

EQUITY FRAMEWORK STEP 1

Identify who, what, and where

INTRODUCTION

The Oregon Department of Transportation (ODOT) collaborated with the Oregon Toll Program's Equity and Mobility Advisory Committee (EMAC) to develop an [Equity Framework](#).¹ This framework will direct the process of developing the toll projects to include an intentional and equitable engagement process that leads to equitable outcomes for historically excluded and underserved communities.

As defined in the [Equity Framework](#), historically and currently excluded and underserved communities include:

- People experiencing low-income or economic disadvantage
- Black, Indigenous and People of Color (BIPOC)
- Older adults and children
- Persons who speak non-English languages, especially those with limited English proficiency
- Persons living with a disability
- Other populations and communities historically excluded and underserved by transportation projects

This memorandum outlines the work done by the Project team toward accomplishing Step 1 of the framework, and includes an overview of updated demographic maps, a summary of the I-205 Corridor User Analysis, and a summary of the I-205 community engagement efforts.

THE EQUITY FRAMEWORK – STEP 1

This step includes the following actions:

- **Identify all historically excluded and underserved communities and small businesses** the toll projects may disproportionately affect, including presenting the context of how and why these communities have been excluded and underserved in the past through prior transportation and land use planning and investment.
- **Document the travel patterns of historically excluded and underserved communities** that may be affected by the toll projects, and anticipate potential changes to those travel patterns.
- **Develop a range of potential pricing strategies and related policy proposals** that directly address community-identified mobility and equity priorities.

Figure 1. Five Step Process for Achieving Equitable Outcomes



¹ Cohen, S., and Hoffman, A., *Pricing Roads, Advancing Equity*, Report and toolkit (Oakland, California: TransForm, 2019).

DEMOGRAPHIC MAPS

Identifying all historically excluded and underserved communities and small businesses begins with demographic maps for the I-205 Toll Project and the Regional Mobility Pricing Project, based on the current, available U.S. Census Bureau data (American Community Survey, 2015 to 2019). We recognize the limitations of U.S. Census Bureau data and will deepen our understanding and analysis through community engagement work and additional study (such as social resource mapping). Our up-to-date maps are attached at the end of this document.

I-205 TOLL PROJECT CORRIDOR USER ANALYSIS

The [I-205 Corridor User Analysis](#) was prepared in February 2021 to better understand travel patterns on I-205. The analysis focused on trips in the I-205 Toll Project corridor, on the highway and local alternatives, as well as the regional impact.

Who is driving in the I-205 Toll Project corridor today?

StreetLight² provided the demographic information included in the corridor user analysis.. The StreetLight platform does not collect specific driver demographic information but instead estimates user demographics based on assigning a given device a “likely home location.”³ Because this information is based on estimates and does not contain device-user data, the analysis only considered whether I-205 user demographics appeared to be similar to demographic percentages for the region as a whole, and for Clackamas County specifically (because a large share of the trips using the I-205 Toll Project segment are local). Table 1 and Table 2 provide demographic information from StreetLight.

² StreetLight is a web-based, on-demand mobility data analytics platform. This service uses anonymous, personal cellular-device location data and navigation GPS data that is processed into origin/destination matrices, and travel-time and routing information.

³ The demographic information from StreetLight is based on an estimate for the “likely home location” of smart devices. If a device regularly pings overnight within a residential area, StreetLight considers that as a likely home location of the device owner. The device is then assigned the race, income, and other demographic information for that area from the U.S. Census Bureau and American Community Survey data. The device then “carries” the demographic distribution to all its trips. The demographics data is linked to smart devices that generate location-based data and is not directly linked to individual trips.

Table 1. Race and Ethnicity - Comparison of I-205 Users to Portland Metro Area

	White	Black	American Indian/ Alaska Native	Asian	Native Hawaiian/ Pacific Islander	Other Race	Multiple Races	Hispanic*
I-205 Users	84%	2%	1%	5%	Less than 1%	4%	4%	10%
Clackamas County	88%	1%	1%	4%	Less than 1%	3%	3%	8%
Portland Metro**	81%	3%	1%	6%	Less than 1%	5%	4%	11%

Source: StreetLight, U.S. Census Bureau, 2010

* Hispanic is an ethnicity, and people who identify as Hispanic can be of any race.

** Portland Metro refers to the census Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area.

Table 2. Income Level - Comparison of I-205 Users to Portland Metro Area

	Less than \$50,000	\$50,000 to \$125,000	More than \$125,000
I-205 Users	41%	43%	16%
Clackamas County	40%	44%	16%
Portland Metro*	44%	42%	14%

Source: StreetLight, American Community Survey 2010 5-Year Estimates

* Portland Metro refers to the census Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area.

Focused analysis on common trips

The user analysis addressed the following questions related to travel patterns:

- **Origin/Destination Analysis:** Where do trips using the I-205 Toll Project segment, from OR 213 to Stafford Road, come from and go to?
- **Travel Shed Analysis:** How far off of I-205 do the I-205 Toll Project segment trips typically travel, and what routes are used most often?
- **I-205 Mainline Travel Patterns:** Which ramp interchanges are used most frequently to access I-205, and what share of trips are passing through the corridor?

Key findings from that analysis include the following:

- Through trips make up about 25% of the I-205 Toll Project segment. The remaining 75% of trips enter and/or exit I-205 at one of the five local interchanges.
- A relatively high share of Abernethy Bridge trips are local access trips from/to nearby areas such as West Linn, Oregon City, Gladstone, and Clackamas. About 15% to 20% of trips are internal to the I-205 Toll Project segment, entering and exiting within the five local interchanges. About 10% to 15% of Abernethy Bridge trips have an origin or destination outside of the Portland metro region. Less than 5% of Abernethy Bridge trips are from/to Clark County, Washington.

- Trip origins/destinations cover a broad regional area beyond the I-205 Toll Project segment, including urban areas in Washington County. More than 50% of trips traveling northbound across the Abernethy Bridge come from I-5. More than 80% of northbound trips across the Abernethy Bridge exit I-205 before the I-84 interchange.

Where are people rerouting (or diverting) from I-205 during congestion today?

The user analysis also addressed current rerouting trends within the I-205 Toll Project segment. Rerouting (sometimes called diversion) refers to people changing routes for trips that could or would use I-205 and choosing to take another alternative route, typically to save time by avoiding congestion delays experienced on I-205 during peak demand periods.

Although differences in travel patterns by time of day could reflect other differences in travel characteristics (such as trip purpose), the shifts in traveler routing away from I-205 across many origin/destination pairs in the area appear strongly related to the time and direction of recurring congestion on I-205.

The rerouting analysis investigated origin/destination pairs with reasonable routing alternatives that could include I-205 mainline, parallel roadway alternatives to the I-205 mainline, or a combination of both. By identifying differences in routing choices between peak and off-peak travelers, the analysis indicates the degree to which peak-period congestion on I-205 could be causing travelers to reroute from I-205 and onto other roadways.

Key findings related to rerouting include the following:

- Rerouting occurs off I-205 and onto local streets during peak periods (either from 7 a.m. to 9 a.m. or from 4 p.m. to 6 p.m.) across a range of origin/destination travel patterns.
- Rerouting takes place in both directions and often corresponds to heavier traffic congestion (delays) on I-205 in the southbound direction during the AM peak period (7 a.m. to 9 a.m.) and in the northbound direction during the PM peak period (4 p.m. to 6 p.m.).
- The magnitude of rerouting varies across different origin/destination pairs.
- Local travel patterns generally show a higher likelihood of rerouting than longer-distance regional trips.
- Borland Road, Willamette Falls Drive, OR 99E, Stafford Road and Schaeffer Road were identified as alternative routes that experience the greatest amount of rerouting.

I-205 TOLL PROJECT ENGAGEMENT

In summer 2020, ODOT launched an education and engagement period for the I-205 Toll Project. We heard from more than 4,600 survey responses, letters, emails, voicemails, and comments at meetings and briefings between August 3 and October 16, 2020.

Online Survey

More than 80% of the public comment submittals came through the English online survey. The following demographic and language trends were observed from those who provided their

demographic information in the online survey (Note: answering demographic questions was optional) :

- Of those who provided their demographic information, 651 (16% of total respondents) identified as Black, Indigenous, or People of Color, which is similar to the population of the largest four counties of the Portland metro area as reported by the U.S. Census Bureau American Community Survey data (2014 to 2018).
- About 7% of survey respondents completed the survey in a language other than English, which is less than the regional percentage of people who speak a language other than English at home. The 2017 U.S. Census Bureau American Community Survey data shows that 4.2% of the population in Clackamas County speaks English less than very well. In Multnomah and Washington Counties, the figures are 8.5% and 9.1%, respectively.
- About one-quarter of respondents (23%) reported their annual household income as less than \$50,000, which is a lower percentage than the region as a whole. In a 20-mile radius around Portland, about 38% of households have incomes less than \$50,000 per year, according to the 2017 U.S. Census Bureau American Community Survey. In the I-205 corridor near the Abernethy Bridge, about 34% of households have incomes less than \$50,000.
- People who identified as Hispanic or Latin American were likely underrepresented in the survey responses compared to the size of these communities in the region.⁴

Table 3. Race/Ethnicity of Online Survey Respondents Compared to Clackamas County and the Portland Metro Area

Race/Ethnicity	Online Survey Respondents ¹	Clackamas County	Portland Metro Area
American Indian/Alaskan Native	3%	1%	1%
Asian	6%	4%	7%
Black/African American	4%	1%	3%
Hispanic/Latino ²	6% ³	9%	12%
Native Hawaiian/Pacific Islander	1%	0%	1%
Slavic	2%	N/A	N/A
Middle Eastern	1%	N/A	N/A
White	54%	88%	81%
No response/other	33%	N/A	N/A
Some Other Race	N/A	2%	3%
Two or More Races	N/A	4%	5%

¹ Data for online survey respondents is based on responses to the following question: “How do you identify your race/ethnicity? (select all that apply)” Total will not equal 100%.

