

The Topeka Fast-Track Bike Plan

An Action Plan and Supplement to the Bikeways Master Plan



Approved:
August 6, 2020



Developed for the City of Topeka and the Metropolitan Topeka Planning Organization

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Letter from the Metropolitan Topeka Planning Organization Policy Board

We are extremely proud of the progress we have made in Topeka over the past ten years to support bicycling as a key component of our transportation system. In 2010, the Shunga and Landon Trails stood out as jewels for recreational bicycling, but we lacked an on-street network and many other key ingredients to encourage bicycling for everyday transportation throughout the city. Since that time, our community has taken several important steps, we:

- Developed and adopted our first Bikeways Master Plan in 2012;
- Voted for a countywide half cent sales tax with up to \$3.5 million for bike projects through 2031;
- Developed Design Guidelines to strengthen the city and county Complete Streets policies;
- Built approximately 73 miles of on-street bike facilities including bike lanes (10%), multi-use side-paths (21%), and share the road signage or sharrows (69%);
- Received approximately \$2.4 million in grants for bicycling improvements;
- Launched the Topeka Metro Bikes bikeshare program;
- Received designation as a Bronze-Level Bicycle Friendly Community by the League of American Bicyclists;
- Adopted a new Land Use Growth Management Plan with Transportation choices as one of the major pillars; and
- Adopted the Futures 2040 Regional Transportation Plan that includes an increased emphasis on active transportation.

The Topeka Fast-Track Bike Plan serves as an Action Plan and Supplement to the 2012 Topeka Bikeways Master Plan. It prioritizes a network of **high-quality, low-stress** bike projects and renews our commitment to bicycling as a means to achieve the broader community goals of health, sustainability, equity, economic development, and high quality of life. This plan will guide our fast-tracking of key, high-quality bike facilities to ensure that Topeka a great place for people of all ages and abilities to ride.



Bill Riphahn

MTPO Policy Board Chair

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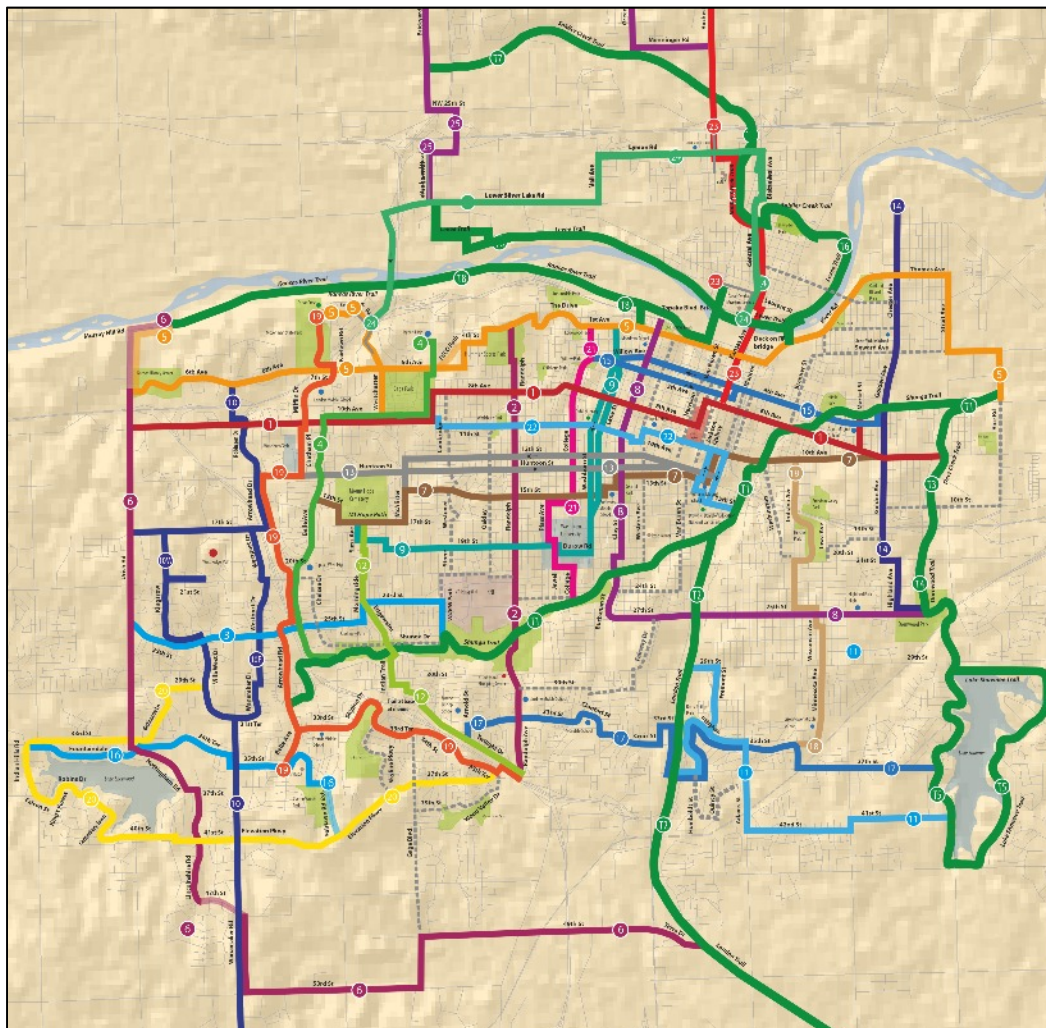
Vision

Fast-Track Bike Plan Vision:

Topeka will be a place where people of all ages, abilities, and backgrounds have safe, comfortable, and convenient opportunities to bike for transportation and recreation.

The development of the Topeka Bikeways Master Plan set the stage for greater bicycling in Topeka. Adopted by the Metropolitan Topeka Planning Organization (MTPO) in 2012, the Plan included eight trails and a 122-mile on-street bike network to be built in five phases over a 15-year period. In addition, it included recommendations to support this infrastructure with policies and programs including engineering, education, encouragement, enforcement, and evaluation. Topeka has since expanded the total mileage that will be built as part of the Bikeways Network to 167 miles and continues to look for opportunities to increase the mileage of bike facilities through Complete Streets projects and other opportunities on city and county projects.

2012 Topeka Bikeways Plan Proposed Network



The ambitious on-street network recommendations included shared streets and sharrows, bike lanes, separated bike lanes (cycle-tracks) and sidepaths to be built-out by the year 2026. While the city has built nearly 73 miles of on-street bike facilities to the network to date, the majority of these consist of shared lanes that do not provide separation between bicyclists and motor vehicles. While not perfect, this focus on shared facilities was strategic: the 2012 Plan envisioned starting with projects that were easy to implement quickly and at a low-cost to build momentum for bicycling projects with a goal of ultimately installing higher quality bike facilities where greater separation from traffic was needed. It is now time to prioritize the installation of these high-quality facilities.

Purpose of the Bike Plan Update

Topeka is at an important crossroads where it is critical to ensure that the next phase of bicycle infrastructure spending takes bicycling to a higher level in both quality and appeal to potential riders. The Topeka Fast-Track Bike Plan does not replace the 2012 Plan, rather it serves as an action plan and supplement to that plan as it responds to evolving community priorities and current best practices. It provides an assessment of how far Topeka has come since the initial plan and takes stock of what is working and what needs to be strengthened. As a plan update, the Fast-Track Bike Plan achieves the following purposes, it:

- Refreshes the bike plan goals and prioritization criteria to guide future project selection;
- Establishes a priority “low-stress/high quality” network that will appeal to potential users of all ages and abilities and can realistically be built within the next ten years;
- Recommends a short list of grant-ready “ultimate design” projects to complete by 2030 using committed sales tax funds. These recommendations include both upgrades to previously implemented facilities as well as new routes and trails.
- Illustrates high level design concepts to help jump-start the priority projects and leverage grant funding.
- Updates existing routes and design guidance to better achieve the community’s updated bicycling goals and current state of engineering best practices.
- Acknowledges that the process for implementing the full “Vision” network must be an iterative one. The long-term Vision Network should be revisited every 7-8 years with a bike plan update process that allows for a fresh look at prioritizing projects based on current state of the practice and shifts in development and public desires.



Guiding Principles for Bicycling in Topeka

The 2012 Plan identified six primary goals for bicycling in Topeka. While the 2012 goals are still relevant, the Fast-Track Plan reorganizes and supplements these ideals to include a greater emphasis on equity, healthy and active living, and designing for all ages and abilities. These new Guiding Principles for Bicycling in Topeka reflect the input received during the planning process from the general public and stakeholder groups, current research on user types, and best practices in bicycle planning and design.

Fast-Track Bike Plan

Guiding Principles for Bicycling in Topeka

Equity and Access for All

- Improve access for all members of the community to key destinations, trails, and neighborhoods along a safe, connected, and well-maintained bicycle network.

- Plan and design for bicyclists of all ages and abilities recognizing the diverse needs of low-income users, youth, women, people of color, seniors and other underrepresented groups.

Health, Wellness and Safety

- Provide opportunities for active transportation choices through the planning, design and promotion of the bicycle system.

- Increase roadway safety for bicyclists.

Sustainability and Economic Development

- Reduce the environmental impacts and infrastructure costs of the community's transportation system through greater opportunities for active transportation.

- Capitalize on the potential of an all ages and all abilities bicycle network to attract tourists, residents, and businesses.

Livability

- Support bicycling and active transportation as critical components in providing a high quality of life for people living, working, recreating, and visiting Topeka.

Land Use and Transportation Connections

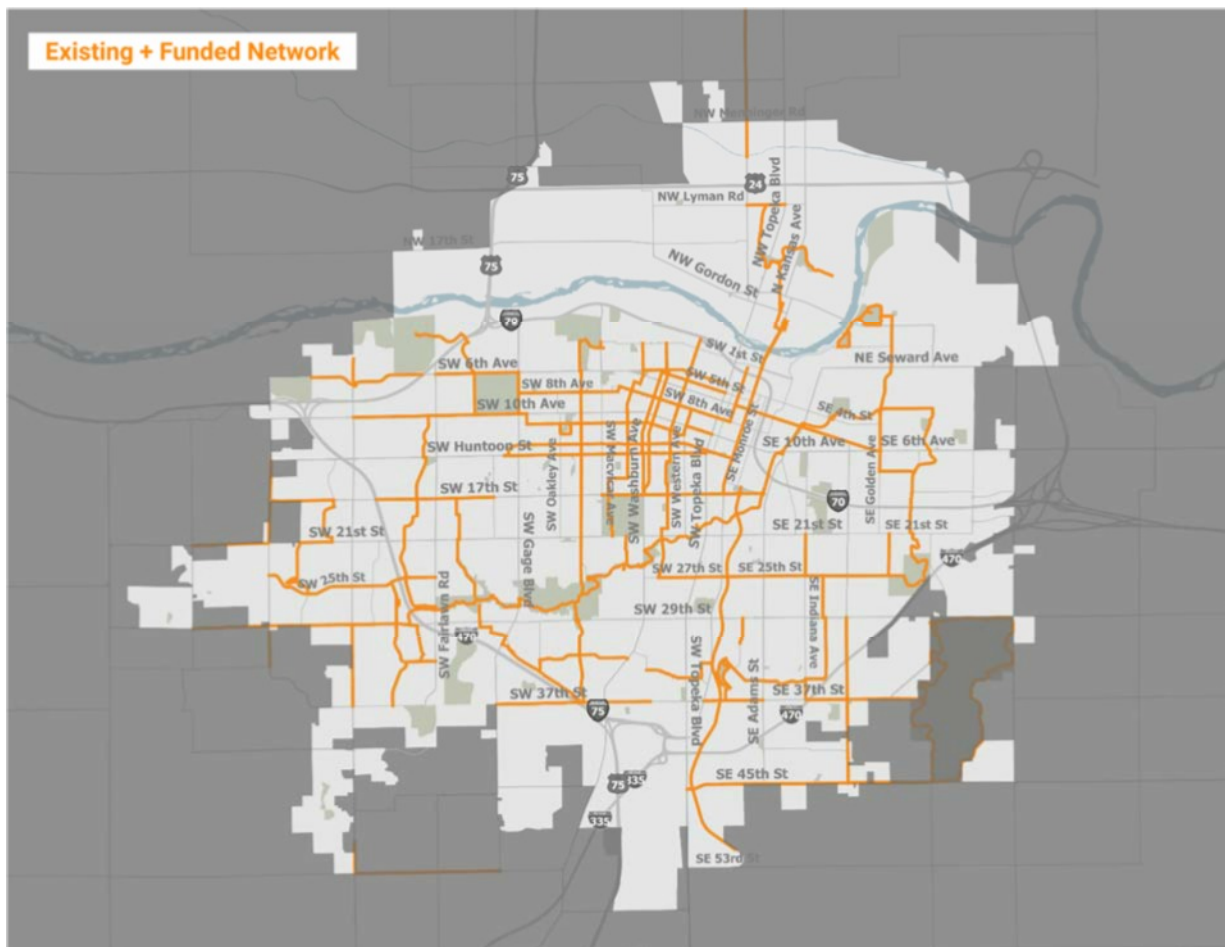
- Prioritize a destination-based bicycle network with end-of-trip facilities to support active transportation.

Why Bicycling?

Bicycling provides tremendous benefits for both the bicyclist and the non-bicyclist alike. These include:

- Keeping our community active and healthy and reducing health care costs;
- Less congestion and pollution which benefits both riders and non-riders;
- Reductions in both private and personal expenditures as bicycle infrastructure costs less than infrastructure for motor vehicles and the cost of owning and maintaining a bicycle is less than owning and maintaining an automobile;
- Places to bike contribute to sense of place and can serve to attract both businesses and residents.

Topeka Bike Network Today

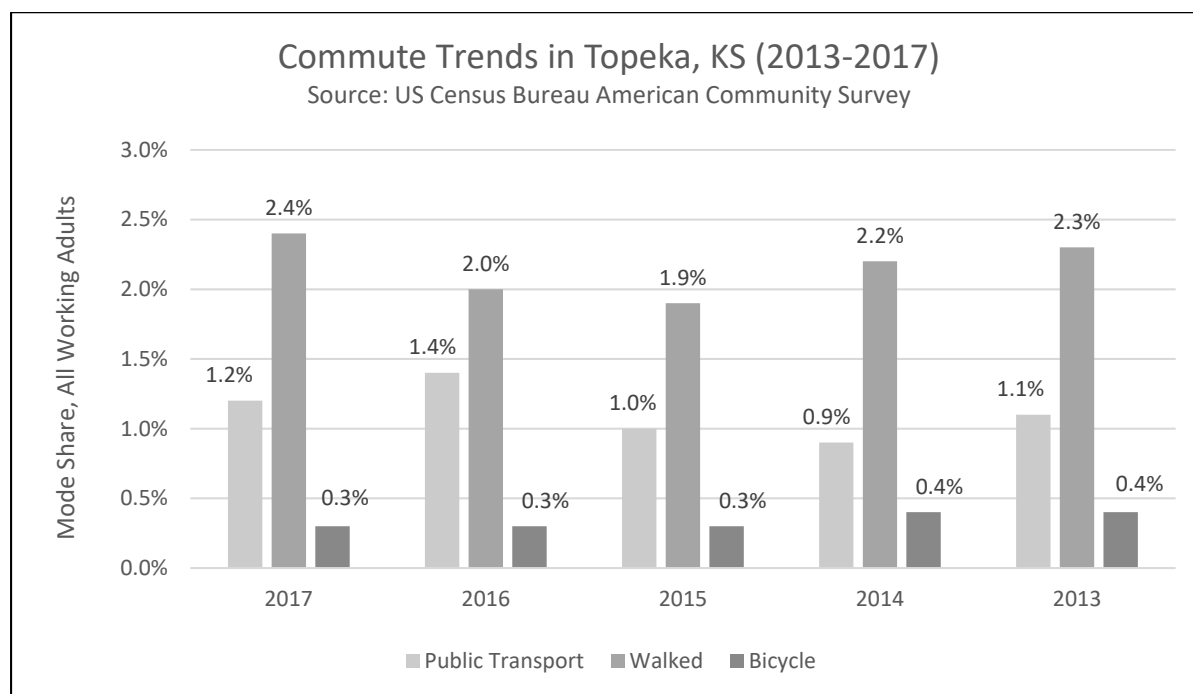


Where We Are Today

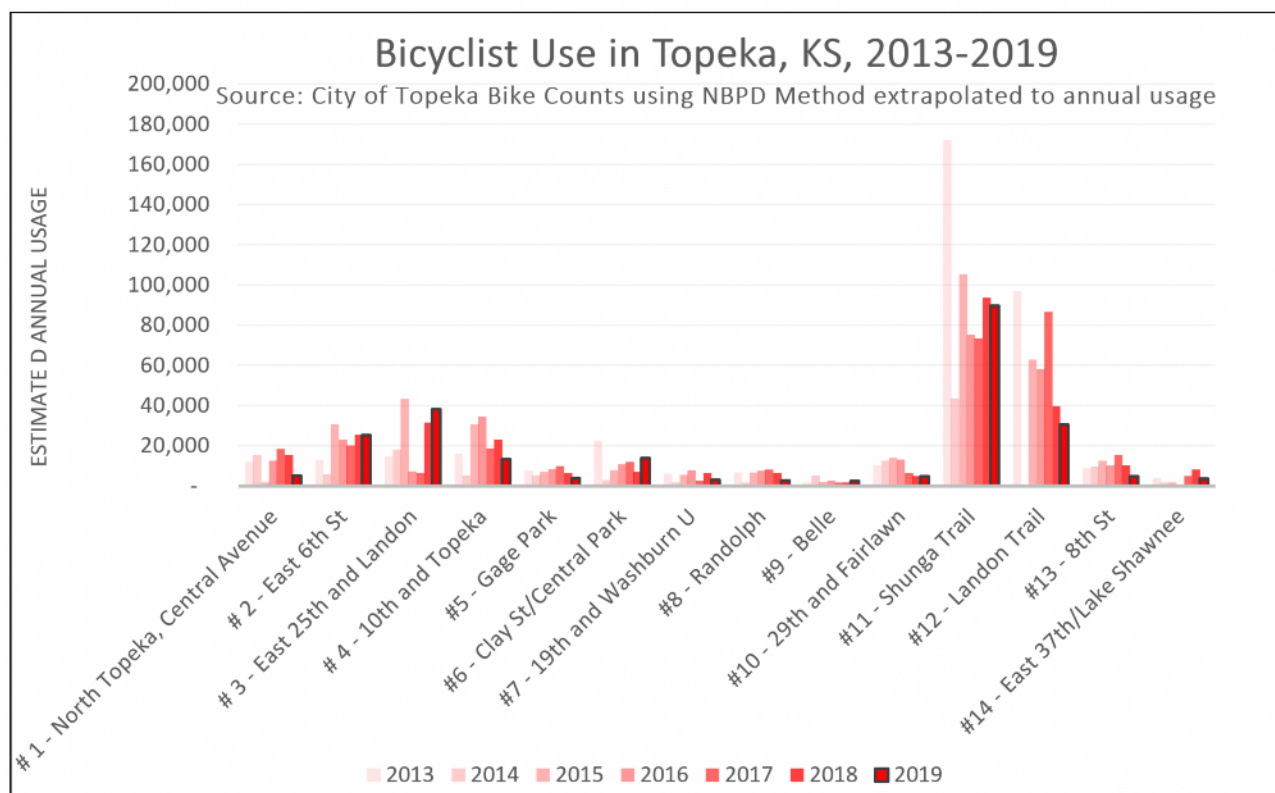
Topeka is the state capital of Kansas and the fifth largest city in the state with a population of approximately 127,000. Shawnee and the City of Topeka have a combined total population of just over 170,000. The population and job growth rate have been slow to recover after the 2008 recession, however the City and County are continuously engaged in economic development

efforts to attract businesses and residents to the area. Providing a bicycle friendly community can be a key component of attracting younger residents, workers, and families to the community.

