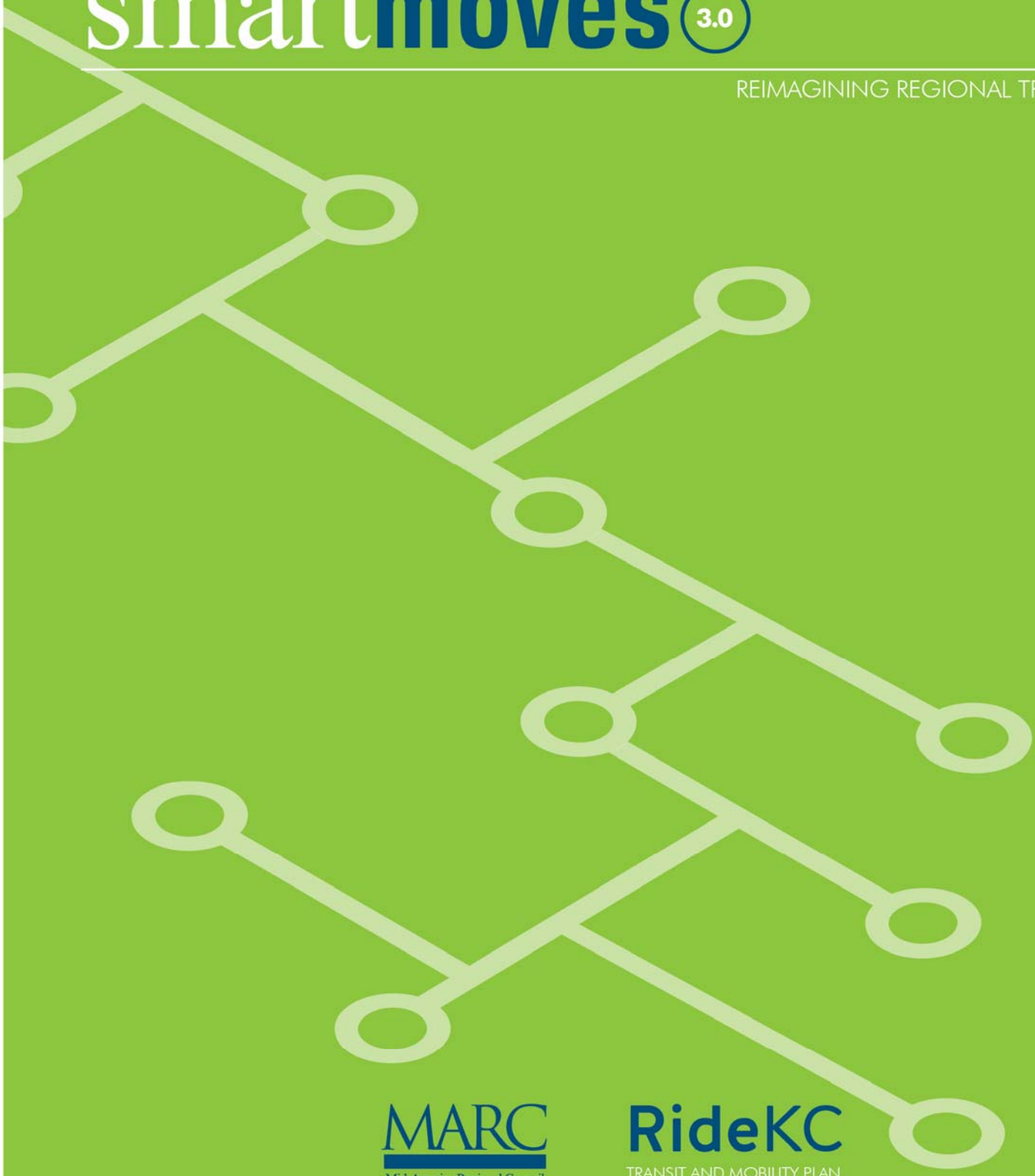
Appendix G: Pilot Area Analysis

The pilot area analysis is one of the deliverables from the consultant team. It details the employment center-based approach to increasing jobs accessibility by transit that the Smart Moves planning team began with, and how five pilot employment areas were selected.

Analysis for each pilot area includes: a profile of the employment center, a transit gap analysis and recommendations for increased jobs accessibility by transit and mobility services.

smartmoves 3.0

REIMAGINING REGIONAL TRANSIT



MARC
Mid-America Regional Council

RideKC
TRANSIT AND MOBILITY PLAN

TECHNICAL MEMO Nº 4 PILOT PLANS & LESSONS LEARNED

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1. OVERVIEW

Smart Moves 3.0 has a goal of doubling the number of jobs accessible by transit. To test the ability to increase transit accessibility at major job locations, five pilot locations were selected to conduct employment center-focused transit planning. The goal of the data-driven research at these pilot locations was to identify strategies to increase the numbers of jobs accessible by transit, and then extrapolate lessons learned and apply them to the region.

From these five pilots – each with different characteristics or typologies – the Planning Team extrapolated lessons learned and applied those lessons to other locations with similar employment characteristics to inform the *Smart Moves 3.0* plan.

A data-driven approach provided important insights for transit planning in the Kansas City area. For example, the **Independence Center** location has one of the highest percentages of:

- Workers under the age of 29
- Jobs earning the lowest wage (per census categories breakdown)
- Female workers
- Retail/food service jobs (over 60 percent)

These characteristics indicate a higher likelihood of transit use, yet there was no transit service in the late evening timeframe (8-11PM). That means that a significant number of retail and food service jobs in the area are not accessible by transit in the late evening. Fixed-route transit recommendations at this location, including expanding service hours, yielded an estimated 231.3 percent change in access to jobs within 60-minutes, with a 2.8 percent increase regionally.

2. USING A PILOT STUDY PROCESS FOR EMPLOYMENT CENTER-FOCUSED PLANNING

The pilot planning process can be a useful tool for conducting future employment center-focused planning, whether designing new services or fine-tuning existing services. The following process provides a framework for conducting employment center-focused mobility planning:

1. Identify an employment center and make contact with the employer(s) to develop a relationship and establish interest.

2. Establish pilot boundary for analysis. This boundary should be inclusive of one or more employers.

3. Collect data for the boundary.
   - Employment data is best gathered through a relationship with the human resources office at the employer. It may include:
     - Where workers live, such as zip code data, which can be provided by the human resources office without being connected to an employee name. For this memo, the data was gathered via the 2010 Census (U.S. Census Bureau). The Bureau of Labor Statistics can also provide valuable information.
     - Types of jobs, such as manufacturing, retail or office. This information will provide valuable feedback on the regularity of individuals' schedules.
     - Socioeconomic information, such as worker income, age, gender, commuting distance, and educational attainment. This data will help indicate an individual's propensity to use transit. Staff at MARC can support the development of maps and models to depict this data.

   > This planning process will help communities create strategies suited to their specific situations. Using the typologies listed in Technical Memo 3, communities can compare similarities and differences related to their characteristics.

   - Existing land use of the area will be provided by the municipal government as a GIS layer. For this memo, the analysis used data gathered through MARC's land use layer.
   - Current transit available within the boundary that is provided by KCATA or other local transit providers.
   - Transport Analyst travel shed data at different peaks will indicate the fixed route transit available. (Provided by MARC).

4. Analyze data within the boundary using GIS.

5. Analyze worker location of pilot jobs as it relates to the travel shed boundaries (60 minutes or less, 60-120 minutes, and outside of 120 minutes). Transport Analyst will only provide information for fixed route accessibility. Job access via non-fixed routes will not to be assessed via other modes.

6. Analyze workers of pilot jobs within transit propensity tracts.

7. Evaluate transit and mobility options using – the toolkit presented in Technical Memo 3 is a good starting point.

8. Analyze the effectiveness of the mobility options based on the data available in Transport Analyst.

9. Develop recommended options and an implementation plan. Some considerations that should be part of any future employment center-focused planning include:
    - While anecdotal information regarding business and worker needs can be useful in identifying potential problem areas, data regarding worker residence location and propensity to use transit is very useful in understanding supply and demand for transit services at a particular location.
    - The employment center-focused planning process could better support implementation of recommended changes by engaging employer representatives, employees, local business associations/chambers/alliances, local government representatives, and transit agencies at the early stages and throughout the planning process.
    - Relationships with the employers are important. They will be more willing partners if they understand how workforce transportation impacts their bottom line and how more reliable transit options could help.

3. SELECTING LOCATIONS FOR PILOT STUDIES

Using pilot studies to research existing conditions and test transit strategies was identified as a valuable illustrative tool during the *Smart Moves 3.0* process. MARC selected five pilot study locations from a pool of more than 35 regional employment centers that had the highest employment density for all jobs and the highest density of low-wage workers. These centers were defined by their location within the Census 2010 block group boundaries (per 2011 LEHD dataset edited by MARC). To narrow the list to five pilot study locations, the Planning Team took the following actions:

- Utilized an online, open-source software tool called Transport Analyst to identify the existing transit services available at each employment center, and overlaid this data with existing workers at each employment center.
- Applied local knowledge, such as recent transit agency efforts and developments.
- Considered specific local interest in enhanced transit.

To develop lessons learned that could be extrapolated to other communities in the region, it was important to select pilot study locations that represent different types or typologies of employment locations (see Technical Memo 3 for more information), different industries and employee characteristics, and different geographic areas. The Planning Team collected and analyzed the following data to select the final five pilot study locations:

- Census data to develop worker profiles at each of the employment centers, characterized by worker age, earnings, educational attainment, and gender.
- Distance and direction data that illustrate how far workers are traveling and the directional travel patterns from that specific employment center.
- Non-census data, such as the number of workers within high and very high transit propensity census tracts, and level of current transit service.

EMPLOYMENT CENTER ANALYSIS FOR PILOT SELECTION

The census, distance, and non-census data were mapped for more than 20 of the 35 top employment centers. Transport Analyst was used to perform a baseline analysis of job access, specifically the 60-minute and 120-minute travel shed at three different time periods for each employment center. These periods were AM Peak (6-9 AM), PM Peak (4-6 PM), and Late Evening (8-11 PM). The data was combined with MARC's transit propensity mapping and redevelopment potential, and analysis for each of the employment centers was summarized in matrices (see Appendix A).

Figure 1 below indicates the employment centers along the I-435 corridor that were evaluated to determine which locations would have the greatest potential for increasing jobs accessible by transit and thus would make the most sense to focus on in the pilot process.

Appendix A provides significant data related to each pilot location, including:

- Pilot area profile
- Gap analysis with maps
- Recommendations and outcomes
- Fixed route access evaluation

Figure 1: Employment centers evaluated along the I-435 corridor.

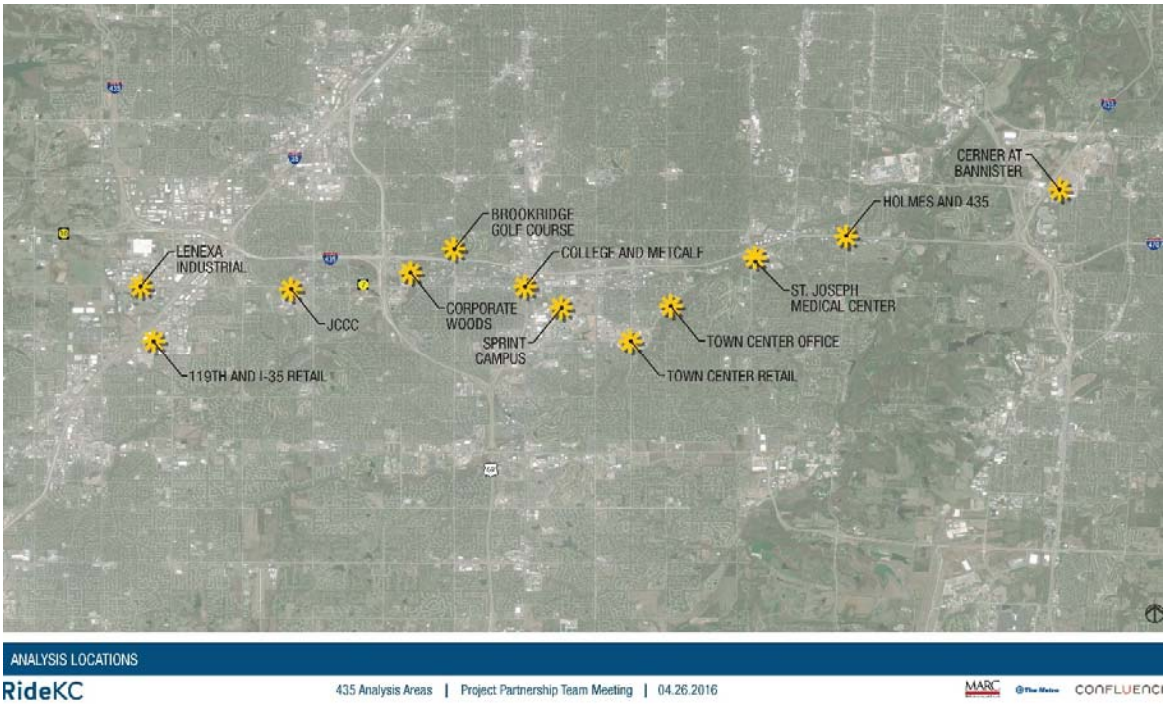
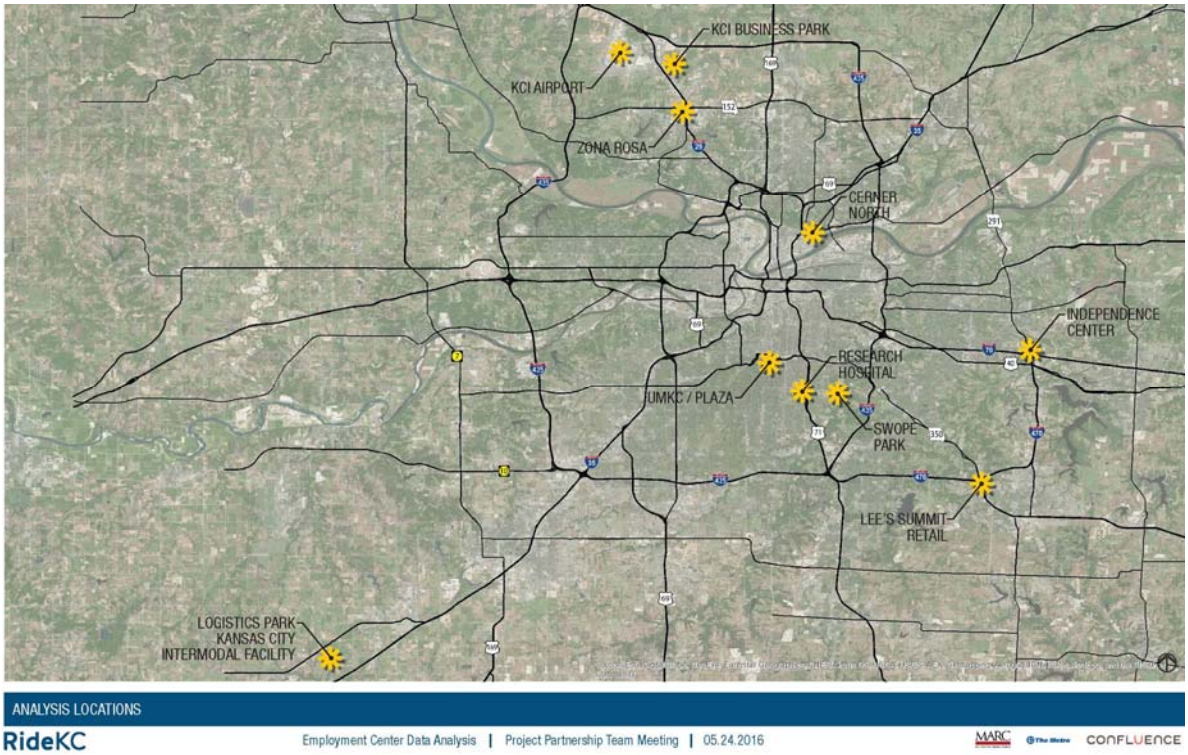


Figure 2 below shows the additional sites that were evaluated outside the I-435 corridor.

Figure 2: Additional employment centers evaluated.



SELECTED PILOT STUDY LOCATIONS

The following list describes the final five pilot study locations and the reasons they were selected:

1. **KU Medical Campus & Neighborhoods -** This location represents one of the region's best-served areas for transit. Its characteristics include large employment base, high employee ridership, strong transit service and infrastructure, urban location, regional attraction, existing first- and last-mile solutions, current and ongoing activities to enhance transportations options at the facility, future plans for employee growth with a stated need for the campus to find alternatives to the single occupant vehicle, and an interested local government. All of these factors make this location a good opportunity to explore emerging trends in transit and mobility options.
2. **KCI & Zona Rosa -** This area extends to KCI Business Park and KCI Airport and is sometimes called Boardwalk Square. Located between three primary Northland destinations, this commercial and mixed-use area has limited existing transit service. It provides a good opportunity to explore strategies that could be utilized in other areas in the region that have little transit service.
3. **Independence Center -** With more than 44 percent of workers in the retail/trade industry and limited transit access, the Independence Center pilot area represents a good opportunity to test how extending transit service into the evening hours could impact job access across the region.
4. **College & Metcalf -** With more than 29,000 jobs, the College & Metcalf area is one of the highest employment centers evaluated. It also serves an area with a high propensity for transit riders, including low-income and younger workers, which makes it an ideal location to test strategies that might be beneficial across the region.
5. **Johnson County Community College (JCCC) -** In addition to having a high concentration of jobs, this area provided variety among the pilots. With its strong representation of education workers, this pilot offers industry-sector variation from College & Metcalf, which predominantly serves workers in the financial and professional services industries.

4. DATA GATHERING PROCESS FOR PILOT STUDIES

A two-pronged approach was used to gather data for the selected pilot study locations:

1. **A profile** for each pilot study location was developed and included:
   - Location boundary
   - Typology
   - Typology selection process
   - Worker type based on Census Bureau categories (2014 raw data extracted from OnTheMap),
   - Existing transit and mobility options
   - Existing land use (MARC's 2012 existing land use)

2. **A gap analysis** for each pilot study location was developed using the 4-6 PM travel shed boundary created by Transport Analyst to identify the number of workers traveling from employment locations within three different timeframes:
   - Total workers within 60 minutes or less from a specified point
   - Total workers between 60 and 120 minutes from a specified point
   - Total workers outside of 120 minutes from a specified point

In addition to studying how many workers at each pilot study location travel within these time categories, the Planning Team superimposed the transit propensity census tracts (created and categorized by MARC) to calculate the number of workers within high and very high transit propensity census tracts, as well as the number of workers within low and very low transit propensity census tracts. The total numbers of workers found within high and very high transit propensity tracts help illustrate areas of priority for investing (or not investing) in fixed route transit solutions.

The Planning Team then recorded distance and direction data, which indicates the distance from work to home for each worker, broken down into the following categories:

- Less than 10 Miles
- 10 to 24 Miles
- 25 to 50 Miles
- Greater than 50 Miles

DEVELOPMENT OF STRATEGIES TO INCREASE JOBS ACCESSIBLE BY TRANSIT

Once the data profiles and gap analysis were completed for each pilot, the Planning Team developed strategies to increase the number of jobs accessible by transit. The table below describes the process the Planning Team used to identify and evaluate mobility, communication, technology, and urban design strategies, and develop recommendations.

TABLE 1: STRATEGIES FOR INCREASING JOBS ACCESSIBLE BY TRANSIT

STRATEGY CATEGORY	STRATEGY DEVELOPMENT PROCESS
FIXED ROUTE TRANSIT Buses travel along an established path with scheduled times and stops.	Existing transit routes were reviewed to determine direction(s) from which workers were traveling and their propensity to use transit. Consideration was also given to job types and work shifts. Modifications to existing routes such as span and frequency, or new routes or route segments, were proposed to serve aggregations of workers that had a propensity to use transit and were currently unserved or underserved.
NON-FIXED ROUTE TRANSIT On-demand services where users determine the time and route.	Areas that did not have sufficient aggregations of workers to justify fixed route transit were considered candidates for non-fixed route services.
CARPOOL Regularly scheduled or flexible service that allows at least two people to ride together.	The profile of the workers and jobs at the employment location were used to assess current carpool activity and potential to develop additional strategies to encourage or promote carpools.
VANPOOL Regularly scheduled or flexible service to allow a group of people to ride together.	The profile of the workers and jobs at the employment location were used to assess current vanpool activity as well as the potential to encourage or promote additional vanpooling.
CAR SHARE Allows hourly car rentals with charges based on time and distance traveled. Individuals return cars to share stations after use.	Density of the employment center was assessed to determine if the area has or could support a car share station.
BIKE SHARE Allows people to rent a bicycle and return it to any other bike station within the system's service area.	Density, area characteristics, and extent of bike-friendly infrastructure were assessed to determine if the area has or could support a bike share station.
FIRST/LAST-MILE TRANSIT This describes the beginning or end of an individual trip made primarily by public transportation. People often walk to transit, but origin or destination may be difficult to access by a short walk. These strategies help fill that gap.	The characteristics of the area and relationship to potential mobility hub locations were used to assess first/last-mile transit and other flexible mobility connections.

STRATEGY CATEGORY	STRATEGY DEVELOPMENT PROCESS
BICYCLE CONNECTIONS Refers to making sure there are bike racks on buses and adequate bike facilities to help users begin and end trips by bicycle.	Existing bicycling facilities were assessed to determine options and opportunities for bicycling to or from the employment center.
PEDESTRIAN CONNECTIONS Refers to strategies for making the area safe for pedestrians, including sidewalks and signal crossings that help users begin and end trips on foot.	Existing pedestrian facilities and area characteristics were assessed to determine opportunities for encouraging walking to or from the employment center. These include sidewalks, curbcuts, and signalization.
MOBILITY HUBS An array of transportation services, amenities and urban design enhancements to allow seamless mobility between different transportation modes.	Existing locations with more than one transit route or apparent travel mode, existing transfer locations, or primary transit stops near the pilot employment center were assessed to determine potential for expansion as a mobility hub, or the need to develop a mobility hub at a new location for that purpose.
TRANSPORTATION MANAGEMENT ASSOCIATIONS Transportation Management Associations provide transportation services and education to businesses and employees in a particular area, combining the efforts of many employers to reduce program costs.	Activities by employers to encourage employees to change their mode of transportation.
COMMUNICATION STRATEGIES Existing communication through the MARC RideShare program and the KCATA travel training program were assessed regarding their ability to inform potential riders.	Existing communication strategies that can broadly and adequately inform and educate riders were assessed to determine how they might be enhanced.
TECHNOLOGY STRATEGIES Technology within the transportation sector is evolving rapidly with new technologies and applications.	Technologies currently in place in the region were reviewed and an industry-wide scan of more evolving strategies was conducted to determine how different strategies might be employed effectively.
URBAN DESIGN STRATEGIES Near term (5 year) population and employment projections were included in the Transport Analyst modeling of pilot specific transit strategies.	Existing and near term development within and adjacent to the pilot were modeled to assess total potential capture of existing and future workers within each employment center's 60 minute capture.
SUPPORTING POLICIES Best practices were reviewed for applicability to the Kansas City region.	Transit-supportive strategies were identified, such as rules that govern parking and land use development that businesses and governments could implement near an employment center.

5. PILOT ASSESSMENT PROCESS OF RECOMMENDATIONS

Using the strategies identified above, the Planning Team developed and assessed the recommendations for each employment center to determine their impact on increasing the number of jobs accessible by transit.

FIXED ROUTE TRANSIT

The Planning Team used Transport Analyst software tool to perform a baseline analysis of job access. Job access analysis was measured for two conditions:

1. Current employment and transit services
2. Improved transit services based on the implementation of transit recommendations, and potential future employment based on recent commercial developments in that area.

This effort consisted of a single-point analysis evaluating jobs accessible at each location and a regional analysis evaluating how the proposed transit strategies affect job access for every worker in the Kansas City region.

Single-Point Analysis

The single-point analysis shows the number of workers who can reach the pilot study location within a 60-minute average transit commute, including time spent walking, transferring between lines, and waiting for the bus[1]. This analysis was performed for three different time periods (6-9 AM, 4-6 PM, 8-11 PM) because the Transport Analyst tool computes travel times based on departures from the selected location. As a result, the effects of one-way transit services are included. There is also a category of projected future workers, which represents additional workers projected in residential developments at or near the pilot location in approximately five years. The percent change column shows the increase in the number of workers that can reach the pilot location for each time of day.

Regional Impact Analysis

To calculate the regional impact, the Planning Team computed the average change in the number of jobs every worker in the region can access within a 60-minute commute. These access impacts were computed during the AM peak, since the analysis included travel times starting from residential locations. In addition, results were broken down by the same worker demographics used in the single-point analysis to show the impacts of the pilot on all members of a particular group throughout the region. The Planning Team did not evaluate the impacts on future workers in this section, as there were data on future workers for the pilot study locations, but not across the whole region. Generally speaking, regional impacts were much smaller than the impacts at pilot study locations, and the pilot-focused strategies that were proposed had relatively small impacts in areas that were more distant from the pilot study sites.

[1] Time spent waiting is calculated assuming that people may depart at any time during the PM peak (4-6pm). Wait time could be very brief if there is a bus coming immediately, or very long if a bus has just been missed. These times are computed to provide an average travel time, using the methods described in Conway, Matthew Wigginton, Andrew Byrd, and Marco van der Linden. "Evidence-Based Transit and Land Use Sketch Planning Using Interactive Accessibility Methods on Combined Schedule and Headway-Based Networks." *Transportation Research Record*, forthcoming.

Specific fixed route transit outcomes and projected increase in jobs accessible by transit for each pilot can be found within the next section. The Planning Team also produced maps showing the change in job access for every location in the Kansas City region. These maps identify the areas that benefit the most from particular strategies, and can be found in Appendix B of this document.

CARPOOL AND VANPOOL STRATEGIES

Carpool and vanpool strategies were assessed by mapping the origins and destinations of current users searching for carpool partners through the MARC Rideshare regional ride-matching website. This analysis shows rideshare propensity throughout the region, but is not meant to be an accurate representation of actual ridesharing activity. Applied knowledge of density, area characteristics, and employment typologies further informed recommendations of carpool and vanpool strategies.

The impact of mobility strategies like carpool and vanpool is difficult to quantify because it is based on individual commuter behavior, and these strategies are very diverse and interact with each other and fixed route transit.

OTHER MOBILITY STRATEGIES

The other mobility strategies – non-fixed route transit, car share, bike share, first/last-mile transit, bicycle connections, and pedestrian connections – were assessed in a qualitative manner because they are behavior-driven and not easily modeled with traditional forecast methods. In addition, the number and availability of the new mobility options are evolving at a rapid pace. As new mobility choices are added to the mix of available services, public transportation as a whole is benefiting from additional use, while dependence on single automobiles is reduced.

COMMUNICATION STRATEGIES, TECHNOLOGY STRATEGIES, AND SUPPORTING POLICIES

The use of public transportation is significantly enhanced by communication and technology infrastructure, which supports real-time information, GPS, fare payment, scheduling and dispatching, as well as information about mobility choices. For planning purposes, improvement of transit access to jobs using communication strategies and employing a range of new technologies was assessed qualitatively.

6. PILOT STUDY SUMMARIES

A summary of each pilot study is provided below. More detailed information about existing area conditions, the gap analysis data, specific strategies and recommendations, and access evaluation is provided for each pilot study in Appendix A.

KU MEDICAL CAMPUS & NEIGHBORHOODS

Area Profile

- Regional destination.
- Near the urban core.
- 6,391 employees (and additional student population).
- 61% of employees are education service, 28% are healthcare/social assistance.
- Geographic boundary: Southwest Boulevard/I-35 to the north, State Line Road to the east, 47th Street to the south, and Mission Road to the west.
- Typology: Urban, Regional, Diverse District, Mixed Shift.
- 5% transit mode share (regional transit mode share is 1%).

Gap Analysis

- 50% of workers live less than 10 miles away from their jobs.
- 35% of workers live 10 to 24 miles away.
- This is the pilot with the highest number of workers living within a high and very high transit propensity census tract.
- This pilot provides the best example of how multiple mobility options can work together, and reinforces the regional employment importance that the KU Medical Center represents.
- The compass diagram below illustrates the distances that workers travel to their jobs in this pilot study location, with darker colors indicating shorter distances, and lighter colors indicating longer distances. The diagram also overlays direction of these measures, with the colors and lengths indicating the direction they are travelling. The center of the compass represents the center of the pilot study location.

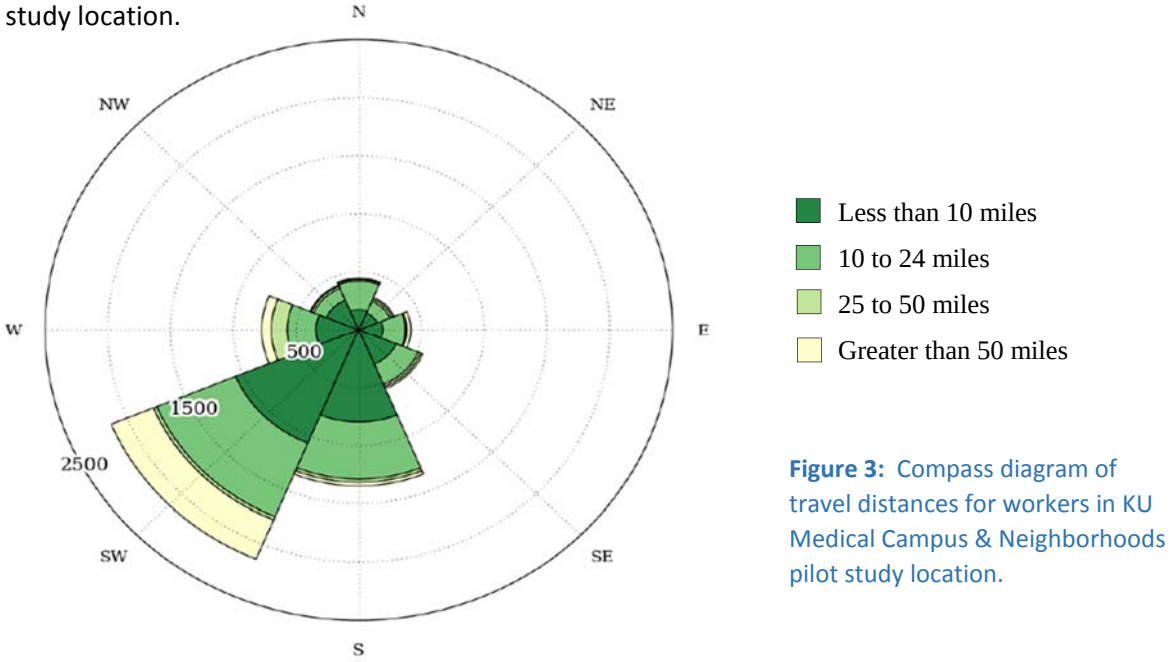


Figure 3: Compass diagram of travel distances for workers in KU Medical Campus & Neighborhoods pilot study location.

Recommended Strategies

Based on the area profile and gap analysis, three fixed route transit strategies were recommended:

- Increase route frequency on 39th Street (Route 39).
- Provide half-hour peak connections to the Mission Transit Center (Route 107).
- Extend service on Nall Avenue further south to 135th Street, and double the number of peak trips (Route 667).

> Note: Full-size maps depicting the change in jobs access for each pilot are presented in Appendix B.

The recommendations for non-fixed route transit strategies are:

- Work with KCATA to review Bridj service and make changes as appropriate.
- Coordinate existing KUMed shuttles with other services in the area.
- Expand and enhance carpool, vanpool, carshare, bikeshare, and ridehailing.
- Through development of a pilot mobility hub, develop and implement appropriate technology and communication tools, such as the new RideKC Freedom Taxi Mobile Application, to enhance access to a range of mobility services

Outcomes

Fixed route transit recommendations for the KU Medical Campus & Neighborhoods resulted in an increase in the jobs accessible within 60 minutes by 22.5 percent, and 3.2 percent regionally. The map at right depicts this increase. Substantial improvements in access were concentrated around KU Medical Center and the Nall Corridor. Improvements to transit accessibility regionally were small based on the enhancements made for this pilot.

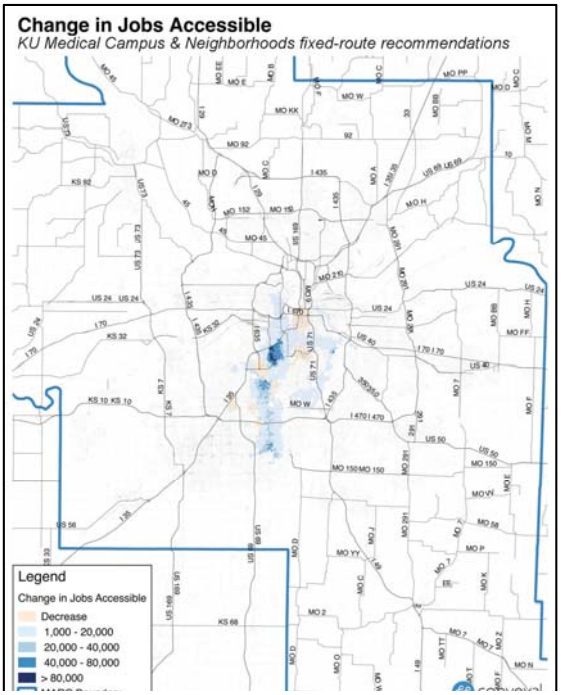


Figure 4: Change in jobs accessible for KU Medical Campus & Neighborhoods.

Non-fixed route strategies had low to medium impact on job access because these modes transport fewer people at a time. However, they tend to be highly cost-effective. Of all the pilots, KU Medical Campus & Neighborhoods showed the largest concentration of desired carpool destinations. Connections to other modes through a destination mobility hub increase the usefulness of carpooling as part of a multi-modal trip. Developing and supporting Transportation Management Associations that can provide consistent marketing and communications to employees would be beneficial to the success of mobility in this location, as well as the other four pilot study locations.

The KU Medical Campus is expanding substantially. That growth is likely to spur additional redevelopment in the near term, which could create demand for additional mobility options that are not measured in this analysis. Given the profile and existing transit connections of the KU Medical Campus & Neighborhoods, the location has the potential to support one of the region's first destination or junction mobility hubs. That hub could serve as a model for other mobility hubs.

KCI & ZONA ROSA

Area Profile

- Three employment centers: KCI Airport, KCI Business Park and Zona Rosa.
- 18,415 commercial, industrial, and mixed-use jobs.
- Currently, there are relatively low-density development patterns in the Northland, which make it difficult to expand fixed route transit service cost effectively. But significant residential growth is anticipated nearby in the Twin Creeks area.
- Currently, there is limited existing transit service, with most service in a north-south pattern and relatively few east-west connections. This situation is partly due to a lack of east-west street infrastructure.
- Typology: Outer Ring, Regional, Major Multi-Purpose, Mixed Shift – suggests the need for flexible first/last-mile transit connection solutions.

Gap Analysis

- 38 percent of the employees live less than 10 miles away from work.
- 17.5 percent of people who work in the area's three employment centers can access their jobs within 60 minutes or less by transit.
- In the Northland, transit propensity is generally much lower than other areas in the metro, and was the lowest of all the pilots. As a result, fixed route transit is not likely a primary solution. Other mobility options, such as first/last-mile connections, and related strategies, such as land use, technology and communication, are extremely important when trying to increase access for employees at this location.
- The compass diagram below illustrates the distances that workers travel to their jobs in this pilot study location, with darker colors indicating shorter distances, and lighter colors indicating longer distances. The diagram also overlays direction of these measures, with the colors and lengths indicating the direction they are travelling. The center of the compass represents the center of the pilot study location.

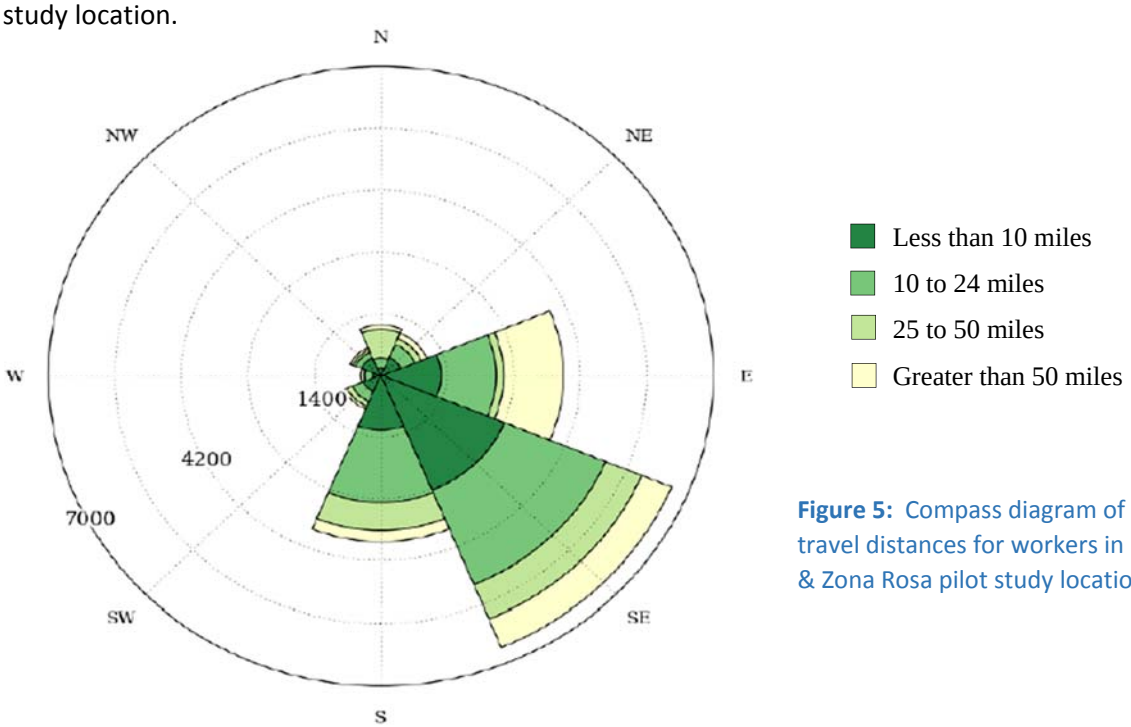


Figure 5: Compass diagram of travel distances for workers in KCI & Zona Rosa pilot study location.

Recommended Strategies

The recommendations for the KCI Zona Rosa pilot area for fixed route transit strategies are:

- Provide more direct express between KCI, Boardwalk and Downtown with consistent headways (Metro Route 129).
- Connect with Zona Rosa on every trip (Metro Route 142).
- Add a new Barry Road service: Liberty to Zona Rosa.
- Add a new 64th/68th/72nd service: MO-9 to Brighton to Barry Road.
- Add a new MO-9 route: Boardwalk Square MetroCenter to Parkville.

Because the existing Boardwalk Square Transit Center is not pedestrian-friendly or visible from major streets, a major urban design strategy for this location would relocate the transit station and/or identify opportunities for public-private partnerships that allow for a successful transit station that could thrive with further investment. This approach will help make transit more visible to Northlanders.

The recommendations for non-fixed route transit strategies are:

- Consider developing ridehailing and rideshare connectivity at this location.
- Work with employers on additional carpool and vanpool opportunities.
- Communicate the availability of MARC's guaranteed ride home program.
- Integrate walkability and other development features.
- Consider the addition of bike facilities at various employer locations.

Outcomes

Fixed route transit recommendations for KCI & Zona Rosa resulted in an increase in the jobs accessible within 60 minutes by 14.2 percent within the pilot study area, and 3.3 percent regionally. The map at right depicts this increase. This increase reinforces the notion that to be successful in improving access to jobs, public transportation strategies must be combined with other mobility solutions and land use investment decisions.

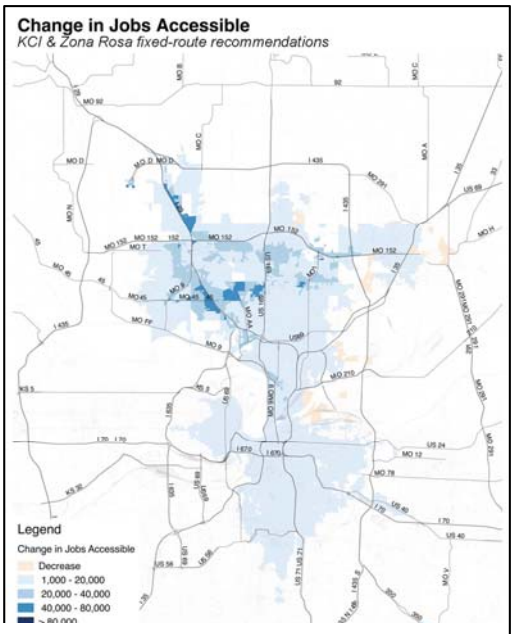


Figure 6: Change in jobs accessible for KCI & Zona Rosa pilot study location.

Non-fixed route strategies had low to medium impact on job access because these modes transport fewer people at a time. However, they tend to be highly cost-effective.

Vanpools could provide a faster commute and more flexibility for shift workers.

Developing and supporting Transportation Management Associations that can provide consistent marketing and communications to employees would be beneficial to the success of mobility in this location, as well as the other four pilot study locations.

INDEPENDENCE CENTER

Area Profile

- Large commercial and mixed-use area located in Eastern Jackson County.
- Major highway interchanges bisecting the area.
- 7,553 jobs in the area.
- Over 70 percent of jobs are in the food and accommodation services or retail trade categories
- Limited transit service in evenings and weekends.
- For a suburban location, the transit propensity is relatively high in comparison to other suburban pilot areas.
- Typology: First Suburb, Community, Diverse District, Evening/Weekend – and supporting data illustrate the need for extended hours of transit services.

Gap Analysis

- Nearly 50 percent of the workers live less than 10 miles away from their jobs.
- 33 percent are 10 to 24 miles away.
- While most workers live northwest of their jobs, there are also considerable numbers of workers living in all other directions except northeast. Transit service to the pilot area generally trends north and west of Independence Center in the AM and PM peaks.
- No transit service is available during the 8-11 PM timeframe. Because more than 70 percent of jobs are in the food and accommodation services or retail trade, the lack of fixed-route transit services during typical shift work underscores the need for extending transit hours.
- The compass diagram below illustrates the distances that workers travel to their jobs in this pilot study location, with darker colors indicating shorter distances, and lighter colors indicating longer distances. The diagram also overlays direction of these measures, with the colors and lengths indicating the direction they are travelling. The center of the compass represents the center of the pilot study location.

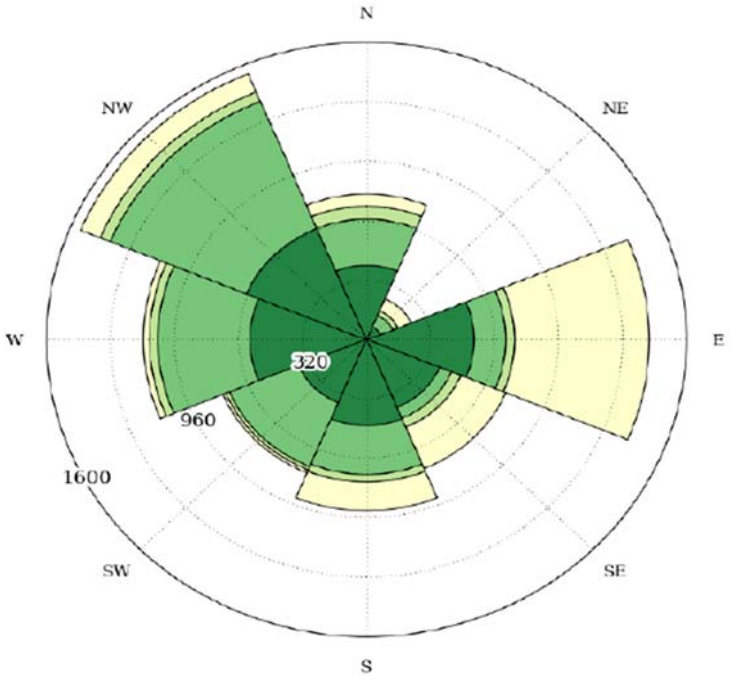


Figure 7: Compass diagram of travel distances for workers in Independence Center pilot study location.

Recommended Strategies

The Independence Center pilot study analysis of worker residences illustrates the demand for transit service between Lee's Summit, Blue Springs, and Independence Center. There also appears to be a relatively high need for transit service during weekend and evening hours, as more than 70% of employees are within retail trade or accommodation/food service job trade categories, as identified by the U.S. Census Bureau.

The recommendations for fixed route transit strategies are:

- Increase IndeBus frequencies to 30-minute headways, extend service hours from 5 AM to 11 PM, and operate seven days a week.
- Extend service east (via Truman Rd and M-291) to Independence Center (Metro Route 24).
- Increase trips and route half of the 251 trips (via US-40 and M-291) to Independence Center (Metro Route 251).
- Add a reverse commute from downtown KCMO to Independence Center (Metro Route 170).

The recommendations for non-fixed route transit strategies are:

- Promote the regional trip matching platform for new employers.
- Develop vanpooling strategy for reverse commute from KCMO or Johnson County.
- Enhance bicycle facilities and programs for last-mile solutions
- Identify communication strategies, marketing and technology applications that will be important to the success of expanding the number of jobs accessible by transit in this location.

Outcomes

Fixed-route transit recommendations yielded a 231.3 percent change in access to jobs within 60-minutes, with a 2.8 percent increase regionally. This is the highest change of all the pilots. The map at right depicts this increase. This illustrates the power of extending hours and bolstering local transit circulators (e.g., IndeBus), along with illustrating the need for key express connections for in order to increase the regional benefit.

Non-fixed route strategies had low to medium impact on job access because these modes transport fewer people at a time. However, they tend to be highly cost-effective.

Carpooling strategies will need ongoing marketing and outreach to maintain a critical mass of potential carpool partners for the wide range of shifts at this pilot location.

In addition, as these new strategies and technologies evolve, their effectiveness as tools for enhancing access and mobility will continue to increase.

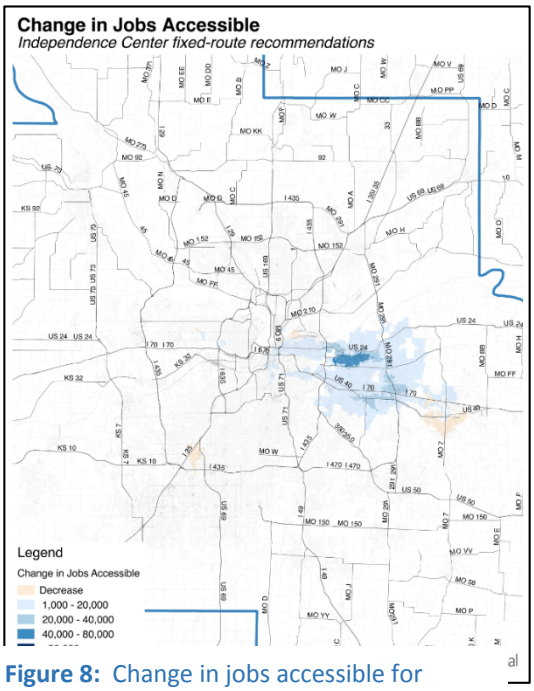


Figure 8: Change in jobs accessible for Independence Center pilot study location.

COLLEGE & METCALF AND JOHNSON COUNTY COMMUNITY COLLEGE

Important transit-related data emerged from the evaluation of 12 employment centers along the I-435 corridor in the southern part of the region. Of those 12 employment centers, two pilots were identified – College/Metcalf and Johnson County Community College – because of their significant regional draw and the important lessons the pilots could bring to other major employers. Prior to this analysis, many planning efforts had assumed most workers in Johnson County were driving more than 10 miles to jobs. Because data indicates many of the workers in the pilot locations live less than 10 miles from their work destination, *Smart Moves 3.0* recommends additional intracounty service. Due to the proximity of the pilot locations, the potential impacts of implementing fixed route transit recommendations for both pilots were combined as a single analysis through the Transport Analyst tool.

Area Profile

- **College & Metcalf**
  - Highest concentration of suburban employment.
  - 24,343 jobs with a mixture of job types.
  - Over 55% of workers live less than 10 miles from this employment center.
- **Johnson County Community College (JCCC)**
  - The smallest number of jobs of all the pilot locations, totaling only 2,679 jobs. This does not include students attending JCCC.
  - 97% of jobs are within educational services.
  - Typology: destination category as a "focused function".
  - Colleges are traditionally strong partners and present a good opportunity to enhance access through transit. Because of its student population, this location has good relationships with existing transit service and represents an opportunity to improve the perception and use of transit by young adults in Johnson County, as a precursor to future transit expansion.

Gap Analysis

- **College & Metcalf**
  - Over 50% of the workers live less than 10 miles from work.
  - Only 6% of the workers are within the 60-minute-or-less fixed route transit service network.
  - Yields one of the highest number of workers within high or very high transit propensity areas.
- **Johnson County Community College**
  - Highest percentage of workers who live less than 10 miles away from their jobs – almost 70 %
  - 14 % of those workers are within the 60-minute fixed route transit travel shed.
  - While there is some existing transit service in the pilot area, typical fixed route transit solutions are not a complete solution given the location of workers.

The compass diagram below illustrates the distances that workers travel to their jobs in this pilot study location, with darker colors indicating shorter distances, and lighter colors indicating longer distances. The diagram also overlays direction of these measures, with the colors and lengths indicating the direction they are travelling. The center of the compass represents the center of the pilot study location

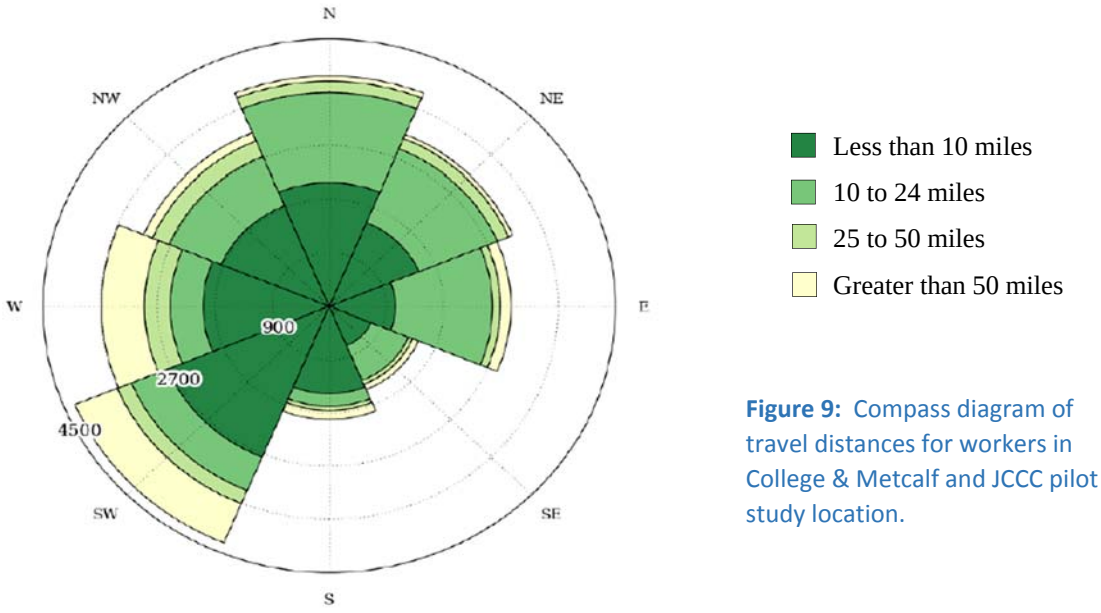


Figure 9: Compass diagram of travel distances for workers in College & Metcalf and JCCC pilot study location.

Recommended Strategies

Connecting fixed and non-fixed route services through mobility hubs will play an important role in enhancing the mobility transportation network. Redefining the future relationship of transit and land use within the Kansas City Metropolitan area, particularly within Johnson County, will entail properly providing and calibrating transit service connectivity. It will also require a consistent framework for mobility hubs, related transportation services and mobility options that connect with each, as well as a range of transit-supportive land uses and services available near these hubs.

Based on the data showing that over half of workers live less than 10 miles from their jobs, the Planning Team combined the pilot locations for a single analysis and structured two conceptual options to evaluate fixed route transit:

1. **Full grid build-out** that includes transit routes along nearly all major arterial streets in Johnson County.
2. **Priority grid** that focuses on a few key corridors

The recommendations for fixed route transit strategies are:

- 556 Metcalf (from 135th)/Plaza Connex - 15-minute headways with 18 hours of service (5AM-11PM) 7 days.
- 575 75th/Quivera (with Troost connection) - 15-minute headways with 18 hours of service (5AM-11PM) 7 days.
- Johnson/Shawnee Mission- 30-minute headways with 18 hours of service (5AM-11PM) 7 days.
- 95th/Bannister - 30-minute headways with 18 hours of service (5AM-11PM) 7 days.
- College - 30-minute headways with 18 hours of service (5AM-11PM) 7 days.
- 135th - 30-minute headways with 18 hours of service (5AM-11PM) 7 days.
- Olathe Express - 30-minute peak/60 minute off peak service with 18 hours of service (5AM-11PM) 7 days.

The recommendations for non-fixed route transit strategies are:

- Examine potential for short trip and first/ last-mile strategies from ridehailing companies, Bridj or other location demand response service.
- Promote and expand and expansion of the region's vanpool and carpool program.
- Identify locations for carshare program development.
- Integrate B-cycle program into employer-based wellness programs.

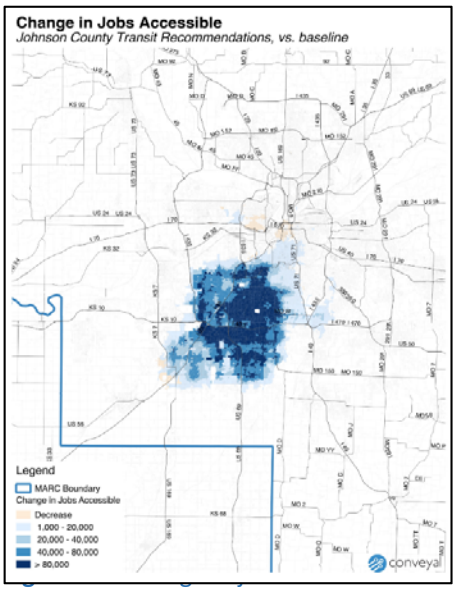
Outcomes

Fixed-route transit recommendations include a full build-out of the College & Metcalf and JCCC grid and has the largest regional impact of any of the pilots. Averaged over all workers in the region, the full build-out scenario increases job access by 48%, although this benefit is concentrated in Johnson County and not regionally. The priority grid has a smaller regional impact of 25%. The maps at right depict increases based on these grids.

Non-fixed route strategies had minor to moderate impact on job access, although they tend to be highly cost-effective. This pilot area has a moderately high concentration of carpool destinations and is a good candidate for additional rideshare outreach and marketing. In addition, as these new strategies and technologies evolve, their effectiveness as a tool for enhanced access and mobility will continue to increase.

Both plans have positive effects at the two pilot sites. At College & Metcalf, there is a 168% increase in workers who can access this location under the full build-out, and 139% under the priority grid. At Johnson County Community College, there is a 150% increase under the full build-out, and a 61% increase under the priority grid.

This pilot showed that it is possible to significantly increase access through extensive deployment of transit service. Most of the transit service in both grids terminates at the state line. Accessibility benefits are concentrated in Johnson County, reinforcing the need to integrate the backbone routes across jurisdictional boundaries. Although both modeled options (full and priority grid) are ambitious, services will likely move incrementally from today's services toward a grid. The *Smart Move 3.0* recommendations for Johnson County are available in Technical Memo 2.



College & Metcalf and JCCC pilot study location – FULL GRID

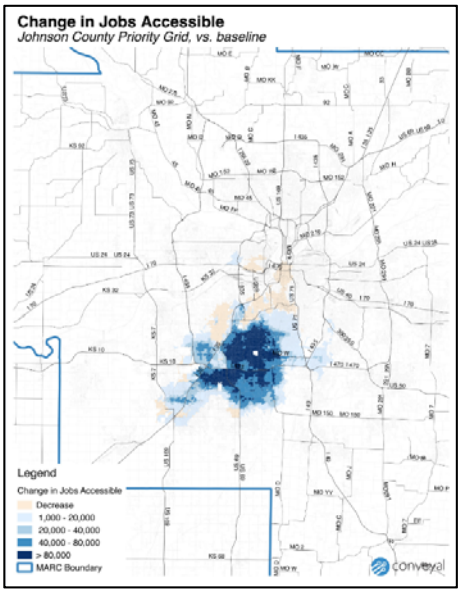


Figure 11: Change in jobs accessible for College & Metcalf and JCCC pilot study location – PRIORITY GRID

7. KEY LESSONS LEARNED

The employment-center pilot planning process provided several lessons for understanding how each individual employment center might be better served by transit and mobility options, as well as supporting communication, technology, urban design strategies and policies. The five pilot studies collectively pointed to system-wide considerations that informed the Planning Team's recommendations for fixed and non-fixed routes and underscored the importance of land development/urban design policies to double jobs accessible by transit.

FROM INDIVIDUAL PILOTS

KU Medical Campus & Neighborhoods

KU Medical Campus & Neighborhoods is the densest and most urban location of the five pilot study locations. As a result, it has the most diverse collection of mobility options available. In many ways, it already serves many of the functions of a mobility hub, but it has mostly evolved organically with minimal physical infrastructure. In areas such as KU Medical Center, the focus should be on better connecting the services that are already available for those workers who can access employment via the fixed route network, and enhancing services with newer on-demand transit options for those who cannot. This approach would include supportive policies to further enhance mobility options, and improving the technology and communication tools to better connect people to the mobility services they need. Employers that are having mobility challenges, such as KU Medical Center with its issues related to parking supply and location, are more likely to be willing partners interested in increasing jobs accessible by transit.

KCI & Zona Rosa

Many of the workers in the Zona Rosa/KCI Industrial Corridor live in the region's Northland, but relatively low density development patterns in the area have made it difficult to expand fixed-route service cost-effectively. Technical Memo 2 provides strategies for land use that could optimize transit investments. Most service exists in a north-south pattern, with relatively few east-west connections, partly due to a lack of existing east-west street infrastructure. Transit options here include adding east-west transit service to begin developing a grid of routes that would serve KCI, as well as other parts of the Northland. Similarly, because of the low-density nature of the area, a mobility hub at the Zona Rosa location could be very helpful in linking the fixed route services with on-demand services, which could extend the reach of transit. Also, because KCI is on the northwestern fringe of the metropolitan area, but is a major regional asset, there would be value in some higher speed connections between KCI and the remainder of the region.

Independence Center

The Independence Center analysis of worker residences illustrates a strong connection between Independence, Lee's Summit and Blue Springs for workers and jobs, but there is limited transit service that connects these three eastern Jackson County communities today. More frequent transit service between these three cities and Kansas City would better serve the commute patterns, both specifically to Independence Center and generally for other east-west movements, and more frequent IndeBus service would facilitate travel within Independence.

Another observation from the Independence Center pilot is a relatively high need for transit service during weekend and evening hours, as over 70% of employees are in the retail or accommodation/food service job categories.

College & Metcalf and JCCC

These two Johnson County employment centers are part of a much larger employment district stretching along the south leg of I-435, which draws workers from across the region and represents a strong potential to increase jobs accessible by transit. In fact, 69% of workers in the JCCC pilot area live less than 10 miles away from their jobs, while 55% of workers in the College & Metcalf pilot area live less than 10 miles away from their jobs. So, while it is important to connect the rest of the region to Johnson County jobs, it is also important to facilitate north-south and east-west travel within Johnson County to provide access to these jobs.

Other Considerations

The pilots also looked at the full range of mobility options, but in many cases the recommended strategies, such as carpooling, vanpooling, communication strategies and technology strategies, were the same for each pilot area because they should be implemented as a network across the region. For bicycle and pedestrian connections, the focus on improved infrastructure and support for community and business policies applies across all pilot study locations, with some specific infrastructure needs and opportunities.

FROM PILOTS COLLECTIVELY

From these individual pilot lessons, specific lessons for transit and mobility are applicable region-wide, including:

- The need for higher frequency connections between routes. Low frequencies translate into long connection times between services, which limit the destinations a traveler can reach in a reasonable amount of time.
- The need for expanded service hours. Many of the jobs in the current economy do not fit the traditional 8-to-5 work day. Making those jobs accessible by transit requires transit services be offered in the evening and on weekends.
- The need for direct connections across boundaries (city/county/state). Lines that do not cross boundaries force additional connections that can limit the distances traveled in a reasonable amount of time.
- Travel is a mix of short (less than 10-mile) and longer (more than 10-mile) trips, and the region needs a transportation system that is flexible enough to serve both trip lengths. Diverse options, such as ridehailing, fixed route, van polling and express lanes can meet these diverse needs.
- For longer trips, there is a need to rapidly cross large sections of the region to keep commutes within the desired 60-minute-or-less timeframe. Speed amenities, such as bus on shoulder or commuter rail, would improve travel times.
- The greater the intensity of activity in a given location, the greater the variety of travel options that make sense at that location.
- Traditional fixed-route transit services are not the best options to meet the needs of all travelers in terms of either convenience or cost. New, alternative mobility options may better serve some markets.

APPENDIX A: PILOT ANALYSES
PILOT AREA PROFILE, GAP ANALYSIS, RECOMMENDATIONS AND OUTCOMES, FIXED ROUTE TRANSIT ACCESS EVALUATION

RideKC Workforce Connex

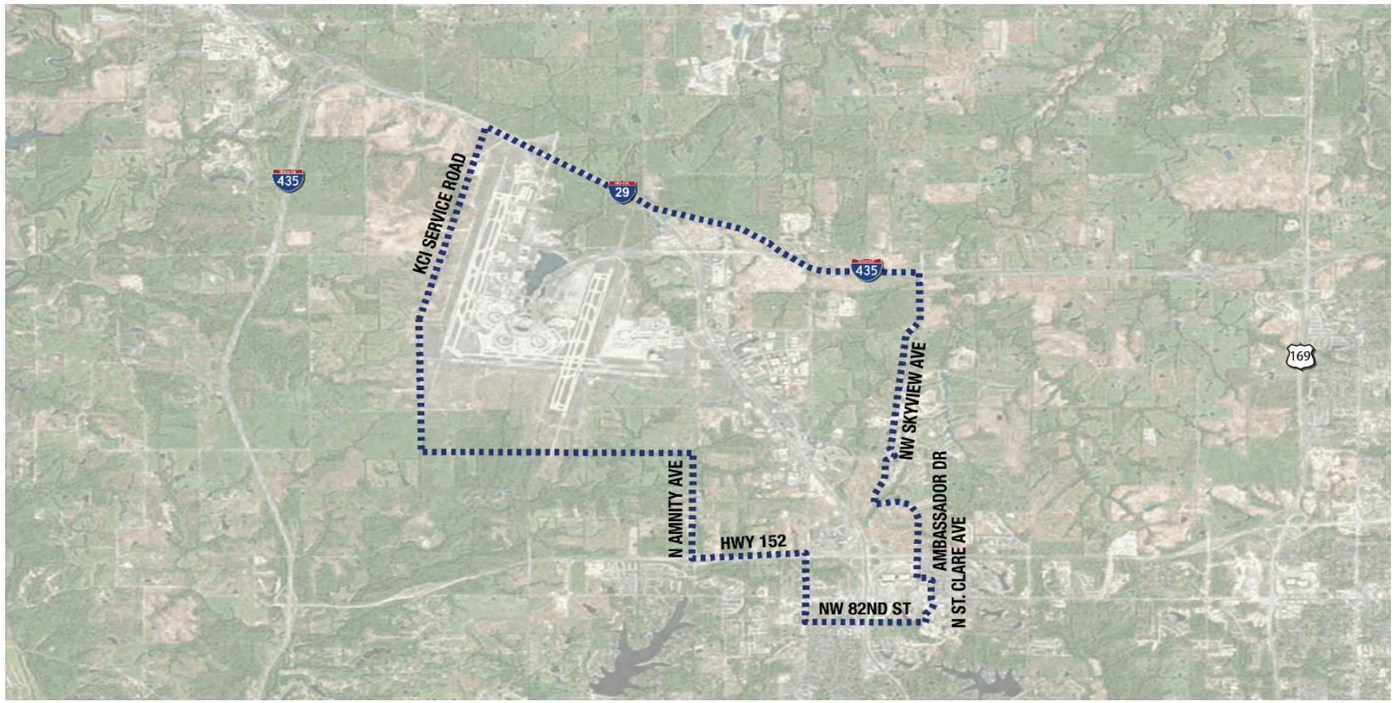
Zona Rosa Pilot

Pilot Area Profile

Pilot Area Boundary	North	East	South	West
	Interstate 29, Interstate 435,	N St. Clair Ave, N Ambassador Drive, N Skyview Ave	NW 104th street; Hwy 152; NW 82nd Street	West edge of KCI; Amity Ave; Congress Ave;

Typology	Context	Attraction Level	Destination	Peak Hours
	Outer Ring	Regional	Major Multi-Purpose	Evening/Weekend

Workers within Boundary	Number	Percent
Agriculture/Forestry/Fishing/Hunting	16	0.1%
Mining/Quarrying/Oil and Gas Extraction	1	0.0%
Utilities	0	0.0%
Construction	196	1.1%
Manufacturing	1,529	8.3%
Wholesale Trade	1,287	7.0%
Retail Trade	2,409	13.1%
Transportation/Warehousing	2,690	14.6%
Information	485	2.6%
Finance/Insurance	1,060	5.8%
Real Estate/Rental/Leasing	466	2.5%
Professional/Scientific/Tech Services	424	2.3%
Mgmt of Companies/Enterprises	774	4.2%
Admin/Support/Waste Mgmt/Remediation	2,415	13.1%
Educational Services	214	1.2%
Health Care/Social Assistance	1,649	9.0%
Arts/Entertainment/Recreation	110	0.6%
Accommodation/Food Services	2,286	12.4%
Other Services (exc. Public Administration)	272	1.5%
Public Administration	132	0.7%
Total Jobs	18,415	100.00%



Current Transit and Mobility Options and Usage		*Pilot Area Usage*	*Regional Usage*
Fixed Route Transit	Metro Route 129	415	
	Metro Route 136	49	
	Metro Route 142	1209	
	Metro Route 230	19	
	Metro Route 231	22	
	Boardwalk Square MetroCenter		
Non Fixed-Route Transit			
Carpool			
Vanpool	2 vanpools operating to KCI		
Carshare			
Bikeshare			
First/Last Mile Transit			
Bicycle Connections			
Pedestrian Connections			

Current Land Use Condition*	Count	Percent
Single Family	8,285	21.60%
Vacant / Ag	7,915	20.64%
Parks / Open Space	1,836	4.79%
Commercial	5,509	14.36%
Public / Semi Public	2,371	6.18%
Multi-Family / Condo	3,039	7.92%
Office	272	0.71%
Industrial / Business Park	0	0.00%
Mixed Use	0	0.00%
ROW	9,127	23.80%
Railroad ROW	0	0.00%
	38,354	100.00%

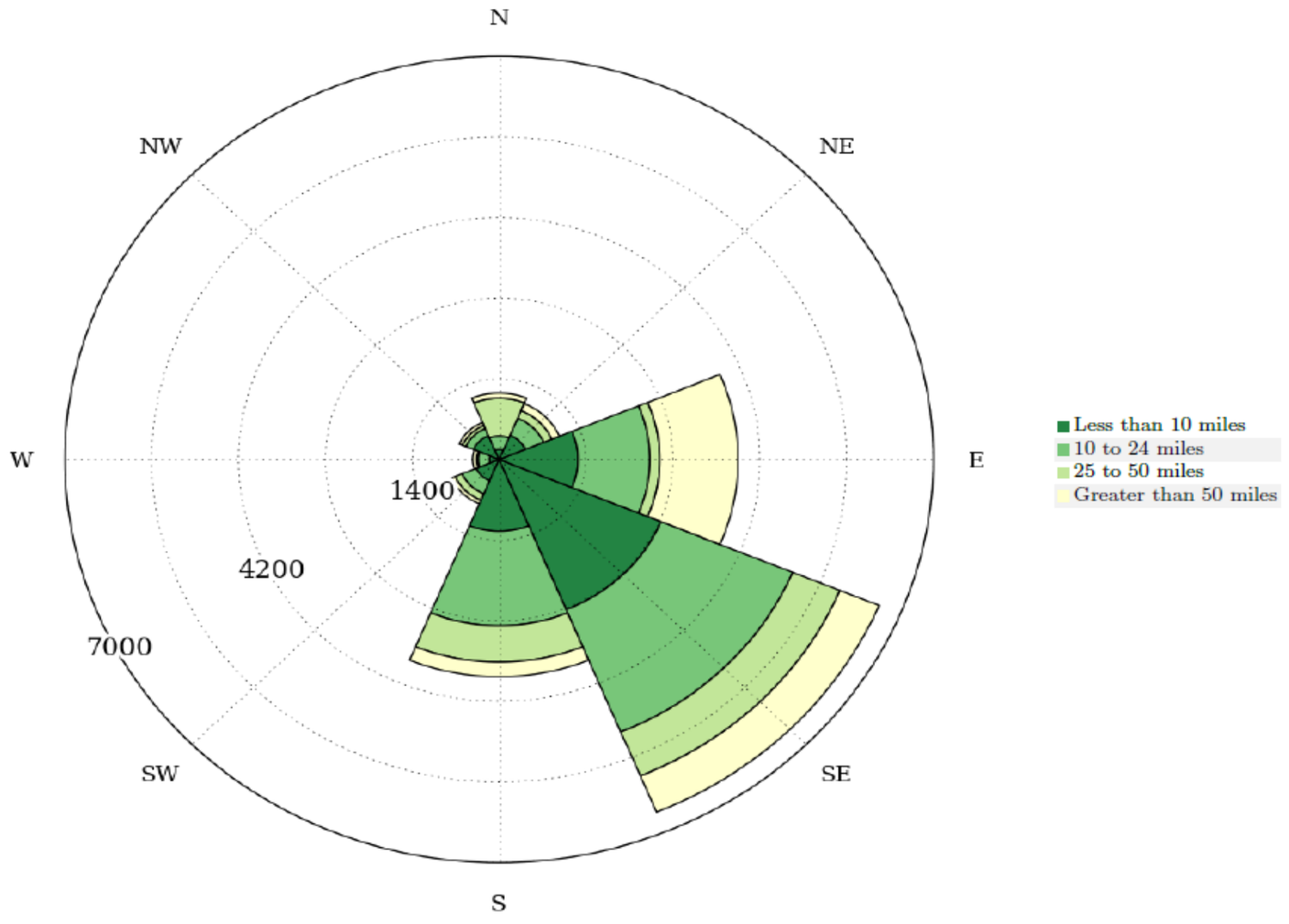
*Per MARC's 2012 Land Use raster data within the 4PM-6PM 30-minute Travelshed Boundary for this pilot area

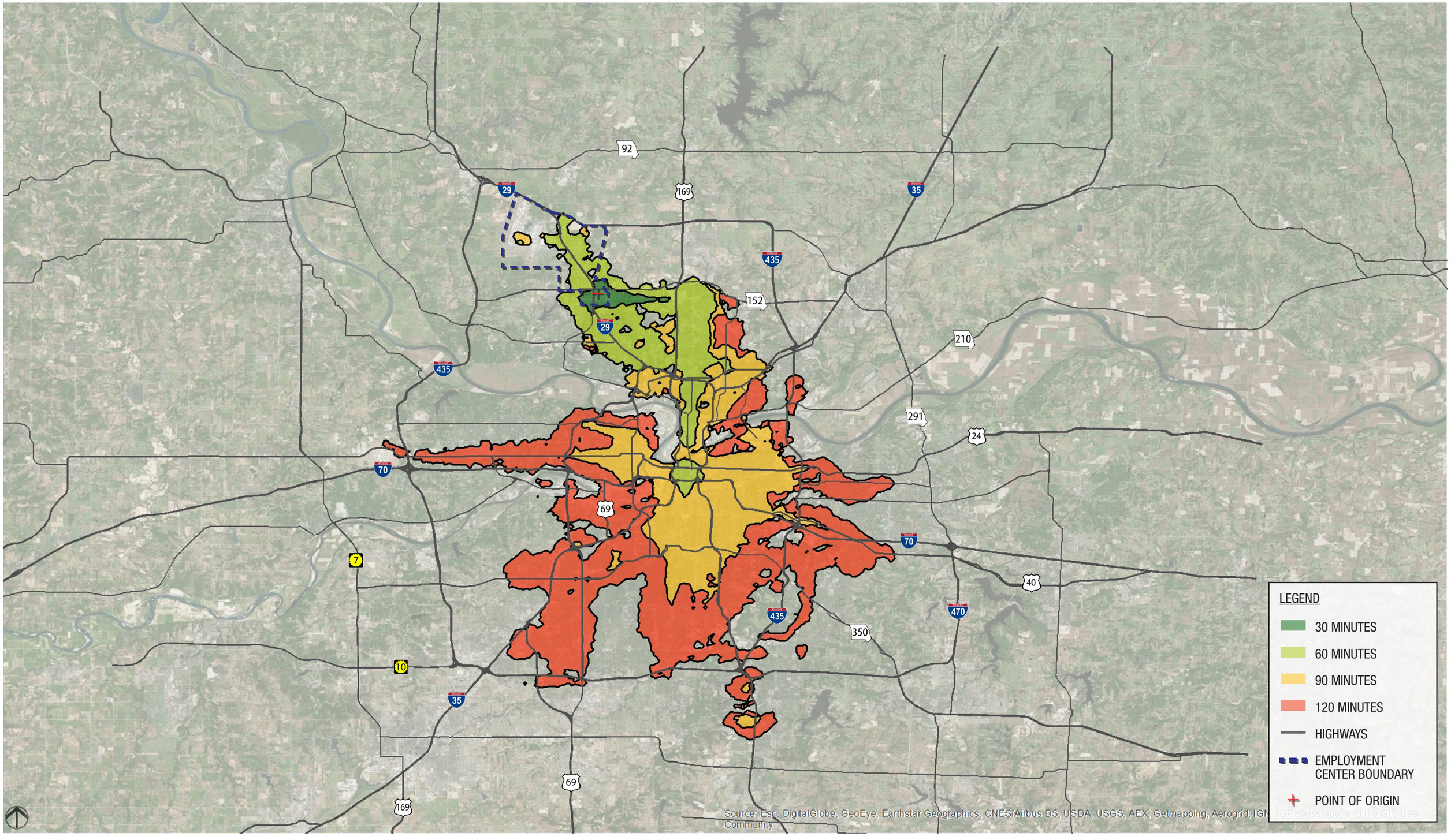
RideKC Workforce Connex

Zona Rosa Pilot

Gap Analysis

Zona Rosa Worker Residence (4-6 PM Travelshed)	Number
Total	
60 Minute	3,226
60-120 Minute	4,635
Outside 120	10,554
In High and Very High Transit Propensity Tracts	
Within 60 minutes	153
Outside of 60 minutes	1,605
In Low and Very Low Transit Propensity Tracts	6,628
Distance from Work to Home Census Block	
Less than 10 Miles	6,970
10 to 24 Miles	6,213
25 to 50 Miles	2,624
Greater than 50 Miles	2,608





