3.5 Environmental Justice

This section discusses the potential adverse human health or environmental effects the proposed strategies may have on minority and low-income populations including those covered by the Executive Order on Environmental Justice, Title VI, Title VIII, and The Americans with Disabilities Act (ADA).

What is the Environmental Justice?

In early transportation projects, many of the impacts affected minority and/or low-income populations in greater ways than other populations. This has been partly attributed to these populations and neighborhoods being located near downtowns which were the target of transportation projects. Typically, these neighborhoods are perceived to lack political power and representation. As a result minority and low-income populations and neighborhoods were impacted more often than other populations and neighborhoods.

Environmental Justice regulations were established to address disproportionately high and adverse human health or environmental effects that projects funded by the federal government may have on minority and low-income populations. The Environmental Justice requirements were established by Executive Order 12898 entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" in 1994. This mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of proposed projects on minority and low-income populations. Environmental Justice builds on Title VI of the Civil Rights Act of 1964 which declares that discrimination on the basis of race, color, or national origin shall not occur in connection with programs and activities receiving federal funding assistance. Environmental Justice has three guiding principles:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental impacts,

Title VI of the Civil Rights Act of 1964:

Title VI prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.

Title VIII of the Civil Rights Act of 1968:

Title VIII (Fair Housing Act) prohibits discrimination in the sale, rental, and financing of dwellings based on race, color, religion, sex, or national origin.

Americans with Disabilities Act (ADA) of 1990:

ADA prohibits discrimination based on disability.

Disproportionately High Defined:

The adverse effect is predominately felt by minority and/or low-income populations or the adverse effect is noticeably more severe or greater in magnitude than the adverse effect that will be suffered by non-minority and/or non-low-income populations.

including social and economic effects on minority and low-income populations.

- Ensure full and fair participation by all potentially affected communities in the decision-making process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Environmental Justice Populations Defined:

Those populations that are minority and/or low-income.

What Groups are Included in Environmental Justice Analysis?

For the analysis of Environmental Justice, minority populations are defined as any person who is Black, Hispanic, Asian American, American Indian, or Alaskan Native. Low-income populations are defined as those households with a total income at or below the U.S. Department of Health and Human Services poverty guidelines of $21,200 (in 2008) for a family of four. The guideline was $17,030 for a family of four at the time of the 2000 Census. Whether or not they fit the definition of an Environmental Justice population, all groups and individuals have the right to access and participate in the transportation decision-making process as protected by Title VI of the Civil Rights Act.

Minority Populations Defined:

Those persons who are Black, Hispanic, Asian American, American Indian, or Alaskan Native.

How Did The Study Team Involve Environmental Justice Populations?

Both Federal and State Environmental Justice policies stress that early and ongoing public outreach is a vital component of the Environmental Justice process. The Study Team held two rounds of public outreach prior to the publication of this DEIS. Public meetings or listening posts allow members of the public to speak one to one with the Study Team. All meetings were held in an open house format over two to three hours and members of the public could stop by at any time during the meetings. The first round of public outreach was held during September 2008, which included two weekday evening public open houses and two Saturday morning public coffee and open houses. The September 2008 public outreach was held at the following locations.

Low-Income Populations Defined:

Those households with a total income at or below the U.S. Department of Health and Human Services poverty guidelines of $21,200 (in 2008) for a family of four.

- St. Paul's School of Theology, Holter Center Cafeteria, 5123 E. Truman Road, Kansas City

- Truman High School, 3301 S. Noland Road, Independence
- Central High School, 3221 Indiana Avenue, Kansas City
- Don Bosco Senior Center, 580 Campbell Street, Kansas City

The Study Team encouraged the public to comment on the study at all meetings. Prior to the public outreach activities, newsletters and/or postcards were sent to homes and businesses near the corridor including all minority and lower income households. Both the newsletters and the postcards were translated into Spanish and Vietnamese. In addition, flyers were mailed to umbrella organizations, agencies, businesses, and public officials. Media releases were sent by MoDOT to local media outlets in the Kansas City area. All locations were ADA accessible with public transit access, enhancing the opportunity for lower income citizens or people who do not own automobiles to attend.

The Study Team revised their approach for the second round of public outreach in order to increase public participation. The second round of public outreach was held in January 2009, which included one online public meeting and one open house public meeting. The open house public meeting was held at St. Paul's School of Theology. The details of the open house public meeting and on-line meeting were posted on the Kansas City Scout electronic variable message signs along the corridor. **Chapter 4** discusses the public outreach efforts in more detail.

Low-income, minority, and other community members will have further chances to comment on the study through a well advertised public hearing process and public comment period during the review process of this FTEIS.

What Minority and Low-Income Populations are in the Study Area?

Based on the demographic profile of the Study Area discussed in **Section 3.2**, the Study Team conducted an analysis to identify Environmental Justice populations using U.S. Census

data. U.S. Census Bureau Census 2000 block group and block level data was used as the primary data source for the Environmental Justice analyses.

An evaluation of population characteristics indicates that there are Environmental Justice populations living within the Study Area. The ethnicity/race characteristics are shown in **Table 3.5.1** and the income levels and poverty status profiles are shown in **Table 3.5.2**

Table 3.5.1 Ethnicity/Race Assessment

	Study Area	Jackson County	Missouri
Total Persons	57,590	654,880	5,595,211
Total Minority Population as a Percent of All Persons	44.2%	32.30%	16.20%
White Population (Non-Hispanic) as a Percent of All Persons	55.8%	67.70%	83.80%
African American Population (Non-Hispanic) as a Percent of All Persons	32.3%	22.80%	11.10%
American Indian Population (Non-Hispanic) as a Percent of All Persons	0.4%	0.50%	0.40%
Asian Population (Non-Hispanic) as a Percent of All Persons	1.9%	1.30%	1.10%
Native Hawaiian Population (Non-Hispanic) as a Percent of All Persons	0.3%	0.10%	0.10%
Hispanic Population (all races) as a Percent of All Persons	7.1%	5.30%	2.10%
Other Race Alone as a Percent of All Persons	0.0%	0.30%	0.10%
Two or More Races as a Percent of All Persons	2.2%	2.10%	1.40%

Source: U.S. Census Bureau, Census 2000. Study Area data is for the Census Block Groups.

Table 3.5.2 Income Levels and Distribution

	Study Area	Jackson County	Missouri
Median Household Income	$28,467	$39,277	$37,934
Per Capita Income	$16,567	$20,788	$19,936
Individuals Below Poverty Level[1]	17.80%	11.90%	11.70%

Source: U.S. Census Bureau, Census 2000. Study Area data is the Census Block Groups.
[1]Based on the poverty guideline for the year 2000.

The percent of minorities living in the Study Area is approximately 40 percent. **Figure 3.5.1** at the end of this chapter shows the percent of the population that is minority by block group. **Figure 3.5.1** indicates that the highest concentration of minorities living in the Study Area is from the eastside of the downtown loop to approximately U.S. 40; over 60 percent of the population in this area is part of a minority group. The data shows a difference in the makeup of the population in the western portion of the Study Area in Kansas City, Missouri compared to the eastern portion of the Study Area in Independence, Missouri. Generally, as one travels from downtown Kansas City, Missouri in the west to Independence, Missouri in the east the percent of minorities living in the Study Area decreases.

What is a Micropolitan Statistical Area?

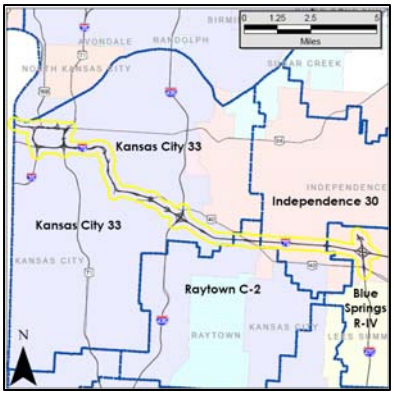
An urban area with a population of least 10,000 persons, but less than 50,000 persons.

The U.S. Census Bureau defines a substantial low-income population as an area where 20 percent or more residents have an annual income below the poverty level. Median income for the Study Area is $31,714. Per capita income for the I-70 Study Area is $16,766. According to Census 2000 data, 19 percent of families in the Study Area were below the poverty level, while this is not a substantial low-income population by definition it does indicate that a large low-income population is present in the Study Area. **Figure 3.5.2** at the end of this chapter shows the percent of the population that is low income by block group. The analysis identified 21 block groups with substantial low income populations.

The Study Team also analyzed data from Mid-America Regional Council's Metro Dataline, www.metrodataline.org. This data provides an estimate of children five to 17 years of age in poverty by school district for 1995, 1997, and 1999 to

What counties are in the Kansas City Metropolitan Statistical Area?

The 15 counties in the Kansas City MSA are: Clinton, Caldwell, Platte, Clay, Ray, Jackson, Lafayette, Cass, and Bates in Missouri and Leavenworth, Wyandotte, Johnson, Franklin, Miami, and Linn in Kansas.



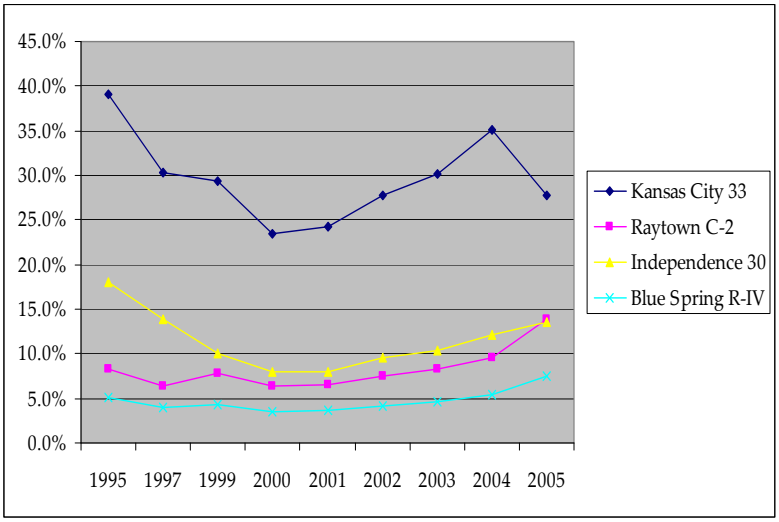
School District Boundaries

2005. Estimates are included for the 15 counties in the Kansas City Metropolitan Statistical Area (MSA) (four counties were added in 2003), the two counties in the Micropolitan Statistical Areas (Atchison, Kansas and Warrensburg, Missouri) that added to the Kansas City MSA, form the new Combined Statistical Area (CSA) of Kansas City-Overland Park-Kansas City, and Douglas County, Kansas.

