



DRAFT

ACTIVE TRANSPORTATION PLAN



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EXECUTIVE SUMMARY

In 2003, the City of Fayetteville adopted the FATT Plan, which laid out a vision for the development of a city-wide trail system. The FATT Plan was developed through an extensive public input process which resulted in a comprehensive set of goals and objectives. At the time the FATT Plan was developed, Fayetteville had not yet committed to building the Scull Creek Trail that has become the backbone of our trails system. The FATT Plan served as a catalyst to initiate large-scale trail development and brought greater awareness of the benefits of alternative transportation networks. Now in 2015, the viability of these networks is readily apparent and other regional cities are replicating and expanding trail networks with the development of the Razorback Regional Greenway.

This Active Transportation Plan (ATP) document replaces the 2003 Fayetteville Alternative Transportation & Trails (FATT) Plan, and it will be used to guide the design and implementation of bicycle and sidewalk infrastructure. The ATP sets forth a vision and a roadmap for measuring success and it provides the general parameters for the prioritization and design of bicycle and pedestrian infrastructure without prescribing solutions for specific projects. Individual projects to be implemented should incorporate the visions and principles set forth in this plan, while balancing the goals of the plan, funding availability, citizen input and potential success for each project.

"Fayetteville's culture of active transportation plays a critical role in promoting our city's economic viability as well as the health and well being of all our residents."

-Mayor Lioneld Jordan

ATP VISION AND GOALS

The City envisions the ATP as the guiding document for identifying and prioritizing bicycle and pedestrian infrastructure improvements. This plan is intended to be general in scope and to provide a dynamic and timely framework for the decision making process. Ultimately, the vision for this Plan is as follows:

Fayetteville endeavors to develop and promote an interconnected and universally accessible network of sidewalks, trails and on-street bicycle facilities that encourage citizens to use active/non-motorized modes of transportation to safely and efficiently reach any destination.

THE PRIMARY GOALS OF THE ATP ARE:

- Strive to create an inclusive Multimodal Transportation System.
- Endeavor to build a trail connection within one half mile of every residence.
- Increase the active transportation commuting mode share to 15% by 2020.
- Work to identify and correct missing bicycle and pedestrian linkages.
- Partner with advocates to address bicycle and pedestrian needs.
- Earn a League of American Bicyclists Bicycle Friendly Community designation of Silver by 2017.

WHAT IS ACTIVE TRANSPORTATION?

Active transportation is any form of human powered transportation, ie., walking, cycling, using a wheelchair, in-line skating or skateboarding.



WHAT IS MULTI-MODAL TRANSPORTATION?

Multi-modal refers to a range of mobility options; vehicular traffic, public transit, walking, bicycling and ride sharing that are effectively integrated to provide a high degree of accessibility for all users.



WHAT ARE ACTIVE TRANSPORTATION NETWORKS?

Just as our existing motorized transportation networks connect destinations via an interconnected system of roadways that enable people to get from A to B, active transportation networks allow people to do the same thing by walking and bicycling. Imagine a system of trails, quiet neighborhood streets, bike lanes and cycle tracks that connect your home with your work, school, shopping, entertainment and other destinations. You can enjoy the freedom of safely and conveniently getting where you're going without needing to drive.

INTRODUCTION

community development pattern chart

Completely automobile dependent communities share many of the same characteristics; lack of pedestrian connectivity and non-vehicular infrastructure, increased per capita travel mileage, increased vehicle traffic and associated costs, economic and social disadvantages for non-drivers, reduced diversity and fewer opportunities for education, employment and recreation.

The following table shows the relationships between built environment for supporting an auto dependent or multi-modal transportation based community.

AUTOMOBILE DEPENDENT COMMUNITY

MULTI-MODAL TRANSPORTATION COMMUNITY

High per capita car ownership	CAR OWNERSHIP	Medium per capita car ownership
High per capita motor vehicle mileage	VEHICLE TRAVEL	Medium to low motor vehicle mileage
Automobile traffic is prioritized over pedestrian and bicycle use	PRIORITY OF TRAVELERS	Non-drivers are prioritized and their needs merit significant consideration
Generous supply, free	PARKING	Moderate supply, priced appropriately in high destination areas
Maximum traffic speeds	TRAFFIC SPEEDS	Lower traffic speeds
Low with common destinations dispersed from residential areas	LAND USE DENSITY	Medium to high with common destinations and residential areas clustered
Primarily single use development patterns	LAND USE MIX	Abundance of mixed-use development patterns
Large amounts of land devoted to roads and parking	LAND AREA FOR TRANSPORTATION	Medium amounts of land devoted to roads and parking
Parking is placed in front of buildings	SITE DESIGN	Buildings are placed at the street with parking behind or at the side
Streets designed for primarily automobile traffic	STREET DESIGN	Streets designed to support multiple modes and users
Large scale streets and blocks	STREET SCALE	Medium to small streets and blocks
Low levels of street connectivity with abundant cul-de-sacs	STREET CONNECTIVITY	High levels of street connectivity with numerous intersections
Walking can be hazardous and is primarily undertaken by those unable to afford a car	WALKING	Walking is pleasurable on most public streets and is a safe and efficient alternative to driving for many daily activities
Non-drivers are a small minority with little political influence	PLANNING PRACTICES	Planning places a high value on transportation modal diversity



THE PLANNING PROCESS

The ATP has been developed with information gathered from a wide variety of planning studies and public input over time. This Plan recognizes that exceptional bicycle and pedestrian planning, design and implementation occurs at many levels and is influenced and guided by a variety of plans, policies and advocates.

In developing the Alternative Transportation Plan, staff incorporated data, best practices and input from a wide variety of sources including:

- 2003 Fayetteville Alternative Trails and Transportation Plan
- Recommendations from the 2014 League of American Bicyclists Fayetteville Bronze designation
- Recommendations from the NWA Bicycle and Pedestrian Plan developed with help from Alta Planning for the NWA Regional Planning Commission and endorsed by the Fayetteville City Council
- City Plan 2030 and the City of Fayetteville's Master Street Plan
- Specific neighborhood plans adopted by the City, including: Walker Park, Fayette Junction and the Wedington Corridor Plan
- The City of Fayetteville's annual sidewalk plan developed by the Transportation Services Department
- Recommendations from the Bicycle Coalition of the Ozarks
- Generous public input from participants in the above plans, programs and policies

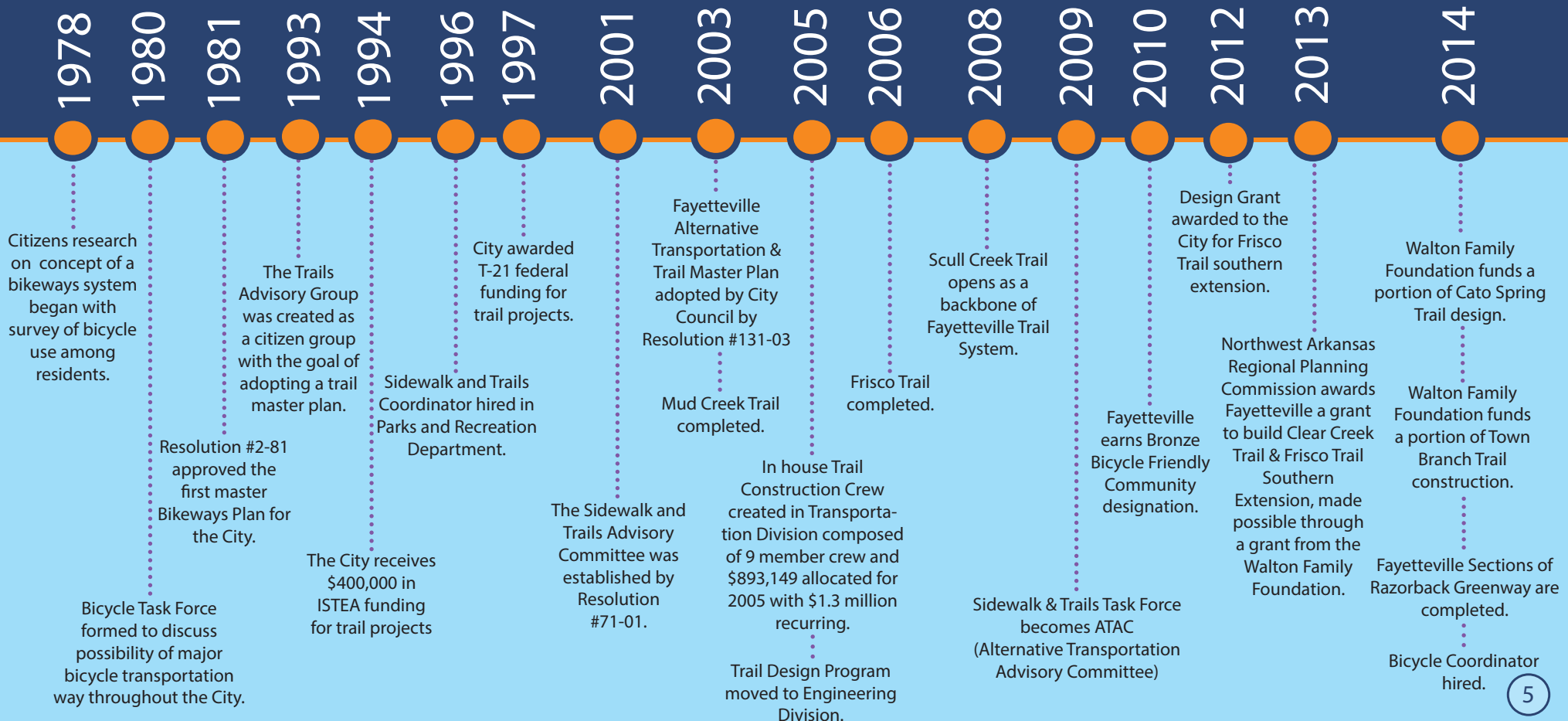


413
THE AVERAGE NUMBER OF USERS ON A FAYETTEVILLE TRAIL EACH AND EVERY DAY.

PROGRESS AND TIMELINE

The City of Fayetteville has made enormous progress in the development of bicycle and pedestrian infrastructure since the adoption of the FATT Plan in 2003. Some notable accomplishments include: the completion of Scull Creek Trail in 2008 that serves as the backbone of the City's trail system, the adoption of a complete street policy through the adoption of a Master Street Plan and complete street cross-sections in 2005, the completion of the Dickson Street enhancement project in 2004 and the City's designation as a Bronze Bicycle Friendly Community by the League of American Bicyclists in 2010. Additionally, the City has embraced on-street bicycle infrastructure and a significant number of new and retrofitted projects have been completed in the last 10 years.

