



Prepared for:	City of Henderson, Nevada	Project Name:	I-215 Beltway Widening Project – Pecos Road to Stephanie Street
Copy to:	Nevada Department of Transportation		
Prepared by:	Allison Hahn, Jacobs		
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1. Introduction

The City of Henderson (City) proposes to widen the Interstate 215 Bruce Woodbury Beltway (I-215) from Pecos Road to Stephanie Street in the City of Henderson, Clark County, Nevada. This section of I-215 freeway is one of the primary east-west freeway corridors in the Las Vegas Valley and connects the City of Henderson to the rest of the Las Vegas Valley. The I-215 Beltway Widening Project (Project) involves widening of I-215, ramp reconstruction, and local road improvements to the interchanges with I-215 at Pecos Road/St. Rose Parkway and Green Valley Parkway. The Project would also reconstruct ramps at the Valle Verde Drive and Stephanie Street interchanges. Figure 1-1 shows the Project location and study area.

The Project is being completed with funding from Clark County. However, because I-215 is within Nevada Department of Transportation (NDOT) right-of-way, an NDOT encroachment permit is required to construct the improvements. The interstate system is under the jurisdiction of the Federal Highway Administration (FHWA) providing a federal nexus to prepare an environmental document to comply with the National Environmental Policy Act of 1969 (NEPA). Thus, in compliance with NEPA, the City is preparing documentation to evaluate the potential environmental impacts of the project. This technical memorandum presents potential impacts to environmental justice associated with the No Action Alternative and the Preferred Alternative and identifies measures to mitigate impacts identified.

2. Project Description

I-215 serves as an important connection between the City of Henderson and the surrounding Las Vegas metropolitan area. The Pecos Road/St. Rose Parkway and Green Valley Parkway interchanges with I-215 provide access to and from the residential and commercial developments at the west edge of the City. Clark County and the City have experienced significant population growth over the last decade. Between 2010 and 2020, Clark County's population grew by over 300,000 residents (an increase of about 20 percent) and the City's population grew by over 60,000 residents (an increase of about 25 percent) (U.S. Census Bureau 2010 and 2020). The regional population is projected to continue to grow.

This segment of I-215 currently experiences congestion due to existing roadway deficiencies and the regional population growth, which has increased current traffic volumes that exceed the roadway's capacity. In addition, existing roadway deficiencies result in increased travel time and contribute to accidents. By 2050, if no improvements are made on I-215 in the Project area, severe congestion with average speeds of less than 15 miles per hour is expected in both the morning and afternoon peak periods in some areas.

The proposed Project would widen I-215 from Pecos Road to Stephanie Street, improve interchanges and ramps, and construct a pedestrian bridge over Green Valley Parkway near Village Walk Drive. The purpose of the Project is to eliminate existing roadway deficiencies and provide transportation improvements to serve existing and future traffic demand.