² According to the U.S. Census Bureau, Hispanic origin can be viewed as the heritage, nationality, lineage, or country of birth of the person or the person’s parents or ancestors before arriving in the United States. People who identify as Hispanic, Latino, or Spanish may be any race.

³ Composed of survey respondents who identified as Hispanic/Latin American and/or Indigenous Central or South American.

⁴ The survey and comment period were open to anyone who wanted to participate. Respondents do not represent a random sampling of households in Clackamas County or the Portland metro area and therefore are not statistically representative of the population as a whole.

What did we hear from historically and currently excluded and underserved communities?

During the I-205 early engagement, ODOT intentionally sought to engage people who have historically been and are currently excluded in transportation planning processes and underserved by the transportation system. As shown in Figure 2, the geographic locations of the greatest concentration of survey responses from BIPOC communities mirror those of all survey responses. The following were the key responses:

- The need for toll discounts and provisions for non-tolled alternative routes.
- The more than 300 respondents who submitted surveys in a language other than English expressed much less concern with minimizing negative diversion to local streets compared to all respondents. “Providing alternative, non-tolled driving routes” was the top concern identified by those completing the survey in another language, and “reducing traffic congestion” was the second, most important concern.
- Surveys from speakers of languages other than English frequently included comments about the state of the economy and its impact on unemployment, as well as the personal financial impacts of tolls.
- Typically, people experiencing low income responded similarly to the overall survey respondents with a few key exceptions:
 - 52% of respondents experiencing low income identified the need to “minimize the impact of tolls on people of low income.” The same percentage of respondents also identified the need to “provide alternative, non-tolled driving routes.” These rates are much higher rates than survey respondents as whole, where 36% indicated the need to “minimize the impact on people of low income” and 41% indicated the need to “provide alternative, non-tolled routes.”
 - In the multiple-choice responses, about a quarter of the people experiencing low income (26%) expressed concerns about rerouting and diversion at a similar rate as overall survey respondents (31%), but less than respondents with higher incomes (38%).
 - About 13% of all respondents shared comments about equity topics,⁵ highlighting concerns about whether certain groups or communities are more likely to experience disproportionate outcomes and impacts from tolling. Comparatively, 23% of the people experiencing low income shared comments on equity.
- Older adults who responded to the survey—like those respondents with higher incomes and White/Caucasians—expressed greater concern with minimizing negative diversion to local streets compared to survey respondents as a whole.

⁵ “Equity” related comments were those that discussed whether certain groups or communities will experience disproportionate outcomes and impacts from tolling. They were differentiated from topics of “fairness,” which included comments on the existence of viable alternative routes, paying for highways that have already been built, fairness of user-pay systems, flexibility of personal schedule or travel patterns and geographic effects on local communities.

Input from historically and currently excluded and underserved communities was drawn from the online survey, which, as noted previously, had demographic questions related to race/ethnicity, age, gender, and income. In addition, survey responses received in languages other than English were considered in this analysis. Input received via email, voicemail, letter, and during webinars and presentations was not included in the analysis of input from historically and currently excluded and underserved communities because demographic questions were not included in those formats. Table 4 includes respondents by category.

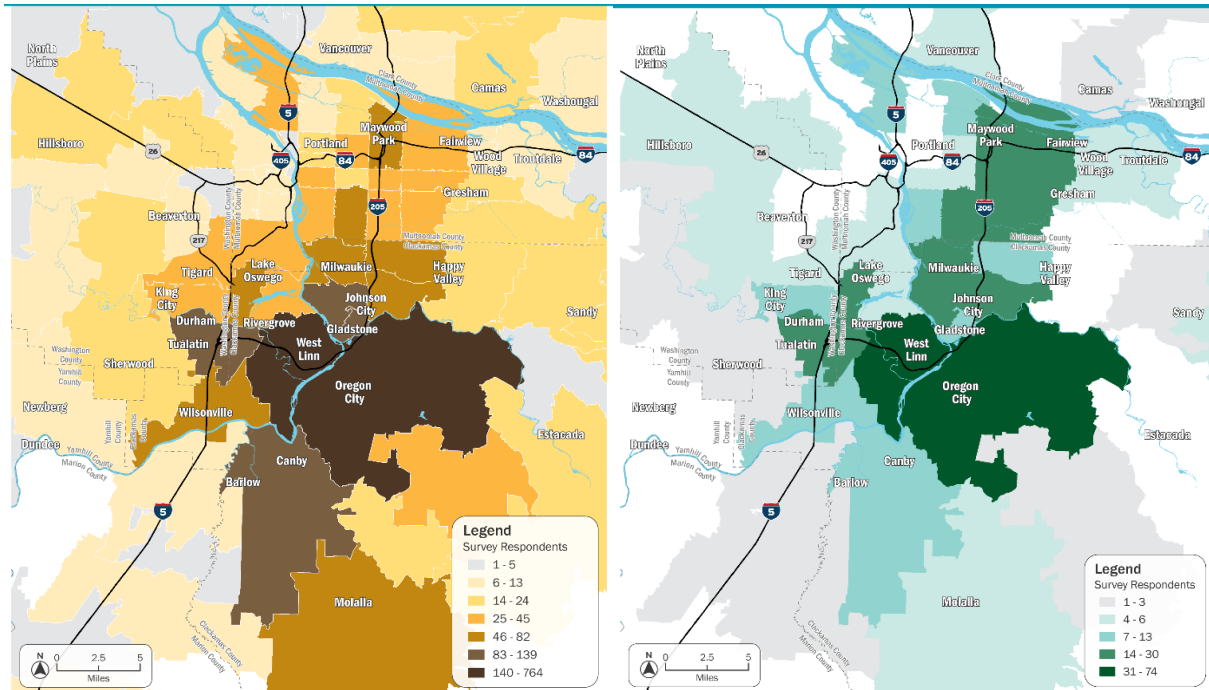
Table 4. Combined Categories for Analysis

Combined Category	Race/Ethnicity, Age, and Income Level	Number of Respondents
African/African American	<ul style="list-style-type: none"> • African • African American/Black 	122
American Indian	<ul style="list-style-type: none"> • American Indian or Alaska Native 	87
Asian/Pacific Islander	<ul style="list-style-type: none"> • Asian • Native Hawaiian or Pacific Islander 	247
Hispanic	<ul style="list-style-type: none"> • Hispanic/Latin American • Indigenous Central or South American 	173
Slavic	<ul style="list-style-type: none"> • Slavic 	80
White/Caucasian	<ul style="list-style-type: none"> • White/Caucasian 	1,990
Black, Indigenous, and People of Color (and Slavic) <i>Note: Slavic was included in this grouping because the majority of these respondents are Russian-language speakers and recent immigrants.</i>	<ul style="list-style-type: none"> • African • African American/Black • American Indian or Alaska Native • Asian • Native Hawaiian or Pacific Islander • Hispanic/Latin American • Indigenous Central or South American • Slavic 	651
65+	<ul style="list-style-type: none"> • 65 or older 	467
<\$50,000	<ul style="list-style-type: none"> • Up to \$49,999 per year 	552

Where do people live who responded to the survey?

Based on self-reported zip codes, most online survey respondents indicated that they live in the Portland metro area (81%), and the majority live near the Project, as shown in Figure 2. More than half of survey respondents live in Clackamas County (54%) and travel by car most of the time (82%), based on survey data. Within the four-county Portland metro area, Clark County and Washington County were the least represented (3% and 7%, respectively). Given that the Project is in Clackamas County, it appears that more responses were received from those drivers and residents who the Project is more likely to directly affect.

