# IV. Transit and Mobility Services: Challenges and Gaps

# Challenges

Providing efficient transit and other mobility options is no simple task in the Kansas City area and many other regions. Specific transit and mobility challenges include historic land use and development patterns, residents' attachment to driving, employment centers that are not easily accessible by transit, and funding shortfalls. These challenges directly relate to this plan's goals: economic vitality, placemaking, equity, transportation choices, safety and security, system condition, system performance, public health, environment, and climate change and energy use. Complicating matters, these challenges relate to each other in a type of feedback loop where one challenge affects another.

For example, the region is not bound by significant geographic barriers like coasts or mountains, which has allowed it to spread over a large area, causing residents to feel a strong need for and attachment to their personal vehicles. Easy access to the region's many highways, necessary because of the large amount of single-occupancy vehicles, reinforces the dispersed nature of development. The lack of density in many places in our region, enabled by the lack of geographic barriers and car-oriented development patterns, also makes it difficult for transit service to reach employment centers, disproportionately affecting opportunities for workers who rely on transit.

# Kansas City's Land Use and Development Pattern

Like many Midwestern cities that grew quickly after the end of World War II, the Kansas City metro area has a relatively dense urban core surrounded by a pattern of lower-density, suburban land use stretching to the edges of the metro area. While Kansas City's urban core is dense enough to support robust transit and mobility services, it is harder and harder to deliver good, cost-effective transit as residential and commercial densities decrease. Even if transit service reached low-density areas, many people will choose to drive if using transit takes longer to get where they need to go.

# Solutions

This does not mean, however, that those who live in less dense areas of the region should not have transportation choices beyond their own vehicles. This plan identifies mobility service solutions for areas of the region that are not dense enough to support traditional, fixed-route transit. It also includes recommendations to create denser, mixed-use development — especially at mobility hubs and along transit routes — to create nodes of density that can support transit service in suburban conditions.

Although it has not yet been deployed to serve less-dense areas, it is possible to envision a microtransit model that could help suburban residents reach key local destinations. Vanpooling, carpooling, walking, biking, bike-share, and other mobility strategies could also provide meaningful transportation options for those without access to a bus (or rail) route.

# Car Culture

Kansas Citians are not unique when it comes to loving their cars. Driving one's own car is convenient, and currently relatively affordable. Nationwide, when gas prices are higher, more people shift to transit, carpooling, and other transportation options. From 2002 to 2008, the price of gasoline rose substantially, before falling sharply in 2009 during the recession. In 2012, prices reached the highest level in 80 years in both current and constant dollars, but began a steep decline afterwards. In constant dollar terms, the price of gasoline in 2015 was only seven cents higher than in 1929.<sup>1</sup>

People who do not own their own cars must rely on transit, walking, biking or carpooling. But it is often difficult to convince residents who can afford their own vehicles to consider other modes, especially when gas prices are low and parking is free or inexpensive, as it often is in the Kansas City region.

#### Solutions

Creating a more robust and efficient transit and mobility system will not be enough to convince many Kansas Citians to leave their vehicles at home, even if gas prices go up again. Cities and counties can encourage more people to take transit and use other modes of transportation through policies that promote denser development near mobility hubs and transit routes. In addition, marketing and educational efforts can educate potential riders on the benefits of transit and mobility services and how to use them.

# **TRIPS BY MODE**

In the Kansas City region, the vast majority of our trips are taken in single-occupant vehicles. Although data on all trips is not available, the Census Bureau collects data on how workers commute. Currently, more than 83 percent of workers in the Kansas City region drive alone, while 8.6 percent carpool and 1.2 percent take transit.

# Means of Transportation to Work in the Kansas City Metro Area

	# of Workers	%
Drove Alone	779,418	83.4%
Carpooled	80,593	8.6%
Used Transit	11,290	1.2%
Walked	11,867	1.3%
Bicycled	1,796	0.2%
Worked from		
Home	41,503	4.4%
Other	8,324	0.9%
TOTAL	934,791	100.0%

Source: ACS 2015 5-Year Estimates.