SIGNIFICANT DATES

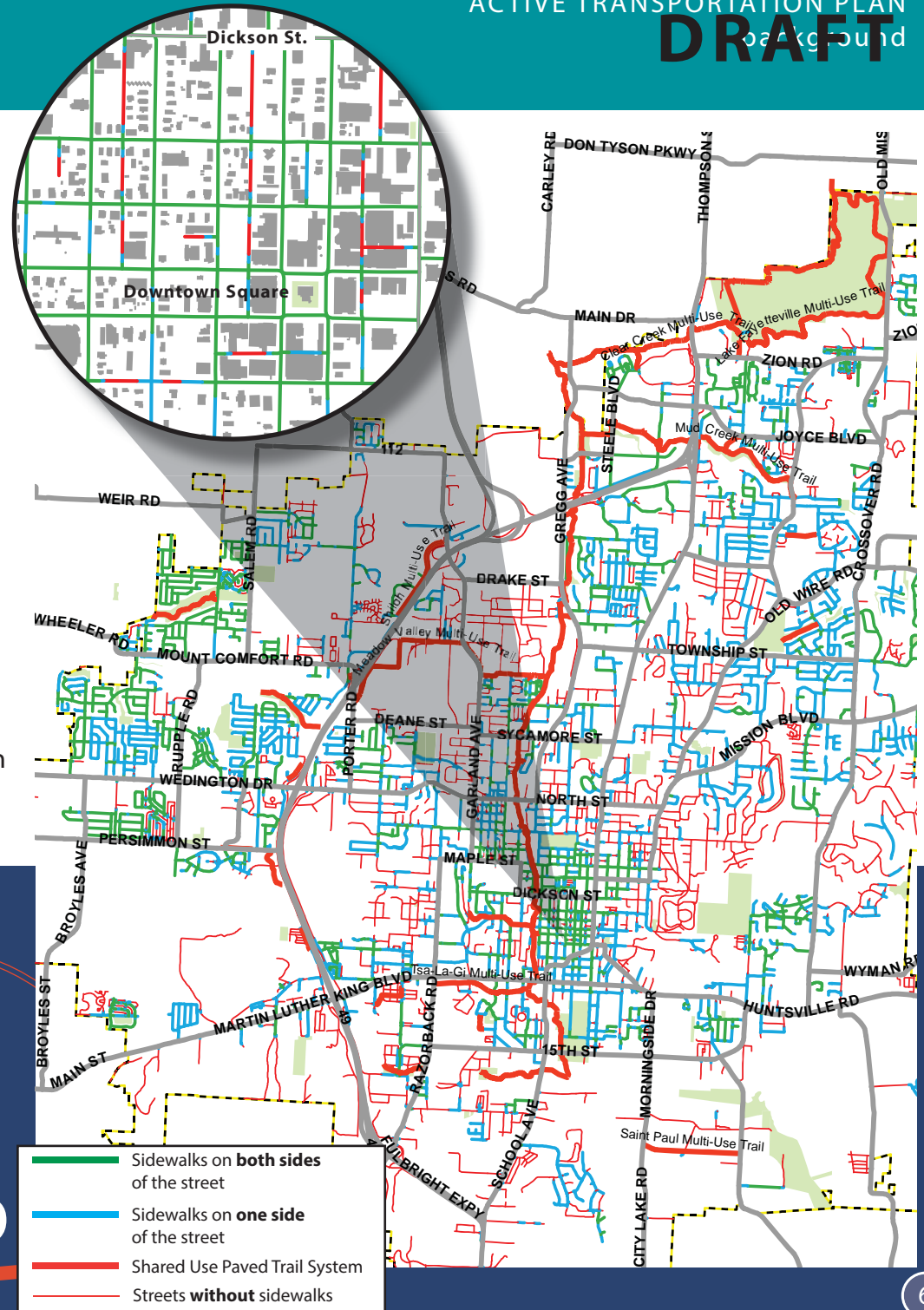


BACKGROUND

existing conditions

EXISTING CONDITIONS

Fayetteville is fortunate to have a well-connected street network within the historic central core of the City that was developed prior to the 1940's as a street grid of small blocks with low traffic speeds. Small blocks encourage pedestrian use and provide for safe and convenient bicycle transportation within the existing travel lanes. Generally, areas of the City that were developed from the 1940's through the 1990's have a non-gridded street pattern that is characterized by looping streets and cul-de-sacs. These streets generally lack sidewalks and are not interconnected. The development pattern from the 2000's to present has, for the most part, been built in the era of "complete streets" which requires the inclusion of bicycle and pedestrian infrastructure when building new streets. This requirement stems from the adoption of Fayetteville's Complete Street Policy in 2006 as an element of the Master Street Plan. The Master Street Plan is complimentary to the City's long range land use plan, City Plan 2030. These transportation and land use policies are updated every five years.



FAYETTEVILLE is considered a hilly city . . .

a **STEEP** slope for a multi-use trail is **5%** or more.

FAYETTEVILLE'S TRAIL SYSTEM has an average slope of

2.2%

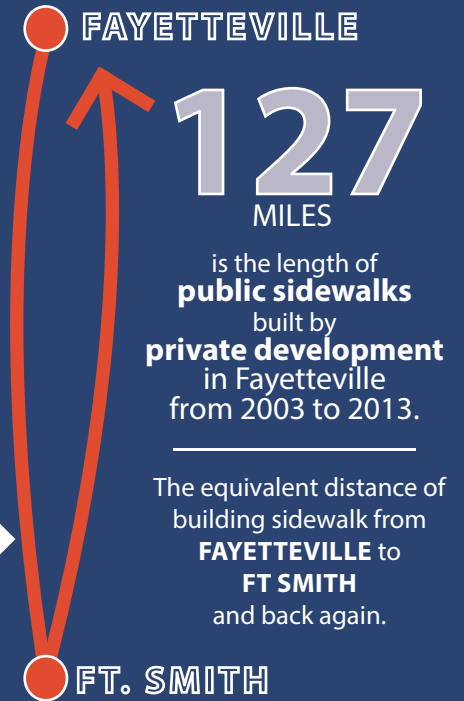
BACKGROUND

the pedestrian network

IT IS IMPORTANT TO LOOK AT EACH ACTIVE TRANSPORTATION MODE IN DETAIL IN ORDER TO UNDERSTAND HOW IT FITS INTO THE LARGER MULTI-MODAL TRANSPORTATION NETWORK.

THE PEDESTRIAN NETWORK

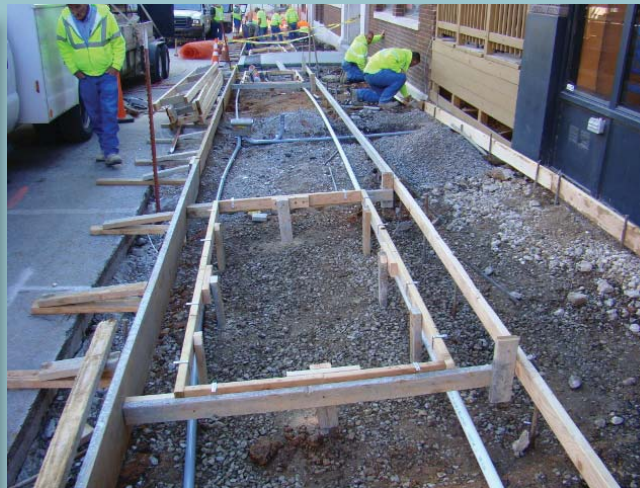
At present, Fayetteville's pedestrian network is made up of 435 miles of existing public sidewalks and 40 miles of existing shared-use paved trails. The sidewalk map (Figure 1) shows where existing sidewalks are located and where gaps exist. Traditionally, Capital Improvement Program funds have been allocated for an annual sidewalk budget in the City's Transportation Department to build new sidewalks or to rebuild and replace existing damaged or inadequate sidewalks. Additional funding has also come through State and Federal Grant for sidewalk construction. Construction of sidewalks is required for all new development along public streets. As a result of this requirement, 127 miles of sidewalks were built from 2003 to 2013 by private developers. This plan provides the framework for identifying and prioritizing sidewalk improvements in the future. Future sidewalk planning will emphasize improving connectivity throughout the existing network by connecting densely populated areas to key destinations such as parks, schools and businesses. According to the 2013 Census Bureau's American Fact Finder Survey, walking constituted 6.3% of the overall commuting mode share for all forms of transportation utilized by workers 16 years of age and older.