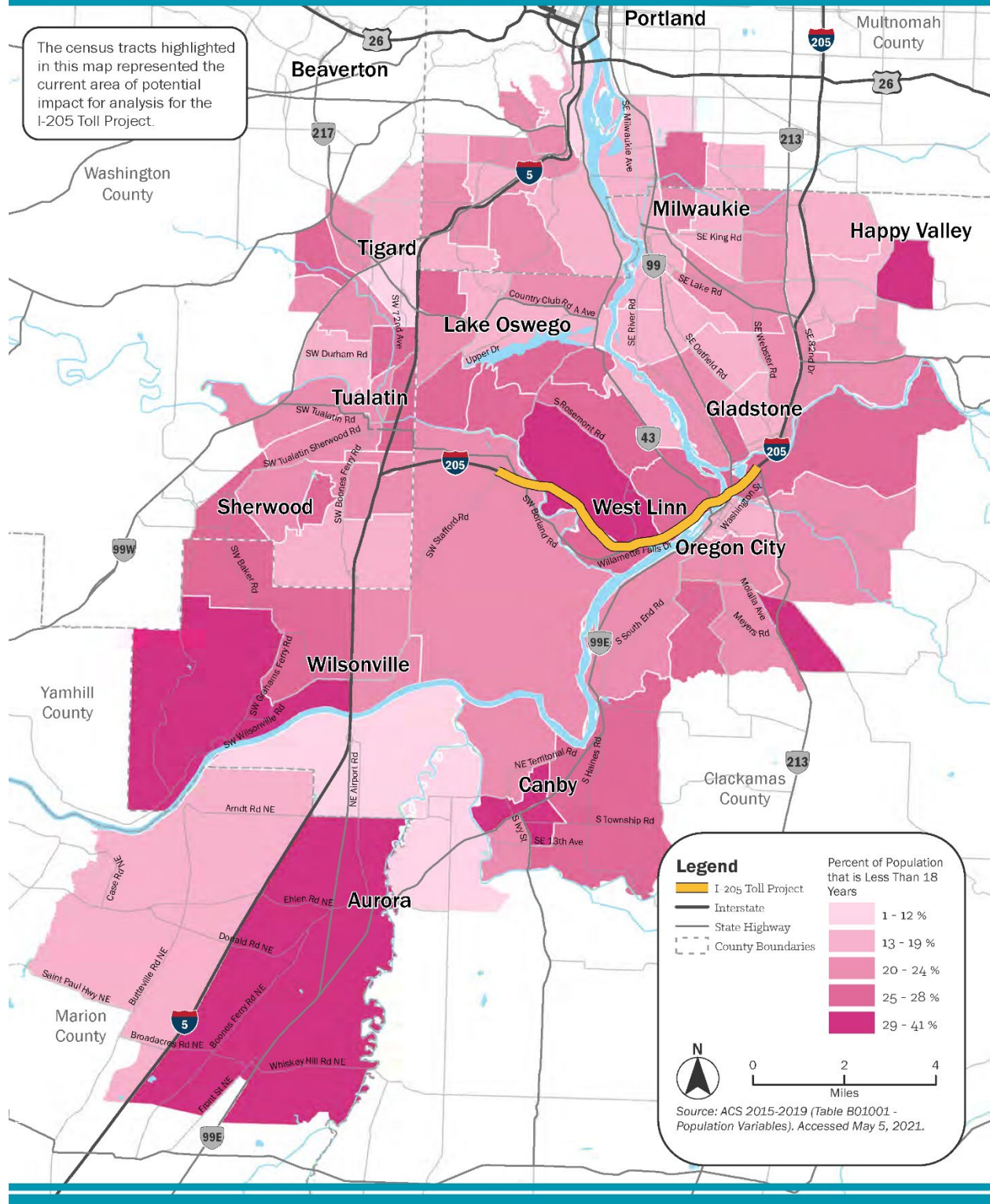
Figure 2. Heat Map of All Online Survey Responses by ZIP Code (left) and Heat Map of Online Survey Responses from Black, Indigenous, and People of Color (right)



Demographic Maps

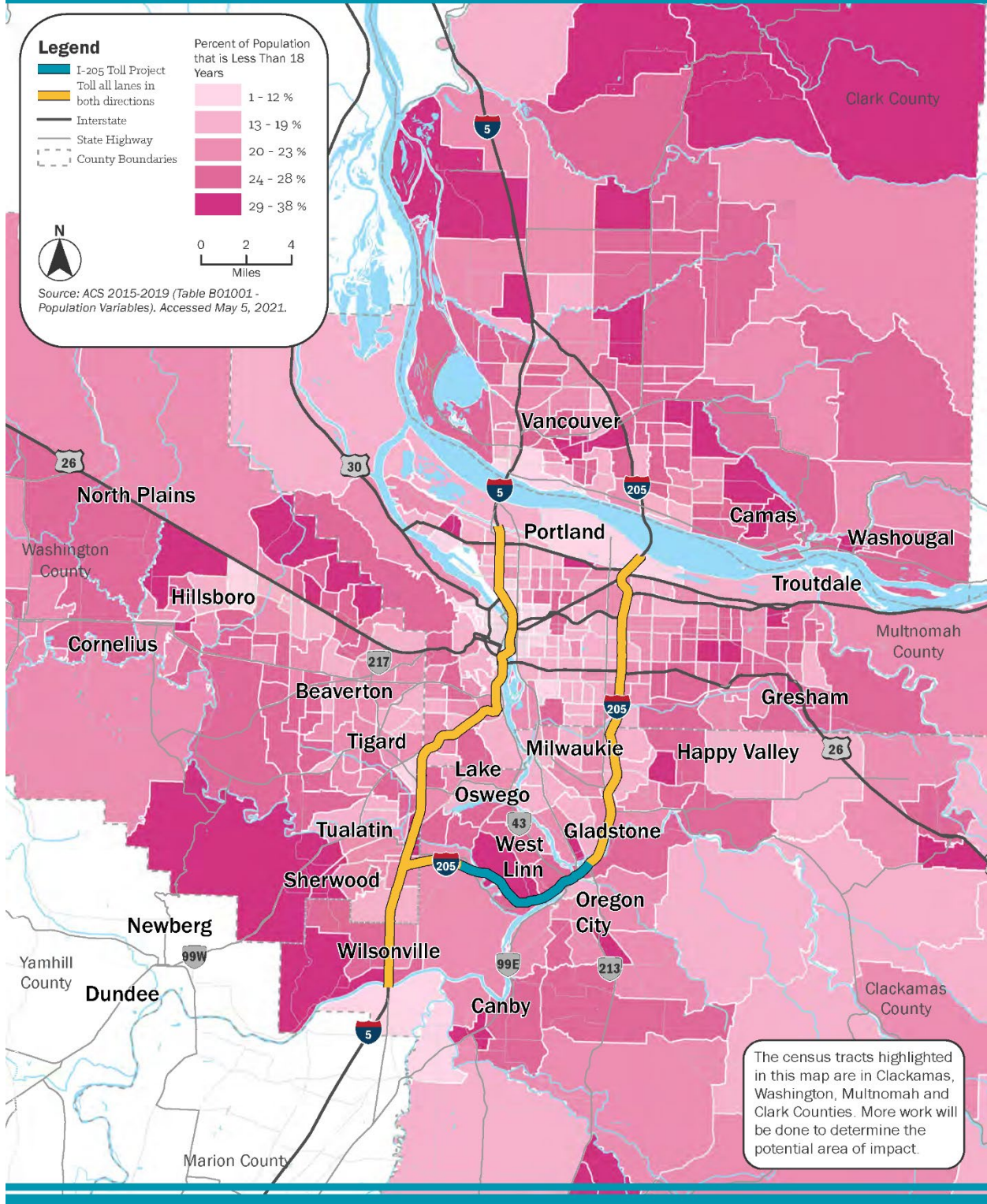
Children (18 years and younger)

Equity Framework Step 1



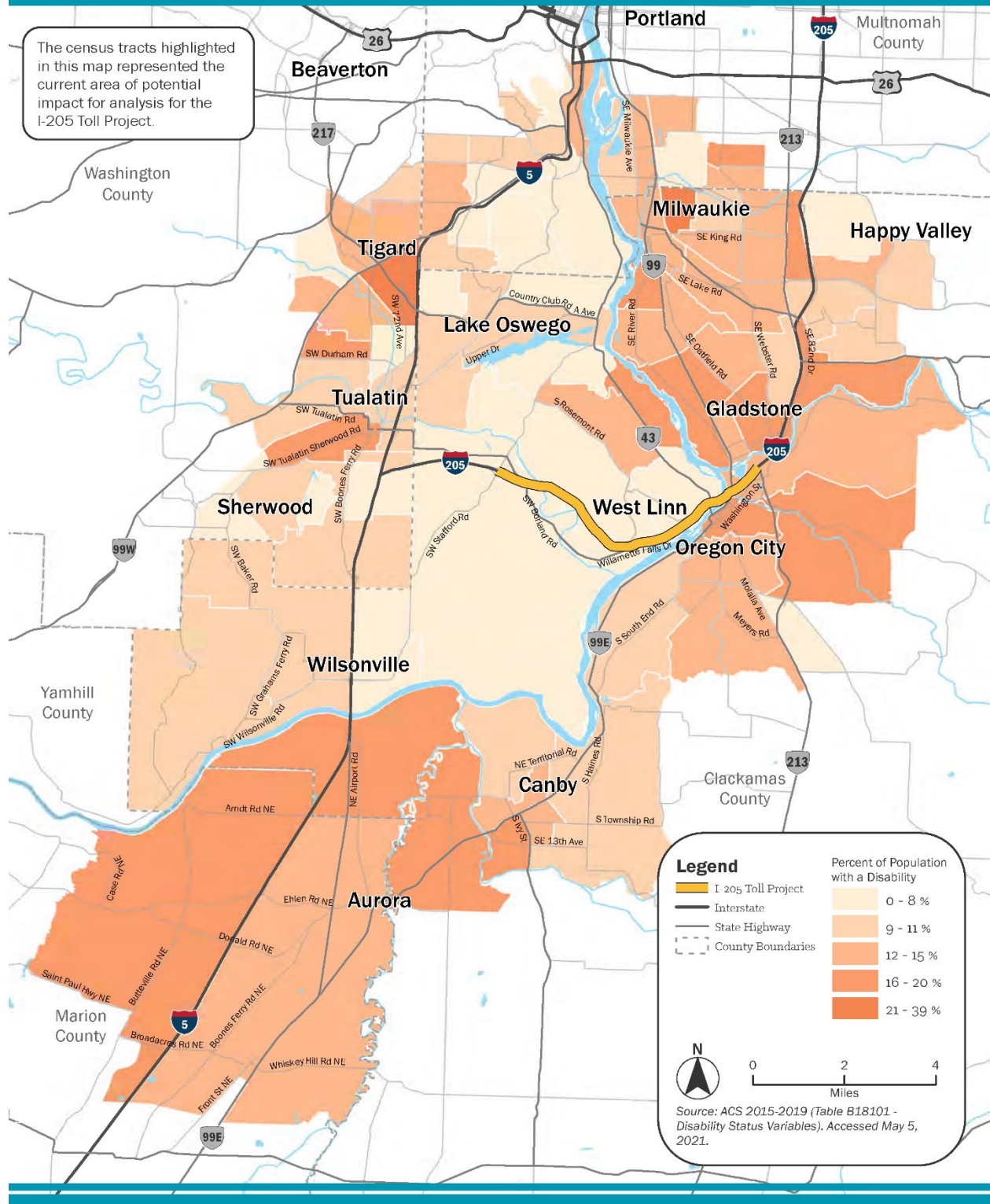
Children (18 years and younger)

