



"Exhibit A"



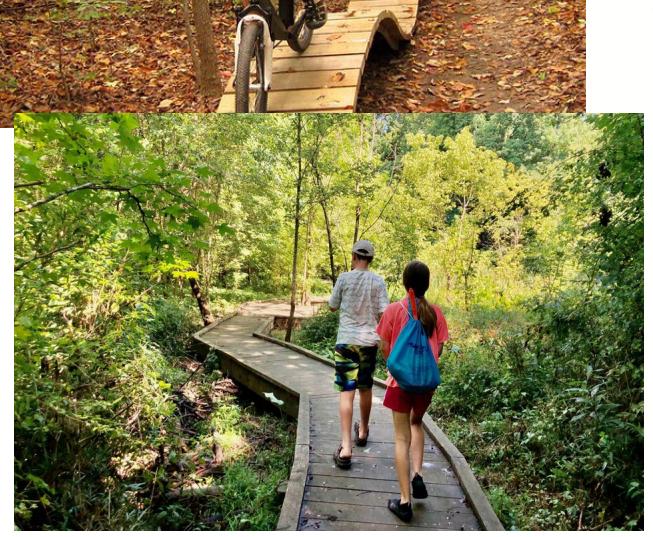
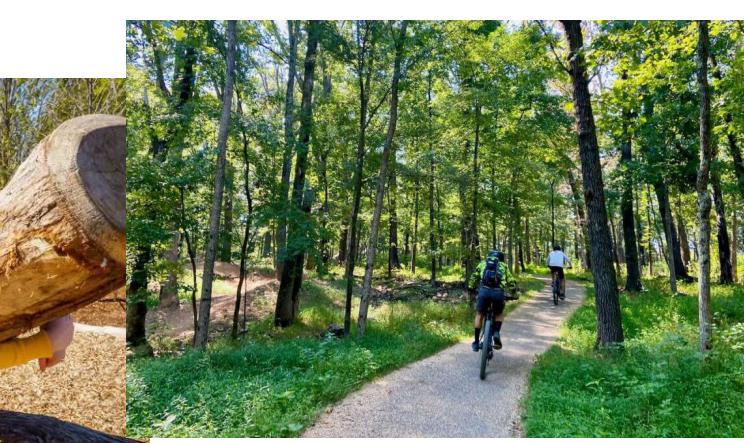
ATCHLEY PARK MASTER PLAN

Lebanon, Missouri

March 8, 2023 / J21-03549



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NELSON PARK MASTER PLAN

Lebanon, Missouri

March 8, 2023 / J21-03549



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LEGEND:

1. EXISTING PARKING LOT
2. EXISTING PLAYGROUND
3. EXISTING ROUTE 66 PARKING AREA
4. EXISTING TRAIL
5. EXISTING SHELTERS
6. EXISTING REST ROOMS
7. AQUATIC FACILITY
8. EXISTING TENNIS & BASKETBALL COURTS
9. PROPOSED SPLASH PAD
10. PROPOSED UPDATED TRAILS
11. PROPOSED NATIVE PRAIRIE AREAS
12. PROPOSED SHADE TREES

