

# Appendix D

## Environmental Justice Methodology Technical Memorandum

I-290 Eisenhower Expressway  
Cook County, Illinois

*Prepared For:*

Illinois Department of Transportation

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# 1.0 Background

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This memo describes the proposed process for the Environmental Justice (EJ) assessment for the I-290 Study and includes some of the results of the analysis, which are summarized in the Draft Environmental Impact Statement (DEIS). The goal of an EJ assessment is to evaluate a proposed federal project based on potential disproportionately high and adverse impacts to minority and low-income populations and make provisions so that those groups are treated fairly during, and can participate in, decision-making processes related to proposed federal projects. To guide federal agencies in achieving this goal, Executive Order 12898 was issued entitled: “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” on February 11, 1994.

The Executive Order states that “each Federal agency shall make achieving EJ part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” Pursuant to the Executive Order, the Federal Highway Administration (FHWA) has adopted FHWA Order 6640.23A, “FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” dated June 14, 2012.

FHWA Order 6640.23A defines the term “adverse effects” to include “the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects,” which may include, but are not limited to: bodily impairment, infirmity, illness, or death; air, noise, and water pollution and soil contamination; destruction or disruption of human-made or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community’s economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of benefits of FHWA programs, policies, or activities.

In terms of transportation policy, the EJ framework contains three fundamental principles:

1. To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations;
2. To ensure full and fair participation by all potentially affected communities in the transportation decision-making process; and

3. To prevent the denial of, reduction in, or considerable delay in the receipt of benefits by minority and low-income populations.<sup>1</sup>

Under FHWA Order 6640.23A, a minority is defined as a person who is:

- **Black:** A person having origins in any of the black racial groups of Africa;
- **Hispanic or Latino:** A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
- **Asian American:** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent;
- **American Indian and Alaskan Native:** A person having origins in any of the original people of North America, South America (including Central America) and who maintain cultural identification through tribal affiliation or community recognition; or
- **Native Hawaiian or Other Pacific Islander:** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Under FHWA Order 6640.23A, low income is defined as a person whose median household income is at or below the Department of Health and Human Services poverty guidelines.

## 2.0 Defining Environmental Justice Populations in the Study Area

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For this assessment, the data has been aggregated as White, Black, Asian, and Other. The Other category represents the sum of several US Census classifications, including American Indian and Alaskan Native, Native Hawaiian and Pacific Islander, Other Races, and those identified by two or more races.

As presented in FHWA Order 6640.23A, Hispanic or Latino populations are classified as a minority group, regardless of race. Consistent with the US Census data, Hispanic or Latino origins are considered as ethnicity data and a separate designation from race data.

According to the US Census Bureau, the terms "Hispanic" or "Latino" refer to persons who trace their origin or descent to Mexico, Puerto Rico, Cuba, Spanish speaking Central and South America countries, and other Spanish cultures. Origin can be considered as the heritage, nationality group, lineage, or country of the person or the person's parents or ancestors before their arrival in the US. People who identify their origin as Hispanic

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<sup>1</sup> FHWA, 2000. [http://www.fhwa.dot.gov/environment/environmental\\_justice/](http://www.fhwa.dot.gov/environment/environmental_justice/)

or Latino may be of any race, consistent with the FHWA Order 6640.23A. Thus, the percent Hispanic was not added to percentages for racial categories.

Under FHWA Order 6640.23A, low-income is defined as a person whose median household income is at or below the US Department of Health and Human Services (HHS) poverty guidelines.

Compliance with EJ requirements is evaluated by identifying and assessing potential impacts to minority and low-income populations within the identified Study Area.

As defined by the US Census Bureau, census block groups generally contain between 600 and 3,000 people, and usually cover a contiguous area that does not cross state, county, or census tract boundaries. In conducting these assessments, available data for census block groups on population demographics is taken from the US Census and other sources.

For the purpose of comparison, there are two geographic units analyzed. The first, the affected community (AC), is defined as any census block group that is overlapped by the Study Area. The second, the Community of Comparison (COC), is a larger geographic unit that contains all of the alternatives; for the purposes of this study – it is Cook County, Illinois.

## 2.1 Determination of Meeting the Minority or Low-income Threshold

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To identify concentrated racial and ethnic minority and low-income populations, 2010 Census block groups that met the following threshold criteria were classified as an EJ population of concern:

- If the AC population is more than 50 percent minority, ethnicity or low-income, or
- If the percentage of low-income, ethnicity or minority population in the AC is 10 percent greater than the percentage of low-income, ethnicity, or minority population in the COC.

## 2.2 Output of Environmental Justice Definition

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The output of the definition of EJ concentrations is a series of GIS-based maps and tables. Due to the length of the corridor, the corridor is subdivided for readability. There are three sets of maps (Appendices A, B, and C): 1) minority status; 2) Hispanic/Latino ethnicity status; and 3) low income status, with two shading types depending on if the AC population is 50 percent minority, ethnicity or low income or if it is 10 percent greater than that of the COC. These maps will also be used to define impacts in the EJ section of this Environmental Impact Statement (EIS). Demographic tables will accompany the maps quantifying 2010 US Census population data.

### 3.0 Describing the Engagement of Environmental Justice Populations

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In addition to analysis related to the EJ impacts of the proposed project, a component of EJ is the inclusion of EJ populations in the project planning process. As will be shown through the analysis in the EIS, EJ AC's are densely populated throughout the Study Area. To attempt to reach a diverse population throughout the Study Area, public meetings and other engagement tools have been used. To encourage participation, different engagement methods were employed and are documented in the I-290 EIS.

### 4.0 Methodology for Analyzing and Describing Potential Impacts to Environmental Justice Populations

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The build alternatives being evaluated in the I-290 EIS include capacity and lane management improvements on the mainline of I-290, interchange modifications, and other multimodal improvements. The EJ analysis considers these improvements in determining impacts. The following table presents the analysis undertaken by type in the EIS.

**Table 1. Environmental Justice Analysis by Impact Type**

Impact Type	Review Element	Methodology/Measure
<b>Mobility</b>	<p>Are interchange modifications providing consistent benefits/impacts throughout the Study Area?</p> <p>Does the design change access to/from residences or businesses?</p>	<p>Evaluate any right-of-way and traffic impacts of interchanges/cross roads as compared to the No Build Alternative. Since the interchanges are the same for all alternatives, the new interchange designs are compared with the 2040 No Build Alternative design.</p>
<b>Mobility</b>	<p>Does the occupancy requirement or cost of toll cause low income users to travel in more congested lanes, thereby increasing travel time?</p>	<p>Review travel time output from the travel demand model. This was done by reviewing trip tables at the transportation analysis zone level – and evaluating travel times. A series of maps was developed that compares all alternatives against the No Build Alternative for up to distinct EJ population origin and destinations versus overall changes in the Study Area to determine any disproportionate travel time impacts (Appendix D).</p>

Impact Type	Review Element	Methodology/Measure
<b>Mobility</b>	Does the cost of toll in the build alternatives (if applicable) cause travelers to divert onto local system into low income/minority neighborhoods as compared to the No Build Alternative?	Trip table output from the travel demand model will give point to point travel data. This allows us to understand the level of diversion that occurs based on the alternative. Compare all alternatives against the No Build Alternative to determine diversion onto the local road network.
<b>Mobility</b>	Do any of the alternatives affect transit users, bicyclists and pedestrians in a disproportionate way?	Qualitatively discuss improvements being made to bicycle and pedestrian facilities. Discuss if project improvements are impacting these users more than auto users.
<b>Safety</b>	<p>Does the cost of toll cause travelers to divert onto local system into low income/EJ neighborhoods (as compared to the No Build Alternative), which could pose a higher safety risk to neighborhood residents (bicycles, pedestrians and local drivers)?</p> <p>Will the alternatives impact (positive or negative) emergency response times to the AC/EJ populations as compared to the No Build Alternative?</p>	<p>Compare all alternatives against the No Build Alternative to determine traffic diversion onto the local road network from travel model. If significant traffic changes, determine impacts to safety and response times.</p> <p>Review national research on HOT/toll lanes relative to HOT/toll lane usage versus income.</p>
<b>Other</b>	Do any of the alternatives of the proposed project result in disproportionately adverse environmental effects in EJ communities?	Reiterate project impacts in the following environmental disciplines: Noise, Air quality, Section 4(f), Relocations, Public Services and Utilities, Land Use, Visual, Economic, and Cultural Resources. Where adverse effects are anticipated, discuss if these effects are concentrated in areas that have a higher percentage of EJ and low-income populations. There would be “disproportionately high and adverse” effects if, for example, all project-related noise impacts are concentrated in EJ communities.

## 5.0 Summary of Environmental Justice Findings

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There are minority and low-income EJ Populations in the Study Area. The project was examined to identify any disproportionately high adverse human effects on these



populations, to ensure that participation in the transportation decision-making process was full and fair, and to ensure that project benefits would be received by EJ communities in an equitable and timely manner.

To measure the effects, access to employment, non-motorized transportation and transit access to and from I-290 between 1<sup>st</sup> and 25<sup>th</sup> Avenues, and traffic effects on neighborhood arterials were examined from a transportation standpoint. Also, social and environmental factors such as community changes, noise, air quality, and historic properties were examined for disparate impacts between the EJ and non-EJ communities served by the project. The public involvement/community outreach efforts were identified, both as to location, frequency, and method of delivery.

No substantial differences in transportation access were found with any of the build alternatives with respect to EJ communities, as compared to non-EJ communities, and all build alternatives had benefits in job accessibility and non-motorized and transit access for EJ communities that were similar to non-EJ communities. Of the build alternatives, the HOT 3+ & TOLL alternative had a worse impact on 2040 arterial traffic than the No Build Alternative, while the other three build alternatives showed positive effects. Environmental effects such as those to air, noise, and social and economic resources (including construction impacts) were similar for both EJ and non-EJ communities, and no residences or businesses in either EJ or non-EJ communities are proposed to be displaced by any of the build alternatives. Public involvement was encouraged by the participation of representatives of EJ communities in the project's CAG study group, as well as traditional and non-traditional means of engaging the public in participation at public and community meetings. Though there will be impacts (noise and construction impacts in particular) to EJ and non-EJ communities along the Study Area, upon implementation of the planned mitigation, as described in this EIS, and coordinated with each community, the impacts will not be disproportionately high and adverse to EJ communities.

# Appendix A

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## Minority Populations

## **Minority Populations**

### Black/African American Populations

The geographic dispersion of Black/African American communities is presented in Figure 1. The Project Corridor for the I-290 Study consists of 167 census block groups. Of these 167 block groups, 98 have Black/African American populations that are 50 percent or more of the block group total or have Black/African American populations at least 10 percent higher than the Cook County average (24.6 percent). These block groups can be classified as EJ Populations.

Black/African American populations are the most predominant minority community within the Study Area, making up 33.4 percent of the Study Area population, according to the US Census Bureau 2013 estimates. The Study Area total of Black/African Americans is higher than the Cook County average of 24.6 percent.

One of the largest concentrations of Black/African American populations is in the eastern portion of the Study Area in the City of Chicago, primarily between Austin Boulevard and Ashland Avenue. Other concentrations of Black/African American populations are located in the western half of the Project Corridor, north of I-290 in Maywood and Bellwood, and south of I-290 in Broadview.

### Asian Populations

Thirteen block groups have Asian populations that are 50 percent or more of the block group total or have an Asian population at least 10 percent higher than the Cook County average (6.2 percent). These block groups can be classified as EJ Populations.

The geographic distribution of Asian populations can be seen in Figure 2. The largest concentration of Asian populations in the Project Corridor is found in Chicago between Damen Avenue and Ashland Avenue. Other areas of Asian populations that are 10 percent or greater than the Cook County average are found in Chicago, south of West Harrison Street, between Western and Ashland Avenues. The Village of Westchester also has an Asian population that is 10 percent greater than the Cook County average located between Wolf Road and US Route 45.

### Some Other Race

According to the US Census Bureau the 'Some Other Race' category includes all other responses not included in the 'White', 'Black or African American', 'American Indian and Alaska Native', 'Asian' and 'Native Hawaiian and Other Pacific Islander' race categories described above. Respondents providing write-in entries such as multiracial, mixed, interracial, or a Hispanic/Latino group (for example, Mexican, Puerto Rican, or Cuban) in the 'Some Other Race' category are included in the Some Other Race classification.

