

CHAPTER 1 INTRODUCTION AND BACKGROUND



INTRODUCTION

The City of Wichita Bicycle Master Plan (Plan) is a ten year (2013-2023) guide for the development and implementation of bicycle projects and programs for the City of Wichita (City), including the 2030 growth area. It was developed with input from more than 4,000 individuals who completed surveys, served on committees, volunteered for community events and attended open house events. The Plan includes goals, objectives, actions, priorities and performance measures along with a Priority Bicycle Network map with 149 miles of recommended new bicycle facilities.

COMMUNITY NEEDS

Multiple citizen surveys have shown a desire for bicycle infrastructure improvements in Wichita. The most recent was the 2010 National Citizen Survey which compared the satisfaction of Wichita residents to the satisfaction of citizens in other similar cities. The 2010 edition reports that the satisfaction of Wichita residents with the ease of bicycle travel in the city was “much below” the satisfaction of residents in comparable cities. Wichita ranked 21 out of 29 comparable cities for the ease of bicycle travel in the 2010 National Citizen Survey. It was one of the three least positive ratings by the citizens of Wichita.

In response to the community’s desire to improve conditions for bicycling the City of Wichita secured grant funding through the U.S. Department of Energy to address the issue in a comprehensive manner by developing a Master Plan. This Plan contains the community goals, objectives, prioritized actions and implementation strategies to improve conditions for bicycling in Wichita. The boundaries of the Plan encompass the City of Wichita and the Wichita 2030 Urban Growth Area.

In preparation for the Plan initiative, a working group of City staff and community stakeholders identified the following questions as important Wichita planning issues.

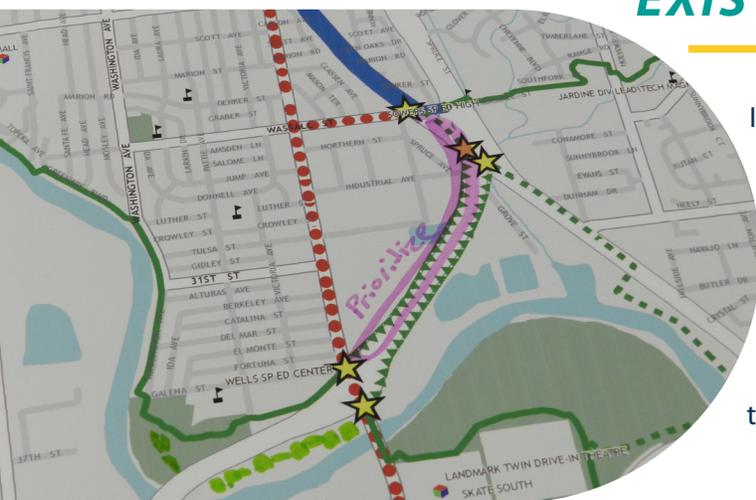


- Do bicycles belong on streets with automobiles or off the roadways?
- How can the safety of cyclists in Wichita be improved?
- How should bicycle transportation infrastructure be designed?
- What are the guiding principles that help determine when bicycle facilities are appropriate?
- Where should bicycle travel infrastructure be provided, and what type should it be?
- What are the top priority bicycle travel infrastructure needs?
- What are the top priority non-infrastructure needs?
- Are policy changes needed, and how should they be addressed?
- Do the proposed facilities address primarily recreational or transportation needs?
- How can existing facilities be combined to create a seamless network of bicycle travel options?
- Should currently planned bicycle facilities continue to be recommended?
- How will regional bicycle travel infrastructure continue through Wichita?
- How should bicycle infrastructure be maintained?
- What metrics do we use to measure success?
- How will the recommendations (infrastructure and non-infrastructure) be implemented?



EXISTING FACILITIES

In the 1980s through the present, the City of Wichita focused on securing rights-of-way and constructing paths. They have become extremely popular among residents and visitors to the City. New paths offered opportunities for people to become more comfortable riding a bicycle for utilitarian and recreation trips. However, it soon became clear that improvements would also be needed in order to link paths and connect bicyclists directly to their destinations.



