Strategic Plan
2011 Update

Getting you there is our BUSiness.

www.thejo.com

Prepared for:

Johnson County Transportation Council

and the

Johnson County Board of County Commissioners

Prepared by:

Johnson County Transit

August 2011

Strategic Plan 2011

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Section 1 Introduction & Plan Overview

***The JO** is Johnson County Transit's fixed-route public transportation service operating in Johnson County and the Kansas City region, connecting residents to popular destinations such as Johnson County Community College (pictured above).*

Johnson County Transit (JCT) is the provider of public transportation services in Johnson County, Kansas and one of three providers in the Kansas City region. JCT is a department of Johnson County Government and operates commuter fixed route and paratransit services in Johnson County and the surrounding region. The Johnson County Transportation Council (JCTC) provides strategic oversight to JCT staff and can make recommendations to the Board of County Commissioners (BOCC).

In recognition of the increased need for mobility options, JCT strives to improve public transit in Johnson County and the greater metropolitan area. At the local level, JCT has developed new routes and services cooperatively with city officials. JCT has also strengthened the position of transit within Johnson County government, a benefit to residents who expect better transit services as well as those who rely on current services. On a regional level, JCT works with the Mid-America Regional Council (MARC), the Kansas City Area Transportation Authority (KCATA) and Unified Government Transit (UGT) to improve cooperation in order to further regional transit initiatives by making travel easier.

Johnson County Transit's services consist of the following:

- ***The JO***: a commuter fixed-route and flex-route public transit system serving Johnson County and the greater metropolitan area.
- ***The JO – Special Edition***: a curb-to-curb paratransit service for elderly, disabled, and low-income residents of the county.
- ***Sheltered Workshop Industrial Fixed Transportation (SWIFT)***: provides home to worksite commute trips for Johnson County Developmental Supports clients.

The Strategic Plan

The purpose of the Strategic Plan is to serve as a guide for transit improvement projects in Johnson County and to promote JCT's transit services, both internally and throughout the metropolitan area.

The original JCT Strategic Plan was adopted in 2007. This plan drew from prior transit-related projects in Johnson County, re-evaluated those plans and re-packaged them into a single cohesive plan. Previous plans and reports incorporated into this document include the 1999 Comprehensive Service Analysis and the Transportation Future Focused Task Force in April 2006. This process included public participation efforts in order to build a plan that includes services that are consistent with public expectations and needs for transit service.

It is recognized that transportation needs in the County and the metropolitan area are dynamic and the Strategic Plan must be capable of responding to a changing environment and changing demands. As such, the Strategic Plan is updated annually and detail is added to elements or projects as they move closer to implementation.

Each Strategic Plan update has included strategies for implementing improved and expanded transit service in the County, yet physical and service level improvements have been limited. Most recently, an emergency funding request approved in November 2008 by the BOCC also allowed for the expansion of transit services in 2009 due to increased demand for transit and rising fuel costs. In 2010, a federal CMAQ grant was utilized to add transit service in the Metcalf/Shawnee Mission Parkway and 75th Street/Quivira corridors. However, these expansions have not kept pace with the demand for additional transit service in the county. Johnson County has many competing needs and there has been a lack of consensus on transit as a priority. This, and the absence of a dedicated funding source, has been the primary obstacle to realizing an improved transit system in Johnson County.

The Strategic Plan builds on the Smart Moves regional transit plan, led by MARC and involving other transit providers and local governments. Since the updated Smart Moves Regional Transit Vision was adopted in 2008, a three-phased Regional Transit Implementation Plan has provided additional detail for future urban (Phase I) and commuter (Phase II) transit corridors. Phase III—which will integrate the findings of the first two phases and add cost estimates—is scheduled for completion in late 2011. JCT staff continues to be involved in this and other regional transit planning processes in order to improve mobility options for residents.

Planning efforts in 2011 led to the final input and direction for the content of the Strategic Plan Update. This included the Strategic Transit Action Recommendation Taskforce (START), which met ten times beginning in August 2010 and submitted its final recommendations in January 2011. START gave direction to the future planning of routes, with a focus on an incremental approach to expansion and on improving the rider experience by making the system easier to use. In April and May 2011, three Strategic Planning workshops were held with the JCTC and JCT staff. These workshops provided the basis for many of the strategies included in this Plan.

Why Update the Strategic Plan?

The 2011 Strategic Plan update is presented in response to the increasing need for quality transit services in the community, and recognition of the following:

- Rapidly changing demographics, including the increase of transit-dependent populations such as elderly and low-income residents.

- Growing awareness in sustainability, including environmental quality, social equity, and economic viability.
- The effect of rising fuel costs, and the dramatic fluctuations of these costs.
- Growing concern for the viability of automobile-oriented transportation systems and development patterns.
- Growing momentum in regional cooperation with other transit providers and local governments.
- Accounting for, and building on the success of, several ongoing planning and transit infrastructure improvement efforts such as new basic passenger infrastructure in the Metcalf/Shawnee Mission Parkway corridor and for I-35 express bus-on-shoulder transit services.
- Recognition of budget constraints due to economic recession, including budget reductions at the county level.
- The recommendations of the Strategic Transit Action Recommendation Taskforce (START), which presented its final report to the BOCC in January 2011.

This annual update of the Strategic Plan builds on the original plan and provides updated costs and strategies based on changing priorities and demographics.

Vision Statement & Goals

Johnson County Transit is committed to providing convenient, reliable and safe mobility options. The JCT team strives to deliver responsive, environmentally responsible and efficient transit services that constantly exceed customer expectations. JCT will develop and implement transportation-related environmental, social and economic sustainability strategies.

Recent revisions to the vision statement reflect increased interest in sustainability and the views of JCTC and JCT that public transit promotes mobility options that lead to less vehicle miles traveled and encourages bicycle and pedestrian activities. Public transit service is important to the County's quality of life, the environment, air quality and to support the growing demand for pedestrian friendly and transit oriented developments (TOD). An aging population will continue to expect additional transit options. As communities move from planning and developing for only the automobile, to embracing TOD, pedestrian traffic and transit in general, JCT must be in a position to not only be proactive but be able to respond to these demands.

The following represents the Strategic Plan goals as refined by the Transportation Council and by the Strategic Transit Action Recommendation Taskforce. The complete START Report, along with previous JCTC strategic points and goals, are included in Appendix B.

1. ***Expand transit service to provide more transportation choices*** for individuals living and working in Johnson County. This includes local routes serving intra-county needs, as well as express commuter service to regional destinations and employment centers. Transit service should be expanded in planned phases to ensure program success, community support, and long-term funding. Special services for mobility-limited populations should be increased along with fixed route services.

2. ***Tailor transit services to the Johnson County market*** in order to maintain the high standards typically associated with the county. Quality transportation options must be implemented that support a competitive edge, sustainable growth, promote a healthier

life style for county residents, and are responsive to changing demographics and community dynamics.

3. ***Focus on enhanced customer service and basic passenger infrastructure*** that improves the reliability and efficiency of transit services. Bus stops and transit centers should include infrastructure that promotes safety, reliability, and comfort. The level of amenities should be appropriate for each bus stop, based on location, adjacent land use, level of transit service, and ridership expectations. Advanced information technology systems such as real-time arrival signs should be utilized to enhance the user experience.

4. ***Maintain and improve transportation options for residents with limited mobility***. This includes improving the accessibility of fixed-route services as well as ***The JO – Special Edition*** services for senior and disabled residents. Expansion of transit services will provide additional opportunities for individuals with disabilities and older residents to take advantage of less expensive transit options.

5. ***Encourage and promote transit-oriented development throughout the region***, in coordination with local jurisdictions and the private sector. JCT and the Council will advocate for sustainable land use patterns that reduce vehicle miles travelled and increase transit, pedestrian, and bicycle activity. This includes mixed-use and higher-density developments that promote environmental, social and economic sustainability.

6. ***Expand the market for transit service in Johnson County and the region***. Transit service in Johnson County is intended to be broader than the downtown Kansas City commuter market. New transit services must reflect the changing employment and travel patterns in the county and the region, including services designed to:
    - Support Johnson County employment by providing transportation to jobs within the county ("reverse commute" service).
    - Expand transit usage for non-work activities such as shopping, education, entertainment, recreation, tourism, and convention business.
    - Expand the ability for Johnson County residents to travel within the county for daily needs by providing more frequent access to local neighborhoods and businesses.

7. ***Provide effective and seamless connections to the larger regional transportation system*** by coordinating with local jurisdictions and other regional transit providers. Municipal, county and state boundaries must not be allowed to be barriers for transit services. Improved connectivity through shared passenger facilities and timed transfer points, along with cooperative efforts to improve travel times through technology and information sharing between providers are a few of the direct measures that can impact passenger services. Consolidation of management systems like marketing, communications, and maintenance should be explored. JCTC also is resolute in its support for local decision-making and maintenance of the public/private partnerships in service delivery.

8. ***Secure dedicated funding for transit*** by proactively working with cities, the business sector and civic organizations to establish transit as a priority. The funding should be reliable and predictable to allow for effective planning of future service enhancements. It is important that sufficient controls are in place to ensure that publicly generated funding is used in a responsible manner and balances costs and benefits. In lieu of a dedicated

funding program, JCT still must receive sufficient federal, state and local funding to provide the quantity and quality of services County residents and businesses expect.

9. ***Continue marketing efforts to improve the public image of transit and attract new passengers***. These activities include advertising, presentations to local organizations, website and social media activity, and distribution of transit information to current and potential passengers. The use of cutting-edge information technology such as GPS-based bus location systems and web applications will be critical in these marketing efforts.

10. ***Develop and maintain management systems to support effective and efficient transit services***. Service measurement and monitoring will be employed to ensure services meet standards for efficiency and effectiveness. JCT will pursue data collection and analysis techniques that allow for greater ability to determine the effectiveness of services and assist in implementing changes.

11. ***Exhibit environmentally-friendly practices in all aspects of transit operations***. JCT strives to be a leader in reducing greenhouse gas emissions associated with transportation and facilities operations, such as by pursuing the use of alternative fuels, reducing waste, and by maintaining and operating our facility in accordance with green building practices.

Report Structure

The Strategic Plan is intended to serve as a guide for future investment decisions and is updated annually. Additional detail on specific projects or services is provided in other documents, including recent alternatives analyses and implementation plans for I-35 bus-on-shoulder operations for I-35 express routes and the Metcalf/Shawnee Mission parkway corridor.

The plan includes supporting documentation in the form of demographic data, ridership survey results, and background information on existing services. These sections are the base and spell out the reasoning for the planned services detailed later in the plan.

In this Plan, transit service and infrastructure improvements are presented in three phases:

- Near-term: detailed implementation strategies for the next five years, based on current and projected budget realities and other funding expectations.
- Medium-term: Planned services and improvements to occur over in five to ten years, based on optimistic yet realistic expectations for the growth of the transit system.
- Long-term: A 20-year high-level vision for a sustainable transit system tailored to the needs of Johnson County.

The Implementation and Financing sections describe the anticipated costs and strategies for implementing future services.

About Public Transportation

According to the American Public Transportation Association (APTA), Americans took 10.2 billion trips on public transportation in 2010. This represents a 31 percent increase since 1995—higher than the 17 percent growth in population and the 24 percent growth in highway use during the same period. More than 7,200 organizations provide public transportation services, including nearly 1,100 that provide bus service and 6,700 that provide paratransit services.

According to APTA's 2007 Profile *of Public Transportation Passengers*, 59 percent of trips made on public transit were for work purposes. Approximately 11 percent of trips were for school, nine percent for shopping or dining, seven percent for social activities, and five percent for personal business.

Public Transportation Benefits

The provision of public transportation services improves the quality of life and economic development of communities in the following ways:

- Provides transportation options, which increases personal mobility and freedom, especially for populations who are unable to drive a personal automobile.
- Provides access to employment for millions of Americans, and provides businesses with access to a broader and more diverse workforce.
- Reduces the number of cars on the road and the number of vehicle miles traveled by an estimated 4,400 miles per household annually.
- Reduces gasoline consumption and the "carbon footprint." APTA estimates that One person switching to public transit can reduce daily carbon emissions by 20 pounds, or more than 4,800 pounds in a year.
- Provides economic development opportunities by creating jobs and generating business activity. APTA estimates that for every $1 invested in public transportation, $4 in economic returns are generated.
- Since approximately 60 percent of transit trips are accessed by walking, using transit improves public health by promoting physical activity.
- Saves money for households by reducing the cost of owning, operating, maintaining, and insuring an automobile. After housing, transportation is the largest household expenditure for most households (94 percent of which is spent on buying, maintaining, and operating cars according to APTA).

Section 2 Transit Background


Operating from the Murray L. Nolte Transit Center in Olathe, Kansas, Johnson County Transit's services reach throughout the Kansas City region and connect to regional employment centers and other transit providers.

There are three fixed-route transit operators in the Kansas City metropolitan area: the Kansas City Area Transit Authority (KCATA), and Unified Government Transit (UGT), and Johnson County Transit (JCT). Figure 2-1 shows the routes operated by these three transit operators, as of July 2011.

Kansas City Area Transportation Authority – The Metro

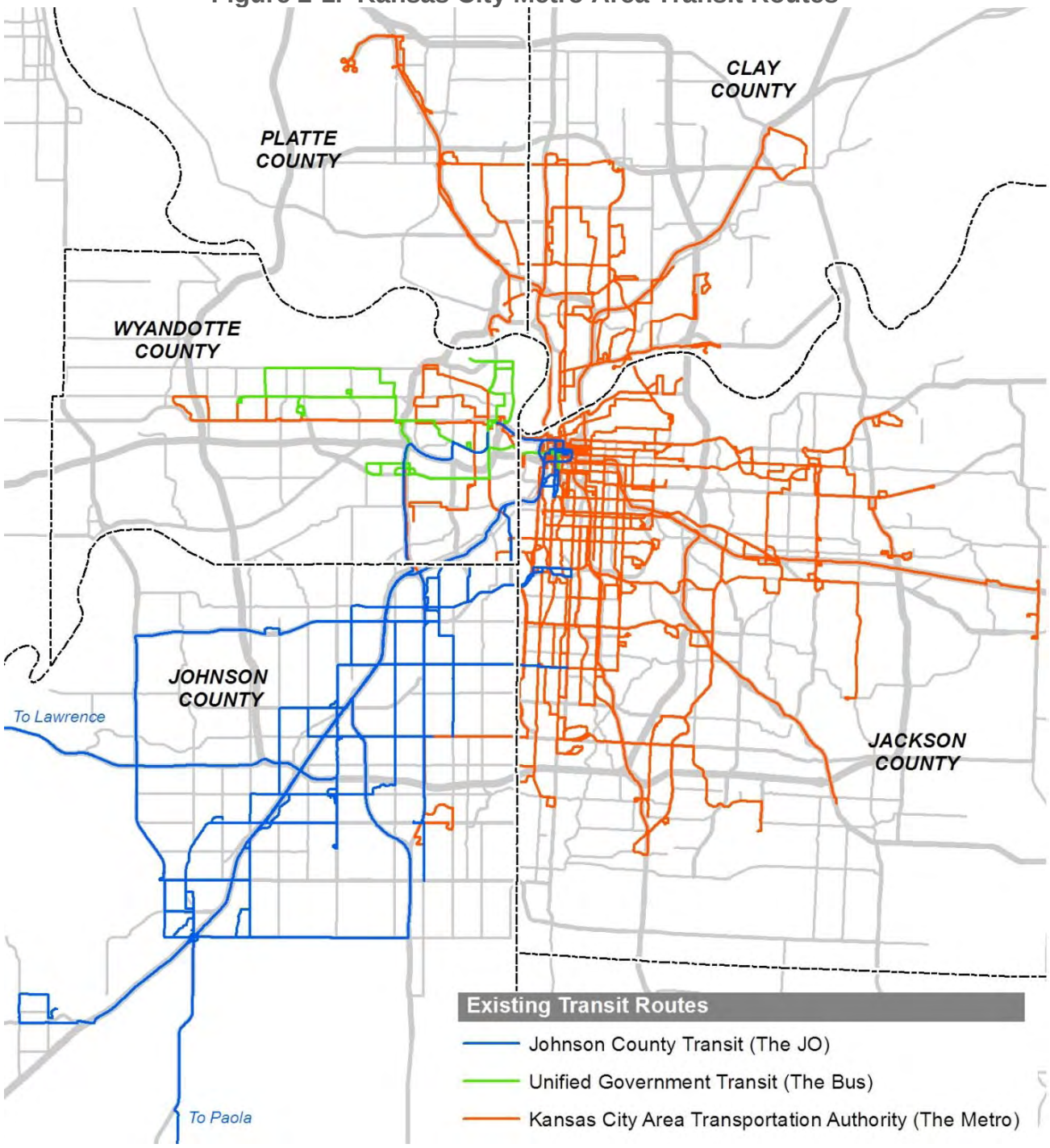
KCATA is a bi-state agency that operates transit service in several Missouri communities, including Kansas City, Liberty, Independence, Raytown, Riverside, Gladstone, North Kansas City, Lee's Summit and Kansas City, Kansas. The ATA operates The Metro bus service, the Metro Area Express (MAX) Bus Rapid Transit service, MetroFlex demand-response routes, Share-A-Fare paratransit service for the elderly and persons with disabilities, and AdVANtage vanpool service. One KCATA route (Route 175) is operated into Johnson County. The standard base fare is $1.50, with a reduced fare of $0.75. Three express services have a fare of $3.00. Metro monthly passes are valid for both KCATA and Unified Government services.

KCATA operates approximately 65 transit routes on weekdays, 48 routes on Saturday and 23 routes on Sunday. On weekdays, KCATA vehicles operate approximately 36,000 miles per day, with a peak number of 215 buses. In 2010, KCATA provided approximately 50,000 passenger trips per day on weekdays, 25,600 on Saturdays, and 11,300 on Sundays.

Since 2005, the KCATA has developed two Bus Rapid Transit Routes, branded as the Metro Area Express (MAX). The Main Street MAX and the Troost MAX provide a higher level of express service and facilitate faster travel for passengers. Since these MAX routes began operation, providing connections to these routes has been a priority of JCT, with connections in Downtown, Crown Center, the Country Club Plaza, and Waldo areas of Kansas City, Missouri.

Funding for KCATA services is primarily from a 5/8-cent sales tax levied in Kansas City, Missouri. This includes a 1/2-cent sales tax levied since 1971 and an additional 3/8-cent first passed in FY 2003 and renewed for fifteen years in April 2008. Other local funding is provided by other cities through purchase of service contracts. Funding for these contracts is generally from general revenue sources. KCATA also receives funding from the Federal Transit Administration (FTA) and is the designated recipient of funds. The state of Missouri provides limited transit funding.

Figure 2-1. Kansas City Metro Area Transit Routes



Unified Government Transit

Unified Government Transit (UG Transit) provides fixed-route and paratransit services that operate within Kansas City, Kansas, Wyandotte County. In addition to the service that UG Transit provides directly, the Unified Government also contracts with KCATA to operate additional fixed-route transit service within Wyandotte County. Service is available Monday

through Friday. Limited evening, Saturday and Sunday fixed-route service is provided by KCATA. Approximately 30 vehicles are needed for the services operated by the Unified Government's Transportation Division. The standard base fare is $1.50, with a reduced fare of $0.75. Unified Government Transit services are funded through general revenues and federal and state transit funding. In 2010, UG Transit fixed-route service provided approximately 122,000 trips, with an additional 957,000 provided under UG Transit's contract with KCATA for fixed-route services. Dial-A-Ride paratransit service and Senior Group Transportation is also provided by UG Transit and KCATA in Wyandotte County.

Johnson County Transit

JCT currently operates the following public transportation services:

- ***The JO:*** a fixed-route and flex-route public transit system serving Johnson County and the greater metropolitan area.
- ***The JO – Special Edition:*** a curb-to-curb paratransit service for elderly, disabled, and low-income residents of the county.
- ***Sheltered Workshop Industrial Fixed Transportation (SWIFT):*** provides home to worksite commute trips for Johnson County Developmental Supports clients.

The JO

The JO currently consists of 24 fixed and flex routes operating in Johnson County and the greater metropolitan area. Many of these routes have been designed to move commuters between Johnson County and downtown Kansas City, Missouri, although other major employment concentrations are also served. These routes provide a total of 194 revenue trips per day (not including Local Link flex services). Most of ***The JO's*** services are provided during the weekday peak travel periods, with some flexible and fixed routes operating in the middle of the day. In addition to routes serving Kansas City, Missouri, several routes also serve portions of Wyandotte, Douglas, and Miami counties in Kansas.

In 2010, The JO provided an average of 1,823 passenger trips per day. Ridership is generally higher during the months that schools are in session and there are few holidays. In September 2010, for example, an average of 2,185 trips were made on The JO.

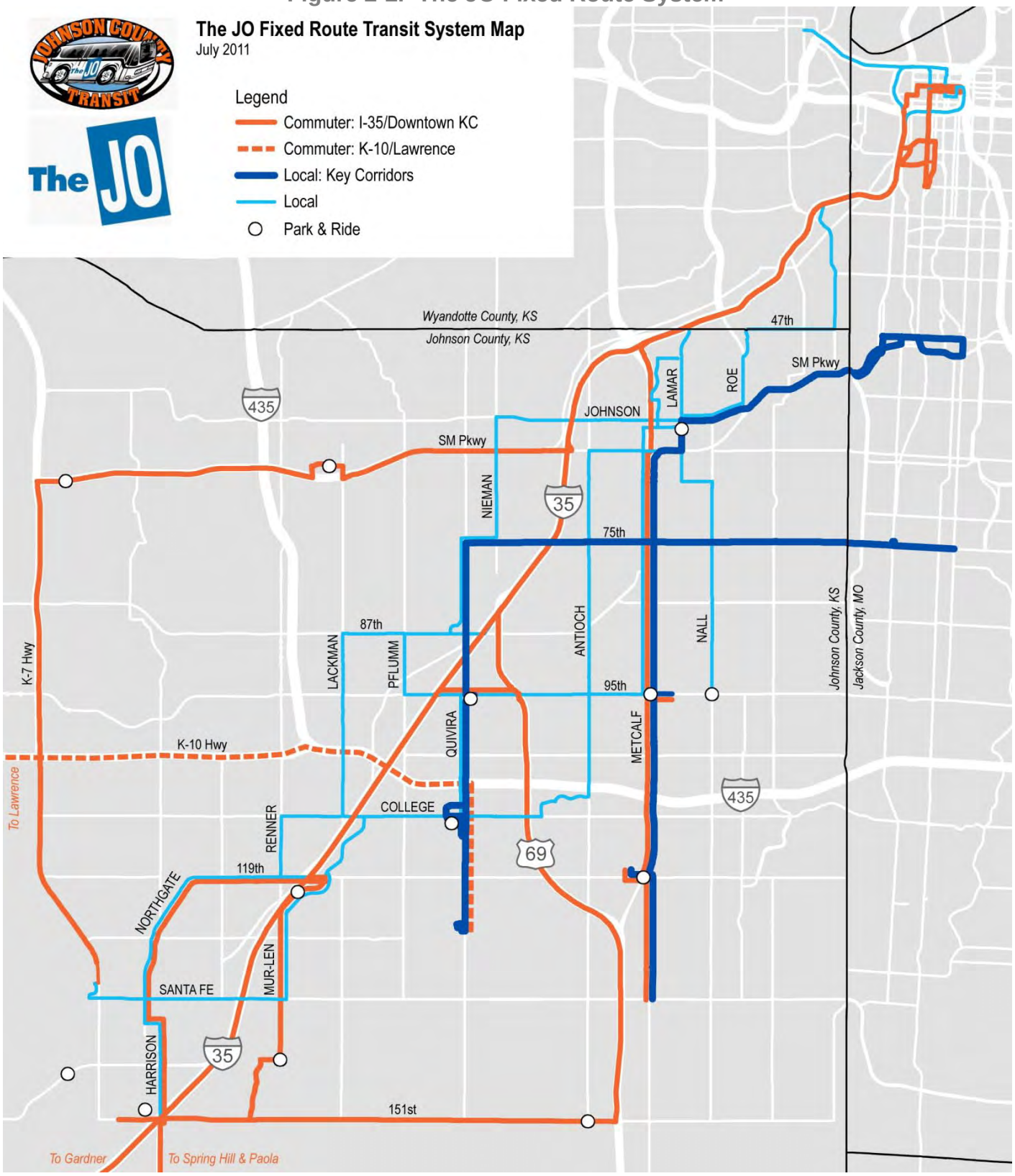
JCT maintains a fleet of 107 vehicles, including 54 buses and 53 cutaways. During peak periods, approximately 59 vehicles are dispatched to provide fixed-route service. JCT does not currently operate weekend service, and only one route (***Route 710 – K-10 Connector***) provides late evening service Monday through Thursday. Figure 2-2 is a schematic of ***The JO*** system.

The JO routes can generally be categorized into the following types:

- Commuter Routes connect park-and-ride lots with major employment and education destinations, running primarily closed-door service and on highways. JCT currently operates two types of express service: commuter service along the I-35 corridor, and the K-10 connector operating between Overland Park and Lawrence on K-10 Highway.
- Local Routes in Key Corridors form the spine of the JCT transit system within Johnson County and connect to major destinations. Increasing service on these routes is a primary strategy for growing transit in the county.
- Local Routes operate on arterial streets within Johnson County, with connections to other portions of the region and to major employment centers in the metropolitan area.
- Local Links are midday loop routes with flex service between fixed timepoints, planned and operated in cooperation with cities.

These routes are described in greater detail in Section 4.

Figure 2-2. The JO Fixed Route System

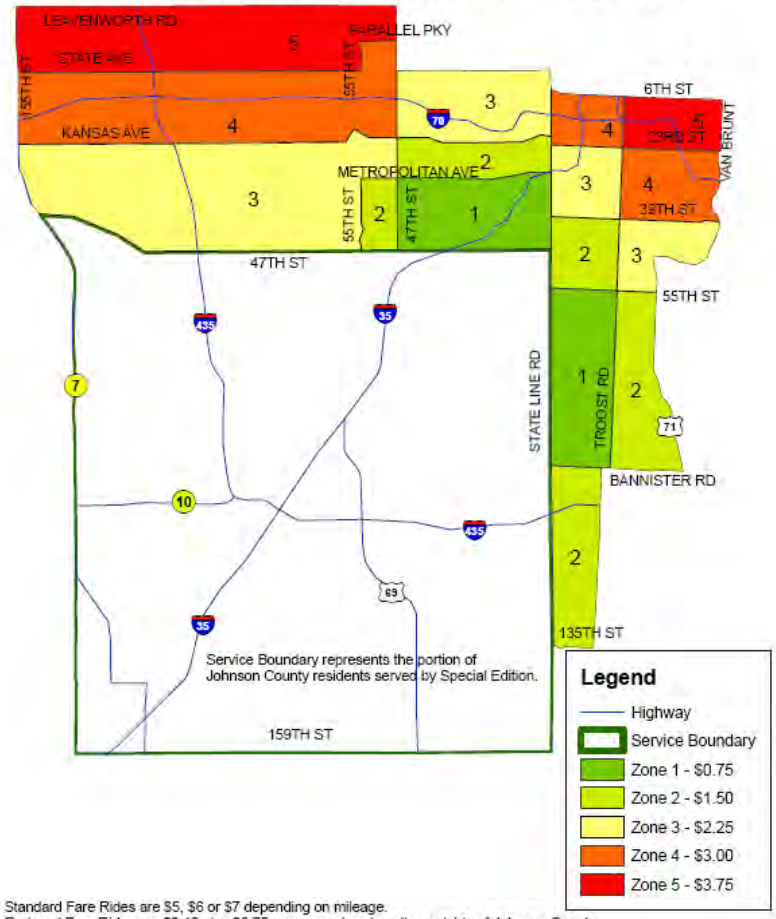


The JO – Special Edition

JCT operates an expansive discretionary paratransit service for elderly, disabled, and low-income persons with mobility limitations, although it is believed these specialized services fall far short of meeting overall needs. Forty-five vehicles are used to provide paratransit service. Special Edition provides affordable curb-to-curb service for Johnson County residents who are 60 years of age or older, have a documented disability or are within established low-income guidelines. Children ages 13 to 18 with a documented disability may ride for medical appointments only. Special Edition operates Monday through Friday from 6:00 a.m. to 6:00 p.m. Fares are based on one-way trips and range between $3.80 and $7.00 depending on the length of the trip and income status.