The Study Team looked at the data for the four school districts that serve the Study Area; Kansas City 33, Raytown C-2, Independence 30, and Blue Springs R-IV. According to the data, the Kansas City 33 School District had the largest percentage of children in poverty in 2005 at approximately 28 percent when comparing the four districts. Independence 30 and Raytown C-2 had approximately 14 percent and Blue Springs R-IV had approximately eight percent. Historically, all four school districts have seen increases in the percent of children in families in poverty at varying rates since 2000, except Kansas City 33. Kansas City 33 experienced a decrease in the percent of children in families in poverty from 2004 to 2005.

Prior to 2000, the percent of children in families in poverty had been decreasing, except from 1997 to 1999. From 1997 to 1999 the Raytown C-2 and the Blue Springs R-IV school districts saw an increase in the percent of children in families in poverty. **Figure 3.5.3** shows the percentage of children in families in poverty for each of the four school districts for the available years.

Figure 3.5.3 Children in Families in Poverty



What are the Effects of Each Strategy on Environmental Justice Populations?

Potential Environmental Justice effects are defined as disproportionately high and adverse human health or environmental effects of proposed projects on minority and low-income populations.

No-Build Strategy

The No-Build Strategy will have minimal adverse affects on segments of the population including minorities and low-income persons. The primary effects would likely be ongoing congestion throughout the corridor along with associated noise and air quality issues as discussed in other sections of this document.

Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy may have adverse affect on minorities and low-income persons living near key bottlenecks. The potential impacts will be dependent on the improvements needed at each bottleneck. If an interchange requires ramps to be lengthened, there may be no impact to the surrounding population. If modifications to interchanges are required there will be impacts to the surrounding populations.

The key bottlenecks most likely to have an adverse affect on minorities and low-income persons are those in the Urban Sub-Area. This Sub-Area has some of the highest concentrations of minorities and low-income persons living in the Study Area and two of the worst bottlenecks, the Benton and Jackson curves are located in this Sub-Area. **Figure 3.5.1** and **Figure 3.5.2** show the percent of minorities and low-income persons by 2000 Census Block Group for the Study Area.

The population living in the block group adjacent to the Benton curve is 60 to 80 percent minorities and 20 to 40 percent of the population is below the poverty line. The population living in the block groups adjacent to the Jackson Curve is 60 to over 80 percent minorities and 20 to 60 percent is below the poverty line. The most likely impacts in the Urban Sub-Area are relocations and increased noise, discussed further in **Section 3.4 Relocations** and **Section 3.10 Noise**.

Add General Lanes Strategy

The Add General Lanes Strategy will have adverse affect on minorities and low-income persons living along the corridor. Like the Fix Key Bottlenecks Strategy the most likely impacts to minorities and low-income persons are in the Urban Sub-Area. There will be additional right of way required for this strategy which will result in adverse impacts to all populations including minorities and low-income populations in the Study Area. The most likely impacts to Environmental Justice populations would be in the Urban Sub-Area are relocations and increased noise, discussed further in **Section 3.4 Relocations** and **Section 3.10 Noise**.

Transportation Improvement Corridor Strategy

The Transportation Improvement Corridor Strategy will have adverse affect on minorities and low-income persons living along the corridor. Like the other Build Strategies the most likely impacts to minorities and low-income persons are in the Urban Sub-Area. There will be additional right of way required for this strategy which will result in adverse impacts to the all populations including minorities and low-income

populations along the corridor. The most likely impacts to Environmental Justice populations would be in the Urban Sub-Area are relocations and increased noise, discussed further in **Section 3.4 Relocations** and **Section 3.10 Noise**.

Identified Preferred Strategy

The Identified Preferred Strategy may have adverse affect on minorities and low-income persons living near key bottlenecks west of I-435. The potential impacts will be dependent on the improvements needed at each bottleneck. If modifications to interchanges are required there will be impacts to the surrounding populations.

The key bottleneck locations most likely to adversely affect minorities and low-income persons are those in the Urban Sub-Area. This Sub-Area has the highest concentrations of minorities and low-income persons living in the Study Area and two of the worst bottlenecks, the Benton Curve and the Jackson Curve, are located in this Sub-Area. **Figure 3.5.1** and **Figure 3.5.2** shows the percent of minorities and low-income persons by 2000 Census Block Group for the Study Area.

The population living in the block group adjacent to the Benton curve is 60 to 80 percent minorities and 20 to 40 percent of the population is below the poverty line. The population living in the block groups adjacent to the Jackson Curve is 60 to over 80 percent minorities and 20 to 60 percent is below the poverty line. The most likely impacts in the Urban Sub-Area are relocations and increased noise, discussed further in **Section 3.4 Relocations** and **Section 3.10 Noise**.

How Will Analysis of Environmental Justice Proceed Into The Second Tier Studies?

The Second Tier studies will further evaluate and refine the impacts that the Selected Strategy will cause to Environmental Justice populations, including those protected under the Executive Order on Environmental Justice, Title VI, Title VIII, and the ADA. As a part of the Second Tier studies the strategy and its footprint will be refined. The Second Tier studies will make a final determination if there are potential

disproportionate and adverse affects on minority and/or low income populations. In addition, appropriate mitigation measures will be evaluated for disproportionate impacts on minorities and/or low-income persons living in the Study Area. Close attention will need to be paid to addressing potential impacts to Environmental Justice populations as part of all of the Second Tier studies, but especially those in the Urban Sub-Area.