More recently, the City has explored the use of on-street bicycle facilities by developing both the Mt. Vernon Rd. and 1st St and 2nd St bike lanes. As of 2012, Wichita has 54 miles of exiting bike paths and nine miles of existing bike lanes. This Plan is a direct result of the expressed desire of Wichita residents to improve conditions for getting around Wichita on a bicycle and to determine if on-street bicycle facilities should be utilized to improve bicycle access on Wichita's roadway system.

TIMELINE

This Plan was developed in three phases:

1. **Data Collection** (July 2011 – November 2011). The data collection included gathering public input, coordinating with City staff, and reviewing previous plans for bicycle facility recommendations. It also included extensive field analysis of Wichita's existing transportation network to determine locations where bicycle facilities can be integrated into the existing street network. Over 800 miles of roadways were analyzed.
2. **Draft Plan** (November 2011 – June 2012). The draft Plan was developed with input from the project Steering Committee, City staff and citizens who attended the two public open house events. The plan goals, objectives, actions, priorities and performance measures reflect community preferences.
3. **Final Draft and Plan Adoption** (July 2012 –December 2012). The Plan was endorsed by the Wichita City Council on February 5, 2013.

INVESTMENT

The level of investment that will be required in order to implement this Plan is modest in comparison to other transportation facilities. The planning level cost estimate to implement the on-street elements and side paths of the 149 mile Priority Bicycle Network is \$12.7 million. The Priority Bicycle Network includes approximately 32 miles of bicycle lanes, 38.7 miles of shared lane markings, 57.2 miles of bicycle boulevards and 12.1 miles of side path facilities. The estimated cost to implement the off-street facilities is \$2.25 million, and would develop 4.5 miles of shared use paths. By comparison, the cost to develop one mile of a five lane arterial street is approximately \$4 million.

PLAN UPDATES

This Plan is a dynamic document and updates will be necessary in the future in order to assess progress, take advantage of emerging opportunities and re-evaluate priorities as needed. As the bicycle facility network is developed and new technologies are adopted, bicycling mode share will likely increase and travel patterns will change. Priorities will shift and new opportunities will become apparent. These changes will be reflected in the annual action plan. The Plan recommends updates to the full Wichita Bicycle Master Plan, including the Bicycle Network maps, every four years.

REVIEW OF PLANS AND POLICIES

This section provides a review of city, county, and regional level plans; and City of Wichita policies and regulations that address bicycling both on-street and off-street. The purpose of this review is to establish a baseline for bicycle improvements in Wichita. The previous planning efforts represent years of thoughtful work and public involvement that goes back more than 40 years, and provide an important starting point for the Priority Bicycle Network. Although Wichita has a rich history of bicycle planning, in order to ensure that the information reviewed is the most relevant - only those plans developed after 1995 are reviewed in this report.

Each planning document recognizes the importance of bicycling and walking as part of balanced multimodal transportation system. While pathways and trails have been a major emphasis of bicycle network development in the past, numerous policies and strategies have been identified for developing a denser network of bicycle facilities that includes on-street facilities such as bike lanes, paved shoulders, and shared lane markings. In fact, the City to date has installed nine miles of bike lanes and regional plans have identified 220 miles of additional bicycle facilities. In addition, the city's municipal code contains provisions on bicycling in the city. Reviewed plans and policies are presented below – plans are presented in chronological order beginning with the most recent.

Plans

WAMPO Safety Plan (2010, updated in 2011)