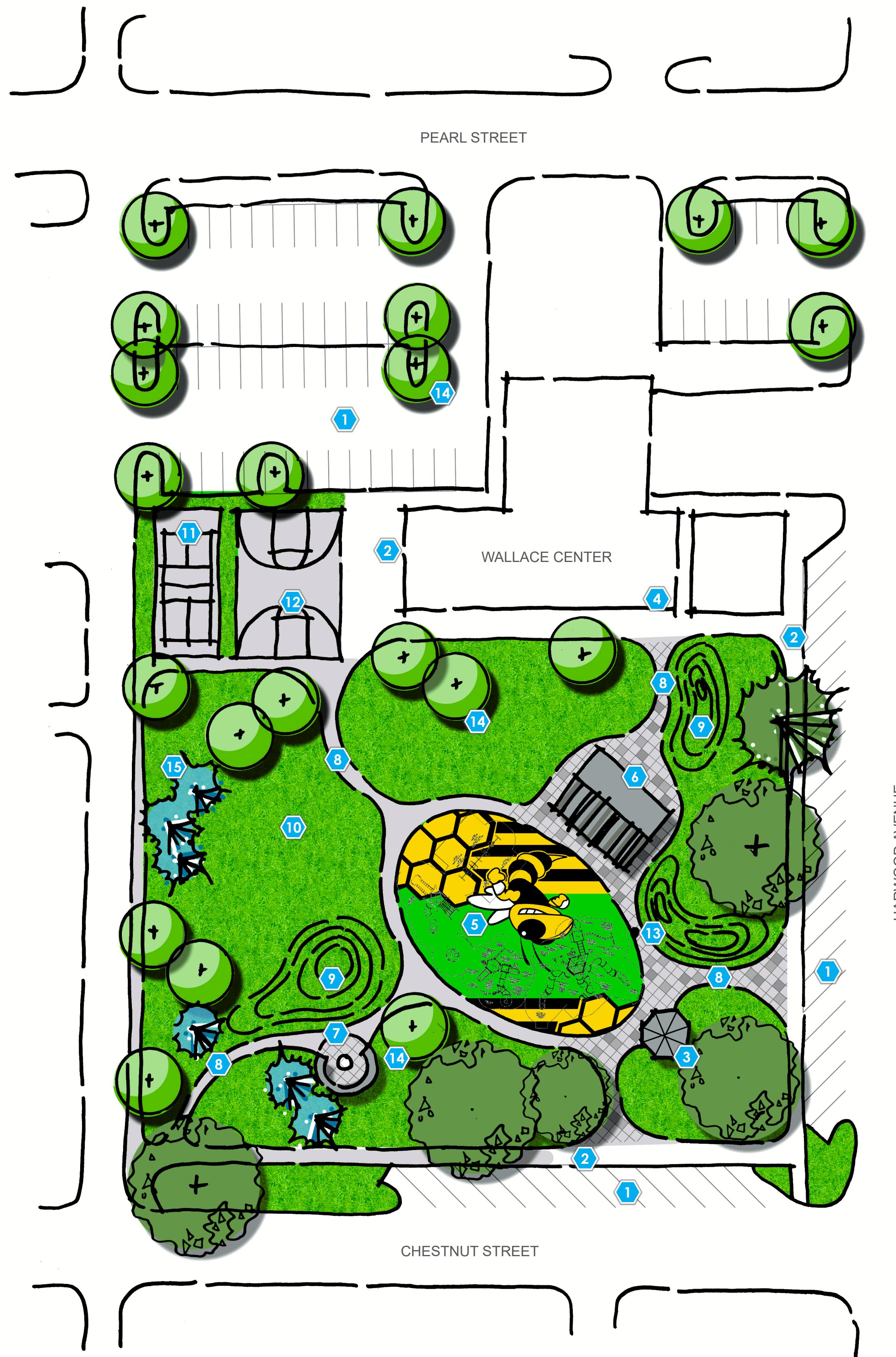
BOSWELL PARK MASTER PLAN

Lebanon, Missouri

March 8, 2023 / J21-03549



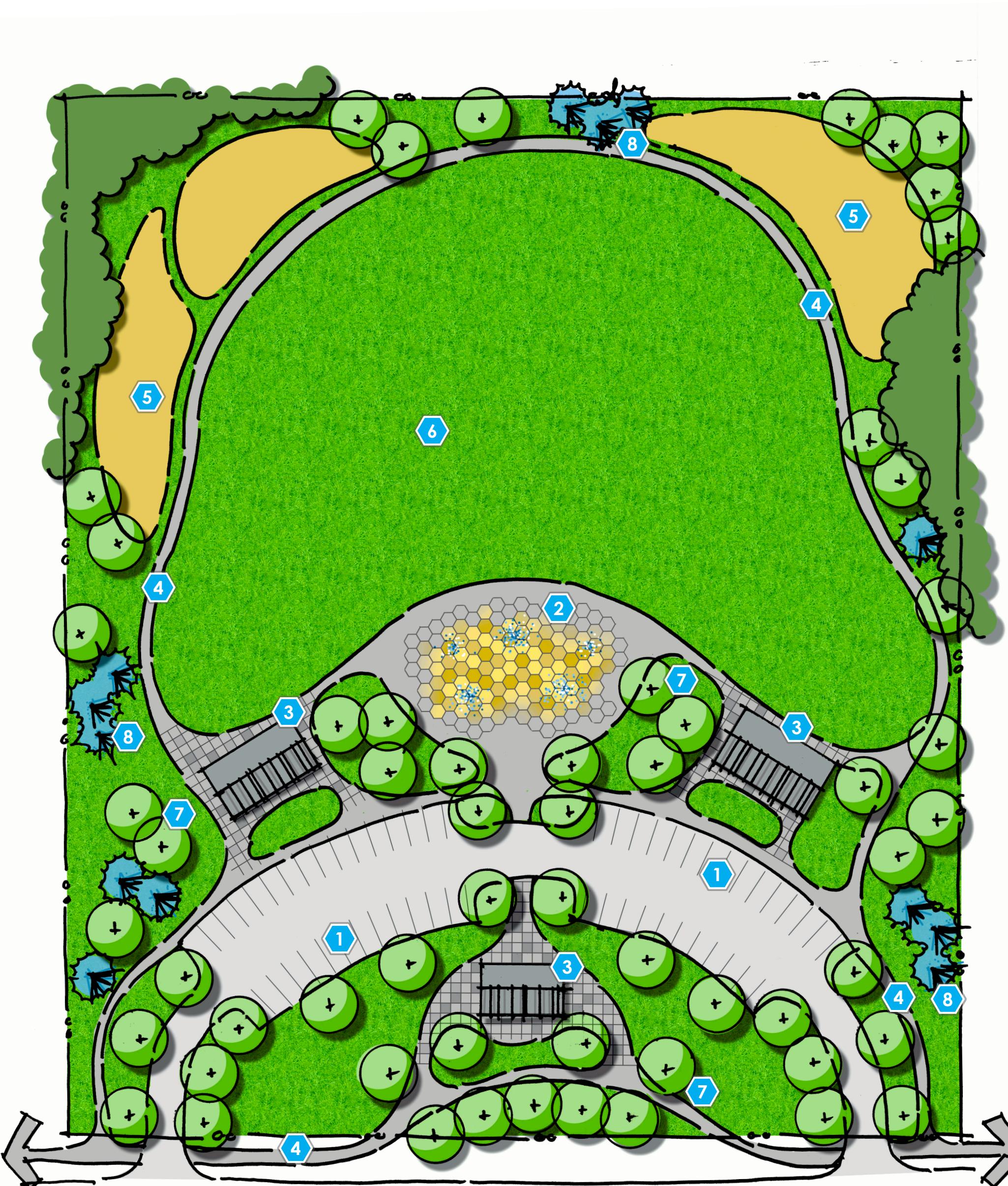
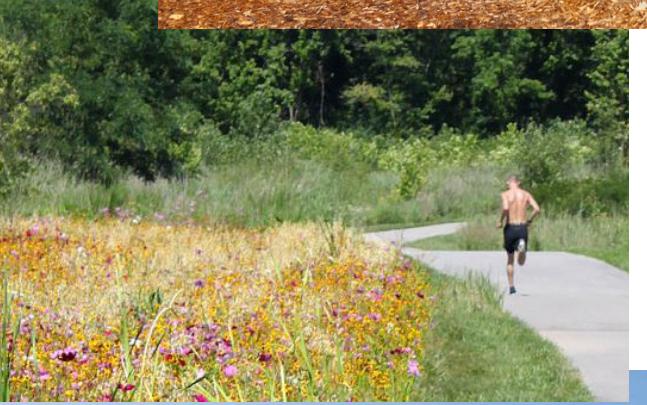
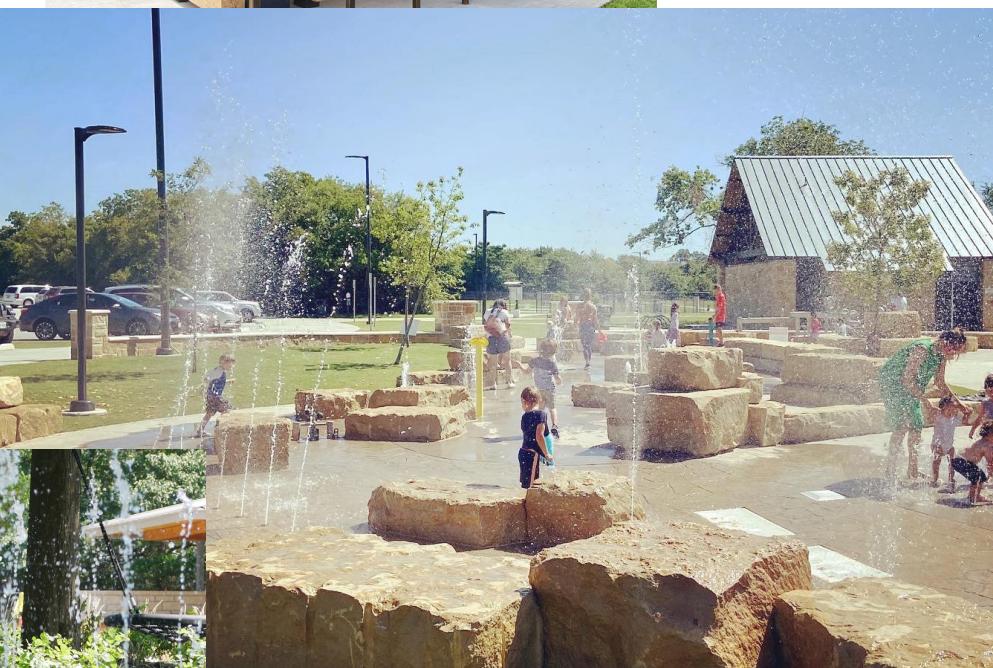
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LEGEND:

1. EXISTING PARKING
2. EXISTING SIDEWALK
3. EXISTING GAZEBO
4. EXISTING RESTROOMS
5. PROPOSED PLAYGROUND
6. PROPOSED SHELTER
7. PROPOSED FIRE PIT
8. PROPOSED UPDATED TRAILS
9. PROPOSED BERM AREAS
10. OPEN LAWN
11. PROPOSED PICKLEBALL COURT
12. PROPOSED BASKETBALL COURT
13. EXISTING DRINKING FOUNTAIN
14. PROPOSED SHADE TREES
15. PROPOSED EVERGREEN TREES





LEGEND:

1. PROPOSED PARKING LOT
2. PROPOSED SPLASH PAD
3. PROPOSED SHELTER
4. PROPOSED TRAIL
5. PROPOSED NATIVE PRAIRIE AREAS
6. PROPOSED OPEN LAWN
7. PROPOSED SHADE TREES
8. PROPOSED EVERGREEN TREES

NEW 5 ACRE PARK MASTER PLAN

Lebanon, Missouri

March 8, 2023 / J21-03549



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NEW 8 ACRE PARK MASTER PLAN

Lebanon, Missouri

March 8, 2023 / J21-03549



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LEBANON, MISSOURI

TRAILS

MASTER

PLAN

REV 1 - MAY 24, 2023

1 INTRODUCTION

Trails are often beloved parts of a city, and this is no exception for Lebanon. City park trails are used every day for exercise or to simply enjoy the outdoors. For reasons of practicality, walking activity is somewhat limited to the trails found in parks, but walking around a city can be just as enjoyable while being functional, safe, and efficient. The Lebanon Trails Master Plan (Plan) can help to make this a reality.

Section 1 provides an introduction to the Plan by providing context to its purpose, background, and function.

PURPOSE AND BACKGROUND

The City of Lebanon recently gained voter approval to impose a one-half cent parks and storm water sales tax, with three-eighths of the tax allotted to parks.

Proposed improvements with passage of the tax included implementation of a Parks and Recreation Master Plan, park maintenance projects, storm water improvements, park expansion, and additional trail connectivity based on recommendations in the Parks and Recreation Master Plan.

This Plan is a result of the passage of the tax and follow-through on the proposed improvements. Recommendations included in this Plan are derived from existing conditions data analysis and findings from public engagement completed for the Parks and Recreation Master Plan.

WHAT IS A TRAILS MASTER PLAN?

Through an analysis of existing conditions related to transportation and recreation and an understanding of needs through public engagement, a trails master plan recommends priority areas for trail and sidewalk connectivity and ideal routes to provide safe active transportation options for all.

Trails are more than a path from Point A to Point B. They are non-vehicular corridors part of a larger category of active transportation infrastructure. Active transportation is any self-propelled, human-powered mode of transportation, such as walking and bicycling.



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Active transportation systems provide a variety of benefits to overall quality of life, including:

- **Health benefits.** Active transportation options encourage active lifestyles, which results in improved physical and mental health.
- **Social benefits.** Active transportation options provide increased social interactions with other walkers and bicyclists.
- **Environmental benefits.** Active transportation options increase outdoor recreation opportunities and foster meaningful connections to the natural environment.
- **Economic benefits.** Active transportation options provide a high return on investment to the community, adjacent land uses, tourism, and employee recruitment and retention.

Trails master plans promote active transportation and the various design elements of Smart Growth America's Complete Streets initiative. Complete streets are designed and operated to provide safe, accessible, and healthy travel for all users of the street, including pedestrians, bicyclists, and motorists. The complete streets approach leverages existing street networks and right-of-way into safe corridors that offer multimodal and multipurpose options of the space between the buildings on either side of the street.



ATCHLEY PARK

2 EXISTING CONDITIONS

Before exploring potential connections and recommended priority routes, it is important to understand what currently exists. **Section 2** provides an analysis of existing active transportation facilities and community destination points and an overview of public engagement findings. The information in this section provides important context to the recommendations of this Plan.

EXISTING PLANS AND STUDIES

City of Lebanon Comprehensive Plan (2005)

The most recent comprehensive plan for the city was completed in 2005 and includes recommendations for future land use, transportation, annexations, and city services. The plan proposes a feasibility study for constructing bicycle and pedestrian trails in and around the city.

Street Maintenance Master Plan (2017)

A street maintenance master plan was completed in 2017. While the plan was primarily focused on roadway and vehicular connections, sidewalks were analyzed as part of the transportation system. The plan notes that the city utilized Missouri Department of Transportation (MoDOT) Enhancement Grants in 2011 to add 2.4 miles of new sidewalk connections and 73 new curb ramps in 2015 to replace sidewalks along Jefferson Avenue. Improvements on much of the sidewalk network would be necessary to comply with Americans with Disabilities Act (ADA) requirements and to expand into high density residential areas.

EXISTING ACTIVE TRANSPORTATION NETWORK

The maps in **Figures 2.1** and **2.2** show the existing active transportation network, which consists of sidewalks and trails. It is important to note that this Plan does not include a full Level of Service (LOS) analysis for roadways or bicycle routes, nor does it include Pedestrian Level of Traffic Stress (PLTS) to show the practicality of traveling by foot or by bicycle within the current transportation network. Rather, a brief analysis of connectivity and infrastructure quality is provided in the following sections.

