EXISTING TRANSPORTATION FACILITIES
The Kansas City region has a wealth of existing transportation facilities, infrastructure and services that residents and visitors use to accomplish tasks in their daily lives. Roads, bridges, transit service, bikeways and trails, and transportation management technology all contribute to how we move around the region.

Highways and roadways
Streets and highways form the foundation of the transportation system. According to the latest data, nearly 16,000 miles of public roadways in the region carry about 47 million vehicle miles of travel each day. Based on the Federal Highway Administration 2012 Highway Statistics Report, the bistate Kansas City urbanized area ranks 28th in the nation for roadway miles per capita, far ahead of larger urbanized areas such as St. Louis, Atlanta and Chicago.¹

Functional Class
The Federal Highway Administration (FHWA) maintains a set of concepts, criteria and procedures to determine the functional classification of roadways in the United States. Functional classification assigns roadways to classes or categories according to the type of service they are intended to provide. The classification is used to summarize and report roadway system information and has implications for federal transportation funding eligibility.

The Federal Aid System includes all roadways classified as Minor Collector or higher, except for Minor Collector roads located outside of Urban Area Boundaries (UABs) established cooperatively by Metropolitan Planning Organizations (MPOs), state departments of transportation and FHWA. Roadways on the Federal Aid System are eligible for funding through certain federal transportation programs. More information on these programs is available on the MARC website.

National Highway System
The U.S. Department of Transportation (USDOT) developed the National Highway System (NHS) in cooperation with the states, local officials and MPOs. The NHS consists of roadways that are important to the nation’s economy, defense and mobility. The NHS includes the following roadway subsystems:

- Interstates.
- Other principal arterials.
- Strategic Highway Network (STRAHNET).
- Major strategic highway connectors.
- Intermodal connectors.

Current federal transportation legislation requires the USDOT to establish performance measures for system condition and performance on the NHS. State DOTs and MPOs were required to establish targets for these identified performance measures and incorporate them into future long-range transportation

Functional classification system

- Metropolitan planning organization (MPO) Boundary
- Interstate
- Freeway
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector

Source(s): MODOT, KDOT and by MARC and local city and county jurisdictions.
Date Prepared: 6/2/2020

National Highway System (NHS)

- Metropolitan Planning Organization (MPO) Boundary
- National Highway System (NHS)

Source(s): United States Department of Transportation: Federal Highway Administration.
Date Prepared: 5/18/2020
plans. The Kansas City region’s progress toward these targets can be seen in MARC’s annual performance measures report.

System condition

Pavement condition
The establishment of a good transportation system does not end when a road is constructed. That road needs maintenance for as long as a jurisdiction intends for it to be of service. Kansas and Missouri departments of transportation monitor pavement conditions on highways. You can see the current state of pavement conditions in the Kansas City region and goals for the future in MARC’s annual performance measures report.

Bridges and bridge condition
The Kansas City region has 3,633 bridges and 788 of them are on the NHS. Current bridge conditions in the eight-county transportation planning area were determined based on 2018 National Bridge Inventory (NBI) data submitted by Kansas and Missouri DOTs to FHWA as part of the national bridge inspection program. The NBI database includes all the nation’s bridges that are over 20 feet in length, located on public roads (including interstate highways, U.S. highways, state and county roads) as well as publicly accessible bridges on federal lands. State DOTs are required to submit an annual summary analysis of the number, location and general condition of the bridges in their states.

An important part of evaluating bridge condition is the identification of structurally deficient and functionally obsolete bridges. According to 2013 NBI data, 312 (9%) of the region’s bridges are structurally deficient, and 593 (17.1%) are functionally obsolete. On the NHS, 20 (2.5%) of bridges are structurally deficient, and 168 (21.3%) are functionally obsolete.

A structurally deficient designation does not imply that the bridge is in danger of collapse or unsafe for the traveling public. Structurally deficient means that a bridge requires repair or replacement of a certain component such as cracked or spalled concrete, the bridge deck, the support structure or the entire bridge itself. If the condition is poor enough that a bridge can no longer carry its intended traffic loads, it may be weight restricted. Functional obsolescence is assessed by comparing the existing configuration of each bridge to current standards and demands.