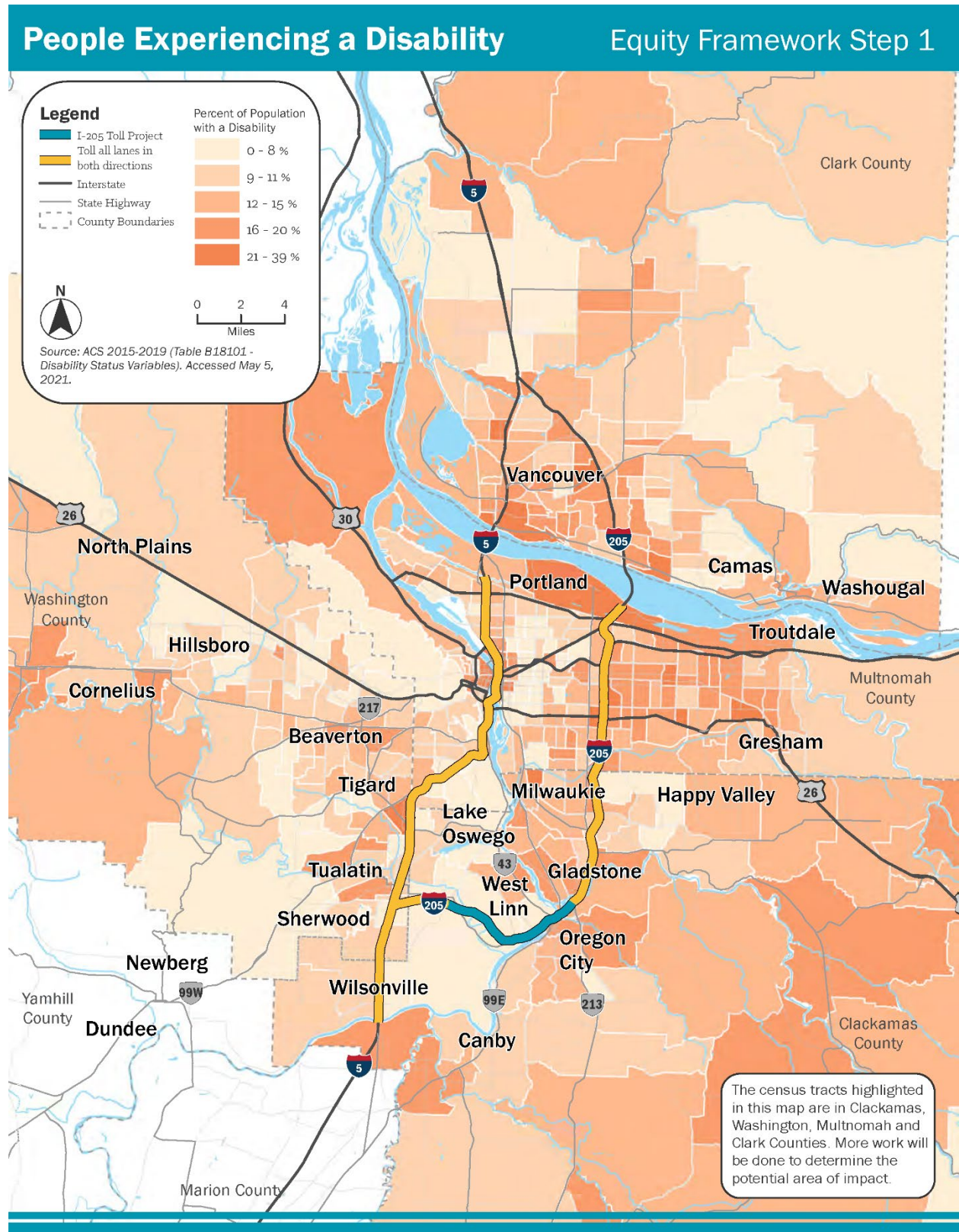
Equity Framework Step 1



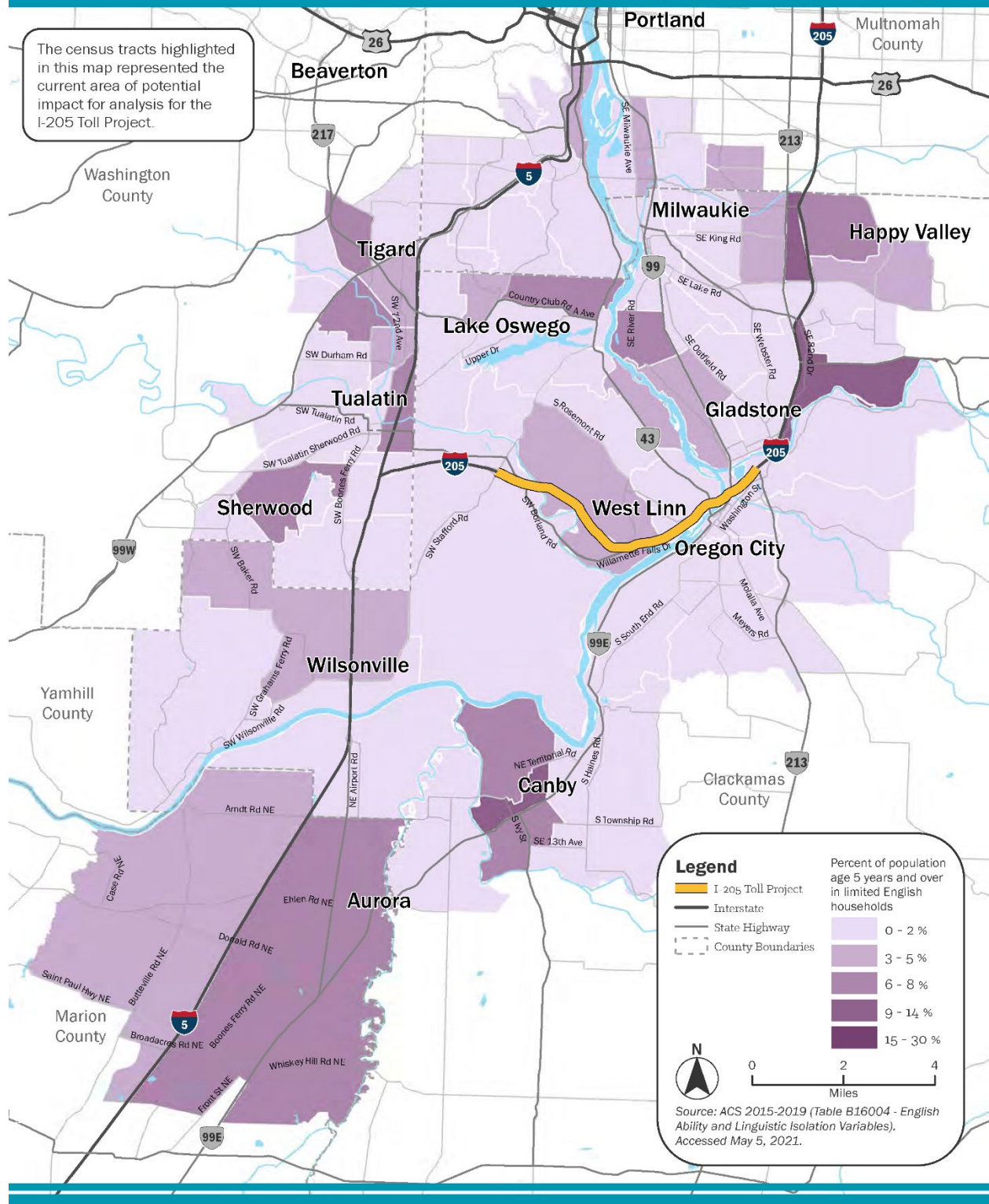
People Experiencing a Disability

Equity Framework Step 1