While population and job growth have remained relatively steady and on-street bike lanes and share-the-road signs and pavement markings have been installed over the past 10 years, the number of people who choose to bike to work has remained relatively flat with less than 1% of people commuting to work by bike as shown in the commute trends below. Annual bike counts from locations throughout the city also show relatively flat trends overall with some annual variation.¹ The locations with the highest ridership are along the Shunga and Landon Trails. Despite these flat commute and locational bike count numbers, other data indicate great interest in bicycling in Topeka. The popular bikesharing program, Topeka Metro Bikes has had more than 5,000 signups, with riders taking over 50,000 trips and pedaling 110,000 miles. In addition, 85% of respondents to the survey for this plan said that bicycling conditions have improved since the adoption of the 2012 Bikeways Master Plan.



¹ Bike Counts are conducted only once per year during a certain week using the National Bicycle and Pedestrian Documentation (NBPD) method developed by ITE and Alta Planning and are extrapolated to give yearly volumes. Thus, these counts may not give a full picture of bicycling levels in Topeka.



In addition, the MTPO recently reiterated its commitment to making bicycling safe, comfortable, and convenient in the recently passed Topeka Regional Transportation Plan, the Futures2040 Plan. That plan's guiding principles include:

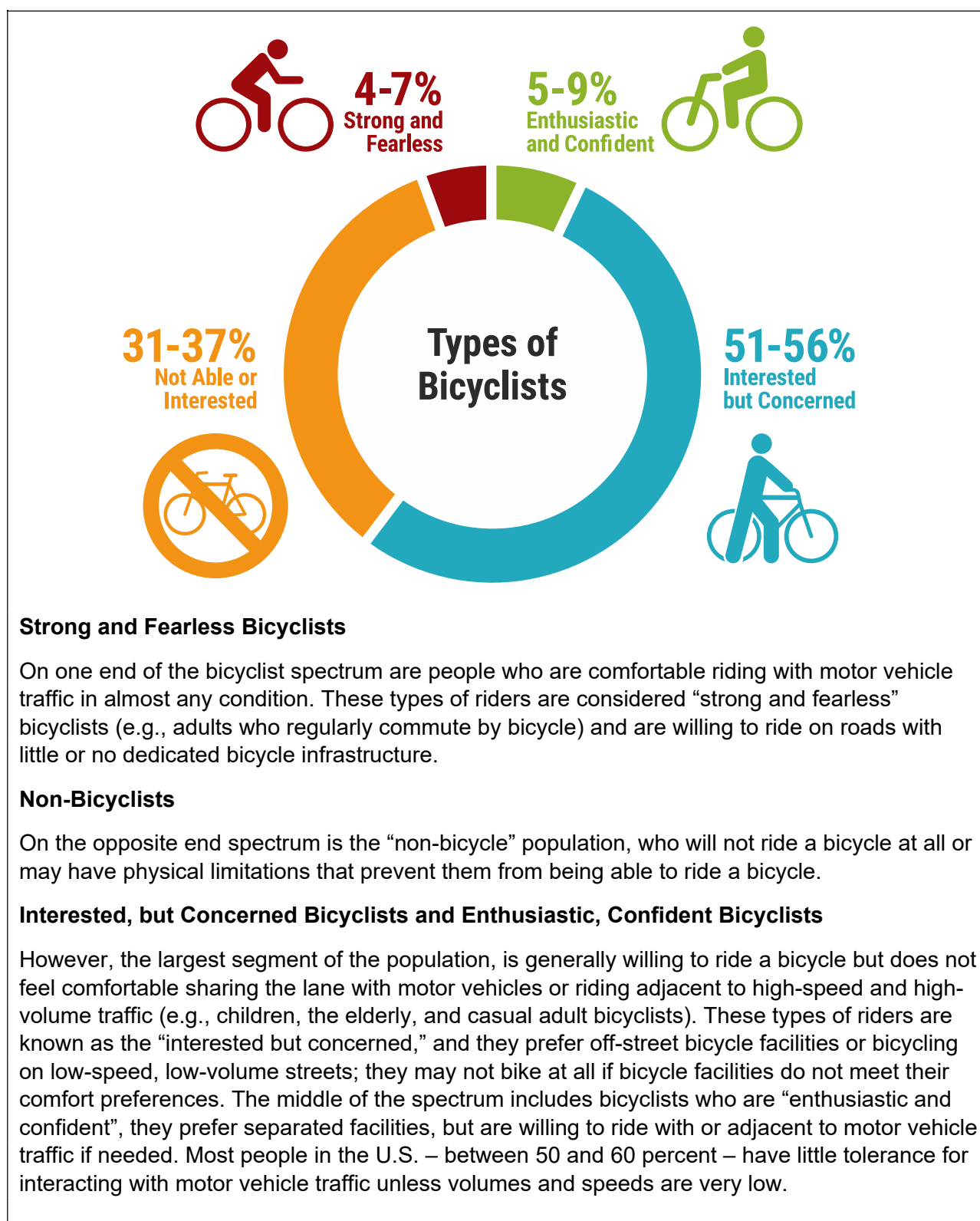
- Sustainability,
- Health and Wellness
- Livability, and
- Strong Transportation and Land Use Connections

So, what's needed to breakthrough to the next level of ridership? How can we shift from a community that is *interested* in and *supportive* of bicycling to a city that *BICYCLES*? The Fast-Track Bike Plan will lead the way.

Comfort and Safety for People of All Ages and Abilities

Both national research and input from the local community indicate that in order to really tip the balance toward greater ridership, people need to feel safe and comfortable as they ride and, for most people, this means not having to share the road with high speed motor vehicles. Research has found that a large share of the American population is interested in bicycling for transportation but does not currently do so because they believe the routes they would need to travel on are unsafe or feel uncomfortable. Many people feel safer and more comfortable riding on low-traffic, low-speed streets or on facilities that provide physical separation from fast-moving traffic.

When considering how to develop a bicycling network in Topeka for people of all ages and abilities, it is useful to think about the different types of bicyclists present in a community as illustrated below.



Two key take-aways from our online survey for this plan reflect similar trends as the national research:

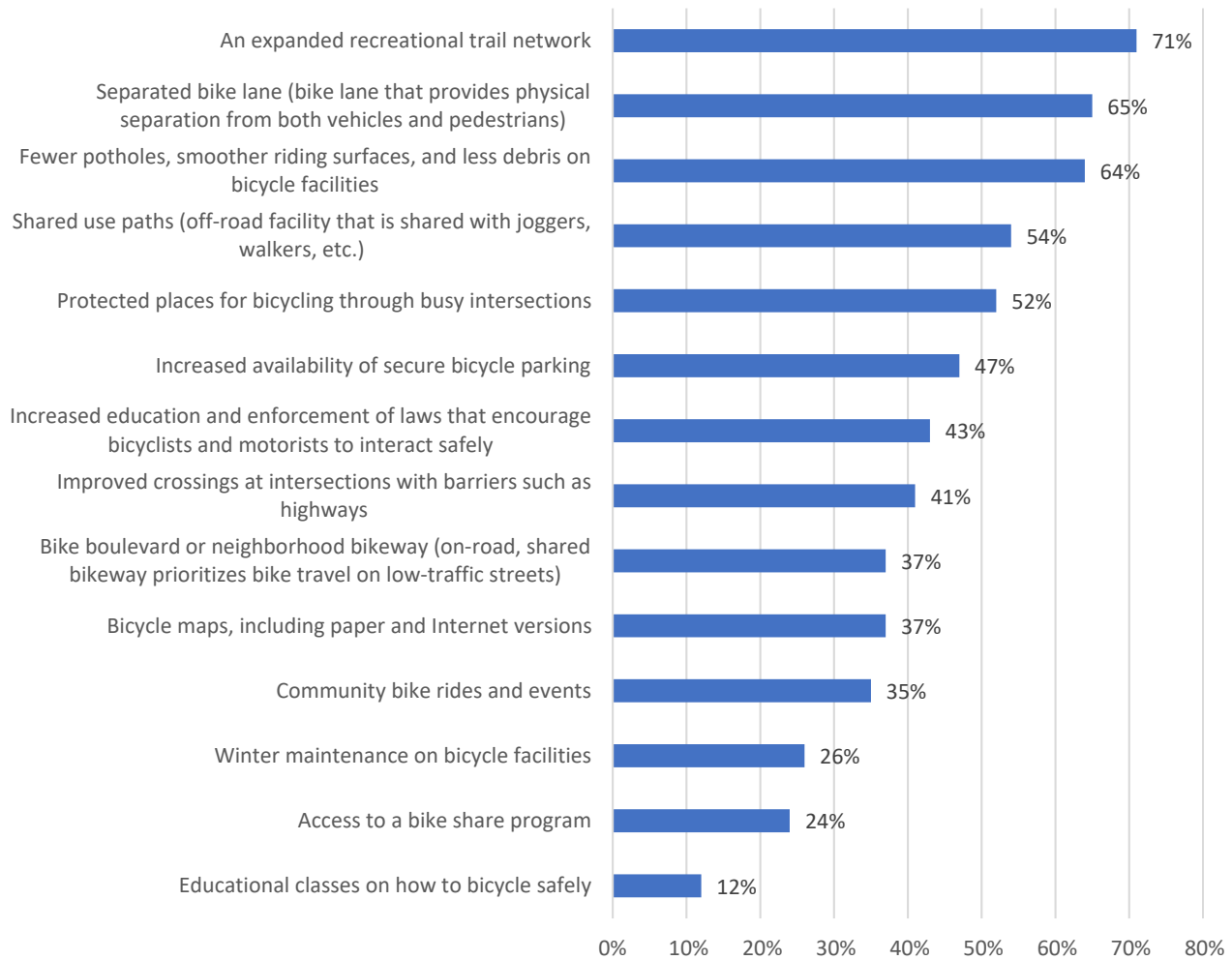
1) **Residents support an expanding trail network.** Topeka's existing trail network is a point of pride for the community. Biking is popular along the Shunga Trail, Landon Trail, and Lake Shawnee Trail. The most common bicycling trips are recreational and occur in Topeka's parks. Residents indicated their #1 priority for future bicycle-related funding is to build more trails along greenways and waterways. They also report that an expanded recreational trail network is the top factor that would get them to bicycle more (followed closely by Separated Bike Facilities and better maintained pavement). Creating more connections between neighborhoods and trails was also a high priority.

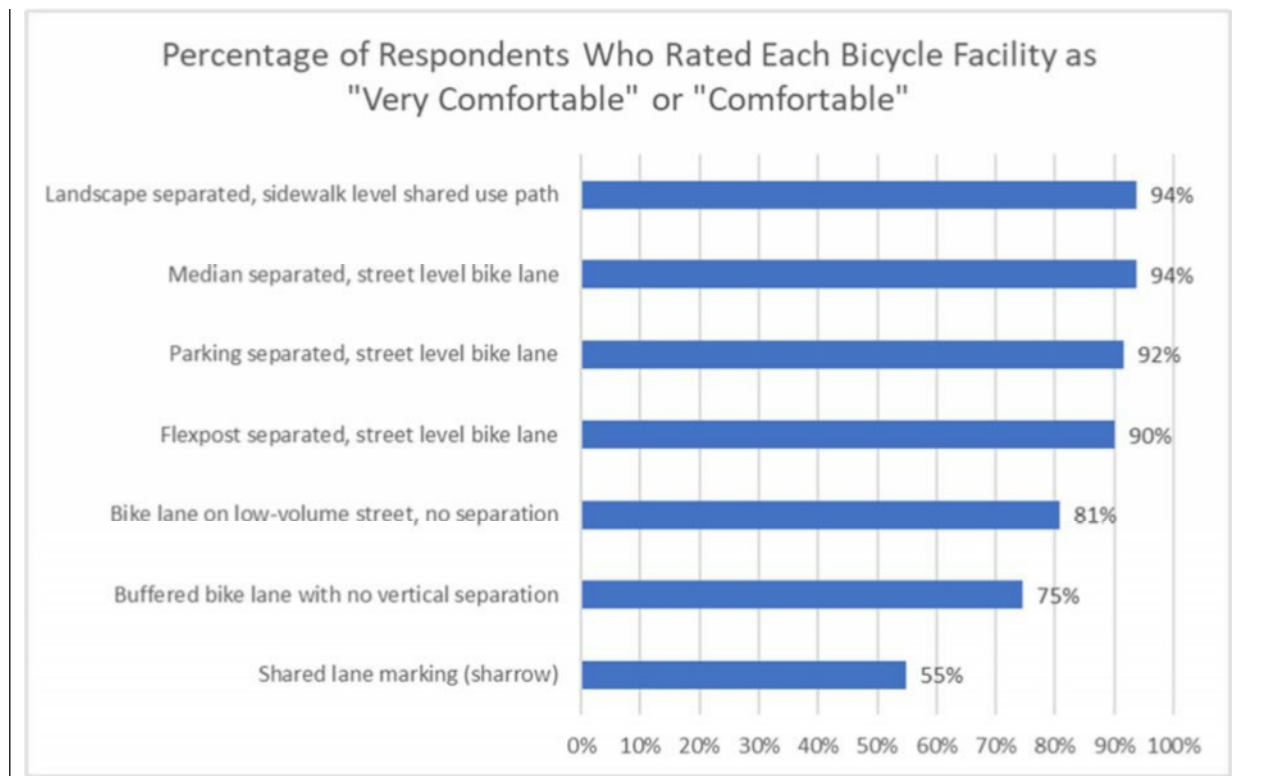
2) **There is high demand for more separation between motorists and bicyclists.** In several ways, participants indicated they are most comfortable with facilities that provide barriers between people driving and bicycling. A visual preference survey indicated that people prefer separation no matter how it is provided (i.e. landscaping, medians, parked cars, flex posts). The #2 funding priority for residents was focusing on three to five on-street separated bicycle facility projects. Separated bike lanes were also the #2 factor that would get people to bicycle more. Survey respondents also indicated that motor vehicle traffic is the biggest concern they have while bicycling.

This framework of rider types and input from the online survey was used to assess the existing bicycle network and to select facility types for the Topeka Fast-Track Bike Plan. This "interested, but concerned" rider type has the highest potential for increasing bicycle mode share when facility types that support and encourage bicycling for this type of rider are available. Therefore, this plan focuses on developing a network geared towards the "interested, but concerned" rider and provide a bicycle network that will be comfortable for people of all ages and abilities.

Community Survey Results Regarding Factors that Influence Riding and Comfort Levels

Which factors would make it more likely for you to bicycle more?
(Respondents could check multiple responses)





Vision Bike Network

The Vision Bike Network Map on page 22 shows the long-term vision for bicycling routes in Topeka. This long-term network remains largely as envisioned by the 2012 Bike Plan with the goal of providing high-quality bike facilities that connect residents and visitors to destinations throughout the City. However, there are several key differences. The Fast-Track Bike Plan's Vision Network:

- supplements the original map with additional routes to fill gaps in the network based on public input gathered in 2019-2020, data analysis, fieldwork, and latest best practices;
- recognizes that the process for implementing the full "Vision" network must be an iterative one that is updated every 7-8 years to allow for high-quality "ultimate design" routes to be constructed;

As originally envisioned, the long-term network was selected based on the principles of integrity, directness, safety, comfort, user experience, feasibility and potential destinations. While these basic principles still guide long-term bicycle network planning, the **Fast-Track Bike Plan places a greater emphasis on high-quality bicycle facilities that provide more separation from traffic to attract more riders of all ages and abilities.**

Currently, approximately half of the on-street network envisioned by the 2012 Bike Plan has been completed (see map on page 22), but in most cases, this has been achieved by installing shared roadway pavement markings, or sharrows, where bicyclists are mixed with motor vehicle traffic. Many of the higher quality, "ultimate designs" for most bike routes in the 2012 Plan have yet to be implemented. The Fast-Track Bike Network addresses this issue by selecting a small

subset of projects from the Vision Bike Network that should be implemented in the short-term with a focus on high-quality facilities for bicycling. These make up the Fast-Track Bike Network.