A bridge can be categorized as functionally obsolete due to several factors, such as substandard lane widths, outdated design standards or narrow shoulders. It may also not have enough vertical clearance for large trucks to pass underneath, causing repeated hits and damage to the bridge.¹

¹http://www.wsdot.wa.gov/Bridge/Reporting/BridgeRatings.htm

Fixed route transit
The region’s transit system is a network of services provided by five area transit agencies: the Kansas City Area Transportation Authority (KCATA), Johnson County Transit, Unified Government Transit, the city of Independence and the Kansas City Streetcar Authority. These agencies run vehicles along predetermined routes that pick up and drop off people at specified stops, forming a core service that is the picture many people have in mind when thinking about public transportation. In 2015, the KCATA Board of Commissioners approved a unified branding for these agencies, called RideKC.
# Transit Providers in the Kansas City Region

<table>
<thead>
<tr>
<th>Transit Provider</th>
<th>Created</th>
<th>Funding</th>
<th>Geography Served</th>
<th>Transit Centers Served</th>
<th>2018 Ridership</th>
<th>2018 Operating Funds Expended</th>
<th>2018 Capital Funds Expended</th>
<th>2018 Fleet Size*</th>
<th>2018 Average Age of Fleet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas City Area Transportation Authority</td>
<td>1965</td>
<td>Two KCMO sales taxes, capital charges, Missouri state funds, fare revenue*</td>
<td>Platte, Clay, and Jackson Counties, MO and Wyandotte and Johnson Counties, KS</td>
<td>10th and Main, 3-Trails, 3rd and Grand, Boardwalk Square, Independence Transit Center, Midtown KCK Transit Center</td>
<td>12,957,336</td>
<td>$96,239,250</td>
<td>$36,486,634</td>
<td>393 vehicles</td>
<td>5.5 years</td>
</tr>
<tr>
<td>Johnson County Transit</td>
<td>1982</td>
<td>County funds, Kansas state funds, fare revenue</td>
<td>Johnson, Douglas and Wyandotte Counties, KS, and KCMO</td>
<td>10th and Main, JCCC – Carlsen Center, Mission Transit Center, Oak Park Mall</td>
<td>551,903</td>
<td>$11,291,409</td>
<td>$2,035,693</td>
<td>126 vehicles</td>
<td>6.3 years</td>
</tr>
<tr>
<td>Unified Government Transit</td>
<td>1978</td>
<td>City and county funds, Kansas state funds, fare revenue</td>
<td>Wyandotte and Johnson Counties, KS, and KCMO</td>
<td>10th and Main, Midtown KCK Transit Center, Mission Transit Center</td>
<td>192,369</td>
<td>$3,784,621</td>
<td>$1,244,199</td>
<td>19 vehicles</td>
<td>0.0 years</td>
</tr>
<tr>
<td>City of Independence</td>
<td>2012</td>
<td>City and Missouri state funds, fare revenue</td>
<td>Independence, MO</td>
<td>Independence Transit Center</td>
<td>288,262</td>
<td>$2,208,614</td>
<td>$0</td>
<td>11 vehicles</td>
<td>2.0 years</td>
</tr>
<tr>
<td>Kansas City Streetcar Authority</td>
<td>2012</td>
<td>Transportation Development District</td>
<td>River Market to Union Station in KCMO</td>
<td></td>
<td>2,017,091</td>
<td>$4,928,270</td>
<td>$7,964,012</td>
<td>4 vehicles</td>
<td>3.0 years</td>
</tr>
</tbody>
</table>

*In December 2019, the Kansas City City Council voted to eliminate fares within the city. The change has not been permanently implemented at time of writing.

**Fleet size refers to Vehicles Available for Maximum Service for National Transit Database full reporters (KCATA, JCT, KCSA), or Vehicles Operated at Maximum Service for partial reporters (UG, Independence).
RideKC Streetcar
The RideKC Streetcar is a rail transit vehicle that operates on the road with cars and other vehicles in the heart of Kansas City. Its 2.2-mile track runs from Union Station to the River Market district and serves 16 platform stops. Over 6 million trips have been made on the Streetcar since its opening in May of 2016.

