East/West Circulation Alternatives

# Land Use and Community Design Analysis

Kingston Terrace Master Plan
King City, Oregon

**Prepared For:**
3J Consulting and King City, Oregon

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## East/West Circulation Alternatives

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**Project Information**

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| Project: | Kingston Terrace Master Plan |
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**Reviewing Agency**

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| Jurisdiction: | King City, Oregon |

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# 1 INTRODUCTION

## 1.1 Purpose of this Report

This report has been prepared to document many of the factors identified for evaluation in the broad land use and community design category. Included in the report is an assessment of how well the east/west circulation alternatives:

- Support planned land use patterns
- Affect existing and new neighborhood cohesion
- Serve those with the greatest transportation needs and the least resources
- Benefit or impact disadvantaged or marginalized populations (i.e., social and environmental justice (EJ) populations and resources in the study area)

The analysis presented in this report includes an overview of the study area's existing conditions and an assessment of the social and EJ implications of a range of alternatives.

## 1.2 Study Area

The study area for evaluating land use and community design impacts is primarily focused on the area north of the Tualatin River, south of Beef Bend Road, east of Roy Rogers Road, and west of the existing city limits and the BPA/PGE utility corridor. The location of the Kingston Terrace Master Plan (KTMP) study area is illustrated in **Figure 1**, along with the existing boundaries of King City.

## 1.3 How the Information in This Report will be Used

The information presented in this report will be used to support the multi-disciplinary evaluation of east/west circulation alternatives using factors that are described in Chapter 2. Ultimately, the results of the analysis covered in this report will be compiled into an Alternatives Analysis report which will inform further discussion on transportation options for the Master Plan. This information will be further considered as the Kingston Terrace master planning process continues, ultimately leading to identification of a preferred course of action.

## 1.4 Report Content and Organization

This report is organized into six chapters. Following this introduction, Chapter 2 discusses the regulatory framework used in particular for evaluating social and environmental justice evaluation factors. Chapter 3 reports on existing conditions in the study area, including existing land uses, and demographics and EJ populations. Chapter 4 summarizes the future land use plans for the study area. Chapter 5 presents the social and environmental justice evaluation for the Kingston Terrace east/west circulation alternatives, and Chapter 6 summarizes the evaluation results.

**Figure 1. Kingston Terrace Study Area and Vicinity**
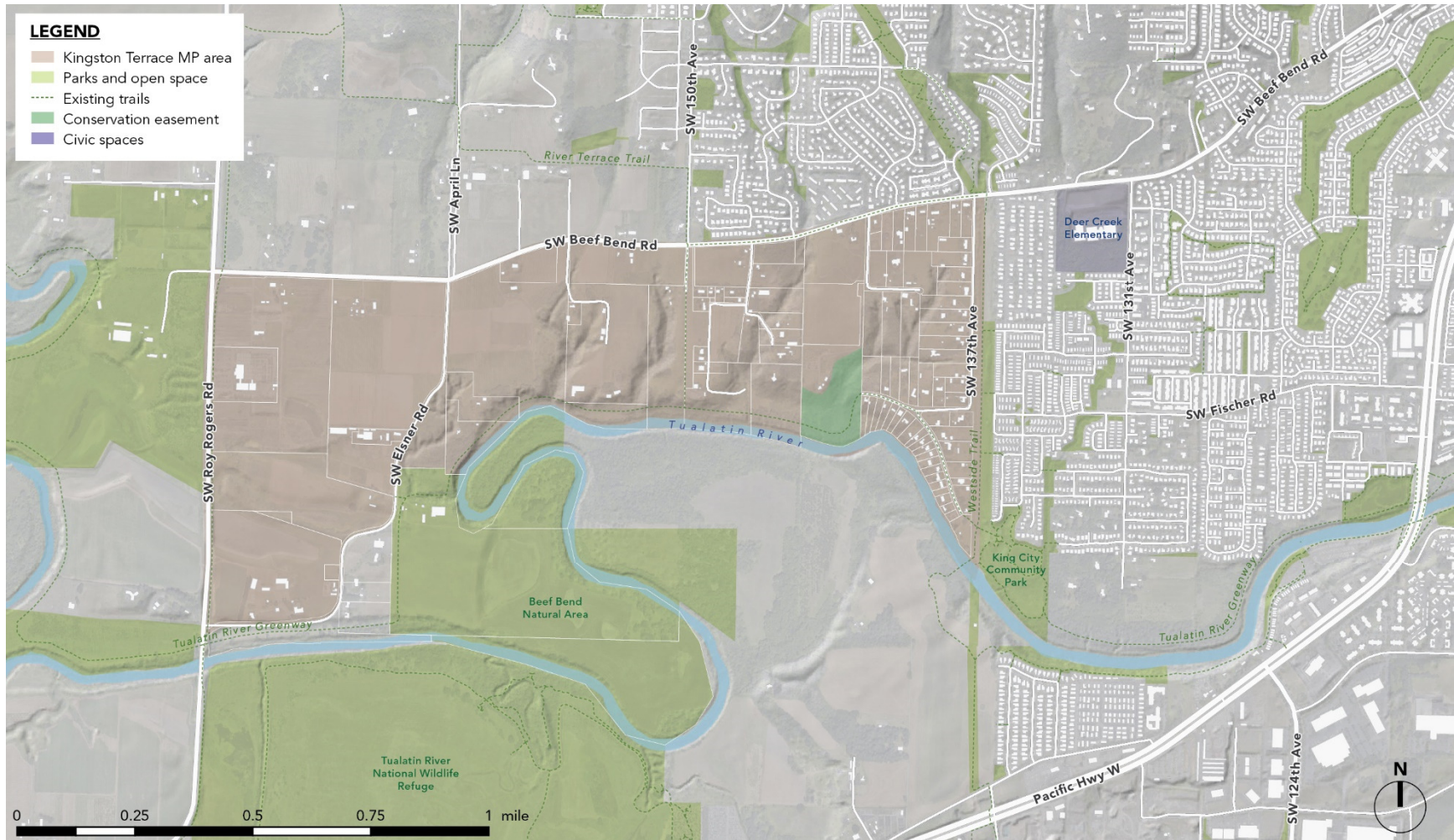
# 2 REGULATORY FRAMEWORK AND EVALUATION FACTORS

## 2.1 Social and Environmental Justice Regulatory Framework

The EPA defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to development, implementation, and enforcement of environmental laws, regulations, and policies."[1] While there is no specific regulatory requirement for social and environmental justice analysis at a local level, federal and state laws lay out a framework to guide the implementation of relevant regulations.

### 2.1.1 Federal Framework

In response to mounting evidence that communities of color and low-income communities faced a disproportionate share of adverse environmental consequences, Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was signed in 1994. The Order was created to ensure that "all communities and persons across this Nation live in a safe and healthful environment."[2] Among other initiatives, this Order directs each federal agency to develop a strategy to ensure its actions do not have "disproportionally high and adverse human health or environmental effects" on low-income and minority populations.

The Order lays out the framework for integrating environmental justice considerations within Federal actions by requiring agencies to do the following:

- ♦ Analyze environmental effects, including human health and socioeconomic impacts of Federal actions on minority and low-income communities
- ♦ Provide opportunities for early and continuous input by communities potentially affected by action, including opportunity to review and discuss environmental and/or health impacts, alternatives and mitigation measures

Further, the Order explicitly incorporates environmental justice considerations into Federal agency compliance with Title VI of the Civil Rights Act of 1964. Title VI provides that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."[3]

### 2.1.2 State Framework

Awareness of social and environmental injustice has grown in recent decades, and Oregon has responded in a number of ways. In 1993, The Oregon Environmental Equity Citizen Advisory Committee was formed to assist Department of Environmental Quality (DEQ) and Oregon Health Division to investigate how the State's environmental programs may contribute to environmental discrimination; DEQ made a series of recommendations for immediate action to incorporate equity considerations into agency programs in 1994.

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[1] *https://www.epa.gov/environmentaljustice*

[2] *https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf*

[3] *42 U.S.C. § 2000(d) (1964)*

In 1997, The Governor's Environmental Justice Advisory Board (GEJAB) was created to determine how the state's natural resource agencies could better implement the 1994 recommendations. And in 2007, Oregon's Environmental Justice Task Force was established to advise the Governor and state natural resource agencies on environmental justice concerns. The Task Force meets with EJ communities across the state, reports directly to the Governor about environmental justice concerns those communities are facing, and works with agencies to address those concerns while meeting EJ goals. The law also requires state natural resources agencies to address EJ issues as part of standard operations.

### 2.1.3 Social and Environmental Justice Guidance

Although, as previously mentioned, there are no specific local regulatory requirements related to social and environmental justice, guidance can be found from both federal and state agencies. The State of Oregon Environmental Justice Task Force produced a handbook titled "Environmental Justice: Best Practices for Oregon's Natural Resource Agencies" that offers guidance, tools, and approaches for identifying potential environmental justice issues[4]. This report used guidance from the EJ Task Force's handbook to identify social and environmental justice populations and resources in the study area.

## 2.2 Evaluation Factors for Social and Environmental Justice

These factors address the potential effect of alternatives on various components of social and environmental justice within the community, including land use, recreational, environmental, and cultural impacts. Specific factors include:

- ♦ Impacts to or support of land use patterns as envisioned in the Concept Plan and evolving Kingston Terrace Master Plan (KTMP)
- ♦ Protects existing and new neighborhood cohesion
- ♦ Minimizes adverse impacts and provides circulation benefits to those with the least access to transportation resources and the greatest mobility needs
- ♦ Order of magnitude impact to historically disadvantaged or marginalized populations

The intent of evaluating these factors is to differentiate among alternatives, highlighting the choices and trade-offs that need to be made to arrive at a final decision on a preferred alignment(s). This report specifically addresses an evaluation process based on the land use factors and will largely consider "order of magnitude" effects of each alternative.

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[4] *https://www.oregon.gov/odot/Business/OCR/Documents/Oregon_EJTF_Handbook_Final.pdf*

# 3   EXISTING STUDY AREA CONDITIONS

This chapter describes the existing land use patterns and the social and environmental justice (EJ) resources and populations in the study area. Demographics information is provided for EJ populations in the study area, alongside comparative data for King City and Washington County.

## 3.1   Existing Land Use

The existing incorporated area of King City includes about 460 acres and is situated at the southwestern edge of the Portland metropolitan area. The KTMP study area is directly adjacent to and west of the existing King City limits, along the northern bank of the Tualatin River.

Current land use in the study area is dominantly agriculture with associated rural homesteads, and also includes a small number of single-family residential developments unassociated with farming on the eastern edge of the study area, just outside the existing city limits. Areas of moderately dense single-family and multifamily residential development are located just outside and adjacent to the study area: to the east, across 137th Avenue, and to the north, across Beef Bend Road between 137th and 150th Avenues.

The existing study area and its surrounding context are shown in **Figure 1**.

## 3.2   Study Area Demographics

This section examines the demographics data for three EJ populations within the study area: minority populations, low-income households, and limited English proficiency (LEP) populations. Census data for the EJ populations within the study area was gathered from EPA's Environmental Justice Screening and Mapping Tool (EJScreen)[5]. Using official U.S. Census Bureau 2015-2019 American Community Survey (ACS) 5-Year Estimates provided at the block group[6] level, the EJScreen tool distills the census data to reflect only the population within the study area. EJ population data is also provided for King City and Washington County for comparison purposes. EJScreen reports can be found in **Attachment A**.

### 3.2.1   Minority Population

Minority population data for the study area, King City, and Washington County are provided in **Table 1**.

The study area as defined in Figure 1 currently has a small population of 314, with 31.8% of its population identifying as minority individuals. This is slightly smaller than the percentage of minorities in Washington County (34.3%), but quite a bit larger than that in King City overall (18.4%).

In the breakout of ethnicities shown in Table 1, the percentages in the study area roughly mirror those of King City and Washington County. Of note, the percentage of Black residents in the study area is 6.1%, significantly higher than that of King City (2.9%) or Washington County (1.9%). The percentage of Hispanic or Latino residents is 14.3% which, while slightly lower than that of Washington County (16.7%), is quite a bit higher than that of King City (9.6%).