The JO – Special Edition ridership is more consistent due to limited eligibility and capacity for the service. In 2010, this service provided an average of 262 passenger trips per day. There are currently 1,835 eligible participants for The JO – Special Edition. There are an estimated 118,000 people in Johnson County that would be eligible to use ***The JO – Special Edition***, based on age, disability, and income requirements. This number is projected to double to 240,000 by 2030 due primarily to an aging population. While many of these people do not necessarily require paratransit service to meet their daily needs, the demand for paratransit service in Johnson County clearly far exceeds the capacity of ***The JO – Special Edition*** to provide this service.

Figure 2-3. Special Edition Service Area



Sheltered Workshop Industrial Fixed Transportation (SWIFT)

SWIFT provides home to worksite commute trips for Johnson County Developmental Supports clients. ***SWIFT*** service is much more stable than Special Edition, as demand is known and schedules can be pre-loaded. Current peak demand periods are approximately 6:30 a.m. to 9:00 a.m. and from 3:00 p.m. to 5:00 p.m. (when most patrons travel to and from their jobs). An important point in this service is to attempt to maintain a high level of consistency due to the patrons' special needs. An average of 182 trips per day were provided to JCDS clients in 2010, an increase of 41 percent compared to 2003.

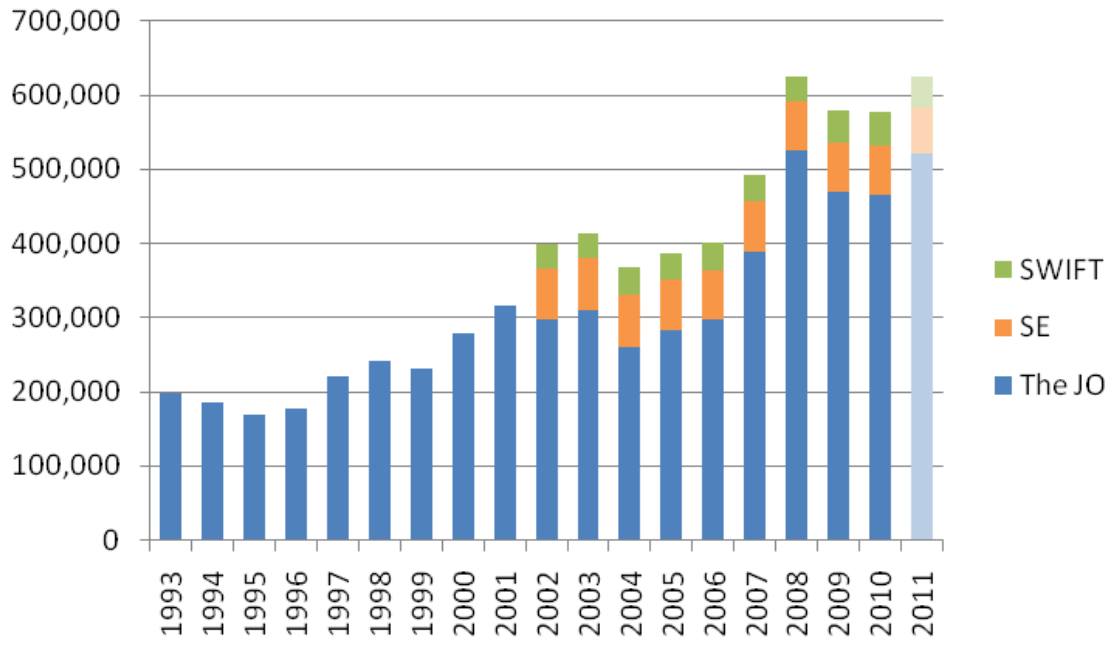
JCT Statistics Overview

Ridership Trends

Total ridership on JCT's transit services in 2010 was just under 578,000. ***The JO*** ridership continues to increase as the system matures and becomes more recognizable. The nearly 465,000 riders in 2010 was 63 percent higher than in 2005 and 19 percent higher than in 2007. While overall trends are positive, 2009 and 2010 ridership decreased slightly compared to 2008 due in part to fluctuating gasoline prices.

However, ***The JO*** ridership is back on the rise. As of June, 2011 ridership has increased approximately 12 percent compared to 2010. During the months of March, April, and May, ridership was higher than any other March, April or May in the history of ***The JO***.

Figure 2.4: JCT Ridership Trends

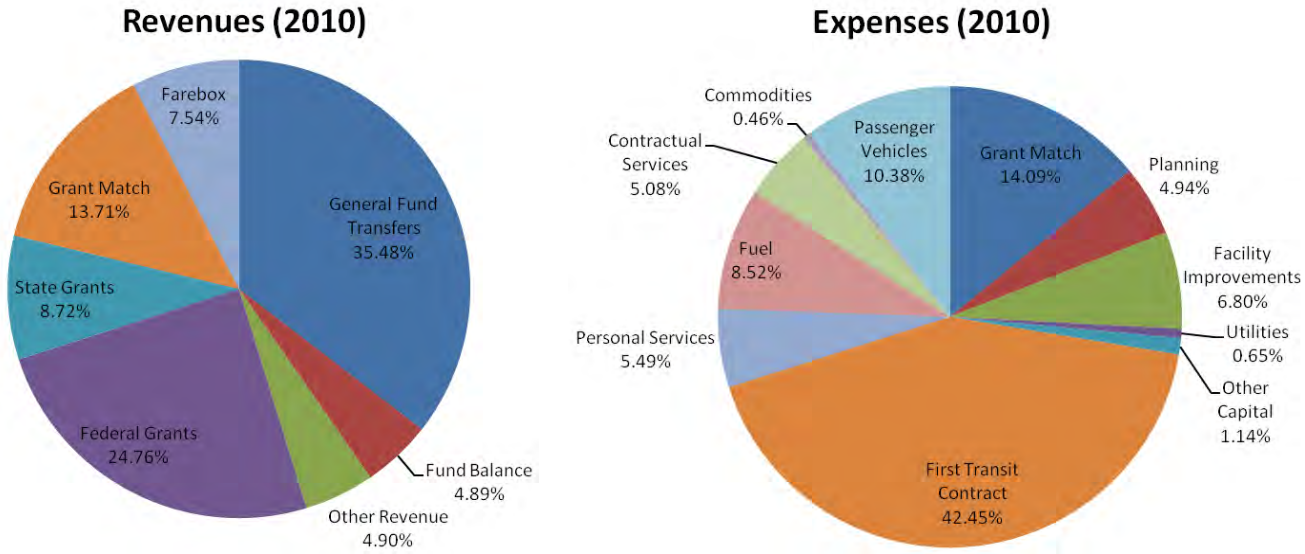


Source: Johnson County Transit, First Transit
Note: 2011 ridership is projected based on Jan-June totals

Current Budget

JCT services are funded through Johnson County general revenues and federal and state transit funding. Funding is also provided by cities for certain "Local Link" routes. Figure 2.3 shows JCT's revenue sources and expenditures for FY 2010.

Figure 2-5. JCT Budget (FY 2010)



Source: Johnson County Transit

JCT's 2010 budget represents an unusual amount of federal grant revenue due to the I-35 bus-on-shoulder project. This budget category exhibits the greatest amount of fluctuation from year to year. Currently, about 12 percent of JCT's revenues come from the bus fares paid by passengers. The primary expense for JCT is the operating contract with First Transit, currently accounting for 42 percent of JCT's costs. In 2011, fuel costs have increased considerably and now represent a larger percentage of JCT's costs.

Planning Activities

JCT conducts a variety of planning activities in support of maintaining and improving the current system, as well as planning for new transit services in the future. As of 2011, major planning efforts include:

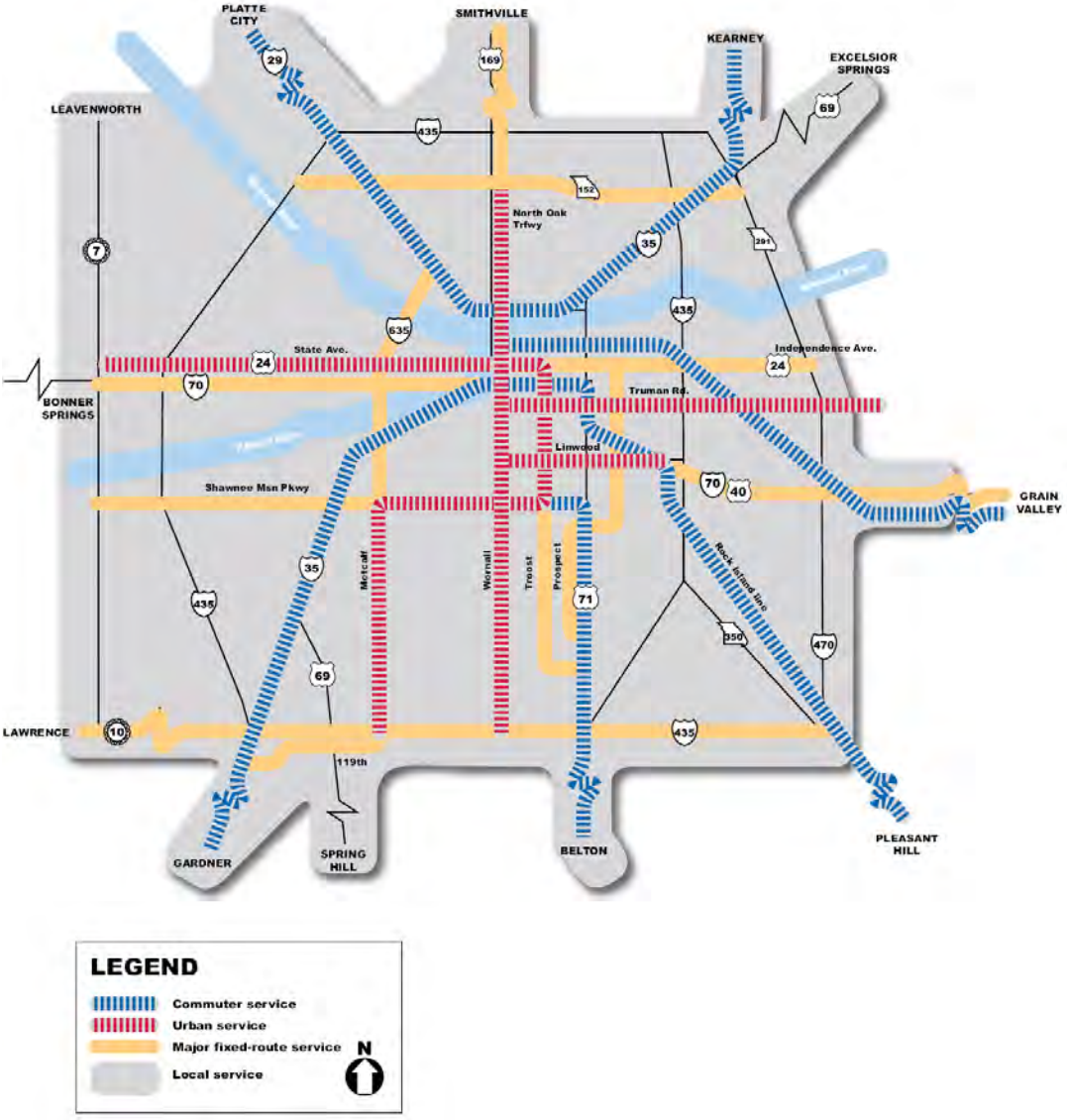
- Working with the Mid-America Regional Council (MARC) to advance regional transit plans and initiatives, including the Smart Moves Regional Transit Plan.
- Implementation of bus-on-shoulder operations on I-35, including an enhanced service plan and new transit stations that provide access to express routes.
- Planning, design and construction of transit and pedestrian infrastructure improvements in the Metcalf/Shawnee Mission Parkway corridor in Overland Park, Mission, and Roeland Park.
- Implementation of bus-on-shoulder operations on I-35, including an enhanced service plan and new transit stations that provide access to express routes.
- Coordination with local communities to improve Basic Passenger Infrastructure throughout the transit system.
- Coordination with other public and private transportation providers to improve connectivity, making it easier for more people to travel throughout the region.

- Ongoing route and timing modifications, to improve system efficiency and to meet budget goals.

Smart Moves Regional Transit Plan

Smart Moves is the vision for expanded and enhanced public transportation services in the seven-county Kansas City region. JCT, along with KCATA, the Unified Government and the Mid-America Regional Council (MARC), has participated in every stage of this process. Figure 2-5 shows the schematic route map that was created as part of the June 2008 update to the Smart Moves Plan.

Figure 2-6. Smart Moves Concept Graphic



Source: Smart Moves, Mid-America Regional Council

Smart Moves integrates previous regional initiatives by developing detailed service plans for the seven-county area and linking them together, and the strategies envisioned to fund the plan. The plan expands on the existing transit routes and facilities operated by JCT, KCATA and UGT

to form an integrated regional transit system. The plan utilizes four coordinated systems to build the regional movement service:

- *Commuter Service* provides direct, express-type service between residential areas and major employment centers during the peak hours using the metropolitan area's expansive freeway system;
- *Urban Service* provides bus rapid transit limited-stop service along major regional arterials;
- *Major Fixed-Route Service* provides frequent service along other major regional highways and arterials; and
- *Local Service* provides service to local destinations within communities and to transit centers that link to the entire region.

Regional funding initiatives were introduced in the Kansas and Missouri legislatures during the FY 2006 legislative session. The initiative passed in Missouri but did not advance in the Kansas Legislature in FY 2007. After adoption of the Smart Moves update in 2008, the following planning processes have taken place in support of the plan:

Phase I: Urban Corridors

This phase provided further definition for regional bus rapid transit services on the Urban Corridors as defined in Smart Moves. This network spanning the metropolitan area serves as the backbone to the larger regional transit system and provides connections between local transit services. Information developed as part of Phase I was used to support a successful application for transit capital project funding from the American Recovery and Reinvestment Act (ARRA). The Metcalf/Shawnee Mission Parkway corridor is Johnson County's "urban corridor" identified in this study; transit improvements along this corridor in accordance with Smart Moves are underway.

Phase II: Commuter Corridors

The study of Commuter Corridors addressed the physical, operational and ownership components necessary to develop a commuter rail system in the Kansas City metropolitan area. In corridors where rail operations are deemed feasible, this report sets forth strategies for additional review of potential corridors, their initial system set up, and implementation. While the I-35 corridor in Johnson County was identified as a "commuter corridor" in Smart Moves, the Phase II study focuses on rail transit on other regional commuter corridors. JCT is pursuing bus-on-shoulder operations on I-35 rather than rail.

Phase III: System Integration and Financial Study

Currently in progress, Phase III will integrate findings from prior phases, solidify the Regional Transit Plan and develop an overall regional implementation strategy and approach.

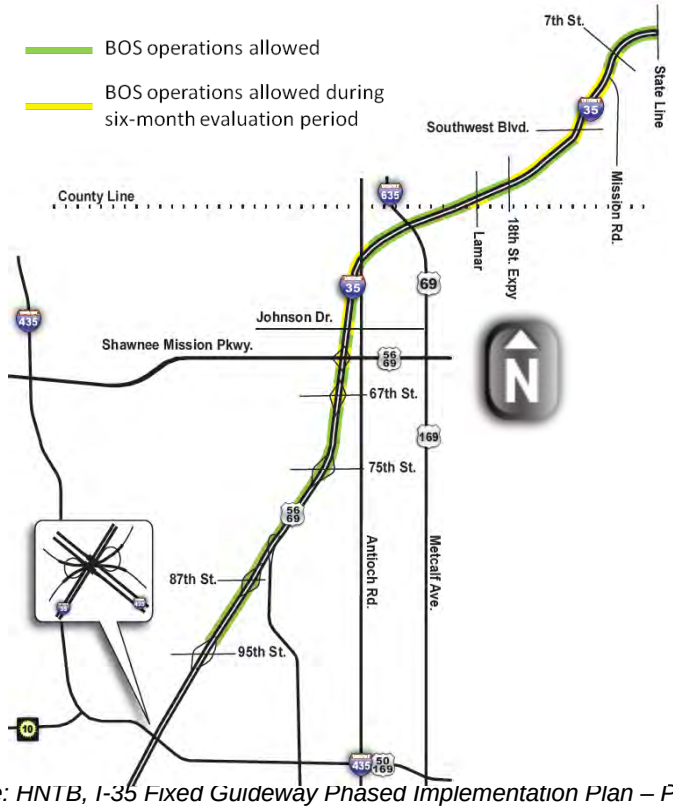
I-35 Fixed Guideway Planning and Implementation

For nearly two decades Johnson County Transit (JCT) has looked for ways to enhance transit services, increase transit ridership, and decrease congestion in the I-35 corridor in Johnson County, Kansas. The initial solution was commuter rail on the parallel BNSF railroad; this solution was later deemed infeasible due to cost. However, after much debate it became apparent that a new approach was needed. In 2007, the *I-35 Fixed Guideway Alternatives Analysis* concluded that Bus on Shoulder was the preferred alternative. In 2009, JCT completed the Fixed Guideway Phased Implementation Plan, a preliminary study of the implementation of the Bus on Shoulder system. Phase II of this plan, which includes detailed planning, design, and preliminary engineering—began in 2010 and is due to be complete in late 2011.

The purpose of Phase II of the Phased Implementation Plan is:

- To prepare a BRT service plan identifying routes, service levels and stops
- Further evaluate the Bus on Shoulder operating strategy recommended in the Alternatives Analysis
- Update capital and operating cost estimates
- Complete a plan for an early implementation project to be finished by the end of 2011
- Transition into the next phase of planning which will determine long range improvements

Figure 2-7. I-35 Bus On Shoulder Segments of Operation



Source: HNTB, I-35 Fixed Guideway Phased Implementation Plan – Phase II

The project is on schedule to be completed by the end of 2011. Primary features of the project include:

- Minor construction along the shoulders of I-35—between roughly 95th Street and the state line—to allow for buses to operate safely and reliably on the shoulder. The benefit to JCT transit operations is travel time savings of 15% to 20% and a significant improvement in reliability. Improvements include adding signage throughout the corridor, relocating sections of guardrail, replacing specified storm water drainage inlets, and installing pavement markings.
- Improved transit stations that are utilized by existing express routes, to include high-quality shelters, route information kiosks, and electronic real-time arrival signage.
- Revised service plan to include a streamlined downtown route and reverse commute trips that provide better access to jobs in Johnson County.

Metcalf/Shawnee Mission Parkway Corridor Planning and Implementation

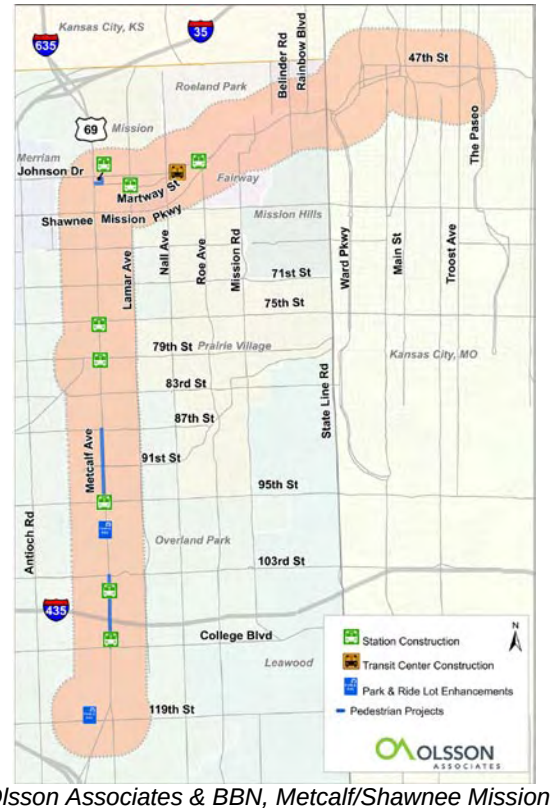
The Metcalf/Shawnee Mission Parkway corridor received $10.7 million of a $50 million regional TIGER grant for transit and related improvements. The corridor extends from 119th and Metcalf in Overland Park to Cleaver and Troost in Kansas City, Missouri. Improvements will include:

- 18 new transit stations
- Improved stations at two park-and-ride facilities: Rosana Square and Metcalf South
- Pedestrian access and trail improvements in Overland Park and Mission, including sidewalks, crosswalks, new bike/hike trail segments, and landscaping
- A transit signal priority system that will allow transit vehicles greater ability to adhere to schedules by adjusting signal timing
- A new transit center in downtown Mission to serve as a primary transfer point for many of The JO's routes

Final design of the improvements will be complete in late 2011, with construction in 2012.

In addition to these improvements, JCT is also nearing completion of the *Metcalf/Shawnee Mission Parkway Alternatives Analysis* to determine the Locally Preferred Alternative for long-term transit service in this corridor. This study has included conceptual engineering of alternatives—baseline, BRT mixed traffic, and BRT fixed guideway—as well as consideration of the future development of the corridor as planned in Vision Metcalf (Overland Park) and the East and West Gateway studies (Mission).

Figure 2-9. TIGER Stations on the Metcalf/Shawnee Mission Parkway Corridor



Source: Olsson Associates & BBN, Metcalf/Shawnee Mission Parkway

Basic Passenger Infrastructure Improvements

Due to the primary START recommendation that JCT focus on improving amenities that make the transit system easier and more comfortable to use, JCT is working with local cities to improve existing bus stops and system information. Specifically, JCT is currently working with local cities to provide improved transit amenities in coordination with upcoming road construction and streetscape projects. JCT will continue to coordinate with local cities to integrate transit improvements with road construction projects. More detail on ongoing and planned basic passenger infrastructure is provided in Section 6.

Figure 2-10. Example of Planning For Basic Passenger Infrastructure in Olathe

KU Medical Center Area Planning Study

In May 2011, JCT along with MARC, KCATA, UG, and the City of Roeland Park began a study to review options for improving transit service in the area of the University of Kansas Medical Center in southwest Wyandotte County. The study will create an actionable plan to improve connections between both local transit routes and between the new premium bus services to be implemented on State Avenue to the north and Shawnee Mission Parkway to the south. Providing for the transportation of the thousands of employees, patients, visitors and students each day has become a significant problem. Although the area is served by four transit routes currently, there is very limited service from northeast Johnson County to the medical center area and the connections between existing transit routes and connections to KU Medical Center facilities needs improvement. Due to its strategic location in the region, the project team envisions the area as a future hub for transit services, linking each of the three providers in the region.

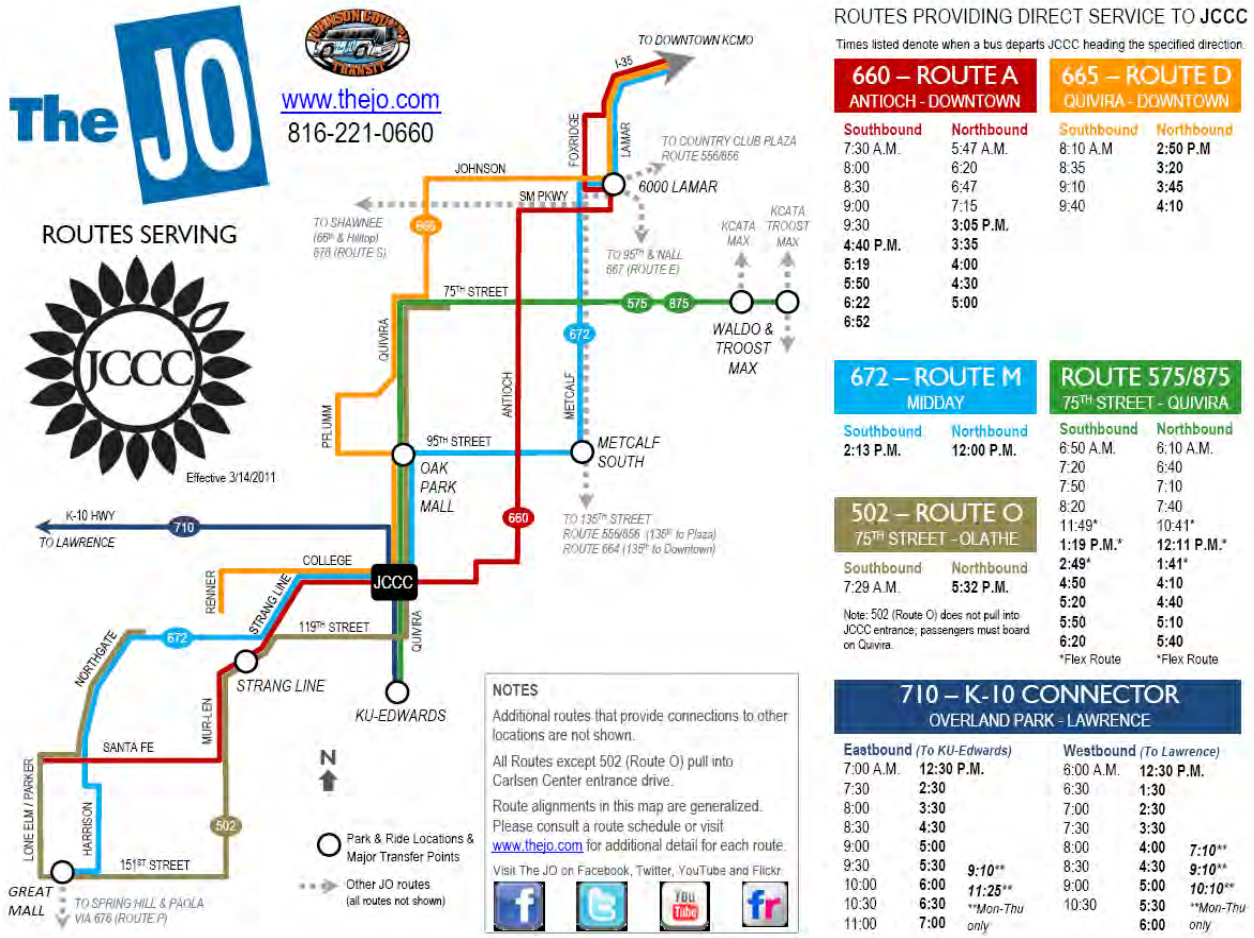
The study will be completed in October 2011 and will include:

- A transit vision and concept plan for the KU Medical Center area
- Implementation strategies
- An operations plan to include routing and service levels, connections among routes, capital improvements, operations, costs, and project phasing.

Johnson County Community College

JCT is coordinating with staff at Johnson County Community College (JCCC) to identify ways to increase transit ridership and reduce the demand for parking at the college. Potential opportunities include seeking grant assistance for the purchase of new vehicles that could provide express service to the college and other higher education institutions in the region. This strategy may also include working with other institutions in order to assist with the operating costs of such a service.

