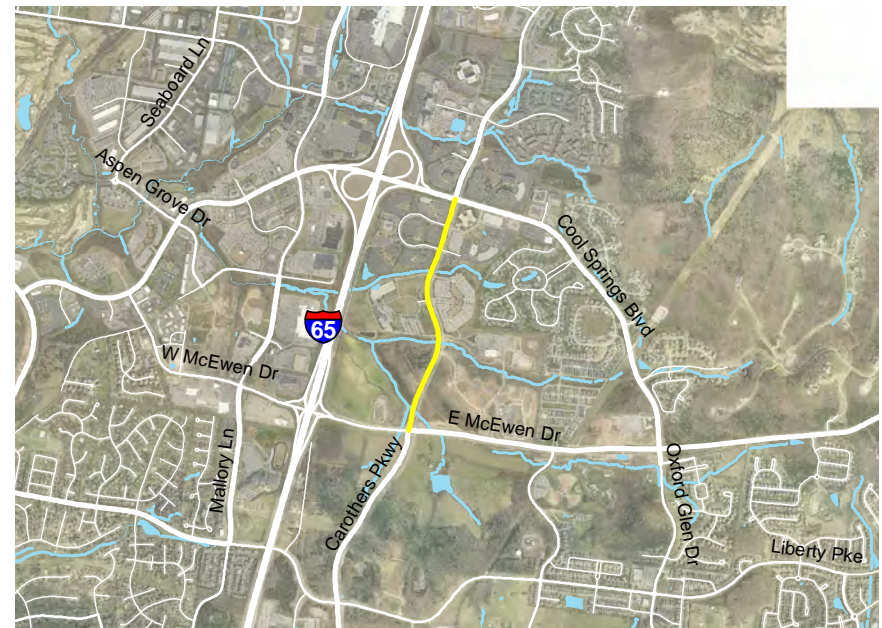
EAST MCEWEN DRIVE TO COOL SPRINGS BOULEVARD

PROJECT OVERVIEW	
OVERALL COST:	\$11,000,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.96 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	157 feet

PROJECT SPECIFICS	
LANE WIDTH:	13 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	Yes

This widening is a continuation of project 51. This section of Carothers will also be widened from 4 to 6 lanes from Cool Springs Boulevard to East McEwen Drive. This is a key north-south corridor that accesses the employment areas within the City. This segment has a 2015 LOS of B. The 2040 LOS after improvements changes to a LOS of D. This drastic change is due to the increased density and type of development in this area and its location between two major intersections to access I-65. The staff will need to review future recommendations prior to 2040 as development occurs. Mass transit in this area could also positively impact this LOS.



53 HIGHWAY 96 WEST (SR-96W) OLD HILLSBORO ROAD (SR-46) TO MACK HATCHER PARKWAY (SR-397)

Highway 96 West (SR-96W) will be widened to 4 lanes from Old Hillsboro Road (SR-46) to Mack Hatcher Parkway (SR-397). This section takes vehicular traffic out to the Westhaven development and out of the City's jurisdiction. There will be significant traffic as Westhaven continues to develop and other mixed use or residential development occurs in the northwest quadrant of the City. The 2015 LOS is D from Mack Hatcher Parkway to near the entrance of Westhaven. There is a small area that is a LOS C in front of the first Westhaven entrance and then moves to a LOS B. The 2040 LOS after improvements changes to a LOS of F in that section from Mack Hatcher to Westhaven and then has a LOS of D and C respectively. With the full built out of Mack Hatcher, this decrease in LOS can be attributed to this complete and more traffic using Mack Hatcher to get around the City and on to a SR to go west.



PROJECT OVERVIEW	
OVERALL COST:	\$25,300,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.79 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

(OLD/EXISTING) WILSON PIKE EXTENSION

LIBERTY PIKE EXTENSION TO EAST MCEWEN DRIVE

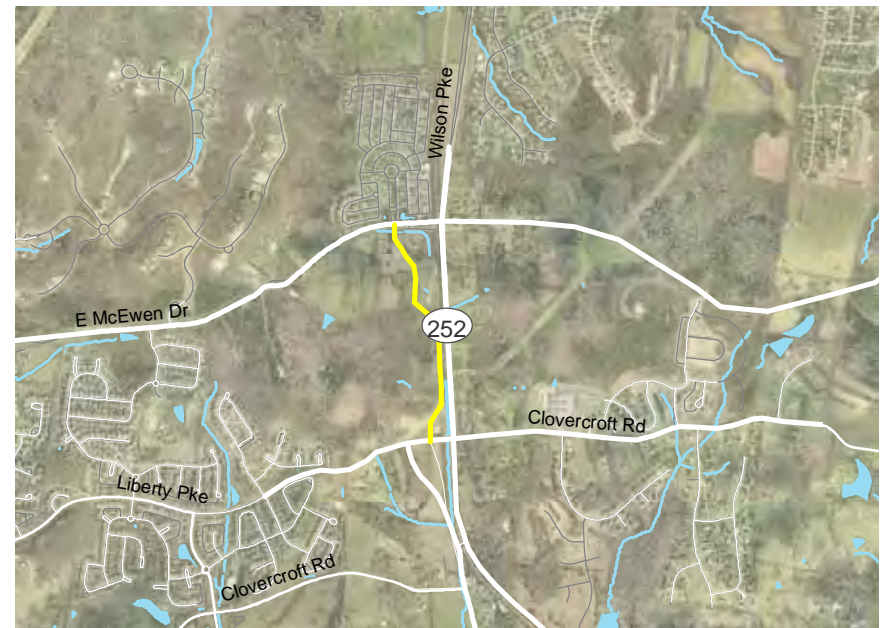
54

PROJECT OVERVIEW	
OVERALL COST:	\$5,700,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.71 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

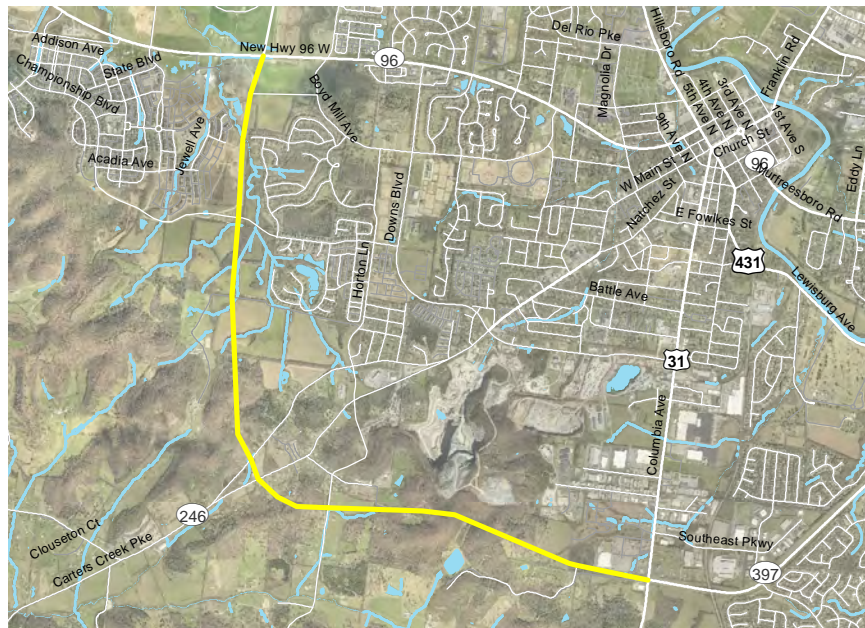
PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	No

Old/Existing Wilson Pike Extension will be widened with an additional lane from 2 to 3 lanes. This minor collector will be widened from Liberty Pike Extension to East McEwen Drive. This section needs to be upgraded due to the changes in Wilson Pike to eliminate the two single lane bridges on this road way. With improved access Wilson Pike will be traveled more frequently and require a widening to this segment. The 2015 LOS is C. The 2040 LOS after improvements changes the LOS to an F.



55 MACK HATCHER PARKWAY (SR-397) HIGHWAY 96 WEST (SR-96W) TO COLUMBIA AVENUE (SR-6/US-31)

The southwest quadrant of Mack Hatcher Parkway (SR-397) from Highway 96 West (SR-96W) to Columbia Avenue (SR-6/US-31) will be constructed with a new 4 lane road. This will be the final piece of the loop road around the City. There is no 2015 LOS because the road had not be constructed. The 2040 LOS after improvements changes slightly to a LOS of B.



PROJECT OVERVIEW	
OVERALL COST:	\$77,100,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Expressway / Freeway
SEGMENT LENGTH:	4.17 miles
EXISTING LANES:	0
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	250 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Multi-Use Trail (Northeast Side)
BICYCLE FACILITY:	Multi-Use Trail (Northeast Side)
TRANSIT FACILITY:	No

LEWISBURG PIKE (SR-106/US-431) 56

MCLEMORE ROAD TO GOOSE CREEK BYPASS (SR-248)

PROJECT OVERVIEW	
OVERALL COST:	\$30,100,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	2.13 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

Lewisburg Pike (SR-106/US-431) will be widened to 4 lanes from Goose Creek Bypass (SR-248) to McLemore Road. This major arterial is a key north-south connector that provides an alternative to move people south of the City on a local network instead of the interstate. This segment has a 2015 LOS of B. The 2040 LOS does not change after improvements.



57 LIBERTY PIKE

FRANKLIN ROAD (SR-6/US-31) TO MACK HATCHER PARKWAY (SR-397)

Liberty Pike will be widened from 3 to 4 lanes from Franklin Road (SR-6/US-31) to Mack Hatcher Parkway (SR-397). This minor arterial provides east-west access right outside the downtown core to Mack Hatcher and therefore is heavily used. The 2015 LOS is C from Franklin Road to Eddy Lane, B from Eddy Lane to Ralston Lane and E from approximately Ralston Lane to Mack Hatcher Parkway. The 2040 LOS after improvements changes slightly to a LOS of A from Franklin Road to Ralston Lane and B from Ralston Lane to Mack Hatcher Parkway.



PROJECT OVERVIEW	
OVERALL COST:	\$8,500,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	1.20 miles
EXISTING LANES:	3
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	128 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	Yes

LIBERTY PIKE 58

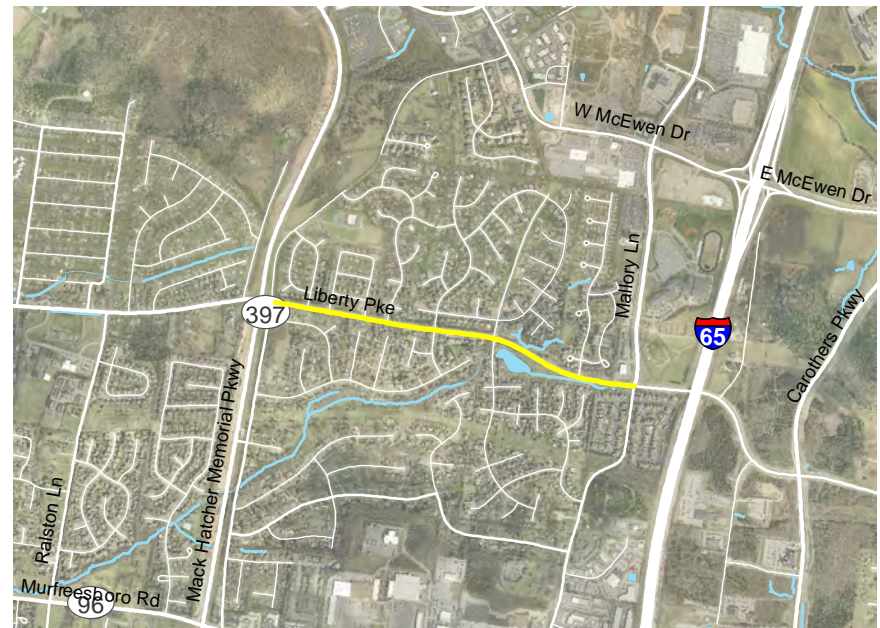
MACK HATCHER PARKWAY (SR-397) TO MALLORY LANE

PROJECT OVERVIEW	
OVERALL COST:	\$6,700,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	0.97 miles
EXISTING LANES:	3
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	128 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	Yes

This segment is a continuation of project 57. Liberty Pike will be widened from 3 to 4 lanes from Mack Hatcher Parkway (SR-397) to Mallory Lane. This minor arterial provides access from the core to several neighborhoods located just to the northwest of the downtown. This road also provide access under I-65 to get to the Cools Springs shopping and employment areas. The 2015 LOS is F with a small segment LOS D from Cadet Lane to Hillhaven Lane. The 2040 LOS after improvements changes to a consistent LOS C.



59

CARTERS CREEK PIKE (SR-246)

MACK HATCHER PARKWAY (SR-397) (FUTURE SW QUADRANT) TO DOWNS BOULEVARD

Carters Creek Pike (SR-246) will be widened from 2 to 4 lanes to help the flow of traffic out of Franklin along this minor arterial. The widening will happen from Mack Hatcher Parkway (SR-397) to Downs Boulevard. The 2015 LOS is C in two small segments and B for the majority of the road. The 2040 LOS after improvements changes slightly to a LOS of B from Downs Boulevard to the Y intersection and then forward a LOS A.



PROJECT OVERVIEW

OVERALL COST:	\$21,800,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

PROJECT CHARACTER

FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	1.54 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	128 feet

PROJECT SPECIFICS

LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Southeast Side)
BICYCLE FACILITY:	Multi-Use Trail (Northwest Side)
TRANSIT FACILITY:	No

CARTERS CREEK PIKE (SR-246)

60

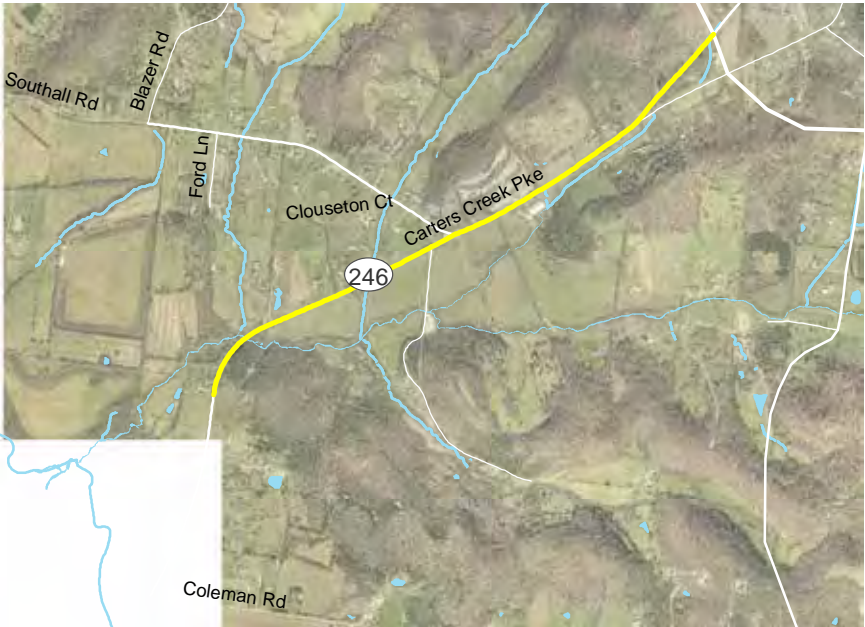
SOUTHWEST URBAN GROWTH BOUNDARY TO MACK HATCHER PARKWAY (SR-397) (FUTURE SW QUADRANT)

PROJECT OVERVIEW	
OVERALL COST:	\$23,400,000
TIME FRAME:	Long
PROJECT DRIVER:	TDOT

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	1.66 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	128 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Southeast Side)
BICYCLE FACILITY:	Multi-Use Trail (Northwest Side)
TRANSIT FACILITY:	No

This project is a continuation of the widening to 4 lanes in project 59. Carters Creek Pike (SR-246) will be widened from Mack Hatcher Parkway (SR-397) to Southwest Urban Growth Boundary to help the flow of traffic along this minor arterial. The turnoff lane will access individual properties that has developed along this road. This segment has a 2015 LOS of B from Mack Hatcher to Southall Road and an LOS A from Southall Road to the Urban Growth Boundary. The 2040 LOS after improvements changes slightly to a LOS of C and B, respectively. The decrease in this LOS can be attributed to the completion of Mack Hatcher Parkway and more people using SR-246 as a local road to travel southwest away from the city.