In the Project Corridor, there are concentrations of 'Some Other Race' populations dispersed across the corridor. As depicted in the Figure 3, most of the 'Some Other Race' populations are outside the EJ study area. The largest concentrations of 'Some Other

Race' populations are located in Cicero between Ridgeland Avenue east to Kostner Avenue, and from Roosevelt Road south to Cermak Road. Another concentration is located along Cermak Road in Chicago from Ashland Avenue east to I-94. Census block groups with populations of 'Some Other Race' that are 10 percent or greater than the Cook County average are also located in Maywood, Bellwood and Hillside in the western portion of the Project Corridor.

Of the 167 total block groups of the project area, 14 block groups had populations of individuals identifying themselves as 'Some Other Race' that made up 50 percent or greater than the block group's total population or are 10 percent higher than the Cook County Average. These block groups can be classified as EJ Populations.

#### Two or More Races Populations

Within the 167 block groups of the Project Corridor, there is one block group that is an EJ Population, because it has a population identifying as Two or More Races that was 10 percent higher than the Cook County average (1.8 percent) (Figure 4). This area is located north of Cermak Road, approximately between Ashland Avenue and Racine Avenue in Chicago.

#### Minority Populations

Block groups in the Project Corridor that are composed of 50 percent or more minority populations make up the majority of the block groups assessed. Of the 167 total block groups in the corridor, 109 contain 50 percent or greater minority populations, equating to 65.3 percent of all the block groups in the project corridor. The geographic dispersion of minority populations in the Project Corridor is detailed in Figure 5 through Figure 8. The maps show majority minority census block groups throughout the Project Corridor. The exceptions are largely in the far eastern portion of the Project Corridor in Chicago, the Villages of Oak Park, Forest Park, and River Forest.

Figure 1. Environmental Justice Analysis for Black/African American Populations by Census Block Group in the Project Corridor

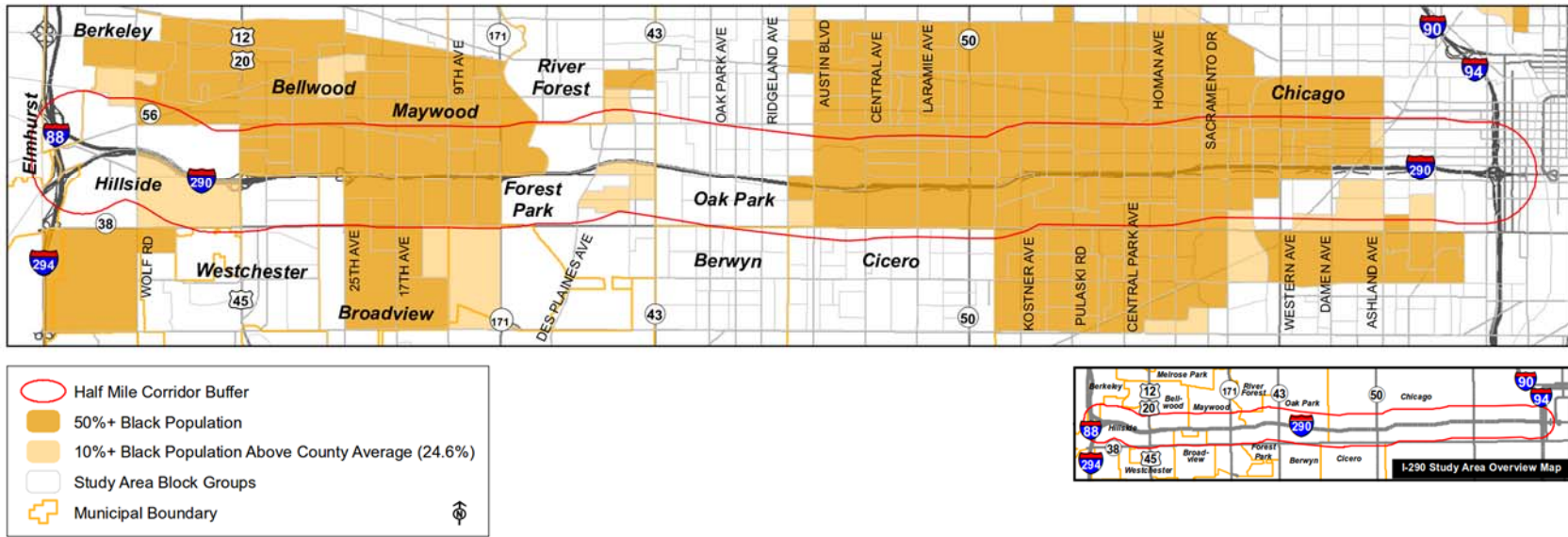


Figure 2. Environmental Justice Analysis for Asian Populations by Census Block Group in the Project Corridor

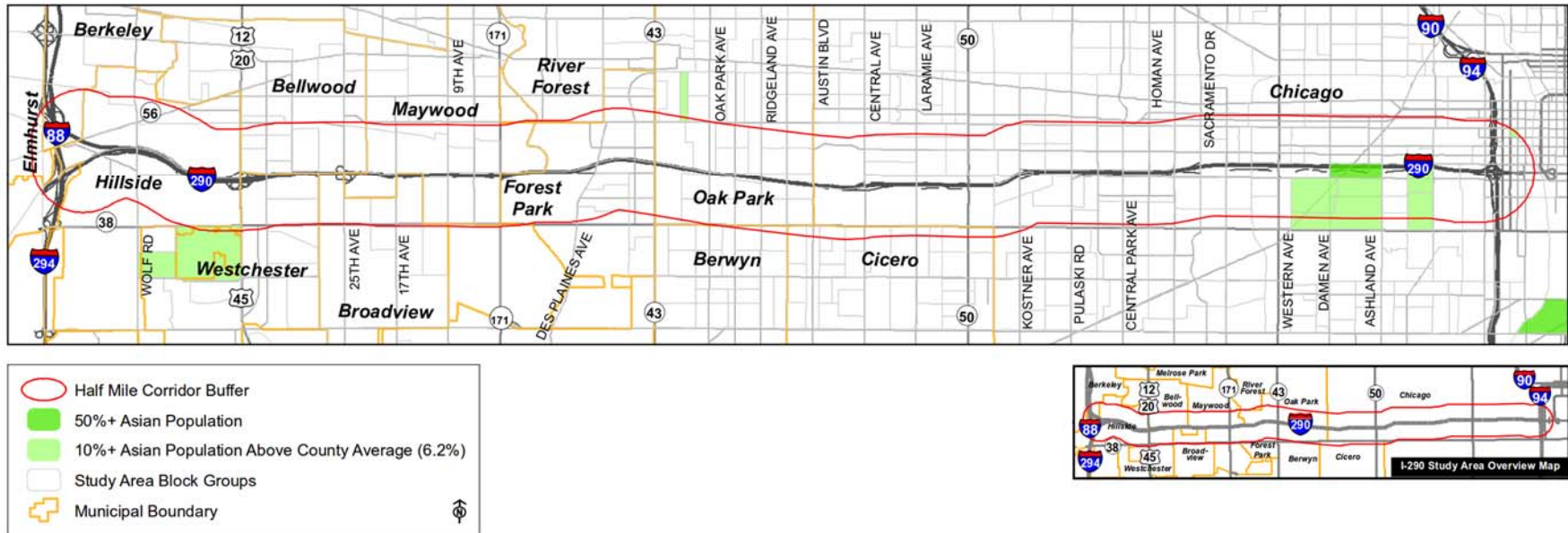


Figure 3. Environmental Justice Analysis for Some Other Race Populations by Census Block Group in the Project Corridor

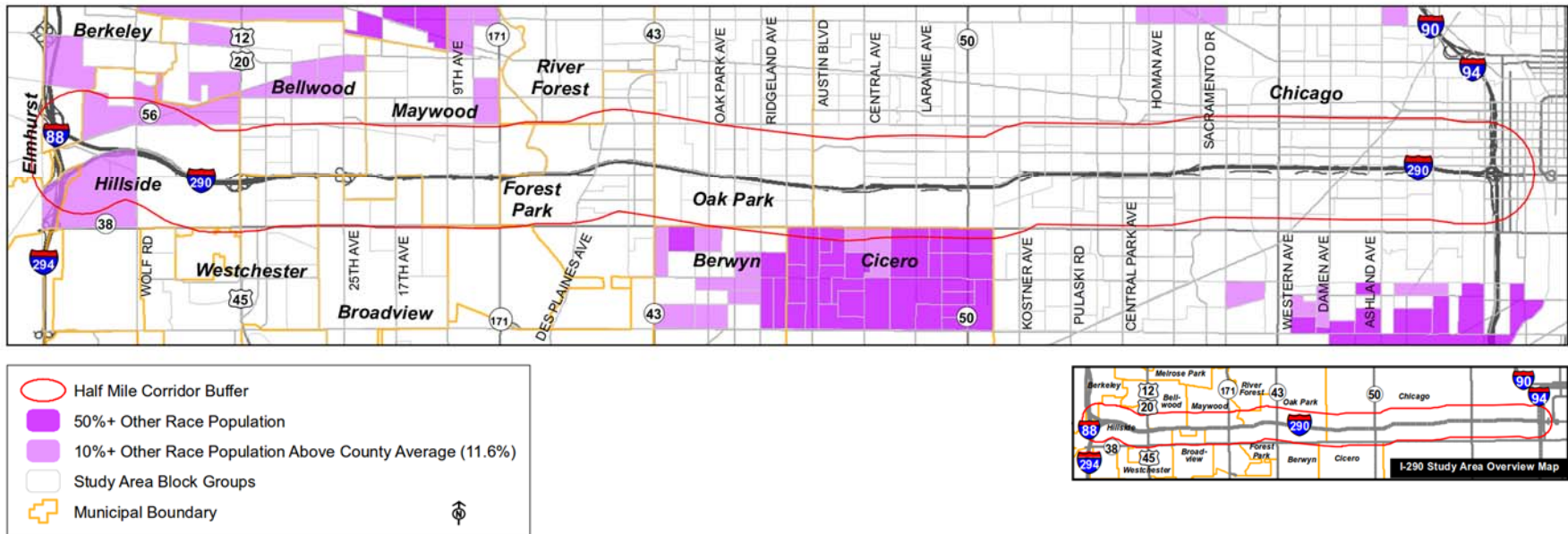


Figure 4. Environmental Justice Analysis for Two or More Populations by Census Block Group in the Project Corridor

