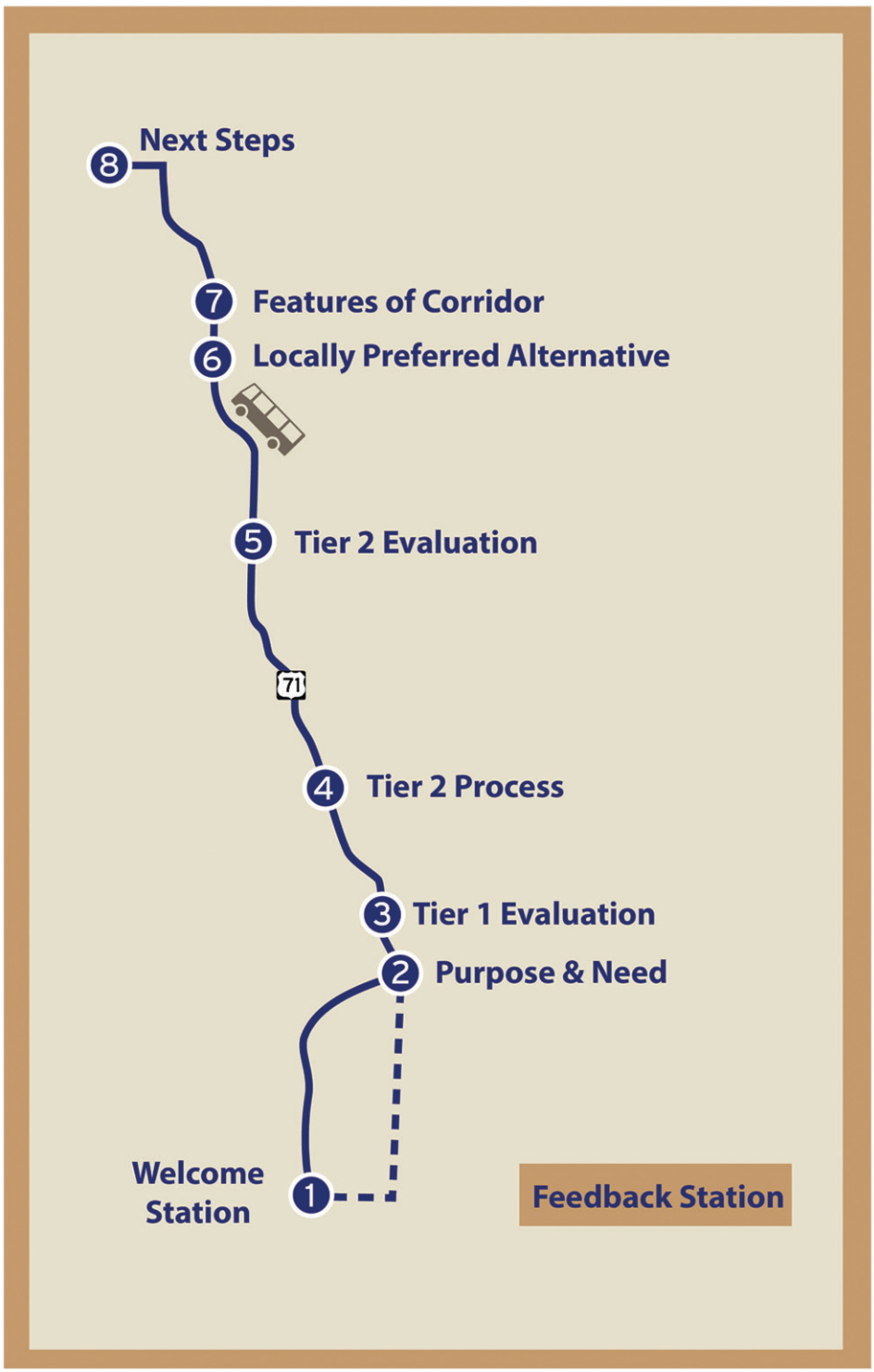
U.S. 71 Transit Study

Welcome!
Meeting Layout



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Project Information

What is an Alternatives Analysis (AA)?

According to the Federal Transit Administration, an Alternatives Analysis, or AA, is the local forum for evaluating costs, benefits, and effects of a range of transportation alternatives. The alternatives are designed to address mobility problems and other locally-identified objectives in a defined transportation corridor The process also determines which particular investment strategy should be advanced for more focused study and development.