Sidewalk Coordinator, City of Fayetteville



CENTER ST.
before reconstruction



CENTER ST.
during reconstruction

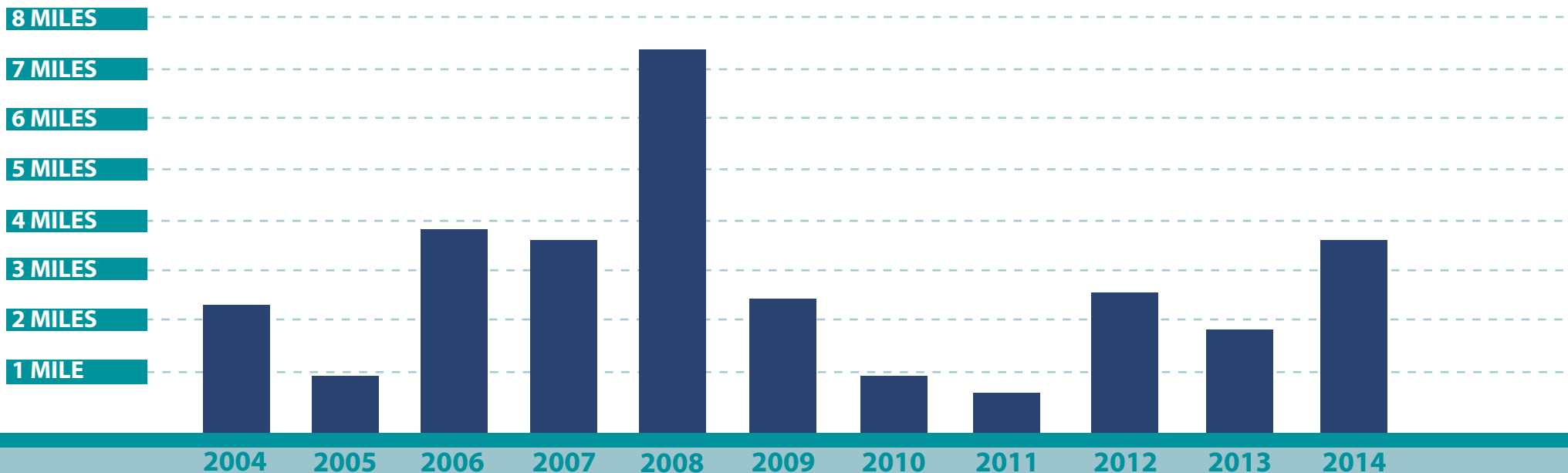


CENTER ST.
after reconstruction

BACKGROUND

shared-use paved trails

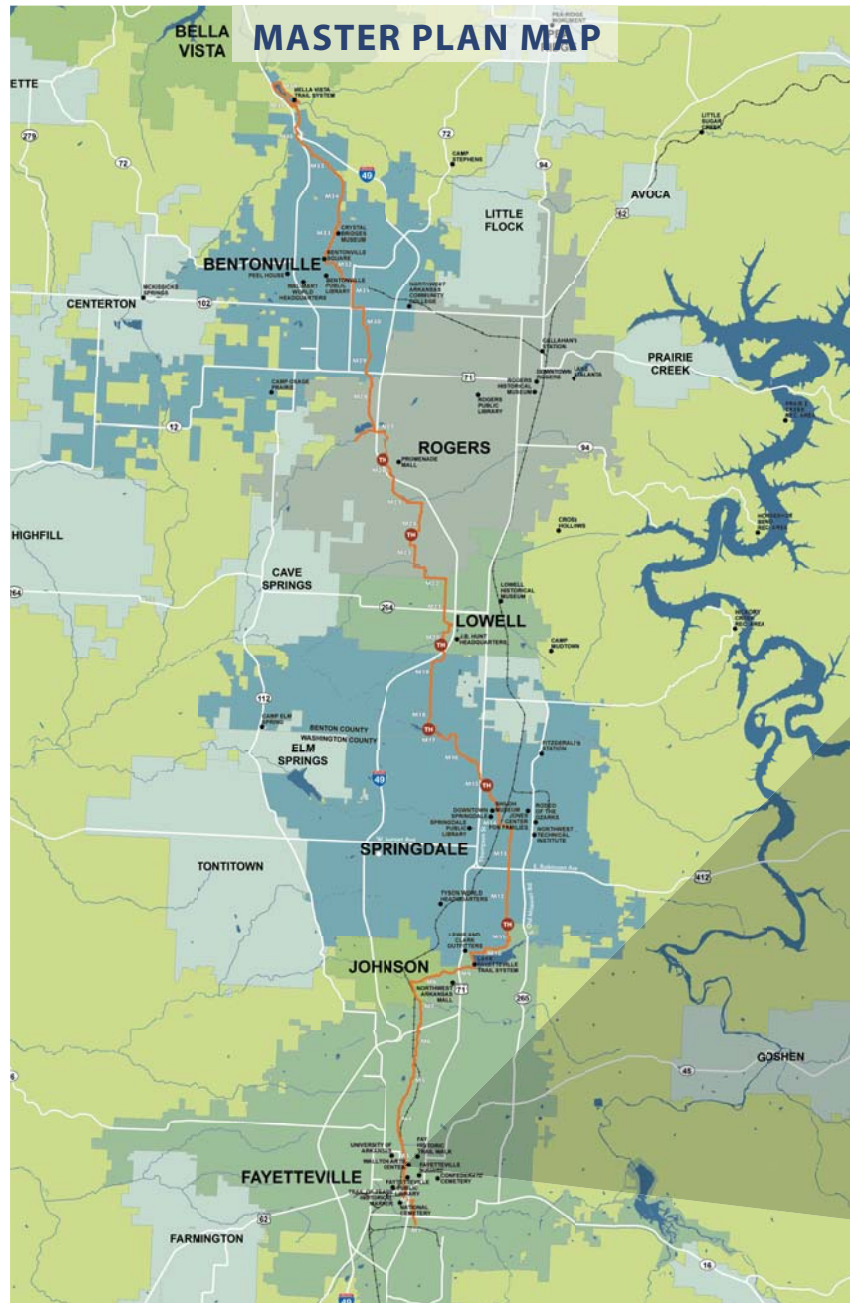
Shared-use paved trails, due to their separation from the roadway network, are especially useful for building a robust multi-modal transportation network. The ability to accommodate both bicyclists and pedestrians allows trails to provide a significant return in terms of use and convenience for the public investment. Fayetteville was fortunate to acquire a north-south oriented corridor along an existing Arkansas/Missouri Railroad rail line. Together, the rail line and Scull Creek provided a natural “spine” through the center of town. This trail segment has ultimately become the southern section of the Razorback Regional Greenway. Spur trails to the east and west along this spine will be the focus for much of the future trail network. Much like our sidewalk program, trails are funded through dedicated Capital Improvement Project funds and additional public and private grant sources. The City is extremely grateful for the generosity of the Walton Family Foundation and the Endeavor Foundation for significant funding to assist in the planning, designing and construction of many miles of shared-use paved trails. The Safe Routes to School Program administered by the Arkansas State Highway Department has also been a valuable partner for funding a number of sidewalk and trail projects. Ultimately, this plan envisions an interconnected shared-use paved trail network that will be within one half mile of every residence, school, commercial area and place of employment within the City.



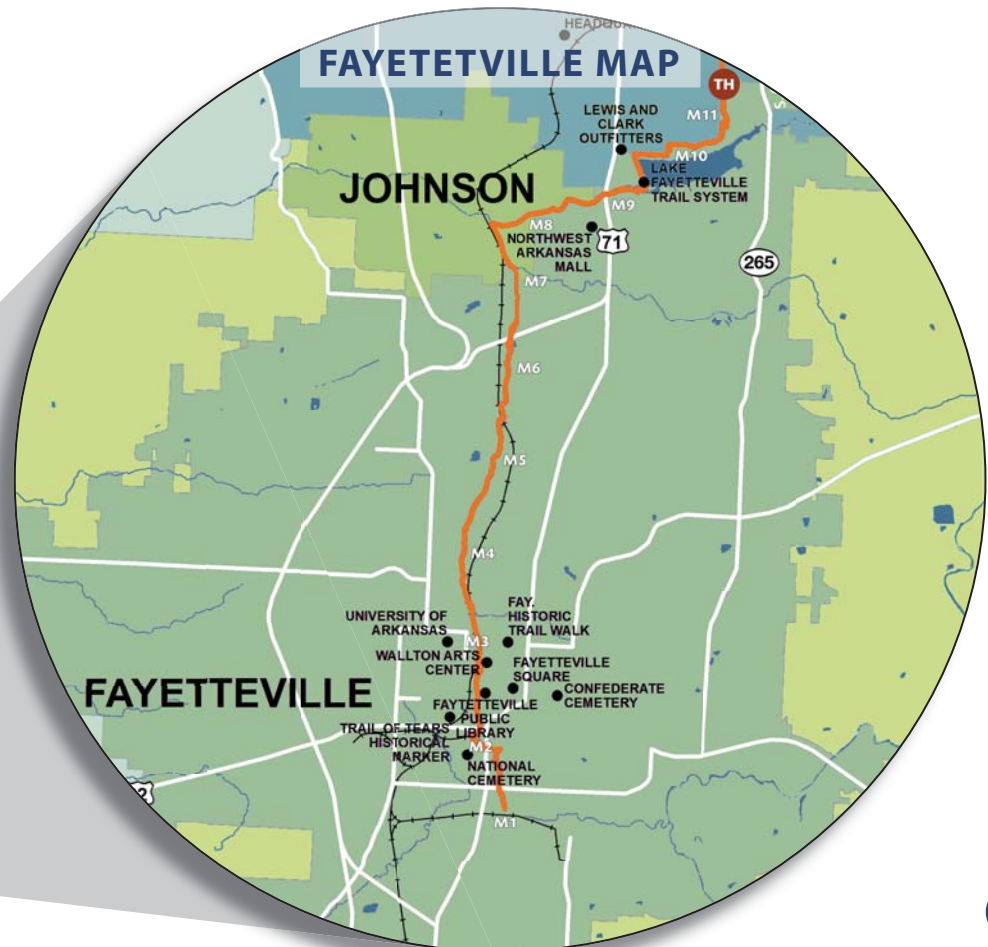
TRAIL AND SIDE PATH CONSTRUCTION MILEAGE OVER PAST 10 YEARS.

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RAZORBACK REGIONAL GREENWAY



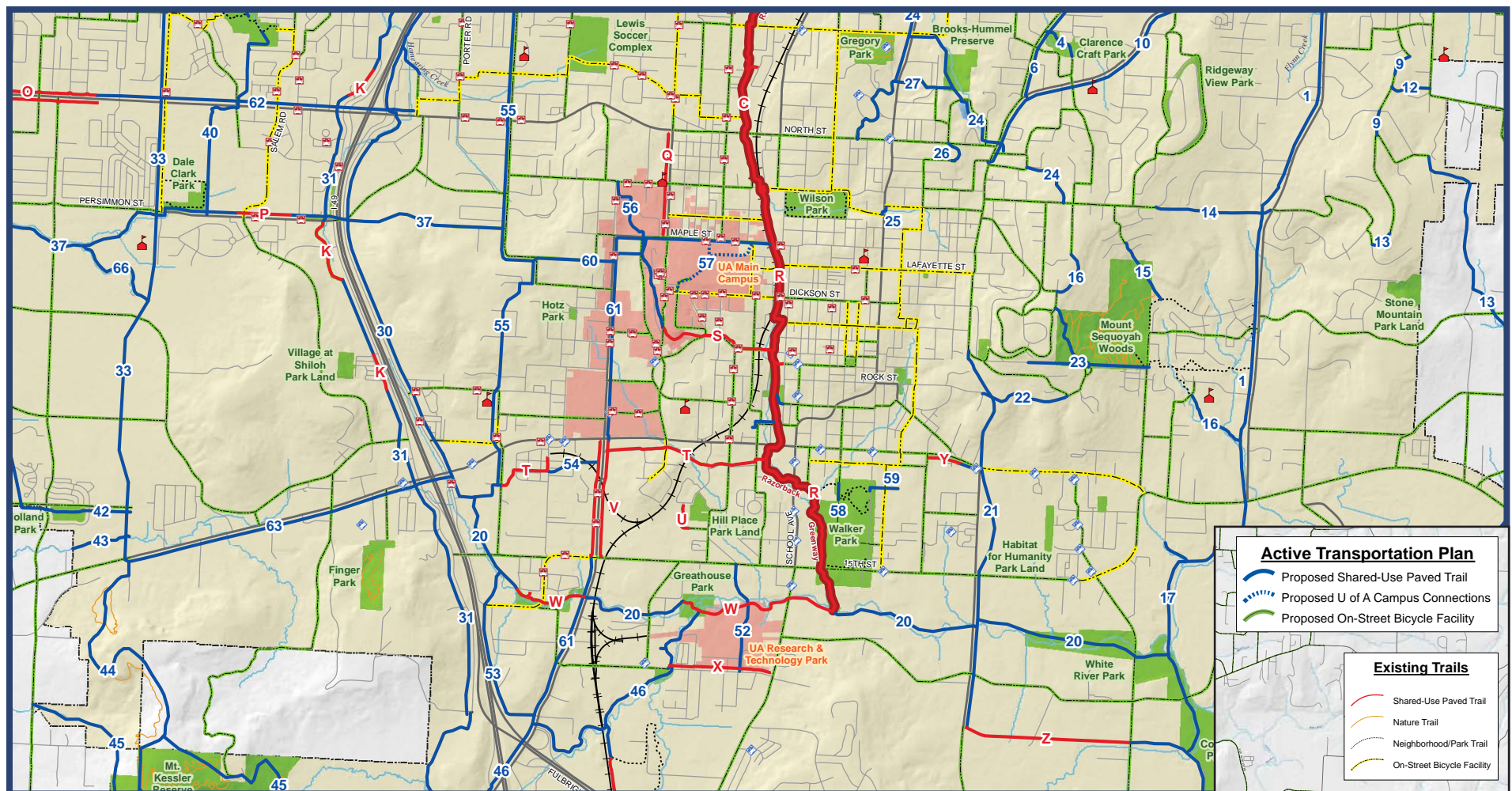
The Razorback Regional Greenway is a 36 mile shared use paved trail that extends from south Fayetteville to Bella Vista linking six downtowns and many popular community destinations such as parks, schools, art and entertainment venues, commercial areas and neighborhoods. The Razorback Regional Greenway cost approximately \$38 million dollars and was completed and opened in the spring of 2015. Funding for the greenway came from a federal transportation grant, local government resources and grants from the Walton Family Foundation. The Razorback Greenway is among the nations longest and most complete greenways of its kind.