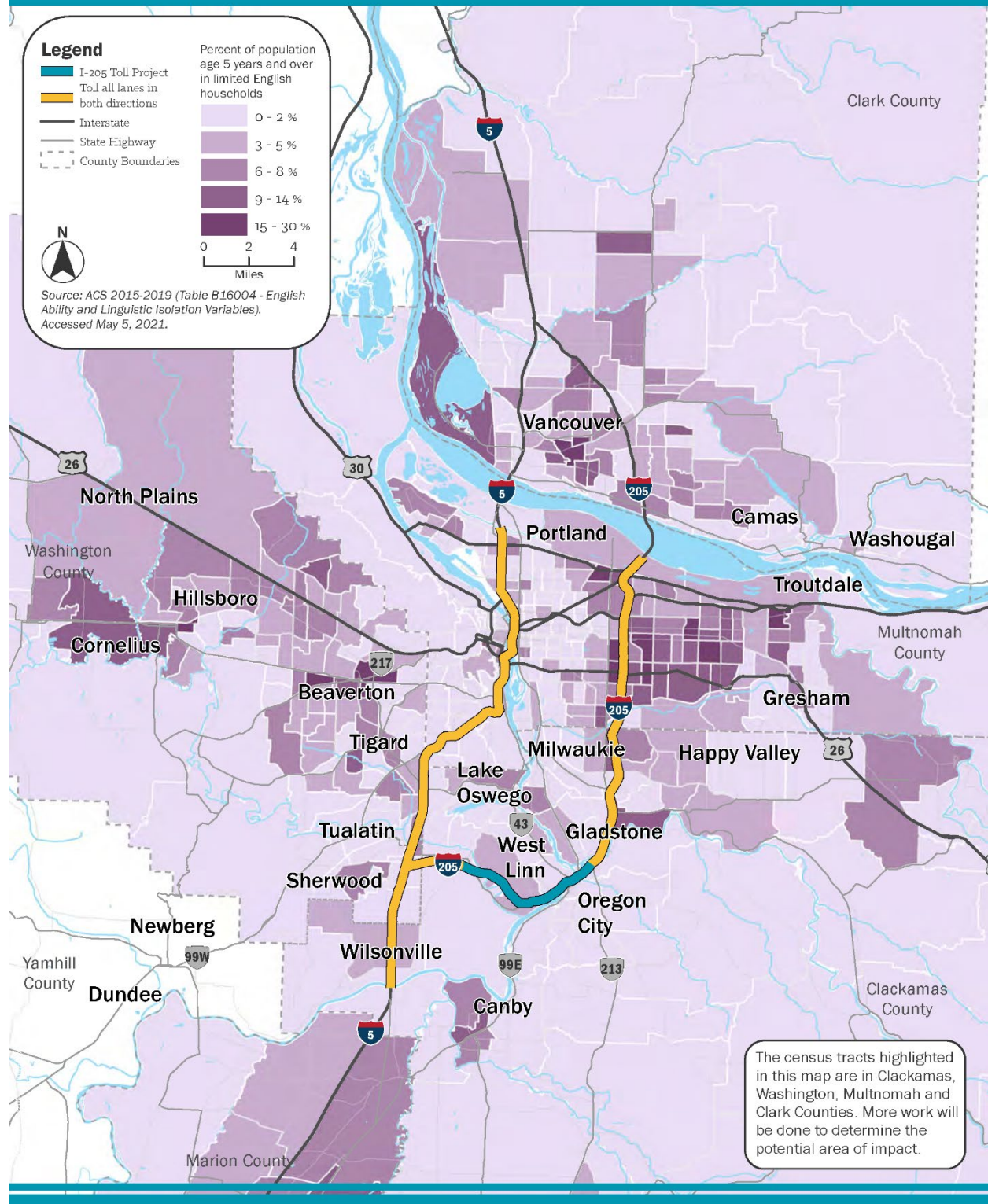


Persons with Limited English Proficiency Equity Framework Step 1



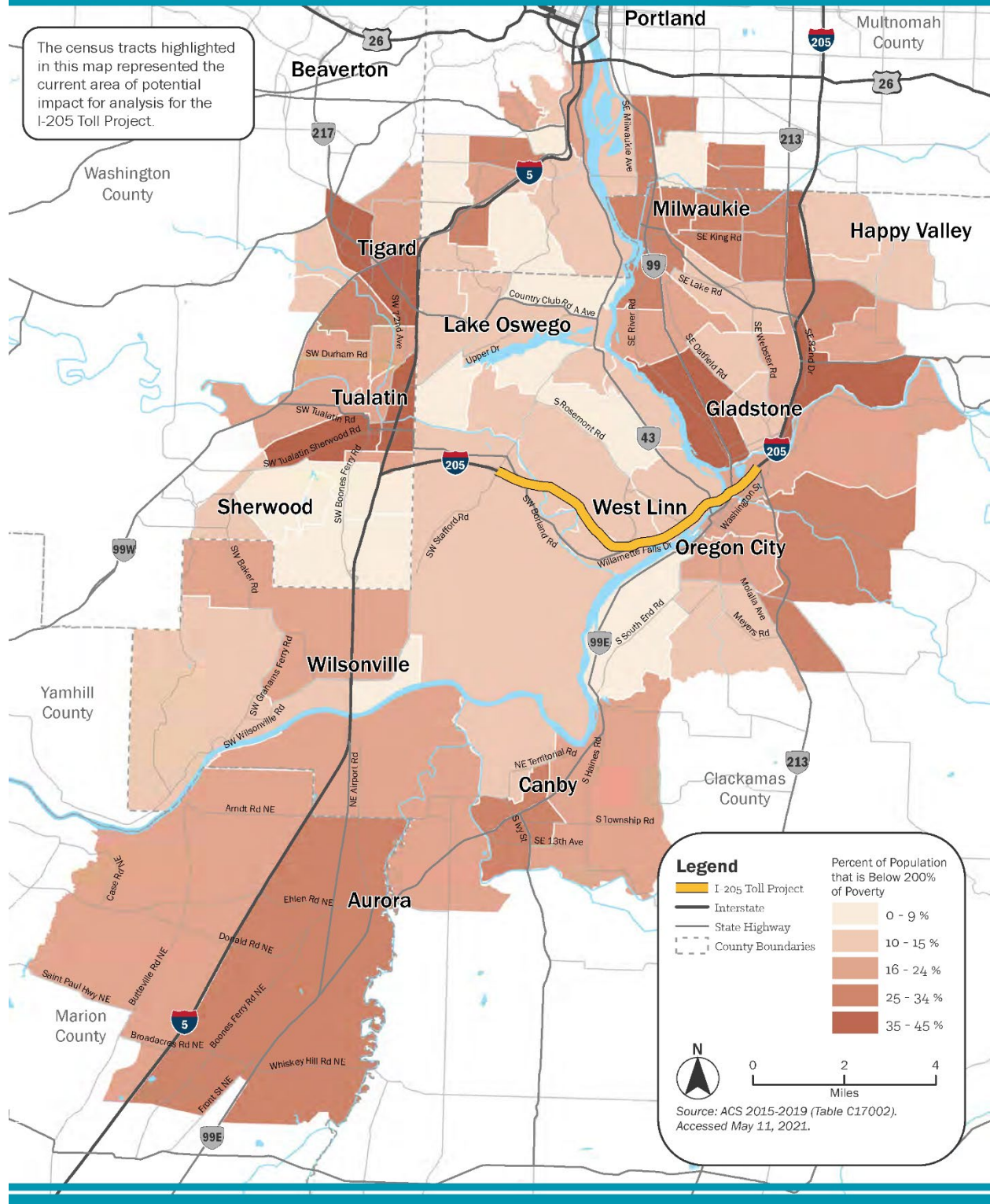
Persons with Limited English Proficiency