61

LIBERTY PIKE EXTENSION

TERMINUS OF EXISTING LIBERTY PIKE TO WILSON PIKE (SR-252)

This project is the creation of a new 2 lane roadway extending Liberty Pike from the Terminus of existing Liberty Pike to Wilson Pike (SR-252). This minor arterial is an important connector in order to complete and connect the improvements to Wilson Pike. This new road would provide another completed western route from I-65 to the east. Since this was not constructed in 2015, there was no LOS. The 2040 LOS after improvements changes slightly to a LOS of A and B. There is a small segment that is a LOS F from new alignment Wilson Pike to old alignment Wilson Pike.



PROJECT OVERVIEW	
OVERALL COST:	\$8,900,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin / Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	0.60 miles
EXISTING LANES:	0
PROPOSED LANES:	2 (Future 4 Lanes)
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

BOYD MILL AVENUE

FRANKLIN GREEN PARKWAY TO DOWNS BOULEVARD

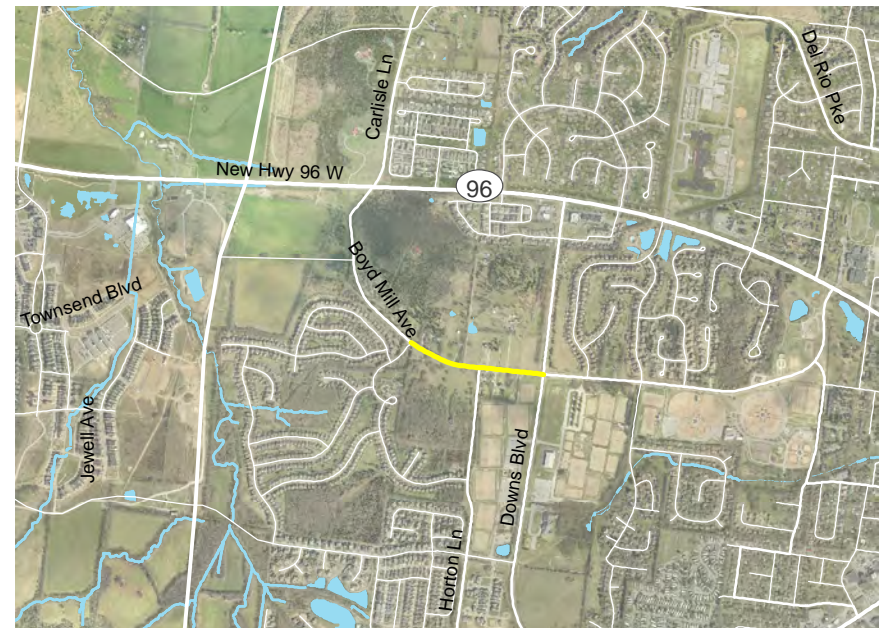
62

PROJECT OVERVIEW	
OVERALL COST:	\$3,800,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.38 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Lanes)
BICYCLE FACILITY:	Bike-lane (Both Lanes)
TRANSIT FACILITY:	No

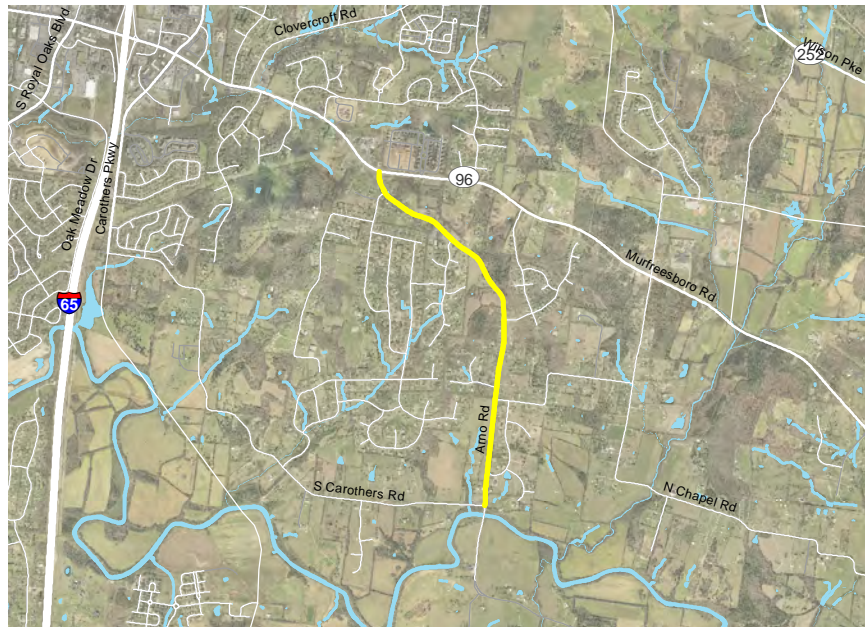
Minor collector Boyd Mill Avenue will be upgraded to City standards from Franklin Green Parkway to Downs Boulevard. The upgrade of this road would be a continuation of the upgraded Boyd Mill from Highway 96 West to a very large neighborhood. The 2015 LOS is C. The 2040 LOS after improvements changes to a LOS B.



63 ARNO ROAD

SOUTH CAROTHERS ROAD TO MURFREESBORO ROAD (SR-96)

Widening of major arterial Arno Road. The widening will be from 2 to 4 lanes from Murfreesboro Road (SR-96) to South Carothers Road. Arno Road is a direct connections from Murfreesboro Road to South Carothers. The 2015 LOS is an F from Murfreesboro Road to Cedarmont Drive, LOS D from Cedarmont Drive to just east of Tullamore Lane and LOS C from Tullamore Lane to South Carothers Road. The 2040 LOS after improvements changes slightly to a LOS of C.



PROJECT OVERVIEW	
OVERALL COST:	\$28,800,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	2.04 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	No

COTTON LANE 64

DEL RIO PIKE TO FIELDSTONE PARKWAY

PROJECT OVERVIEW	
OVERALL COST:	\$5,900,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.84 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

Cotton Lane will be upgraded to current standards. This upgrade will occur between Fieldstone Parkway and Del Rio Pike. This road needs to be upgraded because of improvements that will be made to Del Rio Pike as well as new connector road from the west creating a new intersection at Del Rio Pike and Cotton Lane. The 2015 LOS is B. The 2040 LOS after improvements does not change.



65 DOWNS BOULEVARD

WEST MAIN STREET (SR-246) TO COLUMBIA AVENUE (SR-6/US-31)

Downs Boulevard will be widened from West Main Street (SR-246) to Columbia Avenue (SR-6/US-31). This roadway will be widened from 2 to 4 lanes. Downs Boulevard is a key east west connector between W Main Street and Columbia Avenue. If the gravel pit ever becomes available for development an upgraded road will be needed. This segment has a 2015 LOS of B. The 2040 LOS after improvements is A.



PROJECT OVERVIEW	
OVERALL COST:	\$9,533,333
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	1.01 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	122 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

DOWNS BOULEVARD

MURFREESBORO ROAD (SR-96) TO WEST MAIN STREET (SR-246)

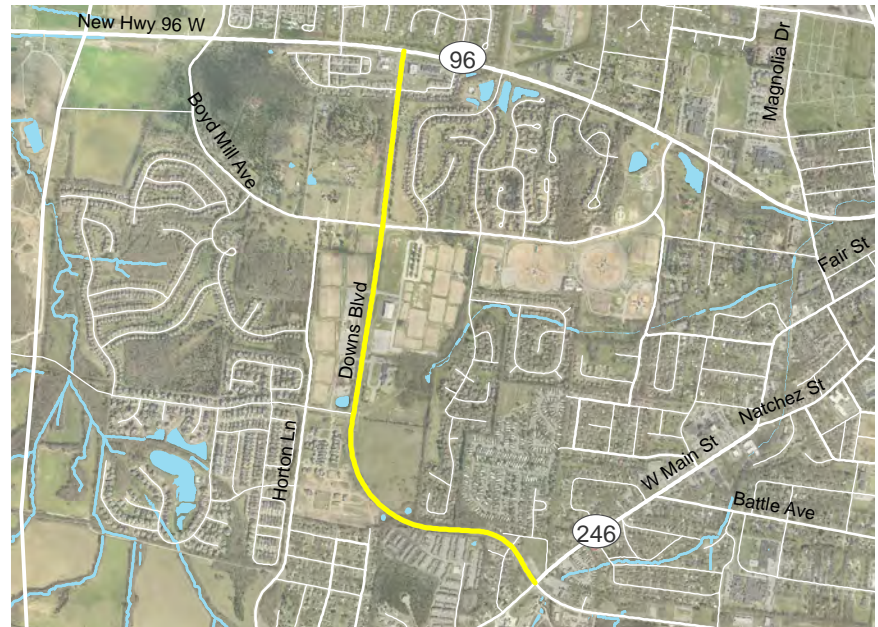
66

PROJECT OVERVIEW	
OVERALL COST:	\$12,050,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	1.70 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	122 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

This project is a continuation of project 65 with a widening of Downtown Boulevard from 2 lanes to 4 lanes. This roadway will be upgraded from Murfreesboro Road (SR-96) to West Main Street (SR-246). Downs Boulevard carries significant residential traffic to Highway 96 West and towards Columbia a major north-south arterial. The 2015 LOS is A generally from Highway 96 West to Boyd Mill Avenue, LOS B from Boyd Mill Avenue to Willowsprings Boulevard and a LOS C from Willowsprings Boulevard to W Main Street. The 2040 LOS after improvements changes a LOS B from Highway 96 W to Boyd Mill Avenue and a A from Boyd Mill Avenue to W Main Street.



67 BOYD MILL AVENUE CONNECTOR

MACK HATCHER PARKWAY (SR-397) TO BOYD MILL AVENUE

A new 2 lane road for Boyd Mill Avenue Connector, a minor collector will be constructed to help with traffic from residential neighborhoods accessing Boyd Mill Avenue and potentially Mack Hatcher. The new road will start at Mack Hatcher Parkway (SR-397) and end at Boyd Mill Avenue. Because the road does not exist there was no 2015 LOS. The 2040 LOS after improvements is a B.



PROJECT OVERVIEW	
OVERALL COST:	\$2,800,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.34 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

CARLISLE LANE

STONE MILL LANE TO DEL RIO PIKE

68

PROJECT OVERVIEW	
OVERALL COST:	\$4,186,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.55 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

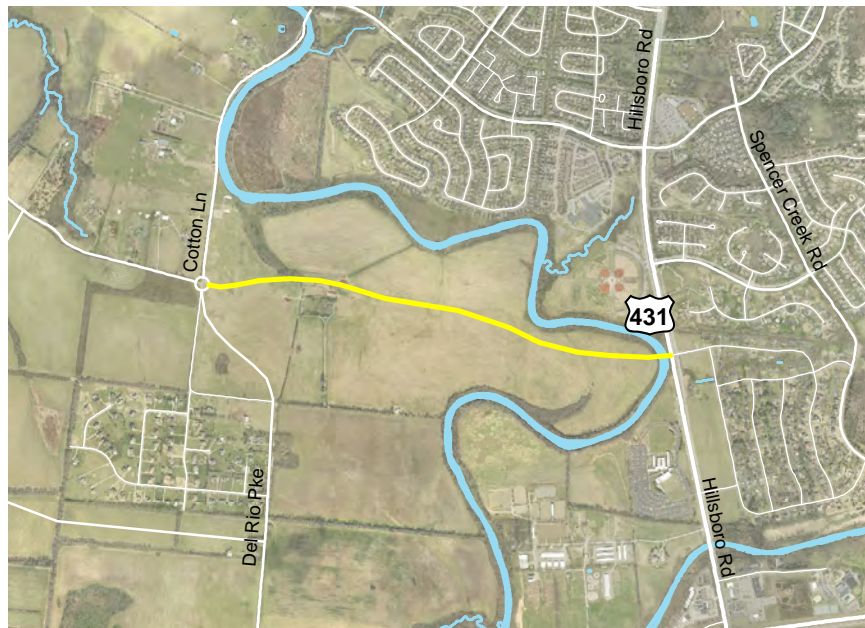
This is an upgrade to an existing 2 lane roadway. This new road will start at Del Rio Pike and end at Stone Mill Lane. This road provides an additional connection for several neighborhoods to access Highway 96 West quicker. There is no LOS in 2015 because the road was not constructed. The 2040 LOS after improvements is C.



69 NEW ROADWAY

COTTON LANE TO HILLSBORO ROAD (SR-106/US-431)

This project is a new roadway for a yet to be named road. The 2 lane road will start at Cotton Lane and end at Hillsboro Road (SR-106/US-431). This road provides a key connection in the very northwest quadrant to be constructed as the area builds out. This will be an east-west road that connects several north-south roads. There is no 2015 LOS as this has not been constructed. The 2040 LOS after construction is B.



PROJECT OVERVIEW	
OVERALL COST:	\$11,500,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.27 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

HORTON LANE 70

WEST MAIN STREET (SR-246) TO BOYD MILL AVENUE

PROJECT OVERVIEW	
OVERALL COST:	\$8,300,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.18 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

Horton Lane will be upgraded to City standards between Boyd Mill Avenue and West Main Street (SR-246). This roadway provides several residential neighborhoods a major north-south connection for the neighborhoods west of Columbia Avenue and to the east of Mack Hatcher. This segment has a 2015 LOS of A except for a middle segment from Winberry Drive to Fountainwood Boulevard which is a LOS B. The 2040 LOS after improvements is A.



71 DEL RIO PIKE

OLD HILLSBORO ROAD (SR-46) TO COTTON LANE

Del Rio Pike will be upgraded to City standards between Old Hillsboro Road (SR-461) to Cotton Lane. This minor collector connects into an interchange that has a new road connection from the east as well as an upgraded to City standards Cotton Lane. This segment has a 2015 LOS of B. The 2040 LOS after improvements changes to an A.



PROJECT OVERVIEW	
OVERALL COST:	\$6,200,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.88 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

NORTH CHAPEL ROAD 72

EXISTING WESTERN 90 DEGREE CURVE TO TRINITY ROAD

PROJECT OVERVIEW	
OVERALL COST:	\$11,100,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.58 miles
EXISTING LANES:	0-2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

A new 2 lane roadway will be constructed. North Chapel Road will be constructed from the existing western 90-degree curve of North Chapel Road to Trinity Road. This road will provide access to developable property and will be critical once the southwest side of the City develops. There is no 2015 LOS since the road has not been constructed. The 2040 LOS after construction will generally be a LOS C. There is a small area from Trinity Road west that has a LOS B.