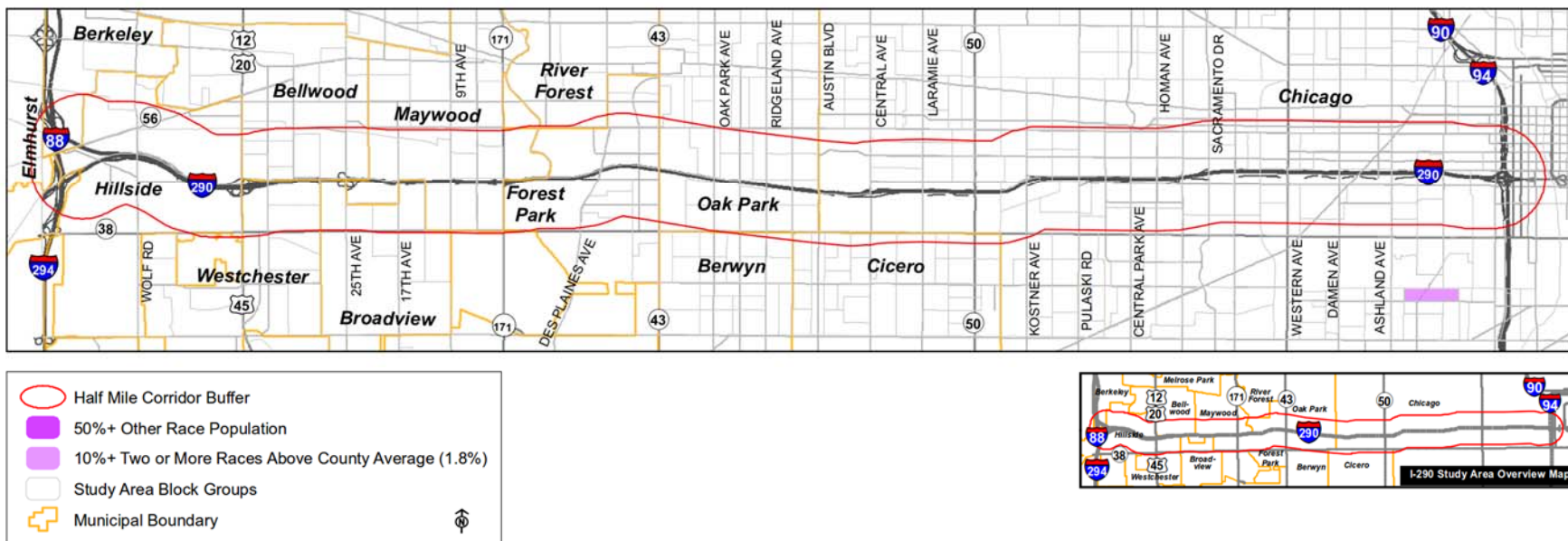
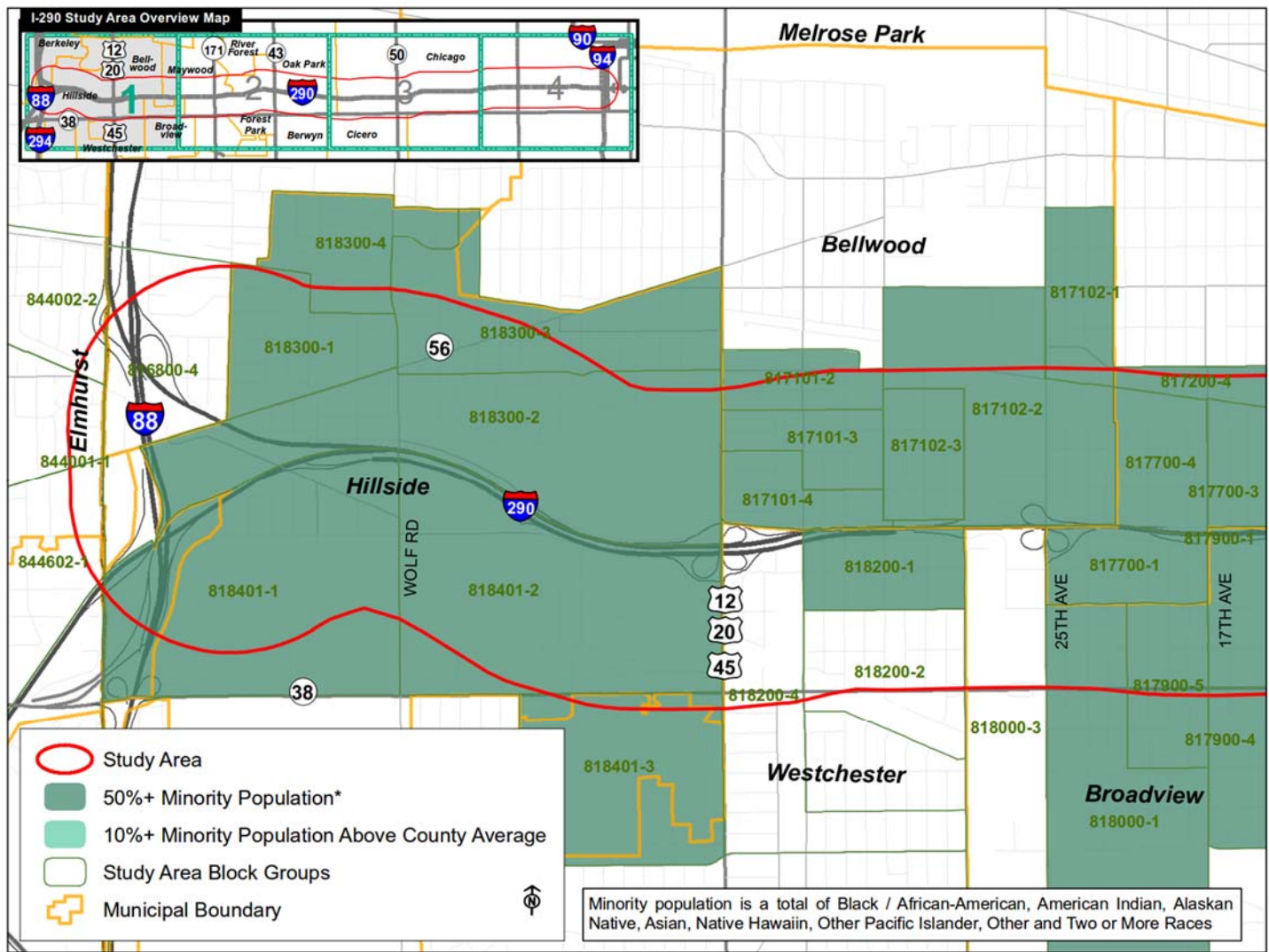


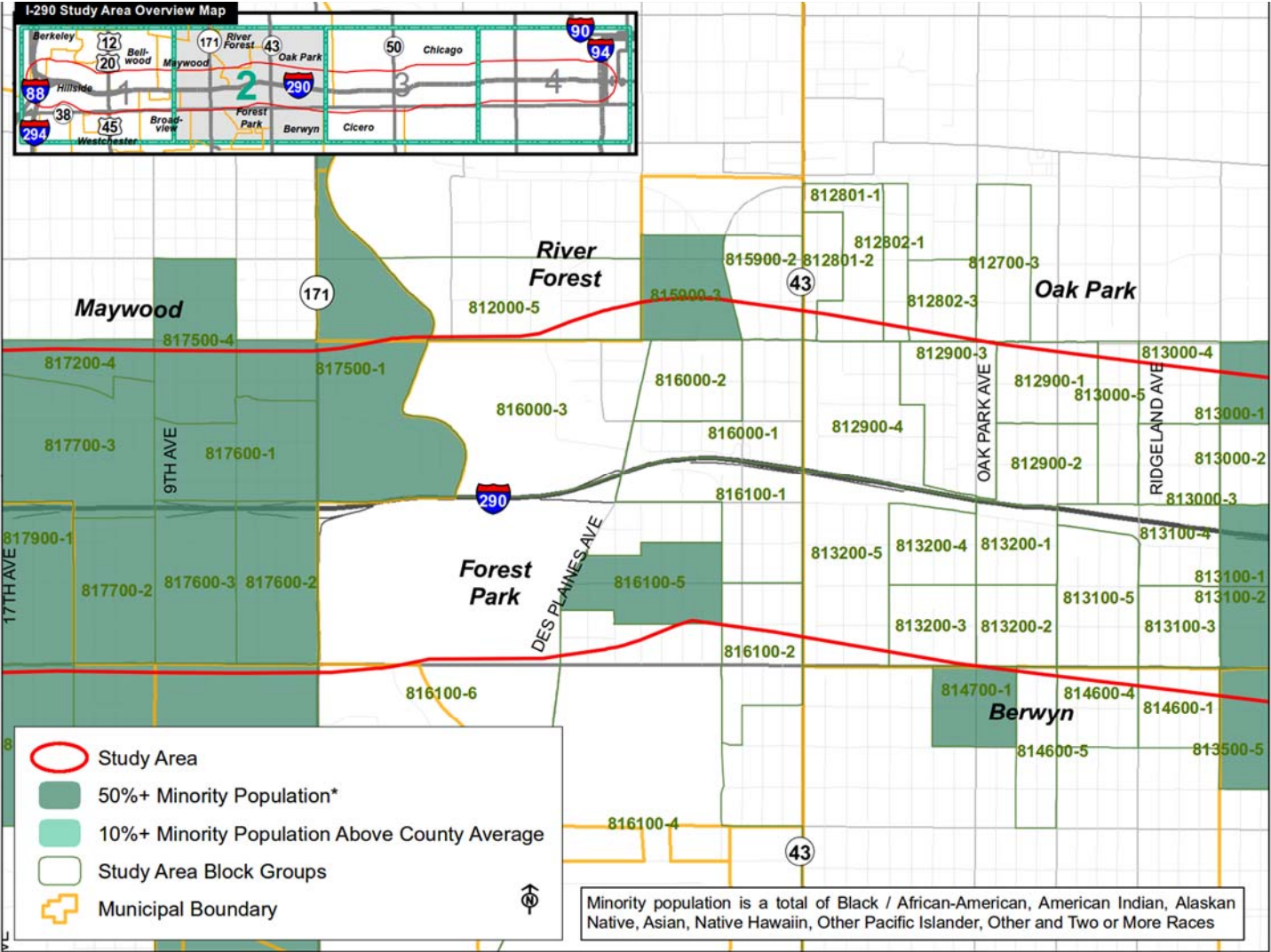


Figure 5. Environmental Justice Analysis for all Minority Groups by Census Block Group in the Project Corridor (Sheet 1)



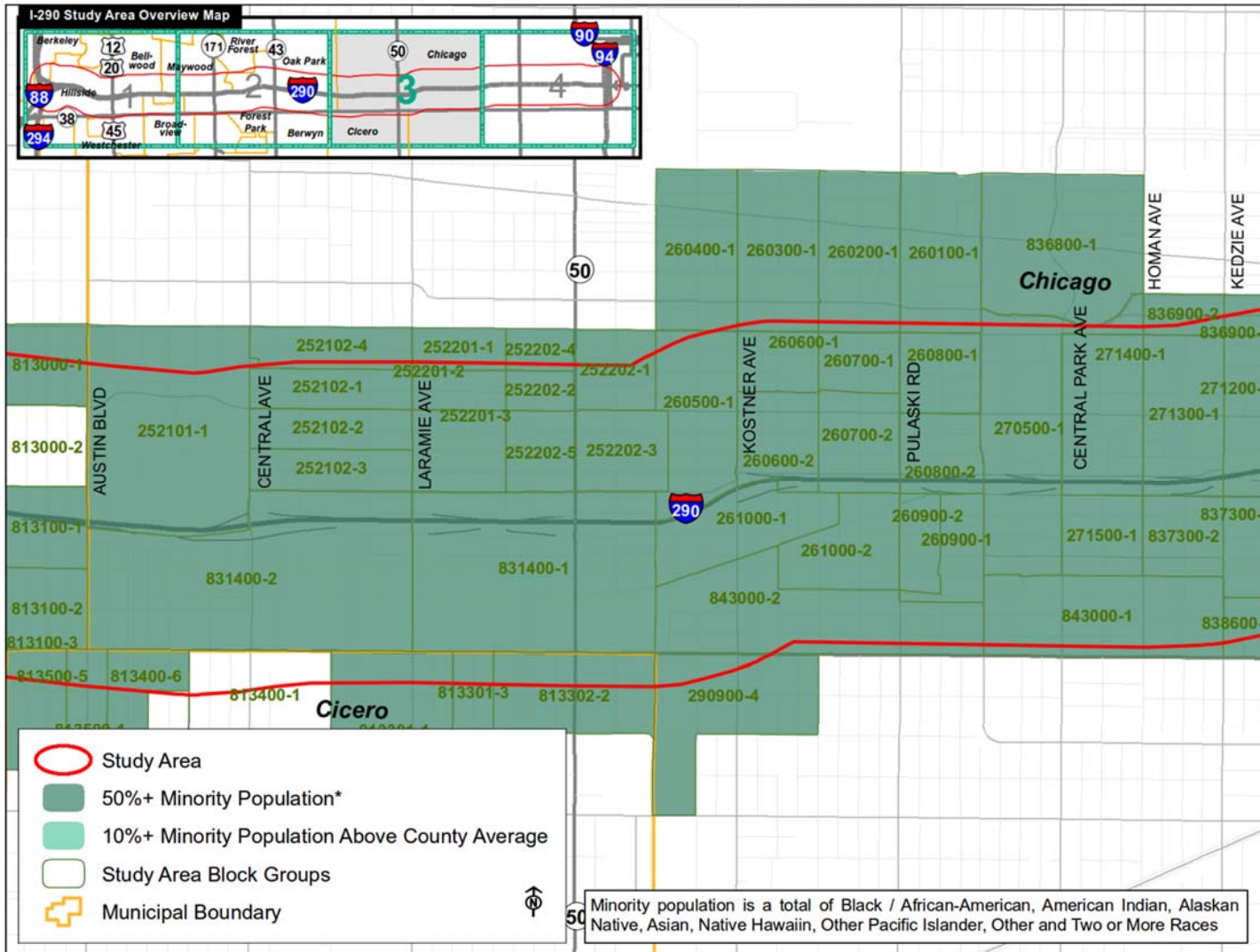
Source: US Bureau of the Census, 2013

Figure 6. Environmental Justice Analysis for all Minority Groups by Census Block Group in the Project Corridor (Sheet 2)