BACKGROUND

active transportation plan map

The Active Transportation Plan Map illustrates the location of the existing and future trail system and on-street bicycle facilities. This map is adopted by a resolution of the City Council and it serves as the official map for directing the development of active transportation infrastructure. City Staff utilizes the map to prioritize City led infrastructure improvements. The Active Transportation Plan Map is also used to inform land owners and developers of future trail corridors for planning and development purposes. Please see map attached to this plan for more detail.



BACKGROUND

the on-street bicycle network

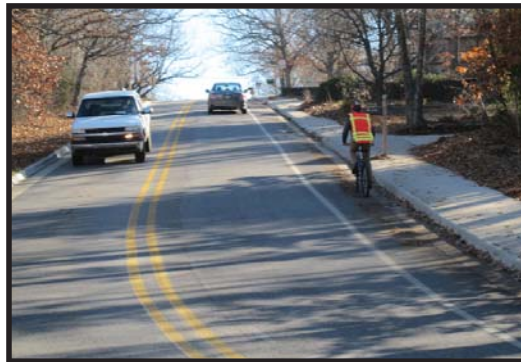
THE ON-STREET BICYCLE NETWORK

Shared-use paved trails serve as the foundation of our active transportation infrastructure but on-street linkages provide a critical link for cyclists to reach trails and other destinations using city streets. Fayetteville's on-street bicycle network has been rapidly developed in recent years; 25 miles of on-street bike lanes and shared bikeways were added to Fayetteville streets in the years between 2010 and 2014. Fayetteville has gone from a patchy inadequate pattern of on-street bike facilities to a network of usable and navigable bike routes, yet continued progress is needed to meet the growing demand for these on-street facilities.

Fayetteville's varied development patterns and occasionally steep terrain require a variety of on-street solutions to make the most efficient use of space while providing safe and comfortable travelways for cyclists. On-street shared lanes, bike lanes, climbing lanes, buffered bike lanes and bike ways have all been implemented in Fayetteville. Other facilities such as cycletracks, fully protected bike lanes may be constructed in the future. As part of Fayetteville's commitment to the continued expansion of on-street bicycle facilities, City Plan 2030 requires all new street projects and significant street reconstruction incorporate some form of bicycle infrastructure in the public right-of-way where the City Plan indicates bicycle infrastructure is appropriate. The images below illustrate examples of the context-sensitive solutions used in various locations in Fayetteville and other regional cities.



ON-STREET SHARED LANES
Willow Avenue - Fayetteville



CLIMBING LANES
Ash Street - Fayetteville



BIKE LANES
Appleby Road - Fayetteville



CYCLETRACKS
Silent Grove Rd. - Springdale



BUFFERED BIKE LANES
Rolling Hills Drive - Fayetteville



BICYCLE WAYS
Asbell Bike way - Fayetteville

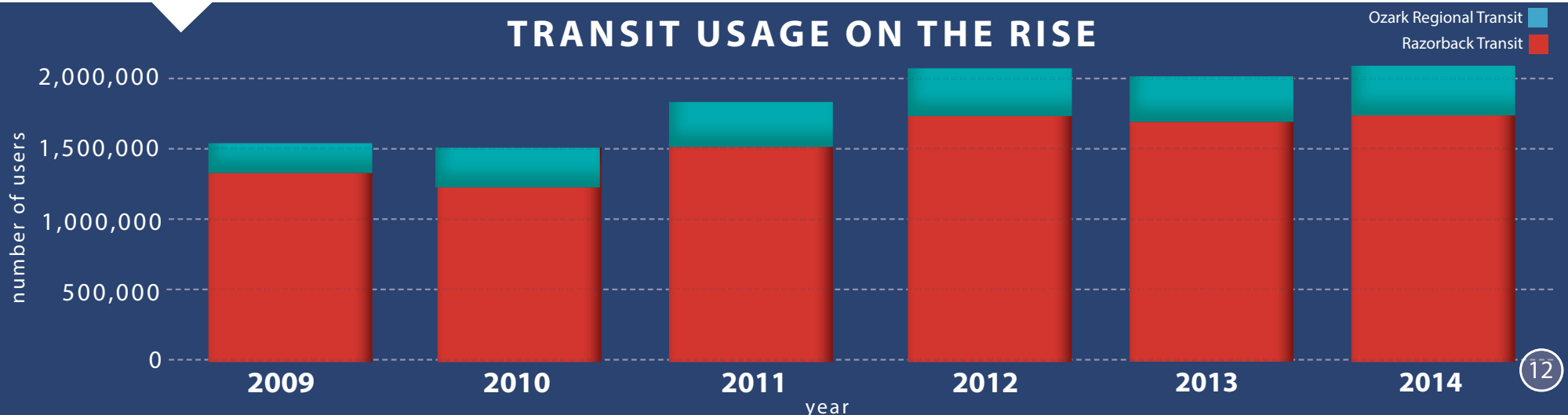
TRANSIT

Fayetteville is served by two public transit agencies, Razorback Transit and Ozark Regional Transit. Razorback Transit serves University of Arkansas Students and residents of Fayetteville. Service is provided by the University of Arkansas and riders pay no fee. Ozark Regional Transit, which serves cities in Benton and Washington counties, charges a rider fee but the agency is primarily funded through a combination of federal, state and local programs and contributions. Public transit provides a critical link in a multi-modal transportation network. High quality public transportation allows residents to walk or bike to transit stops, ride the bus to a stop near a destination and then walk or bike the final leg of the trip. These multi-modal trips are typical within a responsive and dynamic transportation network that incorporates the active transportation to connect users and destinations.

According to the 2013 American Fact Finders survey, public transportation has a 2.7 % commuting mode share for workers 16 years of age and older.



TRANSIT USAGE ON THE RISE



BENEFITS OF A BICYCLE AND PEDESTRIAN PLAN



13 = THE NUMBER OF POUNDS THE AVERAGE PERSON WILL LOSE IN THEIR FIRST YEAR OF BIKING TO WORK





THE PROMOTION OF HEALTHY LIFESTYLES

Bicycling and walking bring innumerable benefits to an individual's physical, mental and emotional well-being. Americans are increasingly aware of the link between transportation choices and health, and people value neighborhoods that are conducive to bicycling and walking as a form of exercise and transportation. Necessarily, the built environment is key to providing individuals with transportation choices and options. Fayetteville's commitment through City Plan 2030 to promote infill development, discourage sprawl and develop a livable transportation network acknowledges this linkage between the built environment and healthy lifestyles.

balance

Cycling produces the balance between exertion and relaxation which is important for the body's inner equilibrium.

mental health

Cycling has a relaxing effect due to uniform movement which stabilizes physical and emotional functions. It reduces anxiety, depression and other psychological problems.

back pain

Cycling posture is optimum, and the cyclic movement of the legs stimulates muscles in the lower back.

heart

All the risk factors that lead to a heart attack are reduced. Regular cycling reduces the likelihood of heart attack by more than 50%.

waistline

Cycling is ideal for targeting problem areas. It enables people who can not move easily to exercise. It increases fitness and stimulates the body's fat metabolism.

coordination

Moving both feet around in circles while steering with both your hands and your body's own weight is good practice for your coordination skills.

muscles

A week of inactivity reduces the strength of the muscular system by up to 50% and can harm muscles long-term. During cycling, most of the body's muscles are activated.

joints

The circular movement of cycling assists the transport of energy and other metabolic producers to the cartilages, reducing the likelihood of arthrosis.



ACTIVE TRANSPORTATION BENEFITS

transportation benefits of biking and walking

ACTIVE TRANSPORTATION PLAN
active transportation benefits

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**QUALITY
OF LIFE**

ENHANCED QUALITY OF LIFE.

Quality of life is understood to mean the well being of individuals, cities and societies. Quality of life can be measured in a variety of ways such as community stability, culture, education, open spaces, health, the environment and infrastructure. Active transportation alternatives can have positive impacts on all aspects of quality of life. All efforts and actions toward improving Fayetteville's Bicycle Friendly community designation are intended to improve the quality of life for all residents. This is especially true when measuring transportation mode share and the locational equity and extent of the existing and future bicycle, trails and sidewalk networks.



ACTIVE TRANSPORTATION BENEFITS

transportation benefits of biking and walking

ACTIVE TRANSPORTATION PLAN
active transportation benefits

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ENVIRONMENT

ENVIRONMENTAL BENEFITS FOR THE COMMUNITY

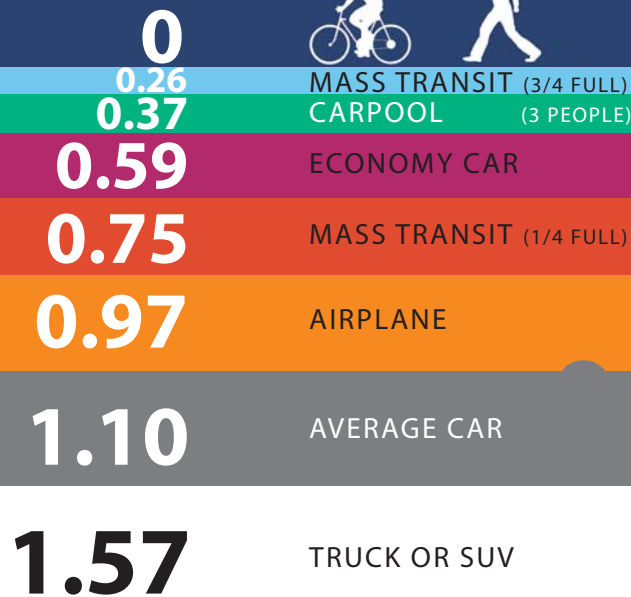
When non-motorized transportation options are present, the community has the ability to choose biking and walking for trips such as commuting to work, traveling to school or going shopping. The goal is to create a balanced transportation network that fosters one's ability to make environmentally conscious choices that result in less traffic congestion, cleaner air and less dependence on non-renewable fuels. An accessible active transportation network is essential for an environmentally sustainable community, considering that the transportation sector contributes approximately one third of American greenhouse gas emissions.

(Cambridge Systematics Inc. and Urban Land Institute, Moving Cooler an Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions, July 2009).



CO₂ EMISSIONS

pounds per passenger mile traveled



ACTIVE TRANSPORTATION BENEFITS

transportation benefits of biking and walking

ACTIVE TRANSPORTATION PLAN
active transportation benefits

DRAFT



ECONOMIC

ECONOMIC RESILIENCY BENEFITS FOR THE COMMUNITY

Economic resiliency is an often overlooked benefit of having a robust active transportation network. Economic resiliency can be measured broadly, at the community level, or narrowly as the benefits and costs to an individual or family. At the community scale, economic resiliency can be measured a number of ways including the number of jobs created by building and maintaining infrastructure or by calculating the communities overall costs of living and transportation affordability. Local economies are impacted negatively by the high transportation costs associated with an automobile oriented land use and transportation network. Multi-modal transportation systems that include extensive active transportation components are less expensive to construct, operate and maintain. Community metrics like commuting time or the average annual costs of operating an automobile, can provide measurements for assessment and goal setting. At an individual scale, economic resiliency can be measured by automobile ownership and operation costs, but leisure time and quality of life attributes are also important. Additional economic benefits include the development potential for residential and commercial uses in close proximity to active transportation networks or corridors and tourism benefits associated with regionally scaled trail amenities. Northwest Arkansas is poised to take advantage of the limitless development potential along the Razorback Regional Greenway. Communities that recognize and actively pursue appropriate development in this corridor will begin realizing immediate economic benefits.