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[5] *EPA EJScreen Mapping Tool, https://ejscreen.epa.gov/mapper/*

[6] *Block groups are geographic units used for data collection by the U.S. Census Bureau. A block group generally has a population of 600 to 3,000 and is the smallest geographic unit for which the Census Bureau publishes sample data.*

Table 1. Minority Population in the Study Area

| Geography | Kingston Terrace Study Area | | King City | | Washington County | |
|---|---|---|---|---|---|---|
| | # of People | % of Total | # of People | % of Total | # of People | % of Total |
| Total population | 314 | -- | 3,937 | -- | 589,481 | -- |
| White alone | 215 | 68.5% | 3,211 | 81.6% | 387,456 | 65.7% |
| Black or African American alone | 19 | 6.1% | 113 | 2.9% | 11,469 | 1.9% |
| American Indian and Alaska Native alone | 3 | 1.0% | 17 | 0.4% | 1,539 | 0.3% |
| Asian alone | 19 | 6.1% | 131 | 3.3% | 62,050 | 10.5% |
| Native Hawaiian and Other Pacific Islander alone | 0 | 0.0% | 0 | 0.0% | 2,417 | 0.4% |
| Some other race alone | 0 | 0.0% | 0 | 0.0% | 1,025 | 0.2% |
| Two or more races | 14 | 4.5% | 87 | 2.2% | 25,324 | 4.3% |
| Hispanic or Latino (of any race) | 45 | 14.3% | 378 | 9.6% | 98,201 | 16.7% |
| **Total minority population** | **100** | **31.8%** | **726** | **18.4%** | **202,025** | **34.3%** |

Note: King City total population in this table reflects values as of the 2015-2019 time period used in analysis presented in this report. Current 2021 population is just under 5,200 residents.

## 3.2.2  Low-Income Households

Data on low-income[7] households in the study area, King City, and Washington County are shown in **Table 2**.

Table 2. Low-Income Households in the Study Area

| Geography | KT Study Area Households | | King City Households | | Washington Co. Households | |
|---|---|---|---|---|---|---|
| | # of Households | % of Total | # of Households | % of Total | # of Households | % of Total |
| Total households | 118 | -- | 2,038 | -- | 219,053 | -- |
| Less than $15,000 | 7 | 5.9% | 310 | 15.2% | 12,775 | 5.8% |
| $15,000-$25,000 | 3 | 2.5% | 223 | 10.9% | 12,668 | 5.8% |
| $25,000-$50,000 | 7 | 5.9% | 405 | 19.9% | 37,828 | 17.3% |
| $50,000-$75,000 | 17 | 14.4% | 405 | 19.9% | 36,464 | 16.6% |
| $75,000 or more | 84 | 71.2% | 694 | 34.1% | 119,318 | 54.5% |
| **Total low-income households (<$50,000)** | **17** | **14.4%** | **938** | **46.0%** | **63,271** | **28.9%** |

Low-income households account for 14.4% of all households in the study area. This is well below the percentage of low-income households in King City (46.0%) and Washington County (28.9%). Because

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[7] *The Oregon Environmental Task Force recommends using 200% of the federal poverty line as a standard best practice for low-income designation. The Office of the Assistant Secretary for Planning and Evaluation (ASPE) website identified the January 11, 2019 poverty guidelines for a four-person household equaling $25,750 per year; 200% of the poverty line would be $51,500. Because the Census data provides income information in ranges of $5,000, this analysis defines a low-income household as one with a household income of less than $50,000 per year.*

King City was originally established as a retirement community, it's not surprising that its share of low-income households would skew well above the regional average, as most retirees live on a fixed income.

### 3.2.3 Limited English Proficiency (LEP) Population

Information on limited English proficiency (LEP)[8] populations in the study area, King City, and Washington County is provided in **Table 3**.

**Table 3. LEP Population in the Study Area**

| Geography | KT Study Area Population | | King City Population | | Washington Co Pop. | |
|---|---|---|---|---|---|---|
| | # of People | % of Total | # of People | % of Total | # of People | % of Total |
| Total population > 5 years old | 279 | -- | 3,316 | -- | 553,510 | -- |
| Speak only English | 218 | 78.1% | 2,689 | 81.1% | 416,442 | 75.2% |
| Speak English "very well" | 55 | 19.7% | 536 | 16.2% | 88,241 | 15.9% |
| Speak English "well" | 4 | 1.4% | 34 | 1.0% | 27,796 | 5.0% |
| Speak English "not well" | 2 | 0.7% | 56 | 1.7% | 15,932 | 2.9% |
| Speak English "not at all" | 0 | 0.0% | 0 | 0.0% | 5,099 | 0.9% |
| **Total population speaking English "less than well" ("not well" + "not at all")** | **2** | **0.7%** | **56** | **1.7%** | **21,031** | **3.8%** |

Limited English proficiency can significantly impede an individual's ability to access resources or participate in public processes, so it is important to document these populations. LEP individuals account for only 0.7% of the study area's population, as compared to 1.7% for King City and 3.8% for Washington County.

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[8] *LEP populations include people over five years old who self-report they speak a language other than English and speak English less than well.*

# 4   FUTURE LAND USE PLANS

This chapter summarizes the future land use plans for the KTMP study area, as taken from the King City URA 6D Concept Plan and the Draft Transportation System Plan. These future land use plans guide the development of the KTMP and the evaluation of social and environmental justice factors.

## 4.1   Concept Plan – King City Urban Reserve Area 6D

The Concept Plan is a long-range planning framework for the 528-acre Kingston Terrace area (formerly known as Urban Reserve Area 6D). The plan promotes a connected transportation system of new internal streets and paths to provide travel options to and through the district, and take traffic pressure off the County arterials. The arterial streets bounding the study area (SW Roy Rogers and SW Beef Bend Roads) are envisioned to evolve to become urban boulevards providing a pleasant and safe walking and bicycling environment, characteristics the current rural highway design lacks.

The plan envisions a walkable and transit-friendly environment to support future transit service along major streets such as SW Beef Bend Road, SW Roy Rogers Road, and the southerly extension of SW River Terrace Boulevard. The development concept proposes a diverse mix of development contexts, with the higher density uses in the western and northern portions of the area. Moving east, neighborhoods are planned to become more residential and are defined by the natural edges of the ravines. The least dense areas would be furthest to the east and along the Tualatin River. The overall design philosophy embraces a careful sensitivity to the transition between rural and urban areas.

Key land use guidelines include:

- ♦ Assume the more immediate development will occur on the west side of the URA 6D within first ten years and slow incremental development will occur over a longer period on the east side.
- ♦ Concentrate the intensive mixed land uses and development types to the west.
- ♦ Identify the minimum development yield or number of dwelling units that will be needed to pay for infrastructure, including utilities, streets and parks.
- ♦ Identify the maximum development yield or number of dwelling units that could be achieved while meeting the community vision and goals.

An illustration of the Concept Plan's land use framework is shown in **Figure 2**.

**Figure 2. Concept Plan Land Use Framework**
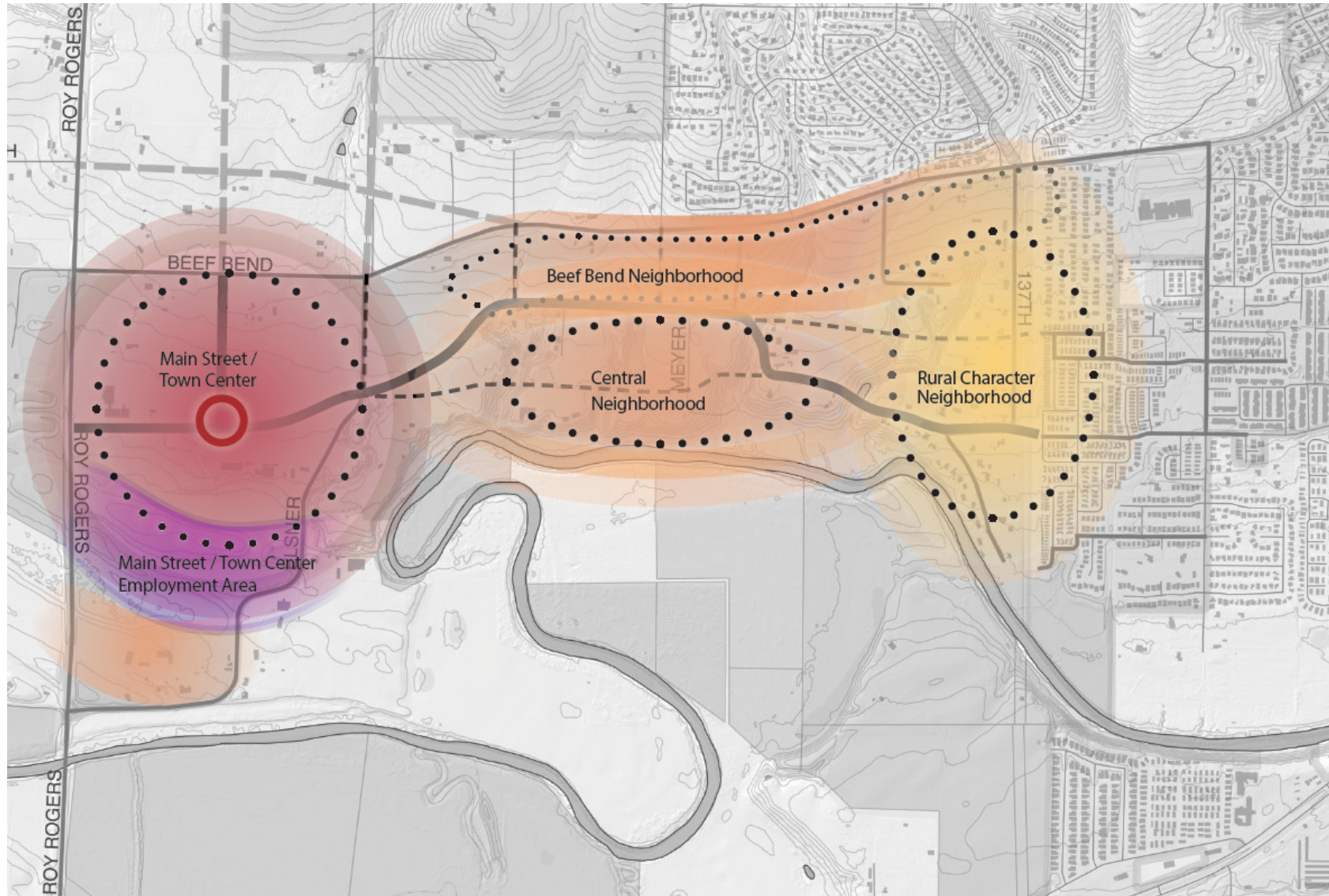
# 5 ANALYSIS OF SOCIAL AND ENVIRONMENTAL JUSTICE EFFECTS

The information presented in this report is part of a more detailed refinement of the 2018 Concept Plan originally prepared for Kingston Terrace. Since that initial effort was completed, questions have been raised about the location, alignment, and general characteristics of an east/west collector street through the proposed development. A more in-depth circulation alternatives analysis is being conducted which includes consideration of potential land use impacts and effects on social and environmental justice. This chapter presents a discussion of the development of circulation alternatives including identification of a shortlist of reasonable options, highlights of the analysis process, and key findings relevant to several land use and community design evaluation factors.

## 5.1 East/West Circulation Alternatives

**Figure 3** illustrates the shortlist of reasonable east/west circulation alternatives, identified through a multi-step screening process, for which the social and environmental justice evaluation has been conducted. It should be noted that the alignments illustrated in this figure are both generalized and preliminary. As the analysis process is conducted, alignment modifications may be made and some options may ultimately be rejected.

Additionally, it should also be noted that the precise alignment of the preferred circulation alternatives identified through more detailed planning may well be revised when actual land development and more detailed engineering occur at some point in the future.

## 5.2 Summary of Evaluation Process

### 5.2.1 Development of Evaluation Factors

As noted in Chapter 2, the evaluation process is based on a list of factors that are expected to most clearly identify the differences among the shortlisted alternatives. As noted in that chapter, the evaluation process is based largely on qualitative, order-of-magnitude comparisons for which precise results are less important that differences among the alternatives.