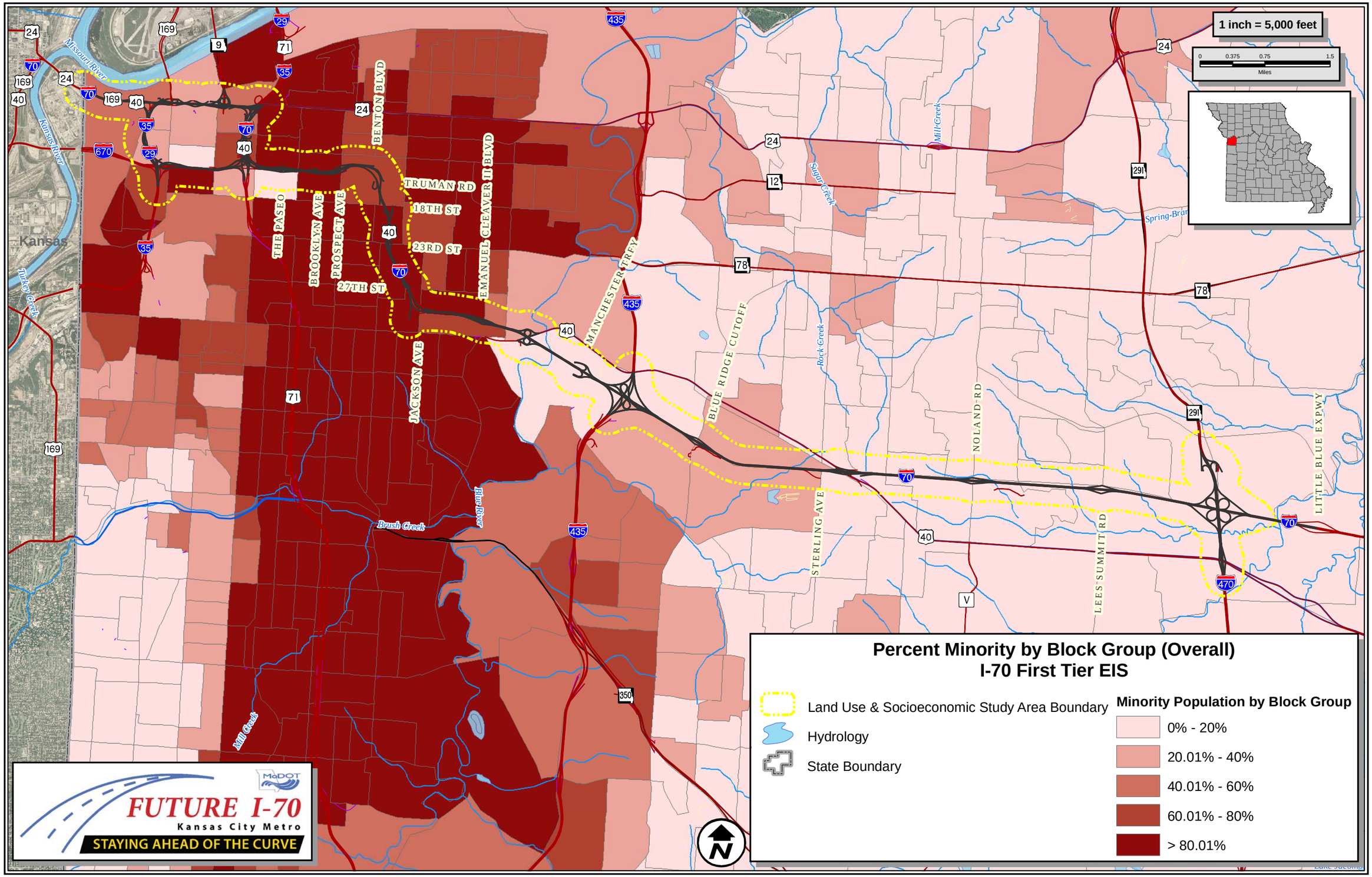


Figure 3.5.1 Percent Minority by Block Group - Overall

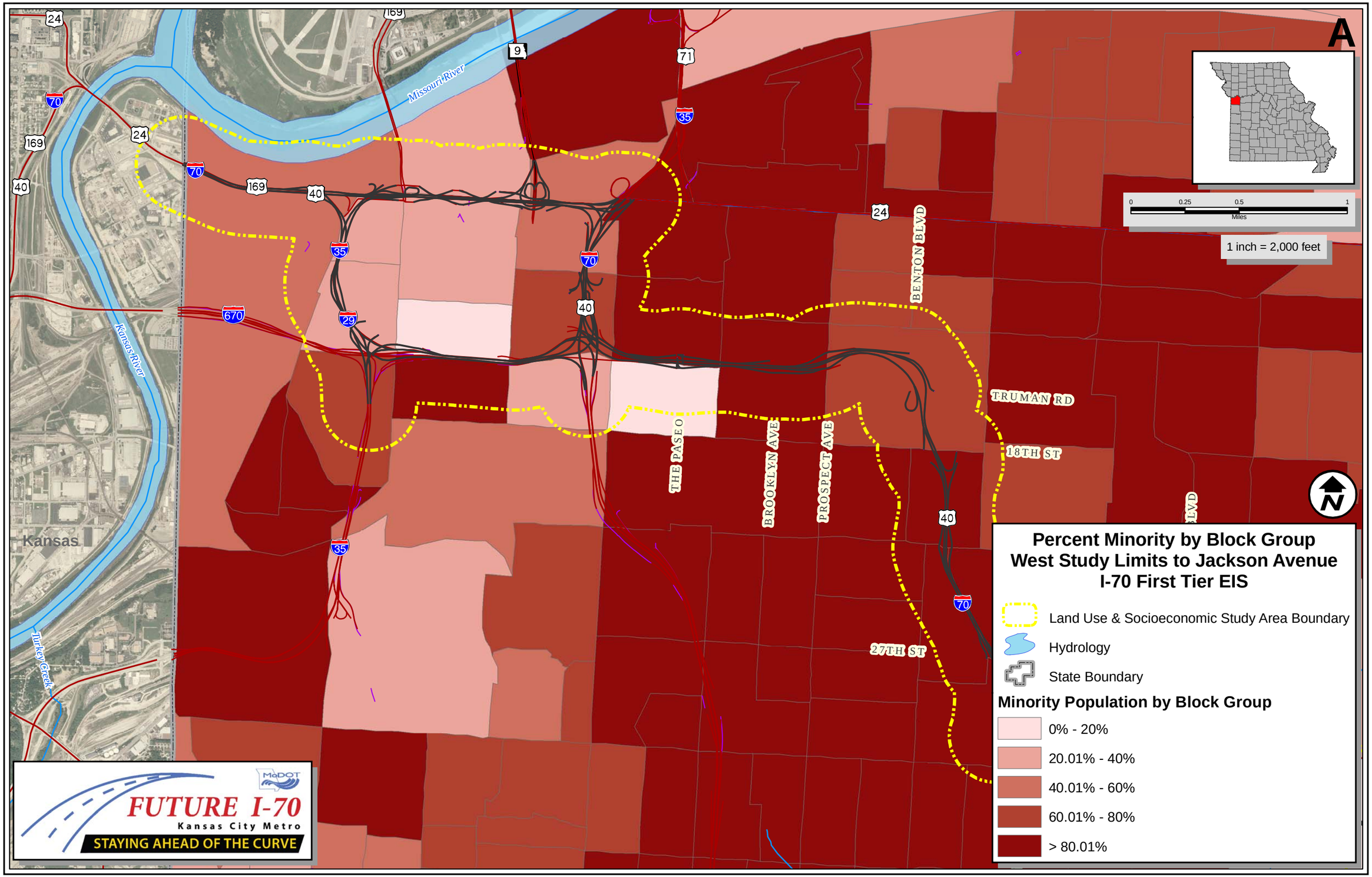


Figure 3.5.1 Percent Minority by Block Group - West Study Limits to Jackson Avenue