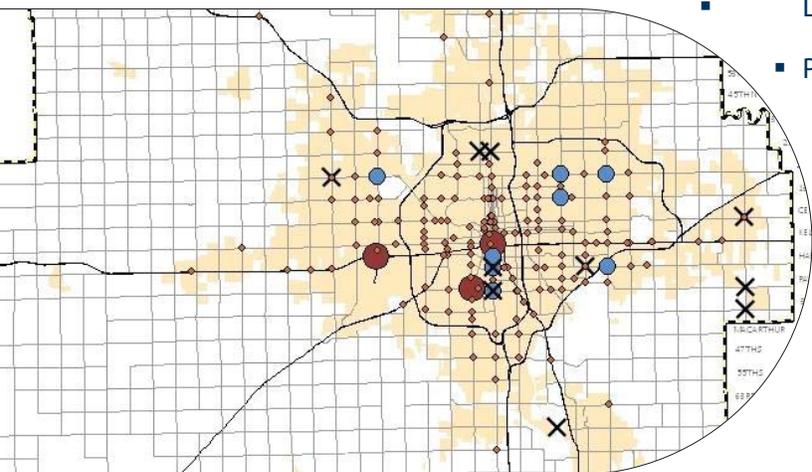
The Wichita Area Metropolitan Planning Organization (WAMPO) Safety Plan identifies the region's key safety needs and helps guide investments decisions to achieve a reduction in crashes, injuries, and fatalities on the region's transportation network. This plan identifies motorcyclist, pedestrians, and cyclists as vulnerable road users and recommends both long-term and short-term strategies to increase their safety. The strategies related to bicycling are listed below.

Short-Term Strategies

- Create a regional pedestrian and bicycle advisory group
- Incorporate a regional pedestrian plan in the WAMPO Regional Pathways System Plan (RPSP)
- Promote Safe Routes to School programs, strategies, and walk or bike to school events
- Prioritize construction of regional missing links that have been identified in the WAMPO RPSP

Long-Term Strategies

- Promote or provide a regional bicycle liaison officer
 - Create a coordinated public information and education campaign on targeted safety needs.
 - Create a program to identify and remediate hazardous/substandard pedestrian and bicycle road crossings



WAMPO Metropolitan Transportation Plan 2035 (2010)

The WAMPO Metropolitan Transportation Plan (MTP) 2035 is the blueprint for all regionally significant transportation projects and activities through 2035. It is a 25 year strategic plan for maintaining and improving mobility within and through the region. The MTP 2035 is very important for the region because it allows local jurisdictions access to federal transportation funds. The MTP identifies projects and programs to meet the future needs of the region. It is fiscally constrained by the amount of funding available, including both local and federal funding. The MTP does not guarantee federal funds for projects. In addition, the MTP also provides recommendations and strategies to achieve a safe, efficient, accessible, and affordable transportation system. The MTP 2035 Vision is to have a multimodal transportation system in 2035 that is safe, efficient, accessible, and affordable, and the plan is organized around these four goals:

Goal: Safe – Achieve a transportation system that enhances safety and public welfare.

Goal: Efficient – Achieve a transportation system that optimizes investments in time, energy, and financial resources.

Goal: Accessible – Achieve optimal intermodal accessibility, mobility, and connectivity throughout the region.

Goal: Affordable – Achieve a transportation system that is affordable and equitable for all users.

In addition to these goals, 11 objectives are identified in the MTP. A number of these objectives support, and are supported by, the development of the Wichita Bicycle Master Plan, including those listed below.

- Increase the miles of off-road multiuse paths, on-street bicycle lanes and paved shoulders and sidewalks
- Increase the percentage of population that uses alternative modes of transportation.
- Increase the affordability of the transportation system for all users
- Reduce vehicle miles traveled
- Increase multimodal options and access
- Decrease the number of transportation related injuries, fatalities, and wrecks
- Make transportation improvements that support economic development

The MTP 2035 Plan also provides high level recommendations for accommodating and promoting bicycling based on the 5 E's: Education, Enforcement, Encouragement, Engineering, and Evaluation. Many of these recommendations are more specifically addressed in the City of Wichita Bicycle Master Plan.





Project Downtown: Downtown Master Plan (2010)

The City of Wichita Downtown Master Plan guides development, the provision of infrastructure, and the provision of municipal services within downtown. It includes recommendations and actions to invest in and integrate multimodal transportation systems (e.g. transit, bicycling, and walking) within, and connecting to, the downtown area. Specifically, it calls for making downtown bikeable with defined streets/lanes linked to regional networks, and incorporating bike parking and convenient walking access to destinations and transit. The plan proposes a near- and long-term street hierarchy that includes a network of “Bicycle Balanced Streets” with either bicycle lanes or shared lane markings.

