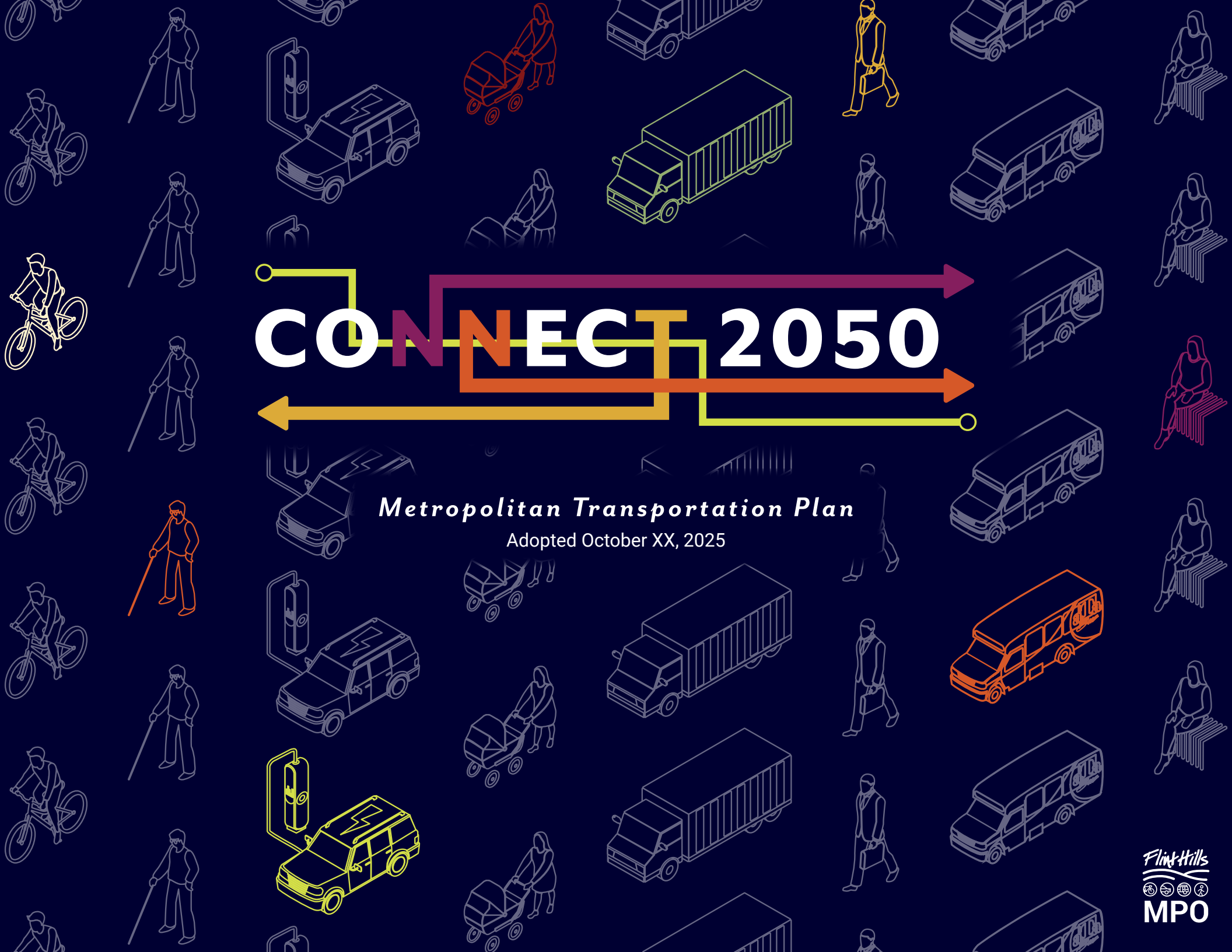

CONNECT 2050

Metropolitan Transportation Plan

Adopted October XX, 2025

Flint Hills MPO

> At the Kansas Department of Transportation, our purpose is straightforward: building and maintaining the transportation system that keeps Kansas moving forward. Our work is centered on People and dedicated to delivering Results that matter—a safer, more reliable transportation system for all Kansans. We are committed to being **Forward Looking**, supporting a strong economy that is ready for the future."
>
> -Calvin Reed
> Kansas Secretary of Transportation

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TITLE VI NOTE

The Flint Hills Metropolitan Planning Organization (MPO) hereby gives public notice that it is the policy of the agency to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, sex, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the MPO receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with the MPO. Any such complaint must be in writing and filed with the MPO's Title VI Coordinator within one hundred and eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discriminatory Complaint Form, please see our website at www.FlintHillsMPO.org.

DISCLAIMER

The preparation of this report has been financed in part through funds from the Federal Highway Administration and Federal Transit Administration, U. S. Department of Transportation, under the Metropolitan Planning Program, Section 104(f) of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

ACKNOWLEDGMENTS

Connect 2050 was a collaborative process that included robust community, stakeholder, and staff participation. Those included below and several other community members had an important role that shaped the content of this document.

POLICY BOARD

- **Geary County Commission,** Keith Ascher
- **Pottawatomie County Commission,** Dee McKee
- **Riley County Commission,** John Ford
- **City of Junction City Commission,** Ronna Larson
- **City of Manhattan Commission,** Peter Oppelt
- **City of Wamego Commission,** Clifford Baughman
- **Kansas Department of Transportation,** Mike Moriarty

- **Federal Highway Administration,** Javier Ahumada
- **Federal Transit Administration,** Gerri Doyle
- **Flint Hills Area Transportation Agency,** Anne Smith
- **Fort Riley Military Installation,** Kelley Paskow

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- **Riley County Planning,** Amanda Webb
- **Junction City Public Works,** Ray Ibarra
- **Manhattan Community Development,** John Adam
- **Manhattan Public Works,** Karen Becker
- **Wamego Planning,** Cameron Matthews
- **Wamego Public Works,** Casey Frisbie
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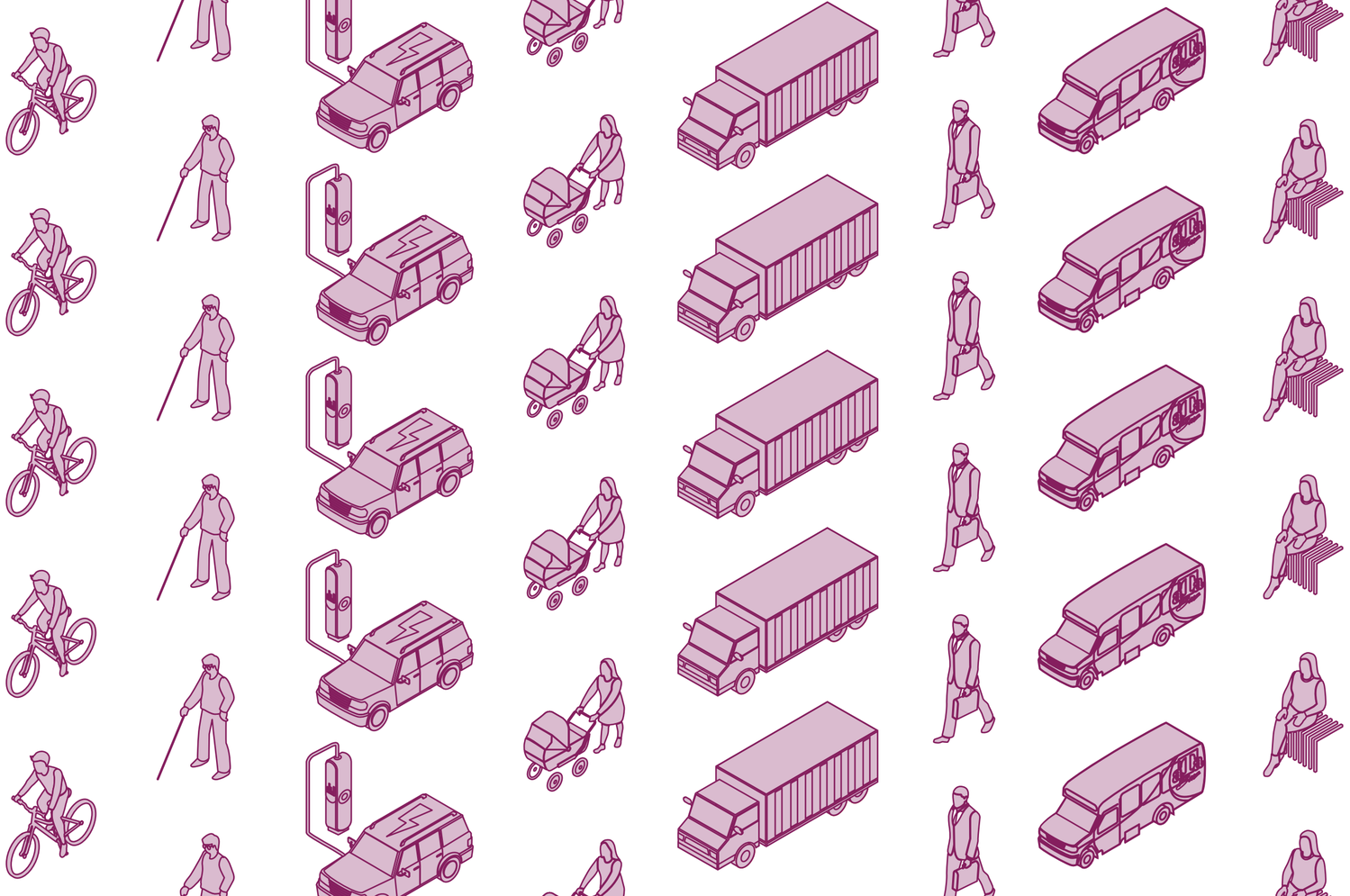
- **Flint Hills Area Transportation Agency,** Anne Smith
- **Kansas State University Transportation,** Adrienne Tucker

- **Federal Highway Administration,** Cecelie Cochran
- **Federal Transit Administration,** Jared Austin
- **Fort Riley Military Installation,** Kelley Paskow
- **Ogden Zoning,** Angela Schnee

TABLE OF CONTENTS



Chapter One

OVERVIEW

Connect 2050 is the guiding document for the future of our region's multi-modal transportation system. It's the blueprint for how we can achieve our goals of safety, preservation, mobility, and prosperity.

Transportation plays an important role in our region and directly impacts community livability. This chapter introduces the role the Flint Hills MPO and the long-range plan play in guiding our transportation system for decades to come.

CHANGES SINCE OUR LAST PLAN

IIJA
Infrastructure Investment & Jobs Act

INFRASTRUCTURE INVESTMENT & JOBS ACT (IIJA)

IIJA, also known as the Bipartisan Infrastructure Law (BIL), became law in November 2021. The law authorizes $1.2 trillion for transportation and infrastructure projects, of which $550 billion is directed towards new investments and programs. IIJA also provides technical assistance to states for federal grant writing and administration.

KANSAS DOT
IKE
THE EISENHOWER LEGACY TRANSPORTATION PROGRAM

KDOT'S NEW TRANSPORTATION PROGRAM: EISENHOWER LEGACY

During the development of the MPO's first plan, the Kansas Department of Transportation (KDOT) was in the middle of implementing T-WORKS, a 10-year, $10 billion transportation program. *Connect 2050* was adopted during KDOT's newest long-range program known as the Eisenhower Legacy Transportation Program (or IKE). This program focuses on preserving our existing roadways and making cost-effective improvements to support economic development.

INFLATION

In the last five years, inflation has had a major impact on the cost of projects. Construction costs have seen the greatest increases with costs jumping 25%-44% across the region. This has had significant impact on local budgets and the amount of projects constructed.

EVRP

ELECTRIC VEHICLES AND RESILIENCE

In 2025, the MPO released the region's first Electric Vehicle Readiness Plan (EVRP). The plan provides information about EVs and includes recommendations tailored to the Flint Hills region based on existing adoption rates and infrastructure. The EVRP findings, together with the planning factors listed in IIJA, have resulted in the addition of Resilience as a new Goal for *Connect 2050*.

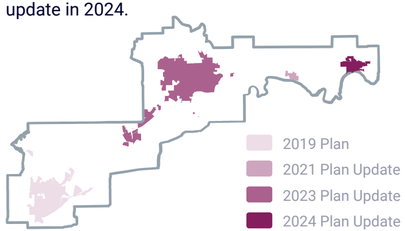
Photo: BikeWalk MHK

BIKE & PEDESTRIAN NETWORK BUILDOUT

Since 2020, 1.4 miles of multi-use paths have been built across the region. Additionally, 1.7 miles of bike lanes and bike boulevards have been built. Importantly, the reconstructed bike lane on N. Manhattan Ave in Manhattan, has created the region's first protected bike lane, setting a standard for safety and functionality. This project was recognized in 2023 as one of the top 20 new bike projects nationwide by People For Bikes.

SAFE ROUTES TO SCHOOL

The MPO has completed plans for all cities in our region in the last six years, beginning with Junction City in 2019 and concluding with Wamego's Sidewalk Master Plan update in 2024.



KANSAS DRIVE TO ZERO (DTZ)

Kansas Drive To Zero is a statewide multi-organization initiative that aims to eliminate fatal and serious injury crashes on all public roads in Kansas. The Flint Hills MPO has served on several support teams during the development of the Kansas Drive To Zero Plan, which replaces the Strategic Highway Safety Plan (SHSP). It incorporates the Safe System Approach, emphasizing multiple layers of safety to prevent crashes and minimize harm.

DRIVE TO ZERO
KANSAS TRAFFIC DEATHS

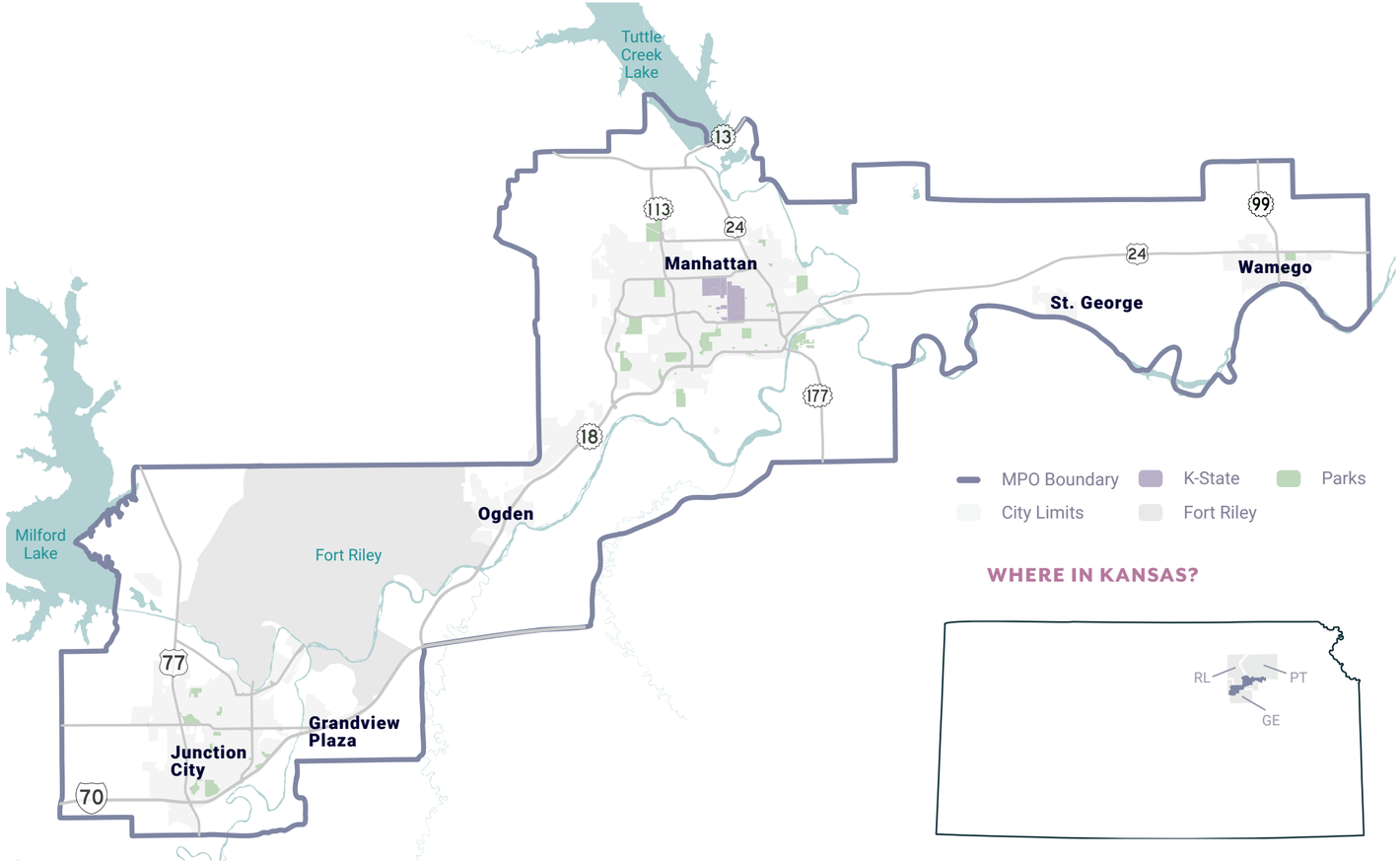
Logo: Kansas Drive to Zero

THE FLINT HILLS MPO

Metropolitan Planning Organizations (MPOs) serve as regional transportation planning organizations in urbanized areas with a population of 50,000 or more people. They are tasked with providing a continuous, cooperative, and comprehensive planning process that includes all modes of surface transportation (vehicles, walking, biking, public transit, and freight).

The Flint Hills MPO serves portions of Riley, Geary, and Pottawatomie Counties, including the Cities of Manhattan, Junction City, Wamego, Ogden, St. George, and Grandview Plaza; as well as the southern portion of Fort Riley Military Installation. The MPO is responsible for providing a forum for regional coordination among these local entities, as well as our state and federal partners, key stakeholders, and residents. Together, we develop policies and programs that guide the development of our transportation system.

The Flint Hills MPO is governed by a Policy Board consisting of elected officials from each of the three counties, the three major cities (Manhattan, Junction City, and Wamego), and a representative from the Kansas Department of Transportation (KDOT). The Policy Board receives recommendations on actions by a staff-level committee, the Technical Advisory Committee (TAC). The Federal Transit Administration and Federal Highway Administration serve as non-voting members on both the Policy Board and TAC.



FLINT HILLS MPO

114,191
residents

247
square miles

974
centerline miles of roadway

741
million vehicle miles traveled
(2023)

OUR MISSION

Provide a **regional** forum to coordinate, encourage, and promote a **safe, efficient, affordable,** and **integrated** transportation system for all users; in support of **livable communities** and **economic competitiveness**.

CONNECT 2050 PURPOSE & PROCESS

PURPOSE

The development of a long-range transportation plan is one of the core responsibilities of an MPO. Every five years, MPOs must facilitate the process of evaluating existing conditions, making financial projections, and working through project prioritization to identify the region's vision and priorities for the next twenty-five years. From a regulatory perspective, the long-range transportation plan is one of the key products an MPO must produce per federal regulations. From a practitioner standpoint, long-range planning serves as the foundation for responsible decision-making when it comes to implementing the region's future transportation system.

Connect 2050 is an update to our 2020 long-range plan, *Connect 2040*, which itself built upon the *Flint Hills Transportation Plan* to set the vision for our transportation future. It focuses on how our past decisions have shaped our current system and sets a direction for what transportation should be over the coming decades. *Connect 2050* is intended to be concise and educational, walking the reader through the story of our region's historical transportation decisions and where those might lead us come the year 2050. This plan takes a deep-dive into the historical growth patterns of our communities, how we have invested in our transportation system, and analyzes the overall health of our communities from a transportation perspective.

PROCESS

Connect 2050 was developed using a data-forward and collaborative process. It builds on previous efforts and plans, our current transportation assets, and public input to create a realistic plan to achieve our transportation goals. A variety of tools, data sets, and feedback was gathered to help identify the region's needs and opportunities.

1 WHERE WE ARE TODAY
Understanding the existing system through data analysis and citizen feedback.

2 WHERE WE WANT TO GO
Establishing goals, identifying needs, and engaging the public to achieve our vision.

3 HOW WE ARE GOING TO GET THERE
Identifying financially realistic investments and priorities for our future.

OUR REGIONAL GOALS

The goals developed for *Connect 2050* provide guidance on how to attain our vision for a transportation system that enhances mobility, strengthens communities, and generates prosperity. To measure our progress, a variety of performance metrics and corresponding targets were established.

SAFETY
Provide a safe and secure multi-modal transportation system.

PRESERVATION
Invest in the preservation and maintenance of our existing transportation infrastructure and assets.

MOBILITY
Maintain system performance and enhance modal choice for the efficient movement of people, goods, and freight.

PROSPERITY
Create an affordable, sustainable, and integrated transportation system for all users.

RESILIENCE
Promote a transportation system that adapts to change, recovers from disruption, and advances environmental sustainability.

FEDERAL PERFORMANCE METRICS

SAFETY

- Number of fatalities
- Rate of fatalities per 100 million Vehicle Miles Traveled (VMT)
- Number of serious injuries
- Rate of serious injuries per 100 million VMT
- Number of non-motorized fatalities and serious injuries

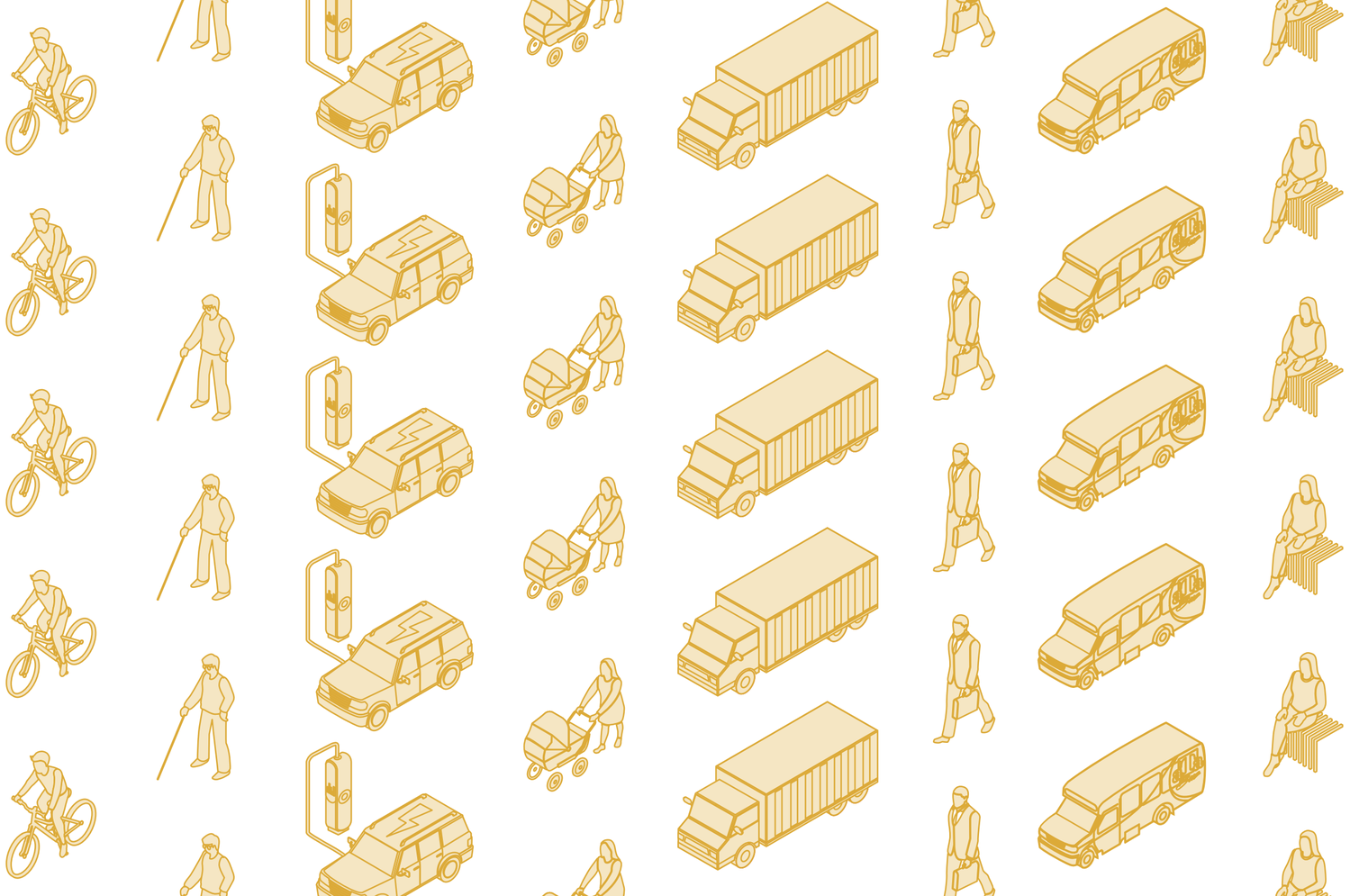
PRESERVATION

- % of bridges in "good" and "poor" condition
- % of interstate and highway pavement in "good" and "poor" condition
- % of public transit vehicles that have met or exceeded their Useful Life Benchmark

MOBILITY

- % of the person-miles traveled on the Interstate and highways that are reliable
- Truck Travel Time Reliability (TTTR) Index on Interstate System

We are waiting for further guidance on performance measures from the US Department of Transportation for Prosperity and Resilience.



Chapter Two

OUR REGION TODAY

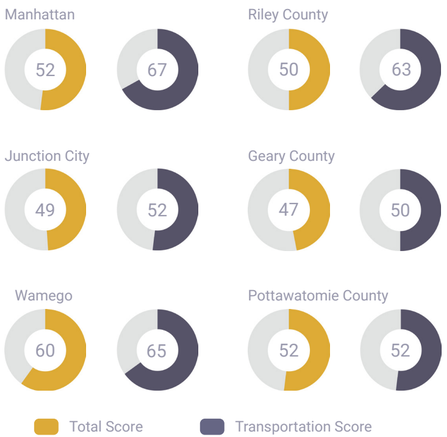
Our transportation network can provide an instant gauge for how our communities value livability. Transportation is the backbone to our economy and key to a prosperous future. Understanding our current assets and shortcomings allows us to understand where we are today and how we might alter our decisions for where we go in the future. If we can learn from our past, we can change the course of our future.

This chapter will review our region's existing conditions, examine historical trends, and provide a snapshot of the transportation system today. As we look at where we have been and the challenges it has created, we must also begin to look at how we can modify our growth patterns so we can continue to be a thriving, economically-sound place to live, work, learn, and play.

TRANSPORTATION & LIVABILITY

WHAT IS A LIVABLE COMMUNITY?
A community tailored to the needs of all residents.

AARP LIVABILITY SCORES



Livability can be measured using a variety of metrics, but transportation is included as a criterion in nearly all evaluations. Transportation affects our daily lives in ways many of us don't consider. It contributes to our cost of living, our overall health, our decisions on where to work or live, and impacts community equity.

CHANGING DEMANDS

Despite the post-World War II development patterns that created vehicle-dependency for many communities, a shift in transportation preferences is emerging amongst the youngest and oldest generations. Younger generations are less interested in driving than the generations that came before them,[1] electing to live in more dense communities for ease of access to destinations and the sense of place. This interest makes transportation choice and place-making even more important for attracting and retaining the future workforce. Older Americans are interested in similar types of environments; choosing to live in walkable areas for increased mobility and livability that allow aging-in-place.[2]

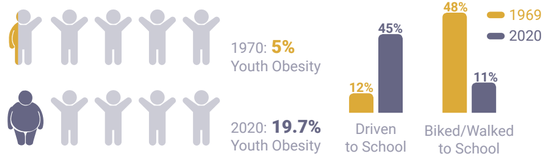
[1] Highway Statistics Series, Federal Highway Administration, 2023
[2] AARP Livability Index
[3] National Center for Safe Routes to School, 2011
[4] Photo: Richmond Times-Dispatch Collection, The Valentine
[5] Photo: Source: Valerie, Shocking Tulsa

HEALTH IMPACTS

Over the last half-century, the number of people commuting to work or school by walking or biking has decreased significantly. During this time, there have been startling increases in childhood obesity rates, chronic diseases, and a decrease in life expectancy. While these aren't directly attributable to changes in transportation behavior or community growth patterns, both transportation and land use can serve as ways to reverse these trends.

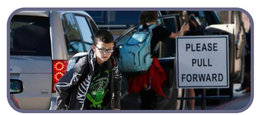
OBESITY ON THE RISE[3]

Experts argue that childhood obesity may be partly caused by the rising number of children who do not walk or bike to school.



SCHOOL CULTURE

THEN[4]

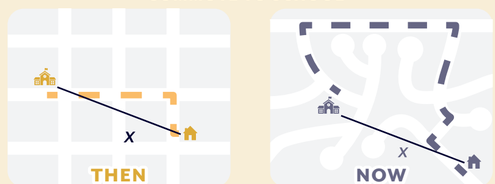


NOW[5]

LAND USE IMPACTS

Development patterns directly impact transportation efficiency and how people commute. For example, with a traditional grid-like roadway network, a quarter mile walk to school takes 5 minutes; whereas it might take a person three times as long to travel by foot in a more suburban-style development. When street and sidewalk connectivity are lacking, walking and biking become more challenging and time consuming, leaving traveling by vehicle the most practical option.

COMMUTE TO SCHOOL



5 minute walk - ¼ Mile

15 minute walk - ¾ Mile

REGIONAL POPULATION TRENDS

POPULATION CHANGES OVER TIME

The last ten years have seen a redistribution of people from the different communities in the MPO area, with some communities losing residents and others gaining. Junction City's population peaked in 2012 and has steadily declined since. As the largest city in the region, Manhattan's trend line slants upward, but has leveled off in recent years. The smaller towns served by the MPO, Ogden and Grandview Plaza, have also declined slightly, with a combined 2023 population of 3,258 people (about 3.4% of our region's total population, down from 4% in 2014). Wamego's population has grown at a steady rate of about 5% in the last ten years.