Figure 2-11. The JO Routes Serving Johnson County Community College



Future Transit Studies

To continue planning for the expansion of transit services in Johnson County, JCT will need to continue Alternatives Analysis and other studies on existing and future transit corridors. These efforts will ensure that future investments are well-planned, and that JCT can take advantage of various grant opportunities by already having plans in place. Anticipated future studies include:

- Shawnee Mission Parkway West Bus Rapid Transit: determine the preferred alternative for future route serving west Johnson County and connecting to the Metcalf/Shawnee Mission Parkway corridor.
- College Boulevard/119th Street Service Implementation: study the alignment and timing of future routes on these arterial streets and surrounding areas, given the unique opportunities and obstacles for providing transit to major employers and neighborhoods in this corridor.
- I-435 Corridor: assess the feasibility of various options for providing transit in this high-traffic corridor connecting many cities in the southern portion of the Kansas City region.
- Northeast Johnson County Transit Facility Operations Study: Analyze all aspects of transit operations to be impacted by a future transit facility in northeast Johnson County.
- JCCC Transit Center Study: With new and expanded services planned for both the Quivira and College corridors, there will be a need to upgrade The JO's stop at this location to better facilitate transfers and more buses.

- K-7 Corridor: Identify service strategies for connecting communities in the west metro area and providing service to major employment centers such as the future Gardner/Edgerton intermodal facility.
- ADA Complimentary Paratransit Service Strategy: initial planning for the provision of paratransit once JCT's transit services evolve to the point where the system is no longer considered a "commuter" system.

Other Regional Transit Coordination Efforts

JCT collaborates with KCATA, UGT, MARC, and local governments on a variety of ongoing planning and implementation efforts. Among other and ongoing endeavors, this regional coordination includes:

Participation in the MARC Transit Committee and Seamless Transit workgroup

Involvement in study teams for ongoing planning processes such as the *Metcalf/Shawnee Mission Parkway Alternatives Analysis* and the *KU Medical Center Area Transit Study*.

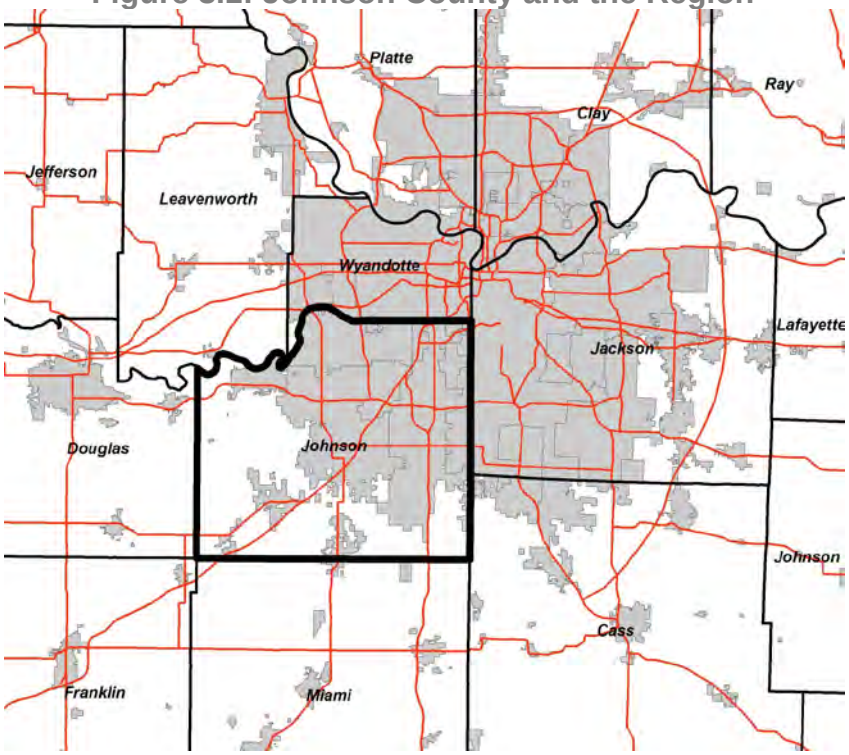
- Branding of regional transit services to improve the public perception and usability of the transit system; the Connex brand will be utilized by both JCT and KCATA/UG for enhanced transit service in key corridors.
- Efforts to create a regional transit pass
- Coordination on regional grant applications to seek funding for a variety of basic passenger infrastructure improvements throughout the region
- Joint procurement of buses and other capital
- Various "behind the scenes" planning and operations efforts such as the placement of bus stops, timing and route adjustments to facilitate convenient connections, and sharing of useful data for the benefit of regional transit.

Section 3 Community Characteristics

The continued growth of Johnson County, Kansas has been accompanied by the expansion of highways (I-35 pictured above) and arterial streets to accommodate the growing number of trips in the county. However, there has been an increased interest in other modes of transportation—transit, walking, and biking— and the opportunities that these modes provide to reduce congestion and construction costs.

Johnson County, Kansas is situated on the eastern border of Kansas and is in the southwest portion of the Kansas City metropolitan area. Johnson County's population is rapidly growing, increasing by more than 20 percent in the past decade to a current population of 544,179 (Census 2010). The county is the largest in Kansas and represents nearly 27 percent of the population of the Kansas City Metropolitan Statistical Area.

Figure 3.1: Johnson County and the Region



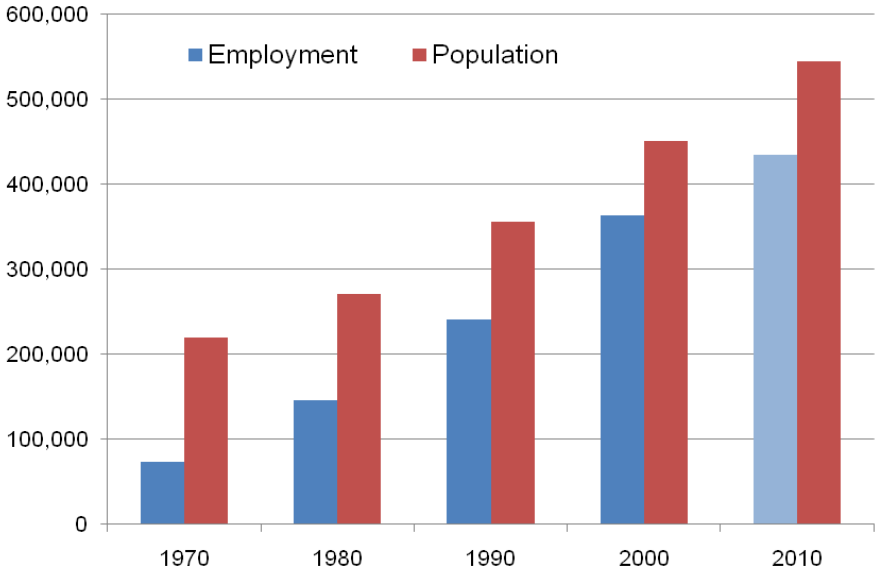
Source: U.S. Census Bureau

Johnson County is known for its high quality of life, due in part to quality schools, public safety, civic facilities, cultural amenities, and a vibrant business community. A well-developed highway and street network has also contributed to the growth of the county and the high quality of life. However, this automobile-centric transportation network has facilitated low-density development patterns that are not conducive to transit service.

Population and Employment Growth

The population of Johnson County increased by more than 20 percent from 2000 to 2010, continuing the rapid growth that has occurred since the mid 1900s. Johnson County has historically been known as primarily a suburban "bedroom community" that exports workers to surrounding areas, especially to the Kansas City, Missouri central business district. However, the county is increasingly an employment center in its own right. In 1970, there were 0.33 jobs for every county resident; in 2010, there were 0.80 jobs for every resident.

Figure 3.2: Johnson County Population and Employment Trends

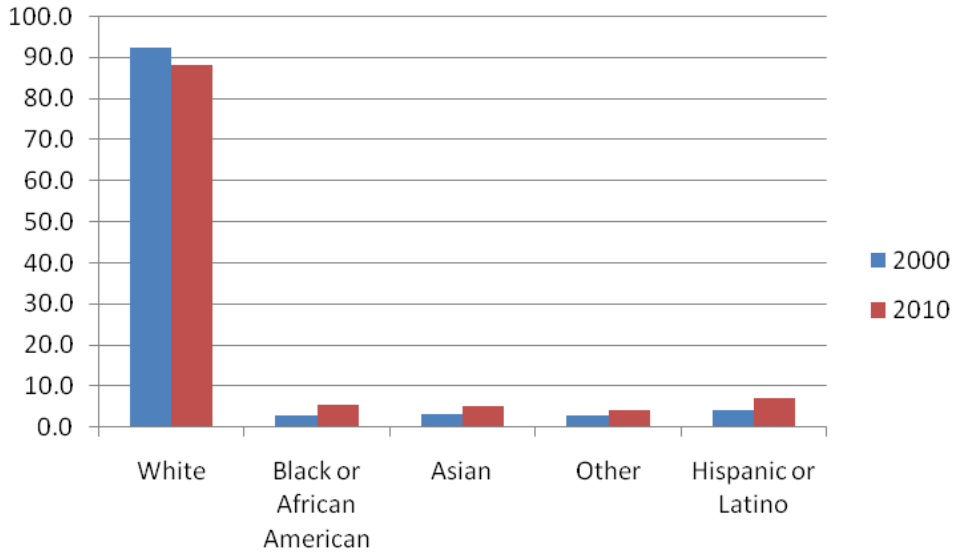


Source: U.S. Census Bureau, CERI, Johnson County Transit
Note: 2010 employment estimated using 2008 population and employment data.

Demographic and Economic Trends

Johnson County's population is changing. Recent Census statistics reveal increasing demographic and economic diversity in the county, as well as an aging population. The median age of county residents has increased from 35.2 in 2000 to 36.4 in 2010. There is also increasing racial diversity in Johnson County. From 2000 to 2010, the percentage of Black or African American residents increased from 3.0% to 5.3%; the percentage of Asian residents increased 3.2% to 5.0%, and the percentage of Hispanic or Latino residents increased 4.0% to 7.2%. (All race statistics use the "race alone or in combination with one or more other races" category).

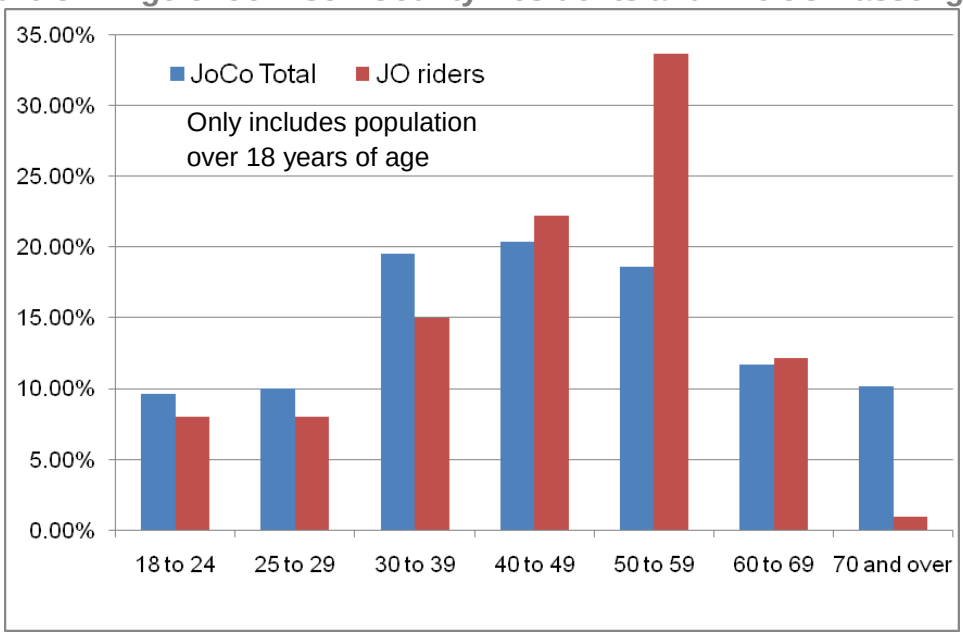
Figure 3.3: Percentage of Population by Race



Source: U.S. Census Bureau
Note: Data is from "race alone or in combination" category, total does not add up to 100%.

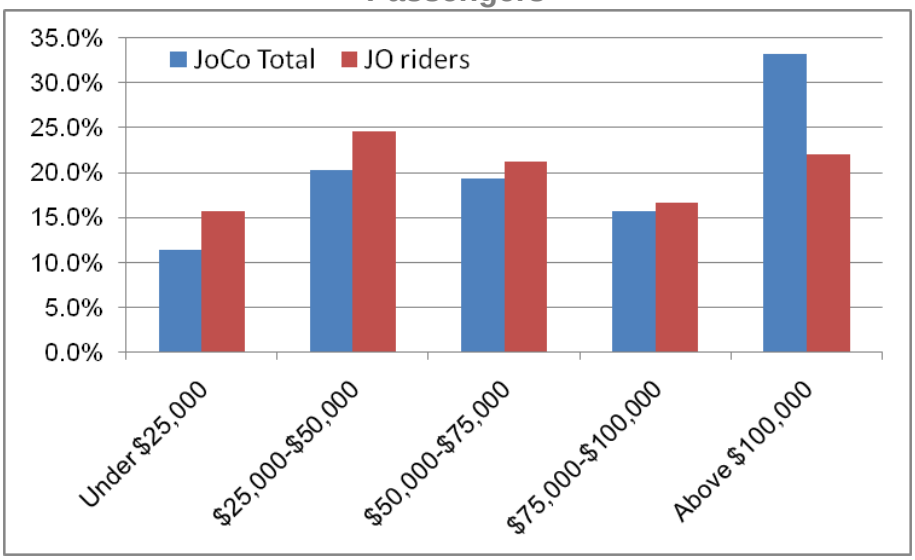
Current JO ridership characteristics also show increasing diversity in demographic and economic indicators. Compared to the county's overall population, JO riders tend to be older and have lower incomes as a whole. However, JO riders represent a wide variety of income levels, and 22 percent of JO riders have a household income above $100,000.

Figure 3.4: Age of Johnson County Residents and The JO Passengers



Source: U.S. Census Bureau, 2011 JCT Passenger Survey

Figure 3.5: Household Income of Johnson County Residents and The JO Passengers



Source: U.S. Census Bureau, 2011 JCT Passenger Survey

Recent data from the American Community Survey reveals that the number and percentage of the county's population living in poverty is rapidly increasing. From 2008 to 2009, the percentage of Johnson County residents living in poverty increased from 4.7 percent to 7.1 percent. There are an estimated 38,000 Johnson County residents living in poverty as of 2009. The median household income during this same span dropped by nearly six percent.

Population & Demographics: The Bottom Line

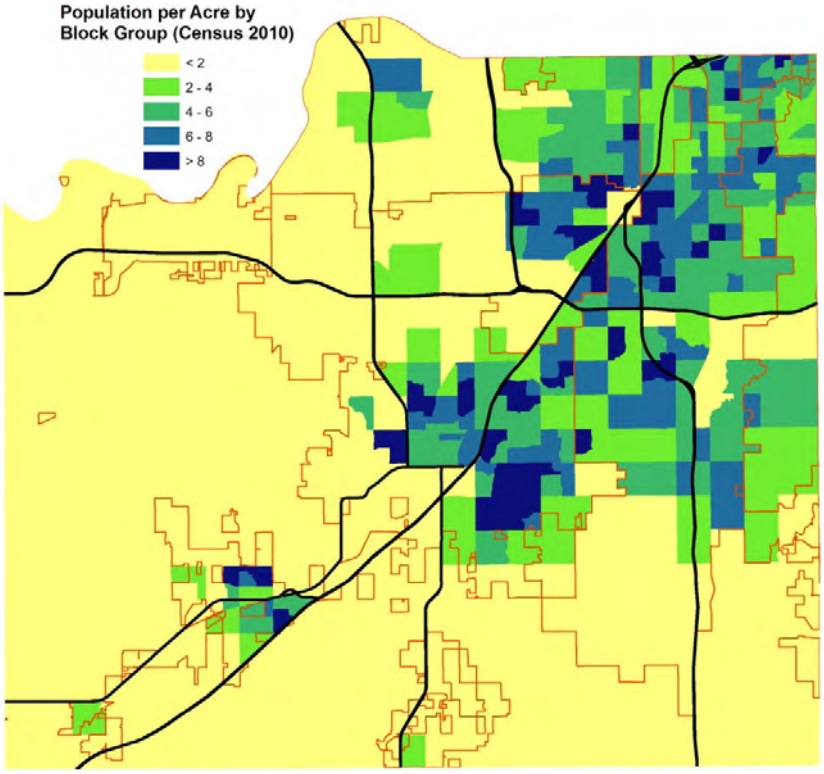
The increasing diversity in the county's population suggests a need to tailor transit services to a wider range of needs. This includes providing transportation to the increasing number of people that do not have other transportation options. In addition to providing trips to work, those with limited mobility due to income, disability, or age also need to travel to a variety of locations to access a wide range of daily services.

Development Patterns

Most of Johnson County developed in the 1950s or later with the land use and development patterns reflecting a suburban development style. Population densities are in the 2,000 to 3,000 persons per square mile range and land uses are typically separated from each other. This is particularly the case in portions of the County outside of the I-435 loop. As with many suburban communities throughout the nation, land uses are typically separated and are low to medium density in nature. In order to provide capacity for the number of personal automobile trips that are required given these patterns, highways and arterial streets throughout the county continue to be expanded to add more lane miles. These development patterns create a more difficult environment for transit by reducing demand and creating an unfriendly physical environment for transit users.

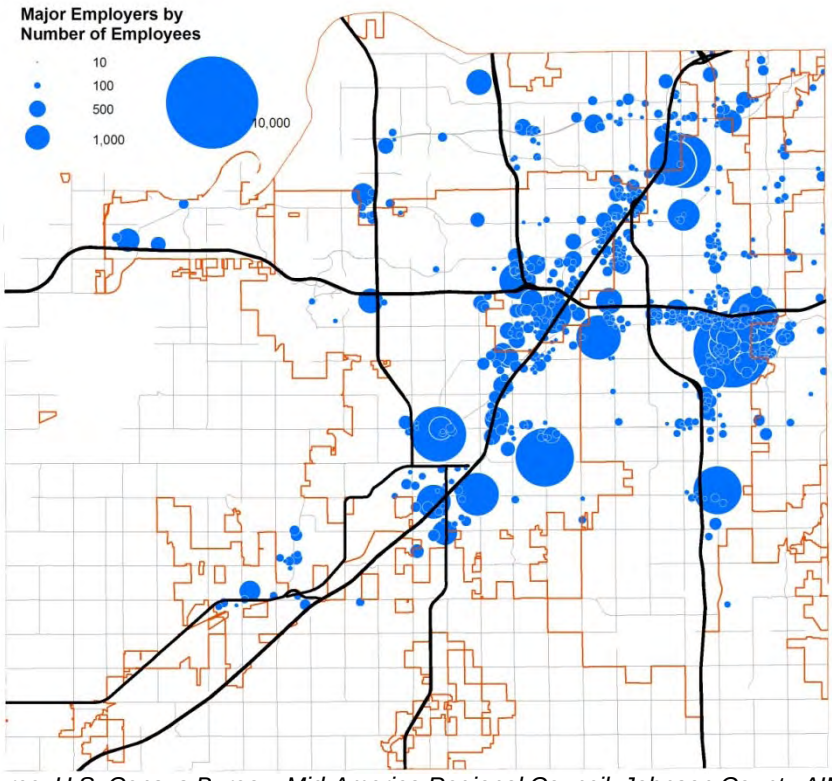
A primary goal of JCT is to work with local jurisdictions to encourage land use planning and development that reduces the need for private automobiles, and creates a more favorable environment for all modes of transportation, including transit, cycling, and walking.

Figure 3.6: Population Density in Johnson County, by Census Block Group



Source: U.S. Census Bureau, Mid-America Regional Council, Johnson County Transit

Figure 3.7: Major Employers in Johnson County



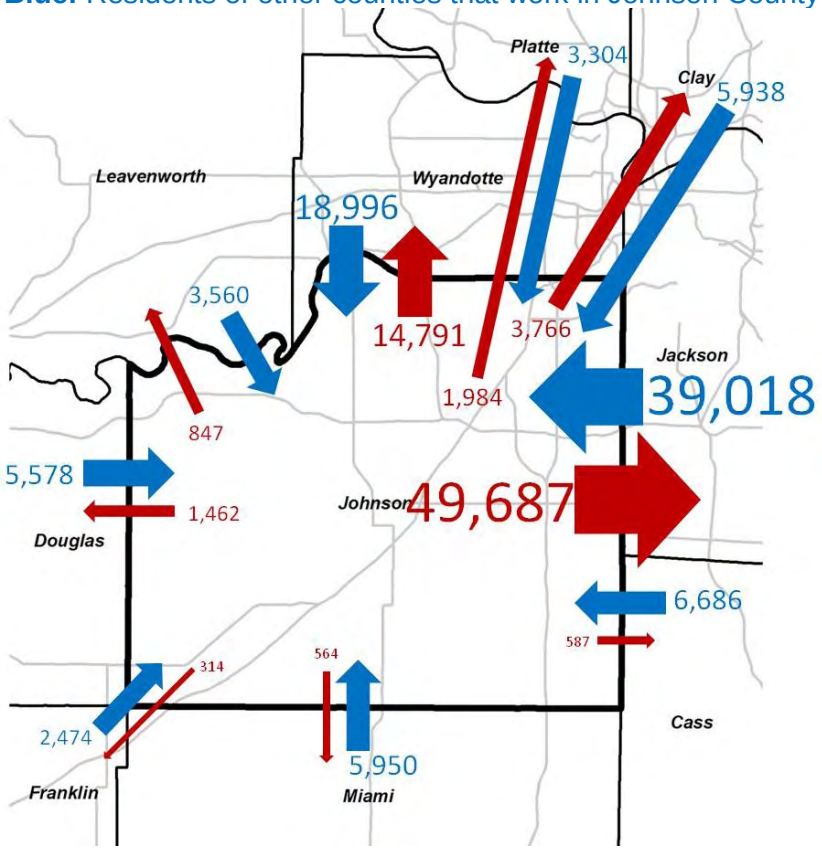
Source: U.S. Census Bureau, Mid-America Regional Council, Johnson County AIMS

Travel Patterns and Air Quality

The 2005-2009 American Community Survey estimates that only 0.5 percent of Johnson County residents use public transportation to get to work; 85 percent drive alone, seven percent carpool, and two percent used other means to get to work. The average Johnson County commute is 20 minutes. A substantial reduction in the percentage of trips made by driving alone would have a dramatic impact on the number of cars on the road. This would reduce congestion and the need for certain highway and road expansion projects.

Much of the travel to work in the Kansas City region crosses municipal, county, and/or state boundaries, as seen in Figure 3.6.

Figure 3.6: Journey to Work (Census 2000)
Red: Residents of Johnson County that work in other counties
Blue: Residents of other counties that work in Johnson County



Source: U.S. Census Bureau

According to the MARC's *Clean Air Action Plan 2011 Update*, The Environmental Protection Agency (EPA) strengthened the national air quality standards for ground-level ozone in 2008. The EPA is expected to designate the Kansas City region as a nonattainment area after the agency issues more stringent eight-hour standards in July 2011. Standards for other pollutants are also expected to be tightened in the near future. Recognizing the impact of transportation choices on air quality, Action 1 of the plan update is to "promote options that are pedestrian, bike, and transit friendly for communities." Many of the goals associated with this action are related to encouraging transit-oriented development, increasing the number of trips taken on transit, and pursuing the increased use of alternative fuels.

Non-attainment status could have a variety of negative impact for the region, including a loss of funding for various infrastructure improvements and resulting loss of economic development. Increased use of transit, rather than driving alone, is one of the most important measures individuals can take to help maintain clean air in the region. Local and state governments can contribute to better air quality by encouraging the use of transit, walking and cycling.

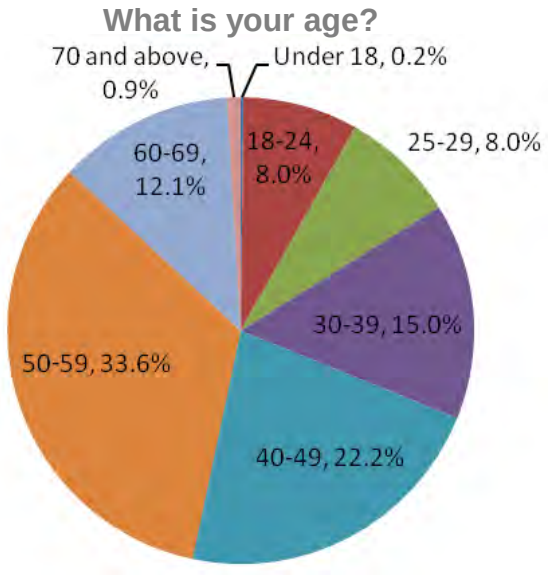
Public Perception of Transit

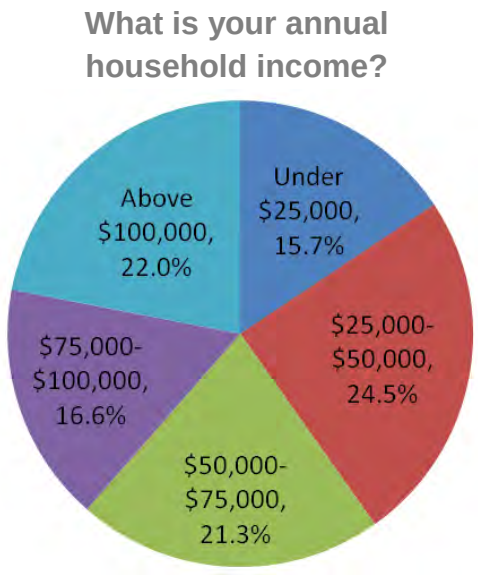
Every two years, Johnson County conducts a county-wide survey of a random-sample of county residents. In both 2009 and 2011 versions of the survey, public transit was recognized as having one of the highest "opportunities for improvement." Opinions of the quality and importance of transit in the county are highly polarized, more so than any other topic included on the survey. While public transit service ranked lowest in overall satisfaction, almost every other county service saw larger decreases in satisfaction from 2009 to 2011. One major finding of the report is that 87 percent think that "it is important for Johnson County to support sustainability programs that reduce pollution, conserve energy, and protect water resources."

The JO Ridership Characteristics (2011 Ridership Survey)

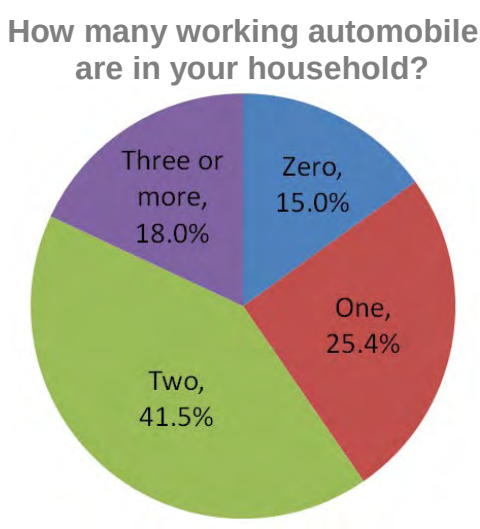
Johnson County Transit conducted a survey of passengers during the month of April 2011. The survey was available to all riders and was widely advertised on buses, at www.thejo.com, and on social media sites. A total of 545 completed surveys were returned to JCT, 345 of these were completed online. The survey was also a valuable tool in collecting contact information so that more riders can receive e-mail notifications concerning the routes that they ride. The survey is a snapshot of current ridership characteristics and opinions of The JO, and also allows for a comparison to the last system-wide survey conducted in 2008.