Fast-Track Bike Network (On- and Off-Street)

The following Fast-Track Network Map on page 21 shows the projects that should be prioritized for implementation as stand-alone projects using the dedicated countywide sales tax to leverage grant funding (e.g. State/Fed, Transportation Alternatives) over the next 10 years. These projects align with the guiding principles of the plan and meet the following prioritization criteria developed during the planning process:

- create a priority network of connected high-quality routes that form the spine of the low-stress bicycle network (see page 23),
- provide greater separation between motor vehicles and bicyclists on higher speed, higher volume routes,
- connect to major destinations and trails,
- provide greater access to underserved neighborhoods, and
- build a downtown network of bike facilities connected to neighborhoods.

The route selection and prioritization were based on an analysis of the current plan, Level of Traffic Stress and Bike Network Analysis (see pages 41-42), equity scores using the City's Neighborhood Health Map, fieldwork, input from the public and the Complete Streets Advisory Committee, and extensive discussions with staff. (See pages 37-42 for more discussion of the planning process.) A list of these Fast-Track Priority Projects is provided in the table on pages 24-27. The projects are divided into three separate categories of high-priority projects: 1) On-Street Routes that are not currently funded; 2) Off-Street Trail and trail connections that are not currently funded, 3) On-Street Routes that will be completed as part of upcoming roadway reconstruction projects.

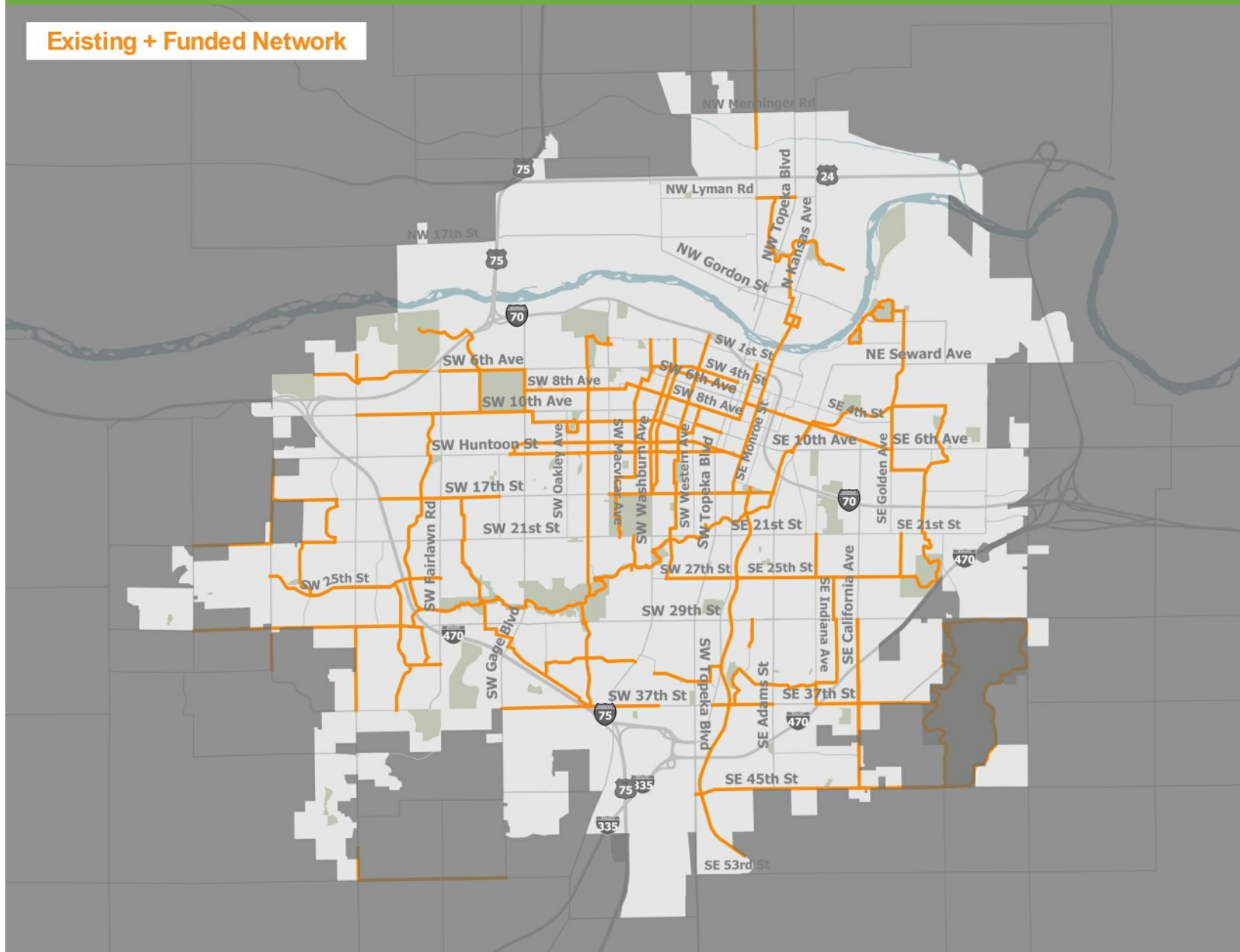
As opportunities arise, projects included in the Vision Bike Network, but not listed below as Fast-Track Priority Projects, will continue to be implemented as part of repaving and road reconstruction projects and may also be included in packages with other projects where possible.

Spine Network

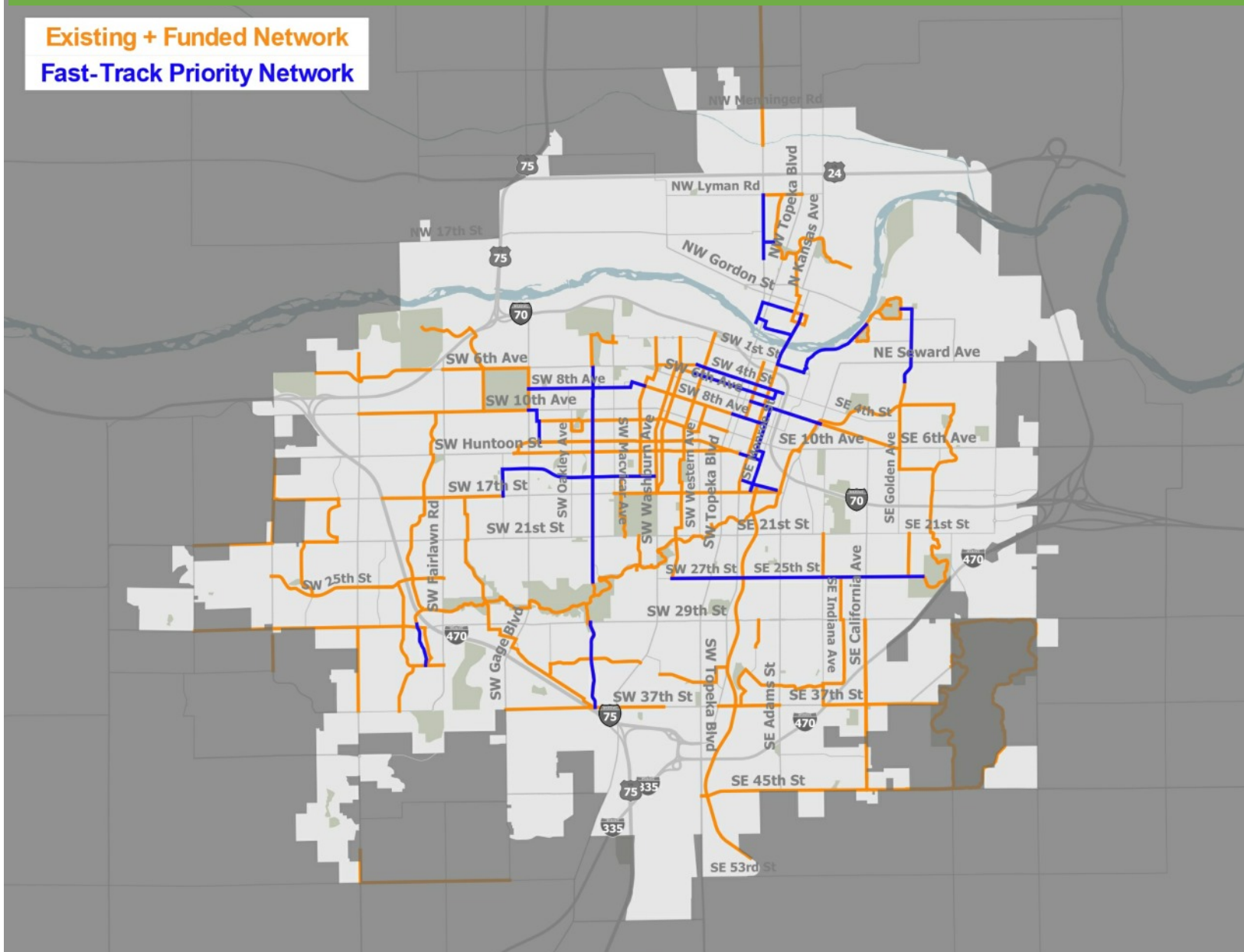
The Spine Network Map on page 23 shows a combination of existing and funded on-street and trail infrastructure, fast track projects and vision projects. The 98-mile Spine Network (highlighted in red) is intended to reflect high-quality routes that form the spine of the low-stress bicycle network. It achieves access to safe bike facilities for all segments of Topeka's population and connects diverse neighborhoods. Today, we have completed about 53% of the spine network. At the conclusion of this action plan, we will have 81% completed upon completion of street projects and fast track projects.

Existing and Funded

Existing + Funded Network

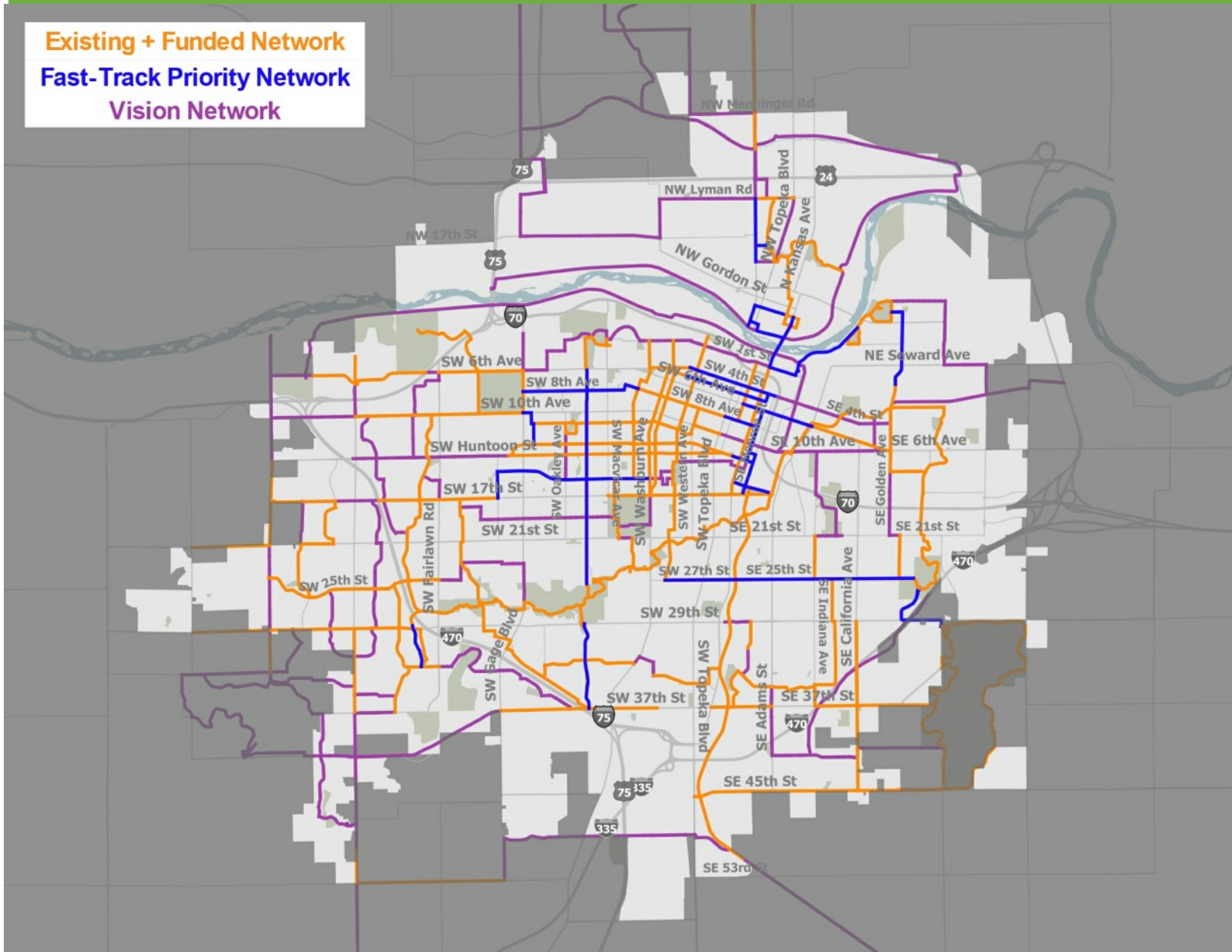


Fast-Track Priority Network

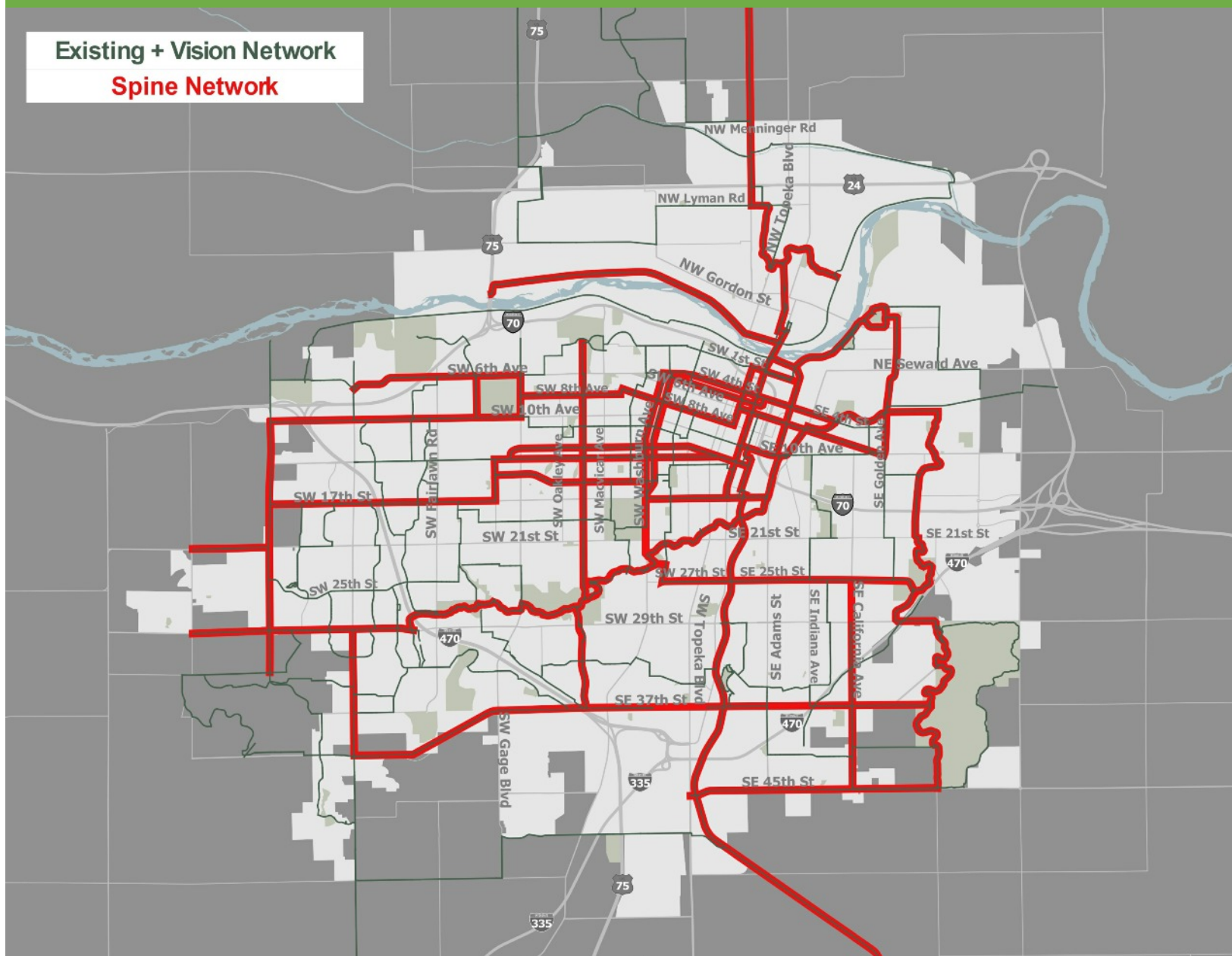


Vision Bike Network

Existing + Funded Network
Fast-Track Priority Network
Vision Network



Spine Network



Fast-Track Priority Projects

						Prioritization					
Corridor Name	From	To	2012 Plan	Existing Treatment	Preliminary Proposed Concept	Connects to Major Destinations / Trails	Builds Downtown Network	Feasible Opportunity for Greater Separation	Demand	Equity	○=Low ◐=Medium ●= High
Near Term Priority On-Street Routes (Currently Unfunded, Final Design Concept TBD)											
6 th Avenue	VanBuren	Branner Trafficway	yes Route 1	Sharrow	Buffered or Separated Bike Lanes	●	●	●	●	●	3
Kansas Ave Bridge	1st Street/ Downtown	NOTO	yes Route 23	Sharrows	Buffered or Separated Bike Lanes or Shared Bike/Ped Facility	●	●	●	●	●	3
4th/5th Avenue	Monroe St	Willow/Buchanan	yes Route 15	None/Sharrow	One-Way or Two-Way Separated Bike Lanes	●	●	●	●	●	3
Landon Downtown Connector (Via Monroe)	Landon Trail Head	Downton/Riverfront	yes Route 22	None	Two-Way Separated Bike Lane	●	●	◐	●	●	2.8
8th Ave	College Ave	Gage Park	yes Route 1	Signed Route, Sharrows	Enhanced Bike Boulevard with Traffic Calming	●	◐	○	◐	◐	2
Oakland / Downtown Connector (1 st /Crane/ River Road)	Kansas/Quincy	Oakland Billard Park Trails System	yes Route 5	None	Sharrows/Paved shoulders	◐	◐	○	●	◐	2
Chester/Golden Avenue	Sardou Ave	6th	yes Route 14	Sharrows	Enhanced Bike Boulevard with Traffic Calming	◐	○	○	●	●	1.8
15th Street (Portion of McAlister from 15th to 17th)	McAlister	Washburn	yes Route 7	None	TBD-Likely Bike Boulevard or Shared Use Path	●	○	◐	◐	○	1.8