### 5.2.2 Application of Scoring Factors

Using each of the social and environmental justice evaluation factors, a summary of the key findings and conclusions for each alternative has been prepared and is documented in this chapter. The key findings of this analysis are presented in a summary table which is supported by a more detailed summary in matrix format that has been included in Chapter 6. Based on the summary of both quantitative and qualitative data, each alternative will be scored relative to each factor. Determination of rankings will be based on quantitative analysis data where available. Otherwise, a qualitative assessment of the relative merits of each alternative for each factor will be determined.

**Figure 3. East/West Circulation Alternatives**
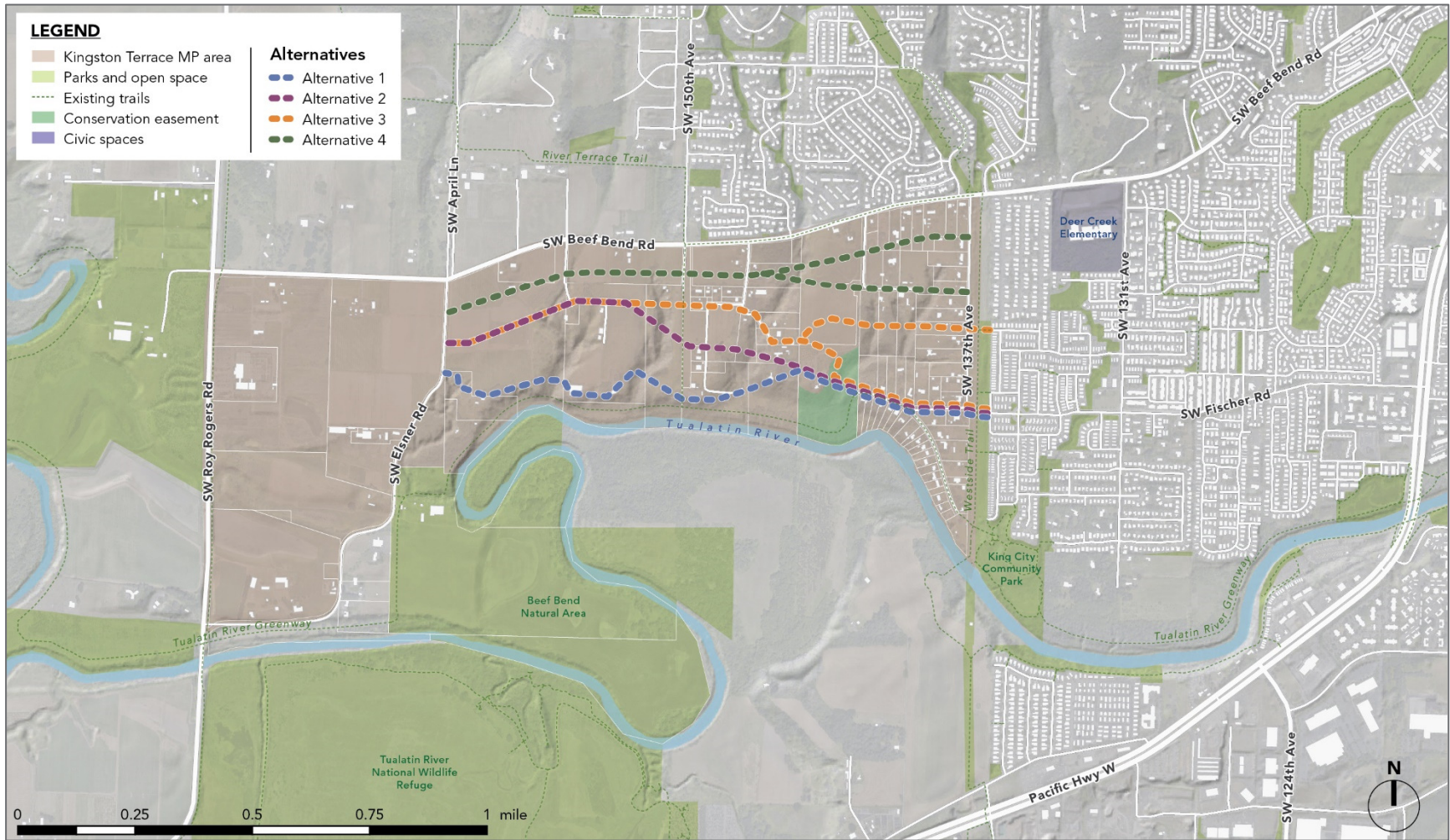
The east/west circulation alternatives will be evaluated for each factor based on five levels of impact as illustrated in the graphic. In considering how best to rank a circulation alternative relative to a specific factor or among categories of factors it will be important to consider how the alternatives compare with each other. Absolute numbers from a quantitative evaluation or the more general qualitative assessments are less important than the comparison among alternatives.

- Most positive or least negative effect
- Positive or low to moderately negative effect
- Neutral or moderate effect
- Moderately high negative effect
- Most negative effect
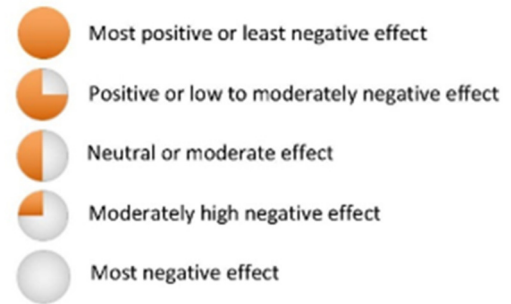
It will also be important in identifying a preferred alternative to recognize that there is no perfect solution – all alternatives will have positive benefits and negative impacts. Existing plans, policies and the regulatory context will be considered in evaluating trade-offs among alternatives, as will the magnitude of identified adverse impacts and positive benefits. A balance among the factors will be sought so that no single category outweighs another but that they are considered on the basis of their merits. Scoring results for all alternatives and factors are presented in Chapter 6.

## 5.3   Evaluation of Land Use and Community Design Factors

This section focuses on the potential effects of the east/west circulation alternatives on social and environmental justice resources and communities. The evaluation was conducted using the factors identified in Chapter 2 and summarized below as they related to sustainable/healthy outcomes, safety, performance, connectivity, and accessibility. Specific factors include:

- Impacts to or support of land use patterns as envisioned in the Concept Plan and evolving Kingston Terrace Master Plan (KTMP)
- Protects existing and new neighborhood cohesion
- Minimizes adverse impacts and provides circulation benefits to those with the least access to transportation resources and the greatest mobility needs
- Order of magnitude impact to historically disadvantaged or marginalized populations

Each of these factors is discussed in more detail in the sub-sections that follow.

### 5.3.1   Support of Planned Land Use Patterns

This section evaluates how each alternative would impact or support land use patterns as envisioned in the Concept Plan and the evolving Kingston Terrace Master Plan. Analysis results are included in **Table 4**.

As noted in Chapter 4, both the Concept Plan and the Draft King City Transportation System Plan prescribe connections to existing and planned infrastructure in the areas surrounding the study area. Providing no direct east/west connection would not support these future land use plans. Alternatives 1 and 4 are farther from the center of the overall study area, and Alternative 4 additionally provides no direct connection to the existing city to the east. Alternatives 2 and 3 are more central to the study area and planned future development and provide a direct easterly connection.

Table 4. Support of Planned Land Use Patterns

| Alternative | Potential Impacts on Land Use Patterns |
|---|---|
| No Direct Connection | Would not support future land use patterns as envisioned in Concept Plan and KTMP |
| Alternative 1 | Peripheral to center of development and farther from higher-density planned land uses in northern portion of site, but provides direct east/west connection to existing city |
| Alternative 2 | Central to development; serves both higher-density planned land uses in northern portion of site and lower-density planned uses in southeastern portion of site; provides direct east/west connection to existing city |
| Alternative 3 | Central to development; serves both higher-density planned land uses in northern portion of site and lower-density planned uses in southeastern portion of site; provides multiple direct east/west connections to existing city |
| Alternative 4 | Closer to higher-density planned land uses in northern portion of site, but peripheral to center of overall development; no direct connections to existing city |

## 5.3.2 Support of Existing and New Neighborhood Cohesion

This evaluation looks at how well each of the alternatives would support existing and new neighborhood cohesion. Neighborhood cohesion is an important social and economic justice factor; maintaining cohesion is vital to successful communities. Analysis results are shown in **Table 5**.

Table 5. Support of Existing and New Neighborhood Cohesion

| Alternative | Potential Impacts on Neighborhood Cohesion |
|---|---|
| No Direct Connection | Reliance on indirect routes would reduce neighborhood cohesion |
| Alternative 1 | Would provide connection to existing neighborhoods to the east |
| Alternative 2 | Would provide connection to existing neighborhoods to the east |
| Alternative 3 | Would provide multiple connections to existing neighborhoods to the east; some opportunity for connections to the north |
| Alternative 4 | No direct connection to the east of 137th, but provides for connections to the north |

Providing no direct east/west connection as the KTMP study area is developed would lead to reliance on indirect routes, reducing neighborhood cohesion. Alternative 4 would provide some opportunities for connections to the north across Beef Bend Road, but provides no direct connection to the existing city. Alternatives 1, 2, and 3 would all provide direct connections to the existing city, helping to support neighborhood cohesion among new and existing neighborhoods. Of these three, the location of Alternative 3 provides some opportunities for northern connections as well, boosting its potential to support neighborhood cohesion.

## 5.3.3 Serves Those with Greatest Transportation Needs and Least Resources

This factor evaluates the extent to which each alternative would serve those with the greatest transportation needs and least resources. To assist in this evaluation, low-income households within a quarter-mile radius of each east/west alternative alignment were identified using the same EJ Screen methodology described in Section 3.1 and are shown in **Table 7**. The analysis results are presented in **Table 8**. EJScreen results for each alternative can be found in **Attachment A**.

**Table 6. Low-Income Households within ¼ Mile of Each Alternative**

| Geography | KT Study Area | | Alt 1 Focus Area | | Alt 2 Focus Area | | Alt 3 Focus Area | | Alt 4 Focus Area | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of HH | % of Total | # of HH | % of Total | # of HH | % of Total | # of HH | % of Total | # of HH | % of Total |
| Total households | 118 | -- | 251 | -- | 259 | -- | 366 | -- | 845 | -- |
| Less than $15,000 | 7 | 5.9% | 16 | 6.4% | 16 | 6.2% | 23 | 6.3% | 32 | 3.8% |
| $15,000-$25,000 | 3 | 2.5% | 8 | 3.2% | 8 | 3.1% | 11 | 3.0% | 14 | 1.7% |
| $25,000-$50,000 | 7 | 5.9% | 14 | 5.6% | 14 | 5.4% | 20 | 5.5% | 68 | 8.0% |
| $50,000-$75,000 | 17 | 14.4% | 37 | 14.7% | 38 | 14.7% | 54 | 14.8% | 104 | 12.3% |
| $75,000 or more | 84 | 71.2% | 177 | 70.5% | 183 | 70.7% | 259 | 70.8% | 627 | 74.2% |
| **Total low-income HHs (<$50,000)** | **17** | **14.4%** | **38** | **15.1%** | **38** | **14.7%** | **54** | **14.8%** | **114** | **13.5%** |

Note: See Attachment A for maps of the focus areas.

**Table 7. Serves Those with Greatest Transportation Needs and Least Resources**

| Alternative | Potential to Serve Those with Greatest Transportation Need and Least Resources |
|---|---|
| No Direct Connection | Would cause travelers to use circuitous, likely longer routes |
| Alternative 1 | Serves population with highest percentage of households below poverty level; not central to development but provides direct east/west connection |
| Alternative 2 | Serves population with relatively high percentage of households below poverty level; central to development and provides direct east/west connection |
| Alternative 3 | Serves population with relatively high percentage of households below poverty level; central to development and provides direct east/west connection |
| Alternative 4 | Serves population with lowest percentage of households below poverty level; not central to development and provides no direct east/west connection |

Looking at the demographics within a quarter-mile radius of the alignments allows for a finer look at the populations that might be affected by each alternative. Alternative 4 would serve the smallest percentage of low-income households; it is also not central to the development and also provides no direct connection to the existing city to the east. Alternative 1 would serve the highest percentage of low-income households and provide a direct connection to the east, although it is not central to the development. In the long term, the population with the greatest transportation need would be better served by direct, central routes and ample connections to the surrounding neighborhoods, all of which would be provided by Alternatives 2 and 3.