Existing Trail Connections

The current multimodal trail network shown in **Figure 2.1** exists almost exclusively in parks. While these trails are popular recreational amenities among residents, they are not being utilized as viable transportation corridors. Popular walking trails include the Atchley Park Trail, Maplecrest Park, and the Coleman Memorial Conservation Area Trail. The longest trail is the Coleman Memorial Conservation Area Trail at 1.5 miles.

Existing Sidewalk Connections

Figure 2.2 shows existing sidewalk connections mapped for the 2017 Street Maintenance Master Plan. The majority of the city's sidewalk network is in the downtown business district and along the US Route 66/Elm Street corridor. The network expands from the downtown business district but is limited to the central commercial areas and major collector corridors. Most of the existing network, prior to the 2011 expansion, was built between 1940 and 1960. Sidewalk conditions vary throughout the network. Some areas were improved between 1980 and 1990, but most areas do not meet the current ADA requirements for sidewalk construction.

FIGURE 2.1

EXISTING TRAILS

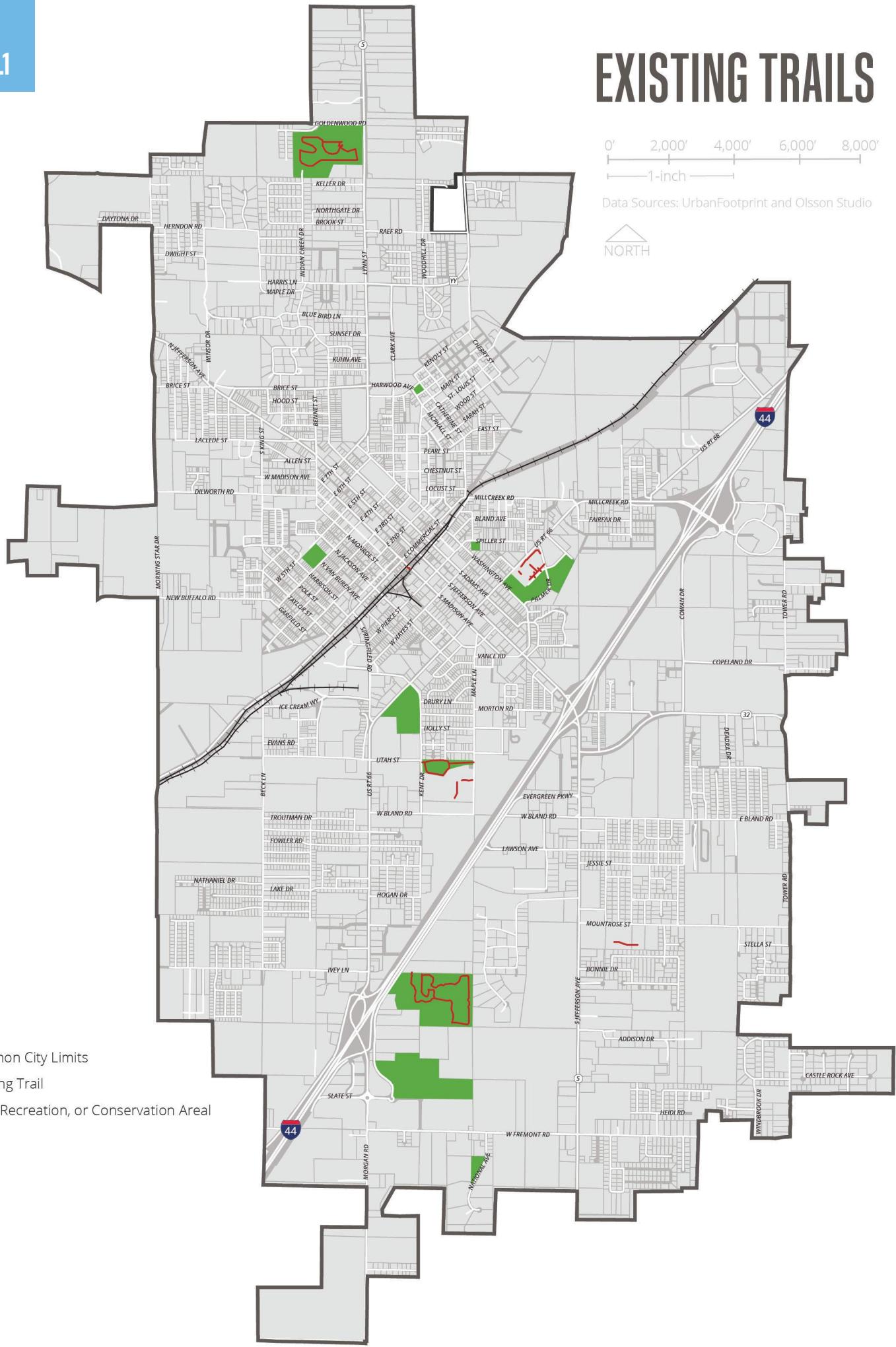
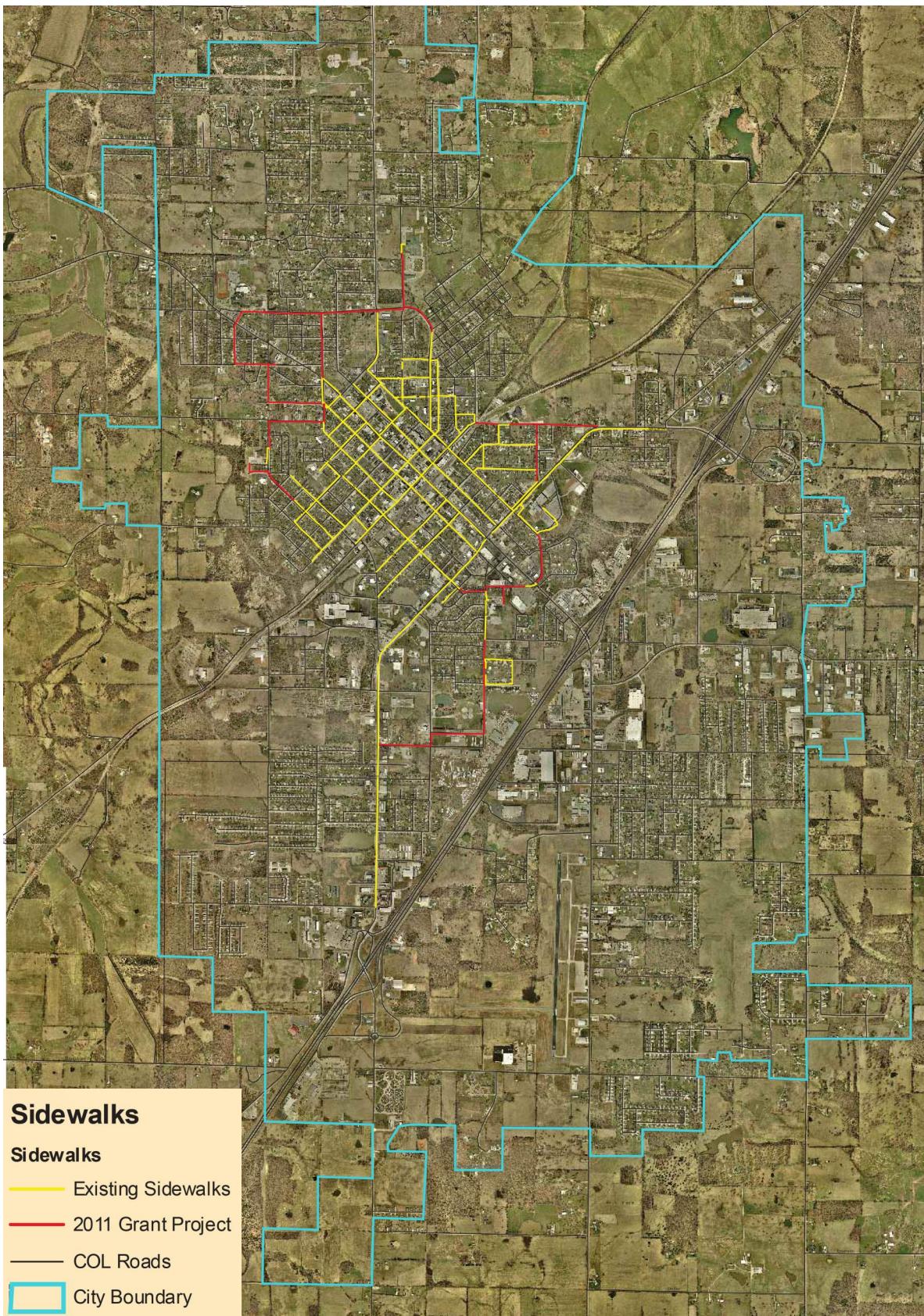