Fast-Track Priority Projects

						Prioritization					
Corridor Name	From	To	2012 Plan	Existing Treatment	Preliminary Proposed Concept	Connects to Major Destinations / Trails	Builds Downtown Network	Feasible Opportunity for Greater Separation	Demand	Equity	○=Low ◐=Medium ●= High
Near Term Priority On-Street Routes Cont'd (Currently Unfunded, Final Design Concept TBD)											
Randolph Avenue Bikeway	SW 6th Ave	SW 37th St	yes Route 2	Signed route, Sharrows	Varies	●	○	◐	◐	○	1.8
Randolph Avenue	6th/Hummer Sports Park	21st	yes	Signed route, Sharrows	Bike boulevard enhancements (traffic calming, wayfinding, crossing treatments), fill sidewalk gaps						
Randolph Avenue	21st	27th	yes	Signed route, Sharrows	Separated Bike Lane or Shared Use Path						
Randolph Avenue	29th	33rd	yes	Signed route, Sharrows	Separated Bike Lane (w/landscaping or flexposts)						
Randolph Avenue	33rd	37th	yes	Signed route, Sharrows	Shared Use Path or bike boulevard enhancements						
10th Ave /11th Street	Frazier Ave	Gage Park	yes Route 22	None	Combination of Sharrows and Shared Use Path	◐	○	○	◐	◐	1.6
25 th Street /27 th Street	Buchanan	Dornwood/Lake Shawnee Parks	yes Route 8	Sharrows/short bike lane section	TBD-traffic calming, bike lane in some sections, fill sidewalk gaps	◐	○	○	○	◐	1.4

Fast-Track Priority Projects

						Prioritization					
Corridor Name	From	To	2012 Plan	Existing Treatment	Preliminary Proposed Concept	Connects to Major Destinations / Trails	Builds Downtown Network	Feasible Opportunity for Greater Separation	Demand	Equity	○=Low ◐=Medium ●= High
Near-Term Priority Trail Projects (Currently Unfunded)											
North Levee Trail (Kaw Reserve), potential to loop	Kansas Ave Bridge	Sunflower Soccer	yes	Levee Trail	signage, access, pavement	○	◐	●	◐	●	2.2
Shunga Trail Extension	29th	33rd	yes	none	paved trail	◐	○	●	◐	○	1.8
Deer Creek Connections – Dornwood park to 29 th	Dornwood Park	29th	yes	none	paved trail	◐	○	◐	◐	◐	1.8
Shunga Trail Crossing in vicinity of 21 st and Fillmore (exact location TBD)			yes	crossing	assess existing crossing-grade separated paved trail	◐	○	◐	◐	◐	1.8
Trail Connections (Multiple, see appendix)					TBD-Several high impact trail connections will be selected for priority funding						

Fast-Track Priority Projects

						Prioritization					
Corridor Name	From	To	2012 Plan	Existing Treatment	Preliminary Proposed Concept	Connects to Major Destinations / Trails	Builds Downtown Network	Feasible Opportunity for Greater Separation	Demand	Equity	○=Low ●=Medium ●= High
Near-Term Priority On-Street Routes (To be completed as part of upcoming roadway projects, Final Design Concept TBD)											
Huntoon Street	Topeka	Gage	yes Route 13	None	Separated / buffered bike lane or Shared Use Path						
17th/15th Corridor	I-470	Adams/Landon Trail	yes Route 7	None	TBD						
17th Street	I-470	McAlister	no	None							
17th Street	Washburn	Adams/Landon Trail	no	None							
NW Rochester	46th	Soldier Creek Trail	no	None	Separated/Buffered Bike Lane or Shared Use Path						
45th Street	California	Lake Shawnee	no	None	Separated/Buffered Bike Lane or Shared Use Path						
10th Street	Wanamaker	Belle	no	None	Separated/Buffered Bike Lane or Shared Use Path						
29th Street	Wanamaker	I-470/Shunga Trail	no	None	Shared Use Path						
37th Street	Burlingame	Adams	no	None	TBD						
37th Street	Burlingame	Scapa									
37th Street	Kansas	Adams									

Designing for an All Ages and All Abilities Network

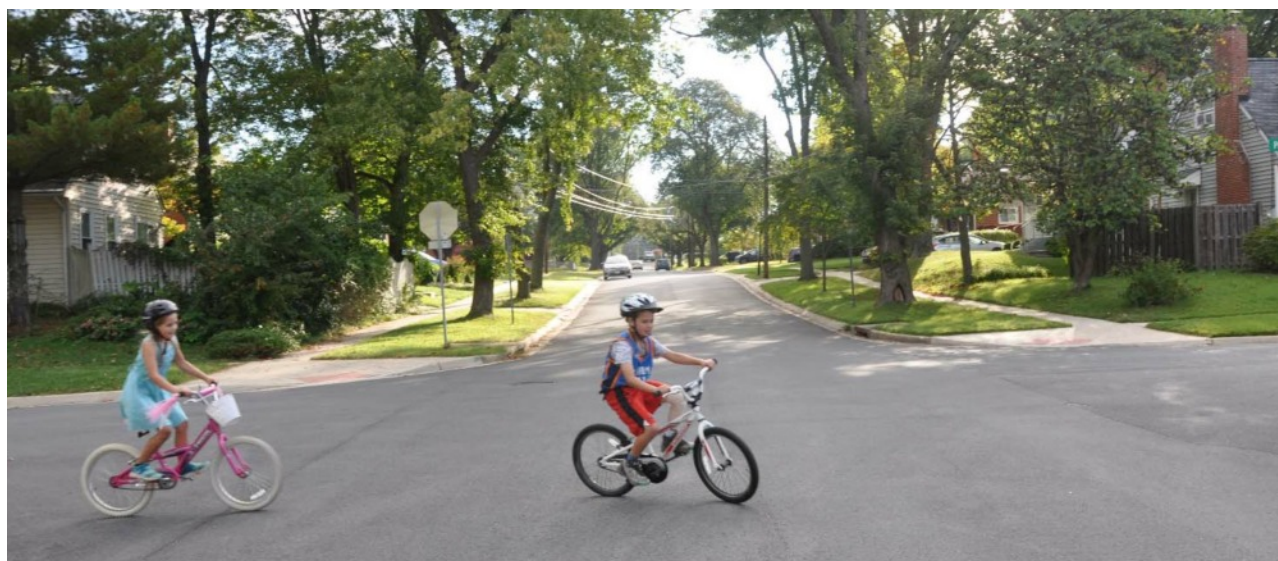
A critical step to providing a high-quality, low-stress bike network in Topeka will be to design facilities using the most up-to-date design guidance and best practices. This section provides an overview of the key bike facility types, the conditions in which they should be used and other important considerations. Additional guidance is provided in the Topeka and Shawnee County Complete Streets Design Guidelines, the 2012 and forthcoming AASHTO Guide for the Development of Bicycle Facilities, and the 2019 FHWA Bikeway Selection Guide. The guidance provided here regarding facility selection and design supersedes any guidance or terminology provided for bike facilities in the 2012 Topeka Bikeways Master Plan.

“Interested but Concerned” and “Enthusiastic and Confident” Bicyclists

As discussed in the Background section on page 10, bicyclists’ comfort levels decrease proportionally with increases in motor vehicle volumes and speeds. As both volume and speed increase, there is a greater need to separate the bikeway from traffic to appeal to a wider cross-section of people. Wider bikeways also help to mitigate the effects of volume and speed, albeit to a lesser extent than increasing facility separation with painted buffers or physical barriers.

From a bicyclist comfort point of view, separated bike lanes and shared use paths are generally preferable to traditional bicycle lanes, shoulders, or buffered bike lanes once traffic volumes reach 6,000 vehicles per day or prevailing motor vehicle speeds exceed 35 miles per hour. Figure 1 on page 29 provides guidance for using speed and volume to determine appropriate bicycle facilities in urban and suburban settings.

In addition to traffic volume and speed, land use is also an important factor in selecting the appropriate bicycle facility type for a given roadway. See the Topeka and Shawnee County Complete Streets Guidelines for information on appropriate bicycle facilities for urban, suburban, and rural roadways associated with different street types.



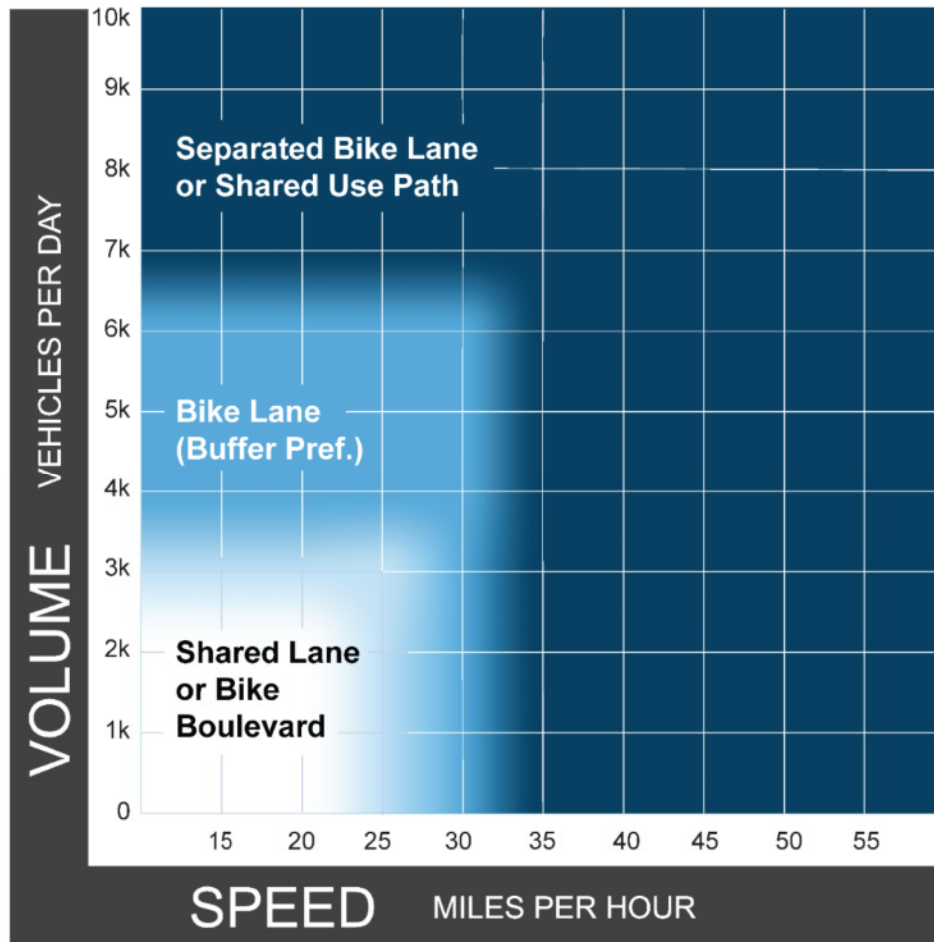


Figure 1: Preferred Bikeway Type for Urban, Urban Core, Suburban and Rural Town Contexts, FHWA Bikeway Selection Guide, 2019.

*It is generally assumed that vehicle operating speeds are the same as the posted speed limit. If operating speeds differ, use the operating speed for bicycle facility selection.

Choosing Between Separated Bike Lanes and Shared Use Paths

The type of separated bike facility— separated bike lane or shared use path— and method of separation should be determined once it is decided that physical separation from motor vehicles should be provided.

Where both walking and bicycling demand are relatively low and are expected to remain low, a shared use path may be considered in place of a separated bike lane to satisfy demand for walking and bicycling in a single facility to reduce project costs. As volumes increase over time, the need for separation should be revisited. The Shared-Use Path Level of Service Calculator (FHWA, 2006) can help planners and designers understand the potential volume thresholds where conflicts between bicyclists and pedestrians will limit the effectiveness of a shared use path. When Level of Service is projected to be at or below level 'C,' separate facilities for pedestrians and bicycles should be provided, unless right of-way constraints preclude separation.



Bicycle Facility Toolkit

Shared Use Paths/Sidepaths

A shared use path is a two-way facility physically separated from motor vehicle traffic and used by bicyclists, pedestrians, and other non-motorized users. Shared use paths, also referred to as trails, are often located in an independent alignment, such as an abandoned railroad. They are also regularly constructed along roadways; these are called “sidepaths.”



Figure 2: Shared Use Path in Greenville, SC, Image from Toole Design

Use

Shared use paths may be appropriate along any road with one or more of the following characteristics:

- Total traffic lanes: 3 lanes or greater
- Posted speed limit: 30 mph or greater
- Average Daily Traffic: 6,000 vehicles or greater
- Parking turnover: frequent
- Streets that are designated as truck or bus routes

Shared use paths may be preferable to separated bike lanes in low density areas with few pedestrians.

Separated Bike Lanes

Separated Bike Lanes (also known as protected bike lanes or cycle tracks) are an exclusive bikeway facility type that combines the user experience of a sidepath with the on-street infrastructure of a conventional bike lane. These facilities physically separate motor vehicle traffic from bicyclists and are more attractive to a wider range of bicyclists than striped bikeways on higher volume and higher speed roads.

Use

Separated bike lanes may be appropriate on any road with one or more of the following characteristics:

- Total traffic lanes: 3 lanes or greater
- Posted speed limit: 30 mph or more
- Average Daily Traffic: 6,000 vehicles or greater
- Parking turnover: frequent
- Streets that are designated as truck or bus routes

Separated Bike Lanes may be preferred to shared use paths in higher density areas and in locations with high pedestrian volumes.



Figure 3 Image of Separated Bike Lane in Cambridge, MA. Images from Toole Design

Buffered Bike Lanes

Buffered bicycle lanes are created by painting or otherwise creating a flush buffer zone between a bicycle lane and the adjacent travel lane. While buffers are typically used between bicycle lanes and motor vehicle travel lanes to increase bicyclists' comfort and safety, they can also be provided between bicycle lanes and parking lanes to prevent "dooring."

Use

Buffered bike lanes will generally be considered on any road with one or more of the following characteristics:

- Where there is 7 feet or more of space for a bike lane
- Total traffic lanes: 3 lanes or fewer
- Posted speed limit: 30 mph or lower
- Average Daily Traffic: 6,000 vehicles or fewer
- Parking turnover: infrequent.
- Where a separated bike lane or shared use path is infeasible or not desirable



Figure 4: Buffered Bike Lane in Denver, CO . Image from Toole Design

Counter-Flow Bike Lanes

One-way streets and irregular street grids can make bicycling to specific destinations within short distances difficult. Counter-flow bicycle lanes enable only bicyclists to operate in two directions on one-way streets. Contra-flow lanes are useful to reduce distances bicyclists must travel and can make bicycling safer by creating facilities that help other roadway users understand where to expect bicyclists.

Use

- Counter-flow lanes should be used where there is a clear need for the connection, as evidenced by wrong-way riding bicyclists or bicyclists riding on sidewalks in the opposing direction.
- Counter-flow lanes are often short, connecting segments. They are not typically used along extended corridors.
- Counter-flow lanes are less desirable on streets with frequent and/or high-volume driveways or alley entrances on the side with the proposed contraflow lane. When counter-flow bike lanes are installed at these locations, use additional treatments to increase visibility of bicyclists.



Figure 5: Image from Toole Design, 2010.

Conventional Bicycle Lanes

Bicycle lanes provide an exclusive space for bicyclists in the roadway. Bicycle lanes are established by lines and symbols on the roadway surface. Bicycle lanes are for one-way travel and are normally provided in both directions on two-way streets and/or on one side of a one-way street. Bicycle lanes may only be used temporarily by vehicles accessing parking spaces and entering and exiting driveways and alleys.