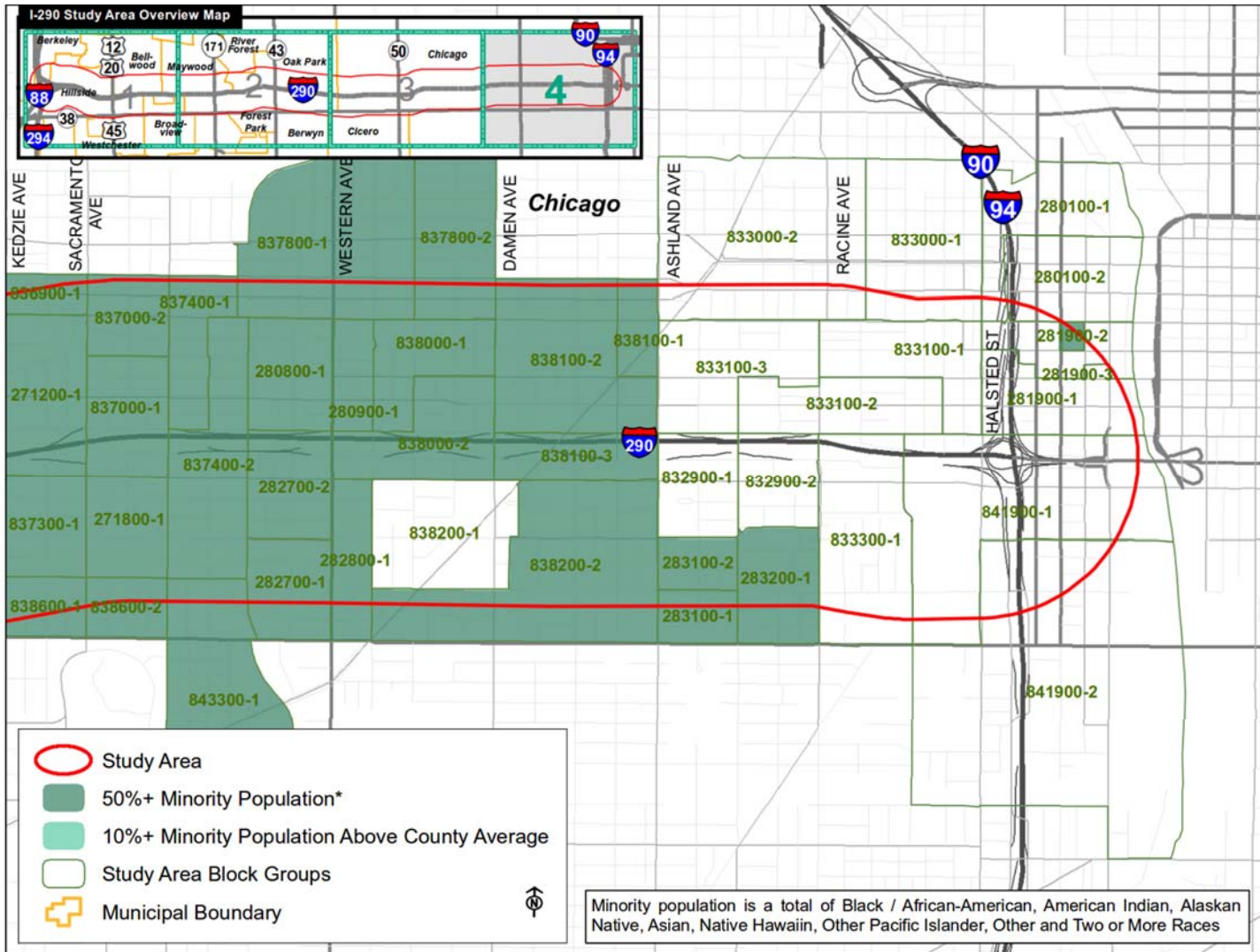
Source: US Bureau of the Census, 2013

Figure 7. Environmental Justice Analysis for all Minority Groups by Census Block Group in the Project Corridor (Sheet 3)



Source: US Bureau of the Census, 2013

Figure 8. Environmental Justice Analysis for all Minority Groups by Census Block Group in the Project Corridor (Sheet 4)



Source: US Bureau of the Census, 2013

# Appendix B

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## Hispanic/Latino Ethnicity Populations

### **Hispanic/Latino Populations**

Figure 9 through Figure 12 depict the geographic dispersion of Hispanic/Latino block groups along the Project Corridor that either make up 50 percent of the block group's population or are 10 percent or greater than the Cook County Hispanic/Latino population average. Of the 167 block groups assessed in the Project Corridor, 16 were found with Hispanic/Latino populations making up 50 percent or more of the block group's total population.

The largest concentration of Hispanic/Latino populations is located in Cicero and Berwyn along Roosevelt Road. This area extends from Cicero Avenue west to approximately Oak Park Avenue in Berwyn. Hispanic/Latino populations making up 50 percent or more of the population are also located along Douglas Boulevard south to 16th Street and from Kedzie Avenue west to Central Park Avenue.

Figure 9. I-290 Hispanic/Latino Ethnicity Status (Sheet 1)

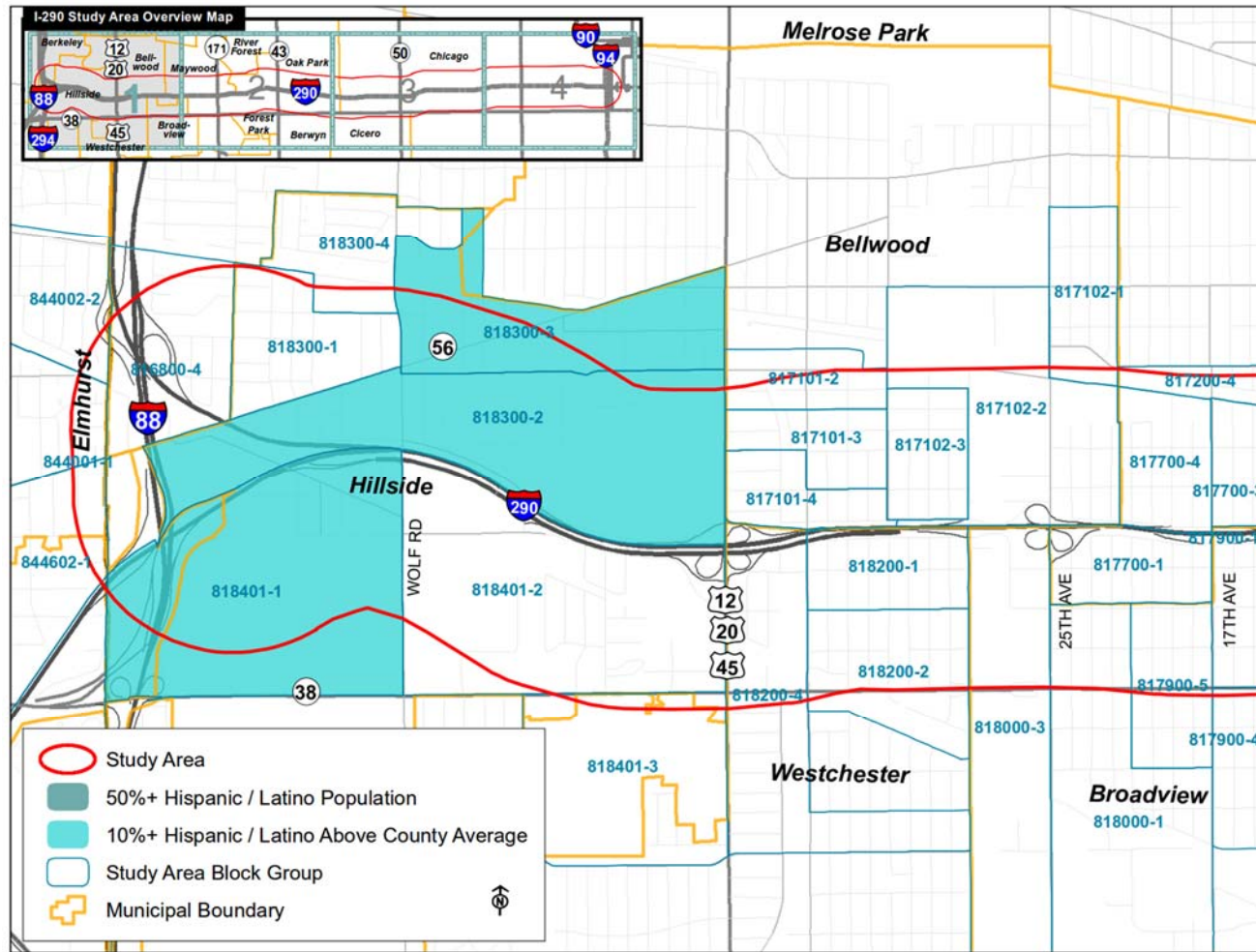






Figure 11. I-290 Hispanic/Latino Ethnicity Status (Sheet 3)

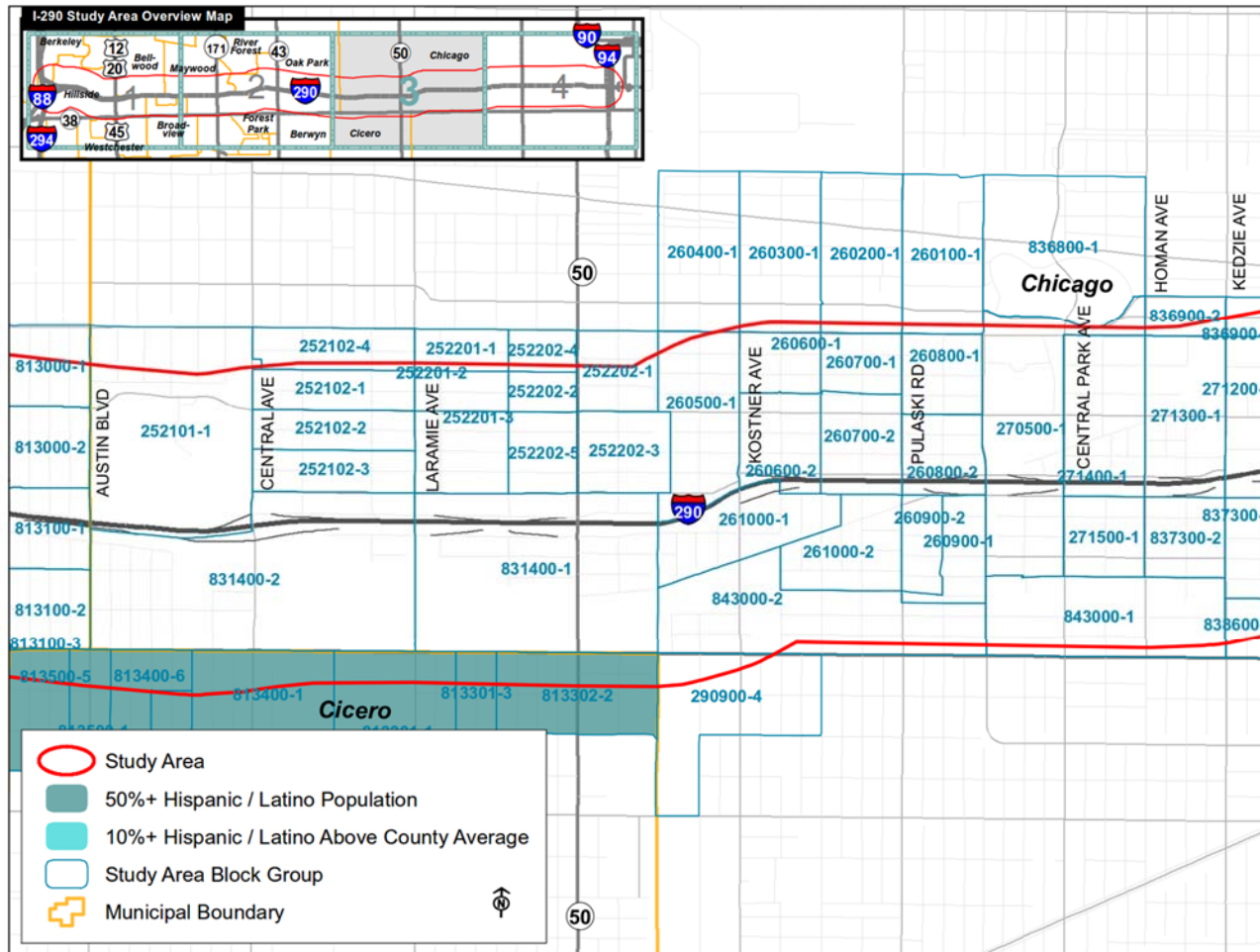
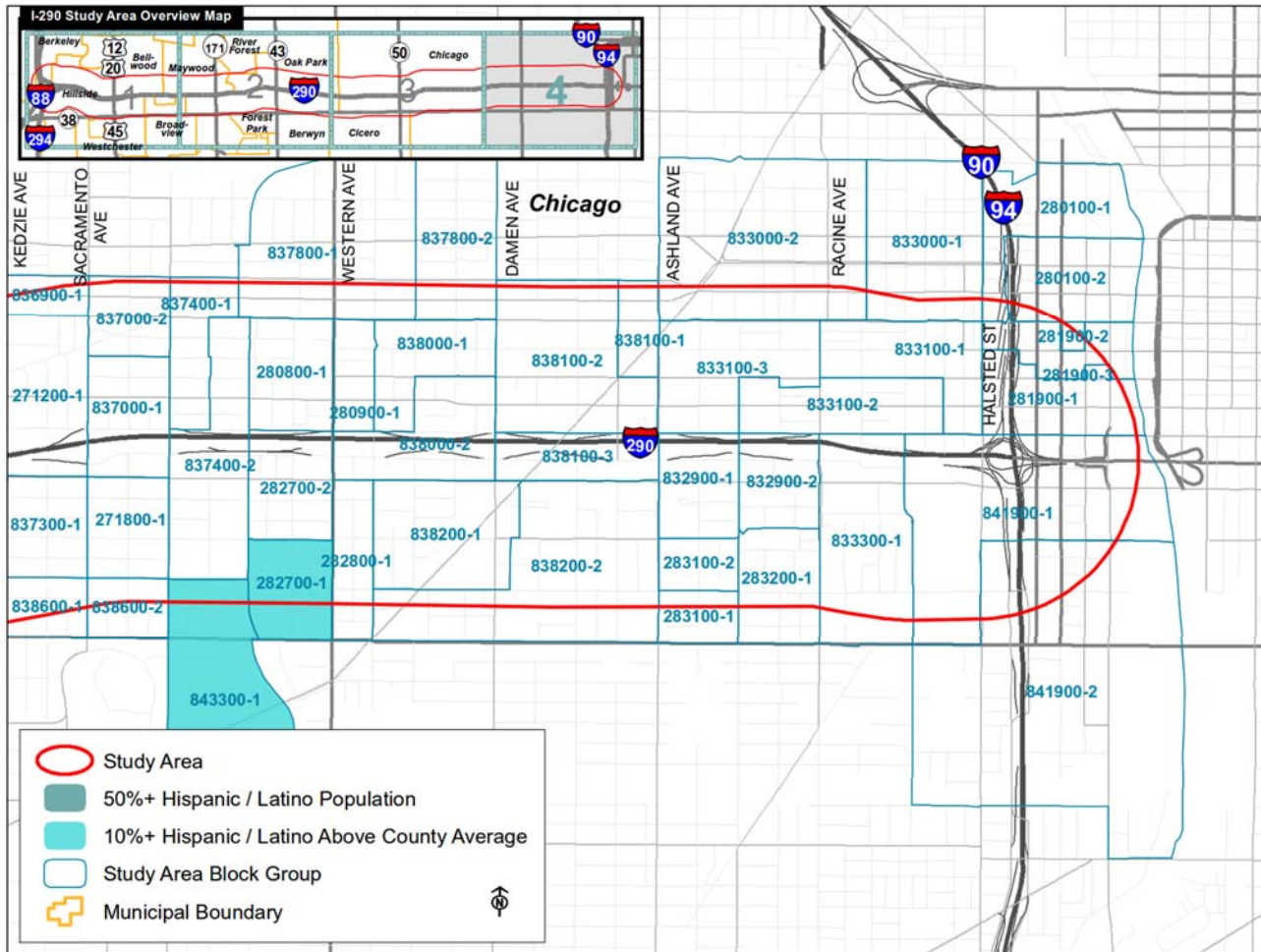