## 5.3.4 Impacts to Disadvantaged or Marginalized Population Groups

This factor evaluates the extent to which each alternative would impact disadvantaged or marginalized population groups. To assist in this evaluation, minority and limited English speaking (LEP) populations within a quarter-mile radius of each east/west alternative alignment were identified using the same EJ Screen methodology described in Section 3.1 and are shown in **Tables 9 and 10**. The analysis results are presented in **Table 11**. EJScreen results for each alternative can be found in **Attachment A.**

**Table 8. Minority Populations within ¼ Mile of Each Alternative**

| Geography | KT Study Area | | Alt 1 Focus Area | | Alt 2 Focus Area | | Alt 3 Focus Area | | Alt 4 Focus Area | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of People | % of Total | # of People | % of Total | # of People | % of Total | # of People | % of Total | # of People | % of Total |
| Total population | 314 | -- | 729 | -- | 758 | -- | 1,166 | -- | 2,388 | -- |
| White alone | 215 | 68.5% | 496 | 68.0% | 517 | 68.2% | 795 | 68.2% | 1,664 | 69.7% |
| Black or African American alone | 19 | 6.1% | 47 | 6.4% | 47 | 6.2% | 73 | 6.3% | 108 | 4.5% |
| American Indian and Alaska Native alone | 3 | 1.0% | 7 | 1.0% | 7 | 0.9% | 11 | 0.9% | 14 | 0.6% |
| Asian alone | 19 | 6.1% | 40 | 5.5% | 45 | 5.9% | 67 | 5.7% | 226 | 9.5% |
| Native Hawaiian and Other Pacific Islander alone | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 8 | 0.3% |
| Some other race alone | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Two or more races | 14 | 4.5% | 32 | 4.4% | 33 | 4.4% | 51 | 4.4% | 87 | 3.6% |
| Hispanic or Latino (of any race) | 45 | 14.3% | 107 | 14.7% | 109 | 14.4% | 168 | 14.4% | 280 | 11.7% |
| **Total minority population** | **100** | **31.8%** | **233** | **32.0%** | **241** | **31.8%** | **370** | **31.7%** | **723** | **30.3%** |

**Table 9. LEP Populations within ¼ Mile of Each Alternative**

| Geography | KT Study Area | | Alt 1 Focus Area | | Alt 2 Focus Area | | Alt 3 Focus Area | | Alt 4 Focus Area | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # of People | % of Total | # of People | % of Total | # of People | % of Total | # of People | % of Total | # of People | % of Total |
| Total population > 5 years old | 279 | -- | 646 | -- | 673 | -- | 1,034 | -- | 2,170 | -- |
| Speak only English | 218 | 78.1% | 502 | 77.7% | 525 | 78.0% | 806 | 77.9% | 1,732 | 79.8% |
| Speak English "very well" | 55 | 19.7% | 132 | 20.4% | 135 | 20.1% | 209 | 20.2% | 360 | 16.6% |
| Speak English "well" | 4 | 1.4% | 8 | 1.2% | 9 | 1.3% | 13 | 1.3% | 50 | 2.3% |
| Speak English "not well" | 2 | 0.7% | 4 | 0.6% | 4 | 0.6% | 6 | 0.6% | 18 | 0.8% |
| Speak English "not at all" | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 9 | 0.4% |
| **Total population speaking English "less than well" ("not well" + "not at all")** | **2** | **0.7%** | **4** | **0.6%** | **4** | **0.6%** | **6** | **0.6%** | **27** | **1.2%** |

**Table 10. Impacts to Disadvantaged or Marginalized Population Groups**

| Alternative | Potential Impacts to Disadvantaged or Marginalized Population Groups |
|---|---|
| No Direct Connection | No impacts in the short term; long-term impacts via lack of regional connectivity |
| Alternative 1 | Temporary (construction) impacts to population with highest percentage of minority residents and households below poverty level, but long-term benefits via increased regional connectivity |
| Alternative 2 | Temporary (construction) impacts to population with relatively high percentage of minority residents and households below poverty level, but long-term benefits via increased regional connectivity |
| Alternative 3 | Temporary (construction) impacts to population with relatively high percentage of minority residents and households below poverty level, but long-term benefits via increased regional connectivity |
| Alternative 4 | Temporary (construction) impacts to population with relatively high percentage of minority and LEP residents, but long-term benefits via increased regional connectivity |

There is relatively little difference among the four alternatives with regard to minority and LEP populations. Although all alternatives would present short-term construction impacts to those in the immediate vicinity, they would also provide long-term benefits via increased regional connectivity. Because its construction impacts would potentially reach a larger percentage of minority and low-income populations, Alternative 1 is slightly less desirable than Alternatives 2, 3, and 4. Providing no direct east/west connection would be the least desirable in the long term, causing impacts to disadvantaged populations via lack of regional connectivity.

# 6  SUMMARY OF CONCLUSIONS

Based on the evaluation presented in the previous sections, alternatives were qualitatively scored for each factor using the scoring levels identified in Section 5.2.2. The qualitative scores are shown in **Table 12**, and the final row provides a comparative overall ranking based on each alternative's individual factor scores. Summary text supporting these rankings is provided in **Table 13**.

Based on the evaluation of social and environmental justice factors, Alternative 3 would be the most desirable option, followed closely by Alternative 1. Providing no direct east/west connection would be the least desirable option.

**Table 11. Comparative Ranking of Land Use and Community Design Factors**

| Evaluation Factors | No Direct Connection | Alternative 1 | Alternative 2 | Alternative 3 | Alternative 4 |
|---|---|---|---|---|---|
| Supports planned land use patterns | | | | | |
| Supports existing and new neighborhood cohesion | | | | | |
| Serves those with greatest transportation needs and least resources | | | | | |
| Impacts to disadvantaged or marginalized population groups | | | | | |

**Table 12. Summary of Key Findings from Evaluation of Land Use and Community Design Factors**

| Evaluation Factors | No Direct Connection | Alternative 1 | Alternative 2 | Alternative 3 | Alternative 4 |
|---|---|---|---|---|---|
| Supports planned land use patterns | *Would not support future land use patterns as envisioned in Concept Plan and KTMP due to the lack of a collecting level street system to move local traffic between neighborhoods and arterials streets.* | *Peripheral to center of development and farther from higher-density planned land uses in northern portion of site, but provides direct east/west connection to existing city.* | *Central to development; serves both higher-density planned land uses in northern portion of site and lower-density planned uses in southeastern portion of site; provides direct east/west connection to existing city.* | *Central to development; serves both higher-density planned land uses in northern portion of site and lower-density planned uses in southeastern portion of site; provides multiple direct east/west connections to existing city.* | *Closer to higher-density planned land uses in northern portion of site, but peripheral to center of overall development; no direct connections to existing city.* |
| Supports existing and new neighborhood cohesion | *Reliance on indirect routes outside of the immediate neighborhood would reduce neighborhood cohesion.* | *Would provide connection to existing neighborhoods to the east linking Kingston Terrace to the larger community.* | *Would provide connection to existing neighborhoods to the east linking Kingston Terrace to the larger community.* | *Would provide multiple connections to existing neighborhoods to the east; some opportunity for connections to the north providing a strong link to the greater community.* | *No direct connection to the east of 137th, but provides opportunities for connections to the north.* |
| Serves those with greatest transportation needs and least resources | *Would cause travelers to use circuitous, likely longer routes reducing potential for future transit service.* | *Serves population with highest percentage of households below poverty level; not central to development but provides direct east/west connection which could potentially see some form of transit service.* | *Serves population with relatively high percentage of households below poverty level; central to development and provides direct east/west connection. Greater potential for transit service.* | *Serves population with relatively high percentage of households below poverty level; central to development and provides direct east/west connection. Greater potential for transit service.* | *Serves population with lowest percentage of households below poverty level; not central to development and provides no direct east/west connection. Could see some form of localized transit but not reginal service.* |

| Impacts to disadvantaged or marginalized population groups | *No impacts in the short term unless widening of Beef Bend Road east of 137$^{th}$ is necessary, then could have substantial impacts to low income and/or elderly population groups; long-term impacts via lack of connection to the region as a whole.* | *Temporary (construction) impacts to population with highest percentage of minority residents and households below poverty level, but long-term benefits via increased connection to the region as a whole.* | *Temporary (construction) impacts to population with relatively high percentage of minority residents and households below poverty level, but long-term benefits via increased connection to the region as a whole.* | *Temporary (construction) impacts to population with relatively high percentage of minority residents and households below poverty level, but long-term benefits via increased connection to the region as a whole.* | *Temporary (construction) impacts to population with relatively high percentage of minority and LEP residents, but long-term benefits via increased connection to the region as a whole.* |
|---|---|---|---|---|---|

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# Attachment A

EJScreen Demographics Reports

# EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-miles radius
Description: Kingston Terrace Study Area

ACS means American Community Survey
MOE means Margin of Error

| Summary of ACS Estimates | 2015 - 2019 |
|---|---|
| Population | 314 |
| Population Density (per sq. mile) | 290 |
| People of Color Population | 100 |
| % People of Color Population | 32% |
| Households | 118 |
| Housing Units | 118 |
| Housing Units Built Before 1950 | 4 |
| Per Capita Income | 47,352 |
| Land Area (sq. miles) (Source: SF1) | 1.08 |
| % Land Area | 100% |
| Water Area  (sq. miles) (Source: SF1) | 0.00 |
| % Water Area | 0% |

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 314 | 100% | 531 |
| Population Reporting One Race | 301 | 96% | 1,195 |
| White | 240 | 76% | 449 |
| Black | 19 | 6% | 157 |
| American Indian | 5 | 2% | 44 |
| Asian | 19 | 6% | 286 |
| Pacific Islander | 0 | 0% | 66 |
| Some Other Race | 17 | 5% | 193 |
| Population Reporting Two or More Races | 14 | 4% | 94 |
| Total Hispanic Population | 45 | 14% | 315 |
| Total Non-Hispanic Population | 270 | | |
| White Alone | 215 | 68% | 474 |
| Black Alone | 19 | 6% | 157 |
| American Indian Alone | 3 | 1% | 31 |
| Non-Hispanic Asian Alone | 19 | 6% | 286 |
| Pacific Islander Alone | 0 | 0% | 66 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 14 | 4% | 94 |
| **Population by Sex** | | | |
| Male | 157 | 50% | 337 |
| Female | 157 | 50% | 308 |
| **Population by Age** | | | |
| Age 0-4 | 35 | 11% | 132 |
| Age 0-17 | 89 | 28% | 265 |
| Age 18+ | 225 | 72% | 435 |
| Age 65+ | 41 | 13% | 179 |

**Location:** User-specified polygonal location
**Ring (buffer):** 0-miles radius
**Description:** Kingston Terrace Study Area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 211 | 100% | 404 |
| Less than 9th Grade | 4 | 2% | 45 |
| 9th - 12th Grade, No Diploma | 7 | 3% | 66 |
| High School Graduate | 34 | 16% | 116 |
| Some College, No Degree | 45 | 21% | 241 |
| Associate Degree | 24 | 11% | 162 |
| Bachelor's Degree or more | 98 | 47% | 314 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 279 | 100% | 517 |
| Speak only English | 218 | 78% | 434 |
| Non-English at Home[1+2+3+4] | 61 | 22% | 265 |
| [1]Speak English "very well" | 55 | 20% | 215 |
| [2]Speak English "well" | 4 | 1% | 104 |
| [3]Speak English "not well" | 2 | 1% | 47 |
| [4]Speak English "not at all" | 0 | 0% | 73 |
| [3+4]Speak English "less than well" | 2 | 1% | 86 |
| [2+3+4]Speak English "less than very well" | 6 | 2% | 135 |
| **Linguistically Isolated Households*** | | | |
| Total | 0 | 100% | 30 |
| Speak Spanish | 0 | 0% | 12 |
| Speak Other Indo-European Languages | 0 | 0% | 12 |
| Speak Asian-Pacific Island Languages | 0 | 100% | 27 |
| Speak Other Languages | 0 | 0% | 12 |
| **Households by Household Income** | | | |
| Household Income Base | 118 | 100% | 178 |
| < $15,000 | 7 | 6% | 55 |
| $15,000 - $25,000 | 3 | 3% | 36 |
| $25,000 - $50,000 | 7 | 6% | 89 |
| $50,000 - $75,000 | 17 | 14% | 84 |
| $75,000 + | 84 | 71% | 271 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 118 | 100% | 178 |
| Owner Occupied | 100 | 85% | 182 |
| Renter Occupied | 18 | 15% | 79 |
| **Employed Population Age 16+ Years** | | | |
| Total | 236 | 100% | 437 |
| In Labor Force | 159 | 68% | 365 |
| Civilian Unemployed in Labor Force | 4 | 2% | 65 |
| Not In Labor Force | 76 | 32% | 248 |

Location: User-specified polygonal location

Ring (buffer): 0-miles radius

Description: Kingston Terrace Study Area

| | 2015 - 2019<br>ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home*** | | | |
| Total (persons age 5 and above) | 1,622 | 100% | 456 |
| English | 1,298 | 80% | 431 |
| Spanish | 185 | 11% | 247 |
| French | 14 | 1% | 50 |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | 20 | 1% | 73 |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | 46 | 3% | 155 |
| Chinese | 2 | 0% | 15 |
| Japanese | N/A | N/A | N/A |
| Korean | 33 | 2% | 139 |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | 7 | 0% | 31 |
| Other Asian | 0 | 0% | 17 |
| Tagalog | 7 | 0% | 34 |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | 0 | 0% | 17 |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | 2 | 0% | 15 |
| Total Non-English | 323 | 20% | 627 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.