Slightly more Kansas City commuters walk (1.3 percent), while only a small fraction (0.2 percent) bicycle to work.

# Jobs Access

For Smart Moves 3.0, the planning team analyzed job accessibility by transit in the region. To do this, the team contracted with Conveyal, a company that developed a transit accessibility model (for more on how this model works, see Section V — Jobs Access via Transit). The model shows that currently, only five percent of jobs are accessible via transit in the morning and three percent in the evening for the average worker within a 60-minute commute. These figures, while low, are not very surprising given the decentralized nature of employment in the Kansas City region. While Downtown Kansas City still has the highest concentration of jobs, the areas experiencing the highest employment growth are in suburban locations, often very far removed from transit.

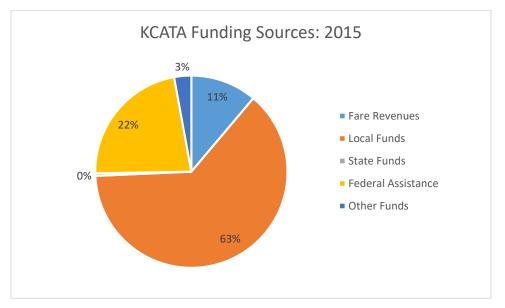
<sup>&</sup>lt;sup>1</sup> <u>https://energy.gov/eere/vehicles/fact-915-march-7-2016-average-historical-annual-gasoline-pump-price-1929-</u> 2015

#### Solutions

This plan recommends a phased approach to expanding the region's transit system to better connect workers to employment centers. This includes adding new routes, modifying and extending existing routes, and expanding service hours and weekend service. Additional jobs access gains will be achieved by expanding existing mobility services (such as bike-share, car-share and employer shuttles) and developing new mobility services (such as Transportation Management Associations and microtransit), especially when paired with the creation of mobility hubs. To learn more, see Section VII — Strategies and Recommendations.

#### Funding

Although private companies or nonprofits generally provide mobility services in response to market demand, fixed-route transit service depends primarily on public funding. The following charts show funding sources for transit in 2015.



#### **Figure 11: KCATA Funding Sources**

Local funds account for about two-thirds of transit funding, with all other sources, including federal funds and fare revenues, making up only about a third of the dollars devoted to transit. Because local sources provide the most funding — which unlike federal dollars can be spent on both operations and capital expenses — local funds largely determine the amount of service that can be provided. Currently the only dedicated sources of local transit funding in the Kansas City region are two sales taxes in Kansas City, Missouri. Other local governments that allocate sizable resources to the operations of their transit systems are the Unified Government of Wyandotte County and Kansas City, Kansas; the City of Independence, Missouri; and Johnson County, Kansas. Additionally, several smaller municipalities in the region provide financial support for transit service in their community or for community-based transit service.

# Solutions

Given that there does not seem to be momentum for a single, regional tax dedicated to funding transit, the new transit service recommended in this plan assumes instead that a county-by-county funding system, similar to that in use by Johnson County, is feasible. Most transit services in our region cross city, county and/or state boundaries, and improvements to transit service and job access are needed throughout the region, making a county-by-county funding model a viable solution in the absence of more intensive funding solutions.

# How the Kansas City Region's Transit and Mobility Challenges Relate to Plan Goals:

The challenges that the region faces with land use, car culture, jobs access, and funding directly relate to the 10 goals included in Smart Moves 3.0. When workers struggle to get to jobs or go to school, the region's economic vitality and equity suffer. A lack of dense, mixed-use nodes negatively impacts placemaking, system performance, public health, the environment, climate change and energy use. Likewise, it is difficult to offer transportation choice and maintain the safety and condition of the transit system given these current regional challenges.

# Gaps

In addition to broad regional challenges, the Project Team identified a number of gaps in current transit service through route analysis and stakeholder and public feedback.

# East-West Connectivity

Through the first phase of public and stakeholder outreach, it became very apparent that many people have difficulty making transit connections between the east and west areas of the Kansas City region. This includes east-west service:

- North of the Missouri River
- Between Jackson and Johnson counties, including:
  - o Between Kansas City and northeastern Johnson County
  - o Between Lee's Summit and Olathe

Note: There is also a need for better north-south transit options between Johnson and Wyandotte counties.