73 NEW ROAD (EXISTING NORTH CHAPEL ROAD)

MURFREESBORO ROAD (SR-96) TO WILSON PIKE (SR-252)

To complete the transportation network in this area and support future residential development a new minor collector for a yet unnamed road will be created. This would be an extension of the existing North Chapel Road. This new road would start at Murfreesboro Road (SR-96) to Wilson Pike (SR-252). Because this segment has not been constructed there is no 2015 LOS. The 2040 LOS after construction would be a LOS of B from Wilson Pike to the Future North Chapel Extension and a LOS A from the Future North Chapel Extension to Murfreesboro Road.



PROJECT OVERVIEW	
OVERALL COST:	\$12,000,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.47 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	No

LYNWOOD WAY 74

NORTHWEST URBAN GROWTH BOUNDARY TO FRANKLIN ROAD (SR-6/US-431)

PROJECT OVERVIEW	
OVERALL COST:	\$8,600,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	0.61 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	122 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Multi-Use Trail (South Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

Lynwood Way will be widened to 4 lanes from the northwest urban growth boundary to Franklin Road (SR-6/US-431). The 2015 LOS is D from Franklin Road to Moher Boulevard and LOS C from Moher Boulevard. The 2040 LOS after improvements changes to a consistent LOS D.



75 CHADWELL/REAMS FLEMING OVERPASS

BERRY FARMS - CHADWELL TO BERRY FARMS - REAMS-FLEMING

A new overpass will be constructed to help connect minor collectors. This overpass would be the Chadwell/Reams Fleming Overpass to help provide additional access east-west across I-65. This would connect Chadwell at Berry Farms to Reams-Fleming also in Berry Farms. Because this road has not been constructed there is no 2015 LOS. The 2040 LOS after construction is an A.



PROJECT OVERVIEW

OVERALL COST:	\$12,000,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER

FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.24 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS

LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	-
TRANSIT FACILITY:	No

DEL RIO PIKE 76

CARLISLE LANE TO COTTON LANE

PROJECT OVERVIEW	
OVERALL COST:	\$13,666,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	1.45 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	126 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Lanes)
BICYCLE FACILITY:	Bike-lane (Both Lanes)
TRANSIT FACILITY:	No

A new Del Rio Pike road extension will be constructed. This roadway will be a 2 lane road from Cotton Lane to Berry Farms-Reams Fleming. This new road will complete the transportation network in the northwest quadrant that will have increased development in the area. Because this road was not constructed, there is no 2015 LOS. The 2040 LOS after improvements is a C.



77 HORTON LANE EXTENSION

CARTERS CREEK PIKE (SR-246) TO COLEMAN ROAD

Horton Lane Extension is a new 2 lane roadway. The new road will start at Carter’s Creek Pike (SR-246) to Coleman Road. This new road adds another north-south collector on the west side of the City. This will provide access to land in the City that has the potential for future residential development. Because this road has not been constructed, there is no 2015 LOS. The 2040 LOS after construction is A.



PROJECT OVERVIEW	
OVERALL COST:	\$20,000,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin / Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	2.44 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

TRINITY ROAD 78

MURFREESBORO ROAD (SR-96) TO WILSON PIKE (SR-252)

PROJECT OVERVIEW	
OVERALL COST:	\$11,600,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.64 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	No

Trinity Road will be upgraded to City Standards from Wilson Pike (SR-252) to Murfreesboro Road (SR-96). This road will see increased traffic because other roads connecting into Trinity Road are either being widened or upgraded to City standards. The 2040 LOS after improvements changes slightly to a LOS of B from Wilson Pike to a new unnamed road and a LOS A from new unnamed road to Murfreesboro Road.



79 NORTH CHAPEL ROAD (FUTURE MARKET STREET) MURFREESBORO ROAD (SR-96) TO EXISTING WESTERN 90 DEGREE CURVE

Minor collector, North Chapel Road (Future Market Extension), will be upgraded to City Standards from Murfreesboro Road (SR-96) to the existing western 90-degree curve. With upgrades to Murfreesboro Road and the creation of a new road, North Chapel Road will experience increased traffic. The 2015 LOS is A. The 2040 LOS after improvements change the LOS to a B.



PROJECT OVERVIEW	
OVERALL COST:	\$2,900,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.41 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike Lanes (Both Sides)
TRANSIT FACILITY:	No

NEW ROADWAY 80

OLD HILLSBORO ROAD (SR-46) TO DEL RIO PIKE

PROJECT OVERVIEW	
OVERALL COST:	\$11,400,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.41 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Sides)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

A new 2 lane road from Old Hillsboro Road (SR-46) to Del Rio Pike will be created. The minor collector provides a new east-west connection in this northwest quad and provides access to additional land proposed as residential. This road was not constructed prior to 2015 so there is no LOS. The 2040 LOS after construction is LOS A.



81

SNOWBIRD HOLLOW ROAD

COLUMBIA PIKE (SR-6/US-31) TO GOOSE CREEK BYPASS (SR-248)

Snowbird Hollow Road, a Minor Collector, will be upgraded to City standards from Columbia Pike (SR-6/US-31) to Goose Creek Bypass (SR-248). This road will see increased traffic due to future residential growth in the area, therefore upgrading this road is necessary.



PROJECT OVERVIEW

OVERALL COST:	\$8,000,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER

FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.14 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS

LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

SNOWBIRD HOLLOW ROAD

82

GOOSE CREEK BYPASS (SR-248) TO LEWISBURG PIKE (SR-106/US-431)

PROJECT OVERVIEW	
OVERALL COST:	\$9,000,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.26 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (North Side)
BICYCLE FACILITY:	Multi-Use Trail (South Side)
TRANSIT FACILITY:	No

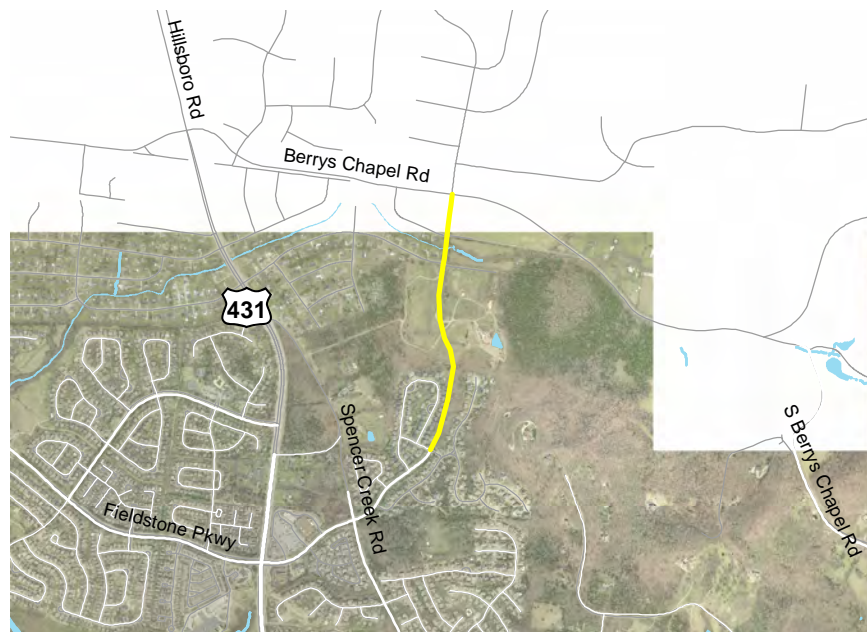
As a future connection project to project 81, a new 2 lane extension will be constructed. Snowbird Hollow Road will be extended from Goose Creek Bypass (SR-248) to Lewisburg Pike (SR-106/US-431). Since this was not in existence in 2015 there is no LOS. The 2040 LOS after construction is LOS A.



83 FIELDSTONE PARKWAY EXTENSION

BEXLEY PARK DRIVE TO SOUTH BERRYS CHAPEL ROAD

Fieldstone Extension Parkway, which is a Minor Collector, will be extended as a 2 lane roadway from South Berry’s Chapel to Bexley Park Drive. This extension will provide another connection to South Berrys Chapel Road for resident to access the northern reaches of the transportation network. Because this road was not constructed in 2015 there is no LOS. The 2040 LOS after construction is LOS C.



PROJECT OVERVIEW	
OVERALL COST:	\$5,300,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin / Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.71 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	-
TRANSIT FACILITY:	No

RALSTON LANE 84

MURFREESBORO ROAD (SR-96) TO LEWISBURG PIKE (SR-106/US-431)

PROJECT OVERVIEW	
OVERALL COST:	\$9,000,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.72 miles
EXISTING LANES:	0
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	No

Ralston Lane extension is a new 2 lane road from Murfreesboro (SR-96) to Lewisburg Pike (SR-106/US-431). This road will provide additional access for nearby residential development to help reduce congestion along Murfreesboro Road by providing another connection to the south and connecting to Lewisburg Pike. There is no 2015 LOS as the road was not constructed. The 2040 LOS after construction is a LOS B and an LOS A near the intersection of future Ralston and Lewisburg Pike Avenue.



85 MCLEMORE ROAD EXTENSION

LEWISBURG PIKE (SR-106/US-431) TO LEWISBURG PIKE (SR-106/US-431)

In order to support the future residential and commercial growth in this area, the McMlemore Road Extension from Lewisburg Pike (SR-106/US-431) to Lewisburg Pike (SR-106/US-431) will create a new 2 lane road. There is no 2015 LOS since this road has not been constructed. The 2040 LOS after new construction is a LOS A.



PROJECT OVERVIEW	
OVERALL COST:	\$10,900,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.35 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

CLOVERCROFT ROAD 86

WILSON PIKE (SR-252) TO EASTERN CITY LIMITS

PROJECT OVERVIEW	
OVERALL COST:	\$11,400,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	1.11 miles
EXISTING LANES:	2
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	128 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

Clovercroft Road will be increased to 4 lanes from Wilson Pike (SR-252) to the Eastern City limits. This minor arterial serves as key east-west connection into and out of the City. This segment has a 2015 LOS of B. The 2040 LOS after improvements changes slightly to a LOS of C. This change in LOS is due to the new connection of Liberty Pike to Wilson Pike.



87 HENPECK LANE

COLUMBIA PIKE (SR-6/US-431) TO LEWISBURG PIKE (SR-106/US-431)

Henpeck Lane from Lewisburg Pike (SR-106/US-431) to Columbia Pike (SR-6/US-31) should be upgraded to City standards in order to connect existing neighborhoods and to the larger pedestrian network. The 2015 map shows a LOS A from Columbia Avenue to Moss Lane and a LOS B from Moss Lane to Lewisburg Pike. The 2040 LOS after improvements is LOS B from Columbia Avenue to Moss Lane and LOS C from Moss Lane to Lewisburg Pike.



PROJECT OVERVIEW	
OVERALL COST:	\$15,300,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	2.16 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

CAROTHERS PARKWAY (SOUTH EXTENSION) GOOSE CREEK BYPASS (SR-248) (FUTURE EXTENSION) TO PEYTONSVILLE ROAD

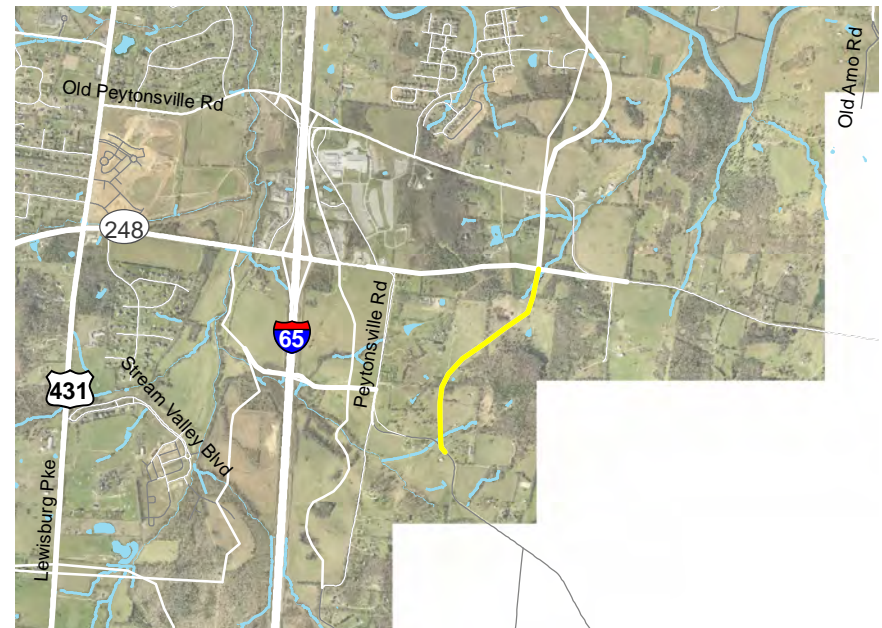
88

PROJECT OVERVIEW	
OVERALL COST:	\$14,300,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

Major Collector, Carothers Parkway (South extension) extension, a new 4 lane road, from Goose Creek Bypass (SR-248) (future extension) to Peytonsville Road. The major collector is a key connection of this southeast quadrant transportation network. Because this road was not constructed in 2015 there is no LOS. The 2040 LOS after improvements changes slightly to a LOS B.

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.90 miles
EXISTING LANES:	0
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	132 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	Yes
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (East Side)
BICYCLE FACILITY:	Multi-Use Trail (West Side)
TRANSIT FACILITY:	No



89

COLEMAN ROAD

COLUMBIA PIKE (SR-6/US-31) TO WESTERN URBAN GROWTH BOUNDARY

This project includes upgrades to Coleman Road from Columbia Pike (SR-6/US-31) to the Western Urban Growth Boundary to City standards and adding a proposed multi-use path. With Henpeck Lane being upgraded and the rest of Coleman Road upgraded, this small section needs to be upgraded. The 2015 LOS is A. The 2040 LOS after improvements changes slightly to a LOS B.