Process

Phase 1: Discovery

- Review previous work- gap analysis
- Develop Purpose & Need
- Identify & develop initial alternatives
- Conduct environmental overview
- Support land use & economic development

Phase 2: Exploring

- Conduct initial screening
- Discuss detailed alternatives
- Conduct environmental overview
- Support land use & economic development

Phase 3: Refining

- Host detailed alternatives workshop
- Identify capital costs
- Estimate operations & maintenance costs
- Conduct Level 2 evaluation & identify Locally Preferred Alternative
- Conduct environmental overview
- Support land use & economic development

Phase 4: Finalizing

- Adopt Locally Preferred Alternative

Project Partners

Jackson County Missouri Established 1826

kcATA Kansas City Area Transportation Authority

MARC Mid-America Regional Council

City of Fountains Heart of the Nation Kansas City Missouri

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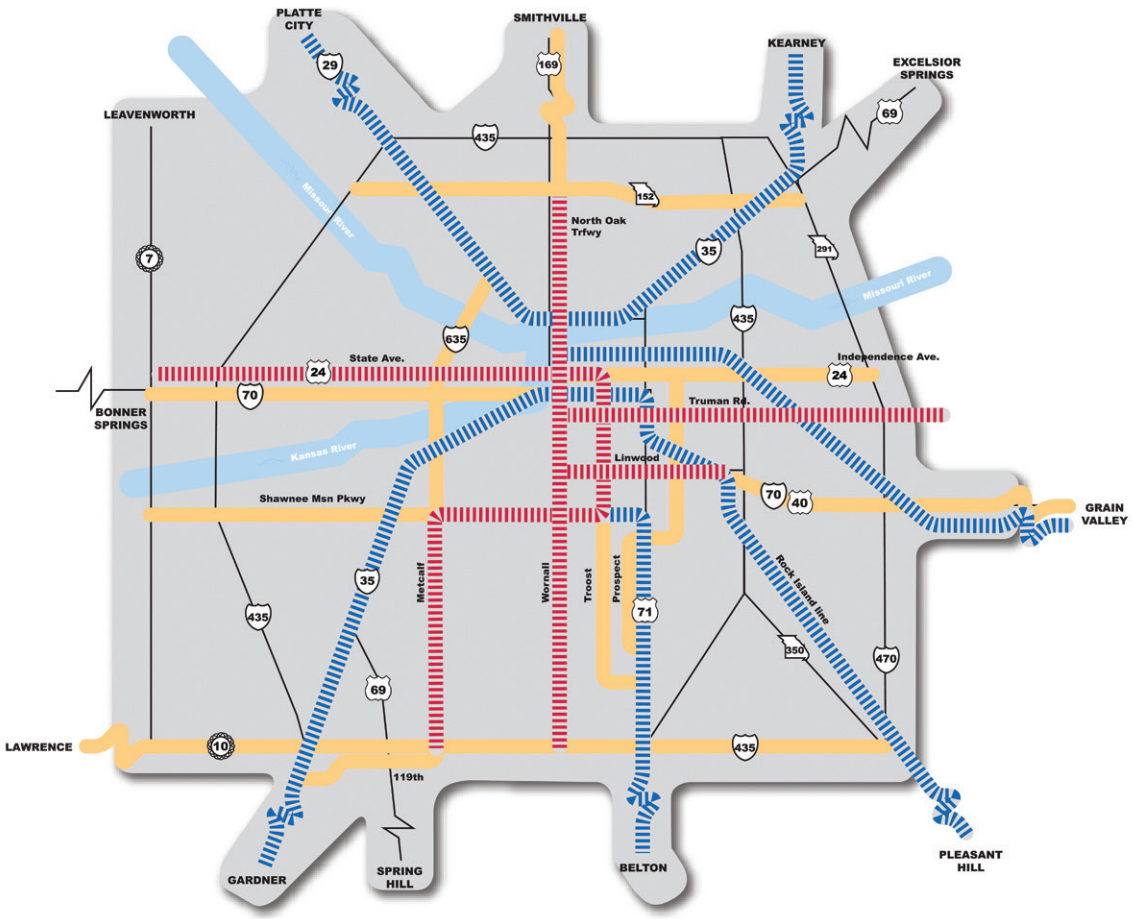
Smart Moves

smartmoves
REGIONAL TRANSIT VISION



LEGEND

- Commuter service
- Urban service
- Major fixed-route service
- Local service

N

MARC Mid-America Regional Council

The Metro

Johnson County Transit

Unified Government Wyandotte County • Kansas City, Kansas

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Purpose Statement

The purpose of a proposed transit investment within the U.S. 71 study area is to provide a meaningful transit alternative to the current mixed-traffic, peak hour-only service on U.S. 71. Current congestion on U.S. 71 challenges the ability of the transit system to be time competitive with the automobile for commuting and other trip purposes. Additionally, the transit dependent population in the study area needs a transit option that allows added mobility options throughout the region. This project should also catalyze redevelopment in and near transit centric activity centers (current and future) and increase the regional transit mode share, thereby reducing emissions from automobiles.