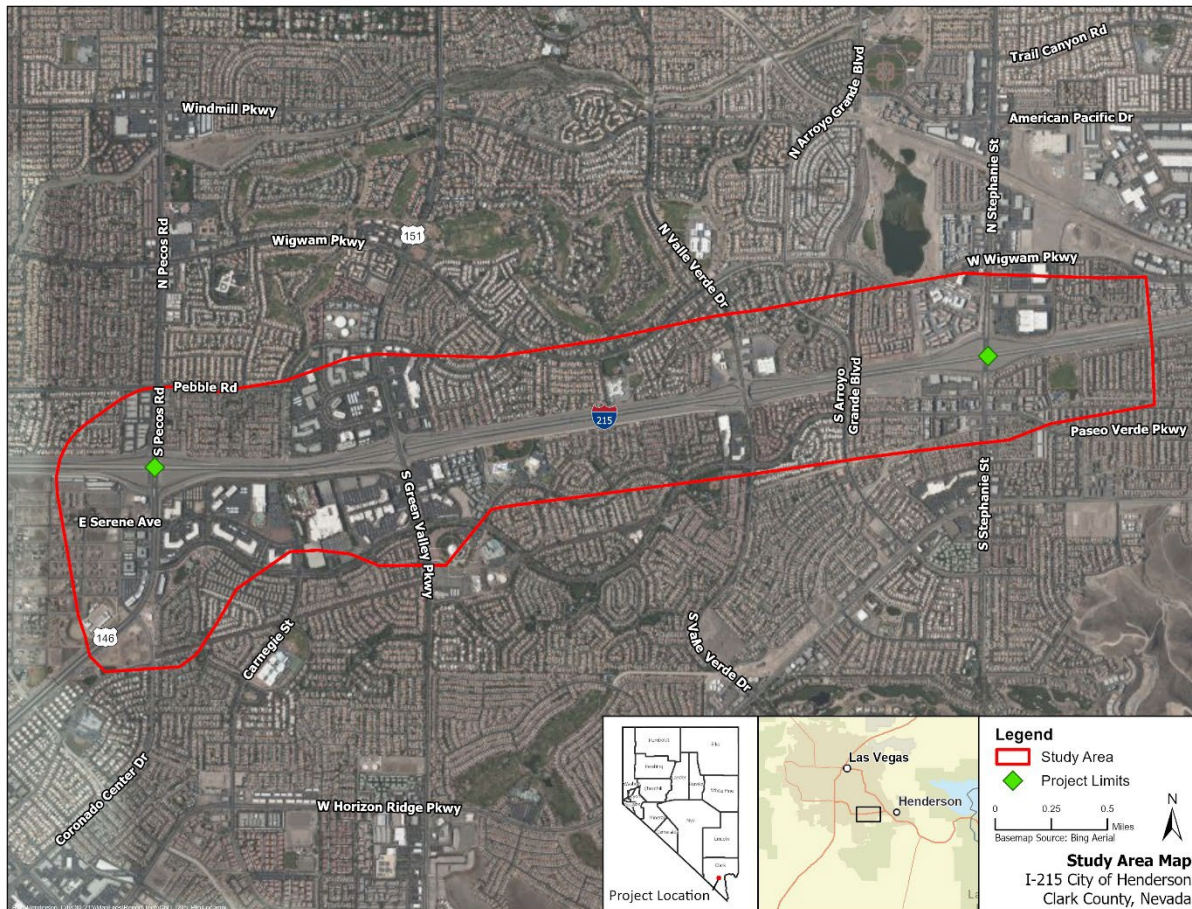


Figure 1-1. Study Area

3. Alternatives Evaluated

Two alternatives were evaluated for impacts, the No Action Alternative and the Preferred Alternative, described in Sections 3.1 and 3.2, respectively.

3.1 No Action Alternative Description

Under the No Action Alternative, none of the improvements included under the Preferred Alternative would be implemented. Only routine maintenance would be performed on I-215. Other planned transportation improvement projects in the area could still move forward. While this alternative would not fulfill the Project's purpose and need, it is included in the analysis as a baseline for comparison.

3.2 Preferred Alternative Description

The Preferred Alternative would widen I-215 with two additional through lanes in each direction (initially four lanes and at ultimate buildout, five lanes in each direction for a total of ten lanes) and an auxiliary lane between each interchange on I-215 from Pecos Road to Stephanie Street. This configuration is consistent with the improvements identified as part of the Henderson (I-11/I-515/I-215) Interchange project located adjacent to the east limit of this study. See Attachment A for a map of the Preferred Alternative.



Other improvements are described as follows:

- Pecos Road/St. Rose Parkway Interchange
 - Eastbound I-215 exit ramp: Construct additional right-turn lane to St. Rose Parkway for a total of two right-turn lanes.
 - Eastbound I-215 entrance ramp: The movement from northbound St. Rose Parkway to the entrance ramp will be free flow. This eastbound entrance ramp will have four receiving lanes: two from the northbound to eastbound movement and two from the southbound to eastbound movement. Eventually, two of the four lanes will drop before merging onto the freeway as a two-lane ramp.
 - Westbound I-215 exit ramp: Widen to two lanes and construct additional left-turn lane, resulting in three left-turn lanes.
 - Along St. Rose Parkway extending to south of the St. Rose Parkway/Paseo Verde Parkway intersection: Extend the northbound outside lane to provide more capacity for vehicles turning right to the I-215 eastbound entrance ramp.
- Green Valley Parkway Interchange
 - Reconstruct interchange as a diverging diamond interchange. Does not require widening of the existing bridge.
 - Reconfigure all ramps to allow for the diverging diamond interchange.
 - Construct one extra approach lane on each exit ramp for a total of two eastbound and two westbound lanes on- and off-ramps.
 - Construct a pedestrian bridge over Green Valley Parkway near Village Walk Drive to remove the east-west at-grade crosswalks (across Green Valley Parkway), enhancing safety for vulnerable road users and improving traffic operations.
- Valle Verde Drive interchange
 - Widen off-ramps from I-215 to two lanes.
- Stephanie Street interchange
 - Widen westbound entrance ramp and eastbound exit ramps to two lanes.

Additionally, the Preferred Alternative would:

- Reconstruct bike trails affected by the Project.
- Reconstruct sound walls and storm drainage facilities, such as storm drain inlets and pipes.
- Construct other ancillary roadway improvements to improve the safety of users of I-215 such as outside shoulders, barrier rails, and retaining walls, as well as pavement markings.
- Install traffic control devices and modify bridge underdeck and ramp lighting.
- Not require any new right-of-way (ROW) along I-215 and all proposed work along I-215 would occur within existing NDOT ROW.¹
- Not convert any existing land uses.

¹ Approximately 1.43 acres of ROW would be required along Green Valley Parkway and up to 0.26 acre of ROW along St. Rose Parkway. These are both City of Henderson streets.



4. Regulatory Context

Environmental justice analyses are conducted as part of NEPA reviews. The following laws, regulations, and guidance describe the regulatory background governing these analyses:

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, dated February 11, 1994 –Provides that each federal agency will make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. The Executive Order addresses the importance of public participation in the project review process.
- Executive Order 14096, Revitalizing Our Nation’s Commitment to Environmental Justice for All, dated April 21, 2023 – Supplements Executive Order 12898 and directs that each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionate and adverse human health or environmental effects of its programs, policies, and activities on communities with environmental justice concerns. The Executive Order reinforces the importance of early and meaningful public involvement in the project review process.
- U.S. Department of Transportation Order 5610.2C to Address Environmental Justice in Minority Populations and Low-Income Populations – Establishes procedures to ensure compliance with Executive Order 12898 and provides guidance on how to evaluate and address environmental justice impacts to minority and low-income populations and to consider the impacts, mitigation, and offsetting benefits.
- FHWA Order 6640.23A, Actions to Address Environmental Justice in Minority and Low-Income Populations (2012) – Directs FHWA to comply with Executive Order 12898. The order emphasizes FHWA’s commitment to ensuring nondiscriminatory action in federally funded projects and activities. It requires NDOT and FHWA to conduct an environmental justice analysis to determine if a proposed project has the potential to result in disproportionately high and adverse effects on minority and/or low-income populations. If, after the consideration of offsetting benefits, disproportionately high and adverse impacts would result from the proposed project, then mitigation measures or alternatives must be developed to avoid or reduce impacts, unless the agency finds that such measures are not practicable.
- Executive Order 13166, Improving Access to Services for Persons with Limited-English Proficiency – Directs agencies to ensure limited-English-proficiency populations have fair and equal access to services.
- Title VI of the Civil Rights Act of 1964 – Prohibits discrimination on the basis of race, color, national origin, age, sex, or disability programs and activities receiving federal financial assistance.

5. Methods

The analysis used demographic and economic information from the most recent Census data (2020 Census and 2017-2021 American Community Survey [ACS] 5-year estimate data). Census tract and block group data were used to determine the presence of minority and/or low-income populations in the Project area. Study area demographics were compared to those of the City of Henderson and Clark County. The study area extends 0.25 mile from the proposed improvements (Figure 5-1). The study area consists of 13 Census tracts and 163 Census blocks. This study area was selected because it encompasses direct impacts (ground disturbance) and indirect impacts (noise, dust, and traffic detours during construction).

Per the Department of Transportation Order 5610.2C and FHWA Order 6640.23A, the definition of minority persons in the environmental justice framework is:

- Black – A person having origins in any of the black racial groups of Africa
- Hispanic – A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race



- Asian American – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent
- American Indian and Alaskan Native – A person having origins in any of the original people of North America or South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition
- Native Hawaiian and Other Pacific Islander – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands

Low-income persons are defined as, “persons whose median household income is at or below the [U.S.] Department of Health and Human Services poverty guidelines.”

For the Project, Census tracts containing minority and/or low-income population percentages greater than the City of Henderson, Clark County, or both, are considered environmental justice populations. Of the 13 Census tracts in the study area, two of the Census tracts meet the definition of an environmental justice population as defined above (Census tracts 53.53 and 53.56). This area is outside of the project limits where the proposed roadway improvements would occur but is within the 0.25-mile buffer where potential indirect impacts, such as construction noise and traffic detours, may occur.

Potential burdens and benefits (impacts) from the construction and post-construction operation of the Project and potential mitigation measures were considered to determine the potential for disproportionately high and adverse impacts to minority and low-income populations. The Project team reviewed the environmental impacts analyzed for the Project to determine if construction and post-construction operation would result in adverse impacts to the general population and, if so, who from a minority and low-income perspective would be affected. The impact analysis considered the location, intensity, and duration of the anticipated impacts in relation to the environmental justice populations. The impacts to minority and low-income populations were compared with the impacts of the overall population within the study area to determine if impacts would be primarily borne by minority and low-income populations or be appreciably more severe than the adverse effect suffered by the general population. The evaluation also considered the effectiveness of avoidance, minimization, mitigation measures, and offsetting benefits to address potential adverse impacts to minority and low-income populations.