Figure 2.1: Local Jurisdictions

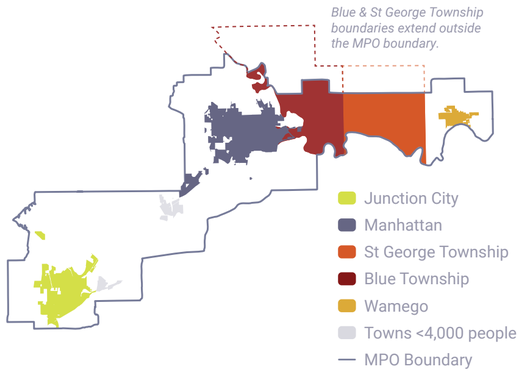


Figure 2.2: Annual Population by Jurisdiction since 1990

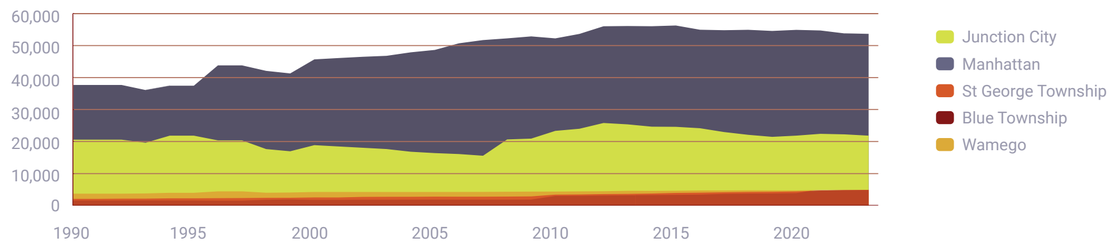
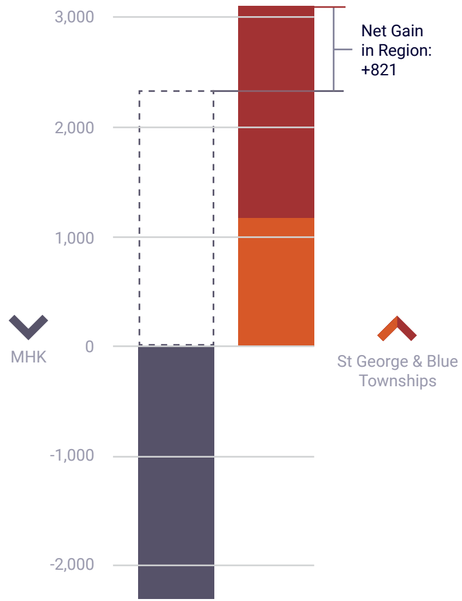


Figure 2.3: Manhattan Urban Area Population



While Manhattan's population has declined slightly, Blue Township and St. George Township are the fastest-growing residential areas in our region, with their populations increasing by nearly 31% and 23% respectively in the last decade.

These changes have resulted in a net population gain of 831 people, about 1% growth, for the Manhattan urban area. Rather than growth or decline, we can think of the last ten years as a redistribution of people within the region.

Note: year-to-year population estimates for Junction City, Manhattan, and Wamego were provided by the Kansas Division of the Budget's Certified Population Data. Green Valley Area population estimates were provided by Pottawatomie County's Planning and Zoning office.

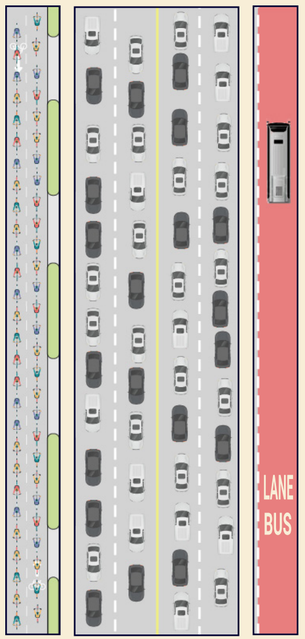
LAND USE & TRANSPORTATION DEMAND

Land use and development patterns directly influence the transportation needs and demands within a community. More compact development easily supports a multi-modal network to move people more efficiently over shorter distances. The farther out from the center of a community that development takes place, the larger the role vehicles take on in transporting people. Figure 2.5 depicts the relationship between land use density and transportation.

As demonstrated in Figure 2.4, creating multi-modal transportation opportunities can increase the amount of people we can move on a downtown roadway. Not not only does this allow for a more efficient transportation system, but it also appeals to a wider audience to attract and retain residents from all social classes, ages, and abilities.

Figure 2.4: Space needed to move people by different modes

Space needed to move **50 people** by bike, vehicle, and bus



Space needed to move **75 people** on a multi-modal road

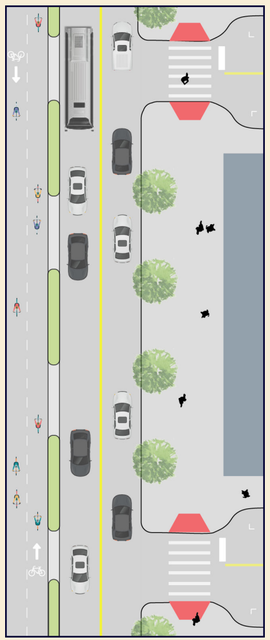
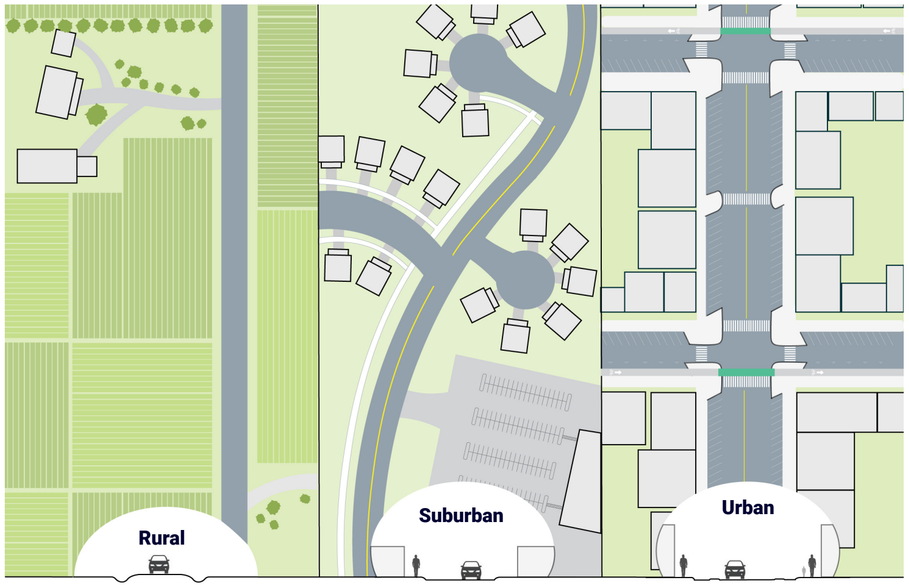
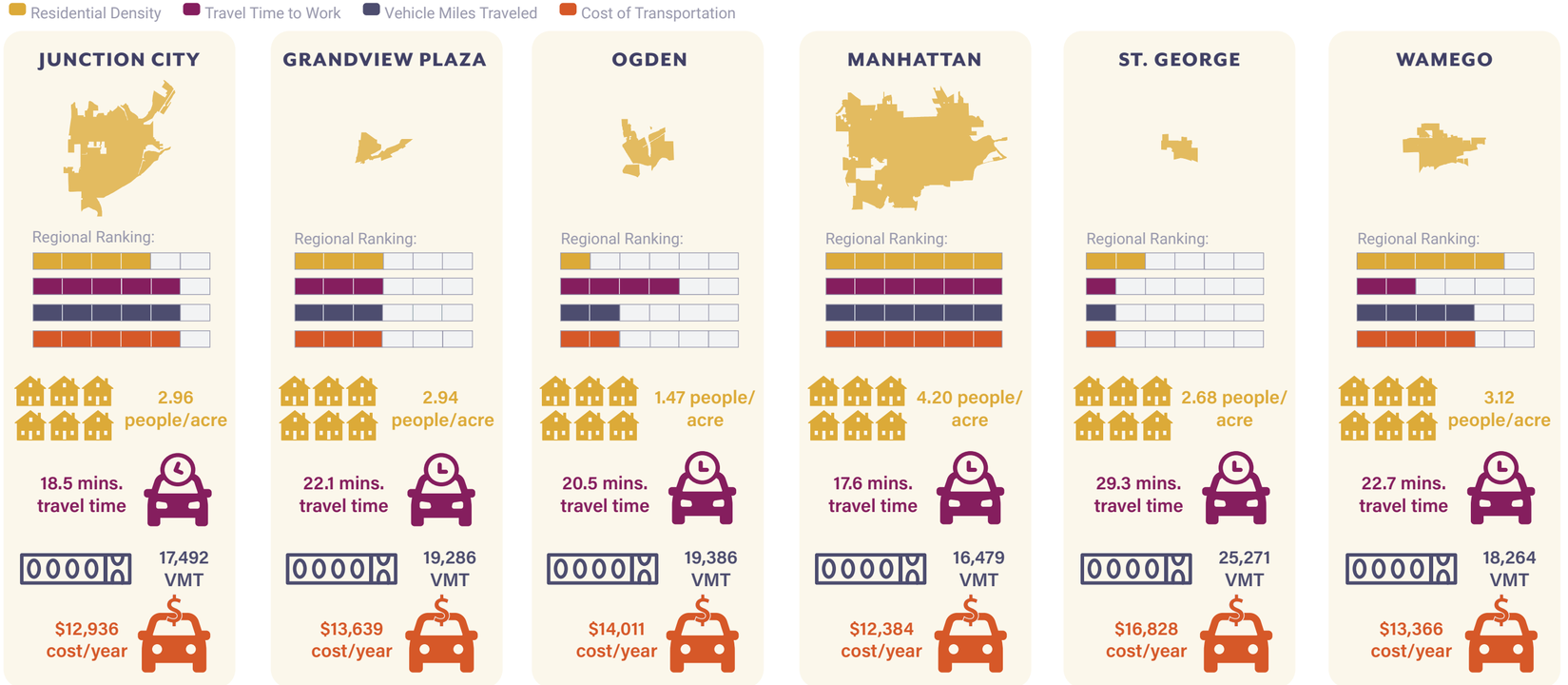


Figure 2.5: Roadway design for varying development patterns



Roadway built for:	Vehicles	Vehicles, pedestrians	Vehicles, pedestrians, bikes, buses
Development density:	Low density, spread out development	Medium density, clustered development	High density, close development
Travel time:	Longer (over 20 minutes)	Medium (15-20 minutes)	Shorter (less than 10 minutes)
Posted speed limit:	High (50mph)	Medium to low (30-40 mph)	Low (20-30mph)

Figure 2.6: Correlation between Residential Density and Household Impacts



DENSITY AND TRANSPORTATION

There is a correlation between land use density, travel time, the number of miles a household drives each year, and the annual cost of transportation for households. To summarize, the further a household lives from the center of our region, the longer travel time they have to get to work, the more miles they drive, and the more they pay each year on out-of-pocket transportation costs. Figure 2.6 summarizes these relationships and provides a regional ranking to depict how each community scores in each of these categories.

In the Flint Hills region, the average household spends more on transportation than on housing. This significant personal investment creates an expectation regarding acceptable travel times, pavement condition, or availability of parking. As the rest of *Connect 2050* will show, often times many of the perceived inadequacies with our roadway network are just that: perceived. In reality, our transportation system performs well in all of the categories above.

However, not every household in our region has access to a vehicle. Over 2,100 households in our communities rely on walking, biking, public transit, or some other form of transportation to go about their day-to-day lives. To adequately serve all residents and transportation needs in our community, we must also improve our multi-modal transportation system.

2,166 households
don't have access to a vehicle

Sources: Population figures are 2023 Kansas Certified Populations. Acres based on 2020 boundaries. Travel times from Data USA. VMT and vehicle ownership cost per year from Housing + Transportation Index.

ROADWAYS PER PERSON

To highlight the relationship between development and the road network needed to support it, analysis was completed comparing our communities' roadway miles, land consumption, and population trends over the last three decades.

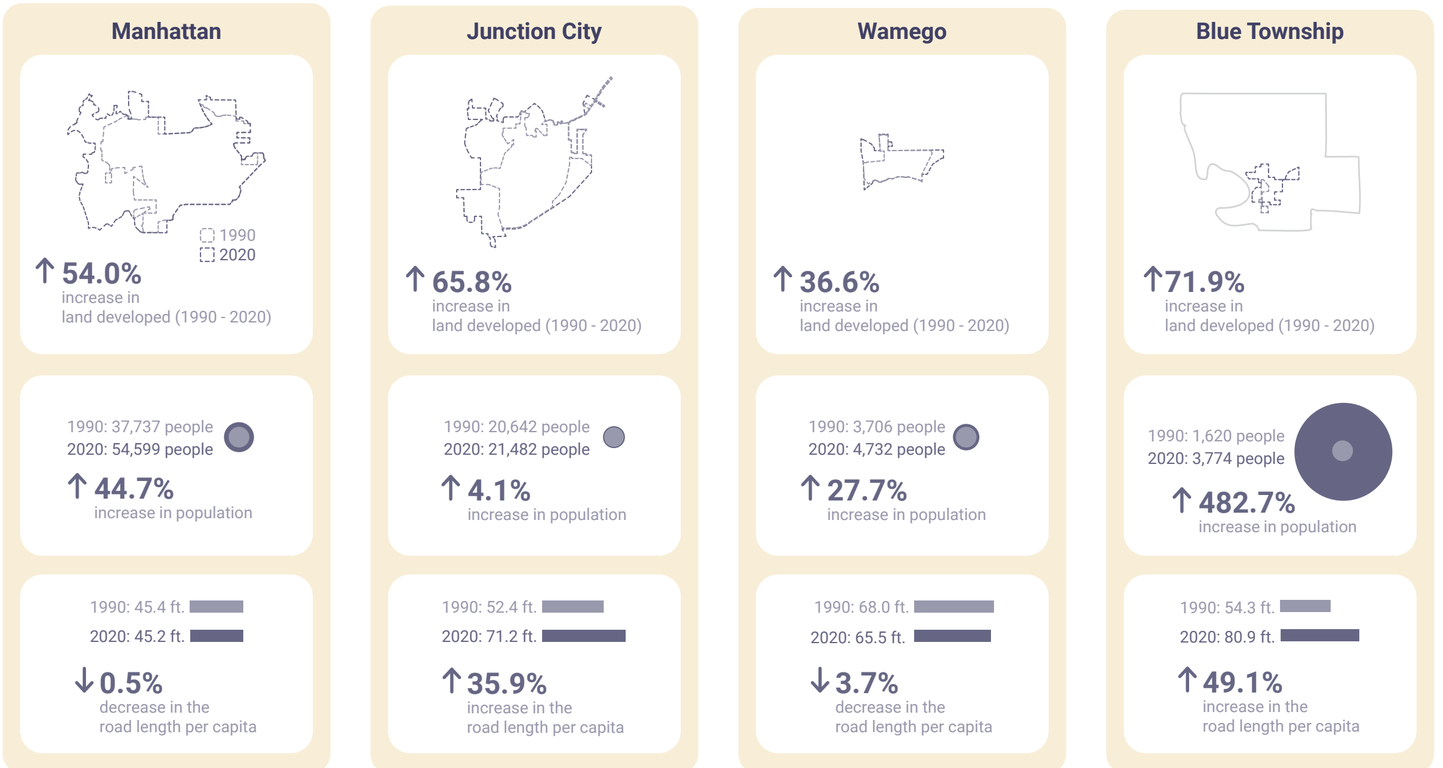
Our region is very diverse in the amount of development it has experienced in the last thirty years. For Manhattan and Wamego, while there has been an increase in the acres of land consumed, it has stayed on pace with the change in population. This has led to a reduction in the number of roadway feet per resident. In Junction City, the change in population has slowed, yet development continued on the western edge of town, significantly increasing the number of feet of roadway per person. The Green Valley Area has experienced tremendous growth in both land developed and population, bringing the overall feet of roads per capita down. However, the focus of this analysis was on paved roads due to the higher construction and maintenance costs. Given these parameters, the Green Valley area has experienced a large increase in the feet of paved roads per person.

Ideally, if our land consumption stays on pace with population growth, the number of roadway feet per resident shouldn't change significantly over time. When population growth fails to keep up with increased infrastructure, a larger financial burden is placed on existing residents. For each additional mile of roadway added, a community must find additional dollars to help maintain and preserve that roadway.

CHAPTER 6: WHAT WE CAN AFFORD

We will no longer be able to afford to maintain or preserve our existing transportation system using current funding sources in the coming years. These constraints will force us to evaluate where new development occurs, how we accommodate growth, and which modes of transportation we invest in.

Figure 2.7: Roadway Feet Per Capita



GEOGRAPHICAL AND ENVIRONMENTAL FEATURES

As mentioned previously, our transportation system is directly impacted by where and how we choose to develop. However, our development opportunities can also be influenced by factors outside of our control like geographical restrictions or environmentally sensitive areas. Our communities surrounding Fort Riley have an even greater responsibility to limit development occurring in certain areas that would prevent the installation from conducting its training missions.

The Environmental Protection Agency sets National Ambient Air Quality Standards for pollutants considered harmful to public health and the environment. There are no air quality monitors in our region. The closest monitor is located in Topeka and is currently in attainment for all pollutants.

IIJA created the Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT), which places an emphasis on the Resilience of transportation infrastructure. Maintaining a balance between a vibrant economy and a healthy environment is key to keeping our region's livability and quality of life. As such, Figure 2.8 identifies geographical barriers and environmentally sensitive areas. These factors should be considered and reviewed during project development.

Our region's land use, shown in Figure 2.8, is mostly comprised of agricultural and open space, largely encompassing our environmentally sensitive areas. Protected areas include conservation easements, recreation areas, and conservation areas.

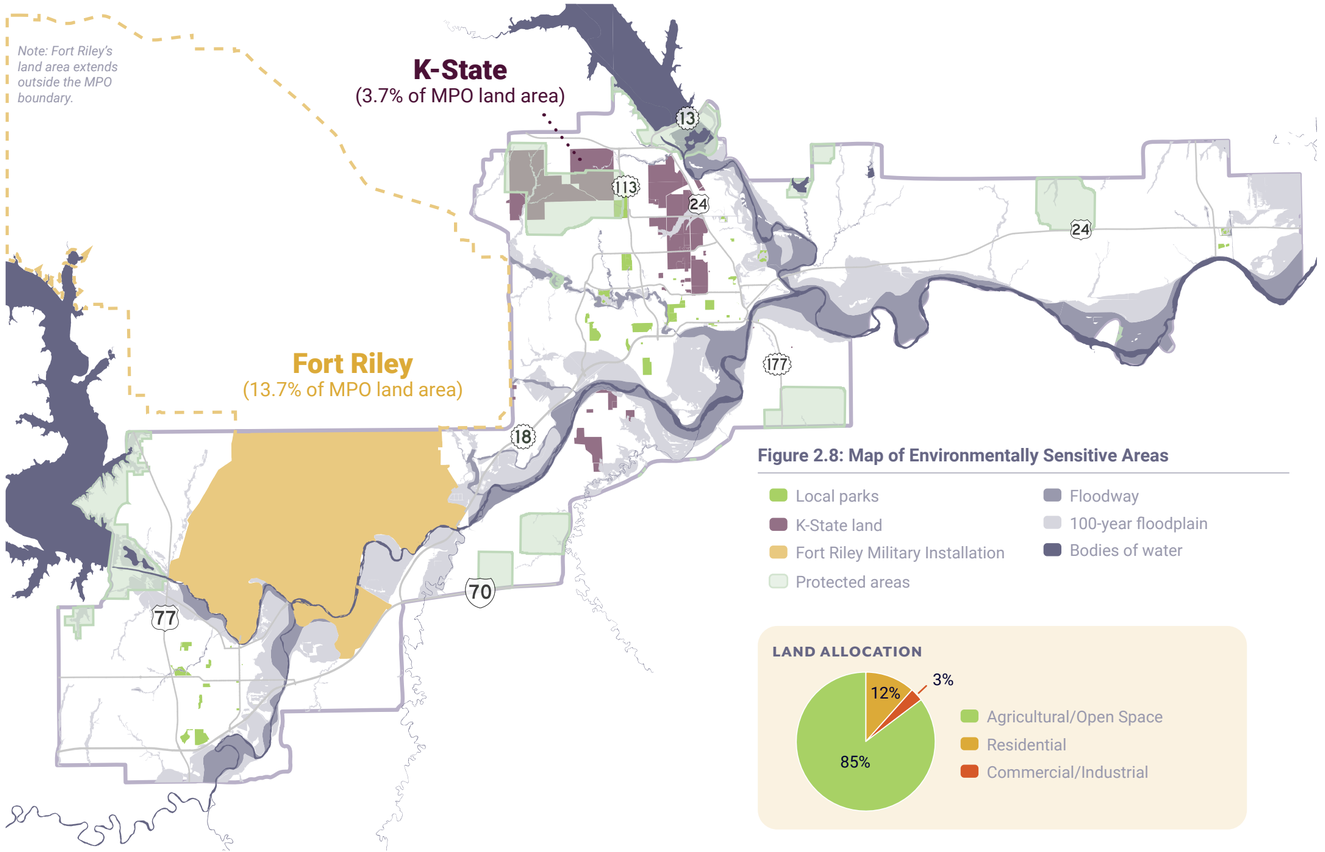


Figure 2.8: Map of Environmentally Sensitive Areas

OUR TWO MAJOR INSTITUTIONS

Our region has two major institutions: Fort Riley Military Installation and Kansas State University (K-State). These institutions significantly influence our region's population, economy, and transportation system. Many of the fluctuations in our communities' populations (Figure 2.2) can be attributed to student enrollment or military personnel stationed at Fort Riley.

K-STATE

K-State students comprise nearly half of the population in Manhattan. When classes are in session, students directly increase traffic volumes, transit ridership, and vehicular crashes. The University is the largest employer in Manhattan and is located in the center of the city. The roadways surrounding the University are some of the most capacity-strained roadways in the region. Efforts have been made to improve additional access to campus by implementing public transit and improving bicycle and pedestrian connections.

FORT RILEY

Fort Riley Military Installation is home to the Big Red 1 and has close to 15,000 active military personnel. It is the largest employer in the region, employing nearly 5,600 civilians and contractors. As a $2 billion dollar economic generator for the State of Kansas, it is important to support the transportation around the installation. Bounded by highways on all borders, the installation is accessible primarily by vehicle. Although the ATA Bus provides demand response transit service to Fort Riley, this service is limited.

ROADWAY NETWORK

Our region has a total of 2,065 lane miles of roadway responsible for the safe and efficient movement of people and goods. Our roads are categorized into several classes based on the role they play in our transportation system. Our **Interstates** (I-70) and **Freeways** (think K-18 between Manhattan and I-70) are intended to carry people at high speeds for long distances. On the opposite end of the spectrum we have our local roads that provide us direct access to our homes. Our **Local** roads are some of our safest roads and make up a vast majority of the total miles of roadways.

Arterials carry large volumes of traffic across our communities. **Collectors** are those roads that connect our arterials to our local neighborhood streets. The **local** roads carry us directly to many of our houses. **University** roads are along the perimeter of or directly on the K-State campus and are responsible for serving a variety of transportation modes. **Downtown/ Aggieville District** streets often accommodate on street parking and have higher volumes of pedestrians.

Roadway Type	Lane Miles	% of total
Interstate	73	4.3%
Freeways/Highways	289	17.2%
Arterials	82	4.9%
Collectors	390	23.2%
Locals	1088	49.4%
University	10	0.6%
Downtown/Districts	5	0.4%
Total	**1680**	**100%**

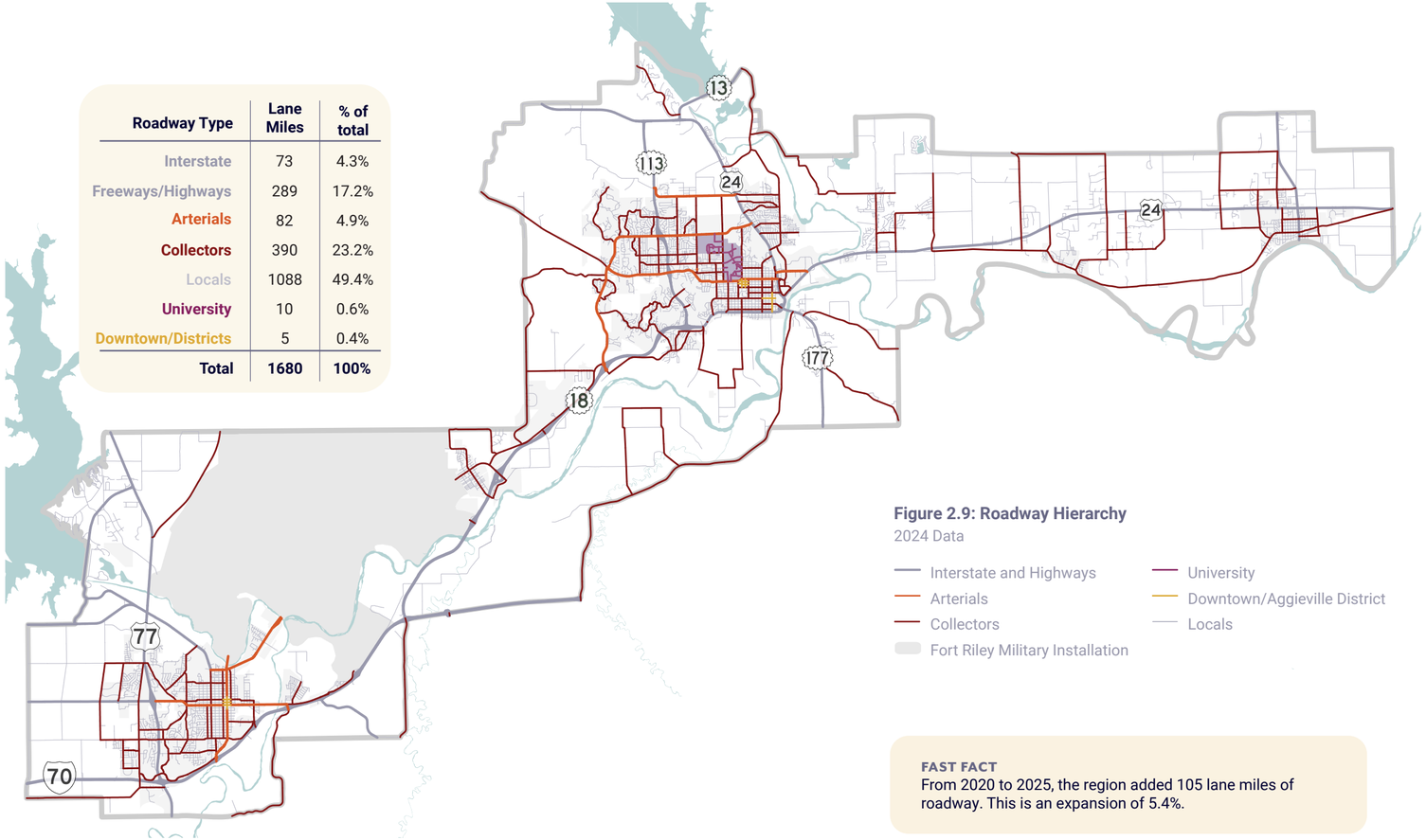


Figure 2.9: Roadway Hierarchy
2024 Data

FAST FACT
From 2020 to 2025, the region added 105 lane miles of roadway. This is an expansion of 5.4%.

QUICK FACTS

974
centerline miles of roadway

2,065
lane miles of roadway

741
million vehicle miles traveled *(2023)*

97.8
miles of bikeways

391
miles of sidewalks

152
public transit bus stops

ROADWAY RELIABILITY

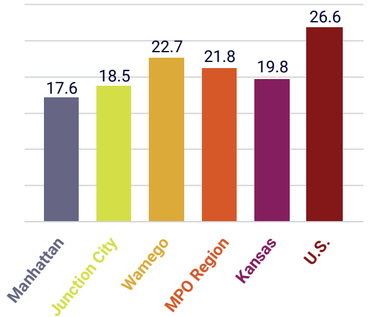
Our region's roadways are incredibly efficient and do not experience congestion like most metropolitan areas. **Our region's average travel time to work is 21.8 minutes,** which is slightly above the state average but well below the national average. While longer commute times can be a reflection of roadway congestion, they are also dependent upon where people choose to live and work. In our region, it is common for someone to live in one community and work in another, which increases the average commute time.

COMMUTING PATTERNS

Figure 2.11 shows the commuting patterns for our region, allowing visualization of how many people commute in or out of each of our communities. The yellow arrow ( ) indicates the number people not living in the community that travel in for work. The orange arrow ( ) represents the number of people living in that community that travel to a different community for work. The circle represents those that both live and work in the same community.

Note that St. George, which has the longest commute time, has the largest percentage of people traveling to a different community to work, while Manhattan has the lowest commuting time and the largest percentage of people both living and working in the same community.

Figure 2.10: Comparison of Travel Times in Minutes
USA Data, 2022 ACS

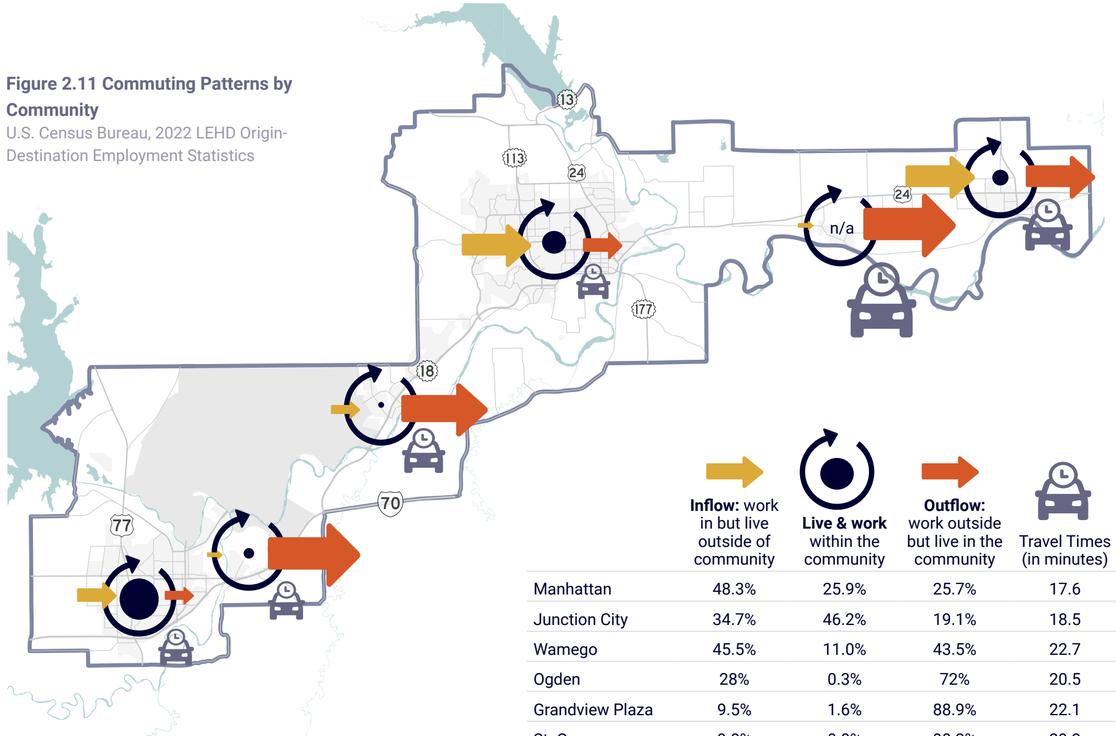


INTELLIGENT TRANSPORTATION SYSTEMS

One of the ways to improve roadway reliability and commute times is to improve efficiency along our signalized corridors. Intelligent transportation systems (ITS) allows technology to improve both the safety and efficiency along corridors. ITS has a variety of applications such as coordinating signals, detecting vehicles at signalized intersections, or providing real-time travel information, to name a few.