Wichita Parks, Recreation, and Open Space (PROS) Plan (2009)

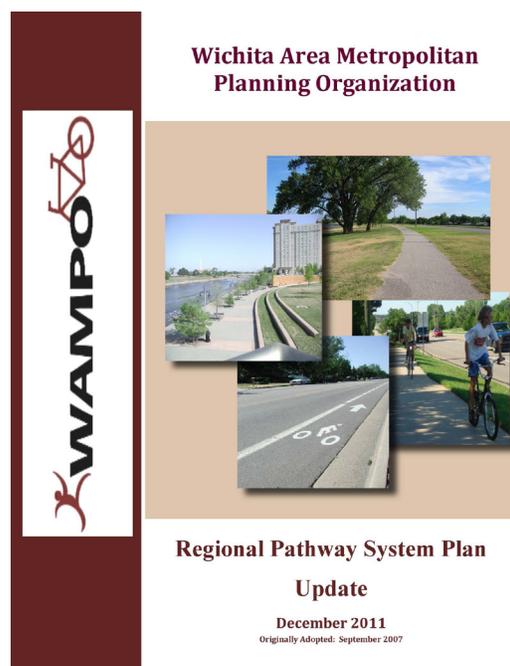
The Wichita Parks, Recreation, and Open Space Plan is a guide for the provision of parks, open spaces, recreation, and paths/trails by the City of Wichita. It incorporates citywide pathway alignments identified as priorities by either the WAMPO pathways plan or by the city. It calls for coordination between departments and agencies to promote the provision of sidewalks, multi-purpose pathways, curb cuts, and crosswalks to accommodate pedestrians and cyclists and to increase access to park resources. The plan also contains design guidelines for various park facilities, including linear parks/pathways. These guidelines focus more on path amenities rather than physical design of the path facility itself.

WAMPO Safe Routes to School Plan (2008)

Funded by KDOT through its Safe Routes to Schools program, this Action Plan, which was developed by the WAMPO Pedestrian Safety Task Force (serving as the Steering Committee), identifies issues that impact student travel behavior and suggests projects to address those issues and provide safe routes to schools. Among the strategies this plan identifies are education of children on safe pedestrian and bicycling behaviors, encouraging parents to allow children to walk or bicycle to school, and providing a safe environment for walking and biking through infrastructural improvements and enforcement projects.

Wichita Area Metropolitan Planning Organization Regional Pathway System Plan (2007, updated in 2011)

The WAMPO Regional Pathway System Plan establishes a



backbone system to connect existing and future bicycle/pedestrian facilities throughout the metropolitan planning area. The plan was developed as a cooperative effort that included extensive participation by various stakeholders including the Wichita Area Metropolitan Planning Organization (WAMPO), federal, state and transit agency representatives, pathway users, and local jurisdictions throughout the region. The main purpose of the Plan is to provide a framework for identifying locations where major pathway



improvements are appropriate and should be prioritized for implementation by one or more jurisdictions. Among the plan's recommendations is developing a fine-grained bicycling network, which includes multi-use paths, on-street bicycle lanes, paved shoulders, etc. The plan acknowledges that focusing on one facility, i.e. paths, as a region-wide solution won't work in terms of providing people with travel options between various origins and destinations.

Wichita-Sedgwick County Comprehensive Plan (1993, Updated in 1999, 2005)

The Wichita-Sedgwick County Comprehensive Plan serves as the overall guide for the City of Wichita and Sedgwick County. It is important for the City of Wichita Bicycle Master Plan in many ways, especially because it identifies the 2030 Urban Growth Area for the City of Wichita. Among the plan's objectives is to promote pedestrian/bicycle-oriented improvements to create alternative transportation networks to major destination points in the city and county. The strategies for doing this include:

1. Implement the Park, and Open Space Master Plan as an element of the Comprehensive Plan and future CIP documents.
2. Increase the convenience of pedestrian/bicycle access to and within commercial, employment, educational, and recreational areas.
3. Whenever possible, separate pedestrian/bicycle trails from motorized traffic through the use of landscape buffering and grade-separated crossings when practical.
4. Monitor road improvements listed in the CIP to include paved shoulders and/or wider curb lanes to accommodate bicycling.
5. Implement a procedure to ensure that non-motorized transportation opportunities are evaluated during the planning phase for major traffic corridors.
6. Connect adjacent subdivisions with walkways to enhance pedestrian/bicycle coordination.