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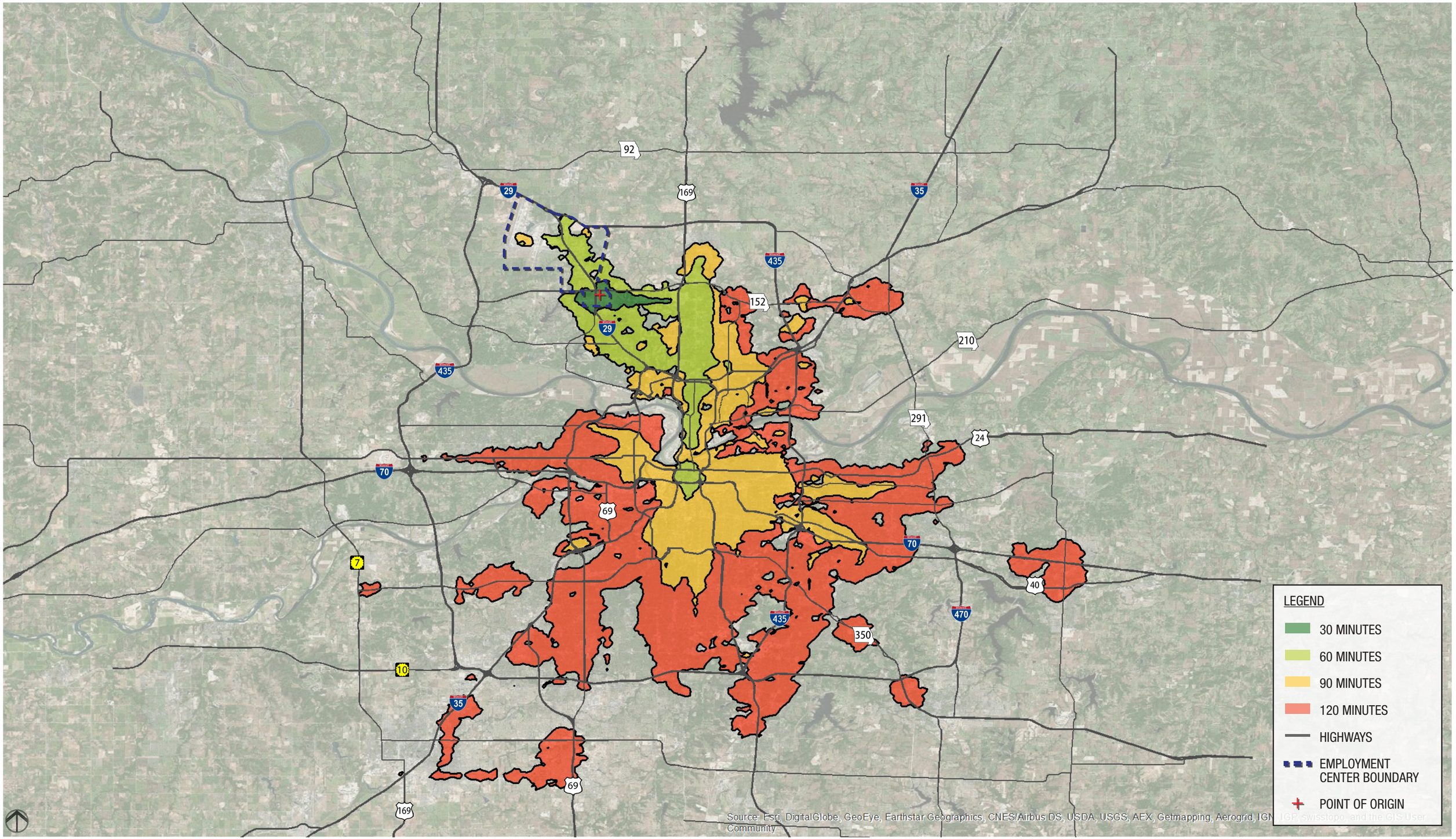

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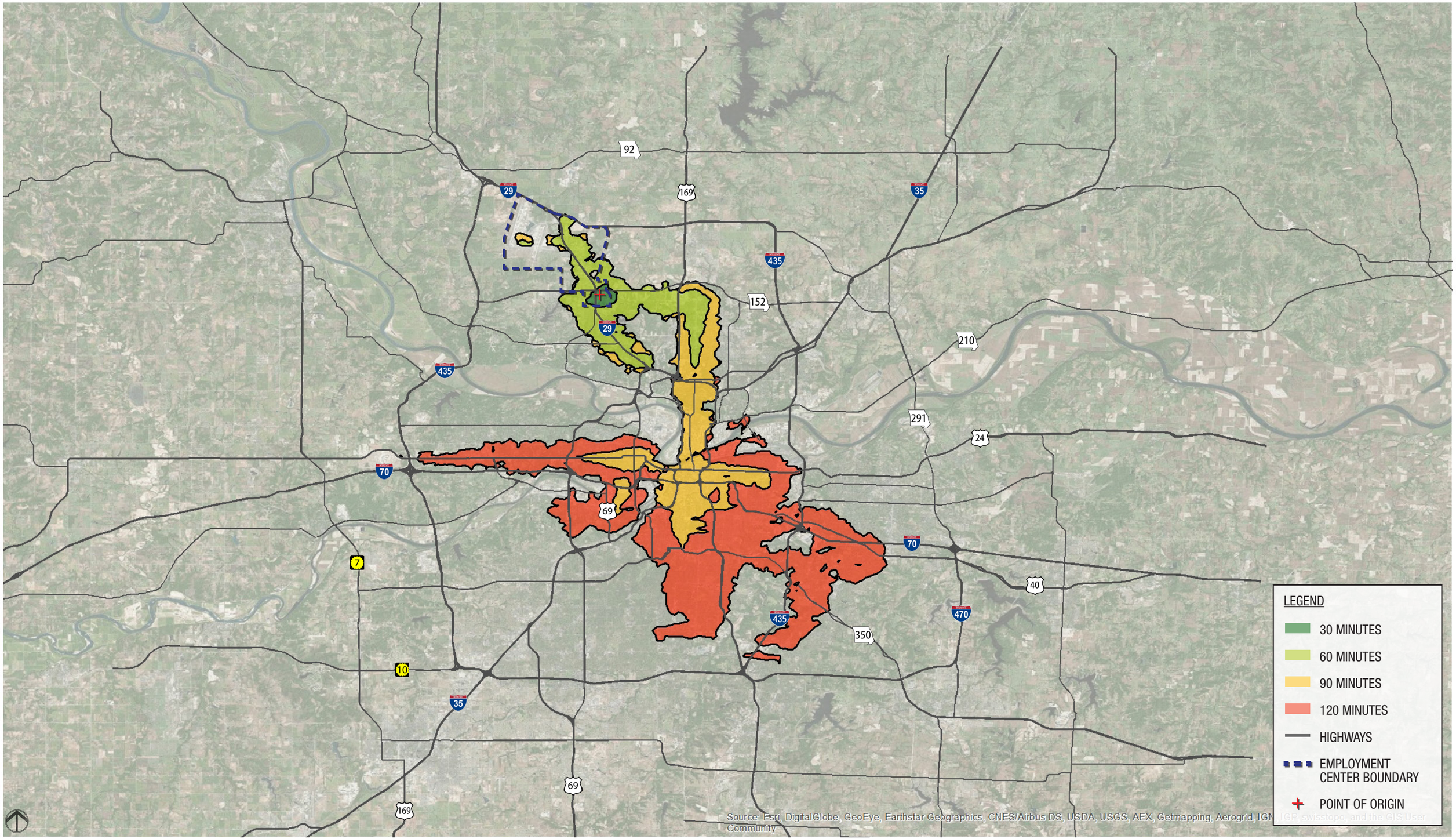

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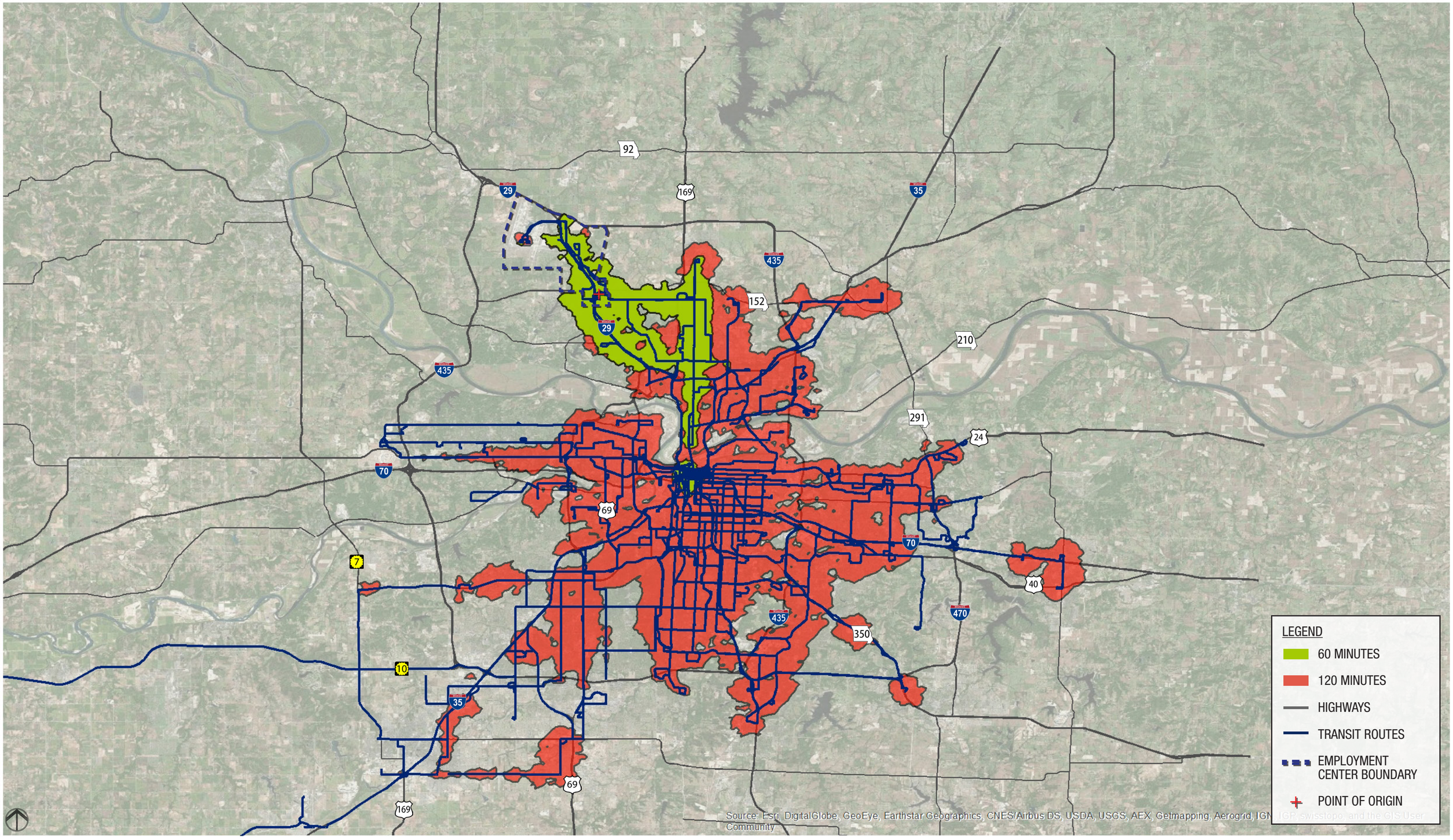

TRANSIT ROUTES

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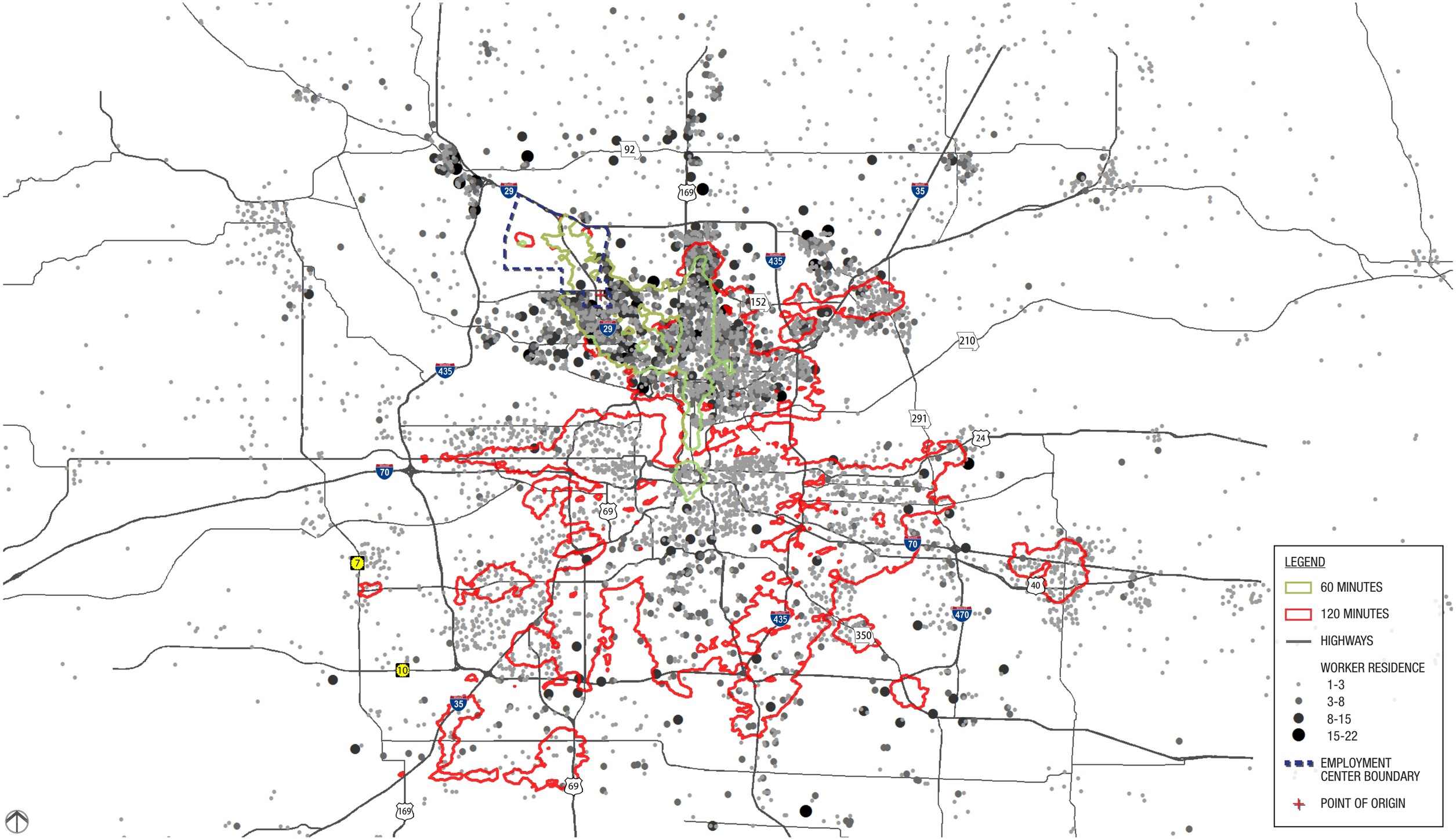

TOTAL WORKER RESIDENCE: 18,415

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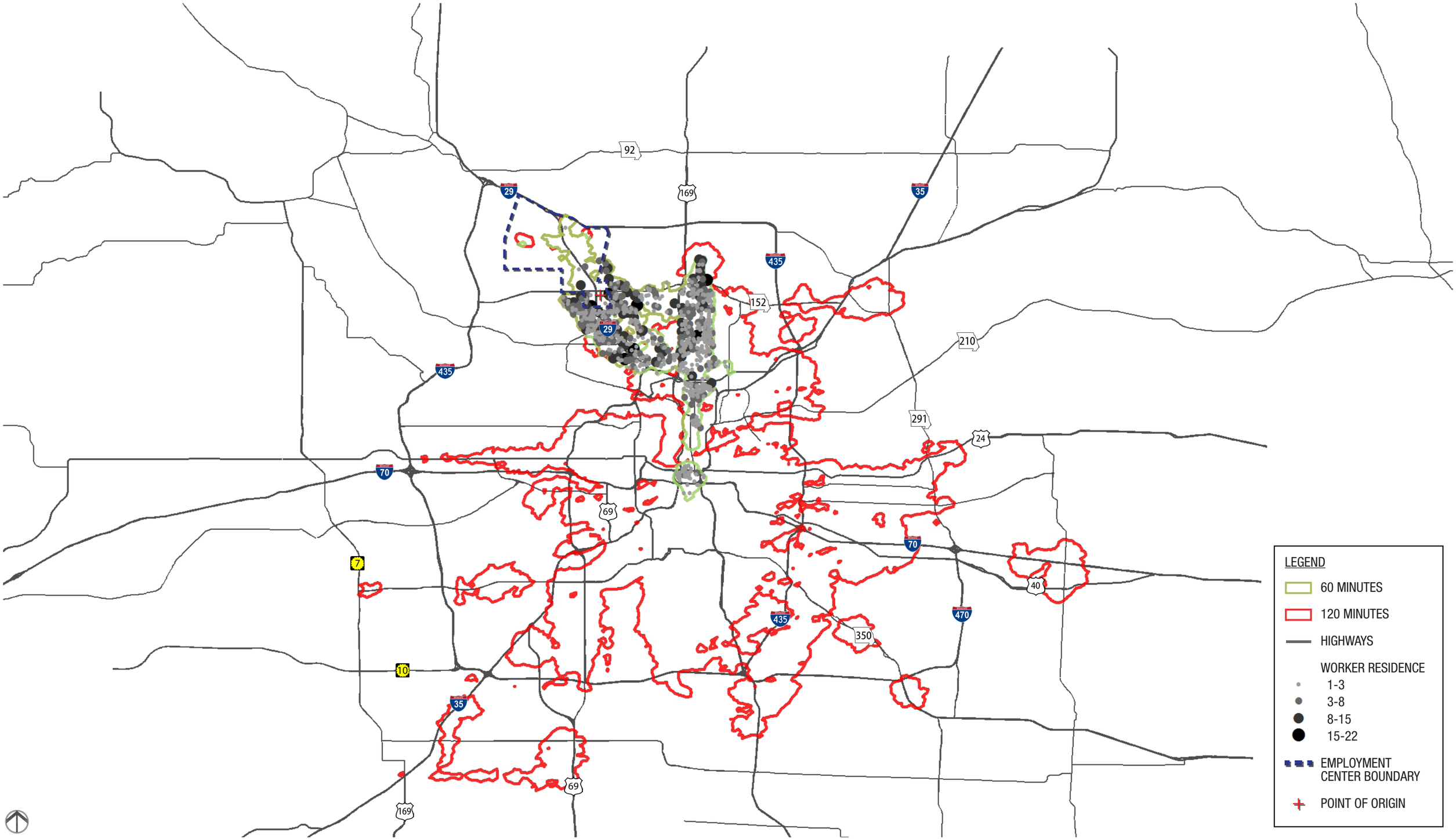
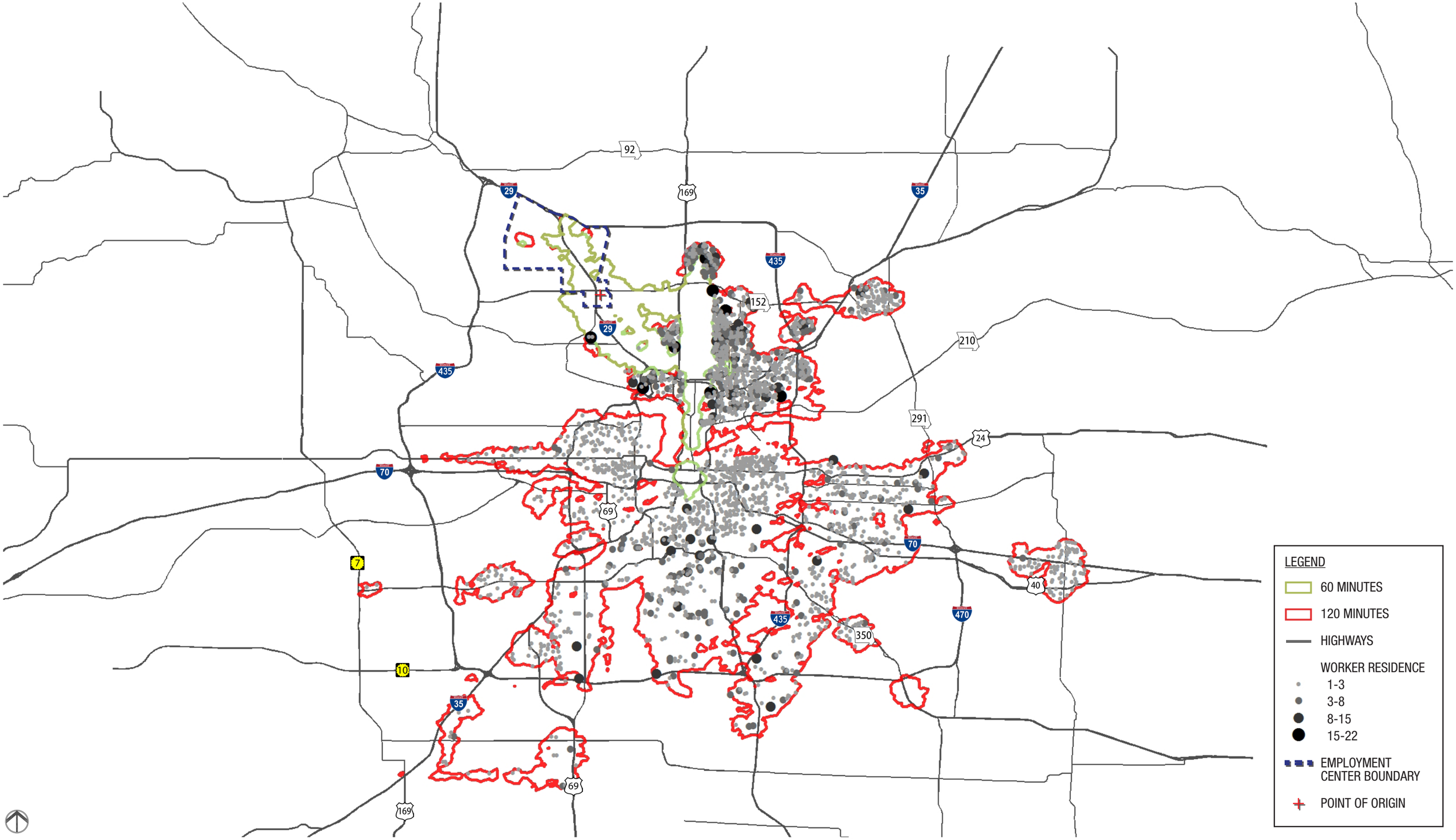


60 MINUTE WORKER RESIDENCE: 3,226

TRAVELSHED: 4 PM - 6 PM



60-120 MINUTE WORKER RESIDENCE: 4,635

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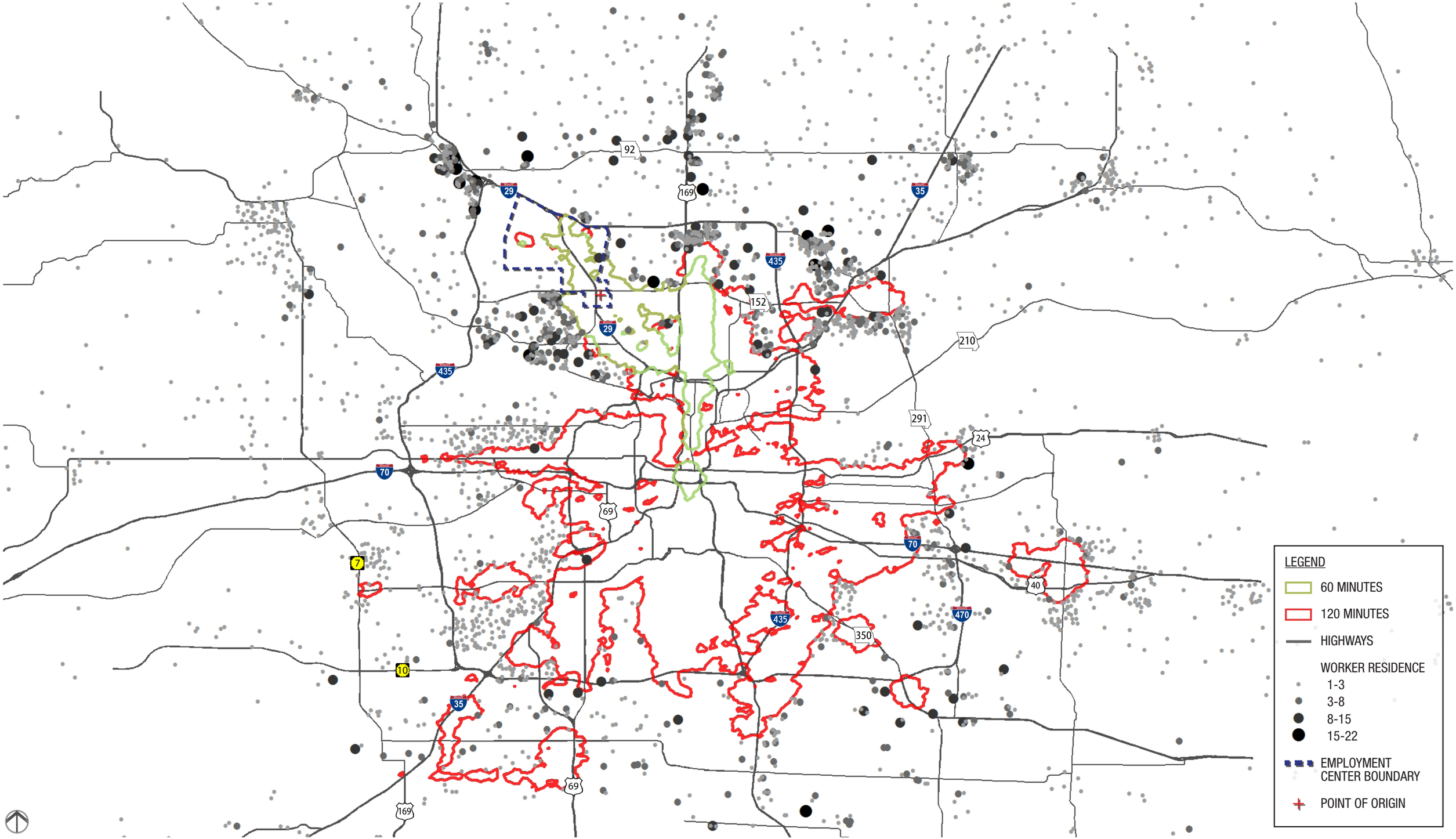
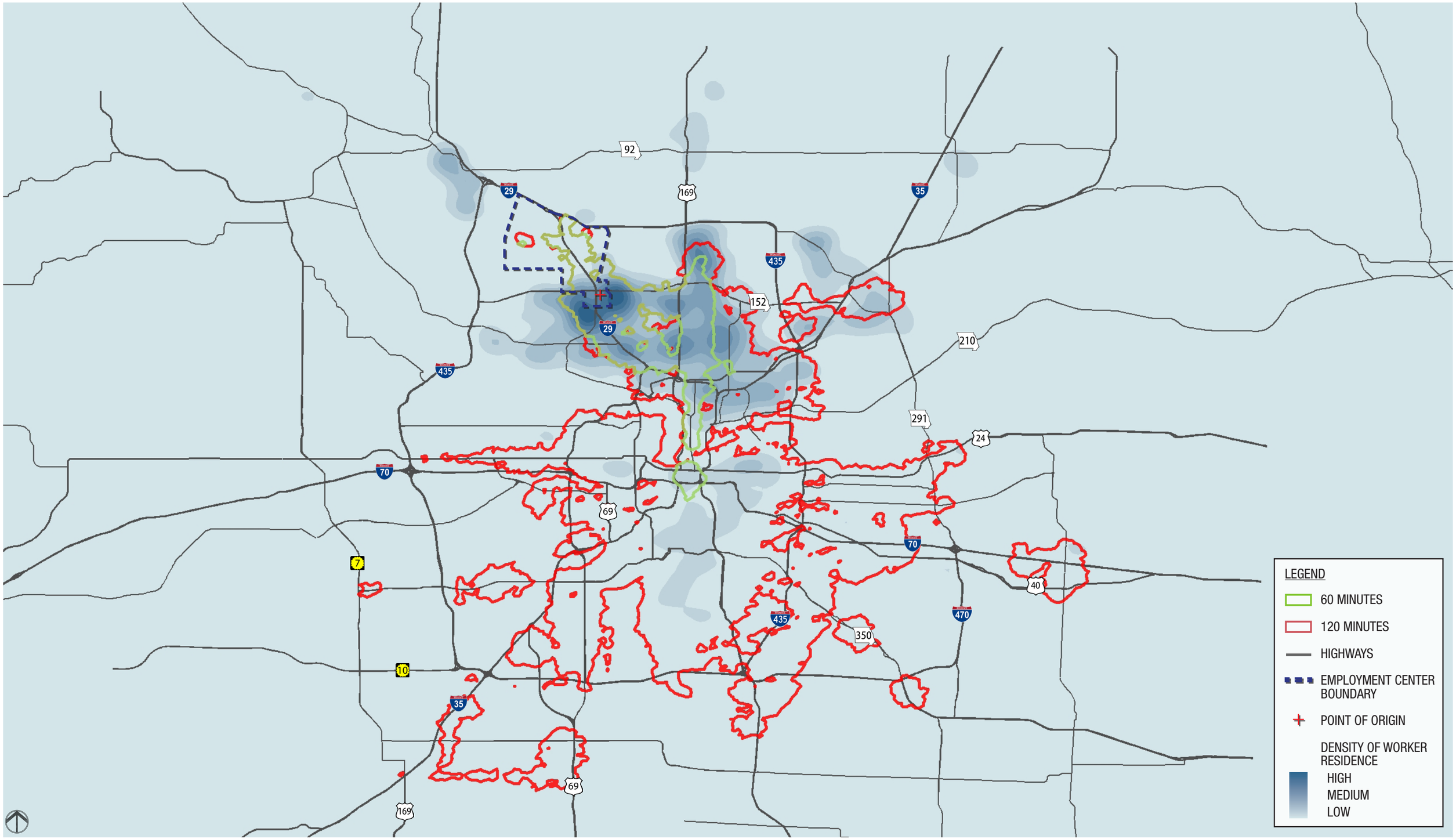


OUTSIDE 120 MINUTE WORKER RESIDENCE: 10,554

TRAVELSHED: 4 PM - 6 PM



WORKER RESIDENCE DENSITY

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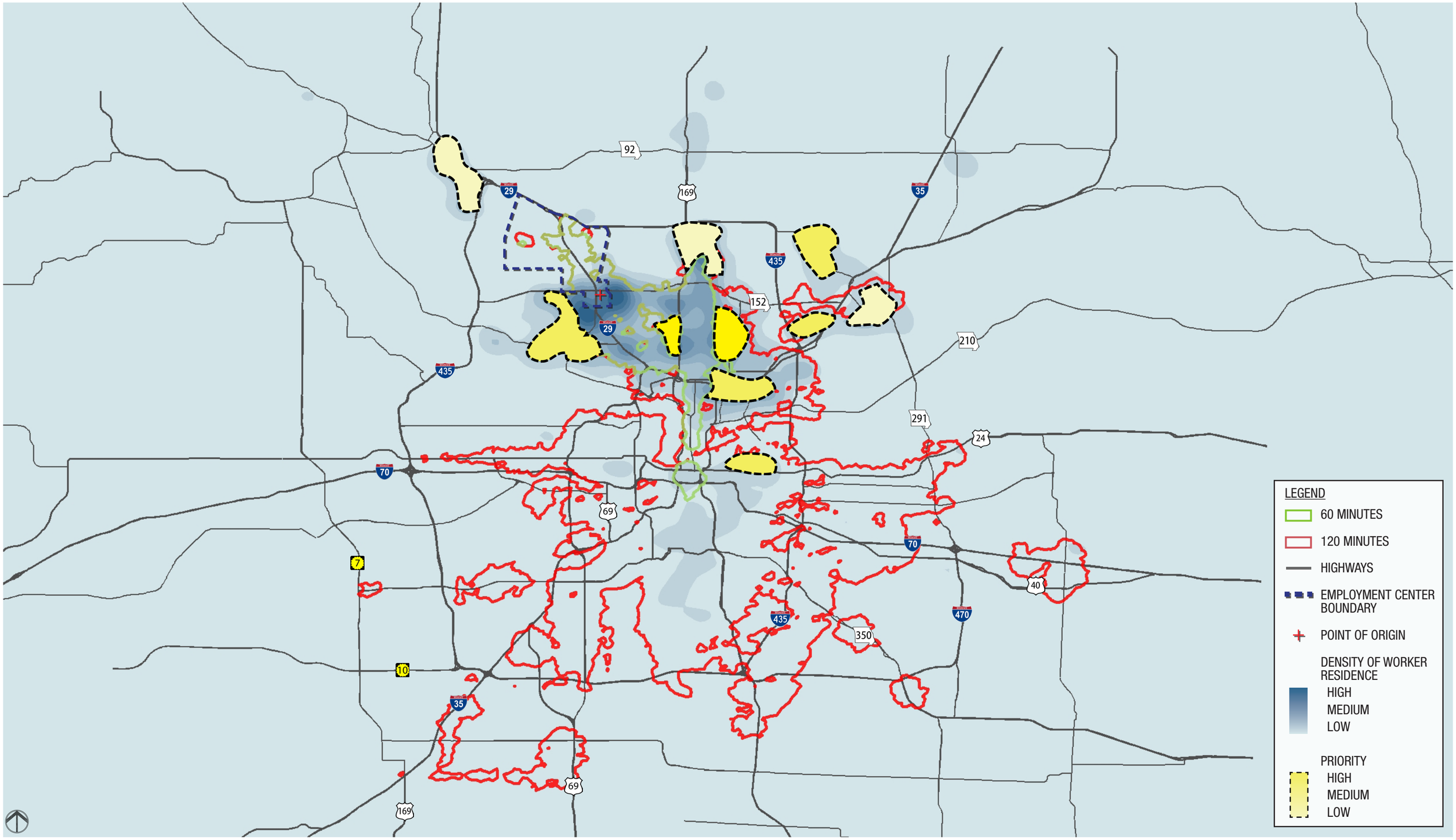
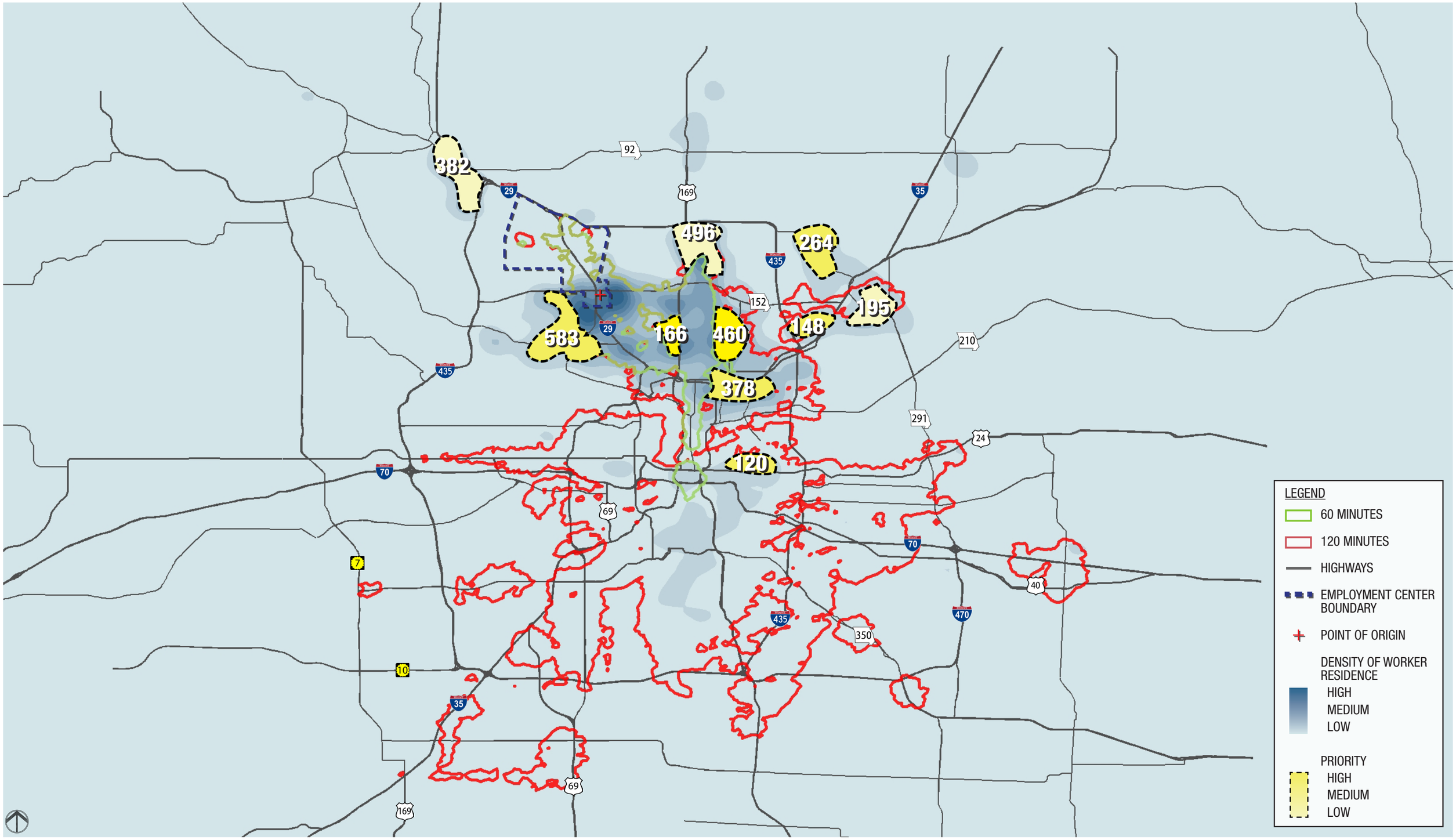


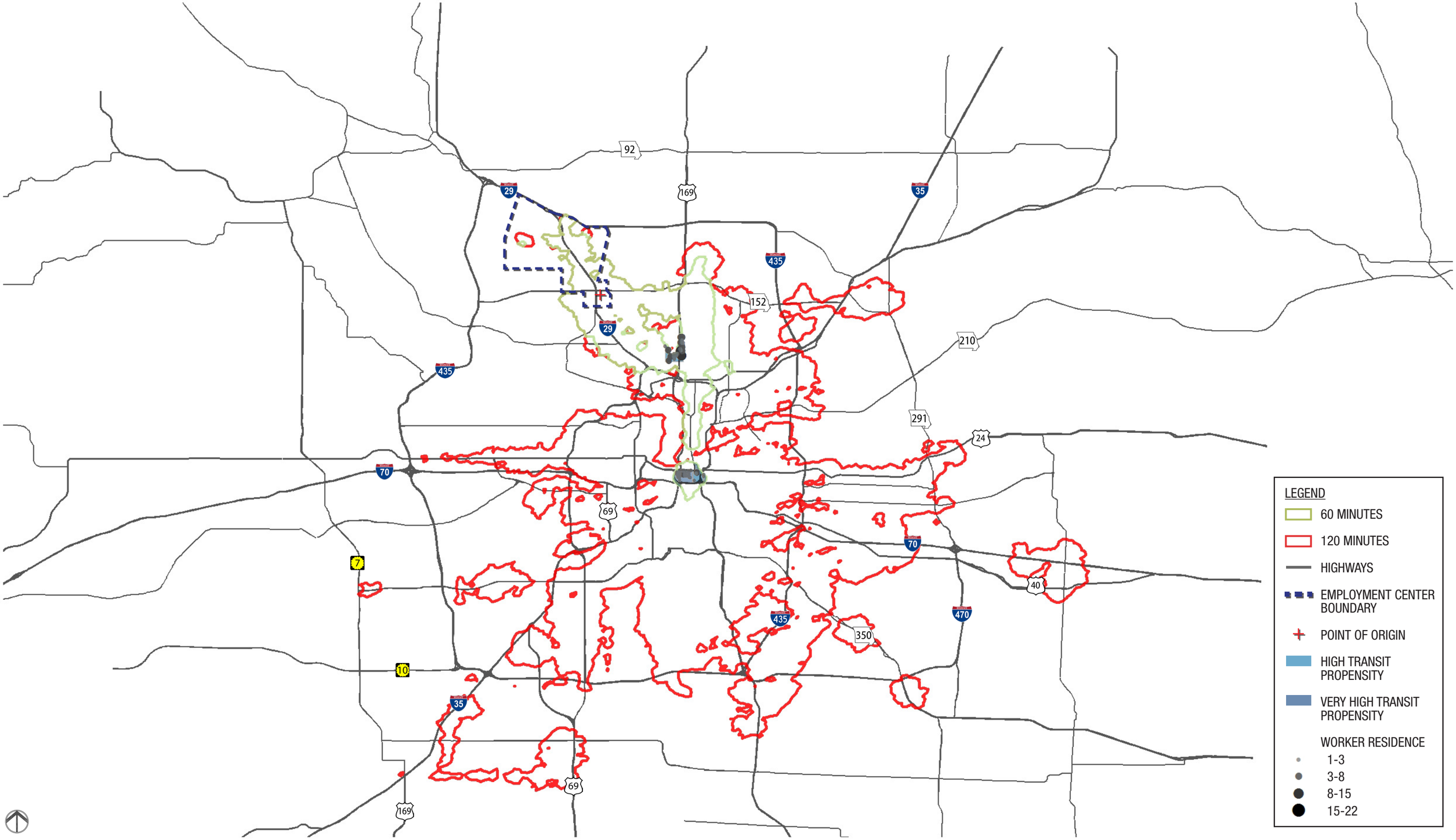
WORKER RESIDENCE POTENTIAL CAPTURE AREAS

TRAVELSHED: 4 PM - 6 PM



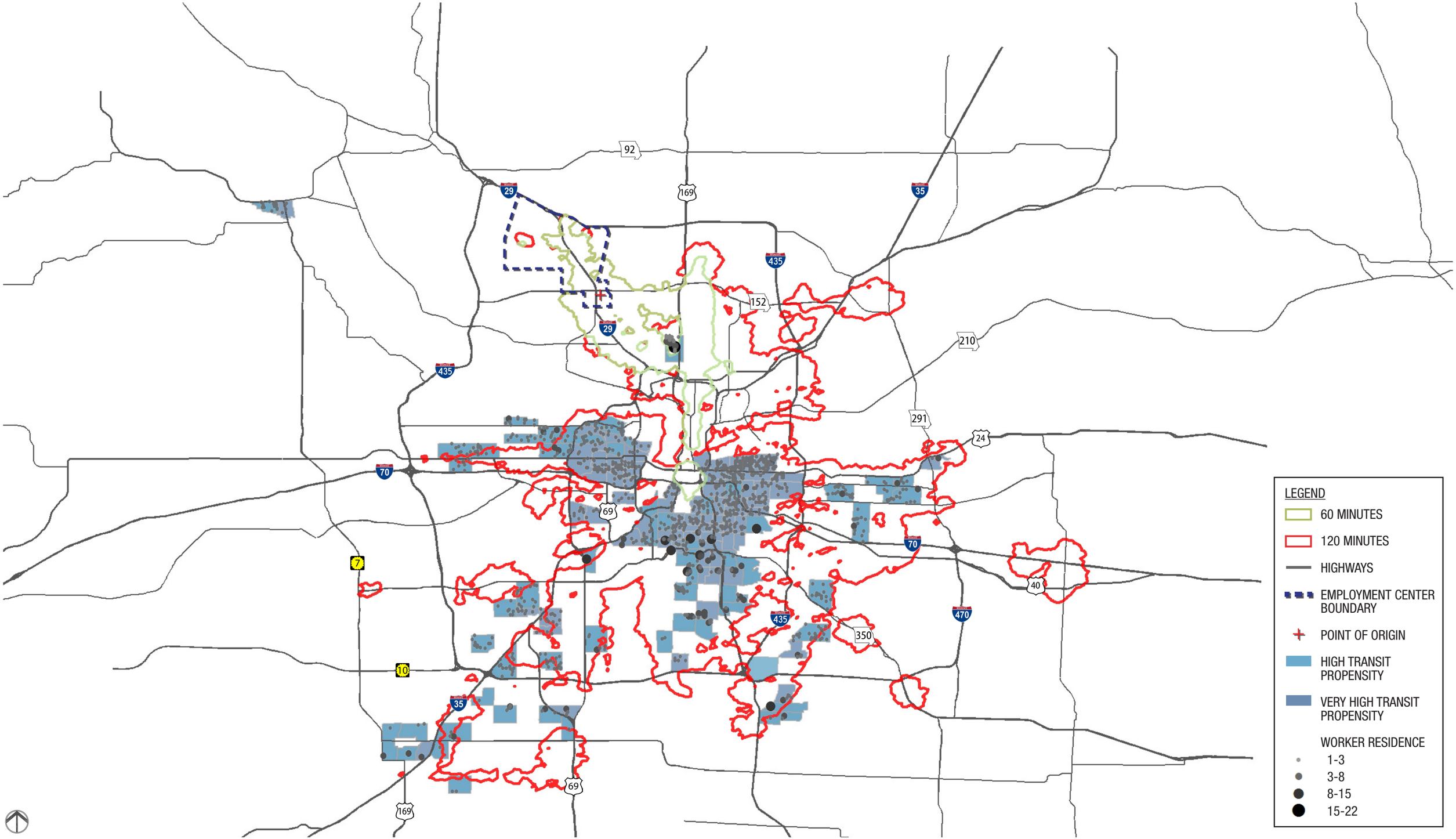
WORKER RESIDENCE POTENTIAL CAPTURE: 3,192

TRAVELSHED: 4 PM - 6 PM



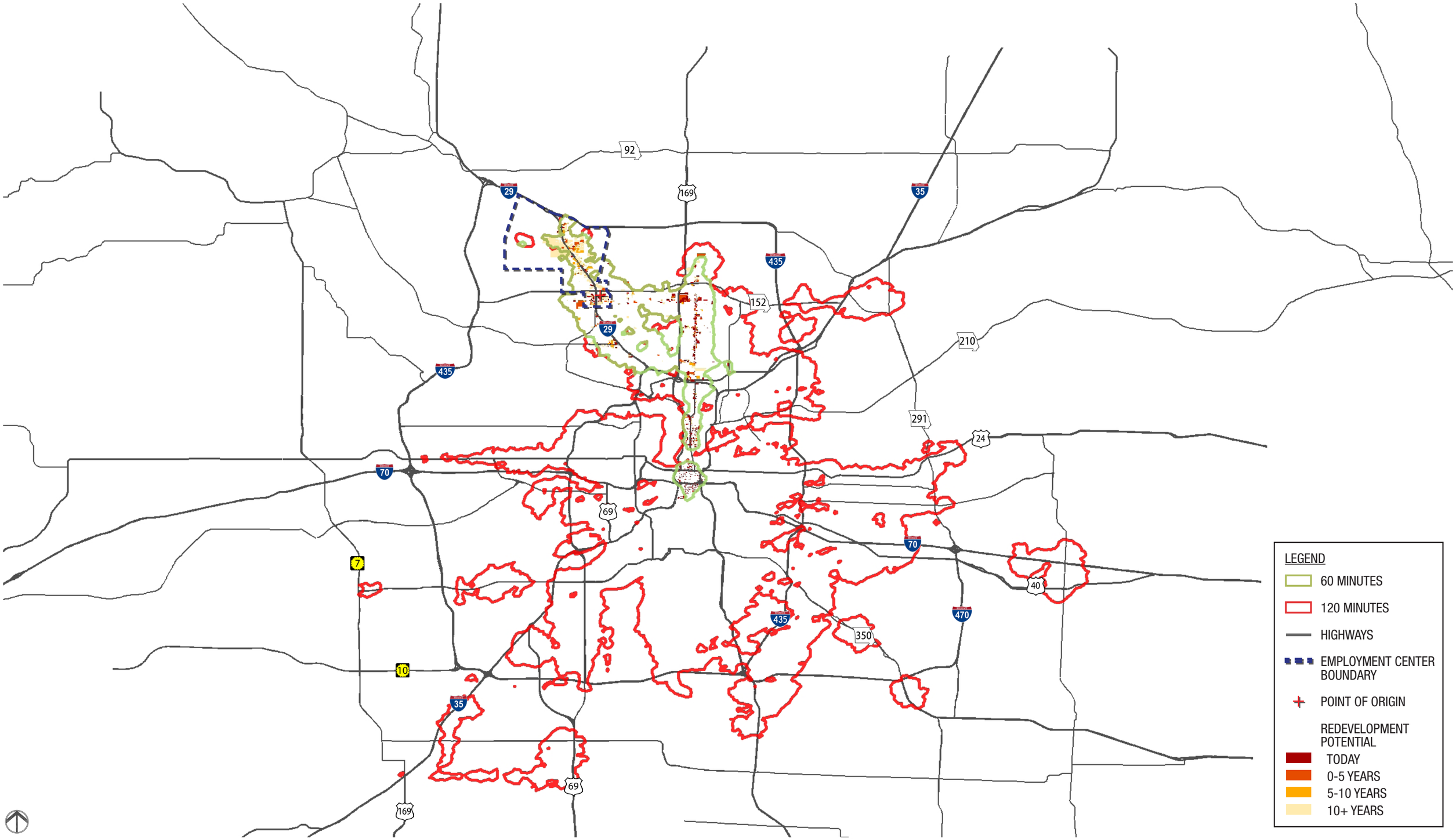
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES: 153

TRAVELSHED: 4 PM - 6 PM



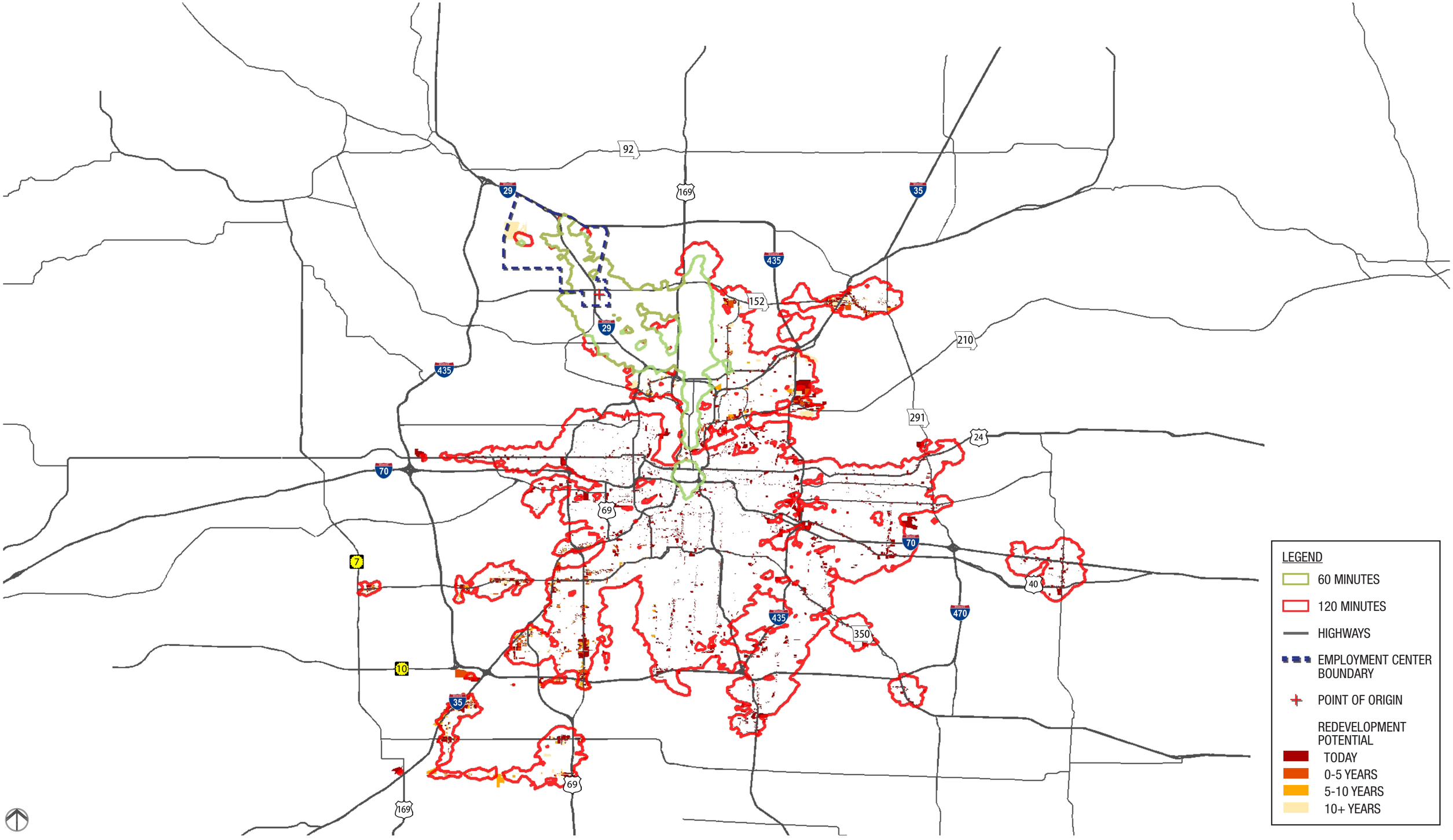
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS OUTSIDE OF 60 MINUTES: 1,605

TRAVELSHED: 4 PM - 6 PM



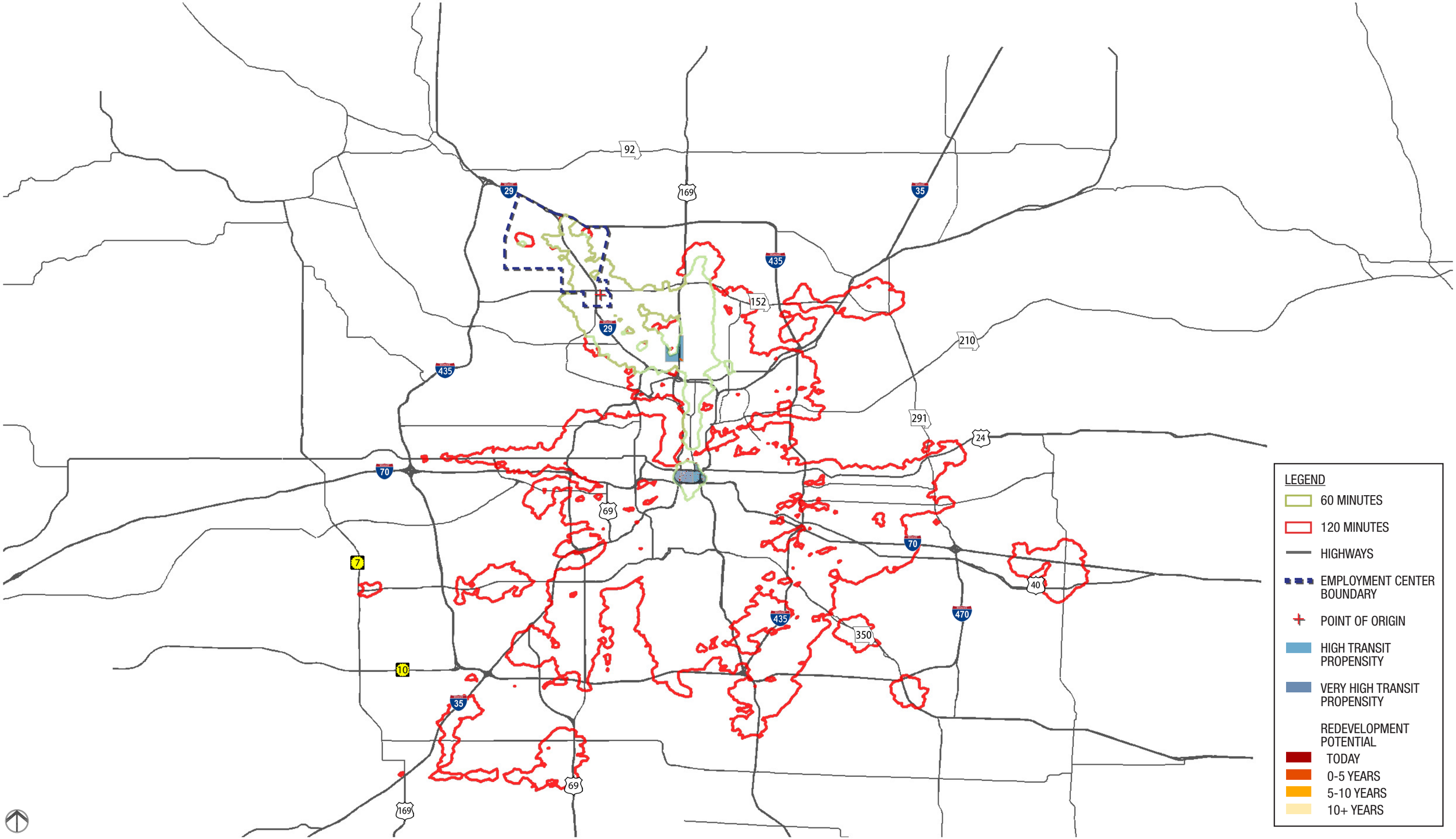
REDEVELOPMENT AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



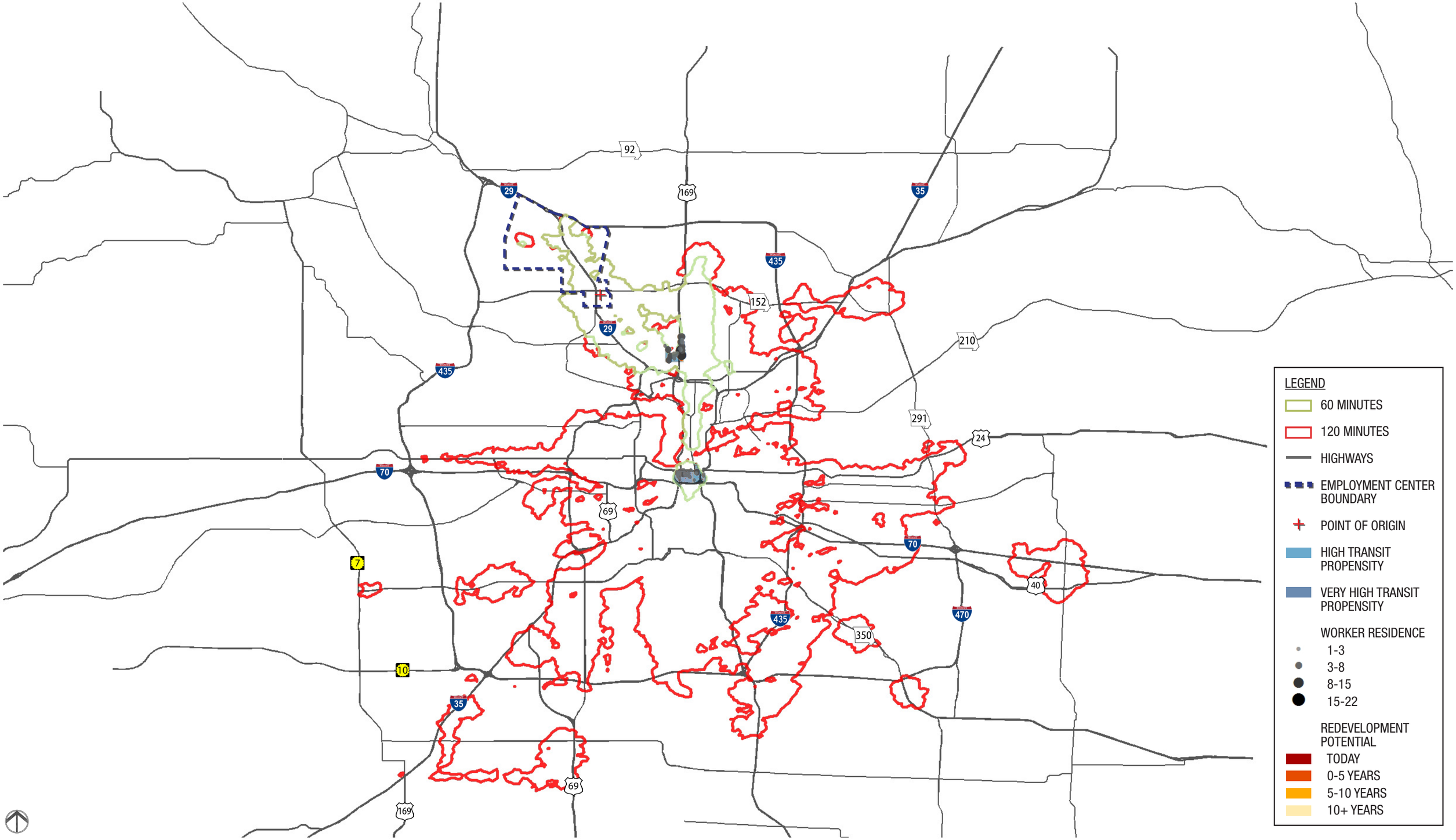
REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



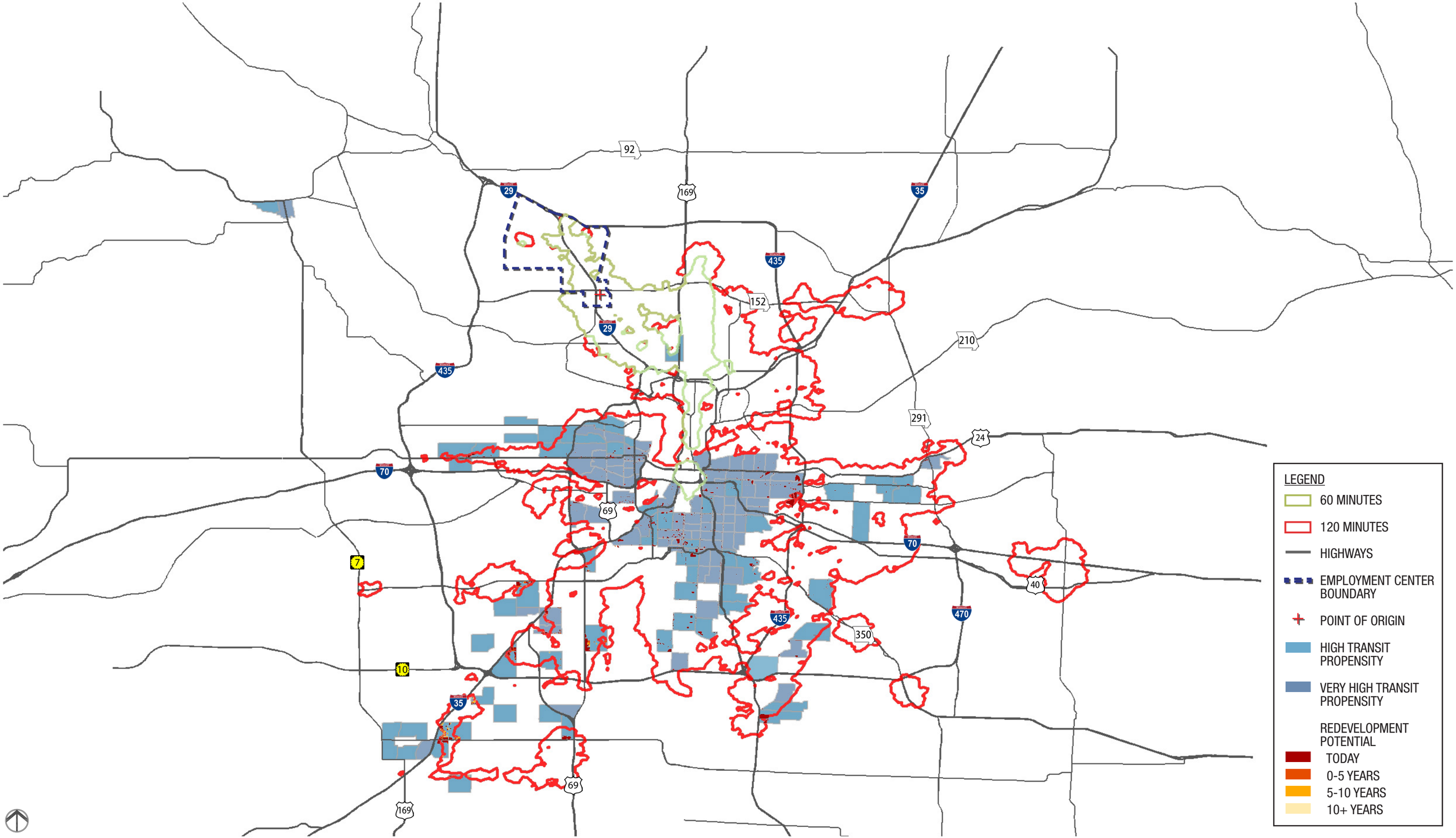
REDEVELOPMENT AREAS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



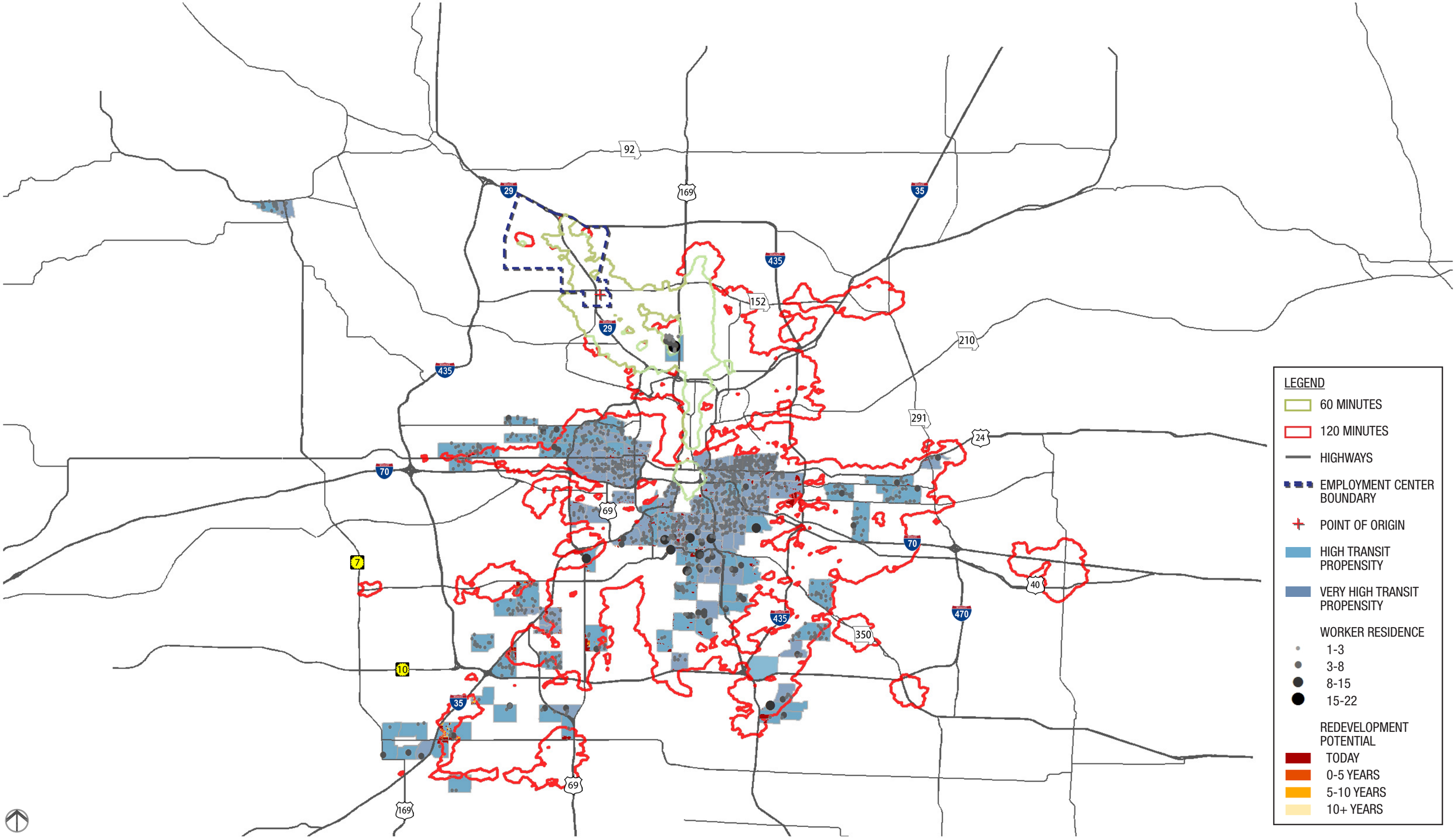
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



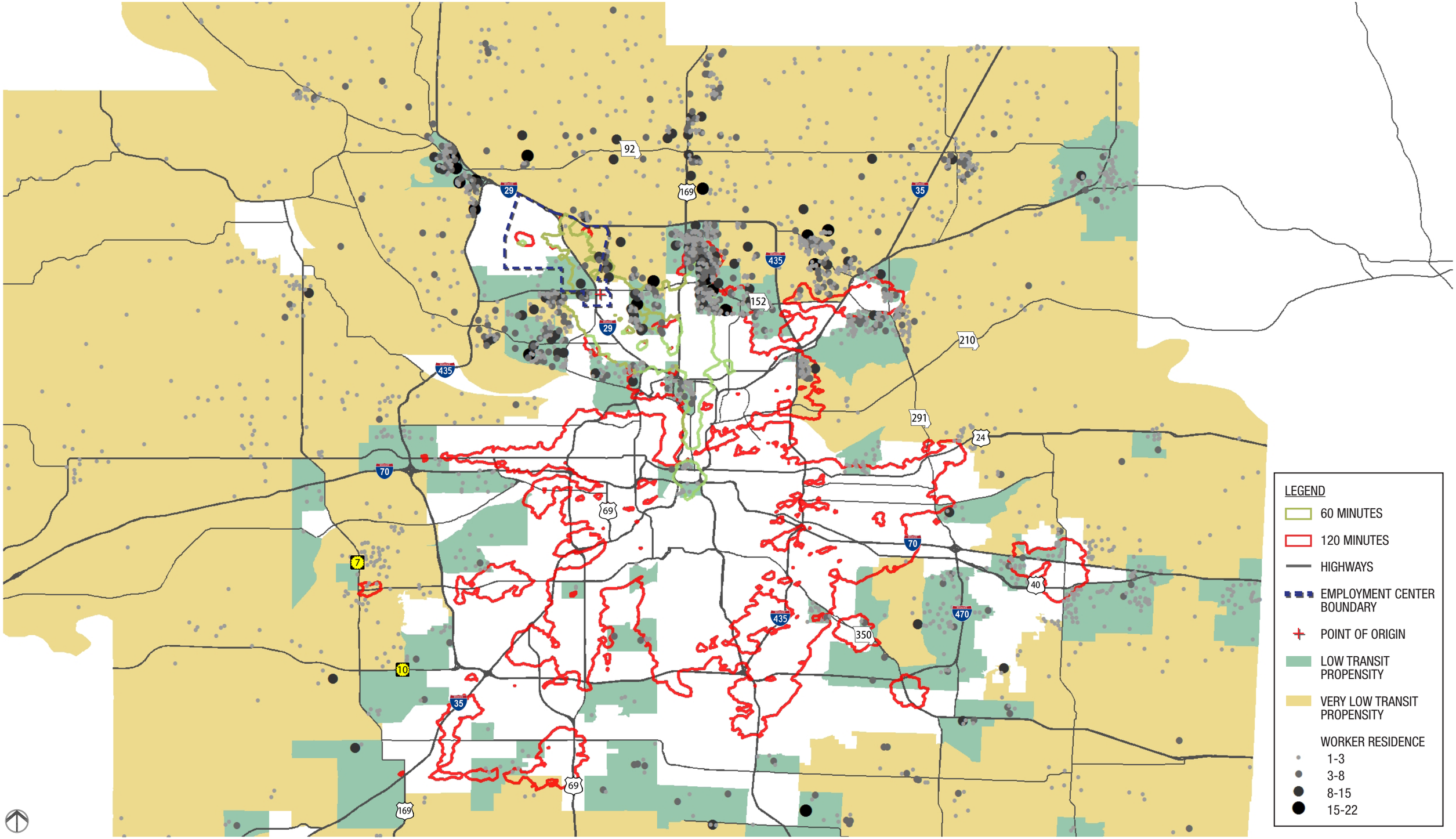
REDEVELOPMENT AREAS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



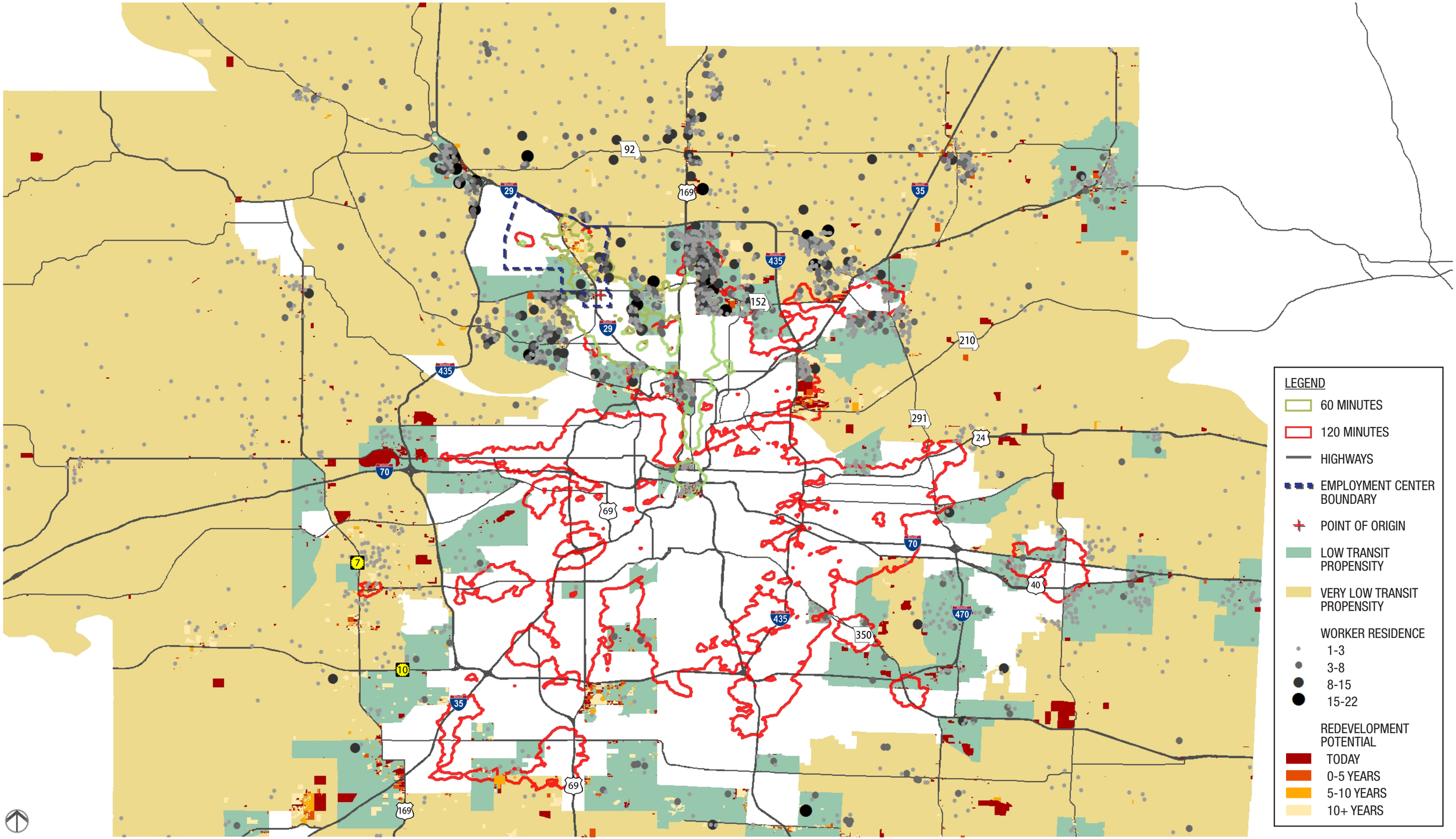
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY AREAS: 6,628

TRAVELSHED: 4 PM - 6 PM



WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY AREA + REDEVELOPMENT POTENTIAL

TRAVELSHED: 4 PM - 6 PM

Zona Rosa Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Zona Rosa Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Mobility Hub											
Primary Deployment	Boardwalk Square MetroCenter (consider re-siting as part of urban design analysis)	KCATA	High priority	Cost to construct physical structure, purchase and installation of IT hardware and software compoenents.	Increased opportunity for connectivity, east-west	Same e-w jobs access especially for Zona Rosa, provides other connectivity potential for first and last mile connectivity and information/communi cation	Medium	Depends on how much interest there might be generated from an employer location e.g. airport, etc	Same		Metrolinx
Secondary Deployment	Note: Boardwalk Square was selected for this pilot since it was a point of confluence for services both to Zona Rosa, KCI Industrial Park, and KCI. From a regional plan standpoint, if ATA moves forward with the thoughts of continuing the 142 N Oak, and developing a separate e-w service on Barry Road, the better site for the hub might be closer to Metro North Mall and paerhaps a secondary hub for services proximate to KCI should be considered										
Mobility Strategies											
Fixed Route Transit	Metro Route 129 - More direct express between KCI, Boardwalk and Downtown; consistent headways	KCATA	Second	43.89/hour and 4.91/mile							
	Metro Route 142 - Connect with Zona Rosa on every trip	KCATA	First priority	43.89/hour and 4.91/mile							

Zona Rosa Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Zona Rosa Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
	New Barry Road Service - Liberty to Zona Rosa	KCATA	Third	43.89/hour and 4.91/mile	12.31%	2.81%					
	New 64th/68th/72nd Service - MO-9 to Brighton to Barry Road	KCATA	Third	43.89/hour and 4.91/mile							
	New MO-9 Route - Boardwalk Square MetroCenter to Parkville	KCATA	Last	43.89/hour and 4.91/mile							
Non-Fixed Route Transit	TNCs at KCI (zTrip?)	Whoever becomes the regional mobility authority/TMA	Medium	App development or add on	Might provide some flexibility for workers and access, modest		Medium	Depends on interest to be generated			Lots of airport examples, mainly not connected to
	Options to connect employees to MetroRoute 129	Regional Mobility provider/TMA	Medium	Same, communication strategy			Medium	Depends on who is interested			
Carpool	Participate in Regional RideShare database to increase pool of potential carpool matches Promote use of the Guaranteed Ride Home program for carpoolers	MARC RideShare and Employers MARC RideShare	Ongoing	No cost No cost	Minor to moderate	Minor to moderate	High (no cost)	Most effective with large employers and regular shifts.		Harley Davidson and KC Sausage participate in RideShare	
	of carpool drivers	Employers		Flexible							
Vanpool	Coordinate with large employers to subsidize vanpools from Boardwalk Transit Center, downtown KCMO Transit Center, Platte City and other population centers outside the 90 min. transit shed	KCATA, vRide, Enterprise	Ongoing	Cap employer subsidy			High, with employer subsidy	Most effective with large employers and regulars shifts		KC Sausage in talks with providers to coordinate vanpools from Boardwalk Transit Center or Downtown KC	Chicago PACE bus METRA feeder vanpools
	Promote use of the Guaranteed Ride Home program for vanpoolers	MARC RideShare		No cost							us.com/sub/vanpool/metra_feeders.asp
Car Share	Not enough density to support carshare at this time									Zona Rosa environs medium for shared use mobility opportunity	

Zona Rosa Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		Currently Responsible Organization	Phasing/ Timeframe	Cost	Increase in Zona Rosa Pilot Area Worker Accessibility	Increase in Regional Job Accessibility	Effectiveness (cost per unit of increase) *(High-Medium-Low)*	Replicability Considerations *(narrative)*	Potential Impact of Replicated Deployment	Stakeholder Interest	Stories to Make the Case
										http://maps.sharedusemobilitycenter.org/sumc/	
Bike Share	Bike racks and employer provided/sponsored bicycles as last mile solution									B-Cycle communicated with Platte County EDC in Dec 2015 about bikeshare stations for I-29 industrial park	
First/Last Mile Transit	Metro Route 230/231 as circulator through KCI Business Park	KCATA									

Bicycle Connections	Bicycle connections both existing and planned take advantage of Missouri 152 Highway Corridor and I-29 Corridor. These corridors provide shared use pathways that connect back to roadways. Roadways including N Congress Ave, NW Barry Rd, and NW Ambassador Dr provided both in some cases, existing bikelanes, and in other cases shared roadway facilities. (KCI Corridor TIF plan, TrailsKC, BikeKC, RBP, MetroGreen)	EDC Kansas City	Long Term over multiple years
			
			Long Term over multiple years
			
			Short Term
				$ low resurface & strip
				$$ medium reconstruction
				
				$ low resurface & strip
				$$ medium reconstruction
				
				$ low cost
							High (Requires State DOT)
							
							High (TIF district, plus sales tax)
								Could work in other locations if freeway exists and authorities are amenable			

Zona Rosa Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Zona Rosa Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**

Pedestrian Connections	Pedestrian connections both existing and planned take advantage of Missouri 152 Highway Corridor and I-29 Corridor. These corridors provide shared use pathways that connect back to roadways.
	