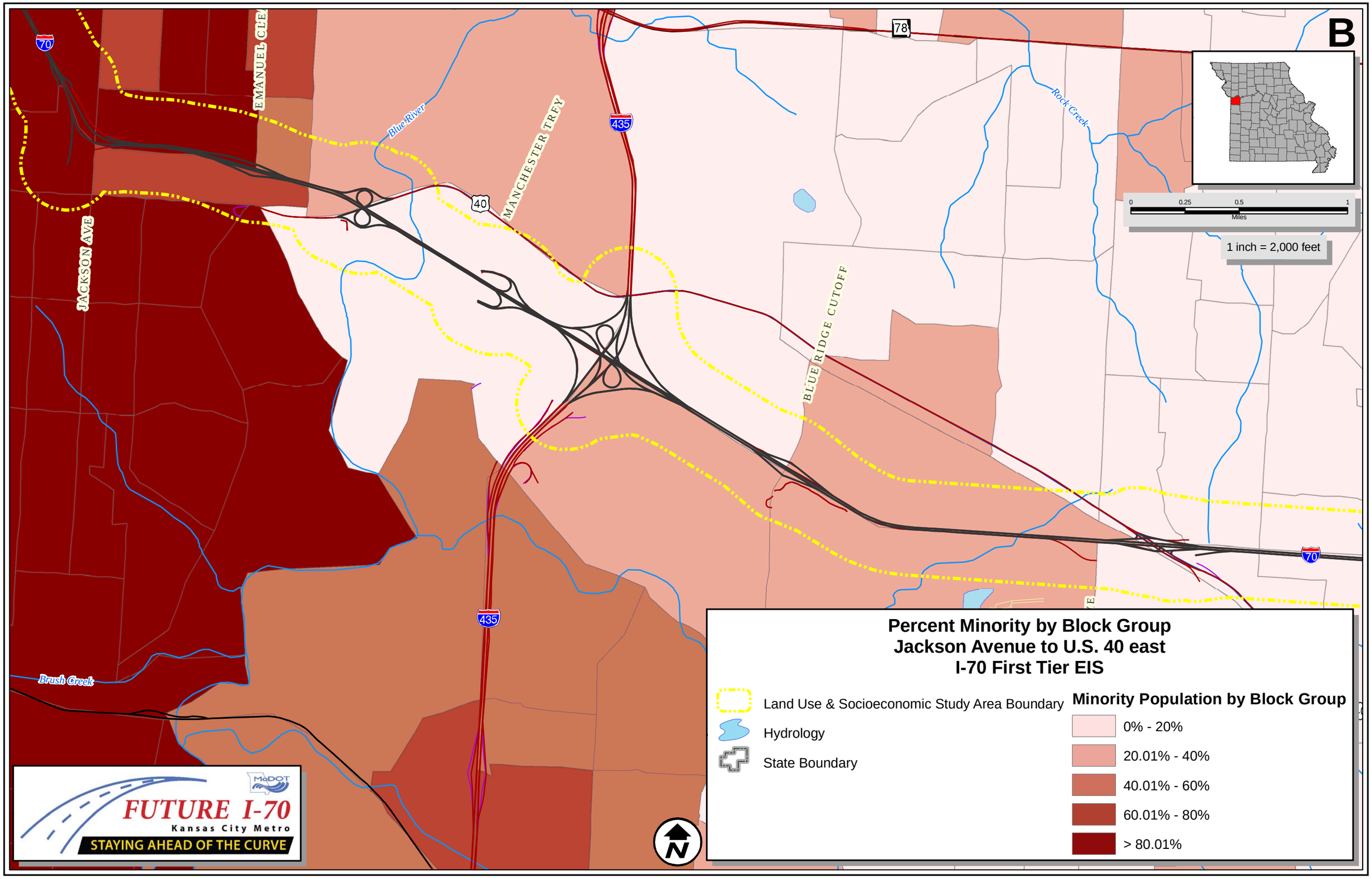


Figure 3.5.1 Percent Minority by Block Group - Jackson Avenue to U.S. 40 east

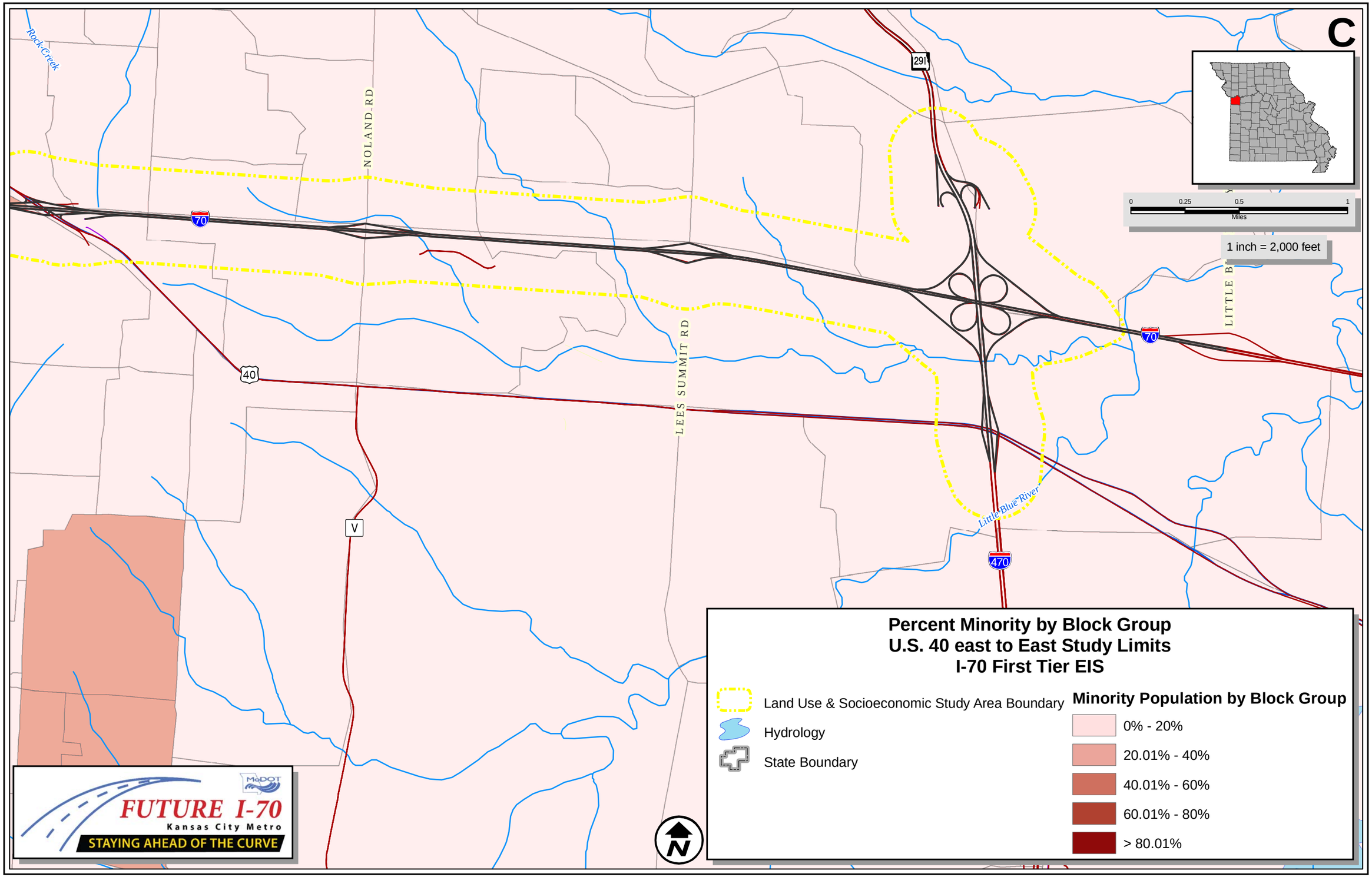


Figure 3.5.1 Percent Minority by Block Group - U.S. 40 east to East Study Limits

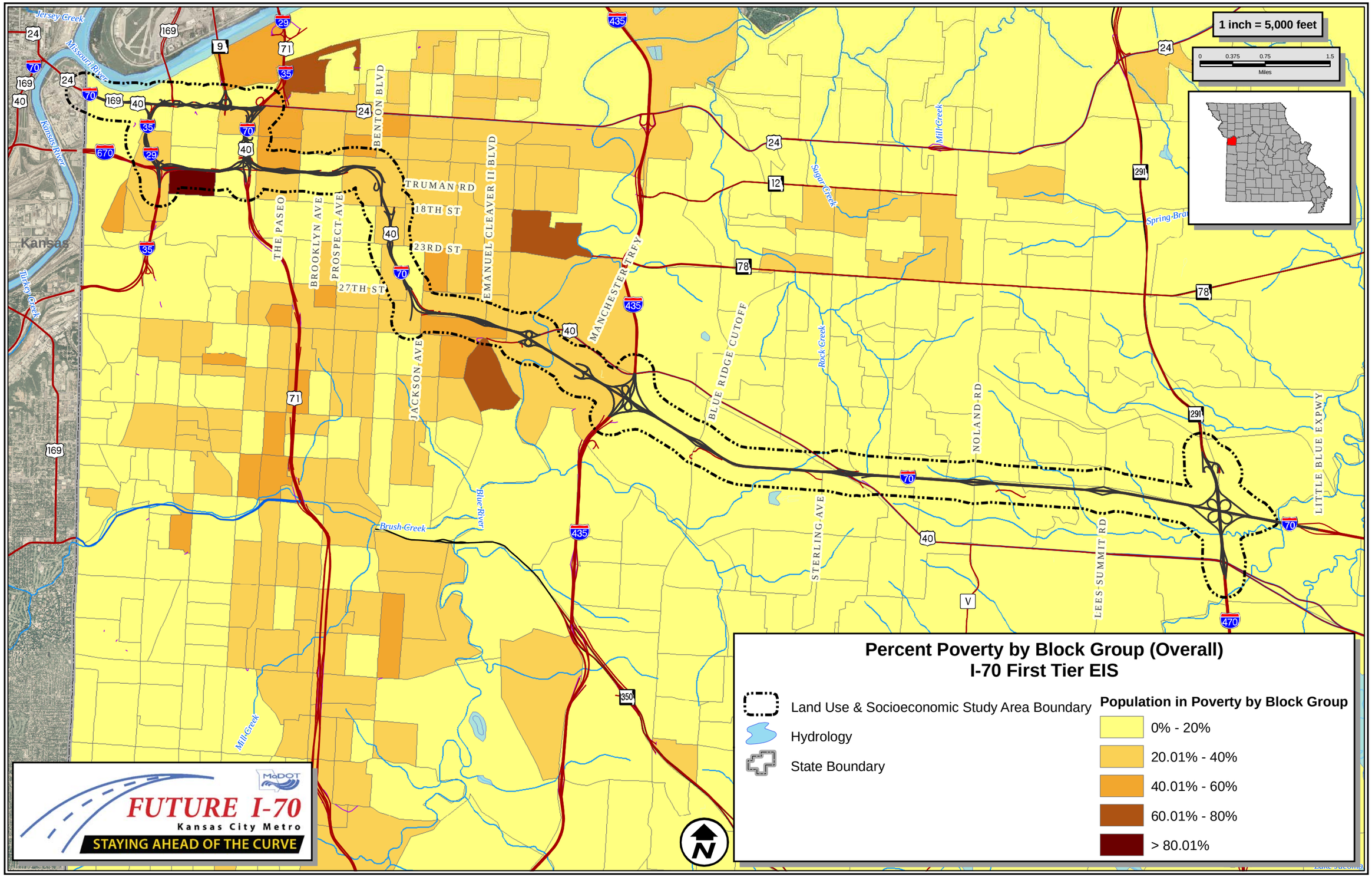


Figure 3.5.2 Percent Poverty by Block Group - Overall

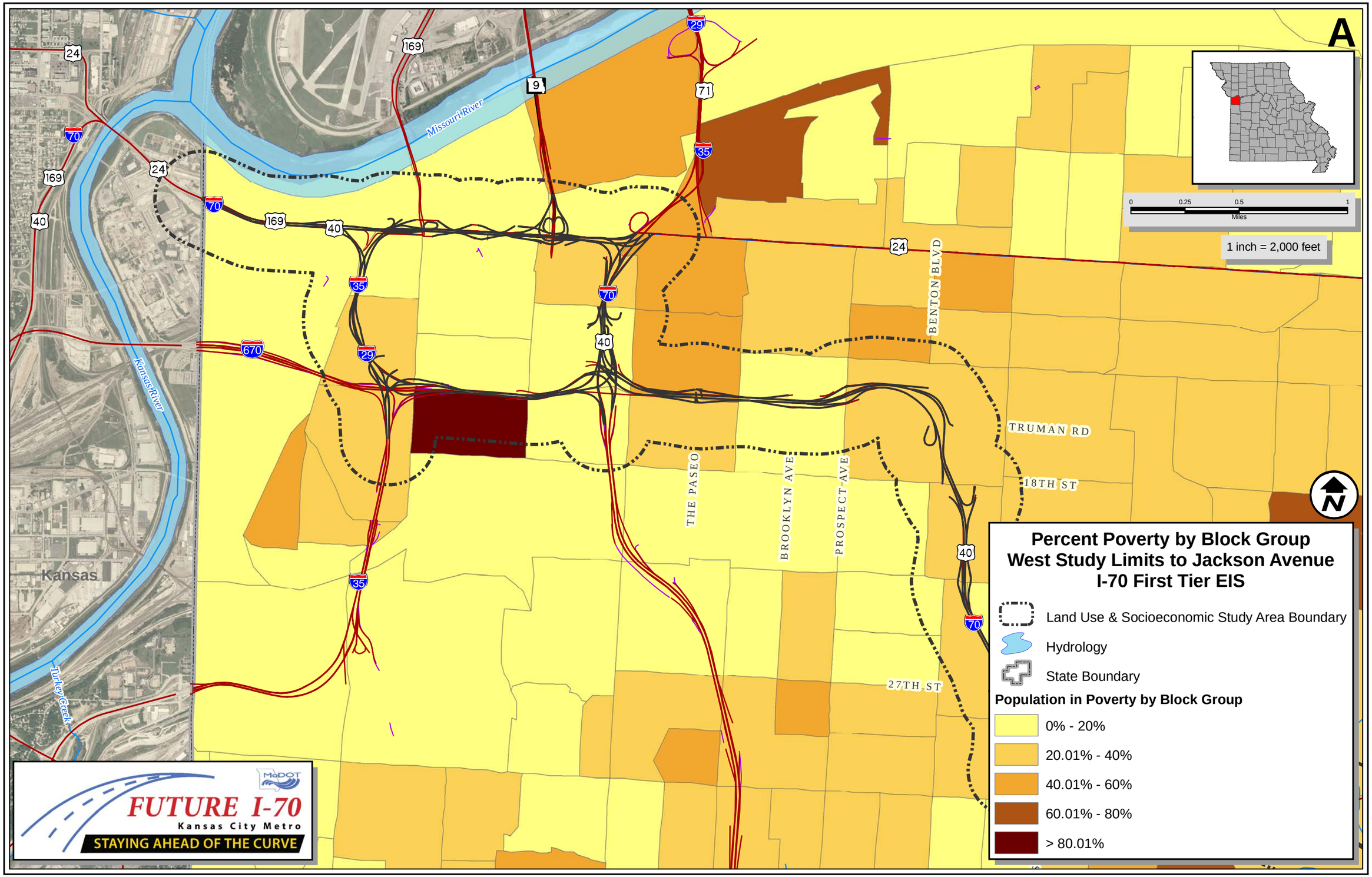


Figure 3.5.2 Percent Poverty by Block Group - West Study Limits to Jackson Avenue