PROJECT OVERVIEW	
OVERALL COST:	\$3,400,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.47 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

WILLOWSPRINGS BOULEVARD EXTENSION

MACK HATCHER PARKWAY (SR-397) TO EXISTING WILLOWSPRINGS BOULEVARD

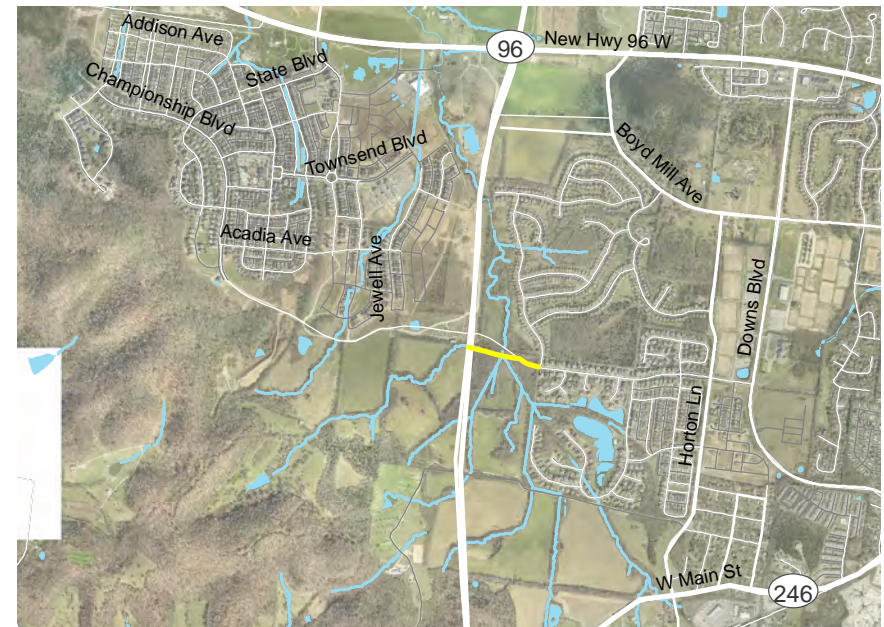
90

PROJECT OVERVIEW	
OVERALL COST:	\$5,000,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

Willowsprings Boulevard, a local road, will be extended from Mack Hatcher Parkway (SR-397) to Willowsprings Boulevard. This road will provide access to Mack Hatcher for several neighborhoods in this area. There is no LOS in the model because it is a local road, which was not modeled.

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Local
SEGMENT LENGTH:	0.74 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	-
TRANSIT FACILITY:	No



91

MCLEMORE ROAD

GOOSE CREEK BYPASS (SR-248) TO LEWISBURG PIKE (SR-106/US-431)

A new 2 lane road, McLemore Road, will be constructed from Goose Creek Bypass (SR-248) to Lewisburg Pike (SR-106/US431). The minor collector provides a valuable connection between Columbia Pike and Lewisburg Pike in the south part of the City. There is no 2015 LOS because it was not connected. The 2040 LOS after construction is A.



PROJECT OVERVIEW

OVERALL COST:	\$11,800,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

PROJECT CHARACTER

FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.67 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS

LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (South Side)
BICYCLE FACILITY:	Multi-Use Trail (North Side)
TRANSIT FACILITY:	No

OXFORD GLEN DRIVE 92

MURFREESBORO ROAD TO CLOVERCROFT ROAD

PROJECT OVERVIEW	
OVERALL COST:	\$5,300,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.93 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	79 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (Both Sides)
BICYCLE FACILITY:	Bike-lane (Both Sides)
TRANSIT FACILITY:	No

Oxford Glen Drive, a minor collector, will be upgraded to City standards from Clovercroft Road to Murfreesboro Road (SR-96). This upgrade will support traffic flow and allow pedestrian connections between the many neighborhoods accessing this road. This segment has a 2015 LOS of B. The 2040 LOS after improvements changes to a LOS F from Clovercroft Road to Montridge Court, a LOS D from Montridge Court to Burton Drive, and a LOS C from Burton Drive to Murfreesboro Road. Future improvements will need to be re-evaluated as future growth expands to the east as this road's LOS decreases.



93 NEW ROADWAY

OLD CHARLOTTE PIKE TO DEL RIO PIKE

A new 2 lane unnamed road will connect Del Rio Pike to Old Charlotte Pike. This minor collector, which is development driven, will provide additional north-south access that will provide options for the future development of land in this area. There is no 2015 LOS as this is a new roadway and not yet constructed. The 2040 LOS after construction is LOS C and LOS D.



PROJECT OVERVIEW	
OVERALL COST:	\$13,700,000
TIME FRAME:	Long
PROJECT DRIVER:	Development

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	1.69 miles
EXISTING LANES:	0
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	75 feet

PROJECT SPECIFICS	
LANE WIDTH:	12 feet
MEDIAN:	No
CURB & GUTTER:	Yes
PARKING:	No
PEDESTRIAN FACILITY:	Sidewalk (West Side)
BICYCLE FACILITY:	Multi-Use Trail (East Side)
TRANSIT FACILITY:	No

MURFREESBORO ROAD (SR-96) MACK HATCHER PARKWAY (SR-397) TO INTERSTATE 65

PROJECT OVERVIEW	
OVERALL COST:	\$3,000,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	1.20 miles
EXISTING LANES:	4
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	Yes

This project includes the addition of sidewalks on the south side of HWY 96 to fill in gaps and convert the existing sidewalk to the north into a multi-use trail. This trail connects multiple commercial areas and neighborhoods and would connect to a larger pedestrian network on Mack Hatcher.



95 SOUTH ROYAL OAKS BOULEVARD

MACK HATCHER PKWY (SR-397) TO MURFREESBORO ROAD (SR-96)

Bicycle / Pedestrian Improvement Only

Add a sidewalk to fill in gaps on the North side and convert the existing sidewalk on the south side into a multi-use trail. The project would be from Mack Hatcher Parkway (SR-397) to Murfreesboro Road (SR-96). This road connects multiple neighborhoods and would connect to a larger pedestrian network on Mack Hatcher.



PROJECT OVERVIEW	
OVERALL COST:	\$1,950,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.30 miles
EXISTING LANES:	4
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No

PROJECT OVERVIEW	
OVERALL COST:	\$1,950,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.30 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No

This project would add onto the existing 5' sidewalk and convert the sidewalk into a 12' wide multiuse trail.



97 1ST AVENUE

SOUTH MARGIN STREET TO NORTH MARGIN STREET

Bicycle / Pedestrian Improvement Only

This project would connect Pinkerton Park, Historic downtown Franklin and Bicentennial Park. Construction includes a 12' wide multi-use trail on the east side of 1st Ave.



PROJECT OVERVIEW	
OVERALL COST:	\$1,470,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Arterial
SEGMENT LENGTH:	0.49 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No

Bicycle / Pedestrian Improvement Only

MALLORY LANE

LIBERTY PIKE TO COOL SPRINGS BLVD

98

This project would add onto the existing 5' sidewalk and convert the sidewalk into a 12' wide multi-use trail.

PROJECT OVERVIEW	
OVERALL COST:	\$2,325,000
TIME FRAME:	Short
PROJECT DRIVER:	Development / City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.55 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	Yes



99 MURFREESBORO ROAD (SR-96) INTERSTATE 65 TO HURSTBOURNE PARK BLVD

Bicycle / Pedestrian Improvement Only

This project includes the construction of a 12' wide multi-use trail on the north side of Murfreesboro Road and 5' sidewalk on the south side of Murfreesboro Road.



PROJECT OVERVIEW	
OVERALL COST:	\$2,700,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.80 miles
EXISTING LANES:	4
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No

MACK HATCHER PARKWAY (SR-397) TO EASTERN FLANK BATTLEFIELD PARK

PROJECT OVERVIEW	
OVERALL COST:	\$2,100,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

This project will construct an open ditch multi-use trail from the Eastern Flank Battlefield Park to Mack Hatcher Parkway. This trail system will eventually connect into the proposed trail system associated with Mack Hatcher Parkway and Lewisburg Pike.

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Local
SEGMENT LENGTH:	1.40 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No



101 MACK HATCHER PARKWAY (SR-397)

HILLSBORO RD (SR-106/US-431) TO FRANKLIN RD (SR6/US-31)

Bicycle / Pedestrian Improvement Only

The Mack Hatcher Parkway (SR-397) has been designed with a multi-use path on the south side of the road. A multi-use path exists from Franklin Road to Daniel McMahon Lane. In order to complete this pedestrian network so there is a complete network around this major corridor, the completion of a multi-use path from Hillsboro Road to Daniel McMahon Lane is necessary.



PROJECT OVERVIEW	
OVERALL COST:	\$2,295,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Expressway / Freeway
SEGMENT LENGTH:	1.53 miles
EXISTING LANES:	4
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	None
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No

COOL SPRINGS BLVD 102

MACK HATCHER PARKWAY (SR-397) TO INTERSTATE 65

PROJECT OVERVIEW	
OVERALL COST:	\$2,700,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.80 miles
EXISTING LANES:	4
PROPOSED LANES:	6
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	Yes

This project would add onto the existing 5' sidewalk and convert the sidewalk into a 12' wide multi-use trail.



103 OXFORD GLEN DRIVE

DAYLILY DRIVE TO EAST MCEWEN DRIVE

Bicycle / Pedestrian Improvement Only

This northern section of Oxford Glen Drive from McEwen Drive to Liberty Pike already has bike lanes, however the right-of-way has enough room for the construction of a 12' wide multi-use trail to provide pedestrian access and benefit the neighborhoods in the area.



PROJECT OVERVIEW	
OVERALL COST:	\$870,000
TIME FRAME:	Short
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.60 miles
EXISTING LANES:	2
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	None
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No

Bicycle / Pedestrian Improvement Only

FOREST CROSSING BLVD 104

STONEGATE DRIVE TO SOUTH ROYAL OAKS BLVD

This project would include a 12' wide multi-use trail to fill in a gap between the Forrest Crossing neighborhood and South Royal Oaks.

PROJECT OVERVIEW	
OVERALL COST:	\$375,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Local
SEGMENT LENGTH:	0.25 miles
EXISTING LANES:	4
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	None
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No



105 RALSTON LANE

MURFREESBORO ROAD (SR-96) TO LIBERTY PIKE

Bicycle / Pedestrian Improvement Only

This project would add onto the existing 5' sidewalk and convert the sidewalk into a 12' wide multi-use trail on the west side of the roadway.

PROJECT OVERVIEW

OVERALL COST:	\$1,155,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER

FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.77 miles
EXISTING LANES:	3
PROPOSED LANES:	2
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS

LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No



NORTH ROYAL OAKS BLVD 106

MURFEESBORO ROAD (SR-96) TO LAKEVIEW DRIVE

This project would add onto the existing 5' sidewalk and convert the sidewalk into a 12' wide multi-use trail on the east side of the roadway.

PROJECT OVERVIEW	
OVERALL COST:	\$420,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	0.28 miles
EXISTING LANES:	4
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No

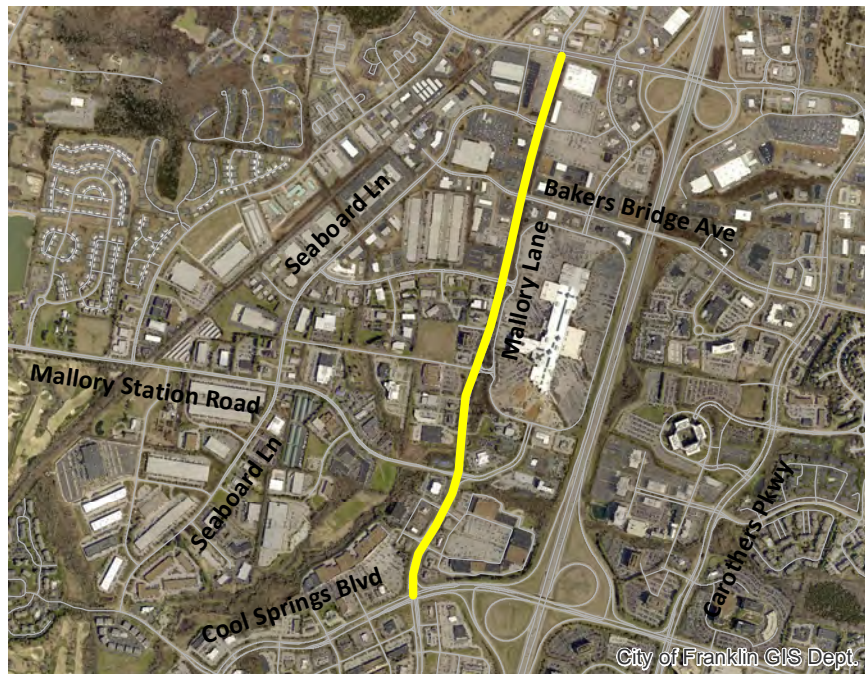


107 MALLORY LANE

COOL SPRINGS BLVD TO MOORES LANE

Bicycle / Pedestrian Improvement Only

This project would add onto the existing 5' sidewalk and convert the sidewalk into a 12' wide multi-use trail.



PROJECT OVERVIEW	
OVERALL COST:	\$2,175,000
TIME FRAME:	Medium
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	11.45 miles
EXISTING LANES:	4
PROPOSED LANES:	5
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	Yes

SEABOARD LANE AND ASPEN GROVE DRIVE

COOL SPRINGS BLVD TO MALLORY STATION ROAD 108

PROJECT OVERVIEW	
OVERALL COST:	\$3,000,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Arterial
SEGMENT LENGTH:	1.53 miles
EXISTING LANES:	4
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No

This project would include the construction of a 5' sidewalk on the south side and a 12' wide multi-use trail on the north side and would connect into Aspen Grove Park.



City of Franklin GIS Dept.

109 GENERAL GEORGE PATTON DRIVE

MALLORY STATION ROAD TO NORTHERN CITY LIMITS

Bicycle / Pedestrian Improvement Only

This project would include the construction of a 12' multi-use trail on the west side and a 5' sidewalk on the east side of General George Patton Drive.



PROJECT OVERVIEW	
OVERALL COST:	\$1,800,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.60 miles
EXISTING LANES:	3
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	Yes

Bicycle / Pedestrian Improvement Only

BAKERS BRIDGE AVENUE 110

MALLORY LANE TO CAROTHERS PARKWAY

This project would add onto the existing 5' sidewalk and convert the sidewalk into a 12' wide multi-use trail. This should be a long term project to be completed when the bridge deck is rehabilitated.

PROJECT OVERVIEW	
OVERALL COST:	\$2,250,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Major Collector
SEGMENT LENGTH:	0.75 miles
EXISTING LANES:	4
PROPOSED LANES:	4
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	Multi-Use Trail
TRANSIT FACILITY:	No



City of Franklin GIS Dept.

CROSSROADS BLVD

SEABOARD LANE TO SOUTHGATE COURT

Bicycle / Pedestrian Improvement Only

This project would add 5' sidewalks on both sides of the roadway.



PROJECT OVERVIEW	
OVERALL COST:	\$750,000
TIME FRAME:	Long
PROJECT DRIVER:	City of Franklin

PROJECT CHARACTER	
FUNCTIONAL CLASSIFICATION:	Minor Collector
SEGMENT LENGTH:	0.25 miles
EXISTING LANES:	3
PROPOSED LANES:	3
PROPOSED RIGHT OF WAY:	N/A

PROJECT SPECIFICS	
LANE WIDTH:	N/A
MEDIAN:	N/A
CURB & GUTTER:	N/A
PARKING:	N/A
PEDESTRIAN FACILITY:	Sidewalk
BICYCLE FACILITY:	None
TRANSIT FACILITY:	Yes

A2 PLANNING CONTEXT

STUDY AREA

The City of Franklin is located approximately 15 miles south of Nashville, Tennessee in Williamson County. Franklin is considered to be part of the Nashville-Davidson-Murfreesboro-Franklin, TN Metropolitan Statistical Area, which has a land area of 7,484 square miles and a 2014 estimated population of 1,792,649 (2014 American Community Survey).

The City of Franklin municipal limits include an area of approximately 41 square miles. According to the 2010 U.S. Census, the City's population was 62,487 (2010 U.S. Census). The City had a special census conducted in 2014 that measured the City population at 66,335. The subject area for this plan includes the City of Franklin Urban Growth Boundary (UGB) as identified by the Nashville Area Metropolitan Planning Organization (NAMPO) in addition to all lands incorporated into the City limits. The Franklin UGB includes an additional 34 square miles of land area. The City limits and Urban Growth Boundary are depicted in Figure A2.2.