FIGURE 2.2

EXISTING SIDEWALKS MAP FROM 2017 STREET MAINTENANCE PLAN



EXISTING DESTINATIONS

Sidewalks and trails serve an important function as connections between civic destinations, which are defined as areas outside of the home that people spend the majority of their time, either by choice or by necessity. Destinations tend to be activity hot spots and warrant the need for non-vehicular connections so that the entire community can reach them safely.

Both necessity and choice destination points are important building blocks of a community. These are the places that people go to for services, food, education, and exercise. They are also the spaces where people gather and form relationships outside of their immediate household. The trails and sidewalks that connect them form a larger network and can become important community facilities in themselves, both as daily transportation routes for those unable to travel by vehicle and as recreation corridors for walkers, runners, and bicyclists.

An annotated list of the destinations mapped in **Figure 2.3** is provided below.

PARKS, RECREATION, AND CONSERVATION AREAS

1. Atchley Park
2. Boswell Park and Aquatic Center
3. Coleman Memorial Conservation Area
4. Gasconade Park
5. Harke Park
6. Lebanon Fairgrounds
7. Nelson Lake
8. Nelson Sports Complex
9. Palmer Park
10. Veterans Park
11. Spiller Park
12. W.T. Vernon Park



NELSON LAKE



COWAN CIVIC CENTER AND LEBANON FAMILY YMCA



LEBANON HIGH SCHOOL

COMMUNITY FACILITIES AND SERVICES

13. Cowan Civic Center and Lebanon Family YMCA
14. Lebanon Laclede County Library
15. Lebanon City Hall
16. Mercy Hospital Lebanon
17. Social Security Administration
18. Downtown Business District
19. Laclede County Court House
20. Hughes Center
21. Mills Center
22. Wallace Center
23. Winfrey Enrichment Center

SCHOOLS

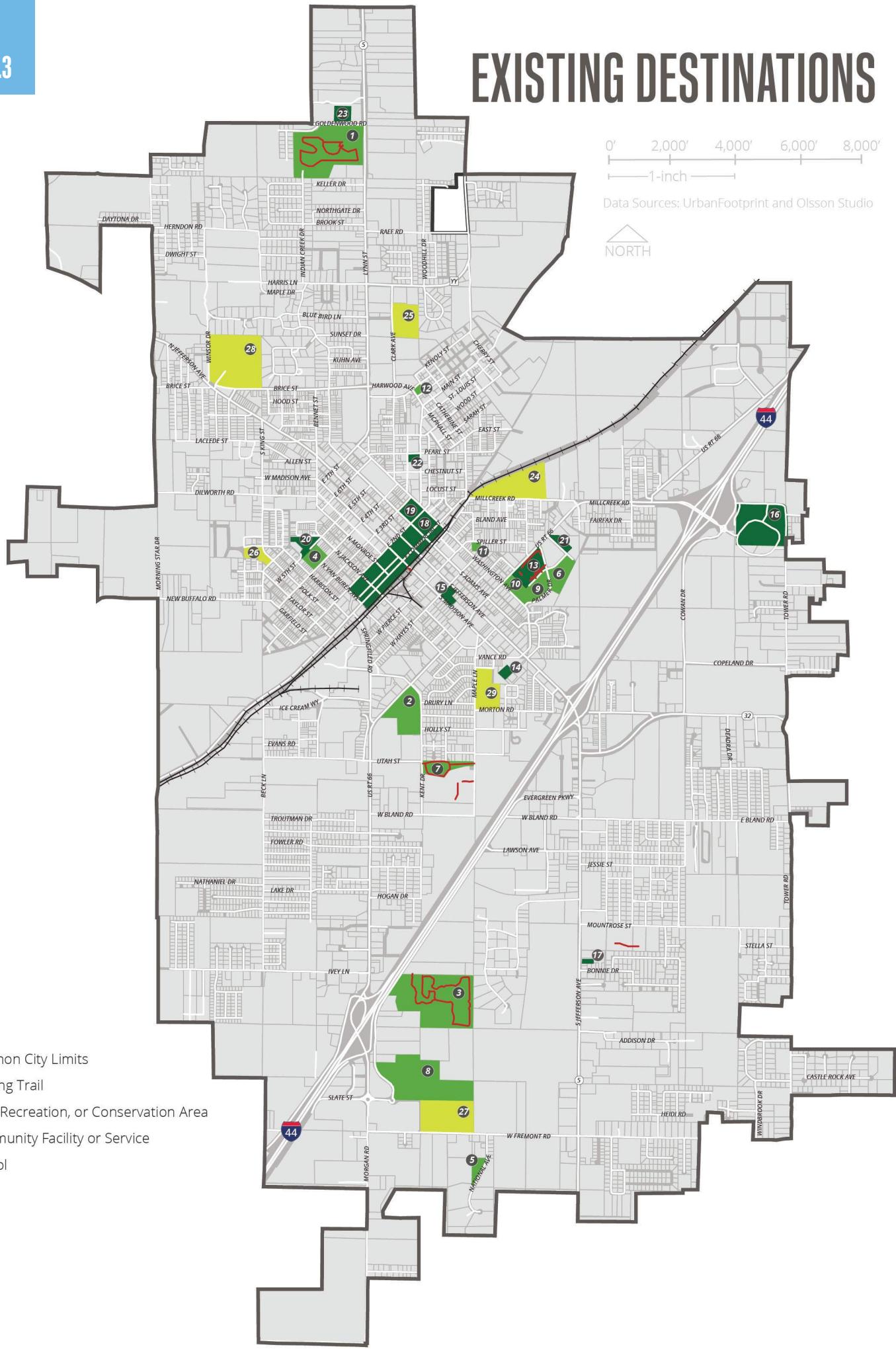
24. Boswell Elementary School
25. Esther Elementary School
26. Hillcrest Education Center
27. Lebanon Middle School
28. Lebanon High School
29. Maplecrest Elementary School