In addition, the Transportation Plan Update outlines transportation improvements based on 2030 population and employment assumptions. While the improvements are primarily focused on meeting projected

motor vehicle demand, they represent opportunities for making improvements to the bicycle network. The recommended improvements include new or improved bridge crossings over the Wichita-Valley Center Floodway, railroad grade separations, arterial street widening, and new arterial streets in the urban service area.

Visioneering Wichita (2004)

The Visioneering Wichita document plan reflects the common vision of the Wichita metropolitan statistical area (Wichita MSA). The Visioneering plan recommends the identification and establishment of neighborhood centers with bikeway and sidewalk connections.

Sedgwick County Parks and Pathways Plan (1996)

The Sedgwick County Parks and Pathways Plan is the currently adopted guide for the development of bicycle facilities within unincorporated Sedgwick County. This plan was adopted as a joint City of Wichita and Sedgwick County plan. However, the City replaced this plan with the 2009 Wichita PROS Plan. The plan still has relevance in terms of its recommended goal to “Establish a network of Linear Parks and Recreation Corridors to Improve Proximity and Accessibility to Parks and to Activity Centers”. Among the strategies it outlines are obtaining public access easements and use river corridors, drainage ways, existing and abandoned utility and railroad rights-of-way, where feasible, for hiking, bicycling, trail riding etc., and acquiring through purchase agreements or voluntary donations, additional right-of-way for developing bicycle facilities along rural arterial recreation corridors and other roads identified in the Future System Map.

Policies/Regulations

City of Wichita Municipal Code

Chapter 11.48 of the City of Wichita Municipal Code contains provisions for bicycles, including definitions; equipment; traffic regulations; riding on roadways and bicycle paths; bicycles on sidewalks; bicycle parking; and penalties for violations. Section 11.48.100 provides that every person riding a bicycle upon a street, highway, or roadway shall be granted

all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle except those that cannot apply to cyclists or that are exempted by special ordinance. Section 11.48.120 describes how a person operating a bicycle should ride on the roadway and bicycle paths. Subsection (d) states that wherever a usable path for bicycles has been provided adjacent to a street, highway, or roadway; bicycle riders shall use such path and shall not use the street, highway, or roadway. This provision has implications that may be in conflict with this Plan and the development of a comprehensive bicycle network that provides convenience, safety, and connectedness to its users; and therefore, may need to be revisited.

Unified Zoning Code, Wichita-Sedgwick County (2009)

The stated purpose of the Unified Zoning Code is to preserve and improve the public health, safety, and general welfare; and to implement the Comprehensive Plan of the City of Wichita and Sedgwick County. While the Comprehensive Plan as updated in 2005 includes provisions for promoting bicycling (previously enumerated), the Unified Zoning Code is silent on the topic of bicycling. There are provisions for not allowing development to



obstruct or impede pedestrian circulation.

Subdivision Regulations (2009)

The Subdivision Regulations (Regulations) provide uniform rules and procedures for the division and improvement of real property. Purposes relevant to this Plan include reduction of vehicular congestion, the provision of recreational facilities, and facilities and improvements deemed appropriate. While the Regulations address sidewalks and pedestrian access easements to schools and parks, there are no specific references to bicyclists or bicycling.

Summary of Goals and Objectives from Previous Plans and Regulations

The following is a summary of the goals and objectives from existing plans. No attempt is made to differentiate goals versus objectives since there is a lack of consistency with regard to use of these terms in previous plans. Additionally, although some goals and objectives read more like implementation strategies, they are included here if they appear in past plans. Finally, only those goals and objectives directly germane to the development of this Plan are included.