*Population by Language Spoken at Home is available at the census tract summary level and up.

Location: User-specified polygonal location
Ring (buffer): 0-miles radius
Description: King City, OR

| Summary of ACS Estimates | 2015 - 2019 |
|---|---|
| Population | 3,937 |
| Population Density (per sq. mile) | 4,862 |
| People of Color Population | 726 |
| % People of Color Population | 18% |
| Households | 2,038 |
| Housing Units | 2,088 |
| Housing Units Built Before 1950 | 53 |
| Per Capita Income | 37,638 |
| Land Area (sq. miles) (Source: SF1) | 0.81 |
| % Land Area | 100% |
| Water Area (sq. miles) (Source: SF1) | 0.00 |
| % Water Area | 0% |

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 3,937 | 100% | 459 |
| Population Reporting One Race | 3,850 | 98% | 1,014 |
| White | 3,439 | 87% | 438 |
| Black | 113 | 3% | 157 |
| American Indian | 33 | 1% | 80 |
| Asian | 131 | 3% | 134 |
| Pacific Islander | 0 | 0% | 12 |
| Some Other Race | 133 | 3% | 193 |
| Population Reporting Two or More Races | 87 | 2% | 128 |
| Total Hispanic Population | 378 | 10% | 315 |
| Total Non-Hispanic Population | 3,559 | | |
| White Alone | 3,211 | 82% | 431 |
| Black Alone | 113 | 3% | 157 |
| American Indian Alone | 17 | 0% | 31 |
| Non-Hispanic Asian Alone | 131 | 3% | 134 |
| Pacific Islander Alone | 0 | 0% | 12 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 87 | 2% | 128 |
| **Population by Sex** | | | |
| Male | 1,646 | 42% | 218 |
| Female | 2,290 | 58% | 341 |
| **Population by Age** | | | |
| Age 0-4 | 219 | 6% | 120 |
| Age 0-17 | 557 | 14% | 173 |
| Age 18+ | 3,380 | 86% | 293 |
| Age 65+ | 1,881 | 48% | 182 |

**Data Note:** Detail may not sum to totals due to rounding.    Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019 ·

# EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-miles radius
Description: King City, OR

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 3,300 | 100% | 379 |
| Less than 9th Grade | 43 | 1% | 61 |
| 9th - 12th Grade, No Diploma | 111 | 3% | 66 |
| High School Graduate | 675 | 20% | 184 |
| Some College, No Degree | 853 | 26% | 178 |
| Associate Degree | 292 | 9% | 82 |
| Bachelor's Degree or more | 1,326 | 40% | 159 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 3,718 | 100% | 438 |
| Speak only English | 3,045 | 82% | 305 |
| Non-English at Home[1+2+3+4] | 673 | 18% | 237 |
| [1]Speak English "very well" | 583 | 16% | 215 |
| [2]Speak English "well" | 34 | 1% | 77 |
| [3]Speak English "not well" | 55 | 1% | 63 |
| [4]Speak English "not at all" | 0 | 0% | 12 |
| [3+4]Speak English "less than well" | 55 | 1% | 63 |
| [2+3+4]Speak English "less than very well" | 90 | 2% | 99 |
| **Linguistically Isolated Households*** | | | |
| Total | 16 | 100% | 29 |
| Speak Spanish | 0 | 0% | 12 |
| Speak Other Indo-European Languages | 16 | 100% | 26 |
| Speak Asian-Pacific Island Languages | 0 | 0% | 12 |
| Speak Other Languages | 0 | 0% | 12 |
| **Households by Household Income** | | | |
| Household Income Base | 2,038 | 100% | 122 |
| < $15,000 | 310 | 15% | 88 |
| $15,000 - $25,000 | 223 | 11% | 63 |
| $25,000 - $50,000 | 405 | 20% | 131 |
| $50,000 - $75,000 | 405 | 20% | 90 |
| $75,000 + | 694 | 34% | 134 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 2,038 | 100% | 122 |
| Owner Occupied | 1,682 | 83% | 117 |
| Renter Occupied | 356 | 17% | 82 |
| **Employed Population Age 16+ Years** | | | |
| Total | 3,455 | 100% | 401 |
| In Labor Force | 1,381 | 40% | 210 |
| Civilian Unemployed in Labor Force | 50 | 1% | 37 |
| Not In Labor Force | 2,074 | 60% | 292 |

**Location:** User-specified polygonal location
**Ring (buffer):** 0-miles radius
**Description:** King City, OR

| | 2015 - 2019<br>ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home\*** | | | |
| Total (persons age 5 and above) | 2,559 | 100% | 456 |
| English | 2,049 | 80% | 431 |
| Spanish | 292 | 11% | 247 |
| French | 21 | 1% | 50 |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | 32 | 1% | 73 |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | 72 | 3% | 155 |
| Chinese | 4 | 0% | 15 |
| Japanese | N/A | N/A | N/A |
| Korean | 52 | 2% | 139 |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | 10 | 0% | 31 |
| Other Asian | 0 | 0% | 17 |
| Tagalog | 10 | 0% | 34 |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | 0 | 0% | 17 |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | 4 | 0% | 15 |
| Total Non-English | 510 | 20% | 627 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.
\*Population by Language Spoken at Home is available at the census tract summary level and up.

Location: Washington County

Ring (buffer): 0-mile radius

Description:

| Summary of ACS Estimates | 2015 - 2019 |
|---|---|
| Population | 589,481 |
| Population Density (per sq. mile) | 814 |
| People of Color Population | 202,025 |
| % People of Color Population | 34% |
| Households | 219,053 |
| Housing Units | 229,077 |
| Housing Units Built Before 1950 | 10,861 |
| Per Capita Income | 39,679 |
| Land Area (sq. miles) (Source: SF1) | 724.27 |
| % Land Area | 100% |
| Water Area  (sq. miles) (Source: SF1) | 2.36 |
| % Water Area | 0% |

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 589,481 | 100% | 0 |
| Population Reporting One Race | 557,497 | 95% | 7,636 |
| White | 447,201 | 76% | 2,484 |
| Black | 11,897 | 2% | 609 |
| American Indian | 3,446 | 1% | 671 |
| Asian | 62,545 | 11% | 1,032 |
| Pacific Islander | 2,514 | 0% | 340 |
| Some Other Race | 29,894 | 5% | 2,500 |
| Population Reporting Two or More Races | 31,984 | 5% | 1,613 |
| Total Hispanic Population | 98,201 | 17% | 0 |
| Total Non-Hispanic Population | 491,280 | | |
| White Alone | 387,456 | 66% | 292 |
| Black Alone | 11,469 | 2% | 596 |
| American Indian Alone | 1,539 | 0% | 275 |
| Non-Hispanic Asian Alone | 62,050 | 11% | 965 |
| Pacific Islander Alone | 2,417 | 0% | 321 |
| Other Race Alone | 1,025 | 0% | 301 |
| Two or More Races Alone | 25,324 | 4% | 1,191 |
| **Population by Sex** | | | |
| Male | 291,701 | 49% | 80 |
| Female | 297,780 | 51% | 80 |
| **Population by Age** | | | |
| Age 0-4 | 35,971 | 6% | 65 |
| Age 0-17 | 136,892 | 23% | 1,361 |
| Age 18+ | 452,589 | 77% | 2,788 |
| Age 65+ | 76,361 | 13% | 1,478 |

**Data Note:** Detail may not sum to totals due to rounding.     Hispanic population can  be  of any race.
N/A means not available. **Source:** U.S. Census Bureau, American  Community Survey (ACS) 2015 - 2019 ·

Location: Washington County

Ring (buffer): 0-mile radius

Description:

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 404,385 | 100% | 124 |
| Less than 9th Grade | 15,228 | 4% | 1,035 |
| 9th - 12th Grade, No Diploma | 16,374 | 4% | 1,018 |
| High School Graduate | 70,243 | 17% | 1,732 |
| Some College, No Degree | 87,072 | 22% | 2,352 |
| Associate Degree | 35,743 | 9% | 1,316 |
| Bachelor's Degree or more | 179,725 | 44% | 2,608 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 553,510 | 100% | 62 |
| Speak only English | 416,442 | 75% | 2,209 |
| Non-English at Home[1+2+3+4] | 137,068 | 25% | 2,654 |
| [1]Speak English "very well" | 88,241 | 16% | 2,411 |
| [2]Speak English "well" | 27,796 | 5% | 1,331 |
| [3]Speak English "not well" | 15,932 | 3% | 1,087 |
| [4]Speak English "not at all" | 5,099 | 1% | 675 |
| [3+4]Speak English "less than well" | 21,031 | 4% | 1,280 |
| [2+3+4]Speak English "less than very well" | 48,827 | 9% | 1,846 |
| **Linguistically Isolated Households*** | | | |
| Total | 8,478 | 100% | 718 |
| Speak Spanish | 3,734 | 44% | 518 |
| Speak Other Indo-European Languages | 1,242 | 15% | 235 |
| Speak Asian-Pacific Island Languages | 3,110 | 37% | 409 |
| Speak Other Languages | 392 | 5% | 159 |
| **Households by Household Income** | | | |
| Household Income Base | 219,053 | 100% | 1,123 |
| < $15,000 | 12,775 | 6% | 887 |
| $15,000 - $25,000 | 12,668 | 6% | 792 |
| $25,000 - $50,000 | 37,828 | 17% | 1,403 |
| $50,000 - $75,000 | 36,464 | 17% | 1,204 |
| $75,000 + | 119,318 | 54% | 2,063 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 219,053 | 100% | 1,123 |
| Owner Occupied | 135,022 | 62% | 1,281 |
| Renter Occupied | 84,031 | 38% | 1,330 |
| **Employed Population Age 16+ Years** | | | |
| Total | 467,997 | 100% | 451 |
| In Labor Force | 323,405 | 69% | 1,830 |
| Civilian Unemployed in Labor Force | 14,106 | 3% | 809 |
| Not In Labor Force | 144,592 | 31% | 1,903 |

# EJSCREEN ACS Summary Report

Location: Washington County

Ring (buffer): 0-mile radius

Description:

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home*** | | | |
| Total (persons age 5 and above) | 553,510 | 100% | 62 |
| English | 416,442 | 75% | 2,567 |
| Spanish | 67,971 | 12% | 1,714 |
| French | 2,154 | 0% | 1,099 |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | 3,066 | 1% | 550 |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | 15,131 | 3% | 1,371 |
| Chinese | 8,343 | 2% | 904 |
| Japanese | N/A | N/A | N/A |
| Korean | 5,046 | 1% | 977 |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | 6,310 | 1% | 985 |
| Other Asian | 13,620 | 2% | 1,153 |
| Tagalog | 4,285 | 1% | 905 |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | 3,467 | 1% | 879 |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | 3,032 | 1% | 733 |
| Total Non-English | 137,068 | 25% | 2,568 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.