DOWNTOWN BUSINESS DISTRICT

FIGURE 2.3

EXISTING DESTINATIONS



EXISTING WALKABILITY

The National Walkability Index dataset characterizes every U.S. Census 2019 block group based on its relative walkability. Walkability depends upon characteristics of the built environment that influence the likelihood of walking being used as a mode of travel.

Census block groups are assigned National Walkability Index Scores on a scale of 1 to 20, categorized as follows:

- **Least Walkable** (1.00 - 5.75)
- **Below Average Walkable** (5.76 - 10.50)
- **Above Average Walkable** (10.51 - 15.25)
- **Most Walkable** (15.26 - 20.00)

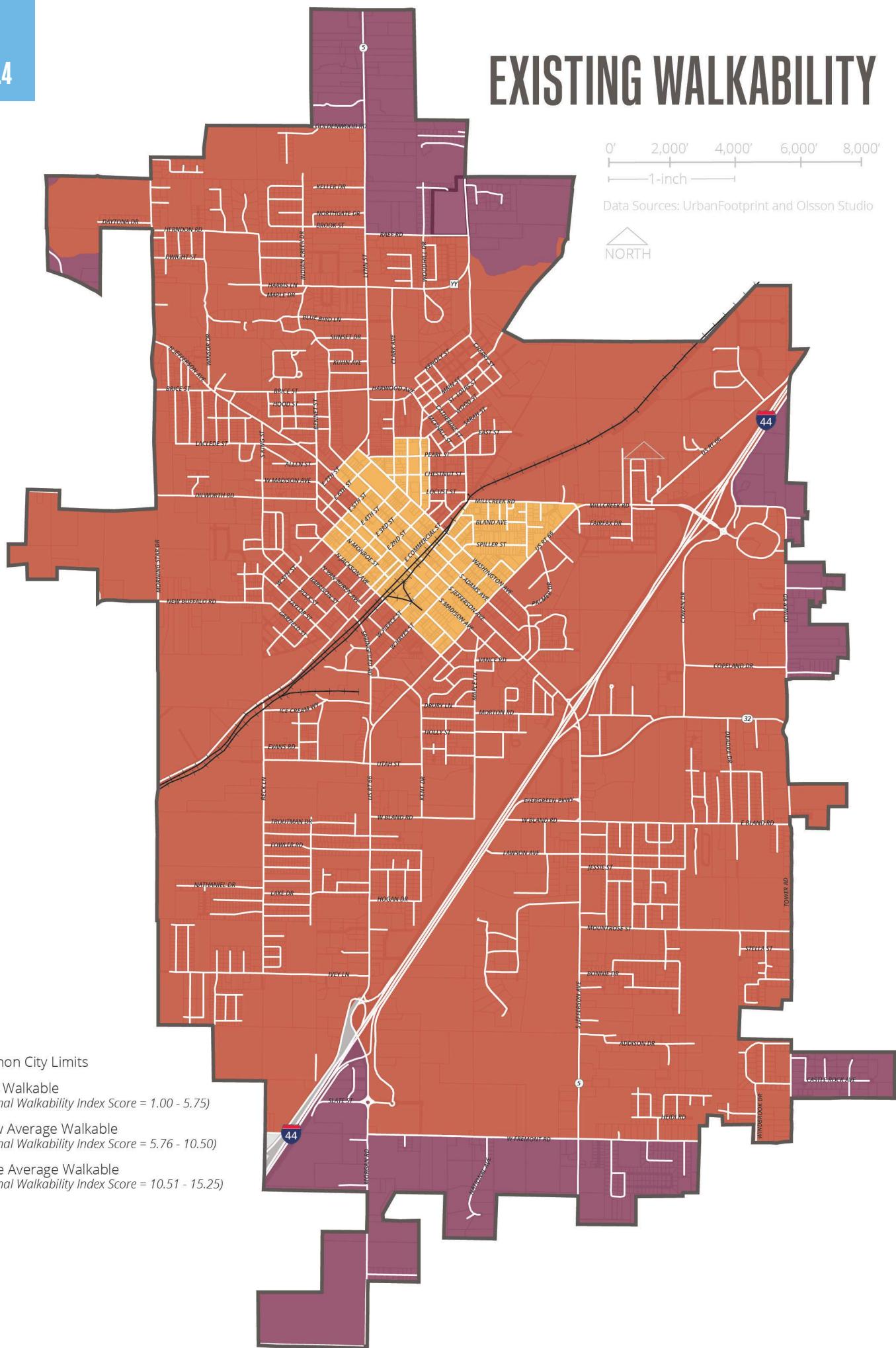
Figure 2.4 shows the walkability scores of the census block groups in the City of Lebanon. The highest scoring block group is in the center of the city with an above average walkability score of 13.7.