Figure 6 Bike Lane in Boston. Image from Toole Design

Use

Conventional bike lanes will generally be considered on any road with one or more of the following characteristics:

- Total traffic lanes: 3 lanes or fewer
- Posted speed limit: 30 mph or lower
- Average Daily Traffic: 6,000 vehicles or fewer
- Parking turnover: infrequent
- Where a separated bike lane or shared use path is infeasible or not desirable

Shared Lane Markings

Shared lane markings (or “sharrows”) are pavement markings that denote shared bicycle and motor vehicle travel lanes. The markings are two chevrons positioned above a bicycle symbol. While these have been implemented on arterials in many communities, shared lane markings should only be used with low traffic speeds and volumes as part of a signed route or bicycle boulevard. (See Figure 1. Preferred Bikeway Type on p.26.)



Figure 7: Shared Lane Markings on a Portland, OR Bike Boulevard. Image from Toole Design

Use

Typically used on local, collector, or minor arterial streets with low traffic volumes. Commonly used on bicycle boulevards to reinforce bicyclist priority.

- Typically feasible within existing right-of-way and pavement width even in constrained situations.
- Intended for use only on streets with posted speed limits of up to 25 mph and traffic volumes of less than 3,000 vehicles per day.
- May be used as a temporary solution on constrained streets with up to 10,000 vehicles per day until a more appropriate bikeway facility can be implemented. Maximum posted speed of street: 35 mph.

Bicycle Boulevard Treatments

Bicycle boulevards incorporate traffic calming treatments with the primary goal of prioritizing bicycle through-travel, while discouraging motor vehicle traffic and maintaining relatively low motor vehicle speeds. These treatments are typically applied on quiet residential streets. Treatments vary depending on context, but often include traffic management measures, traffic-calming measures, pavement markings, and signs. Bicycle boulevards are also known as neighborhood greenways and neighborhood bikeways.



Figure 8: A Bike Boulevard in Minneapolis. Image from Toole Design

Use

- Many cities already have signed bike routes along neighborhood streets that provide an alternative to traveling on high-volume, high-speed arterials. Applying bicycle boulevard treatments to these routes makes them more suitable for bicyclists of all abilities.
- Any stop signs or traffic signals placed along the bicycle route should minimize stops for and give priority to bicyclists whenever possible.
- Bicycle boulevard treatments include traffic calming measures such as street trees, traffic circles, chicanes, and speed humps. Traffic management devices such as diverters or semi-diverters can redirect cut-through vehicle traffic.
- Maximum Average Daily Traffic (ADT): 3,000, and less than 50 motor vehicles per hour in the peak direction at the peak hour. Preferred ADT: Up to 1,000
- Target speeds for motor vehicle traffic are typically around 20 mph.

How the Fast-Track Bike Plan was Developed

As explained in the introduction, the Fast-Track Bike Plan does not replace the 2012 Bikeways Master Plan rather it was developed to serve as an Action Plan and Supplement to that plan to help prioritize the earlier network recommendations, refresh the project goals to reflect public input, and align design recommendations to reflect best practices. In addition to reviewing the 2012 Bikeways Master Plan, the 2040 Futures Plan, the Topeka and Shawnee County Complete Streets Guidelines and other background documents, the project team engaged the public in various ways, and conducted data analysis and fieldwork. These activities are summarized below.

Public and Stakeholder Outreach and Coordination

Open House and Online Surveys

On August 29, 2019, the project team solicited input at an open house, which took place at the Shawnee County Health Department with approximately 20 participants.



An online survey and interactive map were promoted to Topeka residents between late spring and early summer of 2019. The online survey and interactive map mimicked the format that was used at the community workshops and pop-up events. The online survey was completed by approximately 280 people. The online interactive map had nearly 70 users.

Topeka Bikeways Master Plan Update

Survey Questions

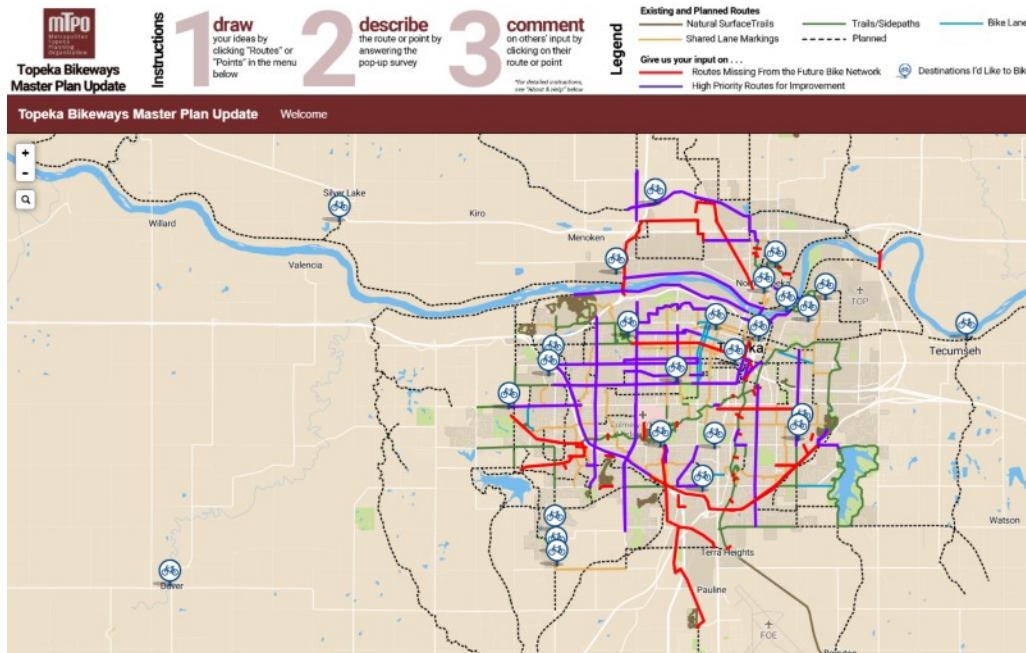
1. Do you think that Topeka has become a better place to bike since the adoption of the 2012 Bikeways Master Plan?

- ☐ Yes
☐ No

2. How often do you bicycle? (It's okay if you don't currently bike. We still want to hear from you!)

- ☐ At least once a day
☐ A few times a week
☐ A few times a month or less
☐ Never

A screen capture of the online survey.



A screen capture of the online interactive map that displays routes missing from the future network, high priorities for improvement, and destinations to bike.

Participatory Mapping Exercises

Participants in the open house and online engagement had an opportunity to identify examples of routes missing from the future network, high priorities for improvement, and destinations to which they would like to bike. This information was compiled and contributed to the selection of priority routes and the additions to the long-term network.



Participants draw on paper maps at the open house.

Data Analysis and Fieldwork

Bicyclist User Comfort

It is important to analyze the existing bicycle network's level of comfort, as this can indicate how many residents may choose to ride a bike for commuting, errands, and recreational trips. Comfort is determined by the speed and volume characteristics of vehicular traffic on segments within the network as well as the level of separation provided between the bicyclist and adjacent vehicular traffic.

One way to analyze bicyclist comfort in the existing bicycle network is through a Level of Traffic Stress (LTS) analysis. LTS is a rating given to an off-street bicycle facility, on-street bicycle facility, undesignated roadway segment, or crossing that indicates the vehicular traffic stress experienced by the "interested but concerned" bicyclist. It is based on the premise that a person's level of comfort on a bicycle increases as separation from vehicular traffic increases and as traffic volumes and/or speeds decrease. The LTS analysis is useful for identifying roadways or crossings that may benefit from upgrading an existing high-stress facility to a lower-stress option or recommending a new bicycle facility where one may not have previously existed. The analysis helps identify appropriate bicycle facilities that are comfortable for people of all ages and abilities.

LTS scores range from 1 to 4. LTS 1 scores indicate little or no traffic stress, and facilities with this score are generally suitable for most of the population. LTS 2 scores mean the user experiences some minimal traffic stress but facilities are suitable for most adults and families. LTS 3 scores describe facilities with moderate traffic stress that is generally uncomfortable or unappealing to a large portion of bicyclists but that may be suitable for somewhat experienced or confident bicyclists. LTS 4 scores include facilities with high traffic stress that are primarily

only suitable for very confident bicyclists. Figure 9 provides examples of which types of bicycle facilities meet each LTS stress score.

This analysis emphasizes a “weakest link” method whereby the characteristic of any portion of a street segment that scores the highest stress level on a scale of 1 to 4 determines the score for that entire segment. For instance, a low-volume two-lane street with a speed limit of 40 mph would rate poorly with an LTS 4 score because of the higher speed limit.



Figure 9. Level of Traffic Stress Scores and Example Roadway Environments

Topeka Level-of-Traffic-Stress Results

The figure below presents the map of LTS scores for all on-street facilities and trails in Topeka. LTS 1 is by far the most common classification due to the large amount low-speed, low-volume neighborhood streets. Roads with these characteristics often do not require designated bicycle facilities to be considered low-stress. However, many of the important north-south and east-west crosstown routes and several downtown streets are considered LTS 4, the highest stress level. Many LTS 4 roadways either have no designated bicycle facilities or have facilities that provide minimal separation from high-speed, high-volume traffic. While these high-stress routes may be less common, they often form the backbone of municipal street networks and function as critical barriers to direct, low-stress travel within Topeka.

It is important to note that this LTS analysis is limited to roadways where it is legal to ride a bike and therefore does not include limited access facilities (e.g., I-470).

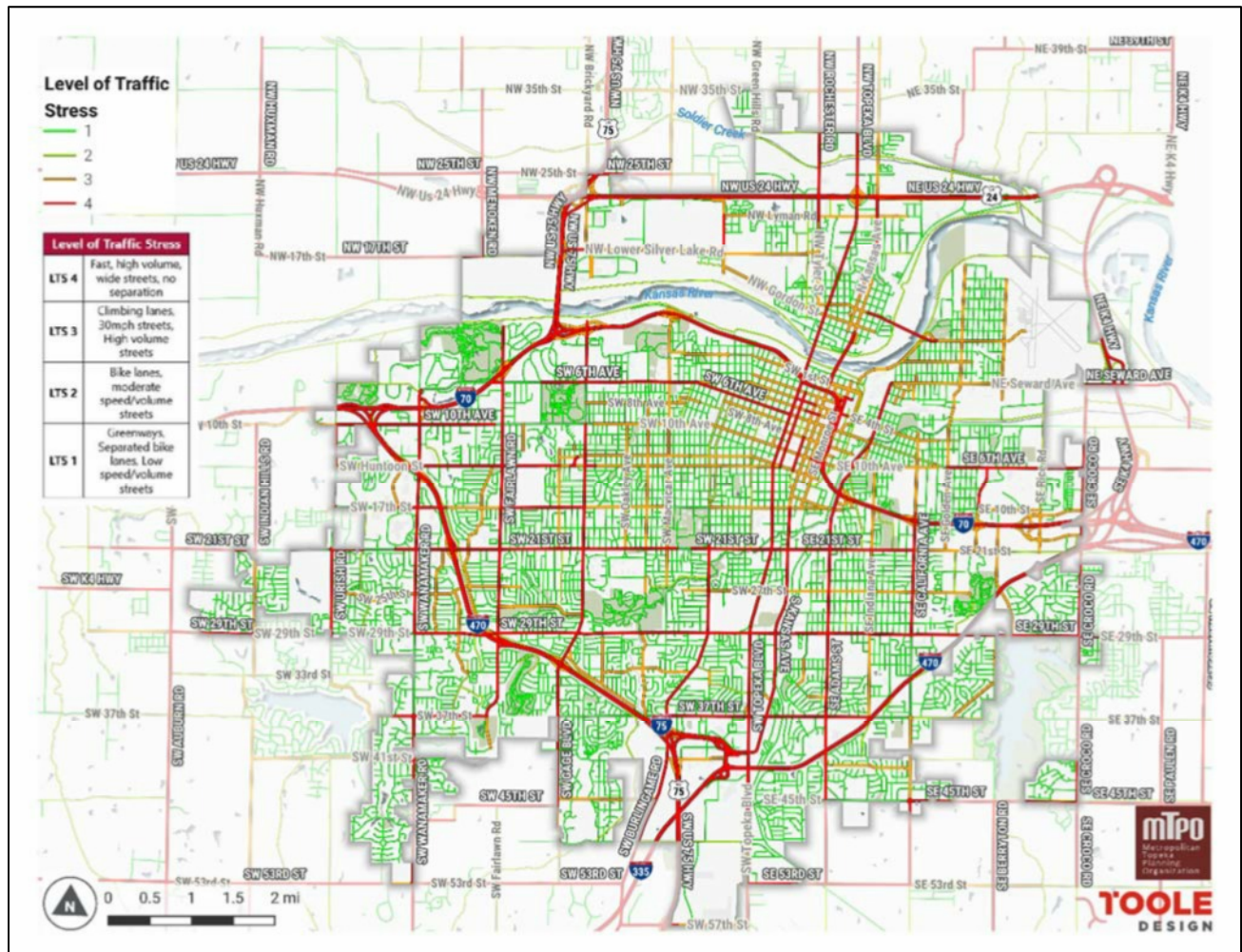


Figure 10. Level of Traffic Stress for streets in Topeka

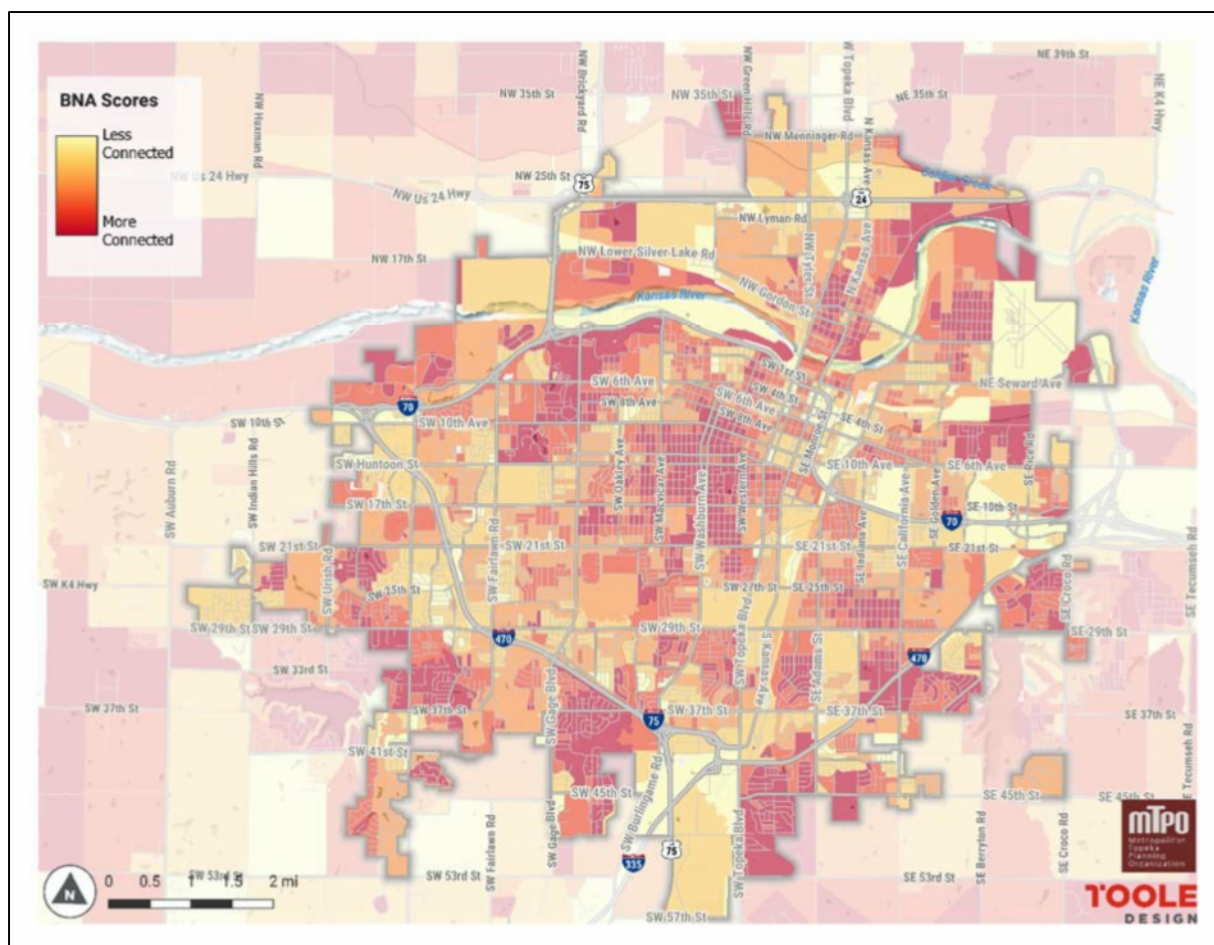


Figure 11. Neighborhood Bicycle Connectivity in Topeka

Bicycle Connectivity

Figure 11 shows the amount of bike connectivity within Topeka. The Bicycle Network Analysis (BNA) is a tool used to measure and score how well bicycle networks connect people with the places they want to go. The BNA score builds upon the LTS analysis to measure how well the low-stress bike network connects to key destinations. The analysis highlights the importance of a continuous network, rather than a patchwork of bike lanes, trails, and paths. The analysis evaluates the connectivity of census blocks within a standard biking distance.

Topeka Bicycle Connectivity Analysis Results

The BNA results indicate that Topeka has a real mix of connected and unconnected neighborhoods as shown in Figure 11. This analysis was used to help prioritize routes that would connect more of the neighborhoods with low connectivity to low-stress routes.