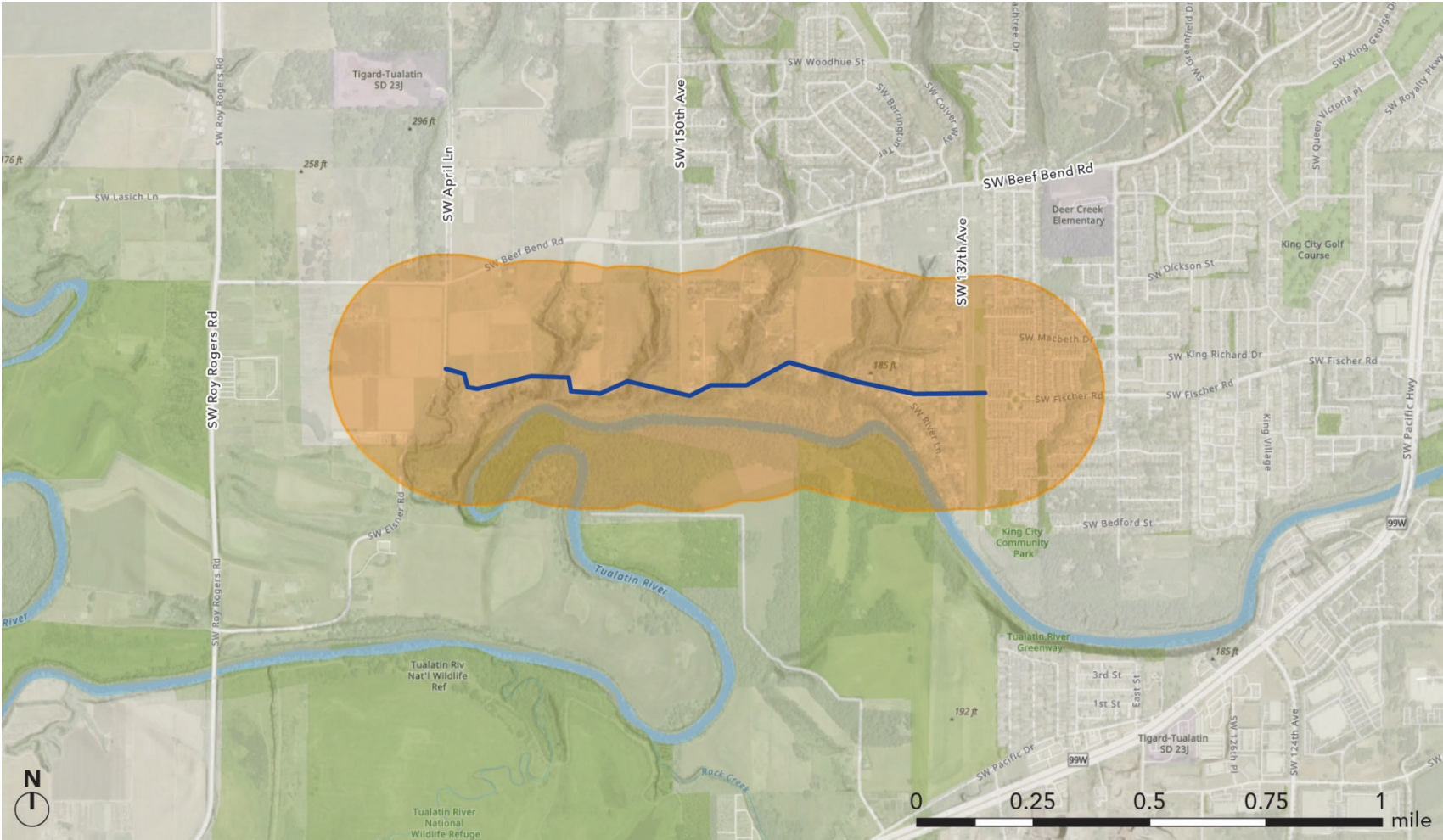N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.

*Population by Language Spoken at Home is available at the census tract summary level and up.

May 27, 2022

# Alternative 1 Alignment and ¼ Mile Buffer

**EPA** United States Environmental Protection Agency

Location: User-specified polygonal location
Ring (buffer): 0-miles radius
Description: Alternative 1 study area

| Summary of ACS Estimates | 2015 - 2019 |
|---|---|
| Population | 729 |
| Population Density (per sq. mile) | 847 |
| People of Color Population | 233 |
| % People of Color Population | 32% |
| Households | 251 |
| Housing Units | 251 |
| Housing Units Built Before 1950 | 9 |
| Per Capita Income | 40,848 |
| Land Area (sq. miles) (Source: SF1) | 0.86 |
| % Land Area | 100% |
| Water Area (sq. miles) (Source: SF1) | 0.00 |
| % Water Area | 0% |

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 729 | 100% | 328 |
| Population Reporting One Race | 697 | 96% | 863 |
| White | 555 | 76% | 323 |
| Black | 47 | 6% | 157 |
| American Indian | 13 | 2% | 44 |
| Asian | 40 | 5% | 134 |
| Pacific Islander | 0 | 0% | 12 |
| Some Other Race | 42 | 6% | 193 |
| Population Reporting Two or More Races | 32 | 4% | 94 |
| Total Hispanic Population | 107 | 15% | 315 |
| Total Non-Hispanic Population | 622 | | |
| White Alone | 496 | 68% | 353 |
| Black Alone | 47 | 6% | 157 |
| American Indian Alone | 7 | 1% | 31 |
| Non-Hispanic Asian Alone | 40 | 5% | 134 |
| Pacific Islander Alone | 0 | 0% | 12 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 32 | 4% | 94 |
| **Population by Sex** | | | |
| Male | 364 | 50% | 218 |
| Female | 365 | 50% | 199 |
| **Population by Age** | | | |
| Age 0-4 | 83 | 11% | 120 |
| Age 0-17 | 208 | 29% | 173 |
| Age 18+ | 521 | 71% | 277 |
| Age 65+ | 93 | 13% | 122 |

**Location:** User-specified polygonal location
**Ring (buffer):** 0-miles radius
**Description:** Alternative 1 study area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 489 | 100% | 258 |
| Less than 9th Grade | 9 | 2% | 45 |
| 9th - 12th Grade, No Diploma | 17 | 4% | 66 |
| High School Graduate | 80 | 16% | 116 |
| Some College, No Degree | 103 | 21% | 154 |
| Associate Degree | 54 | 11% | 82 |
| Bachelor's Degree or more | 225 | 46% | 158 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 646 | 100% | 319 |
| Speak only English | 502 | 78% | 305 |
| Non-English at Home[1+2+3+4] | 144 | 22% | 237 |
| [1]Speak English "very well" | 132 | 20% | 215 |
| [2]Speak English "well" | 8 | 1% | 39 |
| [3]Speak English "not well" | 4 | 1% | 23 |
| [4]Speak English "not at all" | 0 | 0% | 12 |
| [3+4]Speak English "less than well" | 4 | 1% | 23 |
| [2+3+4]Speak English "less than very well" | 12 | 2% | 43 |
| **Linguistically Isolated Households*** | | | |
| Total | 0 | 0% | 12 |
| Speak Spanish | 0 | 0% | 12 |
| Speak Other Indo-European Languages | 0 | 0% | 12 |
| Speak Asian-Pacific Island Languages | 0 | 0% | 12 |
| Speak Other Languages | 0 | 0% | 12 |
| **Households by Household Income** | | | |
| Household Income Base | 251 | 100% | 103 |
| < $15,000 | 16 | 6% | 55 |
| $15,000 - $25,000 | 8 | 3% | 36 |
| $25,000 - $50,000 | 14 | 5% | 62 |
| $50,000 - $75,000 | 37 | 15% | 60 |
| $75,000 + | 177 | 70% | 134 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 251 | 100% | 103 |
| Owner Occupied | 213 | 85% | 112 |
| Renter Occupied | 38 | 15% | 56 |
| **Employed Population Age 16+ Years** | | | |
| Total | 546 | 100% | 280 |
| In Labor Force | 367 | 67% | 210 |
| Civilian Unemployed in Labor Force | 9 | 2% | 30 |
| Not In Labor Force | 179 | 33% | 178 |

**Data Note:** Datail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.

# EJSCREEN ACS Summary Report

Location: User-specified polygonal location

Ring (buffer): 0-miles radius

Description: Alternative 1 study area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home*** | | | |
| Total (persons age 5 and above) | 1,622 | 100% | 456 |
| English | 1,298 | 80% | 431 |
| Spanish | 185 | 11% | 247 |
| French | 14 | 1% | 50 |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | 20 | 1% | 73 |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | 46 | 3% | 155 |
| Chinese | 2 | 0% | 15 |
| Japanese | N/A | N/A | N/A |
| Korean | 33 | 2% | 139 |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | 7 | 0% | 31 |
| Other Asian | 0 | 0% | 17 |
| Tagalog | 7 | 0% | 34 |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | 0 | 0% | 17 |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | 2 | 0% | 15 |
| Total Non-English | 323 | 20% | 627 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.

*Population by Language Spoken at Home is available at the census tract summary level and up.

# Alternative 2 Alignment and ¼ Mile Buffer

# EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-miles radius
Description: Alternative 2 study area

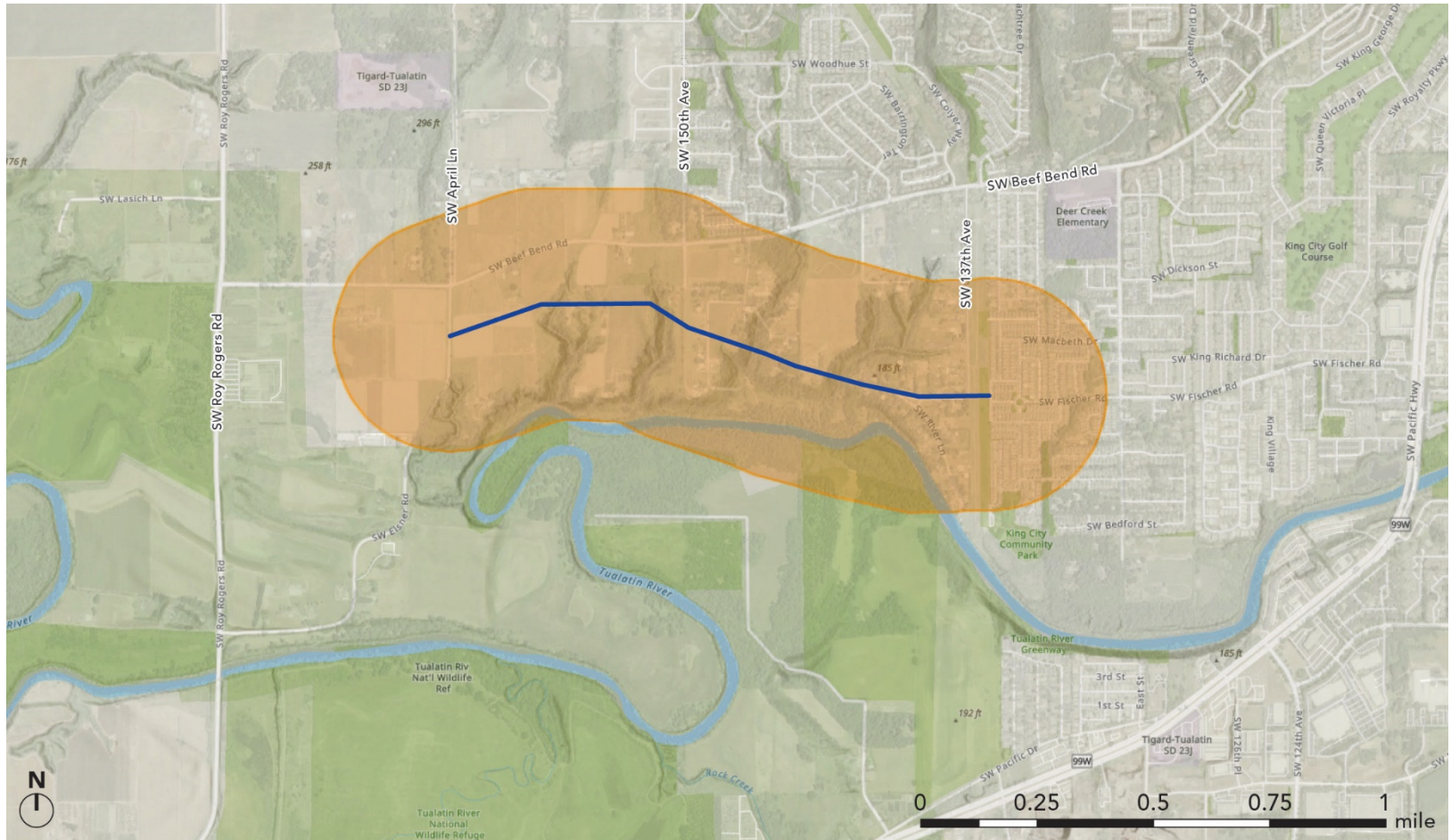| Summary of ACS Estimates | 2015 - 2019 |
|---|---|
| Population | 758 |
| Population Density (per sq. mile) | 792 |
| People of Color Population | 241 |
| % People of Color Population | 32% |
| Households | 259 |
| Housing Units | 260 |
| Housing Units Built Before 1950 | 9 |
| Per Capita Income | 47,352 |
| Land Area (sq. miles) (Source: SF1) | 0.96 |
| % Land Area | 100% |
| Water Area (sq. miles) (Source: SF1) | 0.00 |
| % Water Area | 0% |