In 2013, following the successful campaign to establish a Transportation Development District (TDD) to fund the Streetcar starter line, the city of Kansas City, Missouri, completed a study to determine the optimal corridors for streetcar expansion. Three Streetcar corridors — Linwood Boulevard, Independence Avenue and Main Street — and one bus rapid transit (BRT) corridor — Prospect Avenue — were identified as the best options for expansions of the starter line. Transportation Outlook 2040 adopted these preferred alternatives along with a TDD funding mechanism.

As the highest rated alternative in the 2013 NextRail study, a group of Kansas City residents organized by the Kansas City Regional Transit Alliance (KCRTA) decided to push for Main Street (from the end of starter line near Union Station south to UMKC/Plaza) to be the next segment of Streetcar to develop. The project development phase of the southern extension kicked off in December 2017, led by KCATA, Kansas City Streetcar Authority (KCSA) and a consultant team including HDR. In January 2018, the Federal Transit Administration (FTA) officially moved the project into its project development phase. The
work done by the consultant team provided some details required by FTA such as refined capital and operating costs, estimated ridership and other benefits, assessed environmental impacts and a detailed funding plan.

In addition to the southern extension, the KCSA, Port KC, KCATA and the City of Kansas City, Missouri, completed a feasibility study to extend the Streetcar to the riverfront. This northern extension would serve to link the downtown core at 3rd Street and Grand Avenue directly to the historic riverfront, providing valuable recreation and quality of life benefits, catalyzing density and expediting development plans currently underway. The study was completed in August 2017 and identifies a preferred alignment that heads north near the intersection of 3rd Street and Grand Avenue, goes over existing railroads on the Grand Avenue Bridge, goes under the Heart of America Bridge, and terminates at a centrally located station stop near the midpoint of the riverfront development.

**RideKC MAX**

After the Streetcar, the most visible changes to the RideKC fixed-route network have come in the form of the MAX (Metro Area Express) bus lines. The MAX lines incorporate features of bus rapid transit (BRT) systems, such as stops that are spaced further apart, improved shelter amenities and real-time arrival information at those shelters. The Main MAX originally arrived as the Orange Line in 2005, and the Troost MAX as the Green Line in 2011. Since rebranding to MAX, a third line, Prospect MAX, began operation in December of 2019.

**Transit Service Characteristics**

The quality of transit service provided is made up of several characteristics including, frequency of service, hours of service, and the days of the week that the service is available.

**Frequency**

There are 13 routes in the RideKC system that operate at the 10-20-minute frequency. Of these, only 6 operate at this frequency for all or almost all day.
Hours of Service

Some of the Kansas City region’s transit routes provide express service, meaning a limited number of trips that serve the peak commute times of generally 7-9 a.m. and 4-6 p.m. There are also some routes that offer a few additional trips outside of these periods, but still generally serve the morning and late afternoon/evening commutes. There are 18 of these “peak-only service” routes and are shown with service that operates throughout the day (non-peak) on the following map.
Transit that operates at nighttime, after the evening peak is currently fairly limited. There are 45 routes that operate at least one run after 7 p.m. on weekdays. There are only 6 routes that operate a full run after midnight.
Days of the Week
Out of the 72 routes in the Ride KC system, 24 operate some service seven days a week.
Non-fixed route services

Flex service
Several numbered routes in RideKC’s network do not have pre-defined paths but pick up and drop off passengers upon request within their service areas. These include Routes 99 South Kansas City Flex, 298 N. Kansas City Flex, 299 Gladstone-Antioch Flex, 399 Raytown Flex and 482 Overland Park Flex. Rides need to be scheduled 24 hours in advance or by standing order.

ADA paratransit and RideKC Freedom
Many types of enhanced mobility services exist in the Kansas City region, but Americans with Disabilities Act (ADA) complementary paratransit services provide the greatest number of one-way trips. Federal regulations require that each transit provider operating fixed-route services must also provide ADA-complementary paratransit service for any person with a disability whose trip origins and destinations fall within three-quarters of a mile on either side of any local fixed-route service. Regulations define minimum service thresholds for this service to be considered equivalent to the fixed-route service it complements. ADA-complementary paratransit services are demand-response services, and passengers generally schedule door-to-door trips through a call center. RideKC’s paratransit service is known as RideKC Freedom. The paratransit services of some RideKC member agencies may sometimes be referred to by their pre-unified branding names.
RideKC Freedom On-Demand and RideKC Micro Transit
RideKC also has two app-based ride hailing services. The first is known as RideKC Freedom On-Demand. Like other transportation network companies such as Uber and Lyft, users schedule a ride through a mobile device application. The second, RideKC Micro Transit, operates in two limited service areas, one in Johnson County and another in Wyandotte County.