It is important to have an understanding of projected growth and development in order to make informed decisions regarding future transportation investments.

A2 PLANNING CONTEXT

FIGURE A2.1: REGIONAL CONTEXT MAP

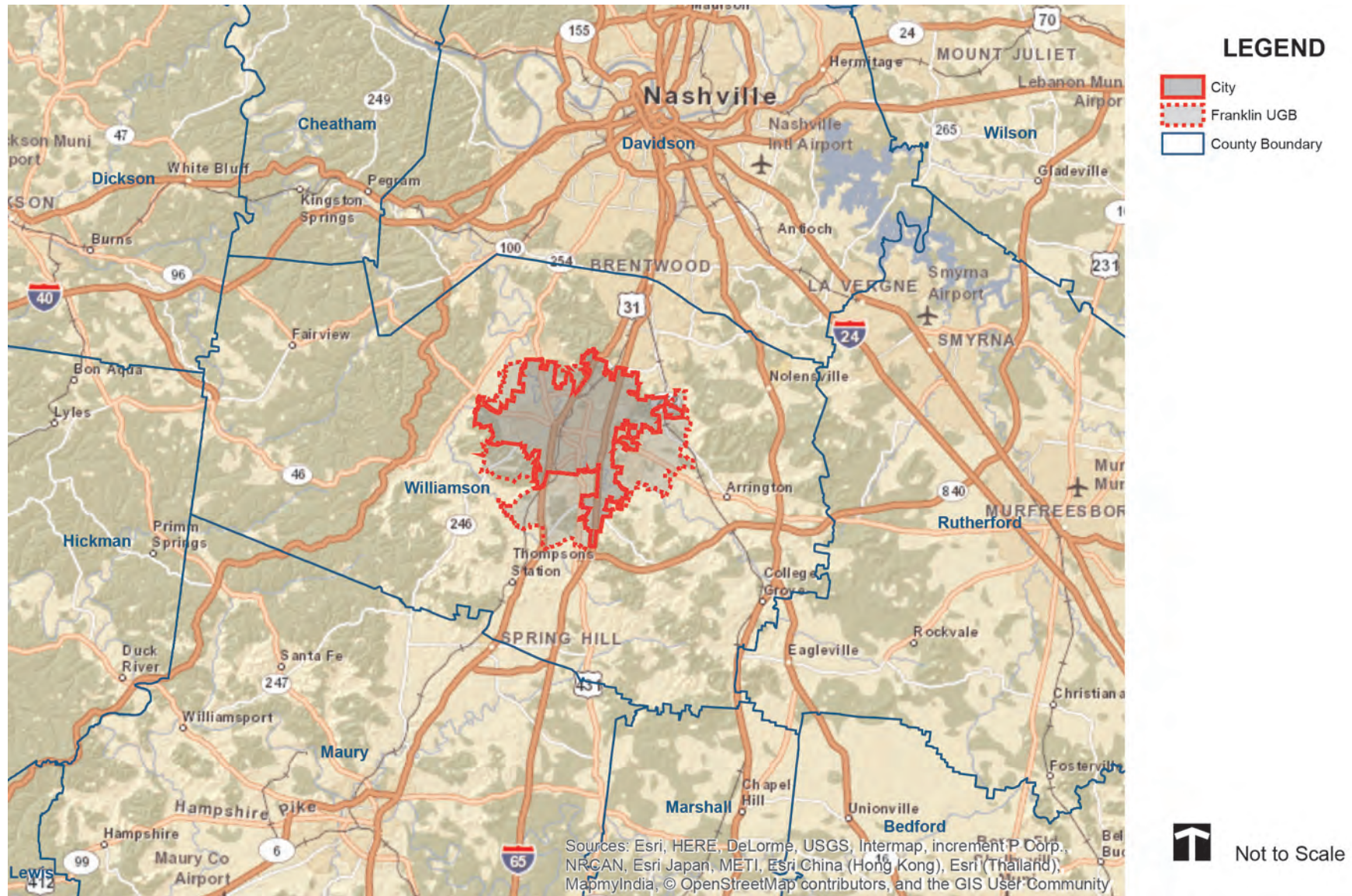
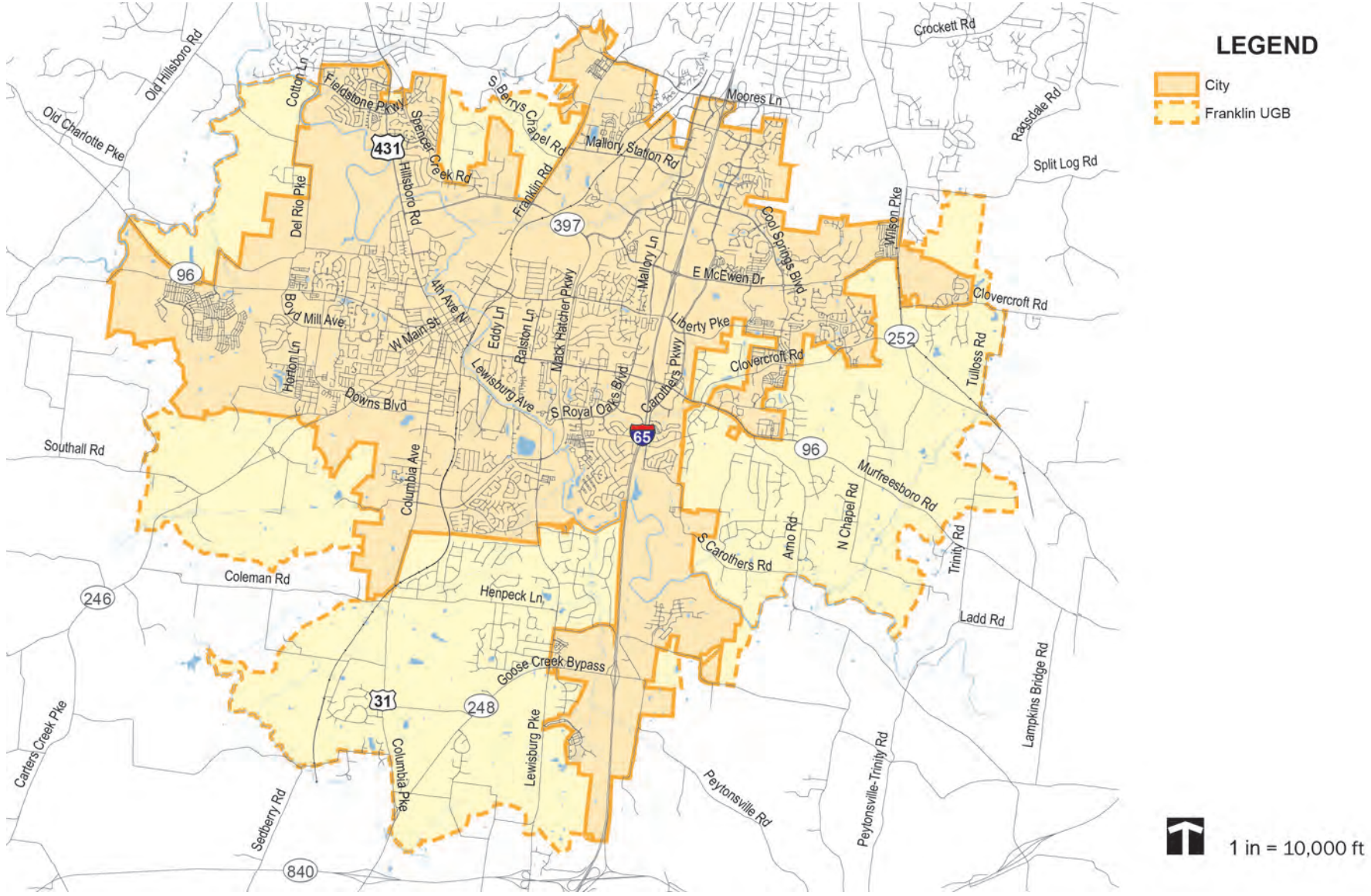


FIGURE A2.2: STUDY AREA MAP



A2 PLANNING CONTEXT

Franklin has become one of the fastest growing cities in the State of Tennessee. Table A2.1 and Figure A2.3 detail the City’s growth from 1950 to 2014. The City’s tremendous growth has had significant impacts on the transportation system. While numerous improvements have been made, it remains important to continue investment in the transportation network to support existing and new growth.

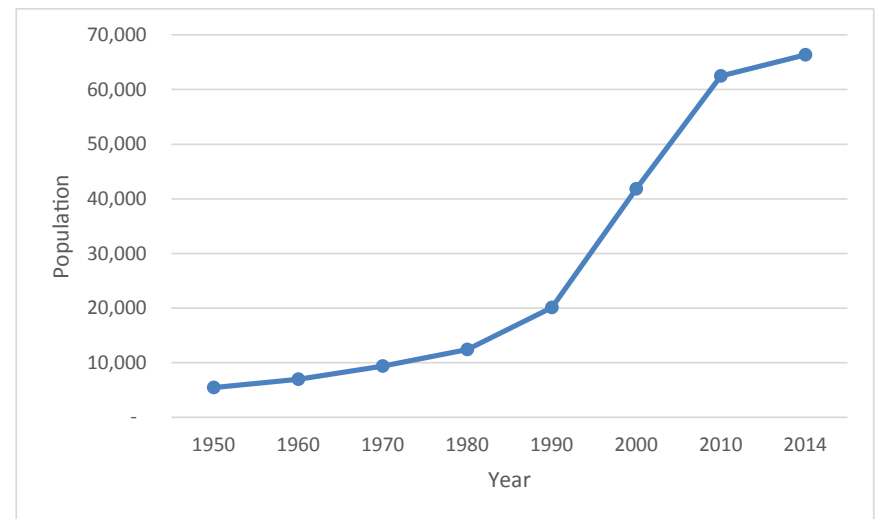
Figure A2.4 shows the existing land use pattern. Residential development is distributed throughout Franklin with concentrations within the Mack Hatcher area in the center of the City, to the north along Hillsboro Road, west along State Route 96 (Murfreesboro Road), and east of Interstate 65 in the Seward Hall character area. When examining the entire Franklin UGB, the 2015 residential population is estimated at 87,921.

Primary employment areas include downtown Franklin, the Cool Springs / Carothers Parkway / McEwen area, the area around the Interstate 65 and State Route 96 interchange, and to a lesser extent, the S. Columbia Avenue corridor. Employment figures represent the number of people working within the study area. For 2013, employment in the Franklin UGB was estimated at 84,995. Figures A2.5 and A2.6 show 2015 estimated population and employment density, respectively. These figures represent the number of persons per acre for population and the number of jobs per acre for employment.

TABLE A2.1 CITY OF FRANKLIN HISTORIC POPULATION

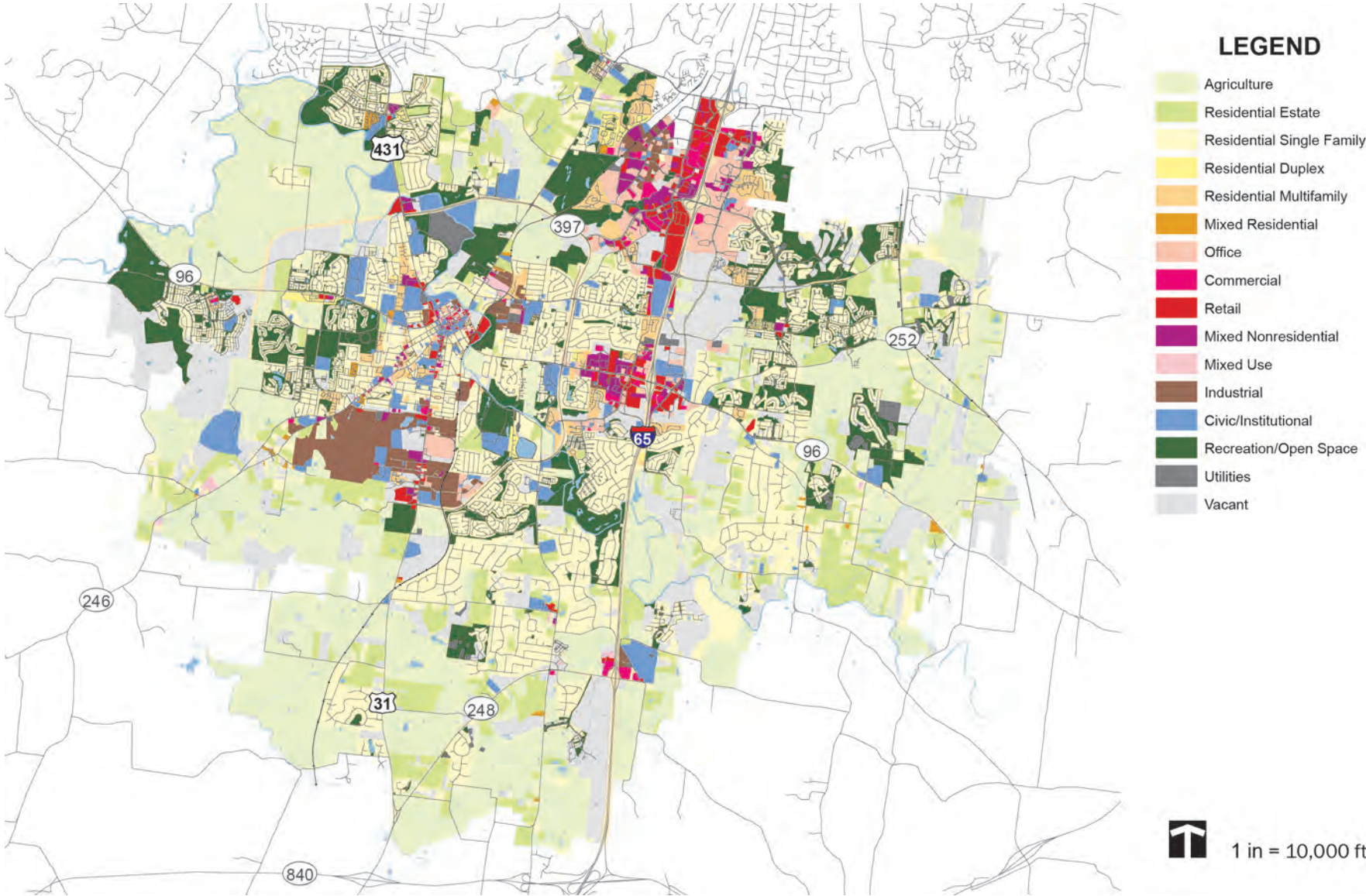
Year	Population	Absolute Change	% Change
1950	5,475 *	-	-
1960	6,977 *	1,502	27.4%
1970	9,404 *	2,427	34.8%
1980	12,407 *	3,003	31.9%
1990	20,098 *	7,691	62.0%
2000	41,842 *	21,744	108.2%
2010	62,487 *	20,645	49.3%
2014	66,335 **	3,848	6.2%
* Source: U.S. Census			
**Source: City of Franklin 2014 Special Census			
Note: Figures represent City of Franklin population and do not include additional UGB area.			