Figure 12. I-290 Hispanic/Latino Ethnicity Status (Sheet 4)



# Appendix C

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## Low-Income Populations

## **Low-Income Populations**

Data assessing low-income population was gathered from the 167 census block groups that are within the Project Corridor. These block groups can be classified as EJ affected communities based on low-income status as defined in the EJ Methodology Memorandum found in Appendix D.

There are 65 block groups that are made up of 50 percent or more low-income residents or are 10 percent higher than the Cook County Average (15.8 percent). These are considered block groups with EJ Populations.

The geographic dispersion of low-income population is shown in Figure 13 through Figure 16. The greatest concentration of low-income populations that are either 10 percent higher than the Cook County average, or block groups with a total population 50 percent or higher low-income, are found in the Chicago portion of the Project Corridor from Austin Boulevard to the I-90/I-94 corridor. Two of the greatest concentrations of low-income populations are found near the intersection of I-290 and Kostner Avenue in Chicago as well as Ashland Avenue to Roosevelt Road. Another area of low-income residents is found along Central Park Avenue from Madison Street south to Roosevelt Road. Most of the block groups found to have populations that are 50 percent or greater of the total population are within the 0.5 mile Project Corridor.

Figure 13. I-290 Corridor Poverty Status (Sheet 1)

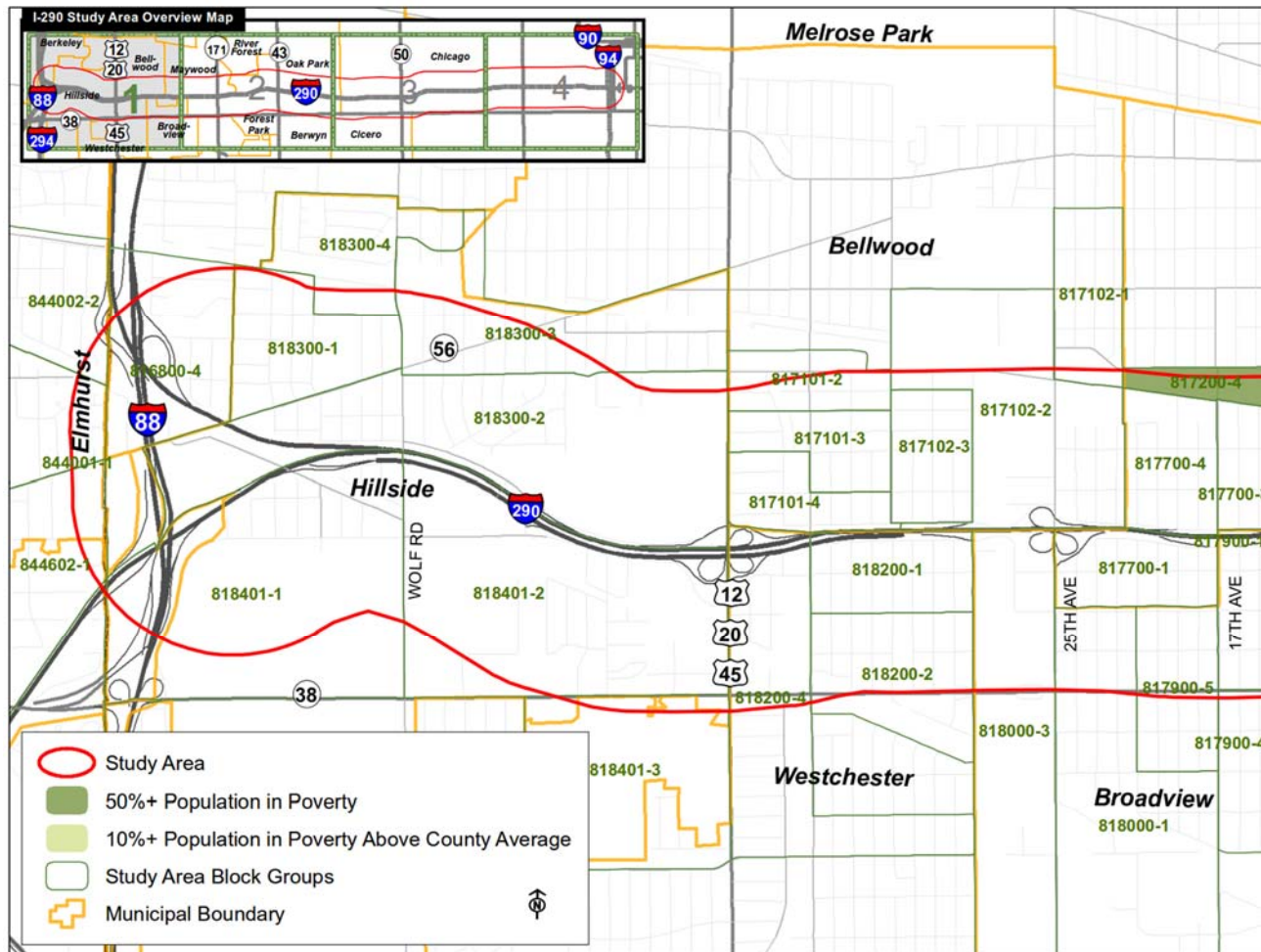




Figure 15. I-290 Corridor Poverty Status (Sheet 3)

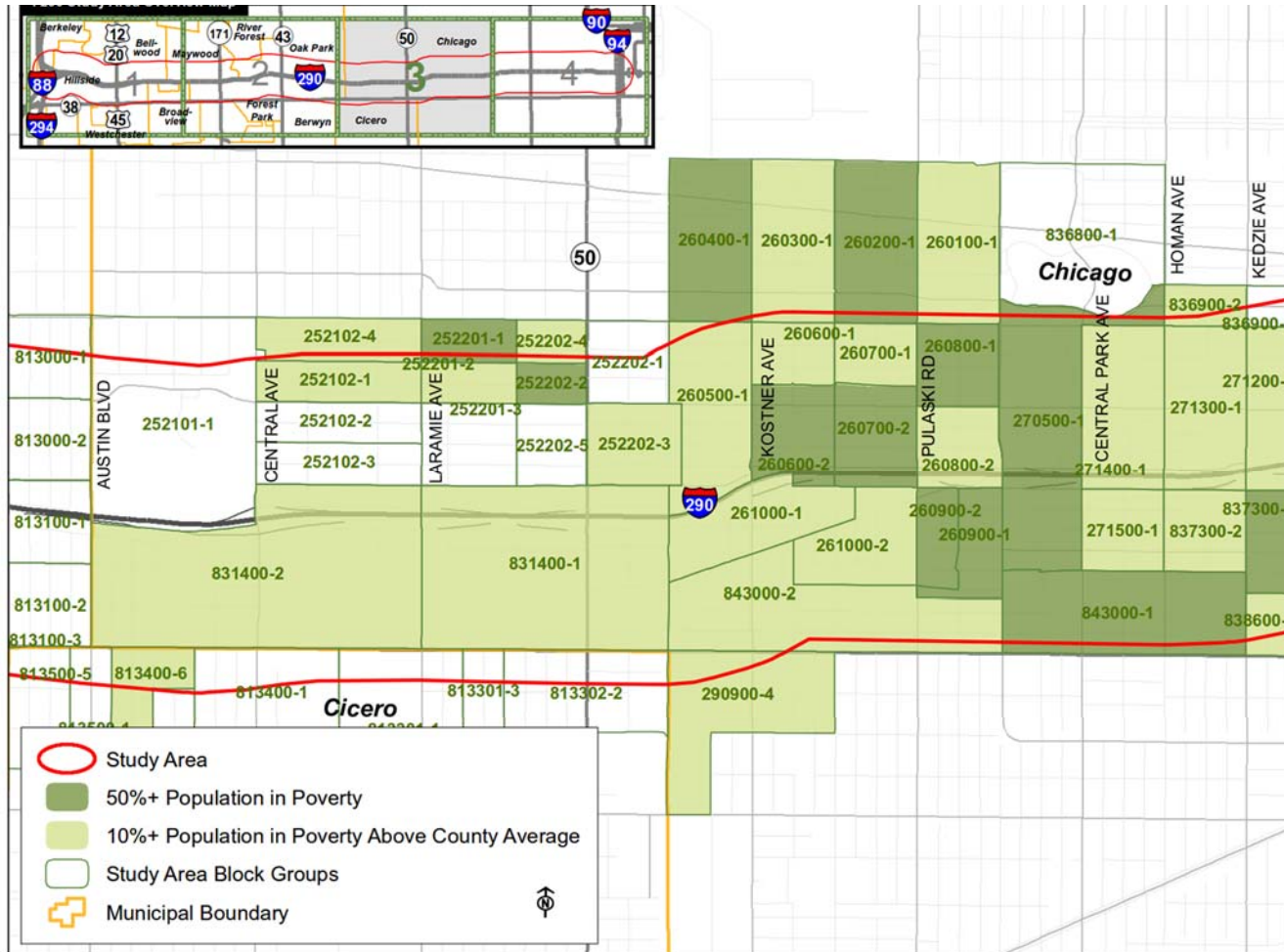
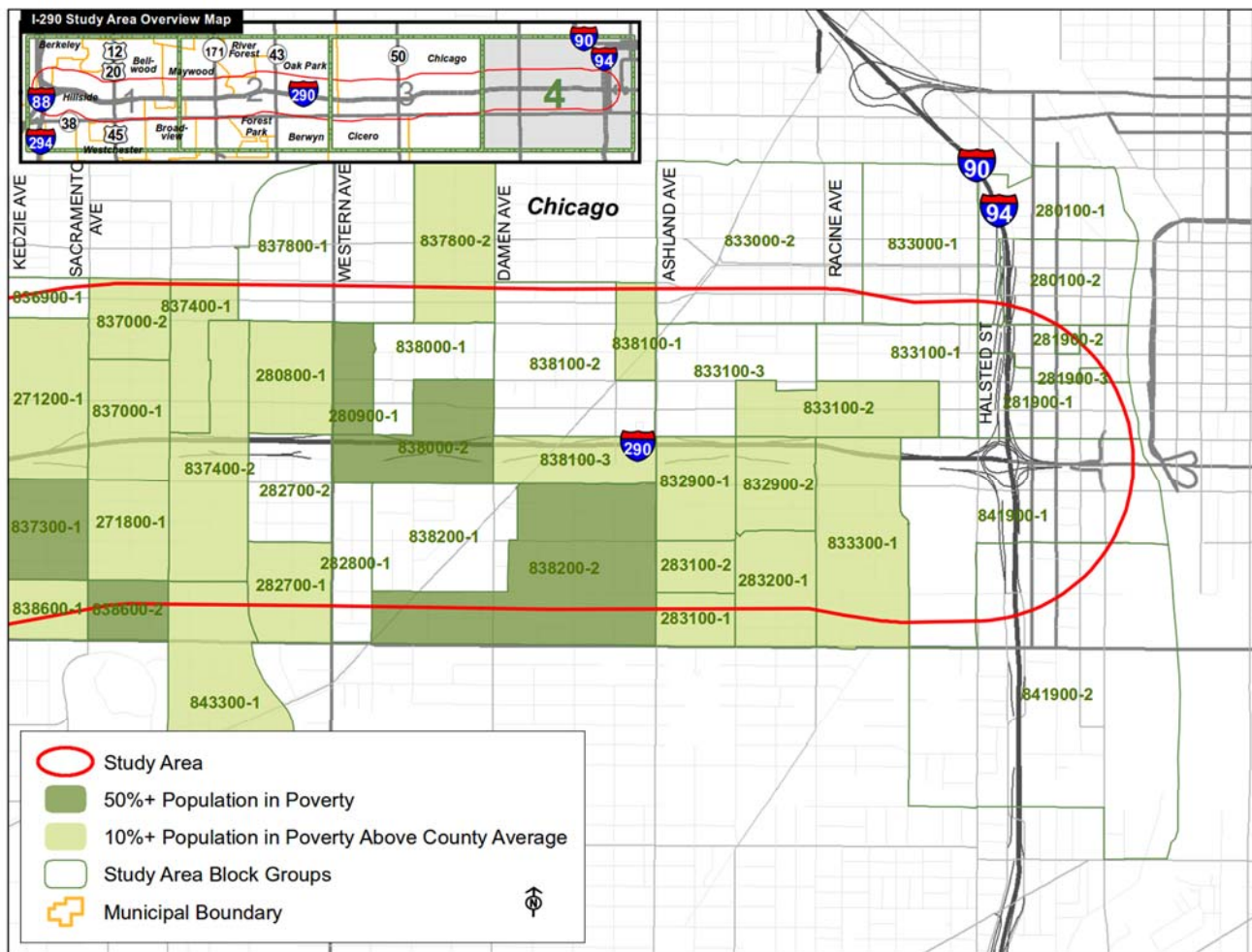