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 758 | 100% | 531 |
| Population Reporting One Race | 725 | 96% | 1,195 |
| White | 578 | 76% | 449 |
| Black | 47 | 6% | 157 |
| American Indian | 13 | 2% | 44 |
| Asian | 45 | 6% | 286 |
| Pacific Islander | 0 | 0% | 66 |
| Some Other Race | 42 | 6% | 193 |
| Population Reporting Two or More Races | 33 | 4% | 94 |
| Total Hispanic Population | 109 | 14% | 315 |
| Total Non-Hispanic Population | 649 | | |
| White Alone | 517 | 68% | 474 |
| Black Alone | 47 | 6% | 157 |
| American Indian Alone | 7 | 1% | 31 |
| Non-Hispanic Asian Alone | 45 | 6% | 286 |
| Pacific Islander Alone | 0 | 0% | 66 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 33 | 4% | 94 |
| **Population by Sex** | | | |
| Male | 379 | 50% | 337 |
| Female | 379 | 50% | 308 |
| **Population by Age** | | | |
| Age 0-4 | 85 | 11% | 132 |
| Age 0-17 | 215 | 28% | 265 |
| Age 18+ | 543 | 72% | 435 |
| Age 65+ | 98 | 13% | 179 |

**Data Note:** Detail may not sum to totals due to rounding.    Hispanic population can  be  of any race.
N/A means not available. **Source:** U.S. Census Bureau, American  Community Survey (ACS) 2015 - 2019 ·

**Location:** User-specified polygonal location
**Ring (buffer):** 0-miles radius
**Description:** Alternative 2 study area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 509 | 100% | 404 |
| Less than 9th Grade | 9 | 2% | 45 |
| 9th - 12th Grade, No Diploma | 18 | 3% | 66 |
| High School Graduate | 82 | 16% | 116 |
| Some College, No Degree | 107 | 21% | 241 |
| Associate Degree | 57 | 11% | 162 |
| Bachelor's Degree or more | 236 | 46% | 314 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 673 | 100% | 517 |
| Speak only English | 525 | 78% | 434 |
| Non-English at Home[1+2+3+4] | 148 | 22% | 265 |
| [1]Speak English "very well" | 135 | 20% | 215 |
| [2]Speak English "well" | 9 | 1% | 104 |
| [3]Speak English "not well" | 4 | 1% | 47 |
| [4]Speak English "not at all" | 0 | 0% | 73 |
| [3+4]Speak English "less than well" | 4 | 1% | 86 |
| [2+3+4]Speak English "less than very well" | 13 | 2% | 135 |
| **Linguistically Isolated Households*** | | | |
| Total | 0 | 100% | 30 |
| Speak Spanish | 0 | 0% | 12 |
| Speak Other Indo-European Languages | 0 | 0% | 12 |
| Speak Asian-Pacific Island Languages | 0 | 100% | 27 |
| Speak Other Languages | 0 | 0% | 12 |
| **Households by Household Income** | | | |
| Household Income Base | 259 | 100% | 178 |
| < $15,000 | 16 | 6% | 55 |
| $15,000 - $25,000 | 8 | 3% | 36 |
| $25,000 - $50,000 | 14 | 6% | 89 |
| $50,000 - $75,000 | 38 | 15% | 84 |
| $75,000 + | 183 | 71% | 271 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 259 | 100% | 178 |
| Owner Occupied | 220 | 85% | 182 |
| Renter Occupied | 39 | 15% | 79 |
| **Employed Population Age 16+ Years** | | | |
| Total | 569 | 100% | 437 |
| In Labor Force | 384 | 67% | 365 |
| Civilian Unemployed in Labor Force | 9 | 2% | 65 |
| Not In Labor Force | 185 | 33% | 248 |

Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified polygonal location

Ring (buffer): 0-miles radius

Description: Alternative 2 study area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home*** | | | |
| Total (persons age 5 and above) | 1,622 | 100% | 456 |
| English | 1,298 | 80% | 431 |
| Spanish | 185 | 11% | 247 |
| French | 14 | 1% | 50 |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | 20 | 1% | 73 |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | 46 | 3% | 155 |
| Chinese | 2 | 0% | 15 |
| Japanese | N/A | N/A | N/A |
| Korean | 33 | 2% | 139 |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | 7 | 0% | 31 |
| Other Asian | 0 | 0% | 17 |
| Tagalog | 7 | 0% | 34 |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | 0 | 0% | 17 |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | 2 | 0% | 15 |
| Total Non-English | 323 | 20% | 627 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.

*Population by Language Spoken at Home is available at the census tract summary level and up.

**Alternative 3 Alignment and ¼ Mile Buffer**
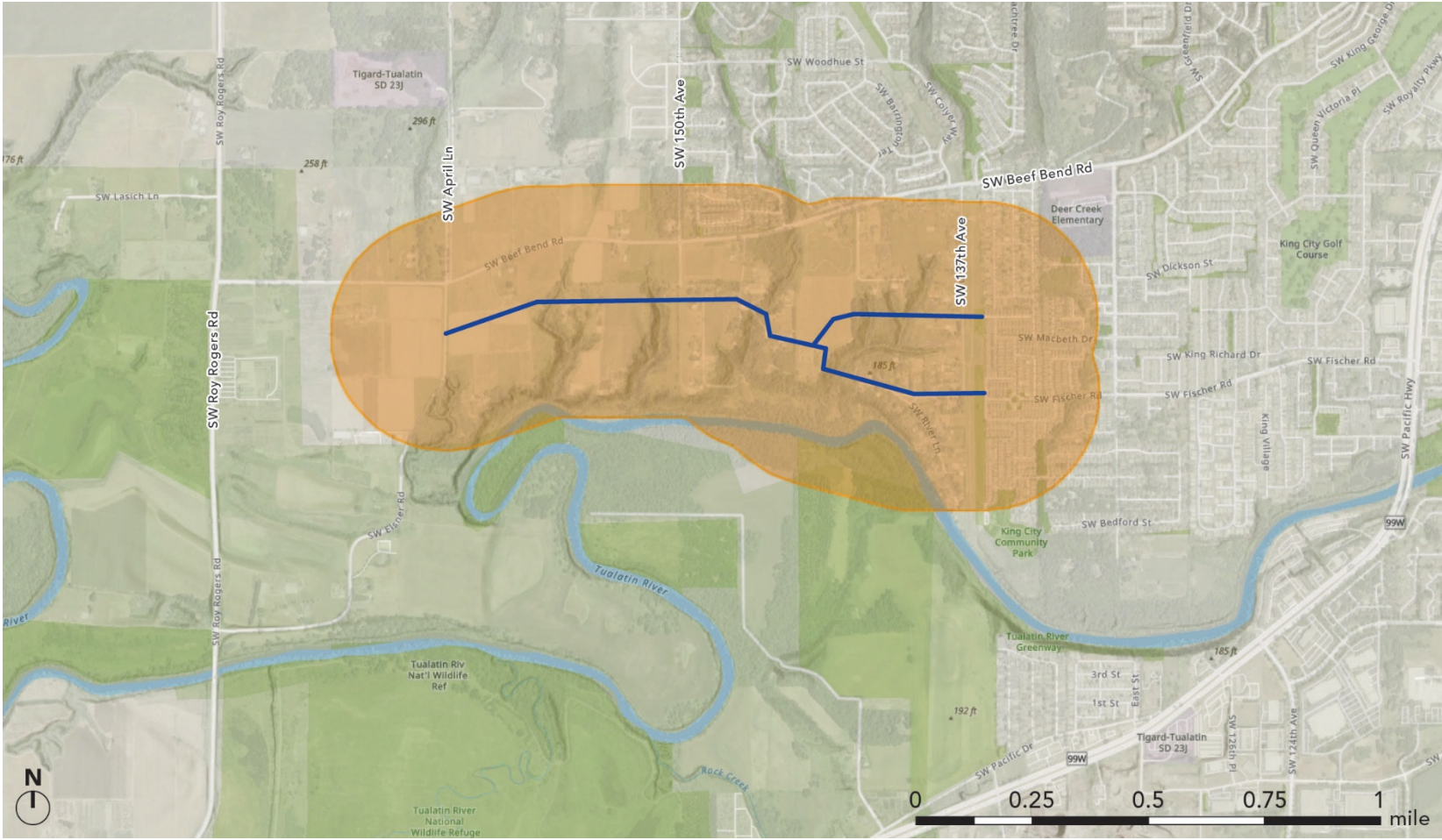
# EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-miles radius
Description: Alternative 3 study area

| Summary of ACS Estimates | 2015 - 2019 |
|---|---|
| Population | 1,166 |
| Population Density (per sq. mile) | 1,188 |
| People of Color Population | 371 |
| % People of Color Population | 32% |
| Households | 366 |
| Housing Units | 367 |
| Housing Units Built Before 1950 | 13 |
| Per Capita Income | 47,352 |
| Land Area (sq. miles) (Source: SF1) | 0.98 |
| % Land Area | 100% |
| Water Area  (sq. miles) (Source: SF1) | 0.00 |
| % Water Area | 0% |

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 1,166 | 100% | 531 |
| Population Reporting One Race | 1,115 | 96% | 1,195 |
| White | 888 | 76% | 449 |
| Black | 73 | 6% | 157 |
| American Indian | 21 | 2% | 44 |
| Asian | 67 | 6% | 286 |
| Pacific Islander | 0 | 0% | 66 |
| Some Other Race | 66 | 6% | 193 |
| Population Reporting Two or More Races | 51 | 4% | 94 |
| Total Hispanic Population | 168 | 14% | 315 |
| Total Non-Hispanic Population | 998 | | |
| White Alone | 795 | 68% | 474 |
| Black Alone | 73 | 6% | 157 |
| American Indian Alone | 11 | 1% | 31 |
| Non-Hispanic Asian Alone | 67 | 6% | 286 |
| Pacific Islander Alone | 0 | 0% | 66 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 51 | 4% | 94 |
| **Population by Sex** | | | |
| Male | 582 | 50% | 337 |
| Female | 584 | 50% | 308 |
| **Population by Age** | | | |
| Age 0-4 | 132 | 11% | 132 |
| Age 0-17 | 331 | 28% | 265 |
| Age 18+ | 835 | 72% | 435 |
| Age 65+ | 150 | 13% | 179 |

**Data Note:** Detail may not sum to totals due to rounding.     Hispanic population can   be   of any race.
N/A means not available. **Source:** U.S. Census Bureau, American  Community Survey (ACS) 2015 - 2019 ·