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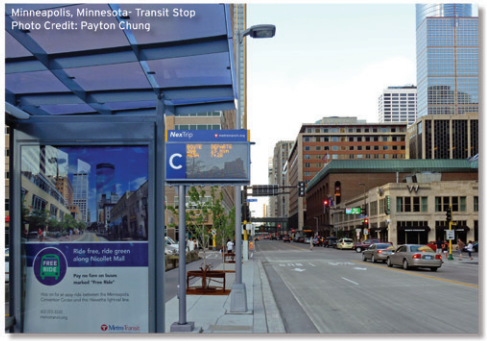
Need Statement

Transportation

- Improve travel time for travelers, making transit time competitive with the automobile and enhance the transit users' travel experience.
- Connect the U.S. 71 study area with the greater Kansas City metropolitan area via multimodal transportation options.
- Serve and enhance the mobility of transit dependent users in the study area.


Detroit, Michigan- Rosa Parks Transit Center
Photo Credit: Parsons Brinckerhoff

Beaverton, Oregon- Bike & Ride Facility (TriMet)
Photo Credit: www.bikeportland.org



Minneapolis, Minnesota- Transit Stop
Photo Credit: Payton Chung

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Need Statement

Land Use/Economic Development

- Connect key activity centers in the study area with enhanced transit as a strategy for enticing development and redevelopment of these areas.
- Support neighborhood revitalization through the development of station areas along the corridor.
- Support local planning initiatives that call for enhanced transit for residents.


Portland, Oregon
Photo Credit: Ansonclit


Denver, Colorado


Minneapolis, Minnesota
Photo Credit: Matt Thomas

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Need Statement

Sustainability/Livability

- Increase transportation options for study area residents and reduce dependence on automobiles.
- Promote the protection, preservation and access to key environmental assets in the study area.
- Promote workforce development in the study area through better job access and through jobs generated by the enhanced transit system.


Beaverton, Oregon- Transit Oriented Development

Jackson County, Missouri- Little Blue Trace Trail
Photo Credit: Jackson County, Missouri


Kansas City, Missouri- Blue River

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Study Overview

Background

Over the past year, the U.S. 71 Transit Study has evaluated how to enhance transit options along the U.S. 71 corridor, beginning in downtown Kansas City, Missouri and extending south, terminating in Grandview, Missouri.

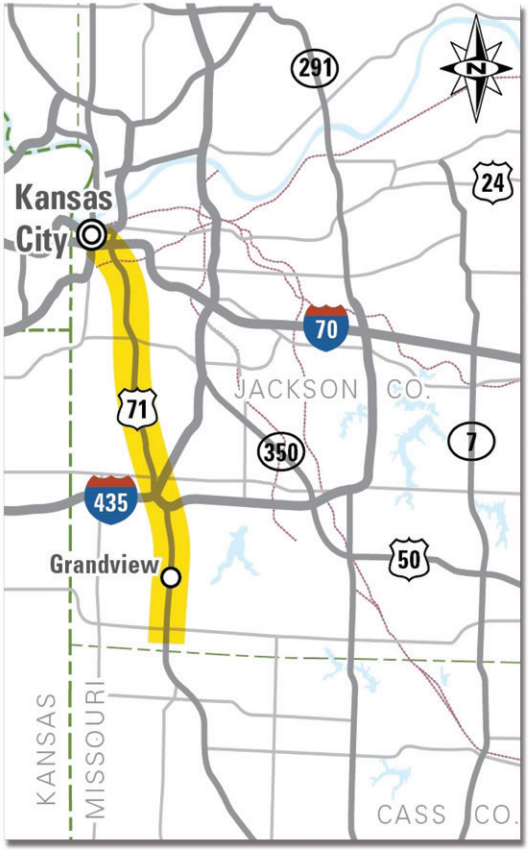
The Mid-America Regional Council (MARC), the Kansas City Area Transportation Authority (KCATA), the City of Kansas City, Missouri, and Jackson County, Missouri make up the Project Partnership Team sponsoring the study, called an Alternatives Analysis (AA).