	Sidewalks exist aling N Congress Ave., NW Barry Rd., and NW Amassador Dr.
		EDC Kansas City	Long Term annual plan
			
			Short Term
			
			Data of sidewalks exist
				$-$$ medium construction required
				
				$ low maintance annual
				$ low inventory updating
							High (Requires State DOT)
							
							High (TIF district, plus sales tax)
								Could work in other locations if freeway exists and authorities are amenable			

Communication Strategies	Broaden RideKC website to emphasize full range of mobility options	KCATA/MARC	High Priority - Need to back up with operating performance for public confidence	Capital and maintenance upkeep	Prerequisite for strong regional program and would assist all pilot sites						A better City website, SFMTA website, Helsinki, Finland: Regional Journey Planner, which finds the optimal route from point A to point B using all modes of transportation
	Consider broader us of apps	KCATA/MARC	All apps and technology need to be integrated and seamless to customers		Same as above, need to be integrated						
	Utilize more real-time communications methods	KCATA/MARC	Same as above, could include on board fare payments, etc								

Zona Rosa Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Zona Rosa Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Technology Strategies	Regional Mobility fare/ticketing that will include the full range of mobility options	KCATA/Private partners	Needs to be integrated and coordinated as part of communication strategy								Dallas
Urban Design Strategies	Encourage affordable housing opportunities to be integrated into future development and redevelopment initiatives	KCMO	Long Term	$ low							
	Promote new development and revitalization projects to include multi-modal connectivity by providing sidewalks, bicycle facilities, and pedestrian amenities.	KCMO	Short Term	$ low							
	Explore options for a new mobility hub / transit center location that is more accessible to existing jobs and residents in the area. The future site should have great visibility from existing street network, and should be connected with existing sidewalks and bicycle network.	ATA / KCMO / Existing Land Owners	Short Term	$$$ high							
	Adopt focused and integrated land use master plans and development policies/regulations around the existing or future transit station (mobility hub) and along identified transit corridors to bolster existing and proposed transit routes, hubs and stations	KCMO	Short Term	$ low							

Zona Rosa Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Zona Rosa Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
	Create catalytic economic development opportunities for new high-density residential, commercial, and mixed-use development/revitalization within walking distance of existing Boardwalk Square or future transit station (mobility hub), and along designated transit route corridors through the use of attractive development incentives, taxing districts to assist in funding transit/transportation improvements, density bonuses, or other programs.	KCMO / Private Developers	Long Term	$$ medium							
	Integrate future transit station/stop locations and other multi-modal facilities into the design of proposed development projects to encourage ridership and access to amenities and services offered by the new development.	KCMO/ATA/ Private Developers	Long Term	$ low							
Supporting Policies											
Business											
Government											
Institutional Infrastructure											

Zona Rosa Pilot

Recommendations and Outcomes

Recommendations				Estimated Outcomes					Engagement	
Strategy	**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Zona Rosa Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**

Append Maps where applicable

[Strategies]

[Change in Commuting Contours]

RideKC Workforce Connex

Zona Rosa Pilot

Fixed Route Transit Access Evaluation

	Access to Zona Rosa Pilot Area Jobs					Average Access to Total Regional Jobs				
	Baseline		With Recommendations			Baseline		With Recommendations		
	Workers within 60 minutes		Workers within 60 minutes			Jobs within 60 minutes		Jobs within 60 minutes		
	Number	Percent	Number	Percent	Percent change from Baseline	Number	Percent	Number	Percent	Change
Current workers	59,256	6.05%	67,639	6.91%	14.15%	40,233	4.17%	41,565	4.31%	3.31%
Future workers	-	-	69,141	-	16.68%					
Worker age										
Age 29 or younger	15,160	6.76%	17,222	7.68%	13.60%	44,708	4.64%	46,144	4.78%	3.21%
Age 30 to 54	32,450	5.94%	36,963	6.76%	13.91%	38,864	4.03%	40,169	4.16%	3.36%
Age 55 or older	11,645	5.60%	13,453	6.47%	15.53%	38,955	4.04%	40,242	4.17%	3.30%
Worker income										
$1,250 per month or less	13,916	5.85%	16,178	6.80%	16.25%	44,016	4.56%	45,361	4.70%	3.06%
$1,251 to $3333 per month	20,242	6.19%	23,314	7.13%	15.18%	44,621	4.63%	46,028	4.77%	3.15%
More than $3,333 per month	25,097	6.06%	28,146	6.80%	12.15%	34,561	3.58%	35,825	3.71%	3.66%
Worker race										
White Alone	49,786	6.06%	56,225	6.85%	12.93%	34,832	3.61%	36,136	3.75%	3.74%
Black or African American Alone	6,573	5.69%	8,077	7.00%	22.88%	74,509	7.72%	75,972	7.88%	1.96%
American Indian or Alaska Native Alone	346	6.36%	401	7.37%	15.90%	45,300	4.70%	46,880	4.86%	3.49%
Asian Alone	1,642	7.20%	1,897	8.32%	15.53%	43,970	4.56%	45,429	4.71%	3.32%
Native Hawaiian or Other Pacific Islander alone	104	9.12%	118	10.35%	13.46%	40,769	4.23%	43,312	4.49%	6.24%
Two or More Race Groups	803	6.31%	918	7.22%	14.32%	45,068	4.67%	46,484	4.82%	3.14%
Worker sex										
Male	29,844	6.06%	34,006	6.90%	13.95%	39,764	4.12%	41,094	4.26%	3.34%
Female	29,412	6.05%	33,633	6.92%	14.35%	40,702	4.22%	42,036	4.36%	3.28%
Worker Educational Attainment										
Less than High School	4,613	5.96%	5,357	6.92%	16.13%	46,635	4.83%	48,049	4.98%	3.03%
High school or equivalent, no college	12,975	6.03%	14,870	6.91%	14.61%	39,698	4.12%	41,054	4.26%	3.42%
Some college or Associate degree	14,235	5.86%	16,264	6.69%	14.25%	38,328	3.97%	39,616	4.11%	3.36%
Bachelor's degree or advanced degree	12,271	5.60%	13,924	6.36%	13.47%	35,962	3.73%	37,180	3.85%	3.39%
Educational attainment not available										
Bachelor's degree or advanced degree	10,667	4.87%	11,711	5.35%	9.79%	35,962	3.73%	36,985	3.83%	2.84%
Educational attainment not available										
Future Workers (Urban Design Growth Projections)										
Total Future Workers										

RideKC Workforce Connex

Independence Center Pilot

Pilot Area Profile

Pilot Area Boundary	North	East	South	West
	E 39th Street South, E 37th Terrace South	S Little Blue Pkwy	Cpl M E Webster Memorial Pkwy	S Tierney Dr to S Maybrook Ave, 291 Hwy

Typology	*Context*	*Attraction Level*	*Destination*	*Peak Hours*
	First Suburb	Community	Diverse District	Evening/Weekend

Workers within Boundary	Number	Percent
Agriculture/Forestry/Fishing/Hunting	0	0.00%
Mining/Quarrying/Oil and Gas Extraction	0	0.00%
Utilities	0	0.00%
Construction	5	0.10%
Manufacturing	0	0.00%
Wholesale Trade	109	1.40%
Retail Trade	3,280	43.40%
Transportation/Warehousing	32	0.40%
Information	46	0.60%
Finance/Insurance	270	3.60%
Real Estate/Rental/Leasing	18	0.20%
Professional/Scientific/Tech Services	161	2.10%
Mgmt of Companies/Enterprises	11	0.10%
Admin/Support/Waste Mgmt/Remediation	246	3.30%
Educational Services	21	0.30%
Health Care/Social Assistance	667	8.80%
Arts/Entertainment/Recreation	135	1.80%
Accommodation/Food Services	2,390	31.60%
Other Services (exc. Public Administration)	153	2.00%
Public Administration	9	0.10%
Total Jobs	7,553	100%

Current Transit and Mobility Options and Usage		*Pilot Area Usage*	*Regional Usage*
Fixed Route Transit	IndeBus Green Route IndeBus Red Route		
Non Fixed-Route Transit			
Carpool	Users with trip origins in Zip codes 64055,64057,64015.64064 Users with trip destinations in Zip codes 64055,64057,64015.6406	44 12	1160 1160
Vanpool	Vanpool riders with **origins** in Independence, Lees Summit or Blue No vanpools have this area as a destination	73	318
Carshare	None		
Bikeshare			
First/Last Mile Transit			
Bicycle Connections			
Pedestrian Connections			

Current Land Use Conditions*	Count	Percent
Single Family	734	4.58%
Vacant / Ag	3,531	22.05%
Parks / Open Space	583	3.64%
Commercial	3,616	22.59%
Public / Semi Public	1,581	9.88%
Multi-Family / Condo	1,603	10.01%
Office	502	3.14%
Industrial / Business Park	137	0.86%
Mixed Use	0	0.00%
ROW	3,723	23.25%
Railroad ROW	0	0.00%
Total	16,010	100.00%

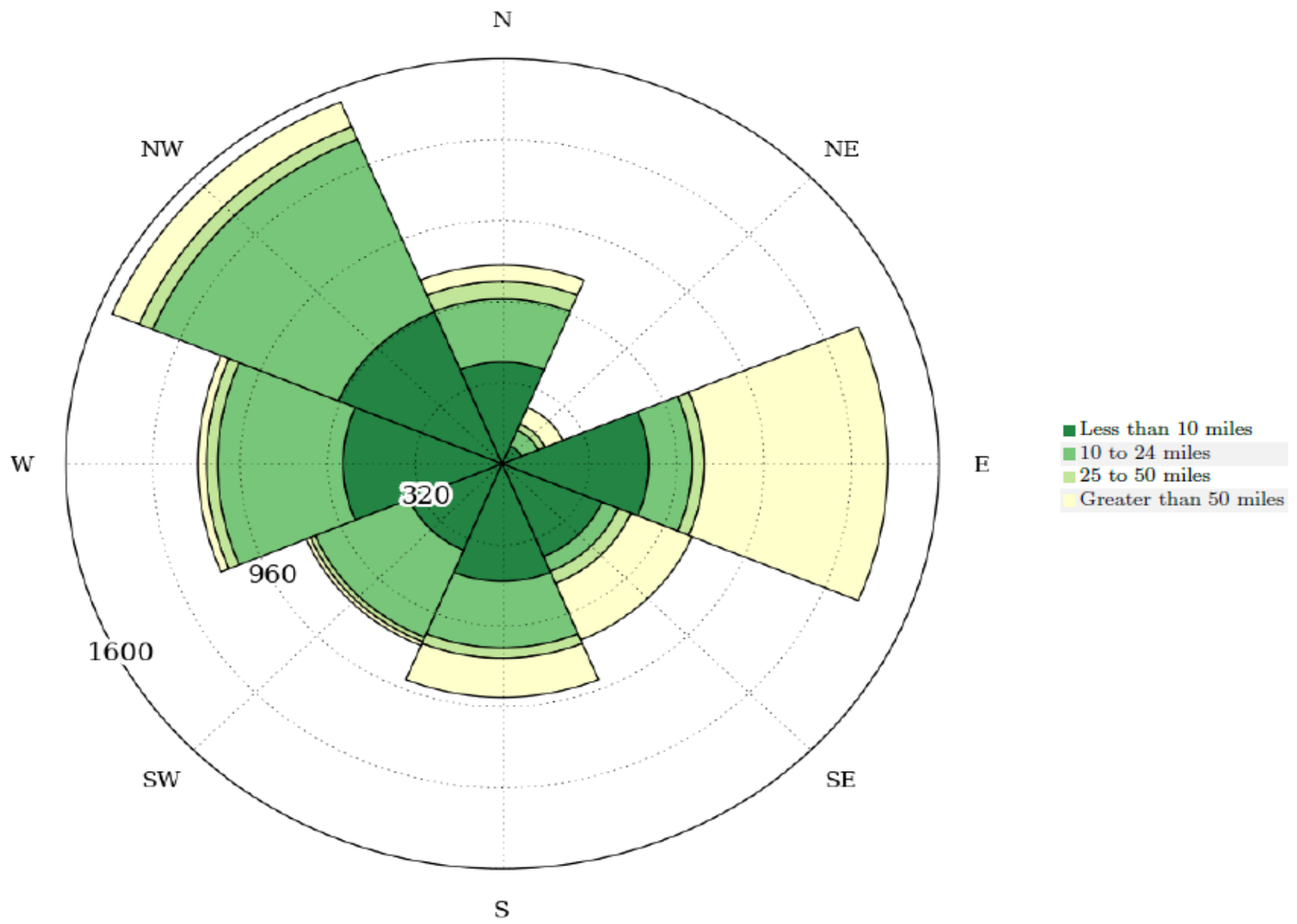
*Per MARC's 2012 Land Use raster data within the 4PM-6PM 30-minute Travelshed Boundary for this pilot area

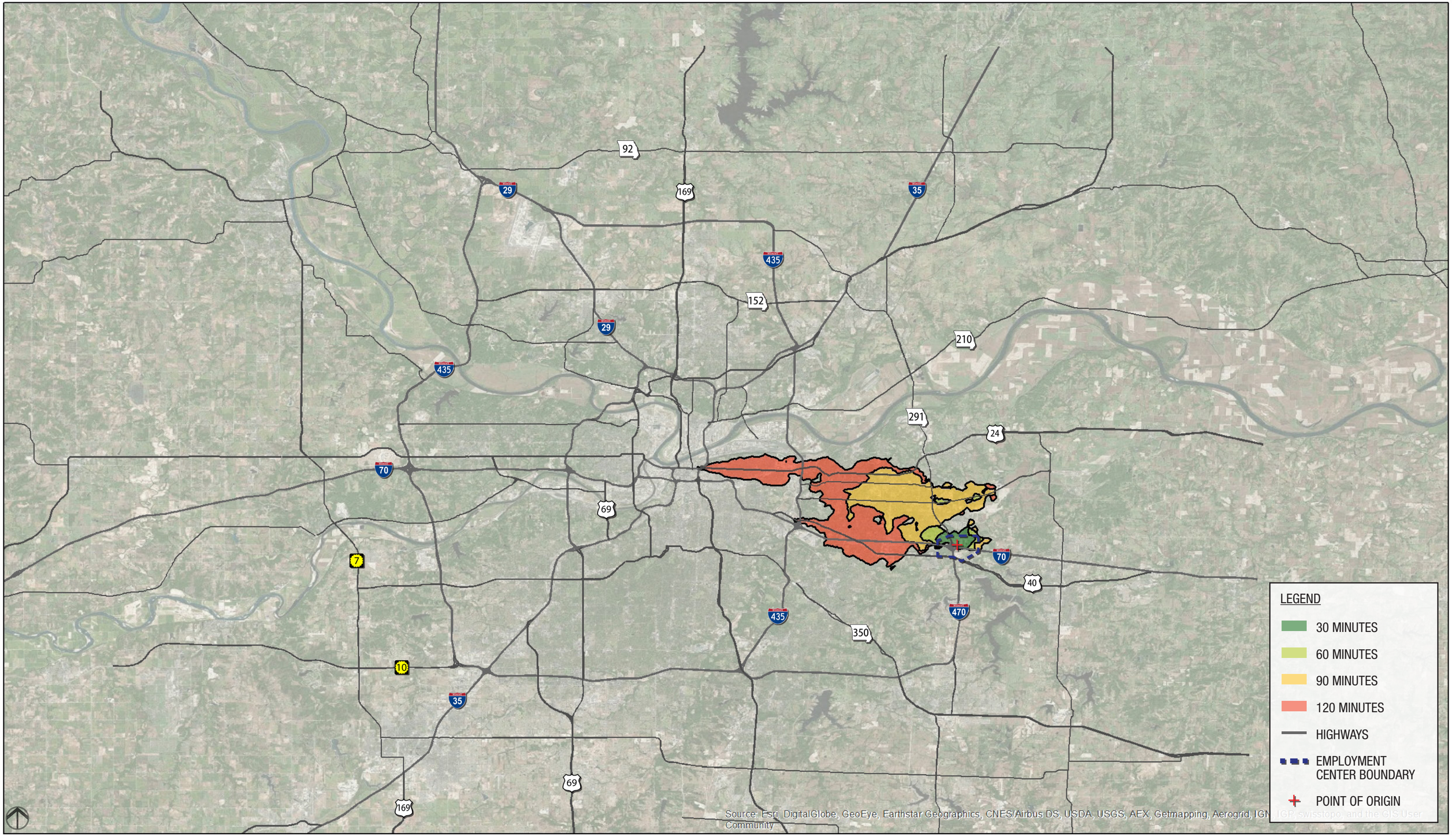
RideKC Workforce Connex

Independence Center Pilot

Gap Analysis

Independence Center Worker Residence	Number
Total	7,553
60 Minute	414
60-120 Minute	1,063
Outside 120	6,076
In High and Very High Transit Propensity Tracts	
Within 60 minutes	153
Outside of 60 minutes	711
In Low and Very Low Transit Propensity Tracts	2,438
Distance from Work to Home Census Block	
Less than 10 Miles	3,476
10 to 24 Miles	2,372
25 to 50 Miles	346
Greater than 50 Miles	1,359





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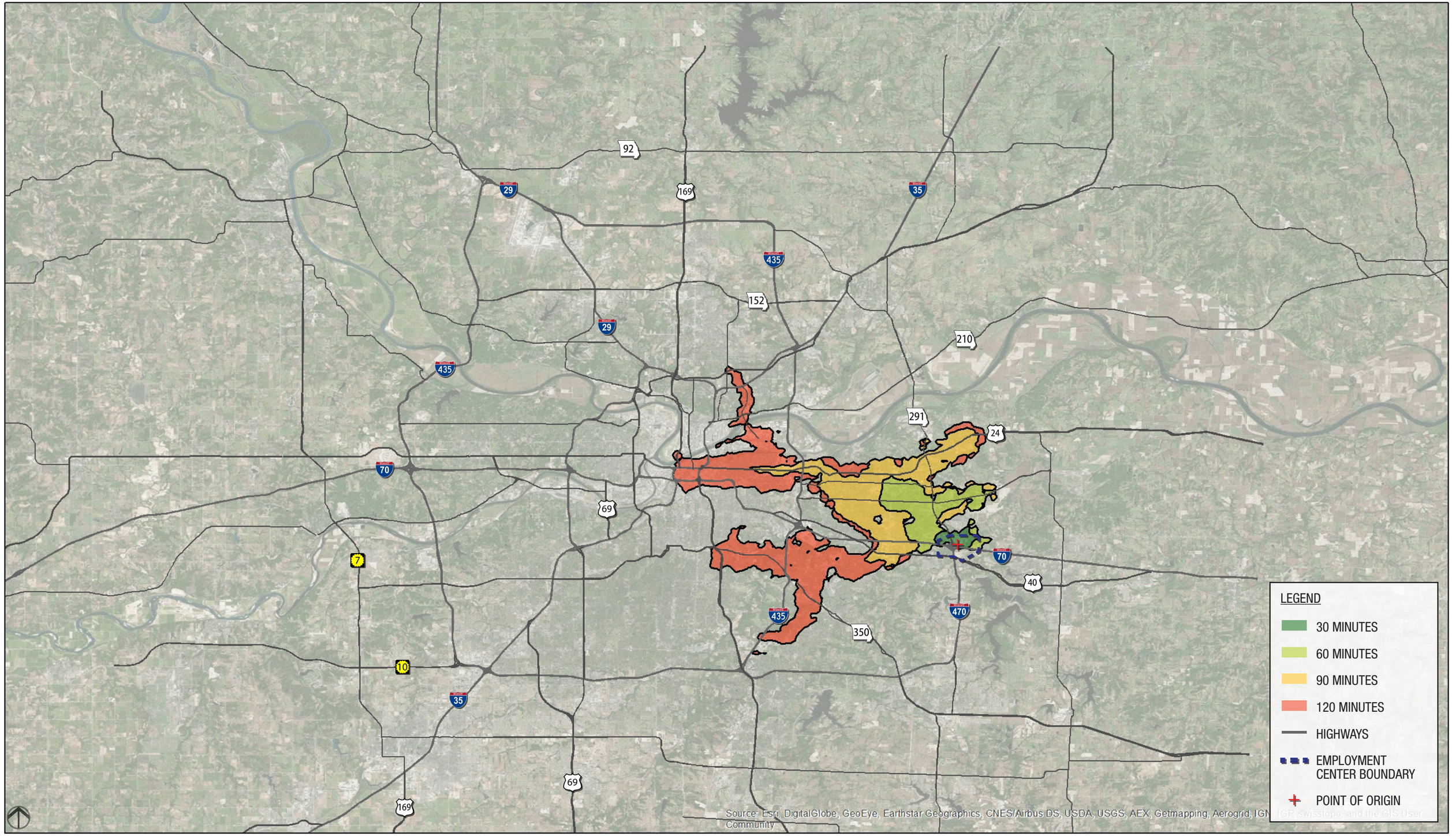

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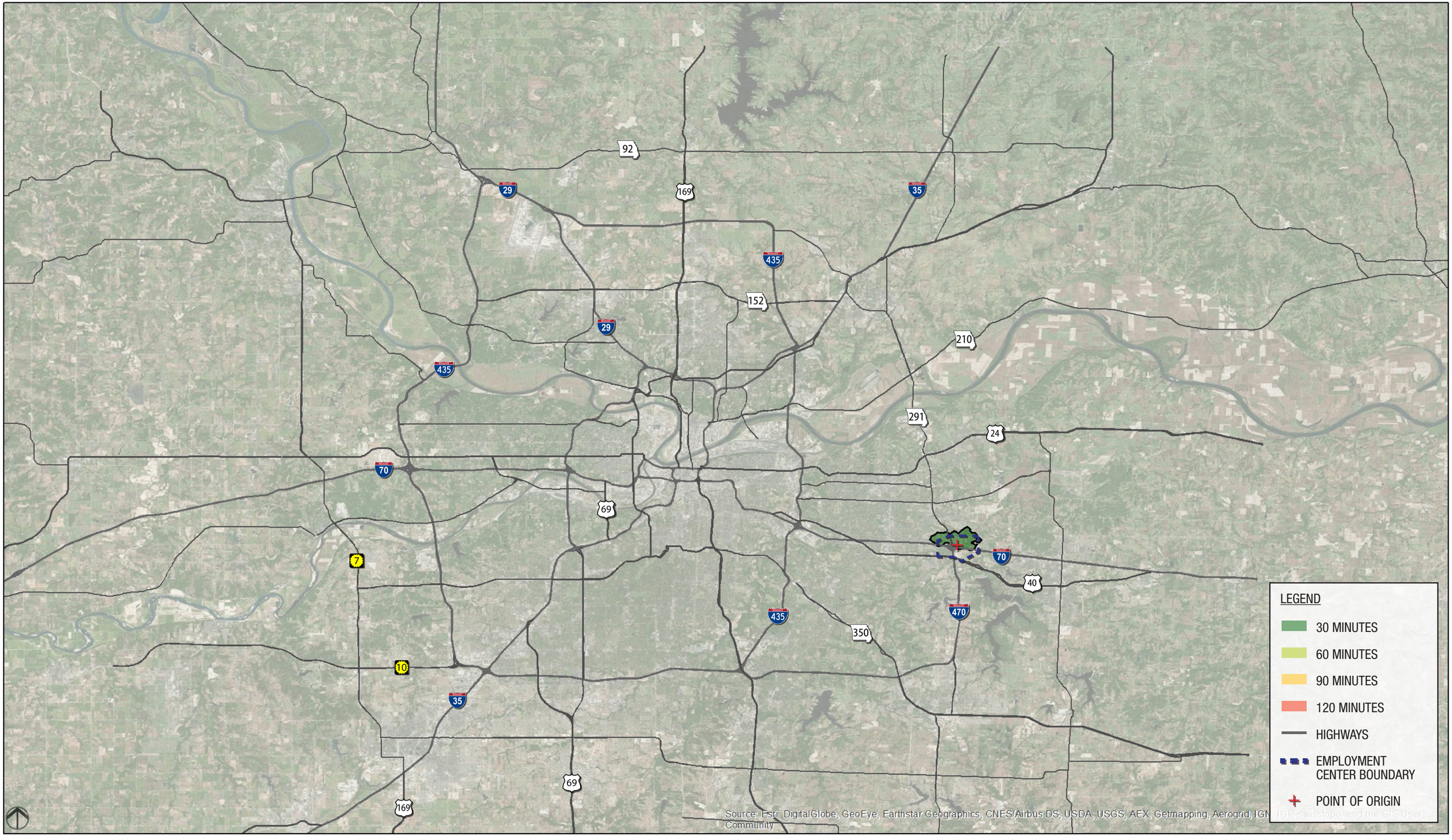

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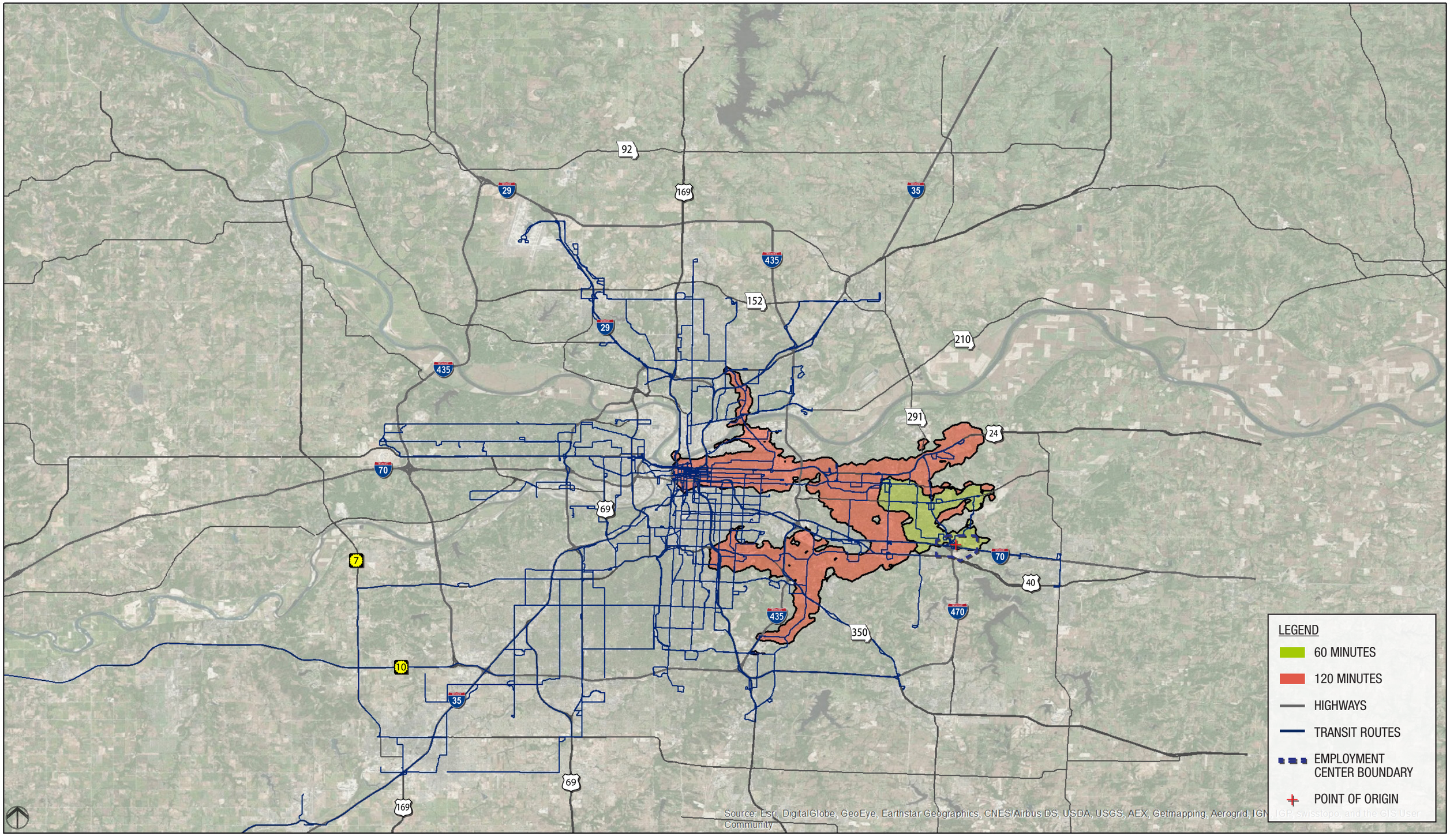
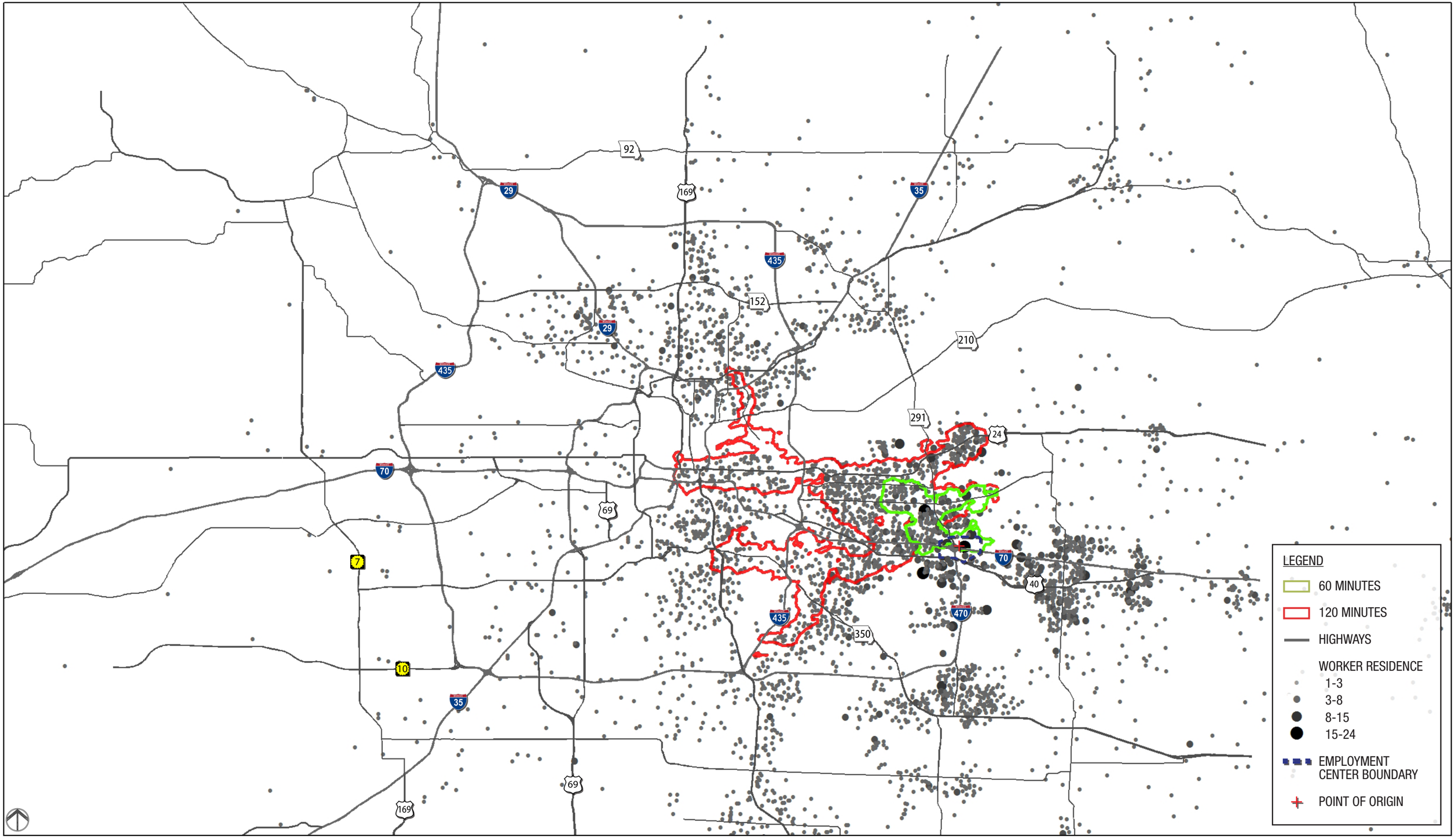


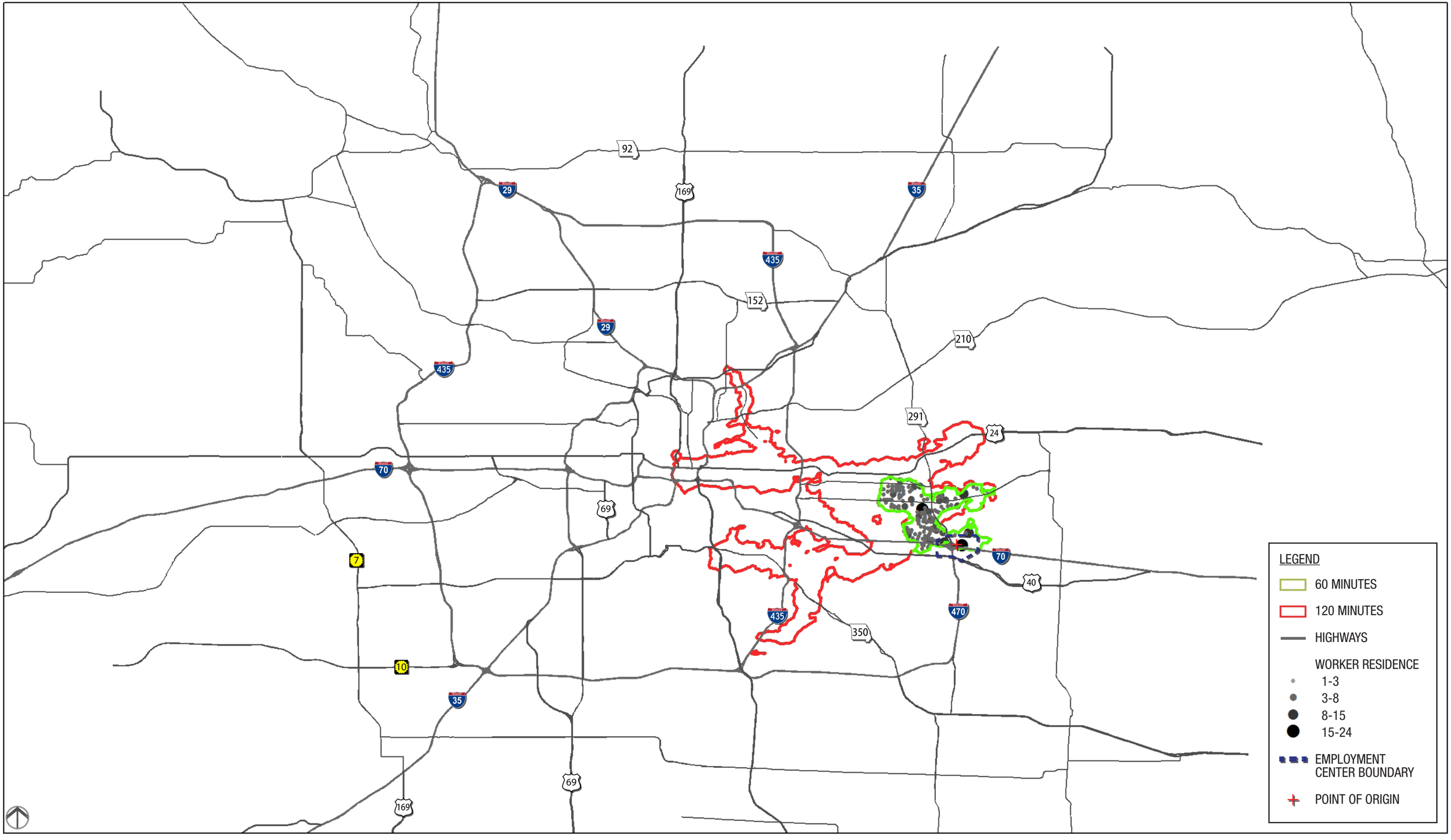
TRANSIT ROUTES

TRAVELSHED: 4 PM - 6 PM



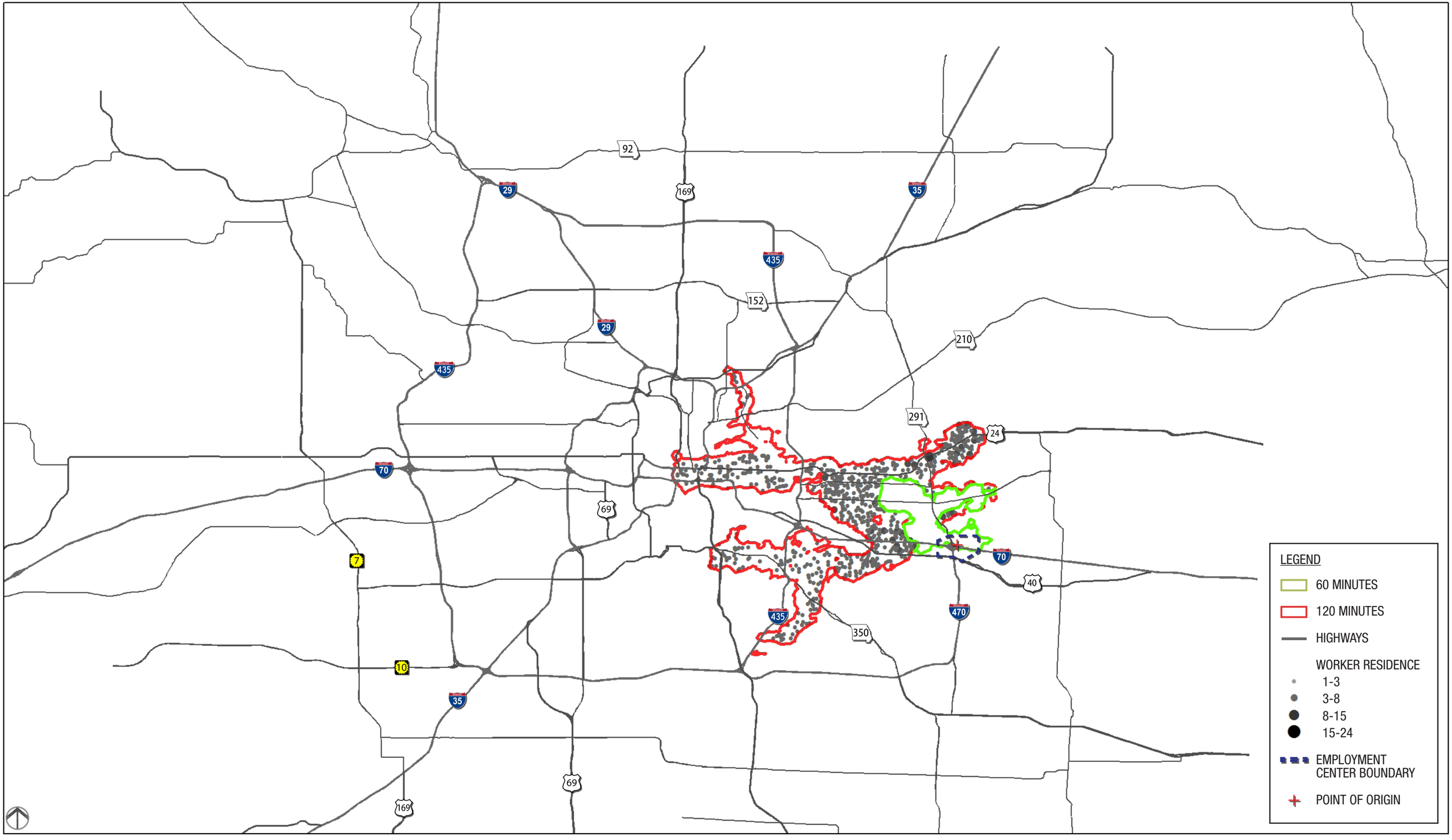
TOTAL WORKER RESIDENCE: 7,553

TRAVELSHED: 4 PM - 6 PM



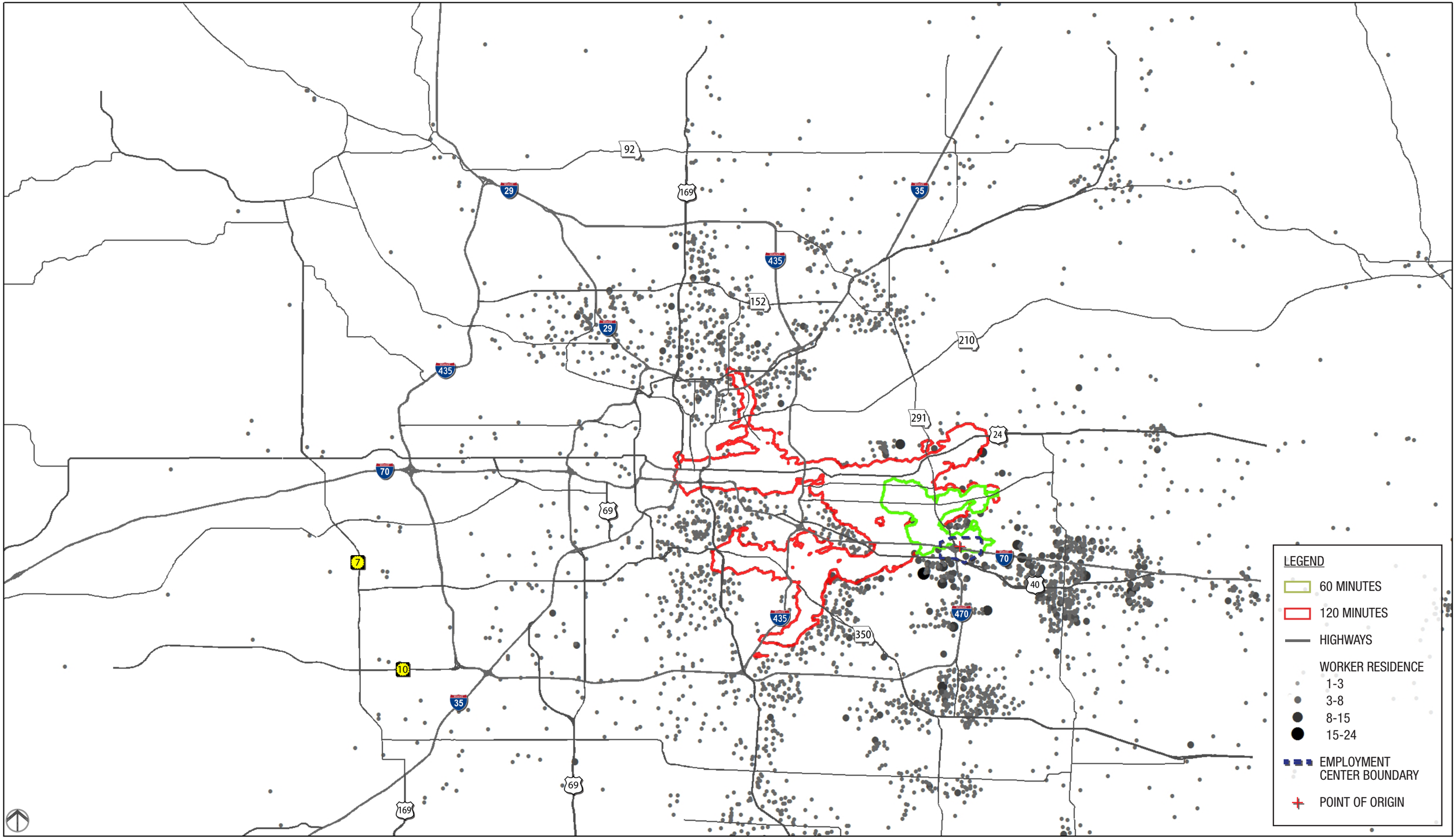
60 MINUTE WORKER RESIDENCE: 414

TRAVELSHED: 4 PM - 6 PM



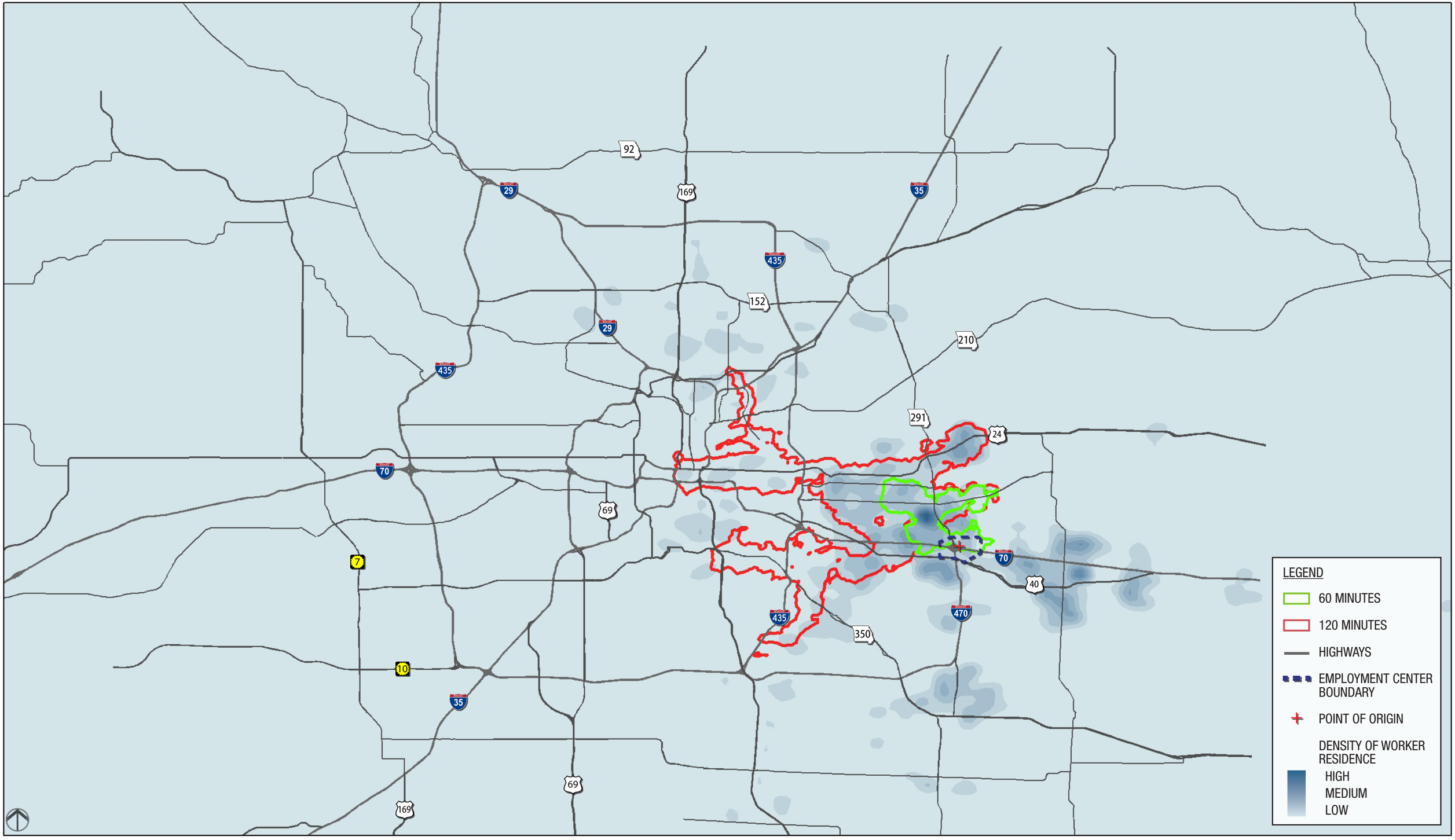
60-120 MINUTE WORKER RESIDENCE: 1,063

TRAVELSHED: 4 PM - 6 PM



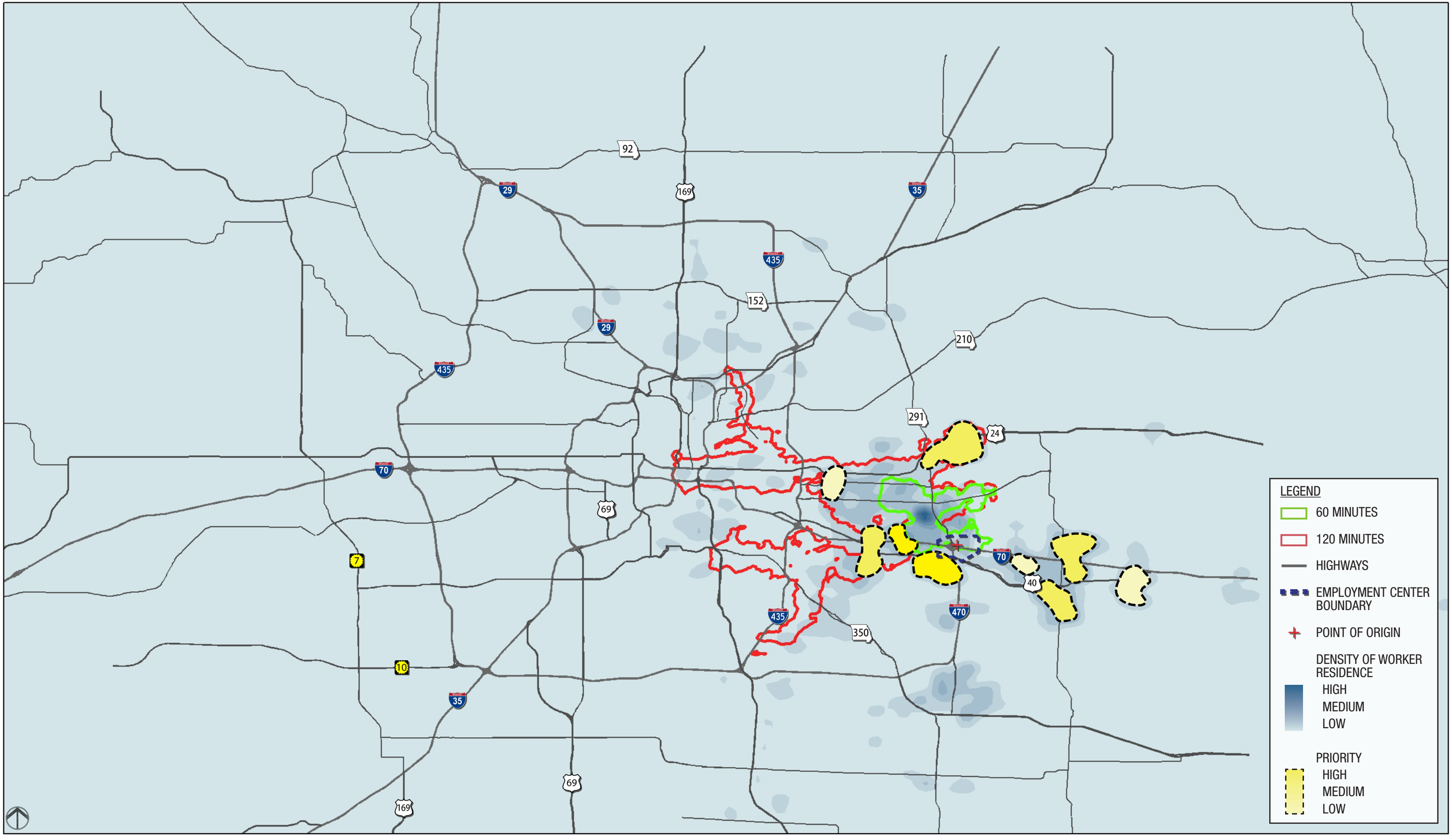
OUTSIDE 120 MINUTE WORKER RESIDENCE: 6,076

TRAVELSHED: 4 PM - 6 PM



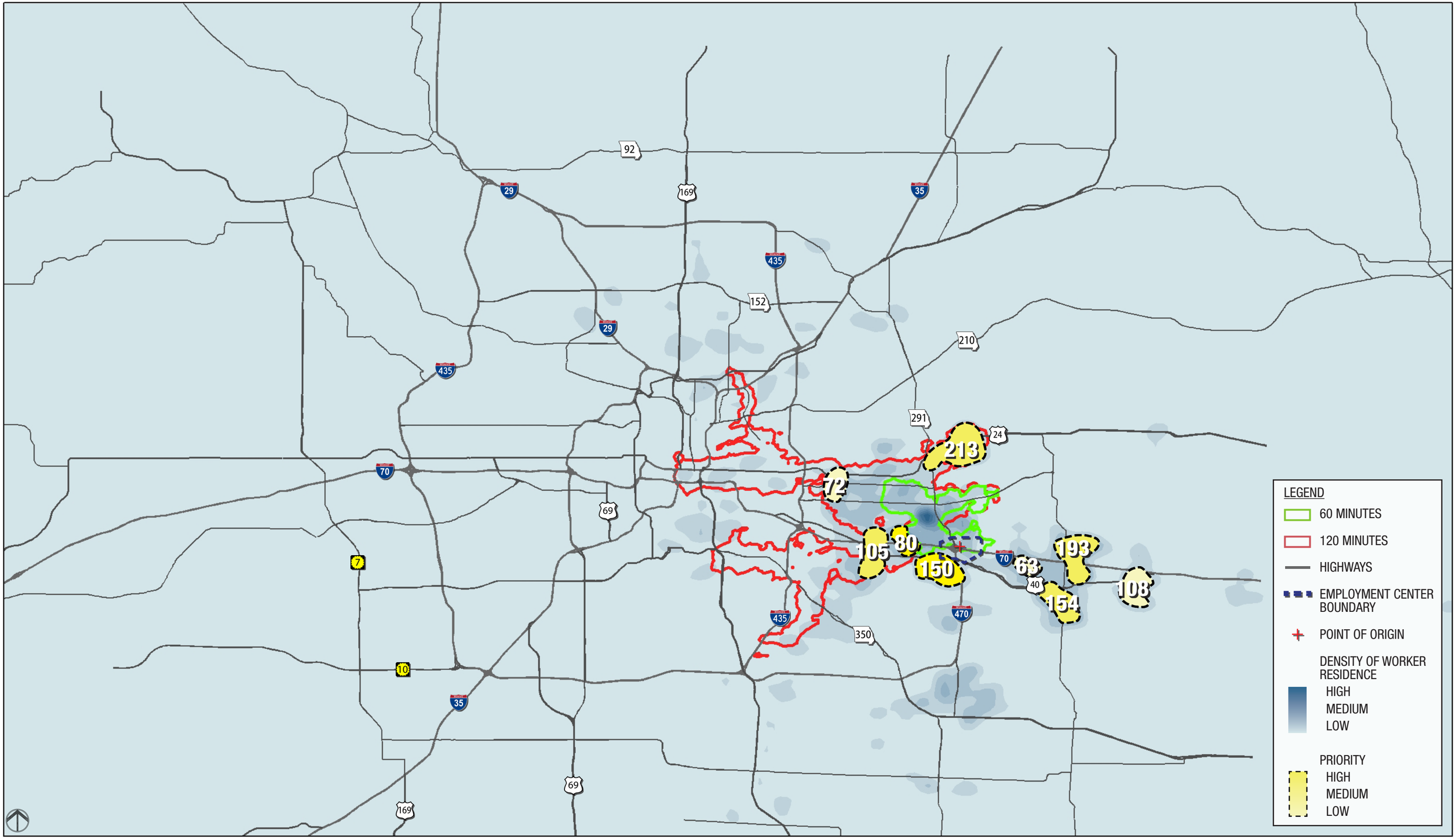
WORKER RESIDENCE DENSITY

TRAVELSHED: 4 PM - 6 PM



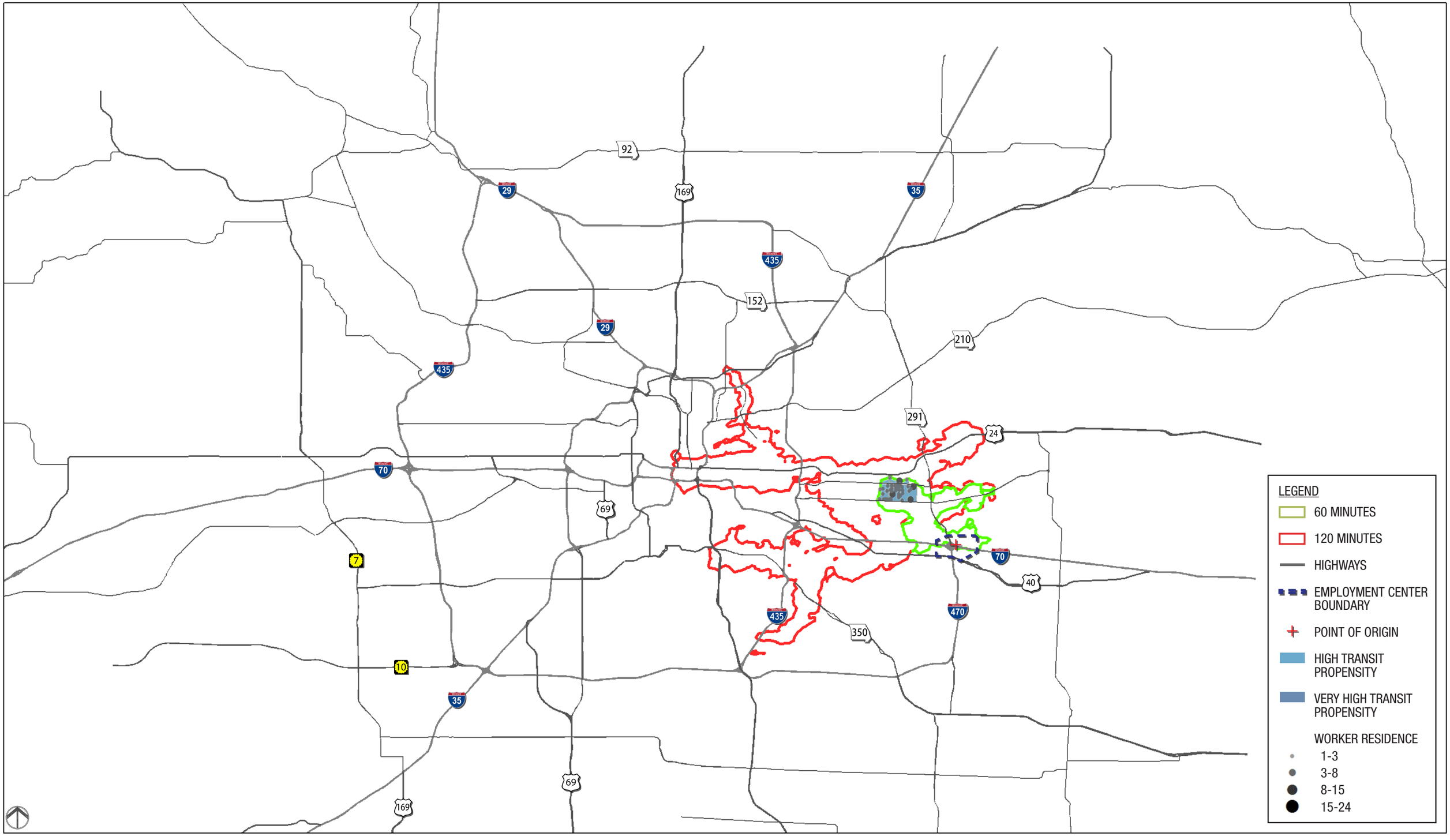
WORKER RESIDENCE POTENTIAL CAPTURE AREAS

TRAVELSHED: 4 PM - 6 PM



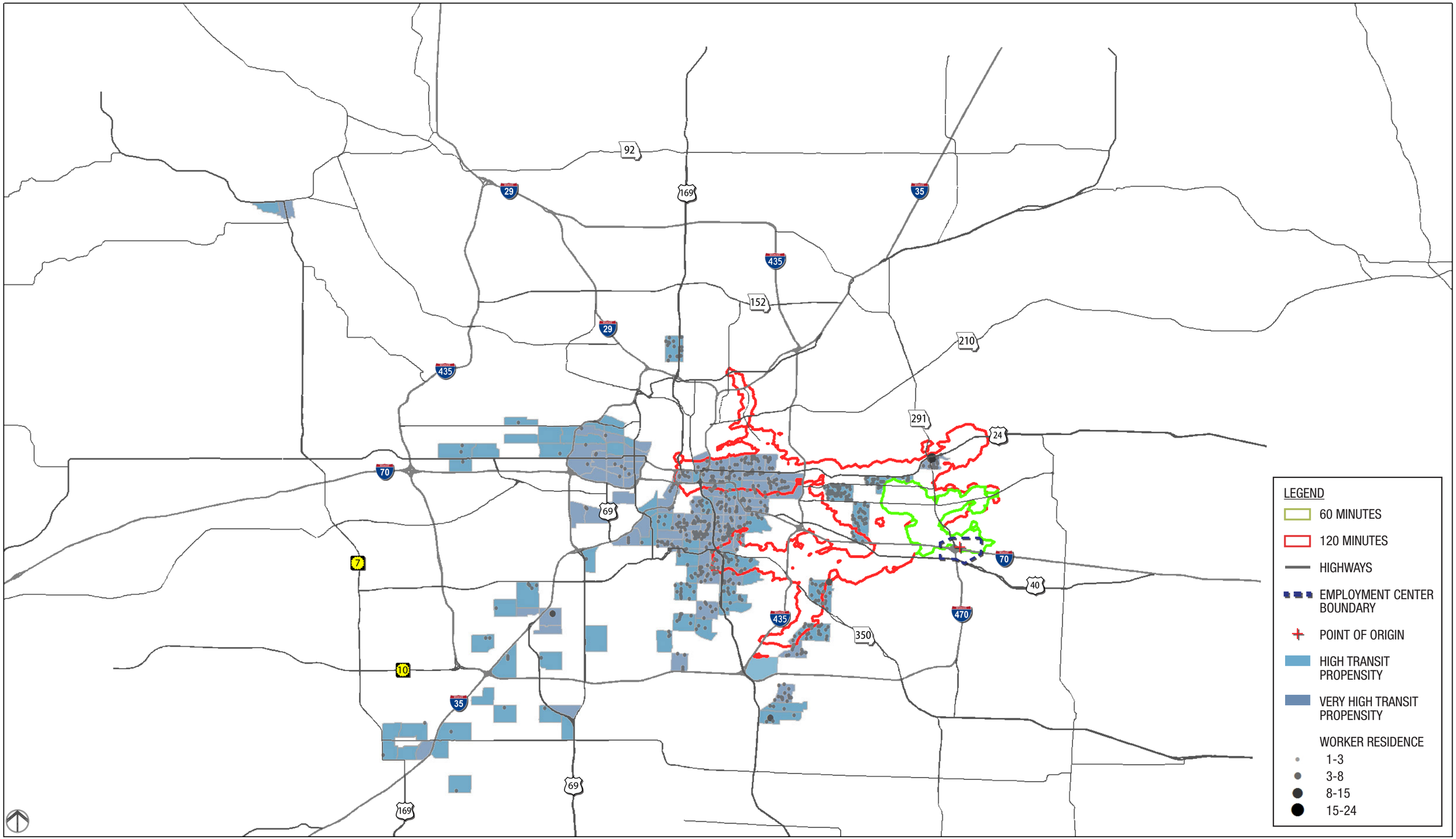
WORKER RESIDENCE POTENTIAL CAPTURE: 3,192