The average annual
operating cost of a
BICYCLE
is



\$308



26Xless

than that of a
VEHICLE



\$8,220



LOCAL ECONOMY PAYBACK

TRAIL SYSTEMS HAVE THE
POTENTIAL TO RETURN \$3 IN
REVENUE FOR EVERY \$1 IN
EXPENDITURE.

The Razorback Greenway cost
approximately **\$30 million** to
complete and could generate **\$100
million** in sales revenue at local
shops, restaurants and hotels.

(Chuck Fink, president of Alta/Greenways)

PLAN VISION

The Active Transportation Plan (ATP) has been developed through numerous planning and visioning exercises both locally and region wide. The ATP proposes to consolidate and summarize all of the various alternative transportation planning processes, policies and programs with the following vision statement: "Fayetteville endeavors to develop and promote an interconnected and universally accessible network of sidewalks, trails and on-street bicycle facilities that encourage citizens to use active/non-motorized modes of transportation to safely and efficiently reach any destination."

- 1 ENDEAVOR TO CREATE AN INCLUSIVE MULTI-MODAL TRANSPORTATION SYSTEM.
- 2 WORK TO BUILD A TRAIL CONNECTION WITHIN ONE HALF MILE OF EVERY RESIDENCE.
- 3 INCREASE THE ACTIVE TRANSPORTATION COMMUTING MODE SHARE FROM 7.5% TO 15% BY 2020.
- 4 IDENTIFY AND CORRECT MISSING BICYCLE AND PEDESTRIAN LINKAGES.
- 5 PARTNER WITH ADVOCATES TO ADDRESS BICYCLE AND PEDESTRIAN NEEDS.
- 6 EARN BICYCLE FRIENDLY COMMUNITY DESIGNATION OF SILVER BY 2017.

PLAN GOALS



ENDEAVOR TO CREATE AN INCLUSIVE MULTI-MODAL TRANSPORTATION SYSTEM

Developing a truly multi-modal transportation system is consistent with City Plan 2030's goal of creating a "Livable Transportation Network" and the City's adopted complete street policy, public street cross-sections and Master Street Plan. Multi-modal refers to a range of mobility options; vehicular traffic, public transit, walking, bicycling and ride sharing that are effectively integrated to provide a high degree of accessibility for all users. To some degree, the ATP addresses all of these modes with the primary emphasis on bicycling and walking. A multi-modal transportation system has a number of significant benefits for the community including: promoting an active and healthy lifestyle, expanding mobility options for all users, reducing overall travel costs for residents and providing environmental benefits through the reduction of traffic congestion and associated air pollution. Success in this goal area can be quantified through increased multi-modal transportation commuting mode share measured by the U.S. Census Bureau, increased transit ridership reported by transit agencies and increased trail usage determined through mechanical counts.



9TH AVENUE IN NEW YORK CITY 2009
ASSOCIATION FOR PEDESTRIAN AND BICYCLE PROFESSIONALS

MULTI-MODAL TRANSPORTATION NETWORK



2 WORK TO BUILD A TRAIL CONNECTION WITHIN ONE HALF MILE OF EVERY RESIDENCE

The ATP Map shows the existing trail system and identifies future trail locations. Once completed, the Fayetteville Trail System will include approximately 150 miles of shared-use paved trails. The Fayetteville Pedestrian Shed (on the following page) illustrates the proximity of the existing and proposed trails. At the current rate of trail construction, it is estimated the City will have achieved this goal by 2040. This goal is essential to ensuring that the trails system and its benefits are inclusive for all residents regardless of the location of their residence. Success will be measured through locational data collected by the City of Fayetteville Geographic Information Systems Division.

2 MILE

1 MILE

1/2 MILE



2 MINUTE

5 MINUTE

10 MINUTE



10 MINUTE

20 MINUTE

40 MINUTE

WHAT IS A PEDESTRIAN SHED ?

A pedestrian shed is the linear distance that a typical pedestrian can walk in a given amount of time. Generally, this distance is 1/2 mile in 10 minutes.

IDEAL TRIPS

for bicycling and walking are those that are **3 miles or less.**



a **cyclist** can complete a **3 mile bike ride** in approximately **15 minutes**

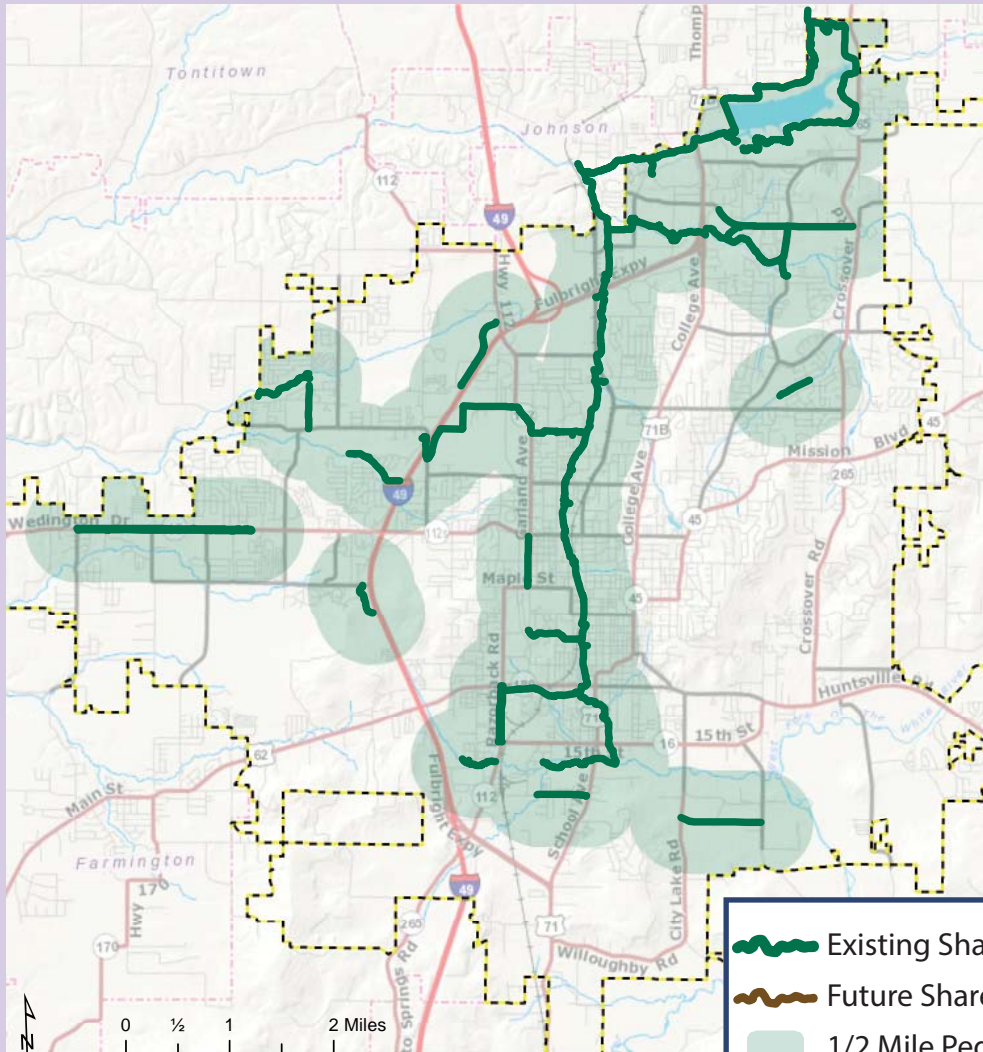
and



a **pedestrian** can walk **1/2 mile** in **10 minutes**

2015 TRAIL SYSTEM

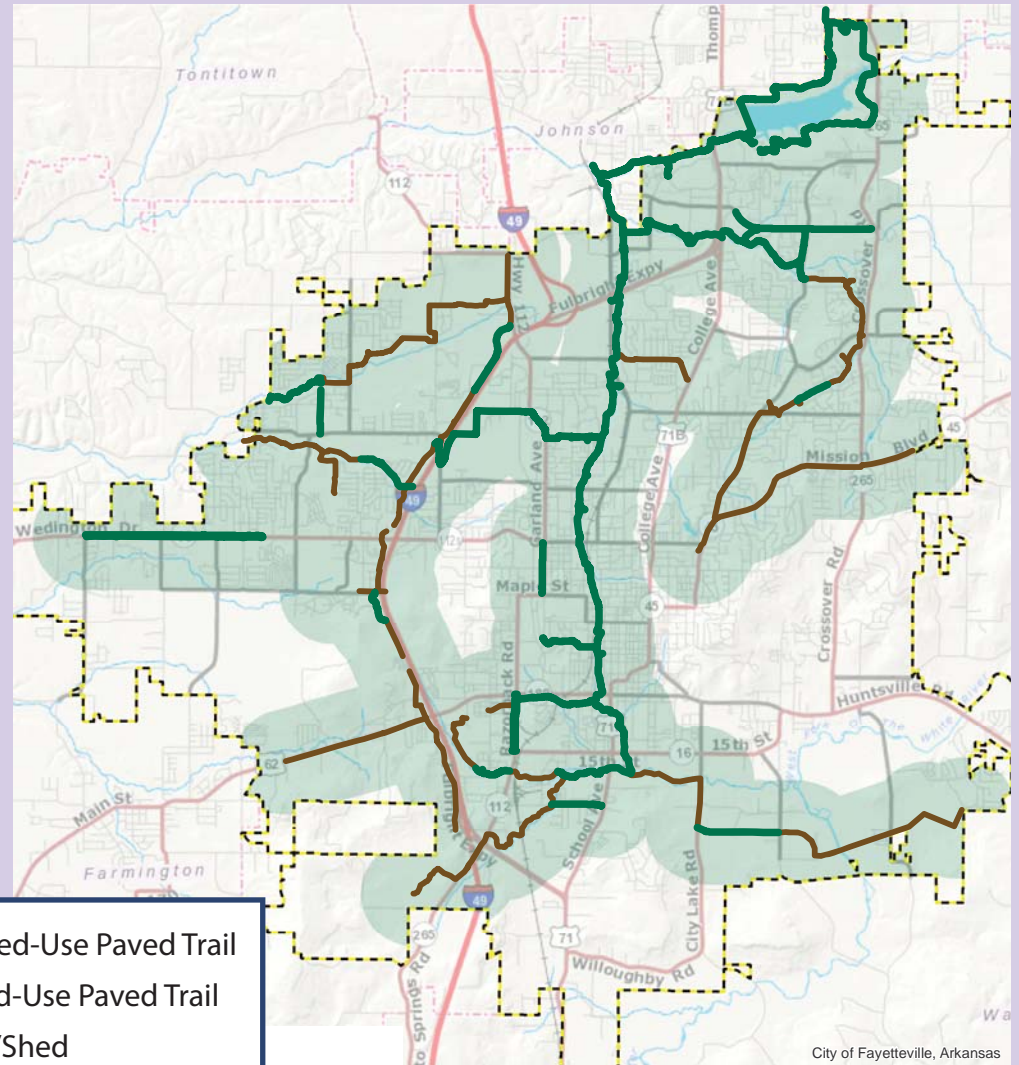
64% of the population live within 1/2 mile of the current trail system.