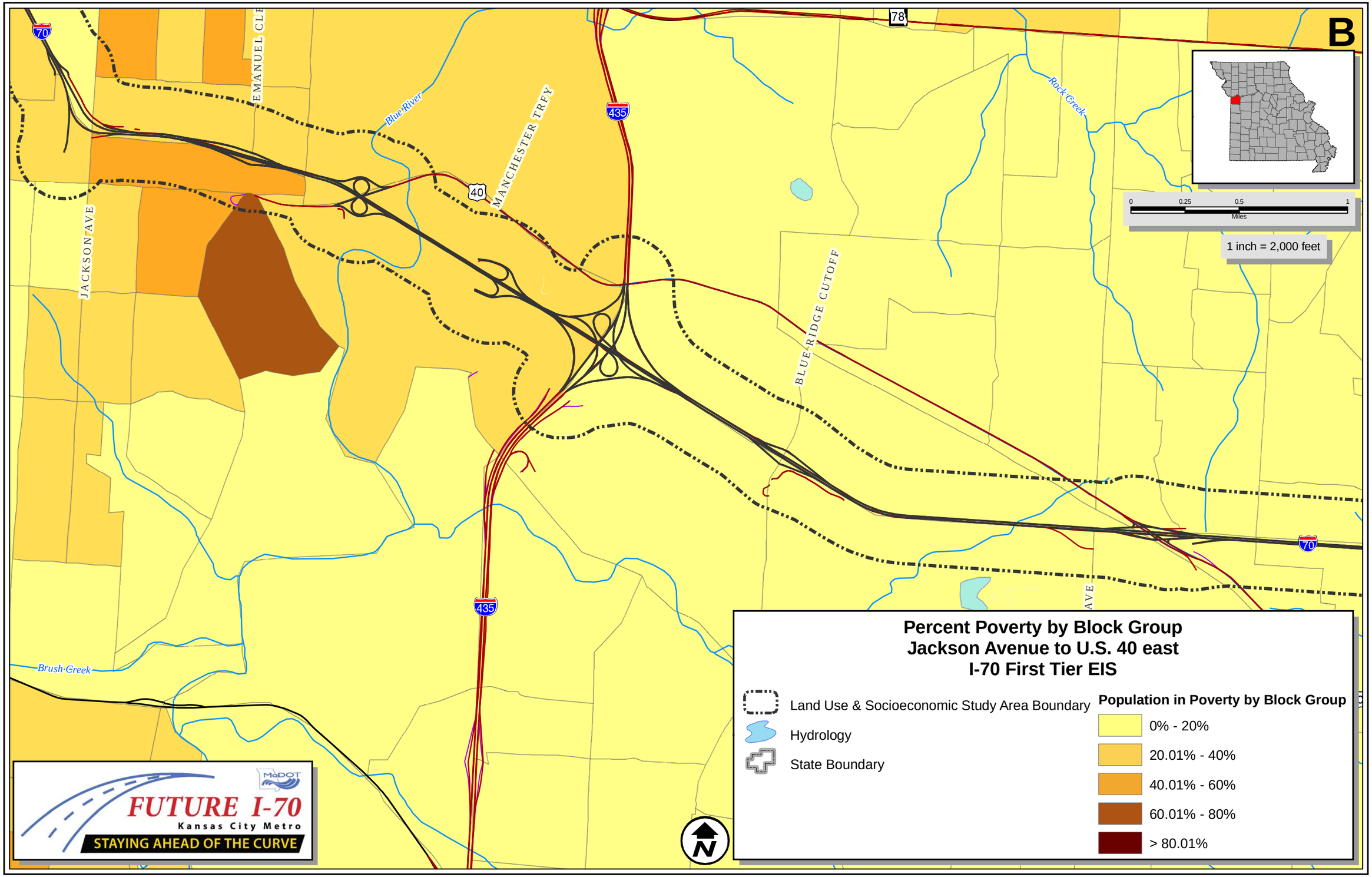


Figure 3.5.2 Percent Poverty by Block Group - Jackson Avenue to U.S. 40 east

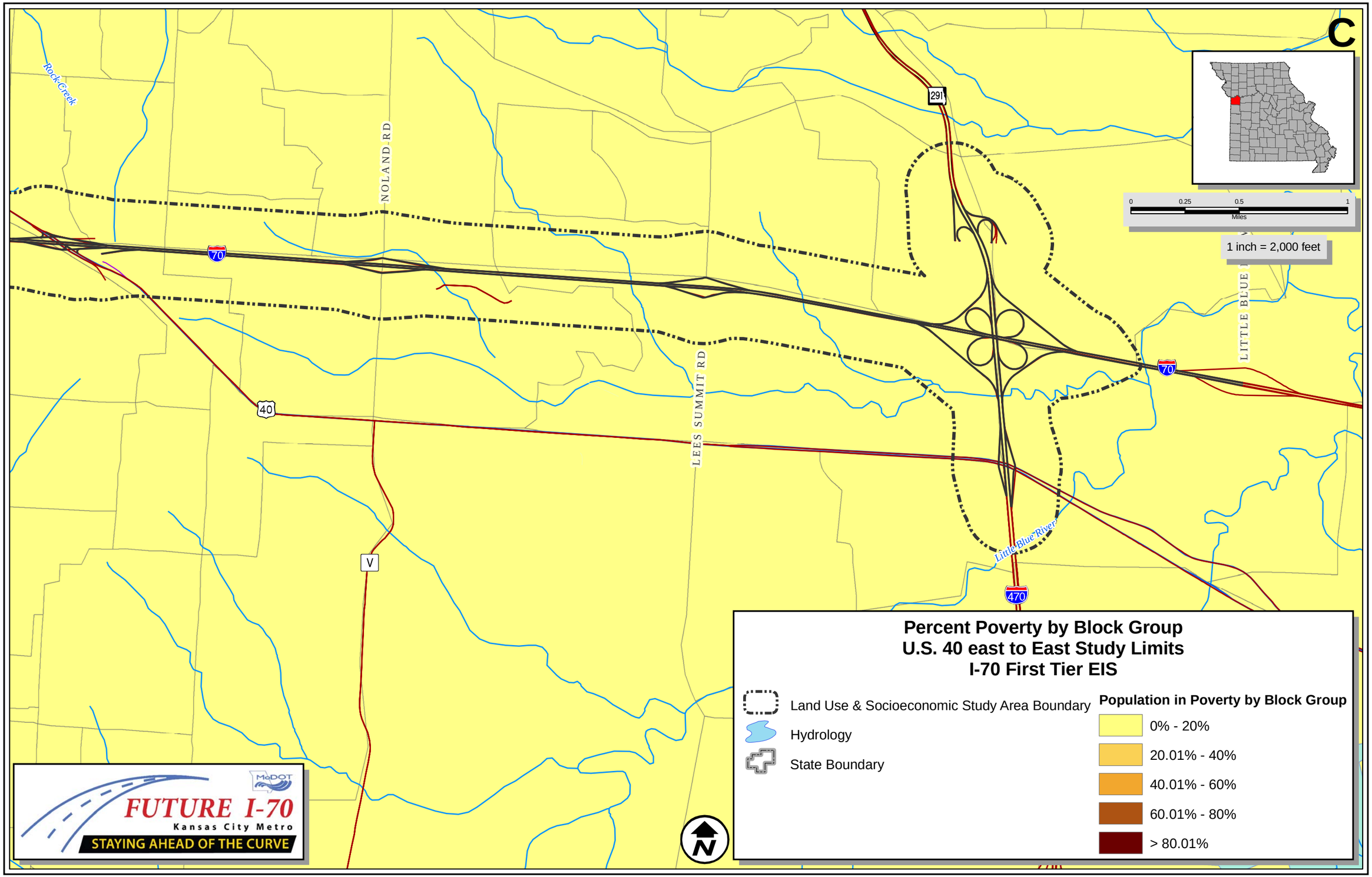


Figure 3.5.2 Percent Poverty by Block Group - U.S. 40 east to East Study Limits

3.6 Economics

This section discusses the effects of proposed I-70 improvements on businesses, jobs, taxes, and freight movements.

What are the Economic Characteristics of People Who Live in the Study Area?

The population of the Study Area has lower average income levels and a greater percentage of people and families in poverty than the overall populations of the City of Kansas City, City of Independence and Jackson County. **Table 3.2.2** and **Figures 3.2.3** and **3.2.4**, located in **Section 3.2 Community and Neighborhood Effects**, provide more detail on the economic characteristics of people who live in the Study Area.

There is no current data available on the level of employment in the Study Area. With the current economic downturn, unemployment rates have been rising throughout the Kansas City area. **Table 3.6.1** shows employment and unemployment information for February 2009 for the jurisdictions in the Study Area.

Table 3.6.1 Local Area Unemployment and Employment Information

	Labor Force	Employed	Unemployed	Unemployment Rate
Jackson County	334,815	302,383	31,841	**9.5%**
City of Kansas City	236,658	210,853	25,805	**10.9%**
City of Independence	58,382	53,172	5,210	**8.9%**

Source: Missouri Local Area Unemployment Statistics (LAUS) from Missouri Economic Research and Information Center (MERIC) in cooperation with U.S. Department of Labor, Bureau of Labor Statistics (February 2009).

Unemployment for the jurisdictions in the Study Area has risen between three and four percent between February 2008 and February 2009. Given the lower average income levels and higher percentage of people who live in poverty in the Study Area, it is reasonable to assume that the unemployment rate in the Study Area is higher than the rates shown in the table above.

What Types of Businesses are Located in the Study Area?

The Study Area features very diverse business activity including:

- Major commercial office towers
- Medium and light industrial facilities
- Local and chain restaurants
- Strip malls and big box stores
- Small business locations
- Hotels and motels
- A variety of service businesses such as gas stations, auto repair, hair stylists, and small professional offices

The following paragraphs discuss the typical businesses found in each of the five Sub-Areas of the Study Area.

Oppenstein Brothers Park in Downtown

Downtown Sub-Area

The Downtown Sub-Area includes the central business district for Kansas City including several office towers and complexes. The area also includes commercial entertainment/restaurant districts associated with the River Market and the Sprint Center/Power and Light District. There are a number of industrial properties located next to I-70 near the western end of the Study Area and on the east side of the downtown loop. Other business uses in the Downtown Sub-Area include small to medium size retail and wholesale businesses.

Urban Sub-Area

U.S. Postal Distribution Center

Business uses in the Urban Sub-Area include smaller retail and industrial facilities. The retail facilities include local stores in small plazas, gas stations, restaurants, and service businesses including auto repair, dry cleaning, and hair and nail salons. These retail businesses tend to be scattered among neighborhood and industrial land uses. The industrial facilities include a variety of small scale manufacturing such as plating, printing, cabinets, furniture, dairy, bakery, and metal works. One large facility adjacent to I-70 at the Benton curve is a United States Post Office distribution facility.

I-435 Sub-Area

The I-435 Sub-Area features a mix of transportation industry uses and hotels/motels. There are two large trucking company sites along with several truck or equipment rental, repair, or suppliers. The I-70 Drive-In is also located in this area.

Suburban Sub-Area

Businesses in the Suburban Sub-Area are typically found close to the interchanges on I-70. This area features a number of small to medium strip shopping centers including the Wal-Mart shopping center at the U.S. 40 interchange. The area also includes scattered motels, gas stations, restaurants, and storage facilities. There are a number of small office buildings near the Noland Road interchange.

Bass Pro Shops

I-470 Sub-Area

Businesses in the I-470 Sub-Area are dominated by large big-box retailers and shopping centers. These include the new Bass Pro Shops development and Independence Center.

How Important is I-70 to the Local, Regional, and National Economies?

I-70 serves a wide variety of transportation and freight uses. It is vital to the local economy as it transports thousands of workers to and from their jobs in the Kansas City area and provides access to hundreds of businesses located along the corridor and in downtown Kansas City. I-70 is also important to the regional and national economies as it provides an important connection for the movement of goods.

Business Stakeholder Discussions

The Study Team met with representatives of a number of business groups including chambers of commerce and local economic development groups and agencies. The purpose of these meetings was to gain a greater understanding of how the existing I-70 freeway affects local and regional businesses and the economy. A common theme in these discussions was how

I-70 is a key part of the interstate system in the Kansas City area and affects the daily lives of thousands of residents.