The Flint Hills Regional ITS Architecture outlines all ITS-related infrastructure for the region, including an inventory of existing ITS assets and planned projects.

Figure 2.11 Commuting Patterns by Community
U.S. Census Bureau, 2022 LEHD Origin-Destination Employment Statistics



	Inflow: work in but live outside of community	**Live & work** within the community	**Outflow:** work outside but live in the community	Travel Times (in minutes)
Manhattan	48.3%	25.9%	25.7%	17.6
Junction City	34.7%	46.2%	19.1%	18.5
Wamego	45.5%	11.0%	43.5%	22.7
Ogden	28%	0.3%	72%	20.5
Grandview Plaza	9.5%	1.6%	88.9%	22.1
St. George	9.8%	0.0%	90.2%	29.3

ROADWAY CAPACITY

To evaluate the efficiency of our roadways, we develop a travel demand model that measures the level of congestion on our roads. Congestion is measured using level of service (LOS) on a scale of A to F, with an LOS of E or F representing heavy congestion. For our most heavily used roadways, an LOS of D is considered acceptable.

In our region, only 0.2% of roadways are operating at a LOS E or F for more than two hours a day; most of which are along US-24 between McCall Road and South Port Drive, as well as some segments directly adjacent to K-State's campus (Figure 2.12). There are a few additional roadways that operate at an LOS E or F between one and two hours a day. This is not surprising as a significant number our daily trips are made during our morning and evening commutes.

It is important to note that a roadway operating at a LOS of E or F doesn't necessarily need to be expanded with additional lanes. For example, near K-State campus, the capacity issues are due to the sheer number of people traveling to campus. In this environment, we must be cognizant that there are not only vehicles on these roadways, but a significant number of people walking and biking. Expanding one of these roads may improve the efficiency for vehicles, but would reduce the level of service and safety for non-motorized users.

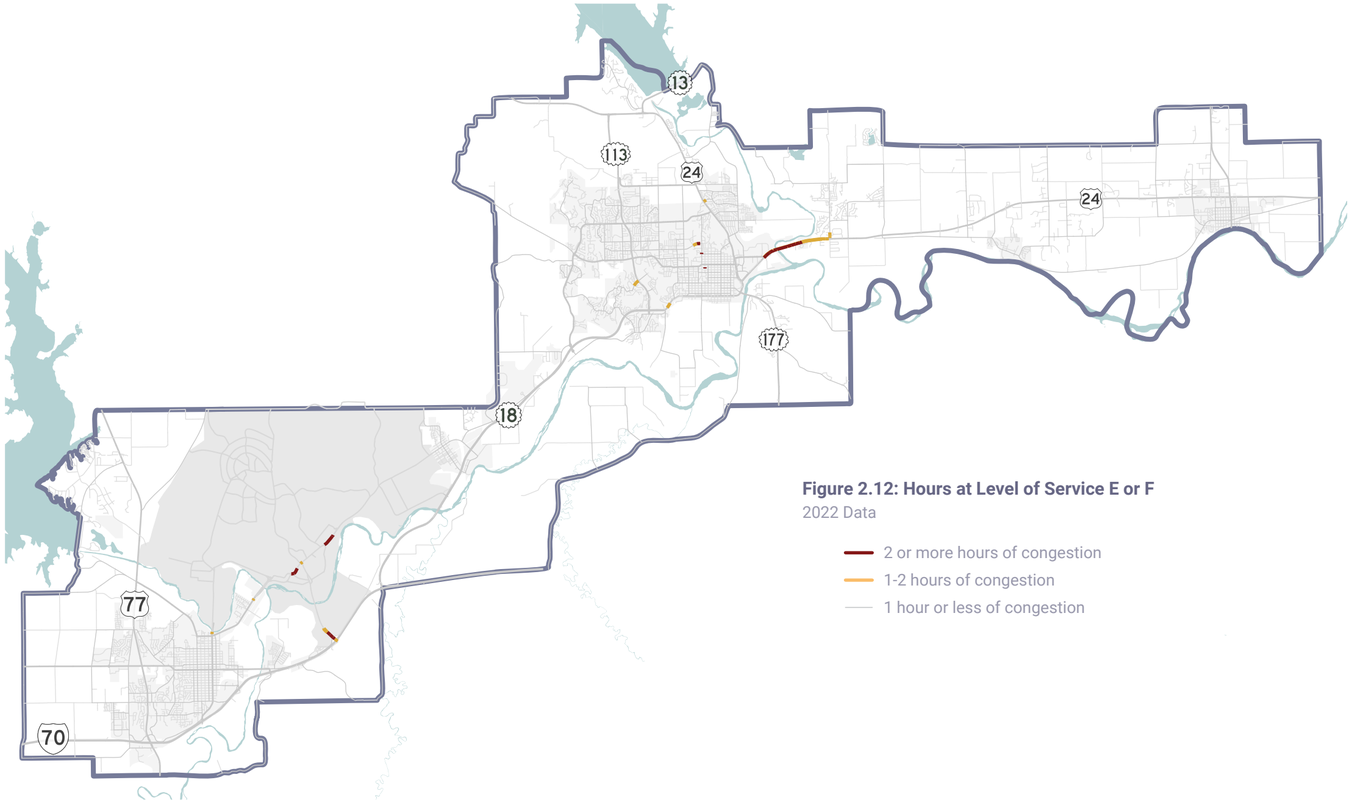
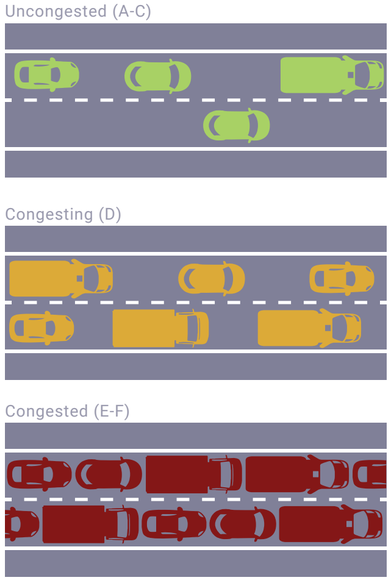


Figure 2.12: Hours at Level of Service E or F
2022 Data



PRESERVATION AND MAINTENANCE

Our region spends an average of $16.3 million dollars maintaining and preserving our roadways each year. This includes everything from snow removal and filling pot holes, to larger preservation projects such as replacing concrete panels or overlaying asphalt roadways.

Pavement Condition

Pavement condition data is maintained for all state-owned roads and for the roadways within the City of Manhattan. For the state-owned roadways, pavement is categorized into three conditions; good, fair, and poor. The state-owned system is divided into two types of roadways, the Interstate system and our state highways.

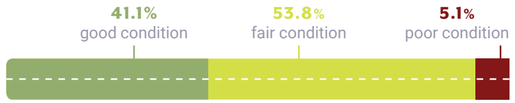
The City of Manhattan uses a different method of maintaining pavement condition known as a pavement condition index (PCI), which rates condition on a scale of 0 to 100. The average PCI for Manhattan's roadways is 71. The City strives to keep the average PCI above 70.

Bridge Condition

There are 159 bridges within the MPO region that are inspected every two years and rated as in good, fair, or poor condition. Across the local and state systems, 65% of our bridges are in good condition as of 2024. Of the 7 bridges in poor condition, 4 are locally owned (maintained by the city or county) and 3 are part of the state system.

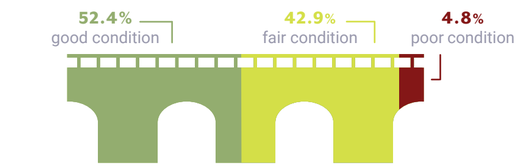
Interstate Pavement Condition

State Highway Pavement Condition



State Highway Bridge Condition

Local Roadway Bridge Condition



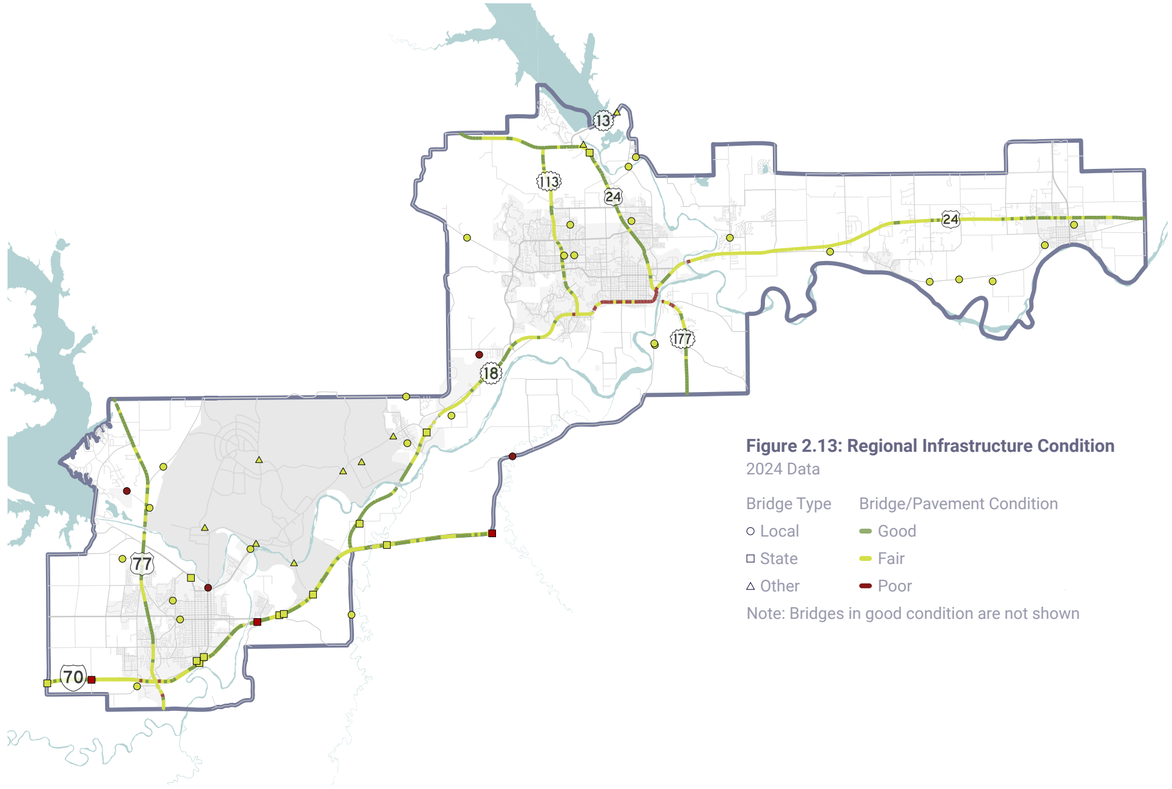


Figure 2.13: Regional Infrastructure Condition
2024 Data

Note: Bridges in good condition are not shown

ROADWAY SAFETY

Over the last five years, the percentage of total serious injury and fatal crashes involving people walking and biking has increased steadily. Vehicular crashes resulting in serious injury or death have increased sharply. While we have information for all vehicle-related crashes with over $1,000 in property damage, this isn't necessarily an effective measure for improved safety. For example, with the installation of the roundabout at 4th Street and Bluemont Avenue in Manhattan, the total number of crashes slightly increased. However, injury crashes were eliminated. Even though the number of crashes at this intersection increased, the overall safety of this intersection was dramatically improved.

In recent years, our region has made strides toward addressing the highest injury-crash locations. Figure 2.14 identifies the locations with either recently completed projects or programmed projects to improve safety for vehicle users.

Bicycle and Pedestrian Crashes

While we have data for nearly all vehicle crashes, we have very limited data on bicycle and pedestrian crashes (often referred to as non-vehicular crashes). One of the reasons is that there are many near-misses. A study conducted in Knoxville, Tennessee found that for every one bicycle crash reported, there were at least 30 near-misses. It also found that for every one bicycle crash reported, there was at least one additional bicycle crash not reported. This lack of data prevents us from being proactive at improving "near-miss" locations before a serious injury or fatality occurs.

Despite comprising only 9% of commuting mode share, people walking and biking are involved in 14% of all serious injury and fatality crashes. This percentage has fluctuated in recent years, largely due to an increase in vehicular crashes.

Transit Safety and Security

Public transit is one of the safest forms of transportation in our region. Over the last three years, there have been no transit-related fatalities or serious injuries. For on-board security, cameras have been installed on all ATA Bus vehicles.

Knoxville, TN study sourced from www.americawalks.org/knoxville-blog

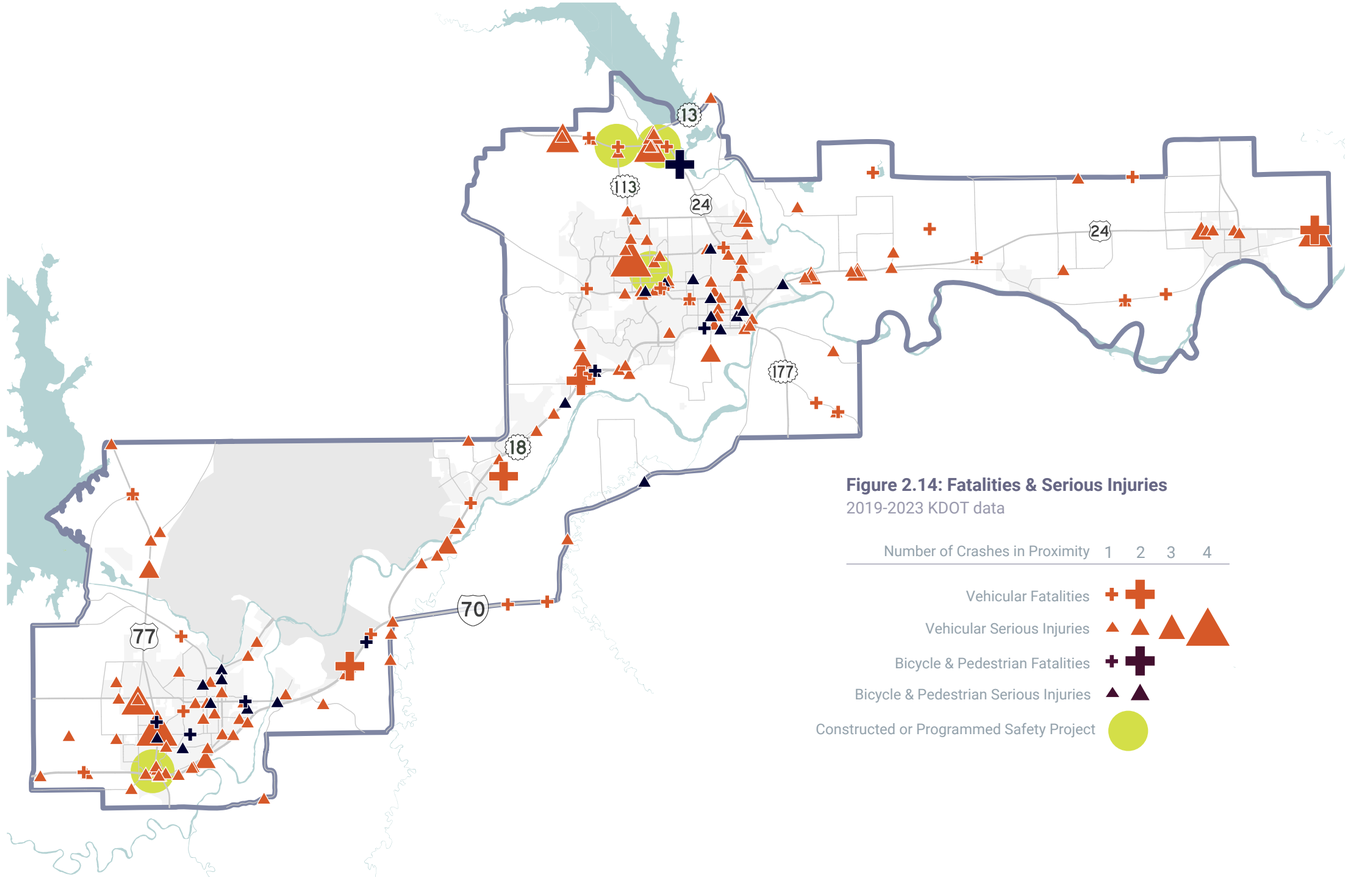


Figure 2.14: Fatalities & Serious Injuries
2019-2023 KDOT data

BICYCLE & PEDESTRIAN NETWORK

Our region has over 63 miles of bicycle infrastructure and 391 miles of sidewalks. When comparing this to our centerline miles of roadways, this is equivalent to 8% of roads having bicycle infrastructure and 78% with sidewalks.

Our bicycle network is comprised of several different types of bike facilities. Figure 2.15 further explains the different types of bicycle infrastructure, while the map provides an overview of where each of these facility types is located. The table below outlines the number of miles of existing bicycle infrastructure by type in our region.

Infrastructure Type	Number of Miles
Multi-use Paths & Trails	44.6
Bike Boulevards	11.9
Protected Bike Lanes	0.3
Bike Lanes	7.0

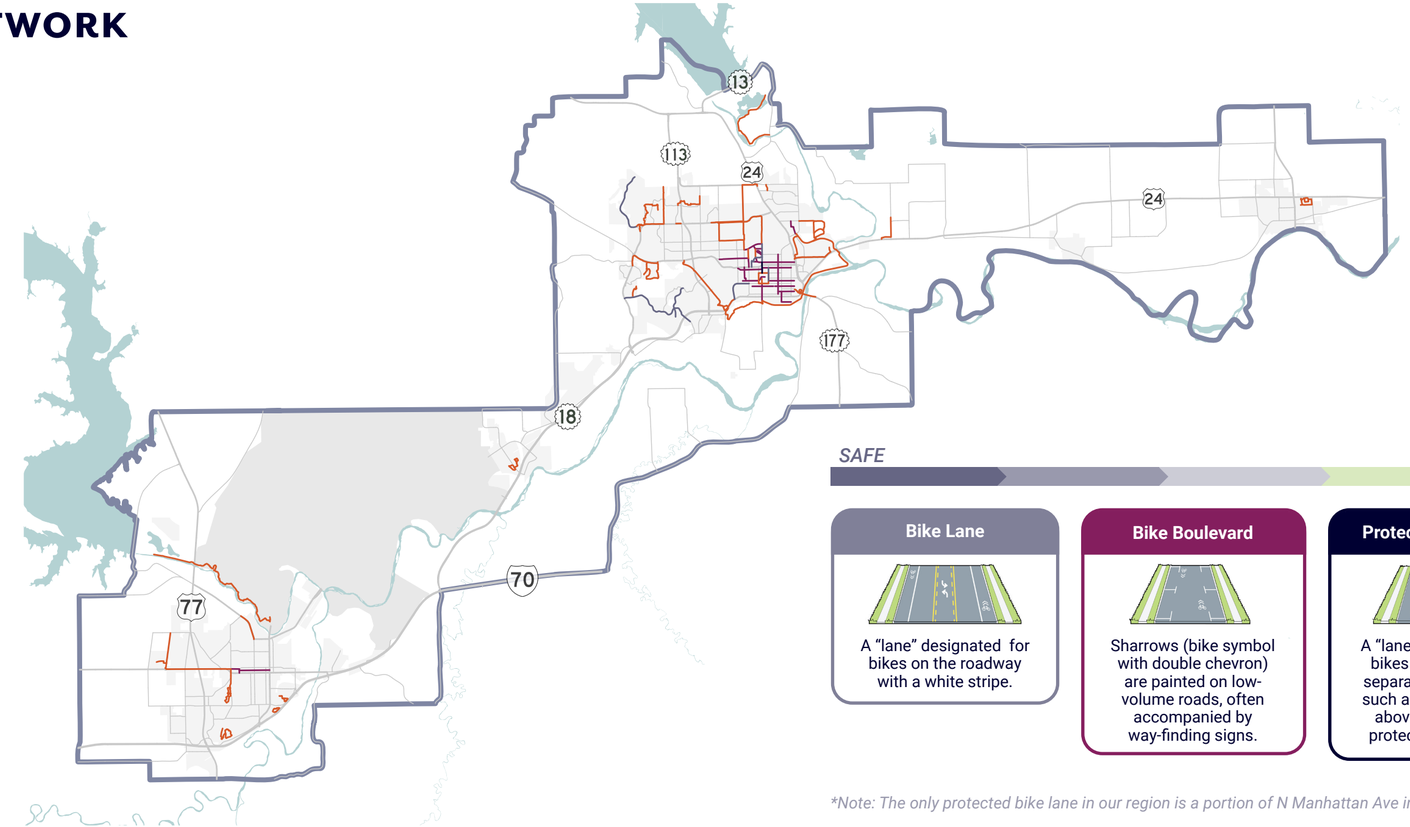


Figure 2.15: Existing Bicycle Infrastructure

- Multi-use Path or Trail
- Bike Boulevard
- Bike Lane
- Protected Bike Lane

SAFE — *SAFEST*

Bike Lane

A "lane" designated for bikes on the roadway with a white stripe.

Bike Boulevard

Sharrows (bike symbol with double chevron) are painted on low-volume roads, often accompanied by way-finding signs.

Protected Bike Lane

A "lane" designated for bikes using physical separation/protection, such as a curb. Shown above is a two-way protected bike lane.*

Multi-use Paths & Trails

A wide sidewalk (at least 8 feet wide) that parallels a roadway and can accommodate bikes and pedestrians. Trails are similar, but more recreation-focused.

**Note: The only protected bike lane in our region is a portion of N Manhattan Ave in Manhattan.*

JUNCTION CITY

In 2020, Junction City was awarded funding to construct the city's first bicycle boulevard. While there is a substantial gap in sidewalks and bicycle infrastructure, progress is being made to address this.

MANHATTAN

Over the last several years, Manhattan has invested in installing bicycle boulevards and bike lanes (including the region's first separated bike lane, completed in 2023); and the existing sidewalk network is substantial. The major issues are providing infrastructure that is accessible by all ages and abilities and improving the safety of crossings at key intersections.

WAMEGO

Overall, the community is very walkable with good connectivity. There are several areas where crossings could be improved or bicycle infrastructure could be added.

GREEN VALLEY AREA

Despite large gaps in the network and no bicyle infrastructure, opportunities exist to improve walking and biking for this area. In recent years, the County has required sidewalks be included in all new developments, but there is still missing infrastructure in the older neighborhoods and along major roadways.

Reference the following plans for additional information on existing conditions: Manhattan's Bicycle and Pedestrian Systems Plan; Junction City's Active Transportation Plan; Wamego Sidewalk Master Plan; USD 383 Safe Routes to School Plan; and USD 320 Safe Routes to School.

Jurisdiction	Miles of Total Bike Infrastructure	Miles of All Ages & Abilities Bike Infrastructure
Junction City	13.7	12.6
Manhattan	44.4	26.7
Wamego	1.2	1.2

Junction City

Manhattan & Green Valley Area

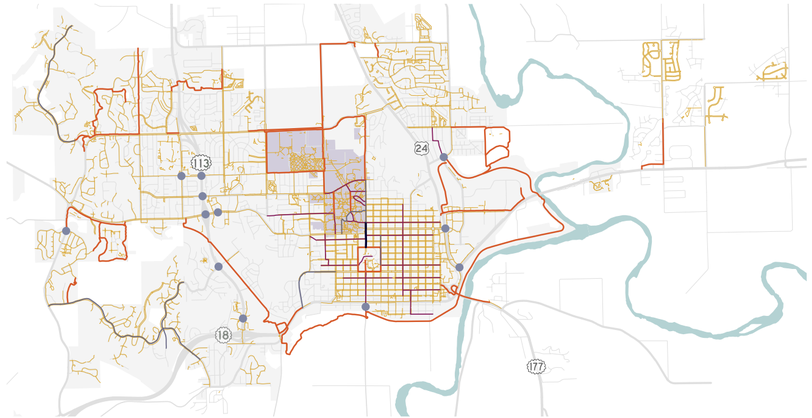


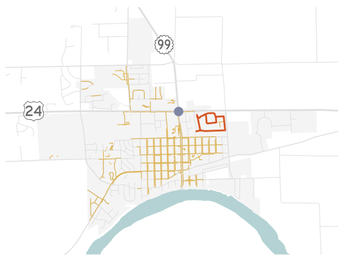
Figure 2.16: Bicycle and Pedestrian Infrastructure
2025 Data

- Multi-use Paths & Trails
- Bike Boulevard
- Bike Lane
- Separated Bike Lane
- Sidewalks
- Key Intersections

BICYCLE FRIENDLY MANHATTAN

Manhattan is recognized by the League of American Bicyclists as a Bronze Bicycle Friendly Community and K-State is recognized as a Bronze Bicycle Friendly University.

Wamego



PUBLIC TRANSPORTATION NETWORK

Flint Hills ATA Bus provides regional public transit throughout the three-county area. There are a total of 8 fixed-routes serving Manhattan, K-State, Junction City, and Ogden - down from 11 fixed routes in 2020. The decline in ridership seen in 2024 is due to the convergence of several factors. One such factor is that in August 2023, K-State ceased offering free student bus passes due to funding cuts. Driver shortages and route cuts are other contributing causes.

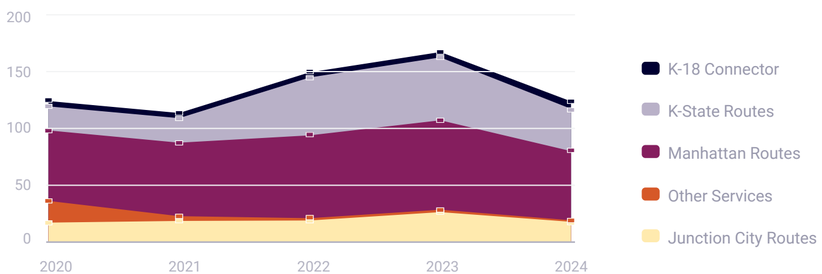
In 2020, 72% of our region's housing was located within a 1/4 mile of a transit stop. In 2025, that number was reduced to 61% due to route and stop changes.

Residences within 1/4 mile of a Transit Stop

Jurisdiction	% of Residences
Manhattan	61%
Junction City	67%
Ogden	21%
Grandview Plaza	51%
Regional	**61%**

Figure 2.17: ATA Bus Ridership by Service 2020-2024

(in thousands)



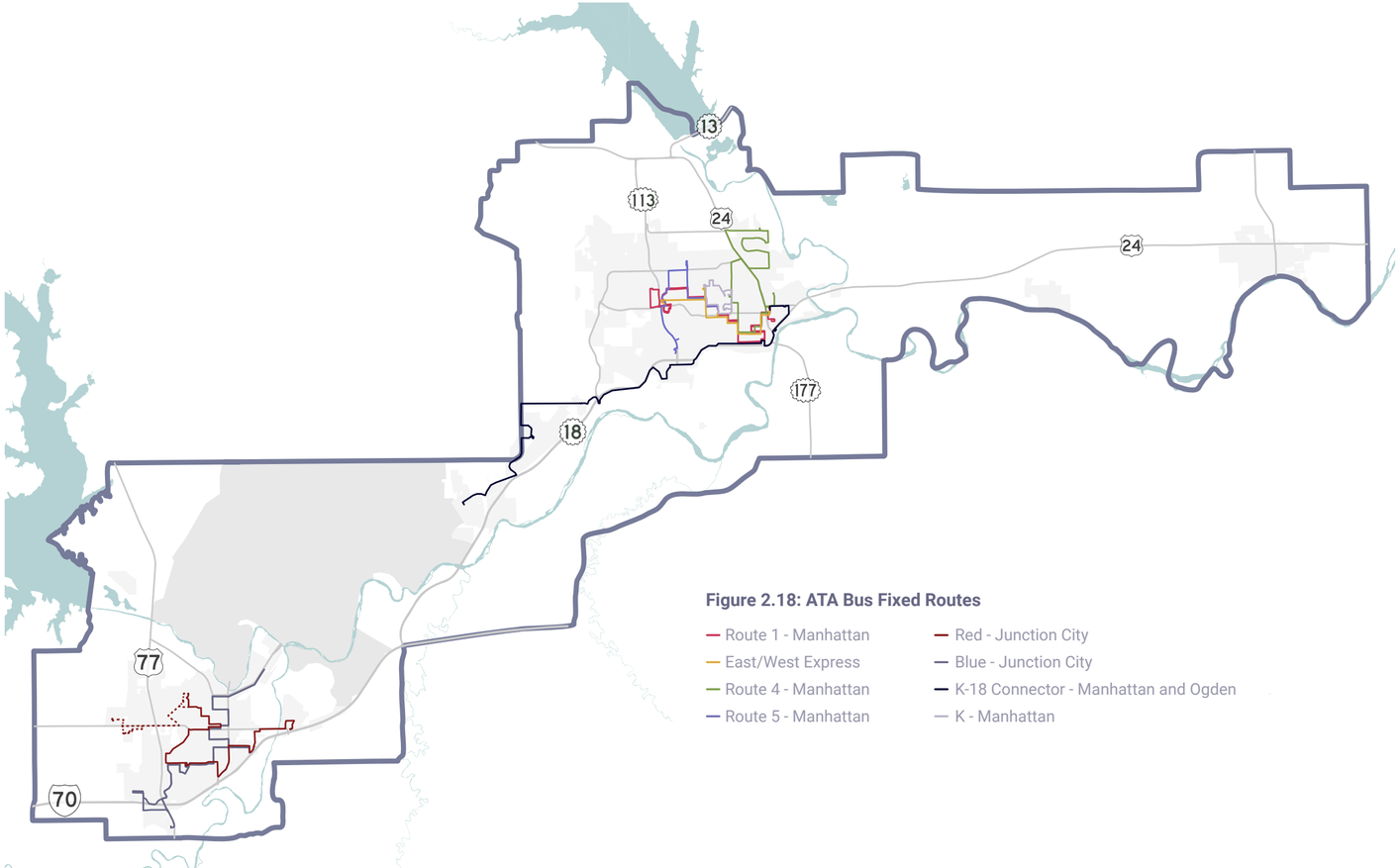


Figure 2.18: ATA Bus Fixed Routes

- Route 1 - Manhattan
- East/West Express
- Route 4 - Manhattan
- Route 5 - Manhattan
- Red - Junction City
- Blue - Junction City
- K-18 Connector - Manhattan and Ogden
- K - Manhattan

MANHATTAN FIXED-ROUTES

Manhattan is served by four citywide fixed-routes. Citywide fixed-routes generally run year-round, Monday through Saturday, 9 am to 7 PM.

K-STATE ROUTES

ATA Bus operates two park-and-ride routes around the K-State campus; the "K" route runs clockwise to key campus locations, while the "S" route runs counterclockwise. While these routes are specifically tailored to the needs of K-State, the routes are open to the public. K-State routes run while school is in session, with no service on weekends or breaks. Days and times of operation vary by route.

While students are required to pay a fare for citywide routes as of August 2023, the K-State routes remain fare-free for students with a K-State ID.