Figure 16. I-290 Corridor Poverty Status (Sheet 4)





# Appendix D

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## Accessibility to Employment Centers

### **Access to Employment Centers**

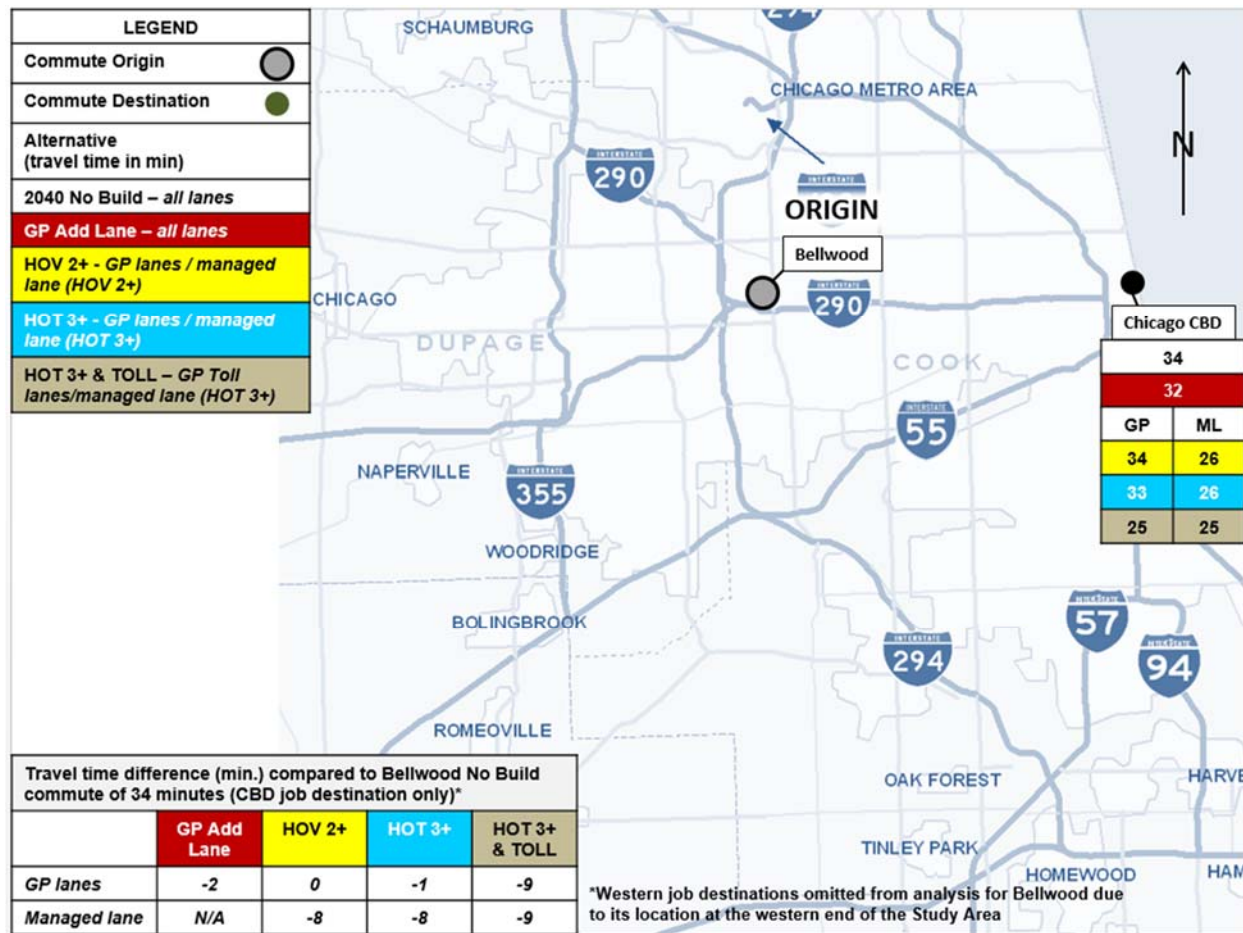
All of the build alternatives offer increases in average travel speed on I-290 through the length of the Project Corridor in the AM and PM Peak periods when compared to the 2040 No Build Alternative. The improved speeds on the expressway relative to the 2040 No Build Alternative would be a benefit to EJ populations since they would be able to travel to and from their destinations more quickly.

An additional analysis of access to employment centers was completed by comparing travel times from different origin and destination (O/D) pairs in the Study Area for all the build alternatives. For this analysis, the study's travel demand model was used. Trips were estimated in Transportation Analysis Zones (TAZs) within communities that have high EJ Populations as well as TAZs within communities that do not have a high EJ component. Five representative EJ communities (Bellwood, South Maywood, North Maywood, and the Chicago neighborhoods of West Garfield Park and East Garfield Park) as well as two representative non-EJ communities (Forest Park and Oak Park) were studied, with a job trip origin at a central location within each community and job trip destinations at the Chicago Central Business District and five representative suburban employment cluster locations (O'Hare Airport-ORD, South Bensenville/North Elmhurst, Oak Brook, Hodgkins, and Westfield/Fox Valley).

For Bellwood, only trips to the Central Business District were studied, since Bellwood's location at the west end of the Study Area would require minimal usage of the proposed I-290 build alternatives by employees accessing the suburban job locations.

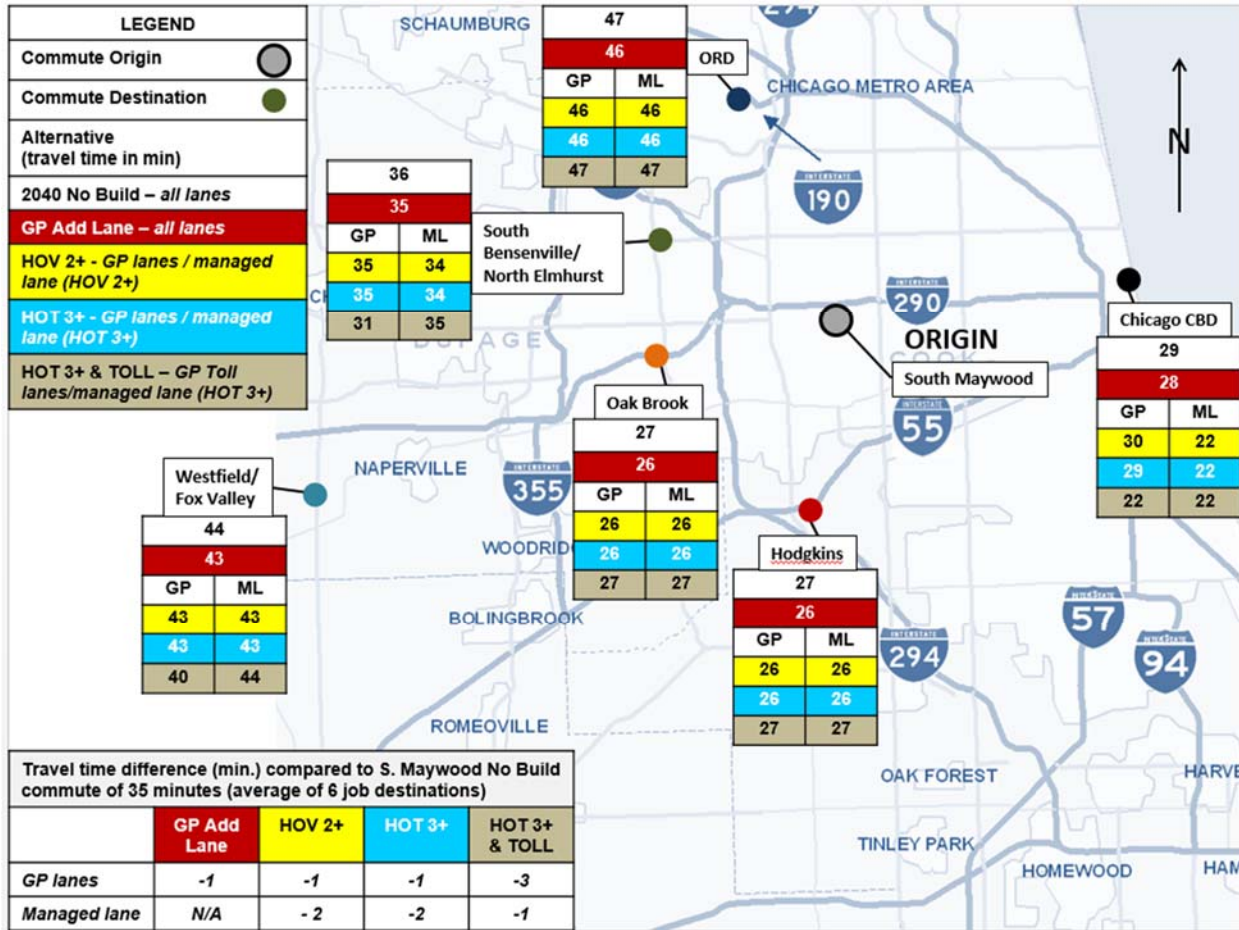
Within each alternative, there are no apparent accessibility differences in travel times between the EJ and non-EJ communities. As shown in Figure 17 through Figure 23, the travel times are primarily a function of the distance from the trip origin to the destination and the efficiency of the alternative and lane in addressing mobility. Therefore, there is no overall discrepancy in potential mobility between EJ and non-EJ communities within any of the alternatives. However, the HOT 3+ & Toll Alternative is the most restrictive alternative with a requirement of three or more occupants to qualify for toll-free access to I-290. The other managed lane alternatives offer three free, unrestricted lanes and a fourth lane that can be accessed with no toll for vehicles meeting the occupancy requirements of two to three persons.