- Existing Shared-Use Paved Trail
- Future Shared-Use Paved Trail
- 1/2 Mile Ped/Shed
- Fayetteville City Limits

2020 TRAIL SYSTEM

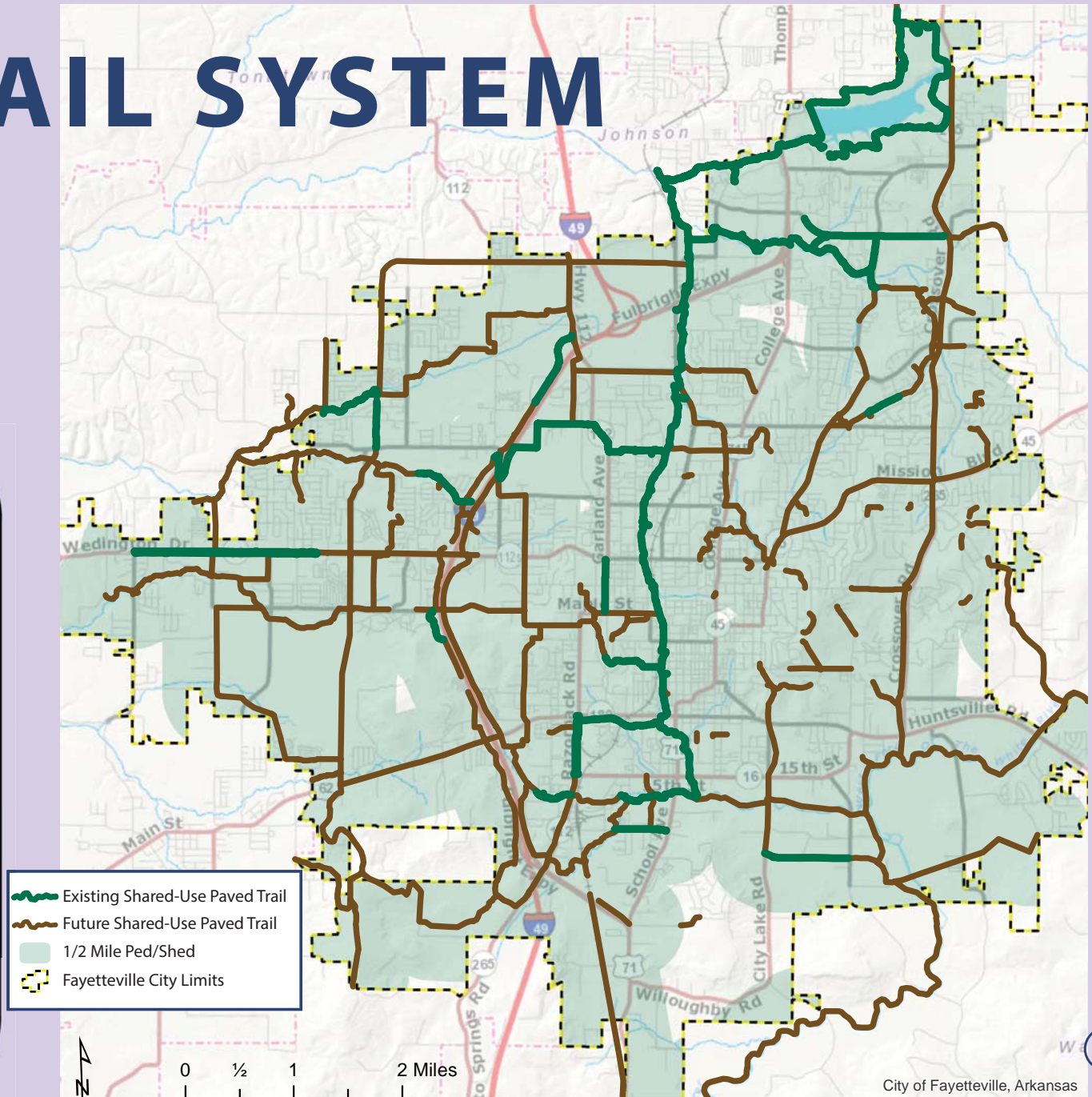
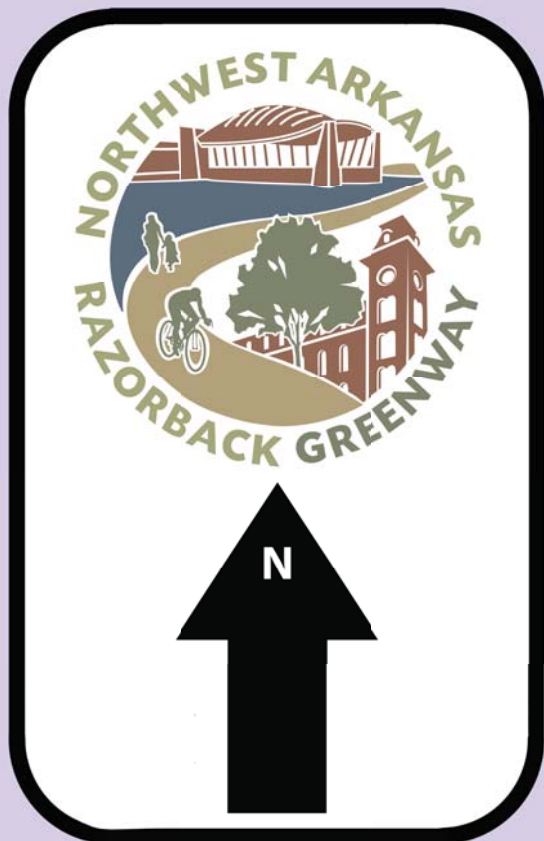
83% of the population will live within 1/2 mile of the current trail system.



City of Fayetteville, Arkansas

2040 TRAIL SYSTEM

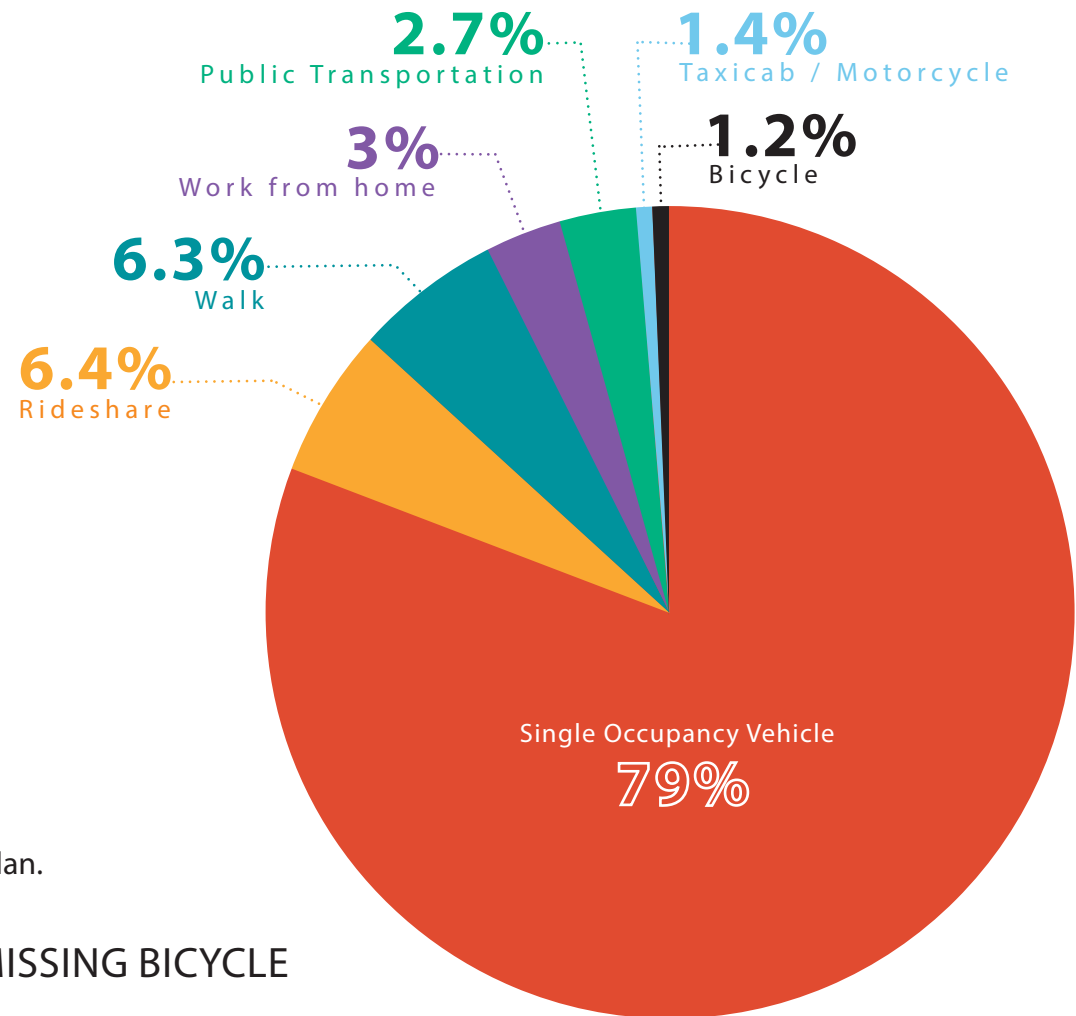
97% of the population will live
within 1/2 mile of all proposed trails.



3 INCREASE THE ACTIVE TRANSPORTATION COMMUTING MODE SHARE TO 15% BY 2020.

Active transportation for the purposes of this plan refers to: “any form of human powered transportation, ie., walking, cycling, using a wheelchair, in-line skating or skateboarding.” According to the U.S. Census Bureau American Fact Finder Survey in 2013, the City of Fayetteville had 36,957 workers 16 years old and over that commute to work. Of these 6.3% walked for their daily commute, 1.2% bicycled to work, 2.7% used public transportation and 1.4% used a taxicab or motorcycle. Rideshare or car-pooling constituted 6.4%, and 3% reported working from home. Therefore, the active transportation commuting walking and biking mode share is 7.5%. The majority of workers 16 years and over, 79% reported commuting in a single occupancy vehicle. The average length of commute for workers was 19.1 minutes. Increasing Fayetteville’s active transportation mode share to 15% by 2020 will be accomplished by a wide variety of action steps identified in the implementation section of this plan.

FAYETTEVILLE MODE SHARE DISTRIBUTION



4 IDENTIFY, PRIORITIZE AND ADDRESS MISSING BICYCLE AND PEDESTRIAN LINKAGES.

The City faces significant challenges for creating a densely gridded bicycle and pedestrian network. Obstacles include steep topography, large undeveloped and underdeveloped parcels and a disjointed street network comprised of cul-de-sacs and inward facing developments. However, Fayetteville does have some built in advantages for building a good active transportation network including numerous stream corridors and a streamside protection ordinance that limits development in these areas that are particularly well suited for multi-use trails. City staff have identified missing sidewalk, trail and on street bicycle linkages utilizing GIS mapping tools. Missing segments are constantly being prioritized for future infrastructure projects to correct and complete these missing linkages.