Goal/Objective	Source
Achieve a transportation system that enhances safety and public welfare	WAMPO Metropolitan Transportation Plan 2035
Achieve a transportation system that optimizes investments in time, energy, and financial resources	WAMPO Metropolitan Transportation Plan 2035
Achieve optimal intermodal accessibility, mobility, and connectivity throughout the region	WAMPO Metropolitan Transportation Plan 2035
Achieve a transportation system that is affordable and equitable for all users	WAMPO Metropolitan Transportation Plan 2035
Increase the miles of off road multiuse paths, on-street bicycle lanes, and paved shoulders and sidewalks	WAMPO Metropolitan Transportation Plan 2035
Increase the percentage of population that uses alternative modes of transportation	WAMPO Metropolitan Transportation Plan 2035
Increase the affordability of the transportation system for all users	WAMPO Metropolitan Transportation Plan 2035
Invest in, and integrate multimodal transportation systems (e.g. transit, bicycling, and walking) within, and connecting to, the downtown area	Project Downtown Master Plan (2010)
Make downtown bikeable with defined streets/lanes linked to regional networks, and incorporating bike parking and convenient walking access to destinations and transit	Project Downtown Master Plan (2010)
In the downtown area, create a hierarchy that includes a network of "Bicycle Balanced Streets" with either bicycle lanes or shared lane markings	Project Downtown Master Plan (2010)
Departments and agencies should coordinate their efforts to promote the provision of sidewalks, multi-purpose pathways, curb cuts, and crosswalks to accommodate pedestrians and cyclists to increase access to park resources	Wichita Parks, Recreation, and Open Space Plan (2008)
Educate children on safe pedestrian and bicycling behaviors	WAMPO Safe Routes to School Plan (2008)
Encourage parents to allow children to walk or bicycle to school	WAMPO Safe Routes to School Plan (2008)
Provide a safe environment for walking and biking through infrastructural improvements and enforcement projects.	WAMPO Safe Routes to School Plan (2008)
Develop an interconnected, fine-grained bicycling network, which includes multi-use paths, on-street bicycle lanes, and paved shoulders	Wichita Area MPO Regional Pathway System Plan (2007)

Goal/Objective	Source
Promote pedestrian/bicycle-oriented improvements to create alternative transportation networks to major destination points in the city and county	Wichita-Sedgwick County Comprehensive Plan (1993, Updated in 1999, 2005)
Increase the convenience of pedestrian/bicycle access to and within commercial and employment areas.	Wichita-Sedgwick County Comprehensive Plan (1993, Updated in 1999, 2005)
Whenever possible, separate pedestrian/bicycle trails from motorized traffic through the use of landscape buffering and grade-separated crossings when practical.	Wichita-Sedgwick County Comprehensive Plan (1993, Updated in 1999, 2005)
Monitor road improvements listed in the CIP to include paved shoulders and/or wider curb lanes to accommodate bicycling.	Wichita-Sedgwick County Comprehensive Plan (1993, Updated in 1999, 2005)
Implement a procedure to ensure that non-motorized transportation opportunities are evaluated during the planning phase for major traffic corridors.	Wichita-Sedgwick County Comprehensive Plan (1993, Updated in 1999, 2005)
Connect adjacent subdivisions with walkways to enhance improvements	Wichita-Sedgwick County Comprehensive Plan (1993, Updated in 1999, 2005)
Establish a network of Linear Parks and Recreation Corridors to Improve Proximity and Accessibility to Parks and to Activity Centers	Sedgwick County Parks and Pathways Plan (1996)
Obtain public access easements and use river corridors, drainage ways, existing and abandoned utility and railroad rights-of-way, where feasible, for hiking, bicycling, trail riding etc.	Sedgwick County Parks and Pathways Plan (1996)
Acquire, through purchase agreements or voluntary donations, additional right-of-way for developing bicycle facilities along rural arterial recreation corridors and other roads identified in the Future System Map	Sedgwick County Parks and Pathways Plan (1996)
Reduction of vehicular congestion	Subdivision Regulations (2009)
Provision of recreational facilities and other facilities deemed appropriate	Subdivision Regulations (2009)
Identify and establish neighborhood centers with bikeway and sidewalk connections.	Visioneering Wichita (2004)