Alternatives

The consultant team, with assistance from the PPT, conducted two tiers of screenings narrowing the range of alternatives to the Locally Preferred Alternative presented today. Each alternative was evaluated according to its ability to address three distinct needs within the corridor as identified by the PPT. Those needs are transportation, economic development/land use, and sustainability/livability.

The alternatives evaluated include:

- **No Build:** A baseline alternative that includes only those project enhancements that are already identified and funded. Analyzing this as an alternative provides information on what would occur if no transit enhancements were developed in the study area.
- **Transportation System Management (TSM):** Relatively low cost improvements that represent the best that can be done to improve transit service short of a major a capital investment.
- **Bus Rapid Transit (BRT):** A BRT line would operate with a combined service on U.S. 71 and Prospect Avenue.
- **Diesel Multiple Unit:** A self-propelled rail car would connect with possible common lines on the northern end of the study area, then travels southwest with limited stops on existing track to its destination near M-150 in Grandview.
- **Enhanced Streetcar:** Eliminated during Tier 1 screening.



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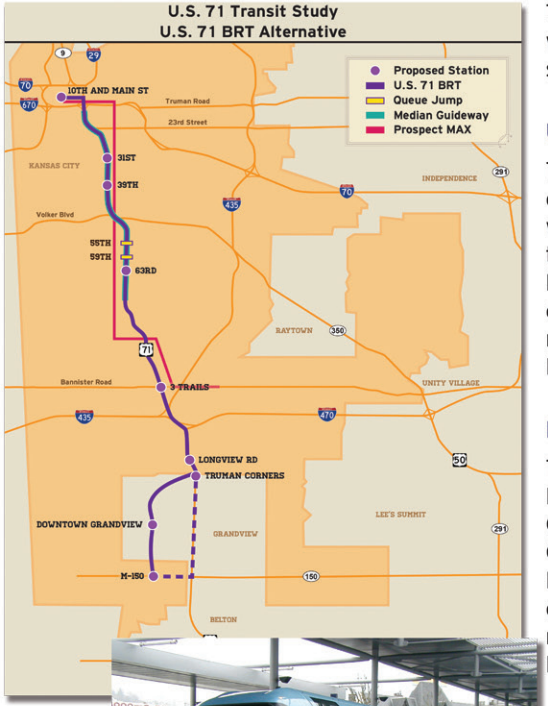
Tier 2 Alternatives

BRT



The BRT line would operate with service on U.S. 71 and MAX service on Prospect Avenue.

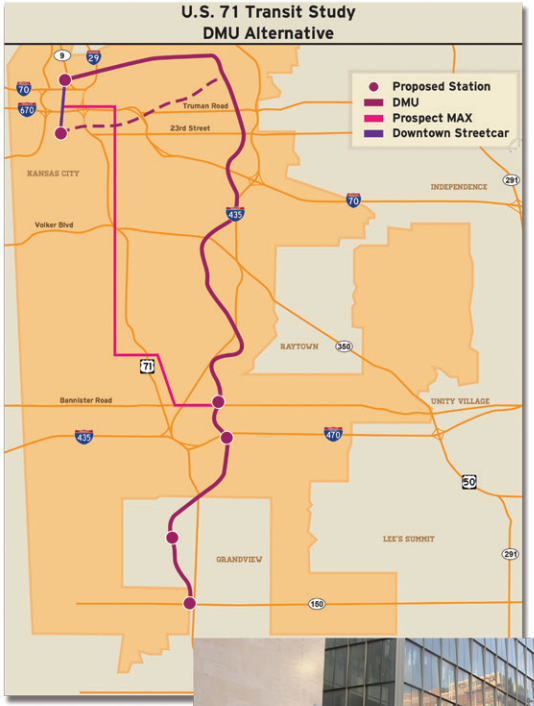
U.S. 71 Service

The U.S. 71 Commuter BRT connects M-150 in Grandview with Downtown Kansas City through a higher-speed limited stop service that offers connections throughout the route with the Prospect Urban BRT.

Prospect Service

The Prospect MAX connects Bannister Road in south Kansas City with Downtown Kansas City through a MAX service on Prospect Avenue that offers connections throughout the route with the U.S. 71 Commuter BRT.