I-70 provides an essential connection for freight transportation and serves local as well as national businesses. Stakeholders emphasized the importance of avoiding congestion on I-70 and of fluid freight movement throughout the area. They are concerned about paying the increased costs for goods and employees that are tied up in traffic. The interchange connections between I-70 and other major routes are important to the local economy and must function well to allow freight and employees to move around the area with ease.

Business and economic stakeholders were concerned with several issues on I-70 including congestion at key bottleneck locations, the need for long-term repairs and redesign, and the desire for more public transportation along the corridor. Other key I-70 economic related issues brought up by business and economic groups included:

- The importance of improving access points between I-70 and downtown
- The potential for I-70 to be a true gateway entrance into downtown Kansas City
- The effect of noise on property values adjacent to the freeway
- The importance of proper signing so that travelers can find their way to businesses and amenities
- Opportunities for development and redevelopment including the areas around I-435 and the Truman Sports Complex
- Linking of development across I-70 between downtown and the River Market

Stakeholders are interested in Development/ Redevelopment around I-435 and the Truman Sports Complex.

Importance of I-70 to Regional and National Freight

As discussed in greater detail in the Purpose and Need Technical Memorandum located in **Appendix B**, I-70 is an important route for the shipment of national and regional freight. Kansas City's mid-continent location makes the region a key location for the movement of goods. I-70 is an important part of that freight movement system. The origin-

destination study completed for the I-70 Statewide Study showed that approximately 30 percent of trucks entering the Kansas City area on I-70 from the east were through trips that exited the Kansas City area on I-70 to the west. Similarly, approximately 35 percent of trucks entering the Kansas City area from I-70 on the west were through trips that exited via I-70 on the east. Trucks hauling freight through the area tend to avoid peak hour congestion on routes like I-70 when possible. Nonetheless, congestion delays on I-70 are a cost to national freight carriers as well as local business owners and residents.

What is an Origin-Destination Study?

An origin-destination study is a survey of motorists and/or truck drivers who are driving on a particular roadway or set of roadways. Motorists are stopped at a logical point such as a rest area or major intersection and asked questions about their trips. The key questions typically include where they live, where they are coming from, where they are going to and whether they may stop along the way.

How Would the No-Build Strategy Affect Businesses and Jobs in the Study Area?

The No-Build Strategy would not have a direct effect on businesses and jobs as it does not include the relocation of any businesses. However, under the No-Build Strategy, the congestion, bottleneck, and goods movement issues discussed in **Chapter 1** and discussed above would not be addressed. Congestion would continue to grow along I-70 and none of the long-term issues with roadway conditions and access would be addressed. As a result there would be indirect affects on businesses and jobs for the No-Build Strategy.

Congestion would continue to cost residents and businesses with a No-Build Strategy.

The thousands of residents that use I-70 on a daily basis to commute to work would continue to experience increasing congestion on their daily commute. This would result in more difficult access to jobs in the central parts of the Kansas City area and a potential reduction in the attractiveness of downtown as a location for employment. More downtown workers may also seek housing closer to downtown as a result.

The 2007 Texas Transportation Institute Study on Urban Mobility found that the cost of congestion in the Kansas City area was $256 million in 2005, or $309 dollars a year for each regular commuter during the peak periods. As a major highway in the Kansas City area, congestion on I-70 is part of this overall regional cost of congestion. The No-Build Strategy will not provide additional relief of the cost of congestion in the Kansas City area.

What is a logistics chain?

A logistics chain is the series of modes and connections used to transport a particular type of product or material. For example, a product may travel from a factory to a boat by truck. It may then be shipped overseas to another port. It may then be loaded on a train and travel across many states before being transferred to a truck for delivery to stores. Each step is a part of the overall logistics chain for the product.

Why is dependability of travel important to the trucking industry?

Many companies and freight haulers depend on just in time delivery of goods or materials. This means that a truck shipment is shipped to arrive right when it is needed. This reduces the need for warehouse and storage space. In order to efficiently carry out just in time deliveries, trucking companies need to be able to accurately predict the amount of travel time a shipment will take. When a certain roadway or route regularly has unpredictable travel times due to congestion and other factors, truckers cannot dependably rely upon it for just in time deliveries.

The No-Build Strategy may negatively affect jobs related to the freight trucking industry and for businesses that rely on I-70 for product delivery. Congestion causes travel time delays for the transportation and delivery of goods. This costs businesses because of increased fuel usage, wages for drivers stuck in traffic, lost productivity of trucks, and a reduction in the number of daily trips that truck drivers can make. Congestion also costs trucking firms and manufacturers because of the uncertainty it creates in the delivery process.

The 2005 MoDOT Freight Study reports, "In the freight industry, retail marketers (e.g. Wal-Mart) are often the influencing parties determining how their freight shipments move across the national and international transportation system. To them, reliability and dependability of the logistics chain and how dollar investment impacts trip time to speed the delivery process from production to customer represents the key critical component to their industry." Fuel consumption increases due to congestion and backups would affect both those traveling through the area on I-70 and local traffic. This would increase the cost of transporting goods and the cost for commuters to get to work.

The cost of congestion is felt by trucking companies, manufacturers, and individuals passing through the area. Overall effects on jobs may be minimal but the business costs are ultimately passed on to consumers in the form of higher prices to account for higher transportation costs.

How Would the Build Strategies Affect Businesses and Jobs in the Study Area?

The Build Strategies including the Identified Preferred Strategy would affect businesses and jobs in three key ways:

- By requiring businesses to relocate as part of the acquisition of new right of way
- By changing access near the location of specific businesses that could make it easier or more difficult for customers to reach the business
- By improving travel times and goods movement for businesses and workers through reduced congestion

The following paragraphs discuss the potential effects on businesses and jobs by each of the Build Strategies including the Identified Preferred Strategy. The Identified Preferred Strategy is the Improve Key Bottlenecks Strategy in the downtown loop and from the downtown loop to east of I-435. From east of I-435 to I-470, the Identified Preferred Strategy is one of either the Improve Key Bottlenecks Strategy or the Add General Lanes Strategy. The effects on businesses and jobs are discussed for each Sub-Area of the I-70 corridor as shown in **Figure 3.0**.

Downtown Sub-Area

The Improve Key Bottlenecks and Transportation Improvement Corridor Strategies would have similar affects on businesses and jobs in the Downtown Sub-Area. As discussed in **Section 3.4 Relocations**, the Improve Key Bottlenecks Strategy would relocate seven businesses in the Downtown Sub-Area while the Transportation Improvement Corridor would relocate eight businesses in this area. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate.

The Improve Key Bottlenecks and Transportation Improvement Corridor Strategies will also improve the flow of traffic to downtown, providing better access for goods movement and employees. Both strategies would include implementation of certain strategies from the downtown loop master plan that would improve circulation in the downtown loop and would also consolidate interchange access on the north and east legs of the loop. Changes to access in the downtown loop may change the routes people take to certain businesses. Further details on the potential downtown loop improvements will be determined in the Second Tier studies and more detail on the economic effects of changing access points in the downtown loop will be determined as part of that study. The Identified Preferred Strategy in the Downtown Sub-Area is Improve Key Bottlenecks and would have the same effects on businesses and jobs.

The Add General Lanes Strategy would have greater affects on businesses and jobs in the Downtown Sub-Area than the other

strategies. The Add General Lanes Strategy would relocate 21 businesses in the Downtown Sub-Area. This includes several light industrial properties near the U.S. 71/I-70 interchange. Most of these relocations are related to providing the missing ramps between I-70 and U.S. 71 in the southeast corner of the loop and between I-670 and I-35 in the southwest corner of the loop. The number of downtown area jobs that would need to be relocated for this strategy would be greater than the other strategies due to the higher number of business relocations and the type of businesses involved including light industrial properties. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate.

The Add General Lanes Strategy also would include implementation of certain strategies from the Downtown Loop Master Plan that would improve circulation in the downtown loop. A benefit of these strategies to businesses will be improved flow of traffic to downtown and improved movement of goods and employees. This strategy also would consolidate interchange access on the north and east legs of the loop. Further details on the potential features of the downtown loop improvements will be determined in the Second Tier studies and more detail on the economic effects of changing access points in the downtown loop will be determined as part of that study.

Urban Sub-Area

All Build Strategies would affect businesses and jobs through relocations in the Urban Sub-Area. The Improve Key Bottlenecks Strategy has the fewest anticipated business relocations (19) in this area and the fewest anticipated job relocations. The Identified Preferred Strategy is Improve Key Bottlenecks in this Sub-Area.

The Add General Lanes Strategy and the Transportation Improvement Strategy would have substantially higher business and job relocations. The Add General Lanes Strategy would relocate an estimated 31 businesses and the Transportation Improvement Corridor Strategy would relocate an estimated 47 businesses. All of the Build Strategies would improve the flow of traffic through the Urban Sub-Area

and to Urban Sub-Area businesses, providing better access for goods movement and employees.

I-435 Sub-Area

All Build Strategies including the Identified Preferred Strategy would have similar effects on businesses and jobs through the I-435 Sub-Area. Most of the effects would be due to relocations. The relocation estimates in this area are very similar for all strategies including 13 to 15 businesses. The impacted businesses include those near the U.S. 40 west and the Blue Ridge Cutoff interchanges. The potential relocations include both travel oriented businesses, such as hotels and restaurants, as well as a few local businesses. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate. The actual relocations may be reduced during detailed design in the Second Tier studies.

The existing committed I-435 interchange improvements are anticipated to include the closure of the Manchester Trafficway ramps to/from I-70. This would affect travel patterns in the area as discussed in the separate Interstate Access Justification Report prepared for that project.

Suburban Sub-Area

All Build Strategies would affect businesses and jobs through relocations in the Suburban Sub-Area. The greatest effect on businesses is expected as a result of improvements to the three closely spaced interchanges between Sterling Avenue and Blue Ridge Boulevard. The Improve Key Bottlenecks Strategy would relocate 13 businesses; the Add General Lanes Strategy would relocate 25 businesses; and the Transportation Improvement Corridor Strategy would relocate 38 businesses. Thus the Identified Preferred Strategy would relocate 13 to 25 businesses depending on the strategy chosen and the refinements made in the Second Tier studies. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate.

What is the Property Tax Base?

The property tax base of a community is the combined taxable value of all properties in the community. This includes the taxable value of real estate and of personal property such as equipment owned by businesses. The property tax base is different from property taxes. Property taxes are calculated by multiplying the property tax base by the property tax rates for the community.