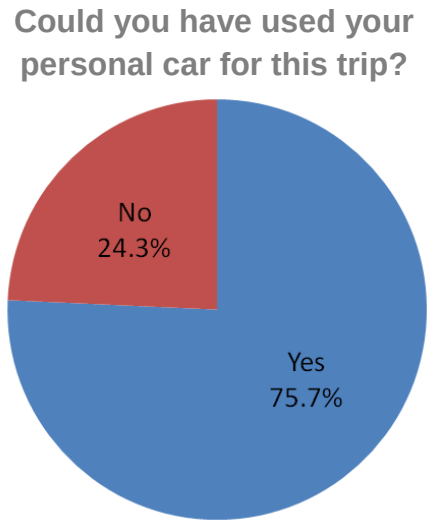
Demographic data revealed an increasingly diverse ridership base. Every age group between 18 and 70 had significant representation in the survey, with the largest age group being those between 50 and 59. Household income was also fairly evenly distributed, with about 60 percent of respondents having household incomes above $50,000. (Note: 18 percent chose not to answer this question)



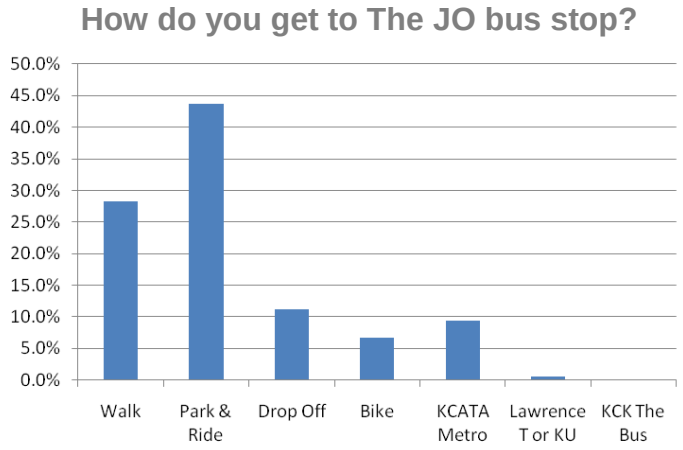


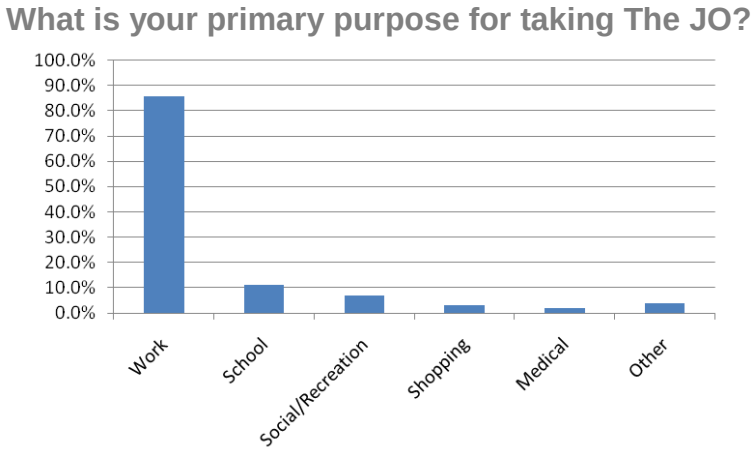
Most survey respondents live in a single-family home (71 percent) and own at least one car (85 percent); although the percentage of households without a car increased from 12 percent in 2008 to 15 percent in 2011. The survey revealed that while most passengers ride The JO by choice, there is a significant population that does not have access to a personal vehicle for some or all of their transportation needs.



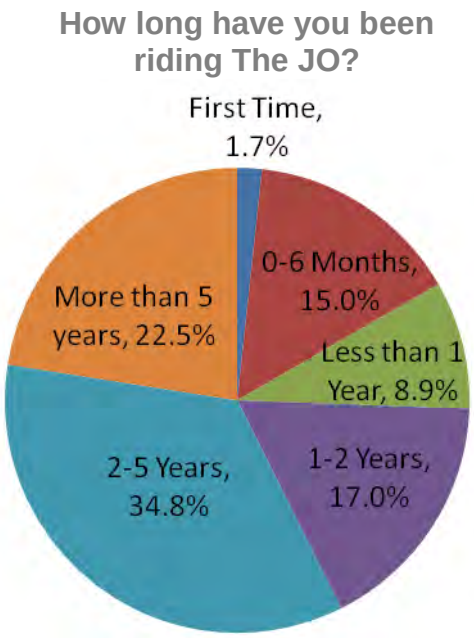


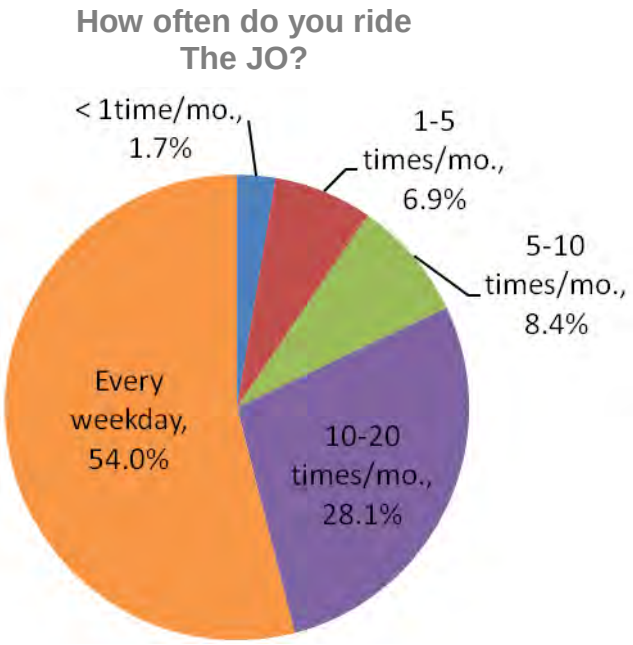
Driving to a park-and-ride lot is the most common way that riders access The JO, and the vast majority of trips are for employment. Two significant trends compared to 2008: a much greater percentage of JO riders ride their bike to the bus stop and/or transfer from a KCATA Metro route. About 30 percent of riders transfer from one bus to another during their trip (includes The JO, Metro, KCK-The Bus, Lawrence T, and KU on Wheels).





Nearly 17 percent of current JO riders have started riding in the past 6 months; although a majority of riders (about 57 percent) have been riding for at least two years. The majority of passengers ride the JO every weekday, and another 28 percent ride between 10-20 days per month.





Every route in The JO system except for the Shawnee CityRide and De Soto FlexRide was represented in the survey, with ***Route 661/B – Olathe-Downtown Express*** and ***Route 660/A – Antioch-Downtown*** having the highest representation. The vast majority of respondents (77 percent) said that our website, www.thejo.com, is their primary source of The JO information.

The most common responses to "I ride The JO because…" included:

- Saves on gas and auto maintenance (86 percent)
- Don't have to bother with hassle of driving, parking, traffic (75 percent)
- It improves the environment (57 percent)

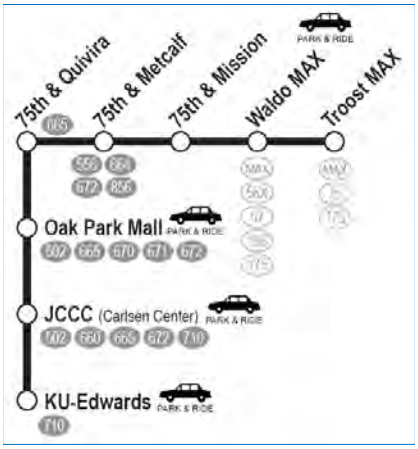
The most common responses to "When you (or friends/family/co-workers) do not ride The JO, what are the primary reasons?" included:

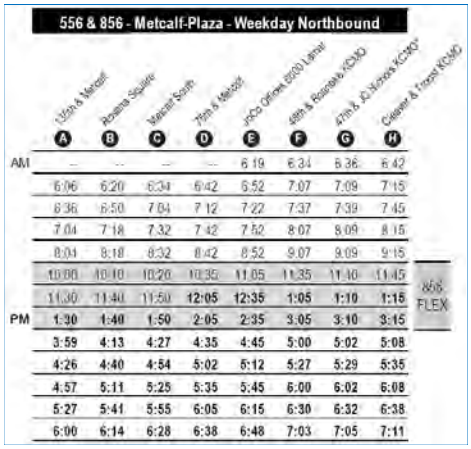
- Routes do not run at the times I need (62 percent)
- No routes or stops near my home or primary destination (30 percent)
- Trips take too long (28 percent)

66 percent of survey respondents chose "add more trips at more times on existing routes" as the most important strategy to expand service. Adding midday and evening/night service was ranked by most respondents as more important than adding weekend service.

Strategic Plan 2011

Section 4 Transit Services





The JO routes are carefully planned to connect neighborhoods to employment and activity centers throughout the region.

Johnson County Transit operates a variety of transit services in Johnson County and the Kansas City region. ***The JO*** consists primarily of commuter routes that connect park-and-ride lots and residential neighborhoods to major employment and education centers in the region. JCT's transit services are generally categorized as follows:

Commuter Routes connect park-and-ride lots with major employment and education destinations, running primarily closed-door service and on highways. JCT currently operates the following types of commuter service:

- Commuter express service along the I-35 corridor connecting park-and-ride lots in Overland Park, Olathe, and Shawnee to downtown Kansas City, Missouri. These routes have long been the core of The JO system. These routes currently operate in one direction (inbound in the morning, outbound in the evening) and only during peak travel periods. These routes include:
  - ***Route 661/B – Olathe-Downtown Express:*** seven round trips from three park-and-ride lots in Olathe to downtown Kansas City, Missouri
  - ***Route 664/C – Metcalf-Downtown:*** nine round trips from south Overland Park to downtown Kansas City, Missouri. Unlike other I-35 express routes, this route travels in both directions in both the morning and afternoon.
  - ***Route 670/L – South Johnson County Express:*** five round trips from Gardner (via stops in Olathe and Overland Park) to downtown Kansas City, Missouri.
  - ***Route 671/N – 151st Street-Downtown Express:*** four round trips from 151st Street in Overland Park to downtown.
  - ***Route 673/S – Shawnee-Downtown Express:*** two round trips from west Olathe and portions of Shawnee along Shawnee Mission Parkway to downtown.
- Reverse commute service from downtown Kansas City, Missouri and Kansas City, Kansas to Johnson County suburbs. It is anticipated that this service will be combined with the above commuter routes when the appropriate levels of service can be added to the system.
  - ***Route 669/I – KCK-Lenexa-Olathe:*** two round trips from downtown Kansas City, Kansas to Lenexa and Olathe

- **Route 677/R – Downtown-Olathe Express:** one round trip from downtown Kansas City, Missouri to Olathe
- **Route 680/V – KCK-Strang Line:** one round trip from parts of Kansas City, Kansas to Villa St. Francis in Olathe.

- ***Route 710 – K-10 Connector*** is a limited-stop commuter express route providing all-day service between Overland Park and Lawrence. There are 20 round trips per day during the school year, with fewer trips during school breaks.

Local Routes: Key Corridors are local fixed routes that are operated on high-priority transit corridors within Johnson County, with connections to other routes in the region. These corridors generally serve higher-density neighborhoods and connect major destinations such as Johnson County Community College and the County Club Plaza.

- ***Route 556/856 – Metcalf-Plaza:*** 12 round trips between south Overland Park and the Country Club Plaza in Kansas City, Missouri; midday trips are flex routes.
- ***Route 575/875 – 75th Street-Quivira:*** 11 round trips between the KU-Edwards campus and 75th & Troost in Kansas City, Missouri; midday trips are flex routes.

Local Routes are intended to complement and provide a feeder service that enables wider access to the transit system and connect users to Key Corridor and Commuter routes.

- ***Route 502/O – 75th Street-Olathe:*** one round trip from Shawnee to south Olathe, via Overland Park.
- ***Route 660/A – Antioch-Downtown:*** nine round trips from downtown Olathe to downtown Kansas City, via Overland Park and Mission.
- ***Route 665/D – Quivira-Downtown:*** eight round trips from Overland Park to downtown Kansas City, via Lenexa, Shawnee, and Mission.
- ***Route 667/E – Nall-Downtown:*** two round trips from 95th & Nall in Overland Park to downtown Kansas City, via Mission, Roeland Park, and the University of Kansas Medical Center in Kansas City, Kansas.
- ***Route 676/P – Paola-Spring Hill-Olathe:*** two round trips from Paola and Spring Hill to Olathe

Local Links are midday loop routes with flex service between fixed timepoints. JCT operates these routes in cooperation with cities.

- ***Route 810 – DeSoto FlexRide:*** Tuesday midday service to Shawnee and Friday midday service to Olathe
- ***Route 812/J – JO Flex:*** Monday, Wednesday, and Friday midday service to destinations throughout the designated service area near downtown Overland Park and surrounding areas.
- ***Route 814-815 – Spring Hill Shuttle:*** Tuesday midday service to Gardner and Friday midday service to Olathe.
- ***Route 816 – Shawnee CityRide:*** Two loop routes (Sunflower Loop and Bluejacket Loop) operating on Tuesday and Friday throughout Shawnee.

Special Transportation Services

In addition to ***The JO***, Johnson County Transit operates need-based and paratransit services not available to the general public. This service provides transportation to elderly, disabled, and low-income populations and is a critical function of Johnson County Transit.

The JO – Special Edition provides affordable curb-to-curb service for Johnson County residents who are 60 years of age or older, have a documented disability or are within established low-income guidelines. Children ages 13 to 18 with a documented disability may ride for medical appointments only. The JO – Special Edition operates Monday through Friday from 6:00 a.m. to 6:00 p.m. Eligible riders may use The JO – Special Edition for any trip purpose within the Johnson County service area bounded by 159th Street on the south, K-7 and Hedge Lane on the west, State Line on the east and County Line on the north. The JO – Special Edition travels into specified areas of Kansas City, Kansas and Kansas City, Missouri for medical trips only. Fares are based on one-way trips and range between $3.80 and $7.00 depending on the length of the trip and income status. Current peak demand periods are approximately 6:30 a.m. to 9:00 a.m. and 3:00 p.m. to 5:00 p.m. Trips are scheduled on a first-come-first-served basis and demand exceeds capacity.

Sheltered Workshop Industrial Fixed Transportation (SWIFT) provides home to worksite commute trips for Johnson County Developmental Supports clients. SWIFT service is much more stable than Special Edition, as demand is known and schedules can be pre-loaded. Current peak demand periods are approximately 6:30 a.m. to 9:00 a.m. and from 3:00 p.m. to 5:00 p.m. (when most patrons travel to and from their jobs). An important point in this service is to attempt to maintain a high level of consistency due to the patrons' special needs.

Transit Needs Analysis

Based on passenger surveys, market research, and past service analysis studies, the following have been identified as major needs in The JO system:

Service Frequency

Many Johnson County residents have identified low service levels as a primary reason for not riding The JO, or not being able to ride more often. This includes:

- Midday: Because the vast majority of JCT service is currently limited to the peak periods, working half-days or adjusting to minor emergencies preclude using the transit system. Most residents understand that full service cannot be offered during the midday because of the costs.
- Evening: Service on most JCT routes terminates around 6:30 p.m. The limited flexibility to work late, or handle additional business after hours has been cited as a shortcoming.
- Weekend: All JCT services only operate between Monday and Friday.

Accessibility improvements

- Paratransit Service: Service for residents with mobility disabilities are limited and should be offered during evenings and weekends.
- Paratransit Service Area: The current Special Edition service area does not include DeSoto, Gardner, or Spring Hill, and portions of west and south Olathe.
- Accessibility Infrastructure: While providing high-quality paratransit service is critical, accessibility improvements to allow more disabled and elderly riders to use public transit is also important. This includes sidewalks and ADA-compliant ramps.

Service Diversification

While providing commuter service to employment centers outside of Johnson County is an important and necessary component of the system, intra-county and reverse commute service should be expanded to provide access to Johnson County employers.

Regional Connections

While state, county, and municipal boundaries affect politics and funding, transportation is not constrained by these boundaries. Travel patterns in the Kansas City metropolitan area reflect the fact that many trips—for a variety of purposes—are across municipal, county, and state borders. The JO system should be integrated with other regional providers so that passengers can get accurate information and make convenient transfers between the systems.

Transit Service Strategy

General priorities for transit service expansion have emerged as part of the Transportation Council strategic planning sessions in April and May 2011. These sessions built on previous processes conducted in 2008 through 2010, as well as the results of the Strategic Transit Action Recommendation Taskforce (START) in 2010 and 2011. Based on these efforts, following service priorities have emerged:

- Transit services to support Johnson County employment centers should be expanded. In the past, emphasis has been placed on serving the downtown commuter market and service in the I-35 corridor. While I-35 commuters are still viewed as an important market, there is a feeling that serving County employers should be a higher priority.
- Additional local transit services that provide trips within Johnson County should be established. The Transportation Council expressed the need for services to serve intra-Johnson County trips rather than focusing entirely on the downtown commuter market segment. In future years as funding becomes available, these local services should include evening and weekend service.
- Reverse commute services should remain a priority. It was acknowledged that services designed to transport employees from other parts of the metropolitan area were important in addressing the county's labor imbalance.
- Paratransit service for persons with mobility limitations was acknowledged to be a very important priority. Improving fixed-route service so that they are accessible to more limited-mobility persons will expand the capacity of the transit system to serve more people who need it.
- Commuter service in the I-35 corridor should continue to be a priority, due to upcoming station improvements and bus-on-shoulder operations.
- Establish a high-frequency transit "spine" on the Metcalf-Shawnee Mission Parkway corridor that has connections to local "feeder" routes.
- Midday service added in the Near-Term and Mid-Term phases of system expansion should be flex routes, deviating up to ¾-mile to provide curb-to-curb service upon request. This improves accessibility until the transit system expands to the point of needing ADA complimentary paratransit services.
- Begin evaluating and planning for a variety of long-term service opportunities, including transit service to Legends/Village West, KCI Airport, and other regional destinations.
- Previous versions of the Strategic Plan included future "Local Links" routes throughout the county. Based on JCTC recommendations, new Local Links routes will be pursued in cooperation with local municipalities. These services should be funded by municipalities and by grant revenue.
- Transit routes should travel in both directions and have multiple round trips per day to provide passengers with a variety of transportation options.

ADA Complimentary Paratransit

Increased transit services as called for in the Strategic Plan's Long-Term Vision will require a higher level of service for the elderly and disabled as defined in the Americans with Disabilities Act (ADA). The ADA Complementary Paratransit Service component (which complements regular fixed route service) is transportation service (within ¾ mile on either side of each transit corridor) required by the ADA for individuals with disabilities who are unable to use fixed route transportation systems. Complementary Paratransit Service must be comparable to the level of service provided to individuals without disabilities who use the fixed route system and must meet certain federal requirements.

Currently, JCT is not required to provide Complimentary Paratransit services, because the transit service is Commuter Express and does not operate fixed routes during the midday, evenings and weekends.

Near-Term Implementation Plan

The following is a list of service improvements that are reasonably anticipated to occur in the next five years, given budget goals, expected grant opportunities, and other factors. The 2011 Strategic Plan update represents an incremental approach to system expansion due to the need to more actively improve the current transit system with passenger infrastructure. The following plans for service expansion will enable JCT to be prepared to take advantage of grant opportunities or revenue increases as they become available.

Note: ***Bold black text indicates existing routes***
Bold blue text indicates future routes

Year 1

In order to meet budget goals and focus efforts on basic passenger infrastructure improvements, JCT is proposing significant changes to transit services at the beginning of 2012. While some of these changes are service eliminations, this process presents some opportunity for efficiency improvements by effectively combining or modifying routes. This is especially true for I-35 express routes, which will benefit from bus-on-shoulder and other improvements that may provide an opportunity to add a limited amount of service.

- Route eliminations:
  - ***Route 502/O – 75th Street-Olathe:*** Funding for this route (CMAQ) runs out in late 2011. Due to low ridership, reallocating other funding sources to keep this route in operation is not justified. This route also does not conform to future service strategies.
  - ***Route 680/V – KCK-Strang Line:*** This route specifically provides service for Villa Saint Francis employees that live in Kansas City, Kansas. This elimination will be mitigated by adjusting Route 669/I to serve Villa Saint Francis.
- Service reductions:
  - ***Route 664/C – Metcalf-Downtown:*** The earliest southbound trip from downtown to 135th & Metcalf will be eliminated due to low ridership and an inefficient deadhead prior to the revenue trip.
  - ***Route 710 – K-10 Connector:*** The first eastbound trip from Lawrence to Overland Park will be eliminated due to low ridership and an inefficient deadhead prior to the revenue trip. In addition, the "break schedule" that operates during KU and JCCC breaks will be reduced.

    - ***Route 671/LN – Late Johnson County Express:*** The last southbound trip will be eliminated due to low ridership. This elimination may be mitigated by adjustments to routes 670/L and 673/N due to bus-on-shoulder operations.
    - ***Route 665/D – Quivira-Downtown:*** The portion of the route between 6000 Lamar and downtown Kansas City, Missouri will be eliminated. Passengers travelling to/from downtown will transfer to Route 660/A at 6000 Lamar. This strategy fits into the Strategic Plan goal of establishing a circulator route from Mission to downtown Kansas City, rather than having all local routes continue to downtown.
- Route modifications:
    - ***Route 660/A – Antioch-Downtown:*** The downtown routing will be adjusted to accommodate passengers making transfers from Route 665/D.
    - ***Route 669/I – KCK-Lenexa-Olathe:*** The route will be modified to serve Villa Saint Francis in Olathe and additional locations in Kansas City, Kansas (mitigation of ***Route 680/V – KCK-Strang Line*** elimination).
- I-35 express routes to be modified based on upcoming HNTB recommendations (includes ***Route 661/B – Olathe-Downtown Express, Route 670/L – South Johnson County Express, Route 673/N – 151st Street-Downtown Express,*** **and** ***Route 678/S – Shawnee-Downtown Express***.):
    - Streamline downtown route alignment to allow faster travel and reduce service hours on each trip.
    - Adjust schedule to reflect increased efficiency and reliability due to bus-on-shoulder operation.
    - Due to potential time savings, additional trips—including reverse commute trip—may be able to be added.

Year 2

While JCT does not anticipate expanded county funding, potential grant opportunities—and finding opportunities for improved efficiency throughout the system—may allow for some increased service in targeted areas. This includes adding reverse commute trips to existing commuter express routes. Also in 2013, JCT will need to determine a permanent funding source for CMAQ-funded services that began operation in July 2010.

- ***Route 661/B – Olathe-Downtown Express:*** reallocate service to provide additional reverse commute trips and add regular commute trips as needed. 6 trips and 7 daily service hours will be added.
- ***Route 670/L – South Johnson County Express:*** reallocate service to provide additional reverse commute trips and add regular commute trips as needed. 5 trips and 6.5 daily service hours will be added.
- ***Route 673/N – 151st Street-Downtown Express:*** provide additional express commuter service to downtown Kansas City. 2 trips and 4 daily service hours will be added.
- ***Route 678/S – Shawnee-Downtown Express:*** reallocate service to provide additional reverse commute trips and add regular commute trips as needed. 4 trips and 7 daily service hours will be added.
- ***Route 556/856 – Metcalf-Plaza:*** establish permanent funding for existing route
- ***Route 575/875 – 75th-Quivira:*** establish permanent funding for existing route

Year 3

Begin initial phase of expanding the transit system in high-priority corridors

- ***Mission-KCK Connector:*** begin service on new route connecting the Mission Transit Center to the State Avenue Connex service in Kansas City, Kansas. 24 trips and 9.5 daily service hours will be added.
- ***College Boulevard:*** begin service on new route on College Boulevard between west Olathe and south Kansas City, Missouri. 12 trips and 16 daily service hours will be added.
- ***Route 661/B – Olathe-Downtown Express:*** reallocate service to provide additional reverse commute trips and add regular commute trips as needed. 6 trips and 7 daily service hours will be added.

Year 4

Incrementally add and expand service on Secondary Local Routes that provide for a more complete transit system.

- ***Route 667/E – Nall-Downtown:*** add service by increasing the number of trips and expanding the route further south to 135h Street. 8 trips and 12 daily service hours will be added.
- ***95th Street:*** begin service on new route on 95th Street between Lenexa and Kansas City, Missouri. 12 trips and 16 daily service hours will be added.
- ***Downtown Connector:*** begin service operating between the Mission Transit Center to downtown Kansas City, Missouri. 24 trips and 17 daily service hours will be added.
- ***Route 660/A – Antioch-Downtown:*** modify route alignment to serve Antioch to 135th Street, and 135th Street/Santa Fe to K-7 Highway. (Rename route to Antioch-135th Street).
- ***Route 665/D – Quivira-Downtown:*** modify route alignment to account for new and expanded service on College and 95th Street.
- ***Route 670/L – South Johnson County Express:*** add additional trips, including midday and evening. 8 trips and 14 daily service hours will be added.
- ***Route 678/S – Shawnee-Downtown Express:*** add additional trips, including midday and evening. 8 trips and 14 daily service hours will be added.

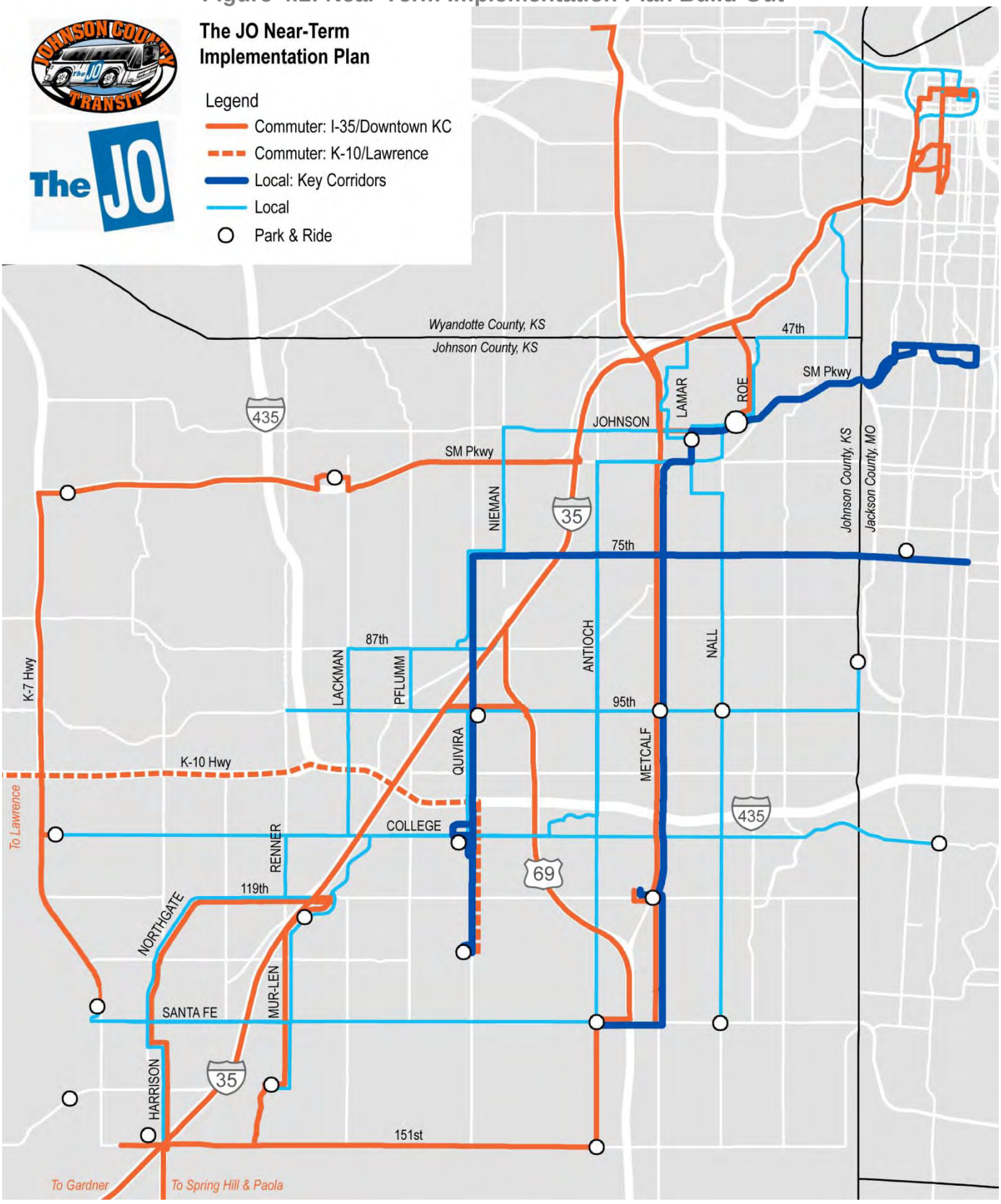
Year 5

Increase frequency of service on established Primary and Secondary Local routes.