Other Enhanced Mobility Services
There are many other types of enhanced mobility services available in the region. Municipalities, volunteer-based organizations, mill levy boards and public-private partnerships provide most of these services. Link for Care (www.linkforcare.org) has a comprehensive, searchable online database of transportation services in the region.

Emerging Mobility Options
As technology continues to evolve, innovations in people’s lives move forward at a pace that is impossible to predict. The transportation field has demonstrated that same innovation. The idea of shared transportation, or on-demand transportation that is crowd sourced, are ideas that have been around the longest of the examples of the evolution of transportation.

For decades, the primary source of transportation outside of public transportation or single occupancy vehicles has been the taxicab. As smart phones have been introduced, revolutions in many different fields have led to a shift in this. This first started through a sort of rideshare program like zip car, allowing people, especially college students, to perform necessary tasks such as grocery shopping, without the burden of owning and maintaining a car. The emergence of companies such as Lyft or Uber have transfigured the transportation network. No longer is there a long wait for a taxi, but now an on-demand response and tracking of drivers has taken place. This service has expanded into food deliveries, both cooked and uncooked, from companies. This innovation has also expanded beyond automobile services into the active transportation realm as well.

There have been several innovations in smaller, one-person shared vehicles, such as electric scooters and bicycle sharing. Bicycle sharing first appeared in the Kansas City region as B-Cycle and were docked in special stations mostly in Kansas City, Missouri. Bicycle sharing has expanded in the region and now includes dockless, or free-standing e-bikes bicycles that can be unlocked by a smart phone. Electric bicycles have become more affordable and prevalent in the region as well. These allow riders to travel longer distances and assist users up the varied topography of the region. Although these are favored by older adults, they are becoming more popular across several demographics and parks departments around the region have started allowing them on trails. Electric scooters have become a mainstay in the region as well, as several companies have come in, with agreements with local governments, to help people move around on a micro level. Their popularity during warmer months is evident by their illegal placement on sidewalks, blocking access for those with disabilities.

Active transportation
Non-motorized options can be an important part of daily travel and mobility for the Kansas City region’s residents. Active transportation describes travel powered by human energy — primarily walking and bicycling. These options are not only healthy and cost effective, but, in most cases safe, convenient ways to travel without the use of an automobile.
Bikeways
The Kansas City region contains a diverse active transportation system that includes trails, paths, sidewalks, bike lanes and neighborhood streets that connect residents to work and other destinations. Bicycle infrastructure is sometimes obvious, in the case of bike lanes. However, a great deal of the bicycle network is less visible because it comes in the form of marked bike routes where bicycles and automobiles share the road. Maps of the network are important because they can help urban cyclists to take advantage of the full bikeway network.

Sidewalks
Poor sidewalk infrastructure is a major barrier to pedestrians. Broken and crumbling sidewalks can be hazards, especially to those with disabilities. Local governments in the region must find ways to repair poor quality sidewalks if they are to encourage active lifestyles in their communities. One continuing need is for updated sidewalk data to show pavement conditions and gaps in the network.

Complete Streets
In 2012, MARC adopted a regional Complete Streets Policy to address context-sensitive solutions and consider the needs and safety of all roadway users, including bicyclists and pedestrians, on all public rights-of-way. Since its adoption, the policy has been used as a tool for evaluate transportation project applications that seek federal funding through MARC’s transportation programming processes. Project applications are evaluated based on their compliance with the policy. As a result, more project applicants and local officials across the region are considering ways to incorporate modal equity and design principles into transportation project scopes. Members of MARC’s Total Transportation Policy Committee (TTPC) also consider the impact and benefits of Complete Streets in project funding decisions.