Fieldwork and Route Prioritization

In addition, to the public engagement and data analysis, the consultant team conducted limited fieldwork to verify some of the conditions indicated by the public input and data analysis and to develop draft concepts for high-quality bike facilities along the corridors that indicated a combination of high need for prioritization and high feasibility for implementation.

Priority Implementation Actions

The following Key Priority Actions are recommended as a supplement to and prioritization of the recommendations of the 2012 Bikeways Master Plan.

- Implement 1-2 projects each year from the high-quality, low-stress Fast-Track Network with the goal of completing these projects by 2030. Draft design concepts have been developed for the first five projects on the fast-track list. Begin with these grant-ready projects to facilitate preparing grant applications and leverage additional funding sources such as the Transportation Alternatives (TA) program.
- Continue to utilize the Complete Streets Guidelines and process to incorporate bike projects from the Vision Network in scheduled street projects such as mill and overlay resurfacing, reconstruction, etc.
- Develop a consistent public engagement process for bikeway projects that includes consideration of design concepts and evaluation of trade-offs early in the process in order to both educate the community about the project and to gather community input.
- Conduct an annual review of the Fast-Track Bike Network list to consider any changes that may be necessary due to shifting opportunities and to begin preparing refined design concepts for the next 1-2 projects in anticipation of upcoming grant cycles. Utilize the prioritization criteria (connects to major destinations and facilities, builds downtown network, high demand, equity, and opportunities for greater separation) when reevaluating existing or considering new routes.
- Maximize potential ridership and safety by designing high-quality bike facilities in line with the latest best-practices. To this end, adopt the bike facility design guidelines provided in the Complete Streets Guidelines and in the forthcoming AASHTO Guide for the Development of Bicycle Facilities into City and County standards.
- Develop and implement a promotional campaign that uses both social media and traditional outreach methods to educate the public in general about the Fast-Track Bike Plan, but also specifically about the transportation and health benefits of bicycling, the safety benefits of various bike facility types, and the location and design concepts under consideration for any upcoming projects.
- Continue to work with community partners to implement and sustain the educational and promotional recommendations included in the 2012 plan.
- Revisit the long-term Vision Network every 7-8 years through a bike plan update process that includes refreshing goals and priorities, an examination of the Vision Network, and a prioritization of new projects based on current state of the practice and shifts in development and public desires.

Appendix: Fast-Track On-Street Bike Network

This Appendix provides additional detail on each of the corridors identified as part of the Fast-Track On-Street Bike Network. These projects should be prioritized for implementation and funding in the next ten years. Preliminary design concepts and planning-level cost estimates¹ have been developed for five of the corridors as described and depicted below. These are high-level planning concept designs that will require additional study and engineering beyond the scope of this plan before they can be implemented. The exact alignment and design will be further fleshed out with additional input from the public and city staff and with additional analysis of current traffic conditions and other factors. The names and route numbers used below are from the 2012 Bikeways Plan to maintain consistency with that plan.

¹ Opinions of probable cost were developed by identifying major pay items and establishing rough quantities to determine a rough order of magnitude cost. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Planning-level cost opinions include a 30% contingency to cover items that are undefined or are typically unknown early in the planning phase of a project. Unit costs are based on 2019 dollars and were assigned based on historical cost data from Kansas Department of Transportation and the Estimator's experiences. Cost opinions do not include easement and right-of-way acquisition; permitting, inspection, or construction management; engineering, surveying, geotechnical investigation, environmental documentation, special site remediation, utility relocation or adjustments, escalation, or the cost for ongoing maintenance. The overall cost opinions are intended to be general and used only for planning purposes. Toole Design Group, LLC makes no guarantees or warranties regarding the cost opinion herein. Construction costs will vary based on the ultimate project scope, actual site conditions and constraints, schedule, and economic conditions at the time of construction.

Priority Corridor: SW 6th Avenue from SW Van Buren to SE Branner Trafficway (Portion of the East-West Bikeway-Route 1)

Overview

SW 6th Avenue between VanBuren and Branner Trafficway is a critical connecting portion of the East-West Bikeway identified in the 2012 Bikeways Master Plan. The route picks up where the existing bike lanes end at SE Branner Trafficway and the Shunga Trail and runs west to SW Van Buren where sharrows guide bicyclists south to the 8th Street bike facility. Bicyclists can use this corridor to traverse Interstate 70 and connect to the Shunga Trail from downtown. The route is currently characterized by wide streets (4 through lanes), and auto-oriented businesses. Some sections of the roadway have angled parking.

Existing Bicycle Facilities

Shared lane markings (sharrows)

2012 Plan Recommendations

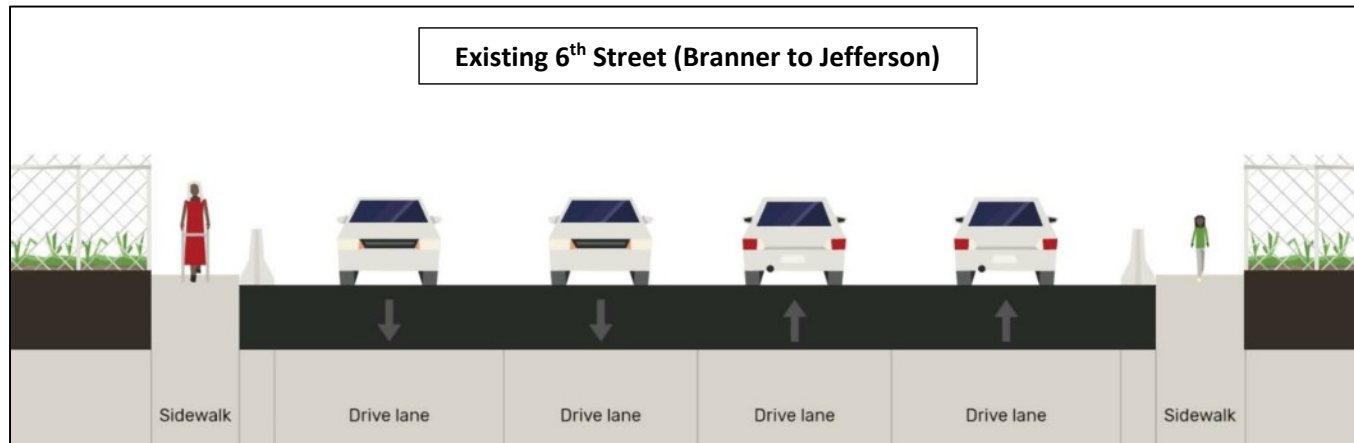
The 2012 recommends bike lanes and back-in angled parking along this route.

Fast-Track Plan Recommended Bikeway Concept

The Fast-Track Plan recommends a buffered bike lane along this section of the East-West Bikeway Corridor. It is broken into two different segments based on the existing rights of way. These concepts are at a planning level and will require further analysis as part of a full design process. **Cost Estimate: \$111,000**



From Branner Trafficway to Jefferson Street (Bridge Section)

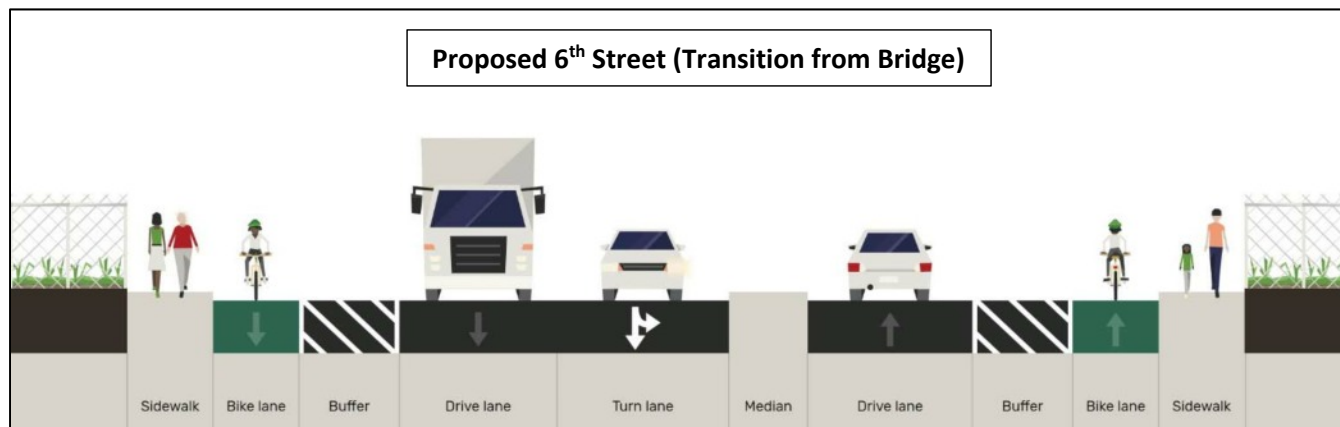
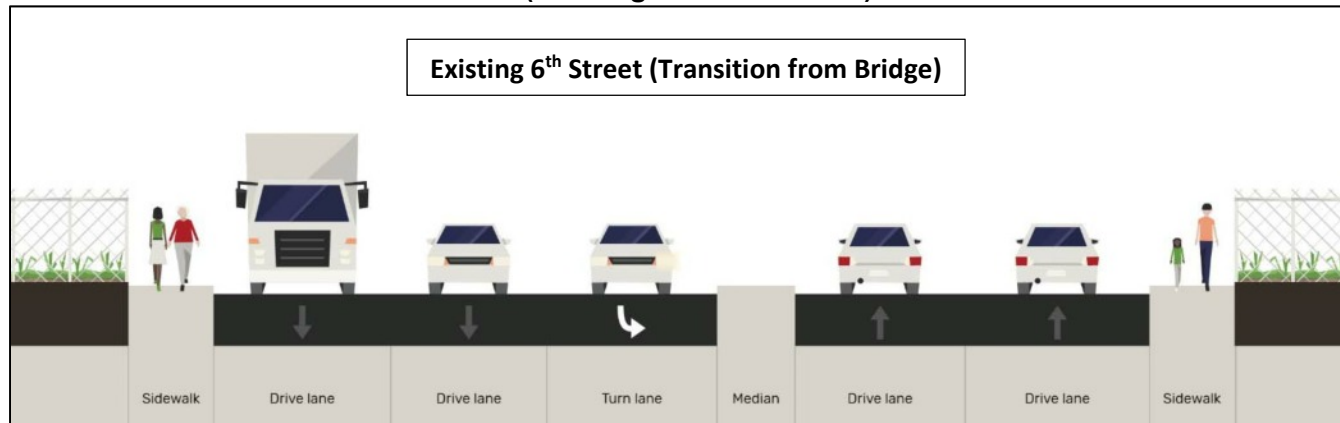


Recommendations

- Reduce exiting travel lanes from four to two to create space for one-way bike lanes on each side.

- Utilize wide painted buffer to create separation between motor vehicles and bicyclists. Provide vertical delineators approaching intersections to control the effective radius for turning vehicles and avoid motorist encroachment into bike lane approaching intersections.

Jefferson Street to Van Buren Street (Existing 5-Lane Section)



- Reduce five motor vehicle lanes to three to create space for buffered bike lanes on each side

- Utilize wide painted buffer to maintain continuity to bridge cross-section. Provide vertical delineators approaching intersections to control the effective radius for turning vehicles and avoid motorist encroachment into bike lane approaching intersections.
- Utilize back-in angled parking where parking exists to increase sight lines between motorists and bicyclists.



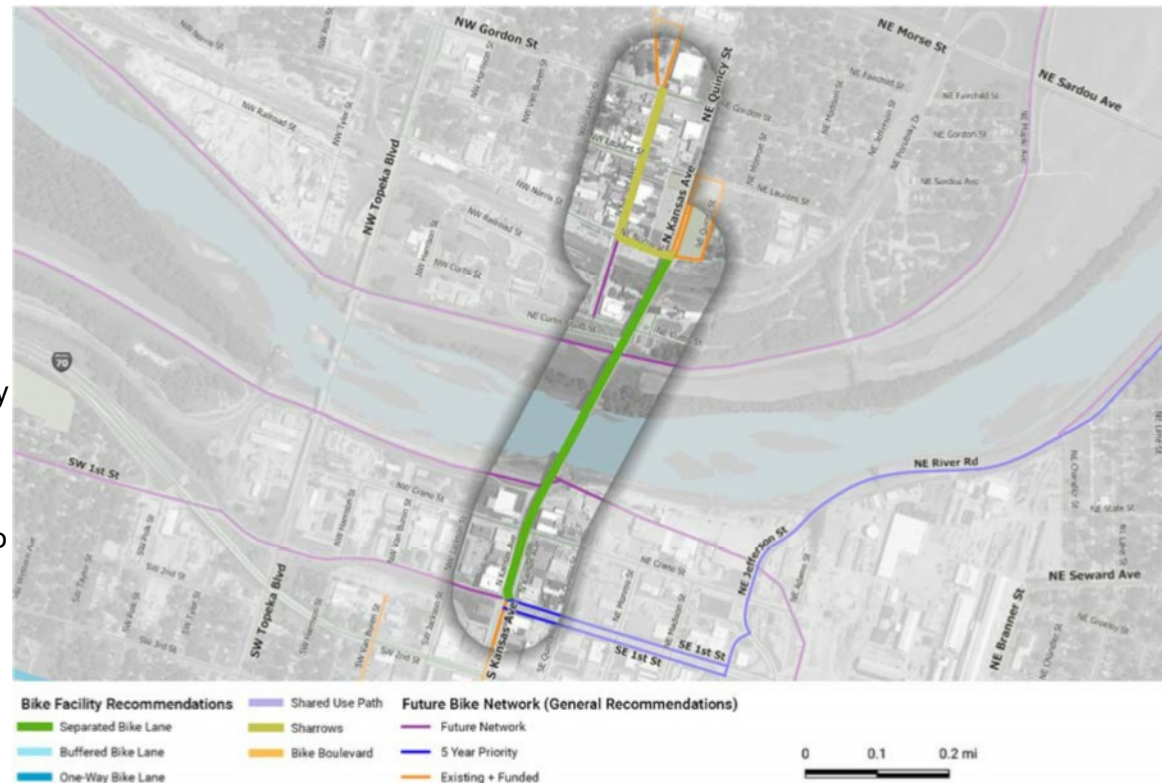
Priority Corridor: Kansas Avenue Bridge, 1st Street to NOTO District (Portion of the North Topeka Bikeway-Route 23)

Overview

This segment connects W 1st Ave downtown to N Laurent Street and the Northern Topeka (NOTO) district and was included as part of the North Topeka Bikeway in the 2012 Plan. NOTO is a redeveloping commercial area that takes advantage of the area's attractive architecture and proximity to Topeka's downtown core. Bicyclists can use this corridor to traverse the river, which currently creates a pinch point for north- south travel. Additionally, this route allows bicyclists to connect to Soldier Creek Trail to the northwest. Finally, there are opportunities to make further connections south along a bikeway on Kansas Avenue though those details will be determined as part of the Polk-Quincy Viaduct project.

Existing Bicycle Facilities

The existing bridge configuration is four vehicular travel lanes (divided, with 2 lanes in each direction). There is shared sidewalk space on the west (southbound) side of the bridge protected by concrete barriers and shared lane (sharrow) markings in the outside travel lanes.



2012 Plan Recommendations

The 2012 Plan recommends sharrows in the short-term and the possible long-term implementation of colored advisory bike lanes.

Fast-Track Plan Recommended Bikeway Concept

This Fast-Track Plan recommends separated or buffered bike lanes on the Kansas Avenue Bridge. The following concepts provide several options for providing greater separation. Option A would require the reducing travel lanes from two to one in both the northbound and southbound directions. Options B and C would require only reducing travel lanes in the southbound direction. These conditions have been informally tested during roadway maintenance and did not have significant impacts on motor vehicle travel. Option B or C where both north and southbound bicycle traffic are on the west side of the bridge is preferred as it allows a smoother transition to Laurent and access to NOTO. These concepts are at a planning level and will require further analysis as part of a full design process. **Cost Estimate:** Option A-\$77,000; Option B-\$980,000; Option C-\$38,000



**Kansas Avenue Bridge - Option B
Southbound**



**Kansas Avenue Bridge - Option C
Southbound**



Kansas Ave Bridge Transitions

North End

- A two-way cycle track, as reflected in Options B & C, allows for a more seamless transition on the North end of the bridge into NOTO. Sharrows on Laurent would guide bicyclists through NOTO and onward toward Central. Option A would require a more complex transition treatment on the north end of the bridge to cross several travel lanes of traffic from the east side of the bridge into NOTO.
- Additional design and analysis of turning movements will be required for this transition.

South End

- For the south end transition, the space currently used for city and county parking shown in the screenshot below could be utilized for bicyclists to navigate under the bridge in order to access a two-way separated bike lane on the west side of the bridge. (Options B & C) Additional connections and bike facilities further South on Kansas will be examined as part of the Polk-Quincy Viaduct project.