K-18 CONNECTOR

The K-18 Connector provides service from Manhattan to the Manhattan Business Park and the City of Ogden. Despite an overall decline in ridership, ridership for this route has continued to grow. The K-18 Connector operates Monday through Friday, focusing on early morning trips and afternoon/early evening trips.

In late 2025 or early 2026, the K-18 Connector will extend west to Junction City, providing a one-bus connection between Manhattan and Junction City.

Figure 2.19: Percentage of community locations within a 1/4 mile of a transit stop (Manhattan & Ogden)
Source: Data from 2025 Routes

Community Locations	% within 1/4 mile
Single-Family Residences	41%
Apartments, Dorms, & Mobile Homes	67%
Major Employers	80%
Grocery & Retail	75%
Healthcare Providers	69%
Civic Locations & Social Services	83%

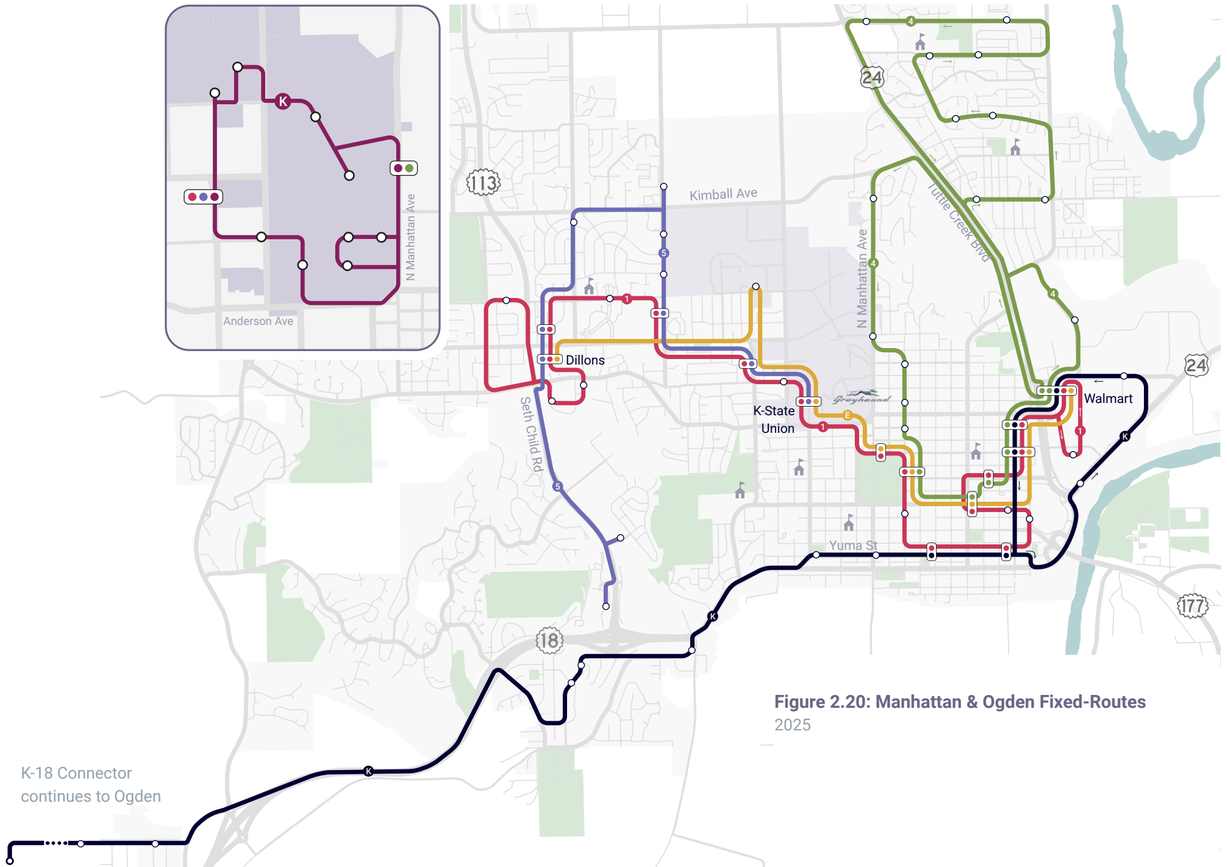


Figure 2.20: Manhattan & Ogden Fixed-Routes
2025

JUNCTION CITY ATA BUS ROUTES

Junction City is currently served by two ATA fixed routes, Red and Blue. The Red Route includes three stops in Grandview Plaza. The routes run year round, Monday through Friday, 6:30am to 6:30pm.

In the spring of 2019, ATA Bus formalized a partnership with USD 475 Geary County and Junction City to allow all USD 475 Middle and High School students to ride the ATA Bus for free. While students ride free year-round, ATA Bus service to the school stops (shown as a dashed line on the Red Route in Figure 2.22) extends only when school is in session.

In late 2025, the K-18 Connector will extend west to Junction City, providing a one-bus connection between Manhattan and Junction City.

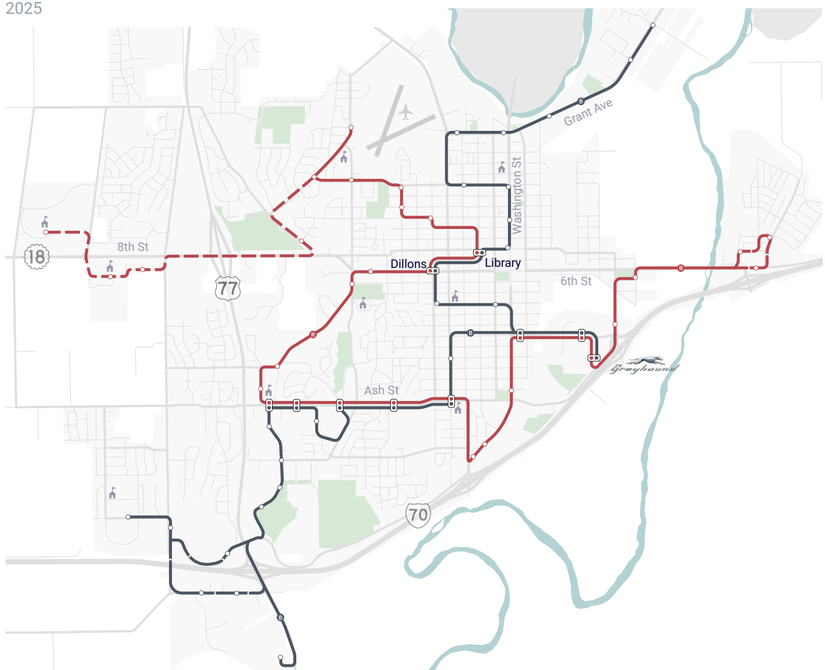
DEMAND-RESPONSE TRANSIT SERVICES

Demand-response is a door-to-door transportation service offered to people over 60 years of age, disabled individuals, or those who live more than 3/4 of a mile away from a fixed-route public transit stop.

Figure 2.21: Percentage of community locations within a 1/4 mile of a transit stop (Junction City & Grandview Plaza)
Source: Data from 2025 Routes

Community Locations	% within 1/4 mile
Single-Family Residences	60%
Apartments, Dorms, & Mobile Homes	77%
Major Employers	100%
Grocery & Retail	100%
Healthcare Providers	89%
Civic Locations & Social Services	88%

Figure 2.22: Junction City & Grandview Plaza Fixed Routes
2025



RURAL TRANSIT

ATA Bus provides on-demand, curb-to-curb service to rural areas in Geary and Riley Counties. Transit users in northern Riley County can schedule travel to Manhattan and throughout the county on Mondays, Tuesdays, and Fridays within a small pick-up and drop-off window. Travelers in rural Geary County can also schedule trips to Junction City and elsewhere in the county if they book in advance.

In the past, ATA offered the Wamego Service for parts of Pottawatomie County, but this service was suspended indefinitely in 2022.

OTHER TRANSIT PROVIDERS

There are a handful of public transit providers in our region that focus on providing transportation to seniors and disabled individuals. Our region has a Mobility Manager that is responsible for coordinating services between transit providers to improve efficiencies and better serve clients.

INTERCITY BUS

Greyhound Lines is an intercity bus provider serving Manhattan and Junction City. Intercity bus service provides longer, cross-country transportation.

FREIGHT AND RAIL

Communities in our region are located near I-70, which is a prominent route for moving freight across the country. Junction City is located adjacent to I-70, while Manhattan and Wamego are approximately 10 miles north.

On I-70, between Junction City and the K-177 exit, approximately 20% of all traffic is freight-related. Out of the highest percentage of freight-related traffic in our region, 30%, is on I-70 between K-18 and K-177.

Several years ago, the Kansas Department of Transportation (KDOT) designated both K-18 (between Manhattan and I-70) and K-99 (between Wamego and I-70) as Critical Freight Corridors and identified them within their statewide freight plan.

Our region has one active rail line, operated by Union Pacific, passing through the area. Fort Riley uses this rail line frequently to move and deploy military equipment. Overall, our region has limited freight and rail operations, although there is potential in Junction City for an inter-modal facility given the proximity to both the Interstate and railroad.

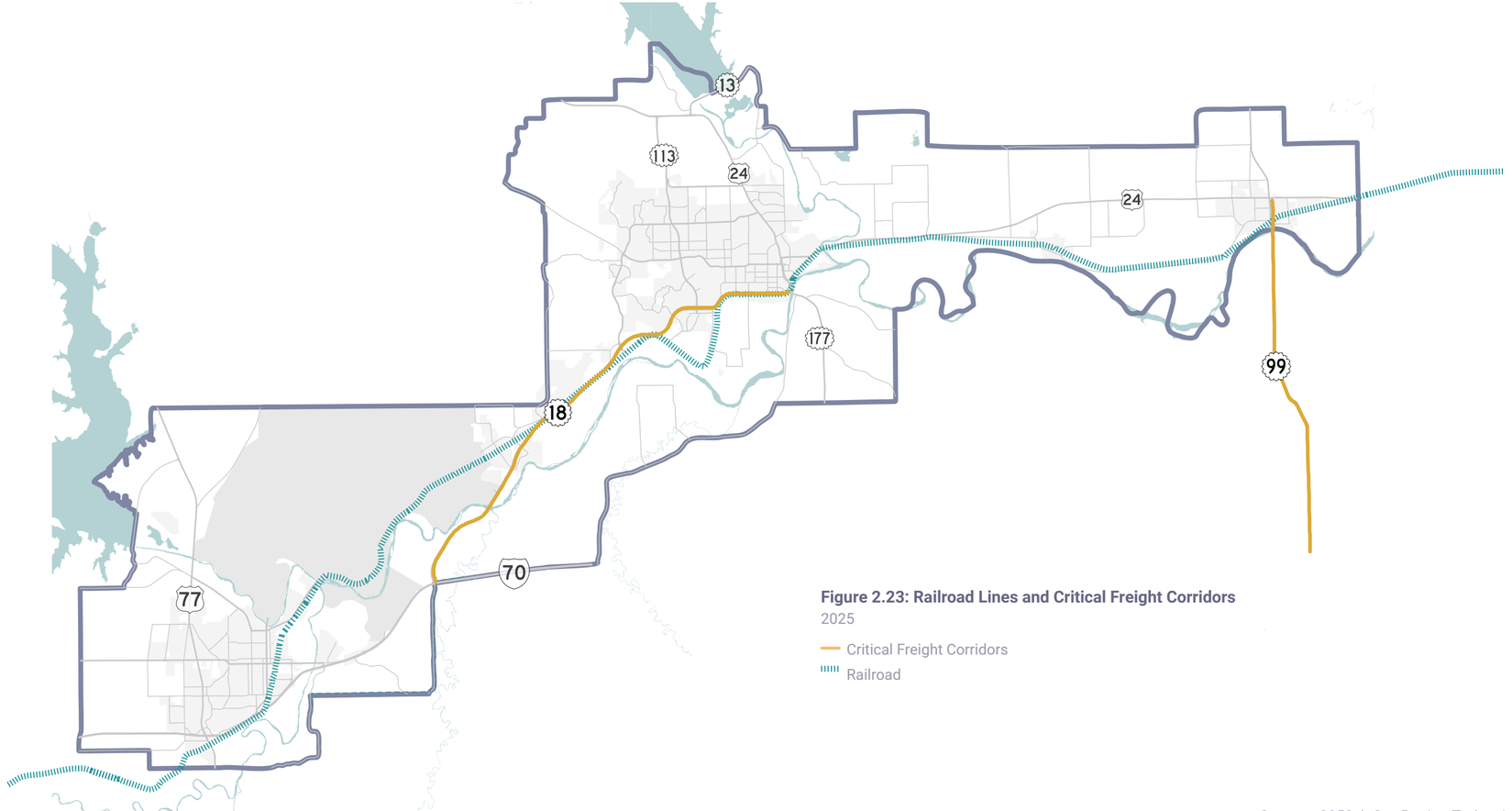
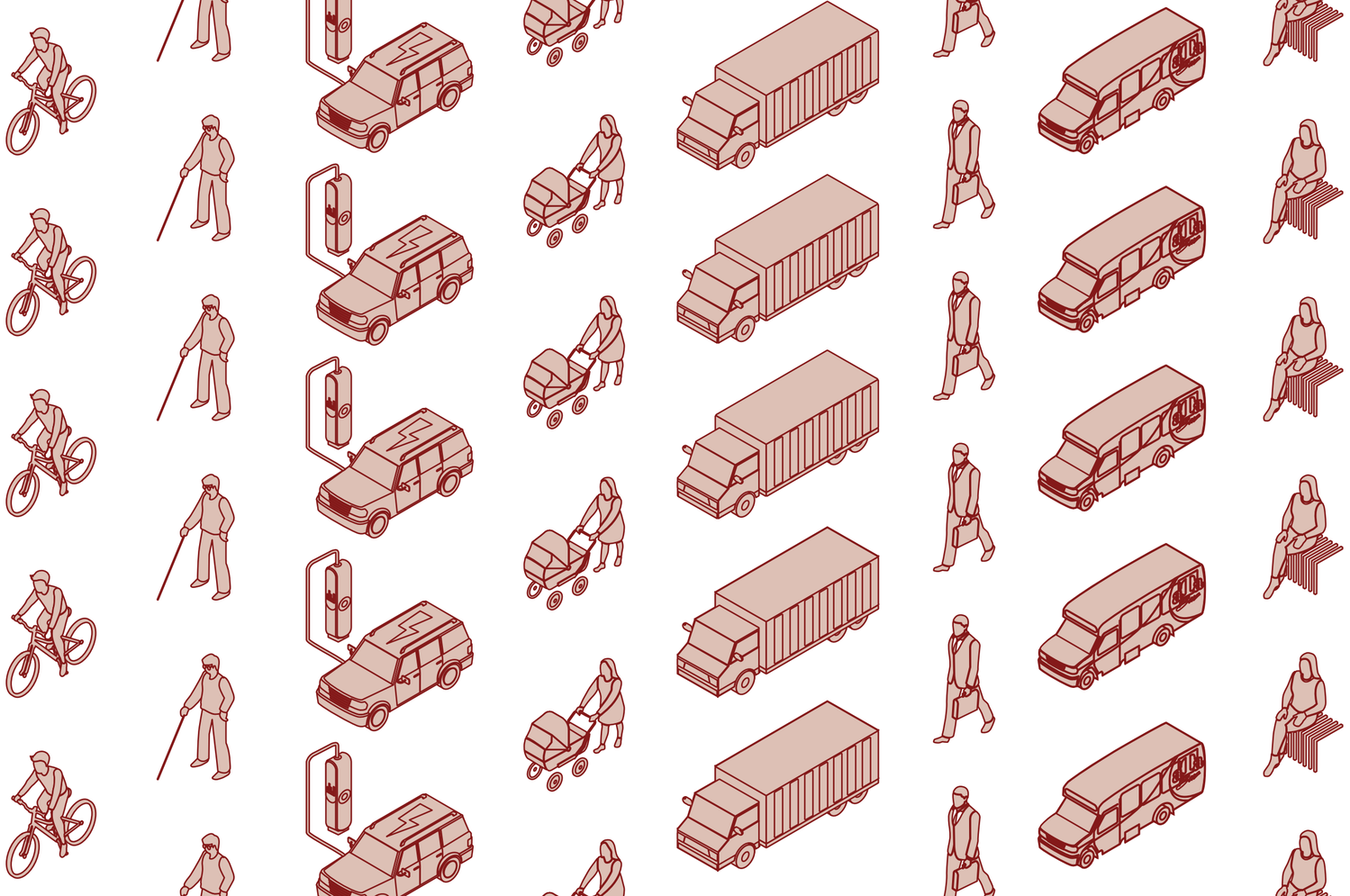


Figure 2.23: Railroad Lines and Critical Freight Corridors
2025

Critical Freight Corridors
Railroad



Chapter Three

OUR REGION IN 2050

Our vision for the year 2050 is to Enhance Mobility, Strengthen Communities, and Generate Prosperity. These are the critical components to ensuring our region is resilient and economically sound over the next twenty-five years. While we can't be certain what our future looks like, we know that we must begin to make some changes to our status quo if we want to have self-sustaining communities.

Using outputs from our travel demand model, along with future demographic projections and community input we've received throughout this process, we were able to identify potential transportation needs. The next few pages build upon the previous chapter and where we are today to better look ahead to 2050.

OUR POPULATION IN 2050

Despite the the region's stagnant population growth the last decade (see Chapter 2), future projections continue to show considerable growth. If these projections come true, over the next twenty-five years, we will add an additional 20,500 people to our region, for a total population of approximately 142,000. It's worth noting that that this is less growth than was projected in Connect 2040, which was approved in 2020. Figure 3.1 provides a general idea of where this project growth will be concentrated. How much growth we actually see, and where this growth occurs, will both play directly into the transportation system that will be needed to support additional residents in the year 2050.

Growth projections were calculated using industry standard sources including Woods and Poole and Wichita State University Center for Economic Development & Business Research. Working with local jurisdiction planning and zoning staff, this data was then distributed into area likely to develop or redevelop. Major areas of growth are projected west of US-77 for Junction City, as well as east along US-24 in the Green Valley Area and St. George Township. Infill development with higher density in portions of Manhattan is also forecast.

Sources: Population based on 2022 travel demand model data, built from US Census Bureau data. The 2022 TDM population was 121,420 divided over 44,926 households. The 2050 TDM population is projected at 141,913, divided over 52,175 households. The average number of people per household in our region is 2.70.

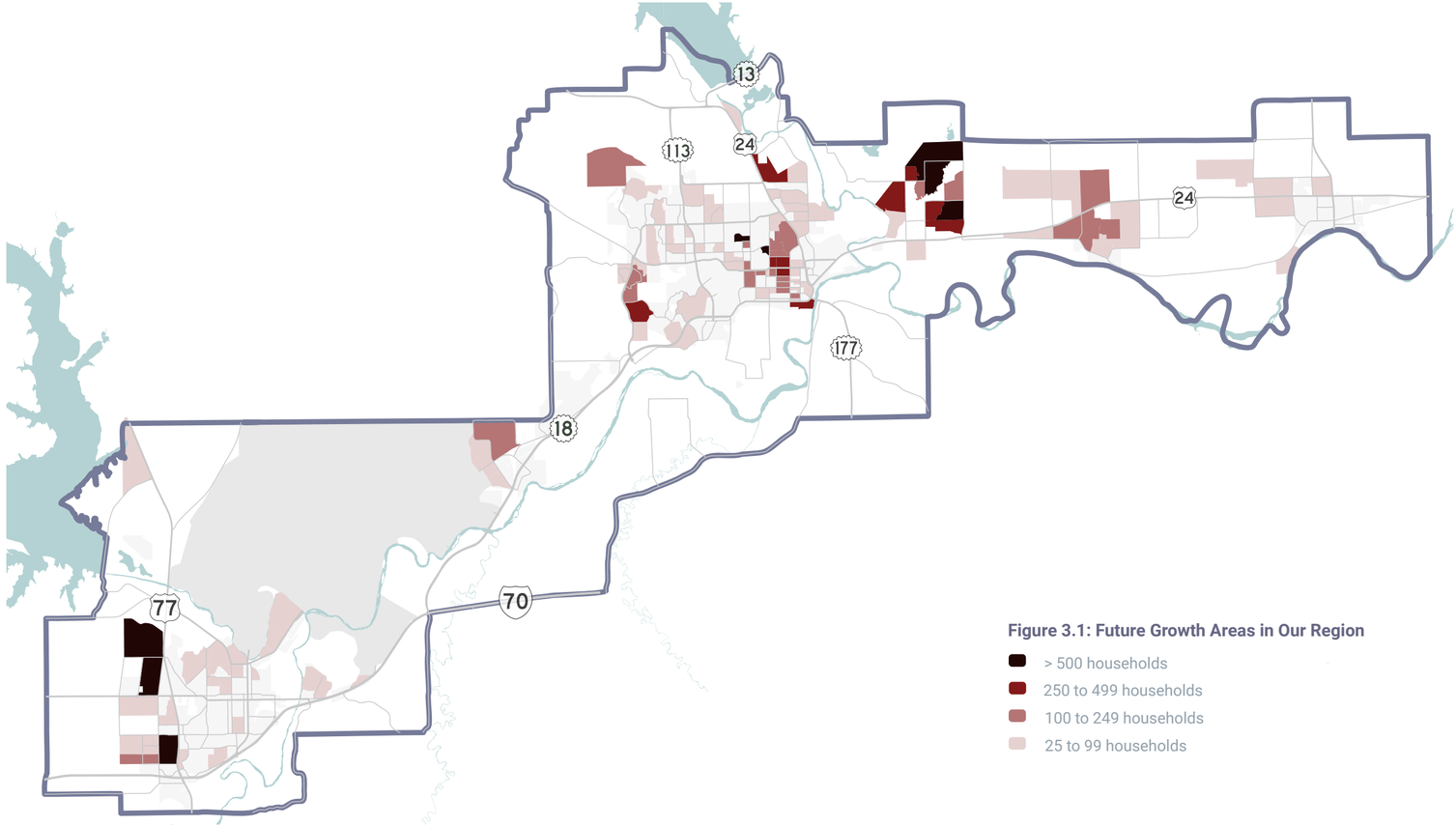


Figure 3.1: Future Growth Areas in Our Region

TRAVEL DEMAND MODEL PROCESS

The travel demand model is one of the tools used to forecast future capacity constraints on roadways and evaluate the effectiveness of projects in reducing congestion.

All models are built with two key sets of data: Road Networks and Population + Land Use. Changing either of these two datasets will alter model outcomes, allowing us to see both the impact of population growth and land use, but also the impact of changes in our road network.

To begin evaluating roadway conditions in the year 2050, we start with creating a model that reflects our existing roadway network, the No-Build road network. This network assumes that we add no additional roadways between now and 2050 other than those already committed for funding, which are identified in the Transportation Improvement Program (TIP). The No-Build network is sometimes referred to as the Existing + Committed (E+C) network.

The No-Build network is the base from which the other two road networks are built. For the Modernization network, potential future safety projects (roundabouts, traffic signals, turn lanes, etc.) right-sizing projects (road diets), and gravel road paving projects, are added to the No-Build network. For the Expansion network, potential future projects including adding lanes or building new roadways are added to the No-Build network.

ROAD NETWORKS

No-Build

Current 2025 road network + projects with committed funding (will be built in next few years).

Modernization

No-Build Network + safety, paving, turning lanes, right-sizing projects (road diets)

Expansion

No-Build Network + new roads, road widening, etc.

Potential projects modeled in the Modernization and Expansion road networks were identified by local jurisdiction public works and community development staff, as well as KDOT. See Appendix A for lists and maps of the projects included in the Modernization & Expansion road networks.

POPULATION & LAND-USE SCENARIOS

Baseline

The Baseline scenario used in the TDM reflects the current(2025) conditions in the region, both in terms of development and population. This represents the low-end future growth scenario.

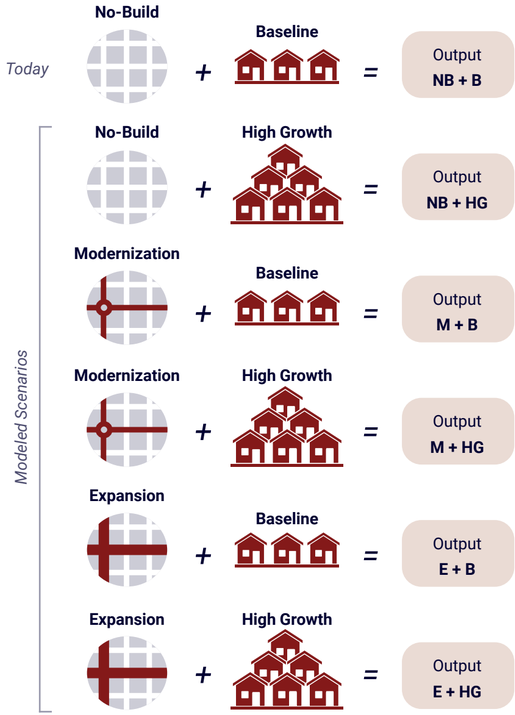
High Growth

The High Growth scenario applies the projected population growth (~20,000 people) and assigns those figures to both residential and employment areas identified in each community's Comprehensive Plan to predict land use and development patterns.

TRAVEL DEMAND MODEL MATRIX

Figure 3.2 shows the matrix of the travel demand model scenarios allows that were run as part of this Plan. This matrix of outputs allows us to see a range of potential future transportation impacts. While the future will not align perfectly with any one model scenario, projects that are needed in most or all future scenarios are critical to our region's success.

Figure 3.2: Travel Demand Model Matrix



2050 NO-BUILD NETWORK

Figure 3.6 shows our No-Build network, which takes our existing roadway network as of 2022 (model base year), and adds any projects completed since 2022 or committed for funding and programed for construction in the Transportation Improvement Program (TIP). Figure 3.3 lists all projects that were included in the No-Build network. Projects starting with "C" have been built and removed from the TIP. Projects starting with "E" or "M" were expected to be constructed at the time the model was built, but now are likely to be constructed in the future.

Figure 3.3: Existing Projects in No-Build Network

C2050 #	Project Name	Improvements
C1	Kimball Ave & Denison Ave Interesction	Widening & Turn lanes
C2	Green Valley Rd: US-24 to Quail Ln	Expand to 5-lanes
C3	Kimball Ave & Grand Mere Pkwy Intersection	Roundabout Replacement
C4	Kimball Ave & Agriculture Rd	Widening, Turn lanes, & Traffic Signal
C5	Salzar Rd: Say Rd to Elm Slough Rd	Paved 2-lane
C6	US-24 & Green Valley Rd Intersection	Double Turn lanes
C7	US-24 & K-113 Intersection	Roundabout
C8	US-24 & K-13 Intersection	Roundabout
C9	US-24 & Levee Dr	Turn lanes & Traffic Signal
E18	Junietta Rd: Green Valley Rd to Excel Rd	Expand to 3-lanes
E29	Moody Rd: Junietta Rd to Mt. Zion Rd	Paved 2-lane
M50	Rockenham Rd: Franklin Rd. to St. George	Paved 2-lane

Figure 3.4 includes No-Build projects that are currently programmed within the TIP and will be constructed in the next few years. These projects are included in the fiscally constrained or illustrative project lists of Connect 2050. This is not a comprehensive list of projects included in the fiscally constrained or illustrative lists; see Chapter 6 for details.

Figure 3.4: Programmed Projects in No-Build Network

C2050 #	Project Name	Improvements
E11	Excel Rd: Cara's Way to Junietta Rd	Pave & Expand to 3-lane
E14	Harvest Rd: Excel Rd to Lake Elbo Rd	Pave & Expand to 3-lane
E47	Elm Slough Rd: K-99 to Salzer Rd	Pave & Expand to 3-lane
M30	I-70 & K-18 Interchange	Auxilary Lane with Flyover Ramp
M41	Miller Pkwy & Arbor Dr Intersection	Roundabout
M58	US-24 & Excel Rd Intersection	Turn Lanes & Traffic Signal

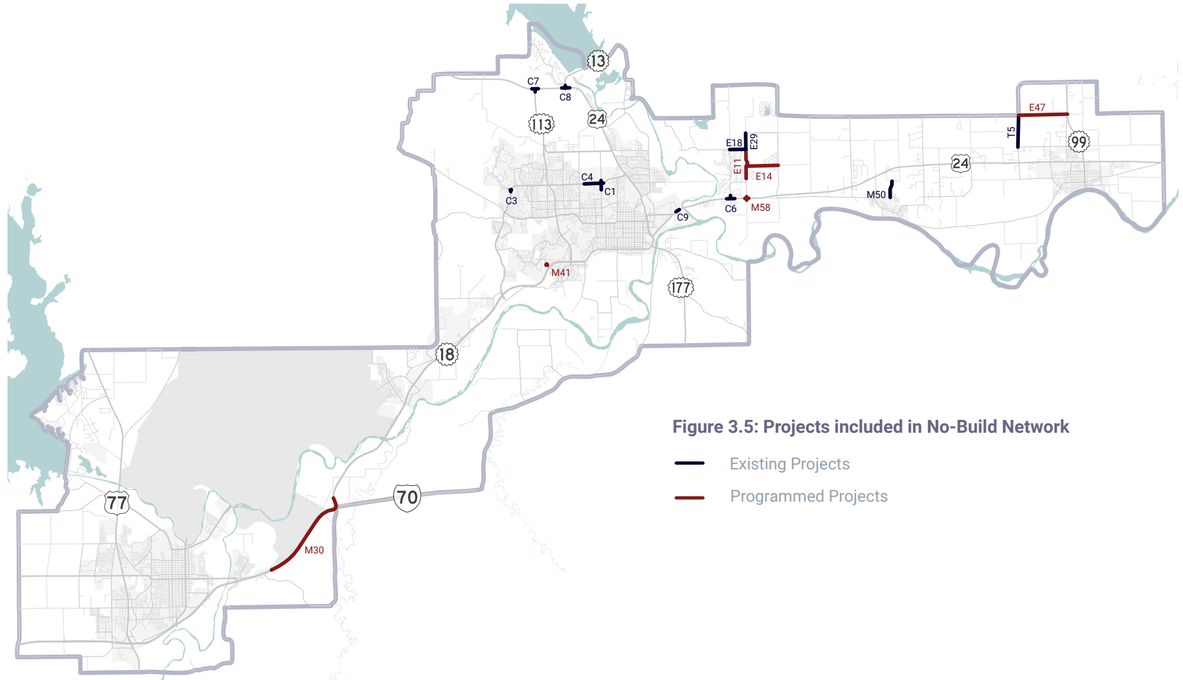


Figure 3.5: Projects included in No-Build Network

Existing Projects

Programmed Projects

2050 NO-BUILD MODEL OUTPUT

Figure 3.6 shows the capacity needs in our region in 2050 if we develop to the High-Growth scenario levels while making no additional investments to our roadways.

Junction City

Even under the High-Growth scenario for year 2050, the large population and job growth projected would be accommodated by Junction City's existing roadways. The High-Growth development includes a full build out of the land bank lots and existing infill of vacant or under-utilized commercial or industrial lots.