Equity Framework Step 1



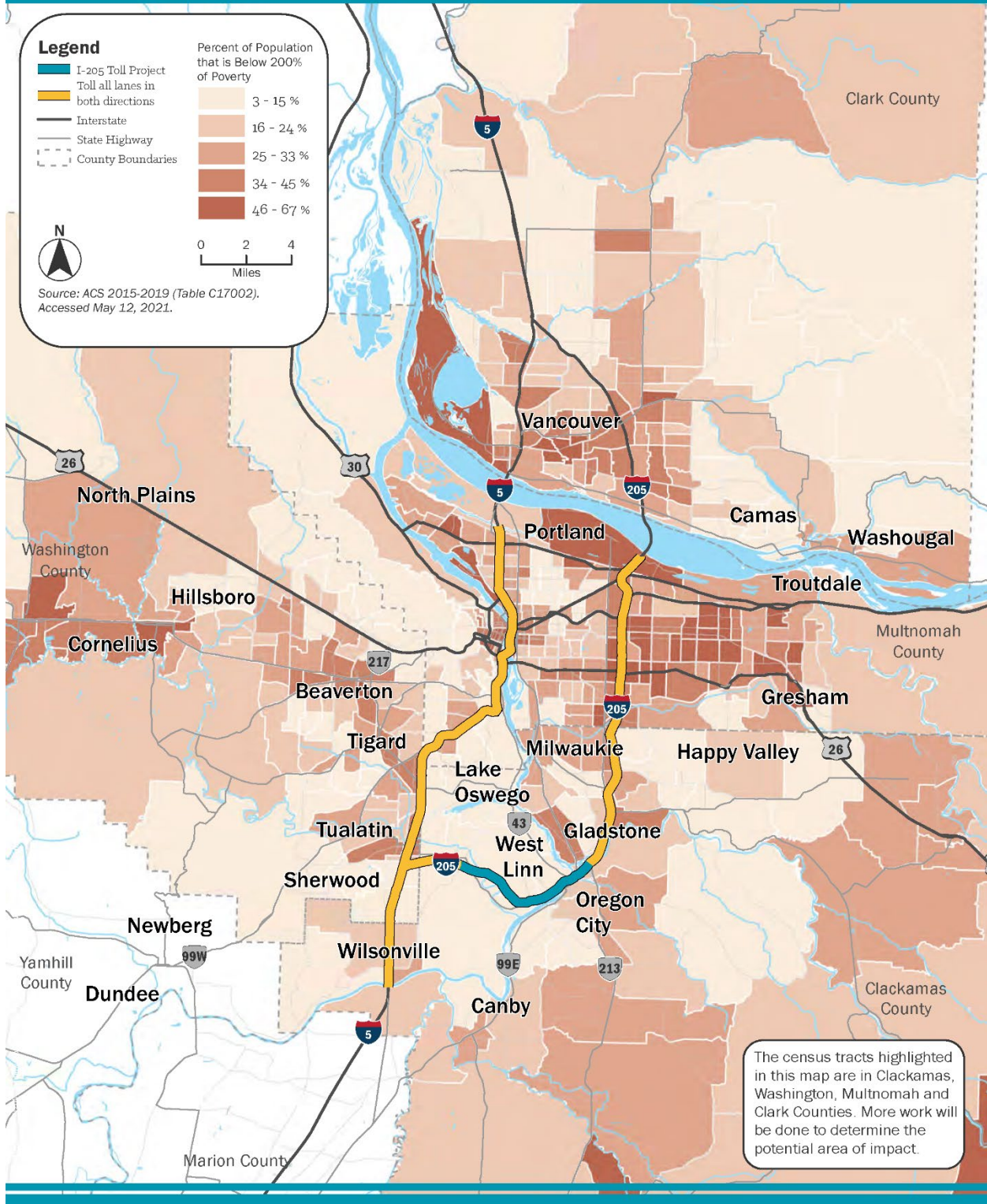
People Experiencing Low-Income

Equity Framework Step 1



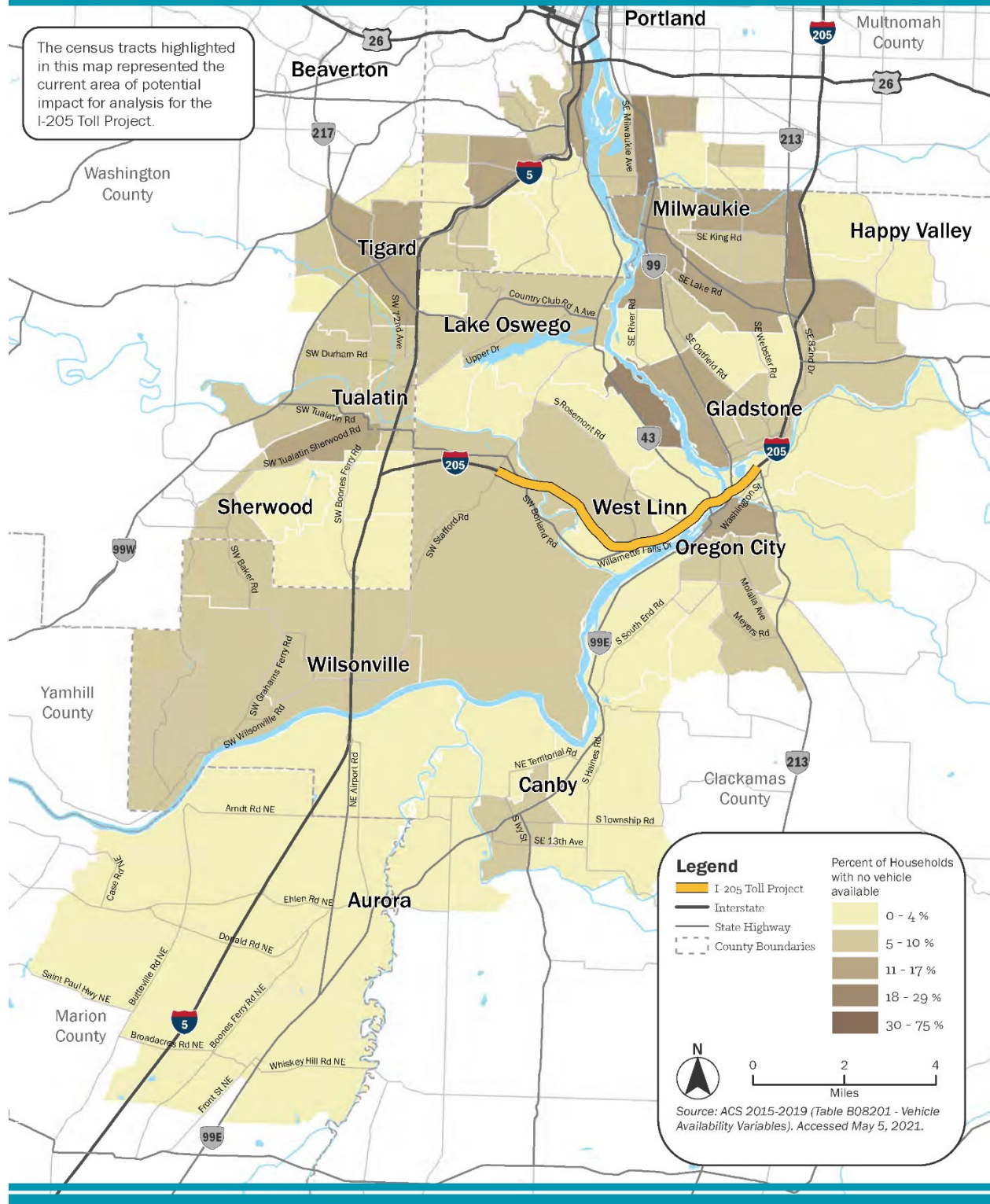
People Experiencing Low-Income

Equity Framework Step 1



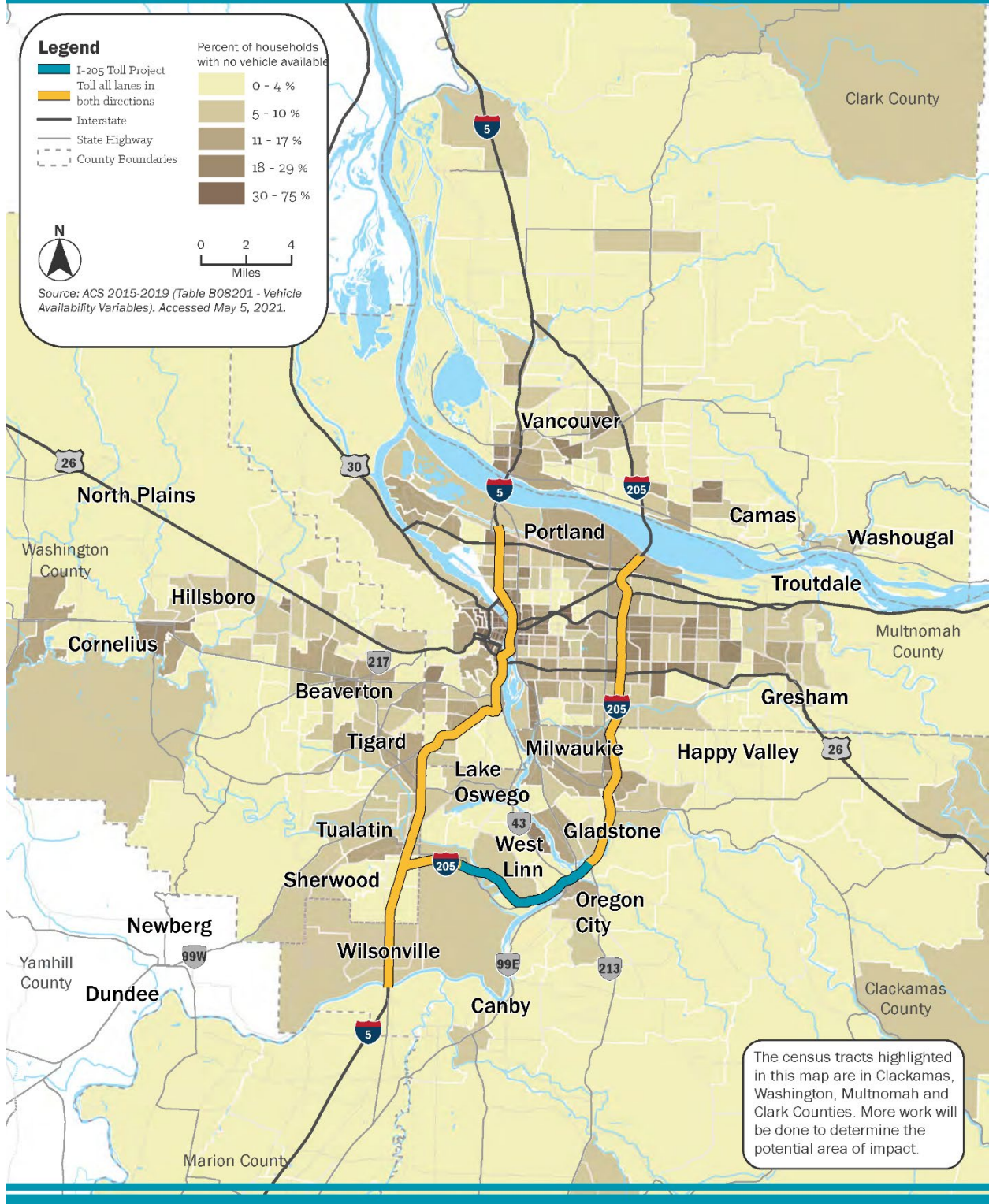
Households with No Vehicle Access