FIGURE A2.3 CITY OF FRANKLIN HISTORIC POPULATION CHART



Source: U.S. Census and City of Franklin 2014 Special Census

FIGURE A2.4: EXISTING LAND USE MAP



A2 PLANNING CONTEXT

FIGURE A2.5: 2015 POPULATION DENSITY BY TRAFFIC ANALYSIS ZONE (TAZ)

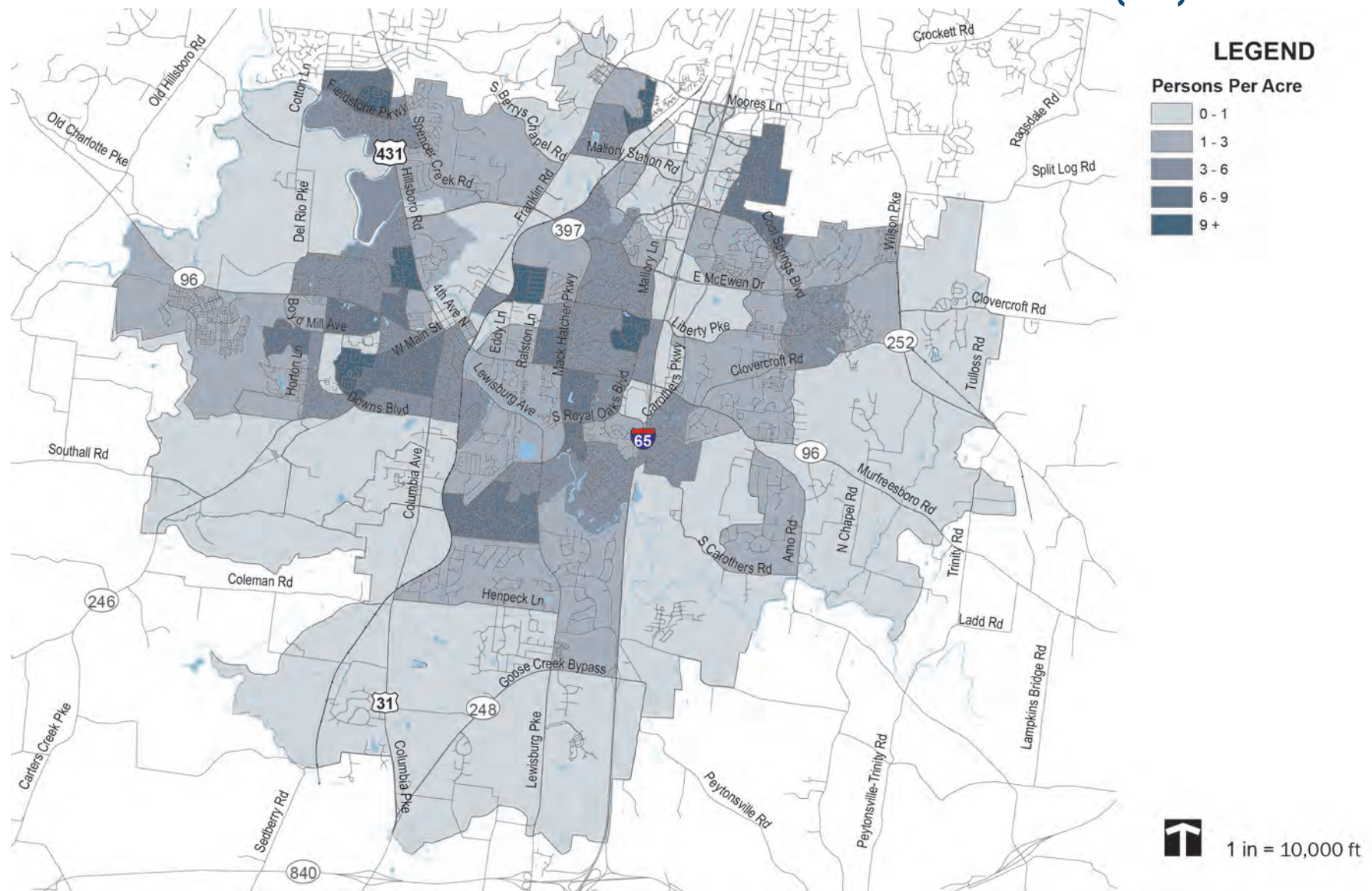
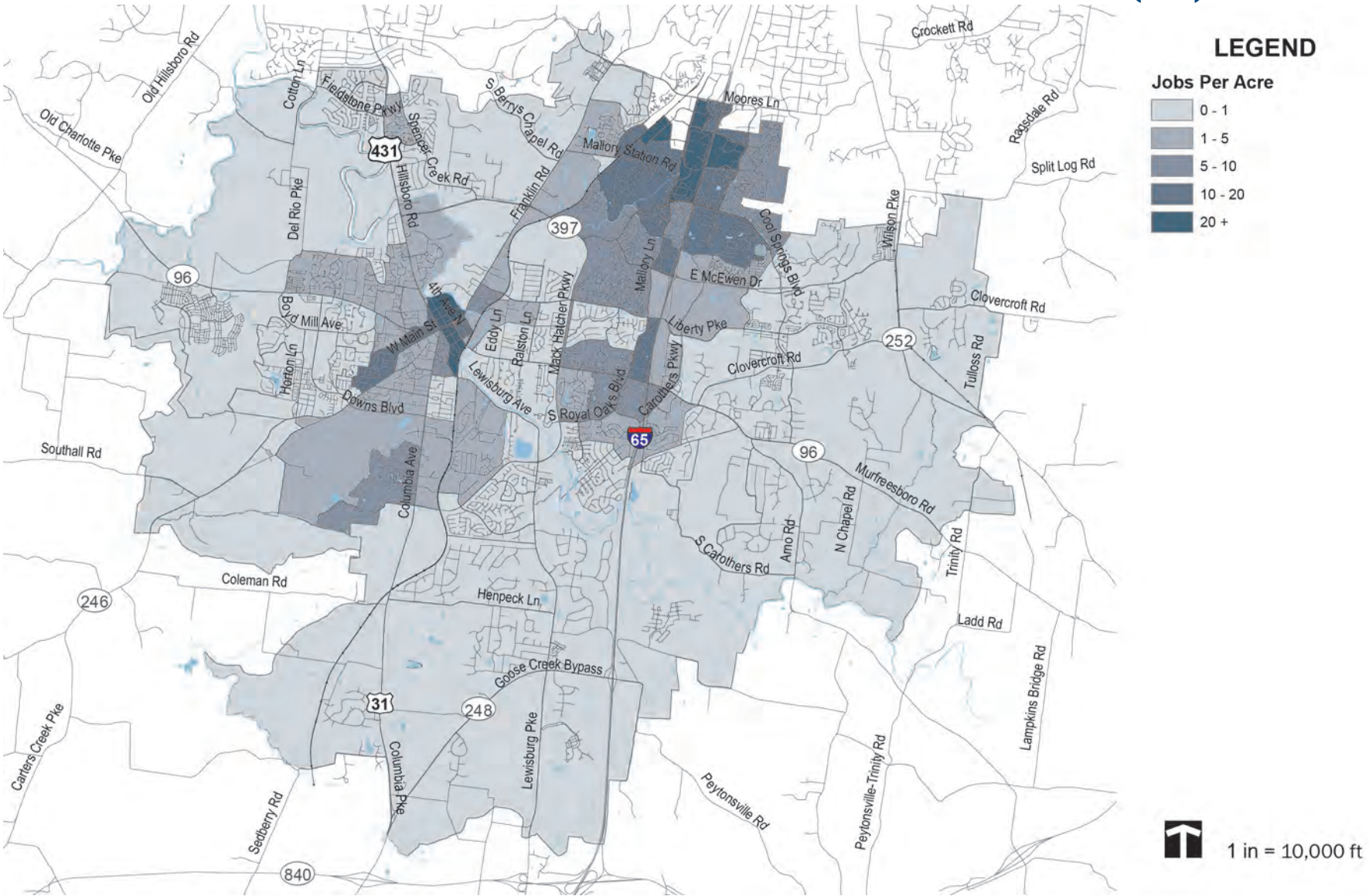


FIGURE A2.6: 2015 EMPLOYMENT DENSITY BY TRAFFIC ANALYSIS ZONE (TAZ)



A2 PLANNING CONTEXT

TRAFFIC ANALYSIS ZONES

Both qualitative and quantitative analysis was used to form the basis of the recommendations in this plan. In addition to the input gathered as part of the public engagement process and consultant team field analysis, a detailed Travel Demand Model (TDM) was used in conjunction with population and employment projections. The Franklin TDM was developed as more detailed version of the NAMPO regional travel demand model. In both cases, the model uses geographic units called Traffic Analysis Zones (TAZ) for inventorying demographic and employment data within the study area. TAZs are based on census block information and can vary considerably in size. Figure A2.7 is a map of the TAZs in the Franklin area.

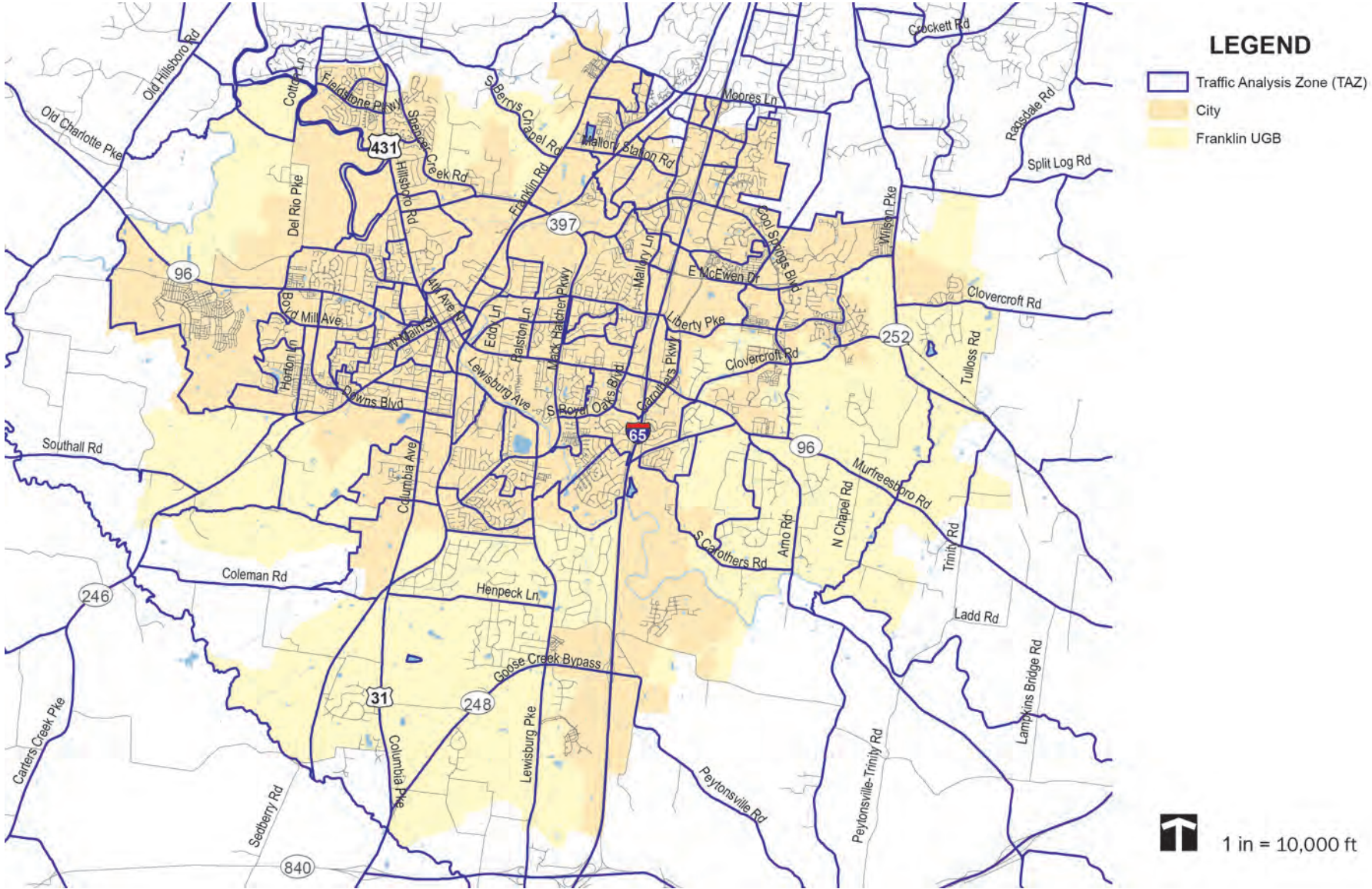
POPULATION AND EMPLOYMENT PROJECTIONS

METHODOLOGY

In order to assess the future demands and needs placed on the transportation network, both population and employment figures for the UGB were projected into the future. These projections are based on existing development patterns, approved development agreements, and potential land use changes. Development agreements are planned or on-going projects that have received approval from the City of Franklin and therefore have an entitlement to some future residential or commercial development figures. The process used to project population and employment growth in the UGB is as follows:

1. Reviewed and mapped development agreements by census block for residential density (units per acre) and non-residential intensity (gross square feet of development).
2. Mapped potential future land use changes and proposed densities by census block based on discussions with City staff.
3. Identified parcels currently classified as vacant and reviewed for existing structures and/or development feasibility.
4. Population projections:
 - Development agreements: Total number of units approved minus existing units (Source: 2013 Development Report).
 - Future land use changes: Parcel area multiplied by gross density to calculate potential units, minus existing units on site, multiplied by persons per household (see Assumptions below).
 - Vacant Parcels: Number of vacant parcels, assuming one dwelling unit (DU) per parcel.
5. Employment projections:
 - Development agreements: Total approved square footage divided by square footage per worker (see Assumptions Table A2.2).
 - Future land use changes / Development based on zoning (see Assumptions): Parcel size multiplied by floor area ratio (FAR) (see Assumptions Table A2.3) to determine building gross square footage, divided by square footage per employee (see assumptions).
 - Employment projections were organized according to the five categories used in the NAMPO model. They are: Agriculture (AG), Manufacturing (MFG), Transportation and Warehousing (TW), Retail (RET), and Office and Services (OFF).
6. All projections were aggregated by TAZ by employment category. If any part of a TAZ was included in the City of Franklin urban growth boundary, all of the census blocks in the TAZ were included even if the block was outside the UGB. However, only blocks within the UGB were projected to 2040, no change in build out is assumed for

FIGURE A2.7: TRAFFIC ANALYSIS ZONES MAP



A2 PLANNING CONTEXT

blocks outside of the UGB (ie existing population and employment numbers were used as future numbers for census blocks inside the TAZ but outside the UGB).

7. The results of the Nashville Area MPO: Regional Land Use Model, Business-as-Usual Scenario census block data was aggregated by TAZ.
8. 2013 Base Data:
 - Population: 2010 MPO/Census data projected to 2013 using 2010-2013 growth rate as reported in the 2013 Development Report.
 - Employment: 2010 MPO/Census data projected to 2013 using 2010-2013 MPO BAU model growth rate. (Employment growth trends not available as part of annual development reports).
9. The population and employment projections estimated from development agreements and current zoning as aggregated in Step 6 were added to 2013 base year levels to calculate 2040 projections.
10. A straight line projection was applied from 2013 to 2040 to calculate interval years (2015, 2020, 2030, and 2040).
11. The population and employment projections were then mapped by TAZ for input into the Franklin TDM.