- ***Route 556/856 – Metcalf-Plaza:*** add service by increasing the number of trips, including additional midday and evening service. 11 trips and 15 daily service hours will be added.
- ***Route 575/875 – 75th-Quivira:*** add service by increasing the number of trips, including additional midday and evening service. 12 trips and 16 daily service hours will be added.
- ***College Boulevard:*** add service by adding additional trips, including midday flex service. 14 trips and 24 daily service hours will be added.
- ***Route 660/A – Antioch-Downtown:*** add service by adding additional trips, including midday flex service. 5 trips and 6 daily service hours will be added.
- ***Route 665/D – Quivira-Downtown:*** add service by adding additional trips, including midday flex service. 8 trips and 12 daily service hours will be added.

Additional detail on each of these strategies is provided in Section 7.

Figure 4.1: Near-Term Implementation Plan Build-Out



Mid-Term Implementation Plan

The following services are anticipated to be implemented incrementally in five to ten years, based on the availability of resources:

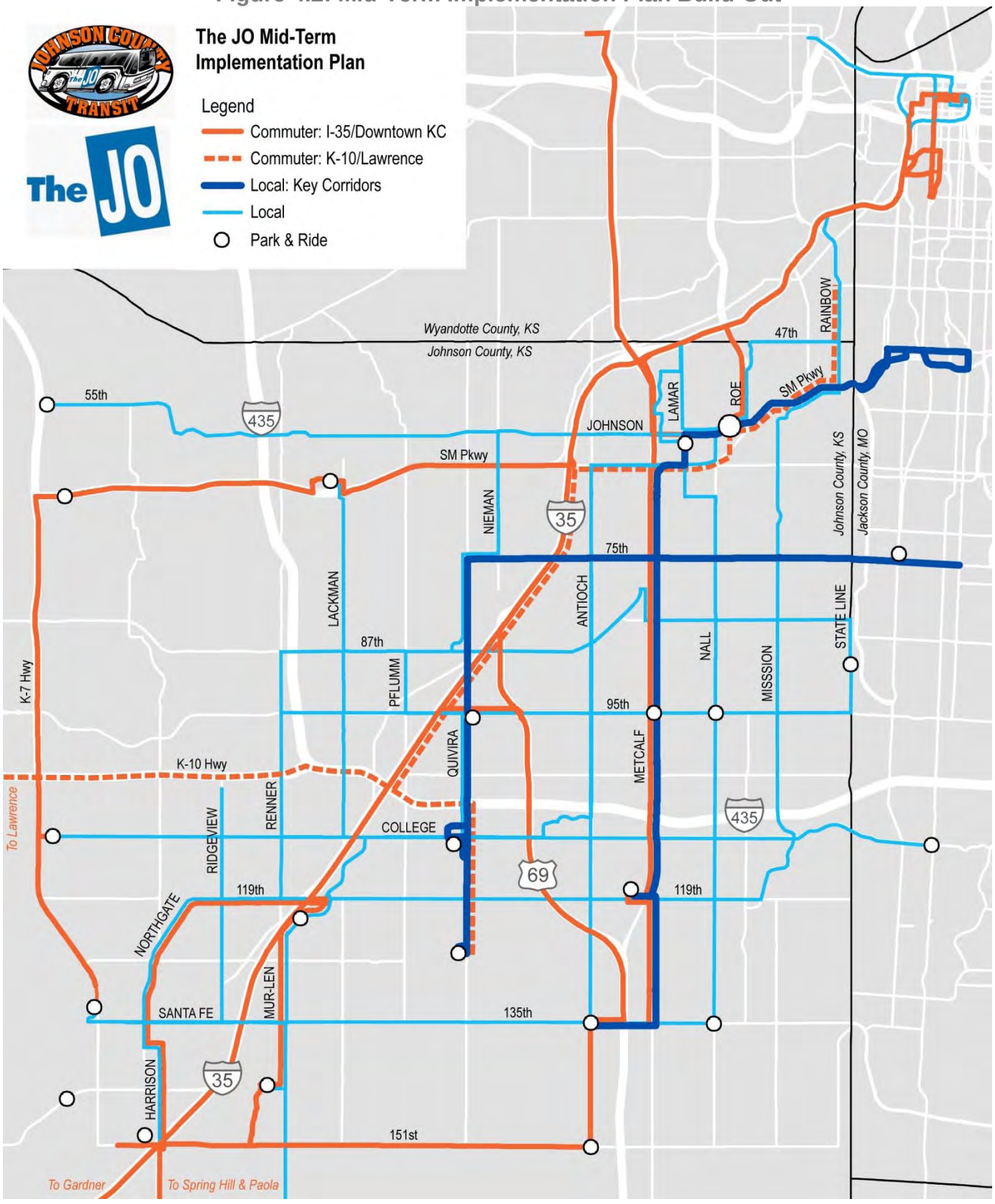
New Routes

- ***K-10 – North JoCo:*** new route connecting KU-Lawrence with KU Medical Center facilities in Johnson and Wyandotte counties, via the Mission Transit Center and park and ride locations in Johnson County.
- ***Shawnee Mission Parkway West:*** new route (potential Bus Rapid Transit) connecting the Metcalf-Plaza service and the Mission Transit Center to west Shawnee. A planning study is anticipated to determine the preferred alternative for this service.
- ***83rd Street/87th Street:*** new route from Lenexa to State Line Road, via downtown Overland Park on Santa Fe Drive and Prairie Village on 83rd Street.
- ***119th Street:*** new route from downtown Olathe to Leawood Town Center Plaza (this route can potentially be combined with Mission Road).
- ***Mission Road:*** new route from KU Medical Center to Leawood Park Place and Town Center Plaza (this route can potentially be combined with 119th Street).
- ***135th Street:*** new route from west Olathe to Leawood and potentially into south Kansas City, Missouri.
- ***Lackman-Ridgeview:*** new route from Shawnee (Shawnee Mission Parkway and Lackman park-and-ride) to 159th Street in south Olathe. Other arterial streets may be used depending on development and ridership potential.

Expanded Service

- ***Route 710 – K-10 Connector:*** Add local service trips, with stops in east Lawrence, Eudora, De Soto, KSU-Olathe campus, and Southlake Business Park. Future commuter express service on I-435 will likely take the shape of all-day bi-directional service similar to the K-10 Connector. This is due to the nature of commuting patterns along the corridor, which include heavy traffic flows in both directions during peak hours.
- ***Route 556/856 – Metcalf-Plaza:*** add additional peak, midday and evening trips and begin weekend service.
- ***Route 664/C – Metcalf-Downtown:*** add commuter service, including midday and evening trips.
- ***Route 673/N – 151st Street-Downtown Express:*** add additional commuter and reserve commute trips.
- ***Route 678/S – Shawnee-Downtown Express:*** add additional commuter and reserve commute trips, including midday and evening service.
- ***Route 667/E – Nall-Downtown:*** add additional peak, midday and evening trips
- ***College Boulevard:*** add additional service, including midday and evening trips
- ***95th Street:*** add additional service, including midday and evening trips

Figure 4.2: Mid-Term Implementation Plan Build-Out



Long-Term Transit Vision

After near and mid-term service improvements have been implemented, future efforts will fill in the gaps in the system and add additional trips on established routes. Based on future development patterns, new routes will likely be needed in growth areas of the county. JCT should remain flexible to provide service as needed to these areas, including:

- ***I-435 Express:*** after a planning process to determine the preferred alternative and route specifics, begin operation of express service along I-435 connecting Lenxa and Olathe with south Kansas City and potentially Lee's Summit, Missouri. A network of park-and-ride lots will be needed close to the highway to facilitate this service. An express ervice travelling north to the Legends at Village West should also be considered.
- New routes on other major arterials, including: ***103rd Street***, ***127th Street***, ***143rd Street***, ***151st Street***, ***159th Street***, ***State Line***, ***Switzer***, ***Pflumm***, ***Blackbob***, and ***Renner***. In some cases, a future route may serve two or more of these corridors.
- Extension of existing routes, or new routes, in Gardner, De Soto, Spring Hill, and Edgerton, including express service allowing connections to other destinations.
- A system of ***Neighborhood Connectors*** to provide feeder service on minor arterial and collector streets within neighborhoods, greatly increasing the number of people that can access the transit system. Potential streets for this service include 51st Street, 55th Street, 67th Street, 71st Street, 79th Street, 83rd Street, 87th Street, 91st Street, 99th Street, 133rd Street, Lee Blvd., Roe, Lamar, Lowell, and Nieman. The purpose of this system will be to provide connections to bus stops of Commuter and Local routes throughout the region.
- ***K-7 Express:*** express service from Olathe to the western Kansas City region including Bonner Springs and potentially to Leavenworth, Kansas.

Service Cost Estimates

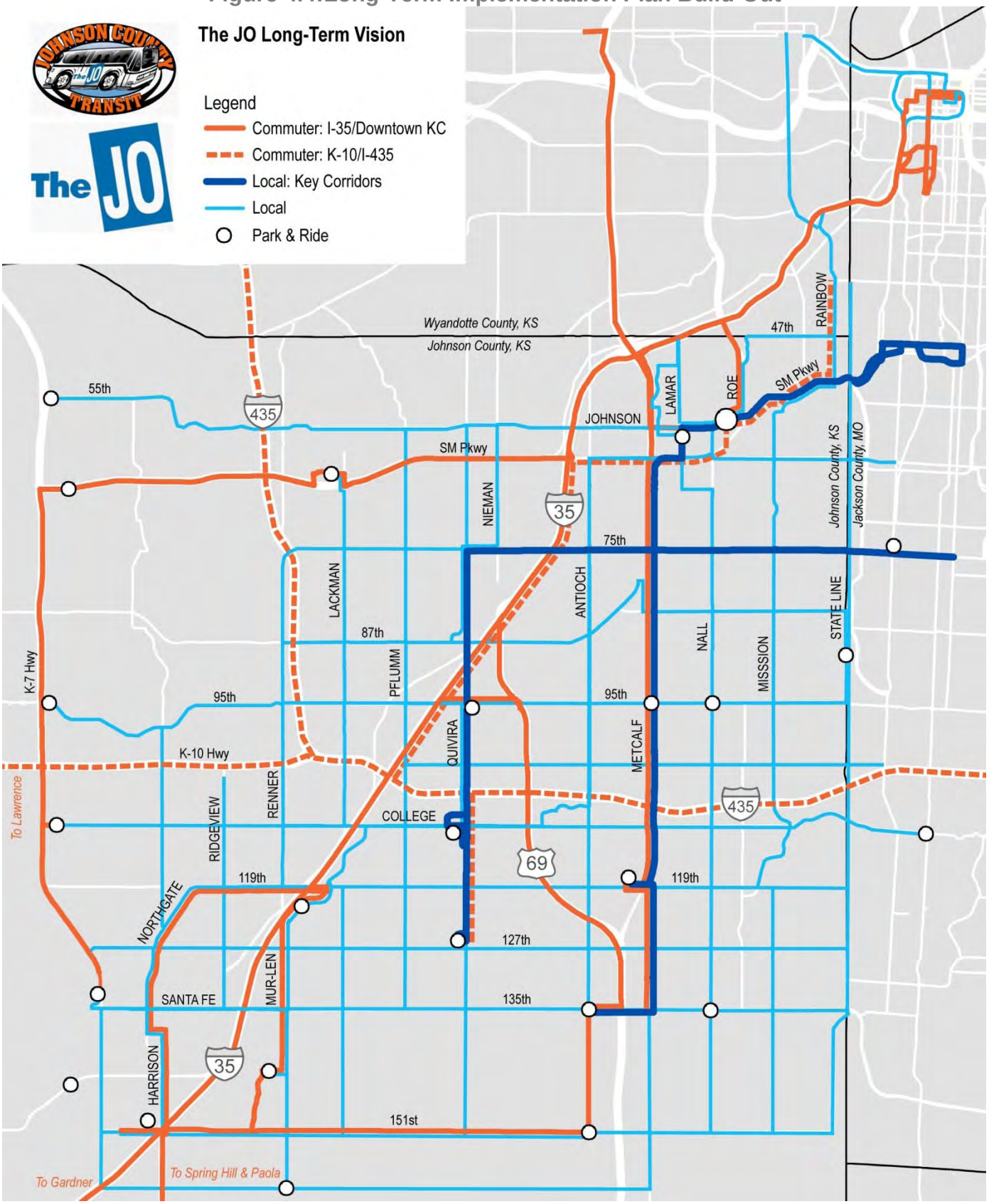
Based on the route strategies detailed in this section of the Plan, the following table presents the anticipated costs of these services over the near, mid, and long-term plan implementation phases.

Figure 4.3: Service Cost Estimates

	Near-Term							
Service & Cost	Year 1	Year 2	Year 3	Year 4	Year 5	**Mid-Term**	**Long-Term**	
The JO								
Hours/Day	330	352	385	449	531	884	1,554	*
Miles/Day	11,912	12,316	12,940	14,372	15,826	23,363	38,001	*
Cost/Year	$5,777,264	$6,325,850	$6,923,322	$8,225,534	$9,824,757	$15,180,005	$44,937,335	
Special Trans.								
Hours/Day	212	212	212	212	212	212	311	*
Miles/Day	4,281	4,281	4,281	4,281	4,281	4,281	6,570	*
Cost/Year	$3,582,080	$3,687,100	$3,712,597	$3,780,175	$3,849,347	$4,300,035	$7,877,605	
Totals								
Hours/Day	542	564	596	661	743	1,096	2,117	*
Miles/Day	16,193	16,597	17,221	18,653	20,107	27,644	50,048	*
Cost/Year	**$9,359,344**	**$10,012,950**	**$10,635,919**	**$12,005,709**	**$13,674,104**	**$19,480,041**	**$52,814,940**	

** Long-Term Hours and Miles do not include weekends; costs do include weekends*

Figure 4.4:Long-Term Implementation Plan Build-Out



Section 5 Basic Passenger Infrastructure

Johnson County Transit currently has bus stop signage placed at various points along existing routes, and transit shelters at certain higher-volume locations. To encourage greater use of public transit and to improve the experience for passengers, JCT plans to install a variety of basic passenger infrastructure improvements at strategic locations along higher-frequency routes throughout the county.

Due to several ongoing projects, comments from customers, and the recommendations of START, Johnson County Transit is focused on improving amenities that make it easier for passengers to access and use the transit system. These improvements include shelters, platforms and sidewalks, signage, and providing route and system information at bus stops. These infrastructure enhancements make the system more visible, easier to use, and help attract new passengers.

Existing Conditions

The lack of transit infrastructure throughout the county is a major deficiency of The JO system. There are only eight transit shelters scattered throughout the county, and these shelters are not necessarily placed at high-demand locations. While "The JO Stop" signs are placed on many routes throughout the county, there are many locations where signs are still needed. For locations where stops are marked, there is often not a sidewalk or platform for passengers to stand and wait for a bus. At each of JCT's shelters, an up-to-date system map is displayed. However, none of the other JO stop locations have any route or system information for passengers. At bus stops within Kansas City, MO, there is a small JO "blade" sign underneath signs for KCATA Metro routes (see above pictures).

Due to a lack of marked bus stops along The JO routes, all routes utilize a "bus stops at hand signal" policy. Except at unsafe locations, on highways, and in right-turn lanes (if the bus is not turning right), passengers can waive at a bus in order for the driver to stop and pick them up. While currently necessary, this system is operationally inefficient and contributes to the low visibility of The JO system.

Current Projects

There are several ongoing projects that will lead to major improvements to the transit infrastructure in Johnson County.

I-35 Stations

Implementation of I-35 bus-on-shoulder operations on I-35 includes funding for a number of improvements to existing park-and-ride locations as well as some additional transit stations along existing routes. Seven of these stations have been identified for real-time arrival (RTA) signage. The following improvements are in the planning and preliminary design stages:

- New shelters and markers at existing park-and-ride lots:
  - Olathe Great Mall
  - Mid-America Nazarene College Church (Sheridan & Mur-Len)
  - Blue Valley Baptist Church (151st & Antioch)
  - Heartland Community Church (123rd & Strang Line)
- Improved bus stops with signage and platform/sidewalk improvements:
  - Garmin (151st & Ridgeview)
  - 127th & Mur-Len
  - Lindenwood between 151st and Sheridan (143rd)
- A new transit station and park-and-ride at 137th & Antioch in Overland Park.
- A potential new park-and-ride station in Gardner, at a yet-to-be-determined location.

Rendering of the shelter and amenities under consideration for park-and-ride lots in Olathe and Overland Park.

Source: HNTB, Landscape Forms

TIGER – Metcalf/Shawnee Mission Parkway

Metcalf/Shawnee Mission Parkway corridor improvements are being funded by the regional TIGER grant awarded to the Kansas City metropolitan area. Johnson County has received $10,714,000 for transit and pedestrian improvements along the Metcalf Avenue and the Shawnee Mission Parkway corridor. Components of the project include:

- Eighteen new transit stations along Metcalf, Martway, Johnson Drive and Shawnee Mission Parkway
- Two park & ride facilities
- Transit transfer center in Mission
- Major pedestrian connections and improvements at and near station sites

Construction is scheduled to begin in late 2011 or early 2012 and be complete by the end of 2012. These stations will be primarily utilized by ***Route 556/856 – Metcalf-Plaza*** and ***Route 664 – Metcalf-Downtown.*** The Mission Transit Center will be utilized by many other routes and provide timed transfers between these routes.

Rendering of a future shelter and route information kiosk at Metcalf and 91st Street in Overland Park.

Source: Olsson Associates, Bowman Bowman Novick

Oak Park Mall

A new park-and-ride lot dedicated for use by JO passengers will open in September 2011 at Oak Park Mall. The lot will include a new shelter and ADA-compliant sidewalks and ramps that connect passengers to the mall. The Oak Park Mall station will be utilized by the following routes:

- ***Route 575 – 75th Street-Quivira***
- ***Route 665/D – Quivira-Downtown***
- ***Route 670/L – South Johnson County Express***
- ***Route 671/LN – Late Johnson County Express***
- ***Route 672/M – JoCo-Downtown Midday***

Future park-and-ride lot under construction (July 2011) at Oak Park Mall, near 95th & Nieman (Northeast of the mall).

Improvement Strategies

JCT strives to provide passengers a comfortable experience and provide adequate information and infrastructure to make the system easy to understand and use.

- Provide high-level transit stations along Express and Primary Local routes, including real-time arrival signage, shelters, and accessibility improvements.
- Provide shelters with updated route and system information at high-ridership locations along Secondary Local routes.
- Along all local routes, provide bus stops approximately every ¼-mile—more frequent in higher-density locations—to increase the street presence of The JO and provide stops that are convenient for users along the corridor.
- As bus stops are added at appropriate intervals along each route, discontinue the "bus stops at hand signal" policy. This existing policy is necessary due to a lack of marked bus stops, but is operationally inefficient and contributes to the low visibility of The JO system.

Transit Centers

As Johnson County's transit system expands in accordance with the Transit Service Strategies in Chapter 4, additional transit centers will be needed. Higher ridership volumes and the opportunities for more transfers between routes will require facilities where these transfers can occur in a safe and convenient manner. Upon its competition in late 2012, the Mission Transit Center will be the primary transit center for The JO. Other locations where future transit centers may be warranted include Johnson County Community College, Metcalf South Mall, Oak Park Mall, Leawood Town Center and Park Place, Shawnee Mission Parkway near I-35, and the area of Santa Fe and Mur-Len in Olathe. Transit Centers in these locations may be a different size and character, but all should have multiple transit bays, covered waiting and boarding areas, and real-time arrival information. Other locations for transit centers may emerge due to future development proposals. It is expected that the private sector, with potential incentives, will partner in the development of some of these facilities as part of a Transit Oriented Development (TOD).

Park and Ride Lots

Park and ride lots serve as the point of transfer for riders from typically single occupant vehicles to transit. The park and ride lot network must be extensive enough to be accessible to Johnson County residents and thereby encourage and promote the use of transit for trips oriented to downtown Kansas City and other employment concentrations. Proposed park and ride lots are included as part of the I-35 bus on shoulder implementation project. Additional park and ride lots will be needed along routes as the system expands, especially near the terminus points of each route. Churches, theaters, and other land uses that operate primarily on nights and weekends are ideal locations for park-and-ride lots. It is expected that the private sector, with potential incentives, will partner in the development of some of these facilities as part of a TOD.

Intelligent Transportation Systems (ITS)

The Transportation Council and JCT staff recognizes that the use of advanced technology is important to both support the operation and provide a higher level of customer service. ITS applications such as automatic vehicle location (AVL)/commuter aided dispatch (CAD) are tools that can be used to improve the reliability and efficiency of transit service. Other applications such as real time bus arrival signs at key stops and transit centers, web-based itinerary planning and real time schedule information can make transit service much more attractive to the

Johnson County travel market. JCT has been involved in the planning of ITS applications for the transit system in the County.

Basic Passenger Infrastructure (BPI) Categories

In order to provide the appropriate level of improvements at a variety of transit stops throughout the county, JCT has developed a system for categorizing transit stops. These categories are based on current and anticipated ridership, number of buses that serve the stop, locations of designated parking for passengers, and available transfer opportunities.

Figure 5.1: Basic Passenger Infrastructure Categories

Level	Name	Description	Examples
6	**Transit Center**	Major facility connecting multiple routes with timed transfers and high-level amenities, including multiple covered boarding areas.	6000 Lamar, future Mission Transit Center
5	**Park & Ride / Transfer**	Parking lot with a shelter and other amenities, for locations served by multiple routes where transfers are expected, or are major destinations.	JCCC, Heartland Church, Oak Park Mall
4	**Park & Ride**	Parking lot where riders will board at that location in the morning and deboard in the afternoon. Minimal or no midday service or transfers.	BVBC (151st & Antioch), College Church (MANU)
3	**Major Stop / Transfer**	Locations along routes where high ridership could be expected, especially locations served by multiple routes and/or all-day service; generally not park-and-ride locations.	75th & Metcalf, Downtown Olathe
2	**Intermediate Stop**	Locations where consistent ridership is expected but not warranting major investment, generally related to timepoints that are not Major Stops	Santa Fe & Mur-Len, 75th & Mission
1	**Basic Stop**	Appropriate street intersections along each route, spaced at least every 1/4-mile (varies depending on surrounding uses, density, and street network).	All other bus stops

Priority BPI Local Corridors

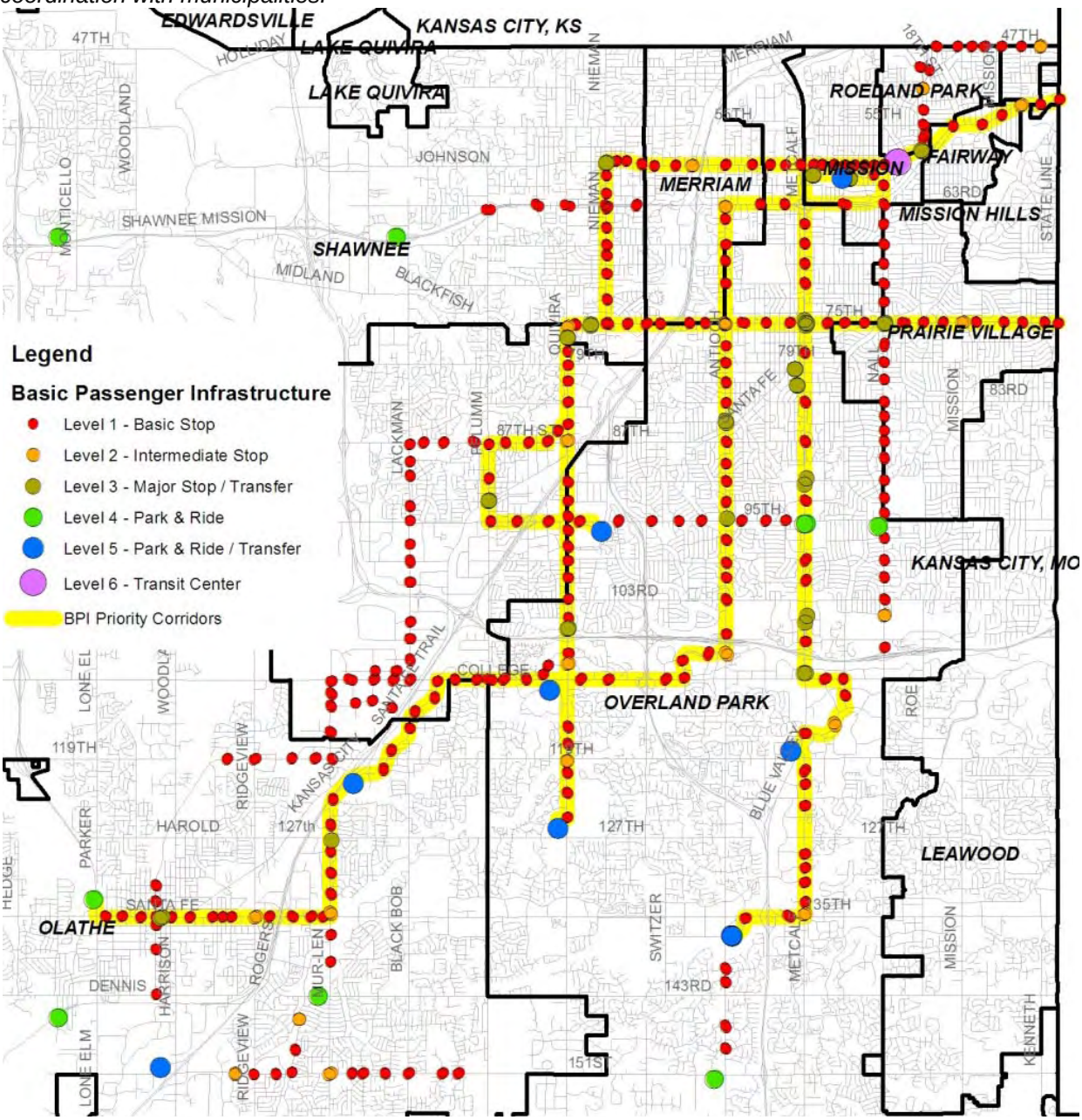
While JCT strives to develop a system of bus stops throughout the county on all routes, there are specific corridors that need more urgent action due to higher levels of transit (more buses per day) and higher ridership and economic development potential. Only streets within Johnson County are listed; JCT will coordinate with regional partners to ensure that proper amenities are provided in other jurisdictions. Priority BPI Local Corridors in Johnson County include:

- ***Route 556/856 – Metcalf-Plaza***
  - Metcalf from 135th to Martway
  - Martway from Metcalf to Roeland
  - Shawnee Mission Parkway from Roe to State Line
- ***Route 575/875 – 75th Street-Quivira***
  - Quivira from 75th to KU-Edwards
  - 75th from Quivira to State Line
- ***Route 660/A – Antioch-Downtown***
  - Santa Fe from K-7 to Mur-Len
  - Mur-Len/Strang Line from Santa Fe to College
  - College from Strang Line to Antioch
  - Antioch from College to Shawnee Mission Parkway
  - Shawnee Mission Parkway from Antioch to Nall

- ***Route 665/D – Quivira-Downtown***
  - Renner from 119th to College
  - College from Renner to Quivira
  - Quivira from College to 95th and from 87th to 75th
  - 95th Street from Quivira to Pflumm
  - Pflumm from 95th to 87th
  - 87th from Pflumm to Quivira
  - Nieman from 75th to Johnson
  - Johnson from Nieman to Roe

Figure 5.2: BPI Priority Corridors and Bus Stop Needs – Existing System

Note: Map shows conceptual locations. Specific locations will be determined after detailed analysis and coordination with municipalities.