Figure 17. Travel Times between Bellwood and Employment Destinations



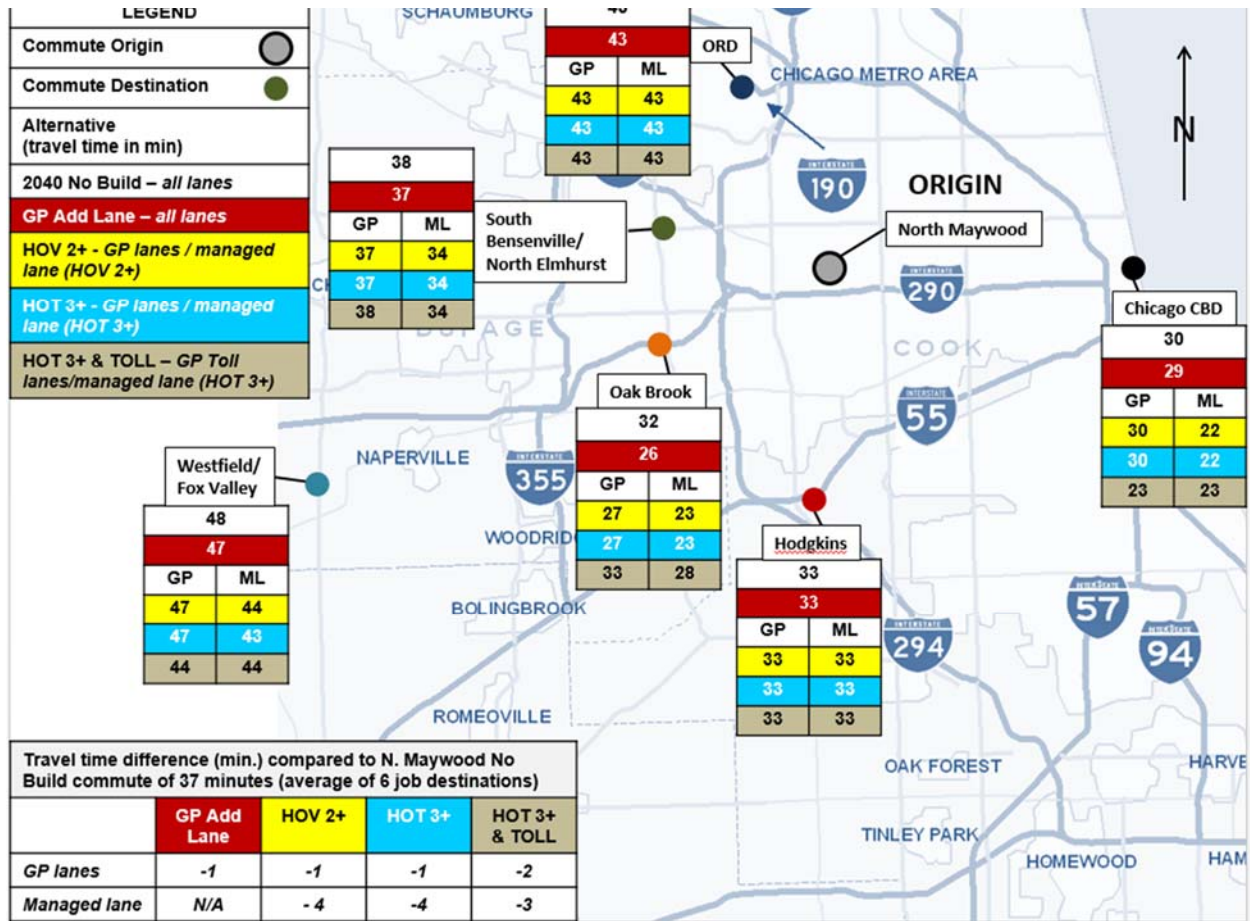
**Bellwood:** Commute travel times to Chicago CBD with the build alternatives range from 2 to 9 minutes less (GP or GP Toll lanes) and 8 to 9 minutes less (managed lanes) than those of the No Build Alternative, depending on alternative and lanes used. The GP lanes of the HOV 2+ Alternative offer the least time savings (0 minutes) and the HOT 3+ & TOLL Alternative’s GP Toll and managed lanes offer the highest time savings (-9 minutes). As stated previously, destinations other than Chicago CBD were not studied for this trip origin due to its location at the western end of the Study Area and minimal potential travel on I-290 to suburban “reverse commute” job destinations.

Figure 18. Travel Times between South Maywood and Employment Destinations



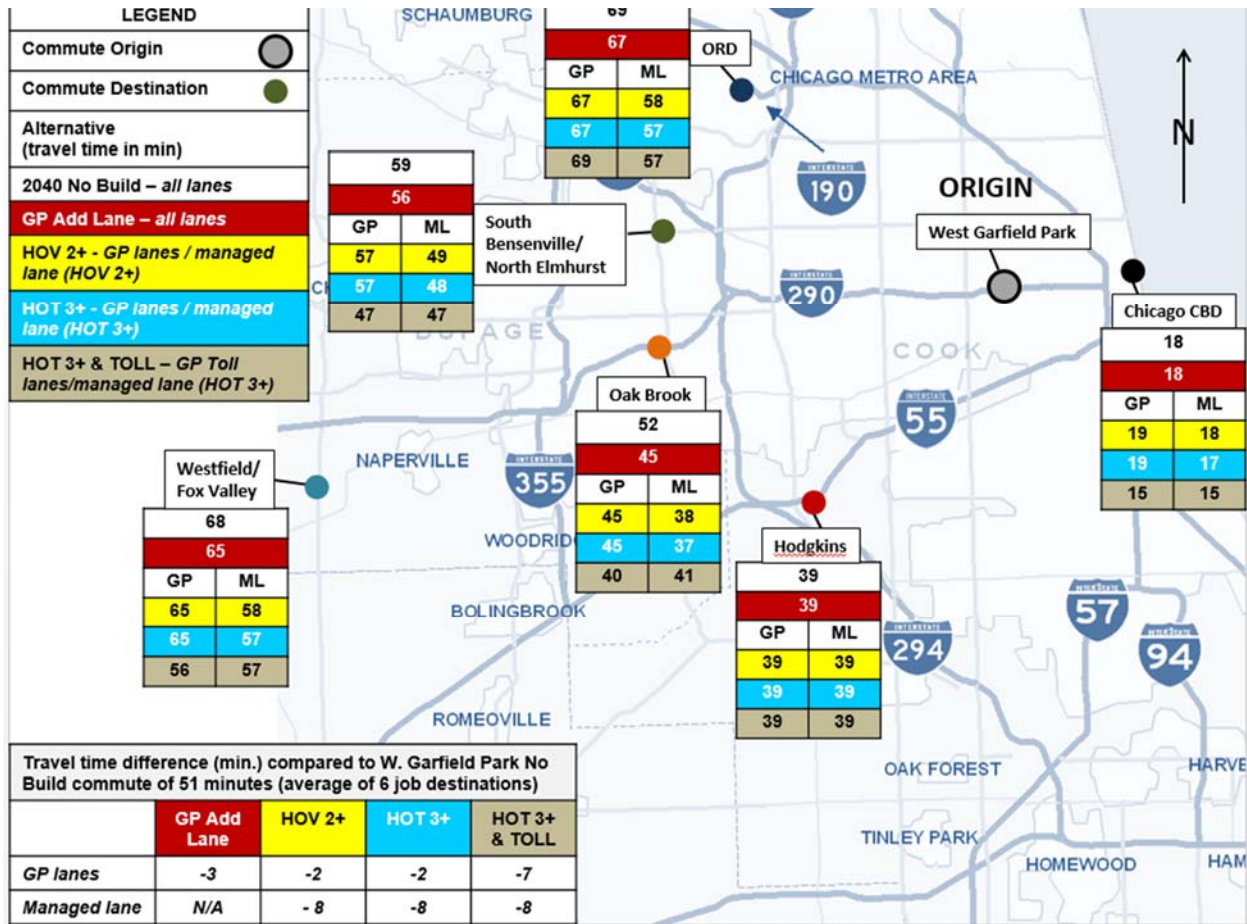
**South Maywood:** Commute travel times to job destinations with the build alternatives range from 1 minute more to 7 minutes less (GP or GP Toll lanes) and 0 to 7 minutes less (managed lanes) than those of the No Build Alternative, depending on destination, alternative and lanes used. The average commute time to all job destinations is from 1 to 3 minutes less than the No Build Alternative, with all lanes of the GP Add Lane Alternative, the GP lanes of the HOV 2+ and HOT 3+ alternatives, and the managed lane of the HOT 3+ & TOLL Alternative offering the least time savings (-1 minute) and the GP Toll lanes of the HOT 3+ & TOLL Alternative offering the highest time savings (-3 minutes).

Figure 19. Travel Times between North Maywood and Employment Destinations



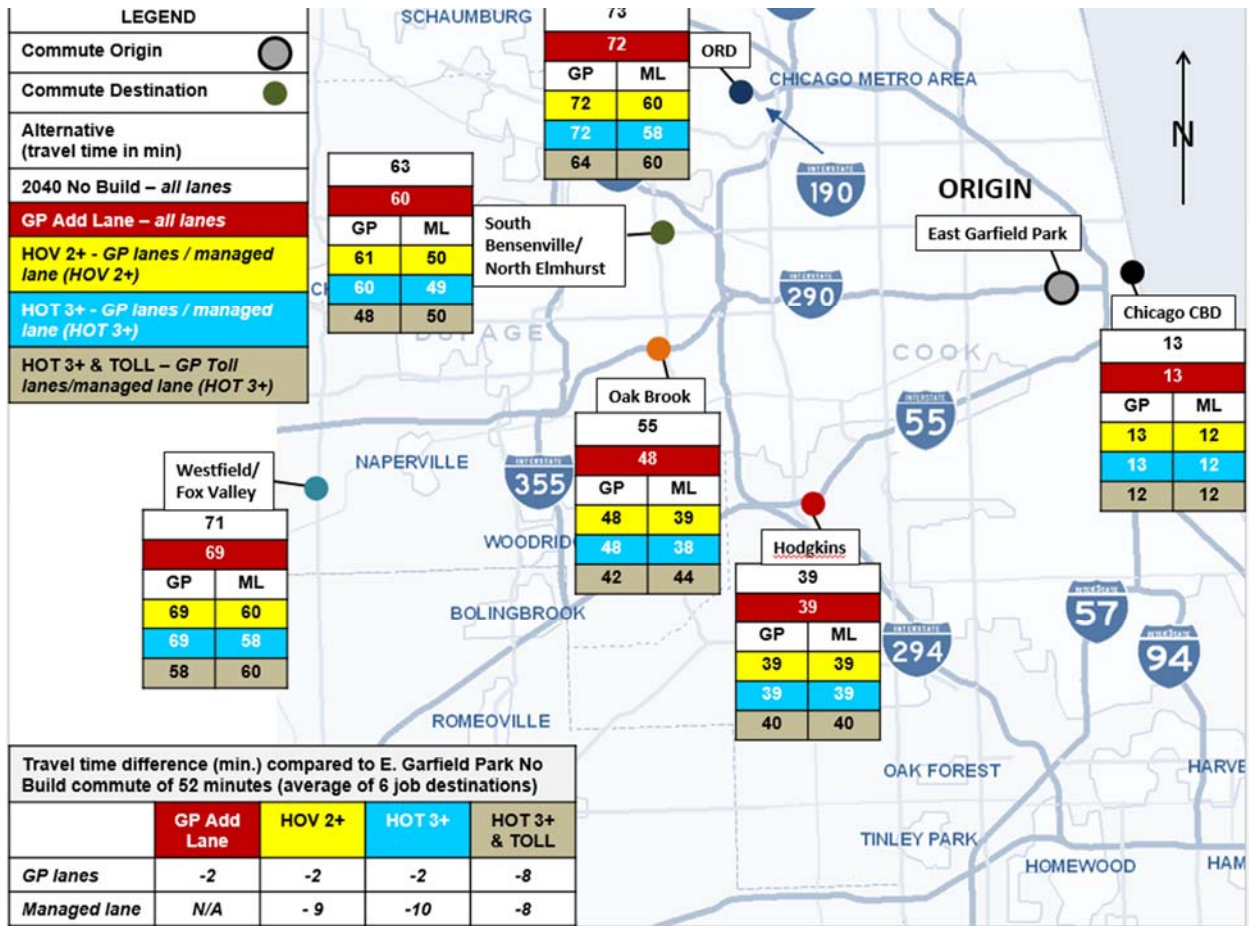
**North Maywood:** Commute travel times to job destinations with the build alternatives range from 0 to 7 minutes less (GP or GP Toll lanes) and 0 to 9 minutes less (managed lanes) than those of the No Build Alternative, depending on destination, alternative and lanes used. The average commute time to all job destinations is from 1 minute to 4 minutes less than the No Build Alternative, with all lanes of the GP Add Lane Alternative and the GP lanes of the HOV 2+ and HOT 3+ alternatives offering the least time savings (-1 minute) and the managed lanes of the HOV 2+ and HOT 3+ alternatives offering the highest time savings (-4 minutes).