I-470 Sub-Area

All Build Strategies would affect businesses and jobs through relocations in the I-470 Sub-Area. Three businesses are expected to be relocated for the I-470 interchange improvements regardless of the strategy chosen. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate.

How would the Build Strategies Affect the Tax Base of the Communities in the Study Area?

Each of the Build Strategies including the Identified Preferred Strategy would directly affect the tax base of the local communities, including the City of Kansas City, City of Independence, Jackson County, and local school districts by removing land used for improvements from the property tax rolls. MoDOT would not pay property taxes on property purchased for improvements to I-70. The Build Strategies include a substantial number of relocations of homes and businesses which would represent a decrease in available property tax base. **Table 3.6.2** shows the size of the property tax base for the Study Areas communities.

Table 3.6.2 Total Property Taxable Value for Study Area Communities

	Total Taxable Value in 2007	Average Growth Rate per Year 2002 to 2007
Jackson County	$10.036 Billion	7.0%
City of Kansas City	$5.186 Billion	5.9%
City of Independence	$1.053 Billion	3.2%
Kansas City School District	$3.200 Billion	4.8%
Independence School District	$0.813 Billion	4.6%

Sources: State Tax Commission of Missouri, Budget Information for Kansas City and Independence, Missouri Department of Elementary and Secondary Education.
Notes: At time of publications, 2007 was the newest available data year for all of the sources. Total taxable value includes personal property and represents the value of real estate and property not the amount of taxes collected. The amount of tax revenue collected is much lower and depends on the tax rates of the individual jurisdiction.

Jackson County currently has approximately 290,000 taxable parcels. The Build Strategies would relocate approximately 250 to 600 properties while acquiring small amounts of land from approximately 350 to 400 additional parcels. The Build

Strategies would acquire parcels with a taxable value that is higher than the average taxable parcel value for the county. However, given the magnitude of taxable value available to the Study Area communities, it is reasonable to expect that the taxable value lost would be less than one percent for any community and less than the average growth rate per year in taxable value. The Second Tier studies will include completion of a detailed analysis of property taxable value affected by improvements to I-70.

The City of Kansas City has a one percent earnings tax. If relocated businesses or residents chose to move out of the city entirely, there would be a loss of earnings tax revenue. The strategies with higher numbers of relocations would have a higher probability of businesses and residents leaving the city entirely.

The City of Kansas City, City of Independence, and Jackson County each have local option sales taxes. Revenue from sales taxes could be marginally reduced if relocated homes or business owners moved entirely out of these communities.

The Build Strategies would also require the purchase of land within the downtown Kansas City Community Improvement District (CID) and potentially several downtown Kansas City and Independence Tax Increment Financing (TIF) areas. These are special districts where a portion of property tax revenue or other tax assessments go directly to finance improvements related to the district. Acquisition of land in these districts would reduce the available tax base within the districts, potentially affecting their revenue sources. The potential impacts on specific CIDs and TIFs will be investigated in more detail in the Second Tier studies.

For the Transportation Improvement Corridor Strategy, How Would a Toll Lane Affect the Economy?

A toll lane would increase the transportation cost to the road user through the tolls paid. A toll lane would also provide improved traffic flow and travel time savings for the toll lane users which would help offset the costs of the toll. The collected tolls would help maintain and operate the road thus reducing the future public investment costs.

A key consideration for the use of a toll is the potential effect on low-income travelers who rely on I-70. These travelers may not be able to access the toll lane and save travel time due to a lack of financial resources. If the toll is implemented as part of a high occupancy lane, low-income users could still access the new lanes by car pooling or using transit. The investment in a toll lane would also have minor job creation benefits related to toll collection and toll system management.

What are the Economic Impacts of the Investment of Construction Dollars?

The investment of construction dollars to improve I-70 would result in the creation of new jobs. When an investment is made in the construction of a transportation facility, the companies and individuals receiving payment for building the project would in turn spend the money they receive on other goods and services. Companies and individuals receiving the benefit of reduced travel time and crash costs would also invest portions of these savings in local and state economies.

Based on the estimated construction cost ranges for the Build Strategies from $580 million to $840 million, the Study Team estimates that between 20,000 and 29,000 jobs would be created over the construction period for improvements. These job estimates are based on a standard ratio used by FHWA that every $1 billion of federal and state dollars invested supports 34,779 jobs. Most of these jobs would be short-term construction related positions. Local job benefits for construction would depend in part on the availability of local materials and workers. MoDOT seeks the best possible value from its investments when tendering construction projects and, like any other project, there is no guarantee local firms would be selected or local materials used.

How will the Economic Analysis Proceed in the Second Tier Studies?

The Second Tier studies will analyze the effects of improvements to I-70 on businesses, jobs, freight movement, and taxes in greater detail. More specifics will be known about the businesses that would be relocated and this will

allow for more detail on the tax base loss and job relocations involved. There will also be greater detail and specifics on potential changes in access at interchanges and their effects on local businesses and commuters. Cost estimates and estimates of the economic impact of the value of construction dollars will be refined in greater detail. The Second Tier studies will also include discussion of how economic effects may be mitigated.

3.7 Visual Effects

This section discusses the potential visual effects of improvements to I-70 as well as measures to avoid, minimize, or mitigate these potential visual impacts.

Downtown Skyline

The visual assessment process provides an analysis of the landscape character for the Study Area. It is also used to determine the type and degree of visual impact for various viewers, such as the interstate user, the recreational tourist, and the local resident.

What Does the Existing Study Area Look Like?

The Study Area and surroundings are best described (from west to east) as downtown central business district, urban residential with some commercial uses, and suburban residential. Residential and commercial properties are the most dominate land uses in the Study Area. Single-family homes make up the majority of the residential land uses while retail, office, and industrial properties are prevalent along corridors throughout the Study Area.

Urban Housing – Apartment Building at 17th Street and Broadway Avenue

The Study Area is rolling terrain. The downtown central business district is a very urban, built up visual experience that differs from the rest of the corridor. The urban area lies east of downtown and provides a mix of business activity and modest single family homes. The suburban section of the Study Area includes retail activities near the interchanges surrounded by residential.

Suburban Housing

The visual quality of an area may depend on the preferences and subjective values of the viewer. FHWA produced a manual titled Visual Impact Assessment for Highway Projects to assist in evaluating the visual qualities of a project area. The assessment of the visual quality of an area consists of an evaluation of the vividness, intactness, and unity of the landscape.

Vividness: The relative strength of the seen image and the visual impression received from contrasting landscape

elements as they combine to form a striking and distinctive pattern.

Intactness: The integrity of visual order in the natural and human-built landscape, and the extent to which the landscape is free from visual encroachment.

Unity: The overall visual harmony of the composition and degree to which various elements combine in a coherent way.

VAU 1 – Southwest Corner of Loop Looking at Downtown

VAU 2 – Eastbound I-70 Looking South

VAU 3 - Residences Close to I-70

In order to complete the analysis, the Study Area was divided into four areas that display consistent visual characteristics and a uniform visual experience which are called "Visual Assessment Units" (VAU). Each VAU may be thought of as outdoor room that has a direct relationship to the natural layout of the area and associated land uses. The boundaries of these visual environments occur where there is a change in visual character. The strongest determinations of the visual boundaries are topography and landscape components. The four VAUs (**Figure 3.7.1** at the end of this chapter**)** within the I-70 FTEIS corridor have the following characteristics:

- VAU 1, Central Business District: VAU 1 consists of a mature urban central business district. Bartle Hall, Sprint Center, the Kansas City Star building, and civic buildings comprise the key visual make up of VAU 1.
- VAU 2, Urban Commerical Area: The area in and around this VAU is dominated by constructed elements. Between VAU 1 and 18th Street, the views from the roadway are of a commercial activity. The standout feature in VAU 2 includes the United States Postal Service's sorting and distribution center. Overall, the built environment is close to the highway which produces the sense of a narrowed, constricted travel corridor.
- VAU 3, Urban Neighborhood Area: The area in and around this VAU is dominated by constructed elements. Between 18th Street and I-435, the views from the roadway are of single family homes and a pocket of commercial activities near Van Brunt Boulevard and U.S. 40. The standout feature in VAU 3 includes the Blue River Valley. Overall, the built

environment is close to the highway which produces the sense of a narrowed, constricted travel corridor.

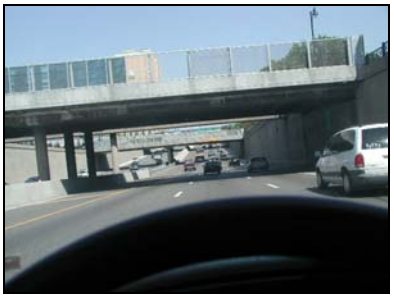
- VAU 4, Suburban Neighborhood Area: VAU 4 provides a contrast to the previous VAU section in regards to the developed environment being set further away from the travel corridor. This VAU is primarily residential with nodes of business activities near the interchanges. The key features in this VAU are the Jackson County Sports Complex and two regional commercial areas, Blue Ridge Crossings and the area around the I-470 interchange.

VAU 4 - Eastbound I-70

What Is the Existing Visual Quality?

Existing Routes VAU 1 Central Business District

The existing route is comprised of heavily built environment. The mid and the background views from the road are generally blocked by the built environment. The exception is the west leg of the downtown loop looking west over the built up Missouri River valley.



VAU 1 - South Leg of the downtown loop traveling east

The south leg of the downtown loop has very limited visual opportunities as the roadway is below the surrounding land use and bounded by walls. The north leg of the downtown loop provides sights of downtown buildings and a park in the Columbus Park neighborhood. The west leg of the downtown loop also provides a blend of walls and more pleasing views stretching across the valleys of the Missouri and Kansas Rivers.

What is a view shed?

A view shed is the area of land, water, or other environmental element that is visible from a fixed vantage point.

The downtown loop is not without a few view sheds. The Missouri River is visible from the highway, a brief break from the otherwise built environment.

VAU 1 – Missouri River view from the West Leg of the downtown loop

The viewers of the roadway generally see a wide expanse that can be intimidating and act as a barrier between downtown and the River Market area to the north or the Crossroads district to the south of downtown, especially to pedestrians. The mid and the background views of the road are generally blocked because the roadway is lower than the surrounding land uses in addition to the built environment.