Wamego

Like Junction City, Wamego has no capacity issues under either future land use scenario. All anticipated growth can be reasonably accommodated with the existing roadway network.

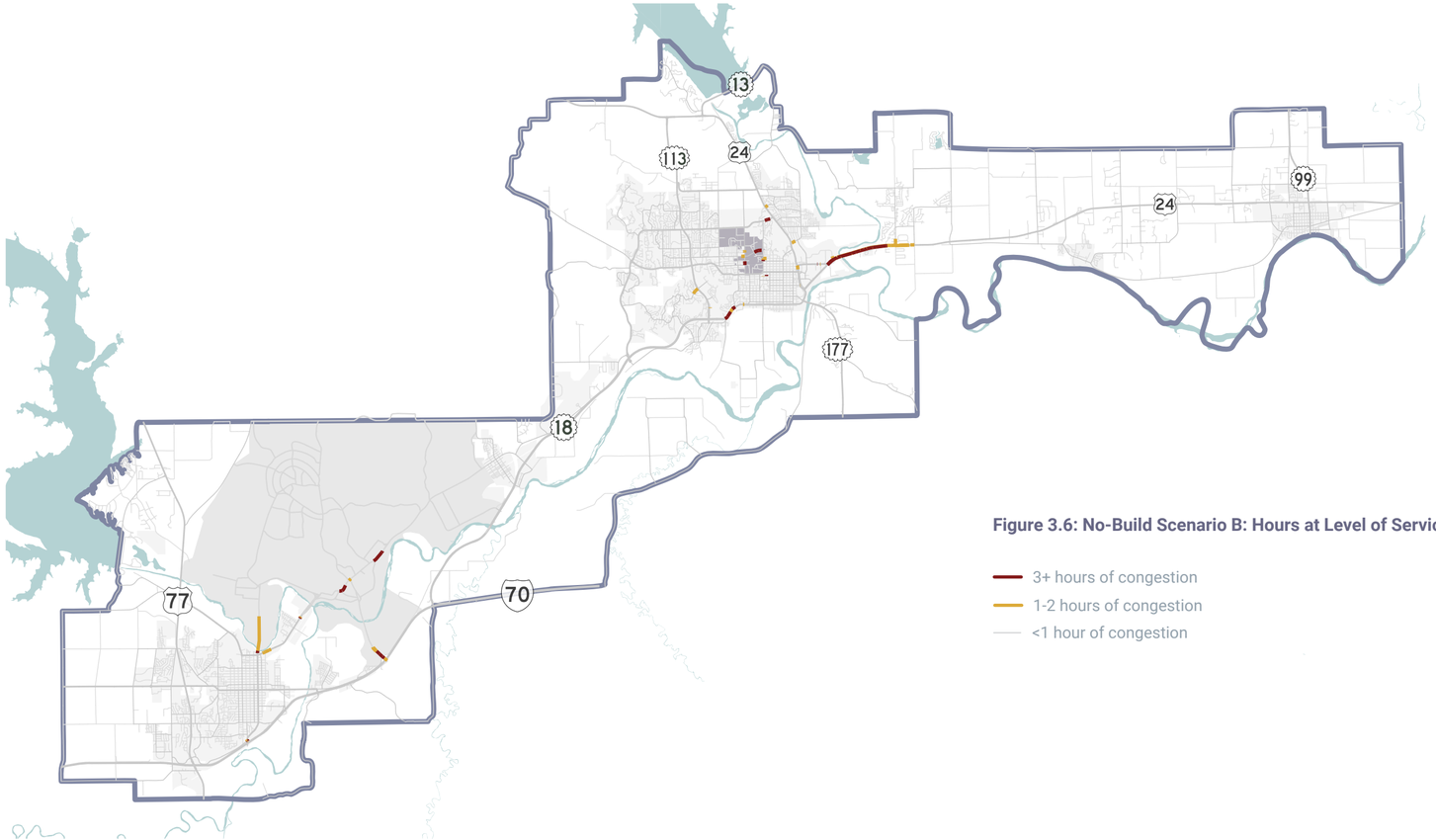


Figure 3.6: No-Build Scenario B: Hours at Level of Service E or F

- 3+ hours of congestion
- 1-2 hours of congestion
- <1 hour of congestion

MANHATTAN NO-BUILD NETWORK OUTPUTS

The capacity issues anticipated to occur in the region over the next two decades will be on roadways within Manhattan or the Green Valley Area. Figures 3.7 and 3.8 provide a comparison of the differences between two vastly differing growth scenarios: Baseline (no-growth) and High Growth. Comparing these scenario outputs demonstrates the impact potential growth with have on our roadways and allows us to identify needed projects to address these issues.

K-State Adjacent

The roadways on and surrounding K-State are likely to continue to experience localized capacity issues. However, these issues are related to traffic signals and intersection queuing, not roadway capacity. The level of congestion is not surprising, as many of these roadways are built in tight right-of-ways and have been designed to serve multiple modes of transportation. One of the ways to reduce capacity demands placed on these roadways is to encourage more students and faculty to walk, bike, or take public transit to campus. The current K-State campus master plan calls for many of the current parking lots to be sites of future buildings, and additional internal roadways to become access only. If this occurs, the lack of parking availability will provide a natural shift in how people get to campus.

Figure 3.7: No-Build + Baseline

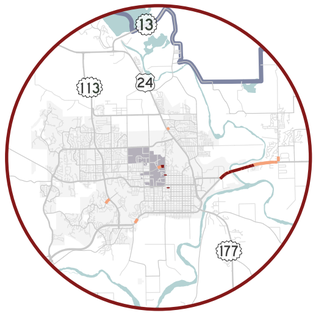
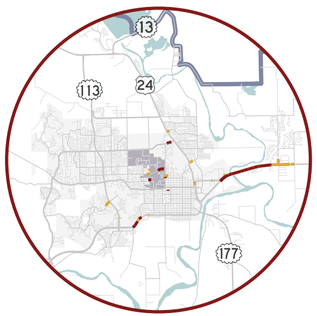


Figure 3.8: No-Build + High Growth



US-24 Corridor

The US-24 Corridor is one of the region's most heavily traveled corridors. However, despite growth over the past several decades, changes - including increased rates of working from home, and the construction of Oliver Brown Elementary - have reduced the number of vehicles traveling US-24 (see Fig. 3.9).

This trend is not likely to hold, as residential, industrial, and commercial growth along US-24 is projected. Figure 3.10 compares the current (Baseline) vs projected (High-Growth) traffic data on US-24 on the No-Build road network.

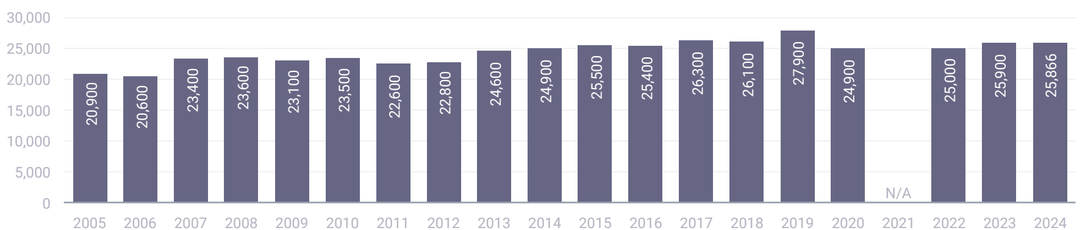
Beyond the No-Build comparison shown in Figure 3.10, the Big Blue River 2nd Connection Cost-Benefit Analysis (see pg. 3.13) will run numerous additional scenarios for US-24. These include the expansion of the roadway to 6 lanes, as well as various new connection options.

Figure 3.9: US-24 ADT on the No-Build Network
(at Big Blue River bridge)

	Baseline		High-Growth	
	WB	EB	WB	EB
Vehicles/day	12,900	12,900	21,600	21,900
Capacity	22,000	22,000	22,000	22,000
Hours at E/F	1	1	2	3

Figure 3.10: US-24 Past ADT Data

No data was available for 2021.



US-24 CORRIDOR STUDY UPDATE

Due to the continued growth along the US-24 corridor, Riley and Pottawatomie Counties, together with the City of Manhattan, have partnered with KDOT to update the US-24 Corridor Management Plan (adopted in 2009). This project, begun in fall of 2025, will address safety, multi-modal needs, and capacity issues along the corridor from Wamego, through Manhattan, and west to the City of Riley. This plan update will utilize the MPO's travel demand model data, as well as data developed in the Big Blue River 2nd Connection Cost-Benefit Analysis.

US-24 CORRIDOR STUDY UPDATE

The idea of a second roadway crossing (2nd Connection) of the Big Blue River between Manhattan and Blue Township in Pottawatomie County has long been discussed. This study, which will parallel KDOT's US-24 Corridor Study Update, will analyze a series of proposed 2nd Connection routes (Figure 3.11), and provide facts, data, and pros and cons of each potential connection route. Utilizing the MPO's travel demand model, traffic impacts will be studied, showing likely route usage and how different routes impact US-24 traffic. The study will not select a preferred route option, rather the study will inform and guide future conversations and plans, and help move the region towards a viable solution.

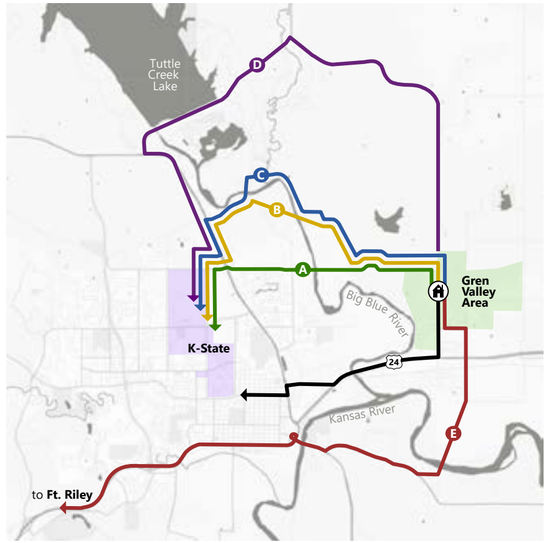


Figure 3.11: Routes of Study
Big Blue River 2nd Connection Cost-Benefit Analysis

MODELING FUTURE PROJECTS

As outlined in the Travel Demand Model Matrix (Figure 3.2), a total of six future scenarios were modeled. The following pages show the Level of Service (LOS) data outputs for each model run.

In addition to LOS, the model provides data on travel times, ADT, etc. Additional model maps can be found in Appendix A. The purpose of having multiple Population + Land Use scenarios (Baseline and High Growth) is to see how our transportation needs may change depending on how much growth occurs and where. While the future will not align perfectly with any one model scenario, projects that are needed in most or all future scenarios, are critical to our region's success. If a project is only needed in one development scenario, that project should be given additional consideration as to its need.

There are four projects that were modeled in all future roadway scenarios (Figure 3.12). In addition to these projects, numerous other road segments were included in various future scenarios, often varying from a 2-lane paved roadway in the Modernization scenarios to 3-lane paved roadway in the Expansion scenarios. Regardless of layout, the paving of existing gravel roads, which greatly increases the number of vehicles the roadway can accommodate. Due to the high expense of paving a gravel roadway, this Plan assigns potential dates to each segment based on likely development and need, thus allowing for a reasonable implementation of roadway upgrades

As a note, only project E13 in Figure 3.12 was included as a priority project in Chapter 6.

Figure 3.12: Projects Included in all Future Roadway Networks

C2050 #	Project Name
E13	Grand Mere Pkwy Extension: Mcleod Dr to Marlatt Ave
E25	Marlatt Ave: Grand Mere Pkwy to K-113
E12	Flush Rd: US-24 north 1/2 mile
M47	Rockenham Rd: US-24 to School Creek

NO-BUILD SCENARIOS

No-Build Scenario A

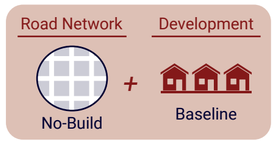


Figure 3.13: Hours at Level of Service E or F

- 3+ hours of congestion
- 1-2 hours of congestion
- <1 hour of congestion

	US-24 @ Blue River Bridge	Blue River Road
Vehicles/day	32,299	134
Capacity	44,088	12,890
Hours at E/F	4	0

No-Build Scenario B

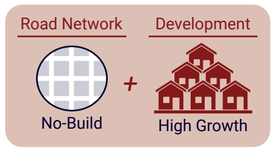


Figure 3.14: Hours at Level of Service E or F

- 3+ hours of congestion
- 1-2 hours of congestion
- <1 hour of congestion

	US-24 @ Blue River Bridge	Blue River Road
Vehicles/day	43,035	1,094
Capacity	44,088	12,980
Hours at E/F	5	0

MODERNIZATION SCENARIOS

Modernization Scenario A

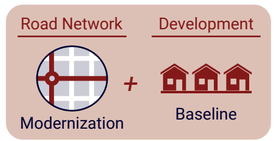


Figure 3.15: Hours at Level of Service E or F

- 3+ hours of congestion
- 1-2 hours of congestion
- <1 hour of congestion

	US-24 @ Blue River Bridge	Blue River Road
Vehicles/day	32,125	384
Capacity	44,088	12,890
Hours at E/F	3	0

Modernization Scenario B

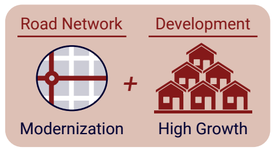


Figure 3.16: Hours at Level of Service E or F

- 3+ hours of congestion
- 1-2 hours of congestion
- <1 hour of congestion

	US-24 @ Blue River Bridge	Blue River Road
Vehicles/day	42,777	1,767
Capacity	44,088	12,980
Hours at E/F	5	0

EXPANSION SCENARIOS

Expansion Scenario A

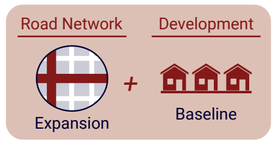


Figure 3.17: Hours at Level of Service E or F

- 3+ hours of congestion
- 1-2 hours of congestion
- <1 hour of congestion

	US-24 @ Blue River Bridge	Blue River Road
Vehicles/day	33,119	65
Capacity	65,472	12,890
Hours at E/F	0	0

Expansion Scenario B

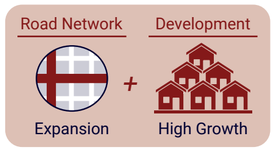


Figure 3.18: Hours at Level of Service E or F

- 3+ hours of congestion
- 1-2 hours of congestion
- <1 hour of congestion

	US-24 @ Blue River Bridge	Blue River Road
Vehicles/day	45,360	309
Capacity	65,472	12,980
Hours at E/F	2	0

OUR FUTURE BICYCLE SYSTEM

There have been several plans developed over the last several years to improve walking and biking within our communities and region. While sidewalks are prevalent within our communities, bicycle infrastructure is limited. Figure 3.19 shows the existing bicycle infrastructure in combination with the planned facilities. This map provides an overview of how each of our communities' planned bicycle infrastructure connects into the larger regional system.

RESOURCES
The *Regional Connections Plan* is a regional document outlining the opportunities to connect our communities to each other and to our state parks via trails. The infrastructure planned within our communities is identified in either the *Junction City Active Transportation Plan*, *Manhattan's Bicycle and Pedestrian Systems Plan*, or the Safe Routes to Schools plans for schools in Junction City, Ogden, Manhattan, or Wamego.

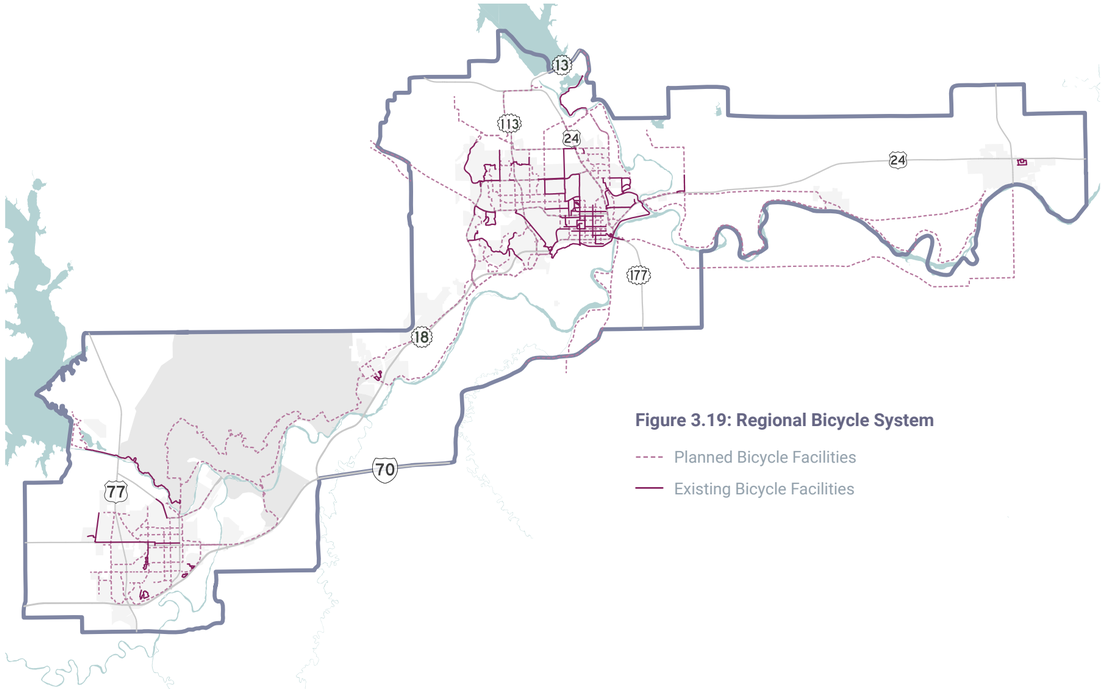


Figure 3.19: Regional Bicycle System

Planned Bicycle Facilities

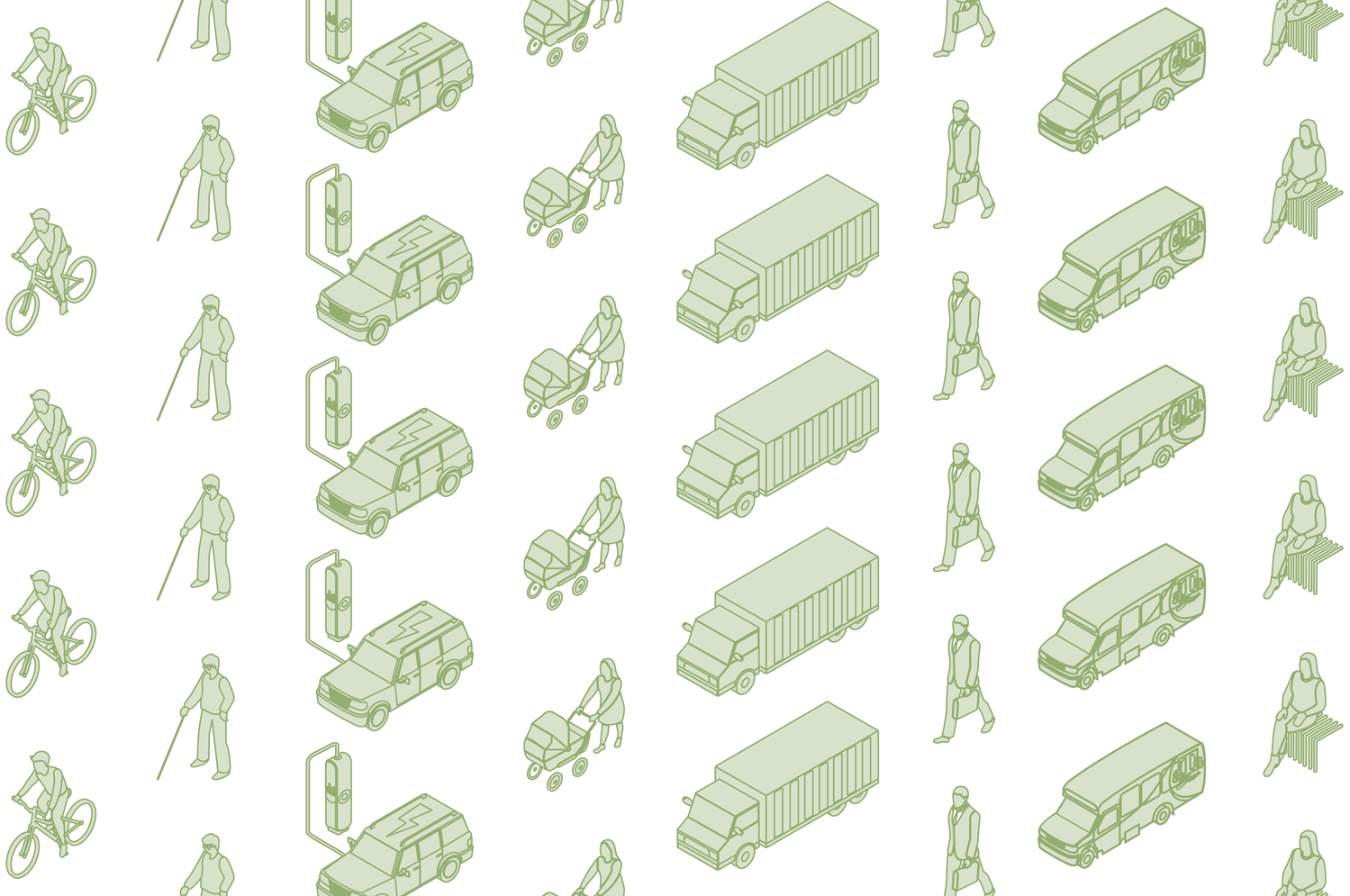
Existing Bicycle Facilities

OUR FUTURE PUBLIC TRANSIT SYSTEM

Flint Hills ATA is currently in the middle of a route study for the Manhattan area. This study is analyzing how best to utilize our limited funding and resources, while serving key areas. New and updated routes should begin service in the next few years, as well as the potential for microtransit service areas. Fixed-route service between Manhattan and the Green Valley Area has also been identified. As this area continues to grow, incorporating public transit into future development will become a necessity.

Regardless of changes to the fixed route systems in Manhattan and Junction City, one key upgrade to begin by the end of 2025 is the expanded K-18 Connector. Currently the K-18 only connects Manhattan and Ogden, with a required on-demand transfer between Junction City and Ogden. The upgraded route will provide direct one-bus service between the two communities, providing shorter and more convenient rides.

FUNDING
Federal funding is often available for improving public transit. However, it takes local investments to leverage this funding.



Chapter Four

COMMUNITY OUTREACH

No plan is complete without public outreach opportunities to engage residents in planning for the future of their community. For the past two years, the Flint Hills MPO team has worked closely with residents to ensure *Connect 2050* is the shared vision for transportation needs and opportunities over the next twenty-five years. During the development of the plan, a variety of outreach methods took place, from traditional public meetings to community surveys to informal “fun events”.

Every survey-taker, event participant, and public commenter involved in the development of *Connect 2050* has helped to mold the future of our region’s transportation system. The following pages outline the methods used to engage the public and the comments received.

Figure 4.1: *Connect 2050* Community Outreach

SURVEYS

» Connect 2050 Survey
November-December 2024

PUBLIC COMMENT PERIOD

» Regional Public Comment Period
October - November, 2025

OPEN HOUSE & PUBLIC EVENTS

» City of Manhattan: East MHK Gateway Plan
February 2024

» Junction City Fit-n-Fun Day
June 2024

» *Connect 2050* Open Houses: Round 1 (Manhattan, Blue Township, Wamego, St. George)
February 2025

» Junction City Grant Ave Visioning
February 2025

» Wamego Chamber Luncheon
July 2025

» PT EcoDevo Board Meeting
August 2025

» Junction City Oktoberfest
October 2025

» *Connect 2050* Open Houses: Round 2 (Manhattan, Junction City, Blue Township, Wamego)
October-November 2025

FUN EVENTS

» Manhattan 3rd Thursday
October 2025

» Trivia Night: St George
November 2025

» Trivia Night: Manhattan
November 2025

» Trivia Night: Junction City
November 2025

METHODS OF OUTREACH

Public outreach activities can greatly range in scale and format. To develop *Connect 2050*, the Flint Hills MPO team made an effort to reach people by going out into the community and asking for feedback.

Flint Hills MPO staff offered traditional public involvement methods such as surveys and open houses. Staff also answered questions and sought feedback about *Connect 2050* at public events for other community plans, such as the *East Manhattan Gateway Plan* and the Grant Avenue redevelopment in Junction City. The MPO also led a series of informal "fun events" to share *Connect 2050* with a wider range of community members.

Figure 4.1 provides an overview of the community outreach initiatives undertaken over the last two years. The feedback received during each of these events was used to help guide the development of *Connect 2050*.

A formal public comment period for the Plan was held from October 29 to November 30, 2025. XXXXX comments were received. Appendix F contains more information on where the draft document was made available to the public.

OUTREACH BY THE NUMBERS

500+
booth visits at pop-up events (2024 to 2025)

24+
hours at pop-up events (2024 to 2025)

190
completed MPO surveys

2
media conversations on KMAN Radio

OPEN HOUSES & FUN EVENTS

Events that encourage education and outreach at established events or popular community locations.

Figure 4.3: Public Festival and Open House

Family Fun-n-Fit Day - Junction City - June 2024

East Manhattan Gateway Plan Public Meeting - Blue Township - February 2024

OPEN HOUSES

At various points during the development of *Connect 2050*, the Flint Hills MPO team attended various community events throughout the region. Some events, such as the East MHK Gateway Plan meetings and the Junction City Grant Ave Visioning meeting, were put on by jurisdictions with the MPO playing a support role. At these events, MPO staff members would learn about the transportation needs of residents and understand their vision for the future.

FHMPO held the first round of Open Houses in Manhattan, Ogden, Wamego, Junction City, Blue Township, and St. George in January and February 2025. Popular public locations such as libraries, schools, and community centers were chosen to maximize outreach. Each Open House provided information about the goals and vision for *Connect 2050,* and attendees were invited to complete the survey and ask questions about the planning process. The seven Open Houses ranged in attendance from 0 to 100 people.

The second round of *Connect 2050* Open Houses will be held in October and November 2025. While the purpose of the first round of Open Houses was to gather information from the community to shape *Connect 2050*, the second round will share the completed Plan with the public. Attendees will again be invited to ask questions and provide comments on the Plan.

Figure 4.4: Open Houses

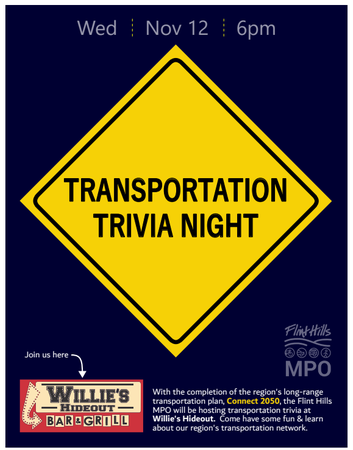
C2050 Open House - Manhattan - February 2025

C2050 Open House - Blue Township - February 2025

FUN EVENTS

In addition to a second round of open houses, Flint Hills MPO will be leading four “fun events” in Fall 2025. These events are intended to be an opportunity for residents to learn about regional transportation and *Connect 2050* in an informal way. The MPO will host three pub trivia nights across the region and lead an interactive, family-friendly mapping activity at Manhattan Third Thursday. By taking a more relaxed approach, the MPO hopes to reach more families and others who may not ordinarily attend a community open house.

Figure 4.5: Trivia Night Flyer



SURVEY RESPONSES

From November to December 2024, FHMPO collected digital and in-person surveys as part of the public input process for Connect 2050.

OVERVIEW

Flint Hills MPO conducted a public survey for *Connect 2050*. Survey participants were able to anonymously voice their opinion about their experiences and desires for the future of transportation in the Flint Hills region. The survey was administered from November to December of 2024, with additional responses gathered at public meetings in February 2025. The survey was available online and in print, receiving 190 total responses.

Survey-takers were asked which mode of travel they typically use to get around and had the option to rank their satisfaction with their usual mode. They were then asked to rank a series of factors that they believed the MPO should use to select transportation projects. Respondents were able to answer an open-ended response if they wanted to share additional thoughts or comment on transportation issues not listed in the survey.

A more in-depth review of responses by jurisdiction is shown in the following pages. Many respondents did not list their home jurisdiction; their responses were excluded from the individual jurisdiction reports, but included in the regionwide report on page 4.12.

Figure 4.6: MPO Jurisdictions by Number of Survey Responses

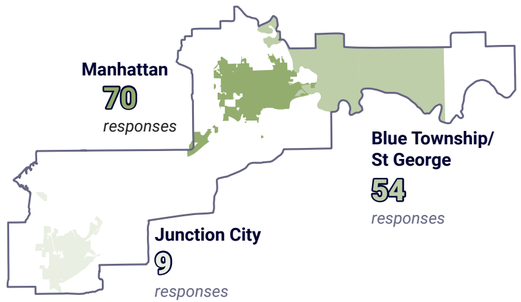


Figure 4.7: Pctg of Responses By Jurisdiction

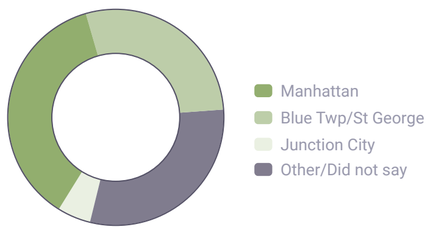


Figure 4.8: Comments & Concerns

MANHATTAN

Of the 190 survey respondents, 70 (37%) identified themselves as Manhattan residents. Survey-takers could select multiple answers for most of the questions, which is why the number of responses to each question sometimes exceeds the number of respondents.

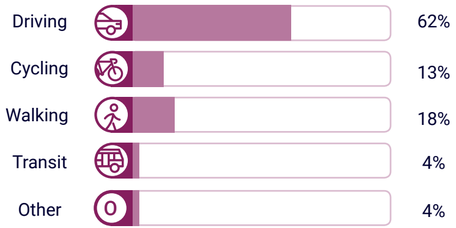
Drivers expressed concerns about road condition, safety, and availability of parking, especially in busy areas like Aggieville. Cyclists, who had the highest percentage of "unsatisfied" responses, cited safety, inattentive drivers, road/trail conditions, and a lack of connectivity among their concerns. Pedestrians had the highest percentage of "satisfied" responses, with many expressing support for the new trails and multi-use paths. There were some complaints about driver behavior and about sidewalk condition in residential neighborhoods.

The survey asked respondents to rank factors for selecting transportation projects from 1 (most important) to 6 (least important). Based on mean scores, respondents in Manhattan prioritized the following factors, in order:

1. **Safety for all users of the transportation system**
2. **Providing alternatives to driving (biking, walking, transit)**
3. **Affordability & cost**
4. **Impact on community livability**
5. **Environmental impacts (air & water quality)**
6. **Congestion/reliable travel times**

What modes do you use to get to work/school?