Priority Corridor: 4th and/or 5th Avenue from SE Monroe to SW Buchanan (Portion of the 4th Avenue Bikeway-Route 15)

Overview

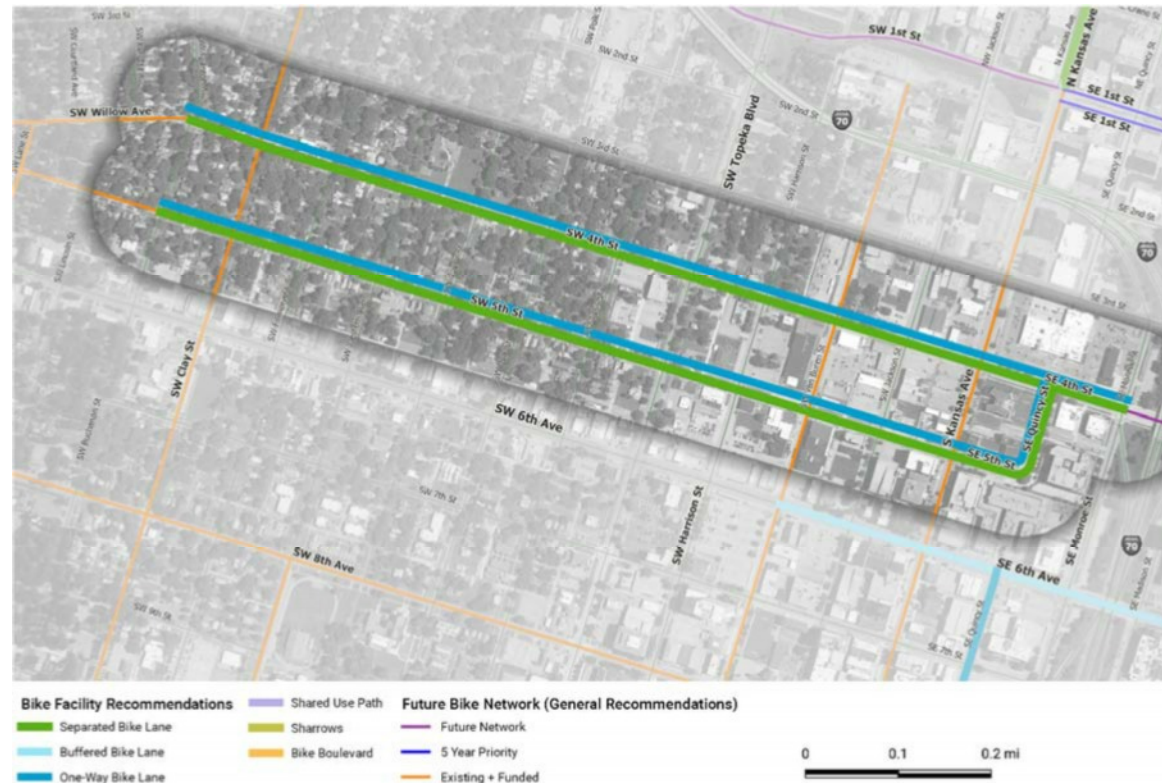
This route connects SE Monroe Street to SW Buchanan Street where 4th becomes Willow Avenue. The route runs east-west along the northern portion of Topeka's central business district. East of Kansas Ave, the roadway is very wide, with street parking on both sides, four through lanes, and a center turn lane. West of Kansas Avenue, each street runs one way and varies from 2 to 3 wide lanes. The corridor is characterized by auto-oriented commercial and government uses on the east side, and residential uses on the west side.

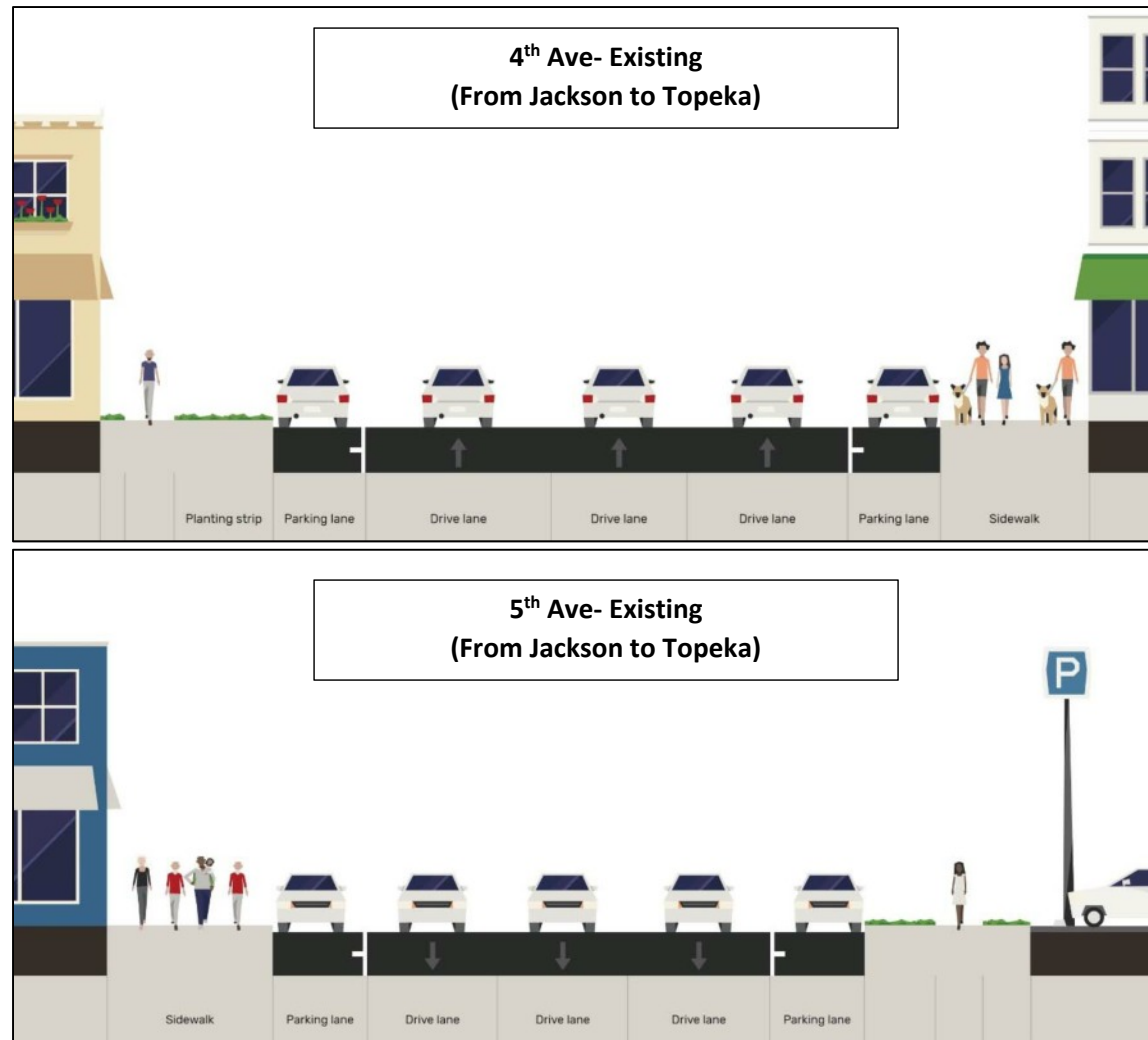
Existing Bicycle Facilities

Shared lane markings (sharrows)

2012 Plan Recommendations

The 2012 recommends a combination of sharrows and bike lanes along this corridor.



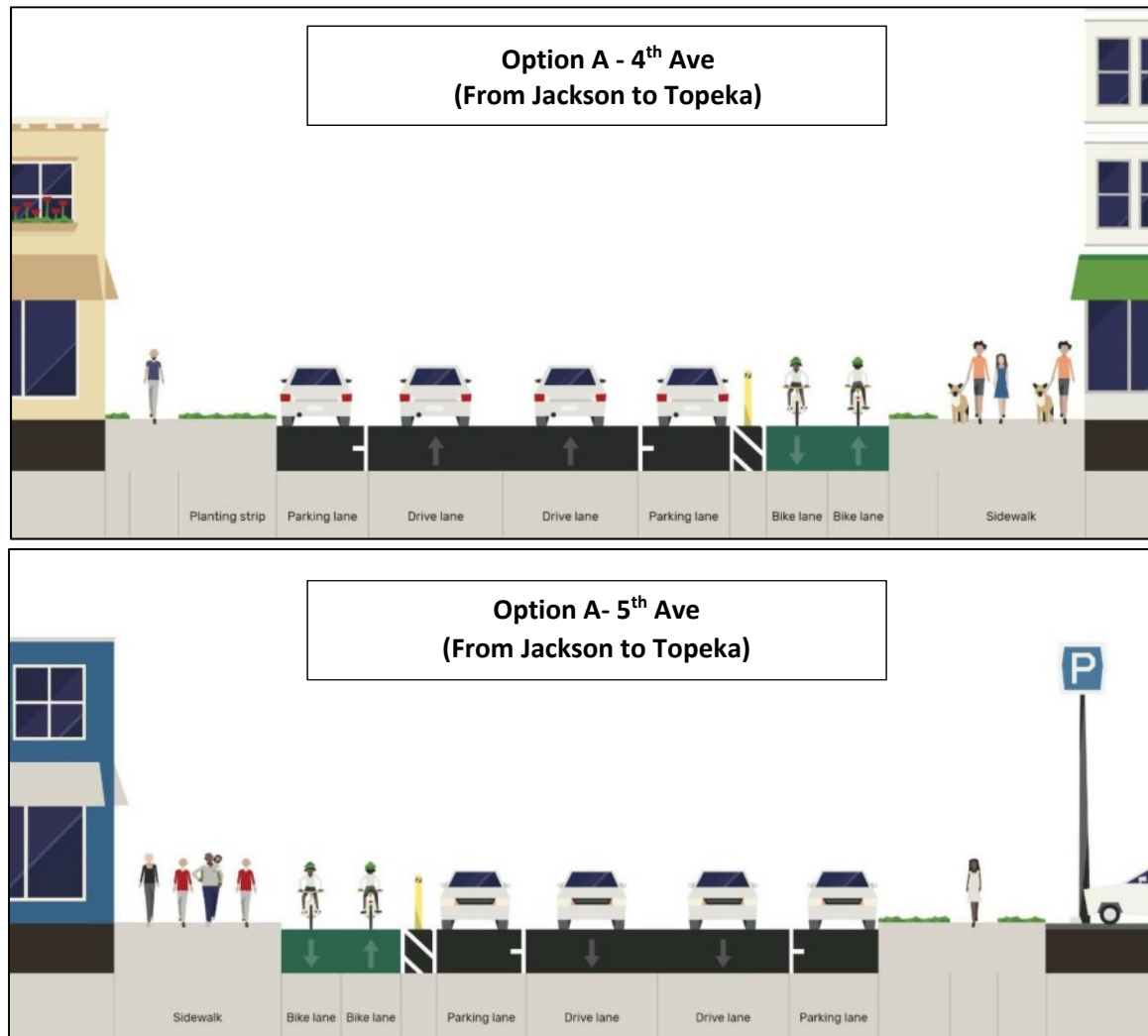


Fast-Track Plan Recommended Bikeway Concept

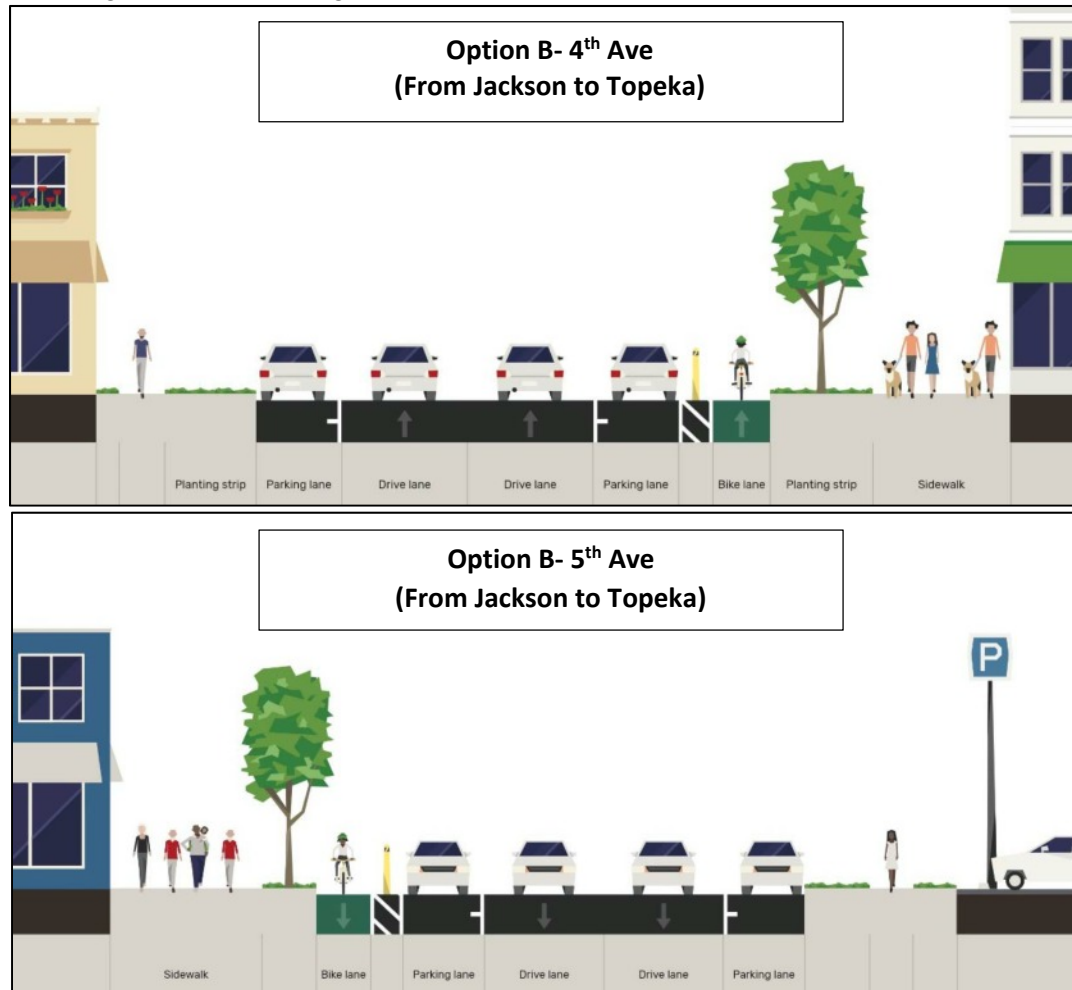
This plan recommends several options for installing separated bicycle lanes on the one-way pair of 4th and 5th Avenue. These options “right-size” the roadways to a more people-friendly scale and allow more greenspace. (West of VanBuren where the roadway

narrows, it may be necessary to further reduce the number of vehicular travel lanes, provide a shared use path or use sharrows.) These concepts are at a planning level and will require further analysis as part of a full design process. The options include:

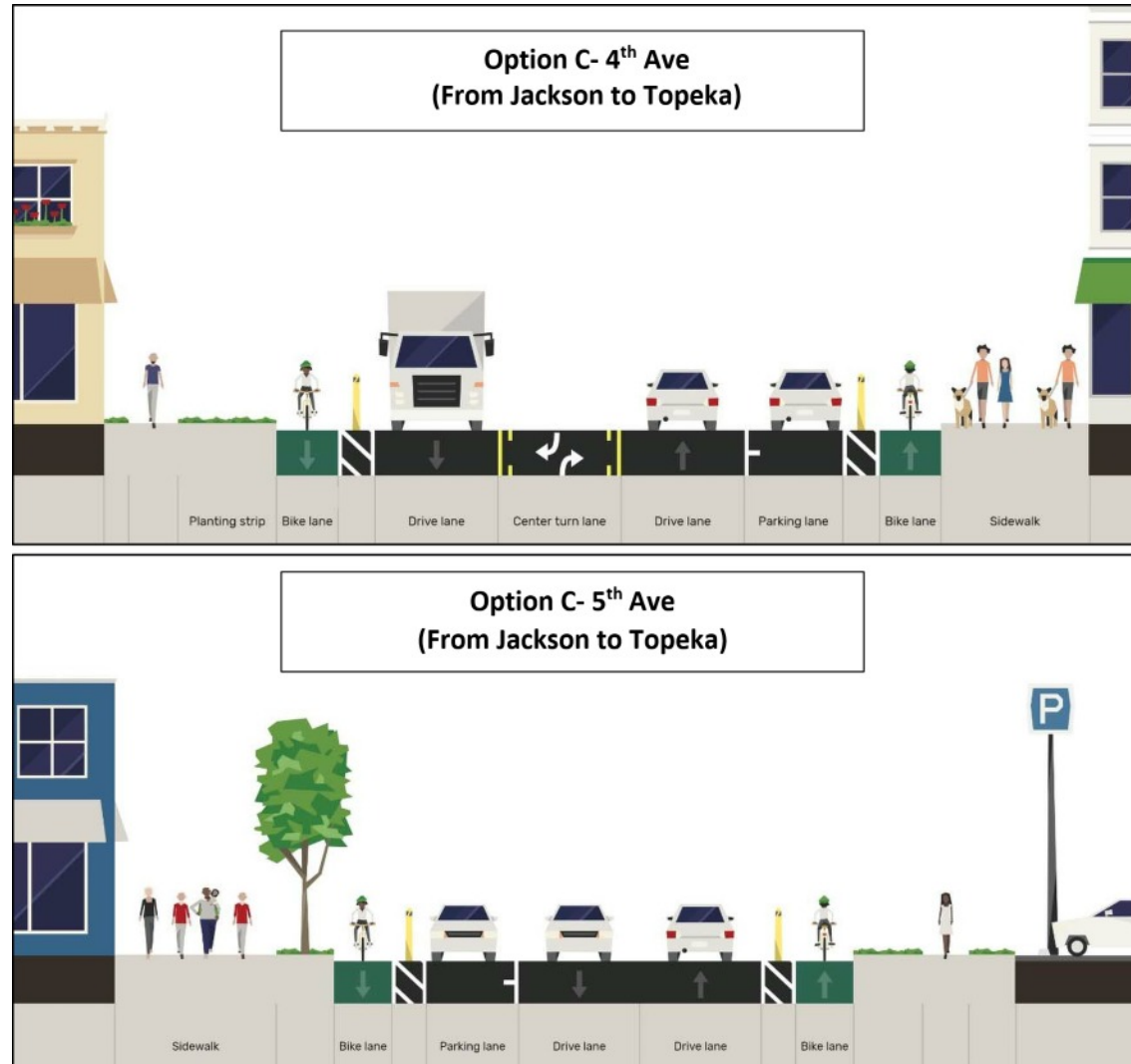
Option A. Two-way separated bicycle lane (cycle-track) along 4th OR 5th Avenues. This option eliminates a vehicular lane and provides additional greenspace while maintaining on-street parking. **Cost Estimate:** \$108,000



Option B. Pair of one-way separated bike lanes on 4th AND 5th Avenues. This option provides one-way bicycle lanes on 4th and 5th Avenues with a new wide tree planting strip. This adds streetscape value where streets currently lack shade and tree canopy while maintaining on-street parking. **Cost Estimate:** \$133,000



Option C. Conversion of the one-way pair to two-way streets with one-way separated bike lanes on 4th or 5th Avenues. A two-way vehicular conversion with bicycle lanes on both sides removes parking on one side but adds traffic calming value and establishes a “standard” for protected facilities in and around downtown. **Cost Estimate:** \$395,000



Priority Corridor: Landon Trail Connector via Monroe, 15th Street to 12th Street (Portion of the 11th Street Bikeway-Route 22)

Overview

This route connects the popular Landon Nature Trailhead with Topeka's central business district along Monroe, passing the Brown v. Board of Education Historic Site and connecting to the 12th Street Bikeway. This improvement would extend the reach of Landon Nature Trail, bringing it into the heart of Topeka. The corridor is characterized by industrial and institutional land uses in the southern section, and commercial land uses in Topeka's central business district.