**Location:** User-specified polygonal location
**Ring (buffer):** 0-miles radius
**Description:** Alternative 3 study area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 783 | 100% | 404 |
| Less than 9th Grade | 15 | 2% | 45 |
| 9th - 12th Grade, No Diploma | 27 | 3% | 66 |
| High School Graduate | 127 | 16% | 116 |
| Some College, No Degree | 165 | 21% | 241 |
| Associate Degree | 87 | 11% | 162 |
| Bachelor's Degree or more | 362 | 46% | 314 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 1,034 | 100% | 517 |
| Speak only English | 806 | 78% | 434 |
| Non-English at Home[1+2+3+4] | 229 | 22% | 265 |
| [1]Speak English "very well" | 209 | 20% | 215 |
| [2]Speak English "well" | 13 | 1% | 104 |
| [3]Speak English "not well" | 6 | 1% | 47 |
| [4]Speak English "not at all" | 0 | 0% | 73 |
| [3+4]Speak English "less than well" | 6 | 1% | 86 |
| [2+3+4]Speak English "less than very well" | 20 | 2% | 135 |
| **Linguistically Isolated Households*** | | | |
| Total | 0 | 100% | 30 |
| Speak Spanish | 0 | 0% | 12 |
| Speak Other Indo-European Languages | 0 | 0% | 12 |
| Speak Asian-Pacific Island Languages | 0 | 100% | 27 |
| Speak Other Languages | 0 | 0% | 12 |
| **Households by Household Income** | | | |
| Household Income Base | 366 | 100% | 178 |
| < $15,000 | 23 | 6% | 55 |
| $15,000 - $25,000 | 11 | 3% | 36 |
| $25,000 - $50,000 | 20 | 6% | 89 |
| $50,000 - $75,000 | 54 | 15% | 84 |
| $75,000 + | 259 | 71% | 271 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 366 | 100% | 178 |
| Owner Occupied | 311 | 85% | 182 |
| Renter Occupied | 55 | 15% | 79 |
| **Employed Population Age 16+ Years** | | | |
| Total | 874 | 100% | 437 |
| In Labor Force | 589 | 67% | 365 |
| Civilian Unemployed in Labor Force | 14 | 2% | 65 |
| Not In Labor Force | 285 | 33% | 248 |

Location: User-specified polygonal location

Ring (buffer): 0-miles radius

Description: Alternative 3 study area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home*** | | | |
| Total (persons age 5 and above) | 1,622 | 100% | 456 |
| English | 1,298 | 80% | 431 |
| Spanish | 185 | 11% | 247 |
| French | 14 | 1% | 50 |
| French Creole | N/A | N/A | N/A |
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| Portuguese | N/A | N/A | N/A |
| German | 20 | 1% | 73 |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | 46 | 3% | 155 |
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| Korean | 33 | 2% | 139 |
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| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | 7 | 0% | 31 |
| Other Asian | 0 | 0% | 17 |
| Tagalog | 7 | 0% | 34 |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | 0 | 0% | 17 |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | 2 | 0% | 15 |
| Total Non-English | 323 | 20% | 627 |

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N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.
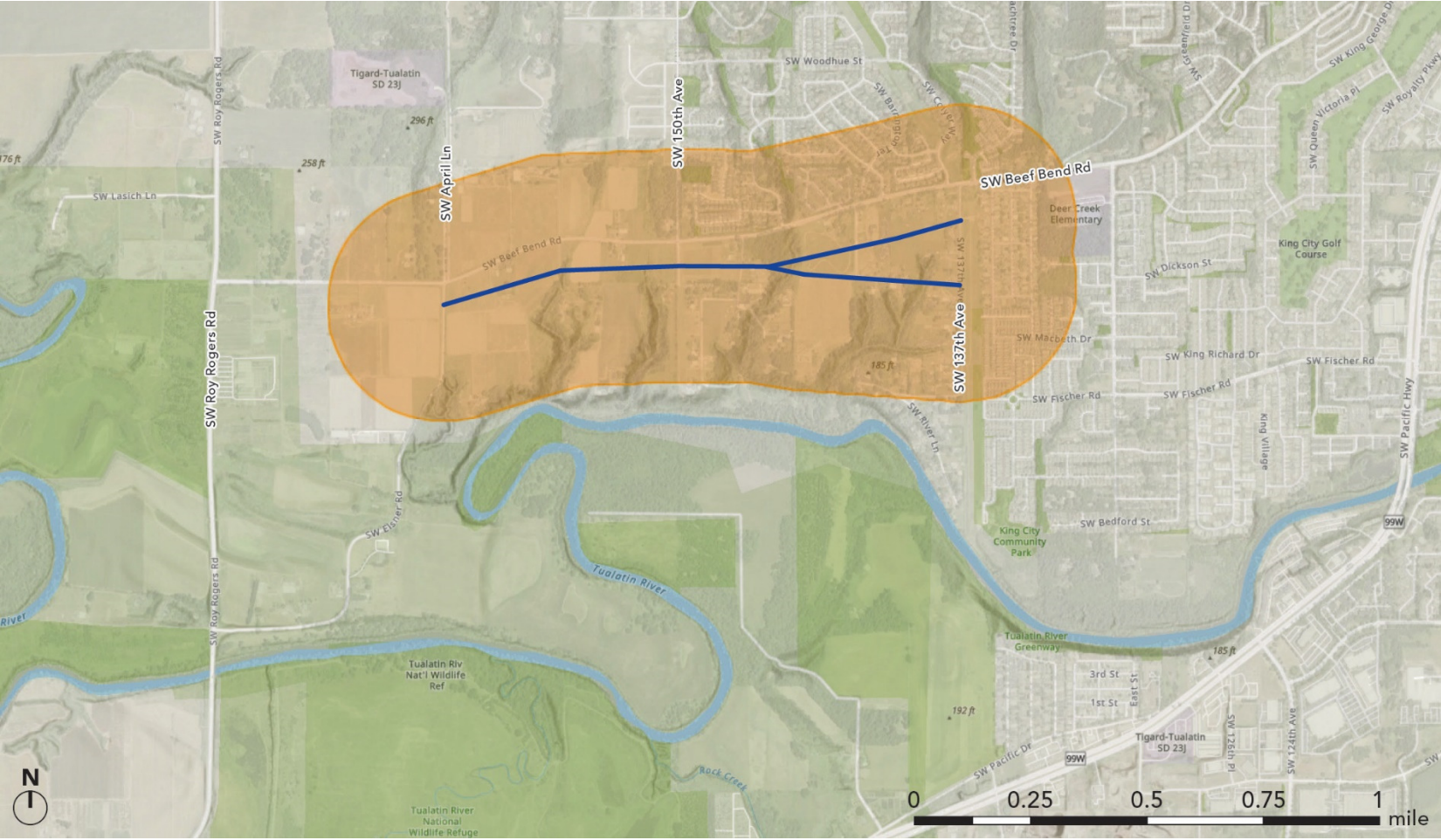
*Population by Language Spoken at Home is available at the census tract summary level and up.

# Alternative 4 Alignment and ¼ Mile Buffer

Location: User-specified polygonal location
Ring (buffer): 0-miles radius
Description: Alternative 4 study area

| Summary of ACS Estimates | 2015 - 2019 |
|---|---|
| Population | 2,388 |
| Population Density (per sq. mile) | 2,167 |
| People of Color Population | 724 |
| % People of Color Population | 30% |
| Households | 845 |
| Housing Units | 862 |
| Housing Units Built Before 1950 | 38 |
| Per Capita Income | 47,352 |
| Land Area (sq. miles) (Source: SF1) | 1.10 |
| % Land Area | 100% |
| Water Area  (sq. miles) (Source: SF1) | 0.00 |
| % Water Area | 0% |

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 2,388 | 100% | 531 |
| Population Reporting One Race | 2,300 | 96% | 1,195 |
| White | 1,847 | 77% | 449 |
| Black | 108 | 5% | 157 |
| American Indian | 26 | 1% | 44 |
| Asian | 226 | 9% | 286 |
| Pacific Islander | 8 | 0% | 66 |
| Some Other Race | 84 | 4% | 193 |
| Population Reporting Two or More Races | 87 | 4% | 94 |
| Total Hispanic Population | 280 | 12% | 315 |
| Total Non-Hispanic Population | 2,108 | | |
| White Alone | 1,664 | 70% | 474 |
| Black Alone | 108 | 5% | 157 |
| American Indian Alone | 14 | 1% | 31 |
| Non-Hispanic Asian Alone | 226 | 9% | 286 |
| Pacific Islander Alone | 8 | 0% | 66 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 87 | 4% | 94 |
| **Population by Sex** | | | |
| Male | 1,202 | 50% | 337 |
| Female | 1,186 | 50% | 308 |
| **Population by Age** | | | |
| Age 0-4 | 217 | 9% | 132 |
| Age 0-17 | 641 | 27% | 265 |
| Age 18+ | 1,746 | 73% | 435 |
| Age 65+ | 328 | 14% | 179 |

**Data Note:** Detail may not sum to totals due to rounding.     Hispanic population can   be   of any race.
N/A means not available. **Source:** U.S. Census Bureau, American  Community Survey (ACS) 2015 - 2019 ·

**Location:** User-specified polygonal location
**Ring (buffer):** 0-miles radius
**Description:** Alternative 4 study area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 1,624 | 100% | 404 |
| Less than 9th Grade | 22 | 1% | 45 |
| 9th - 12th Grade, No Diploma | 44 | 3% | 66 |
| High School Graduate | 216 | 13% | 116 |
| Some College, No Degree | 345 | 21% | 241 |
| Associate Degree | 185 | 11% | 162 |
| Bachelor's Degree or more | 811 | 50% | 314 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 2,170 | 100% | 517 |
| Speak only English | 1,732 | 80% | 434 |
| Non-English at Home[1+2+3+4] | 438 | 20% | 265 |
| [1]Speak English "very well" | 360 | 17% | 215 |
| [2]Speak English "well" | 50 | 2% | 104 |
| [3]Speak English "not well" | 18 | 1% | 47 |
| [4]Speak English "not at all" | 9 | 0% | 73 |
| [3+4]Speak English "less than well" | 28 | 1% | 86 |
| [2+3+4]Speak English "less than very well" | 78 | 4% | 135 |
| **Linguistically Isolated Households*** | | | |
| Total | 4 | 100% | 30 |
| Speak Spanish | 0 | 0% | 12 |
| Speak Other Indo-European Languages | 0 | 0% | 12 |
| Speak Asian-Pacific Island Languages | 4 | 100% | 27 |
| Speak Other Languages | 0 | 0% | 12 |
| **Households by Household Income** | | | |
| Household Income Base | 845 | 100% | 178 |
| < $15,000 | 32 | 4% | 55 |
| $15,000 - $25,000 | 14 | 2% | 36 |
| $25,000 - $50,000 | 68 | 8% | 89 |
| $50,000 - $75,000 | 104 | 12% | 84 |
| $75,000 + | 627 | 74% | 271 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 845 | 100% | 178 |
| Owner Occupied | 723 | 86% | 182 |
| Renter Occupied | 122 | 14% | 79 |
| **Employed Population Age 16+ Years** | | | |
| Total | 1,828 | 100% | 437 |
| In Labor Force | 1,280 | 70% | 365 |
| Civilian Unemployed in Labor Force | 29 | 2% | 65 |
| Not In Labor Force | 548 | 30% | 248 |

**Data Note:** Datail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: User-specified polygonal location

Ring (buffer): 0-miles radius

Description: Alternative 4 study area

| | 2015 - 2019 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home*** | | | |
| Total (persons age 5 and above) | N/A | N/A | N/A |
| English | N/A | N/A | N/A |
| Spanish | N/A | N/A | N/A |
| French | N/A | N/A | N/A |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | N/A | N/A | N/A |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | N/A | N/A | N/A |
| Chinese | N/A | N/A | N/A |
| Japanese | N/A | N/A | N/A |
| Korean | N/A | N/A | N/A |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | N/A | N/A | N/A |
| Other Asian | N/A | N/A | N/A |
| Tagalog | N/A | N/A | N/A |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | N/A | N/A | N/A |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | N/A | N/A | N/A |
| Total Non-English | N/A | N/A | N/A |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.

*Population by Language Spoken at Home is available at the census tract summary level and up.