ASSUMPTIONS

Household Size: 2.45 persons (2010 Census)

TABLE A2.2: FAR AND SQUARE FOOTAGE PER EMPLOYEE BY LAND USE

Land Use	FAR*	SQ FT Per Employee*
Industrial	0.22	498
Office	0.35	350
Retail	0.26	671
Mixed Non Residential	0.21	481
Restaurant	n/a	459
Healthcare	n/a	469
Public Order and Safety	0.10	686
Religious Worship	n/a	2,059
Community College***	n/a	969
Hotel	n/a	0.9**

*Based on the *Planner's Estimating Guide: Projecting Land-Use and Facility Needs* by Arthur Nelson (APA Planners Press, 2004)

** Employees per room, *ITE Trip Generation Manual*, 9th Ed.

***Community College projection is based on reported 6,000 student enrollment at full build-out, 100 GSF per student (Society for College and University Planning), and 969 GSF per employee

TABLE A2.3: FUTURE LAND USE BY ZONING

Zoning District	Land Use
General Office	Office
Central Commercial	Office or Retail*
Neighborhood Commercial	Office or Retail*
General Commercial	Office or Retail*
Light Industrial	Mixed Non Residential
* Based on surrounding use, context, development feasibility, access and visibility	

By 2040, it is projected that 133,647 will live in the City of Franklin / Franklin UGB area. This is a 52% increase in population from the 2015 estimate of 87,921. Projected employment within the study area for 2040 is 126,667, a 49% increase from the 2015 estimate of 84,995 jobs. Table A2.4 summarizes the population and employment projections from 2013 to 2040, including the interval model years. Table A2.5 later in this section includes a detailed breakdown of population and employment projections for each TAZ in the study area.

Figure A2.8 shows the future land use map developed in conjunction with the population and employment projections. A series of design concepts is used to simplify land use categories while also provide information about the scale and intensity of development. More information about each design concept can be found in the *City of Franklin 2015 Land Use Plan Update*.

In addition to the existing population concentrations, residential development is anticipated to the northwest, between Hillsboro Road and State Route 96, south around the Goose Creek interchange in the Berry Farms developments, and west of Interstate 65 in the Seward Hall character area. Figure A2.9 shows the 2040 projected population density.

Employment growth is primarily expected to occur in established commercial areas, specifically the Cool Springs area and along Carothers Parkway. A new employment concentration will be developed around the Goose Creek interchange in the Berry Farms projects. Additionally, Central Franklin and the Columbia Avenue corridor will continue as employment centers. 2040 projected employment density is shown in Figure A2.10.

TABLE A2.4 POPULATION AND EMPLOYMENT PROJECTION SUMMARY

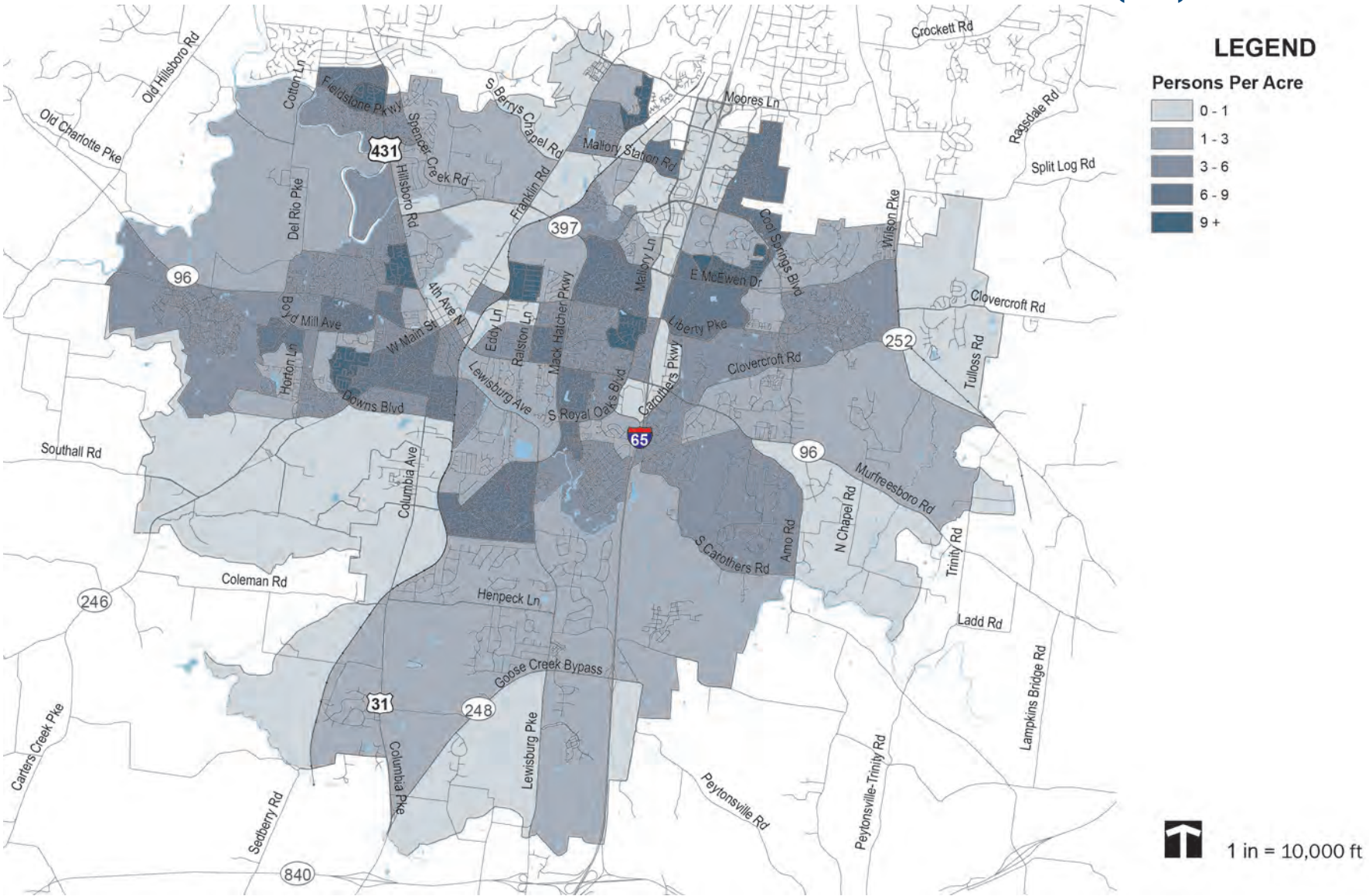
Year	Population	Employment
2013	84,263	81,661
2015	87,921	84,995
2020	97,066	93,329
2030	115,357	109,998
2040	133,647	126,667
Note: Figures represent City of Franklin and UGB area.		

A2 PLANNING CONTEXT

FIGURE A2.8: FUTURE LAND USE MAP

SPACE RESERVED FOR FUTURE DESIGN
CONCEPT MAP-PENDING FINALIZATION
WITH PLANNING DEPT.

FIGURE A2.9: 2040 POPULATION DENSITY BY TRAFFIC ANALYSIS ZONE (TAZ)



A2 PLANNING CONTEXT

FIGURE A2.10: 2040 EMPLOYMENT DENSITY BY TRAFFIC ANALYSIS ZONE (TAZ)

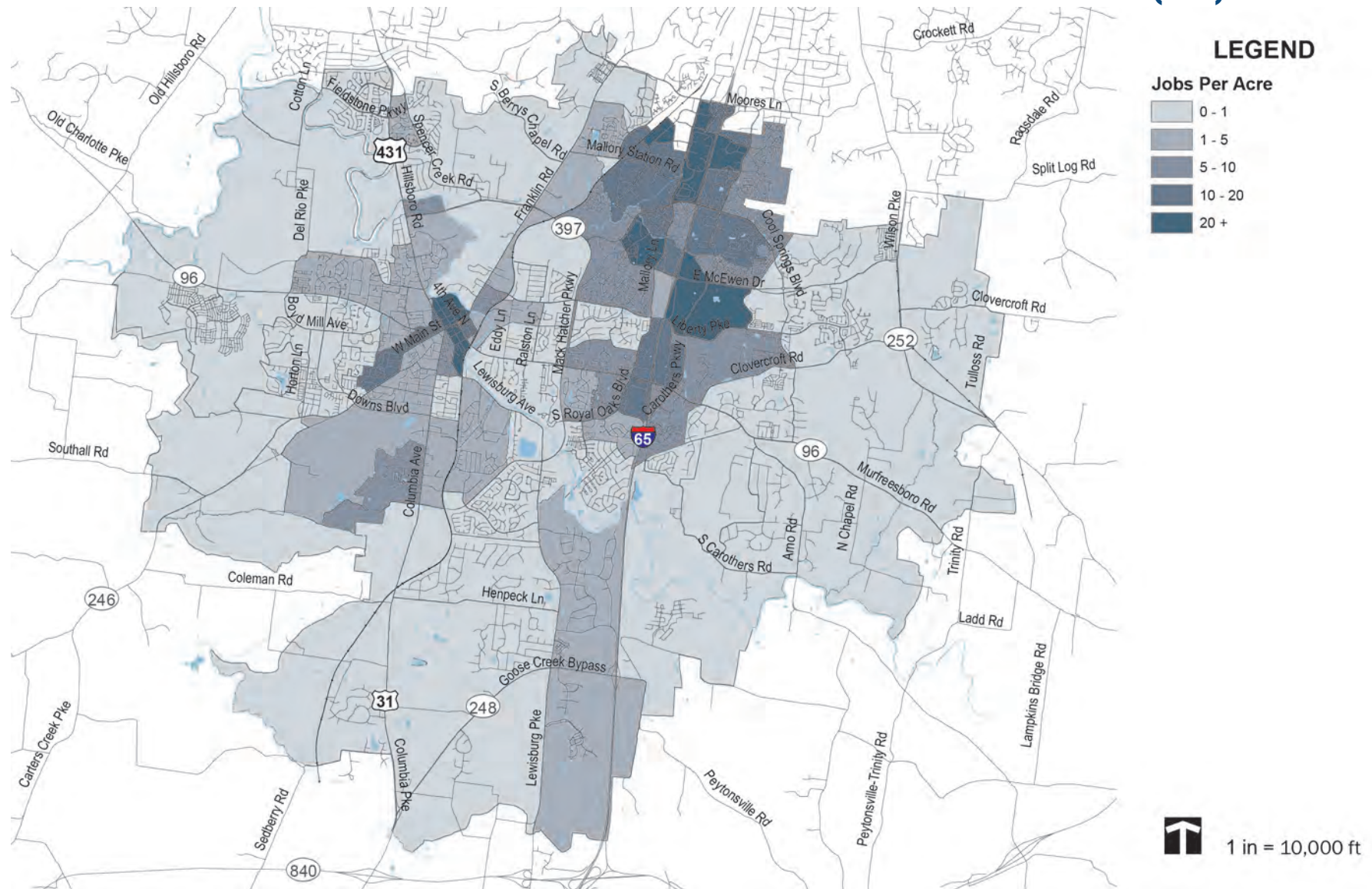


TABLE A2.5: POPULATION AND EMPLOYMENT PROJECTIONS BY TAZ

TAZ	Acres	2013		2015		2020		2030		2040	
		Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population
18799005	2426	20	20	20	20	20	1033	1059	1123	1251	1379
18799016	5271	91	91	91	91	91	955	959	969	989	1009
18799019	772	24	24	24	24	24	63	138	327	705	1082
18799022	1662	113	113	113	113	113	292	293	296	300	305
18799023	5902	65	65	65	65	65	680	681	682	685	688
18799055	181	418	481	640	958	1275	383	510	829	1467	2105
18799056	107	13965	13968	13976	13992	14008	0	0	0	0	0
18799057	115	2206	2206	2206	2206	2206	0	0	0	0	0
18799058	353	4606	4640	4727	4900	5073	589	589	589	589	589
18799061	125	1607	1607	1607	1607	1607	10	10	10	10	10
18799062	501	3246	3246	3246	3246	3246	3588	3588	3588	3589	3590
18799063	704	0	46	162	394	626	961	1003	1109	1320	1532
18799085	985	71	71	71	71	71	141	141	141	141	141
18799091	219	238	238	238	238	238	896	896	896	897	898
18799093	172	9	9	9	9	9	495	495	495	495	495
18799094	85	25	25	25	25	25	1021	1021	1021	1021	1021
18799095	84	1221	1221	1221	1221	1221	0	0	0	0	0
18799096	23	0	0	0	0	0	0	0	0	0	0
18799097	92	642	642	642	642	642	0	0	0	0	0
18799098	193	3876	3878	3884	3895	3905	0	0	0	0	0
18799099	194	2687	2704	2748	2834	2921	0	0	0	0	0
18799100	43	1045	1045	1045	1045	1045	0	0	0	0	0
18799101	40	545	545	545	545	545	0	0	0	0	0
18799102	143	1943	1951	1970	2009	2048	206	206	206	206	206
18799103	75	963	963	963	963	963	0	0	0	0	0

A2 PLANNING CONTEXT

TABLE A2.5: POPULATION AND EMPLOYMENT PROJECTIONS BY TAZ CONTINUED

TAZ	Acres	2013		2015		2020		2030		2040	
		Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population
18799104	122	2274	2276	2281	2290	2299	0	74	258	626	995
18799105	36	365	365	365	365	365	0	0	0	0	0
18799106	94	2299	2299	2299	2299	2299	0	0	0	0	0
18799125	1028	81	103	158	269	380	408	427	476	574	672
18799153	407	415	415	415	415	415	2327	2333	2347	2377	2406
18799154	3282	23	23	23	23	23	446	912	2075	4403	6730
18799155	327	0	0	0	0	0	35	95	244	543	841
18799156	214	62	62	62	62	62	672	706	792	963	1135
18799157	111	345	345	345	345	345	1189	1189	1189	1189	1189
18799158	83	165	165	165	165	165	691	691	691	691	691
18799159	337	417	417	417	417	417	614	615	615	616	617
18799160	67	264	273	295	340	385	0	0	0	0	0
18799161	90	365	365	365	365	365	267	267	267	267	267
18799162	2177	23	23	23	23	23	135	146	174	230	285
18799163	861	21	23	30	42	55	170	171	171	172	173
18799164	1486	21	21	21	21	21	128	128	130	134	137
18799165	476	14	14	14	14	14	34	34	35	36	37
18799166	1621	265	265	265	265	265	2939	3404	4564	6886	9208
18799167	321	18	18	18	18	18	905	905	907	911	914
18799168	482	27	27	27	27	27	167	171	183	205	227
18799169	4153	50	60	85	135	185	429	484	622	897	1173
18799170	130	10	10	10	10	10	1042	1042	1043	1044	1044
18799171	1032	939	1049	1323	1872	2421	109	109	109	109	109
18799172	260	94	94	94	94	94	7	7	7	7	7
18799173	251	753	771	816	907	998	13	13	13	13	13