5 PARTNER WITH ADVOCATES TO ADDRESS BICYCLE AND PEDESTRIAN NEEDS.

The City of Fayetteville currently relies upon the Active Transportation Advisory Committee (ATAC) to help prioritize sidewalk and trail infrastructure projects. ATAC also reviews street projects for the inclusion of bicycle facilities. This committee's process is to take public comment and advise City Staff on the prioritization for active transportation infrastructure within our City. They are also responsible for adopting Sidewalk and Trails Master Plans and recommending 5 year construction plans. Recommendations relating to trails and sidewalks are forwarded to the City Council Transportation Committee. ATAC is comprised of eight voting members and seven non-voting staff members, including representatives from the Parks and Recreation, Transportation, Engineering and Police Departments. In addition to ATAC's work, the City should also continue to develop and expand our positive working relationships with the Fayetteville School District, the Bicycle Coalition of the Ozarks and funding groups such as the Walton Family Foundation and the Endeavor Foundation in addressing Fayetteville's bicycle and pedestrian needs.

6 EARN BICYCLE FRIENDLY COMMUNITY DESIGNATION OF SILVER BY 2017.

The City of Fayetteville was designated a bronze-level Bicycle Friendly Community by the League of American Bicyclists in 2010 and again in 2014. The League of American Bicyclist's uses a criteria called the 5 E's to assess and rate a given communities bicycle friendliness. The 5 E's are: Engineering, Education, Encouragement, Enforcement and Evaluation. Each of these categories is essential for creating great communities for bicycling. The City's 2014 evaluation identified a number of areas for Fayetteville to focus in order achieve silver or gold designations. These measures are discussed in detail in the recommendations section of the plan.

THE "5 E" RECOMMENDATIONS

from the
LEAGUE OF AMERICAN BICYCLISTS



ENGINEERING

Creating safe and convenient places to ride and park bicycles.

EDUCATION

Giving people of all ages and abilities the skills and confidence to ride bikes.

ENCOURAGEMENT

Creating a strong bike culture that welcomes and celebrates bicycling.

ENFORCEMENT

Ensuring safe roads for all users.

EVALUATION & PLANNING

Planning for bicycling as a safe and viable transportation option.

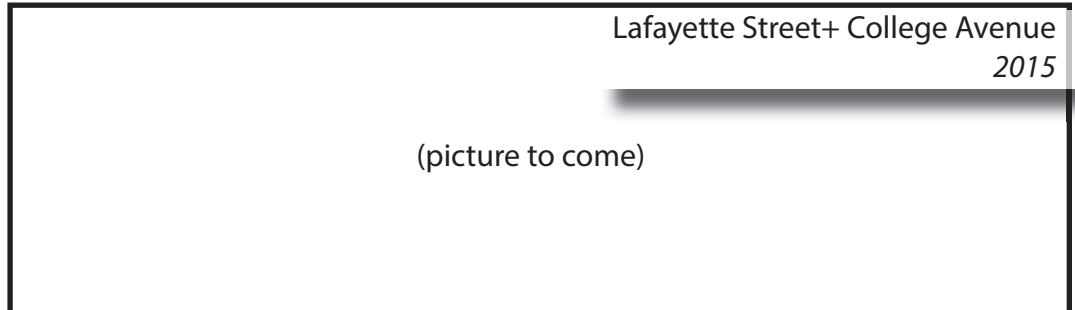
PEDESTRIAN RECOMMENDATIONS

Fayetteville is fortunate to have substantial areas of town that enjoy high walkability with a good sidewalk network, primarily the downtown and University areas and adjacent neighborhoods. Development from the 1950's through the 1990's may not exhibit the attributes associated with highly walkable places; sidewalks, connected streets, small blocks and a wide variety and mixture of building types and land uses. Many neighborhoods constructed during this time period did not include sidewalks. Nevertheless, areas that are minimally connected to the grid through a cul-de-sac intensive development pattern may not necessarily need sidewalks due to low traffic volumes. People can feel safe walking in the street. Still, these subdivisions may benefit from having pedestrian ways sensitively located between cul-de-sacs to connect to the adjacent subdivision.

The City's Transportation Department rebuilds and maintains the public sidewalk system. A portion of the Capital Improvement Program budget is allocated annually for sidewalk construction and repair. The Transportation Department develops an annual sidewalk plan that is presented for approval from the Active Transportation Advisory Committee and the City Council. Sidewalk projects are prioritized based on a number of factors including; streets that do not currently have sidewalks, filling in gaps in the existing sidewalk sections, proximity to schools, parks and commercial areas, and providing linkages to the City's trail system.



Lafayette Street + College Avenue
2004



Lafayette Street+ College Avenue
2015

(picture to come)



Lafayette Street+ College Avenue
future

GOALS OF THE ATP:



- 1 Endeavor to create an inclusive multi-modal transportation system.
- 2 Work to build a trail connection within one half mile of every residence.



- 3 Increase the active transportation commuting mode share from 7.5% in 2014 to 15% by 2020.
- 4 Identify, prioritize and address missing bicycle and pedestrian linkages.



- 5 Partner with advocates to address bicycle and pedestrian needs.
- 6 Earn bicycle friendly community designation of Silver by 2017.

PLANNING

Sidewalks serve as more than mere conduits for pedestrian movement and access. In highly walkable places sidewalks activate the street by providing pedestrian space for social and economic interactions. Highly walkable places are comfortable and encourage walking with a dense mixture of land uses and building types in spaces that were designed at a human scale. This can be difficult to achieve in suburban places that were designed at the automobile scale, with wide streets, large building setbacks and an overabundance of surface parking lots. However, even highly suburban places may be retrofitted, densified and redeveloped into highly walkable places over time. This type of transformation is ambitious but possible with strong leadership, smart investment and sound planning. Planning for highly walkable development is prioritized in Fayetteville’s comprehensive plan, City Plan 2030, with goals of promoting infill development, discouraging sprawl, making traditional town form the standard and growing a livable transportation network. The following action steps should guide the planning process as it relates to pedestrian infrastructure.

ACTIONS

Develop a model to assess the economic impact of a variety of urban and sub-urban land use zoning and build-out scenarios. This economic impact model will be one of the criteria utilized by planners to make land use zoning recommendations to appointed and elected officials. The model should reward and encourage pedestrian oriented development.

goals impacted ① ② ③ ④ ⑤ ⑥

Conduct a baseline sidewalk condition survey in a Geographic Information Systems (GIS) database for the City’s entire existing sidewalk network. Adverse conditions would be noted and geo-located like cracking, buckling or spalling of the concrete surface. This survey could be developed by a group of students utilizing a smart phone application.

goals impacted ① ② ③ ④ ⑤ ⑥

Utilize the Active Transportation Advisory Committee as a venue to elicit public input to determine high priority projects that fill the missing links in the current trail and sidewalk network.

goals impacted ① ② ③ ④ ⑤ ⑥

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ENGINEERING & EVALUATION

The major challenges for expanding the City's sidewalk network are topography and a limited budget. Many streets that lack sidewalks are located on steep inclines and they were not originally designed with storm water infrastructure or sidewalks. These projects are often difficult to design and build as well as are more expensive than sidewalk projects in flatter areas of town. Another challenge is the limited budget for sidewalks in the annual Capital Improvement Program. Necessarily, this budget also includes street maintenance. The following action steps will help to guide the sidewalk program in order to create the greatest value for the most people regarding sidewalk construction.

ACTIONS

Focus on sidewalk connections to key destinations such as schools, parks and entertainment and shopping areas.

goals impacted ① ② ③ ④ ⑤ ⑥

Continue to expand the shared-use paved trail system, especially routes that run parallel to major streets and routes that traverse difficult topography. Emphasis should be placed on east-west streets connecting to the Northwest Arkansas Razorback Greenway.

goals impacted ① ② ③ ④ ⑤ ⑥

Make street intersections and trail crossings safer and more comfortable for pedestrians through the use of colored pavement markings, signage, medians and signalization. Grade-separated trail crossings are preferable particularly with high volume and high speed streets.

goals impacted ① ② ③ ④ ⑤ ⑥

Evaluate and prioritize high use sections of the shared-use paved trails system for expanded cross sections that include separated space for pedestrians and cyclists.

goals impacted ① ② ③ ④ ⑤ ⑥

Provide a buffered area with trees and ground cover between the street curb and the sidewalk when possible.

goals impacted ① ② ③ ④ ⑤ ⑥

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Partner with advocates to address bicycle and pedestrian needs.



Earn bicycle friendly community designation of Silver by 2017.

SAFETY & ENCOURAGEMENT

Pedestrian comfort and safety is essential for creating highly walkable neighborhoods and commercial districts. In addition to basic design elements such as sidewalk width and surface condition, features such as street trees for shade, reduce intersection crossing distance, lighting for night time safety and ADA compliant intersections, are critical for producing an adequate level of pedestrian comfort. Pedestrians' real and perceived safety is increased when a buffer zone is present between the sidewalk and the adjacent street traffic. In a dense urban environment, these may include parallel parking spaces, cycletracks or street trees. In less urban environments, the sidewalk buffer may be comprised of a sufficiently wide planting zone with trees and ground cover. In either case, the idea is to offer pedestrian protection and physical separation from the moving vehicles. These actions are designed to integrate pedestrian safety and comfort in the planning, design and engineering process.

ACTIONS

Evaluate public and private development projects and require sufficient sidewalk width for the anticipated volume of pedestrians.

goals impacted 1 2 3 4 5 6

Prioritize pedestrian safety when redeveloping existing streets through the appropriate use of landscaped buffers, reduced curb radii at intersections, on-street parking, bicycle infrastructure, street trees and signalized ADA compliant intersection design.

goals impacted 1 2 3 4 5 6

Create separate pedestrian and bicycle facilities in areas where the combined active transportation network creates conflicts between the people walking and the people biking.

goals impacted 1 2 3 4 5 6

STREET CROSS-SECTIONS

The City of Fayetteville's complete street policy provides standards for developers building new streets and for the Transportation Division as they rebuild existing streets. This policy ensures that new streets include facilities for all transportation modes; vehicular, pedestrian and bicycle.

Implement recommendations from the Active Transportation Advisory Committee for sidewalks and trails infrastructure projects.

goals impacted 1 2 3 4 5 6

Make street intersections and trail crossings safer and more comfortable for pedestrians through the use of colored pavement markings, signage, medians, grade separation and signalization.

goals impacted 1 2 3 4 5 6

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6

Earn bicycle friendly community designation of Silver by 2017.

Fayetteville was fortunate to have the vision to begin building a multi-use trail system twenty years ago. Today, residents enjoy 40 plus miles of shared-use paved trails. The City anticipates the complete trail build-out will include 150 miles of shared-use paved trails by the year 2040. The City has also made significant advances to increase the number and length of bikeways on City streets. However, major challenges remain in our goal of increasing the number of people who use bicycling as a safe and viable form of everyday transportation. Many people may express interest in bicycling, but are not comfortable bicycling on streets with significant vehicular traffic. The following elements are explored in more detail with recommendations for implementation action steps:

WAYFINDING

As bicycle and trail networks mature, special attention should be paid to developing and installing appropriate wayfinding signs to provide users with information about direction, distance and destinations.