Summary Analysis of Existing Plans and Policies

Observations

- For more than twenty years, Wichita and Wichita area planning documents have consistently called for actions to promote bicycling and bicycle safety.
- Collectively, the goals and objectives in adopted plans are comprehensive and inclusive. Noteworthy goals and objectives include network connectivity, bicycle access and safety, social equity, recommendations for on and off-road facilities, recognition that education, enforcement and encouragement are important, policies that promote bicycling in the downtown area, and a commitment to the health, safety and general welfare of the community.
- Plans for a regional pathway system have a positive history of being updated and implemented.
- Plans calling for on-street bicycle facilities have lacked specificity and have not generally been implemented.
- Missing is the inclusion of bicycle provisions in the Unified Zoning Code and Subdivision Regulations.
- Missing is a well articulated and thought-out strategy to install on-street bicycle facilities and implement programs that promote bicycle safety and use. Also missing are criteria for prioritizing

bicycle projects and programs, performance measures for measuring progress, institutional structures to assure accountability, and strategies for involving the public.

Recommendations (Actions)

- The goals and objectives from previous plans were reviewed and incorporated into this Plan wherever appropriate. They represent years of thoughtful work and public involvement.
- As part of this Plan, the recommended on- and off-street facilities in past plans were included in the study network for further analysis.
- This Plan includes detailed implementation strategies that have been reviewed and endorsed by relevant departments and agencies, elected officials, the Plan Steering Committee and the Plan Technical Advisory Committee.

CHALLENGES AND OPPORTUNITIES

Existing and Future Local Street Constraints and Opportunities

Many of the local streets have high potential for incorporation into the bicycle network as bicycle boulevards. They have low traffic volumes and speeds, and provide connections within the arterial/collector grid that link up with other local streets and/or collector streets. Where these streets intersect arterial streets, there are some challenges. These locations are often unsignalized and generally there are insufficient gaps in traffic that would allow a bicyclist to comfortably and safely cross the street. In some cases, there is the opportunity to utilize an existing pedestrian signal (often to serve a nearby school) 100 to 150 feet from the intersection as a link in the bicycle network. In other cases, a new signal may be needed. One challenge will be to successfully encourage bicyclists to go out of their way to use the existing signal. This Plan recommends exploring other options for making it easier and safer for people traveling on the bicycle boulevards to cross arterial streets.

In addition, there are locations where two local streets that intersect a collector or arterial street are offset from one another. Spot improvements such as short sidepath segments and signage may be necessary to accommodate and direct bicyclists through these locations.





Existing and Future Rural Roadway Constraints and Opportunities

Wichita has the opportunity to create bicycle facilities as it grows. The City contains many two-lane undivided roadways on the edges of the developed areas of the City. Most are spaced at one-mile intervals. These streets range in width from 20 to 24 feet (pavement edge) with some having paved shoulders. Intersections of the rural roadways are typically stop controlled though some have signals. Many of the City's rural roadways offer a good riding experience for experienced bicyclists, but high vehicle speeds and narrow lanes likely deter less confident bicyclists. As new subdivisions are built, many of these roadways will be reconstructed as three and five lane arterial roadways. This

provides an opportunity to install bike lanes and sidepaths. Where roadways will likely not be fully reconstructed within the foreseeable future, improvements such as the addition of paved shoulders and/or bicycle route wayfinding signage will help to make these roadways more comfortable for a wider range of bicyclists.

Path and Sidepath Constraints and Opportunities

The City of Wichita has the opportunity to build upon and extend its extensive network of paved paths. Existing paths are located on abandoned railroad rights-of-way, along rivers, in parks, adjacent to (or under) freeways, and along arterial streets. It is the City's current practice to construct 10 foot wide sidepaths to accommodate bicyclists (and pedestrians) along arterial streets, when warranted and feasible. As the system has developed there are situations where sidepaths immediately transition into sidewalks. This can cause confusion since it can be difficult to distinguish between sidepaths and sidewalks.



There are opportunities to expand the existing path and sidepath network. This can help to address the current challenge where in some areas, i.e. along arterial streets without existing bicycle facilities, sidewalks offer the most comfortable experience for bicyclists wanting to access destinations such as shopping centers or connect to less traveled local streets.

Undeveloped railroad rights-of-way, reconstruction of freeway over/under passes, river and utility corridors provide opportunities for future paths that can be integrated into the larger bikeway network. A challenge will be to find funding for these projects which are more expensive than bike improvements on the roadway system (e.g. restriping an existing street with bike lanes).