# Solutions

This plan recommends new and modified fixed-route transit service that addresses the east-west connectivity gap, including new service along Barry Road in the Northland as well as service on 135<sup>th</sup> Street in the southern part of the region. Smart Moves 3.0 also recommends expanded service hours and days of the week for transit along 7<sup>th</sup> Street and Rainbow between Wyandotte and Johnson counties. These recommendations are complemented by recommendations for mobility hubs and services that have the potential to further facilitate connectivity.

# Service between Suburban Job Centers and Where Workers Live

A number of existing and emerging suburban employment centers are difficult to reach by transit services today because transit service does not exist, there is not enough service or travel time is prohibitively long. Examples of these employment centers include:

• The Legends

- Independence Center
- College and Metcalf
- Cerner, Three Trails
- KCI/Zona Rosa
- Gardner/Edgerton

#### Solutions

Smart Moves 3.0 includes recommendations for new and modified fixed route service that has the potential to increase access to suburban job centers. For instance, the plan includes service expansion on College Boulevard that links to expanded service on Metcalf Avenue. Both of these upgraded services would connect to other services that would even further expand the ability of workers across the region to reach the College and Metcalf employment area. Mobility hubs are also a key strategy for linking workers with jobs in places that are difficult to serve with fixed-route transit service. For example, the plan proposes a mobility hub in Gardner, Kansas. Workers could take transit to this hub and then an employer shuttle or other service could bring them to jobs in the intermodal area in Edgerton.

# Intra-County Service

Using data to examine where employees live and work, MARC was able to determine that there are additional gaps in service *within* certain counties and sub-areas.

#### Johnson County

Almost 63 percent<sup>2</sup> of Johnson County residents work within Johnson County, but more than 85 percent<sup>3</sup> of Johnson County workers commute to their jobs by driving their own vehicles.

# Eastern Jackson County

Currently, other than service provided by IndeBus within the city of Independence, there is no service connecting destinations within Eastern Jackson County. Forty-four (44) percent<sup>4</sup> of residents work within Eastern Jackson County, but nearly 86 percent<sup>5</sup> commute to their jobs by driving their own vehicles.

# Solutions

Smart Moves 3.0 proposes significant fixed-route service expansion within Johnson County and between Eastern Jackson County jurisdictions. This includes an upgrade to fast and frequent (15-minute) service on 75<sup>th</sup> Street and Quivira in Johnson County and expanding the current 251-Truman Medical Center—Lakewood service to link Lee's Summit with Blue Springs by connecting to an upgraded 31<sup>st</sup> Street/Blue Ridge Crossing route. The plan also puts forward mobility services — vanpools transporting workers from mobility hubs to job centers, for instance — as solutions that could work to fill intra-county service gaps.

# Days, Hours and Frequency of Service

Much of the region's existing transit service is designed to meet the needs of a commuter with an 8-to-5 job. But today's economy is built on a number of economic sectors and jobs with shifts that vary

<sup>&</sup>lt;sup>2</sup> OntheMap, 2014 data.

<sup>&</sup>lt;sup>3</sup> ACS 2015 5-Year Estimates.

<sup>&</sup>lt;sup>4</sup> OntheMap, 2014 data.

<sup>&</sup>lt;sup>5</sup> ACS 2015 5-Year Estimates.

<sup>5 |</sup> Smart Moves 3.0 — Transit & Mobility Services: Challenges and Gaps

considerably from the traditional 8-to-5 model. Non-traditional shift workers often exhibit a high propensity to use transit, and the location of their jobs may require a "reverse commute," which entails traveling the opposite of the peak direction.

In addition to extended service hours, shift workers in the retail and health sectors often work on the weekends, when current service is limited or non-existent. Shift workers, like traditional 8-to-5 workers, also could benefit from an increase in service frequency; it is difficult to arrive on time for work if the bus you must take only comes once an hour.

# Solutions

This plan calls for extending service hours and frequencies as well as adding weekend service on many routes, allowing workers with non-traditional shifts better transit access.