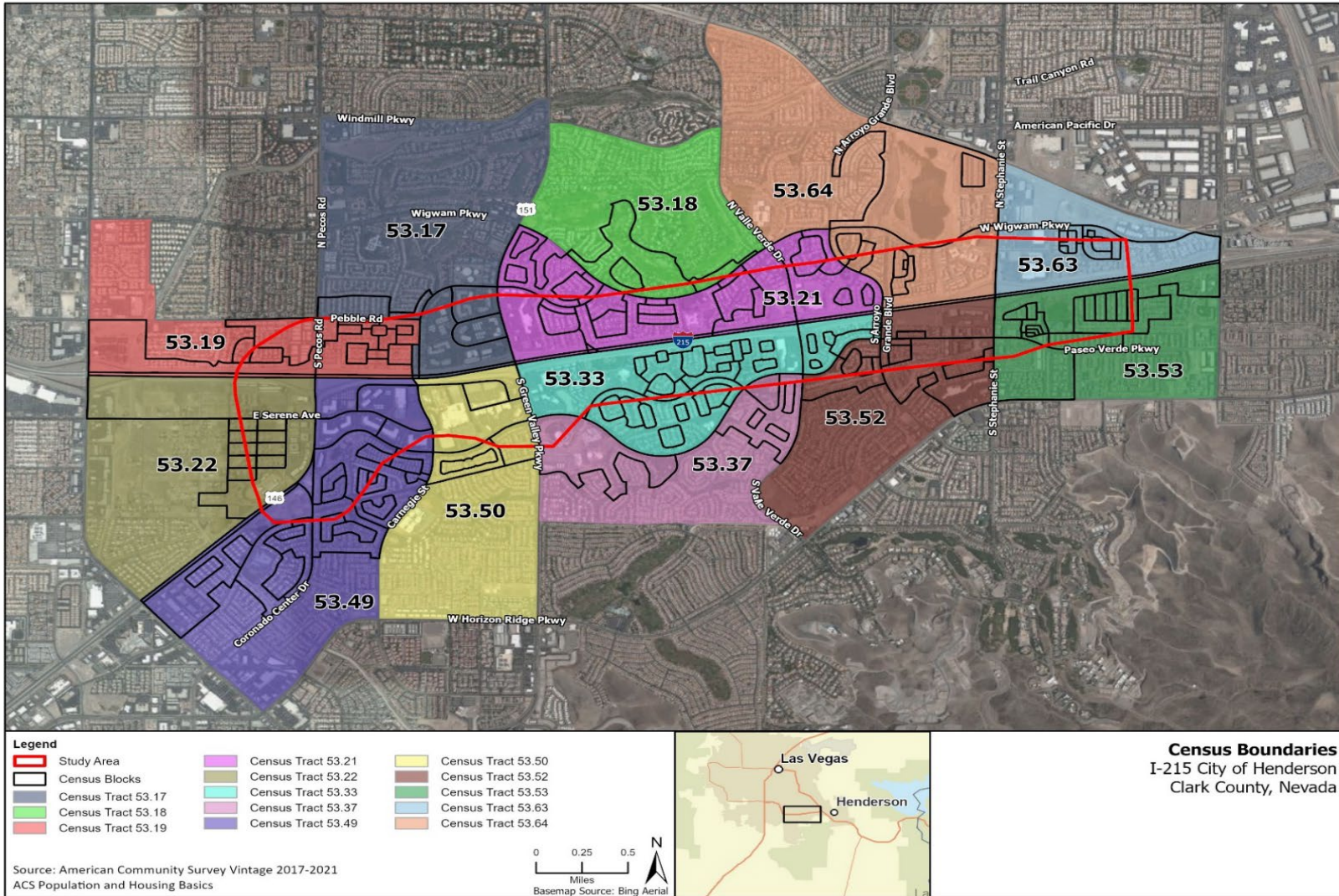


Figure 5-1. Census Boundaries



6. Existing Conditions

6.1 Minority Populations in the Study Area

In the study area, Henderson, and Clark County, Hispanics or Latinos are the largest minority population (Figure 6-1). Overall, White alone is the largest population group within the study area, Henderson, and Clark County. Figure 6-2 illustrates the distribution of the minority population throughout the study area.

Based on a field review of the study area, desktop data search, and conversations with City of Henderson officials, there do not appear to be any large groupings of minority populations in the study area or businesses, places of worship, or services that cater to a specific racial or ethnic group.