Equity Framework Step 1



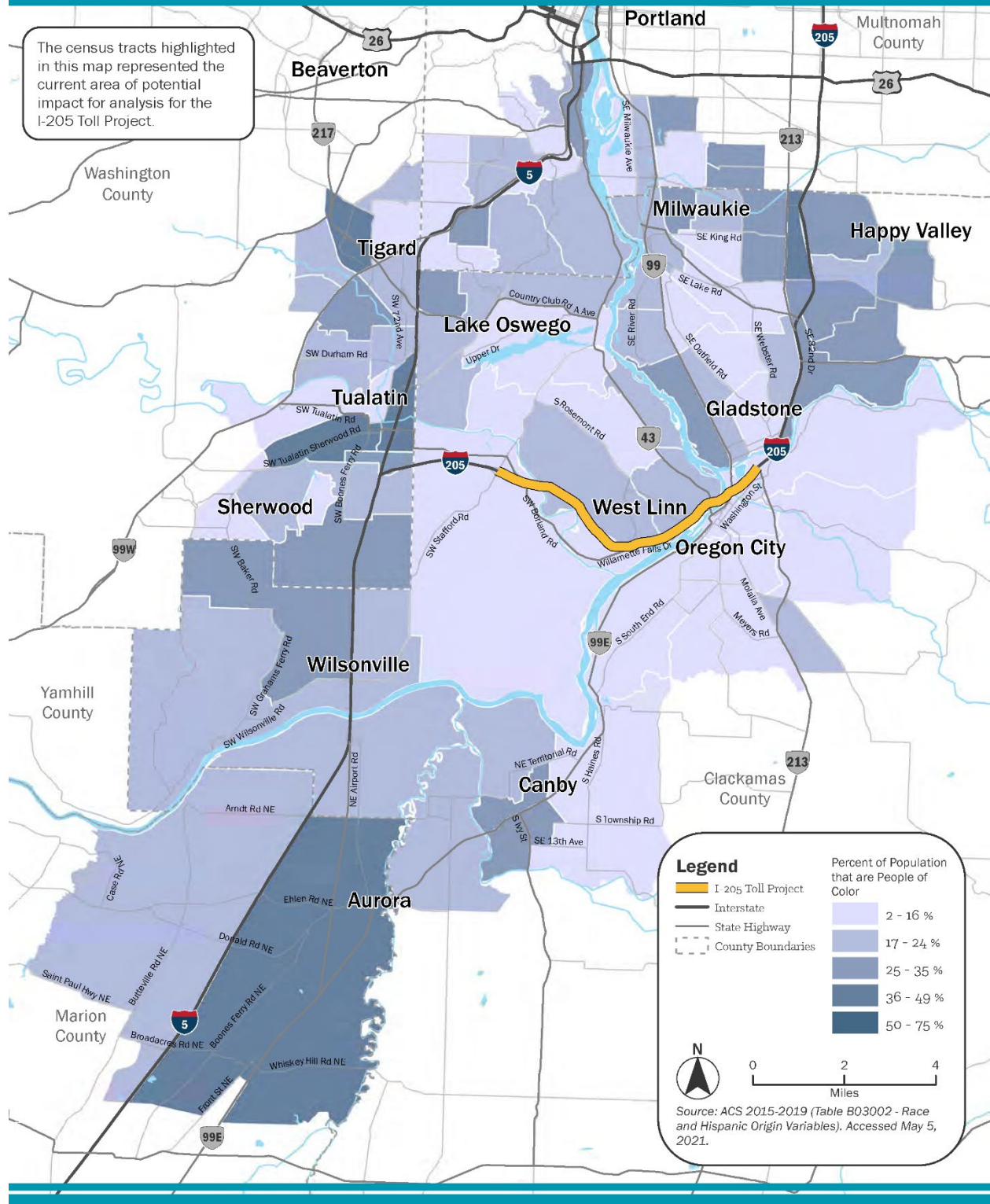
Households with No Vehicle Access

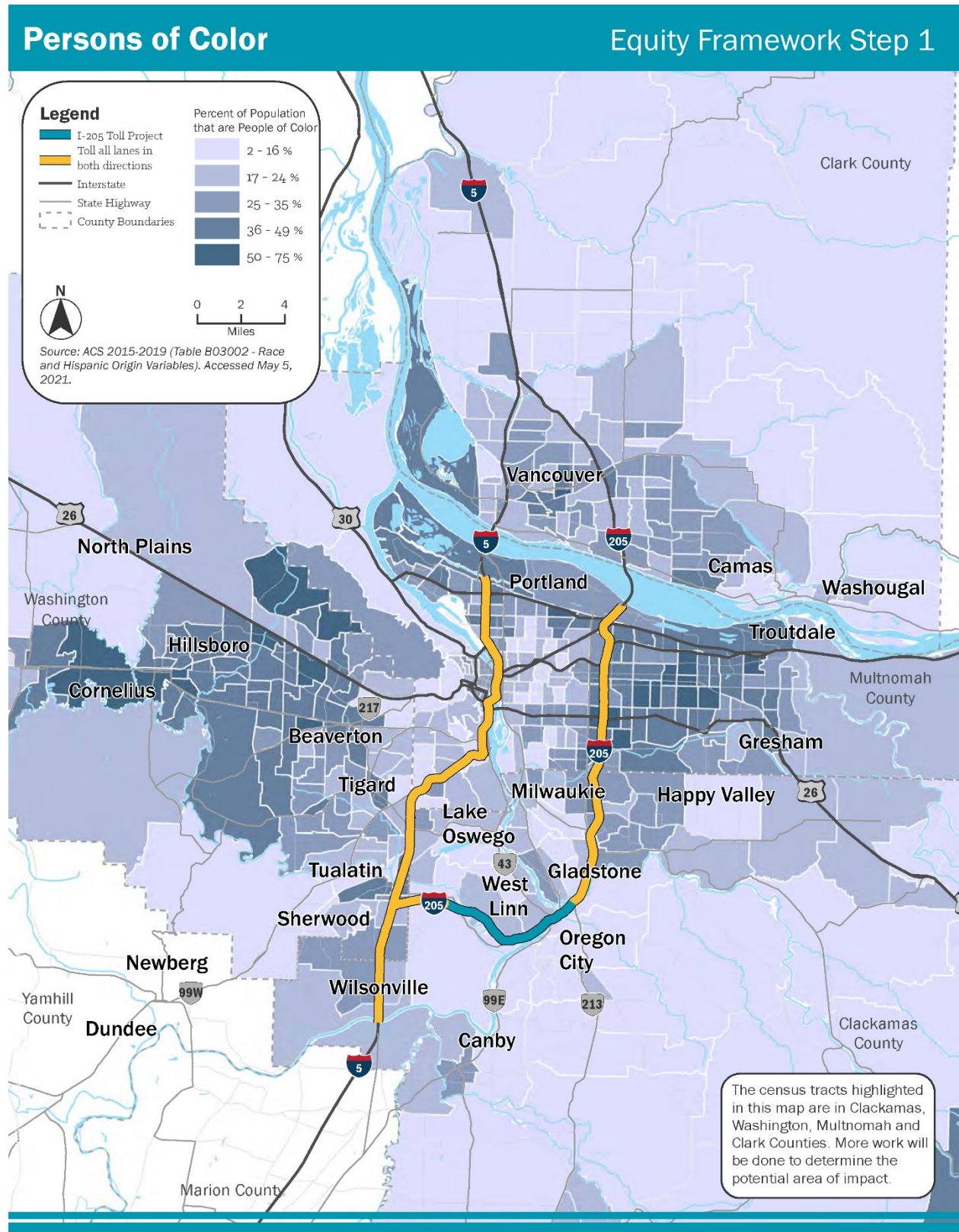
Equity Framework Step 1



Persons of Color

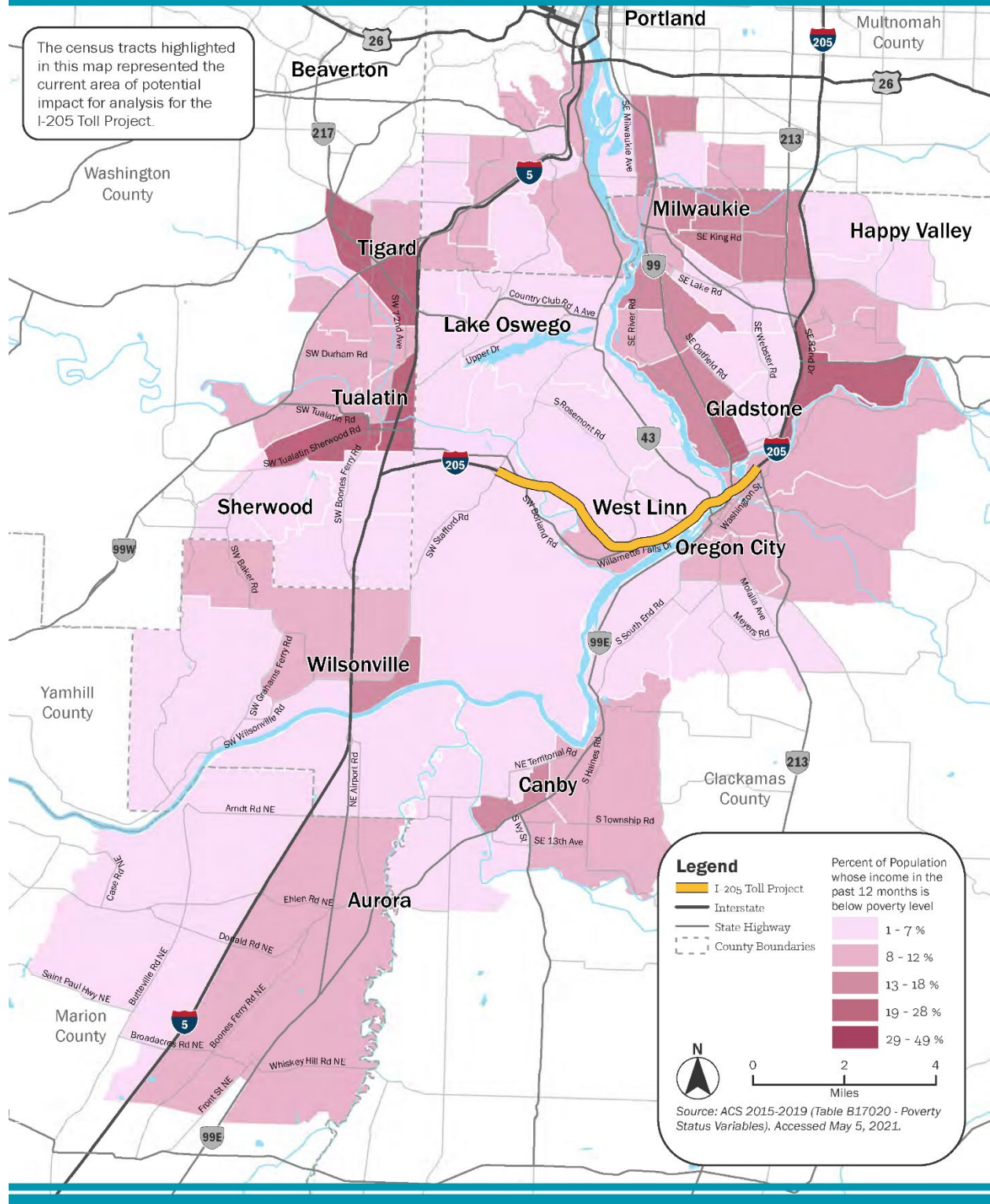
Equity Framework Step 1





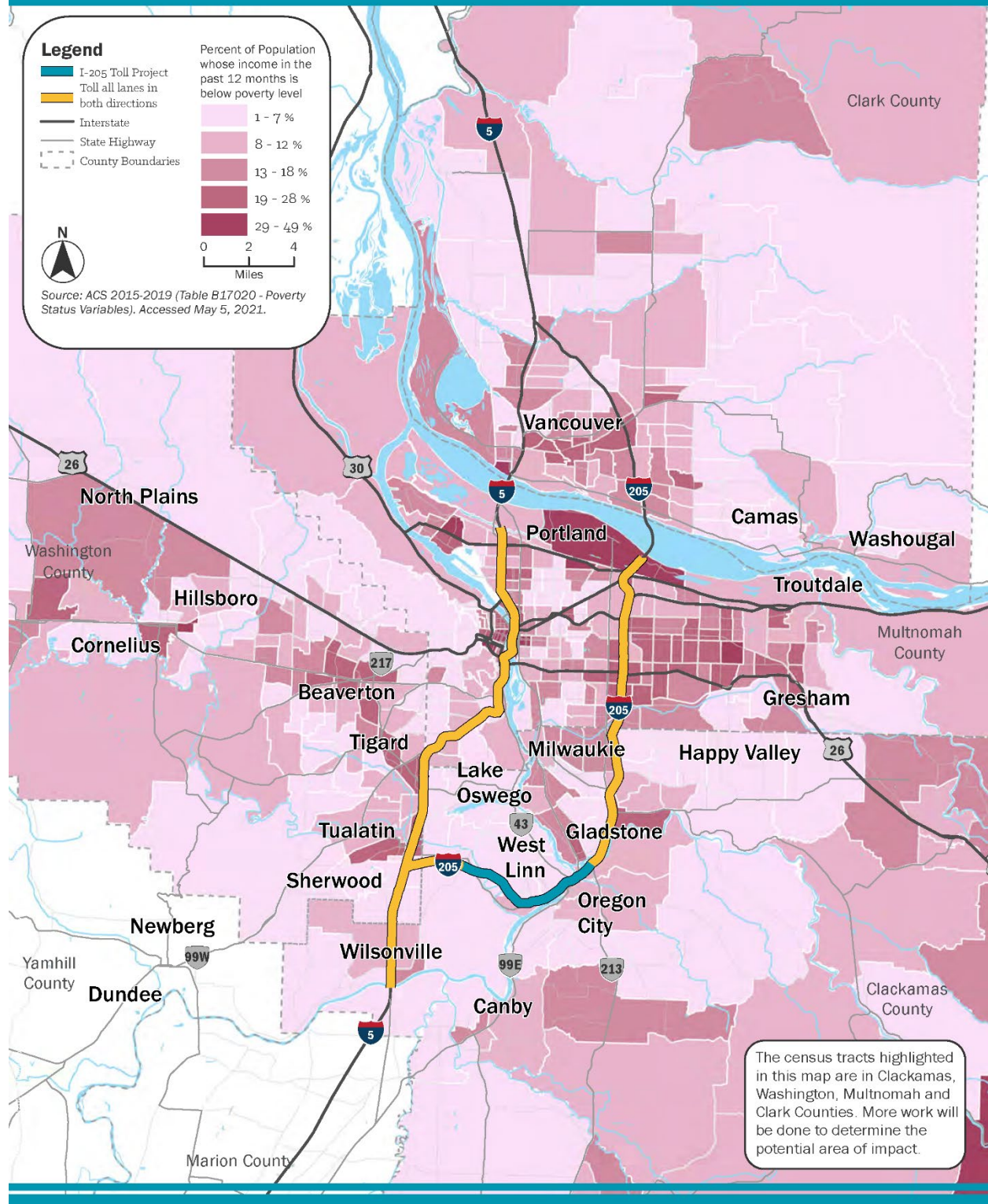