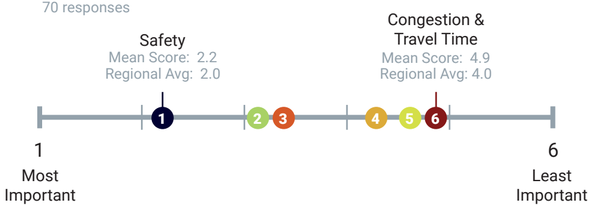
112 responses



How satisfied are you when using the following modes of travel?

Which factors for project selection are most important?

70 responses



JUNCTION CITY

9 survey respondents were residents of Junction City, accounting for 5% of the total respondents.

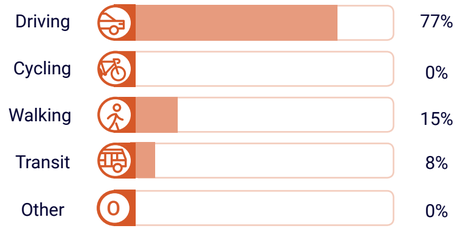
8 of the 9 survey-takers identified driving as their primary mode of traveling. While the number of responses was limited, respondents listed road condition and intersection safety among their primary concerns. Specific areas referenced were Grant Avenue and Washington Street, where the roads are in poor condition and sidewalks lack connectivity. One respondent expressed a desire for bike lanes and revitalization downtown.

Junction City respondents ranked safety as their most important factor the MPO should use to select projects, closely folowed by affordability and cost. The factor they identified as the lowest priority was the environmental impact of a transportation project. Based on mean scores, respondents in Junction City prioritized the following factors, in order:

1. **Safety for all users of the transportation system**
2. **Affordability & cost**
3. **Providing alternatives to driving (biking, walking, transit)**
4. **Impact on community livability**
5. **Congestion/reliable travel times**
6. **Environmental impacts (air & water quality)**

What modes do you use to get to work/school?

13 responses



How satisfied are you when using the following modes of travel?

Which factors for project selection are most important?

9 responses

BLUE TOWNSHIP/ST GEORGE

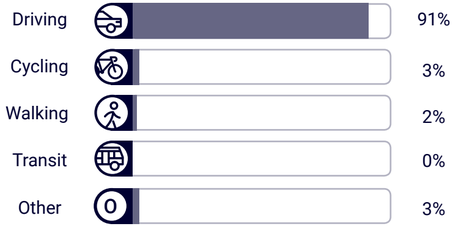
Of the 190 survey respondents, 54 (28%) identified themselves as residents of Blue Township or St George City/ Township.

Of the 54 respondents in the Blue Township or St. George areas, 91% reported they only drive to get to work. As these areas are primarily suburban low-density residential developments located across the river from Manhattan in rural areas, this finding aligns well with the land use implications noted in Chapter 2. Additionally, these respondents had the lowest driving satisfaction, scoring a full 33% lower than those in Manhattan. The key concerns they expressed were congestion, travel time, traffic signals, safety, and parking. Those that did respond that they walk or bicycle had the lowest feeling of safety and access to key destinations, again showing the lack of infrastructure in the area. Ironically, providing alternatives to driving scored as a much lower priority than respondents in Manhattan and Junction City, whereas congestion concerns were given higher priority.

1. **Safety for all users of the transportation system**
2. **Congestion/reliable travel times**
3. **Affordability & cost**
4. **Impact on community livability**
5. **Provide alternatives to driving**
6. **Environmental impacts (air & water quality)**

What modes do you use to get to work/school?

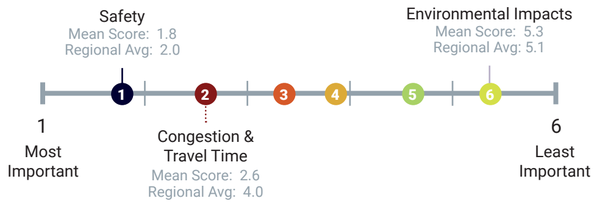
112 responses



How satisfied are you when using the following modes of travel?

Which factors for project selection are most important?

54 responses



REGION-WIDE

In total, 190 responses were received from across the region. Many survey respondents did not list their home jurisdiction; their responses were excluded from the individual jurisdiction reports, but included in the regionwide scores. The MPO received a limited number of responses from residents in smaller communities, including Wamego and Ogden; their answers are also reflected in the regionwide total.

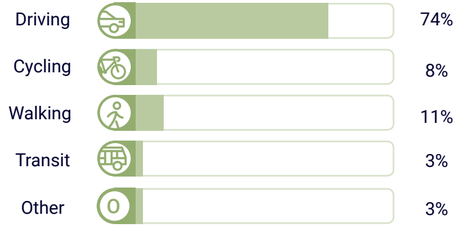
Respondents from across the region highly prioritized safety: "safety for all users of the transportation system" was ranked as the number one project selection factor by all jurisdictions and regionwide. "Environmental impacts" was ranked last by all communities except Manhattan, where "Congestion & reliable travel times" was ranked lower.

Broadly, residents of the Flint Hills region are concerned with road and trail conditions, inattentive drivers, parking, and intersection safety. Cyclists were consistently the least satisfied group of respondents, with many across the region commenting on a need for better connectivity and maintenance of walking and biking trails.

1. **Safety for all users of the transportation system**
2. **Affordability & cost**
3. **Providing alternatives to driving (biking, walking, transit)**
4. **Congestion/reliable travel times**
5. **Impact on community livability**
6. **Environmental impacts (air & water quality)**

What modes do you use to get to work/school?

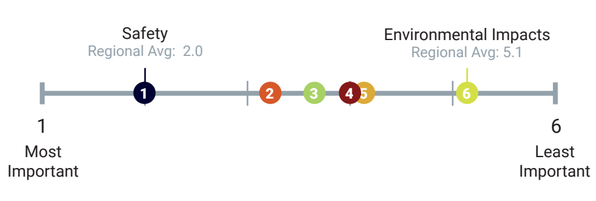
259 responses

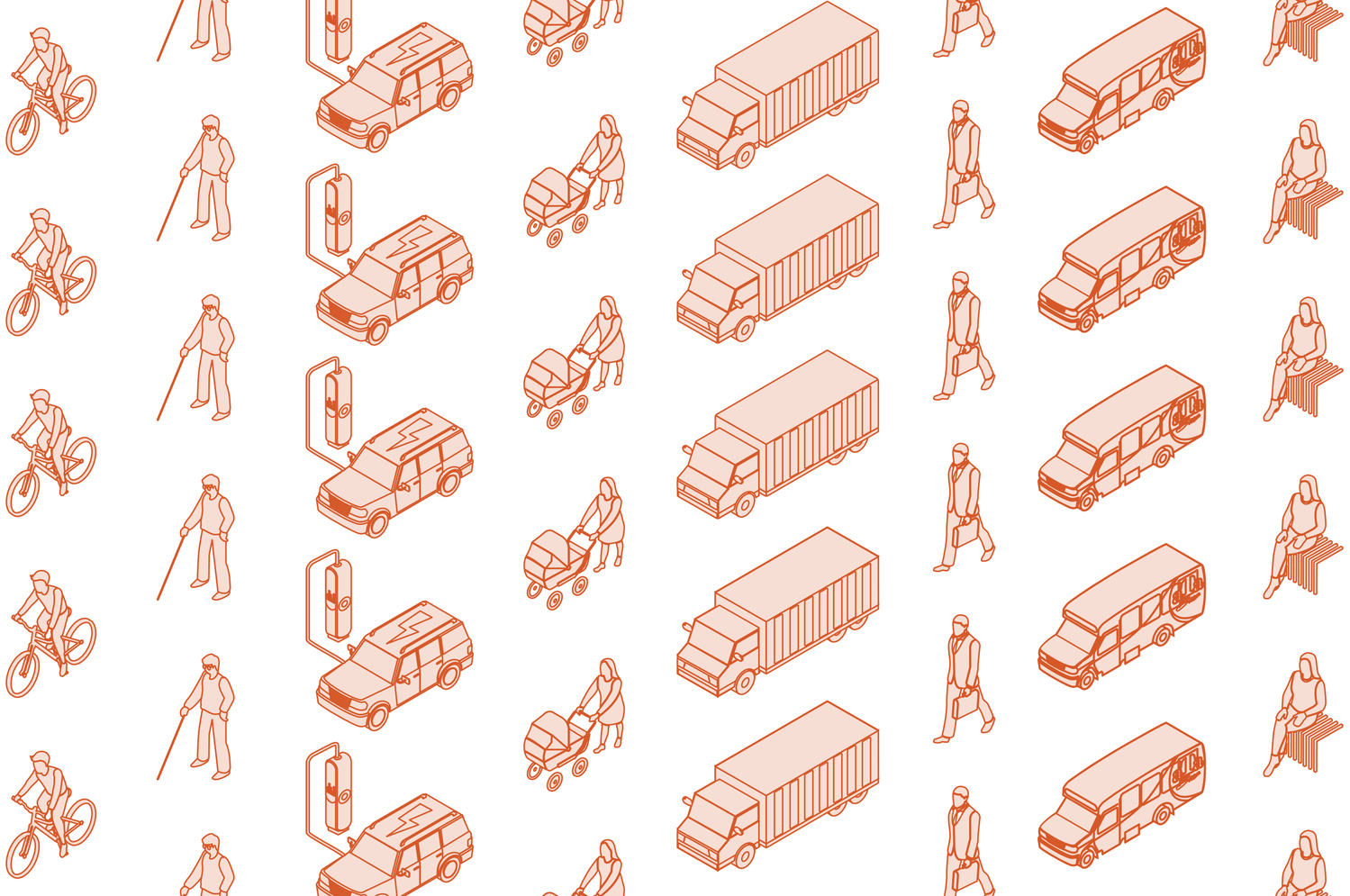


How satisfied are you when using the following modes of travel?

Which factors for project selection are most important?

148 responses





Chapter Five

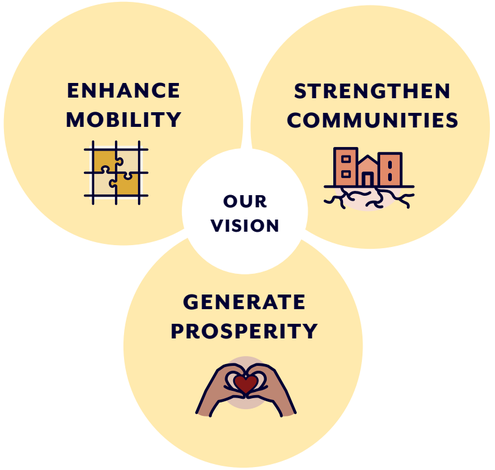
METRICS FOR PROGRESS

To achieve our vision for creating a transportation system that enhances mobility, strengthens communities, and generates prosperity, we must be able to monitor and assess how we are meeting our goals. Performance measures, and their respective targets, allow us to understand how our system is performing now compared to where we want to go.

The following chapter provides a summary of our performance measures and targets. This information is updated routinely to track our progress and identify where and how we should focus our investments.

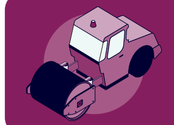
METRICS FOR PROGRESS

To better gauge where we are today and what we need to do to achieve our transportation vision and goals, performance measures and targets have been established. Our MPO is required to track some of these performance measures, while others are voluntary.



CONNECT 2050 GOALS

SAFETY
Provide a safe and secure multi-modal transportation system.



PRESERVATION
Invest in the preservation and maintenance of our existing transportation infrastructure and assets.

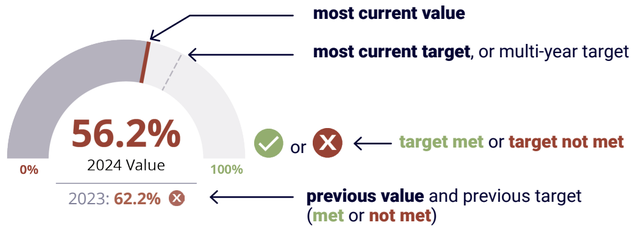
MOBILITY
Maintain system performance and enhance modal choice for the efficient movement of people, goods, and freight.

PROSPERITY
Create an affordable, sustainable, and integrated transportation system for all users.

RESILIENCE
Promote a transportation system that adapts to change, recovers from disruption, and advances environmental sustainability.

UNDERSTANDING THE METRICS AND GAUGES IN THIS CHAPTER

The following chapter has been organized by the five goals of *Connect 2050*. Throughout these sections, gauge charts have been used to clarify the comparison of where we stand today compared to our future targets. Note that there is a delay in reporting for many performance measures, which is why some PMs have different reporting years. FHMPO uses the most recent data available.



Federally Required Metric
MPOs are federally required to use a performance-based approach for guiding transportation investment and policy decisions. Transportation legislation identifies several performance metrics MPOs must monitor, establish targets for, and report on.

Flint Hills MPO Metric
MPOs can choose to establish additional goals and targets specific to their region.

IIJA PLANNING FACTORS

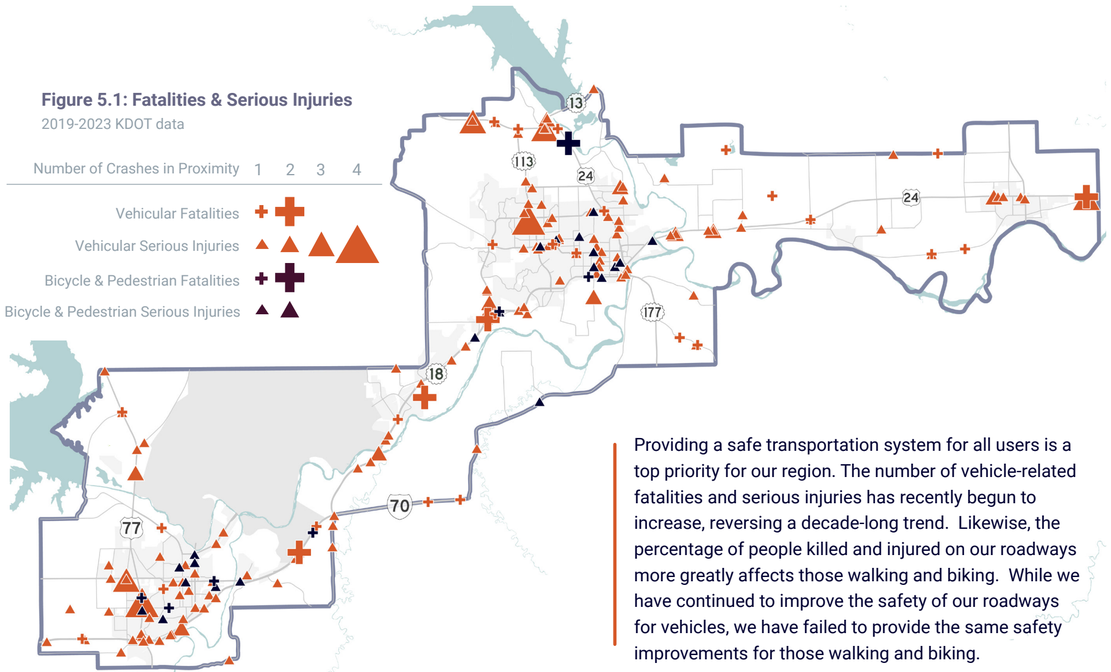
- The current federal surface transportation legislation, the Infrastructure Investment and Jobs Act (IIJA), retains the ten transportation planning factors established in the previous legislation, the FAST Act. Within each *Connect 2050* goal section, you will find the corresponding planning factors listed.
- With the prevalence of data available, the MPO has chosen to set its own targets instead of adopting statewide metrics set by KDOT.

SAFETY

Provide a safe and secure multi-modal transportation system.

Figure 5.1: Fatalities & Serious Injuries

2019-2023 KDOT data



Providing a safe transportation system for all users is a top priority for our region. The number of vehicle-related fatalities and serious injuries has recently begun to increase, reversing a decade-long trend. Likewise, the percentage of people killed and injured on our roadways more greatly affects those walking and biking. While we have continued to improve the safety of our roadways for vehicles, we have failed to provide the same safety improvements for those walking and biking.

PM 1: # of vehicular fatalities

Because the number of vehicular fatalities may vary greatly from year to year, the MPO looks at 5-year averages to gain a better idea of overall trends. Over the last five years of available data (2019-2023), we have had a total of 34 fatalities on our roadways. In 2023, there were 8 vehicular fatalities in the MPO area and the 5-year average increased to 6.8.

PM 2: Rate of vehicular fatalities per 100 million vehicle miles traveled (VMT)

Using a "rate" allows us to compare the safety of our roadways to larger regions that have hundreds more crashes each year. Think of this as a per capita comparison, but rather than using population, we use the number of miles driven on our roadways. The five-year average rate of fatalities per 100 million VMT is 0.93, marking the third consecutive year of increase.

WHAT IS VMT?

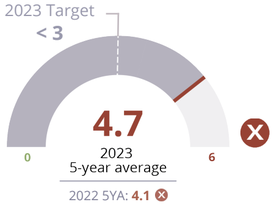
Vehicle Miles Traveled (VMT) is the number of miles driven on our roadways in one year. In 2023, people drove approximately **741 million miles** in our region, an increase from 728 million in 2022.

PM 3: # of serious injuries

The MPO area saw 37 serious injuries in 2023, a decrease from 2022 but still higher than the five-year average. In addition, the five-year average of serious injuries increased to 34, the highest 5-year value since 2017. This five-year average well exceeded both the 2023 target (<18 serious injuries) and the 2024-26 target of <25 serious injuries.

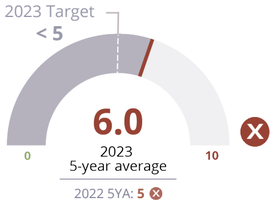
PM 4: Rate of serious injuries per 100 million VMT

In 2023, the rate of serious injuries for the MPO area decreased to 4.991 serious injuries per 100 million VMT. Despite this decrease for the year, the 5-year average increased to 4.7 serious injuries per 100m VMT due to higher numbers in previous years. This exceeds the 2023 target of 3 SI per 100m VMT.



PM 5: Non-motorized fatalities & serious injuries

Bicycle and pedestrian fatalities and serious injuries are classified as "non-motorized". There were 7 non-motorized fatalities and serious injuries within the MPO area in 2023, bringing the 5-year average to 6. This 5-year average exceeds the target value of 5 and is the highest since the MPO began collecting data in 2011.



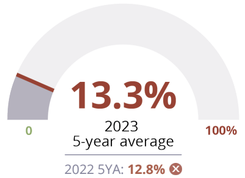
WHAT ARE CONSIDERED SERIOUS INJURIES?

USDOT uses the definition provided by the MMUCC 4th edition. An injury is considered serious if it meets one or more of the following criteria:

- Severe laceration
- Broken or distorted extremity
- Crush injuries
- Skull, chest, or abdominal injury other than bruises
- Significant burns (2nd or 3rd degree on >10% of body)
- Unconscious when taken from the scene
- Paralysis

PM 6: % of serious injury and fatality crashes involving bicycles & pedestrians

Despite comprising only 9% of commuting mode share, the five-year average percentage of serious and fatality crashes involving cyclists and pedestrians was 13.3%. This is an increase from the previous 5-year average of 12.8%.



PM 7: % of public transit buses with cameras

The Flint Hills Area Transportation Agency (ATA Bus) has 32 vehicles, including 28 cutaway vehicles and 4 transit vans. All public transit vehicles are equipped with cameras.

PM 8: # of public transit related fatalities & serious injuries

The ATA Bus had no transit-related fatalities or serious injuries between 2016 and 2024. Public transit remains one of the safest modes of travel in our region.

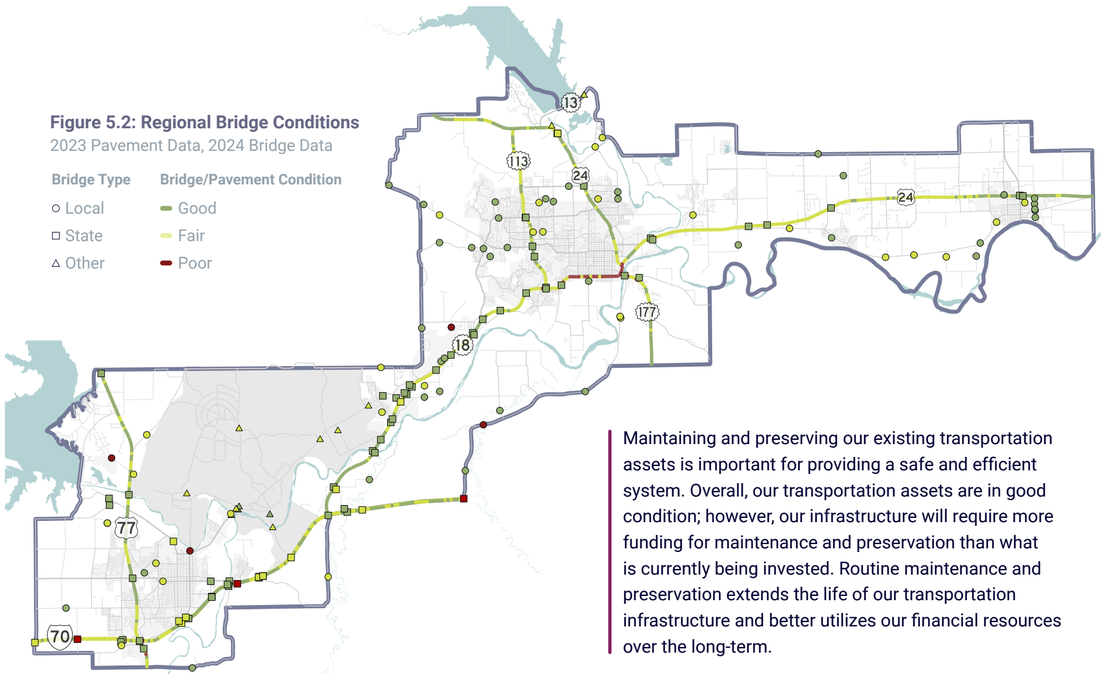
WHAT ARE THE IIJA PLANNING FACTORS FOR SAFETY?

- Increase safety of the transportation system for motorized and non-motorized users.
- Increase security of the transportation system for motorized and non-motorized users.

PRESERVATION

Invest in the preservation and maintenance of our existing infrastructure and assets.

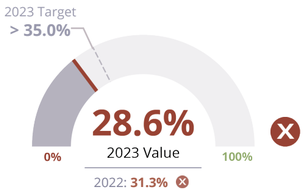
Figure 5.2: Regional Bridge Conditions
2023 Pavement Data, 2024 Bridge Data



Maintaining and preserving our existing transportation assets is important for providing a safe and efficient system. Overall, our transportation assets are in good condition; however, our infrastructure will require more funding for maintenance and preservation than what is currently being invested. Routine maintenance and preservation extends the life of our transportation infrastructure and better utilizes our financial resources over the long-term.

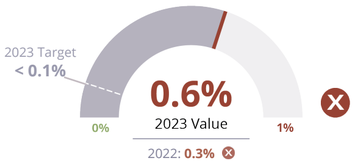
PM 1: % of Interstate pavement in good condition

The 16 centerline miles of I-70 are the only segments of interstate in the MPO region. Current construction work is expected to improve the condition of these lanes in the coming years.



PM 2: % of Interstate pavement in poor condition

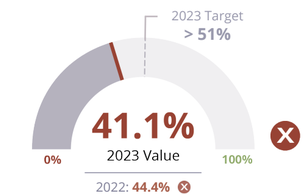
The pavement condition on I-70 continues to deteriorate. The longer preservation and maintenance needs are prolonged, the more expensive repairs become.



Interstate Pavement by Condition

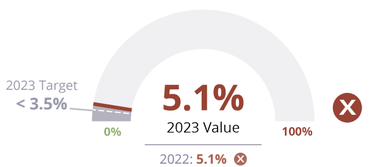
PM 3: % of non-Interstate pavement in good condition

The non-interstate pavement includes all roadways on the National Highway System (NHS), such as state highways. There are 60 centerline miles of non-Interstate NHS roads in our region.



PM 4: % of non-Interstate pavement in poor condition

Since 2018, 3.6% more pavement on non-interstate NHS roadways is now in poor condition. The 2023 percentage, 5.1%, is also well above the target value of less than 3.5%.



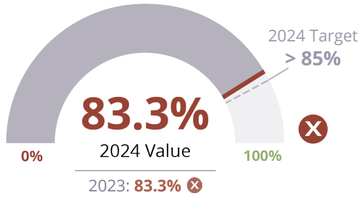
Non-Interstate Pavement by Condition

CENTERLINE VS LANE MILES

Roadway lengths can be measured by **centerline miles** or **lane miles.** Centerline miles do not take into consideration the number of lanes a roadway has, while lane miles do. Example: If a four lane road is 100 feet long, it would be 100 centerline miles or 400 lane miles.

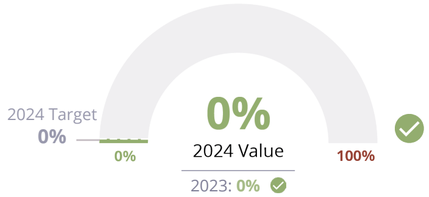
PM 5: % of NHS bridges in good condition

Bridge condition is measured by the deck area classified in good, fair, or poor condition. Of the bridges on the National Highway System (NHS), 83.3% are in good condition.



PM 6: % of NHS bridges in poor condition

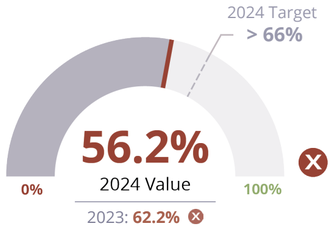
There are no bridges by deck area classified as in poor condition on the NHS system.



State-Owned Bridges by Condition

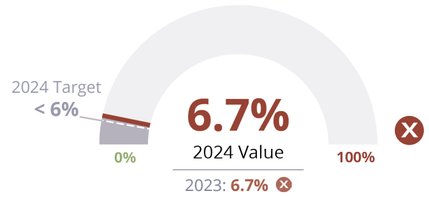
PM 7: % of non-NHS bridges in good condition

Non-NHS bridges are those on the local roadway system. Of the 84 bridges on the local system, 56.2% are in good condition.



PM 8: % of non-NHS bridges in poor condition

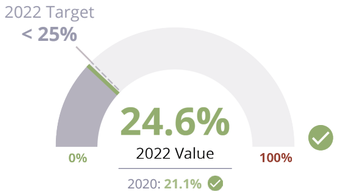
While most of our non-NHS bridges are in good condition, 5.4% are in poor condition.



Non-State-Owned Bridges by Condition

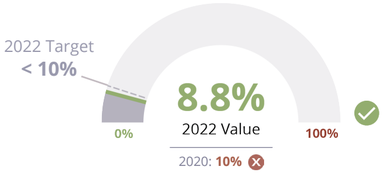
PM 9: % of revenue vehicles exceeding their useful life benchmark (ULB)

Useful life benchmark is the expected life cycle of a transit asset. Our region has several smaller transit providers that provide transportation services to their clients, while the ATA Bus provides the general public with transit services. Our goal is to have less than 25% of all of our transit vehicles meeting or exceeding their useful life. A majority of the vehicles exceeding their ULB are vehicles owned by smaller transit providers.



PM 10: % of transit fleet with more than 200,000 odometer miles

In total, our region has 57 transit vehicles in service by the smaller transit providers and ATA Bus. Of these, five (5) exceed 200,000 odometer miles. The goal is to have less than 10% of the fleet below this threshold as maintenance on high-mileage vehicles is substantially more frequent and expensive.



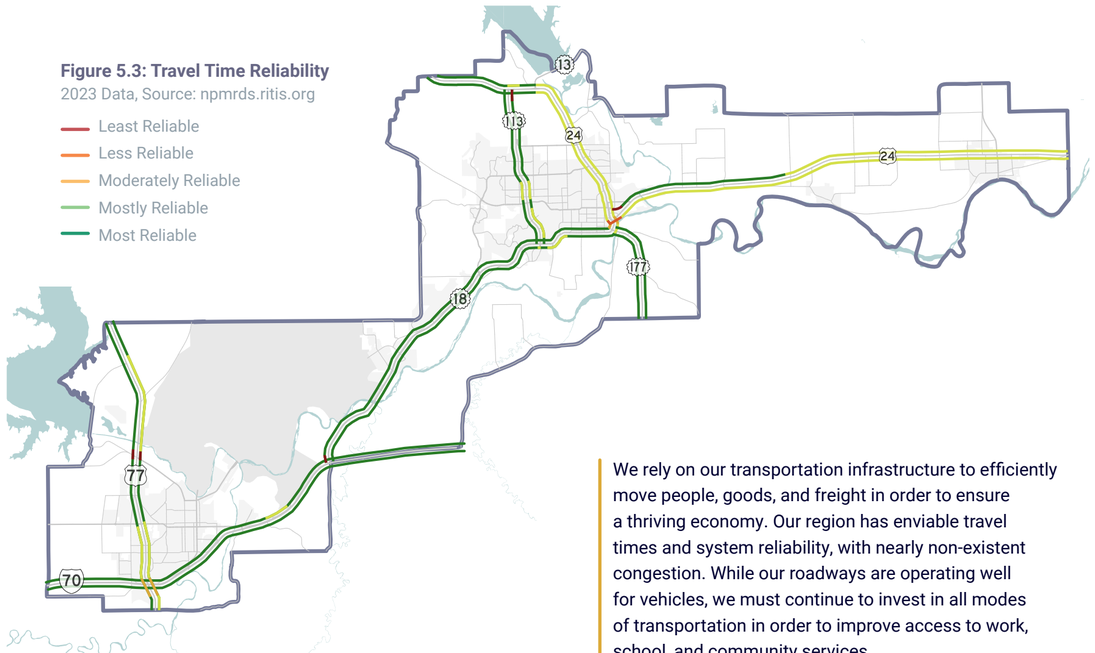
MISSING THE (MOVING) TARGET:

The MPO region failed to meet targets on 12 of 14 Federally required metrics. The reasons are numerous but include project delays, changes in data classification, COVID19 related changes in driving behavior (state & nationwide trends), lack of historical data, and overly aggressive targets. The MPO is working to set more reasonable goals based on the data available. Despite the missed targets, the MPO and its regional communities will continue to leverage data help identify and prioritize projects by safety and need.

MOBILITY

Maintain system performance and enhance modal choice for the efficient movement of people, goods, and freight.

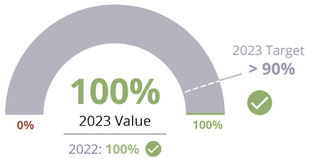
Figure 5.3: Travel Time Reliability
2023 Data, Source: npmrds.ritis.org



We rely on our transportation infrastructure to efficiently move people, goods, and freight in order to ensure a thriving economy. Our region has enviable travel times and system reliability, with nearly non-existent congestion. While our roadways are operating well for vehicles, we must continue to invest in all modes of transportation in order to improve access to work, school, and community services.

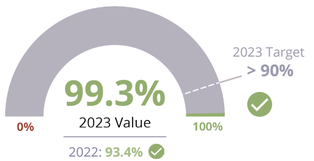
PM 1: % of person-miles traveled on the Interstate with a reliable travel time

100% of the person-miles traveled on I-70 through our region are reliable. This means our Interstate system has a low amount of congestion, allowing people and goods to move efficiently through our region.