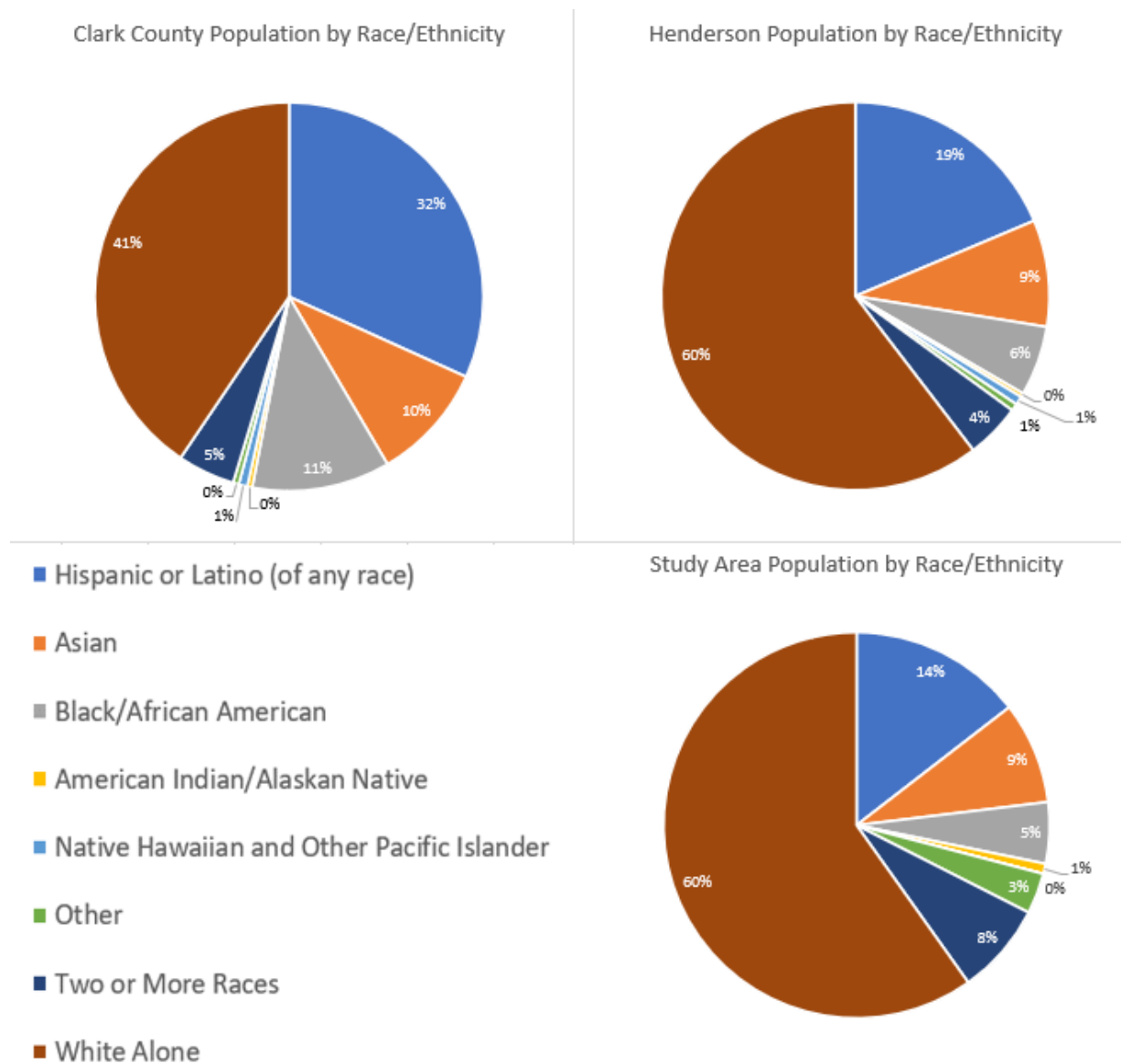


Figure 6-1. Population by Race/Ethnicity

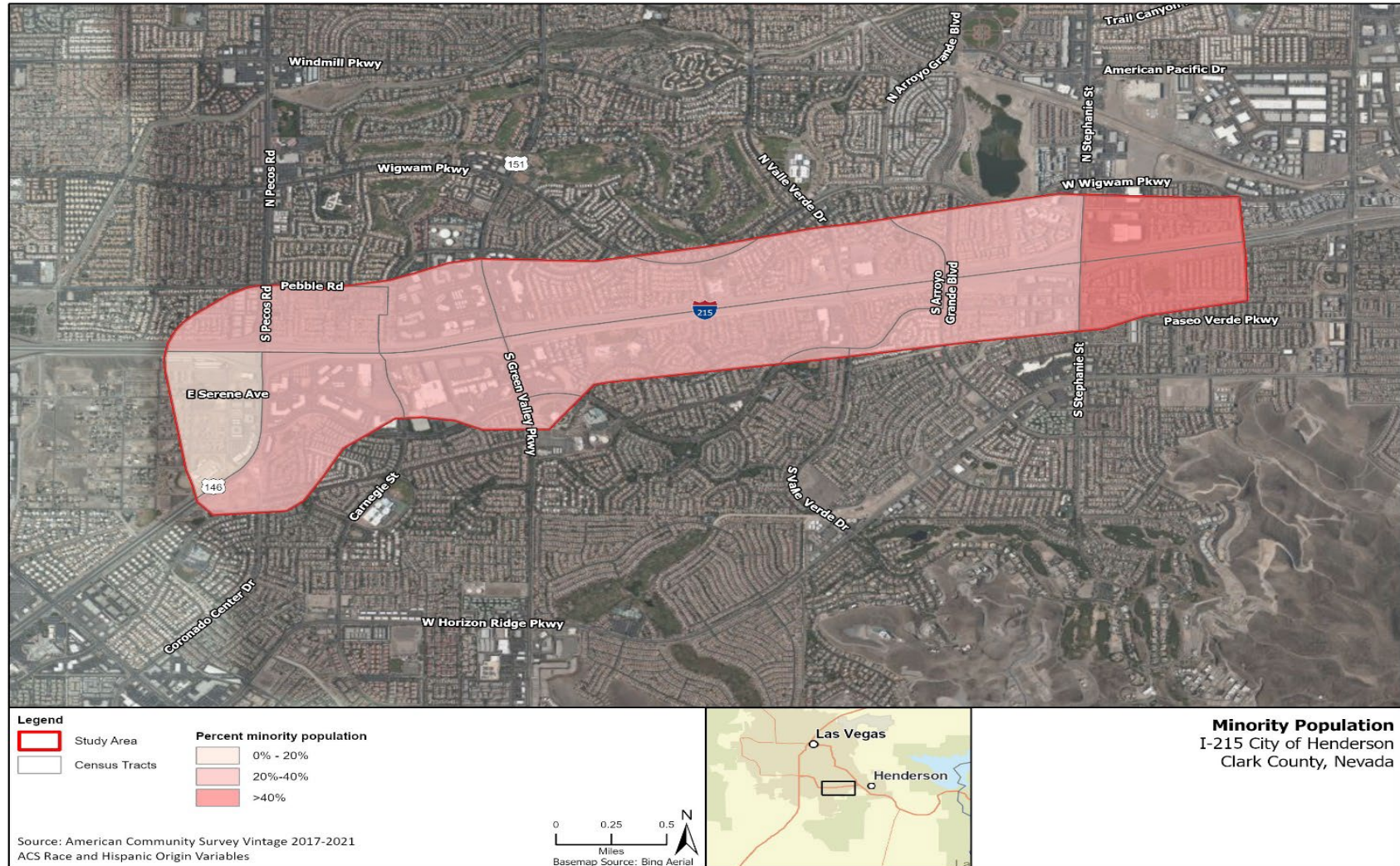


Figure 6-2. Minority Population in the Study Area



6.2 Income in the Study Area

The median household income in the study area is greater than that of the City of Henderson and Clark County (Figure 6-3). The median household income of the study area is about \$10,000 greater than the median household income for the rest of the City of Henderson and about \$25,000 greater than that of Clark County.