TRAVELSHED: 4 PM - 6 PM



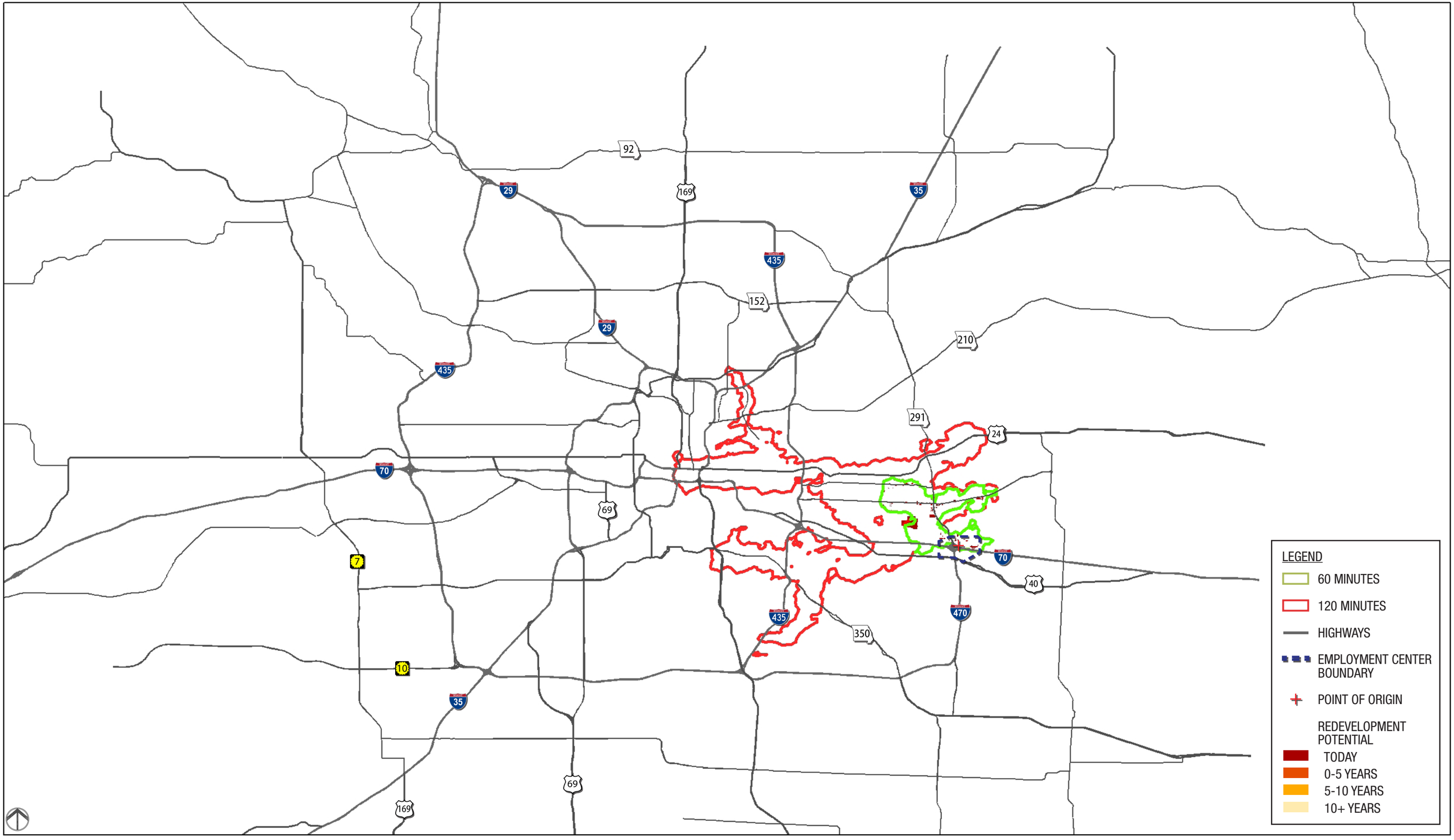
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES: 153

TRAVELSHED: 4 PM - 6 PM



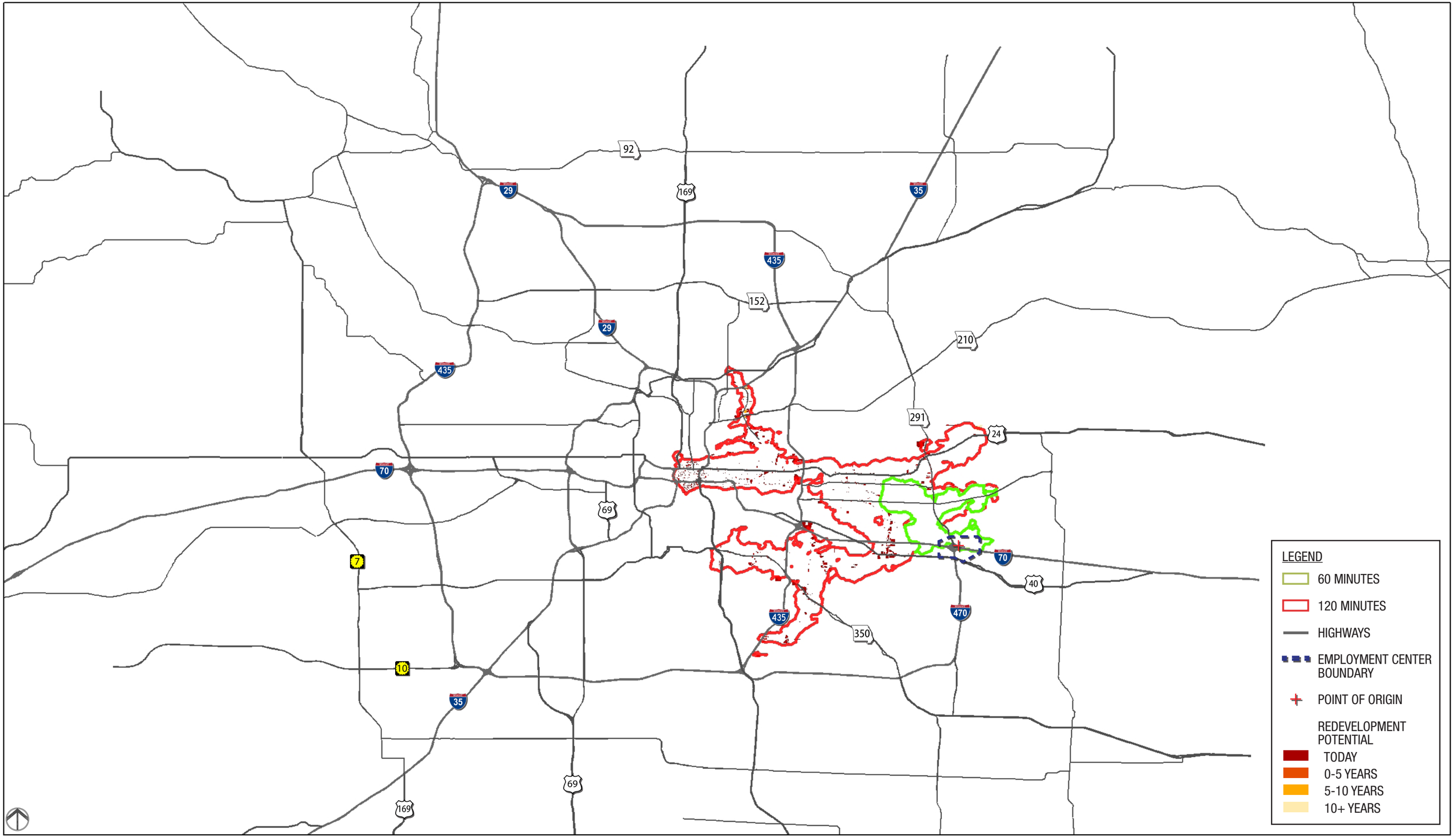
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS OUTSIDE OF 60 MINUTES: 711

TRAVELSHED: 4 PM - 6 PM



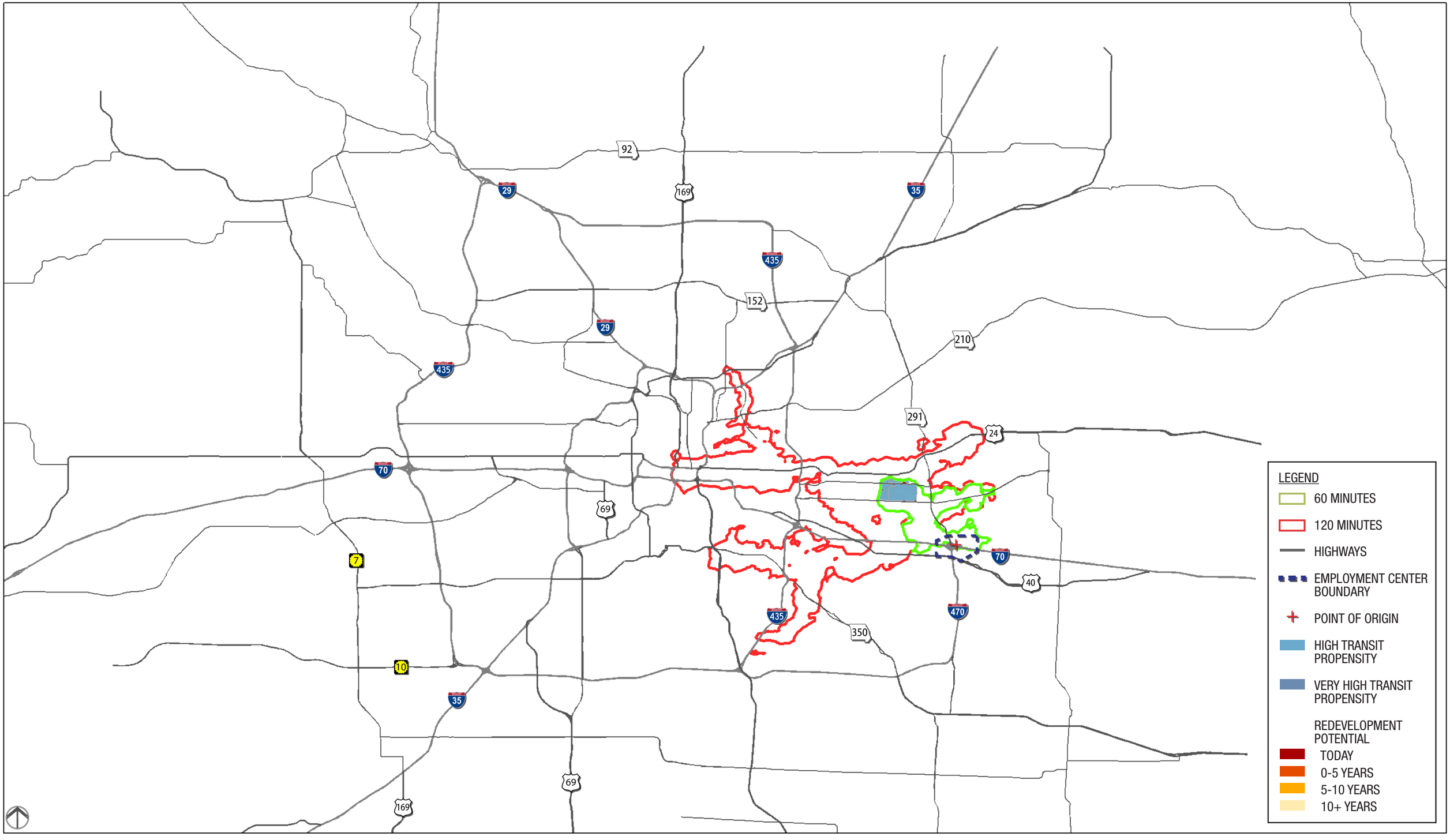
REDEVELOPMENT AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



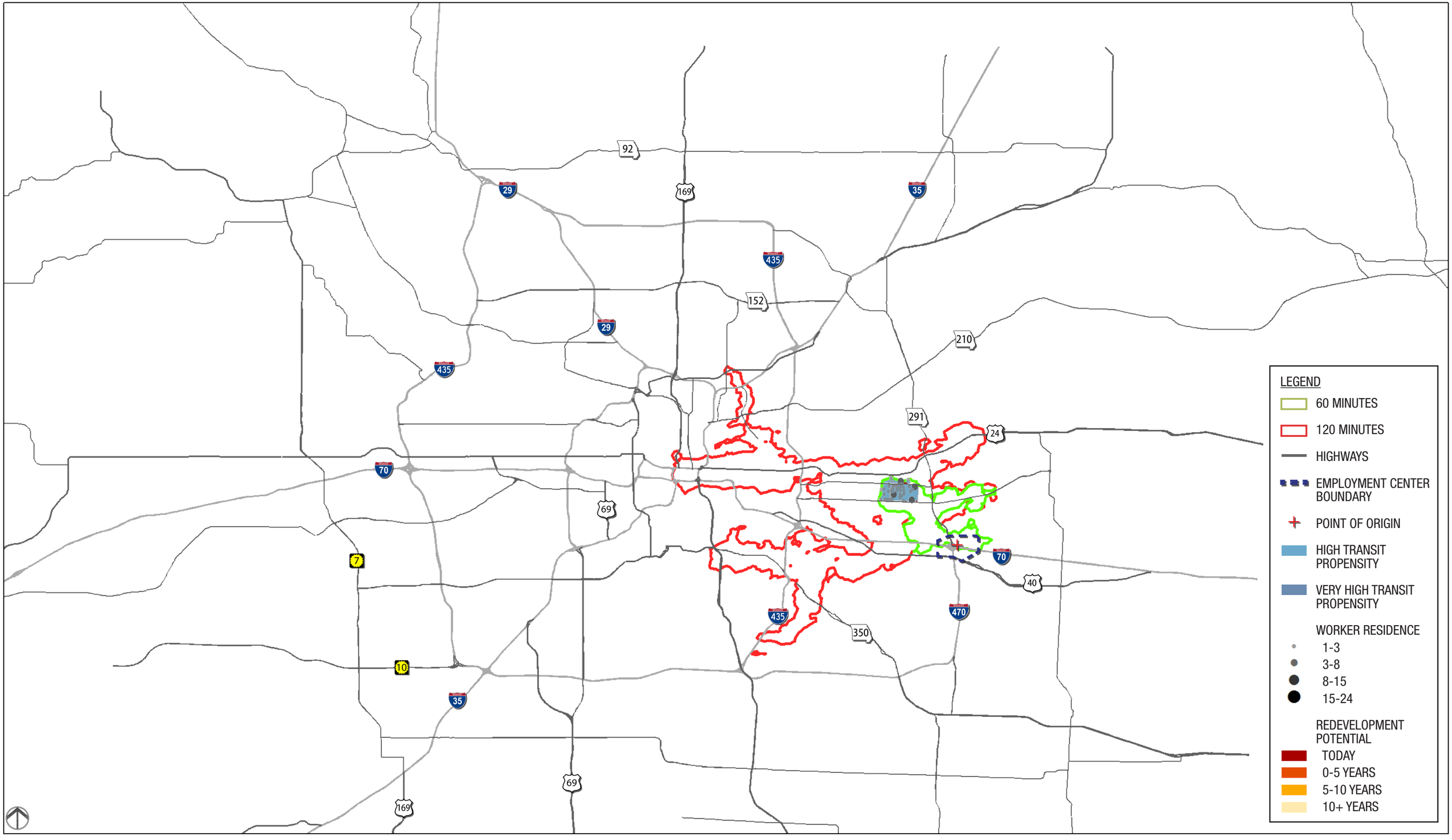
REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



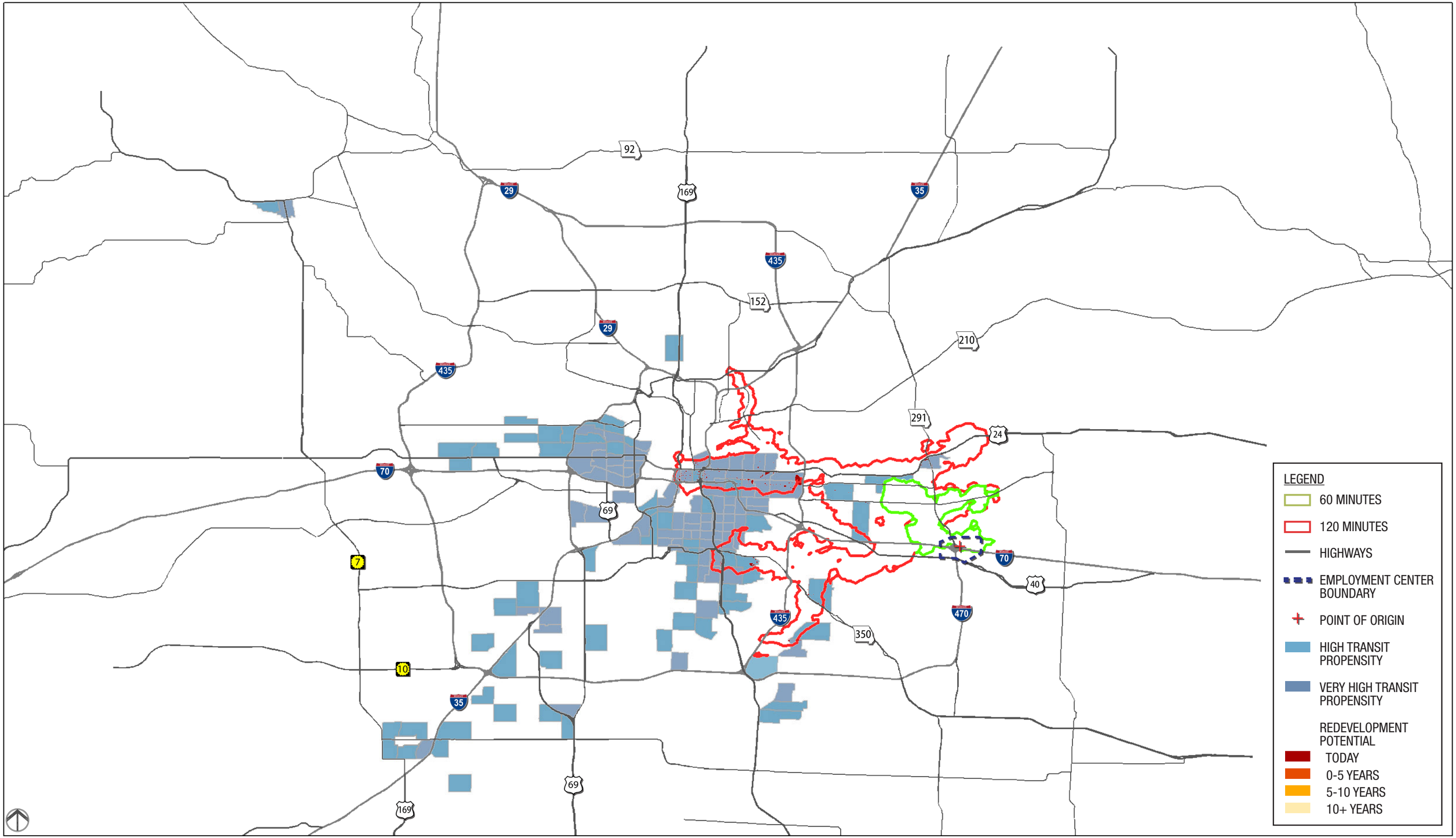
REDEVELOPMENT AREAS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



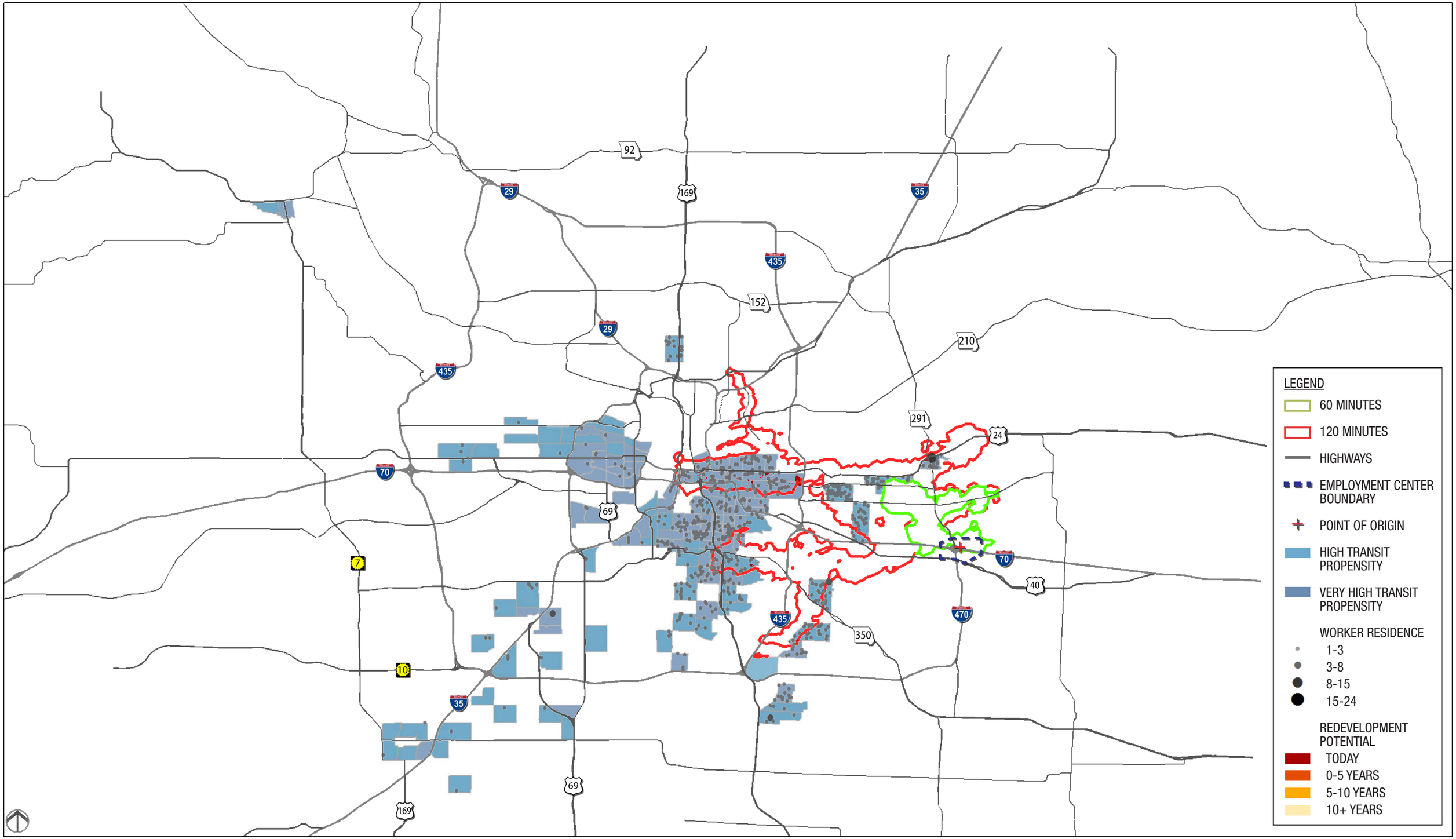
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



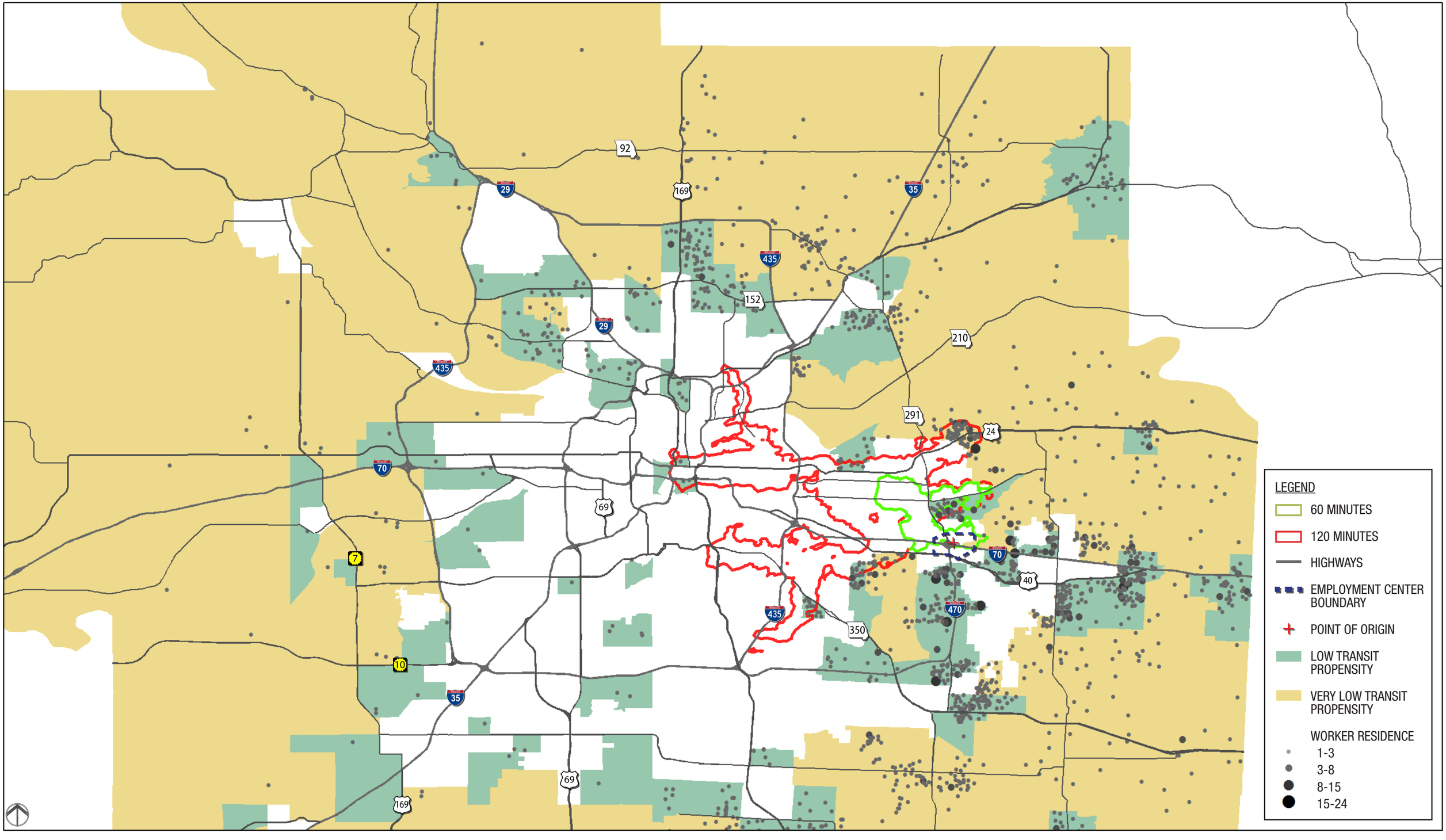
REDEVELOPMENT AREAS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



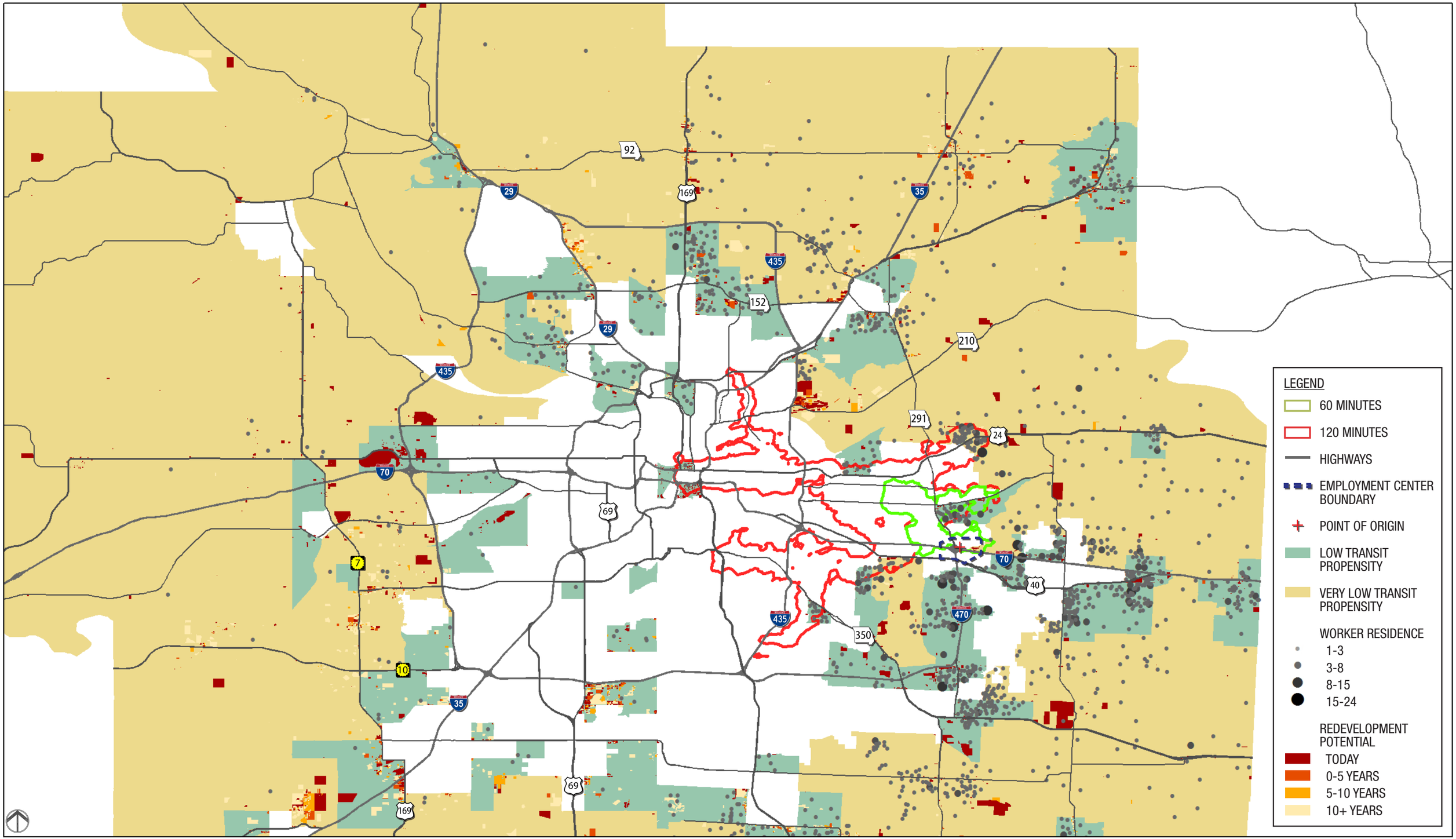
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY AREAS: 2,438

TRAVELSHED: 4 PM - 6 PM



WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY AREA + REDEVELOPMENT POTENTIAL

TRAVELSHED: 4 PM - 6 PM

Independence Center Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		Currently Responsible Organization	Phasing/ Timeframe	Cost	Increase in Independence Center Pilot Area Worker Accessibility	Increase in Regional Job Accessibility	Effectiveness (cost per unit of increase) *(High-Medium-Low)*	Replicability Considerations *(narrative)*	Potential Impact of Replicated Deployment	Stakeholder Interest	Stories to Make the Case
Mobility Hub											
Primary Deployment	Establish a Transit Center-mobility hub where all the existing and new services can meet at the same place	Regional mobility provider/TMA	Priority	Facility infrastructure and IT Software and hardware, including sustainble operating strategy	Increased opportunity for connectivity, as there is currently little service and no connectivity		Medium	Depends on any interest generated in the area to the mobility concepts			Metrolinx
Secondary Deployment											
Mobility Strategies											
Fixed Route Transit	Increase IndeBus frequencies to 30 min. headways; extend service hours from 5 AM to 11 PM; operate 7 days/week	ATA	Second - would benefit mobility in Inde generally	43.89/hour and 4.91/mile	213.90%	2.60%					
	Metro Route 24 - extend service east (via Truman Rd	ATA	First	43.89/hour and 4.91/mile							
	Metro Route 251 - increase trips and route half (via U	ATA	Provides connections to inde center from areas south of I-70	43.89/hour and 4.91/mile							
	Metro Route 170 - add reverse commute from downto	ATA	Potential for people who live in the crown center or downtown areas to have direct interstate access to inde center	43.89/hour and 4.91/mile							
Non-Fixed Route Transit											
Carpool	Promote the RideShareKC regional trip matching plat	MARC, employers	ongoing	none	low	low	medium (because of low cost)	carpool is less successful for retail businesses		No employer interest at this time	

Independence Center Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Independence Center Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Vanpool	Vanpooling as a strategy for reverse commute from a KCMO or Johnson County mobility hub to a large employer such as Centerpointe Medical Center	KCATA vanpool program, private vanpool providers	priority after ATA vanpool RFP is finalized	employer subsidy	6-15 workers per van	medium	high -cost is on riders and employers	Only one employer is large enough to support a vanpool	Medium	No employer interest at this time	Chicago Pace Bus Metra Feeders
Car Share	This pilot area does not have the density to support carshare at this time										Shared Use Mobility Center opportunity analysis tool
Bike Share	Bike racks and employer provided/sponsored bicycles as last mile solution. B-cycle may appeal to tourist staying in hotels. Transit commuters may chose to ride along the trail if stations were placed at the Indpendence Center and at transit stops near the trail.	Employer Business District Associations	Short term but dependent on station instalation.	Example, a station with 10 docks and 5 bike will cost $26,000 capital cost and 8,000 annual maintence							
First/Last Mile Transit	Additional at attention should be given to facilities at transit hubs giving a vareity of short and long term bicycle parking options. Opportunties for bike stations should be considered to service employer sponsored bicycles. Employeer should provide showering and changing facitlties for employees comuting by bicycle.	Empoyers Business District Associations		Bicycle lockers $1,280 to $2,680 Bicycle Racks $64 to $3,610							
Bicycle Connections	The most prommenant bicycle and pedestrian facility in this area is the Little Blue Trace Trail. However,the trail does not provide access to the Indepence Center but could if future connections were made.	Indpendence	Long Term over multiple years	$ low resurface & strip $$ medium reconstruction							

Independence Center Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
	Strategy	**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Independence Center Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**

	There is some concentration of multi-faimly housing along 40 Highway combined with transit and the trail a last mile connection is possible.
	
	http://marc-gis.maps.arcgis.com/home/index.html
			Long Term over multiple years
			
			Short Term
				$ low resurface & strip
				$$ medium reconstruction
				$ low cost							

Pedestrian Connections	A sidewalk and roadway crossing inventory for between all roadways served by transit and the
	
	independence center
		Indpendence	Long Term annual plan
			
			Short Term
			Data of sidewalks exist `
				$-$$ medium construction required
				$ low maintance annual
				$ low inventory updating							

Communication Strategies	Broaden RideKC website to emphasize full range of mobility options	KCATA/MARC	High Priority - Need to back up with operating performance for public confidence	Capital and maintenance upkeep	Prerequisite for strong regional program and would assist all pilot sites						A better City website, SFMTA website, Helsinki, Finland: Regional Journey Planner, which finds the optimal route from point A to point B using all modes of transportation
	Consider broader us of apps	KCATA/MARC	All apps and technology need to be integrated and seamless to customers		Same as above, need to be integrated						
	Utilize more real-time communications methods	KCATA/MARC	Same as above, could include on board fare payments, etc								
Technology Strategies	Regional Mobility fare/ticketing that will include the full range of mobility options	KCATA/Private partners	Needs to be integrated and coordinated as part of communication strategy								Dallas

Independence Center Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
	Strategy	Currently Responsible Organization	Phasing/ Timeframe	Cost	Increase in Independence Center Pilot Area Worker Accessibility	Increase in Regional Job Accessibility	Effectiveness (cost per unit of increase) *(High-Medium-Low)*	Replicability Considerations *(narrative)*	Potential Impact of Replicated Deployment	Stakeholder Interest	Stories to Make the Case
Urban Design Strategies	Encourage affordable housing opportunities to be integrated into future development and redevelopment initiatives	KCMO / Independence	Long Term	$ low							
	Promote new development and revitalization projects to include multi-modal connectivity by providing sidewalks, bicycle facilities, and pedestrian amenities.	Indepdence / KCMO	Short Term	$ low							
	Explore options for a new mobility hub / transit center location that is more accessible to existing jobs and residents in the area. The future site should have great visibility from existing street network, and should be connected with existing sidewalks and bicycle network.	Indepdence / ATA / KCMO / Existing Land Owners	Short Term	$$$ high							
	Adopt focused and integrated land use master plans and development policies/regulations around a future transit station (mobility hub) and along identified transit corridors to bolster existing and proposed transit routes, hubs and stations.	Indepdence / KCMO	Short Term	$ low							
	Create catalytic economic development opportunities for new high-density residential, commercial, and mixed-use development/revitalization within walking distance of existing Boardwalk Square or future transit station (mobility hub), and along designated transit route corridors through the use of attractive development incentives, taxing districts to assist in funding transit/transportation improvements, density bonuses, or other programs.	Independence / KCMO / Private Developers	Long Term	$$ medium							
	Integrate future transit station/stop locations and other multi-modal facilities into the design of proposed development projects to encourage ridership and access to amenities and services offered by the new development.	Independence / KCMO/ATA/ Private Developers	Long Term	$ low							
Supporting Policies											
Business											
Government											

Independence Center Pilot

Recommendations and Outcomes

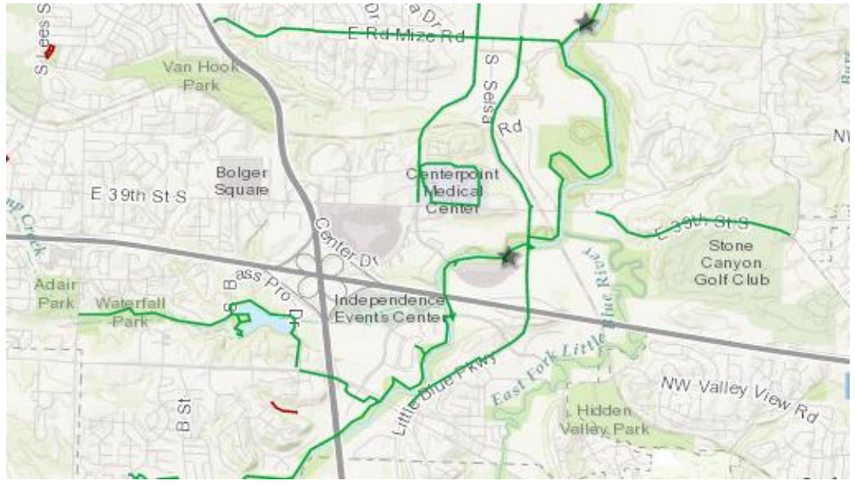
Recommendations					Estimated Outcomes					Engagement	
Strategy		Currently Responsible Organization	Phasing/ Timeframe	Cost	Increase in Independence Center Pilot Area Worker Accessibility	Increase in Regional Job Accessibility	Effectiveness (cost per unit of increase) *(High-Medium-Low)*	Replicability Considerations *(narrative)*	Potential Impact of Replicated Deployment	Stakeholder Interest	Stories to Make the Case
Institutional Infrastructure											

Append Maps where applicable

[Strategies]

[Change in Commuting Contours]

This is snap shot of the trails within Independence Center area.

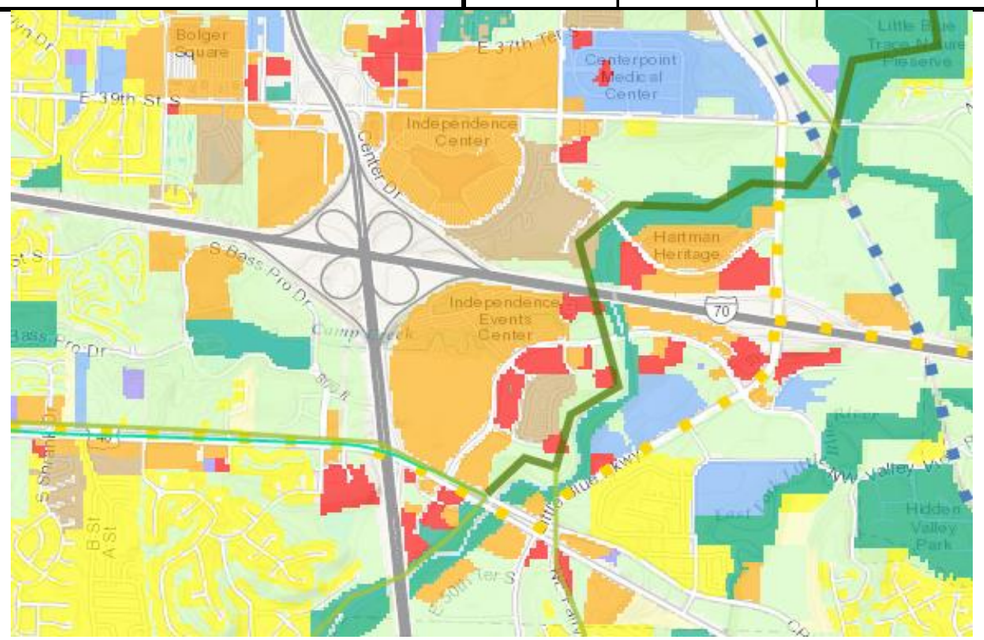


http://www.arcgis.com/home/webmap/viewer.html?webmap=787e3bb15d8c48c790567d1c5755b6b5&extent=-94.7135,38.9757,-94.3853,39.207

Independence Center Pilot

Recommendations and Outcomes

Recommendations				Estimated Outcomes					Engagement	
Strategy	**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in Independence Center Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**



RideKC Workforce Connex

Independence Center Pilot

Fixed Route Transit Access Evaluation

	Access to Independence Center Pilot Area Jobs					Average Access to Total Regional Jobs				
	Baseline		With Recommendations			Baseline		With Recommendations		
	Workers within 60 minutes		Workers within 60 minutes			Jobs within 60 minutes		Jobs within 60 minutes		
	Number	Percent	Number	Percent	Percent change from Baseline	Number	Percent	Number	Percent	Change
Current workers	14,254	1.46%	47,227	4.82%	231.3%	40,230	4.2%	41,347	4.3%	2.8%
Future workers	-	-	47,943	-	236.3%					
Worker age										
Age 29 or younger	3,515	1.6%	11,413	5.1%	224.7%	44,705	4.6%	45,885	4.8%	2.6%
Age 30 to 54	7,494	1.4%	25,177	4.6%	236.0%	38,861	4.0%	39,933	4.1%	2.8%
Age 55 or older	3,243	1.6%	10,636	5.1%	228.0%	38,952	4.0%	40,119	4.2%	3.0%
Worker income										
$1,250 per month or less	3,662	1.5%	12,097	5.1%	230.3%	44,013	4.6%	45,243	4.7%	2.8%
$1,251 to $3333 per month	5,430	1.7%	18,111	5.5%	233.5%	44,617	4.6%	46,023	4.8%	3.2%
More than $3,333 per month	5,161	1.2%	17,018	4.1%	229.7%	34,558	3.6%	35,382	3.7%	2.4%
Worker race										
White Alone	12,806	1.6%	41,251	5.0%	222.1%	34,830	3.6%	35,977	3.7%	3.3%
Black or African American Alone	982	0.9%	4,298	3.7%	337.7%	74,503	7.7%	75,437	7.8%	1.3%
American Indian or Alaska Native Alone	64	1.2%	267	4.9%	317.2%	45,297	4.7%	46,738	4.8%	3.2%
Asian Alone	171	0.7%	622	2.7%	263.7%	43,967	4.6%	44,708	4.6%	1.7%
Native Hawaiian or Other Pacific Islander alone	42	3.7%	133	11.7%	216.7%	40,762	4.2%	44,167	4.6%	8.4%
Two or More Race Groups	185	1.5%	653	5.1%	253.0%	45,065	4.7%	46,356	4.8%	2.9%
Worker sex										
Male	7,032	1.4%	23,246	4.7%	230.6%	39,761	4.1%	40,877	4.2%	2.8%
Female	7,221	1.5%	23,981	4.9%	232.1%	40,699	4.2%	41,817	4.3%	2.7%
Worker Educational Attainment										
Less than High School	1,166	1.5%	3,826	4.9%	228.1%	46,631	4.8%	47,896	5.0%	2.7%
High school or equivalent, no college	3,331	1.5%	11,039	5.1%	231.4%	39,695	4.1%	40,929	4.2%	3.1%
Some college or Associate degree	3,527	1.5%	11,875	4.9%	236.7%	38,325	4.0%	39,443	4.1%	2.9%
Bachelor's degree or advanced degree	2,713	1.2%	9,073	4.1%	234.4%	35,959	3.7%	36,843	3.8%	2.5%
Educational attainment not available										
High school or equivalent, no college	3,129	1.5%	9,873	4.6%	215.5%	39,698	4.1%	40,840	4.2%	2.9%
Some college or Associate degree	3,328	1.4%	10,579	4.4%	217.9%	38,328	4.0%	39,358	4.1%	2.7%
Bachelor's degree or advanced degree	2,564	1.2%	8,066	3.7%	214.6%	35,962	3.7%	36,775	3.8%	2.3%
Educational attainment not available										
Future Workers (Urban Design Growth Projections)										
Total Future Workers										

RideKC Workforce Connex

KU Medical Campus & Neighborhoods Pilot

Pilot Area Profile

Pilot Area Boundary	North	East	South	West
	Southwest Boulevard / I-35	State Line Road	W 47rd Street	Mission Road

Typology	*Context*	*Attraction Level*	*Destination*	*Peak Hours*
	Urban	Regional	Diverse District	Mixed Shift

Workers within Boundary	Number	Percent
Agriculture/Forestry/Fishing/Hunting	8	0.10%
Mining/Quarrying/Oil and Gas Extraction	0	0.00%
Utilities	0	0.00%
Construction	12	0.20%
Manufacturing	46	0.70%
Wholesale Trade	70	1.10%
Retail Trade	14	0.20%
Transportation/Warehousing	0	0.00%
Information	6	0.10%
Finance/Insurance	46	0.70%
Real Estate/Rental/Leasing	12	0.20%
Professional/Scientific/Tech Services	144	2.30%
Mgmt of Companies/Enterprises	8	0.10%
Admin/Support/Waste Mgmt/Remediation	86	1.30%
Educational Services	3,904	61.10%
Health Care/Social Assistance	1,784	27.90%
Arts/Entertainment/Recreation	0	0.00%
Accommodation/Food Services	210	3.30%
Other Services (exc. Public Administration)	19	0.30%
Public Administration	22	0.30%
Total Jobs	6,391	100.00%

Current Transit and Mobility Options and Usage		*Pilot Area Usage*	*Regional Usage*
Fixed Route Transit	Metro Route 39 (39th Street) UGT Route 107 JCT Route 667 (Nall)	470 120 5	
Non Fixed-Route Transit	Bridj	*yes- waiting for current numbers*	
Carpool	RideShare Program		
Vanpool	Advantage Program		
Carshare	None		
Bikeshare			

	None		
First/Last Mile Transit	KU Med Employer Shuttles	*yes- waiting for current numbers*	
Bicycle Connections	On Street in Mixed Traffic Only		
Pedestrian Connections	Existing Sidewalk Network		

Current Land Use Conditions*	Count	Percent
Single Family	21,900	25.45%
Vacant / Ag	7,438	8.64%
Parks / Open Space	3,074	3.57%
Commercial	5,062	5.88%
Public / Semi Public	4,865	5.65%
Multi-Family / Condo	6,385	7.42%
Office	3,186	3.70%
Industrial / Business Park	6,474	7.52%
Mixed Use	50	0.06%
ROW	27,570	32.04%
Railroad ROW	37	0.04%
Total	86,041	100.00%

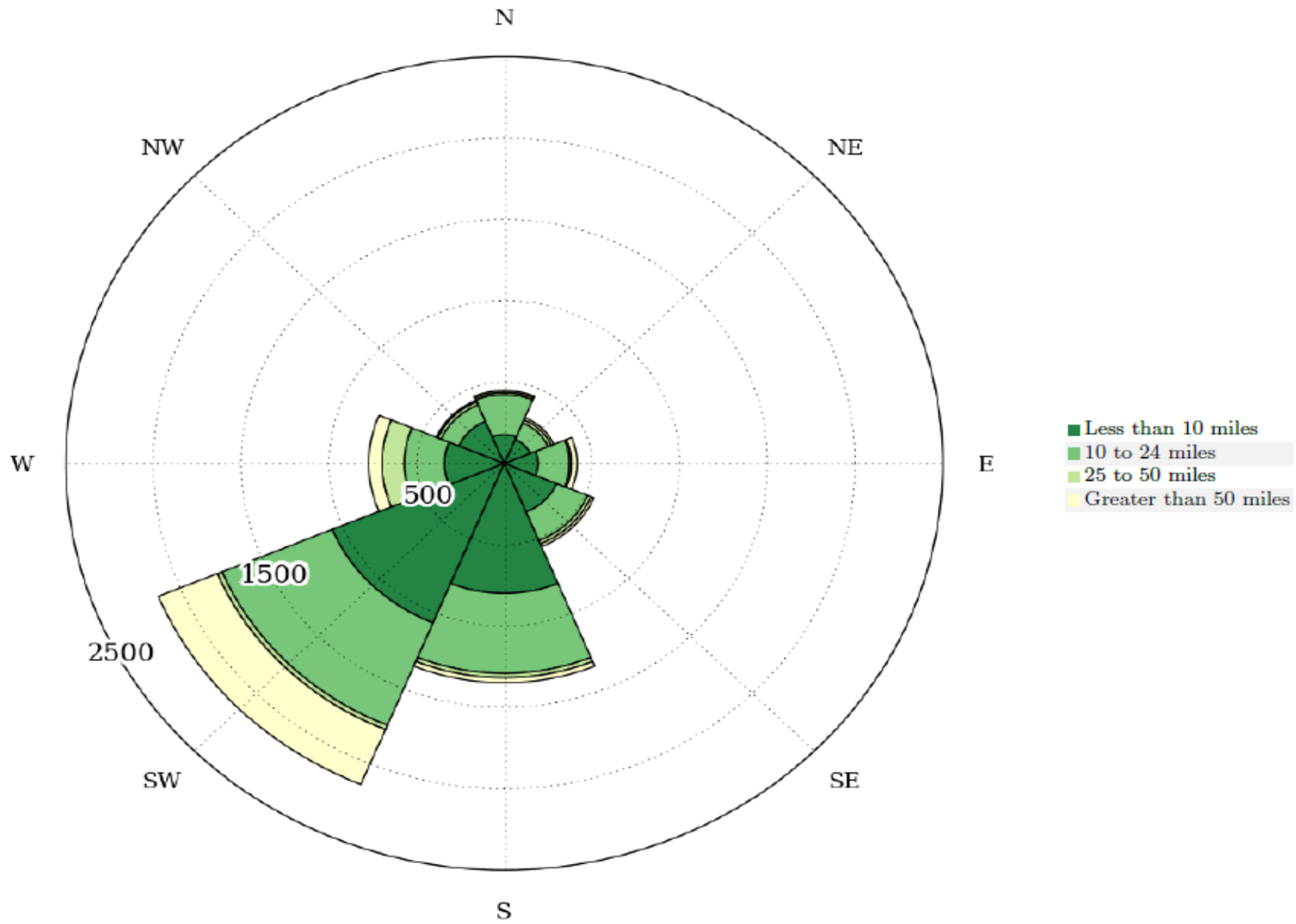
*Per MARC's 2012 Land Use raster data within the 4PM-6PM 30-minute Travelshed Boundary for this pilot area

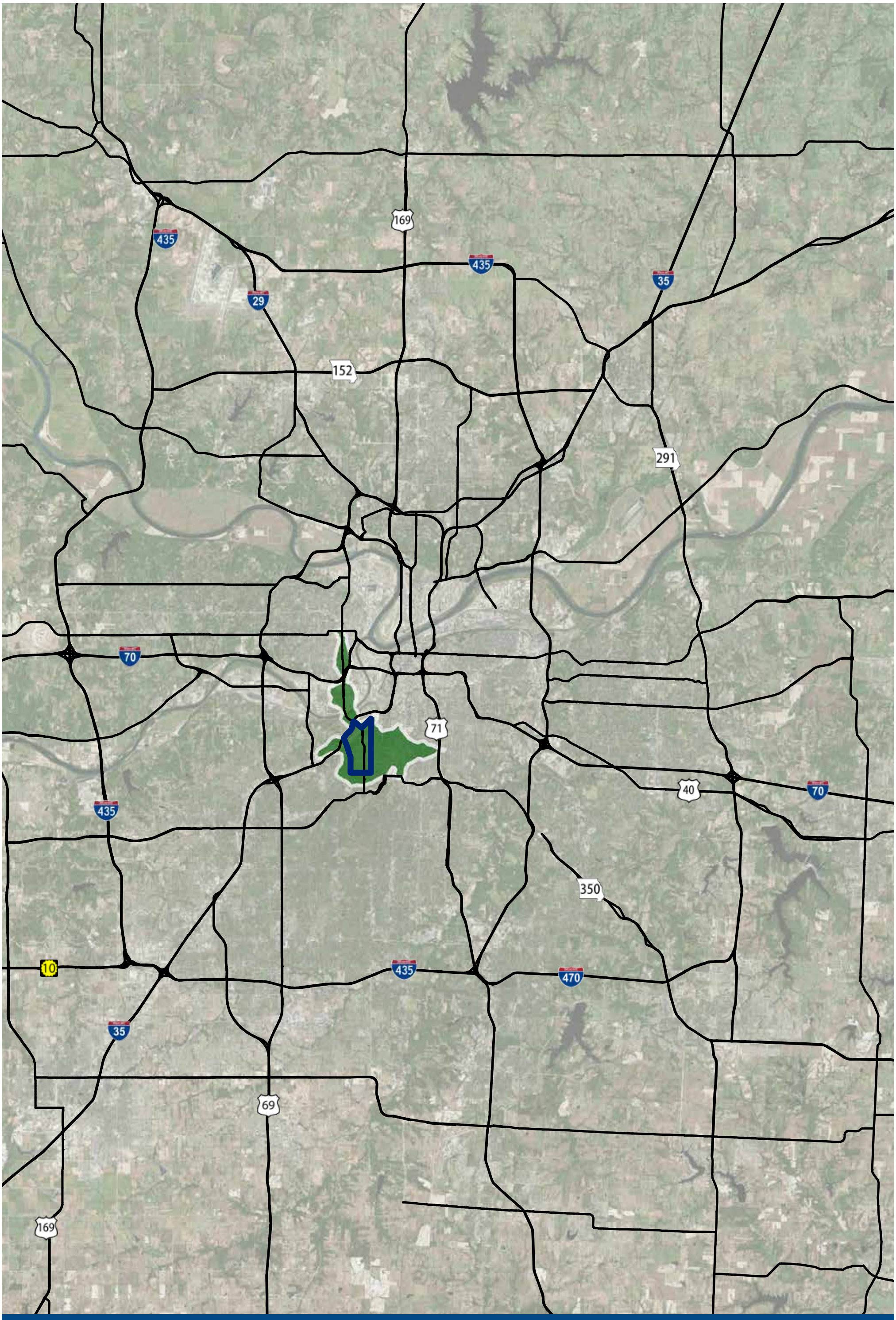
RideKC Workforce Connex

KU Medical Campus & Neighborhoods Pilot

Gap Analysis

KU Med Worker Residence	Number
Total	6,391
60 Minute	1,523
60-120 Minute	2,209
Outside 120	2,659
In High and Very High Transit Propensity Tracts	
Within 60 minutes	880
Outside of 60 minutes	564
In Low and Very Low Transit Propensity Tracts	1,458
Distance from Work to Home Census Block	
Less than 10 Miles	3,334
10 to 24 Miles	2,241
25 to 50 Miles	268
Greater than 50 Miles	553





30 MINUTES

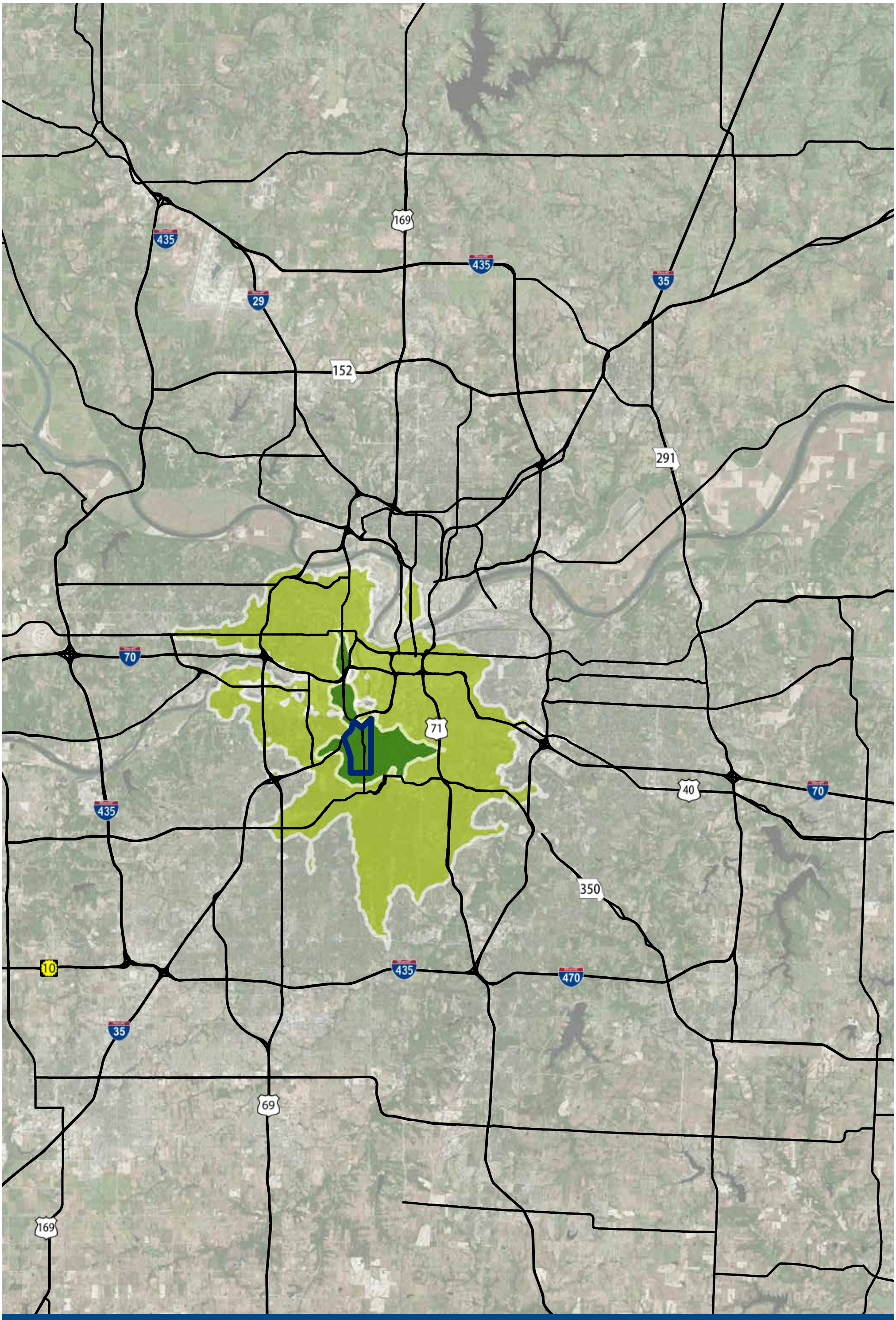
39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

MARC The Metro CONFLUENCE



60 MINUTES

39TH AND CAMBRIDGE

RideKC

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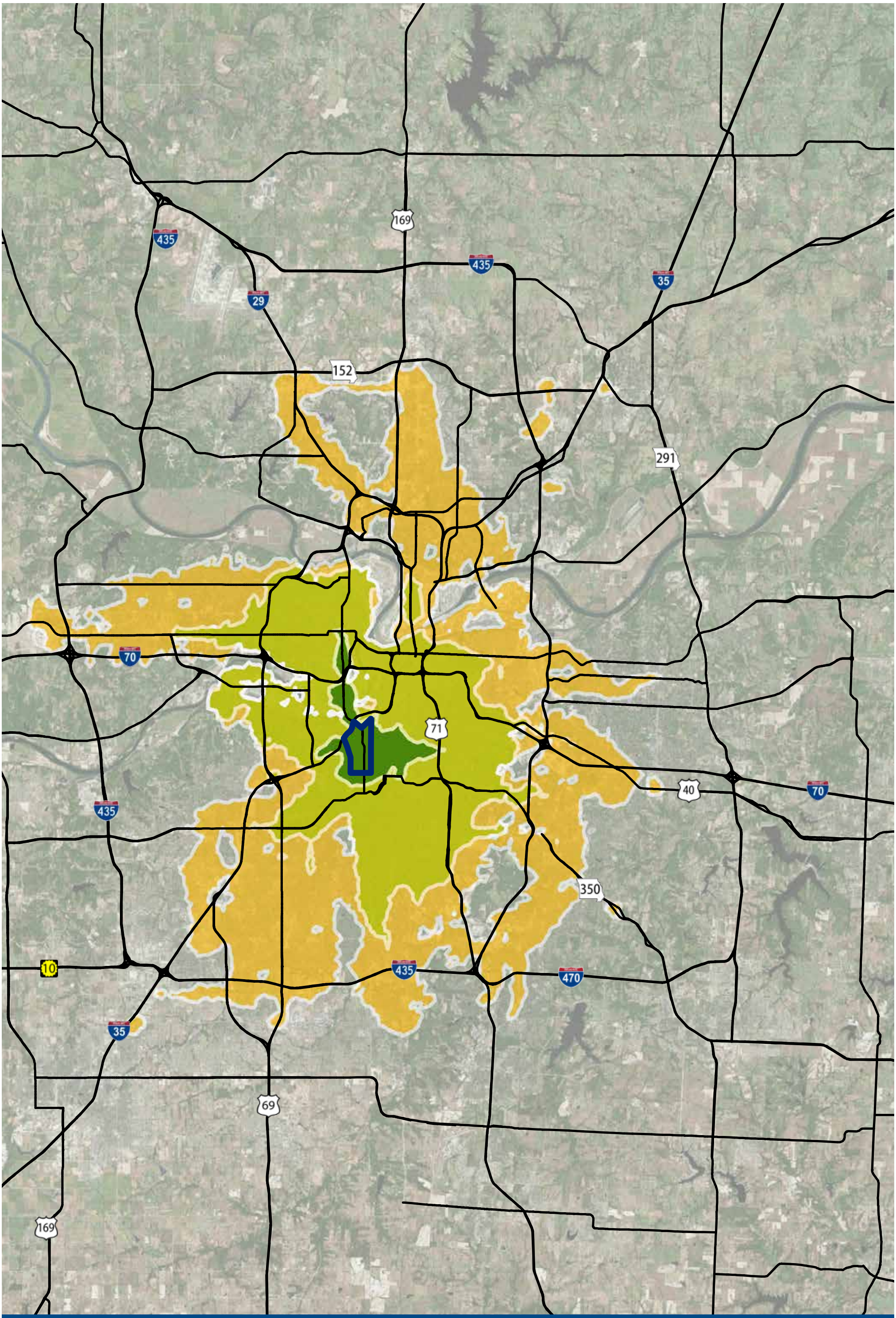

90 MINUTES

39TH AND CAMBRIDGE

RideKC

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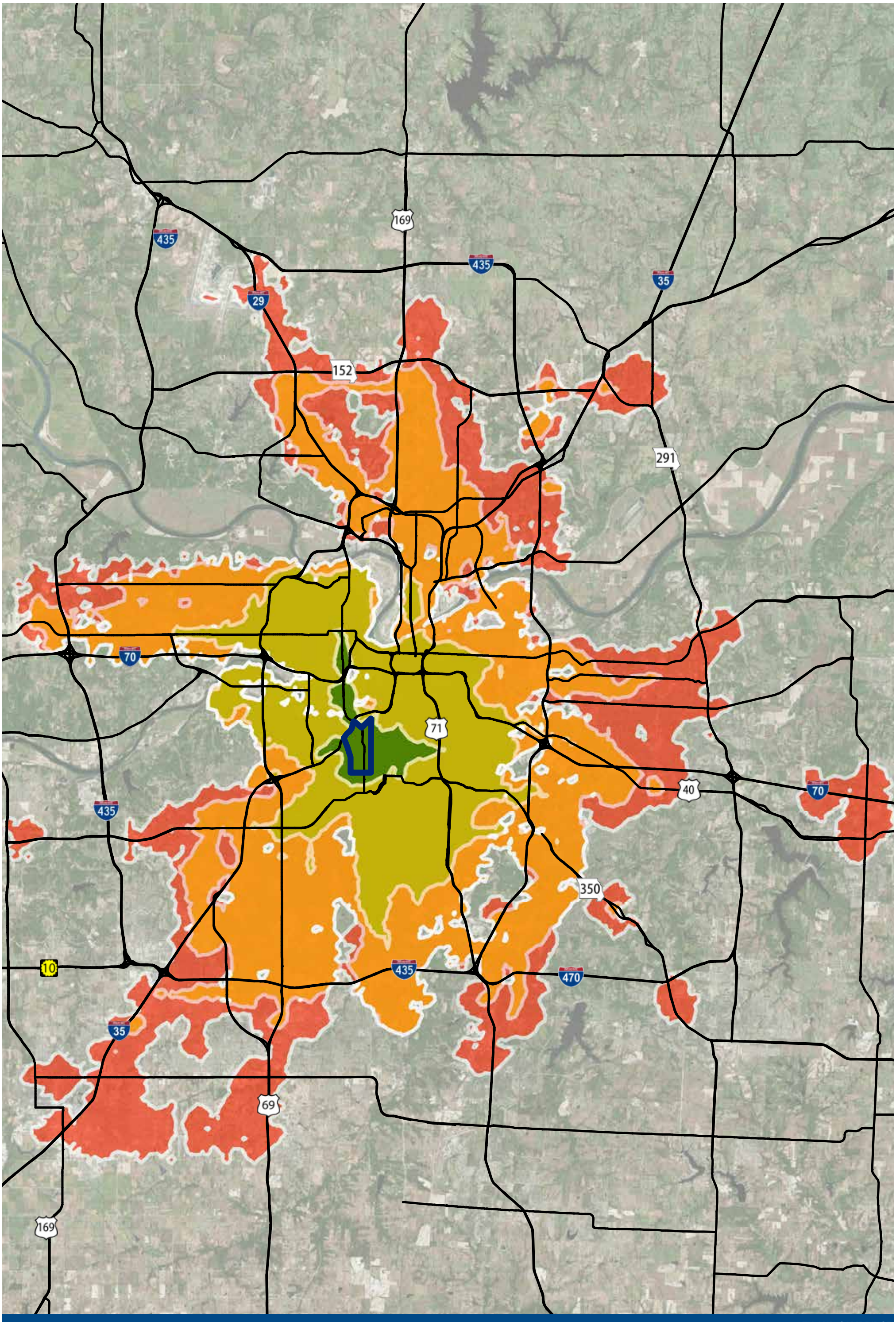

120 MINUTES

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

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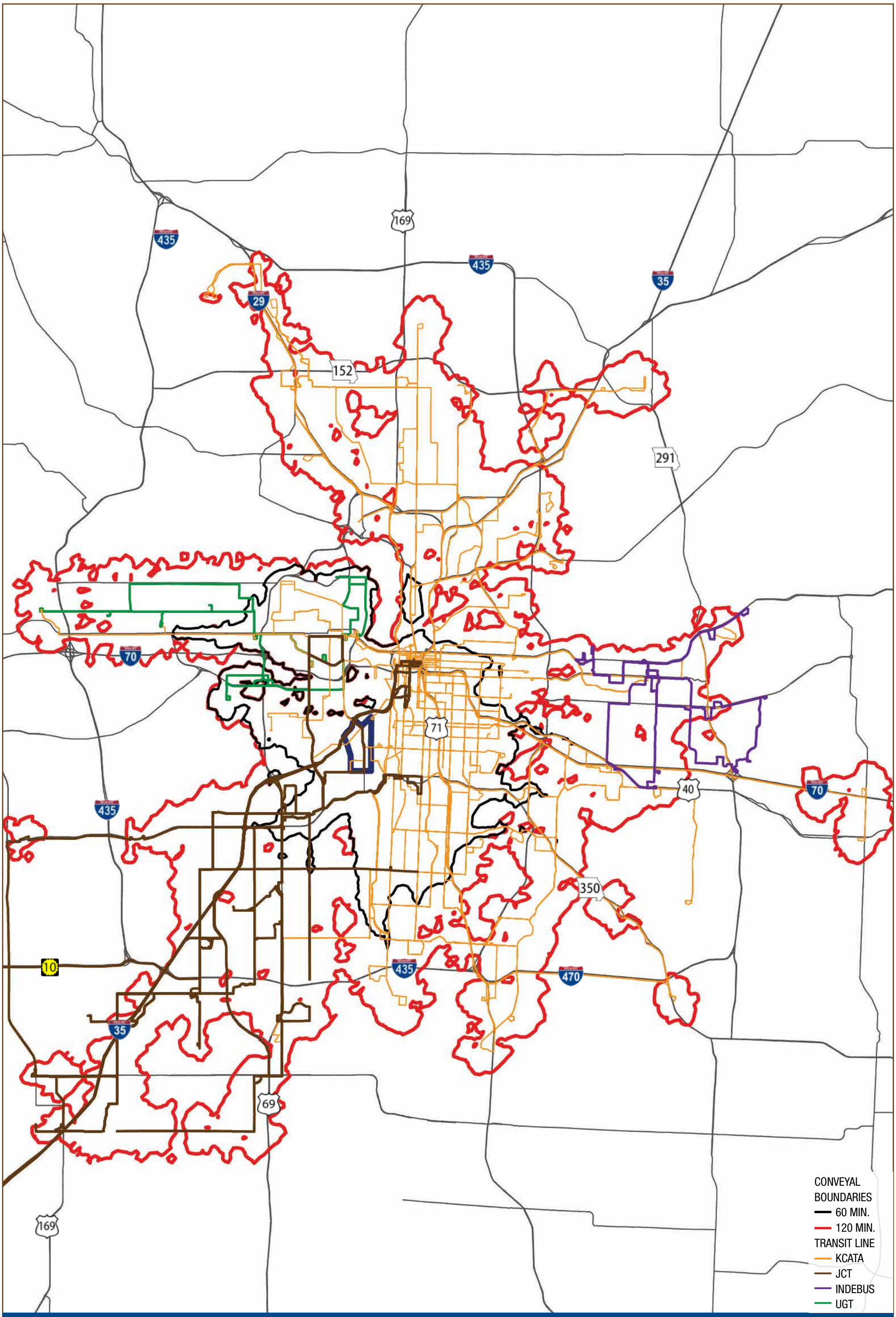

TRANSIT LINES

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

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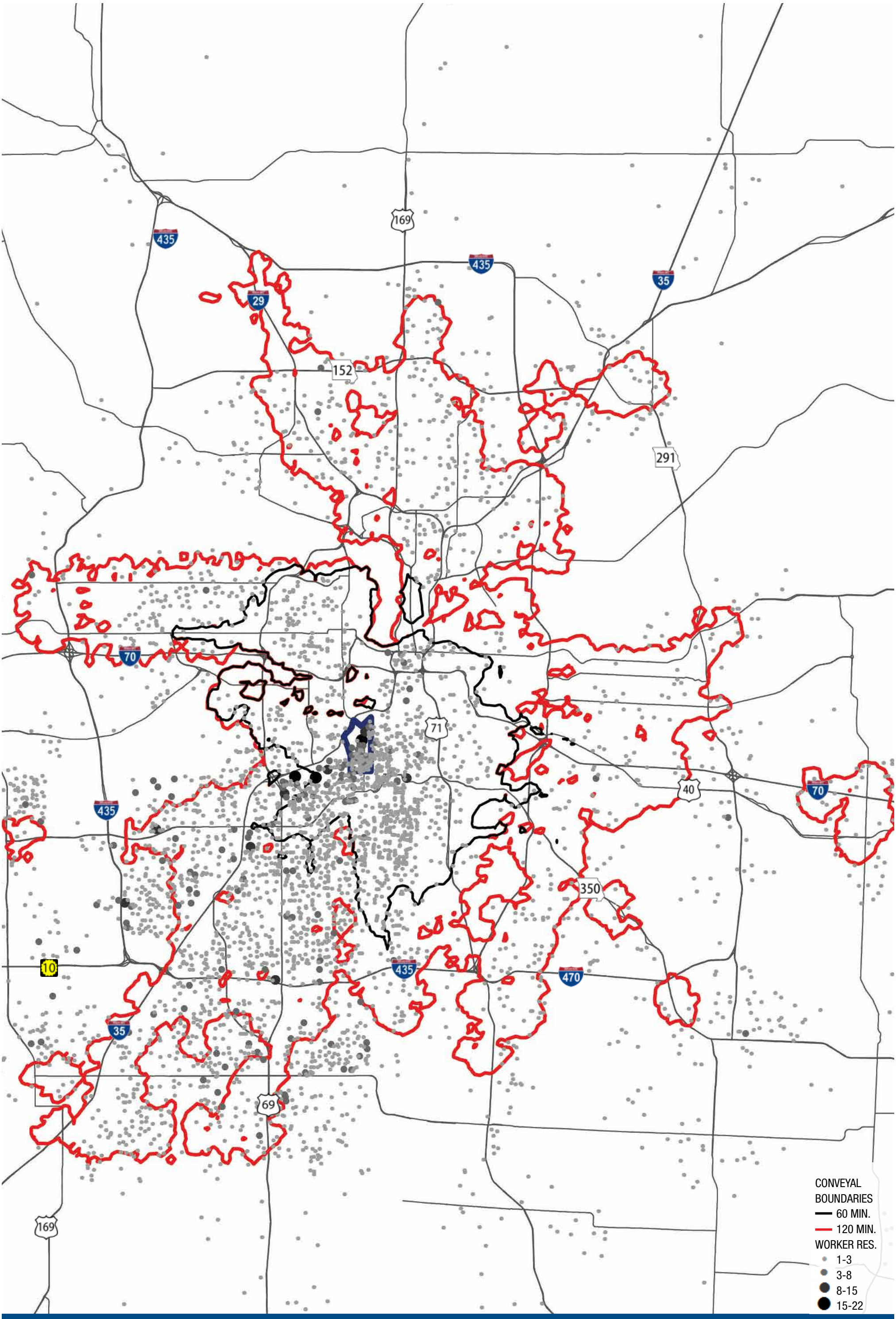