Fortunately, the Northwest Arkansas Regional Bicycle and Pedestrian Master Plan adopts a universal wayfinding sign template that will be used throughout the region along the Razorback Regional Greenway. This signage will provide trail users with on-the-ground information to help them navigate the trail system without the aid of maps. On-street bicycle infrastructure should include directional signage alerting motorists to the presence of bicyclists on the streets. Lastly, the innovative use of temporary signage can be utilized to educate users on bicycle safety and etiquette along the trail.

ACTIONS

Design and install wayfinding signage along the trail network that provides users with information about direction, distance and destinations.

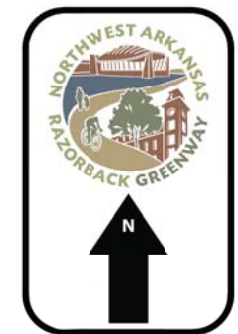
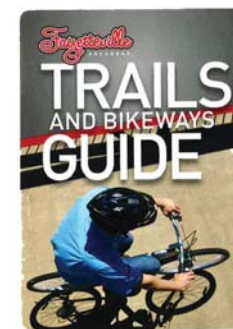
goals impacted 1 2 3 4 5 6

Update the Trails and Bikeways guide every 1 - 2 years.

goals impacted 1 2 3 4 5 6

Design and install wayfinding signage on streets with on-street bicycle facilities.

goals impacted 1 2 3 4 5 6



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Partner with advocates to address bicycle and pedestrian needs.



Earn bicycle friendly community designation of Silver by 2017.

STREET CROSS-SECTIONS

The City of Fayetteville implemented a complete street policy in 2005 with the adoption of City Plan 2025 and the Master Street Plan. This policy ensures that new streets include facilities for all transportation modes; vehicular, pedestrian and bicycle. However, many existing streets lack sidewalks and bicycle facilities. As part of the implementation of this plan, the City will begin to prioritize streets in need of retrofit, focusing on streets that connect the largest number of potential users to the rest of the active transportation network.

ACTIONS

Continue to seek and implement recommendations from the Active Transportation Advisory Committee for on-street and trails infrastructure projects.

goals impacted 1 2 3 4 5 6

Make street intersections and trail crossings safer and more comfortable for bicyclists through the use of colored pavement markings, signage, medians, grade separation and signalization.

goals impacted 1 2 3 4 5 6

ETIQUETTE

Bicyclists on public streets have the same rights and responsibilities as automobile drivers and are subject to the same laws. By all parties obeying traffic laws, the vast majority of conflict between bicyclists and automobile drivers can be prevented. Education efforts targeted at both drivers and cyclists can reduce hostility between these groups and help to foster a sense of mutual respect. Similarly, conflicts between trail users (both cyclists and pedestrians) result from poor trail etiquette and can be prevented through improved education and strategic enforcement.

ACTIONS

Design and install temporary signage displaying information that educates users about trail safety and etiquette.

goals impacted 1 2 3 4 5 6

Update bicycle ordinances to clarify current law and add additional protections for cyclists.

goals impacted 1 2 3 4 5 6

Work with partners such as the Bicycle Coalition of the Ozarks to offer a greater variety of training opportunities for adults to learn and enhance their bicycling skills.

goals impacted 1 2 3 4 5 6

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EVALUATION & ENGINEERING

The collection of accurate and relevant baseline data is key for understanding the effectiveness of a bicycle network. The ongoing evaluation of factors such as traffic speeds, transportation mode share counts, existing street cross-sections, percent of grade and other physical barriers are all significant considerations when determining the appropriate engineering solution for a given project. Additionally, data collected from partnering advocate organizations such as the Bicycle Coalition of the Ozarks or the Fayetteville Public Schools Safe Routes to School Program may be applicable and pertinent to the engineering design process.

Major city streets that carry large amounts of motor vehicle traffic act as barriers to bicyclists because these roads are difficult to cross and generally lack bicycle facilities. Additionally, Fayetteville's hilly topography can present a barrier for lower classification streets that lack proper bicycle facilities such as sidepaths or on-street climbing lanes. The development of appropriate bicycle infrastructure in key locations can provide safe connectivity that is lacking due to these existing physical barriers. Moreover, portions of the existing trail network in Fayetteville are discontinuous, primarily because many trails have been constructed with development projects but have yet to be connected to the larger trail network. This problem of a disjointed trail network is typical of new and developing trail networks and will be overcome in time with private and public investments in bicycle infrastructure.

ACTIONS

Evaluate and prioritize high use sections of the trails system for expanded cross sections that include separated space for pedestrians and cyclists.

goals impacted 1 2 3 4 5 6

Coordinate with local organizations to conduct surveys and user counts to collect active transportation data that is useful for guiding the bicycle infrastructure planning and design processes and measuring success.

goals impacted 1 2 3 4 5 6

Make street intersections and trail crossings safer and more comfortable for bicyclists through the use of colored pavement markings, signage, medians and signalization. Grade-separated trail crossings are preferable particularly with high volume and high speed streets.

goals impacted 1 2 3 4 5 6

Continue to increase the amount of high quality bicycle parking throughout the community.

goals impacted 1 2 3 4 5 6

Continue to expand the on-street bicycle network, especially parallel arterial streets, through the use of different types of on-street or off-street bicycle facilities. Care should be taken to choose infrastructure improvements that are sensitive to the context of the street and to the adjacent land use and development patterns. Consider the use of buffered, protected and separated on-street bicycle infrastructure whenever possible.

goals impacted 1 2 3 4 5 6

Continue to expand the shared-use paved trail system, especially routes that run parallel to major streets and routes that traverse difficult topography where on-street facilities would be inferior. Emphasis should be placed on east-west routes connecting to the Northwest Arkansas Razorback Greenway. Focus on connections to key destinations such as schools, parks and entertainment and shopping areas.

goals impacted 1 2 3 4 5 6

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Partner with advocates to address bicycle and pedestrian needs.



Earn bicycle friendly community designation of Silver by 2017.

EDUCATION & ENCOURAGEMENT

In order to maximize use of the developing active transportation network, an investment of time and funding in the areas of education and encouragement is necessary. Programs that teach and encourage people of all ages and from all walks of life in the advantages of an active transportation network are essential to providing a future user base. Children that have been taught bicycle safety and etiquette in the Fayetteville Public Schools system are more likely to grow up using the City's active transportation network. The University of Arkansas student population provides a strong user base for trail and on-street bicycle facilities but students may also require education, outreach and encouragement in order to maximize their participation.



ACTIONS

Staff a full time dedicated Bicycle/Pedestrian Coordinator for the City of Fayetteville.

goals impacted ① ② ③ ④ ⑤ ⑥

Encourage the University of Arkansas to promote cycling through policy and infrastructure with students, staff and faculty and to seek recognition through the Bicycle Friendly University program developed by the League of American Cyclists.

goals impacted ① ② ③ ④ ⑤ ⑥

Work with interested groups and the Fayetteville Public School district to expand bicycle education efforts to include K-2nd grade balance bike learning.

goals impacted ① ② ③ ④ ⑤ ⑥

Encourage local businesses to promote cycling to their employees and customers and to seek recognition through the League of American Bicyclists Bicycle Friendly Business program.

goals impacted ① ② ③ ④ ⑤ ⑥

Partner with the Bicycle Coalition of the Ozarks and other bicycle advocates to expand encouragement efforts during National Bike Month in May. This may include bicycle themed community events, campaigns and programs.

goals impacted ① ② ③ ④ ⑤ ⑥

Explore possibilities of developing a "bike share" program with outside help either locally or regionally.

goals impacted ① ② ③ ④ ⑤ ⑥

Work with Fayetteville Public Schools to develop a safe routes to school plan to include alternate drop off locations to increase walking and biking by students and reduce traffic congestions around schools.

goals impacted ① ② ③ ④ ⑤ ⑥

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6

Earn bicycle friendly community designation of Silver by 2017.

SAFETY & ENFORCEMENT

Safety is an essential element of any comprehensive active transportation plan that must be included at every phase of planning, design and implementation. The single most significant factor influencing bicyclist safety is the number of cyclists on the road. A strong inverse correlation has been shown between bicycle mode share and accident rates; more cyclists make cycling safer overall. This principle of “safety in numbers” should be central to planning for safer bicycling in Fayetteville. The real or perceived safety of riding a bicycle in the street with cars close by is a major factor in people’s travel mode choice. Streets with high volumes of high-speed automobile traffic can threaten the safety of bicyclists and deter would-be cyclists. Individuals with modest bicycling skills often called the “interested but concerned” cyclists, who represent the largest population of potential cyclists, are most often discouraged by safety concerns. Courses in bicycle safety for adults can help to encourage riders that may need to build confidence in their riding skills. Bike routes that limit cyclists’ interaction with high-traffic conditions by utilizing shared-use paved trails, cycletracks or bike ways provide users with greater safety and comfort that will yield the highest usage. Lastly, local traffic regulations should be reviewed and updated to ensure that vulnerable road users like bicyclist’s are protected.

ACTIONS

Update bicycle ordinances to clarify current law and add additional protections for cyclists.

goals impacted 1 2 3 4 5 6

Make street intersections and trail crossings safer and more comfortable for bicyclist’s through the use of colored pavement markings, signage, medians, grade separation and signalization.

goals impacted 1 2 3 4 5 6

Work with Fayetteville Public Schools to implement a Safe Routes to School program to provide young cyclists with a useful lifelong skillset.

goals impacted 1 2 3 4 5 6

Work with partners such as the Bicycle Coalition of the Ozarks to offer a greater variety of training opportunities for adults to learn and enhance their bicycling skills.

goals impacted 1 2 3 4 5 6

Work with the Fayetteville Police Department to provide police resources to enforce bicycle, pedestrian and vehicular traffic as a part of a bicycle education and enforcement campaign.

goals impacted 1 2 3 4 5 6

Offer a ticket diversion program for cyclists and drivers that have been cited for bicycle and pedestrian related offenses. Educational opportunities would be offered as an alternative to fines or other penalties.

goals impacted 1 2 3 4 5 6

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The 2003 Fayetteville Alternative Trails and Transportation plan succeeded in spurring the development of the City's ever-expanding trail network over the last decade. This Active Transportation Plan builds upon past success and reaffirms the City's commitment to planning for the future of active transportation. This plan sets a path forward by identifying a progressive yet achievable vision, developing a set of realistic goals and through the implementation of important action steps. By combining pedestrian and bicycle planning into active transportation planning we recognize that a comprehensive approach will yield the maximum return on the public's investment. Many of the action steps in this plan are similar to steps taken in other prominent bicycle and pedestrian friendly communities. The implementation process is designed to be ongoing and dynamic with progress made through constant innovation and adaption. Success will be measured through identified metrics collected over time. Ultimately, this plan provides Fayetteville with the framework for building an active transportation network that will lead to a more healthy and vibrant community.