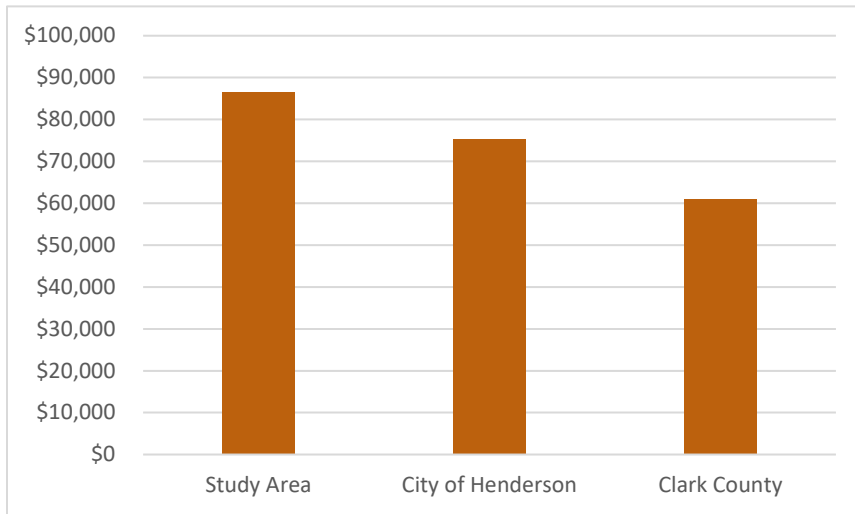


Figure 6-3. Median Household Income

Source: U.S. Census Bureau 2020

The U.S. Department of Health and Human Services (HHS) annually publishes poverty guidelines to determine financial eligibility for certain programs. According to the HHS guidelines, in 2023 a household containing four persons was living in poverty if the total income of the family/household was less than \$30,000 (HHS 2023). As shown on Figure 6-4, the percentage of residents in the study area living in poverty is 7 percent, lower than the City of Henderson and Clark County (U.S. Census Bureau 2020). Figure 6-5 shows the distribution of the population below the poverty level.