DMU



The DMU alignment being considered connects with possible common lines (either terminating at the River Market or at Union Station) at Leeds Junction (west of the Truman Sports Complex), then travels southwest with limited stops on existing Kansas City Southern Track to its destination near M-150 in Grandview. The vehicle would operate in a shared right-of-way with the Kansas City Southern Railroad/Kansas City Terminal Railroad.

The DMU alternative would also include the **Prospect MAX** service described on the left.

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Tier 2 Evaluation

Alternatives Effectiveness at Meeting Needs

Need	Need Statement	Express Bus	Bus Rapid Transit (BRT)	Diesel Multiple Unit (DMU)	Analysis
Transportation	Improve travel time	Low	High	High	Travel times are similar for BRT and DMU alternatives.
	Connect with the region	High	High	Low	BRT provides connectivity to a greater number of locations.
	Enhance mobility for transit-dependent users	Low	High	Low	BRT provides service to a greater number of transit-dependent users.
Economic Development	Connect key activity centers to entice development	Low	Low	High	DMU will provide better conduit to entice development.
	Support neighborhood revitalization through station area investment and development	Low	High	Low	BRT provides service to a greater number of existing neighborhoods.
	Support local planning initiatives	Low	Low	High	DMU more directly supports local planning and redevelopment initiatives.
Sustainability	Increase transportation options and reduce auto-dependency	Low	High	Low	BRT serves more riders than the DMU and connects with more transit centers.
	Promote the protection, preservation and access to key environmental assets	Low	High	High	BRT and DMU result in minimal environmental impacts while increasing access to environmental assets.
	Promote workforce development in the study area through better job access and direct transit jobs	Low	High	High	BRT provides more regional transit options, which provide better job access. The DMU will provide more jobs during construction.

High
Medium
Low

Technical Output from Alternatives

Technical Output	Express Bus	Bus Rapid Transit (BRT)	Diesel Multiple Unit (DMU)
Daily ridership	250	1,200-1,900	500-1,000
Capital Cost	Dependent on level of capital investment	$23,670,000	$81,180,000
Operating Cost	$2,517,000	$2,785,000	$6,960,000 - peak only $11,430,000 - all day
End to end travel time	Varies depending on peak and off-peak	33 minutes, 44 seconds	30 minutes

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Locally Preferred Alternative

A long-term vision for rail and supporting bus services in the corridor advanced through a phased approach to implementation.

The appropriate LPA must serve both urban and suburban users and a phased approach to transit development is essential to serving both markets. While rail is the long-term goal for transit enhancement, shorter term strategies have been identified to prime the area for enhanced transit.

Near-Term Strategies

- Advance Prospect MAX: The Prospect corridor is currently being studied for infrastructure enhancements similar to those along the Troost MAX line.
- Expand and enhance existing express bus service along U.S. 71, leading to express BRT on U.S. 71.
- Continue negotiations with host railroads to facilitate the implementation of near-term commuter DMU service.
- Develop funding solutions for expanded corridor transit service.

Diesel Multiple Units (DMU)

DMUs are rail cars that are self-propelled - no large locomotive engine is required. Using dual cab train set configurations, DMUs are capable of running in the reverse direction which eliminates the need for turnaround tracks. These vehicles are compliant with requirements from the Federal Railroad Administration (FRA) for trains operating on active freight tracks.

Long-Term Strategies

- Expand and enhance commuter DMU operations.
- Identify and advance a U.S. 71 corridor fixed-guideway transit solution.

Bus Rapid Transit (BRT)

Bus Rapid Transit takes different forms depending on the level of investment. KCATA's MAX service is an example of what can be offered through lower investment bus rapid transit. Higher investment bus rapid transit aims to provide a service similar to rail by offering bus-only lanes, enhanced bus stations/amenities and branding. A higher end investment is what is being considered for U.S. 71.

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Next Steps

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The next steps for implementing a comprehensive system strategy for Jackson County include the following for the U.S. 71 corridor:

- Advance design and federal funding request for Prospect BRT.
- Advance environmental and design studies for near-term express bus and rail solutions, contingent upon local authorization and funding.
- Develop plan for a local funding mechanism to support program implementation.

Additional Studies

KCATA Downtown Transit Study

- Determine what short-term route changes need to be made.
- Determine potential longer-term improvements such as new transit centers, superstops, a transit mall to best support downtown activities and development.

Kansas City Streetcar

- Continue design and construction of downtown route.
- Finalize station area locations and begin design of stations.
- Proceed with planning of future routes.