Economically Disadvantaged Populations

Equity Framework Step 1



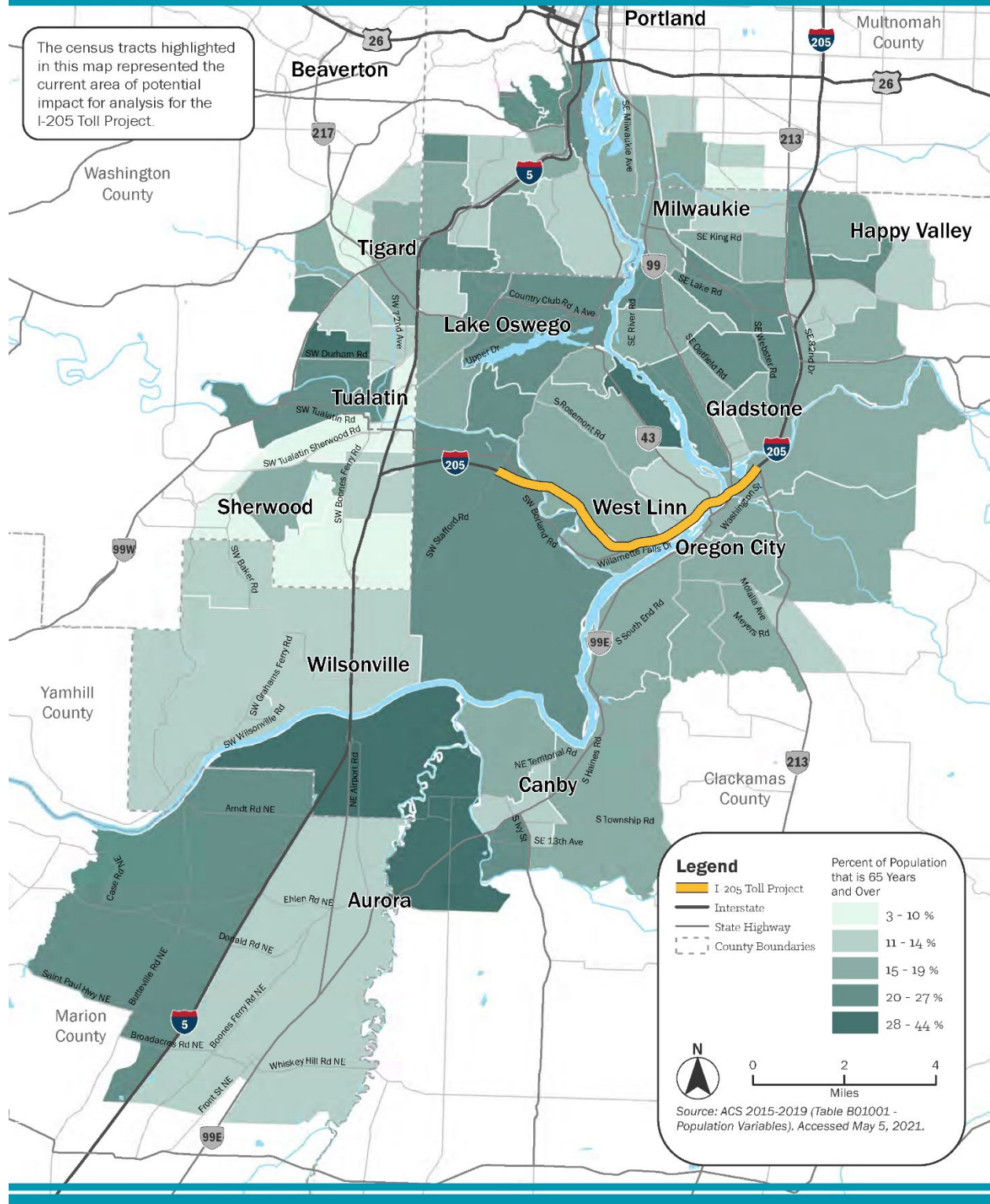
Economically Disadvantaged Populations

Equity Framework Step 1



Older Adults (65 Years and Over)

Equity Framework Step 1



Older Adults (65 Years and Over)

Equity Framework Step 1