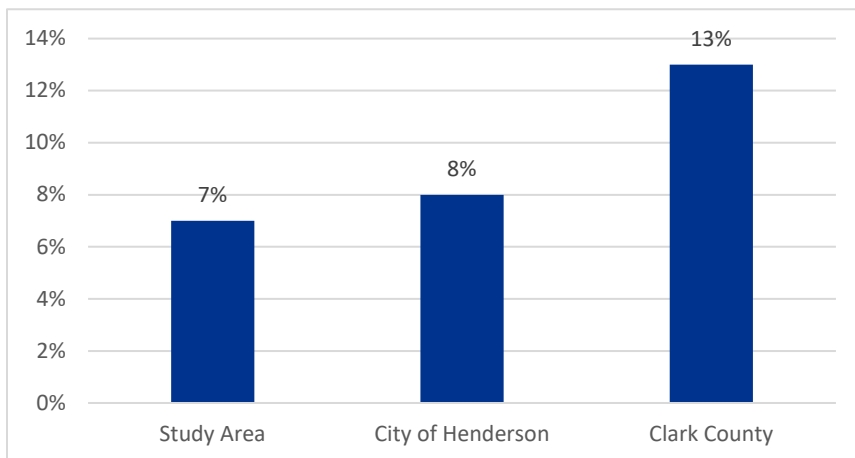


Figure 6-4. Percent of Population Below Poverty Level

Source: U.S. Census Bureau 2020

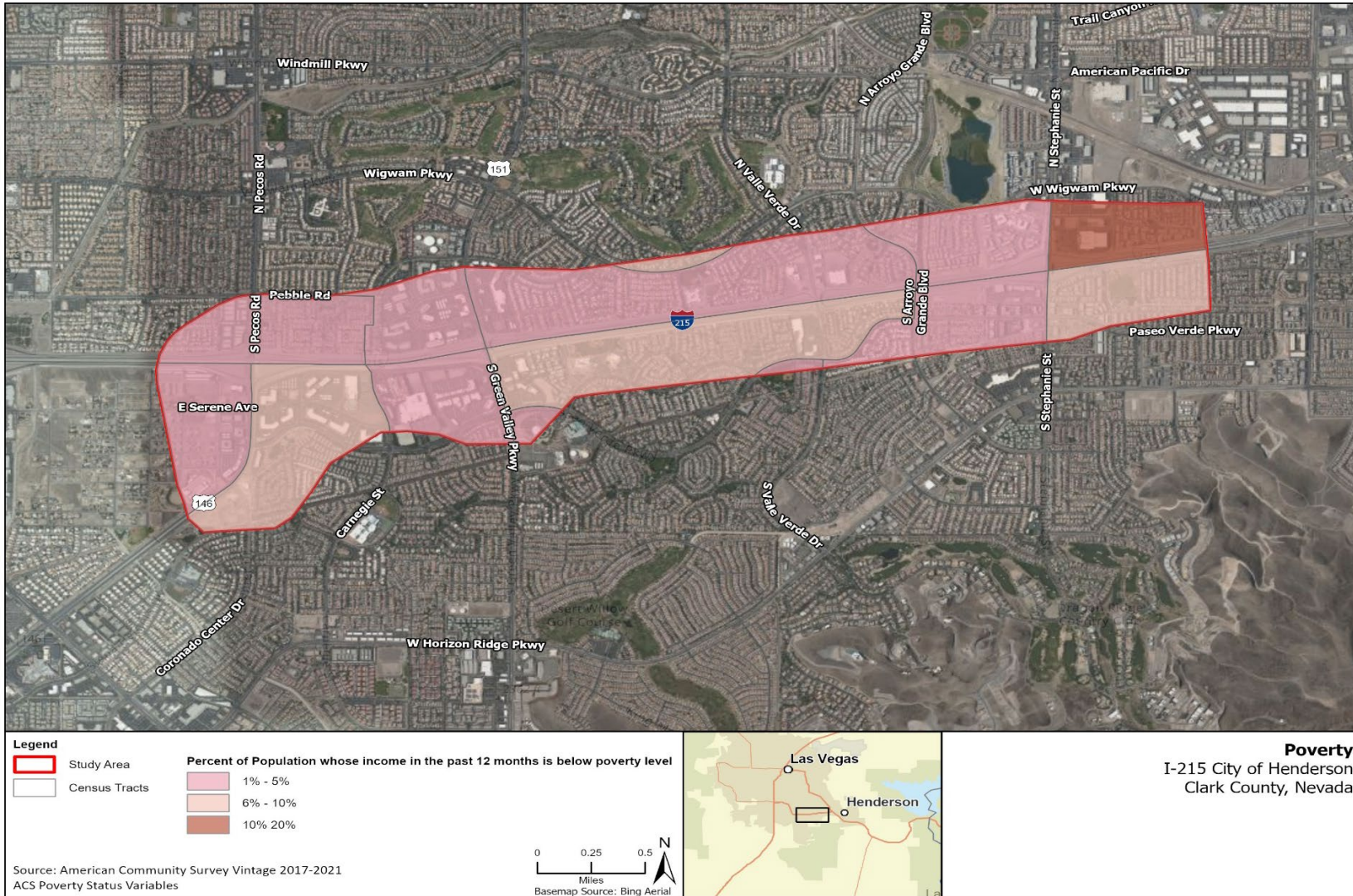


Figure 6-5. Population Below Poverty Level in the Study Area



7. Impacts Assessment

This section describes impacts identified for the No Action Alternative and the Preferred Alternative.

7.1 No Action Alternative Impacts

Under the No Action Alternative, no new development or construction would occur within the study area. No impacts to environmental justice would occur.

7.2 Preferred Alternative Impacts

Although minority and low-income populations occur within the study area, the proportion of minority and low-income residents within the study area is lower than that of the City of Henderson and Clark County. The highest proportion of minority and low-income residents in the study area reside east of Stephanie Street in Census tracts 53.53 and 53.63 (Figures 5-1, 6-2, and 6-5). This area is outside of the project limits where the proposed roadway improvements would occur but is within the 0.25-mile buffer where potential indirect impacts, such as construction noise and traffic detours, may occur. Roadway detours may be necessary during construction, which could temporarily require adjacent residents to travel farther to reach their destinations, including publicly owned or social services agencies such as schools, libraries, and parks. The adverse impacts associated with roadway closures would not be more severe or greater in magnitude for minority or low-income populations than the adverse impacts on the general population. All populations would experience similar travel delays and detours. Therefore, any adverse impacts as a result of the Preferred Alternative would not disproportionately affect environmental justice communities.

In addition, the pedestrian sidewalk ramps are being upgraded along St. Rose Parkway between Paseo Verde Pkwy and the I-215 interchanges, as well as along Green Valley Parkway between Village Walk Drive and the I-215 interchanges. The sidewalk ramps would meet current American Disability Act requirements. Along Green Valley Parkway where crosswalks cross multiple lanes (either left- or right-turn lanes), the Preferred Alternative includes controlled crossings such as pedestrian signals/push buttons. This increases the safety of these roadways for pedestrians and bicyclists to cross the freeway. Additional signage warning motorists about pedestrians using the crosswalks and other facilities may also be incorporated in the Preferred Alternative. Therefore, the Preferred Alternative would improve the safety for pedestrians and bicyclists throughout the study corridor.

8. Mitigation Measures

No mitigation is proposed.