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FIGURE 2.4

EXISTING WALKABILITY



SUMMARY OF PUBLIC SURVEY FINDINGS

A parks and recreation survey was conducted for the City of Lebanon during the summer of 2022 by ETC Institute. The survey was conducted as part of the planning process for the Parks and Recreation Master Plan. A survey was mailed to a random sample of households in the City of Lebanon. The goal to obtain completed surveys from at least 400 residents to achieve statistical significance was met with a total of 408 completed surveys. A summary of the report of findings published in September 2022 is provided below.

Current Usage of Parks and Recreation Facilities

Of the households surveyed, 85% recorded that their household visited Lebanon parks during the past year. Of those who had visited parks, 52% indicated that they visited at least few times per month, 13% had visited at least once per month, and 35% had visited a few times during the year.

Of the respondents who visited parks in the past year and had an opinion, 16% rated the physical condition of the parks as "excellent," 65% rated the parks as "good," 16% rated the parks as "fair," and 3% rated the parks as "poor."

When asked to indicate which of the 16 recreation facilities listed on the survey their household had visited in the past year, the top three responses were: walking, hiking, and biking trails (60%); playgrounds (51%); and picnic shelters (36%). When asked about usage of City of Lebanon trails, 66% of households indicated they use Atchley Park Trail. Other trails used include Harke Trail (38%), Coleman Trail (20%), and Boswell Trail (19%).

Support for Improvements to the Parks and Recreation System

When asked about the City of Lebanon utilizing the three-eighths cent sale tax for improvements, respondents were "very supportive" or "somewhat supportive" of these top three projects: fixing up/repairing older park facilities, shelters, playgrounds, and restrooms (88%); developing new walking and biking trails (75%); and acquiring land for developing neighborhood parks (70%).

Parks and Recreation Facility Needs and Priorities

Respondents were asked to identify if their household had a need for 19 parks and recreation facilities and rate how well their needs for each were currently being met. Based on the analysis of these findings, ETC Institute was able to estimate the number of households in the community that had the greatest "unmet" need for various facilities. An estimated total of 1,675 households in Lebanon reporting having unmet needs for walking and biking trails, which is approximately 27.7% of all households in the city.

The three parks and recreation facilities with the highest percentage of households that indicated a need for the facility were: walking and biking trails (65%); park shelters and picnic areas (50%); and small (2-10 acres) neighborhood parks (46%).

When asked which parks and recreation facilities were most important to households, the top choice was walking and biking trails (51%), followed by small neighborhood parks (34%), playground equipment and play areas (25%), and park shelters and picnic areas (25%).

Using the data collected from the needs and importance assessments, a Priority Investment Rating (PIR) was developed to provide an objective tool for evaluating the priority that should be placed on parks and recreational facilities. Items were scored with equal weighting for both assessments. Scores from 0-49 indicate a lower priority, 50-99 a medium priority, and over 100 a high priority.

Based on the Priority Investment Rating (PIR), walking and biking trails were ranked as the highest priority for investment with a PIR score of 200. Other areas of high priorities were small neighborhood parks (PIR=134) and sledding hills (PIR=102).

3 TRAILS MASTER PLAN FRAMEWORK

After analyzing existing conditions and public survey data, recommendations for trail connections began to take shape. **Section 3** includes the Trails Master Plan Framework and describes both recommended concepts.

TRAILS MASTER PLAN

Figure 3.1 shows the recommended network of off-road and road-adjacent trail facilities, along with the highlighted destination points to show the improvements to internal circulation and connectivity.

North Loop Concept

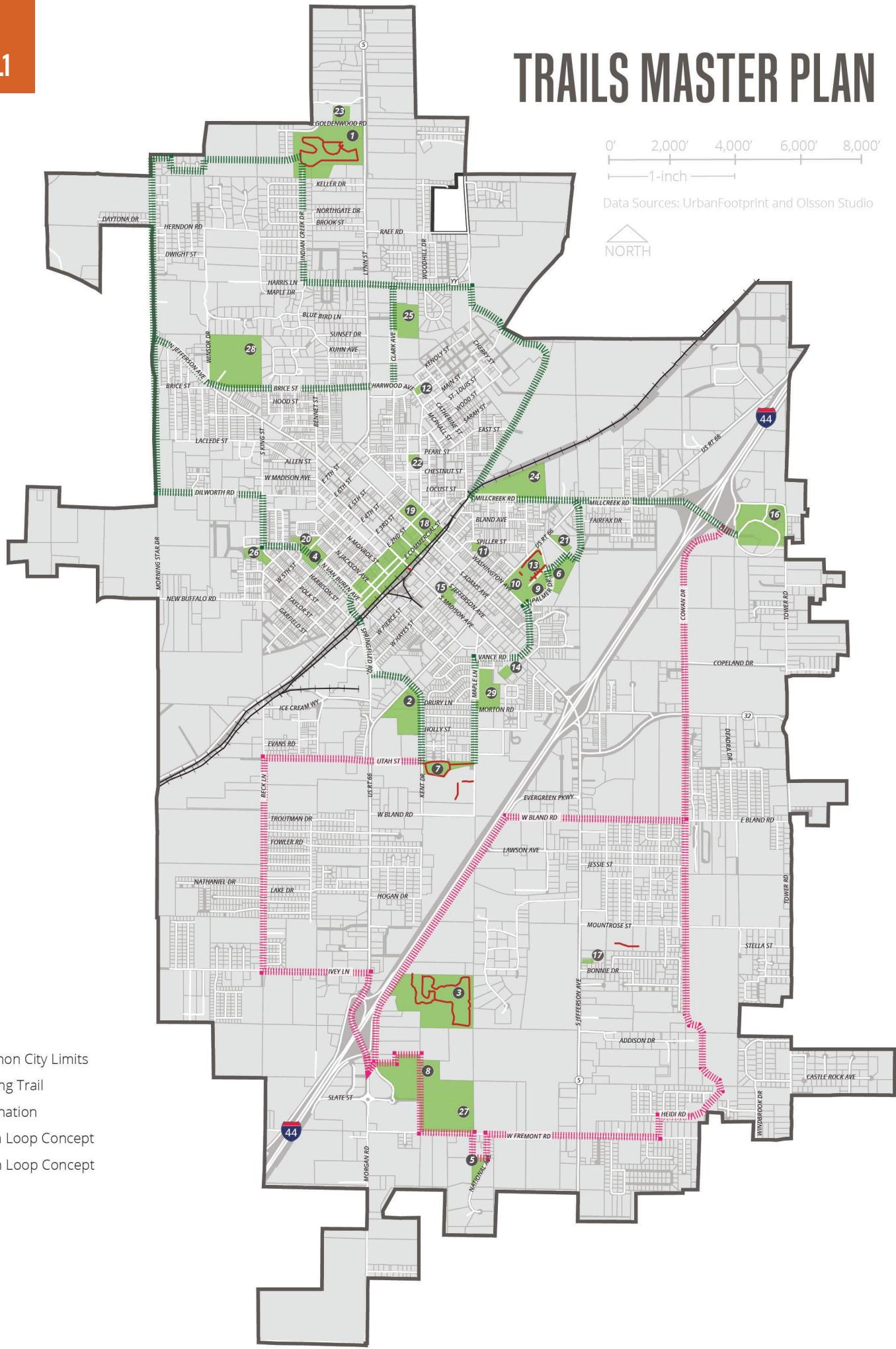
The north loop trail connects with existing trails in Atchley Park, moving south and west through surrounding neighborhoods. The western route connects Lebanon High School, Hillcrest Education Center, Gasconade Park, the Downtown Business District, and Boswell Park and Aquatic Center to its conclusion in Maplecrest Park at the existing trail. The southern route connects Esther Elementary School, Boswell Elementary School, amenities around the Cowan Civic Center, Lebanon LaClede County library, and Maplecrest Elementary until the loop closes at Maplecrest Park. The north loop includes both off-road and road-adjacent facilities and crosses over I-44 along Millcreek Road to provide connectivity to the hospital.