TOTAL WORKER RESIDENCE: 6,391

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

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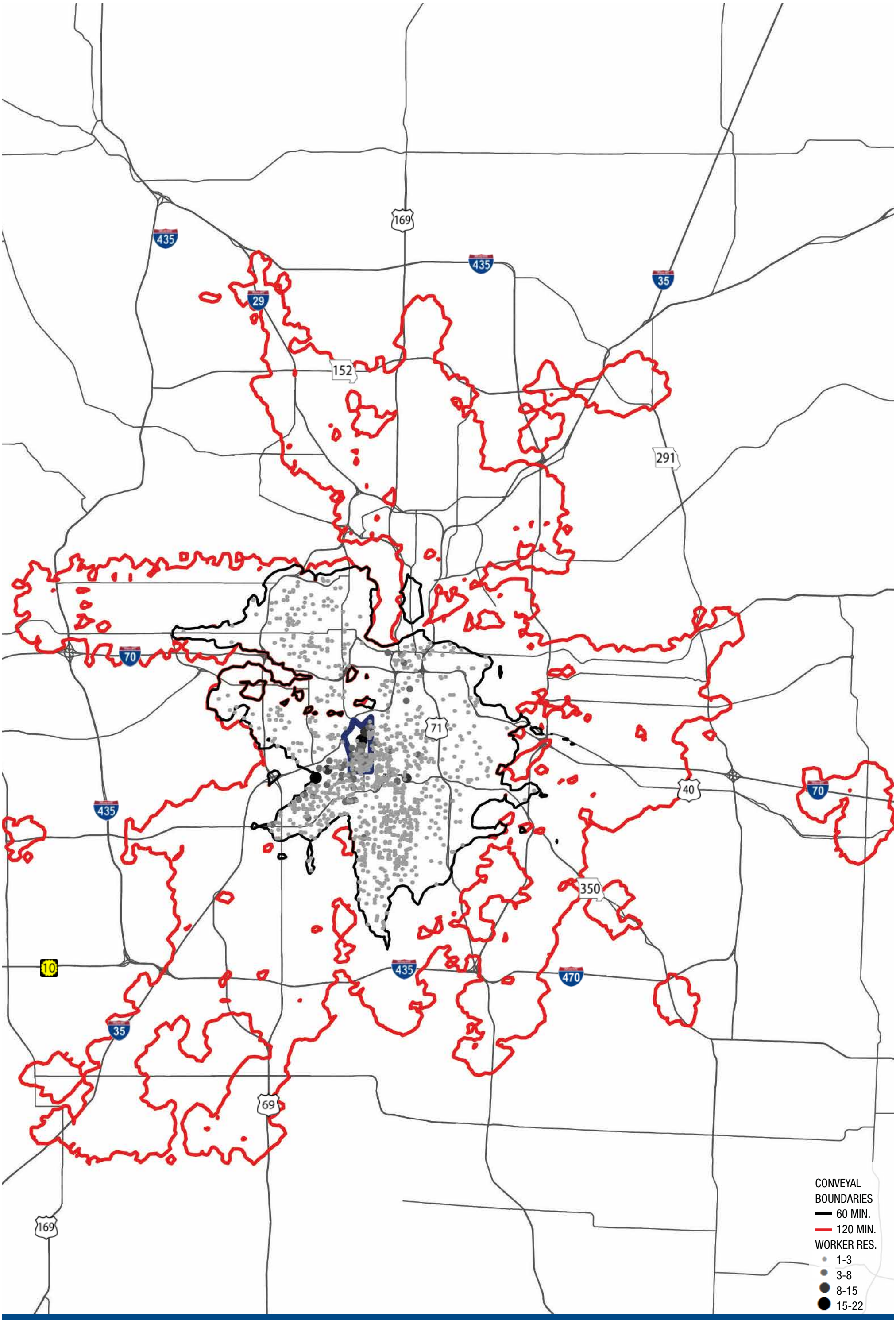


60 MINUTE WORKER RESIDENCE: 1,523

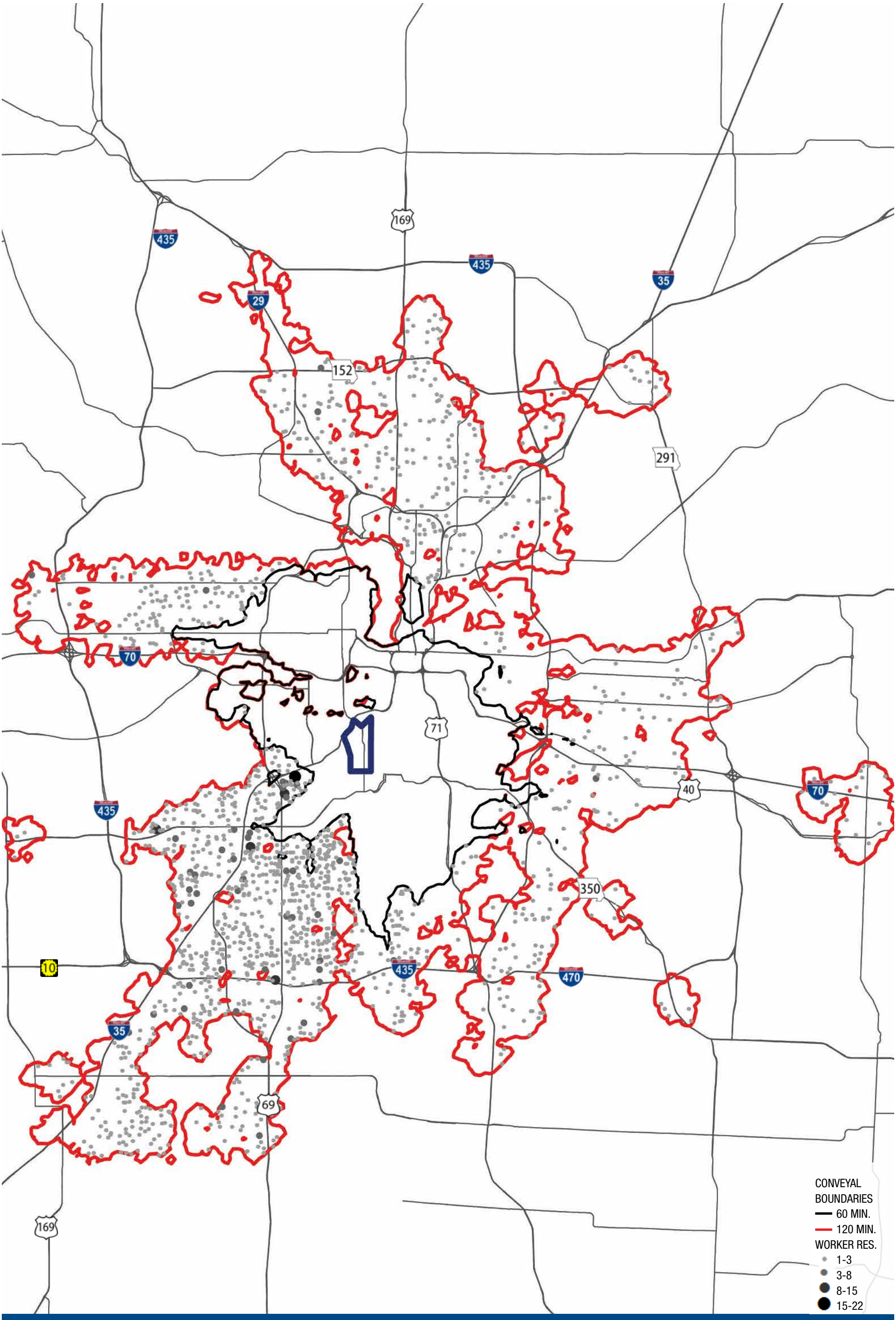
39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

MARC The Metro CONFLUENCE



120 MINUTE WORKER RESIDENCE: 2,209

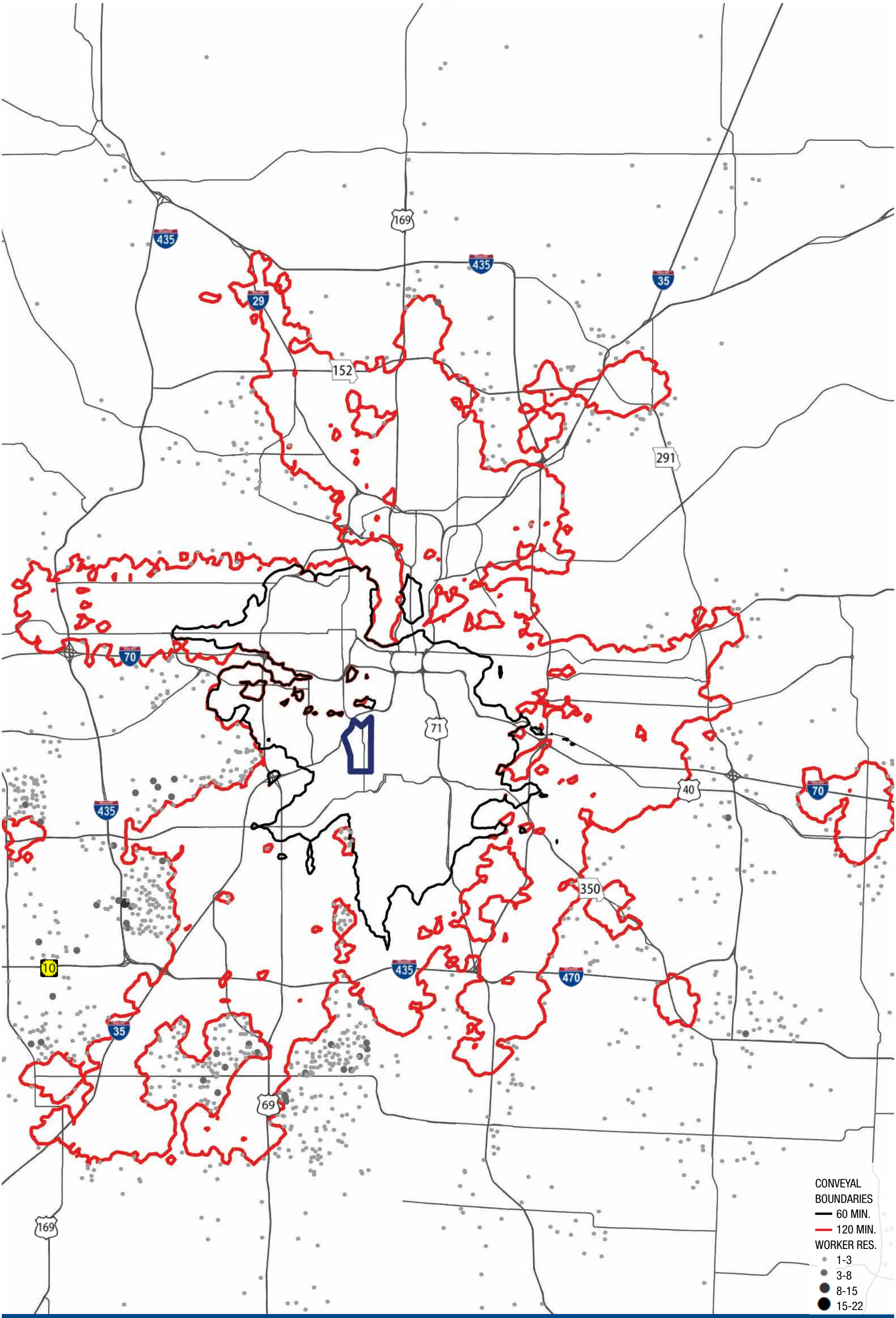
39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

MARC The Metro CONFLUENCE



OUTSIDE 120 MINUTES WORKER RESIDENCE: 2,659

39TH AND CAMBRIDGE

RideKC

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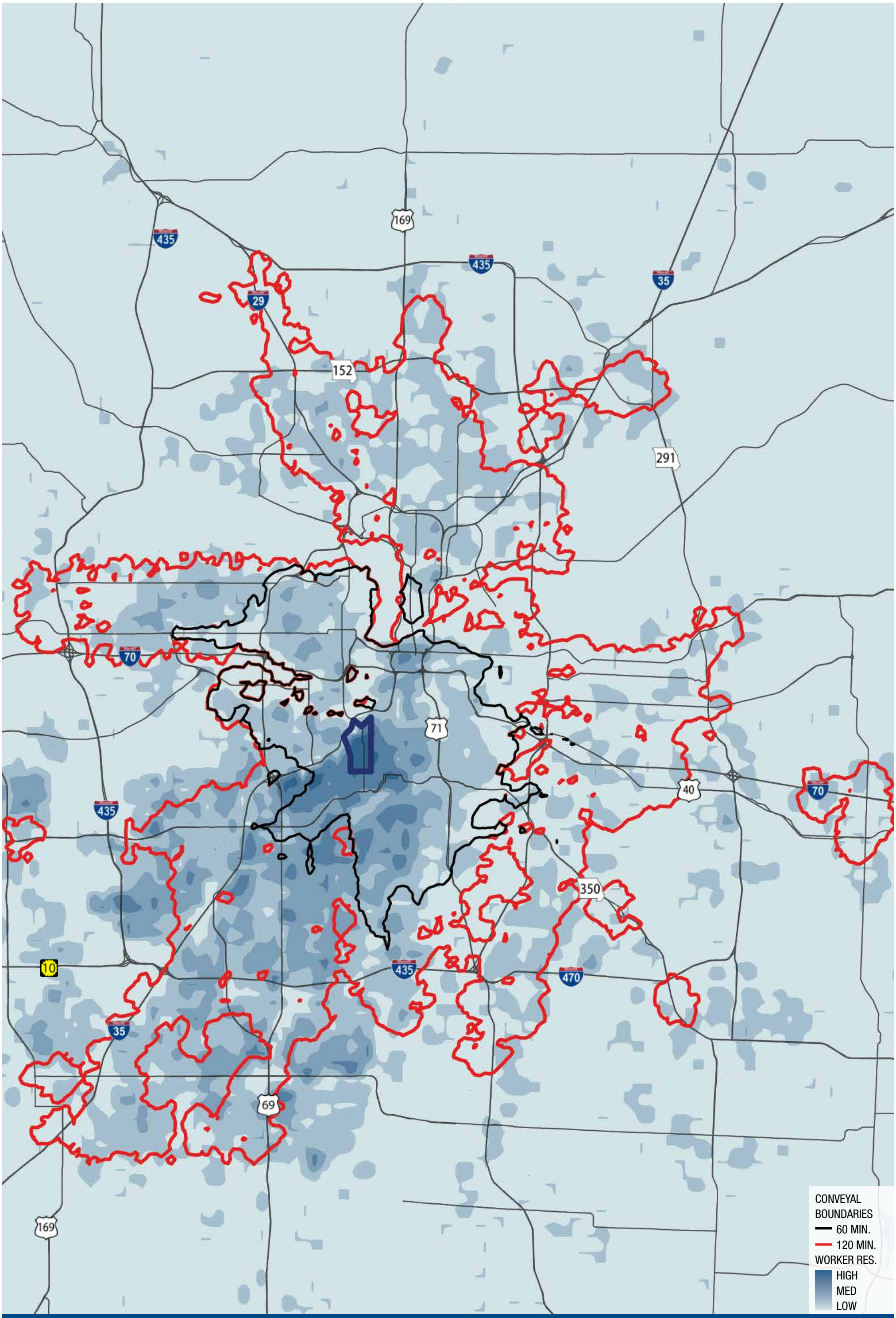


WORKER RESIDENCE

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

MARC The Metro CONFLUENCE

CONVEYAL
BOUNDARIES
60 MIN.
120 MIN.
PRIORITY
HIGH
MED
LOW
WORKER RES.
HIGH
MED
LOW

WORKER RESIDENCE POTENTIAL CAPTURE QUANTITY

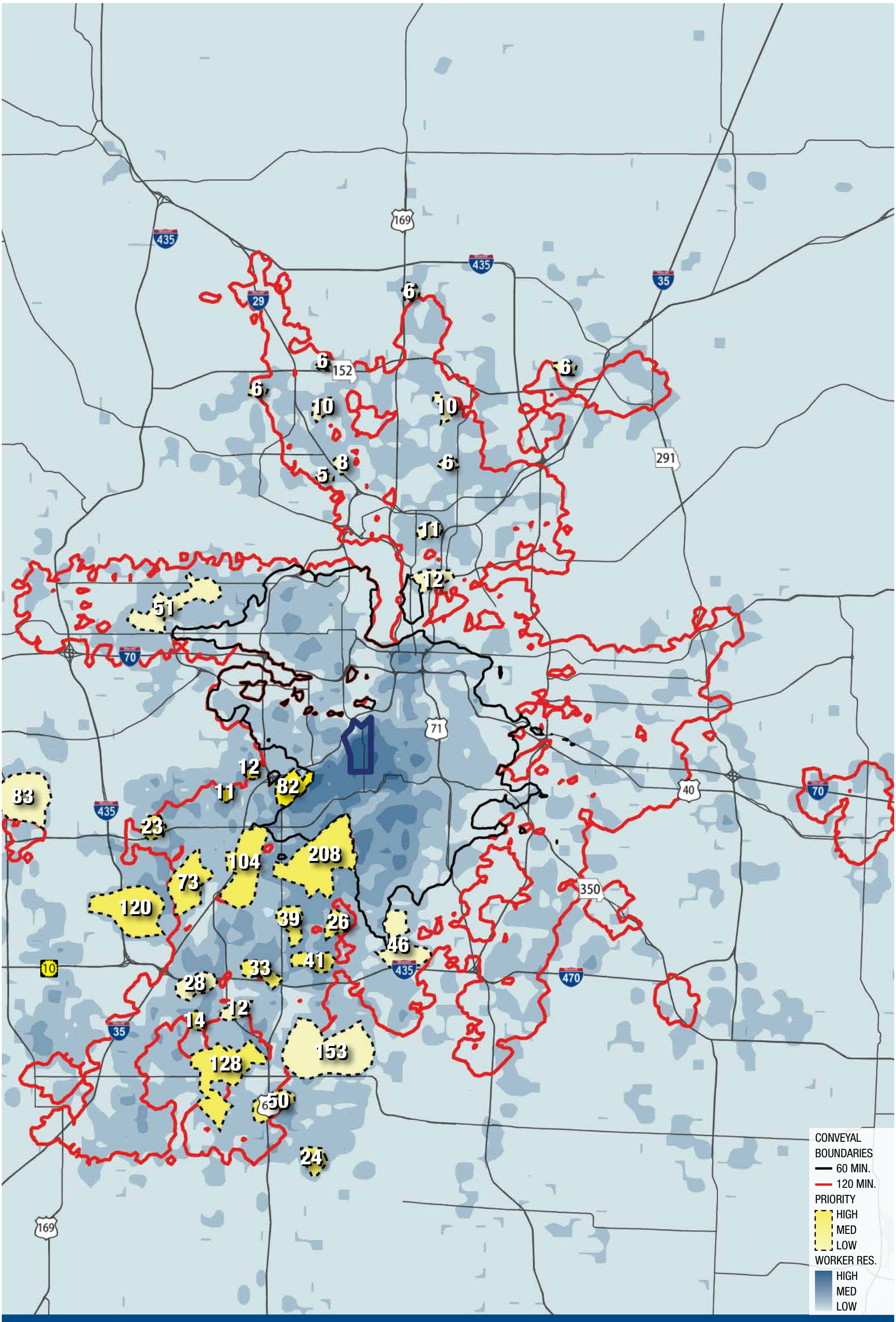
39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

MARC The Metro CONFLUENCE



WORKER RESIDENCE POTENTIAL CAPTURE: 1,447

39TH AND CAMBRIDGE

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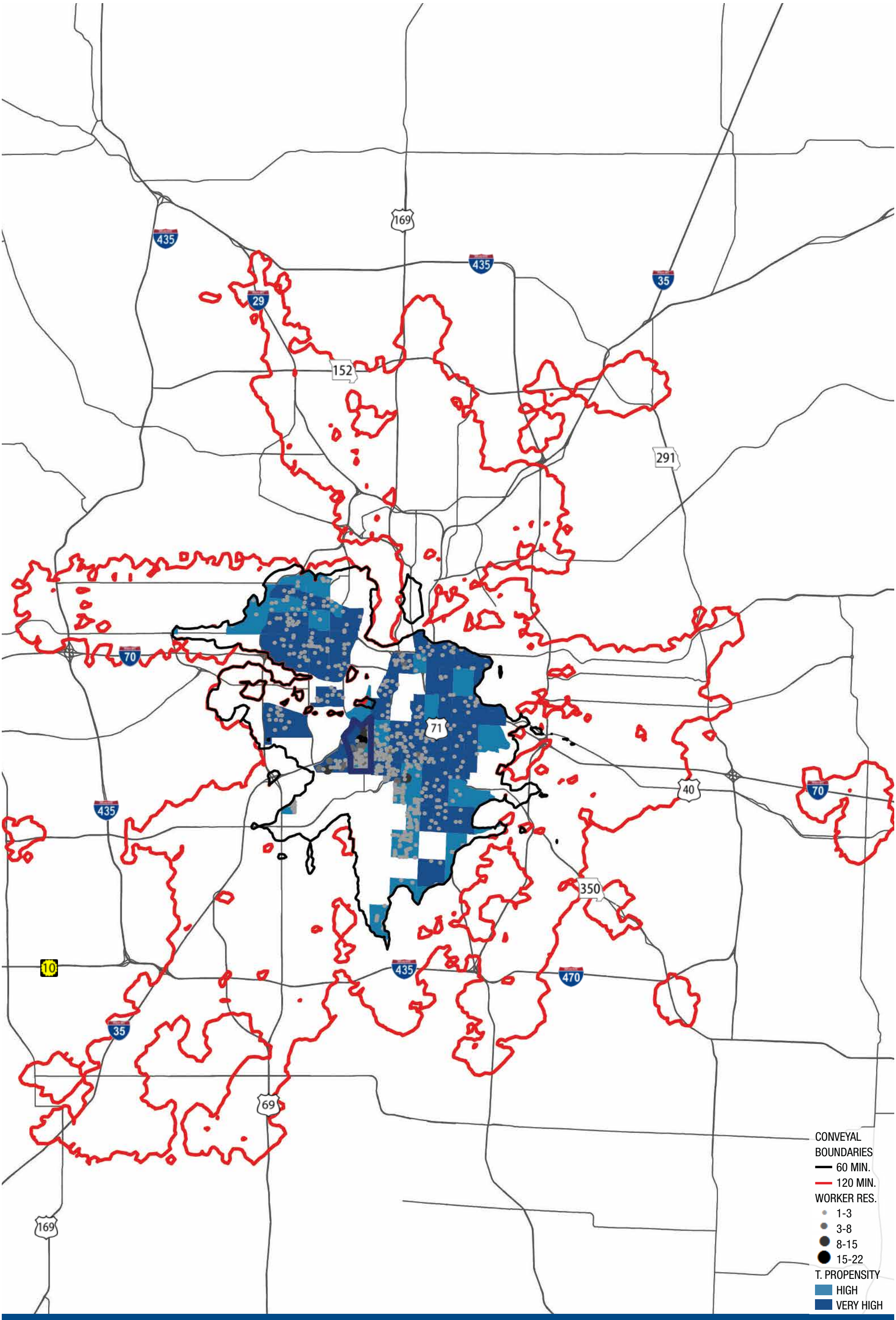

KU WORKERS IN TRANSIT PROPENSITY TRACTS WITHIN 60 MINUTES: 880 WORKERS

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

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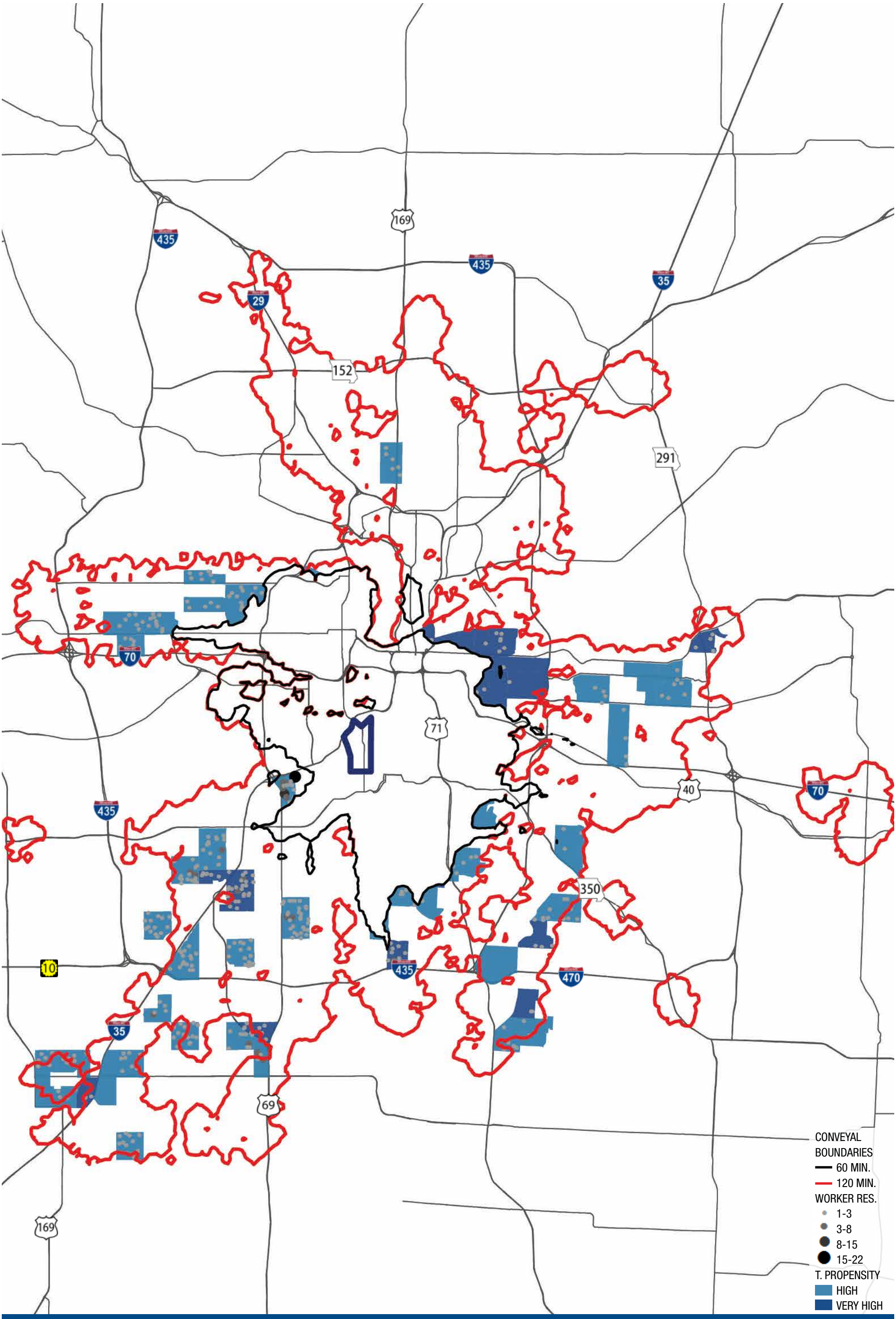

KU WORKERS IN TRANSIT PROPENSITY TRACTS OUTSIDE OF 60 MINUTES: 564 WORKERS

39TH AND CAMBRIDGE

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KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

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CONVEYAL
BOUNDARIES
60 MIN.
120 MIN.
RED. POTENTIAL
TODAY
0-5 YEARS
5-10 YEARS
10+ YEARS

REDEVELOPMENT AREAS WITHIN 60 MINUTES

39TH AND CAMBRIDGE

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PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

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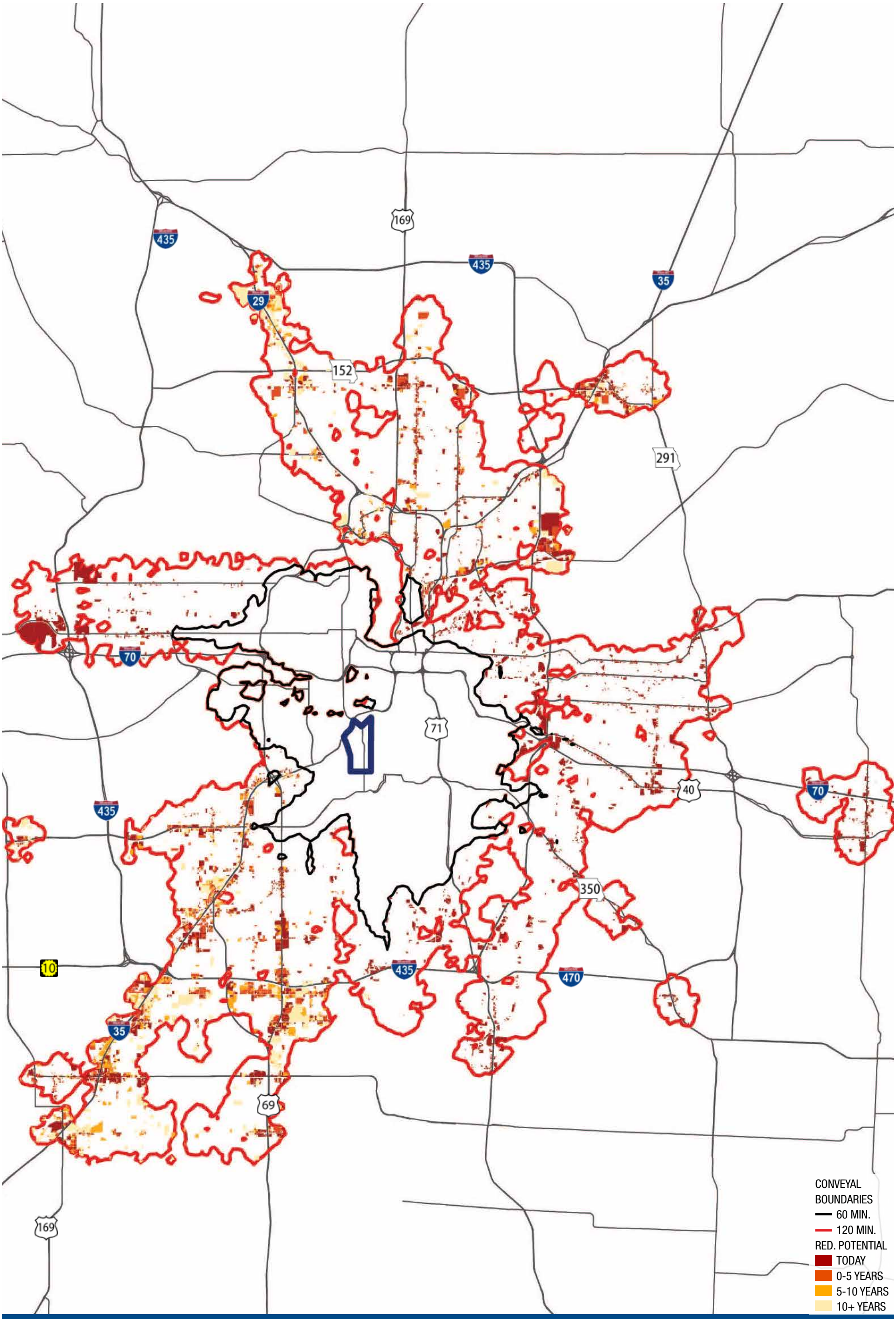

REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

39TH AND CAMBRIDGE

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KU MED PILOT AREA ANALYSIS

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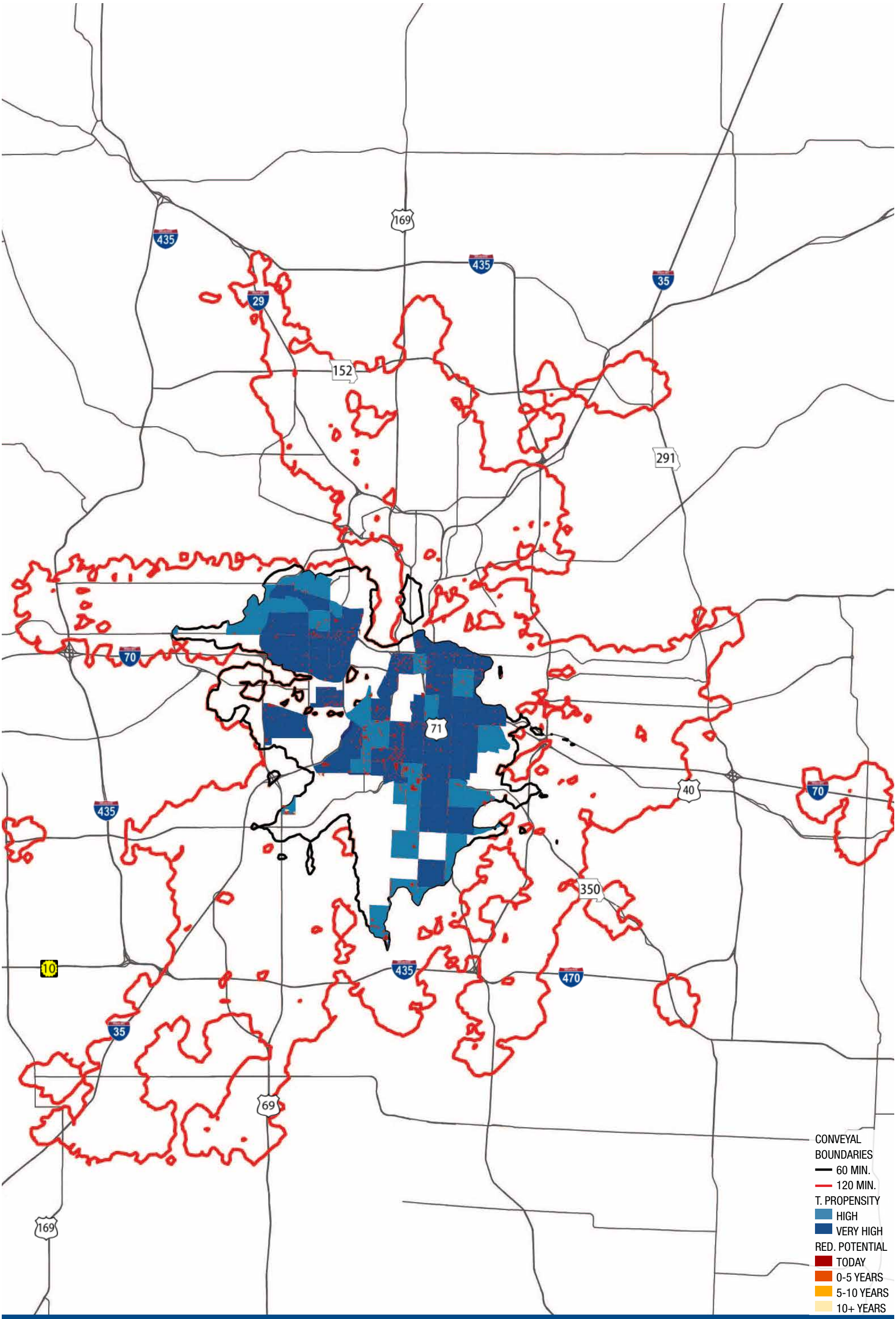

REDEVELOPMENT AREAS IN TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

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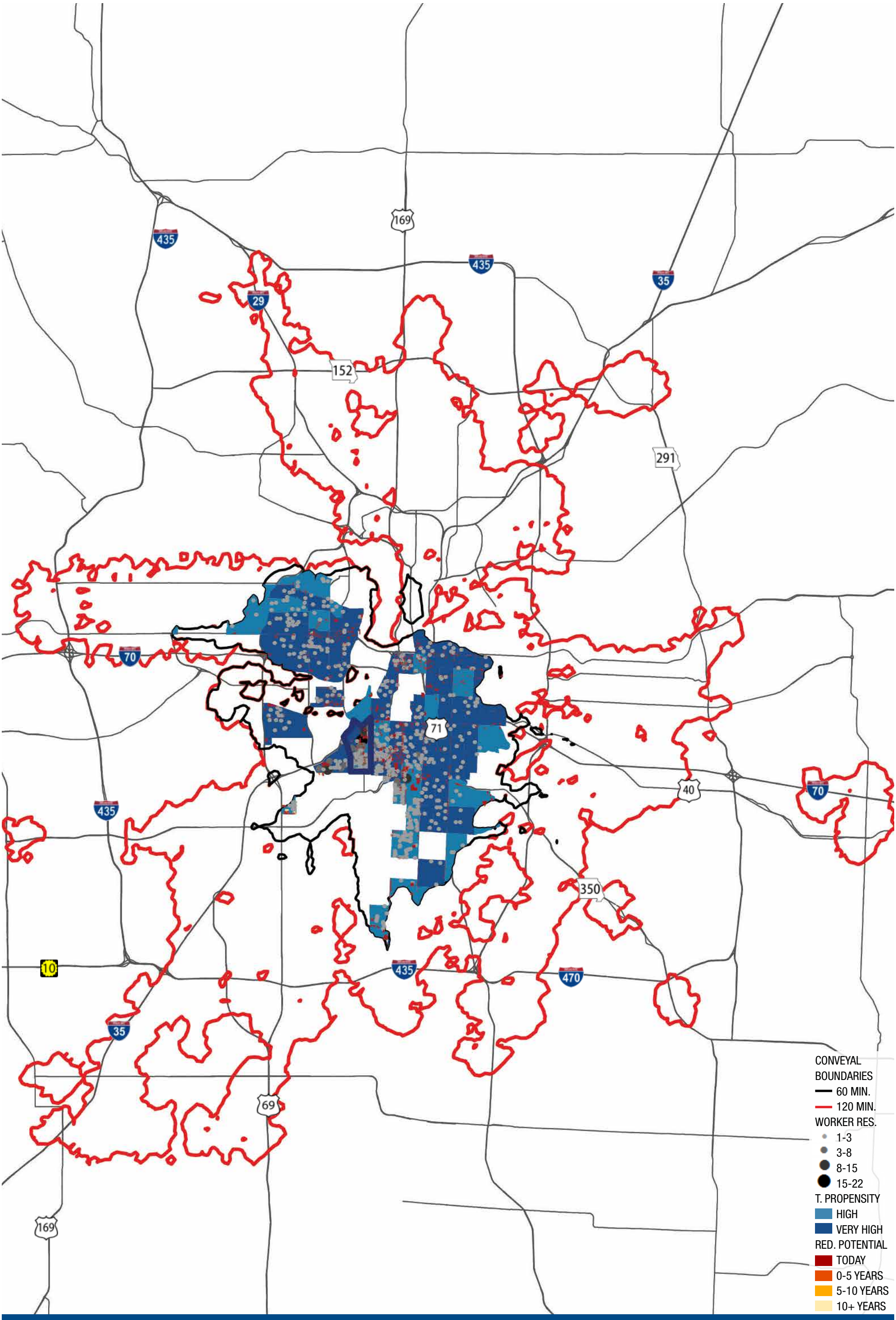

KU WORKERS IN TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS 60 MIN.

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

MARC Mid-America Regional Council · The Metro · CONFLUENCE

CONVEYAL
BOUNDARIES
60 MIN.
120 MIN.
T. PROPENSITY
HIGH
VERY HIGH
RED. POTENTIAL
TODAY
0-5 YEARS
5-10 YEARS
10+ YEARS

REDEVELOPMENT AREAS IN TRANSIT PROPENSITY AREAS BETWEEN 60-120 MINUTES

39TH AND CAMBRIDGE

RideKC

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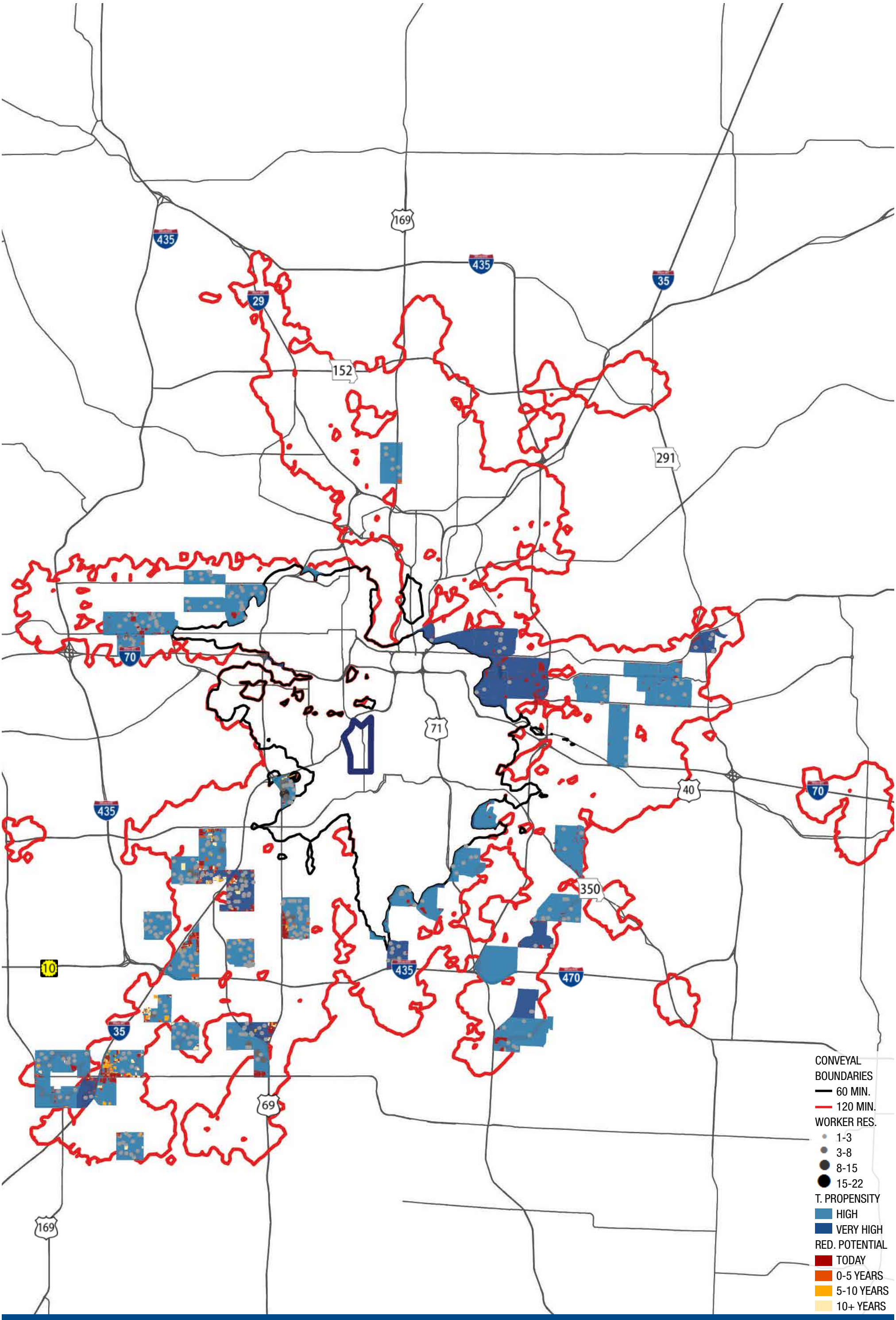

KU WORKERS IN TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS 60 - 120 MIN.

39TH AND CAMBRIDGE

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KU MED PILOT AREA ANALYSIS

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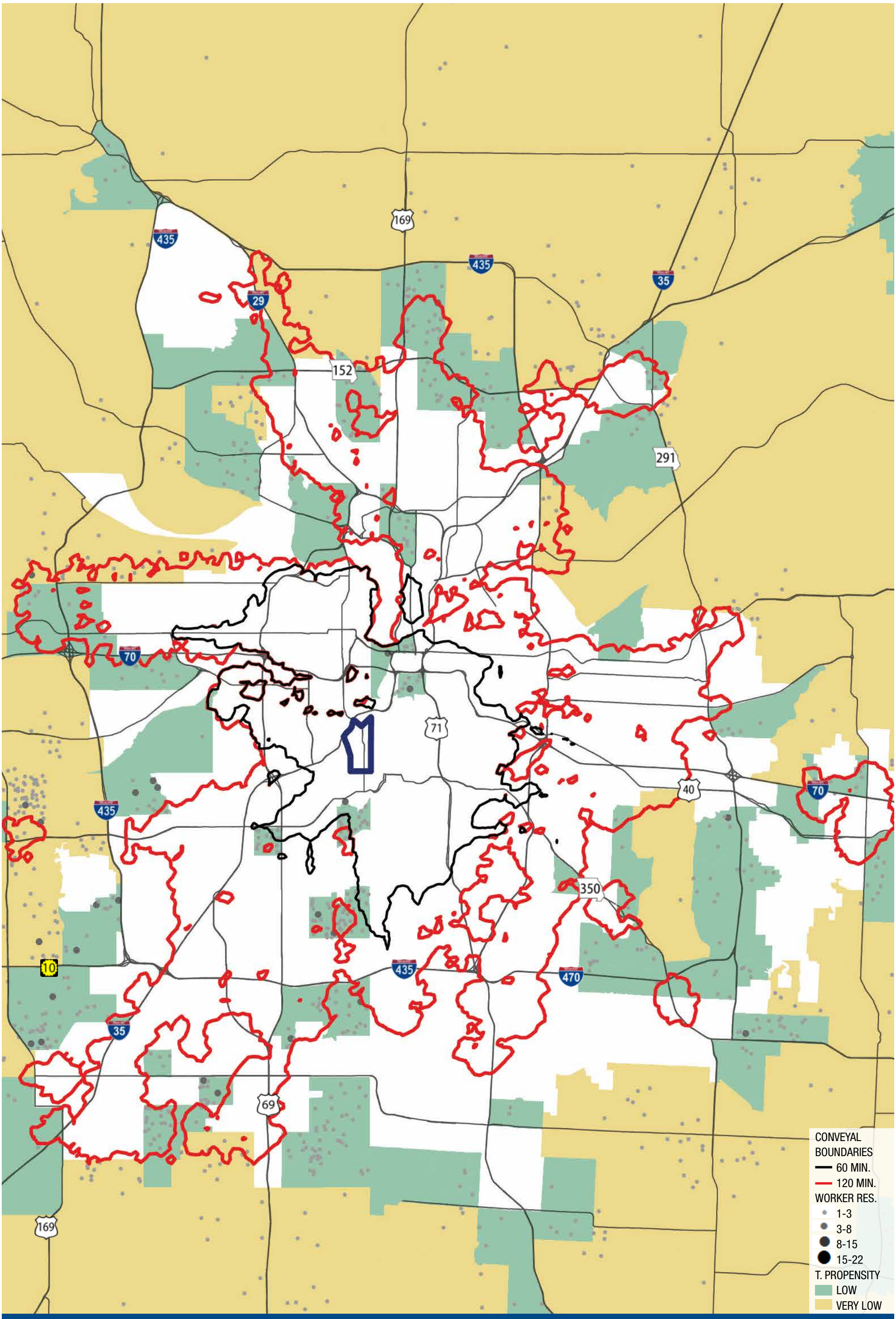

KU WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY: 1,458

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

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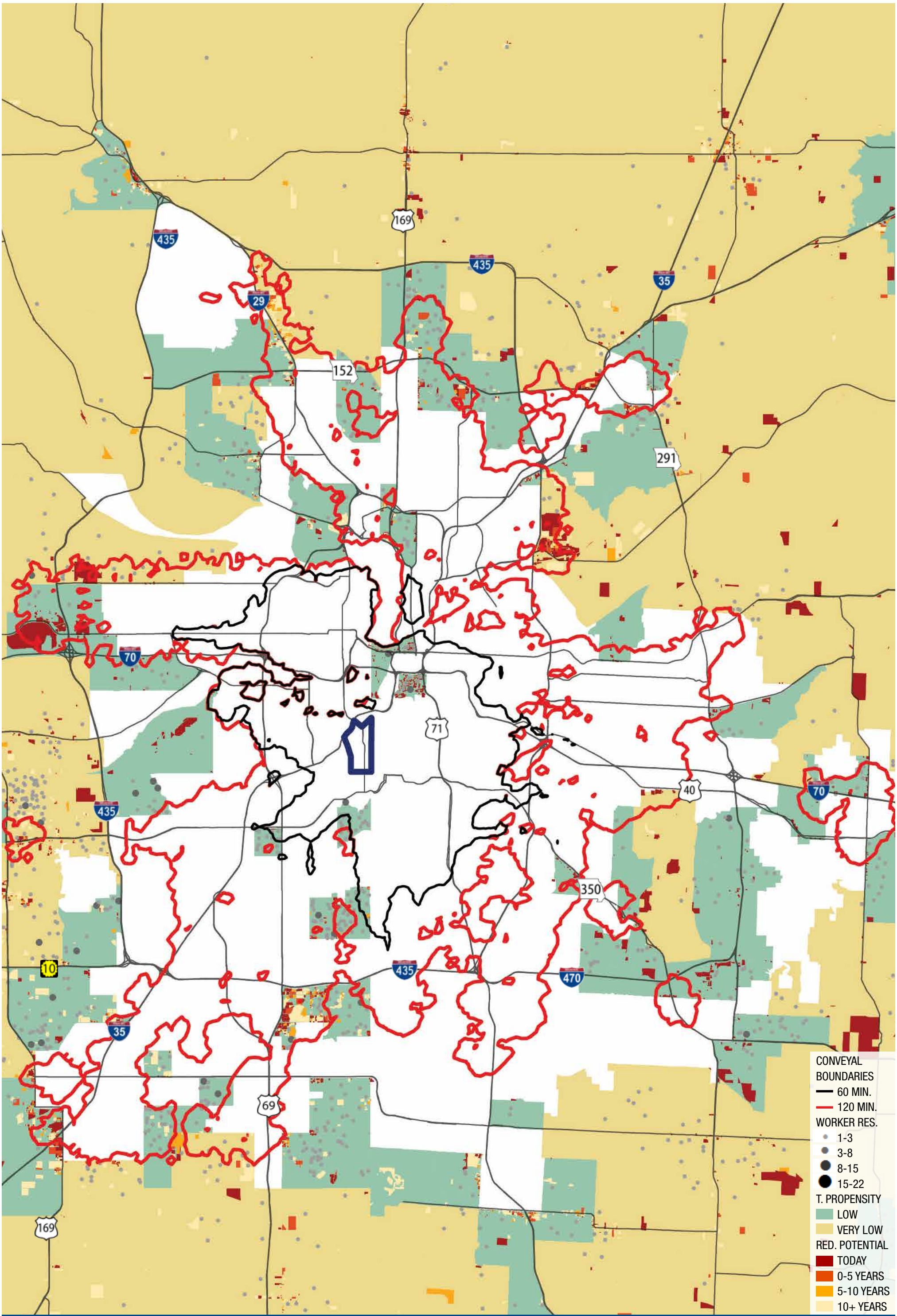

KU WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY + RED. POTENTIAL

39TH AND CAMBRIDGE

RideKC

KU MED PILOT AREA ANALYSIS

PROJECT PARTNERSHIP TEAM MEETING | March 22, 2016

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KU Medical Campus & Neighborhoods Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		Currently Responsible Organization	Phasing/ Timeframe	Cost	Increase in KU Med Worker Accessibility	Increase in Regional Job Accessibility	Effectiveness (cost per unit of increase) *Low)*	Replicability Considerations *(narrative)*	Potential Impact of Replicated Deployment	Stakeholder Interest	Stories to Make the Case
Mobility Hub											
Primary Deployment	Incorporate full range of Mobility Hub components at the Mission Transit Center	KCATA	High Priority Location	Capital, operating, ongoing maintenance	Signficant increase in connectivity for Johnson County		High	High	Similar		Metrolinx, Toronto
Secondary Deployment	Incorporate technology kiosk components at KU Med site	KCATA	High Priority Location		Significant improvement for all workers at KUMed for information and connectivity for all modes						
Mobility Strategies											
Fixed Route Transit	Increase route frequency on 39th Street (Route 39)	KCATA		$43.89/hr $4.91/mil							
	Provide half hour peak connections to the Mission Transit Center (Route 107)	KCATA		*UGT number*	*22.50%*	*3.20%*					
	Extend service down Nall to 135th; double the number of peak trips (Route 667)	KCATA		$67/hr							
Non-Fixed Route Transit	Monitor KU Med area demand for Bridj service	KCATA	Priority	$25/hour	*Waiting for numbers*		High	Moderate	Need destination to make Bridj work	Boston, Washington DC	
	Coordinate existing KU Med shuttles with other elements of the plan	Employer	High Priority	*KUMed transportation department*	Minor						Other private entities that do shuttles, Boston, partners health
Carpool	Provide preferential and/or free parking for carpools	Employer	Priority	cost of signage							
	Participate in Regional RideShare database to increase pool of potential carpool matches	Employer	Ongoing	none							
	Provide access to employer vehicles for off-site meetings	Employer	Priority	Owned vehicles or carshare	minor to moderate	minor to moderate	high	high	best with regular shifts		
	Target employees with longer commutes for promotion	Employer/MARC	Priority	none							
Vanpool	Provide preferential and/or free parking for vanpools	Employer	Same as carpool	cost of signage							
	Provide employer subsidy for cost of vanpool	Employer		Subsidy cap per ride							
	Provide access to employer vehicles for off-site meetings	Employer	Same as carpool	Owned vehicles or carshare	minor to moderate	minor to moderate	high	best with large employer as anchor	similar		
	Target employees with longer commutes for promotion	Employer/KCATA	Same as carpool	none							
Car Share	Contract with carshare provider to place vehicles on/near employment center/campus	Employer	Priority	Less capital expense than company vehicles							
	Work with surrounding neighborhoods to expand carshare network beyond KU Med footprint	Employer/UG/KCMO		low	minor to moderate	minor to moderate	high	ow--requires density	requires density		
	Provide preferential parking for carshare vehicles	Employer		cost of signage							

KU Medical Campus & Neighborhoods Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in KU Med Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Bike Share	Integrate B-Cycle into Employee Wellness Program	Employer	Short term but dependent on station instalation	Cost dependent on subsidy. For example,				Business model has affects the repicablity program across jurisdictions and transit service boundaries			
	Sponsor bikeshare station on property or nearby	Employer	High Priority	Example, a station with 10 docks and 5 bike will cost $26,000 capital cost and 8,000 annual maintence. Increased configurations have an economy of scale to reduce the per dock and bike cost, but maintence cost are less elastic. Federal subsidized programs require 20% local match. Customized matches may increase match to grow system more quickly.	Depends on several factors: location and quality of stations; the bicycle level of service for roadways within the bike travel shed and proximity of mixed use with in the bike travel shed. The average one way bike trip length is 1.8 miles. Comuters are less likely to use tranit if bicycling more expedient. Average bicycle speed is 12 mph.	Depends on several factors including but not lmited to: transit service combined with first mile last mile opportunties; bike share station locations quality of stations, the quality of the bicyle level of service for roadways within the first mile and last mile of the bike travel shed. The average one way bike trip length is 1.8 miles. Average bicycle speed is 12 mph.			Impacts two types of trips: bike only trips within activity centers and first/last mile options for transit users. Trips invovling transit are limited to bike carrier capasity.		
	Provide B-Cycle membership subsidies through employer, local government, or other membership organizations	Employer/UG/Other	Short term but dependent on station instalation	Employee Discount Program offers subsidized membership ($65 Annual Fee) or Corporate Membership Program (customized packages) offers free membership to empoyees							
First/Last Mile Transit	Utilize Ride Hailing (Uber, Lyft, e.g.) for short commutes, connections to Mission Transit Center or other transit	Users/KCATA	Demo a High Priority	Subsidy cap per passenger	High especially during periods of lower fixed route demand		High	The more options available, the more likely people will be willing to use something other than a car		Dallas, Pinellas Sun Coast FL	

KU Medical Campus & Neighborhoods Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in KU Med Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
	Connect KU Med shuttles to Mission Transit Center and use to cover periods of low transit demand	Employer	Connecting shuttles to Mission Transit Center and openning to the general public could be a high value				High	Moderate, need active employer			Boston, Partners health
	Use paratransit resources to connect to Mission Transit Center and to cover periods of low transit demand	KCATA	Consider a demo of general public demand response in certain areas during the off peak	$31.64/hr							
Bicycle Connections	Provide bike lanes on busier roadways	UG/KCMO	Long Term over multiple years	$ low resurface & strip $$ medium reconstruction							
	Design major intersections to allow safe movement of bicyclists through the intersection	UG/KCMO	Long Term over multiple years	$ low resurface & strip $$ medium reconstruction							
	Provide ample bicycle parking near building entrances	Employer/UG	Short Term	$ low cost							
Pedestrian Connections	Address any ADA deficiencies, especially along transit routes and major roadways	UG/KCMO	Long Term annual plan	$-$$ medium construction required							
	Adopt prioritized snow and debris removal policies	UG/KCMO	Short Term	$ low maintance annual							
	Evaluate pedestrian connections between schools, businesses, and retail	UG/KCMO	Data of sidewalks exist	$ low inventory updating							
Communication Strateg	Broaden RideKC website to emphasize full range of mobility options	KCATA/MARC	High Priority - Need to back up with operating performance for public confidence	Capital and maintenance upkeep	Prerequisite for strong regional program and would assist all pilot sites						website, SFMTA website, Helsinki, Finland: Regional Journey Planner, which finds the optimal route from
	Consider broader us of apps	KCATA/MARC	All apps and technology need to be integrated and seamless to customers		Same as above, need to be integrated						
	Utilize more real-time communications methods	KCATA/MARC	Same as above, could include on board fare payments, etc								

KU Medical Campus & Neighborhoods Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in KU Med Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Technology Strategies	Regional Mobility fare/ticketing that will include the full range of mobility options	CATA/Private partne	Needs to be integrated and coordinated as part of communication strategy								Dallas
Urban Design Strategie	Encourage affordable housing opportunities to be integrated into future development and redevelopment initiatives	UG / KCMO	Long Term	$ low							
	Promote new development and revitalization projects to include multi-modal connectivity by providing sidewalks, bicycle facilities, and pedestrian amenities.	UG / KCMO	Short Term	$ low							
	Adopt focused and integrated land use master plans and development policies/regulations around the Mission transit station (mobility hub) and along identified transit corridors to bolster existing and proposed transit routes, hubs and stations	UG / KCMO/Mission	Short Term	$ low	Population Net Gain: 3,416 Employment Net Gain: 5806 Total Workers: 3,022						
	Create catalytic economic development opportunities for new high-density residential, commercial, and mixed-use development/revitalization within walking distance of KU Med complex, around the Mission transit station (mobility hub), and along designated transit route corridors through the use of attractive development incentives, taxing districts to assist in funding transit/transportation improvements, density bonuses, or other programs.	UG/KCMO/Mission/KU/ Private Developers	Long Term	$$ medium								
	Align future vehicular parking regulations in areas around KU Med, the Mission transit station (mobility hub), and along designated transit corridors to discourage excessive quantities of vehicular parking while encouraging integrated passenger drop-off/pick-up facilities (for carpooling, on-demand cabs, shuttles, etc.) and minimal to no parking requirements.	UG/KCMO/Mission	Long Term	$ low								
	Integrate future transit station/stop locations and other multi-modal facilities into the design of proposed development projects to encourage ridership and access to amenities and services offered by the new development.	UG/KCMO/ATA/ Private Developers	Long Term	$ low							
Supporting Policies											
Business	Provide Commuter Tax Benefits to Employees	Employer									
	Provide a Universal Transit Pass to all Employees	Employer/KCATA									
	Adopt Bike Friendly Business Attributes	Employer									
Government	Support a Guaranteed Ride Home Program for users of all mobility services	/KCMO/KCATA/MARC									
	Support/allow park-and-ride lots	UG/KCMO									
	Adopt Complete Streets policies	UG/KCMO									

KU Medical Campus & Neighborhoods Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		Currently Responsible Organization	Phasing/ Timeframe	Cost	Increase in KU Med Worker Accessibility	Increase in Regional Job Accessibility	Effectiveness (cost per unit of increase) *Low)*	Replicability Considerations *(narrative)*	Potential Impact of Replicated Deployment	Stakeholder Interest	Stories to Make the Case
Institutional Infrastructure											

Append Maps where applicable
[Strategies]
[Change in Commuting Contours]

Additional Information behind bike and ped questions

BIKESHARE COST INFORMATION

	Number of Docks	Appx. Number of Bikes	Total Capital Cost	Annual Operations Cost
AR Dykes Library	18	9	35,000	8,000
Kirmayer Fitness Center	14	7	30,000	8,000
39th and Rainbow	13	6	30,000	8,000
47th and Rainbow	13	6	30,000	8,000
47th and Mission	13	6	30,000	8,000
53rd and Belinder	13	6	30,000	8,000
47th and Fisher/Belinder	11	5	28,000	8,000
39th and Bell St.	11	5	28,000	8,000
39th and Mercier	11	5	28,000	8,000
37th and Eaton	10	5	26,000	8,000

Source: Eric Bunch BikeWalkKC E-mail

		Sources
Provide bike lanes on busier roadways (see notes below for further information)	Bike Lanes (Paint c $11,800	Average Cost per mile Souce: Great Kansas City Regional Bikeway Plan, p.37
	Bike Lanes Theron $19,100	Average Cost per mile Souce: Great Kansas City Regional Bikeway Plan, p.37
	Bike Lanes Requiri $133,170	Costs for Pedestrian and Bicyclist Infrastructure Improvements (5 foot bike lanes, 2012 estimate)
Design major intersections to allow safe movement of bicyclists through the intersection (see notes below	Bike Lanes should be continued to intersection according to MUTCD.	
	Bike Lanes through intersection may require intersection widening.	
Provide ample bicycle parking near building entrances (see notes below for further information)	Average Bicycle Lc $2,090 (accomda	Costs for Pedestrian and Bicyclist Infrastructure Improvements

KU Medical Campus & Neighborhoods Pilot

Recommendations and Outcomes

Recommendations				Estimated Outcomes					Engagement	
Strategy	**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in KU Med Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
			Average Bicycle U-	$178 (accomdate	Google: inverted u bike rack price 7/8/2016 (8 providers)					
Address any ADA deficiencies, especially along transit routes and major roadways (see notes below for further information)			average sidewalk construction	of $32	Costs for Pedestrian and Bicyclist Infrastructure Improvements (5 foot sidewalk, 2012 estimate)					
			Average cost for ADA ramp per unit $		Costs for Pedestrian and Bicyclist Infrastructure Improvements (2012 estimate)					

RideKC Workforce Connex

KU Medical Campus & Neighborhoods Pilot

Fixed Route Transit Access Evaluation

	Access to KU Med Center Jobs					Access to Total Regional Jobs				
	Baseline		With Recommendations			Baseline		With Recommendations		
Workers PM Peak Commute	Within 60 Minutes Number	Percent	Within 60 Minutes Number	Percent	Percent Change	Within 60 Minutes Number	Percent	Within 60 Minutes Number	Percent	Percent Change
Total Workers	74,271	11.6%	90,956	14.2%	22.5%	51,154	6.1%	52,776	6.3%	3.2%
		11.6%								
Worker Age										
Age 29 or Younger	19,709	12.5%	23,740	15.1%	20.5%					
Age 30 to 54	39,908	11.3%	49,064	13.9%	22.9%					
Age 55 or Older	14,653	11.0%	18,151	13.7%	23.9%					
Worker Income										
$1,250 per month or less	20,730	12.2%	25,560	15.0%	23.3%					
$1,251 to $3,333 per month	28,034	12.1%	34,464	14.9%	22.9%					
More than $3,333 per month	25,506	10.6%	30,931	12.8%	21.3%					
Worker Race										
White Alone	52,000	9.8%	62,729	11.9%	20.6%					
Black or African American Alone	18,890	22.1%	24,177	28.3%	28.0%					
American Indian or Alaska Native Alone	492	14.2%	565	16.3%	14.8%					
Asian Alone	1,753	11.5%	2,126	14.0%	21.3%					
Native Hawaiian or Other Pacific Islander Alone	65	8.2%	73	9.2%	12.3%					
Two or More Race Groups	1,069	13.5%	1,283	16.2%	20.0%					
Worker Sex										
Male	36,221	11.6%	43,967	14.1%	21.4%					
Female	38,049	11.5%	46,988	14.2%	23.5%					
Worker Educational Attainment										
Less than High School	6,987	14.4%	8,466	17.4%	21.2%					
High school or equivalent, no college	15,510	11.3%	19,125	13.9%	23.3%					
Some college or Associate degree	17,268	11.0%	21,366	13.6%	23.7%					
Bachelor's degree or advanced degree	14,794	10.4%	18,257	12.9%	23.4%					
Educational attainment not available										
Future Workers (Urban Design Growth Projections)			2,581							
Total Future Workers			93,537	14.6%						

RideKC Workforce Connex

College and Metcalf Pilot

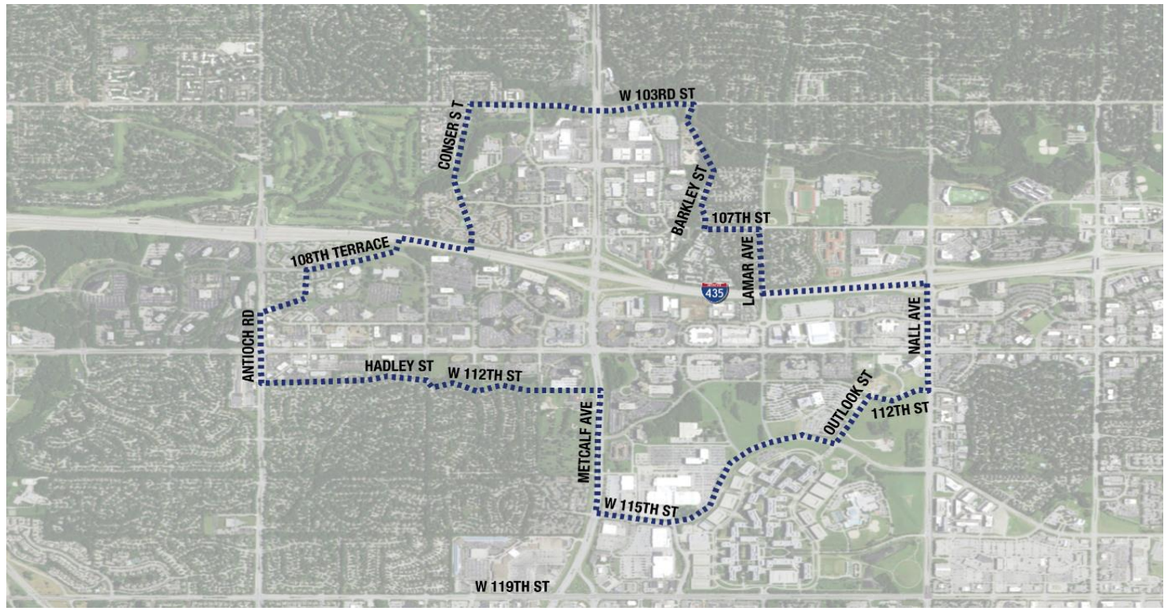
Pilot Area Profile

Pilot Area Boundary	North	East	South	West
	109th Terrace, 108th Terrace, 435, W 103rd St, 107th St, 435	Functionally Glenwood St, Lamar Ave., Nall Ave., 115th St.	W. 113th Street, Hadley St., W. 115th St., Outlook St., W 112th	Metcalf Ave, Antioch Rd, Conser St

Typology	*Context*	*Attraction Level*	*Destination*	*Peak Hours*
	Outer Ring	Regional	Diverse District	Mixed Shift

Workers within Boundary	Number	Percent
Agriculture/Forestry/Fishing/Hunting	0	0.00%
Mining/Quarrying/Oil and Gas Extraction	0	0.00%
Utilities	0	0.00%
Construction	227	0.90%
Manufacturing	32	0.10%
Wholesale Trade	1,208	5.00%
Retail Trade	770	3.20%
Transportation/Warehousing	53	0.20%
Information	306	1.30%
Finance/Insurance	3,397	14.00%
Real Estate/Rental/Leasing	435	1.80%
Professional/Scientific/Tech Services	6,884	28.30%
Mgmt of Companies/Enterprises	336	1.40%
Admin/Support/Waste Mgmt/Remediation	4,580	18.80%
Educational Services	270	1.10%
Health Care/Social Assistance	2,710	11.10%
Arts/Entertainment/Recreation	340	1.40%
Accommodation/Food Services	1,972	8.10%
Other Services (exc. Public Administration)	748	3.10%
Public Administration	75	0.30%
Total Jobs	24,343	100.10%

Current Transit and Mobility Options and Usage		*Pilot Area Usage*	*Regional Usage*
Fixed Route Transit			
Non Fixed-Route Transit			
Carpool	Carpoolers with destinations in zipcodes 66210 and 66211	59	760
	Carpoolers with destinations in zipcodes 66212, 66207, 66213, 662	14	760
Vanpool	No current vanpools with destination in this pilot area	0	27
Carshare	No carshare vehicles currently in this pilot area	0	4



Bikeshare			
First/Last Mile Transit			
Bicycle Connections			
Pedestrian Connections			

Current Land Use Condition*	Count	Percent
Single Family	5,984	17.12%
Vacant / Ag	1,426	4.08%
Parks / Open Space	1,477	4.23%
Commercial	7,728	22.11%
Public / Semi Public	875	2.50%
Multi-Family / Condo	1,591	4.55%
Office	7,616	21.79%
Industrial / Business Park	1,026	2.94%
Mixed Use	0	0.00%
ROW	7,228	20.68%
Railroad ROW	0	
Total	34,951	100.00%

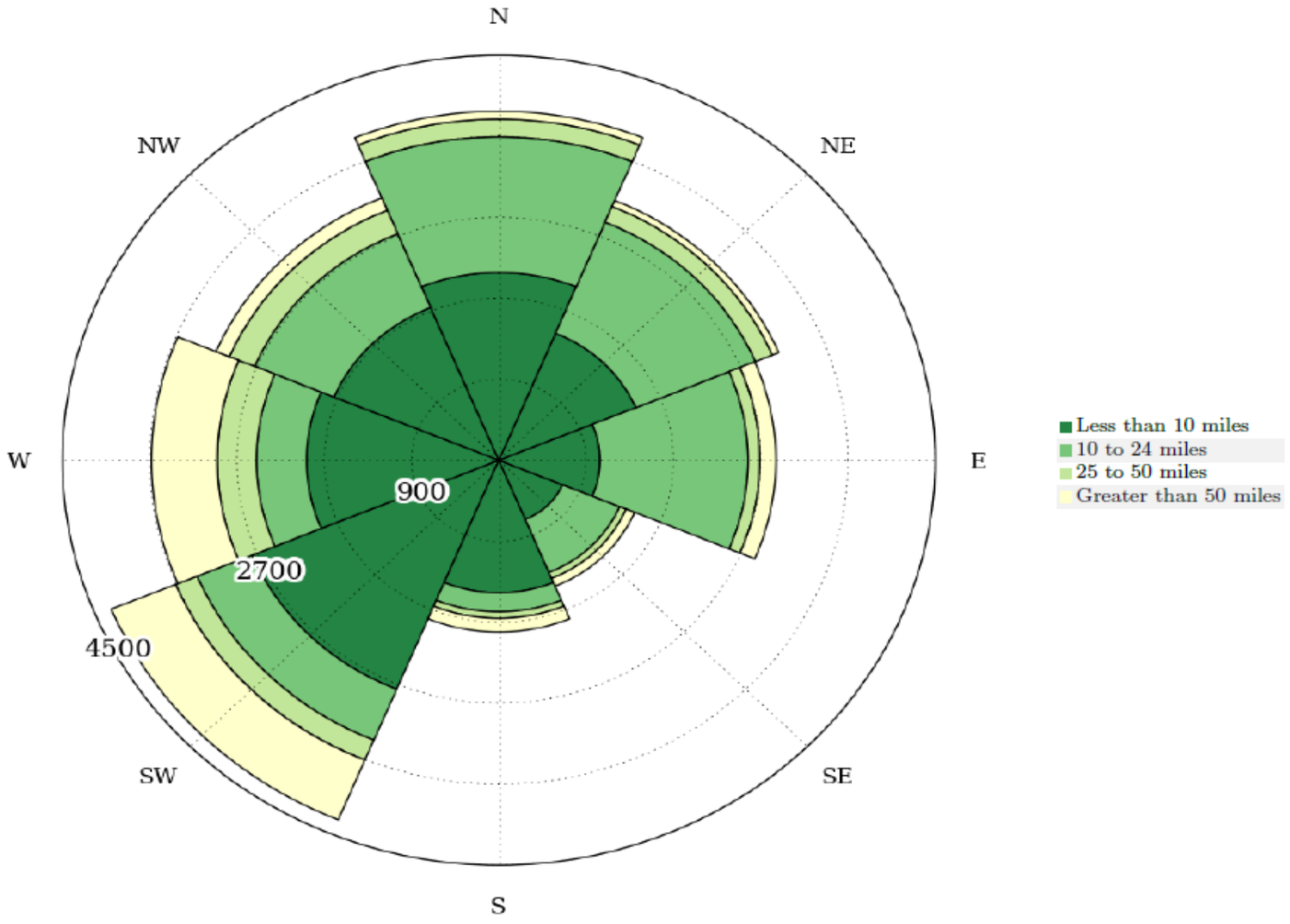
*Per MARC's 2012 Land Use raster data within the 4PM-6PM 30-minute Travelshed Boundary for this pilot area