9. References

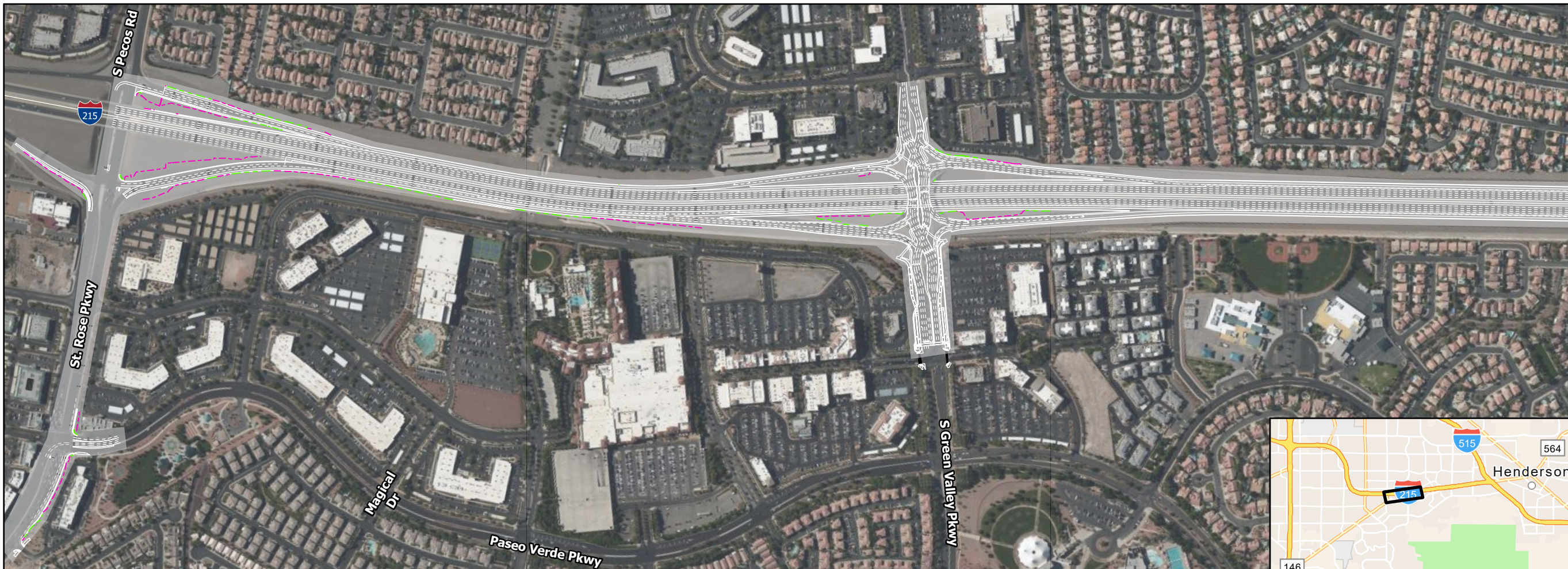
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U.S. Census Bureau. 2020. 2016-2020 American Community Survey 5-Year Estimates. https://data.census.gov/table?q=demographics&g=0500000US32003_1600000US3231900&tid=ACSDP5Y2020.DP05.

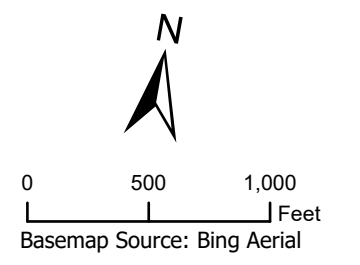
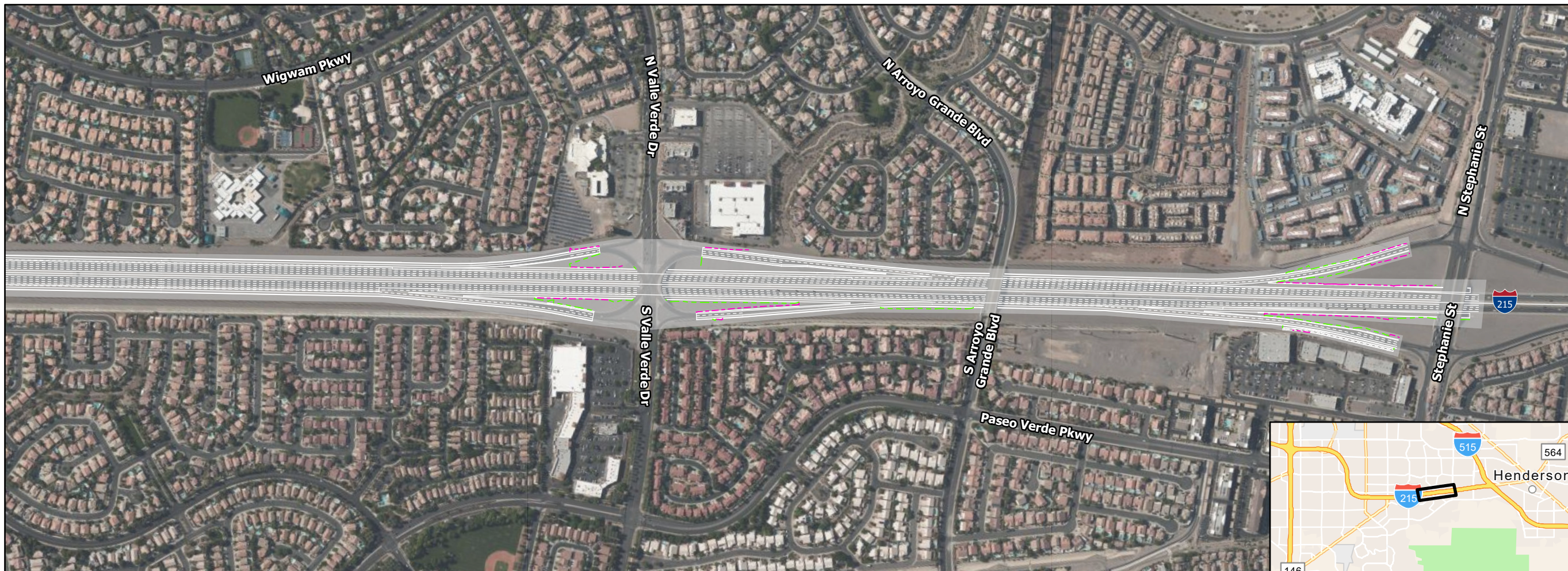
U.S. Department of Health and Human Services (HHS). 2023. HHS Poverty Guidelines for 2023. <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>.



Attachment A
Map of Preferred Alternative



- Legend**
- Proposed Roadway
 - - - Proposed Cut
 - - - Proposed Fill



Preferred Alternative
 I-215 City of Henderson
 Clark County, Nevada