Existing Bicycle Facilities

None

2012 Plan Recommendations

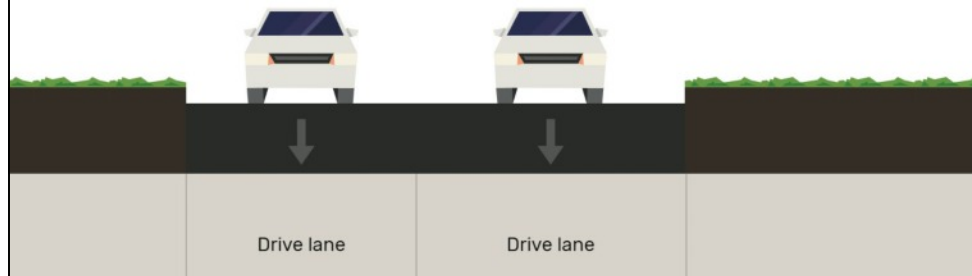
The 2012 Plan recommends a pair of bike lanes on Monroe and Quincy.

Fast-Track Plan Recommended Bikeway Concept

This plan recommends the removal of one traffic lane on Monroe and the installation of a two-way separated bike lane that allows for northbound and southbound bike travel between the Landon trailhead at 15th and the 12th Street Bike Corridor. These concepts are at a planning level and will require further analysis as part of a full design process. **Cost Estimate:** \$234,000



**Landon Connector via Monroe- Existing
(15th Street to 12th Street)**



**Landon Connector via Monroe- Proposed
(15th Street to 12th Street)**



Priority Corridor: SW 8th Avenue, MacVicar Avenue to Gage Park (Portion of the East-West Bike Corridor – Route 1)

Overview

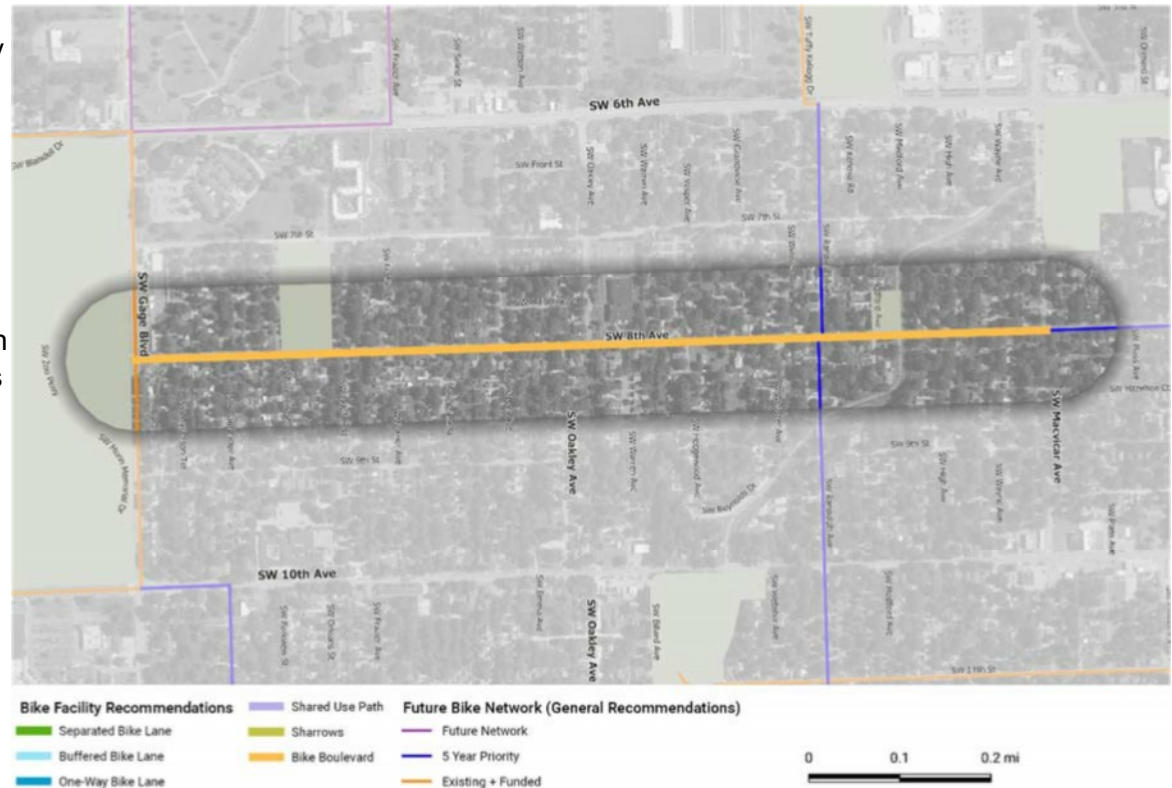
This route connects SW MacVicar Avenue to Gage Park. The route runs east-west slightly west of central Topeka. Bicyclists can use this corridor to connect to several hospitals, Children's Park, Hughes Park, the Topeka Civic Theater and Academy, and Gage Park (which contains the Kansas Children's Discovery Center and the Topeka Zoo, among other attractions). SW 8th Street has two through lanes (one in each direction) with parking generally allowed on both sides. This corridor is defined by mostly low-density residential land uses (although the eastern end of the corridor is a major employment generator, with multiple hospitals).

Existing Bicycle Facilities

Shared Lane Markings (Sharrows)

2012 Plan Recommendations

The 2012 Plan recommends a road widening to provide bike lanes.



Fast-Track Plan Recommended Bikeway Concept

This plan recommends an enhanced bike boulevard with traffic calming measures, bike wayfinding signs and amenities. Some examples of tools and their typical use are provided below. These concepts are at a planning level and will require further analysis as part of a full design process. **Cost Estimate: \$109,000**



RUBBER SPEED CUSHIONS WITH WARNING SIGN ASSEMBLY



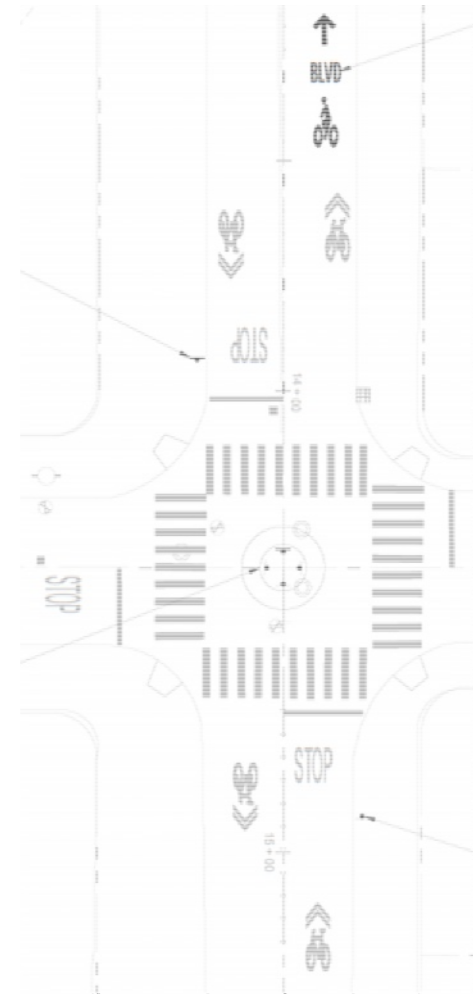
BICYCLE BOULEVARD PAVEMENT MARKING



TRAFFIC CIRCLE CONSTRUCTED WITH TEMPORARY MATERIALS



CURB EXTENSIONS



Corridor Name	15th Street (SW McAlister to Washburn Ave (Portion of 15th Street Bikeway- Route 7)
Overview	This route connects SW McAlister Avenue to SW Washburn Avenue. The route runs east-west through residential neighborhoods slightly north of Washburn University, in the College Hill Area. Bicyclists can use the route to connect to multiple parks and an elementary school. The route has two lanes (one each direction) and is characterized by single-family residential land uses, although it connects to dense student housing on SW Washburn Avenue, and auto-oriented commercial establishments on its east and west side.
Existing Facility Type	Currently, the corridor has no bicycling accommodations.
2012 Plan Recommendation	The corridor is mentioned in the 2012 Plan, which recommended the following two stages of implementation: <ul style="list-style-type: none"> • Initial Stage: Bicycle boulevard with sharrows and identification. • Second Stage: Enhanced bicycle boulevard with traffic calming techniques at key locations, and single-sided parking in striped parking lane.
Fast Track Plan Recommendation	While this plans supports the general 2012 Plan recommendations, the exact facility along this corridor should be determined in coordination with the upcoming roadway reconstruction project on 17 th Street.

Corridor Name	Oakland / Downtown Connector (Portion of Oakland-Potwin Bikeway – Route 5)
Overview	This route connects Kansas Avenue/ SE Quincy Street with Oakland Billiard Park to the northeast. The route runs southwest-northeast, using SE 1st Street, NE Jefferson Street, and NE River Road. Bicyclists can use this corridor to connect between Topeka's central neighborhoods and the existing path system in and around Santa Fe Park and Oakland Billiard Park. The route is characterized by industrial land uses closer to the central business district and residential land uses to the northeast.
Existing Facility Type	Currently, the corridor has no bicycling accommodations.
2012 Plan Recommendation	The corridor is mentioned in the 2012 Plan, which recommended bike lanes on SE 1st Avenue (NE River Road / SE Adams Street to Kansas Avenue) and paved shoulders on NE River Road.
Fast-Track Plan Recommendation	The proposed priority design for this route has yet to be determined but would most likely include a combination of bike lanes, sharrows / paved shoulders (depending on location). Crane should be considered at a possible alternative to NE 1 st and connections to the Polk-Quincy Viaduct and Levee Trail will also be important.

Corridor Name	Chester/Golden Avenue Bikeway, Sardou Ave to 6th Ave (Portion of Golden Bikeway – Route 14)
Overview	This route runs between Oakland-Billiard Park/Sardou Avenue and the Shunga Trail and is an important North-South connector on the east side of the city. This corridor connects neighborhoods, bikeways, parks and schools.
Existing Facility Type	Shared lane markings (sharrows)
2012 Plan Recommendation	The 2012 plan recommends sharrows and some limited traffic calming enhancements or bike shoulders along the corridor.
Fast-Track Recommendation	This corridor has a constrained right-of-way and fairly low motor vehicle volumes. This plan recommends enhancing the current shared lane markings with traffic calming enhancements to encourage slower vehicular speeds that are more conducive to bicycling. In places where sufficient space exists, a shared-use path should be installed.

Corridor Name	Randolph Avenue Bikeway (Portion of Randolph Bikeway – Route 2)
Overview	This route runs between SW 6th Avenue and SW 37th Street. Bicyclists can use this corridor to travel north-south in the western part of the city. Importantly, this route offers connections to the existing Shunga Trail and Big Shunga Park in the city's southwestern section. The street is two lanes wide (one lane each direction) with parking generally allowed on both sides. The route is characterized by mostly residential land uses.
Existing Facility Type	Currently, the corridor has signage and sharrows along its entire length, but no traffic calming has been implemented.
2012 Plan Recommendation	The corridor is mentioned in the 2012 Plan, which recommended the following: <ul style="list-style-type: none"> • Add “first stage” signage and sharrows to the route, with the ultimate design including enhanced bicycle boulevards with traffic-calming techniques (some parking removal). • Between SW 21st Street and TARC, install a shared use path
Fast-Track Recommendation	This Plan calls for the following treatments: <ul style="list-style-type: none"> • SW 6th Street to S 21st Street: Bike boulevard enhancements (traffic calming, wayfinding, crossing treatments), filling sidewalk gaps) • S 21st Street to S 27th Street: Separated Bike Lane or Shared Use Path • S 29th Street to S 33rd Street: Separated Bike Lane (with landscaping or flexposts) • S 33rd Street to S 37th Street: Shared Use Path or bike boulevard enhancements

Corridor Name	SW 10th Avenue / SW 11th Street
Overview	This route would connect SW Frazier Avenue to SW Gage Boulevard by utilizing either SW 11th Street or SW 10th Avenue or a combination of the two. This route connects residential neighborhoods in the western part of the city with Gage Park, as well as with commercial land uses south of Gage Park. This would also provide a connection from the 12 th Street Bike Corridor to Gage Park. SW 11th Street and SW Cambridge Avenue are two lanes total (one in each direction) with parking. SW 10th Avenue is wider and has two total lanes (one in each direction). The street widens to two lanes each direction near the intersection with SW Gage Boulevard. Land uses on the corridor are primarily residential.
Existing Facility Type	Currently, the corridor has shared lane markings (sharrows) and signage on 11 th from Gage to Cambridge and a shared use path on portions of SW 10th Avenue.
2012 Plan Recommendation	The corridor is mentioned in the 2012 Plan, which recommended the following: <ul style="list-style-type: none"> • 11th Street and SW Cambridge Avenue segments: Bicycle boulevard with sharrows, identification, and reduction of stop signs to provide bicycle priority. • SW 10th Avenue segment: Lane reconfiguration with three to five lane taper approaching Gage Boulevard. 10 to 11-foot lane width permits introduction of bike lane to the left of WB to NB right-turn only lane.
Fast-Track Plan Recommendation	Further analysis is needed to determine the exact alignment of this priority corridor and should be coordinated with the 12 th Street reconstruction.

Corridor Name	SW 25th / SW 27th Street
Overview	This route links SW Buchanan Street with two large parks: Dornwood Park and Lake Shawnee Park (the latter has a comprehensive internal bike path network). The route runs east-west in the south-central portion of Topeka. Bicyclists can use this corridor to connect between numerous destinations: the Topeka Country Club; Highland Park High School; Lakewood Park; Rueger Ball Park; Bentley Park; the two parks mentioned above; and the Landon Nature Trail, which connects to Topeka's central business district. The street has two lanes (one in each direction) with center turn lanes on the eastern part. Generally, the corridor contains residential land uses (largely suburban).
Existing Facility Type	Currently, the corridor has bike lanes on 27 th from Burr to California and shared lane markings on the rest of the corridor.
2012 Plan Recommendation	The corridor is mentioned in the 2012 Plan, which recommended bike lanes, or separated bike lanes.
Fast-Track Plan Recommendation	The priority treatment for this corridor is to provide traffic calming and wayfinding, install bike lanes on all sections where space permits, as well as to fill existing sidewalk gaps. These concepts are at a planning level and will require further analysis as part of a full design process.

Trail Connections

Overview

Working list of Trail Connections:

- Connection between Shunga/Dornwood Park and Lake Shawnee
- Connection/Access to the Levee Trails
- Connection from Kansas Ave, to Landon, to Shunga along 15th street
- Connect 6th street to Shunga east of Branner
- Connection to east-west sidewalk on north side near 21st and Western and the fire station
- Connection Shunga the north-south sidewalk on east side of Kansas Ave just north of 21st St.
- Connect Shunga to Murrow Ct./MacVicar
- Soldier Creek Connections at Tyler/Waddell, Grantville, Quincy/Burgess, Broad/Proctor, Independence/Williams
- Connect Hi-crest neighborhood (Butcher Creek) to Landon on 29th Street
- Connect Shunga at Liberty and California in ETN neighborhood
- Connect to Shunga from Jardine
- Connect Shunga Trail to Waterpark and Shawnee County facility at 21st and Urish.
- Connect to Landon at 39th from neighborhood between Kansas and Adams
- Connect Soldier Creek Trail to the North near NW Lyman
- Connections to Shunga near McClure from neighborhood south of 29th and West of Fairlawn
- Connection to Shunga (under street?) at 21st near Clay and old Sonic Drive-In
- Connect Landon to 37th east of the trail ending at Indiana
- Connect Shunga on north side of 10th and Branner
- Shunga at 17th, SE Jefferson, Van Buren, MacVicar, VA Medical Center, SW Sunset Rd, 29th
- Landon at Willow Way, SE Mercier, 33rd/Betty Phillips Park, SE Irvingham, SE 27th, 24th/Lakewood Park, 22nd/23rd
- Addition of proper street signs at all crossings along Landon