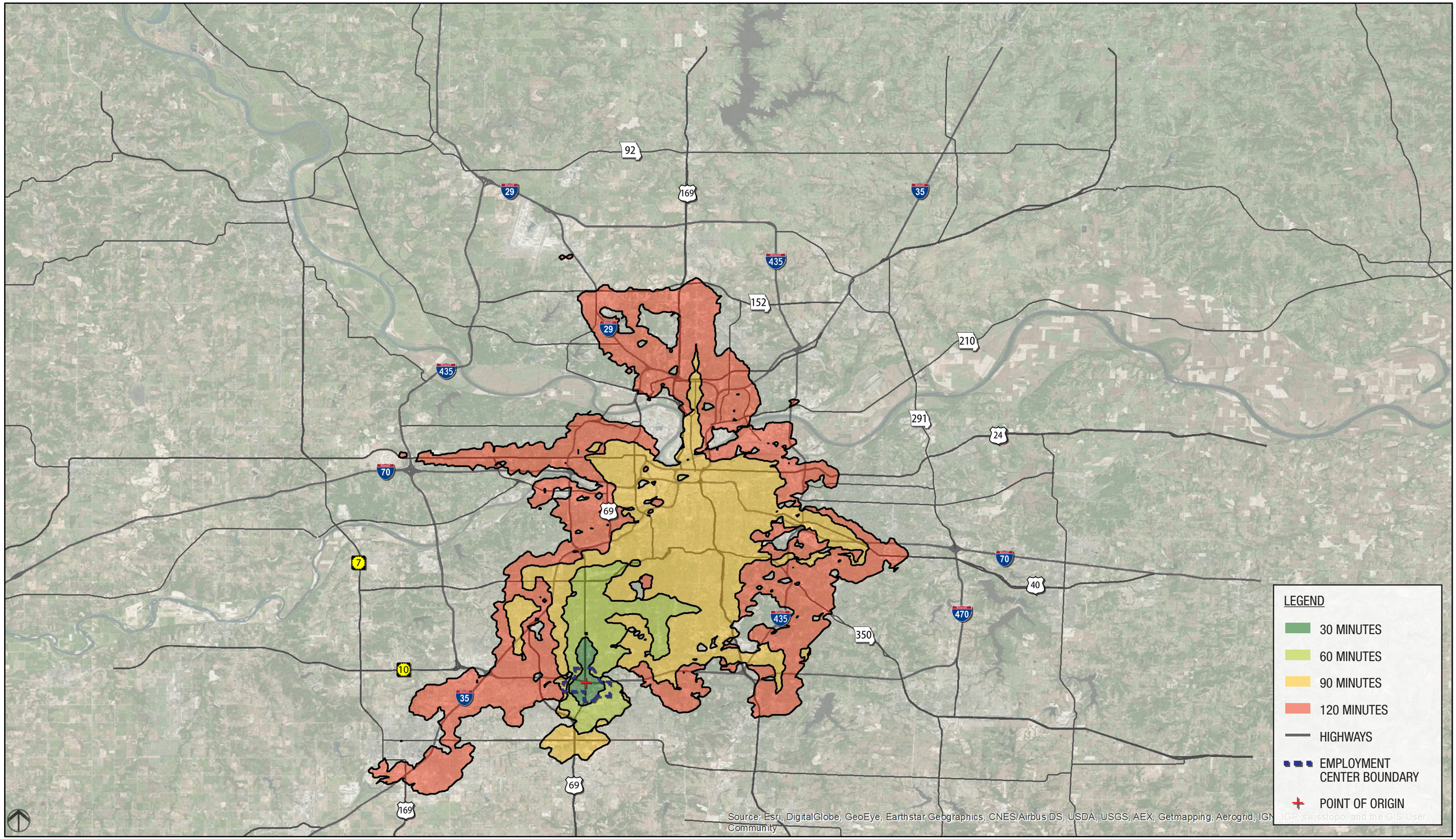
RideKC Workforce Connex

College and Metcalf Pilot

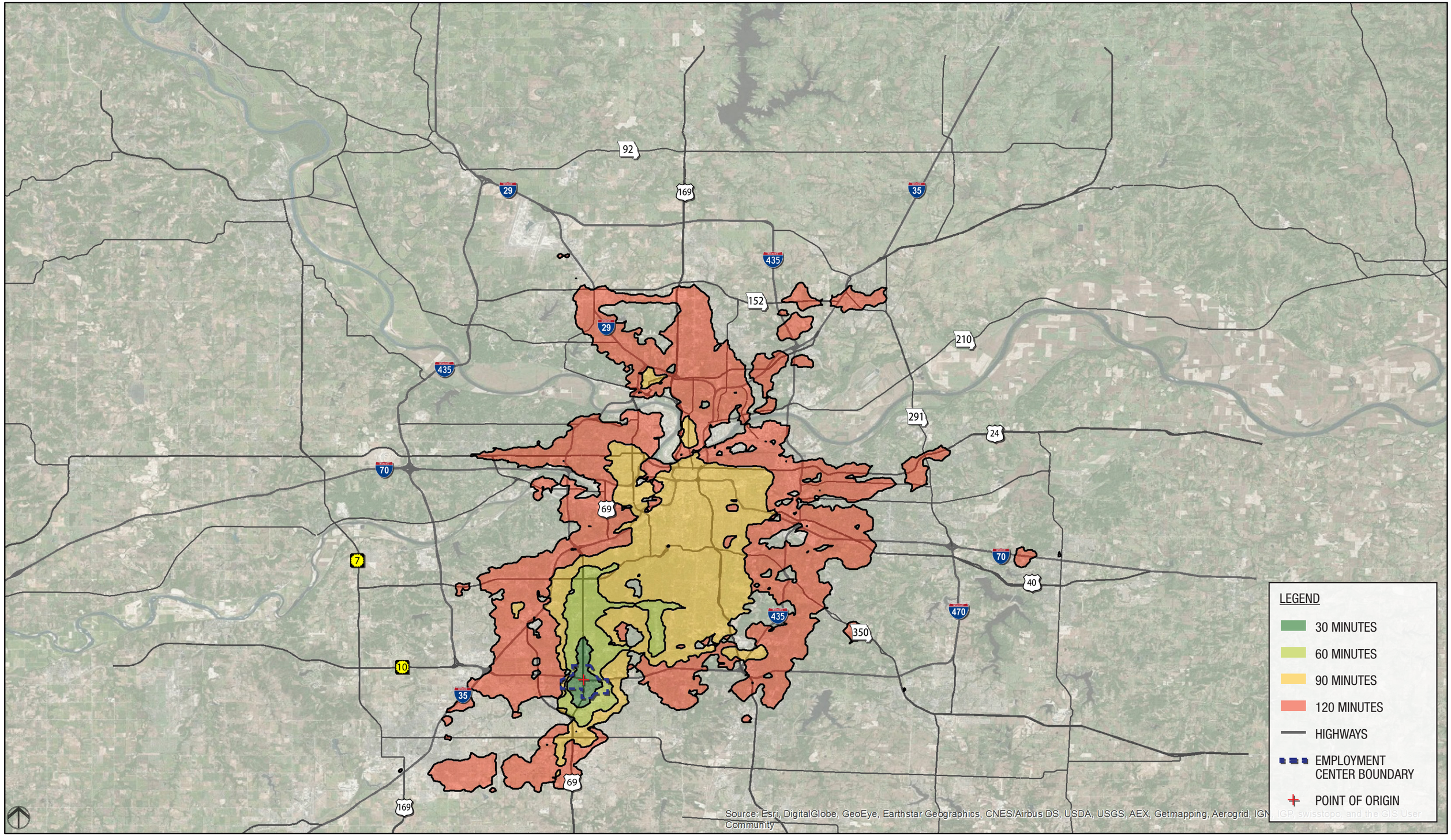
Gap Analysis

College and Metcalf Worker Residence	Number
Total	24,343
60 Minute	1,455
60-120 Minute	7,862
Outside 120	15,026
In High and Very High Transit Propensity Tracts	
Within 60 minutes	202
Outside of 60 minutes	4,187
In Low and Very Low Transit Propensity Tracts	7,076
Distance from Work to Home Census Block	
Less than 10 Miles	13,418
10 to 24 Miles	7,240
25 to 50 Miles	1,571
Greater than 50 Miles	2,114

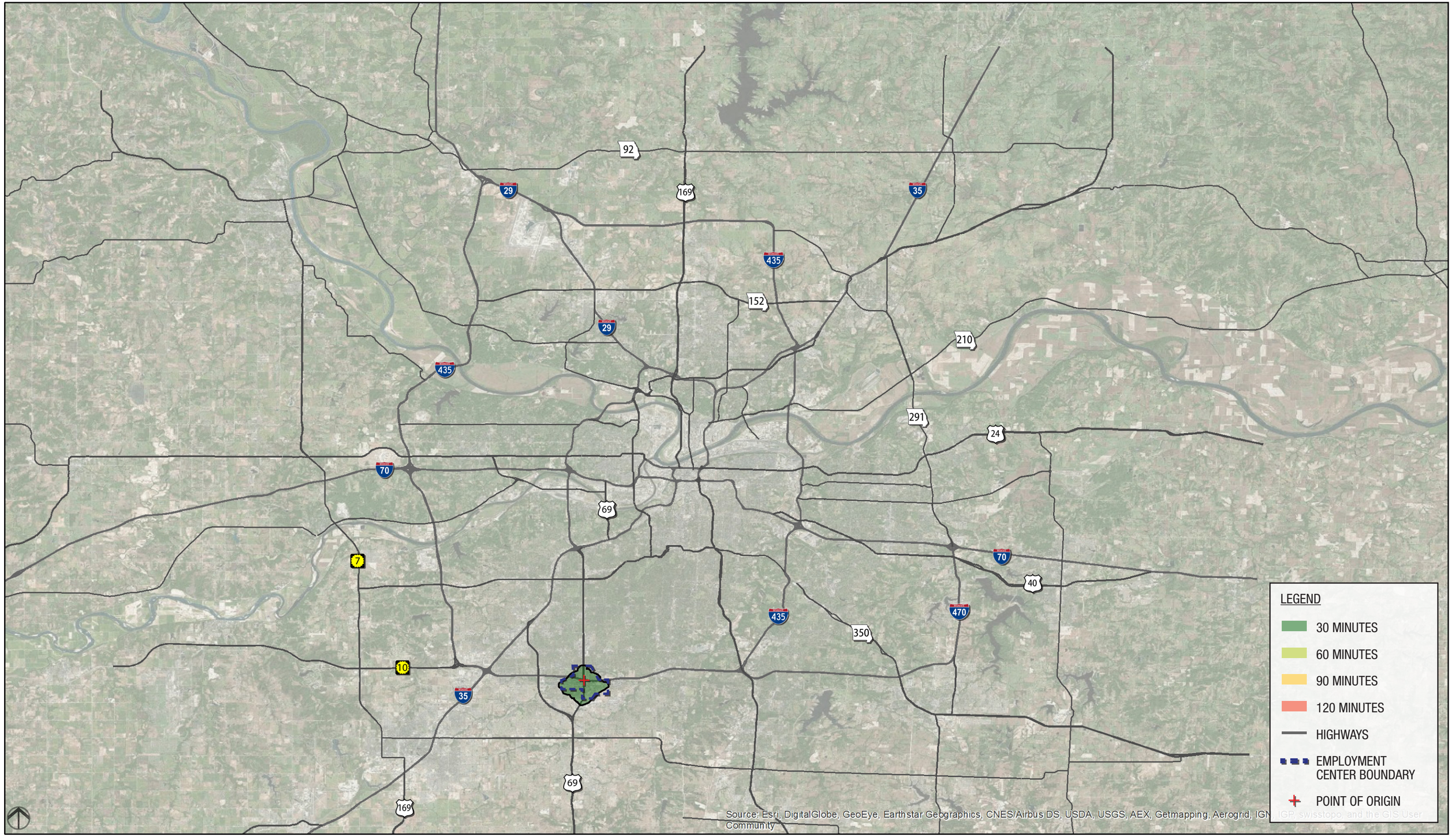




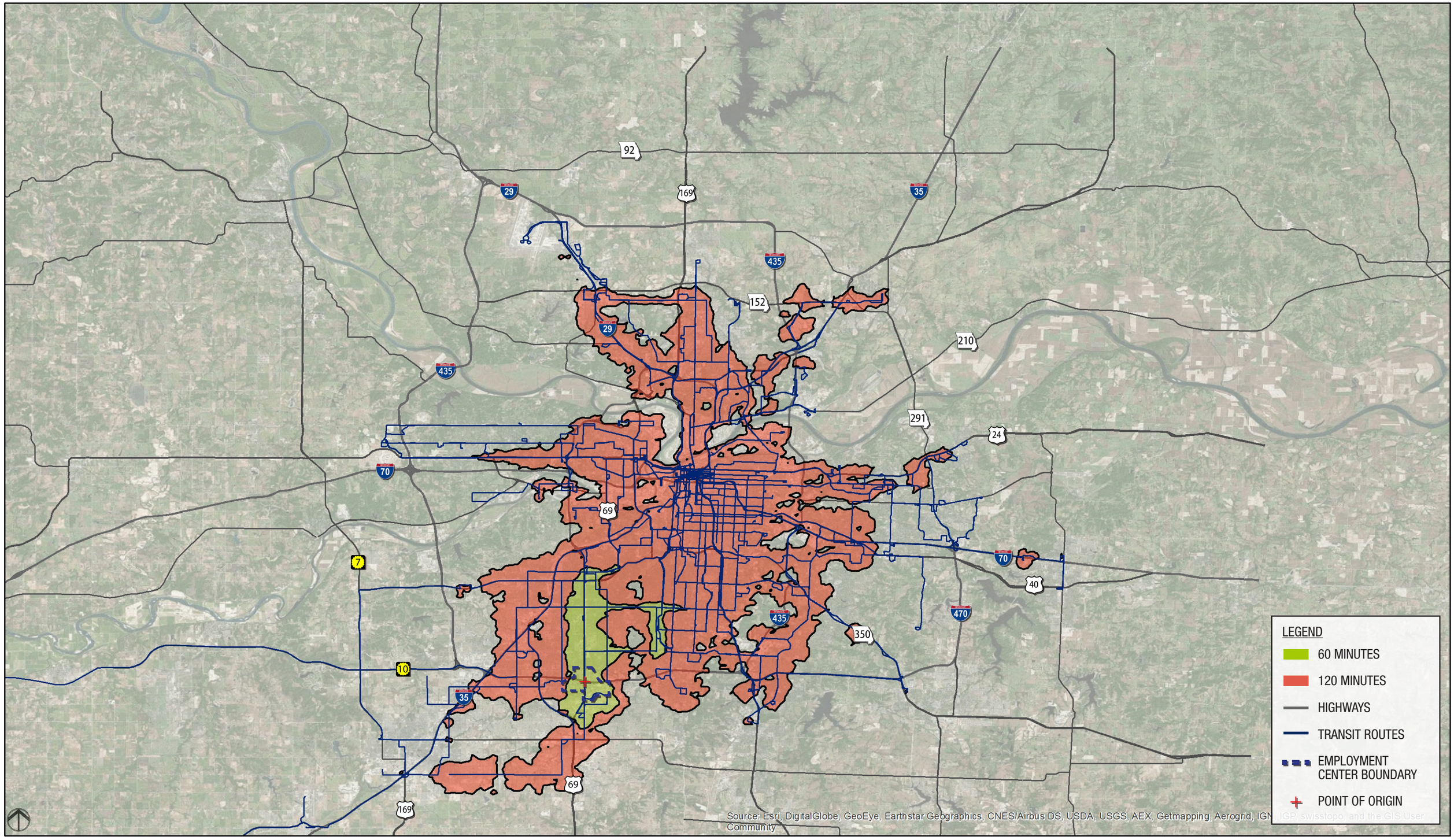
TRAVELSHED: 6 AM - 9 AM



TRAVELSHED: 4 PM - 6 PM

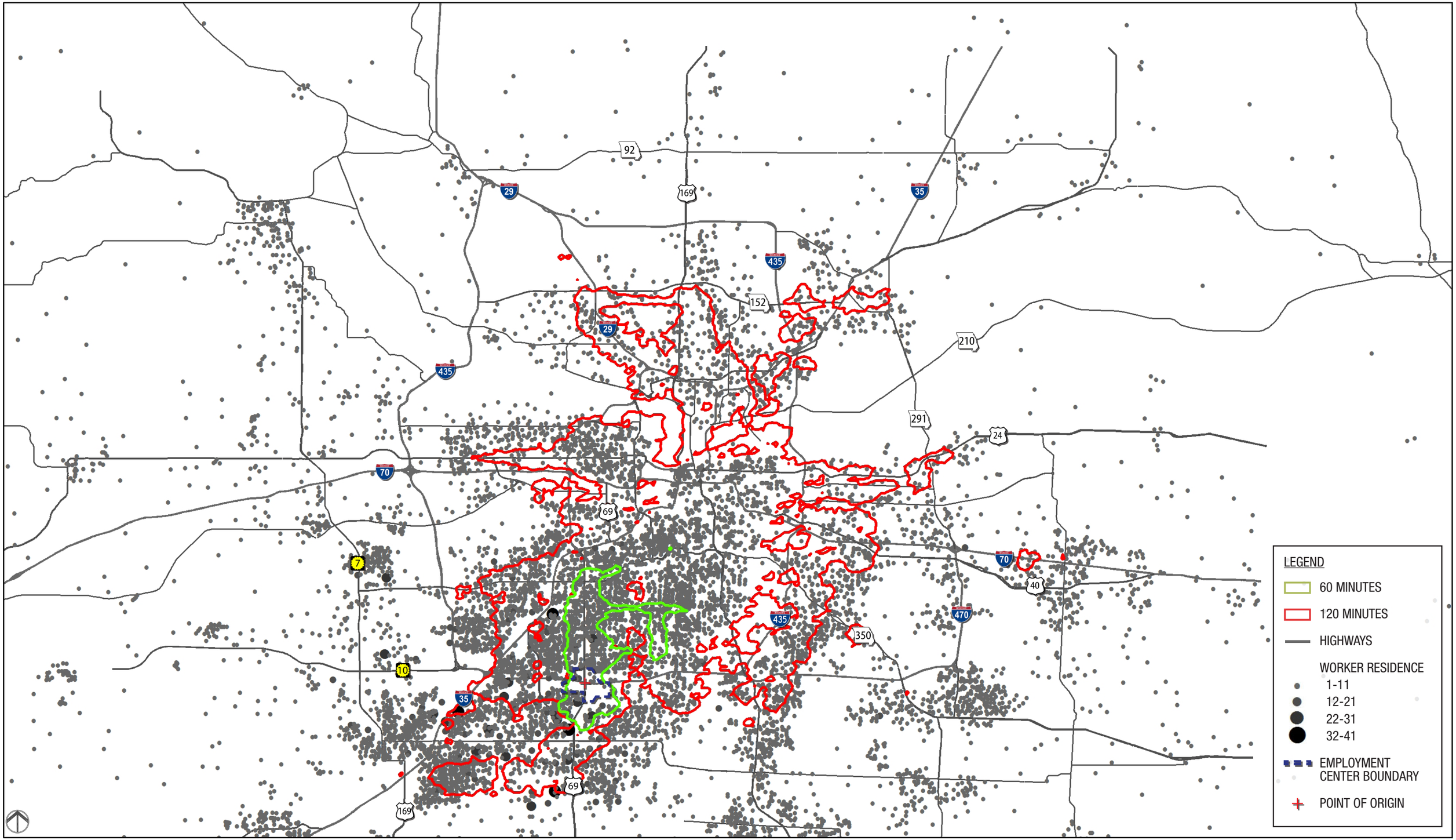


TRAVELSHED: 8 PM - 11 PM



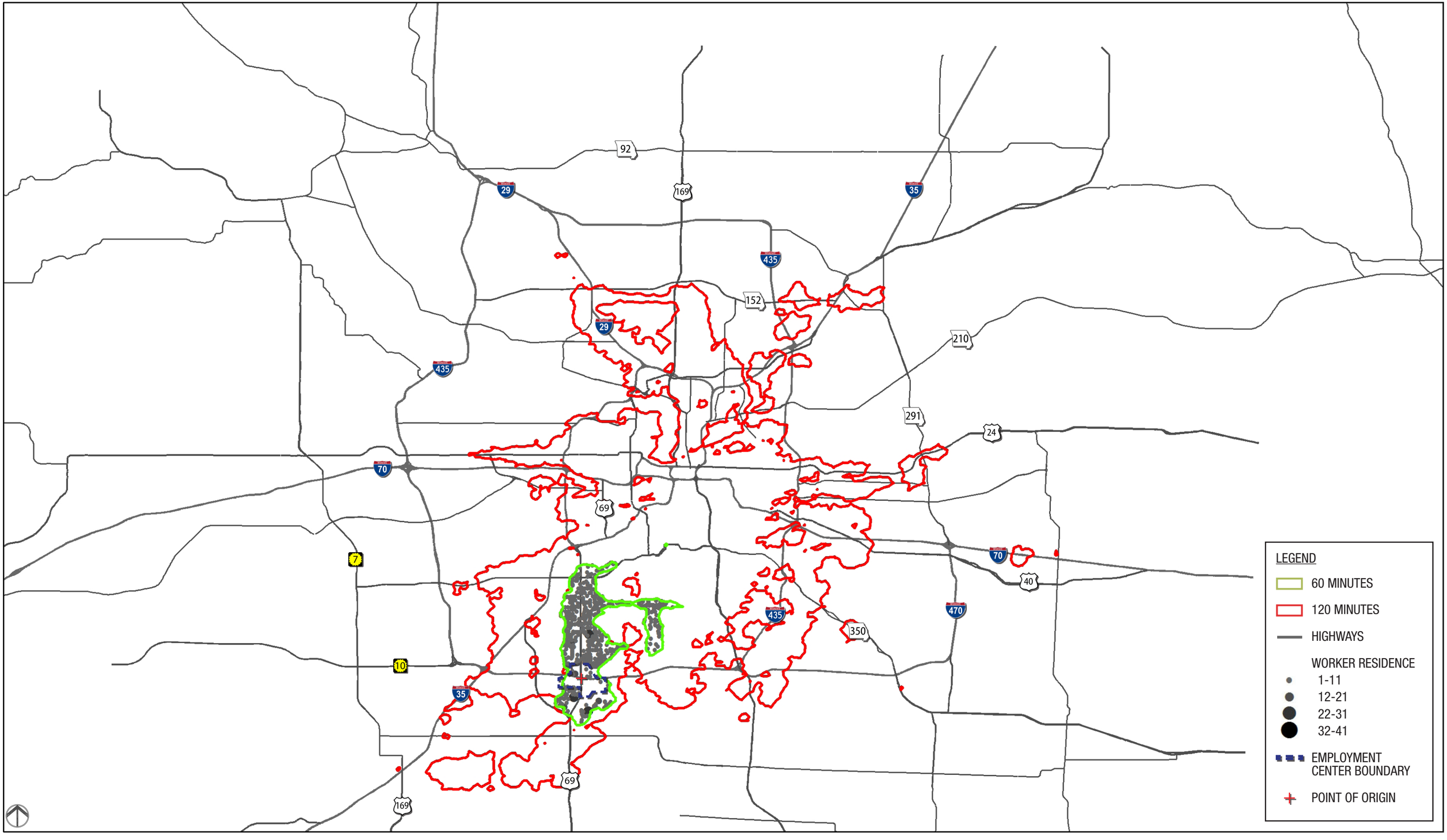
TRANSIT ROUTES

TRAVELSHED: 4 PM - 6 PM



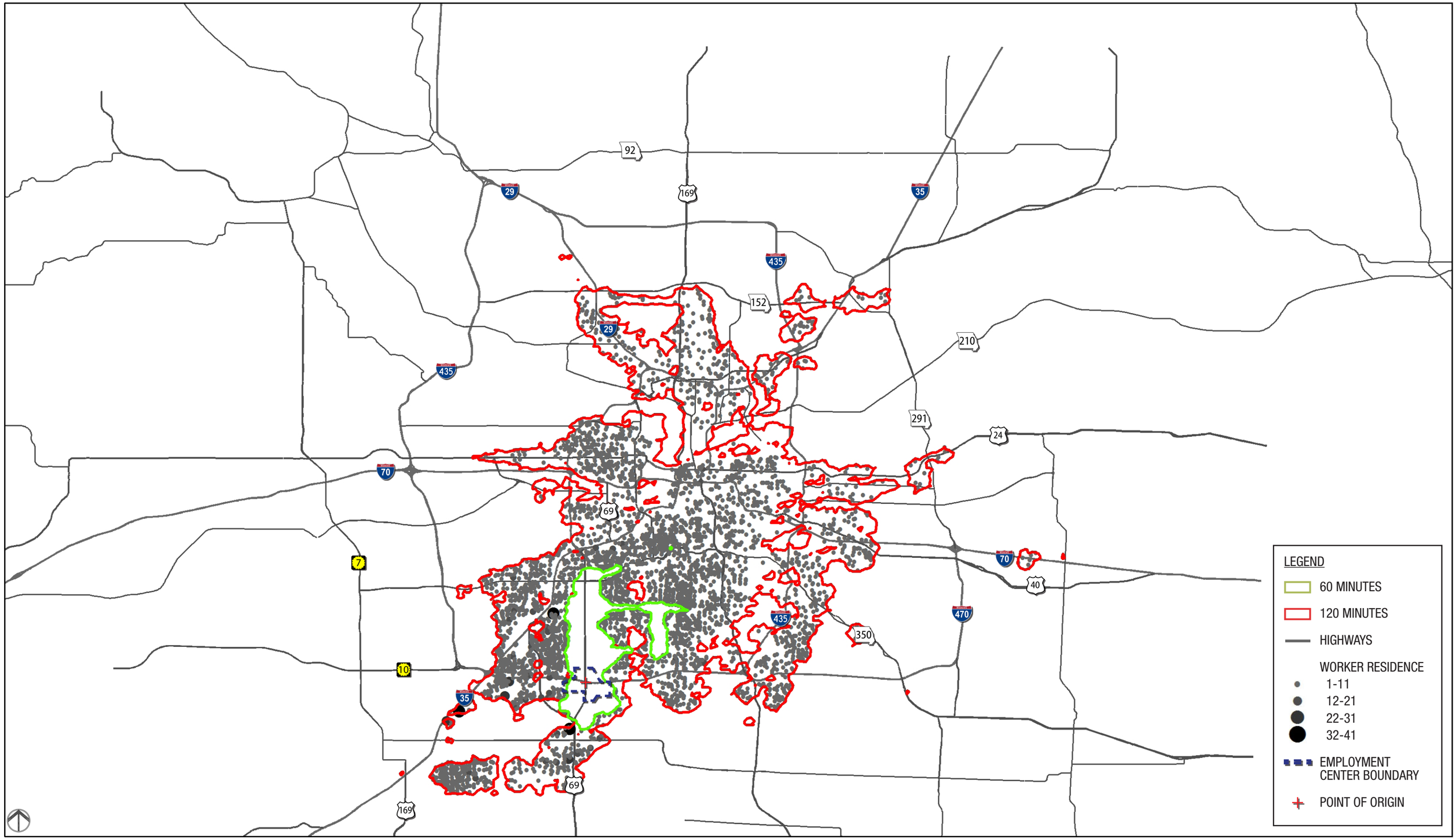
TOTAL WORKER RESIDENCE: 24,343

TRAVELSHED: 4 PM - 6 PM



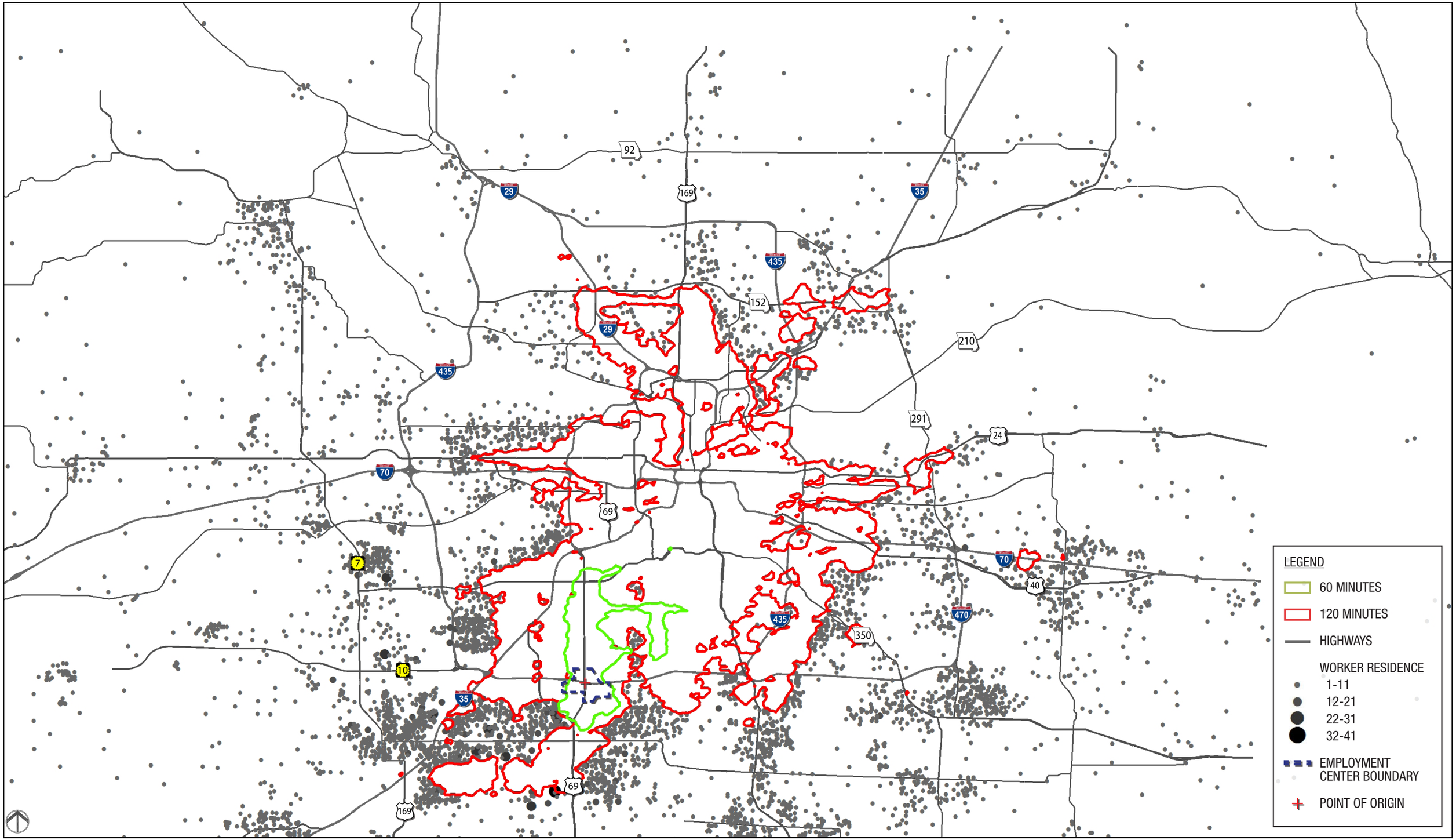
60 MINUTE WORKER RESIDENCE: 1,455

TRAVELSHED: 4 PM - 6 PM



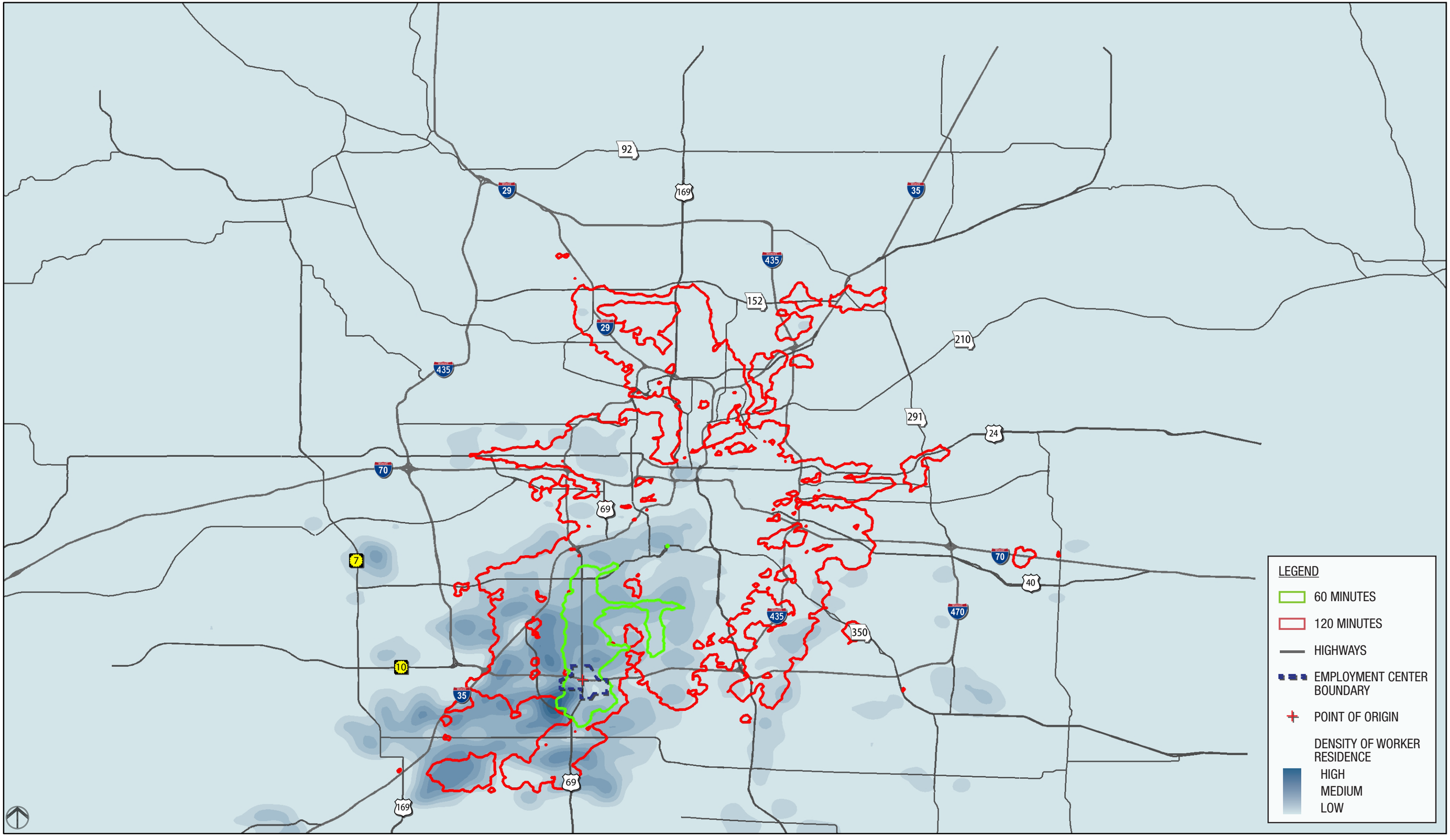
60-120 MINUTE WORKER RESIDENCE: 7,862

TRAVELSHED: 4 PM - 6 PM



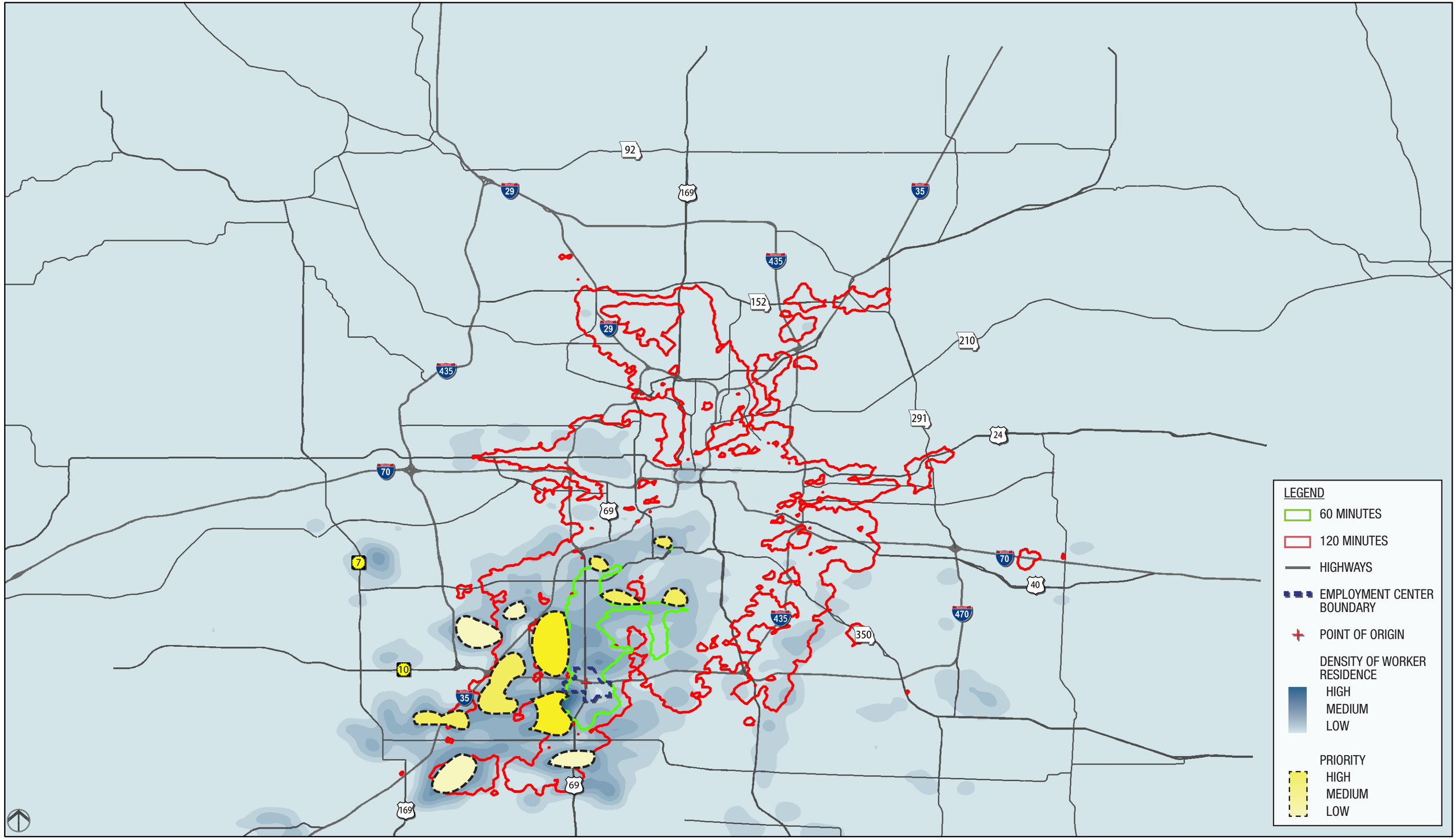
OUTSIDE 120 MINUTE WORKER RESIDENCE: 15,026

TRAVELSHED: 4 PM - 6 PM



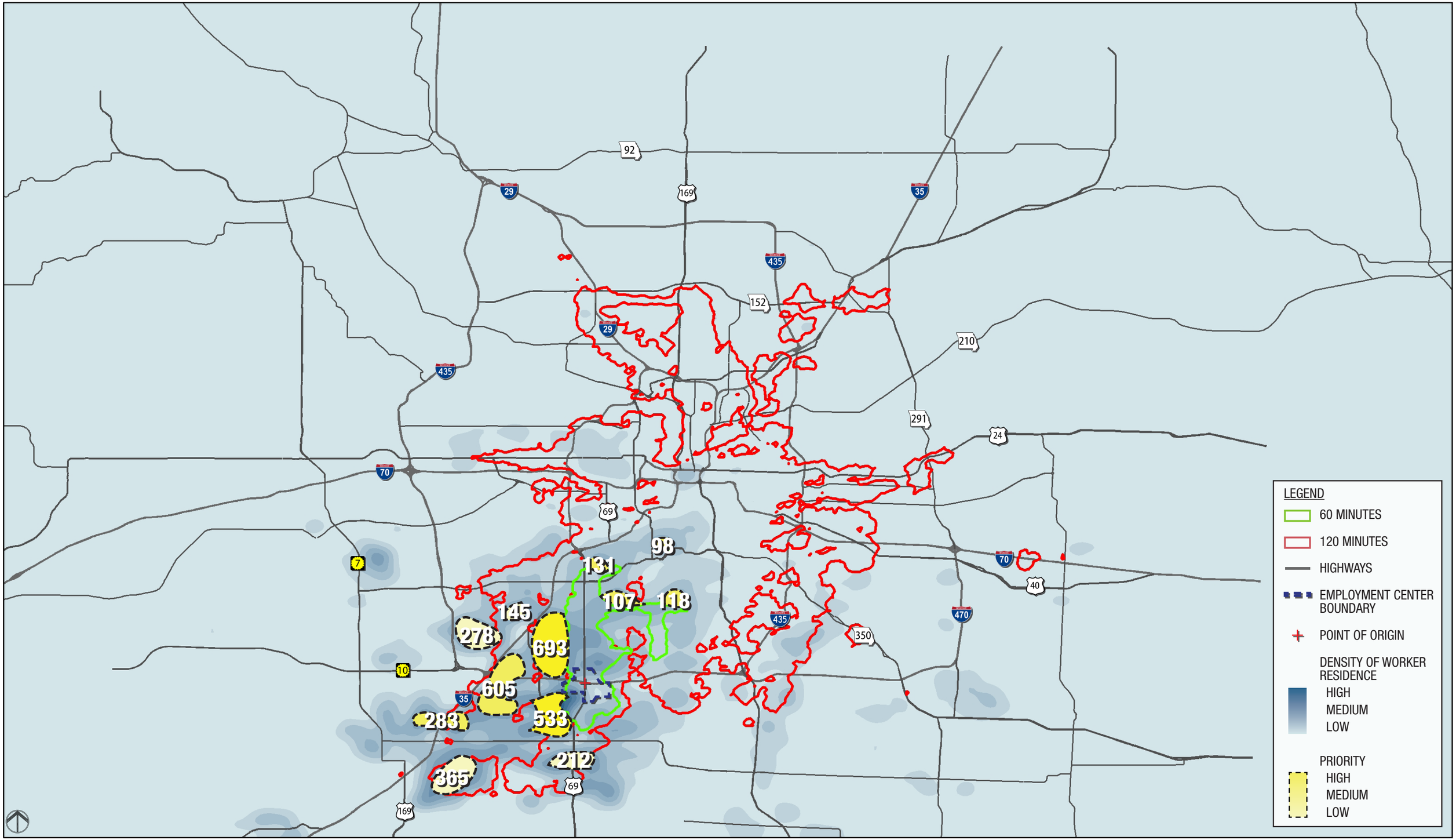
WORKER RESIDENCE DENSITY

TRAVELSHED: 4 PM - 6 PM



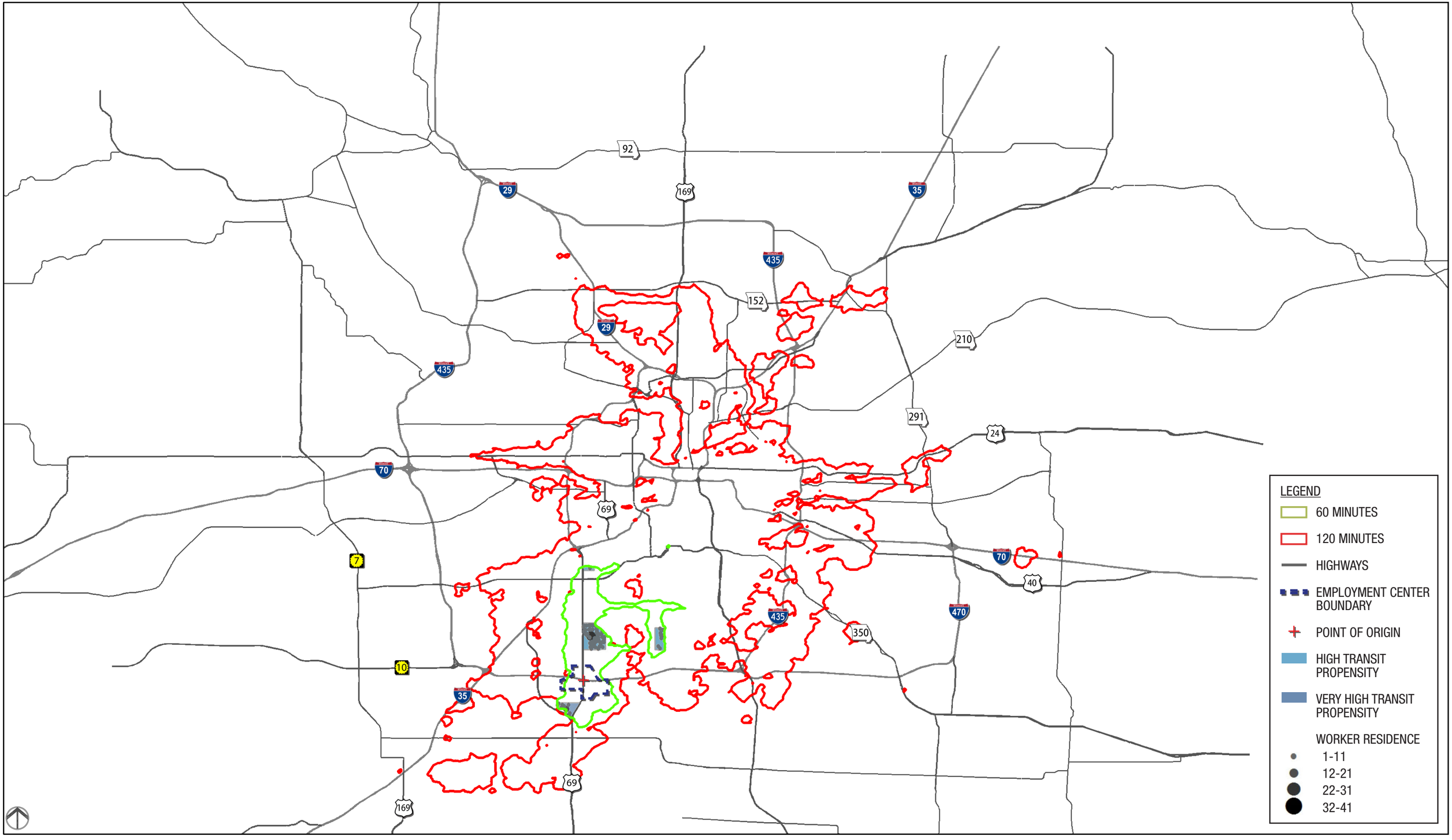
WORKER RESIDENCE POTENTIAL CAPTURE AREAS

TRAVELSHED: 4 PM - 6 PM



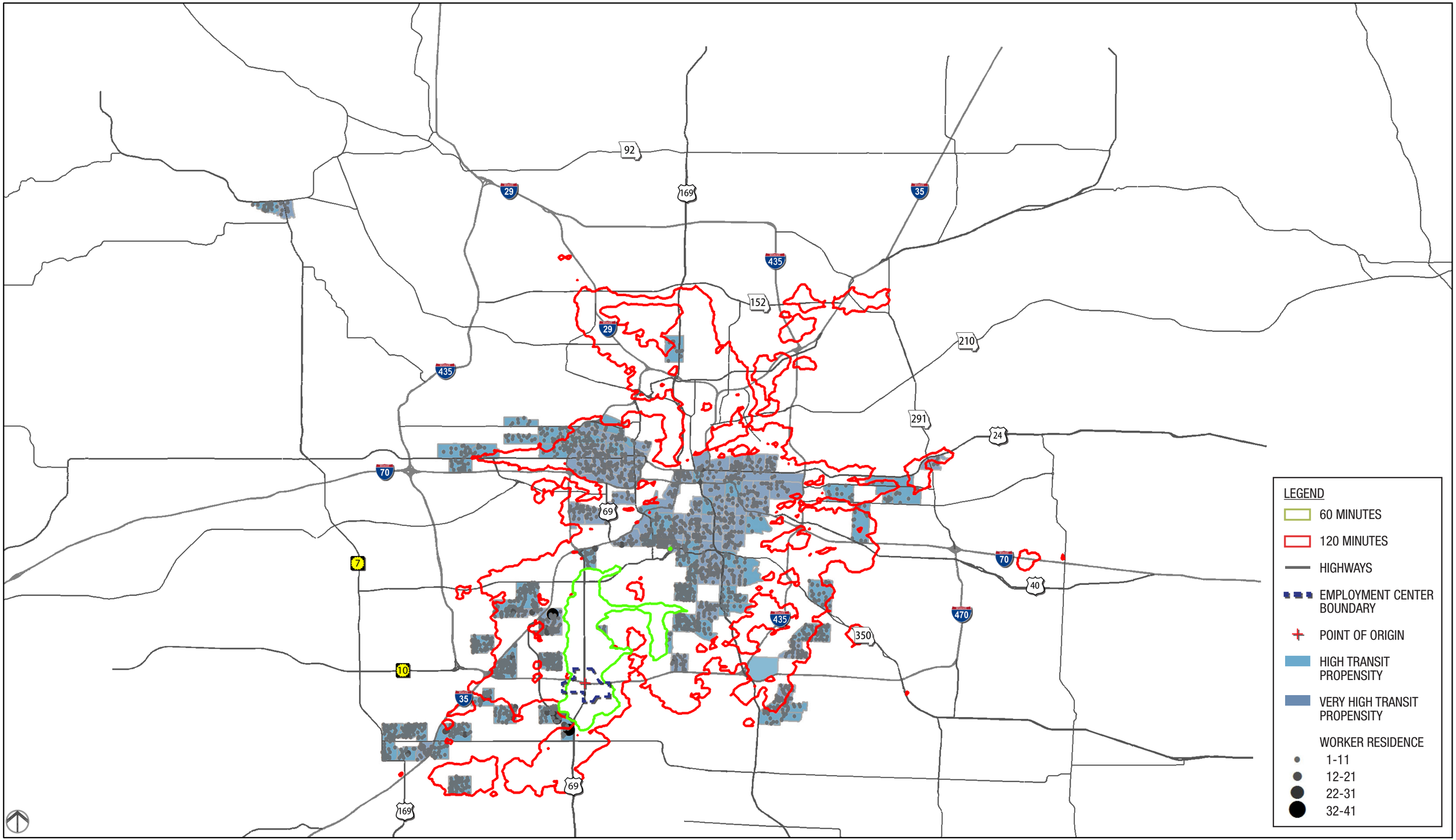
WORKER RESIDENCE POTENTIAL CAPTURE: 3,192

TRAVELSHED: 4 PM - 6 PM



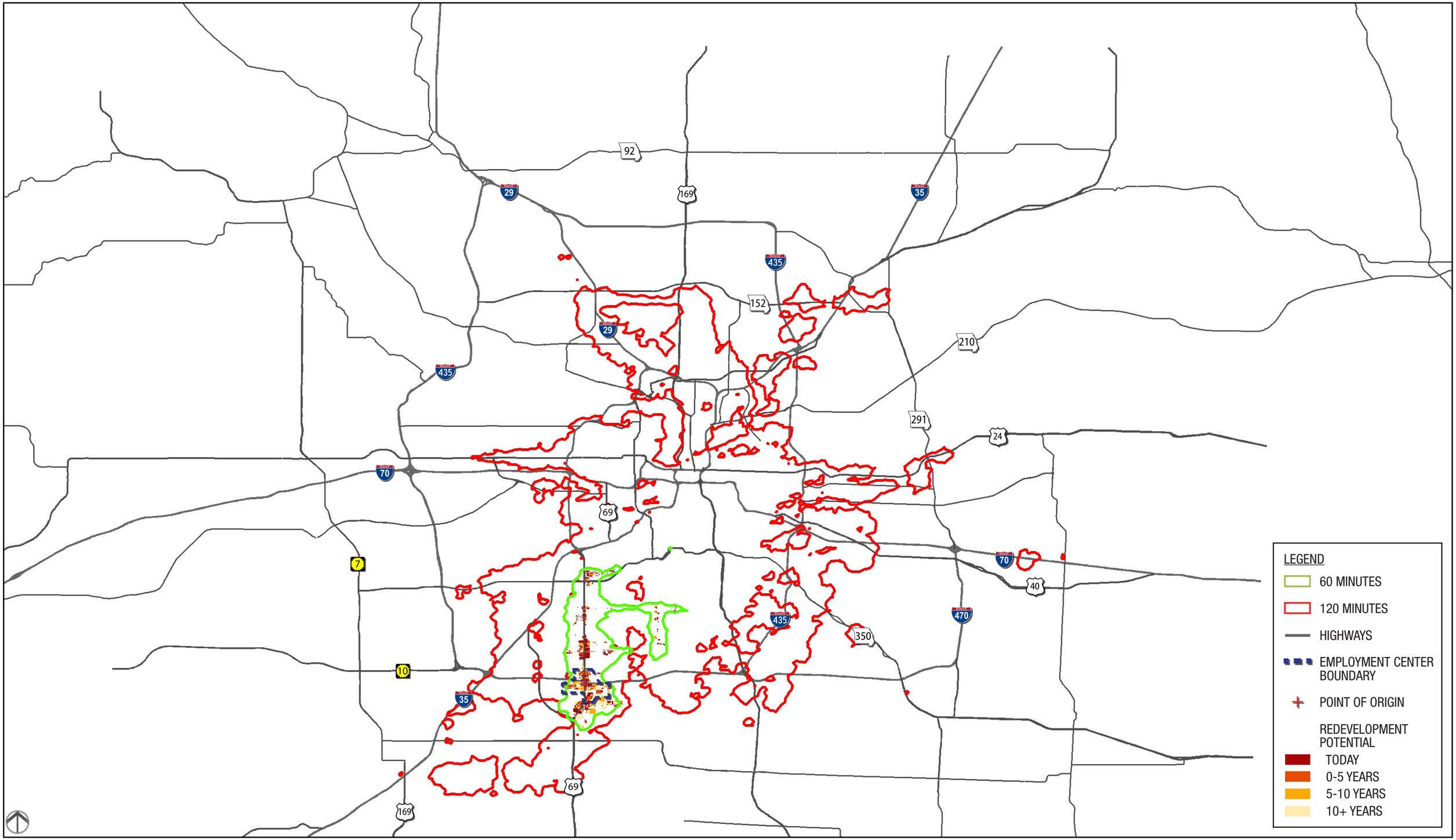
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES: 202

TRAVELSHED: 4 PM - 6 PM



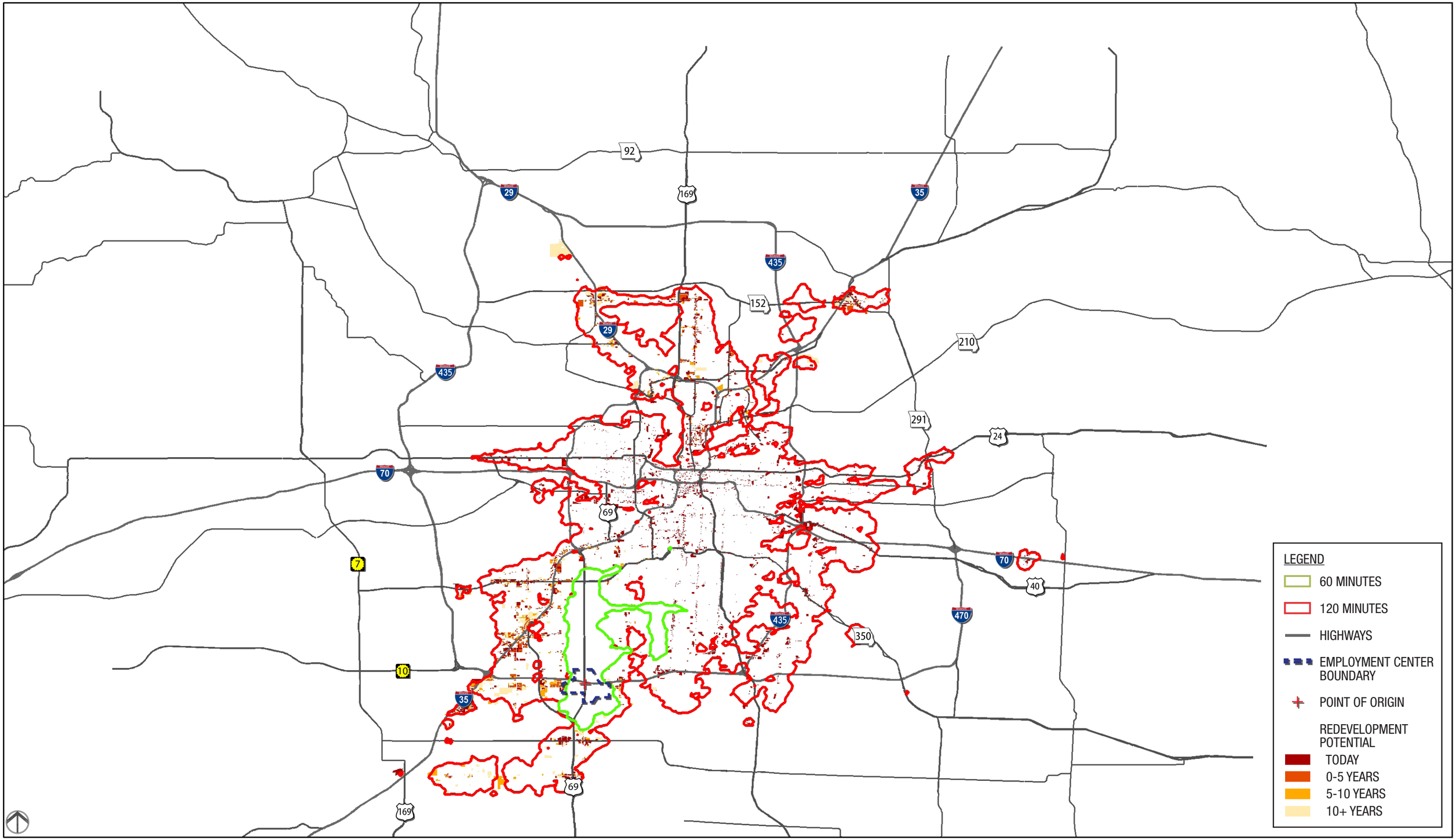
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS OUTSIDE OF 60 MINUTES: 4,187

TRAVELSHED: 4 PM - 6 PM



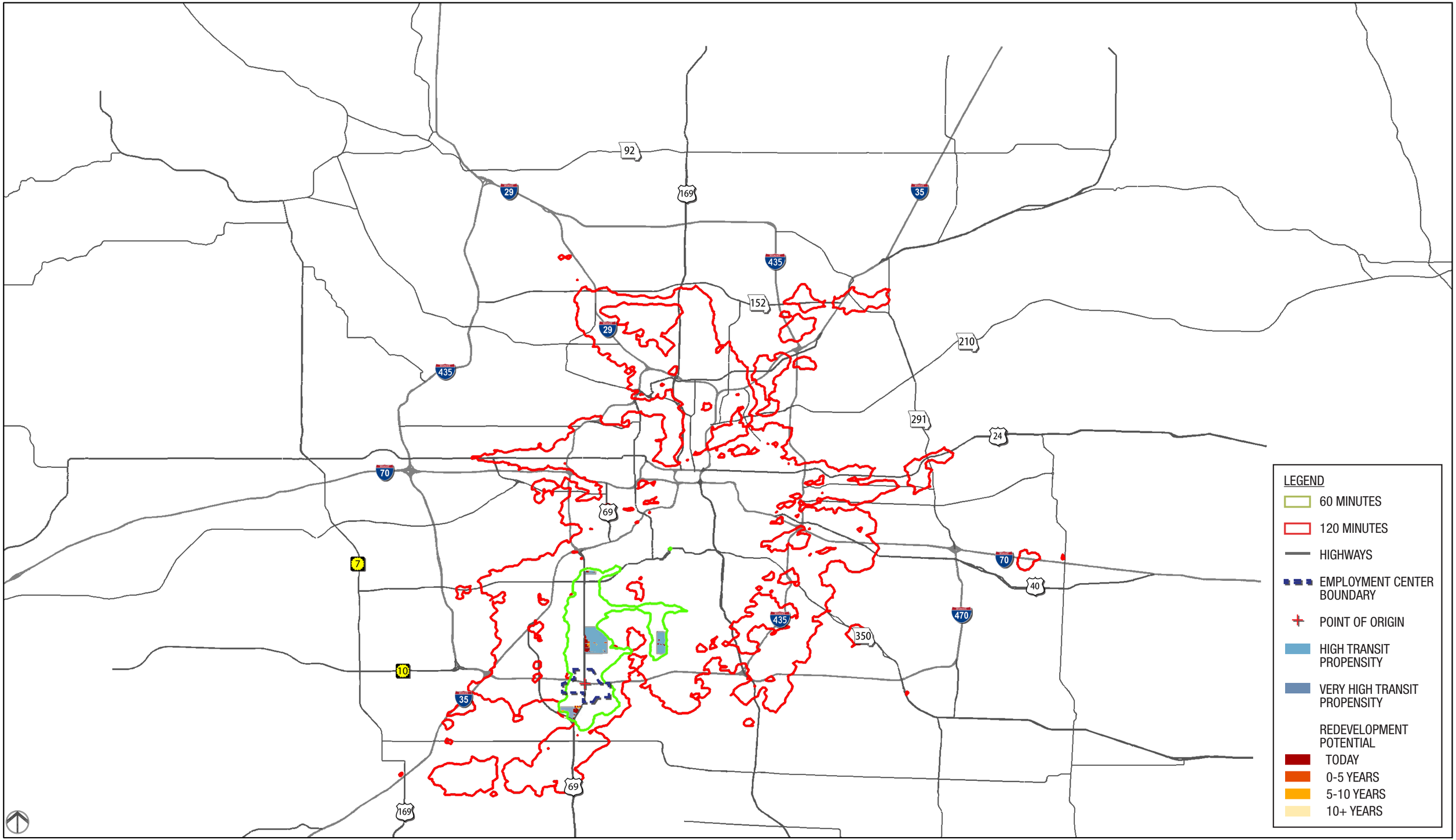
REDEVELOPMENT AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



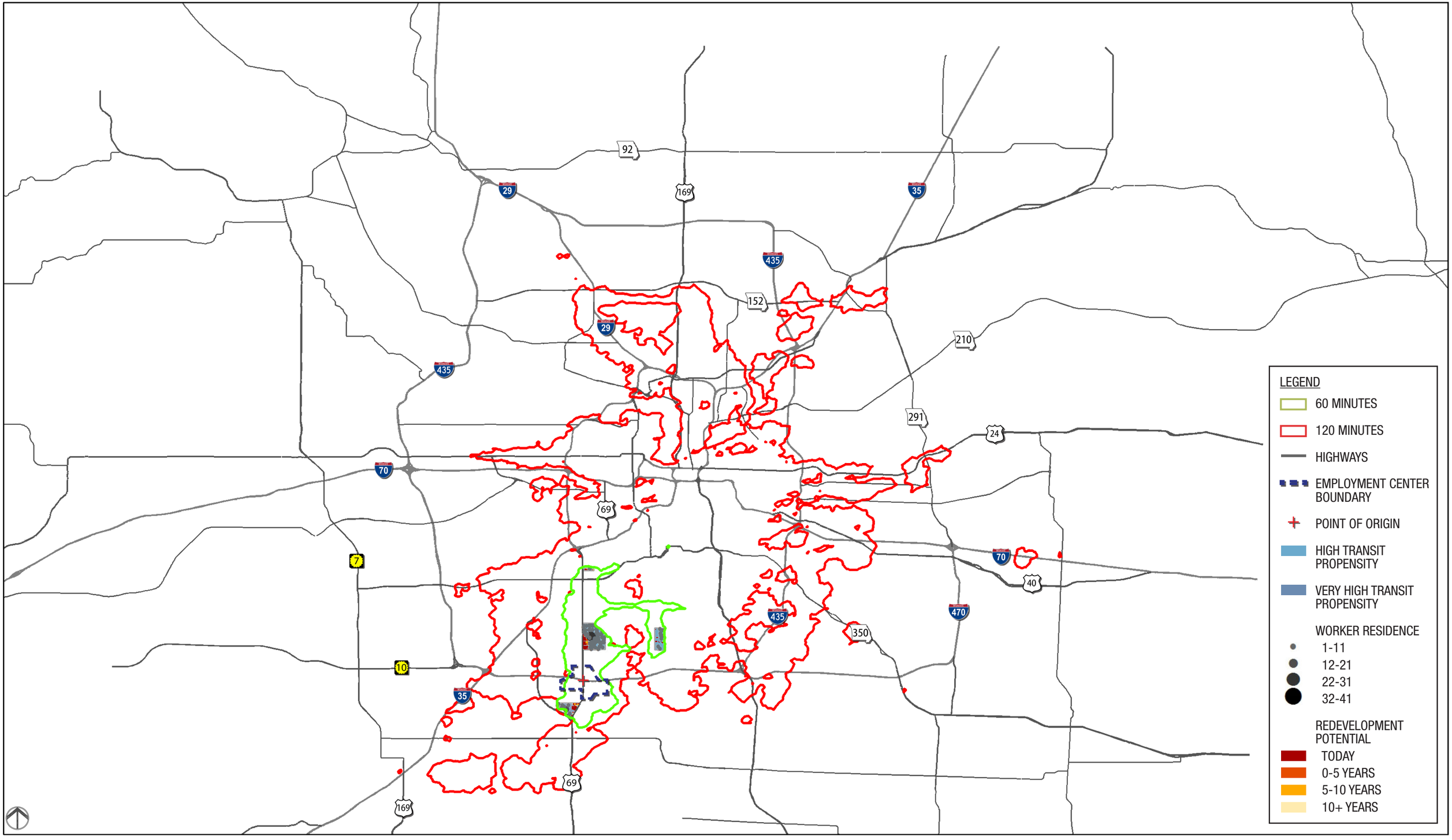
REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



REDEVELOPMENT AREAS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM

LEGEND

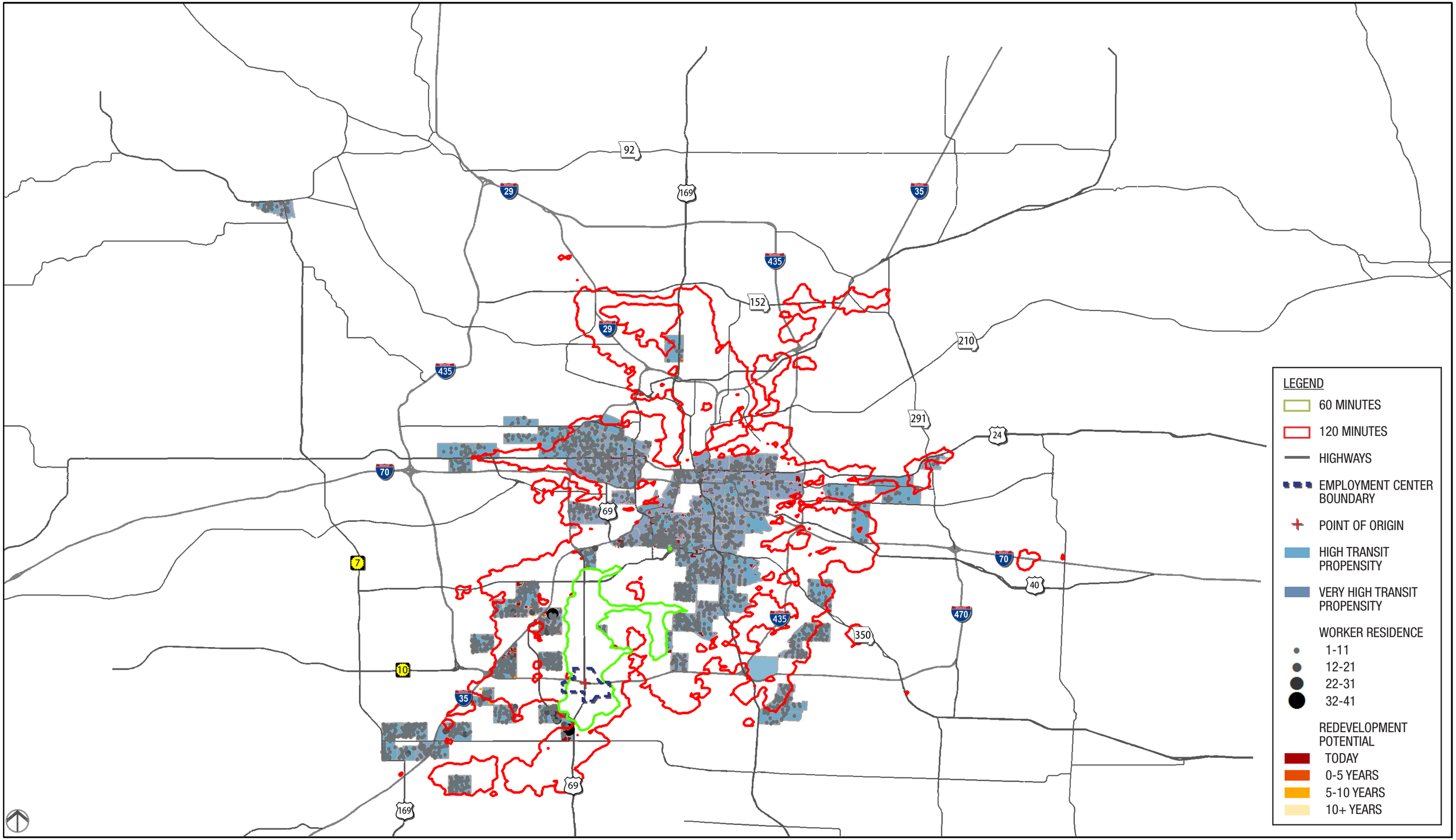
- 60 MINUTES
- 120 MINUTES
- HIGHWAYS
- EMPLOYMENT CENTER BOUNDARY
- POINT OF ORIGIN
- HIGH TRANSIT PROPENSITY
- VERY HIGH TRANSIT PROPENSITY