VAU 1 - North Leg of the downtown loop looking west

Existing Routes VAU 2 Commercial Area (Troost Avenue to 18th Street)

This urban section of I-70 has primarily commercial development very close to the highway. Looking south from the highway the view is generally of the backside of buildings. Like VAU 1, much of the mid and background experiences are blocked by the foreground built environment. The westbound traveler does experience the Kansas City skyline from a number of locations on I-70.

VAU 1 - South Leg of the downtown loop looking west

VAU 2 - Westbound I-70 entering downtown

VAU 2 - Prospect Avenue looking west

VAU 2 - Cross Street under I-70

VAU 2 - Eastbound looking south

The view of the roadway is typical for a six-lane freeway. The relatively wide swath of pavement requires similarly wide bridges to span cross streets. Like VAU 1, traversing over or under the freeway can be intimidating.

VAU 3 - Residences Close to I-70

Existing Route VAU 3 Urban Neighborhood Area (18th Street to I-435)

This section is mostly residential with commercial nodes around Van Brunt Boulevard and U.S. 40 interchanges. VAU 3 also includes the Blue River. VAU 3 provides travelers the sense of a tight, narrow roadway due to the steep embankments with other areas providing a slightly more open feel. VAU 3 has residential development very near the roadway in several locations. The mid and background views are intermittently blocked by the foreground built environment. The mid and background views are best over the Blue River.

VAU 3 - Eastbound I-70 with steep embankments

VAU 3 - Myrtle Street View of and Proximity to I-70

VAU 3 – View of I-70 from Lister Street

VAU 3 –Looking South over Blue River

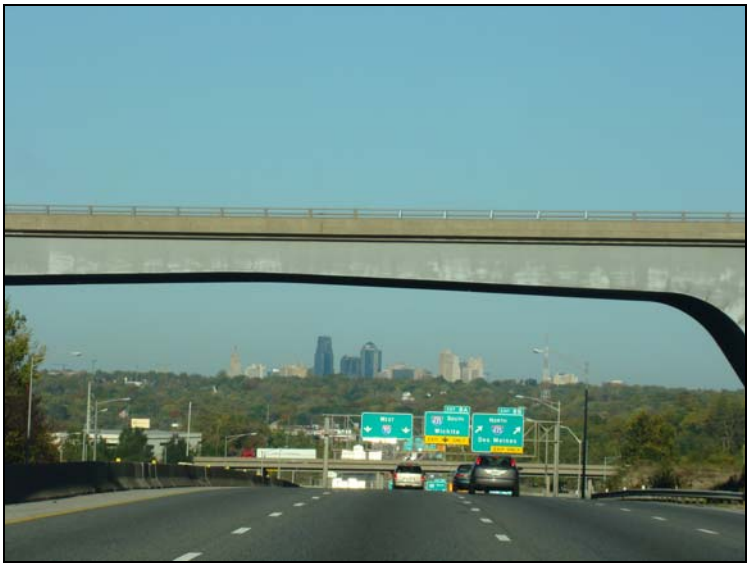
The viewers of the roadway are generally limited to the foreground view of the roadway due to the built and natural environment except through the Blue River valley. The view of the roadway is of a heavily traveled roadway with three lanes in each direction.

VAU 3 - 27th Street view of I-70

Existing Route VAU 4 Suburban Neighborhood Area (I-435 to I-470)

This section is mostly residential with businesses around the interchanges. VAU 4 provides a generally open feel with gently sloped grass perimeters into tree line right of way lines. The businesses at each of the interchanges are generally occupied by office and retail uses. The neighborhood homes

are seen far less often than in VAU 3, however, they still exist relatively close to the roadway. The westbound traveler receives one of the best views of the Kansas City skyline framed by the Stadium Drive Bridge.



VAU 4 - Westbound I-70 near Stadium Drive

VAU 4 – Eastbound I-70

VAU 4 – Nearby Residences

VAU 4 - Blue Ridge Crossings at U.S. 40

The viewers of the roadway are generally limited to the foreground view of the roadway due to the built and natural environment. The view of the roadway is a typical six-lane interstate. With the number of lanes, the structure width required to span a cross street or the length of a structure over the interstate can be extensive.

What are the Visual Effects of the Build Strategies?

No-Build Strategy

The future visual conditions with the No-Build Strategy will remain consistent with the existing conditions. The view of existing roads would not change and the view from the existing roads would only undergo minor changes as new buildings are constructed or old buildings are replaced or removed.

Build Strategies

The overall view of the roadway and the view from the road will vary somewhat among the three Build Strategies;

however, the Study Area view shed is well developed with urban residential and commercial uses and will remain essentially unchanged.

VAU 1: The downtown loop improvements will focus on the interchanges, ramps, and general access considerations to improve safety, reduce congestion, and improve access across to the downtown loop freeway system. The views of the roadway and the views from the roadway will generally be the same in each of the Build Strategies compared to the No-Build Strategy.

VAU 2: The urban commercial area will experience access improvements at the Truman Road interchange, improvements to the I-70 curve at Benton Boulevard, and other interchange improvements. An additional lane, either for general traffic use or as part of the transportation improvement corridor, will change the width of the corridor; however, the overall views of the roadway will be comparable to the existing views.

The overall views of the roadway and the views from the roadway will change only slightly with any of the three Build Strategies since the alignment of the roadway will not change dramatically.

VAU 3: The urban residential area will experience improvements through the 18th Street, 23rd Street, and 27th Street interchanges, improvements to the I-70 curve at Jackson Avenue, more interchange improvements between Jackson Avenue and I-435, and a rebuilt I-435 interchange with I-70. The overall views of the roadway and the views from the roadway will not change.

VAU 4: The suburban neighborhood area will experience a rebuilt I-435 interchange and a rebuilt I-470 interchange. The difference in aesthetics of a cloverleaf interchange versus a different interchange type is minimal. The overall views of the roadway and the views from the roadway will be comparable to the existing views.

Are there Other Visual Impacts?

Indirect visual impacts could result from each of the three Build Strategies being considered. Improved roadway lighting and bicycle/pedestrian crossings at interchanges are examples of indirect changes that could affect the overall visual quality throughout the Study Area. These features will be more specifically developed during the Second Tier studies.

What are the Next Steps for Visual Impacts?

The Second Tier studies will further evaluate and refine the visual assessments of the Build Strategies for each part of the corridor. During Second Tier studies there will be greater analysis and discussion of aesthetic and visual improvements in the corridor such as landscaping, walls, bridges, lighting, signing, and other aesthetic features. MoDOT will work with the local community and neighborhood groups regarding the long-term visual effects of any improvement.

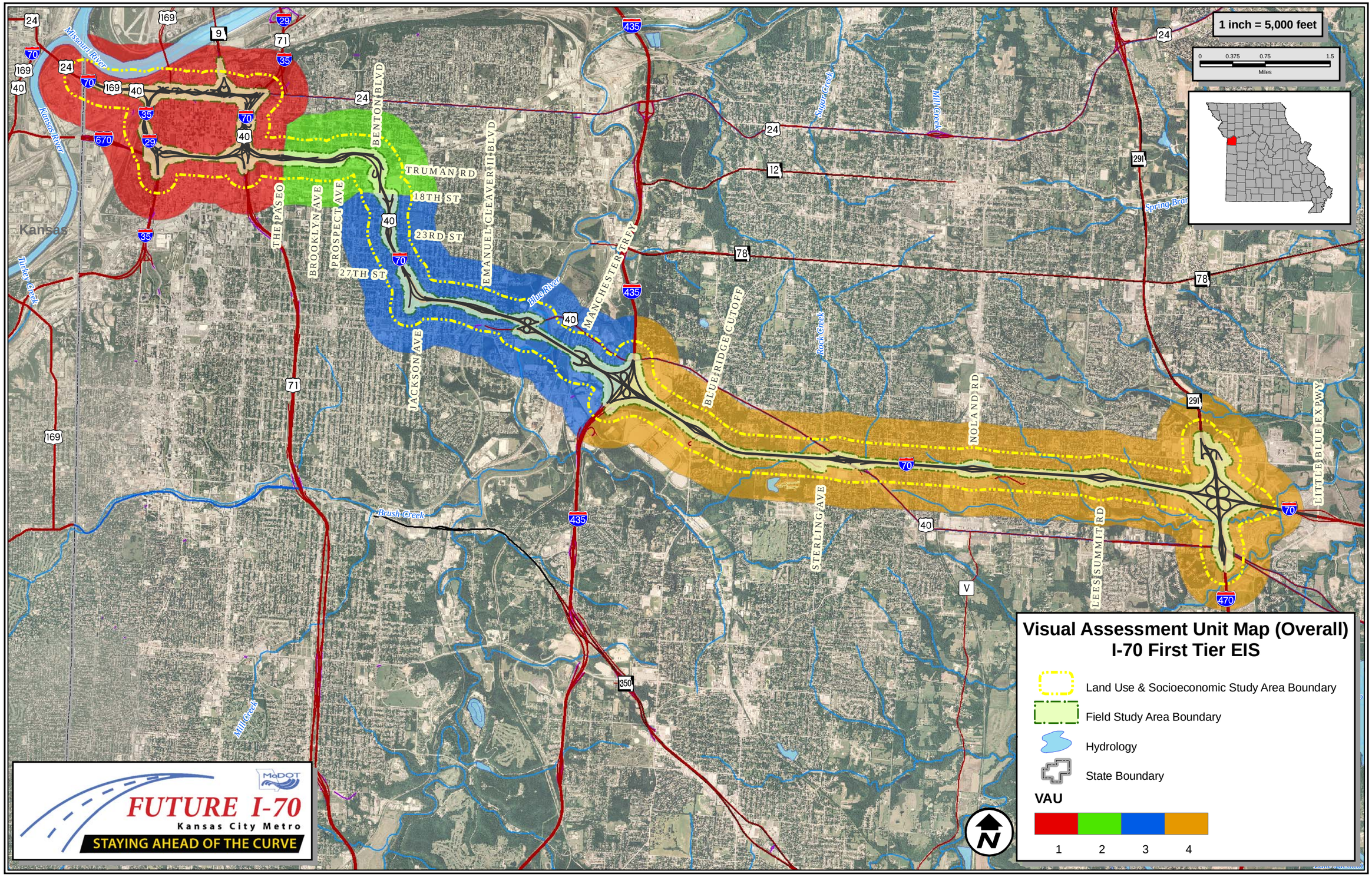


Figure 3.7.1 Visual Assessment Unit Map - Overall