Figure 20. Travel Times between West Garfield Park and Employment Destinations



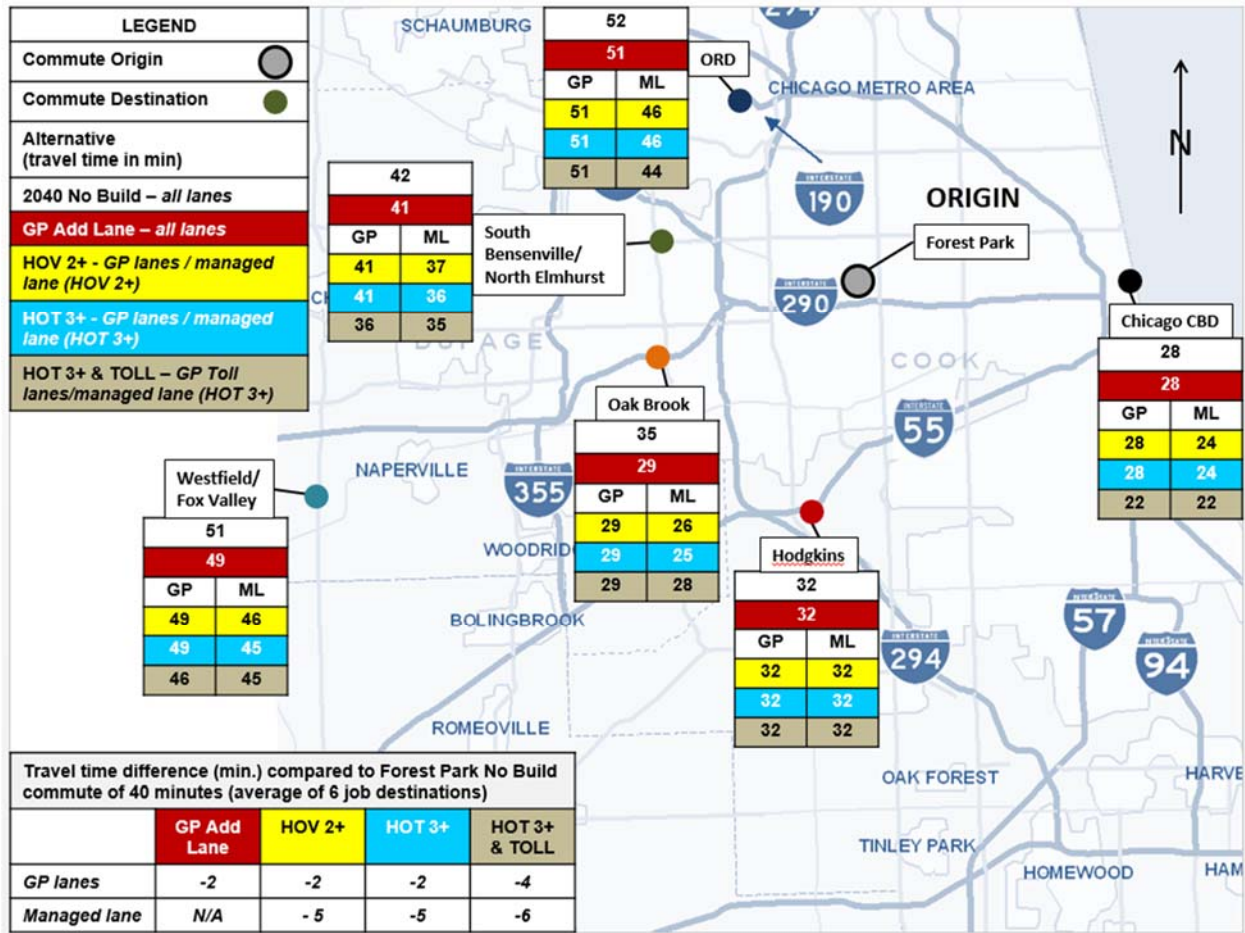
**West Garfield Park:** Commute travel times to job destinations with the build alternatives range from 1 minute more to 12 minutes less (GP or GP Toll lanes) and 0 to 12 minutes less (managed lanes) than those of the No Build Alternative, depending on destination, alternative and lanes used. The average commute time to all job destinations is from 2 to 8 minutes less than the No Build Alternative, with the GP lanes of the HOV 2+ and HOT 3+ alternatives offering the least time savings (-2 minutes) and the managed lanes of the HOV 2+, HOT 3+, and HOT 3+ & TOLL alternatives offering the highest time savings (-8 minutes).

Figure 21. Travel Times between East Garfield Park and Employment Destinations



**East Garfield Park:** Commute travel times to job destinations with the build alternatives range from 0 to 15 minutes less (GP or GP Toll lanes) and 0 to 17 minutes less (managed lanes) than those of the No Build Alternative, depending on destination, alternative and lanes used. The average commute time to all job destinations is from 2 to 10 minutes less than the No Build Alternative, with all lanes of the GP Add Lane Alternative and the GP lanes of the HOV 2+ and HOT 3+ alternatives offering the least time savings (-2 minutes) and the managed lanes of the HOT 3+ Alternative offering the highest time savings (-10 minutes).

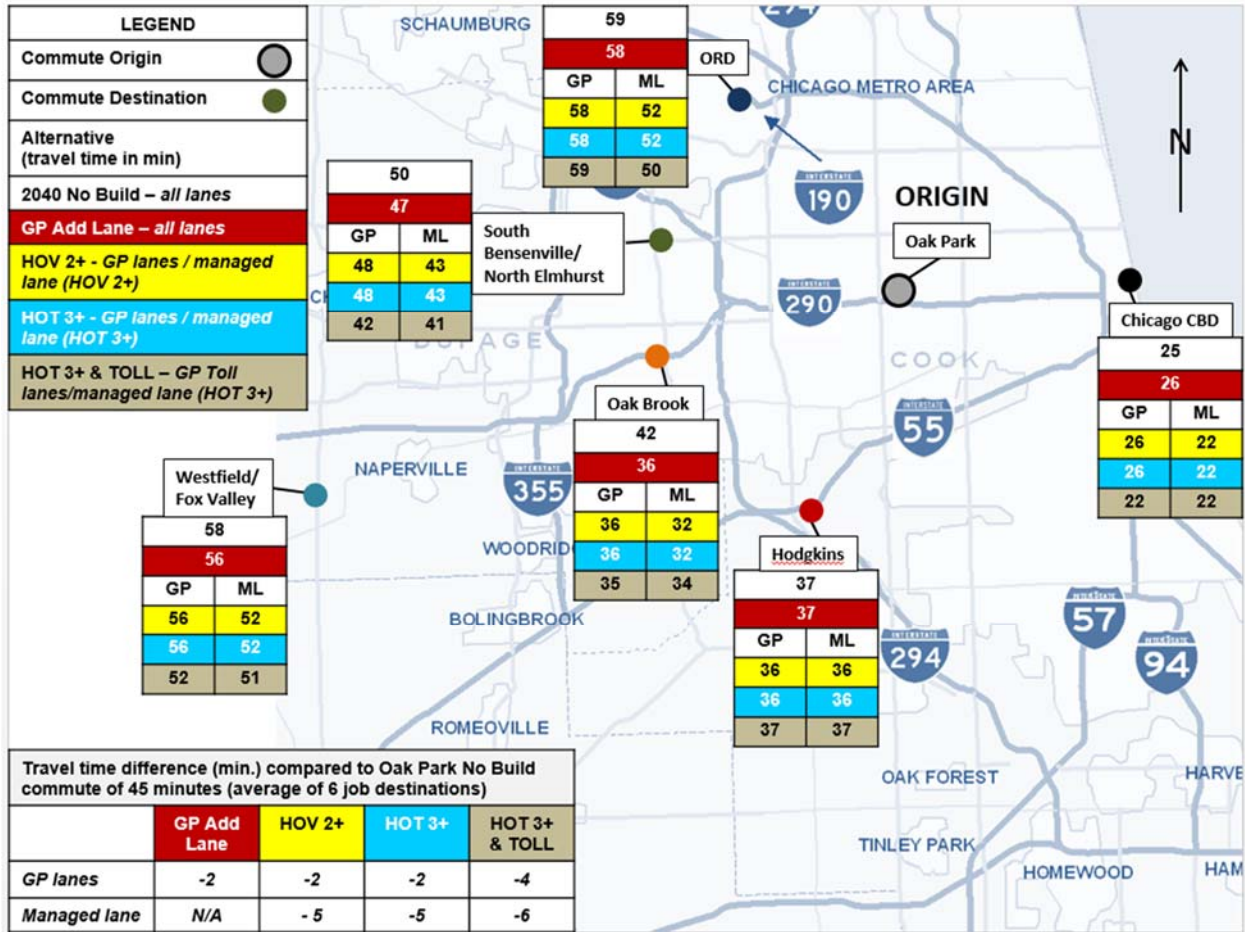
Figure 22. Travel Times between Forest Park and Employment Destinations



**Forest Park:** Commute travel times to job destinations with the build alternatives range from 0 to 6 minutes less (GP or GP Toll lanes) and 0 to 10 minutes less (managed lanes) than those of the No Build Alternative, depending on destination, alternative and lanes used. The average commute time to all job destinations is from 2 to 16 minutes less than the No Build Alternative, with all lanes of the GP Add Lane Alternative and the GP lanes of the HOV 2+ and HOT 3+ alternatives offering the least time savings (-2 minutes) and the managed lane of the HOT 3+ & TOLL Alternative offering the highest time savings (-6 minutes).



Figure 23. Travel Times between Oak Park and Employment Destinations



**Oak Park:** Commute travel times to job destinations with the build alternatives range from 1 minute more to 8 minutes less (GP or GP Toll lanes) and 0 to 10 minutes less (managed lanes) than those of the No Build Alternative, depending on destination, alternative and lanes used. The average commute time to all job destinations is from 2 to 6 minutes less than the No Build Alternative, with all lanes of the GP Add Lane Alternative and the GP lanes of the HOV 2+ and HOT 3+ alternatives offering the least time savings (-2 minutes) and the managed lane of the HOT 3+ & TOLL Alternative offering the highest time savings (-6 minutes).

### *Summary*

For eastbound commuting trips to the Chicago CBD, the build alternatives would generally offer more travel time savings for the EJ communities located farthest from the CBD (North and South Maywood and Bellwood), as compared to the nearby EJ communities of East and West Garfield Park. For the non-EJ communities of Forest Park and Oak Park, similar patterns are evident for trips to the CBD.

For westbound commuting trips (or reverse commute) to suburban employment cluster locations, the build alternatives would generally offer more travel time savings for the EJ communities located farthest from the suburban employment clusters (East and West Garfield Park) as compared to the nearer EJ communities of North and South Maywood. For the non-EJ communities of Forest Park and Oak Park, similar patterns are evident for trips to the suburban employment cluster locations. As both Oak Park and Forest Park are located toward the center of the Project Corridor, little difference in performance would be expected in the westward direction among the two communities.

The managed lanes of the HOV and HOT 3+ and HOT 3+ and TOLL alternatives generally offer the greatest commuting time savings, while general purpose lanes of all alternatives offer more modest time savings, and in some cases offer commuting times that are unchanged or slightly worse than the No Build Alternative. The tolled lanes of the HOT 3+ & TOLL Alternative also have relatively high time savings as compared to the No Build Alternative.