South Loop Concept

The south loop trail begins at the Maplecrest Park trailhead, meeting the north loop trail and the existing park trail. The route travels west along Utah Street, south along Beck Lane, east along Ivey Lane, and crosses over I-44 along Morgan Road. The route splits at Nelson Park, with one path traveling north along Evergreen Parkway, east along West Bland Road, and meeting with the other path at Cowan Drive. The other path travels south through Nelson Park and Lebanon Middle School, loops down at National Avenue to Harke Park, east along West Fremond Road and Heidi Road, and travels off-road north to meet with the path at West Bland Road and Cowan Drive. The path follows along Cowan Drive and meets the north loop at the entrance of the hospital.

FIGURE 3.1

TRAILS MASTER PLAN



4 DESIGN AND FUNDING GUIDELINES

While the previous section described recommendations in the Trails Master Plan Framework, **Section 4** provides guidelines on how to make those connections a reality by describing a variety of trail typologies and funding mechanisms to consider implementing in Lebanon.

TRAIL TYPOLOGIES

Implementation of a trail network must be unique to the community it serves. A variety of facilities are often used to create a citywide network. The recommendations set in the Trails Master Plan Framework will include both off-road and road-adjacent facilities, which are described in the sections below.

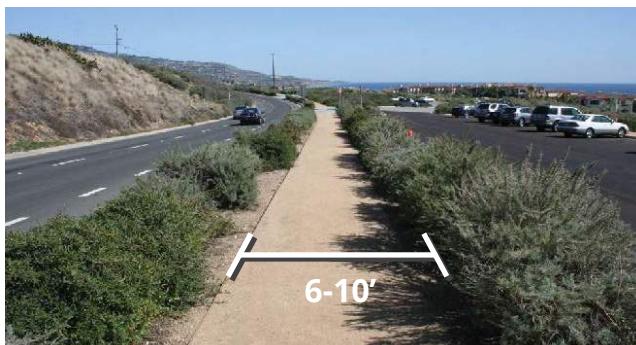
Off-Road Facilities

Facilities located away from vehicular corridors are typically wide shared-use trails. Greenways most commonly refer to these types of trails. Off-road wide shared-use trails are generally placed in gently sloping areas and utility easements and can be paved or a non-hardened surface. Typical materials include asphalt, concrete paving, decomposed granite, or similar permeable material.



Road-Adjacent Facilities

Facilities located adjacent to vehicular corridors are typically paved surface trails placed along roads with constrained right-of-way or topographical challenges. These trails can be either wide or narrow, ranging from six to 12 feet wide, and are typically wider than the average sidewalk.



FUNDING SOURCES

Funding for bike and pedestrian projects is available from a variety of sources including matching grants, sales tax or other taxes, bond measures, or public/private partnerships. This section identifies federal, state, and non-profit foundation sources for funding planning, design, implementation, and maintenance of bike and pedestrian projects. The information is intended to provide an overview of available options and do not represent a comprehensive list. It should be noted that this section reflects the funding available at the time of writing. The funding amounts, fund cycles, and even the programs themselves are susceptible to change without notice.

Federal Funding Sources

Federal transportation funding is typically directed through state agencies to local governments either in the form of grants or direct appropriations, independent from state budgets. Federal funding typically requires a local match. The amount of the local match varies by program but typically ranges from 20 percent to 50 percent.

MoDOT and metropolitan planning organizations (MPOs) administer most federal monies. Federal funding is intended for capital improvements and safety and education programs. Projects must relate to the surface transportation system. Most, but not all, of these programs are oriented toward transportation versus recreation.

The following is a list of federal funding sources that could be used to support construction of many bike and pedestrian improvements. Most of these are competitive and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits. However, it should be noted that, in addition to the standalone projects, the Federal Highway Administration (FHWA) encourages the construction of bike and pedestrian facilities as an incidental element of larger ongoing projects, consistent with its 2010 policy statement on bike and pedestrian accommodations.

- Federal Aid Highway Program
- Surface Transportation Program (STP)
- Highway Safety Improvement Program (HSIP)
- Congestion Mitigation/Air Quality Program (CMAQ)
- Community Development Block Grants
- Community Transformation Grants (Center for Disease Control)
- Rivers, Trails, and Conservation Assistance Program (National Parks Service)

State Funding Sources

There are a variety of state funding sources that can be used to fund active transportation projects, including the MoDOT Cost Share Program, the MoDOT Transportation Alternatives Program (TAP – funding from FHWA – to be defined more clearly with the Infrastructure Investment and Jobs Act), and the RAISE discretionary grant program (funded through US DOT and subject for clarification through the Infrastructure Investment and Jobs Act). Other state funding sources include vehicle registration fees, state general funds, state gasoline tax, and state sales tax.