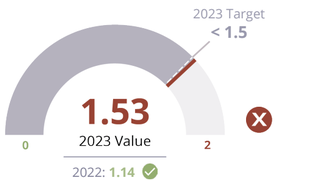
PM 2: % of person-miles traveled on the NHS with a reliable travel time

Of the non-interstate roadways on the National Highway System (NHS), 99.3% are performing at a high-level of reliability. Reliability has improved over the past two years, largely due to the completion of construction projects on K-18 and US-24.



PM 3: Truck Travel Time Reliability (TTTR) index on our interstate system

A complex formula is used to develop the TTTR Index and to calculate the TTTR of our interstate system. Ideally, any segment along a roadway should have a TTTR Index of 1.50 or less. TTTR in the MPO region increased to 1.53, slightly above the target value, due to construction on I-70 in 2023.

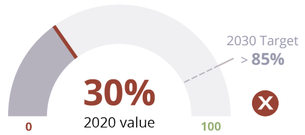


TRAVEL TIME RELIABILITY

Defined as the consistency or dependability in travel times across different days and different times of day.
Truck Travel Time Reliability (TTTR) is the measure of reliable travel times for trucks on the Interstate system.
This is calculated by comparing days with extremely high delays to days with average travel times.

PM 4: % of Intelligent Transportation Systems enabled traffic signals along key corridors

Intelligent transportation systems (ITS) allow for communication and coordination among signals to improve traffic flow. Our region has 17.5 miles of signalized corridors, with 30% percent enabled with signal coordination to improve the efficiency of the corridor.



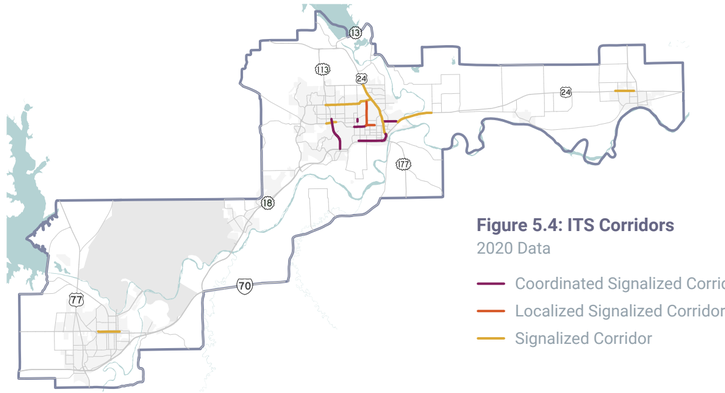
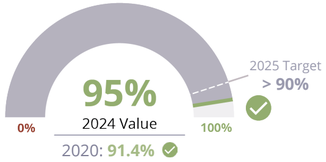


Figure 5.4: ITS Corridors
2020 Data

- Coordinated Signalized Corridor
- Localized Signalized Corridor
- Signalized Corridor

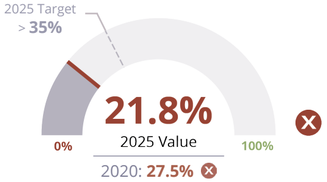
PM 5: % of transit routes on-time performance

Providing an on-time public transit service is important for dependability and reliability. The ATA Bus' current on time performance among all fixed routes has increased from 91.4% in 2020 to 95% in 2024.



PM 6: % of planned bicycle infrastructure projects implemented

There are 242 miles of planned bicycle projects in our region. To date only 67.4 miles, or 21.8%, of this infrastructure has been built. Strides towards the implementation of this bicycle infrastructure will provide our community with a network that will provide access to local and eventually regional connections.



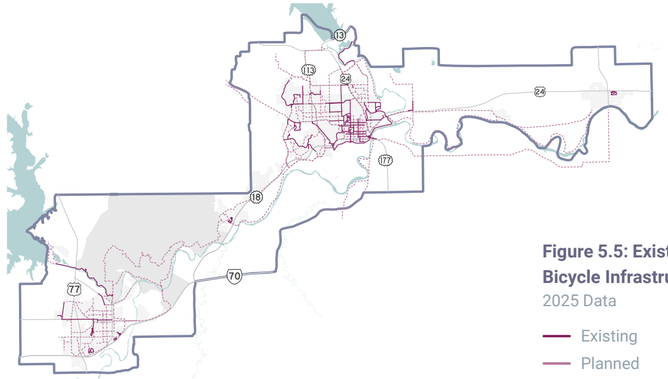


Figure 5.5: Existing & Planned Bicycle Infrastructure
2025 Data

- Existing
- Planned

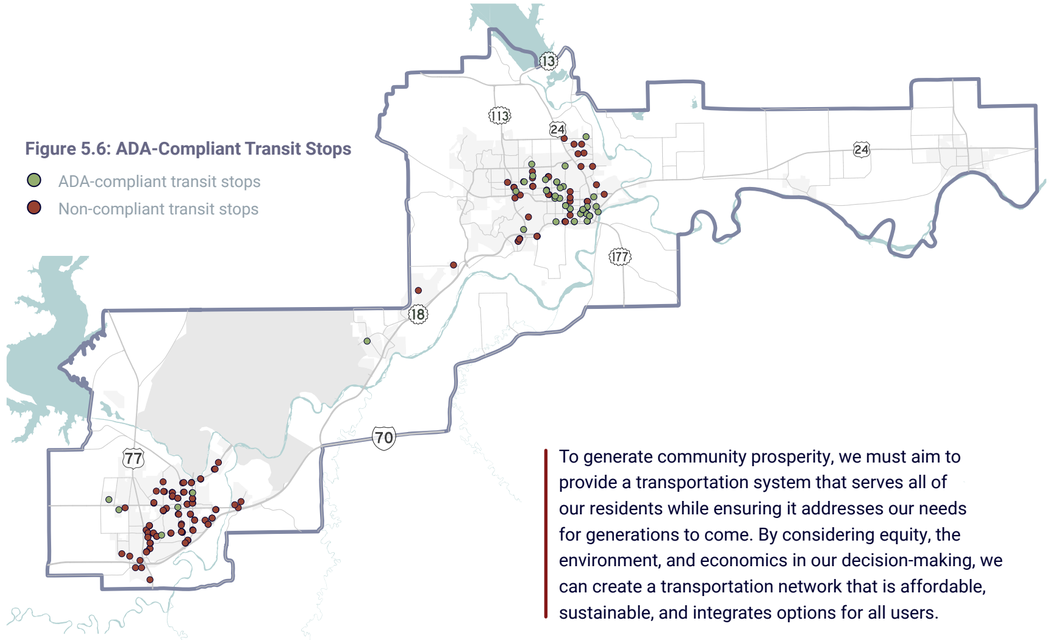
WHAT ARE THE IIJA PLANNING FACTORS FOR MOBILITY?

- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operations.

PROSPERITY

Create an affordable, sustainable, and integrated transportation system for all users.

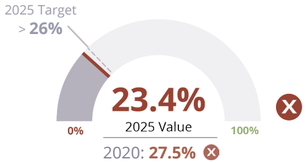
Figure 5.6: ADA-Compliant Transit Stops



To generate community prosperity, we must aim to provide a transportation system that serves all of our residents while ensuring it addresses our needs for generations to come. By considering equity, the environment, and economics in our decision-making, we can create a transportation network that is affordable, sustainable, and integrates options for all users.

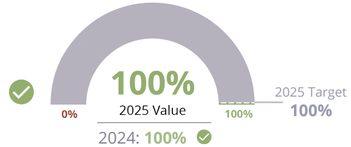
MPO PM 1: % of transit stops compliant with Americans with Disabilities Act (ADA)

Our region has 192 fixed-route bus stops, of which, only 18% are ADA compliant. To improve public transit accessibility, the number of ADA compliant bus stops must increase.



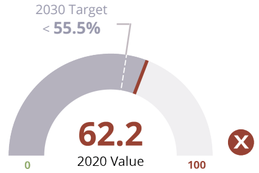
MPO PM 2: % of bus fleet equipped with bike racks

The ATA Bus has a total of 36 buses, of which 21 are equipped with a bike rack. Ideally, all fixed-route buses should have bike racks. This number should also include bike racks on demand response buses that are occasionally used for fixed-routes.



MPO PM 3: Maintain or reduce the number of roadway feet per person

When roadways are built or expanded, a larger financial burden is placed on existing residents to support the infrastructure. To be fiscally responsible and reduce the cost of transportation, our region should focus on reducing or maintaining the number of roadway feet per person.



WHAT ARE THE IIJA PLANNING FACTORS FOR PROSPERITY?

- Protect and enhance the environment, promote energy conversation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.
- Enhance travel and tourism.

RESILIENCE

Promote a transportation system that adapts to change, recovers from disruption, and advances environmental sustainability.

PM 1: # of EVs registered

In 2023, a total of **234** plug-in EVs were registered in the 3 MPO counties. Of these, 54 were registered in Geary County, 49 were registered in Pottawatomie County, and 131 were registered in Riley County.

= 100 cars

PM 2: # of hybrids registered

1,307 hybrid vehicles were registered in the MPO counties in 2023. Residents in Riley County registered the majority with 820 hybrid vehicles. 253 hybrids were registered in Pottawatomie County and 234 in Geary County.

= 100 cars

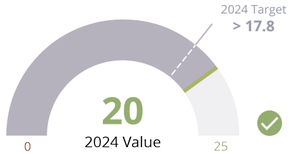
PM 3: % of registered vehicles that are EVs or hybrids

81,698 vehicles were registered in the 3 MPO counties in 2023. EVs or hybrids accounted for 1,541, or **1.9%**, of the vehicles registered. Each car in the graphic below represents 1% of the total vehicles registered in 2023.

Note: The MPO tracks the number of EVs and hybrids registered per year in our region, but does not set goals for registration.

PM 4: # of Level 2 EV Charging Plugs

The MPO uses the US Department of Energy's EV Infrastructure Toolbox Calculator to set targets for EV charging infrastructure. The calculator uses population, existing infrastructure, and EV adoption rates to estimate the infrastructure needed to support a given area. As of 2024, there are 20 Level 2 plugs in the MPO area, exceeding the target of at least 17.8.



The map below is a "gap analysis" showing where Level 2 EV chargers are most needed in the MPO region. The model takes into account land use and existing charging stations to estimate areas of demand for EV charging infrastructure.

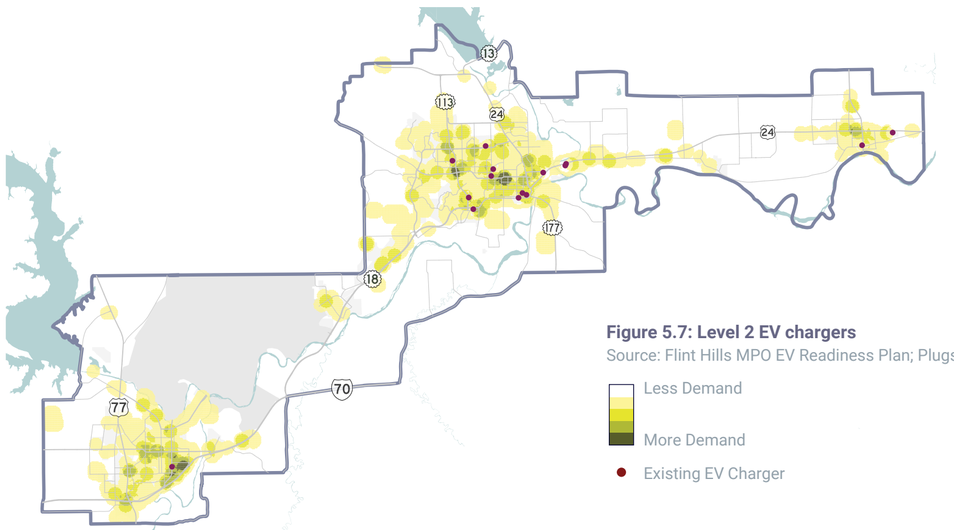
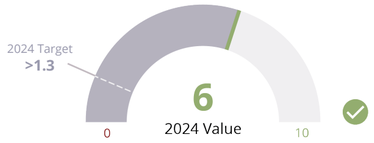


Figure 5.7: Level 2 EV chargers
Source: Flint Hills MPO EV Readiness Plan; Plugshare

PM 5: # of Level 3 EV Charging Plugs

There are currently 6 Level 3 EV charging plugs in the region, well above the target of 1.3. All 6 are located along US-24 near Manhattan. The map below shows the MPO's Level 3 gap analysis, which reveals demand is highest in the I-70 corridor near Junction City.



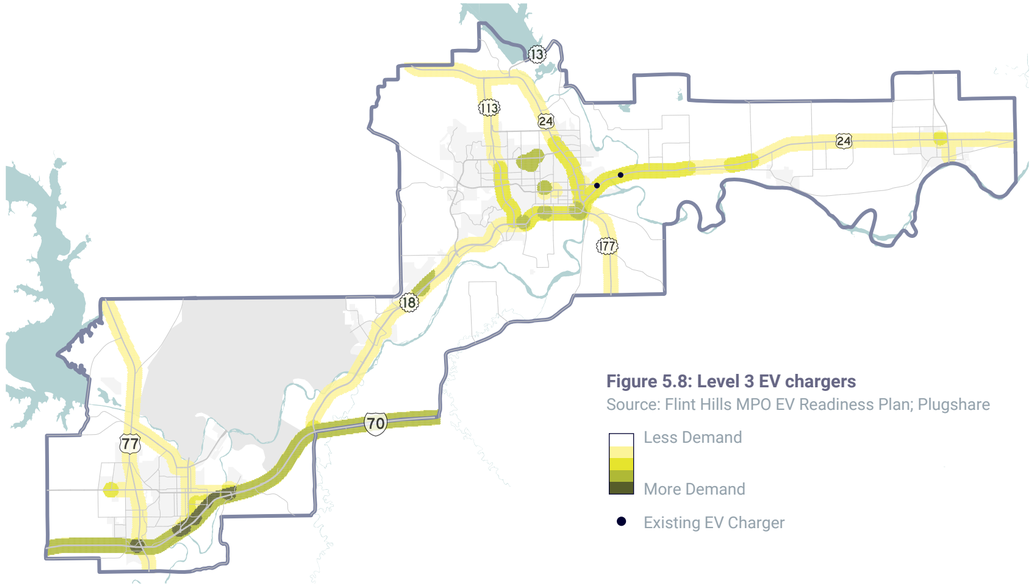


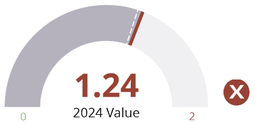
Figure 5.8: Level 3 EV chargers
Source: Flint Hills MPO EV Readiness Plan; Plugshare

PM 6: # of EV/Hybrid Vehicle Fires

While rare, EV fires present unique challenges to firefighters and require specialized equipment to extinguish. The MPO tracks the number of fire incidents involving EVs, EV batteries, and hybrid vehicles using data from emergency management agencies in the MPO counties. To date, there have been no fires caused by an EV or hybrid vehicle in the MPO region.

PM 7: # of Parking Spots Per Capita

The MPO tracks the total number of parking spots in the region, providing insights into urban density and accessibility. Tracking this measure can help prioritize parking policies and inform decisions on EV charging infrastructure placement.



WHAT ARE THE IIJA PLANNING FACTORS FOR RESILIENCE?

- Protect and enhance the environment, promote energy conversation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.

DRIVE TO ZERO

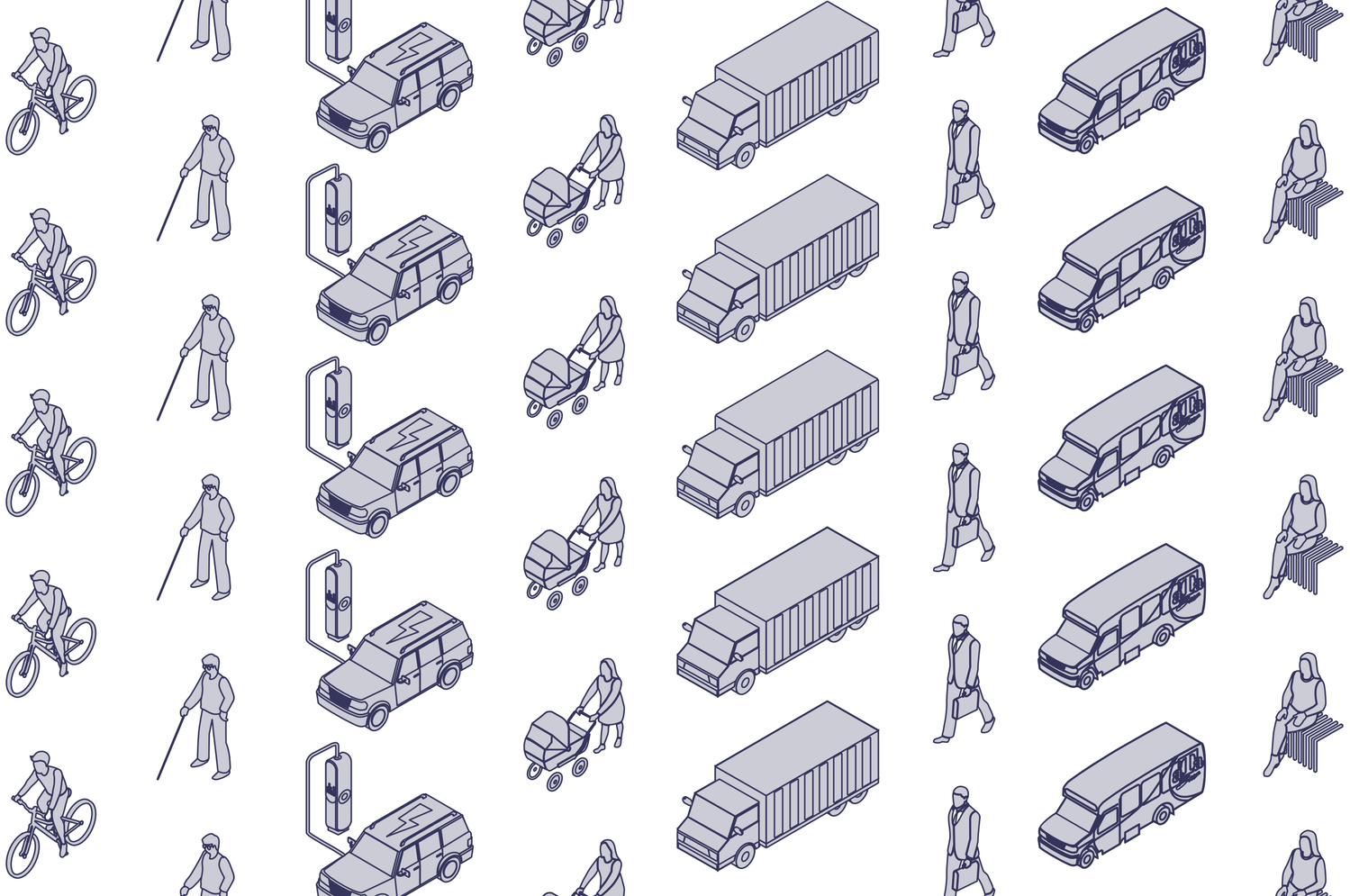
The Kansas Drive to Zero Plan (DTZ), adopted in June 2025, is the official Kansas Strategic Highway Safety Plan (SHSP) for 2025-2029. This plan was developed through a collaborative and data-driven approach, uniting public and private sectors, to produce a holistic safe systems approach (Figure 5.9). Figure 5.10 provides a graphic overview of the five DTZ Strategy Teams and lists the associated DTZ Strategies. While not Performance Measures per se, these Strategies provide a roadmap towards improved safety on our roadways. Projects listed in Chapter 6 have the associated DTZ Strategy listed to show how they align with State goals.

Appendix E contains the full DTZ plan, including detailed information for each Strategy.

Figure 5.9: Drive to Zero Safe Systems Approach

Figure 5.10: Drive to Zero Plan Strategies

Graphics on this page courtesy of Kansas Drive to Zero.



Chapter Six

WHAT WE CAN AFFORD

Connect 2050 envisions a transportation system that considers the future needs of our communities by delivering solutions in a responsible and affordable manner. Due to local funding levels, *Connect 2050* reflects a slim list of future projects.

Connect 2050 serves as both a strategic plan and vision statement for our future transportation system. The projects listed within this chapter are those we can reasonably afford to construct and operate by 2050. These projects range in size and scope, focusing on preserving what we have today to making strategic investments in new infrastructure.

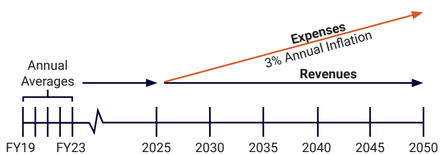
TRANSPORTATION FUNDING

FUNDING 101

Funding our transportation network is a complicated fabric of revenue sources, agencies, programs. However, in the end, it is a simple formula that provides insight into the health of our regional funding system: Revenues minus Expenses equals Funds for New Projects (Figure 6.1). Financial data for the last five years was collected from local jurisdictions, KDOT, and ATA Bus. Five-year averages were calculated and then used to make long-range projections of available revenues and future expenditures. Future expenditures were calculated using a 3% annual inflation factor, while future revenues were held constant (Figure 6.2).

Figure 6.1: Funding Formula

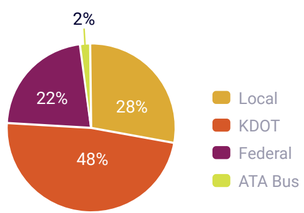
Figure 6.2: Financial Projections



REVENUES 101

The maintenance, preservation, and construction of our region's transportation infrastructure is funded by a combination of local, state, and federal money. As seen in Figure 6.3, over the next 25 years, nearly half of local revenues will be state funds from KDOT. Most of these KDOT funds will be used to maintain state-owned infrastructure, like highways or the Interstate. The following pages show that local needs will go unmet due to a lack of sufficient revenues. The detailed revenue calculations used in this Plan, can be found in Appendix B. For a detailed look at what taxes and programs fund transportation both locally, statewide, and nationally, please see Funding 102 in Appendix C.

Figure 6.3: Total Regional Revenues by Source
(2025-2050)



EXPENSES 101

Expenses are broken down into Operation & Maintenance (O&M) and Preservation. Supporting our existing network is the highest priority in providing a safe and efficient transportation system. However, the preservation expenses of our local-owned roadways continue to outpace our dedicated transportation revenues. Going forward towards 2050, this situation will create a challenge to maintain our infrastructure with just our existing funding sources. This will create a challenge in continuing to preserve and maintain our infrastructure with existing funding sources. Without new sources of funding, or increases to existing funding streams, local budgets will be stretched thin over the coming decades, unable to address all transportation needs. The detailed expenditure calculations used in this Plan can be found in Appendix B.

OPERATIONS AND MAINTENANCE (O&M)
O&M refers to minor upkeep and maintenance like filling potholes, snow removal, re-striping, or maintaining traffic signals. It also includes labor and equipment.

VS

PRESERVATION
Preservation projects are complete rebuilds of existing infrastructure, like replacing a bridge or roadway. This also includes replacing transit buses.

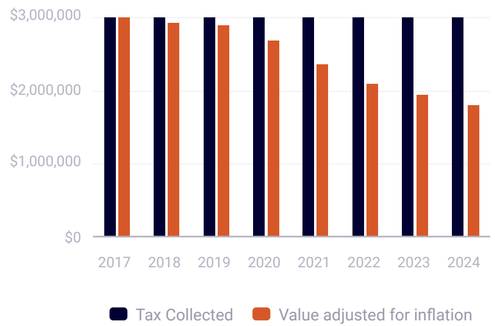
FUNDING 102
A more detailed explanation of transportation funding can be found in Appendix C. Topics include: how Federal funds are disbursed; local and state taxes (Motor Fuel Tax, sales taxes, etc.); the impact of vehicle efficiency, hybrids, and Electric Vehicles (EVs) on revenues; and inflation.

INFLATION

Inflation plays a critical role in the future funding of our transportation system. Over the last 20 years, general inflation has average 3% per year. In practical terms, if revenues do not increase at the rate of inflation, then the purchase power of revenue funds decreases. For example, the last time the Kansas Motor Fuel Tax (MFT, also known as the Gas Tax) increased was the year 2002. Since then, inflation has gone up 51.6%, meaning that if $1 of MFT in 2002 paid for $1 O&M. However, today, that $1 of MFT now pays for only $0.48 worth of O&M.

Locally, the cost of inflation can be illustrated by the City of Manhattan's 0.20% Street Maintenance Sales Tax, which was approved by voters in 2016, and came into effect in 2017. In the eight years since, inflation for transportation projects in our region has been nearly 40%. This means, that despite the City collecting approximately $3 million in Street Maintenance Sales Tax annually, the purchase power of those 2024 funds equates to only $1.8 million in 2017 value (see Figure 6.4). In other words, inflation has canceled out a substantial portion of the value the tax was supposed to provide for road maintenance.

Figure 6.4: Sales Tax Revenue Lost to Inflation



FUTURE FINANCIAL OUTLOOK

While our local jurisdictions will generate and receive over $373 million dollars over the next 25 years, over $787 million will be needed just for O&M and preservation. For most of our cities and counties, this means there are no remaining revenues to build new roads or expand existing ones. This is reflected in Figure 6.5 where the "$ for new projects" bar is in the negative in the 2036-2040 timeband.

KDOT, however, is better situated to operate and maintain the existing state system, only seeing a potential shortfall around 2050. One caveat is that most of this funding will likely be limited to projects on the state system.

Over the next twenty-five years, our local revenues will be exhausted, leaving us with a **$108.7 million deficit** by 2050.

Figure 6.5: Local Revenues and Expenses by Timeband

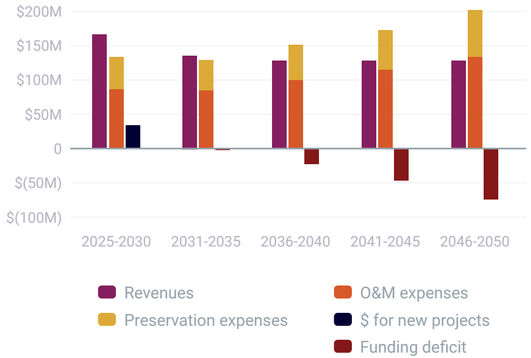
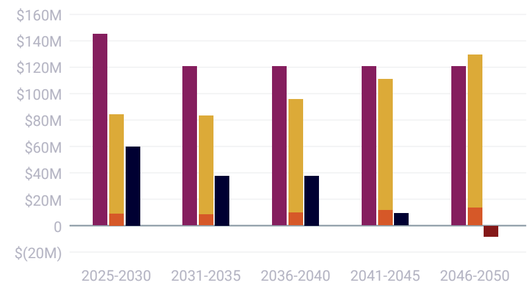


Figure 6.6: KDOT Revenues and Expenses for MPO Region



FINANCIAL INFORMATION BY JURISDICTION

Figure 6.8 presents the revenues and expenditure data by jurisdiction for each of the four timebands. With the exception of Geary County, none of our jurisdictions will have any remaining revenues for new projects after meeting their O&M and preservation obligations by the last timeband. The last bar in each grouping represents either money remaining for new projects or a funding deficit. If there is money remaining, this is the funding that can be used for any new expansion or modernization projects.

Figure 6.7: Local Revenues and Expenses 2025-2050
(in millions)

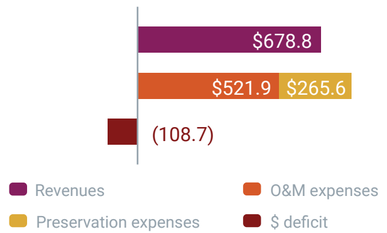


Figure 6.8: Local Revenues and Expenses by Timeband

	2025-2030	2031-2035	2036 - 2040	2041-2045	2046-2050
Manhattan	$85.7 $43.2 $22.9 $19.5	$71.4 $42.3 $22.4 $6.6	$71.4 $49.1 $26.0 ($3.7)	$71.4 $56.9 $30.1 ($15.7)	$71.4 $66.0 $34.9 ($29.5)
Junction City	$11.9 $8.9 $9.6 ($6.6)	$9.9 $8.7 $9.4 ($8.2)	$9.9 $10.1 $10.9 ($11.1)	$9.9 $11.7 $12.7 ($14.4)	$9.9 $13.6 $14.7 ($18.3)
Wamego	$8.8 $2.8 $4.0 $1.9	$7.3 $2.7 $3.9 $0.5	$7.3 $3.2 $4.6 ($0.5)	$7.3 $3.7 $5.3 ($1.7)	$7.3 $4.2 $6.1 ($3.1)
Riley County	$40.0 $5.1 $2.2 $32.6	$22.8 $5.0 $2.2 $15.5	$22.8 $5.8 $2.6 $14.3	$22.8 $6.8 $3.0 $13.0	$22.8 $7.9 $3.0 $11.4
Geary County	$5.5 $2.1 $0.4 $2.5	$4.6 $2.0 $0.4 $2.2	$4.6 $2.3 $0.5 $1.8	$4.6 $2.7 $0.6 $1.3	$4.6 $3.1 $0.7 $0.8
Pottawatomie County	$14.5 $5.2 $2.1 $7.2	$12.1 $5.1 $2.3 $4.9	$12.1 $5.9 $2.4 $3.8	$12.1 $5.9 $2.8 $2.4	$12.1 $7.9 $3.2 $0.9

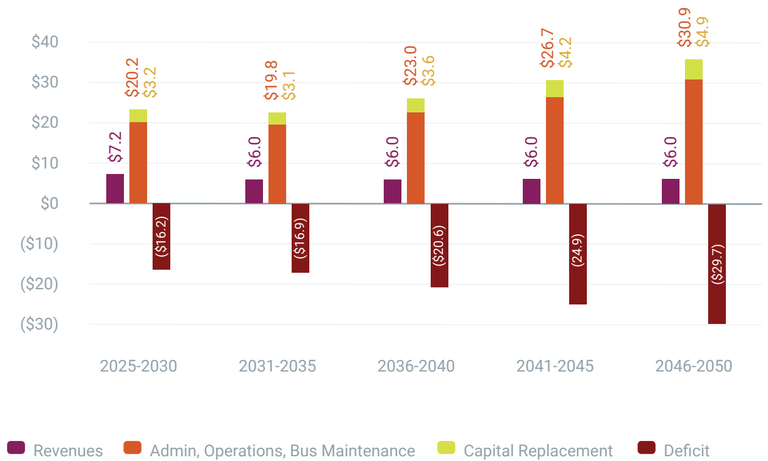
FUTURE FUNDING OF PUBLIC TRANSIT

Like our local jurisdictions, ATA Bus will struggle to operate and maintain the system they have in place today if revenues fail to keep up with the rising cost of expenditures. While federal funds will likely continue to be available, a local investment is required to leverage those funds.

Public Transit Priorities

- Expanding the K-18 Connector to Junction City
- Improving the Junction City Fixed-Routes
- Improving frequency of the Manhattan Fixed-Routes

Figure 6.9: Public Transit Revenues and Expenditures 2025-2050
(in millions)



Note: The projected expenditures for administration, operations, bus maintenance, and capital replacement assume no new routes or services.