Near-Term Implementation Plan

Due to ongoing projects to improve transit stops as described above, JCT anticipates that substantial progress can be made in improving the street presence of the transit system over the next five years. In addition, JCT is planning to utilize several grants to install basic improvements throughout the system. The following plan presents a strategy for installing BPI improvements at more than 500 locations throughout the county over the next five years. Some of these improvements are already funded and under design for I-35 express stations and Metcalf/Shawnee Mission Parkway stations.

Year 1

The following BPI improvements are scheduled to be in operation in 2012:

- Transit stations at park-and-ride lots and other major bus stops in Olathe, Overland Park, and Gardner as a part of the I-35 bus-on-shoulder implementation project. These stops will include high-quality site furnishings including real-time arrival signage and serve as the primary access points for express service along the I-35 corridor to downtown Kansas City.
- Mission Transit Center in downtown Mission (late 2012).
- Transit stations along Metcalf, Martway, and Shawnee Mission Parkway in Overland Park and Mission, including two park-and-ride stations. These stops will include high-quality site furnishings including real-time arrival signage and serve as the primary access points for the Connex service operating from south Overland Park to the Plaza in Kansas City, Missouri.

In addition to the above improvements, JCT is working with local municipalities to plan for the marking and installation of bus stops along BPI Priority Corridors (identified in the above section and map). These efforts will continue throughout the duration of the near-term phase of the Strategic Plan implementation.

Years 2-5

JCT will continue working with local municipalities to plan for the marking and installation of bus stops along BPI Priority Corridors. JCT's goal is to have all Priority Corridors complete with bus stops at appropriately-spaced locations to facilitate easy access to transit routes from surrounding areas and high-visibility of transit. New and expanded routes anticipated to be launched during this time—College, 95th Street, and Nall—will need to have BPI improvements in place at the time that these services begin.

These improvements will allow JCT's to discontinue the "bus stops on hand signal policy" on most routes, at most locations. Passengers will be able to better understand how to use the transit system, and know where to go to catch a bus.

In addition to these basic passenger infrastructure improvements on existing streets, JCT will work with local municipalities to include bus stops—and associated amenities as appropriate—with upcoming road construction or streetscape projects. Including quality transit stations is a relatively minor additional cost when included with these projects, and represents a step to more "complete streets" throughout the county and region.

Mid-Term Implementation Plan

As with new or expanded routes implemented in the near-term phase of the plan, BPI improvements along all new routes should be in place when these routes begin revenue service. This includes:

- 119th Street
- 83th Street/87rd Street
- Johnson Drive
- Mission Road
- West Shawnee Mission Parkway
- 135th Street
- Lackman-Ridgeview

At locations where these new routes connect and a large number of transfers are expected, some stops will need to be upgraded to facilitate larger ridership volumes and transfers. These are anticipated to be Level 3 stations, and may become Level 5 stations depending on park-and-ride status. These locations include:

- Johnson and Antioch
- 75th and Quivira
- 95th and Nall
- 95th and Antioch
- 83rd and Mission
- 119th and Nall (general area)
- 119th and Quivira
- Santa Fe and Mur-Len
- 135th and Nall (park-and-ride)

In addition, upgrading existing stations to Level 6 Transit Centers should be assessed at the following locations:

- Johnson County Community College: Currently a high-volume bus stop and transfer point, this location will also be a primary stop for the new College route, and likely a transfer point for those travelling from Lawrence to jobs further east on College. A location for a transit center will need to be studied that allows better ingress and egress for buses travelling along these corridors, and provides facilities for passengers to transfer between routes.
- 95th and Metcalf: As a park-and-ride and major stop for the Metcalf-Plaza Connex, it is anticipated that this location will become even more important with the implementation of a 95th Street route. The timing and specific nature of improvements will be dictated by the redevelopment of the Metcalf corridor, and Metcalf South Mall in particular.
- Oak Park Mall: As a major destination at all times of day and on weekends, this station will increase in bus and passenger volume and likely warrant further improvements to better facilitate transfers.

Long-Term Vision

Due to the implementation of many new and expanded services, JCT will need to upgrade many of the BPI improvements installed in the near-term and mid-term phases. With many more buses and opportunities to connect to more routes at more locations, many Level 1 or Level 2 stops may need to be upgraded to Level 3, Level 4, or Level 5 stops with a variety of new amenities.

In addition to the further study and implementation of Level 6 Transit Centers at JCCC, 95th and Metcalf, and Oak Park Mall, there are additional locations that will need further planning for a Level 6 station:

- Santa Fe and Mur-Len: served by both commuter and local routes throughout the day and providing access to destinations throughout Olathe.
- Shawnee Mission Parkway and I-35 (general area): served by local and commuter routes along Shawnee Mission Parkway, with connections to north-south routes at Nieman and Antioch.
- Sprint Campus/Town Center Plaza/Park Place: As major destinations for workers and shoppers, this location will be served in the long term by multiple routes that connect throughout the county.

The Transit Service Plan also includes a network of Neighborhood Connectors providing access within neighborhoods and serving as a feeder service to routes on arterial streets. These bus stops will mostly consist of Level 1 BPI stops.

BPI Locations – Full Build-Out

The following table is the estimate of the number of locations where basic passenger infrastructure improvements will occur in accordance with this plan. Near-Term BPI locations are based specifically on the existing system and routes to be implemented during the first five years. Mid-Term and Long-Term locations are projections based on the amount of transit service anticipated in future years.

Figure 5.3: Number of BPI Locations by Level – Full Build-Out

Level	Year 1	Year 2	Year 3	Year 4	Year 5	Mid	Long	Total
Level 1	90	113	69	79	50	300	500	1,201
Level 2	20	10	22	16	0	50	100	218
Level 3	15	5	5	9	7	36	80	157
Level 4	5	1	2	2	2	10	10	32
Level 5	6	1	1	1	1	4	10	24
Level 6	1	0	0	0	0	2	3	6
Total	**137**	**130**	**99**	**107**	**60**	**402**	**703**	**1,638**

Note: TIGER and I-35 Xpress stations (33 total) are included in 2012 figures.

Strategic Plan 2011

Section 6 Bus Fleet and Facility



Johnson County Transit's facility is located at 1701 West 56 Highway in Olathe, Kansas.

In order to provide quality transportation services, JCT must continue to purchase and maintain a fleet of vehicles to comfortably and reliably transport passengers. A facility that allows for the maintenance of this fleet, and offers a productive work environment for employees, is equally essential.

Murray Nolte Transit Center

The Murray Nolte Transit Center was built in 2001 at Old 56 Highway at Robinson in Olathe, Kansas at a cost of just over $8 million, mostly from federal and state capital grant funds. The facility houses all Johnson County Transit operations, including offices, meeting space, a six-bay full-service bus maintenance facility, covered bus parking, fueling station, and bus wash facility. Multiple 'green' measures were designed into the facility including automatic lights, zoned air systems, and natural light and shade areas.

In 2010, a federal American Recovery and Reinvestment Act (ARRA) was awarded to Johnson County Transit to repair and upgrade the Nolte facility. The grant expanded the covered bus canopy to an additional 18 spaces, and replaced a significant portion of deteriorated 'tarmac' concrete.

In 2011, a Federal Transit Administration Bus Livability grant was awarded that will allow JCT to expand the maintenance facility by two additional bays.

The facility is named for Murray Nolte, who was instrumental in influencing transportation policies in the Kansas City area prior to his death in 2001. Nolte was a former Johnson County Commissioner, Merriam City Councilman, Mayor and City Manager, businessman, television personality and Johnson County appointee to the Kansas City Area Transportation Authority Board of Commissioners.

Operational Impacts

Due to the fact that the majority of JCT's existing services operate toward downtown Kansas City (or to Lawrence) in the morning and back from downtown in the evening, The Nolte Center's location in southwest Olathe generally provides for efficient operations. This efficiency could be improved, however, with additional reverse commute trips to and from downtown that would reduce the amount of time that buses spend in non-revenue operation.

Native Prairie Grass Restoration

To promote sustainability and lessen its environmental impact, JCT along with other county departments, Kansas State University and Applied Ecological Services, restored the Nolte Center property from a turf grass lawn to native prairie grass in 2007. Periodic mowing and controlled burning has occurred over the past three years enhance prairie growth.

Before: June 2006

After: October 2010

The project promotes the sustainability "triple bottom line" in the following ways:

- By using native and drought-tolerant plants, the need for irrigation is reduced and water is conserved.
- By providing for on-site infiltration, off-site runoff is reduced. This minimizes the need for costly stormwater infrastructure and minimizes impacts to adjacent streets and properties.
- The natural percolation of stormwater improves water quality by removing pollutants, leading to cleaner streams and rivers.

The preliminary monitoring data shows a significant increase in the infiltration capacity and a corresponding reduction in runoff volume. JCT no longer has to irrigate, fertilize or mow at the site. The native prairie landscape also supports a much broader insect, amphibian, small mammal and predatory population than the original turf grass lawn.

Future Needs

The current facility was designed with expansion capability. JCT anticipates that future growth will require additional facilities in order to carry out system expansion as programmed in this plan. Expansion requirements will be identified based on the growth in services and bus fleet.

JCT has planned for the upgrade and expansion of the Johnson County Transit (JCT) complex as facilities deteriorate and as additional capacity is required. Service expansion and commensurate fleet growth will require additional parking, storage, fueling and maintenance areas. The current JCT complex property area is insufficient to support anticipated near term growth. Adjacent to the complex are five acres of unimproved privately held land. Acquisition of this land would support JCT complex growth. A research will be performed to determine the cost of acquiring the five acre plot and if it is appropriate for JCT expansion purposes. Purchase would be slated for 2013.

Northeast Johnson County Satellite Facility

A planned component of JCT's Strategic Plan is the development of a satellite Transit Operations and Maintenance Facility in the northeast part of the County. Early estimates suggest a need for a 30 to 40-vehicle facility with two to four maintenance bays and administration area for six staff members. The proposed building would be approximately 15,750 square feet. Parking will be required for the vehicles (POVs and a mix of transit coaches and cutaways), and perhaps a Park & Ride opportunity for existing and future routes depending on the identified location of the facility.

Ideally, the satellite facility would be located in close proximity to the Mission Transit Center and much closer to downtown Kansas City than the Murray Nolte Transit Center. This would allow buses to begin and end routes from this facility, dramatically reducing the amount of "deadhead" time and mileage on many routes. The facility would have space for buses to park and undergo light maintenance work, in addition to space for administrative or contract employee offices.

This facility is included in JCT's Capital Improvement Plan, and estimated to cost $19 million. Preliminary projections include design studies for FY 2012. Land acquisition in FY 2013 and further design and consulting work in FY 2013/2014. Construction and move-in are projected for FY 2015/2016.

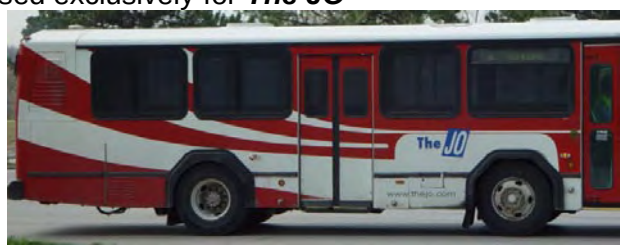
Figure 6-1. Planned Facility Costs (2012-2016 CIP)

Project Title	2012	2013	2014	2015	2016	Total
Facility Improvements		$250,000				$250,000
Transit NE Facility	$1,250,000	$3,400,000	$2,074,250	$9,794,250	$1,281,500	$17,800,000
Total	**$1,250,000**	**$3,650,000**	**$2,074,250**	**$9,794,250**	**$1,281,500**	**$18,050,000**

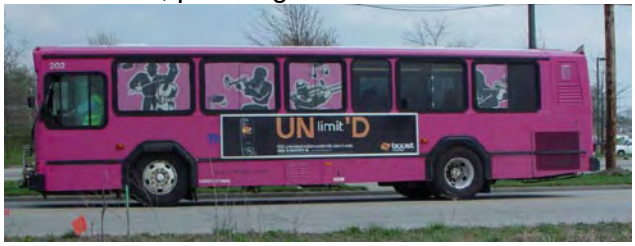
Bus Fleet

A modern, attractive bus fleet is fundamental to the provision of high quality transit service. The bus fleet includes buses of different sizes and types as appropriate for the variety of transit services provided. JCT's existing fleet of 103 transit vehicles consists of the following:

- Thirteen 30-foot passenger coaches used exclusively for ***The JO***

- Nine 35-foot, passenger coaches used exclusively for ***The JO***



- Twenty-nine 40-foot passenger coaches used exclusively for ***The JO***


- Nine over-the-road passenger coaches used exclusively for ***The JO Route 710 – K-10 Connector.***


- 54 cutaways used for ***The JO***, ***The JO – Special Edition***, and/or ***SWIFT***.




JCT has also purchased the following vehicles to add to its fleet in 2011:

- Four 40-foot low-floor buses to add to the fleet, these buses have not yet been put into revenue service.
- Four 20-passenger cutaway accessible vehicles .
- One 45-foot low emission diesel commuter coach that will carry up to 57 passengers and is wheelchair accessible


Bus Replacement and Expansion Plan

JCT's Capital Improvements Program includes the replacement of 30-foot, 35-foot, and 40-foot buses that have reached, or will soon reach, the end of their useful life over the next five years. The expected life cycle of a heavy-duty transit bus is ten to twelve years.

The CIP includes the replacement of FY 1996, 1997, 1999, 2000 and 2001 buses that have or will exceed their useful life based on miles and operating/maintenance expenses for Johnson County Transit services. The replacement schedule is in keeping with the established JCT Capital Replacement Schedule. A portion of the retired buses will be used as spare equipment when other buses are being serviced or down. Buses are delivered 18 to 24 months after order, so buses ordered in 2012 will be delivered in 2013 and/or 2014.

Figure 6-2. Planned Rolling Stock Costs (2012-2016 CIP)

Project Title	2012	2013	2014	2015	2016	Total
JCT Fleet Expansion	$5,345,000		$6,200,000		$9,000,000	$20,545,000
JCT Bus Replacement	$5,000,000	$3,000,000	$3,000,000	$2,000,000	$2,000,000	$15,000,000
Total	**$10,345,000**	**$3,000,000**	**$9,200,000**	**$2,000,000**	**$11,000,000**	**$35,545,000**

Strategic Plan 2011

Section 7 Plan Implementation


The Strategic Plan presents detailed strategies for maintaining existing service and implementing new services that benefits residents and businesses in Johnson County.

As described in previous sections, Johnson County Transit operates 24 fixed routes on Monday through Friday. These routes run a total of 194 trips per day, not including Local Links services. Limited service is provided in the midday and evenings, and the majority of routes have more (or only) northbound/eastbound travel in the morning and southbound/westbound travel in the evening. Detailed statistics are provided in Figure 7.1.

Figure 7.1: Number of Trips and Hours of Service by Route

		Number of trips by time of day and direction								Total Trips	Hours
		AM Peak		Midday		PM Peak		Evening			
		nb/eb	sb/wb	nb/eb	sb/wb	nb/eb	sb/wb	nb/eb	sb/wb		
COMMUTER											
661/B	Olathe-Downtown	7					7			14	25.12
664/C	Metcalf-Downtown	6	4			3	6			19	35.32
670/L	South JoCo-Downtown	5					4			9	21.45
671/LN	Late South JoCo						2			2	4.75
673/N	151st-Downtown	4					4			8	15.58
676/P	Paola-Spring Hill-Olathe	2					2			4	5.75
677/R	Downtown-Olathe		1			1				2	2.68
678/S	Shawnee-Downtown	2					2			4	8.33
680/V	KCK-Strang Line		1			1					2.90
710/K10	K-10 Connector	8	7	4	4	6	6	2	3	40	50.42
LOCAL - KEY CORRIDOR											
556/856	Metcalf-Plaza	5	5	3	3	5	4			25	48.48
575/875	75th-Quivira	4	4	3	3	4	4			22	35.00
LOCAL											
502/O	75th Street-Olathe		1			1					3.83
660/A	Antioch	4	5			5	5			19	34.70
665/D	Quivira	4	4			4	4			16	26.53
667/E	Nall	2					2			4	8.10
669/I	KCK-Lenexa-Olathe		2			2				4	6.83
672/M	Midday			1	1					2	3.67
LOCAL LINKS											
810	De Soto	midday service 2 days/week									2.40
812	JO Flex	midday service 3 days/week									3.60
814/815	Shawnee CityRide	midday service 2 days/week									2.40
816	Spring Hill Shuttle	midday service 2 days/week									2.40
TOTAL		53	34	11	11	32	52	2	3	194	350.24

Route Service Levels

A consistent approach should be followed when implementing new services, and expanding existing services. While all-day, bi-directional transit service is the ultimate goal for all of the routes in The JO system, a phased approach to system expansion is preferred in order to ensure the proper allocation of resources and success of each route.

For all future services, it is understood that basic passenger infrastructure will be provided along each route so that a system of properly-space, convenient, and comfortable bus stops are in place prior to beginning revenue service. For commuter routes, this will likely consist of fewer stations, most of which are park-and-ride lots. For local routes, bus stops will be placed at least every ¼-mile along each corridor, with limited exceptions and with varied degrees of amenities.

Commuter Routes

JCT will continue operating existing commuter route services to downtown Kansas City, Missouri, as these routes are the "bread and butter" of The JO system. However, future expansion of these routes should include "reverse commute" trips that provide access to jobs and other destinations in Johnson County throughout the day.

As a general rule, each express commuter route should include at least half as many "reverse commute" trips as traditional commute trips. In most cases, adding reverse commute trips is relatively inexpensive and simple because it converts deadhead travel time into revenue service. Therefore, more revenue trips per hour of service can be maximized, making the most of limited resources.

Level 1

The initial phase of commuter service may have three trips one direction in the morning and three trips in the opposite direction in the evening. Where feasible, it is preferable for new routes to have reverse commute service as described in Level 2.

Level 2

The expansion of commuter routes will have the primary goal of adding "reverse commute" trips, although some additional traditional commute trips may be added as well and demand warrants.

Level 3

After commute and reverse commute service is well-established, the additional of midday and evening service give commuters a wider range of options and provides for a more convenient transit system.

Level 4

After commute and reverse commute service is well-established, the addition of midday and evening service will allow the route to have consistent 20 to 30-minte peak headways and 30-minute off-peak headways in both directions. ***Route 710 – K-10 Connector*** is a model for this level of service.

Weekend

In the Long-Term phase of system expansion, weekend service should be added to ***Route 710 – K-10 Connector***. Weekend service frequencies may be longer than weekday service, but enough to provide all-day service without gaps.

Figure 7.2: Commuter Route Expansion Phases

	Number of trips by time of day and direction									
	AM Peak		Midday		PM Peak		Evening		Total	Hours
Level	nb/eb	sb/wb	nb/eb	sb/wb	nb/eb	sb/wb	nb/eb	sb/wb	Trips	
Level 1	3					3			6	12
Level 2	4-6	2-3			2-3	4-6			12-18	22-32
Level 3	4-8	4-8	1-2	1-2	4-8	4-8	1-2	1-2	20-40	32-66
Level 4	All-day service with 20 to 30-min.peak and 30 to 60-min. off-peak headways								40-70	57-97
Weekend	All-day service with 60-minute headways								24-34	30-40

Figure 7.3: Timing of Commuter Route Expansion

Route	Lev.1	Lev.2	Lev.3	Lev.4	Wknd
Olathe-Downtown	Exist	2013	2014	Long	
Metcalf-Downtown	Exist	Exist	Mid	Long	
South JoCo-Downtown	Exist	2013	Long	Long	
151st Street-Downtown	Exist	Mid	Long		
Shawnee-Downtown	2013	2013	Mid		
K-10 Connector				Exist	Long
KCK-State Connector			2013	Mid	
Downtown Connector			2015	Mid	
I-435 Connector			Mid	Long	

Local Routes

The following phasing strategy applies to the expansion of local routes that serve arterial streets within Johnson County and connecting to surrounding destinations. At this time, midday trips are anticipated to be flex trips within ¾-mile of the route.

Level 1

New fixed routes should have a minimum of 12 daily trips—three trips in both directions in both the morning and afternoon peak commute hours—to provide enough of a presence along the corridor, and provide passengers enough options to meet their needs.

Level 2

After a route has been well-established as a viable service to transport people in peak travel hours (generally to and from work), the addition of more trips will help attract more riders and provide for more convenient travel options for current riders. Peak hours service should have 30-minute headways. Limited midday flex service and early evening service will also be added during Level 2 expansion.

Level 3

Further expansion should provide for a full-day schedule with 30 minute headways in peak hours and 90 minute headways in midday and evening, with flex service within ¾-mile. Once this phase is implemented, there will be no gaps in service from 5:30 a.m. to 10:00 p.m. each weekday.

Level 4

Applicable to "Key Corridor" routes (***Route 556/856 – Metcalf-Plaza*** and ***Route 575/875 – 75th Street-Quivira***), this phase would increase the number of daily trips to approximately 70, which would provide for 20-minute peak headways, 30-minute early morning and evening headways, and 40-minute midday headways.

Weekend

Weekend service will be added to ***Route 556/856 – Metcalf-Plaza*** and ***Route 575/875 – 75th Street-Quivira*** after all-day weekday service has been established on these routes. The initiation of weekend service can occur either before or after Phase IV, depending on demand.

Figure 7.4: Local Route Expansion Phases

	Number of trips by time of day and direction									
	AM Peak		Midday		PM Peak		Evening		Total	Hours
Level	nb/eb	sb/wb	nb/eb	sb/wb	nb/eb	sb/wb	nb/eb	sb/wb	Trips	
Level 1	3	3			3	3			12	16
Level 2	4	4	3	3	4	4	2	2	26	40
Level 3	All-day service with 30-min.peak and 90-min. off-peak (flex) headways								40	57
Level 4	All-day service with 20-min.peak and 30-min. off-peak headways								70	97
Weekend	All-day service with 60-minute headways								24-34	30-40

Figure 7.5: Timing of Local Route Expansion Phases

Route	Lev.1	Lev.2	Lev.3	Lev.4	Wknd
Metcalf-Plaza	Exist	Exist*	2016	Long	Long
75th-Quivira	Exist	Exist*	2016	Long	Long
Antioch	Exist	2016	Long		
Quivira	Exist	2016	Long		
College	2014	2016	Mid		
Nall	2015	Mid	Long		
95th	2015	Mid	Long		
119th	Mid	Long	Long		
87th	Mid	Long	Long		
Johnson	Mid	Long	Long		
135th	Mid	Long	Long		
Shawnee Mission West	Mid	Long	Long		
Mission	Mid	Long	Long		
Lackman-Ridgeview	Mid	Long	Long		

** Does not include evening trips*

Local Links

Local Link routes that provide midday loop flex service within communities will be implemented upon the request and funding assistance, of each community that desires such service.

These services are intended to be flexible based on the needs of each community and anticipated riders, and could even include standard fixed-route service along a designated corridor.

The initial implementation of these routes will likely provide for service for only two to three days per week. Future expansion to five days per week and eventually seven-day service may occur if justified by ridership and adequate funding.

Individual Route Strategies: Near-Term

The following sections describe the detailed alignment options for routes to be implemented or expanded in the next five years.

New Route: College Blvd

Begin service from KSU-Olathe campus to south Kansas City, Missouri in 2014, with three trips each direction during both the morning and afternoon peak hours. In 2016, additional peak-hour trips will be added, as well as midday flex trips and an evening trip each direction. During the near-term phase, a total of 26 trips and 40 service hours will be added.

The Kansas State University Innovation Campus is currently under construction near College Boulevard and K-7 Highway. When complete, the campus will be a major research facility that attracts students and staff from throughout the region. An existing park-and-ride lot near Red Bridge and Holmes will provide the eastern terminus of the route. There are more than 130 major employers (defined as having more than 50 employees) within a half mile of College Boulevard, with an estimated 32,000 employees. This includes Southlake Business Park and Corporate Woods. If the Sprint Campus is included (most of the campus is slightly further than a half mile from College), the corridor has more than 42,000 employees. These figures also do not include smaller businesses. Major shopping and entertainment is provided at Town Center Plaza and Park Place in Leawood between Roe and Nall. For several of these locations, aligning the route off of College Blvd may be an approach that generates more ridership while sacrificing an acceptable amount of travel time.

Since providing access to jobs is a major goal of the JCTC and START—and thus incorporated into this plan—a route serving College Boulevard is essential to the growth of The JO. High-quality basic passenger infrastructure will be essential along the route due to the lack of pedestrian infrastructure and high traffic volumes that make the corridor difficult to walk.

New Route: Mission-KCK Connector

Begin service connecting the Mission Transit Center with Indian Springs Mall (future transfer station for State Avenue Connex) in 2014, with a total of 12 round trips per day in the morning, midday, and afternoon. A total of 24 trips and 9.5 service hours will be added.

This route will provide an important regional connection that will connect two corridors that will be recently upgraded due to TIGER projects: the Metcalf-Plaza Connex and the State Avenue Connex. The route will also provide a connection from Johnson County to the Legends at Village West, an employment, shopping, and entertainment destination.

Since a large number of people live in Wyandotte County and work in Johnson County, this route will give these workers a convenient means of transportation to work. By connecting to the Mission Transit Center, passengers will have access to the majority of The JO system.

New Route: 95th Street

Begin service connecting Lenexa to south Kansas City, Missouri in 2014, with three trips each direction during both the morning and afternoon peak hours. Additional trips will be added in the mid-term as funding becomes available. A total of 12 trips and 16 service hours will be added.

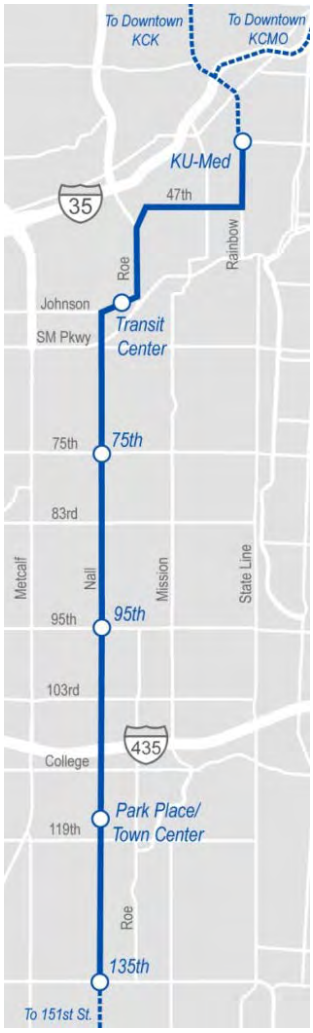
The new route will connect major residential, employment, and shopping centers such as the Lenexa City Center development, Oak Park Mall, and Ward Parkway Shopping Center. Park-and-ride facilities will be pursued at each end of the planned corridor. The route will be a critical east-west connection and allow people to transfer to other routes on Quivira, Antioch, Metcalf, and Nall.