REDEVELOPMENT POTENTIAL

- TODAY
- 0-5 YEARS
- 5-10 YEARS
- 10+ YEARS

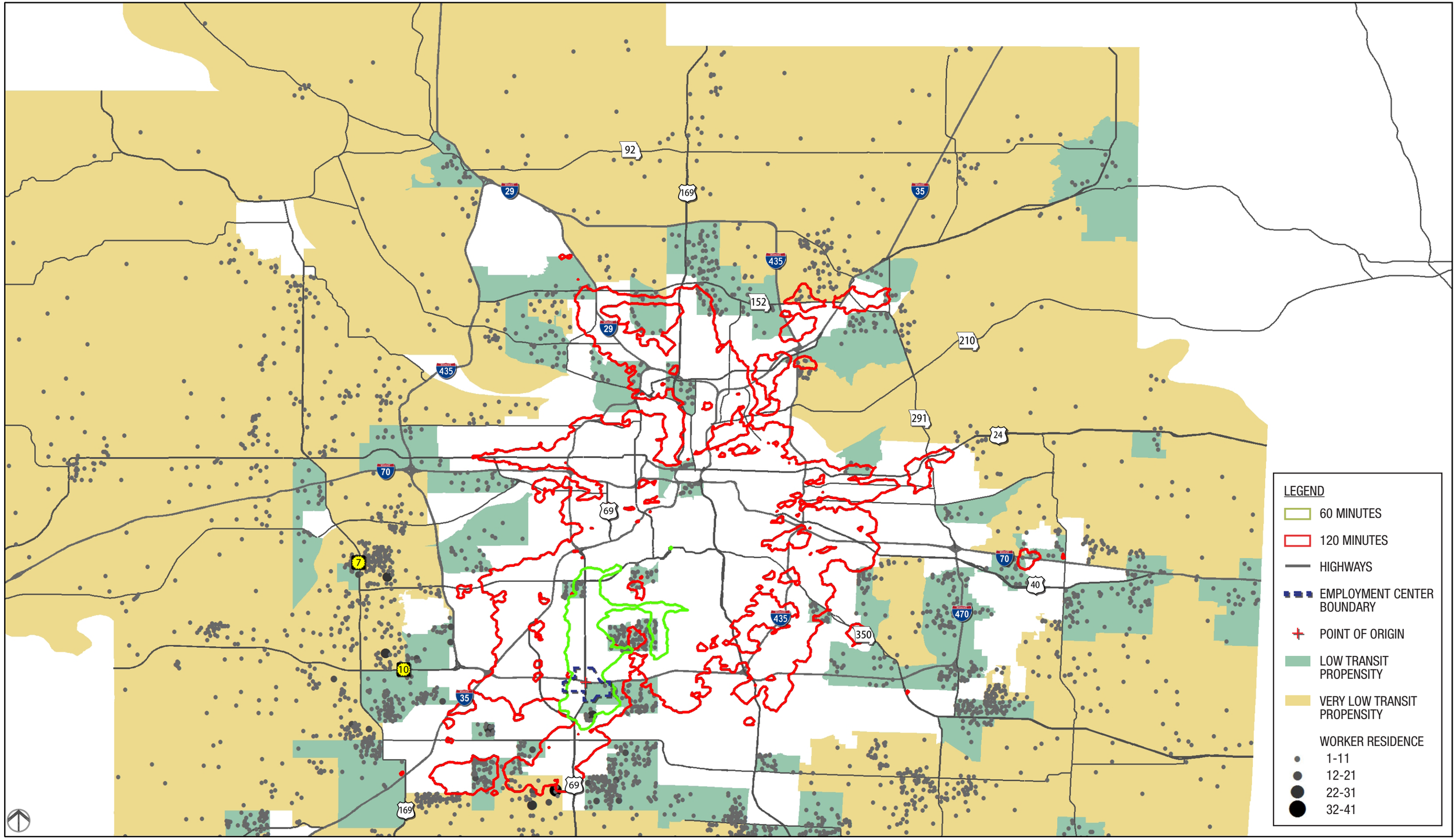
REDEVELOPMENT AREAS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



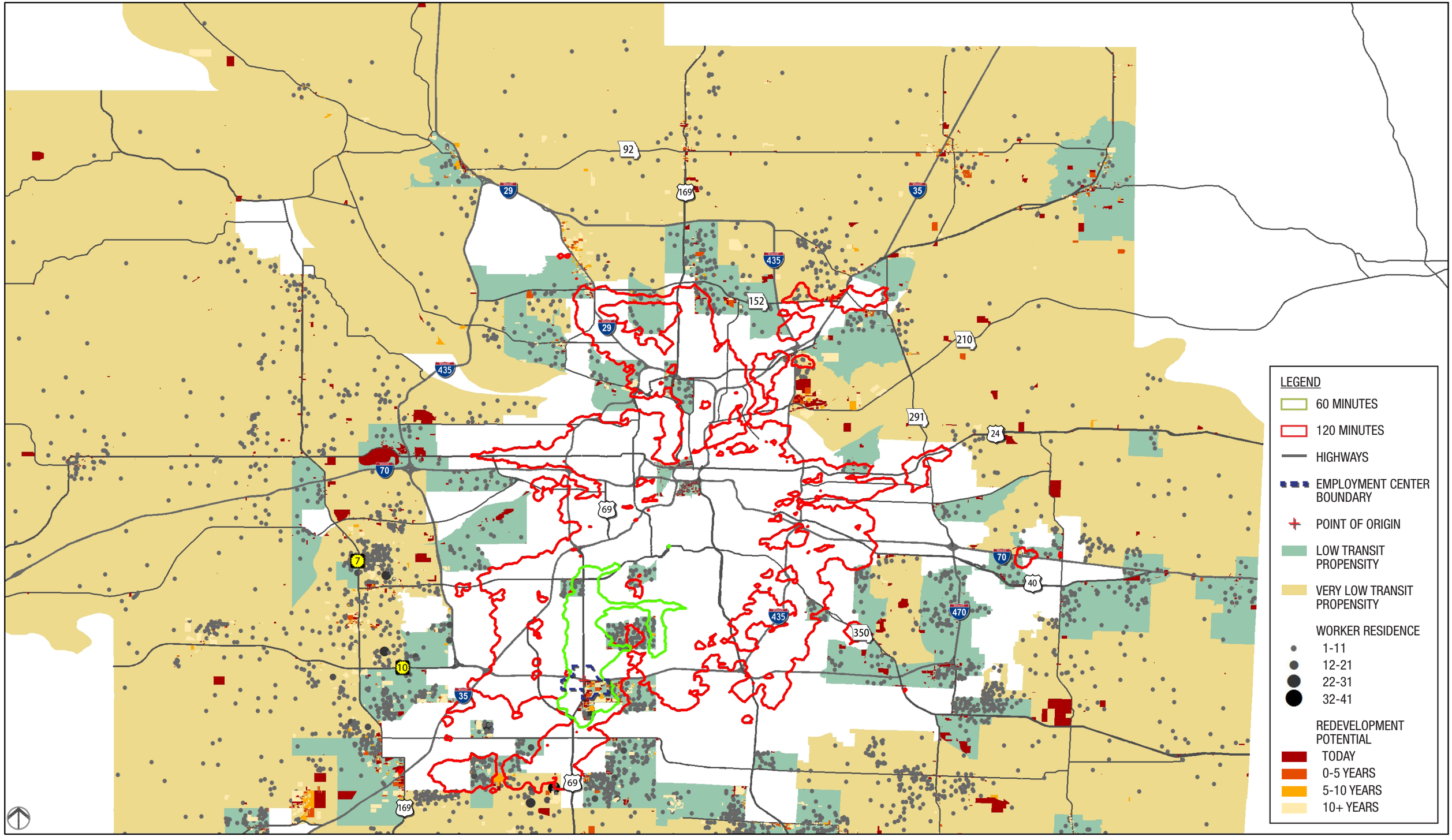
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY AREAS: 7,076

TRAVELSHED: 4 PM - 6 PM



WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY AREA + REDEVELOPMENT POTENTIAL

TRAVELSHED: 4 PM - 6 PM

College and Metcalf Pilot

Recommendations and Outcomes

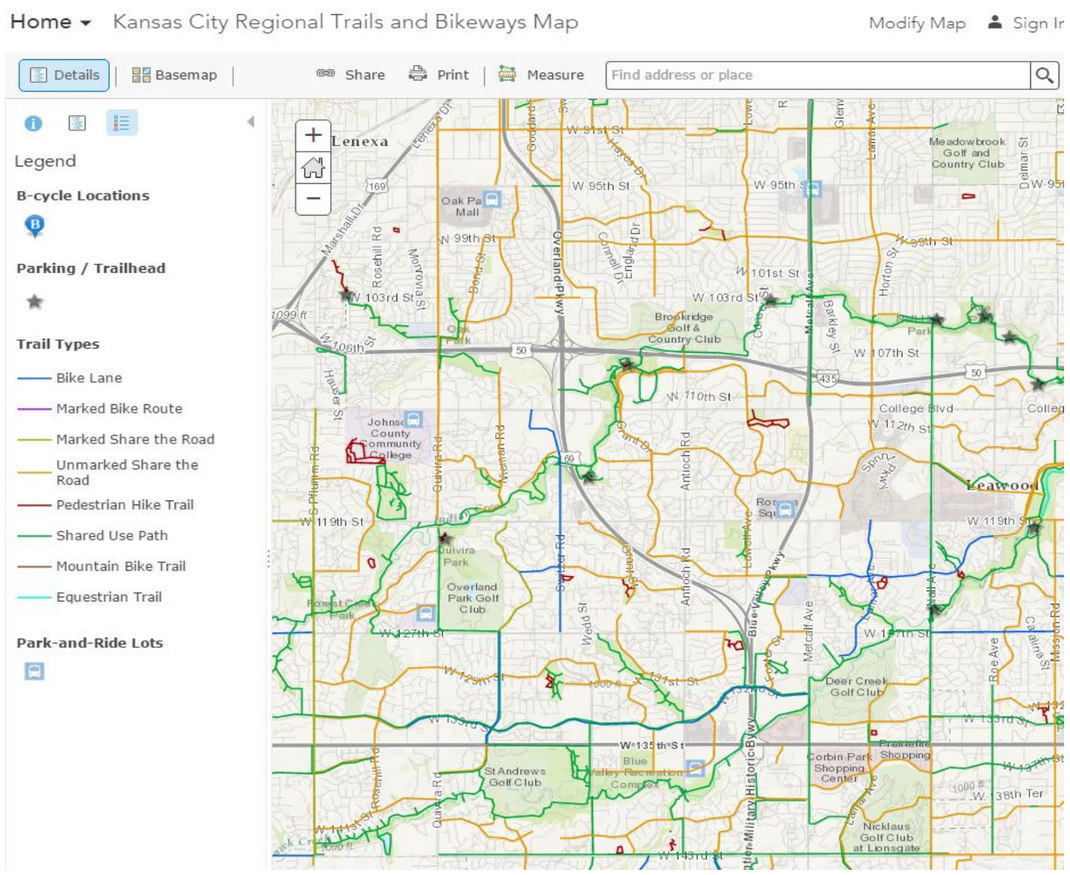
Recommendations					Estimated Outcomes					Engagement	
Strategy		Currently Responsible Organization	Phasing/ Timeframe	Cost	Increase in College and Metcalf Pilot Area Worker Accessibility	Increase in Regional Job Accessibility	Effectiveness (cost per unit of increase) *(High-Medium-Low)*	Replicability Considerations *(narrative)*	Potential Impact of Replicated Deployment	Stakeholder Interest	Stories to Make the Case
Mobility Hub Primary Deployment Secondary Deployment											
Mobility Strategies											
Fixed Route Transit	Services in Johnson County that are a part of the fast and frequent network are listed below. These, in conjunction with other services, would provide connections similar to the prior grid concept. 556 Metcalf (from 135th)/Plaza Connex- 15 minute headways with 18 hours of service (5AM-11PM) 7 days 575 75th/Quivera (with Troost connection) - 15 minute headways with 18 hours of service (5AM-11PM) 7 days Johnson/Shawnee Mission - 30 minute headways with 18 hours of service (5AM-11PM) 7 days 95th/Bannister - 30 minute headways with 18 hours of service (5AM-11PM) 7 days College - 30 minute headways with 18 hours of service (5AM-11PM) 7 days 135th - 30 minute headways with 18 hours of service (5AM-11PM) 7 days Olathe Express - 30 minute peak/60 minute off peak service with 18 hours of service (5AM-11PM) 7 days	KCATA/Johnson County	Phasing based on system development planning	KCATA/ Johnson County			Medium	Many new/expanded services- need to develop ridership base and build emand	Grid modeling indicated significant potential- needs to be developed	To be developed	Large number of employees that live within area. Limited transit service currently.
Non-Fixed Route Transit											
Carpool	Promote use of regional ridematching database Provide preferential parking for carpools Promote Guaranteed Ride Home program to support alternative commute options	MARC, Employers Employers MARC/Employers	Ongoing Ongoing	none Cost of signage none	medium	medium	High (no cost)	Highly replicable for large employers with regular office hours	Carpooling can provide an option where fixed route or vanpool strategies are not viable	Sprint, Ericson and Alere promote RideShare program	
Vanpool	Promote vanpooling to clusters of employees with residences greater than 15 miles distant Provide preferential parking for vanpools Promote Guaranteed Ride Home program to support alternative commute options	MARC, KCATA, Employers Employers MARC	Ongoing Ongoing	Sublidy from employer cost of signage none	medium	medium	High --Riders pay most of the cost	Replicable for largest employers with regular office hours	6-20 riders per van	No current vanpools in this pilot area	Area employers that support vanpooling: Hallmark, EPA, US Military, NOAA, Social Security Administration
Car Share	Provide carshare vehicle parking and contract with carshare provider to give access to cars for mid-day trips	Employer, carshare provider		cost of signage/parking	Supporting strategy for carpool, vanpool, transit, bike commutes	Low	High -- Users pay most of cost	Replicable for large employer or corporate campus	Each carshare vehicle can replace up to 13 privately owned vehicles		Research on benefits of carshare for business: http://innovativemobility.org/wp-content/uploads/2015/07/Zipcar_Corporate_Final_v6.pdf
Bike Share	Integrate B-Cycle into Employee Wellness Program Sponsor bikeshare station on property or nearby Provide B-Cycle membership subsidies through employer, local government, or other membership organizations	Employer Employer Co-op Employer/Overland ParkOther	Short term but dependent on station instalation High Priority Short term but dependent on station instalation	Cost dependent on subsidy. For example, Example, a station with 10 docks and 5 bike will cost $26,000 capital cost and 8,000 annual maintence. Increased configurations have an economy of scale to reduce the per dock and bike cost, but maintence cost are less elastic. Federal subsidized programs require 20% local match. Customized matches may increase match to grow system more quickly. Employee Discount Program offers subsidized membership ($65 Annual Fee) or Corporate Membership Program (customized packages) offers free membership to empoyees	Depends on several factors: location and quality of stations; the bicycle level of service for roadways within the bike travel shed and proximity of mixed use with in the bike travel shed. The average one way bike trip length is 1.8 miles. Comuters are less likely to use tranit if bicycling more expedient. Average bicycle speed is 12 mph.	Depends on several factors including but not lmited to: transit service combined with first mile last mile opportunties; bike share station locations quality of stations, the quality of the bicyle level of service for roadways within the first mile and last mile of the bike travel shed. The average one way bike trip length is 1.8 miles. Average bicycle speed is 12 mph.		Business model has affects the repicablity program across jurisdictions and transit service boundaries	Impacts two types of trips: bike only trips within activity centers and first/last mile options for transit users. Trips invovling transit are limited to bike carrier capasity.	Kansas City B-Cycle Local Governments Transit Providers Employers	Hangzhou, China Hangzhou Public Transport Corporation Paris, France Vélib' New York, New York Citi Bikes
First/Last Mile Transit											

Recommendations					Estimated Outcomes					Engagement	
Strategy		Currently Responsible Organization	Phasing/ Timeframe	Cost	Increase in College and Metcalf Pilot Area Worker Accessibility	Increase in Regional Job Accessibility	Effectiveness (cost per unit of increase) *(High-Medium-Low)*	Replicability Considerations *(narrative)*	Potential Impact of Replicated Deployment	Stakeholder Interest	Stories to Make the Case
Bicycle Connections	There is a network of on-road shared lane bicycle friendly collectors combine with off road stream trails systems A map of existing bikeways and trails is shown below along with Park-and-Ride Lots.	City of Overland Park	Long Term	Cost included in maintance overlay	high	medium	Low over 20 year life	Highly replicable	Increased ridership from expanded travel shed.		
Pedestrian Connections	All transit routes should be evaluated for ADA pedestrian accessibility. Intersections should be evaluated pedestrian crossings and pedestrian signal accommodations to make crossing safe and convenient	City of Overland Park	Long Term	Cost may require reconstruction and signal upgrades	medium	medium	Low over 20 year life	Highly replicable	Increased ridership from expanded travel shed.		
Communication Strategies											
Technology Strategies											
Urban Design Strategies	Encourage affordable housing opportunities to be integrated into future development and redevelopment initiatives	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO	Long Term	$ low							
	Promote new development and revitalization projects to include multi-modal connectivity by providing sidewalks, bicycle facilities, and pedestrian amenities.	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO	Short Term	$ low							
	Explore options for a new mobility hub / transit center location that is more accessible to existing jobs and residents in the area. The future site should have great visibility from existing street network, and should be connected with existing sidewalks and bicycle network.	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO / KCATA / Existing Land Owners	Short Term	$$$ high							
	Adopt focused and integrated land use master plans and development policies/regulations around a future transit station (mobility hub) and along identified transit corridors to bolster existing and proposed transit routes, hubs and stations	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO	Short Term	$ low							
	Create catalytic economic development opportunities for new high-density residential, commercial, and mixed-use development/revitalization within walking distance of existing or future transit station (mobility hub), and along designated transit route corridors through the use of attractive development incentives, taxing districts to assist in funding transit/transportation improvements, density bonuses, or other programs.	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO / Private Developers	Long Term	$$ medium							
	Integrate future transit station/stop locations and other multi-modal facilities into the design of proposed development projects to encourage ridership and access to amenities and services offered by the new development.	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO / KCATA/ Private Developers	Long Term	$ low							
Supporting Policies											
Business											
Government											
Institutional Infrastructure											

Append Maps where applicable

[Strategies]

Recommendations				Estimated Outcomes					Engagement	
Strategy	**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in College and Metcalf Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
[Change in Commuting Contours]										



RideKC Workforce Connex

Johnson County Grid Pilot - College and Metcalf

Fixed Route Transit Access Evaluation

	Average Access to College and Metcalf Area Jobs								Average Access to Total Regional Jobs							
	Baseline		**Planned**			**Full Grid**			**Baseline**		**Planned**			**Full Grid**		
	Within 60 minutes		Within 60 minutes			Within 60 minutes			Within 60 minutes		Within 60 minutes			Within 60 minutes		
	Number of Workers	Percent	Number of Workers	Percent	Percent change from Baseline	Number of Workers	Percent	Percent change from Baseline	Number of Jobs	Percent	Number of Jobs	Percent	Percent Change	Number of Jobs	Percent	Percent Change
Current workers	53,780	5.49%	54,812	5.60%	1.9%	144,138	14.73%	168.0%	40,230	4.2%	41,142	4.3%	2.3%	59,527	6.2%	48.0%
Future workers	-	-	-	-	-	-	-	-								
Worker age																
Age 29 or younger	12,203	5.4%	12,515	5.6%	2.6%	32,142	14.3%	163.4%	44,705	4.6%	45,559	4.7%	1.9%	63,319	6.6%	41.6%
Age 30 to 54	28,699	5.2%	28,968	5.3%	0.9%	77,948	14.3%	171.6%	38,861	4.0%	39,768	4.1%	2.3%	57,676	6.0%	48.4%
Age 55 or older	12,878	6.2%	13,328	6.4%	3.5%	34,047	16.4%	164.4%	38,952	4.0%	39,939	4.1%	2.5%	60,249	6.2%	54.7%
Worker income																
$1,250 per month or less	11,912	5.0%	12,312	5.2%	3.4%	32,054	13.5%	169.1%	44,013	4.6%	44,791	4.6%	1.8%	61,563	6.4%	39.9%
$1,251 to $3333 per month	16,131	4.9%	16,426	5.0%	1.8%	40,827	12.5%	153.1%	44,617	4.6%	45,398	4.7%	1.8%	60,971	6.3%	36.7%
More than $3,333 per month	25,737	6.2%	26,073	6.3%	1.3%	71,256	17.2%	176.9%	34,558	3.6%	35,652	3.7%	3.2%	57,197	5.9%	65.5%
Worker race																
White Alone	47,971	5.8%	48,628	5.9%	1.4%	125,003	15.2%	160.6%	34,830	3.6%	35,815	3.7%	2.8%	55,213	5.7%	58.5%
Black or African American Alone	3,191	2.8%	3,383	2.9%	6.0%	11,227	9.7%	251.8%	74,503	7.7%	74,943	7.8%	0.6%	85,163	8.8%	14.3%
American Indian or Alaska Native Alone	241	4.4%	237	4.4%	-1.7%	588	10.8%	144.0%	45,297	4.7%	46,239	4.8%	2.1%	60,839	6.3%	34.3%
Asian Alone	1,721	7.5%	1,888	8.3%	9.7%	5,553	24.3%	222.7%	43,967	4.6%	44,920	4.7%	2.2%	72,968	7.6%	66.0%
Native Hawaiian or Other Pacific Islander alone	28	2.5%	28	2.5%	0.0%	79	6.9%	182.1%	40,762	4.2%	41,053	4.3%	0.7%	49,703	5.2%	21.9%
Two or More Race Groups	625	4.9%	646	5.1%	3.4%	1,686	13.3%	169.8%	45,065	4.7%	45,858	4.8%	1.8%	62,705	6.5%	39.1%
Worker sex																
Male	26,627	5.4%	27,284	5.5%	2.5%	72,255	14.7%	171.4%	39,761	4.1%	40,648	4.2%	2.2%	59,130	6.1%	48.7%
Female	27,153	5.6%	27,527	5.7%	1.4%	71,883	14.8%	164.7%	40,699	4.2%	41,636	4.3%	2.3%	59,922	6.2%	47.2%
Worker Educational Attainment																
Less than High School	3,702	4.8%	3,779	4.9%	2.1%	9,804	12.7%	164.8%	46,631	4.8%	47,380	4.9%	1.6%	62,995	6.5%	35.1%
High school or equivalent, no college	10,710	5.0%	10,857	5.0%	1.4%	28,045	13.0%	161.9%	39,695	4.1%	40,495	4.2%	2.0%	56,836	5.9%	43.2%
Some college or Associate degree	12,919	5.3%	13,129	5.4%	1.6%	34,893	14.4%	170.1%	38,325	4.0%	39,249	4.1%	2.4%	57,258	5.9%	49.4%
Bachelor's degree or advanced degree	14,244	6.5%	14,530	6.6%	2.0%	39,252	17.9%	175.6%	35,959	3.7%	37,086	3.8%	3.1%	59,525	6.2%	65.5%

RideKC Workforce Connex

Johnson County Priority Grid Pilot - College and Metcalf

Fixed Route Transit Access Evaluation

	Average Access to College and Metcalf Area Jobs								Average Access to Total Regional Jobs							
	Baseline		Planned Service			Priority Grid			Baseline		Planned Service			Priority Grid		
	Workers within 60 minutes		Workers within 60 minutes			Workers within 60 minutes			Jobs within 60 minutes		Jobs within 60 minutes			Jobs within 60 minutes		
	Number	Percent	Number	Percent	Percent change from Baseline	Number	Percent	Percent change from Baseline	Number	Percent	Number	Percent	Change	Number	Percent	Change
Current workers	52,925	5.41%	54,067	5.52%	2.2%	126,357	12.91%	138.7%	40,233	4.2%	41,170	4.3%	2.3%	50,221	5.2%	24.8%
Future workers	-	-	59,648	-	12.7%	132,353	-	150.1%								
Worker age																
Age 29 or younger	12,009	5.4%	12,339	5.5%	2.7%	28,748	12.8%	139.4%	44,708	4.6%	45,599	4.7%	2.0%	54,270	5.6%	21.4%
Age 30 to 54	28,219	5.2%	28,566	5.2%	1.2%	67,656	12.4%	139.8%	38,864	4.0%	39,793	4.1%	2.4%	48,471	5.0%	24.7%
Age 55 or older	12,695	6.1%	13,161	6.3%	3.7%	29,952	14.4%	135.9%	38,955	4.0%	39,958	4.1%	2.6%	50,401	5.2%	29.4%
Worker income																
$1,250 per month or less	11,731	4.9%	12,146	5.1%	3.5%	28,224	11.9%	140.6%	44,016	4.6%	44,806	4.6%	1.8%	53,070	5.5%	20.6%
$1,251 to $3333 per month	15,860	4.9%	16,229	5.0%	2.3%	36,969	11.3%	133.1%	44,621	4.6%	45,420	4.7%	1.8%	53,136	5.5%	19.1%
More than $3,333 per month	25,332	6.1%	25,692	6.2%	1.4%	61,164	14.8%	141.4%	34,561	3.6%	35,691	3.7%	3.3%	46,255	4.8%	33.8%
Worker race																
White Alone	47,223	5.7%	48,009	5.8%	1.7%	110,384	13.4%	133.8%	34,832	3.6%	35,858	3.7%	2.9%	45,362	4.7%	30.2%
Black or African American Alone	3,122	2.7%	3,310	2.9%	6.0%	9,356	8.1%	199.7%	74,509	7.7%	74,856	7.8%	0.5%	80,301	8.3%	7.8%
American Indian or Alaska Native Alone	238	4.4%	233	4.3%	-2.1%	540	9.9%	126.9%	45,300	4.7%	46,289	4.8%	2.2%	53,060	5.5%	17.1%
Asian Alone	1,695	7.4%	1,846	8.1%	8.9%	4,512	19.8%	166.2%	43,970	4.6%	44,975	4.7%	2.3%	58,288	6.0%	32.6%
Native Hawaiian or Other Pacific Islander alone	27	2.4%	28	2.5%	3.7%	67	5.9%	148.1%	40,769	4.2%	41,116	4.3%	0.9%	45,383	4.7%	11.3%
Two or More Race Groups	617	4.9%	638	5.0%	3.4%	1,495	11.8%	142.3%	45,068	4.7%	45,864	4.8%	1.8%	54,271	5.6%	20.4%
Worker sex																
Male	26,190	5.3%	26,896	5.5%	2.7%	63,147	12.8%	141.1%	39,764	4.1%	40,683	4.2%	2.3%	49,736	5.2%	25.1%
Female	26,734	5.5%	27,170	5.6%	1.6%	63,209	13.0%	136.4%	40,702	4.2%	41,655	4.3%	2.3%	50,704	5.3%	24.6%
Worker Educational Attainment																
Less than High School	3,640	4.7%	3,731	4.8%	2.5%	8,659	11.2%	137.9%	46,635	4.8%	47,413	4.9%	1.7%	55,065	5.7%	18.1%
High school or equivalent, no college	10,519	4.9%	10,721	5.0%	1.9%	24,731	11.5%	135.1%	39,698	4.1%	40,511	4.2%	2.0%	48,601	5.0%	22.4%
Some college or Associate degree	12,730	5.2%	12,954	5.3%	1.8%	30,399	12.5%	138.8%	38,328	4.0%	39,269	4.1%	2.5%	48,111	5.0%	25.5%
Bachelor's degree or advanced degree	14,024	6.4%	14,320	6.5%	2.1%	33,818	15.4%	141.1%	35,962	3.7%	37,116	3.8%	3.2%	48,235	5.0%	34.1%

RideKC Workforce Connex

Johnson County Community College Pilot

Pilot Area Profile

Pilot Area Boundary	North	East	South	West
	College Blvd	S. Quivira Rd	Southern Edge of JCCC Campus, functionally 115th Street	Western Edge of JCCC Campus, functionally Gilette St

Typology	*Context*	*Attraction Level*	*Destination*	*Peak Hours*
	Outer Ring	Regional	Focused Function	Business

Workers within Boundary	Number	Percent
Agriculture/Forestry/Fishing/Hunting	0	0.00%
Mining/Quarrying/Oil and Gas Extraction	0	0.00%
Utilities	0	0.00%
Construction	0	0.00%
Manufacturing	0	0.00%
Wholesale Trade	0	0.00%
Retail Trade	0	0.00%
Transportation/Warehousing	0	0.00%
Information	2	0.10%
Finance/Insurance	15	0.60%
Real Estate/Rental/Leasing	0	0.00%
Professional/Scientific/Tech Services	12	0.40%
Mgmt of Companies/Enterprises	4	0.10%
Admin/Support/Waste Mgmt/Remediation	13	0.50%
Educational Services	2,618	97.70%
Health Care/Social Assistance	5	0.20%
Arts/Entertainment/Recreation	0	0.00%
Accommodation/Food Services	1	0.00%
Other Services (exc. Public Administration)	1	0.00%
Public Administration	8	0.30%
Total Jobs	2,679	100%

Current Transit and Mobility Options and Usage		*Pilot Area Usage*	*Regional Usage*
Fixed Route Transit			
Non Fixed-Route Transit			
Carpool	Carpoolers with destination address in 66210 zip code	31	760
	Carpoolers with destinations in 66215, 66213, 66214, 66212	31	
Vanpool	KCATA Vanpools with destinations near JCCC (All these vanpools go to the EPA office in Lenexa)	6 vans, 53 members	27 vans, 188 members
Carshare	No carshare presence at this location	0	4
Bikeshare			
First/Last Mile Transit			
Bicycle Connections			
Pedestrian Connections			

Current Land Use Conditions*	Count	Percent
Single Family	4,583	21.91%
Vacant / Ag	1,265	6.05%
Parks / Open Space	944	4.51%
Commercial	867	4.15%
Public / Semi Public	4,724	22.59%
Multi-Family / Condo	2,948	14.10%
Office	1,871	8.95%
Industrial / Business Park	429	2.05%
Mixed Use	0	0.00%
ROW	3,284	15.70%
Railroad ROW	0	0.00%
Total	20,915	100.00%

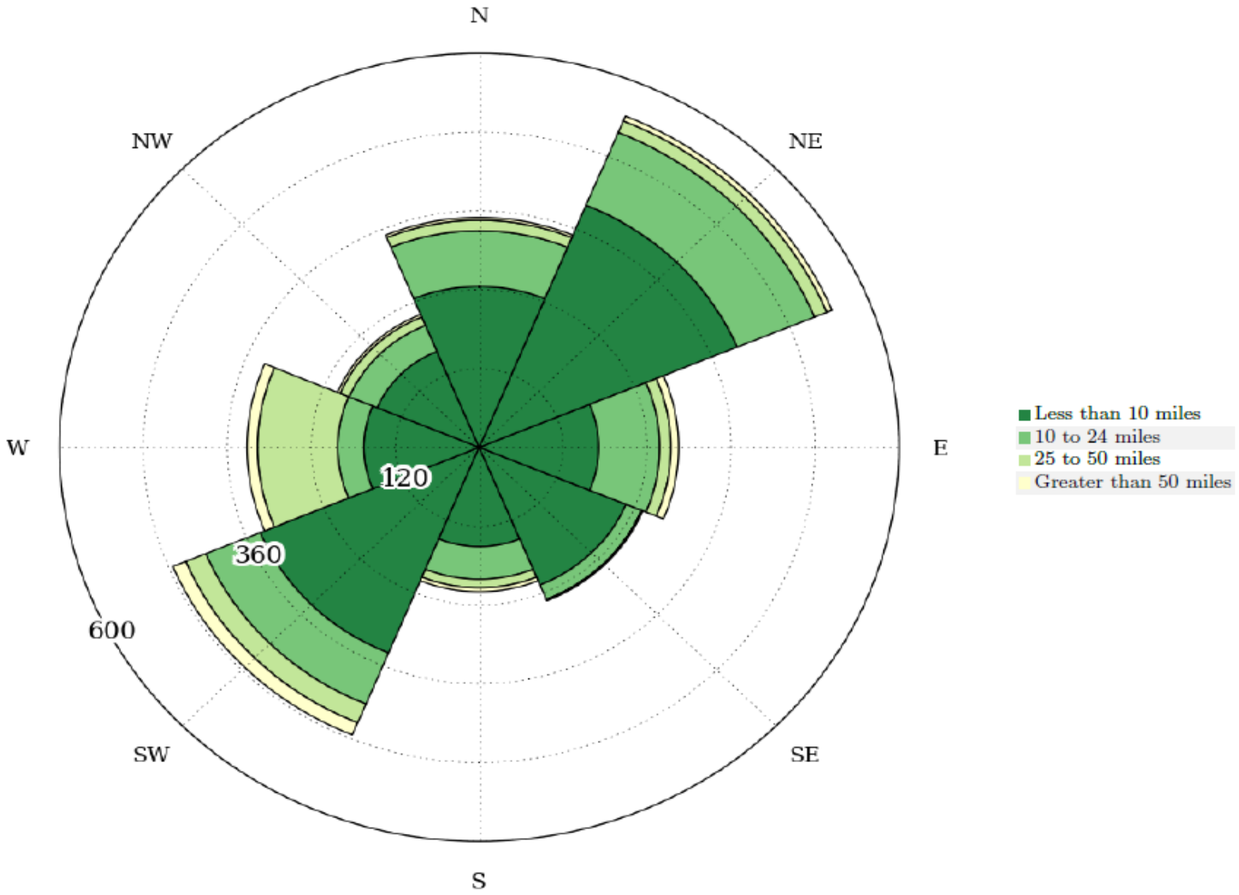
*Per MARC's 2012 Land Use raster data within the 4PM-6PM 30-minute Travelshed Boundary for this pilot area

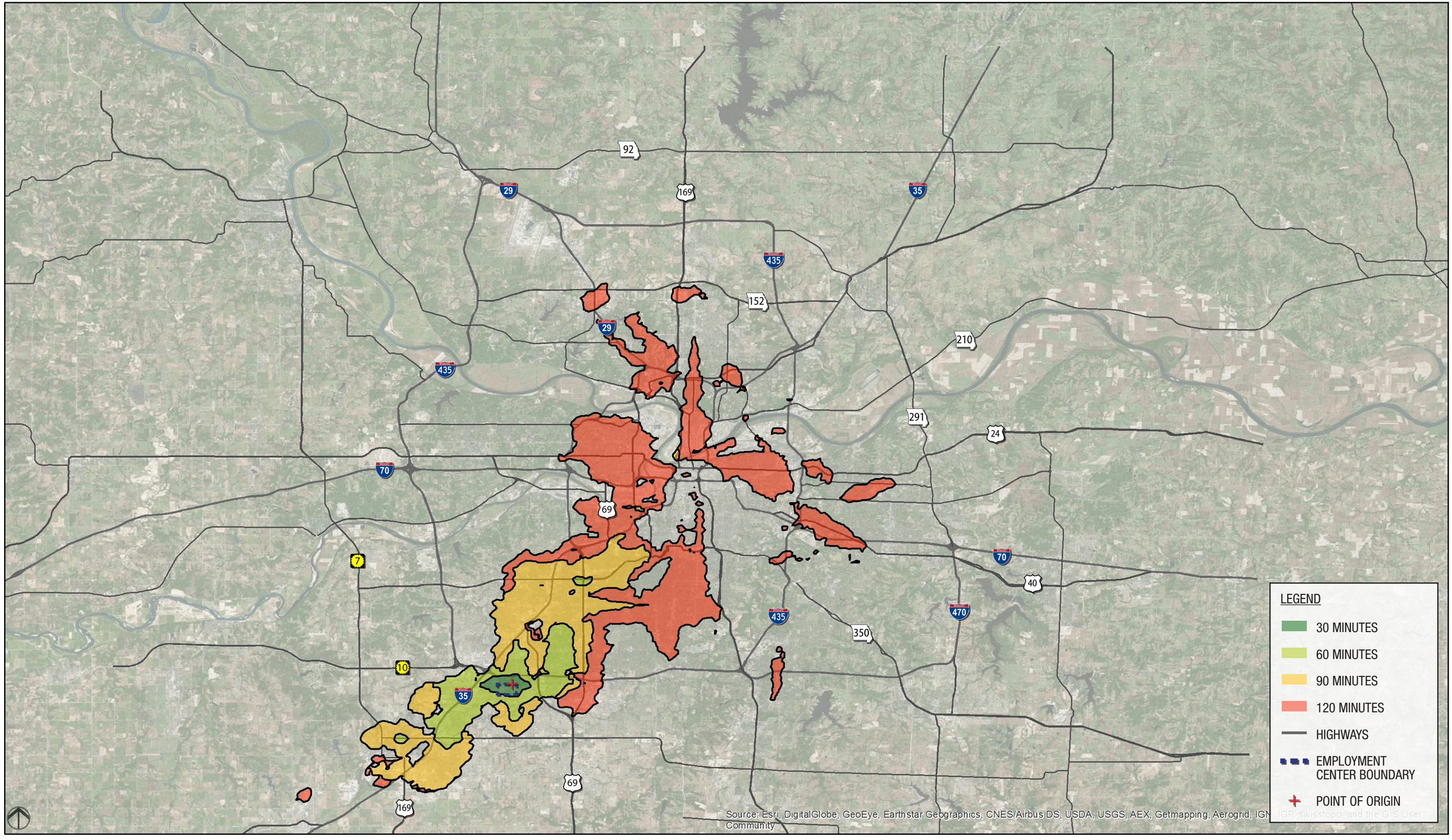
RideKC Workforce Connex

Johnson County Community College Pilot

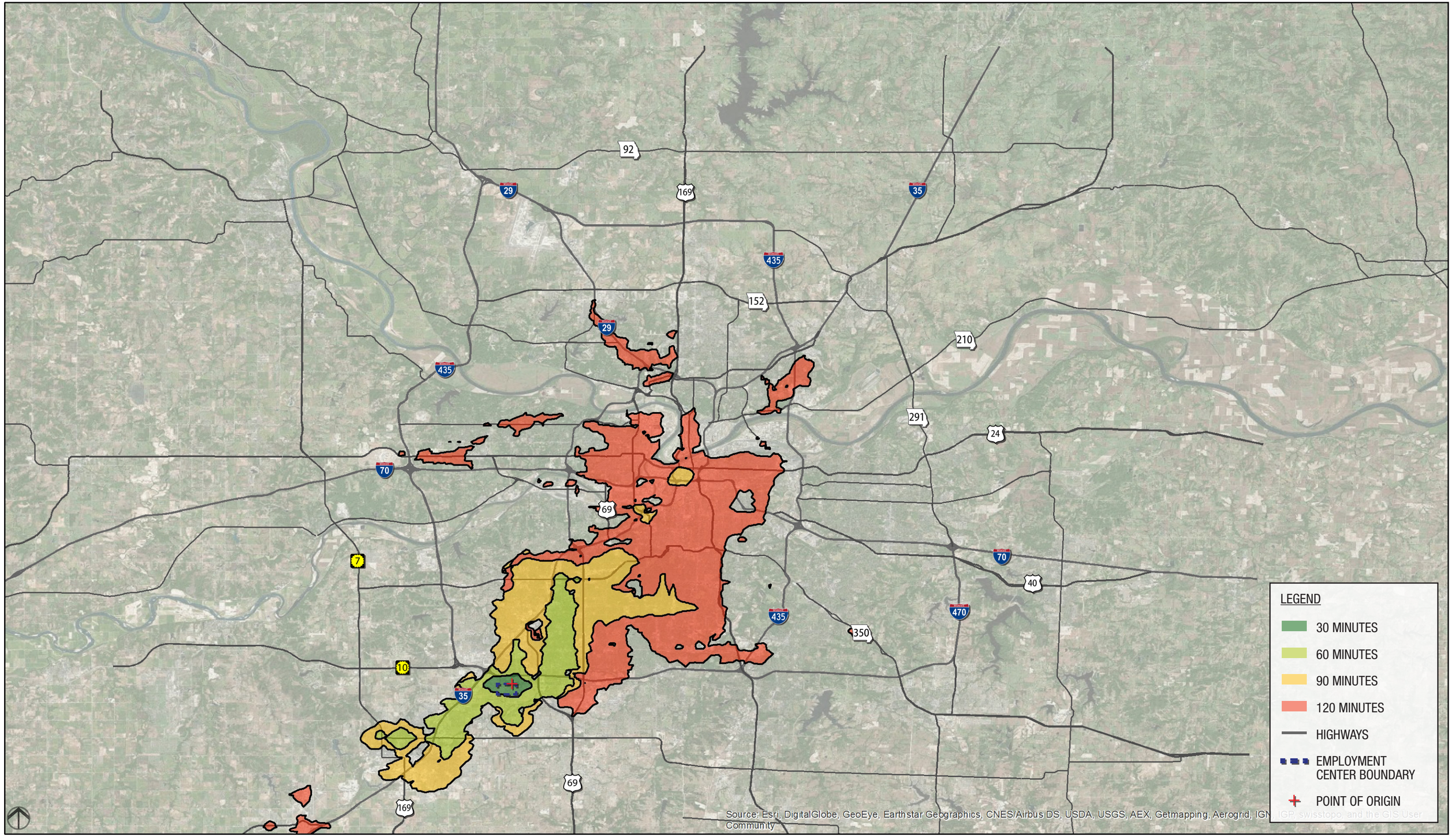
Gap Analysis

JCCC Worker Residence	Number
Total	2,679
60 Minute	366
60-120 Minute	727
Outside 120	1,586
In High and Very High Transit Propensity Tracts	
Within 60 minutes	116
Outside of 60 minutes	348
In Low and Very Low Transit Propensity Tracts	787
Distance from Work to Home Census Block	
Less than 10 Miles	1,855
10 to 24 Miles	530
25 to 50 Miles	224
Greater than 50 Miles	70

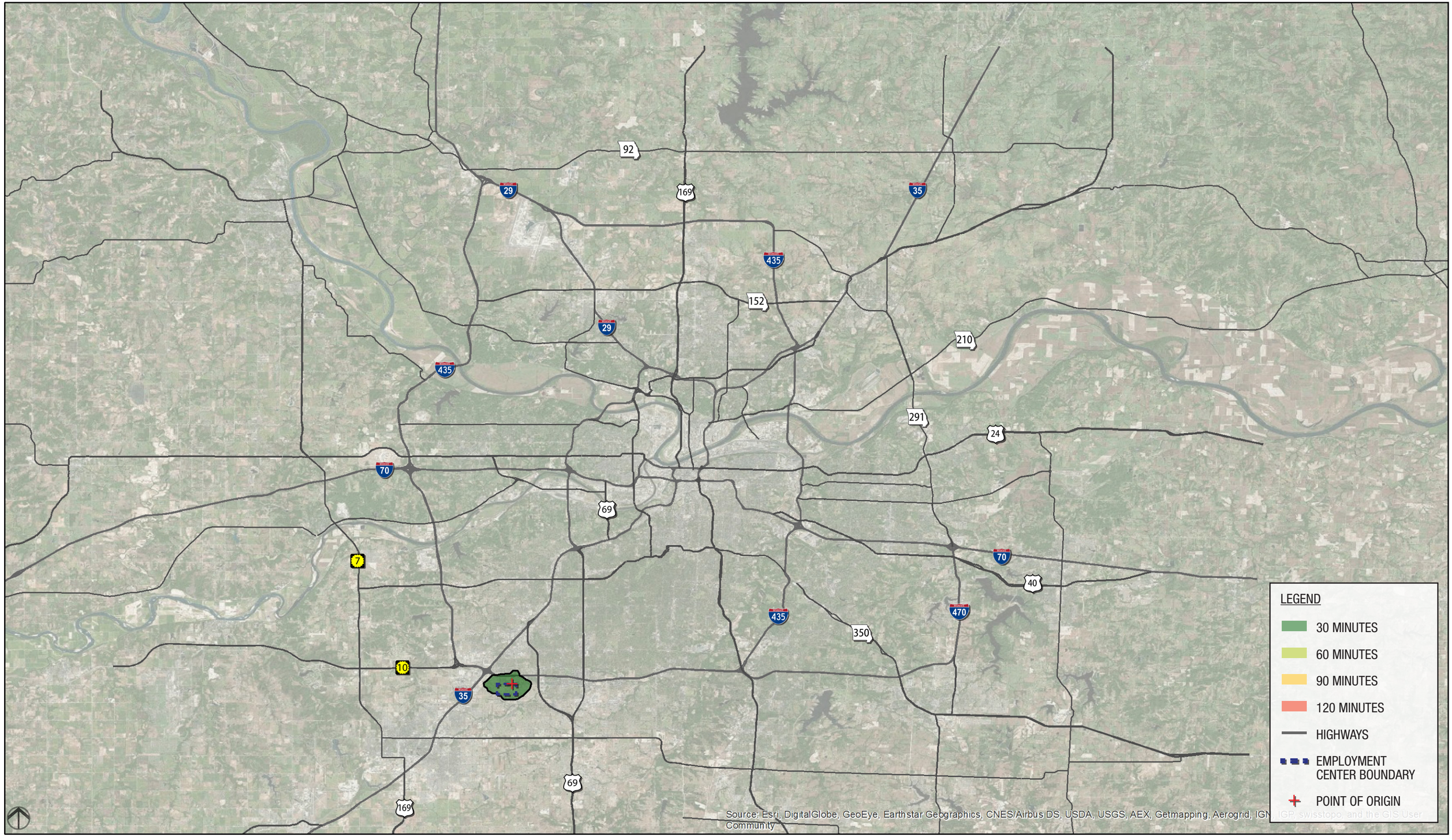




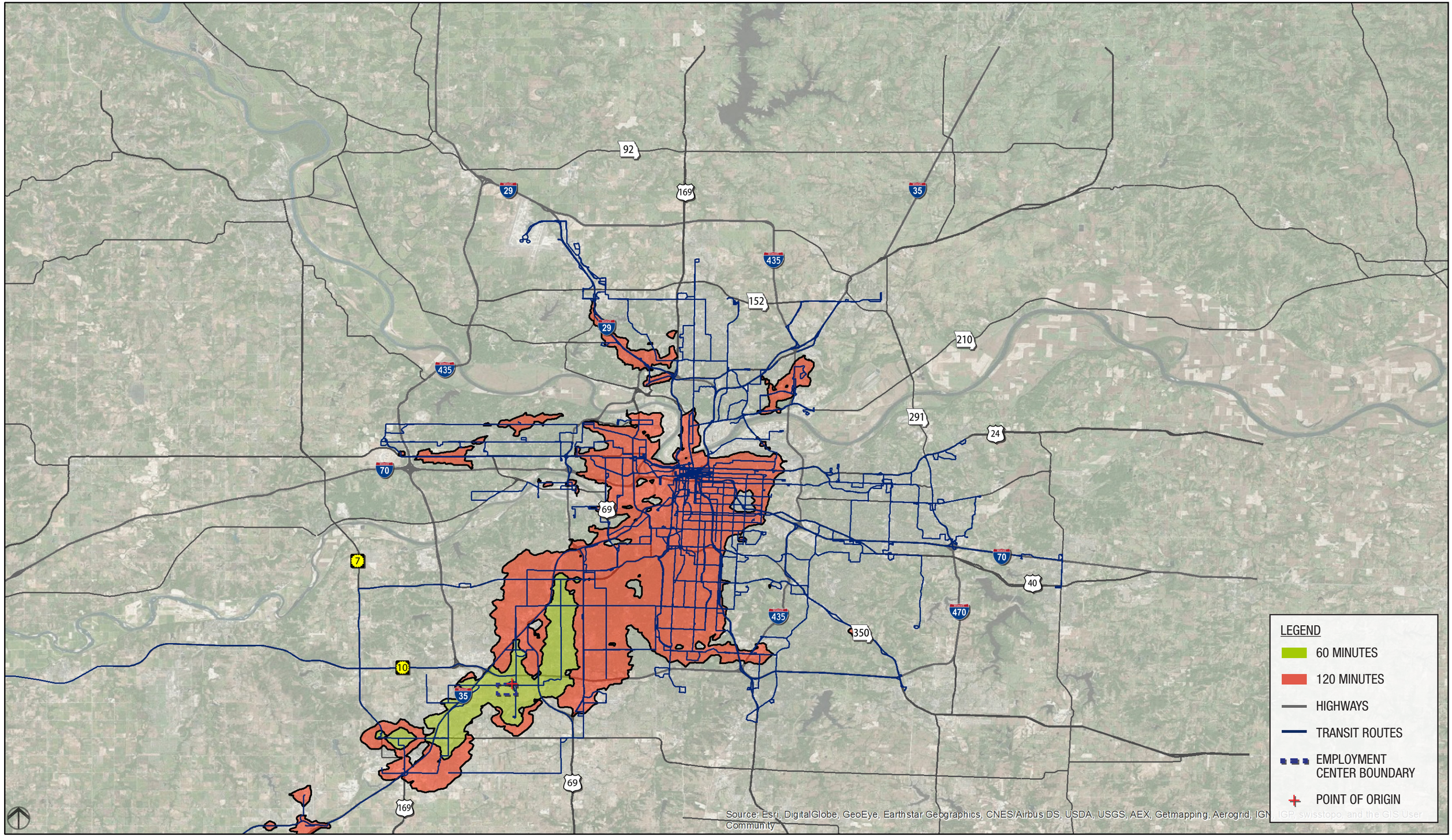
TRAVELSHED: 6 AM - 9 AM



TRAVELSHED: 4 PM - 6 PM

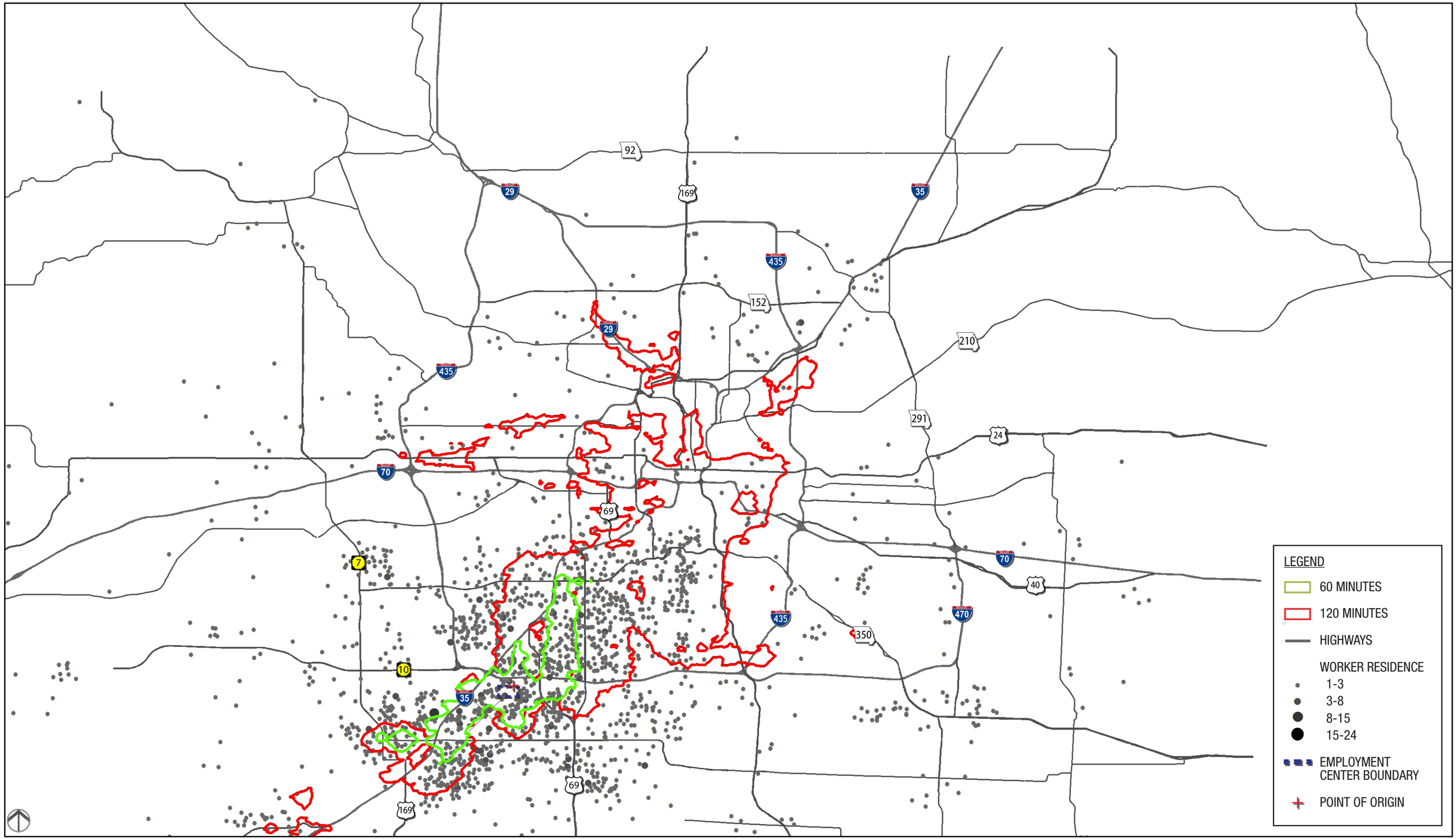


TRAVELSHED: 8 PM - 11 PM



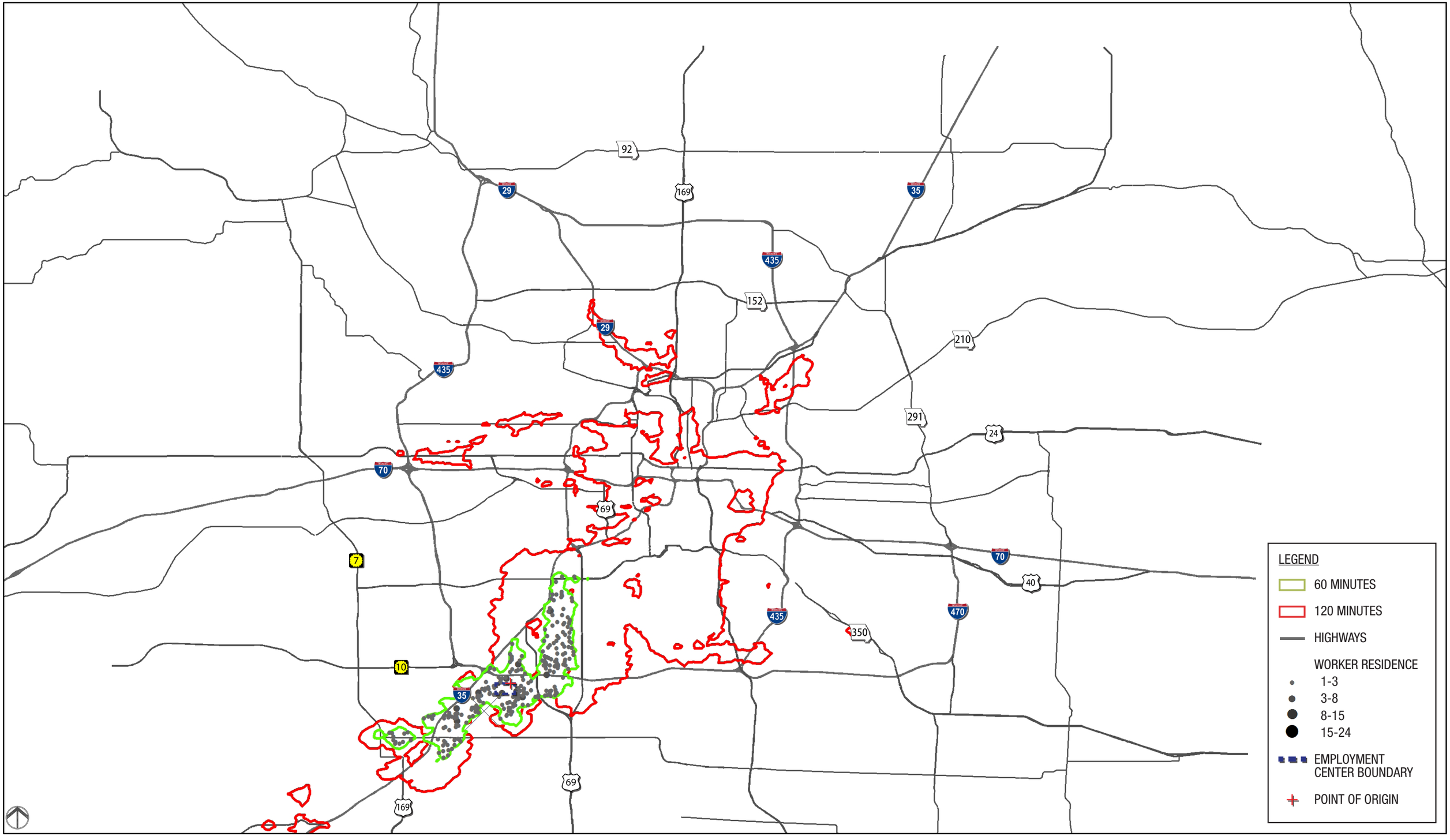
TRANSIT ROUTES

TRAVELSHED: 4 PM - 6 PM



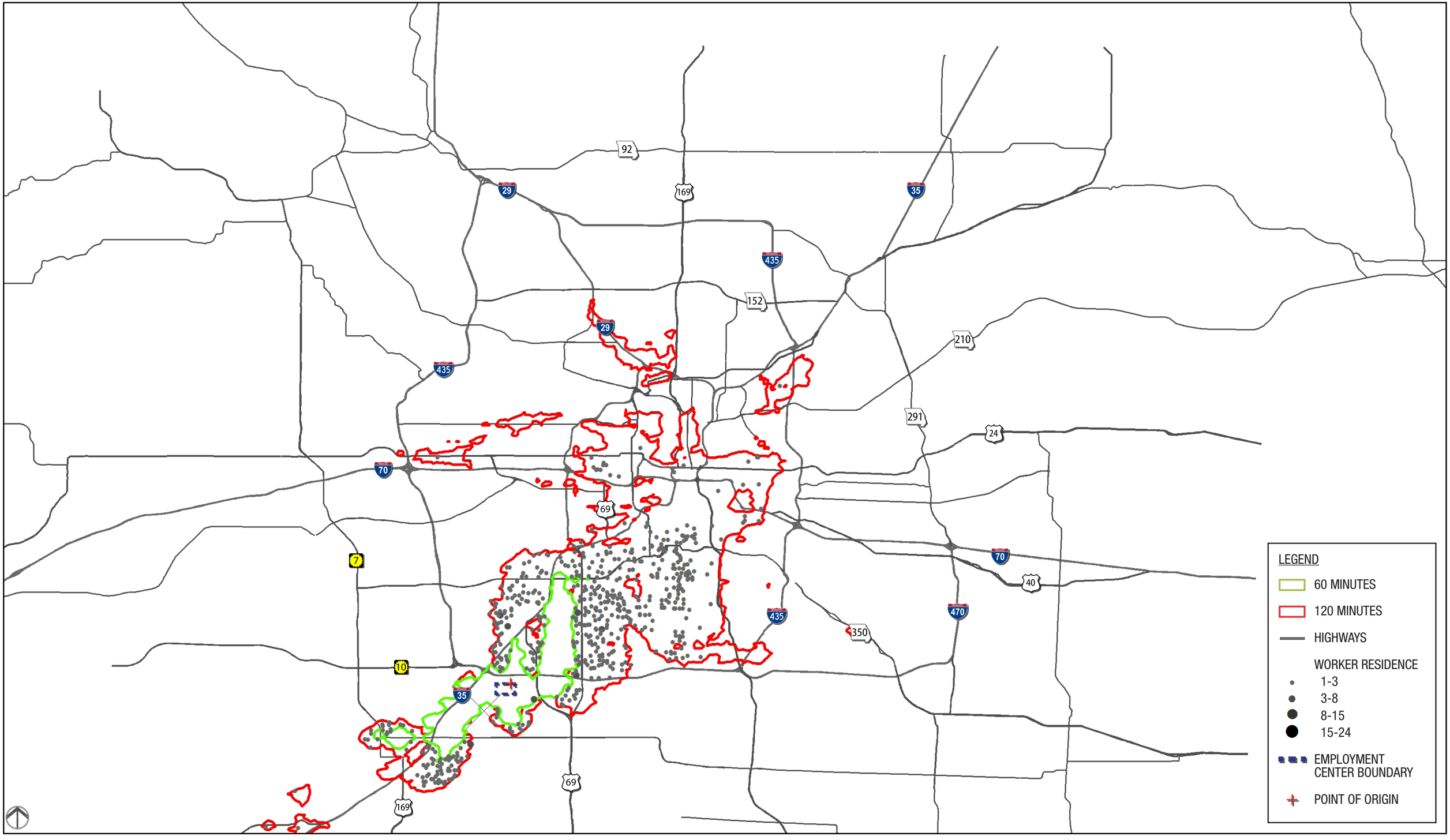
TOTAL WORKER RESIDENCE: 2,679

TRAVELSHED: 4 PM - 6 PM



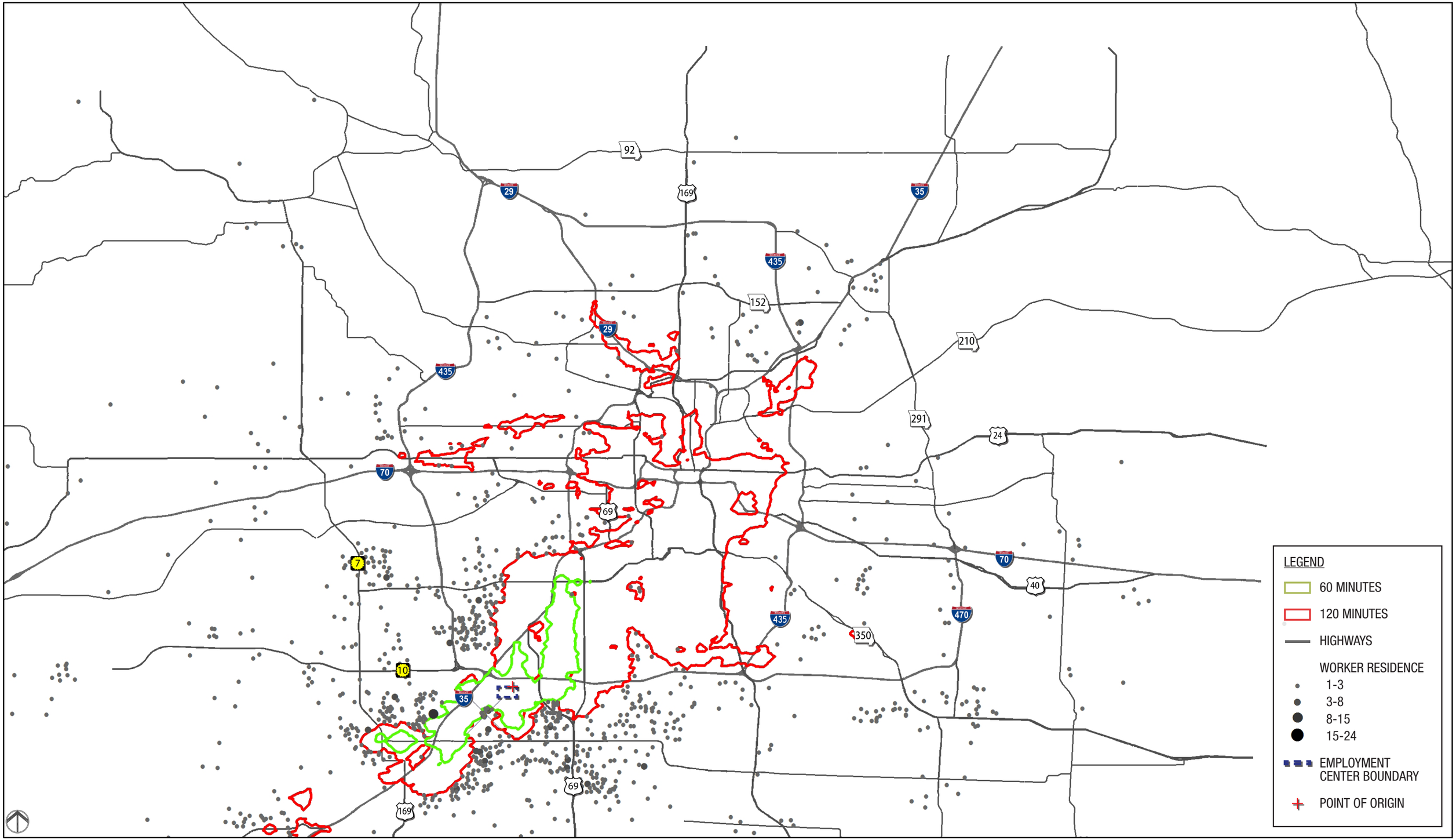
60 MINUTE WORKER RESIDENCE: 366

TRAVELSHED: 4 PM - 6 PM



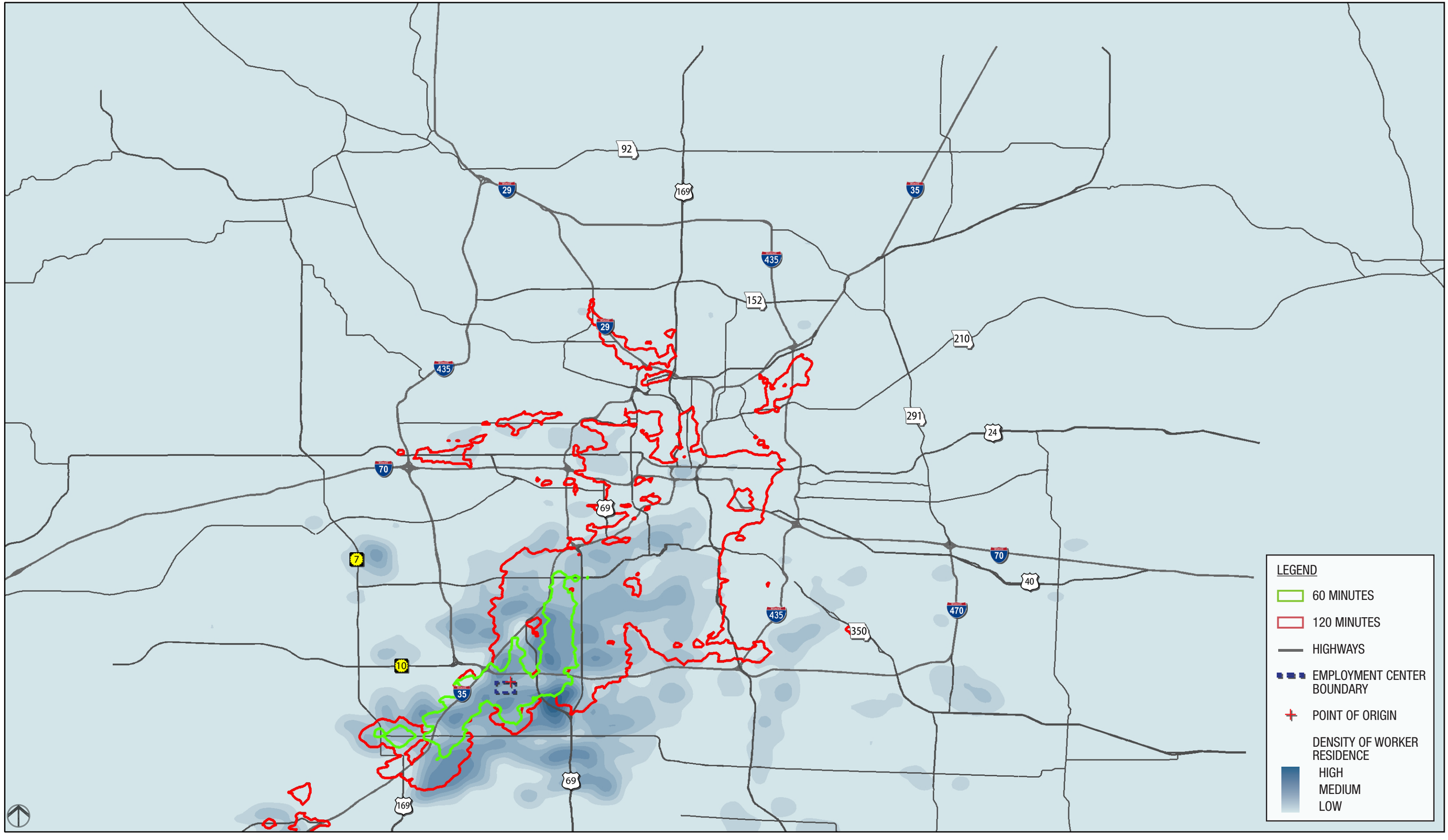
60-120 MINUTE WORKER RESIDENCE: 727

TRAVELSHED: 4 PM - 6 PM



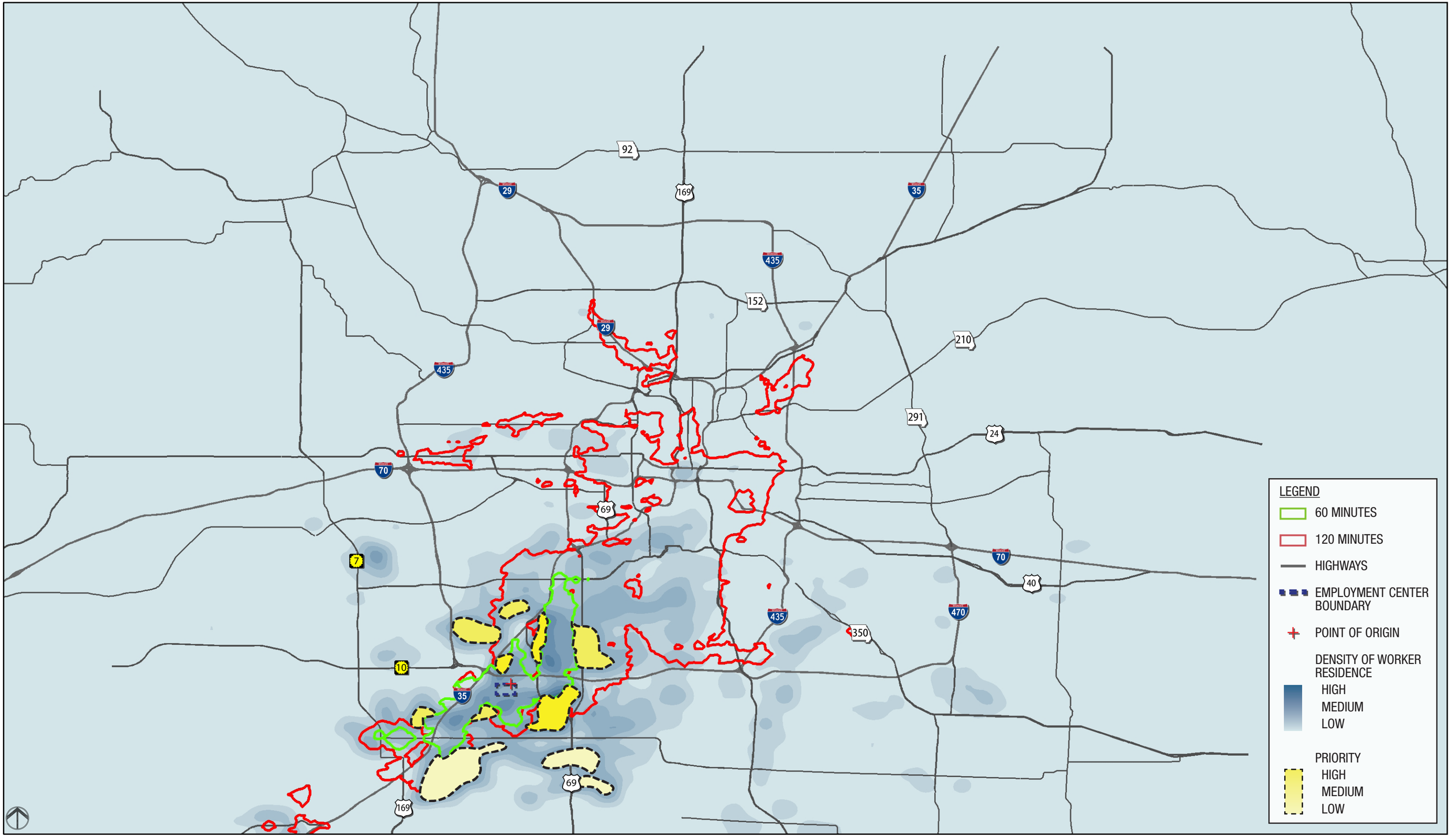
OUTSIDE 120 MINUTE WORKER RESIDENCE: 1,586