FUTURE FUNDING FOR BICYCLE & PEDESTRIAN PROJECTS

For a majority of our cities and counties, there is not a dedicated funding source for bicycle and pedestrian projects. Often times, bicycle and pedestrian infrastructure (like sidewalks or multi-use trails) are added as a component of larger roadway projects.

One of the more popular funding streams utilized by our local jurisdictions to construct these projects is KDOT's Transportation Alternatives (TA) Program. TA is a federal program, administered by KDOT, and awarded on a competitive basis. TA funds have built 18 projects across the region since 2016. The Safe Routes to School Program (SRTS) is a sub-component of TA, focusing on improving walking and biking routes to schools. To be eligible for this funding source, the school must have a SRTS Phase I Plan, identifying infrastructure needs. The MPO has completed the SRTS plans for nearly all of the elementary schools within the region.

Since 2017, the City of Manhattan has had a dedicated sales tax providing roughly $118,000 each year in local match to leverage SRTS grant funds. This sales tax will sunset in 2026.

The bicycle and pedestrian projects planned for the next two decades are identified in either a Safe Routes to School Plan, the *Junction City Active Transportation Plan*, Manhattan's *Bicycle and Pedestrian Systems Plan*, or Wamego's *Sidewalk Plan*.

Figure 6.10: TA & SRTS Grants Received between 2016-2025

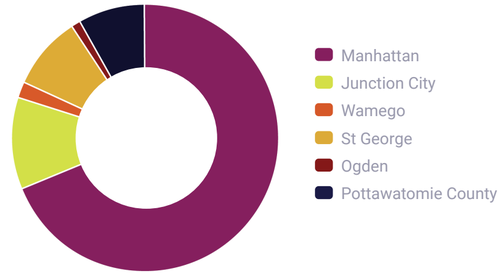


Figure 6.11: TA & SRTS Grants Received 2016-2025

	Amount	Pctg
Manhattan	$7,889,694	69%
Junction City	$1,268,052	11%
Wamego	$179,500	2%
St George	$1,008,660	9%
Ogden	$161,180	1%
PT County	$907,300	8%
USD 383	$17,956	0%
Total	$11,432,342	

PROJECTS WE CAN AFFORD

SELECTION OF FUTURE PROJECTS

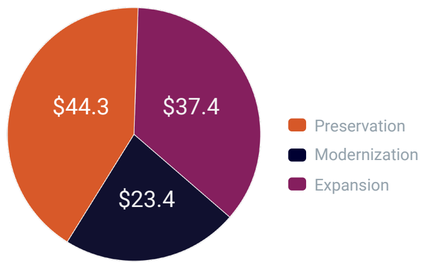
Working with regional cities, counties, and KDOT, projects were identified, with each being assigned a cost estimate and construction year. Projects were then grouped by five-year timebands (matching those used for Revenues & Expenses). The list totals ~150 projects, including the 80-plus projects that were modeled in the Travel Demand Model (Chapter 3), with a total cost of $712.3 million.

Based on the funding anticipated to be available ("$ for new projects"), only a fraction of all projects listed can be included in the fiscally-constrained project list. Most of these can be found in the fist timeband, years 2025-2030, and are included in the 2026 Transportation Improvement Program (TIP), as they have an identified funding source and are nearing construction (or currently being constructed). Figure 6.12 graphs the fiscally-constrained projects by type.

Priority projects without funding are included in the illustrative list. Lower priority projects, or those likely to be further in the future, have been included in the Other projects list. It should be noted that projects can move between the fiscally-constrained, illustrative, and other project lists as priorities and funding changes. When this occurs, this Plan is amended to make projects eligible for inclusion in KDOT's transportation program.

Figure 6.13 shows an overview of the fiscally-constrained process, with projected revenues minus expenses, resulting in "$ for new projects", how these funds are used for fiscally-constrained projects, as well as how projects move between project lists on their way to construction. Identified in Figure 6.12 are the projects included in the fiscally-constrained project list.

Figure 6.12: Fiscally Constrained Projects by Type
(in millions)



FISCAL CONSTRAINT VERIFICATION

Figure 6.8 is used to verify fiscal constraint for each jurisdiction by comparing the revenues anticipated to be available to the projects on the fiscally constrained list. One factor not taken into consideration in Figures 6.7 & 6.12 are other methods and funding sources jurisdictions use to pay for a project. This often includes issuing bonds, receiving grant funding, or utilizing General Funds or outside revenue sources not often used for transportation investments.

For example, Pottawatomie County has $7.2 million available for new projects in the first timeband (reference Figure 6.7). However, the County has $10 million worth of projects on the fiscally constrained list for this same time period. In addition to traditional funding sources, the County will leverage local revenues to pursue KDOT grant opportunities (often 20/80 local/state funding splits), as well as potentially issuing bonds in order to move forward with several identified projects.

A similar approach is used by all other local jurisdictions in order to demonstrate fiscal constraint for projects identified.

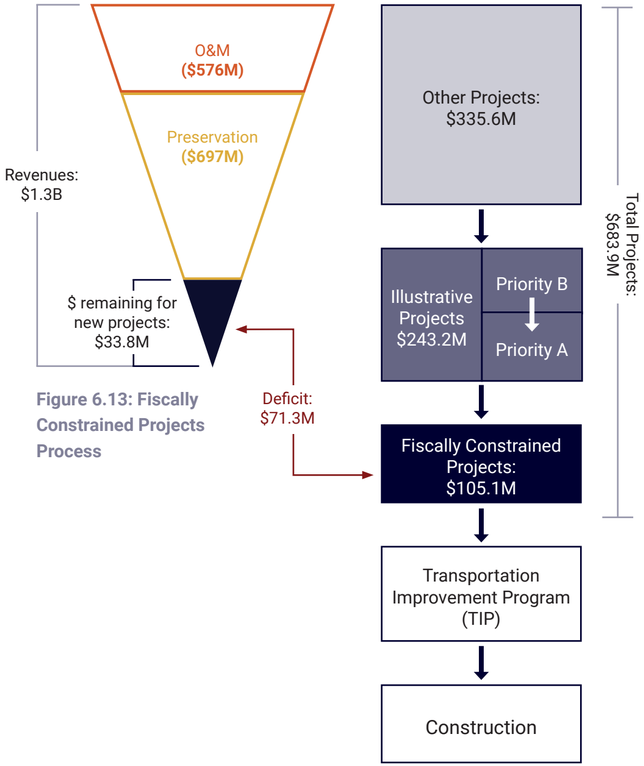


Figure 6.13: Fiscally Constrained Projects Process

FISCALLY CONSTRAINED PROJECTS

Figure 6.14: Fiscally Constrained Projects by Timeband (in millions)

C2050 #	2025-2030 Projects	Year	Cost
E07	Casement Rd	2026	$5.9
E11	Excel Rd	2027	$4.5
E14	Harvest Rd	2028	$2.2
E26	Marlatt Ave	2027	$3.0
E46	Grant Ave Reconstruction	2026	$18.0
E47	Elm Slough Rd	2035	$3.8
M30	I-70 & K-18 Interchange	2024	$16.1
M40	McFarland Rd & Eisenhower Dr Roundabout	2026	$2.8
M41	Miller Pkwy & Arbor Dr Roundabout	2028	$1.5
M58	US-24 & Excel Rd Intersection	2028	$3.0
P01	I-70 Bridge #017 Repair	2030	$5.8
P02	I-70: Repair & Resurfacing	2030	$6.7
P03	K-18: Resurfacing	2027	$1.7
P04	K-57: Resurfacing	2027	$0.9
P06	Washington St Bridge Preservation	2026	$0.7
P07	Taylor Rd & I-70 Bridge Repair	2026	$1.4
P11	US-77: Resurfacing	2027	$1.7
P12	US-77: Resurfacing I-70 to GE County line	2027	$5.4
	Timeband Total		**$85.0**
C2050 #	**2031-2035 Projects**	**Year**	**Cost**
P08	US-24: Mill & Overlay	2035	$12.1
P10	US-40B Smoky Hill River Bridge Replacement	2035	$8.0
	Timeband Total		**$20.1**
	Total for All Timebands		**$105.1**

Note: Please be advised that some of the projects listed as fiscally constrained are being funded by sources of revenue not reflected in Figure 6.8. These include projects being bonded or using local or state funding sources that are not typically used for transportation improvements.

Note: A list of all potential future projects, including Fiscally Constrained projects, can be found in Appendix D.

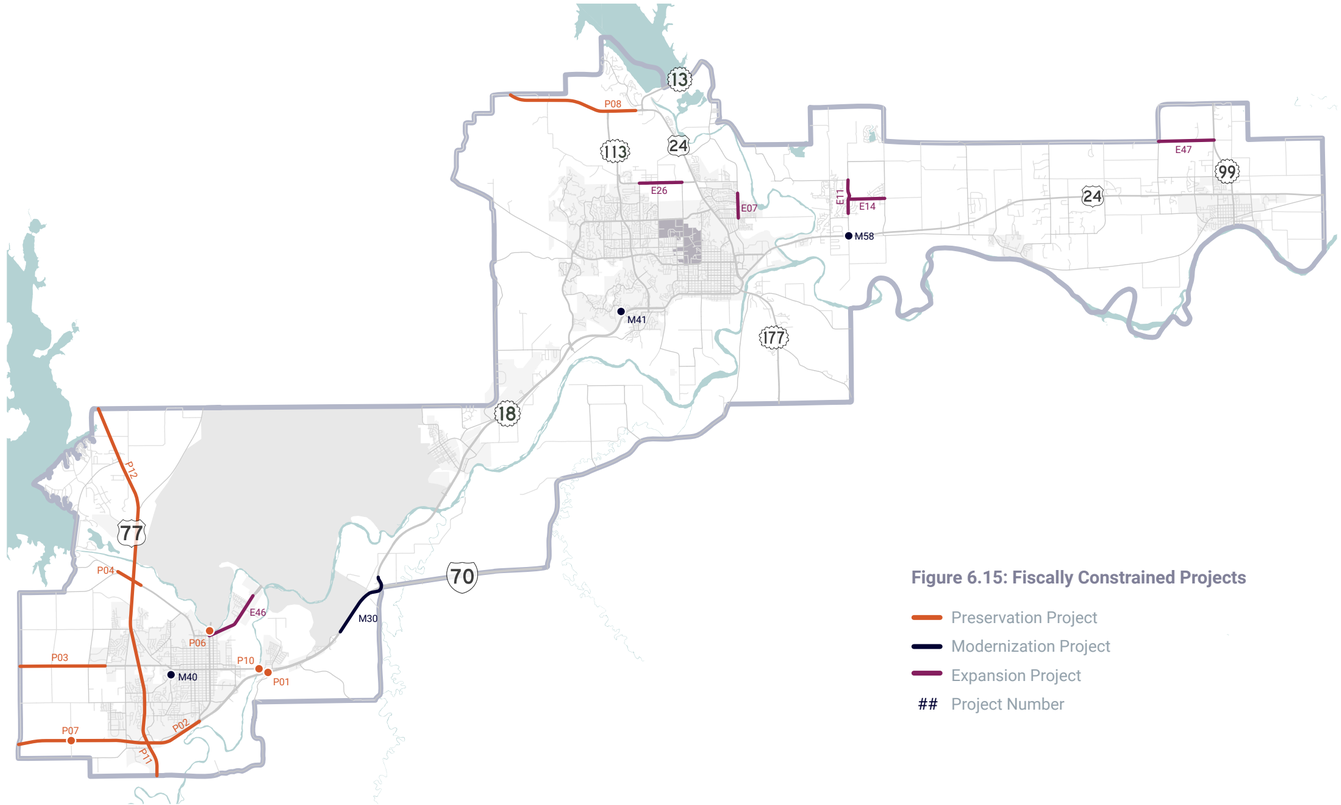


Figure 6.15: Fiscally Constrained Projects

- Preservation Project
- Modernization Project
- Expansion Project
- ## Project Number

Figure 6.16: Fiscal Constraint Table

C2050 #	2025-2030 Timeband	Year	Cost	MHK	Junction City	Wamego	RL County	GE County	PT County	KDOT (State)	HSIP	NHPP	STBG	BR	Other
				Anticipated Revenues											
				$19.6	-$6.6	$1.9	$32.6	$3.0	$7.2	$6.0	$7.2	$12.9	$32.5	$1.7	$16.0
E07	Casement Rd	2026	$5.9	$5.9											
E11	Excel Rd	2027	$4.5						$4.5						
E14	Harvest Rd	2028	$2.2						$2.2						
E26	Marlatt Ave	2027	$3.0	$1.5			$1.5								
E46	Grant Ave Reconstruction	2026	$18.0		$2.0										$16.0
E47	Elm Slough Rd	2035	$3.8						$3.8						
M30	I-70 & K-18 Interchange	2024	$16.1							$1.9		$14.2			
M40	McFarland Rd & Eisenhower Dr Roundabout	2026	$2.8		$1.0					$1.7					
M41	Miller Pkwy & Arbor Dr Roundabout	2028	$1.5	$1.5											
M58	US-24 & Excel Rd Intersection	2028	$3.0						$3.0						
P01	I-70 Bridge #017 Repair	2030	$5.8							$0.6				$5.2	
P02	I-70: Repair & Resurfacing	2030	$6.7							$0.7		$6.0			
P03	K-18: Resurfacing	2027	$1.7							$0.2			$1.5		
P04	K-57: Resurfacing	2027	$0.9							$0.1			$0.8		
P06	Washington St Bridge Preservation	2026	$0.7		$0.3					$0.3					
P07	Taylor Rd & I-70 Bridge Repair	2026	$1.4							$0.5		$0.9			
P11	US-77: Resurfacing	2027	$1.7							$0.2		$1.5			
P12	US-77: Resurfacing I-70 to GE County line	2027	$5.4							$1.0		$4.4			
			Total	**$8.9**	**$3.3**	**$0.0**	**$1.5**	**$0.0**	**$13.5**	**$7.2**	**$0.0**	**$27.0**	**$2.3**	**$5.2**	**$16.0**
			Remaining	**$10.7**	**-$9.9**	**$1.9**	**$31.1**	**$3.0**	**-$6.3**	**-$1.3**	**$7.2**	**-$14.1**	**$30.2**	**-$3.5**	**$0.0**

C2050 #	2025-2030 Timeband	Year	Cost	$6.6	-$8.2	$0.6	$15.5	$2.2	$4.9	-$7.4	$6.0	$10.8	$27.1	$1.4	-
P08	US-24: Mill & Overlay	2035	$12.1							$1.2		$10.9			
P10	US-40B Smoky Hill River Bridge Replacement	2035	$8.0							$1.6		$6.4			
			Total	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$2.8**	**$0.0**	**$17.3**	**$0.0**	**$0.0**	**$0.0**
			Remaining	**$6.6**	**-$8.2**	**$0.6**	**$15.5**	**$2.2**	**$4.9**	**-$10.2**	**$6.0**	**-$6.5**	**$27.1**	**$1.4**	**-**

Notes:

The HSIP and NHPP funding revenues shown are based on a historical average. More HSIP and NHPP funding is being spent in our region than in previous years, which is why the remaining balance of available funding is negative.

The "Other Funding Sources" column is intended to show funding sources that are not included in the fiscal constraint process.

ILLUSTRATIVE LIST

The illustrative list includes projects identified by the cities and counties as priorities that are not included in the fiscally constrained project list due to a lack of funding. These are projects that are likely to be needed or implemented over the next decade and align with the goals of the Plan. These projects are included in the illustrative list and can be moved to the fiscally constrained list should funding become available.

Figure 6.17: Illustrative Project Tables

C2050 #	Priority A Projects	Year	Cost
E13	Grand Mere Pkwy Extension	2030	$6.7
E22	Leavenworth - Hayes Dr Extension	2030	$5.6
E27	McCall Rd @ TCB Triple Left Turn Lanes (SB)	2030	$3.9
E33	Sarber Ln Extension	2035	$1.9
E34	Spring Valley Rd	2030	$7.8
E35	Spring Valley Rd	2030	$2.7
E41	Tuttle Creek Blvd & Bluemont Ave Turn Lanes	2030	$3.9
E43	US-24 & Flush Rd Interchange	2040	$35.5
M02	18th St & Jackson St Roundabout	2030	$2.8
M11	Chapman Rd	2035	$1.3
M20	Flint Hills Blvd & East St Roundabout	2030	$2.8
M45	Poyntz Ave: Lane Reduction	2030	$1.9
M62	US-24 & McCall (east) Roundabout	2035	$5.1
M63	US-24 & Sarber Roundabout	2035	$4.4
M67	US-24: 4-lane Urbanization: Mall to McCall Rd	2035	$5.1
M71	Washingon St & Grant Ave Roundabout	2030	$2.8
M74	Washington St & Ash St Roundabout	2030	$2.8
M83	Munson Rd	2030	$1.1
M84	Rucker Rd	2030	$0.6
P05	Riley Ave: Replacement	2030	$9.4
		Priority A Total	**$108.2**

C2050 #	Priority B Projects	Year	Cost
E01	11th St	2030	$8.7
E02	17th St	2030	$6.3
E09	Claflin Rd & Hylton Heights Rd Intersection	2035	$1.4
E10	East St Extension	2035	$8.0
E17	I-70 & Taylor Rd Interchange	2040	$7.1
E25	Marlatt Ave	2045	$10.7
E29	Moody Rd	2035	$1.4
E30	Mt. Zion Rd	2035	$1.9
E37	Strauss Blvd Extension	2040	$16.1
E38	Taylor Rd	2040	$3.9
E39	Taylor Rd Expansion	2040	$3.7
M07	Bluemont Ave	2030	$0.9
M15	Elm Slough Rd	2035	$4.4
M16	Elm Slough Rd	2035	$2.1
M17	Elm Slough Rd	2035	$4.2
M18	Elm Slough Rd	2030	$3.7
M35	K-18 & Munson Rd Roundabout	2030	$3.1
M46	Ritter Rd	2040	$1.4
M49	Rockenham Rd	2035	$1.5
M50	Rockenham Rd	2035	$1.5
M57	Tuttle Creek Blvd: 4-lane Urbanization	2040	$3.6
M61	US-24 & Lake Elbo Traffic Signal	2035	$1.3
M66	US-24: 4-lane Urbanization: McCall to Excel Rd	TBD	$12.0
M75	K-113 & Marlatt Ave Intersection	2035	$6.4
M77	K-113 & Anderson Ave Intersection	2040	$17.1
P14	Grant Ave Republican River Bridge Repair	2030	$2.5
		Priority B Total	**$135.0**
		Illustrative Total	**$243.2**

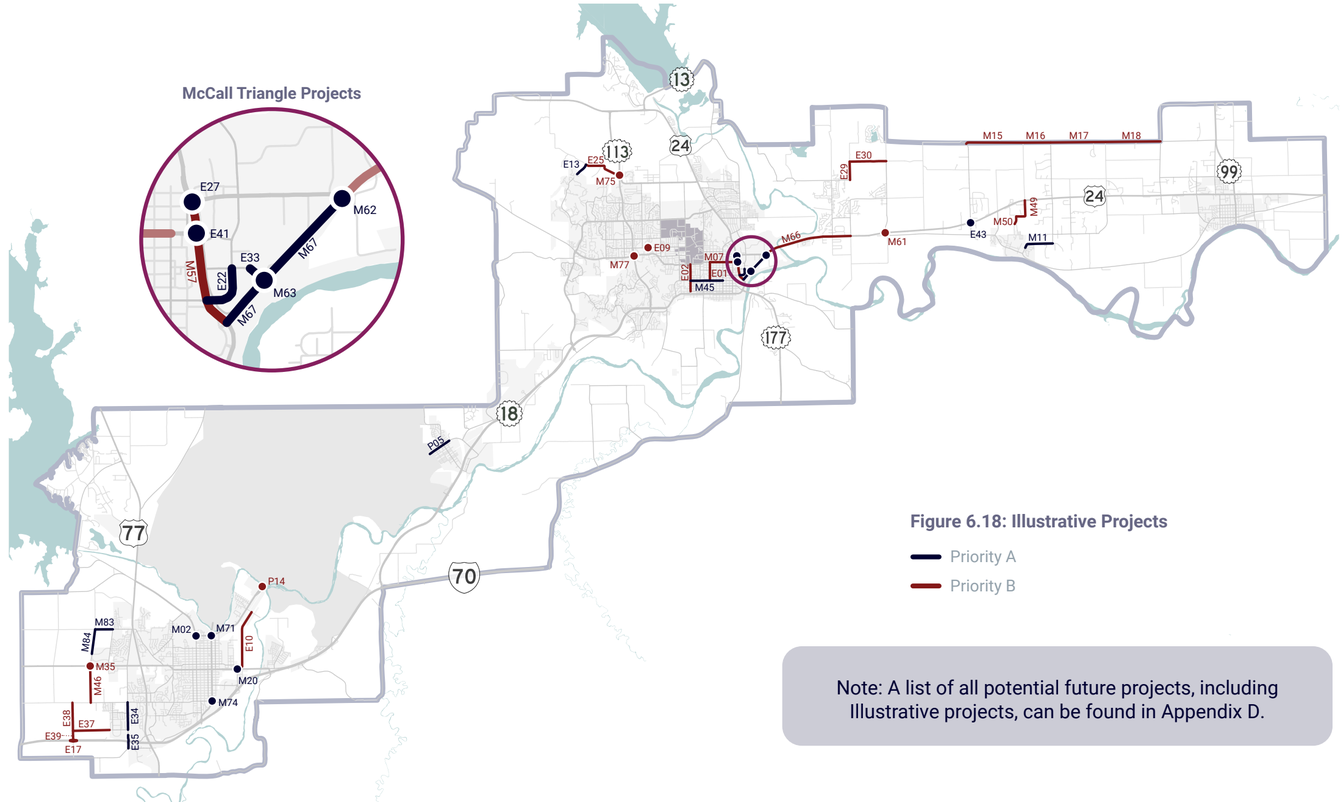


Figure 6.18: Illustrative Projects

Priority A

Priority B

Note: A list of all potential future projects, including Illustrative projects, can be found in Appendix D.

FISCALLY CONSTRAINED PROJECTS & PERFORMANCE MEASURES

C2050 #	Project	Goal	Performance Measure	DTZ Goal
E07	Casement Rd	Safety Mobility	PM1 - PM5 PM6	SR 4.2
E11	Excel Rd	Mobility	PM6	SR 4.2
E14	Harvest Rd			
E26	Marlatt Ave	Mobility	PM6	SR 4.2
E46	Grant Ave Reconstruction	Prosperity Mobility	PM1 PM6	SR 4.2
E47	Elm Slough Rd			
M30	I-70 & K-18 Interchange	Safety Preservation Mobility	PM3, PM5 PM5, PM6 PM1	
M40	McFarland Rd & Eisenhower Dr Roundabout	Safety	PM5, PM6	SR 2.2, SR 4.2
M41	Miller Pkwy & Arbor Dr Roundabout			SR 4.2
M58	US-24 & Excel Rd Intersection	Mobility	PM2, PM3	SR 2.2, SR 4.2
P01	I-70 Bridge #017 Repair	Preservation	PM5, PM6	
P02	I-70: Repair & Resurfacing	Preservation	PM1, PM2	
P03	K-18: Resurfacing	Preservation	PM3, PM4	
P04	K-57: Resurfacing			
P06	Washington St Bridge Preservation	Preservation	PM7, PM8	SR 4.2
P07	Taylor Rd & I-70 Bridge Repair	Preservation	PM5, PM6	
P08	US-24: Mill & Overlay	Preservation	PM3, PM4	
P10	US-40B Smoky Hill River Bridge Replacement			
P11	US-77: Resurfacing	Preservation	PM3, PM4	
P12	US-77: Resurfacing I-70 to GE County line	Preservation	PM3, PM4	

Safety

- PM 1: # of vehicular fatalities
- PM 2: Rate of vehicular fatalities per 100 million vehicle
- PM 3: # of serious injuries
- PM 4: Rate of serious injuries per 100 million vehicle
- PM 5: Non-Motorized Fatalities & Serious Injuries
- PM 6: % of serious injuries & fatality crashes involving bicycles & pedestrians

Preservation

- PM 1: % of Interstate pavement in good condition
- PM 2: % of Interstate pavement in poor condition
- PM 3: % of non-Interstate pavement in good condition
- PM 4: % of non-Interstate pavement in poor condition
- PM 5: % of NHS bridges in good condition
- PM 6: % of NHS bridges in poor condition
- PM 7: % of non-NHS bridges in good condition
- PM 8: % of non-NHS bridges in poor condition

Prosperity

- PM 1: % of transit stops that are ADA-compliant

Mobility

- PM 1: % of person-miles traveled on Interstate with reliable travel time
- PM 2: % of person-miles traveled on the NHS with a reliable travel time
- PM 3: Truck Travel Time Reliability (TTTR) Index on our Interstate system
- PM 4: % of Intelligent Transportation System traffic signals on key corridors
- PM 6: % of planned bicycle infrastructure projects implemented

Note: DTZ Goals are a reference to the Drive to Zero plan Strategies found in Chapter 5 and Appendix E.

ILLUSTRATIVE PROJECTS & PERFORMANCE MEASURES

C2050 #	Project	Goal	Perfomance Measure	DTZ Goal
E01	11th St			
E02	17th St			
E09	Claflin Rd & Hylton Heights Rd Intersection	Safety	PM3, PM4	SR 2.2, SR.4.2
E10	East St Extension			
E13	Grand Mere Pkwy Extension			
E17	I-70 & Taylor Rd Interchange			
E22	Leavenworth - Hayes Dr Extension	Mobility	PM6	
E25	Marlatt Ave			SR 4.2
E27	McCall Rd @ TCB Triple Left Turn Lanes (SB)	Mobility	PM2	
E29	Moody Rd			
E30	Mt. Zion Rd			
E33	Sarber Ln Extension	Mobility	PM6	SR 4.2
E34	Spring Valley Rd			
E35	Spring Valley Rd			
E37	Strauss Blvd Extension			
E38	Taylor Rd			
E39	Taylor Rd Expansion			
E41	Tuttle Creek Blvd & Bluemont Ave Turn Lanes	Mobility	PM2	
E43	US-24 & Flush Rd Interchange	Safety	PM1 - PM4	SR 2.2
M02	18th St & Jackson St Roundabout			SR 4.2
M07	Bluemont Ave	Safety	PM3, PM4	SR 2.2
M11	Chapman Rd			
M15	Elm Slough Rd			
M16	Elm Slough Rd			
M17	Elm Slough Rd			
M18	Elm Slough Rd			
M20	Flint Hills Blvd & East St Roundabout			SR.4.2
M35	K-18 & Munson Rd Roundabout	Safety	PM3, PM4	SR 2.2, SR.4.2
M45	Poyntz Ave: Lane Reduction	Prosperity	PM3	SR 2.2
M46	Ritter Rd			
M49	Rockenham Rd			
M50	Rockenham Rd			
M57	Tuttle Creek Blvd: 4-lane Urbanization			
M61	US-24 & Lake Elbo Traffic Signal	Safety	PM1 - PM4	SR 2.2
M62	US-24 & McCall (east) Roundabout	Mobility	PM2, PM3	
M63	US-24 & Sarber Roundabout	Safety	PM1 - PM4	SR 2.2, SR.4.2
M66	US-24: 4-lane Urbanization			SR 4.2
M67	US-24: 4-lane Urbanization			SR 4.2
M71	Washingon St & Grant Ave Roundabout			SR 2.2
M74	Washington St & Ash St Roundabout	Safety	PM3, PM4	SR 2.2
M75	K-113 & Marlatt Ave Intersection	Safety	PM1 - PM4	SR 2.2
M77	K-113 & Anderson Ave Intersection			SR 4.2
M83	Munson Rd			
M84	Rucker Rd			
P05	Riley Ave: Replacement	Preservation	PM3, PM4	SR 2.2, SR.4.2

Note: DTZ Goals are a reference to the Drive to Zero plan Strategies found in Chapter 5 and Appendix E.

Safety

- PM 1: # of vehicular fatalities
- PM 2: Rate of vehicular fatalities per 100 million vehicle
- PM 3: # of serious injuries
- PM 4: Rate of serious injuries per 100 million vehicle
- PM 5: Non-Motorized Fatalities & Serious Injuries
- PM 6: % of serious injuries & fatality crashes involving bicycles & pedestrians

Preservation

- PM 1: % of Interstate pavement in good condition
- PM 2: % of Interstate pavement in poor condition
- PM 3: % of non-Interstate pavement in good condition
- PM 4: % of non-Interstate pavement in poor condition
- PM 5: % of NHS bridges in good condition
- PM 6: % of NHS bridges in poor condition
- PM 7: % of non-NHS bridges in good condition
- PM 8: % of non-NHS bridges in poor condition

Prosperity

- PM 1: % of transit stops that are ADA-compliant
- PM 3: # of roadway feet per person

Mobility

- PM 1: % of person-miles traveled on Interstate with reliable travel time
- PM 2: % of person-miles traveled on the NHS with a reliable travel time
- PM 3: Truck Travel Time Reliability (TTTR) Index on our Interstate system
- PM 4: % of Intelligent Transportation System traffic signals on key corridors
- PM 6: % of planned bicycle infrastructure projects implemented

TRANSIT PROJECTS & PERFORMANCE MEASURES

C2050 #	Project	Goal	Performance Measure	DTZ Goal
T01	K-18 Connector Expansion to Junction City	Prosperity	PM1	
T02	Improved Headways on Manhattan Fixed Routes	Mobility	PM5	
T03	Improved Headways on Junction City Fixed Routes	Mobility	PM5	
T04	Blue Township Route Expansion			
T05	Extended Service Hours on Fixed Routes			
T06	Geary County Maintenance Facility			
T07	Regional Route along US-24 between Manhattan and Topeka			
T08	Replacement & Upgrade of Transit Fleet	Preservation	PM9, PM10	

Safety

- PM 1: # of vehicular fatalities
- PM 2: Rate of vehicular fatalities per 100 million vehicle
- PM 3: # of serious injuries
- PM 4: Rate of serious injuries per 100 million vehicle
- PM 5: Non-Motorized Fatalities & Serious Injuries
- PM 6: % of serious injuries & fatality crashes involving bicycles & pedestrians

Preservation

- PM 1: % of Interstate pavement in good condition
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- PM 7: % of non-NHS bridges in good condition
- PM 8: % of non-NHS bridges in poor condition

Prosperity

- PM 1: % of transit stops that are ADA-compliant

Mobility

- PM 1: % of person-miles traveled on Interstate with reliable travel time
- PM 2: % of person-miles traveled on the NHS with a reliable travel time
- PM 3: Truck Travel Time Reliability (TTTR) Index on our Interstate system
- PM 4: % of Intelligent Transportation System traffic signals on key corridors
- PM 6: % of planned bicycle infrastructure projects implemented

Note: DTZ Goals are a reference to the Drive to Zero plan Strategies found in Chapter 5 and Appendix E.