New Route: Downtown Connector

Begin service connecting the Mission Transit Center with downtown Kansas City in 2015, with 12 trips each direction, primarily during both the morning and afternoon peak hours but including two midday round trips. A total of 24 trips and 17 service hours will be added.

The implementation of this route will allow the modification of other routes—***Route 660/A – Antioch-Downtown***, ***Route 665/D – Quivira-Downtown***, and potentially ***Route 667/E – Nall-Downtown***—into true local services. Rather than having all of these routes travel downtown, passengers can connect to the Downtown Connector for this portion of their trip. This improves system efficiency and potentially allows for the addition of more trips on other routes.

Expanded Service: Nall Avenue



Modify existing ***Route 667/E – Nall-Downtown*** to extend south to 135th Street and add additional peak-hour trips. A total of 8 trips and 8 hours of service will be added to the existing route in 2015. Additional trips will be added in Mid and Long-Term phases to make the route an all-day local service.

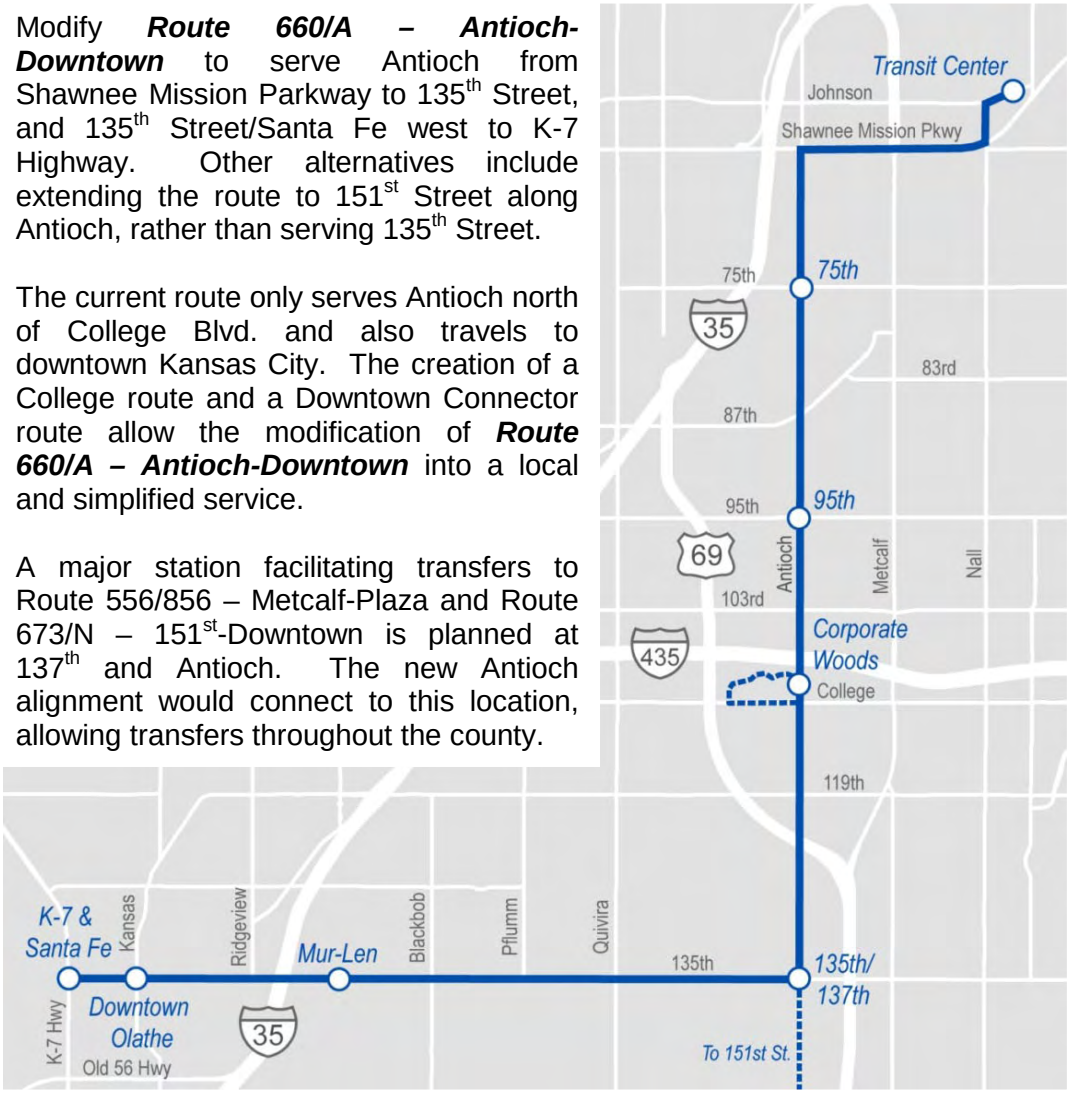
Route 667/E – Nall-Downtown is currently the only route that serves the University of Kansas Medical Center in Kansas City, Kansas and thus is an important route to the future of the system. A recommendation for expanded transit service is an expected outcome of the KU Med Area Transit Study, currently in progress. The route will be able to utilize a future transfer center near the medical center to improve regional connectivity.

Expanded Service: Antioch

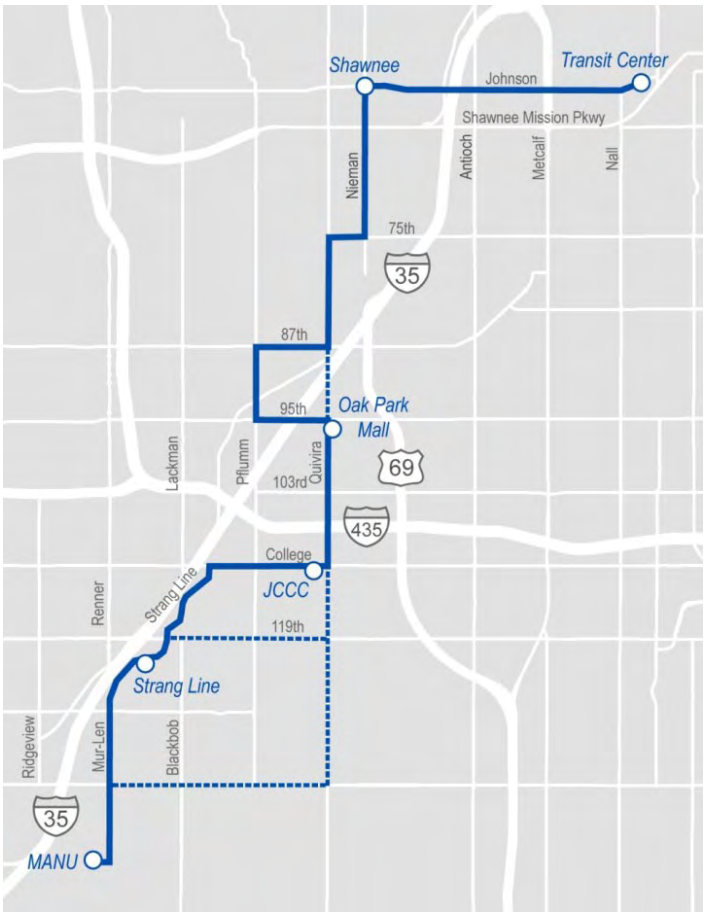
Modify ***Route 660/A – Antioch-Downtown*** to serve Antioch from Shawnee Mission Parkway to 135th Street, and 135th Street/Santa Fe west to K-7 Highway. Other alternatives include extending the route to 151st Street along Antioch, rather than serving 135th Street.

The current route only serves Antioch north of College Blvd. and also travels to downtown Kansas City. The creation of a College route and a Downtown Connector route allow the modification of ***Route 660/A – Antioch-Downtown*** into a local and simplified service.

A major station facilitating transfers to Route 556/856 – Metcalf-Plaza and Route 673/N – 151st-Downtown is planned at 137th and Antioch. The new Antioch alignment would connect to this location, allowing transfers throughout the county.



Expanded Service: Quivira



Due to modifications of other routes and the addition of new routes, ***Route 665/D – Quivira-Downtown*** will be revised to provide more service to portions of Olathe east of I-35.

Other routing alternatives include serving Quivira south to 119th or 135th Street.

Phased Implementation Plan

The following table presents JCT's strategy for expanding transit service over the next five, ten, and twenty years. The level of service for each route is listed.

Figure 7.6: Phased Implementation Plan

		Current	Near-Term					Mid-	Long-	Final
Rte. ID	Route	Level	2012	2013	2014	2015	2016	Term	Term	Level
COMMUTER										
661/B	Olathe-Downtown	1		▲ 2	▲ 3				▲ 4	4
664/C	Metcalf-Downtown	2	▼					▲ 4		4
670/L	South JoCo-Downtown	1		▲ 2		▲ 3			▲ 4	4
671/LN	Late South JoCo	0	▼	✖						
673/N	151st-Downtown	1		▲ 1				▲ 2	▲ 3	3
676/P	Paola-Spring Hill-Olathe	0								0
677/R	Downtown-Olathe	0								0
678/S	Shawnee-Downtown	0		▲ 1		▲ 2		▲ 3		3
680/V	KCK-Strang Line	0	✖							
710/K10	K-10 Connector	4	▼							4
	KCK-State Ave Circulator				▲ 2			▲ 3		3
	Downtown Circulator					▲ 2		▲ 3		3
	K-10 North JoCo							▲ 3		3
	I-435 & K-7 Express								▲ 4	4
LOCAL - KEY CORRIDOR										
556/856	Metcalf-Plaza	2		● 2				▲ 4		4
575/875	75th-Quivira	2		● 2				▲ 3		3
LOCAL										
502/O	75th Street-Olathe	0	✖							
660/A	Antioch	1				◆	▲ 2		▲ 3	3
665/D	Quivira	1	▼			◆	▲ 2		▲ 3	3
667/E	Nall	0				▲ 1		▲ 2	▲ 3	3
669/I	KCK-Lenexa-Olathe	0	◆							0
672/M	Midday	0				✖				
	College				▲ 1		▲ 2	▲ 3		3
	95th					▲ 1		▲ 2	▲ 3	3
	119th							▲ 1	▲ 3	3
	87th							▲ 1	▲ 3	3
	Johnson							▲ 1	▲ 3	3
	135th							▲ 1	▲ 3	3
	Shawnee Mission West							▲ 1	▲ 3	3
	Mission							▲ 1	▲ 3	3
	Lackman-Ridgeview							▲ 1	▲ 3	3
	Long-Term Local Routes								▲ 1	1
	Neighborhood Circ.								▲ 1	1

▲ Service Expansion (to identified Level) ✖ Route Elimination ◆ Route Re-alignment
▼ Service Reduction ● Need Funding for Existing Service

Section 8 Financing the Plan

In order to provide quality transportation services to county residents and employees, JCT regularly seeks and utilizes a variety of sources to fund services and capital projects. Recent CMAQ and TIGER grants have helped JCT improve its facilities and services in 2010.

This section presents the total costs associated with the services included in this plan and a strategy for funding these services. Compared to previous versions of the Strategic Plan, these costs include more basic passenger infrastructure and capital improvements, but much lower overall costs due to reductions in anticipated service levels, especially in the near-term phase of plan implementation.

Revenue and Expenditures

Transit service and facilities in Johnson County are funded through a mix of local, state and federal funding. In 2010, JCT had revenues of $15.3 million and expenses of $14.9 million. These figures are substantially higher due to an increase in federal grant revenue due to the TIGER and I-35 bus-on-shoulder projects.

JCT Revenues (2010)

General Fund Transfers	$5,442,703
Fund Balance	$750,000
Self Generated	$1,909,729
Federal Grants	$3,798,976
State Grants	$1,337,893
Grant Match	$2,102,960
Total	$15,342,262

JCT Expenses (2010)

Personal Services	$820,096
Contractual Services	$1,591,995
Commodities	$68,947
First Transit Contract	$6,338,319
Fuel	$1,271,229
Passenger Vehicles	$1,550,000
Facility Improvements	$1,015,400
Other Capital	$170,594
Grant Match	$2,102,960
Total	$14,929,540

General Fund transfers from Johnson County Government are not expected to increase in the next few years. JCT will continue to rely on grant revenue to continue existing services and fund new services.

One of the most important priorities identified by the Transportation Council is to identify and secure a local funding source that is dedicated and predictable. Given the need for increased funding to cover even some of the desired service expansion projects, this should be one the Transportation Council's highest priorities for the continued deployment of the Strategic Plan.

Cost of Planned Services

General Fund transfers from Johnson County Government are not expected to increase in the next few years. JCT will continue to rely on grant revenue to continue existing services and fund new services.

Figure 8.2: Total Plan Costs

	Near Term (Years 1-5)		
	Startup Costs	Operational	Total Cost
Transit		$37,076,727	$37,076,727
Paratransit		$18,611,299	$18,611,299
BPI	$6,386,063	$1,778,246	$8,164,308
Facility	$17,848,000	$999,151	$18,847,151
Buses	$30,545,000		$30,545,000
Staffing	$11,700	$5,797,381	$5,809,081
Misc.*		$6,732,859	$6,732,859
Total	**$54,790,763**	**$70,995,663**	**$125,786,426**

	Mid Term (Years 6-10)		
	Startup Costs	Operational	Total Cost
Transit		$50,627,269	$50,627,269
Paratransit		$19,835,801	$19,835,801
BPI	$6,168,691	$2,723,043	$8,891,734
Facility	$631,641	$1,216,728	$1,848,368
Buses	$36,880,000		$36,880,000
Staffing		$7,465,080	$7,465,080
Misc.*		$7,529,786	$7,529,786
Total	**$43,680,332**	**$89,397,708**	**$133,078,040**

	Long Term (Years 11-20)		
	Startup Costs	Operational	Total Cost
Transit		$109,200,941	$109,200,941
Paratransit		$42,785,009	$42,785,009
BPI	$12,665,386	$5,873,492	$18,538,879
Facility	$13,662	$2,624,432	$2,638,093
Buses	$85,350,000		$85,350,000
Staffing		$16,101,871	$16,101,871
Misc.*		$15,947,142	$15,947,142
Total	**$98,029,048**	**$192,532,887**	**$290,561,935**

Cost Methodology

- Transit Service: Cost of contract for transit operations, including fuel
- Paratransit Service: Cost of contract for paratransit operations, including fuel
- BPI (Basic Passenger Infrastructure): Improvements at bus stops, including signage, concrete pads, shelters, real-time-signage, site furniture. Also includes software and license and AVL costs.
- Facility: includes future Northeast facility and expansion of existing facility, includes utilities.
- Buses: purchase of buses for transit and paratransit service, includes both replacement and expansion.
- Staffing: Personnel costs, including existing and future staff
- Misc: includes Planning, Misc. Contractual, Misc. Commodities, and Reserves.

These costs are the total anticipated costs for the expansion of transit. The net cost to Johnson County will be lower due to an estimated 20% federal funding for capital projects. Capital projects could potentially be as much as 50% federally funded, which would decrease the amount of county support needed.

All costs are cumulative for the entire term, representing the total costs for the five or ten-year span, not individual years.

Total Plan Costs: Assumptions

Near Term Projections:

- Startup costs (excludes AVL Annual License and Signage): Compounded annual increase of 3%
- AVL: $10,000 per unit with a compounded annual increase of 3%
- RouteMatch License: Compounded annual increase of 10%
- Annual operational costs: Compounded annual increase of 3%
- Utilities, Staffing, Misc Contractual and Misc Commodities: Compounded annual increase of 3%
- Planning: Held at a flat $375,000 per year
- Reserves: Estimated $150,0000 in 2012 with a compounded annual increase of 3%
- Annual Operations Cost per Level (excludes AVL Annual License and Signage):

  Level 1 $0.00
  Level 2 $1,884.00
  Level 3 $3,732.00
  Level 4 $3,828.00
  Level 5 $4,788.00
  Level 6 $7,688.00

Mid Term Projections:

- Startup costs: Used a compounded annual increase from 2017-2021 of 1.5% for site startup costs to create average annual expenses throughout the 5 year period.
- AVL: 2021 projected AVL cost is a cumulative total from FY 2017 to FY 2021, based on a compounded 1% annual increase incrementally distributed from FY 2017 to FY 2021.
- RouteMatch License: 2021 projected RouteMatch cost is a cumulative total from FY 2017 to FY 2021, based on a compounded annual increase of 10%
- Operational costs: 2021 projected cost of operations is a cumulative total from FY 2017 to FY 2021, based on a compounded annual increase of 1%.
- Utilities: 2021 projected utility cost is a cumulative total from FY 2017 to FY 2021, based on a compounded annual increase of 3% plus a 20% increase due to facility expansion.
- Staffing, Misc Contractual and Misc Commodities: 2021 projected staffing cost is a cumulative total from FY 2017 to FY 2021, based on a compounded annual increase of 3%.
- Planning: Held at a flat $375,000 per year
- Facility Expansion: 2021 projected cost is a cumulative total from FY 2017 to FY 2012, based on 2011 expansion project with a compounded annual increase of 3%.
- Reserves: 2021 projected contingency cost is a cumulative total from FY 2017 to FY 2021, based on an estimated $150,0000 in 2012 with a compounded annual increase of 3%.

Long Term Projections:

- Startup costs: Used a compounded annual increase from 2022-2031 of 1.5% for site startup costs to create average annual expenses throughout the 10 year period.
- AVL: 2021 projected AVL cost is a cumulative total from FY 2017 to FY 2031, based on a compounded 1% annual increase incrementally distributed from FY 2022 to FY 2031.
- RouteMatch License: 2031 projected RouteMatch cost is a cumulative total from FY 2022 to FY 2031, based on a compounded annual increase of 10%
- Operational costs: 2031 projected cost of operations is a cumulative total from FY 2022 to FY 2031, based on a compounded annual increase of 1%.
- Utilities: 2031 projected utility cost is a cumulative total from FY 2022 to FY 2031, based on a compounded annual increase of 3% plus a 20% increase due to facility expansion.
- Staffing, Misc Contractual and Misc Commodities: 2031 projected staffing cost is a cumulative total from FY 2022 to FY 2031, based on a compounded annual increase of 3%.
- Planning: Held at a flat $375,000 per year
- Reserves: 2031 projected contingency cost is a cumulative total from FY 2022 to FY 2031, based on an estimated $150,0000 in 2012 with a compounded annual increase of 3%.

Transit Funding Opportunities

Transit service and facilities in Johnson County are funded through a mix of local, state and federal funding. Federal funding is through grants from the Federal Transit Administration as described below.

Federal 5307 Urbanized Area formula program

JCT receives an annual federal apportionment through the federal transportation bill that is based on the Kansas City, Missouri-Kansas metropolitan area population, passenger and revenue miles, and annual passenger ridership. JCT annually executes an Interagency Agreement with the Kansas City Area Transportation Authority to receive approximately 11% of the annual apportionment. These funds can be used to finance capital improvement projects, bus and bus related equipment and facilities, transit enhancement projects, as well as planning projects.

Matching Ratio: Federal: 80% Local: 20%

Federal Section 5309 Bus and Bus Facilities Discretionary Grant Program

The Section 5309 bus and bus facility discretionary grant program provides funds for capital projects for bus and bus facilities. The Bus Livability and State of Good Repair grant programs are authorized under Section 5309 Bus and Bus Facilities program. The funds can be used to purchase buses and other rolling stock, ancillary equipment, and the construction of bus facilities (i.e. maintenance facilities, garages, storage areas, waiting facilities and terminals, transit malls and centers, and transfer facilities and intermodal facilities. This category also includes bus rehabilitation and leasing, park-and-ride facilities, parking lot associated with transit facilities, bus passenger shelters. This program is highly competitive.

Matching Ratio: Federal: 80% Local: 20%

Congestion Mitigation Air Quality (CMAQ)

CMAQ funds may be used for public transportation or highway projects that are likely to result in emissions reductions. The funds can be used to purchase capital investments and operating assistance to help start up viable new transportation services that can demonstrate air quality benefits. Operating assistance includes all costs of providing new transportation services, including, but not limited to, labor, fuel, administrative costs, and maintenance. Operating assistance under the CMAQ program is limited to three years. Funds are secured through an annual competitive selection process

Matching Ratio: Federal-80% Local 20%

Surface Transportation Program (STP)

STP funds may be used (as capital funding) for public transportation capital improvements, car and vanpool projects, fringe and corridor parking facilities, bicycle and pedestrian facilities, and intercity or intracity bus terminals and bus facilities. Funds are secured through an annual competitive selection process

Matching Ratio: Federal 80% Local 20%

Job Access and Reverse Commute Program (JARC)

The Job Access and Reverse Commute program (JARC) goals are to improve access to transportation services to employment and employment related activities for low-income individuals and welfare recipients and to transport residents of urbanized areas and non-urbanized areas to suburban employment opportunities.
JARC funds can be used for capital, planning, and operating expenses that support the development and maintenance of transportation services designed to transport low-income individuals to and from jobs and activities related to their employment and to support reverse commute projects. Funds are secured through an annual competitive selection process

Matching Ratio: Federal-50% Local-50%

New Freedom Program

The purpose of the New Freedom program is to provide additional resources to overcome existing barriers facing Americans with disabilities seeking integration into the workforce and full participation in society. The New Freedom funds are available for capital and operating expenses that support new public transportation services beyond those required by the Americans with Disabilities Act of 1990 (ADA) and new public transportation alternatives beyond those required by the ADA designed to assist individuals with disabilities with accessing transportation services. Funds are secured through an annual competitive selection process

Match Ratio: Federal-50% Local-50%

Economic Stimulus Grant Programs

American Recovery and Reinvestment Act (ARRA)
The ARRA grant program provides funding for infrastructure improvements and capital investments that help maintain or create jobs, build and repair infrastructure and jump start the economy. Only 10% of the ARRA funds allocated can be used to support transit operations.

Matching Ratio: Federal 100% Local 0%

Transportation Investment Generating Economic Recovery (TIGER)
The TIGER is a discretionary grant program that can be used for capital investments, surface transportation infrastructure projects that contribute to the long-term economic competitiveness of the nation, improving the condition of existing transportation facilities and systems, improving energy efficiency and reducing greenhouse gas emissions. Priority is given to projects that are expected to quickly create and preserve jobs and stimulate rapid increase in economic activity. This is a highly competitive grant program.

Matching Ratio: Federal 100% Local 0%

Kansas Department of Transportation (KDOT) grant - State formula grant

In addition to the annual federal formula funds, JCT receives state grant funding from KDOT. These grant funds were originally allocated for the extensive service expansion for The JO that occurred in 1999 as a result of the Comprehensive Service Analysis. Again, these grant funds are allocated on a 65/35 split. These funds have been used for administrative overhead but recently were reallocated for the capital cost of contracting (service operations), fuel and capital acquisition. Typically, we program $250,000 in grant funds for capital purchases.

The Transit T-Link Committee is currently evaluating the funding split for public transit funds among the urban and rural properties. Given the political climate (with Topeka Transit activities) JCT is likely to see a reduction in funds. We have estimated $1 million going forward, as a conservative estimate.

Kansas Department of Transportation Section 5310 Capital Transportation Assistance for Elderly and Disabled

The 5310 program is federal money that is a pass-through grant from the state for capital acquisitions. The program is available to qualified recipients that provided transportation services for the elderly and/or individuals with disabilities. JCT utilizes these grant funds to purchase vehicles for the Special Edition and SWIFT services. JCT also receives $4,000 in operating funds per year.

Kansas Department of Transportation Section 5311 Capital Transportation Assistance for Rural Areas

The 5311 program is federal money that is a pass-through grant from the state of Kansas. The Section 5311 Grant program provides funding to support operating and capital grant for non-urban/rural transportation. The funds can be used to purchase buses and other rolling stock, and ancillary equipment. Funds are secured each year through the Kansas Department of Transportation.

Match: Capital Assistance: Federal/KDOT 80%, Match- 20%.
Operating Assistance: Federal/KDOT 68%, Match- 32%

Funding Strategy

JCT will continue to utilize the above county, state, and federal funding sources to provide transit services.

To initiate funding of transit services, START discussed the following options and submitted them to the County Commissioners for consideration:

- The use of county reserves and the reallocation of existing resources should be considered for near-term capital investments and operating costs.
- Gradually increase the county's mill levy and dedicate this funding to be used for transit projects and operations. The benefit of a mill levy increase is that it is controlled by the county and does not require state legislative approval. However, this funding may not be a consistent source of dedicated funding for transit, based on future budgeting processes. An increase of one mill would generate approximately $7.3 million in annual revenue, which could be used for both operating and capital expenses.*
- Initiate a county-wide motor vehicle registration fee. This fee would require state legislative approval and could be used to fund operations as well as provide a local match for capital projects receiving federal funding. However, this option could represent a dedicated source for transit funding, at a relatively low cost to each car owner. A $10 registration fee would generate approximately $5.5 million in revenue annually.*

  ** These figures are only examples; refer to the above section for the total costs of each phase.*

Appendix A Management and Governance

Transit Governance Structure

Johnson County

JCT is one of three transit operators in the metropolitan area. All transit service in the County is operated by private contractors with funding and policy direction provided by the Johnson County Board of County Commissioners (BOCC) through the Johnson County Transportation Council. Johnson County works closely with KCATA and UGT on transit-related matters including service and fare coordination. In recent years, a number of steps have been taken to ensure transit riders can move across state and county boundaries with few impediments.

Transit in Johnson County has always been a County function; the cities have had little or no involvement in the past. JCT is operated as a department of County government. KCATA operated all the fixed route transit service in Johnson County until 1981 when the County decided an independent operation would be more efficient. From 1982 through 1985, service was provided by a private contractor and operated as *Commuteride*. From 1986 to the present, the system has been known as JCT. JCT administers both ***The JO***, which provides fixed-route commuter express public transportation, and ***The JO-Special Edition***, which provides demand-response and curb-to-curb transportation service.

JCT is a unit of Johnson County Government, with the Transportation Director reporting to the County Manager's Office. The original Johnson County Transportation Advisory Council was created in 1979 by the Board of County Commissioners to advise the Commission on public transportation matters. Over the years, the Transportation Council went through several re-organizations. The most recent change occurred in March 2005 when the Board of County Commissioners gave the Council the ability to oversee the daily operations of the Transportation Department and to make recommendations to the Board on local, regional, state and federal transit issues.

The Transportation Council, in its current structure, is comprised of 12 members, one of whom is a non-voting member who serves as the Johnson County representative to the Kansas City Area Transportation Authority (KCATA) Board of Commissioners. The remaining eleven (11) members are appointed by the Johnson County Board of County Commissioners in the following manner:

1) Each Commissioner (including the Chairperson) shall appoint one (1) member;
2) The Board shall appoint four (4) members who shall have received the recommendation of the Transportation Council. In making such appointments, the Board may appoint, to the extent they are willing to serve, individuals that represent the disabled community, business interests, municipalities, legislative interest groups, transit system users and the general public; and
3) The Transportation Council Chair may recommend individuals for Board of County Commissioners consideration for appointment to the Council.

Kansas City Area Transportation Authority

The KCATA is a bi-state quasi-governmental authority empowered to develop and operate transit systems in the counties of Johnson, Wyandotte and Leavenworth in Kansas, and Jackson, Clay, Platte and Cass counties in Missouri. Policy direction and oversight are provided by a 10-member Board of Commissioners appointed from the counties and the cities of Kansas City, Kansas and Kansas City, Missouri. There are five members from each state.

At the time KCATA was created, the legislation did not provide a dedicated source of revenue to support transit. The only dedicated source of revenue for transit service is provided by the city of Kansas City, Missouri, which began collecting a half-cent sales tax within the city limits in 1972. KCATA contracts with individual communities or counties in the metropolitan area to support transit services. One result of this method of transit financing is that primary decision-making regarding routes, levels of service and fares rests with the local communities that contract for specific service levels. Consequently, service levels vary significantly from community to community, and there have been issues with inter-community travel in the past. In recent years KCATA has been able to address issues regarding inter-community travel through cooperative efforts among the KCATA, local governments and the other transit operators.