TRAVELSHED: 4 PM - 6 PM



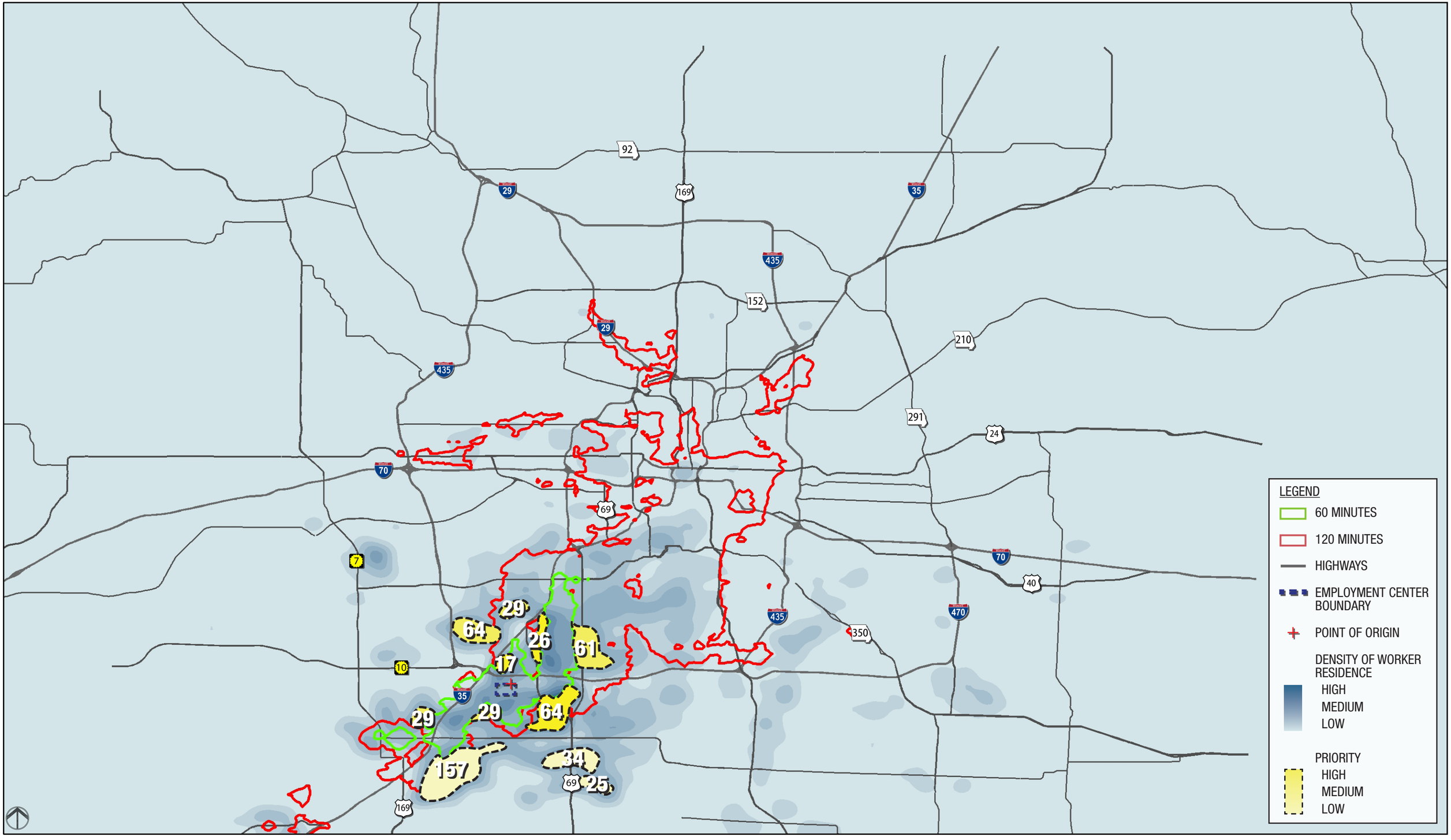
WORKER RESIDENCE DENSITY

TRAVELSHED: 4 PM - 6 PM



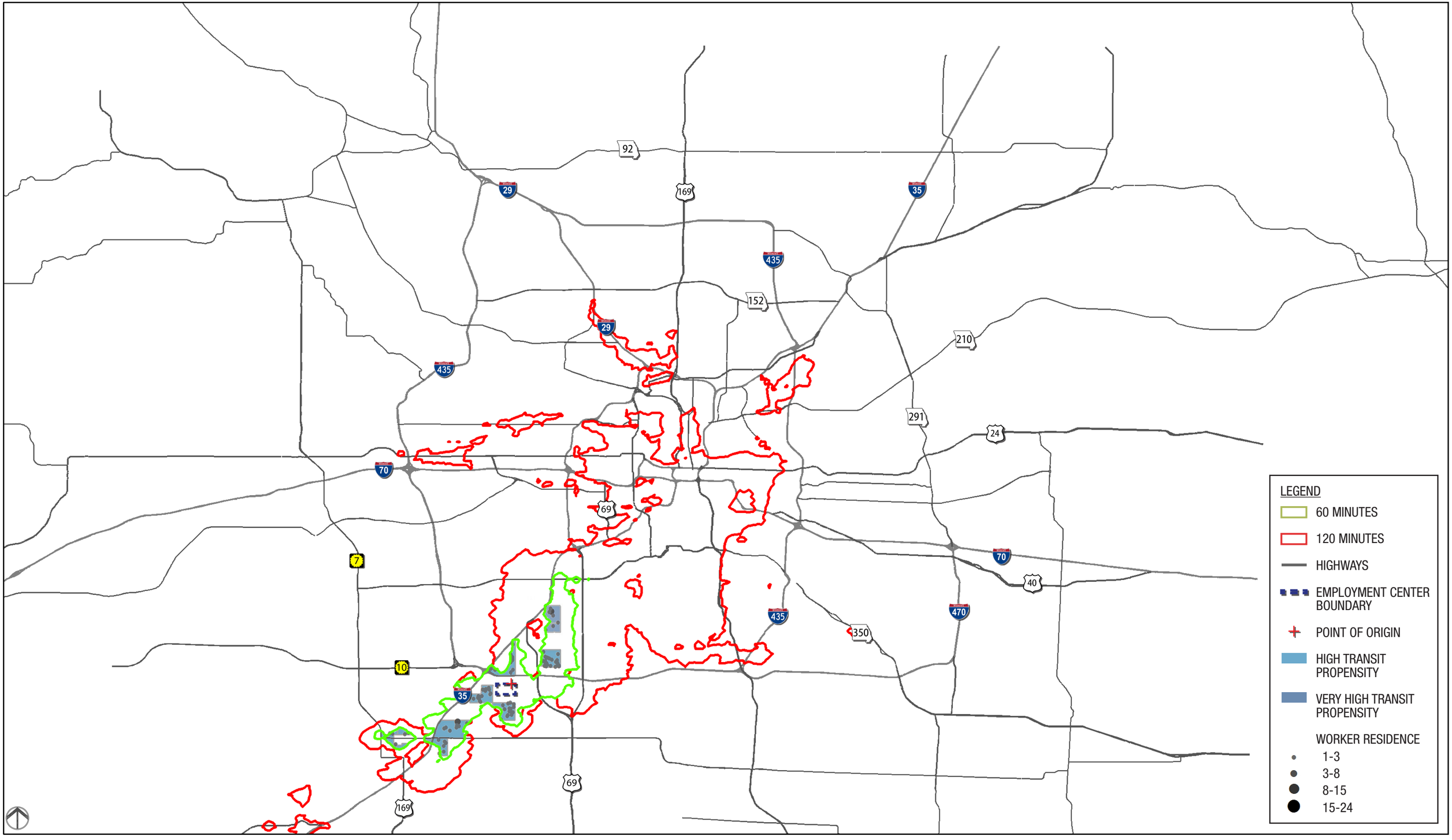
WORKER RESIDENCE POTENTIAL CAPTURE AREAS

TRAVELSHED: 4 PM - 6 PM



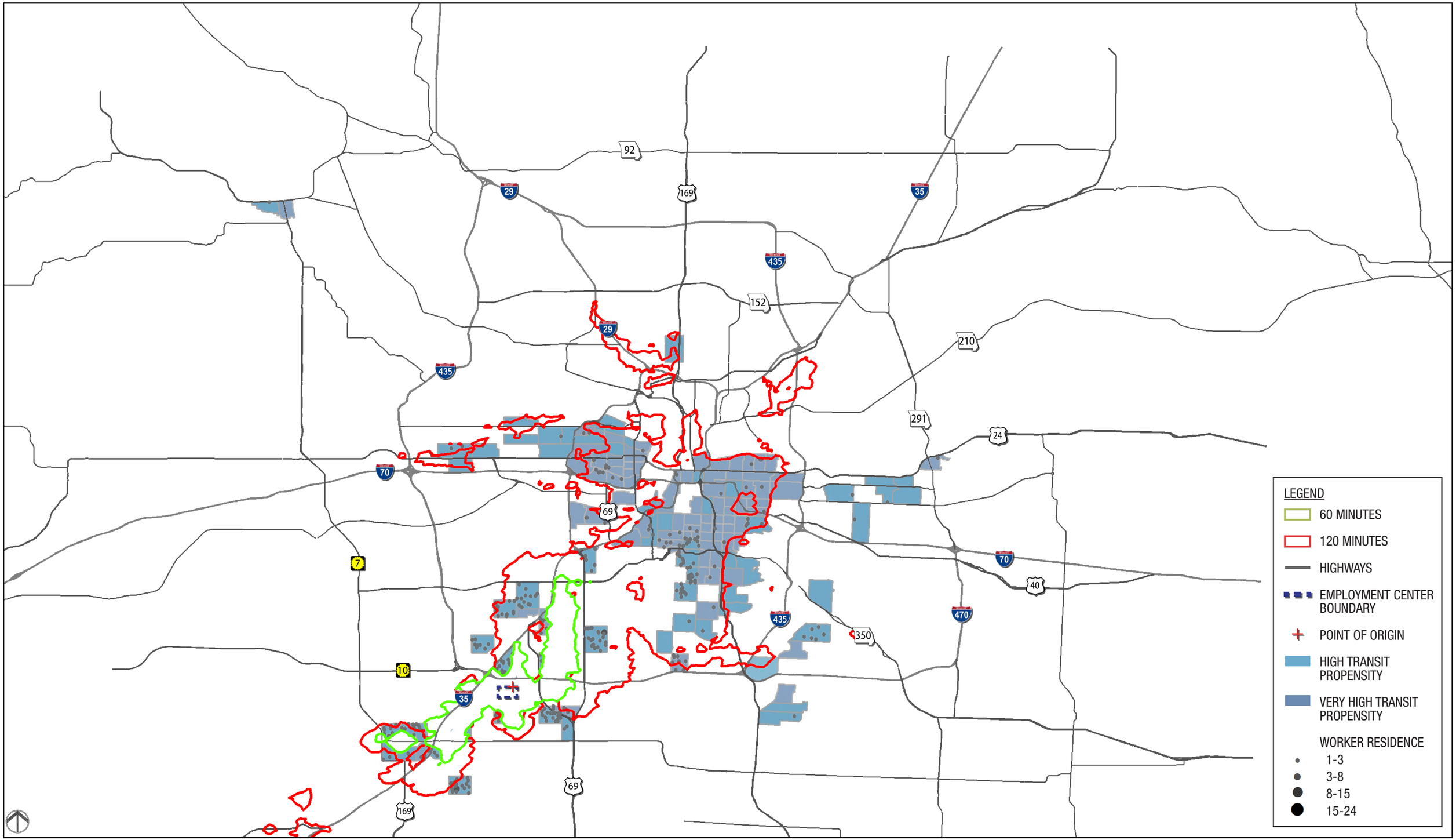
WORKER RESIDENCE POTENTIAL CAPTURE: 535

TRAVELSHED: 4 PM - 6 PM



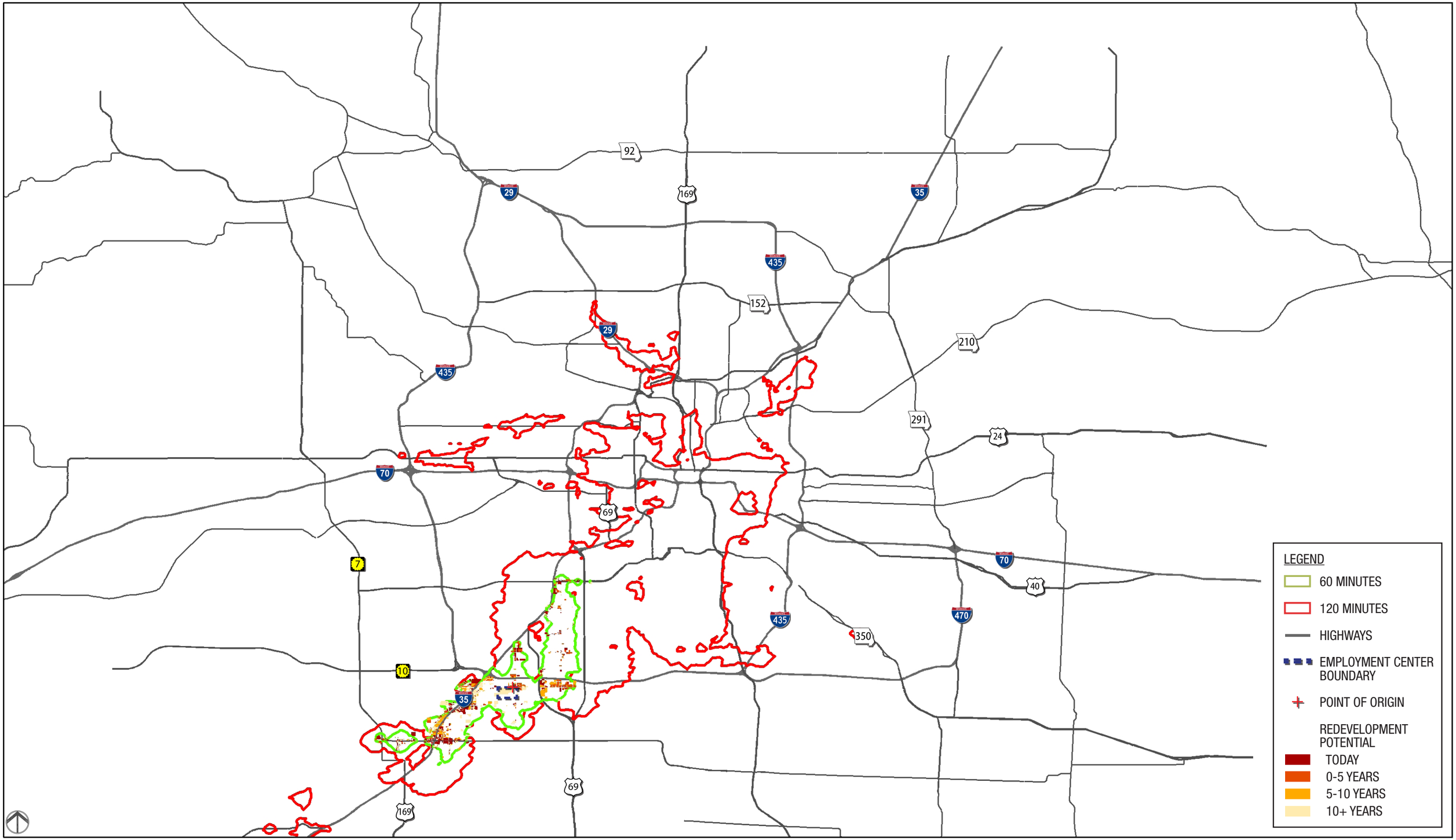
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES: 116

TRAVELSHED: 4 PM - 6 PM



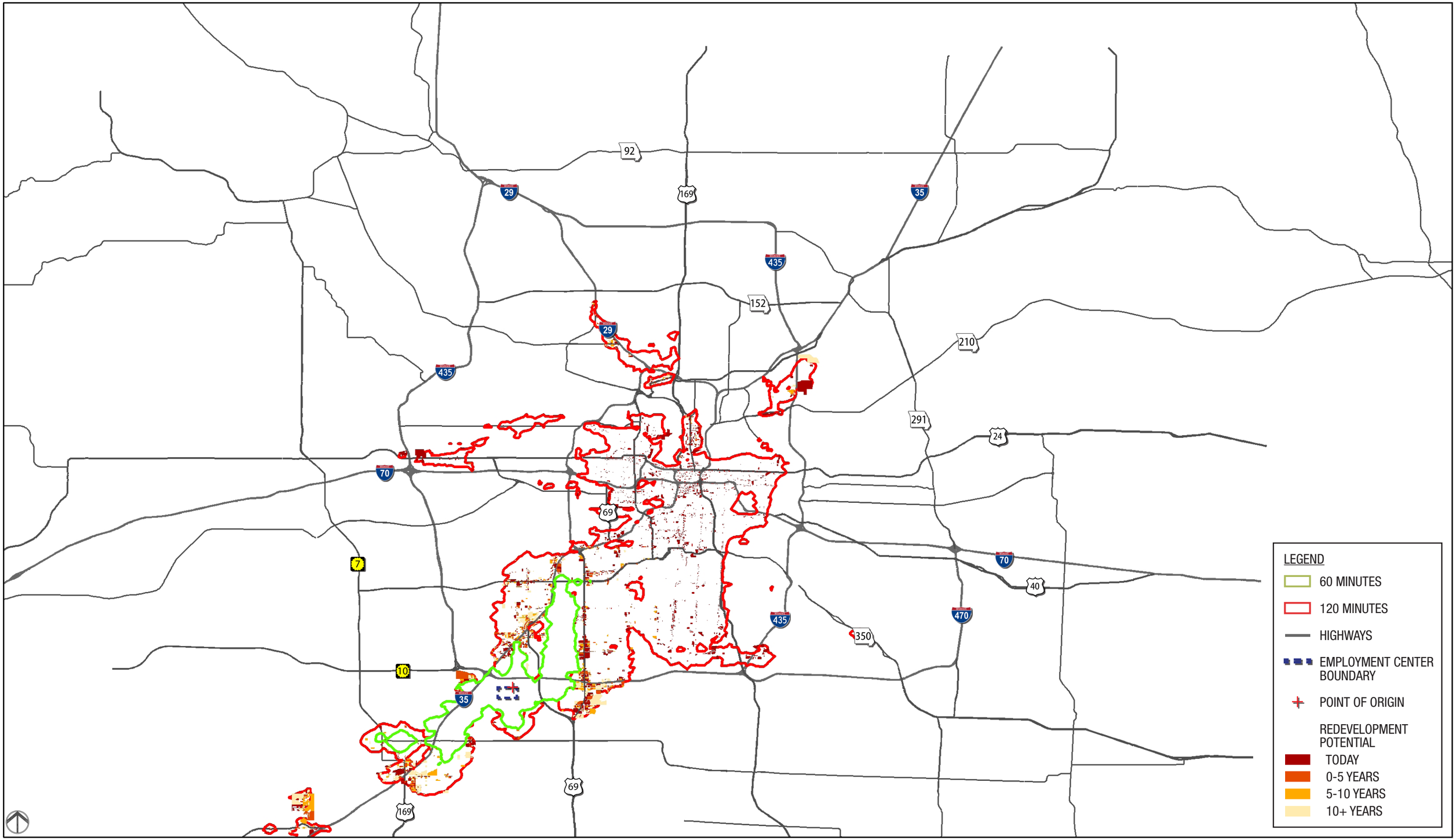
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS OUTSIDE OF 60 MINUTES: 348

TRAVELSHED: 4 PM - 6 PM



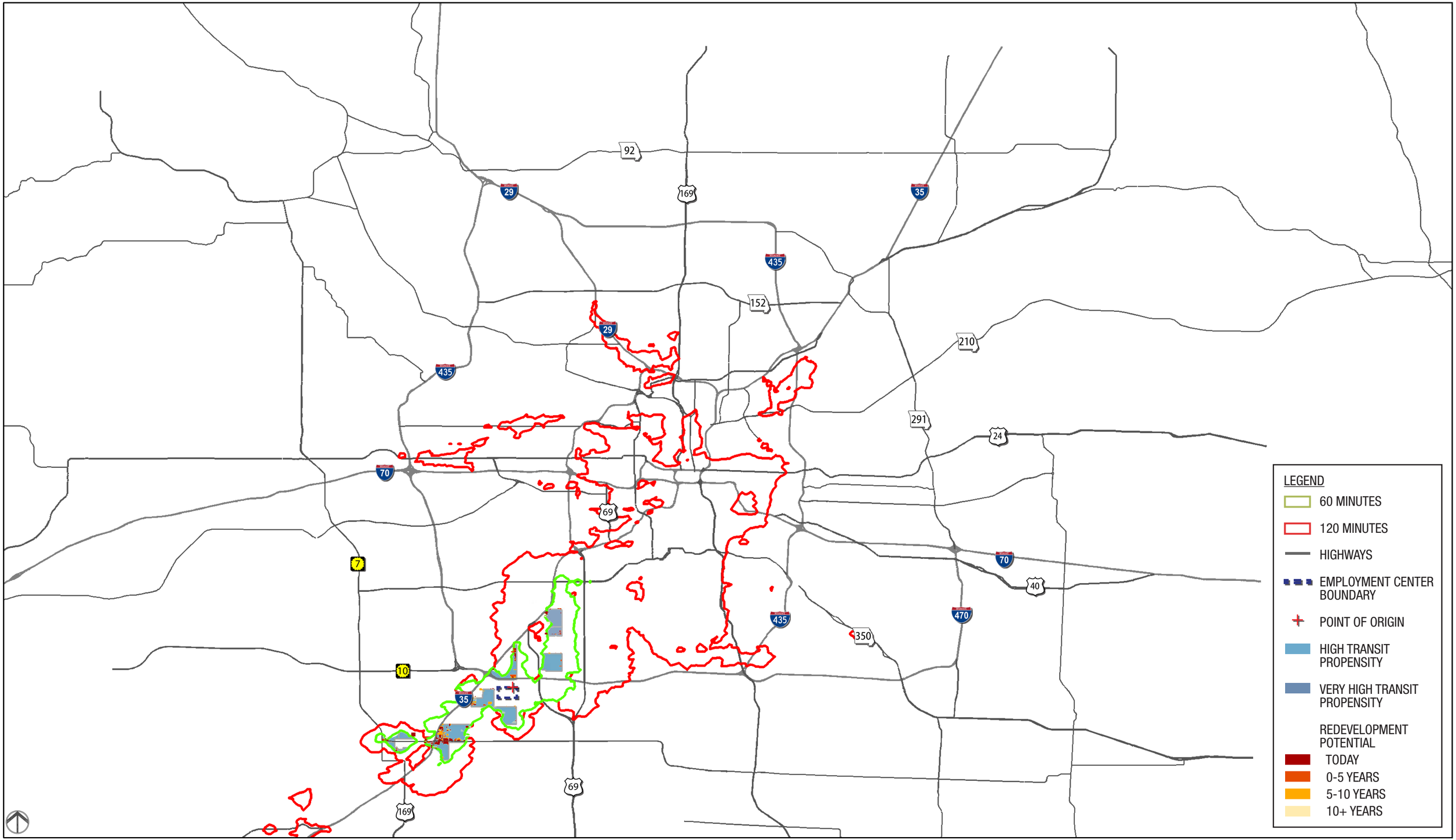
REDEVELOPMENT AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



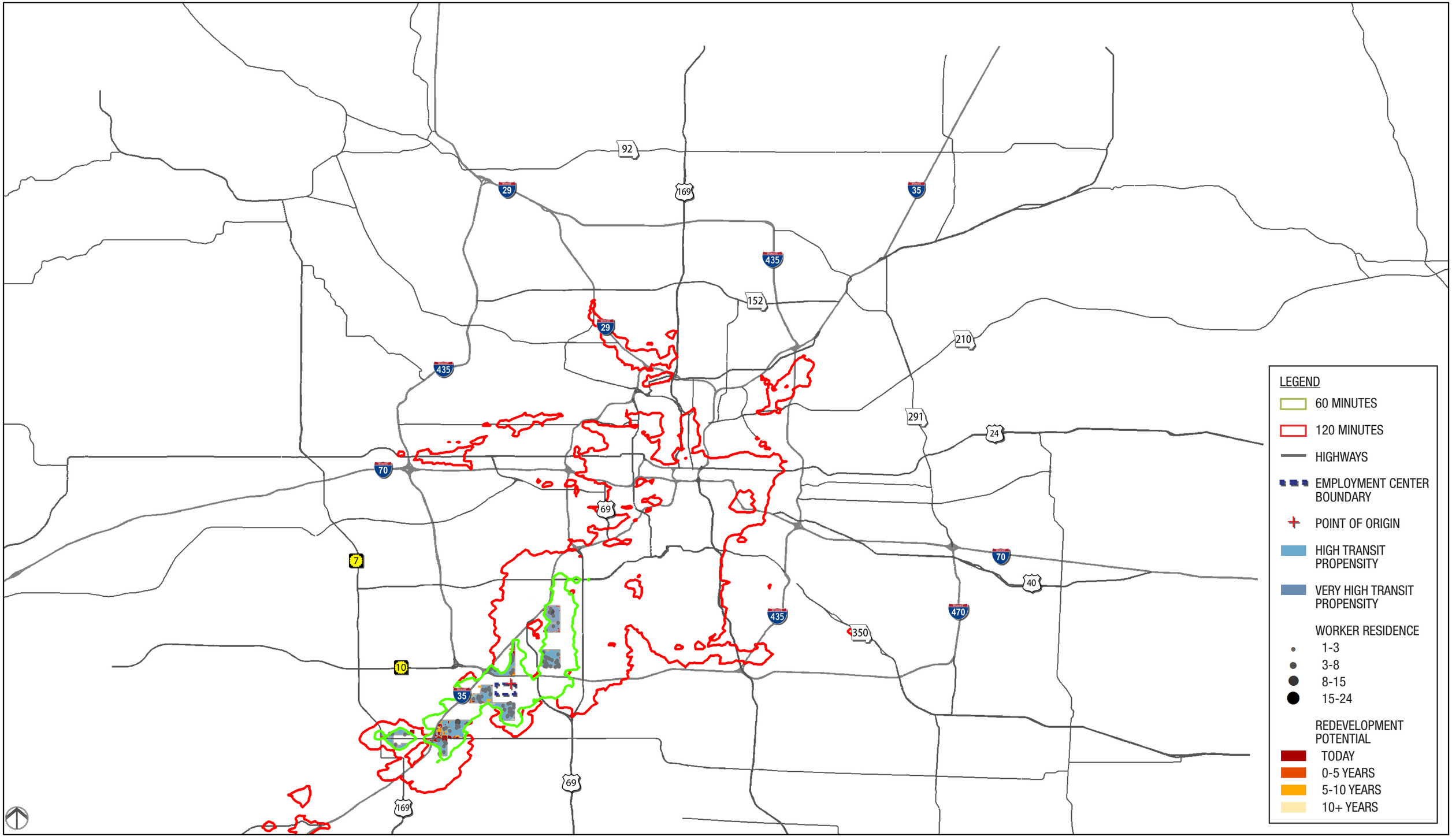
REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



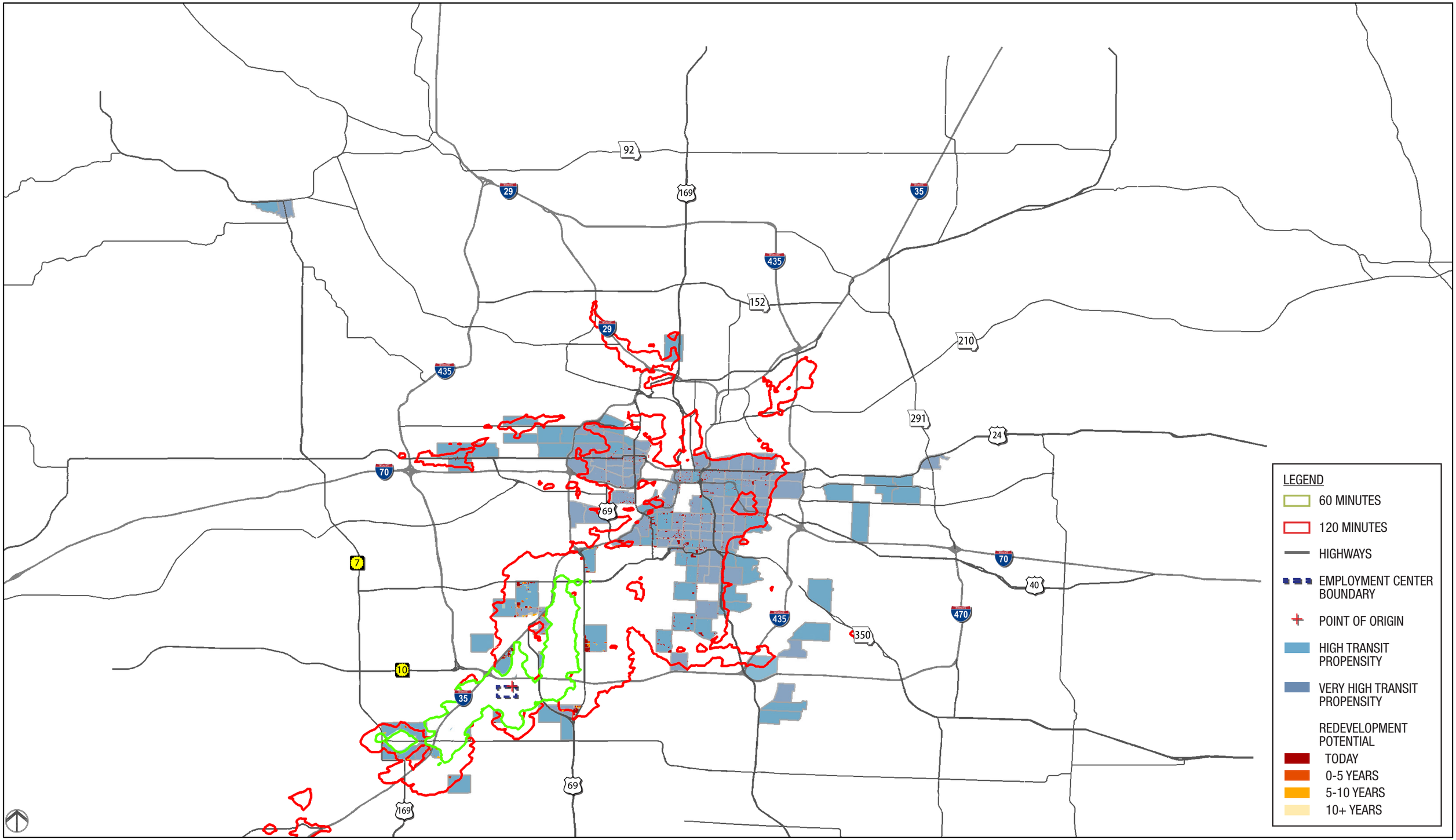
REDEVELOPMENT AREAS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



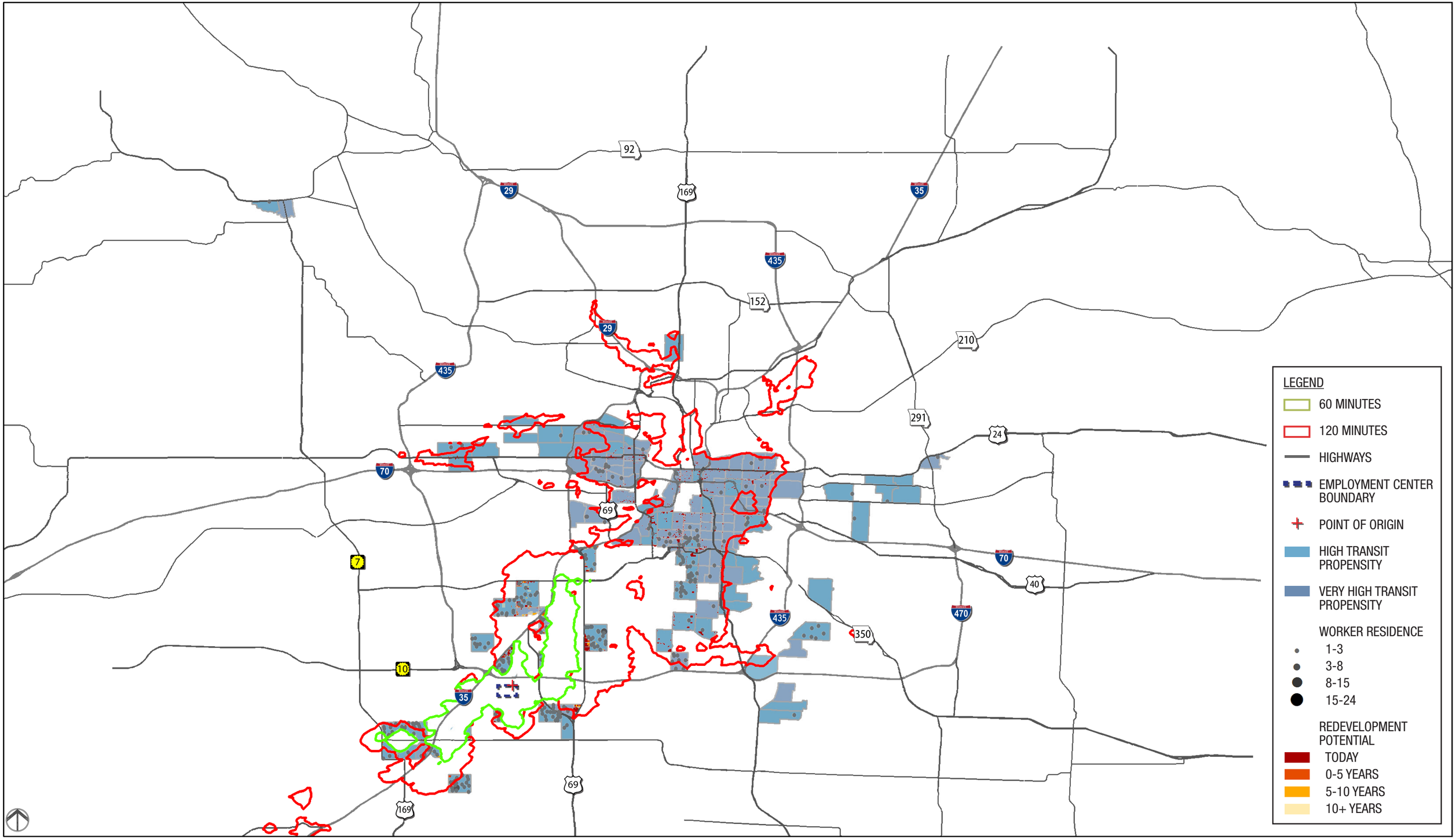
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS WITHIN 60 MINUTES

TRAVELSHED: 4 PM - 6 PM



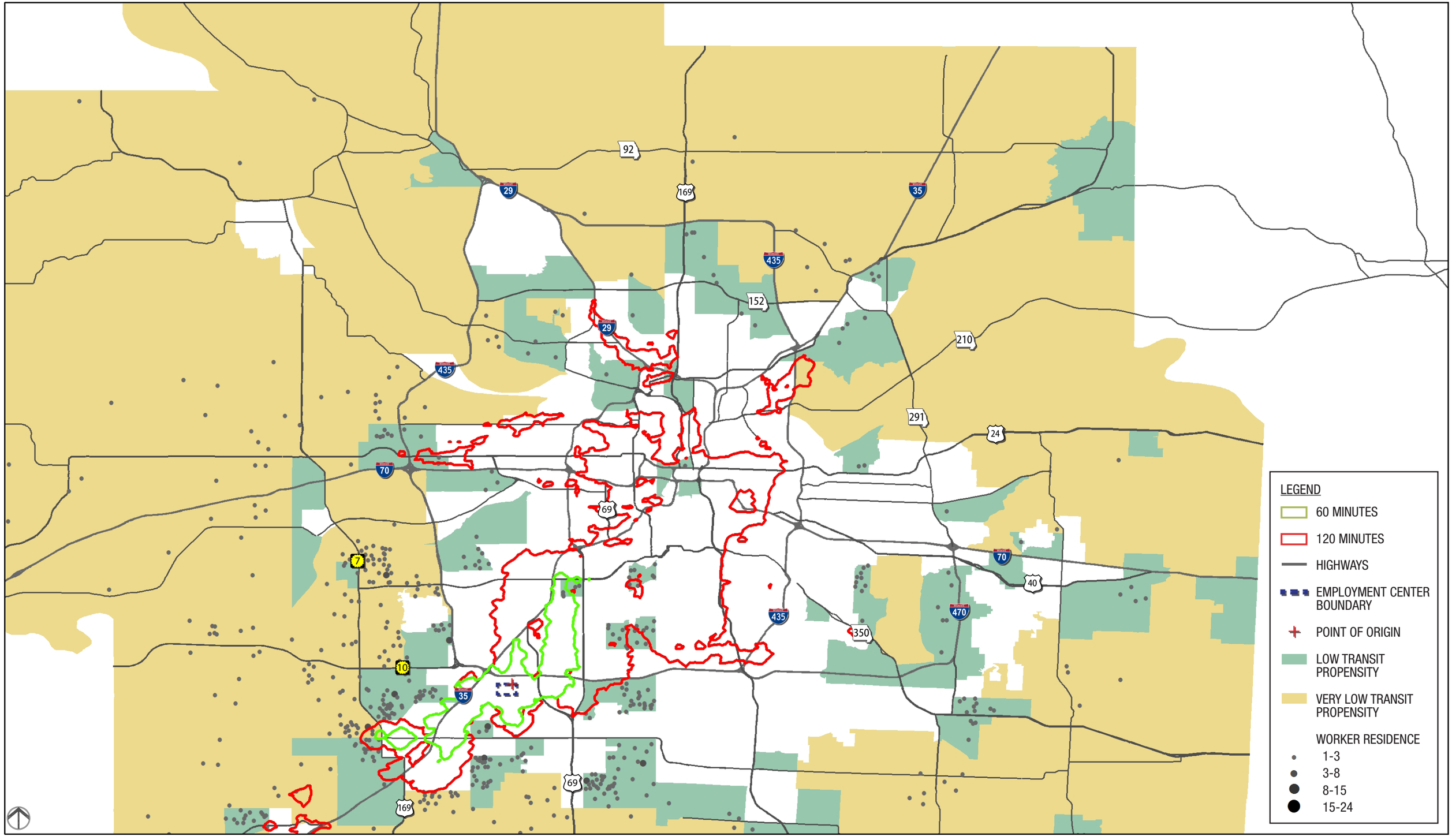
REDEVELOPMENT AREAS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



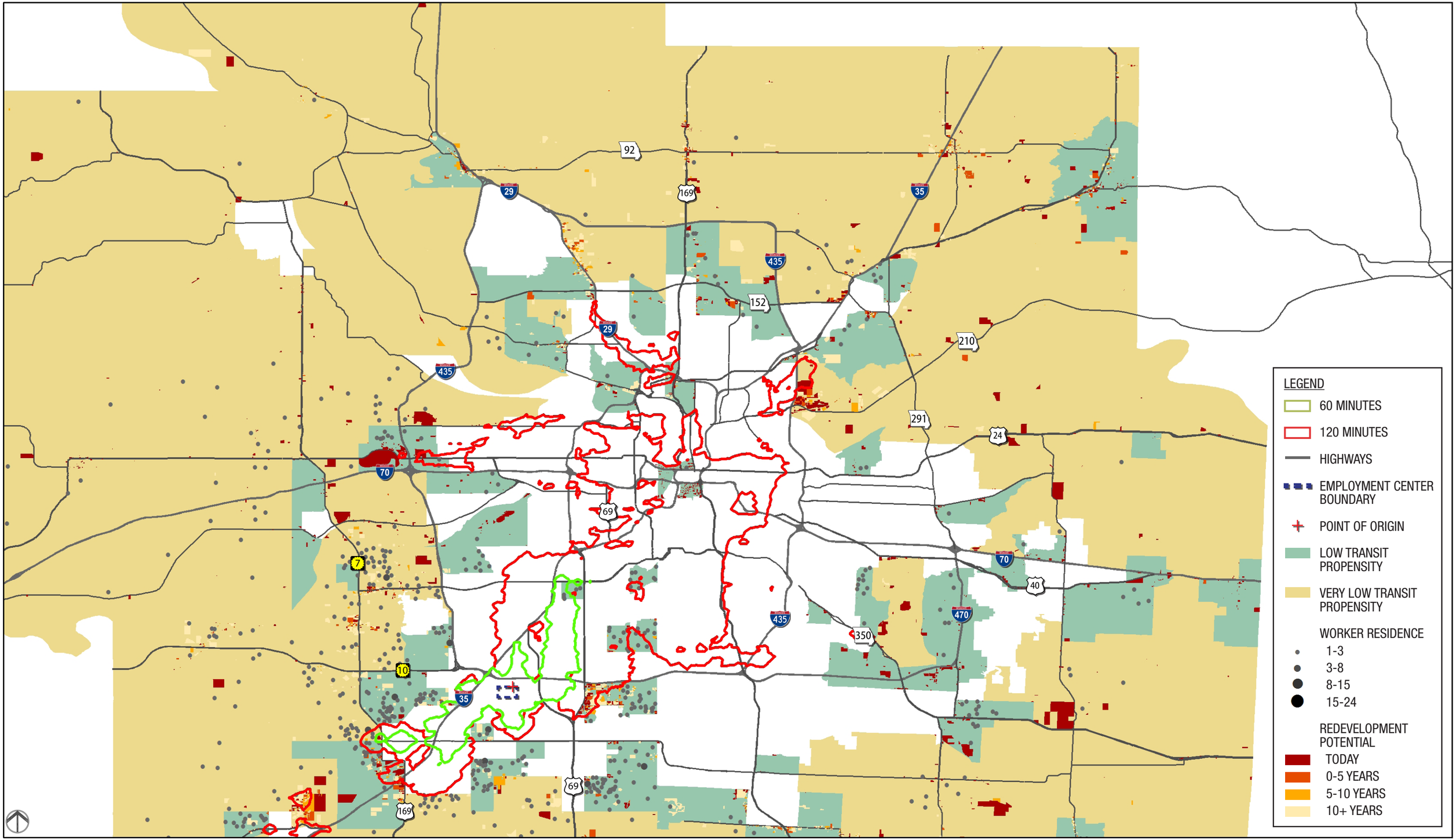
WORKERS IN HIGH & VERY HIGH TRANSIT PROPENSITY AREAS + REDEVELOPMENT AREAS BETWEEN 60-120 MINUTES

TRAVELSHED: 4 PM - 6 PM



WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY AREAS: 787

TRAVELSHED: 4 PM - 6 PM



WORKERS IN LOW AND VERY LOW TRANSIT PROPENSITY AREA + REDEVELOPMENT POTENTIAL

TRAVELSHED: 4 PM - 6 PM

JCCC Pilot

Recommendations and Outcomes

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in JCCC Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Mobility Hub Primary Deployment Secondary Deployment											
Mobility Strategies											
Fixed Route Transit										There are a number of colleges and universities that have coordinated services, fares, policies, etc. to integrate transit options as a family of services - need to develop with JCCC.	UC Santa Cruz, CUMTD (Illinos), Cornell, SUNY Alabany
	Services in Johnson County that are a part of the fast and frequent network are listed below.		Phasing based on system development plans								
	These, in conjunction with other services, would provide connections similar to the prior grid concept. 556 Metcalf (from 135th)/Plaza Connex- 15 minute headways with 18 hours of service (5AM-11PM) 7 days 575 75th/Quivera (with Troost connection) - 15 minute headways with 18 hours of service (5AM-11PM) 7 days Johnson/Shawnee Mission - 30 minute headways with 18 hours of service (5AM-11PM) 7 days 95th/Bannister - 30 minute headways with 18 hours of service (5AM-11PM) 7 days College - 30 minute headways with 18 hours of service (5AM-11PM) 7 days	KCATA/Johnson County		KCATA/ Johnson County							

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in JCCC Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
	135th - 30 minute headways with 18 hours of service (5AM-11PM) 7 days Olathe Express - 30 minute peak/60 minute off peak service with 18 hours of service (5AM-11PM) 7 days										
Non-Fixed Route Transit	Services more readily augmented by other options as described below	MARC/KCATA	ongoing	TBD							
Carpool	Participate in Regional RideShare database to increase pool of potential carpool matches	MARC, Employers/JCCC	Ongoing	none	Low-Medium	Low-Medium	High (no additional cost)	Replicable for large college campus		JCCC participates in RideShareCarpooling is very popular on	Many college campuses nation-wide use carpooling as a TMD strategy to reduce parking requirments and congestion
	Provide preferred parking space or discounted permits for carpooling	Employers/JCCC		cost of signage							
	Promote Guaranteed Ride Home program to support alternative commute options	MARC/ Employer/JCCC	Ongoing	none							
Vanpool	Promote vanpooling, especially from locations in Kansas with no transit access and > 15 mile travel distance	KCATA, MARC, JCCC	Priority after RFP closes	Subsidy from employer/JCCC	Medium	Medium	High-riders pay most of cost	Replicable for large college campus	7-20 riders per van	The Lenexa EPA office has largest number of vanpools in the region	Vanpools at Santa Monica Community College http://www.smc.edu/StudentServices/transportation/Pages/Vanpool-infomration-.aspx
	Provide preferrential parking for vanpools	Employer/JCCC									
	Promote Guaranteed Ride Home program to support alternative commute options	MARC/ Employer/JCCC	ongoing								
Car Share	Provide carshare vehicle parking and contract with carshare provider to give access to cars for mid-day trips	JCCC, Carshare company	priority	cost of signage/parking	Enabling strategy for carpool, vanpool, transit, bike	Low	High-users pay most of cost	Replicable for large college campus	Each carshare vehicle replaces up to 13 private vehicles		Portland Community College carshare https://www.pcc.edu/resources/parking/car-sharing.html

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in JCCC Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Bike Share	Integrate B-Cycle into Employee Wellness Program	Employer	Short term but dependent on station instalation	Cost dependent on subsidy. For example,				Business model has affects the repicablity program across jurisdictions and transit service boundaries			
	Sponsor bikeshare station on property or nearby	Employer Co-op	High Priority	Example, a station with 10 docks and 5 bike will cost $26,000 capital cost and 8,000 annual maintence. Increased configurations have an economy of scale to reduce the per dock and bike cost, but maintence cost are less elastic. Federal subsidized programs require 20% local match. Customized matches may increase match to grow system more quickly.	Depends on several factors: location and quality of stations; the bicycle level of service for roadways within the bike travel shed and proximity of mixed use with in the bike travel shed. The average one way bike trip length is 1.8 miles. Comuters are less likely to use tranit if bicycling more expedient. Average bicycle speed is 12 mph.	Depends on several factors including but not lmited to: transit service combined with first mile last mile opportunties; bike share station locations quality of stations, the quality of the bicyle level of service for roadways within the first mile and last mile of the bike travel shed. The average one way bike trip length is 1.8 miles. Average bicycle speed is 12 mph.			Impacts two types of trips: bike only trips within activity centers and first/last mile options for transit users. Trips invovling transit are limited to bike carrier capasity.		
	Provide B-Cycle membership subsidies through employer, local government, or other membership organizations	Employer/Overland ParkOther	Short term but dependent on station instalation	Employee Discount Program offers subsidized membership ($65 Annual Fee) or Corporate Membership Program (customized packages) offers free membership to empoyees							
First/Last Mile Transit	On campus distribution										
Bicycle Connections	There is a network of on-road shared lane bicycle friendly collectors combine with off road stream trails systems A map of existing bikeways and trails is shown below along with Park-and-Ride Lots.	City of Overland Park	Long Term	Cost included in maintance overlay	high	medium	Low over 20 year life	Highly replicable	Increased ridership from expanded travel shed.		

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in JCCC Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Pedestrian Connections	All transit routes should be evaluated for ADA pedestrian accessibility. Intersections should be evaluated pedestrian crossings and pedestrian signal accommodations to make crossing safe and convenient	City of Overland Park	Long Term	Cost may require reconstruction and signal upgrades	medium	medium	Low over 20 year life	Highly replicable	Increased ridership from expanded travel shed.		
Communication Strategies	Broaden RideKC website to emphasize full range of mobility options	KCATA/MARC	High Priority - Need to back up with operating performance for public confidence	Capital and maintenance upkeep						Prerequisite for strong regional program and would assist all pilot sites	SFMTA, Tri-Met, DART
	Consider broader us of apps	KCATA/MARC	All apps and technology need to be integrated and seamless to customers							Same as above, need to be integrated	
	Utilize more real-time communications methods	KCATA/MARC	Same as above, could include on board fare payments, etc								
Technology Strategies	Regional Mobility fare/ticketing that will include the full range of mobility options	KCATA/Private partners	Needs to be integrated and coordinated as part of communication strategy							Same as above, need to be integrated	
Urban Design Strategies											
	Encourage affordable housing opportunities to be integrated into future development and redevelopment initiatives	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO	Long Term	$ low							
	Promote new development and revitalization projects to include multi-modal connectivity by providing sidewalks, bicycle facilities, and pedestrian amenities.	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO	Short Term	$ low							

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in JCCC Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
	Explore options for a new mobility hub / transit center location that is more accessible to existing jobs and residents in the area. The future site should have great visibility from existing street network, and should be connected with existing sidewalks and bicycle network.	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO / KCATA / Existing Land Owners	Short Term	$$$ high							
	Adopt focused and integrated land use master plans and development policies/regulations around a future transit station (mobility hub) and along identified transit corridors to bolster existing and proposed transit routes, hubs and stations	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO	Short Term	$ low							
	Create catalytic economic development opportunities for new high-density residential, commercial, and mixed-use development/revitalization within walking distance of existing or future transit station (mobility hub), and along designated transit route corridors through the use of attractive development incentives, taxing districts to assist in funding transit/transportation improvements, density bonuses, or other programs.	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO / Private Developers	Long Term	$$ medium							
	Integrate future transit station/stop locations and other multi-modal facilities into the design of proposed development projects to encourage ridership and access to amenities and services offered by the new development.	Overland Park / Olathe / Lenexa / Shawnee / Mission / Merriam / Leawood / Lee's Summit / KCMO / KCATA/ Private Developers	Long Term	$ low							
Supporting Policies											

Recommendations					Estimated Outcomes					Engagement	
Strategy		**Currently Responsible Organization**	**Phasing/ Timeframe**	**Cost**	**Increase in JCCC Pilot Area Worker Accessibility**	**Increase in Regional Job Accessibility**	**Effectiveness (cost per unit of increase)** *(High-Medium-Low)*	**Replicability Considerations** *(narrative)*	**Potential Impact of Replicated Deployment**	**Stakeholder Interest**	**Stories to Make the Case**
Business											
Government											
Institutional Infrastructure											

Johnson County Grid Pilot - Johnson County Community College

Fixed Route Transit Access Evaluation

	Average Access to JCCC Jobs								Average Access to Total Regional Jobs							
	Baseline		**Planned**			**Full Grid**			**Baseline**		**Planned**			**Full Grid**		
	Within 60 minutes		Within 60 minutes			Within 60 minutes			Within 60 minutes		Within 60 minutes			Within 60 minutes		
	Number of Workers	Percent	Number of Workers	Percent	Percent change from Baseline	Number of Worker	Percent	Percent change from Baseline	Number of Jobs	Percent	Number of Jobs	Percent	Percent Change	Number of Jobs	Percent	Percent Change
Current workers	55,538	5.67%	71,992	7.35%	29.6%	139,029	14.20%	150.3%	40,230	4.2%	41,142	4.3%	2.3%	59,527	6.2%	48.0%
Future workers	-	-	-	-	-	-	-	-								
Worker age																
Age 29 or younger	13,403	6.0%	17,295	7.7%	29.0%	31,831	14.2%	137.5%	44,705	4.6%	45,559	4.7%	1.9%	63,319	6.6%	41.6%
Age 30 to 54	29,758	5.4%	38,459	7.0%	29.2%	75,176	13.8%	152.6%	38,861	4.0%	39,768	4.1%	2.3%	57,676	6.0%	48.4%
Age 55 or older	12,375	5.9%	16,237	7.8%	31.2%	32,022	15.4%	158.8%	38,952	4.0%	39,939	4.1%	2.5%	60,249	6.2%	54.7%
Worker income																
$1,250 per month or less	13,298	5.6%	17,256	7.3%	29.8%	32,653	13.7%	145.5%	44,013	4.6%	44,791	4.6%	1.8%	61,563	6.4%	39.9%
$1,251 to $3333 per month	18,379	5.6%	23,482	7.2%	27.8%	41,315	12.6%	124.8%	44,617	4.6%	45,398	4.7%	1.8%	60,971	6.3%	36.7%
More than $3,333 per month	23,860	5.8%	31,253	7.5%	31.0%	65,061	15.7%	172.7%	34,558	3.6%	35,652	3.7%	3.2%	57,197	5.9%	65.5%
Worker race																
White Alone	47,922	5.8%	62,034	7.6%	29.4%	120,955	14.7%	152.4%	34,830	3.6%	35,815	3.7%	2.8%	55,213	5.7%	58.5%
Black or African American Alone	4,629	4.0%	6,094	5.3%	31.6%	10,213	8.8%	120.6%	74,503	7.7%	74,943	7.8%	0.6%	85,163	8.8%	14.3%
American Indian or Alaska Native Alone	250	4.6%	342	6.3%	36.8%	631	11.6%	152.4%	45,297	4.7%	46,239	4.8%	2.1%	60,839	6.3%	34.3%
Asian Alone	1,933	8.5%	2,494	10.9%	29.0%	5,377	23.6%	178.2%	43,967	4.6%	44,920	4.7%	2.2%	72,968	7.6%	66.0%
Native Hawaiian or Other Pacific Islander alone	42	3.7%	56	4.9%	33.3%	86	7.5%	104.8%	40,762	4.2%	41,053	4.3%	0.7%	49,703	5.2%	21.9%
Two or More Race Groups	760	6.0%	969	7.6%	27.5%	1,765	13.9%	132.2%	45,065	4.7%	45,858	4.8%	1.8%	62,705	6.5%	39.1%
Worker sex																
Male	27,622	5.6%	35,840	7.3%	29.8%	69,834	14.2%	152.8%	39,761	4.1%	40,648	4.2%	2.2%	59,130	6.1%	48.7%
Female	27,916	5.7%	36,151	7.4%	29.5%	69,195	14.2%	147.9%	40,699	4.2%	41,636	4.3%	2.3%	59,922	6.2%	47.2%
Worker Educational Attainment																
Less than High School	4,072	5.3%	5,242	6.8%	28.7%	9,663	12.5%	137.3%	46,631	4.8%	47,380	4.9%	1.6%	62,995	6.5%	35.1%
High school or equivalent, no college	10,929	5.1%	14,158	6.6%	29.5%	27,056	12.6%	147.6%	39,695	4.1%	40,495	4.2%	2.0%	56,836	5.9%	43.2%
Some college or Associate degree	13,306	5.5%	17,259	7.1%	29.7%	33,725	13.9%	153.5%	38,325	4.0%	39,249	4.1%	2.4%	57,258	5.9%	49.4%
Bachelor's degree or advanced degree	13,826	6.3%	18,036	8.2%	30.4%	36,752	16.8%	165.8%	35,959	3.7%	37,086	3.8%	3.1%	59,525	6.2%	65.5%

Johnson County Grid Pilot - Johnson County Community College

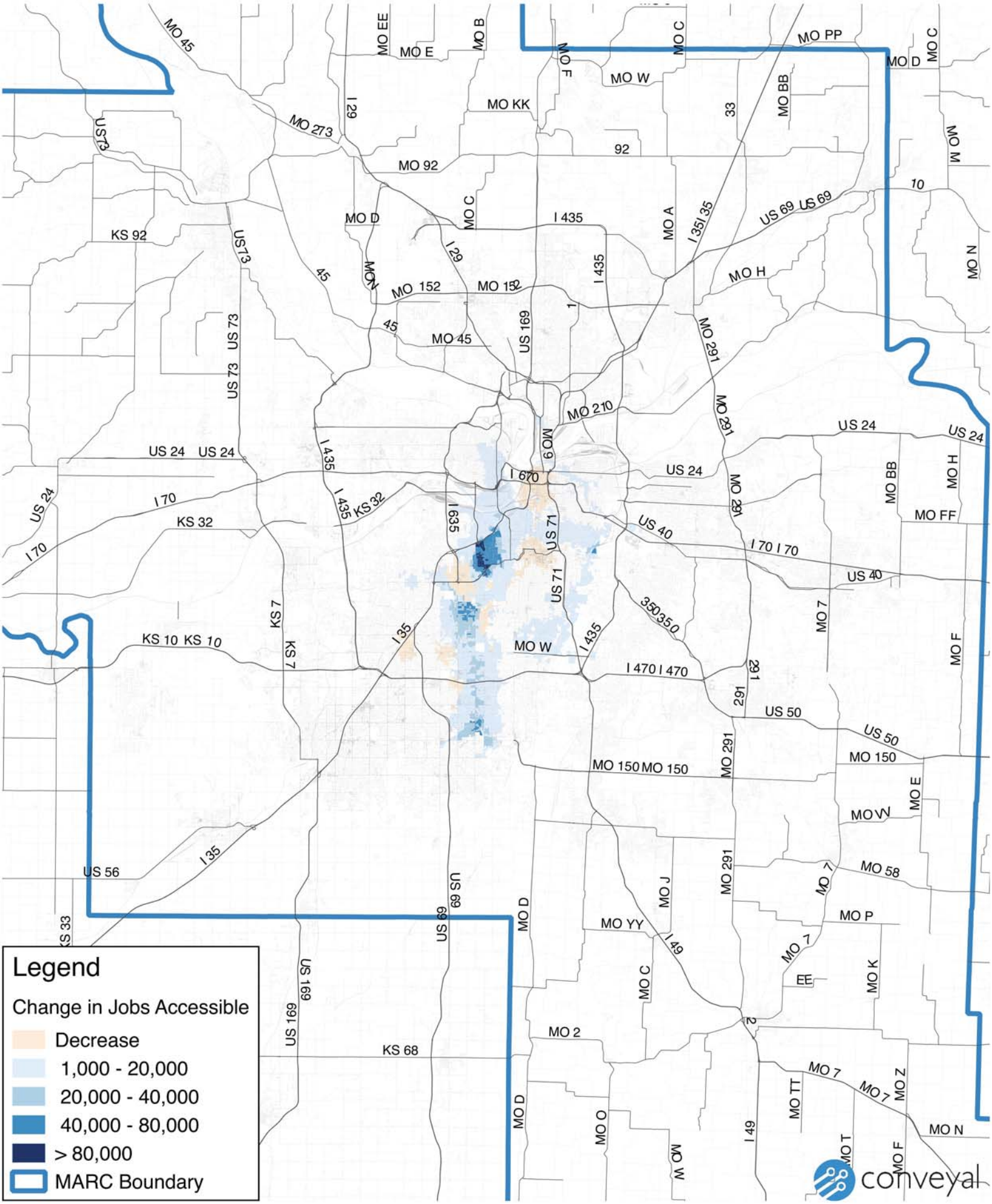
Fixed Route Transit Access Evaluation

	Average Access to JCCC Jobs								Average Access to Total Regional Jobs							
	Baseline		Planned Service			Priority Grid			Baseline		With Recommendations			With Recommendations		
	Workers within 60 minutes		Workers within 60 minutes			Workers within 60 minutes			Jobs within 60 minutes		Jobs within 60 minutes			Jobs within 60 minutes		
	Number	Percent	Number	Percent	Percent change from Baseline	Number	Percent	Percent change from	Number	Percent	Number	Percent	Change	Number	Percent	Change
Current workers	53,274	5.44%	70,332	7.19%	32.0%	85,624	8.75%	60.7%	40,233	4.2%	41,170	4.3%	2.3%	50,221	5.2%	24.8%
Future workers	-	-	75,875	-	42.4%	91,620	-	72.0%								
Worker age																
Age 29 or younger	12,873	5.7%	16,914	7.5%	31.4%	20,177	9.0%	56.7%	44,708	4.6%	45,599	4.7%	2.0%	54,270	5.6%	21.4%
Age 30 to 54	28,548	5.2%	37,583	6.9%	31.6%	45,770	8.4%	60.3%	38,864	4.0%	39,793	4.1%	2.4%	48,471	5.0%	24.7%
Age 55 or older	11,852	5.7%	15,834	7.6%	33.6%	19,676	9.5%	66.0%	38,955	4.0%	39,958	4.1%	2.6%	50,401	5.2%	29.4%
Worker income																
$1,250 per month or less	12,748	5.4%	16,870	7.1%	32.3%	20,424	8.6%	60.2%	44,016	4.6%	44,806	4.6%	1.8%	53,070	5.5%	20.6%
$1,251 to $3333 per month	17,606	5.4%	22,998	7.0%	30.6%	27,012	8.3%	53.4%	44,621	4.6%	45,420	4.7%	1.8%	53,136	5.5%	19.1%
More than $3,333 per month	22,919	5.5%	30,462	7.4%	32.9%	38,188	9.2%	66.6%	34,561	3.6%	35,691	3.7%	3.3%	46,255	4.8%	33.8%
Worker race																
White Alone	46,022	5.6%	60,605	7.4%	31.7%	74,139	9.0%	61.1%	34,832	3.6%	35,858	3.7%	2.9%	45,362	4.7%	30.2%
Black or African American Alone	4,395	3.8%	5,961	5.2%	35.6%	6,648	5.8%	51.3%	74,509	7.7%	74,856	7.8%	0.5%	80,301	8.3%	7.8%
American Indian or Alaska Native Alone	239	4.4%	335	6.2%	40.2%	402	7.4%	68.2%	45,300	4.7%	46,289	4.8%	2.2%	53,060	5.5%	17.1%
Asian Alone	1,850	8.1%	2,423	10.6%	31.0%	3,268	14.3%	76.6%	43,970	4.6%	44,975	4.7%	2.3%	58,288	6.0%	32.6%
Native Hawaiian or Other Pacific Islander alone	41	3.6%	55	4.8%	34.1%	59	5.2%	43.9%	40,769	4.2%	41,116	4.3%	0.9%	45,383	4.7%	11.3%
Two or More Race Groups	725	5.7%	951	7.5%	31.2%	1,105	8.7%	52.4%	45,068	4.7%	45,864	4.8%	1.8%	54,271	5.6%	20.4%
Worker sex																
Male	26,515	5.4%	34,994	7.1%	32.0%	42,924	8.7%	61.9%	39,764	4.1%	40,683	4.2%	2.3%	49,736	5.2%	25.1%
Female	26,758	5.5%	35,337	7.3%	32.1%	42,700	8.8%	59.6%	40,702	4.2%	41,655	4.3%	2.3%	50,704	5.3%	24.6%
Worker Educational Attainment																
Less than High School	3,905	5.0%	5,130	6.6%	31.4%	6,132	7.9%	57.0%	46,635	4.8%	47,413	4.9%	1.7%	55,065	5.7%	18.1%
High school or equivalent, no college	10,472	4.9%	13,823	6.4%	32.0%	16,906	7.9%	61.4%	39,698	4.1%	40,511	4.2%	2.0%	48,601	5.0%	22.4%
Some college or Associate degree	12,764	5.3%	16,862	6.9%	32.1%	20,450	8.4%	60.2%	38,328	4.0%	39,269	4.1%	2.5%	48,111	5.0%	25.5%
Bachelor's degree or advanced degree	13,258	6.1%	17,602	8.0%	32.8%	21,957	10.0%	65.6%	35,962	3.7%	37,116	3.8%	3.2%	48,235	5.0%	34.1%

APPENDIX B: CHANGE IN JOB ACCESS MAPS

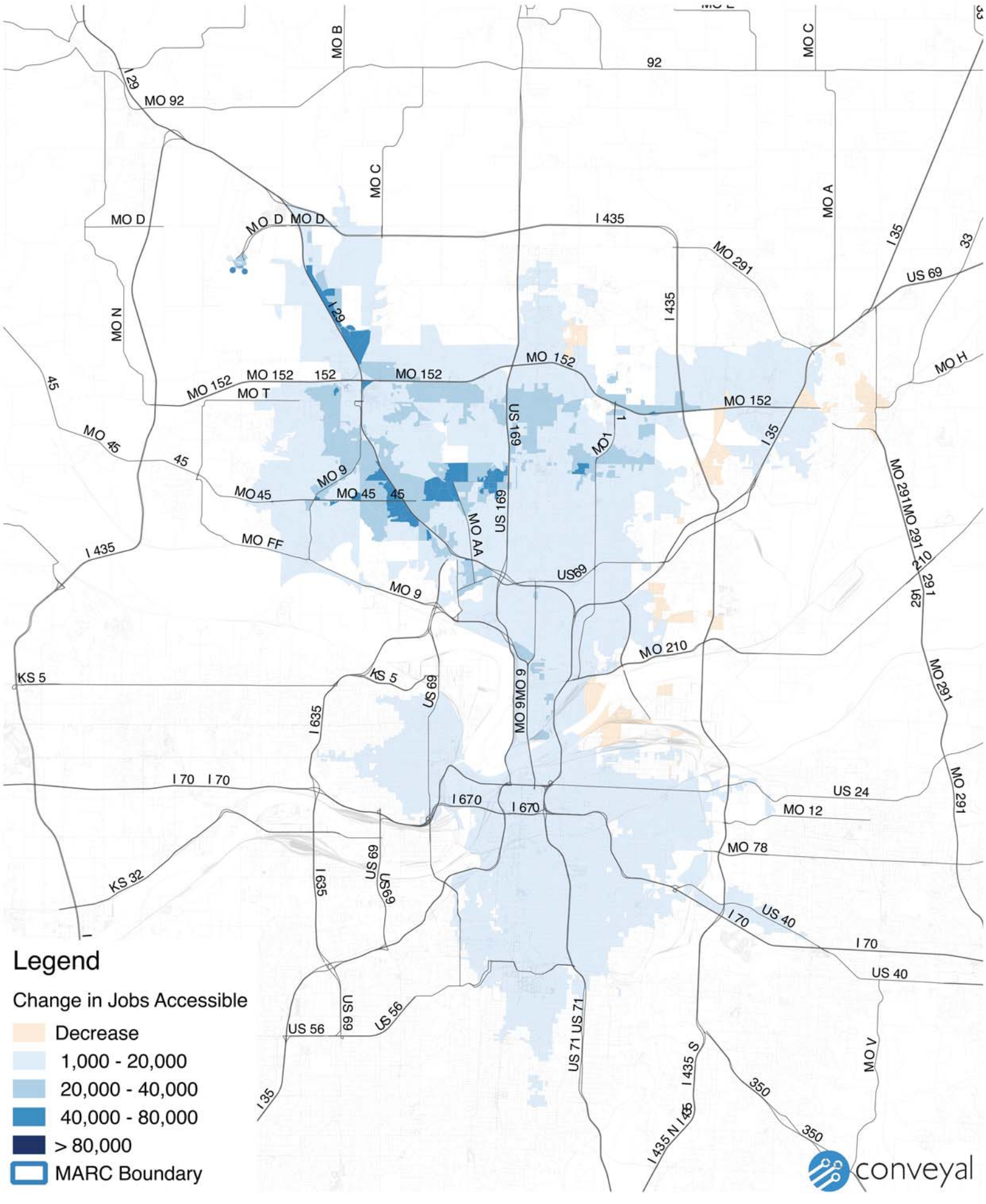
Change in Jobs Accessible

KU Medical Campus & Neighborhoods fixed-route recommendations



Change in Jobs Accessible

KCI & Zona Rosa fixed-route recommendations



Legend

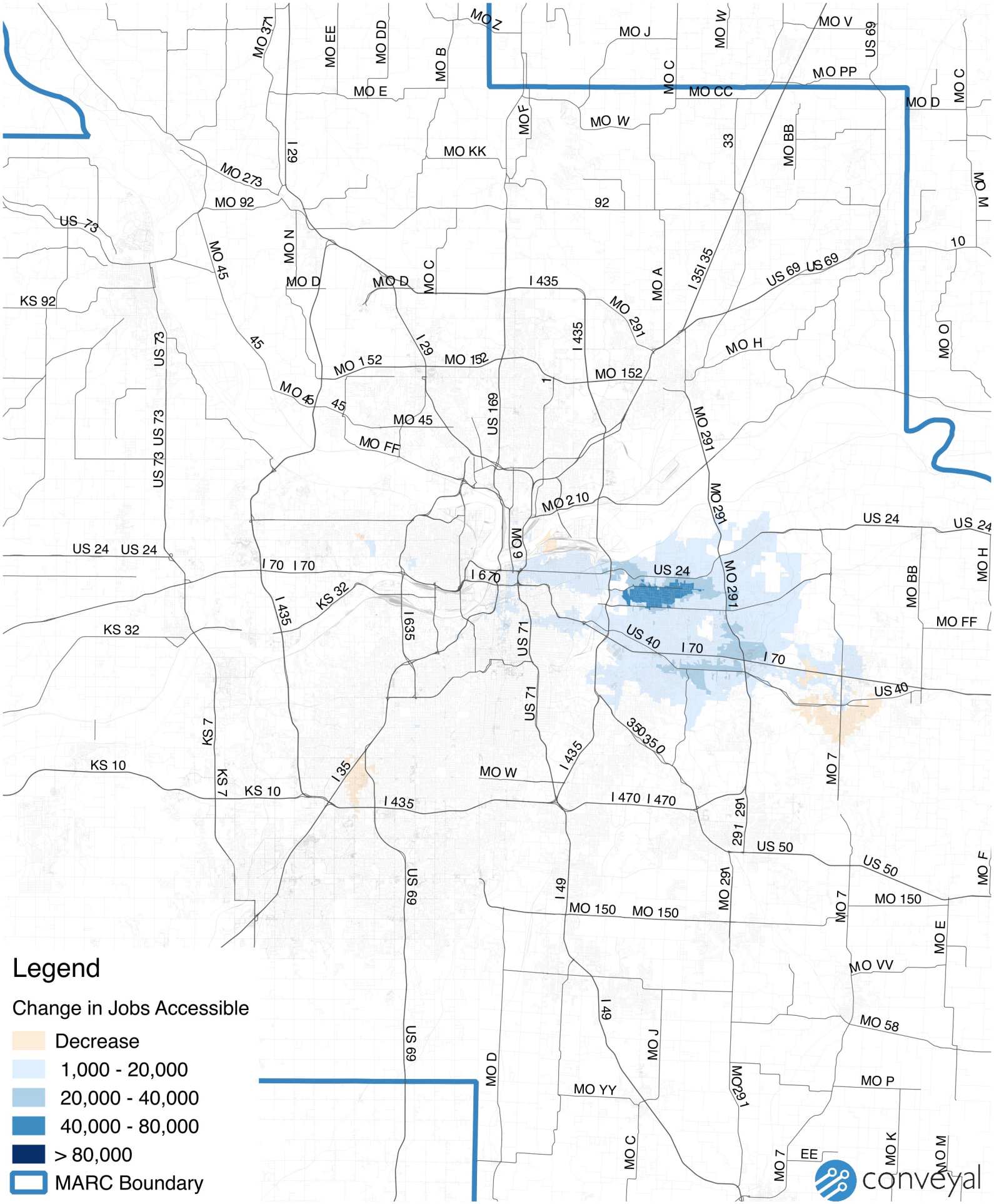
Change in Jobs Accessible

- Decrease
- 1,000 - 20,000
- 20,000 - 40,000
- 40,000 - 80,000
- > 80,000
- MARC Boundary

conveyal

Change in Jobs Accessible

Independence Center fixed-route recommendations



Legend

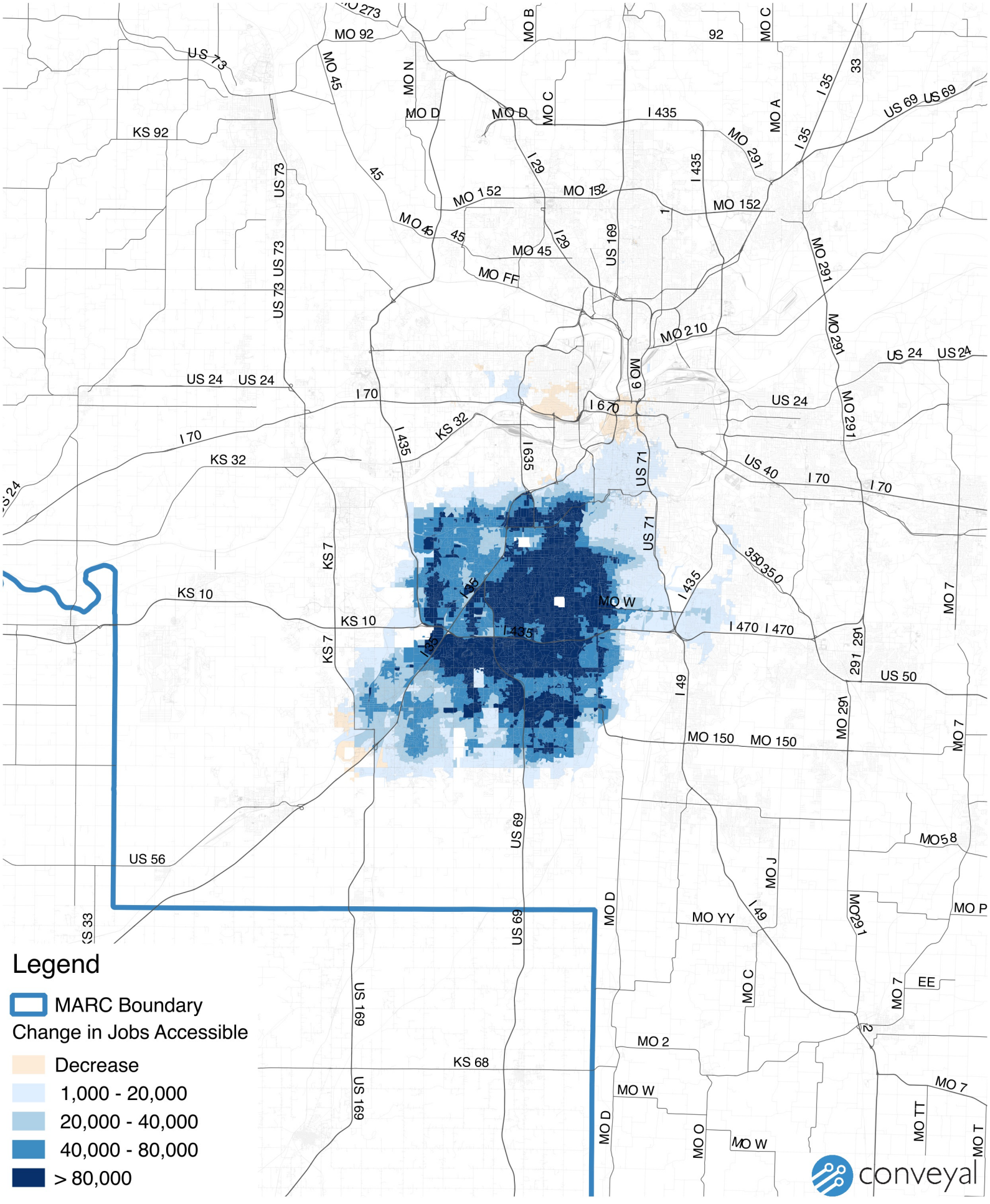
Change in Jobs Accessible

- Decrease
- 1,000 - 20,000
- 20,000 - 40,000
- 40,000 - 80,000
- > 80,000
- MARC Boundary

conveyal

Change in Jobs Accessible

Johnson County Transit Recommendations, vs. baseline



Change in Jobs Accessible

Johnson County Priority Grid, vs. baseline