The following MARC region local government entities have adopted Complete Streets policies of some type in order to guide roadway improvements:

<table>
<thead>
<tr>
<th>Belton</th>
<th>Blue Springs</th>
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<tbody>
<tr>
<td>Grandview</td>
<td>Independence</td>
</tr>
<tr>
<td>Kansas City, Missouri resolution</td>
<td>Kansas City, Missouri ordinance</td>
</tr>
<tr>
<td>Leawood</td>
<td>Lee's Summit</td>
</tr>
<tr>
<td>Roeland Park</td>
<td>Jackson County</td>
</tr>
<tr>
<td>Johnson County</td>
<td>Unified Government of Wyandotte County/Kansas City, Kansas</td>
</tr>
</tbody>
</table>

MetroGreen
The MetroGreen Action Plan provides a “green” print for a metropolitan trails system that connects urban and rural corridors throughout the Kansas City region. Approximately 324 miles of the proposed 1,144-mile MetroGreen system have been developed. From an environmental perspective, active natural resource management along these corridors is necessary to maximize benefits associated with air and water quality, energy conservation and climate protection.
Transportation systems management and operations

Operation Green Light

Operation Green Light (OGL) is a cooperative effort to improve the coordination of traffic signals and incident response throughout the Kansas City area. OGL helps synchronize traffic signals on major streets, especially those that cross city limits. This reduces unnecessary delays, improves traffic flow and cuts emissions that contribute to ozone pollution.

Through OGL, the state and local governments that own traffic signals in the area work together to make sure that the timing plans for the intersections on major routes are coordinated for more efficient flow of traffic. Although existing equipment is used wherever possible, some new communications equipment and software, and new signal controllers must be installed so the traffic signals on the system can communicate with each other and with a central operations center. This equipment and software help keep the traffic signals in sync with new timing plans.

OGL has reduced delays on synchronized routes by an average of 17 percent.

Well-coordinated signals also work with the Kansas City Scout freeway management system to help respond to traffic incidents. OGL’s wireless communications system allows analysts in an office to make changes to a signal without having to visit the intersection. This reduces costs and increases the likelihood that signal problems are solved quickly.

The Mid-America Regional Council, 20 area cities, the Kansas and Missouri departments of transportation, and the Federal Highway Administration work together to deliver Operation Green Light.

Kansas City Scout

KC Scout is Kansas City's bistate traffic management system designed to lessen traffic jams by improving rush-hour speeds, increase safety by decreasing the number of rush-hour accidents and improve emergency response to traffic situations by clearing incidents quickly and safely. Scout manages traffic on more than 300 miles of continuous freeways in Greater Kansas City.

Freight

The region is home to the largest rail center in the United States, by tonnage, and is located at the intersection of four of the nation’s major interstate highways and placed on the largest navigable inland waterway. The region’s central Midwest location and transportation network offers many logistical advantages:

1. Serviced by 5 of the 7 Class 1 Railroads
2. 4 intermodal hubs
3. Largest U.S. rail center by tonnage
4. Connected by 4 major national interstates
5. Ability to service 85% of the U.S. population in two days or less
6. Located on the largest navigable inland waterway
7. An airport that moves more air cargo than any air center in a 6-state region

The Kansas City region has a significant transportation network that includes highways, railroads, airports and the Missouri River system. Numerous corridors are part of the national freight transportation system. The system includes nearly 440 miles of Interstate Highway System facilities.
with high truck traffic volumes and about 800 miles of rail corridors with high train volumes, tonnage and value. Regional and local corridors are classified in a similar manner to characterize truck and train volumes. These modes provide a strong foundation for freight transportation infrastructure in the region.

The region developed a framework that designates Corridors of Freight Significance (COFS). Corridors are applicable across all modes and transportation systems through the three corridor classifications:

- **Corridors of national significance** — provide service across multiple state lines, long-distance travel and access to international ports of entry.
- **Corridors of regional significance** — provide supplementary service for regional travel and direct access to freight-related activities such as manufacturing, distribution and intermodalism.
- **Corridors of local significance** — provide connections to higher-level facilities and provide direct access to freight-related facilities in industrially zoned areas.

**Missouri River Marine Highway Connector**

The Marine Highway system identifies routes with water transportation opportunities that offer relief to landside corridors. The Missouri River designated by the USDOT as M-70 and M-29. The USDOT highlighted public and private efforts to use the river to relieve landside congestion and attain the benefits that waterborne transportation can offer, such as reductions in greenhouse gas emissions, energy savings and increased system resiliency.

![America’s Marine Highway Routes](image_url)

Kansas City to St. Louis M-70 and Kansas City to Omaha NE M-29