Unified Government Transit

The Unified Government of Wyandotte County is the third public transit provider in the metropolitan area. Unified Government Transit is a unit of the Unified Government of Wyandotte County and Kansas City, Kansas. The Transit Manager reports to the city manager's office. Unlike JCT, Unified Government Transit does not have a policy or advisory group, other than the Commission.

In addition to the service that Unified Government Transit provides directly, the Unified Government also contracts with KCATA to operate fixed-route transit service within Wyandotte County.

Regional Cooperation

Despite the fact that transit services are provided by three different organizations, there has been effective coordination among the operators that has led to improved customer services for the metro area's transit users. For example, the systems accept each other's transfers facilitating transfer connections and extending travel options. The systems also have collaborated on a regional transit call center so that the public can access information on transit services in all metro area jurisdictions. Managers also meet regularly on transit matters and have cooperated on the development of the Smart Moves Regional Transit Plan and many other regional initiatives.

Regional Transit Governance

This section presents general information on the advantages of establishing a regional transit authority. Although all of these reasons may not apply in the Kansas City metropolitan area, the Transportation Council and the County may still find it useful to examine the various reasons why regional transit organizations have been formed around the country. As JCT and other agencies in the metropolitan area continue to pursue an improved transit system, it may be possible to achieve many of the advantages of a regional transit authority while maintaining separate governance systems similar to the current situation.

Regional Transit Advantages

Because travel is not limited to municipal or county boundaries, there has been a growth in the formation of regional entities to be responsible for public transportation services over the past half century. A regional authority can have many advantages. A recent report by the North Carolina State University Institute for Transportation Research and Education (ITRE) lists many of these advantages which include:

Benefits to riders - a regional transportation agency can more easily accommodate trips that cross county or municipal lines than can an agency that serves a single county or municipality. A regional authority can be a benefit to riders by providing a single contact point to arrange for trips and a coordinated or integrated fare system.

Coordination or consolidation with special or rural public transportation services - a regional transportation agency is able to more efficiently provide human service agency transportation, or to coordinate with the service provided by these agencies. Like fixed route services, special services should not be limited to jurisdictional boundaries, or operate in a balkanized manner. Persons with disabilities have a need for inter-community travel just as much as the general population.

Operational and administrative economies - a regional system can provide operating benefits such as eliminating duplicate routes, coordinating schedules, and achieving operational economies of scale. There are also potential savings from consolidating administrative functions into a single agency. There are also opportunities to develop and implement more efficient and effective marketing, fare, and other programs at the regional level. Facilities can be used more efficiently.

Adequate funding for public transportation - a regional transportation agency can be created with its own dedicated funding source. This can result in new service in areas that have no service or are underserved. Dedicated funding usually results in a more consistent level of service across the metropolitan area. Dedicated funding can also insure that the transit system can provide matching funds for state and federal grant opportunities.

Building fixed guideway systems - a major advantage of a regional transit agency in an urban area is its ability to plan, design, fund and build a regional rail system.

Ability to address regional transportation problems - a regional transportation agency can provide an effective mechanism for addressing important regional problems such as traffic congestion and air pollution.

More effective regional planning - the functions of a Metropolitan Transportation Planning Organization (MPO) can be facilitated when there is a regional agency that can develop a regional program for public transportation operations and investment.

Transportation and land use planning - an effective regional transportation agency can enable more integrated and balanced land use planning. Land use objectives should include being served by a balanced transportation system where walking, bicycling and riding transit work in harmony with the private automobile.

Develop specialized professional staff - by centralizing administrative functions, a regional or multi-county agency is more likely to be able to meet the expense of and develop more specialized professional staff.

Regional Transit in the Kansas City Metropolitan Area

The Johnson County Transportation Council (Transportation Council) and JCT staff acknowledges the advantages of a regional approach to transit and supports the related principles of dedicated funding and regional cooperation and governance. There has been significant progress in regional cooperation, but it is not likely that regional governance with a regional transit funding source will become a reality in the near term. Concerns have been raised over how a regional transit fund will be managed, especially concerning oversight, and equity, ensuring Johnson County will receive service and benefits commensurate with revenues generated in Johnson County.

Thus, it is important to identify strategies and tactics to achieve the advantages of regional transit. Table 4-1 below lists the attributes of a regional transit system along with strategies for achieving these benefits.

Table 4-1. Regional Transit Attributes and Strategies

Regional Transit Attribute	Strategy
More effective service planning; avoidance of jurisdictional barriers.	• Inter-agency service planning committee. • Inter-agency service agreements. • Inter-agency cost sharing and funding agreements.
Integrated fare and transfer policies.	• Elements of an integrated fare structure are largely in place. • Secure reciprocal monthly pass.
Seamless transfer connections between routes.	• Inter-agency service planning committee. • Improved inter-agency communications. • Use of technology.
Coordination of special services.	• MARC's Special Transportation Advisory Committee (STAC) provides forum currently. • Inter-agency special service planning committee.
Cost efficiency – management and administrative functions.	• Joint marketing and advertising programs. • Joint procurement programs.
Cost efficiency – facilities.	• Joint use agreements for passenger facilities. • Collaboration on maintenance functions.
Administration of regional funding mechanisms.	• To be determined.
Achieving major transit investments.	• Working with KCATA, Unified Government

	and MARC on American Recovery and Reinvestment Act (ARRA) grants.
Consistent policy and decision-making.	• Working with KCATA, Unified Government and MARC on ARRA grants.
Adherence to regional priorities and objectives.	• Working with KCATA, Unified Government and MARC on ARRA grants.
Avoidance of political interference.	• Transportation Council should address concern.
Transportation and land use planning integration.	• Working with city partners.
Transit staff development.	• The Transit Department was restructured in FY 2007. Restructure included a reporting change from Public Works to the County Manager's Office; expansion of staff; and staffing priorities and assignments.

Future Governance Possibilities

The Smart Moves Regional Transit Plan recommends a regional governance system model for the Kansas City regional transit system. The nature of transit service provision is such that a regional approach is considered most effective. A regional approach is more likely to allow the deployment of transit routes that span city, county and state boundaries, enhance transfer connections among routes and have coordinated fare structures.

Although officials representing the jurisdictions and agencies involved in transit in the Kansas City metropolitan area have been unable to reach consensus on the form of the regional transit governance system, substantial progress has been made. There is widespread agreement that a regional transit system is needed and the Smart Moves transit service plan has been accepted as a guide for development of transit services. Management and oversight of a regional transit fund is one of the difficult questions that have not been resolved. The matter remains open and is the subject of constructive discussions.

Included in the progress that has been made in recent years is the passage of a 3/8-cent sales tax in Kansas City, Missouri indicating the willingness of metro area voters to enact new revenue sources for transit improvements. In November 2006, Kansas City voters redirected the transit tax towards a light rail system for the city. However, the City Council rejected that plan. During the FY 2006 legislative session, the Missouri State Legislature passed Smart Moves enabling legislation. If the KCATA and participating jurisdictions decide to move forward and succeed in a referendum, the Missouri side may take a significant step towards a regional transit structure. In this event, it may be possible for the Kansas counties to develop a complementary coordinated transit structure. This possibility is included for consideration in the Strategic Plan.

If the status quo is maintained for the initial two to three years of the Strategic Plan, progress will be made in the form of increased coordination between the metro area's transit systems and transit improvements within Johnson County. The changes in JCT's position in County government, and the new role of the Transportation Council, make the status quo arrangement more effective in terms of directing and managing an effective urban transit system.

However, the status quo is not considered acceptable for the future. It has been clearly demonstrated that the status quo has been unable to deliver on the vision of a comprehensive transit system for the metro area. Public transit has been identified as one of the County services that should be emphasized in the near future. As noted in the Johnson County Community Survey completed in 2007, public transportation in Johnson County was rated among the top services with the greatest opportunity for improvement based on the Importance – Satisfaction Assessment Index[1].

An important element of the Strategic Plan in subsequent years is to continue to work on the concept of regional transit governance, accepting that the status quo is inadequate for the longer term.

The Strategic Plan recognizes four futures relative to regional governance:

1. Short term. Status quo with respect to structure, but make improvements in regional coordination and collaboration, and local funding for transit.
2. Regional transit. Transit becomes the responsibility of a new regional transit agency and Johnson County's role as a direct provider of transit is reduced or eliminated.
3. If the initiative to create a bi-state regional entity fails to materialize, Johnson County will likely work to develop transit on a county basis with the possibility of a Kansas side collaborative effort with Wyandotte County.
4. A regional transit system could also be formed through a series of contractual inter-local arrangements which could maintain accountability while sharing resources to achieve some of the economies of scale that a single transit authority could provide.

Management Considerations

JCT has developed an effective management capability. As the transit system in the County grows, the management capability must grow as well. The Transportation Council recognizes that the goal of an expanded transit system cannot be realized unless the community trusts the management of the system. Building the public's trust is one of the goals identified by the Transportation Council

System Image: Even the best run public transportation system (as recognized on a national level) may be criticized at home for inadequate service, inadequate communication, operating empty buses, and many other perceived transgressions. How then do we create an entity to provide public transportation with a new image and how do we maintain that image? Some ideas are:

- Be active in providing services that help a large number of people in the area—such as running special services for special events. In this way, more of the taxpayers directly benefit from the service;
- Involve the business community: if they are interested in advocating for a particular service and are willing to help campaign for funds, they can help keep public opinion positive. Participate in business events as much as possible to keep in communication;
- Limit services to what the authority can do well. In the tradeoff between route coverage and service headways, try to provide better service in fewer corridors;
- Try to keep the service simple and easy to understand;

[1] ETC Institute, 2007 Community Survey, November 2007.

- Paint the buses bright colors so they are noticed. In Knoxville, people thought that there were many more buses when they were painted bright orange and purple; and
- Use appropriate size buses so that there will not be the impression that the transit system runs many empty buses.

Performance Monitoring and Accountability: How can performance be monitored and accountability ensured in a transit system? Ideas include:

- Creating structure that ensures that municipalities have control over service provided, and that the municipalities pay for the services that they approve. This ensures that those receiving the service have a stake in that service being efficient and effective. In a sense, that is what happens now under a contract for service. Communities explicitly contract for and pay for the services provided.
- If a subsidy is provided through a regional mechanism (such as a county tax) or a state subsidy, using incentive mechanisms to distribute the subsidy once the costs have been allocated. Different mechanisms to consider include:
    - Matching the contribution of each municipality proportionally. That is, if half the cost of service comes from community A, allocate half of the subsidy amount to that community. This approach is used in several areas.
    - Using an incentive formula to distribute the subsidy. For example the subsidy might be distributed by route proportional to the ratio of unlinked passenger trips per hour compared to a system average for that type of route. This means that if a municipality wishes to keep a poorly performing route, they will pay more per hour than for a well performing route. This concept comes from the performance portion of the North Carolina system for allocating revenues between transit authorities statewide. Sixty percent of the funding is allocated based on performance, thirty percent is based on local commitment, and ten percent is shared equally among the systems.
- Creating service and performance standards, and adjusting service in accordance with the standards. The standards would not affect how subsidies are distributed, but be used to determine whether a route is retained or not. The standards could also spell out a procedure to follow for monitoring service, taking remedial action, and reducing or increasing service. There are many examples of performance standards that could be adopted for Johnson County.
- Creating a comprehensive communications plan that will identify the communication strategies needed to effectively communicate and implement the goals and objectives of the Strategic Plan. As with the Plan itself, the communications plan will be revisited on an as needed basis, or at least annually, for assessment and updates.

Strategic Focus: The Transportation Council is aware of the importance of marketing and promotion in the "choice" market of Johnson County. Most residents of and other travelers in Johnson County do not have to rely on transit. They have private automobiles or the means to secure transportation on their own. Thus, transit service must be marketed and promoted.

JCT has a marketing program that, although somewhat limited by budget considerations, has been effective in marketing ***The JO***. The FY 2009 Johnson County Community Survey[2] found that nearly one out of every two (47%) residents was familiar with services provided by JCT.

[2] ETC Institute, 2007 Community Survey, November 2007.

The intent of this section is to outline a process for JCT to be more strategically customer-focused. These ideas stem from strategic planning sessions with the Transportation Council and JCT staff.

Definition of Customer Focus

An organization is customer focused if it successfully addresses the actual and perceived needs of its key constituencies. JCT's customers fall within three groups with a number of sub-groups. They are:

- *Consumers*
  - Current riders
  - Potential Riders
  - Social Service Agencies
  - Businesses

- *Funding Sources*
  - Riders
  - General public
  - Board of County Commissioners
  - County units of government, namely cities but could include school districts
  - Missouri units of government to the extent there is regional financing or cooperation to access other intergovernmental financing (like earmarks or cooperative service agreements).
  - State of Kansas
  - State of Missouri (to the extent funding or regulatory processes contribute to intra-regional cooperation or service cost sharing)
  - Federal Transit Administration

- *Ancillary Stakeholders*
  - Convention and Visitors Bureaus
  - Chambers of Commerce and the business community
  - Economic Development agencies
  - Environmental Advocacy groups
  - Disability Advocacy groups
  - Senior Advocacy groups

Customer Stakes in Transit

Each customer group has a set of stakes or desired outcomes in transit. The stakes can be overlapping or not. It is important that JCT understand what its customers expect of it. This can be done through surveys, focused interviews or based on past experience. Some sample expectations are:

- Consumers
  - Service meets an important transportation need. Service frequencies, geographic coverage, reliability, correct price, reasonable travel time versus other choices are among the key factors.

- Funding Sources
    - Transit should be providing some tangible and vital benefit to taxpayers. Ideally the funding should be an easy decision for the agencies involved, even with the competition for governmental funding.
    - Assurance that JCT is a good steward of public funds.

- Ancillary Stakeholders
    - Overland Park Convention and Visitors Bureau—help make the Overland Park Convention Center appealing to travelers by providing transportation options (to and from KCI, within geographic area of convention center and hotels).
    - Chambers—support in obtaining and retaining employees and customers.
    - Economic development—quality of life issues.
    - Environmental advocates—contribution to air quality and energy conservation.

Focus on Solving Transportation Problems

With unlimited resources, JCT could meet a variety of transportation problems and needs. Reality requires that JCT focus on only some of them. The needs that are targeted will affect one or more of the above customer groups. For example, if I-35 looks like it will experience a major decline in capacity in the coming years, which will affect a number of the above stakeholders, then focusing on solving the I-35 dilemma becomes a priority for JCT.

Other transportation issues may be emerging, as well. Those should be identified and prioritized according to importance to the above groups. A plan, including a financial strategy, should be developed that addresses the problems and JCT's solution(s).

Transportation priorities can be determined through discussions with planning and business professionals as well as from documented studies and local plans.

On-going Efforts:

In addition to emerging issues, it needs to be acknowledged that ***The JO*** is already serving a useful purpose; otherwise it would not have the support it has. What support?

- The single largest indicator of growing support – steady ridership growth. From FY 2006 to FY 2007 and from FY 2007 to FY 2008, ridership growth was 32% and 35%, respectively.
- According to the FY 2007 Johnson County Community Survey, improving public transit in the county ranked as the number two priority, behind emergency preparedness.

Surveys done regarding JCT services during the past several years often show results that the public appreciates the *quality* of ***The JO*** system, but wants more *quantity*. Taking care of the current constituency is as important as broadening services and support. Steps to be taken include:

- Prioritizing the above customer list;
- Determining their desired outcome for transit; and
- Developing and distributing messages accordingly.

For example, if the Board of County Commissioners is a high priority customer, then a regular report would be an effective means of highlighting the benefits ***The JO*** is providing the County citizens. Statistics on JCT's stewardship would be valuable as well. For example, statistics could highlight that JCT's costs are lower than other area transit providers or providers of similar scope elsewhere.

Some suggested communication mechanisms by customer type include:

Customer	Messages	Mechanism
County Municipalities	Benefits provided, public stewardship	Monthly reports and/or updates to various councils/boards and other interested organizations
General Public	Benefits provided, public stewardship	Advertisements, direct mail
Riders	Customer appreciation, reinforce their decision to ride ***The JO***	On-board advertising cards, newsletters, Twitter updates, Facebook postings and e-mail blasts

FINAL REPORT

January 19, 2011

Strategic Plan 2011

Appendix B
START Final Report

At the direction of Chairman Surbaugh and the County Commissioners, the Strategic Transit Action Recommendation Taskforce (START) was formally created in May 2010. The Taskforce's charges were:

- *Studying the county's Transit Strategic Plan;*
- *Evaluating current service options, both within the county and metro links; and,*
- *Finally, presenting recommendations on future public transportation strategies, including both short-term and long-term financing options for a comprehensive county-wide transit system.*

PROCESS

A series of meetings were held from August 5, 2010 to January 5, 2011 at Sylvester Powell Community Center in Mission. The first few meetings of the taskforce focused on providing background information on Johnson County Transit's existing and planned operations, regional transportation projects and planning efforts, transit-oriented development, and comparisons to transit systems in other regions.

The next series of meetings were a facilitated session focusing on building cooperation and leadership within the group, defining issues and goals, and creating a framework for forming recommendations. The final meetings were dedicated to working through issues, clarifying and providing additional information, directing staff to form a phasing plan, and forming and finalizing funding strategies and recommendations.

START will present its recommendations to the Johnson County Board of Commissioners on January 27, 2011 and to the Leadership Summit in 2011.

START MEMBERS

Steve Klika, Chair, Overland Park
Blake Schreck, Vice Chair, Lenexa
Lawrence Andre, Mission
James Azeltine, Leawood
David Belz, Prairie Village
Casey Cassias, Mission
Vicki Charlesworth, Overland Park
Jim Courtney, Overland Park
Dennis Day, Overland Park
Jack Epps, Overland Park
Terry Goodman, Overland Park
Kevin Jeffries, Leawood
Henry Lyons, Leawood
Tim McKee, Olathe
Ronnie Metsker, Overland Park
Calvin Roberts, Olathe
E. Allen Roth, Westwood Hills
Kurtis Ruf, Olathe
Ron Ryckman, Olathe
Lou Serrone, Lenexa
Brenda Sharpe, Overland Park
John Skubal, Overland Park
Diane Stewart, Olathe
Kevin Tubbesing, Shawnee

Finance Sub-Committee

Doug Robinson
Tom Kaleko
Laura Smith
Kevin Hiskey

TENETS

In drafting the recommendations, START agreed on a number of tenets that should serve as guidance for improving transit in Johnson County. These tenets are as follows:

1. To maintain the high standards typically associated with Johnson County, additional quality transportation options must be implemented that support a competitive edge, grow at a sustainable rate and promote a healthier life style for our residents.

2. The approved JCT Strategic Plan, updated annually, serves as a guide for future investment decisions.

3. Reliable and efficient transit benefits the community by supporting:
    - *Air quality and other environmental concerns,*
    - *Area economic development, redevelopment, and other investments by providing transit services to employees, visitors and residents,*
    - *Changing demographics, healthy lifestyle choices, and community dynamics*

4. Successful transit systems need:
    - *Reliable and predictable funding stream to make long-term operation of a transit system in Johnson County viable.*
    - *Strong passenger amenities like safe bus stops, passenger shelters, signage, and real-time information.*
    - *Integration with other area transit systems to provide regional connections.*

5. A phased approach is the most likely way to ensure program success, community support, and long-term funding.

RECOMMENDATIONS

The taskforce determined that recommending full funding of the Strategic Plan over the next seven years was not a viable option at this time. The group decided upon splitting the financing and implementation of future services into a number of phases that are smaller and more incremental than envisioned in the Strategic Plan.

A phased implementation outline was developed by the taskforce to demonstrate this incremental approach to improving transit in Johnson County. This outline is much more conservative than the implementation strategies in the Strategic Plan, acknowledging the current financial and political realities in 2011. While the Strategic Plan still serves as the county's transit vision and will be updated in 2011 to reflect the results of the START process, the approach discussed by the taskforce presents a near-term funding strategy based on the following principles:

- Service will be implemented in a multi-year, phased approach.

- Add and improve passenger amenities such as shelters, park-and-ride facilities, pedestrian infrastructure, and information technology.

- Improve the quality and increase marketing of existing core services; incrementally expand the system in later phases.
- JCT staff will provide cost estimates, reasonable funding options, and accountability measures prior to the implementation of each phase.

Each phase has been designed to incrementally expand the network of routes and the number and quality of passenger amenities. These phases include:

Phase 1: Focus on improving passenger amenities and strengthening the core routes of the system, with the primary goal of providing access to jobs and making the system easier to use.

Phase 2: Continue to strengthen the core system and provide access to jobs, while beginning new services on arterial roads in higher-density portions of the county with businesses and neighborhoods.

Phase 3: Expand the reach of the transit system throughout the county and region by providing access to more neighborhoods and jobs at more times throughout the day.

Phase 4: Add additional service hours to the routes initiated in previous phases, adding peak, midday and evening hours and continuing to improve amenities as development occurs and ridership increases.

Phase 5: Continue to expand service on routes initiated in early phases, making the system more accessible to non-work trips and to all areas of the county.

Note: These phases are presented in greater detail in the START *Discussion* document.

FINANCING CONCEPTS

To support the taskforce in evaluating various funding options and scenarios, a Finance sub-committee was created to provide detailed information on potential funding sources and the feasibility of each option. A number of financing options were evaluated, including:

- Mill Levy Increase
- Motor Vehicle Registration Fee
- Specific User Fee – Transportation Utility Fee
- New Gas Sales Tax
- Local Sales Tax Increase
- Excise Tax – Countywide
- Transportation Development District Special Assessment
- Community Improvement District

The sub-committee created three initial funding scenarios that were based on conservative federal and state funding projections. The funding sources range from sales and use taxes, general government support and motor vehicle fees. Very few transit properties that were evaluated during the START process use mill levy support to fund extensive transit systems.

To initiate funding of transit services, the following options have been discussed and submitted to the County Commissioners for consideration:

- The use of county reserves and the reallocation of existing resources should be considered for near-term capital investments and operating costs.

- Gradually increase the county's mill levy and dedicate this funding to be used for transit projects and operations. The benefit of a mill levy increase is that it is controlled by the county and does not require state legislative approval. However, this funding may not be a consistent source of dedicated funding for transit, based on future budgeting processes. An increase of one mill would generate approximately $7.3 million in annual revenue, which could be used for both operating and capital expenses.*

- Initiate a county-wide motor vehicle registration fee. This fee would require state legislative approval and could be used to fund operations as well as provide a local match for capital projects receiving federal funding. However, this option could represent a dedicated source for transit funding, at a relatively low cost to each car owner. A $10 registration fee would generate approximately $5.5 million in revenue annually.*

* These figures are only examples; refer to the Phased Implementation Outline in the START *Discussion* for the total costs of each phase.

CONCLUSION

The members of the Strategic Transit Action Recommendation Taskforce generously contributed their valuable time and effort to the process of creating a transit vision for the county. A wealth of transportation and development-related information was presented and thoroughly analyzed at each meeting, with strong participation by all taskforce members. Due to the complexity of the issues revolving around transit, there were many diverse ideas on the best way to move the county forward.

The group agreed that it was important to work toward improving mobility options in Johnson County. This report is a tool for the County Commission to utilize in considering how to provide a consistent funding source for future transit improvements and operations. The taskforce feels strongly about the importance of continuing the growth, improvement and stability of the transit system to meet the needs and demands of the future growth of Johnson County.

While this report and presentation to the BoCC on January 27th formally concludes the START process, the continued public education and marketing of transit services and benefits is critical to the success of the system. The taskforce intends for their work to spark a public discussion of transit and to guide future marketing and planning efforts.

Appendix C Ridership Forecasts

After the completion of the Strategic Plan 2010 Update, JCT asked Olsson Associates to use the transit ridership elasticity forecasting approach to estimate the potential ridership of routes that would be implemented or expanded as indicated in the Strategic Plan prepared by Johnson County Transit (JCT). Although the 2011 Update has changed the timeline and specific number of trips and service hours for many of these routes, these forecasts still are valuable in planning for future route expansion.

Forecast Methodology *(Olsson Associates)*

Ridership forecasts are based on a number of factors. Transit growth rates were applied based upon transit growth rates from other areas of the Kansas City metropolitan area where transit service expanded. Different rates were applied according to the type of service expansion envisioned for each route in JCT's Strategic Plan.

Future ridership projections for existing routes utilize transit rates from other areas of the Kansas City metro area where service has expanded from commuter-orientated service to all day service. This transit rate was applied to existing JCT routes that are currently commuter-orientated and are envisioned in JCT's Strategic Plan to become all day service.

For routes with all day service currently, elasticity rates for expanded service were used based upon experience in the Kansas City metro area where additional service hours have been added to routes that already offered all day service.

The number of households within walking distance of a transit route factored into the transit rate. GIS software buffered a half mile distance around existing and planned transit routes to determine the number of households within a ten minute walk to locations where passengers could board a bus. An effort was made to limit the buffer to areas that typically serve as trip origins. The projected 2010 household data from the MARC Regional Travel Demand model was used in this analysis.

Ridership has not been forecasted for the Downtown Circulator or KCK-State Avenue Connector as these routes are not orientated toward the ridership methodology that has been developed.

Table 1 on the next page provides the ridership forecast information for weekday ridership.

Table 1: Ridership Forecast (Current and Projected)

ID	Route	Route Length (mi.)	Weekday Trips	Current Hours	Aug 09 Ridership		Route Length (mi.)	N/S or E/W	Weekday Trips	Mon-Fri Frequency*			Daily Hours*			Projected Weekday Riders
					Month	Day				Peak	Midday	Evening	M-F	Sat	Sun	
1	Metcalf-Plaza (Rt. H)	18.4	19	23.25	1,728	81.1	18.4	N/S	56	20	30	60	94	72	24	558
2	Metcalf-Downtown (Rt. C)	22.3	19	22.87	2,658	118.4	22.3	N/S E	18	15	--	--	36	0	0	272
3	75th Street	15.7	16	16	664	30.7	15.7	E/W	42	40	40	40	39	18	18	518
4	KCK-State Ave Connector						7.7		22	30	--	--	7.5	0	0	
5	Quivira (Rt. D)	26.6	16	21.55	3,531	160.5	13.6	N/S	36	30	60	60	92.5	0	0	583
6	Metcalf-Local						9.9		28	60	60	60	48	0	0	415
7	Downtown Circulator						10.7		30	--	30	60	18	0	0	
8	Antioch (Rt. A)	30.9	20	31.33	3,964	180.2	12.9	N/S	36	30	60	60	73	0	0	372
9	119th Street						12.5	E/W	40	30	60	60	56	0	0	422
10	College Boulevard						12.2	E/W	40	30	60	60	56	0	0	344
11	87th Street						6.7	E/W	56	20	30	60	44	0	0	281
12	95th Street						11.7	E/W	40	30	60	60	56	0	0	480
13	Nall Avenue (Rt. E)	17.3	4	3.58	812	36.9	10	N/S	18	30	--	--	51	0	0	428
14	Johnson Drive						7.6	E/W	32	40	40	--	48	0	0	281
15	135th Street						12.2	E/W	40	30	60	60	56	0	0	425
16	Gardner-Edgerton (Rt. L)	39.4	10	14.82	2,966	134.8	45.4	N/S	19	15	--	--	39.5	0	0	314
17	I-35 (Rts. B,L/N,N,R,S,V)		32		10,289	467.7		N/S	58	20	--	--	46.5	0	0	601
18	Shwn Mssn Pkwy BRT (Rt. Q)	10.9	2	1.12	56	2.5	8.1	E/W	64	20	30	60	43.8	0	0	596