TABLE A2.5: POPULATION AND EMPLOYMENT PROJECTIONS BY TAZ CONTINUED

TAZ	Acres	2013		2015		2020		2030		2040	
		Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population
18799174	449	2800	2814	2851	2924	2998	12	37	98	222	345
18799175	196	103	103	103	103	103	1100	1106	1119	1147	1174
18799176	138	97	97	97	97	97	157	190	271	434	598
18799177	183	4	4	4	4	4	163	178	218	297	376
18799178	80	233	233	233	233	233	387	392	405	430	456
18799179	175	26	28	31	38	44	1078	1080	1083	1089	1095
18799180	186	22	22	22	22	22	1333	1333	1333	1333	1333
18799181	104	21	21	21	21	21	1142	1142	1142	1142	1142
18799183	513	148	148	148	148	148	1654	1654	1654	1654	1654
18799184	136	336	336	336	336	336	668	668	668	668	668
18799185	1659	241	241	241	241	241	2510	2514	2522	2538	2555
18799186	276	143	143	143	143	143	730	730	730	730	730
18799187	272	275	275	275	275	275	2	2	2	2	2
18799188	538	4	4	4	4	4	234	237	243	256	268
18799189	129	326	326	326	326	326	68	68	68	68	68
18799190	62	546	546	546	546	546	188	189	192	199	205
18799191	45	0	0	0	0	0	838	842	851	871	891
18799192	101	42	42	42	42	42	1250	1250	1250	1250	1250
18799193	138	1906	1906	1906	1906	1906	1041	1041	1042	1044	1046
18799194	41	638	638	638	638	638	184	184	184	184	184
18799195	90	2634	2640	2654	2682	2710	64	64	64	64	64
18799196	25	70	70	70	70	70	5	5	5	5	5
18799197	14	166	166	166	166	166	0	0	0	0	0
18799198	105	484	484	484	484	484	652	654	660	672	684
18799199	60	399	399	399	399	399	252	252	253	255	257

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TABLE A2.5: POPULATION AND EMPLOYMENT PROJECTIONS BY TAZ CONTINUED

TAZ	Acres	2013		2015		2020		2030		2040	
		Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population
18799200	27	468	468	468	468	468	69	69	69	69	69
18799201	66	2317	2318	2320	2325	2329	217	217	219	223	226
18799202	112	470	470	470	470	470	683	689	706	740	773
18799203	164	509	526	569	655	742	622	622	623	624	625
18799204	127	114	114	114	114	114	732	736	745	764	783
18799205	239	1676	1721	1834	2060	2285	1012	1012	1012	1012	1012
18799206	434	35	35	35	35	35	1099	1100	1100	1102	1104
18799207	128	26	26	26	26	26	1172	1172	1172	1172	1172
18799208	80	4	4	4	4	4	459	460	460	461	462
18799209	166	710	710	710	710	710	80	80	80	80	80
18799210	178	113	114	118	125	133	484	487	497	516	535
18799211	124	81	81	81	81	81	918	918	920	922	925
18799212	434	2312	2319	2336	2370	2404	2331	2394	2550	2864	3177
18799213	147	799	967	1386	2226	3065	437	437	437	437	437
18799214	67	683	683	683	683	683	0	0	0	0	0
18799215	85	153	158	169	191	213	0	0	0	0	0
18799216	89	44	44	44	44	44	379	379	379	379	379
18799217	214	1569	1569	1569	1569	1569	1055	1055	1055	1055	1055
18799218	88	21	21	21	21	21	389	389	389	389	389
18799219	111	1365	1365	1365	1365	1365	514	514	514	514	514
18799220	113	46	46	46	46	46	1155	1155	1155	1155	1155
18799221	576	328	328	328	328	328	1398	1404	1417	1444	1472
18799222	150	183	183	183	183	183	485	485	486	488	490
18799223	391	742	784	888	1097	1307	1124	1124	1124	1124	1124
18799224	159	20	20	20	20	20	250	250	250	250	250

TABLE A2.5: POPULATION AND EMPLOYMENT PROJECTIONS BY TAZ CONTINUED

TAZ	Acres	2013		2015		2020		2030		2040	
		Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population
18799225	252	33	33	33	33	33	1915	1915	1915	1915	1915
18799226	124	30	30	30	30	30	716	720	732	756	779
18799227	161	548	548	548	548	548	1264	1264	1264	1264	1264
18799228	153	864	893	966	1111	1255	676	676	676	676	676
18799229	72	72	72	72	72	72	494	494	494	494	494
18799230	108	644	681	773	957	1140	0	0	0	0	0
18799231	196	299	309	334	385	435	348	357	378	419	461
18799232	248	133	133	133	133	133	983	983	985	987	990
18799233	374	293	293	293	293	293	1701	1702	1702	1703	1704
18799234	880	106	106	106	106	106	1297	1298	1301	1306	1312
18799235	202	93	93	93	93	93	1286	1286	1287	1288	1288
18799236	1172	143	340	830	1812	2794	1254	1366	1646	2206	2766
18799237	2147	181	187	205	239	274	1390	1477	1694	2127	2561
18799238	1169	23	23	23	23	23	1110	1140	1213	1360	1507
18799239	2146	43	43	43	43	43	586	628	733	943	1153
18799240	1497	43	334	1061	2516	3971	444	601	993	1778	2563
18799243	557	301	545	1157	2379	3602	931	1008	1202	1589	1975
18799244	486	18	1291	4473	10839	17205	21	320	1066	2560	4053
18799245	157	565	694	1017	1663	2309	0	0	0	0	0
18799246	154	136	136	136	136	136	412	412	412	412	412
18799247	447	7	7	7	7	7	880	965	1178	1603	2028
18799248	211	12	12	12	12	12	930	930	931	933	935
18799249	266	138	141	148	161	175	1556	1556	1556	1556	1556
18799250	1686	121	129	147	184	220	623	870	1485	2717	3949
18799251	488	21	21	21	21	21	1005	1028	1088	1206	1325

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TABLE A2.5: POPULATION AND EMPLOYMENT PROJECTIONS BY TAZ CONTINUED

TAZ	Acres	2013		2015		2020		2030		2040	
		Employment	Population	Employment	Population	Employment	Population	Employment	Population	Employment	Population
18799252	140	19	19	19	19	19	245	253	272	311	350
18799253	42	257	258	261	266	271	5	5	5	5	5
18799254	231	491	549	692	979	1266	1195	1195	1195	1195	1195
18799255	713	48	48	48	48	48	1078	1183	1445	1969	2493
18799256	702	107	107	107	107	107	391	575	1036	1956	2877
18799257	164	9	9	9	9	9	885	885	885	885	885
18799259	5734	454	454	454	454	454	851	1308	2451	4738	7025
18799260	1166	15	26	52	103	155	662	663	667	674	681
18799261	2707	12	395	1351	3263	5176	312	385	566	929	1292

MODEL CALIBRATION AND VALIDATION

The Tennessee Model Users Group (TNMUG) adopted a set of guidelines to help with the task of travel demand model validation. The Minimum Travel Demand Model Calibration and Validation Guidelines for State of Tennessee document, (originally adopted in 2003), was updated in the fall of 2012. The guidelines closely resemble the tables and criteria set forth in the Travel Model Improvement Program, (TMIP), Travel Model Validation and Reasonableness Checking Manual, 2nd Edition.

Using both documents as a guide, the following criteria were used to validate the 2010 regional travel demand model traffic assignment:

1. Root Mean Square Error (RMSE) by Functional Class;
2. Root Mean Square Error (RMSE) by Volume Group;

3. Percent Error by Volume Group;
4. Percent Error by Volume and Lane Group;
5. Percent Error by Functional Category;
6. Coefficient of Correlation (R2).

Percent Root Mean Square Error (%RMSE) n

Percent Root Mean Square Error is used to help determine how accurate the model’s assignment volumes compare to TDOT and Franklin’s base-year ground counts. This procedure is automatically run for the base-year condition and is included in the model script. The following tables show the %RMSE results:

TABLE A2.6: RMSE BY FUNCTIONAL CLASS

Functional Class	Number of Links	Pct. RMSE	Validation Criteria
1- Rural Freeway	2	11.24	20
6- Rural Minor Arterial	2	22.70	40
7- Rural Major Collector	4	39.34	70
8- Rural Minor Collector	2	45.69	70
11- Urban Freeway	7	4.19	20
14- Urban Principal Arterial	18	24.26	30
16- Urban Minor Arterial	11	27.97	40
17- Urban Collector	18	30.66	70

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TABLE A2.7: RMSE BY VOLUME GROUP

Volume Group	Number of Links	Pct. RMSE	Validation Criteria
< 5,000	7	46.25	45-100%
5,000-9,999	15	28.61	35-45%
10,000-14,999	14	25.34	27-35%
15,000-19,999	9	28.44	25-30%
20,000-29,999	10	21.69	15-27%
30,000-49,999	7	4.22	15-25%
50,000-59,999	2	7.66	10-20%
Citywide	64	19.30	35-45%

Percent Error

The comparison between modeled volumes and observed volumes is depicted in the following tables. The first table compares link volumes to traffic count volumes grouped by the roadway’s reported average daily traffic (ADT) volume. The second table also compares link volumes to traffic counts, but are grouped by the number of lanes in a particular volume group. The third table compares modeled volume to traffic counts grouped by facility category.

TABLE A2.8: VOLUME TO COUNT RATIO BY VOLUME GROUP

Volume Group	Number of Links	Model Volume	Count Volume	Pct. Deviation	Validation Criteria
1,000 - 2,499	1	3,742	2,442	53.23%	100%
2,500 - 4,999	6	25,663	24,577	4.42%	50%
5,000 - 9,999	15	98,860	108,430	-8.83%	25%
10,000 - 24,999	31	437,072	512,904	-14.78%	20%
25,000 - 49,999	9	317,956	327,271	-2.85%	15%
> 49,999	2	107,418	112,226	-4.28%	10%

TABLE A2.9: VOLUME TO COUNT RATIO BY VOLUME AND LANE GROUPS

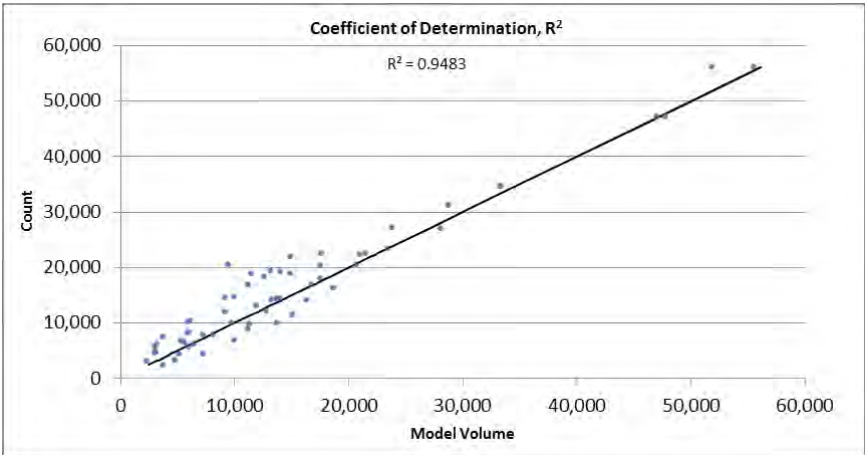
Volume/Lane Group	No. of Links	Model Volume	Count Volume	Pct. Deviation	Validation Criteria
< 10,000 (2L)	22	128,265	135,449	-5.30%	25-50%
10,000 - 30,000 (4L)	13	215,868	254,007	-15.02%	20-30%
30,000 - 50,000 (6L)	0	0	0	n/a	15-25%
50,000 - 65,000 (4-6L Freeway)	2	107,418	112,226	-4.28%	10-20%
65,000 - 75,000 (6L Freeway)	0	0	0	n/a	5-15%
> 75,000 (8L+ Freeway)	0	0	0	n/a	5-10%

TABLE A2.10: VOLUME TO COUNT BY FUNCTIONAL CATEGORY

Functional Category	No. of Links	Model Volume	Count Volume	Pct. Deviation	Validation Criteria
Freeway	9	373,498	385,334	-3.07%	+/- 6-7%
Arterial	31	434,025	492,034	-11.79%	+/- 10-15%
Collector	24	183,187	210,482	-12.97%	+/- 20-25%

Coefficient of Correlation (R2)

The citywide correlation coefficient between modeled and observed traffic is 0.95. This falls within the threshold of 0.88 established in the TNMUG guidelines. A scatter plot showing the volume to count relationship is shown in the following figure.



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Summary of NAMPO Model Enhancements

The following is a detailed list of enhancements to the Nashville Area MPO's base-year travel demand model as a way to improve the performance inside Franklin's Urban Growth Boundary (UGB). These enhancements also help improve model validation statistics:

- Added new Field: CTNP_Flag;
 - = 1: inside Franklin UGB
 - = 0 (or null): outside Franklin UGB
- Activated Nichol Mill Road and adjusted centroid and connectors (TAZ 18799104);
- Activated Jordan Road and adjusted centroid and connectors (TAZ 18799213);
- Activated Aspen Grove Drive;
- Deactivated Crescent Centre Drive;
- Deactivated McEwen Drive from Carothers Parkway to Cool Springs Boulevard;
- Deactivated portion of Local Road between McEwen Drive and Liberty Pike and east of I-65;
- Activated Carothers Parkway between McEwen Drive and Liberty Pike and east of I-65 and adjusted centroid and connectors (TAZ 18799244);
- Activated Fieldstone Parkway between Hillsboro Road and Spencer Creek Road;
- Activated 11th Avenue between Natchez Street and West Main Street and adjusted centroid and connectors (TAZ 18799198);
- Activated Church Street and South Margin Street between 5th Avenue and 3rd Avenue; adjusted centroid and connectors (TAZ 18799200 & 18799201);
- Activated a portion of Lynwood Way west of Franklin Road;
- Activated Eddy Lane between State Route 96 and Liberty Pike and adjusted centroid and connectors (TAZ 18799209 & 18799210);
- Deactivated Brink Place between Del Rio Pike and Alexander Drive;
- Activated Alexander Drive between Del Rio Pike and Edwards Drive and adjusted centroid and connectors (TAZ 18799157);
- Activated 1st Avenue / Bridge Street from West Main Street to 5th Avenue North and adjusted centroid and connectors (TAZ 18799195);
- Disabled a portion of the centroid connectors for the following Traffic Analysis Zones (TAZs):
 - 18799178, 18799158, 18799161, 18799205, 18799260, 18799005, 18799008, 18799009, 18799016, 18799103, 18799231, 18799194, 18799189, 18799188, 18799190, 18799154, 18799155, 18799117
- Relocated centroids and/or centroid connectors connected for the following TAZs :
 - 18799217, 18799173, 18799221, 18799098, 18799174, 18799225, 18799223, 18799233, 18799232, 18799219, 18799220
- Corrected West Main Street to operate as a one-way street between 7th Avenue North and 5th Avenue North;
- Activated 9th Avenue South between Natchez Street and Columbia Avenue;
- Corrected TDOT count station location (#18700162);
- Relocated TDOT count station location (#18700164);
- Relocated TDOT count station location (#18700030);
- Relocated TDOT count station location (#18700035);

Note:

Activated = Model will be allowed to assign traffic to this segment.

Deactivated = Model will NOT be allowed to assign traffic to this segment.

Relocated = Spatially moving centroid and/or centroid connectors from one location to another; thus increasing / decreasing travel time of the centroid connectors.