



# Memorandum

To: Rhode Island Department of  
Transportation  
Two Capitol Hill  
Providence, RI 02903

Date: February 12, 2019

Project #: 72900.00

From: Peter Pavao

Re: Reconstruction of the Pell Bridge Approaches Environmental  
Assessment- Environmental Justice

## 1. Introduction

The Claiborne Pell Newport Bridge (Pell Bridge) carries State Route 138 between Jamestown and Newport and is the only road connection between Jamestown and Aquidneck Island. The Proposed Action for the Pell Bridge Interchange Project (Project) would provide direct connection from the northern part of the City to the downtown area, reduce queued vehicle traffic onto the Pell Bridge, reduce traffic in downtown Newport, and provide a portion of the bicycle and pedestrian facilities envisioned in the Aquidneck Island Transportation Study. The Proposed Action (Project) would occur in the City of Newport and Town of Middletown, Rhode Island. In accordance with the National Environmental Policy Act (NEPA), an Environmental Assessment (EA) is being developed to evaluate the impacts of construction and operation of the re-designed interchange on environmental resources.

In accordance with the National Environmental Policy Act (NEPA), an Environmental Assessment (EA) has been developed to evaluate the impacts of construction and operation of the re-designed interchange on environmental resources. This technical memorandum identifies and describes environmental justice geographies and the populations therein that are proximate to the reconstruction of the Pell Bridge Approaches (Project). This document also identifies the Project's potential to result in disproportionately high and adverse effects on such populations, along with appropriate mitigation measures, as necessary. Strategic public outreach efforts are also described.

## 2. Study Area and Methodology

### Study Area

The Study Area for this environmental justice analysis was defined as a 0.25-mile-wide buffer around the Project's limit of disturbance (LOD). This Study Area is based on the extent of the Project and populations most likely to experience environmental impacts due to their adjacency to the Project footprint. The Study Area is comprised of the following 13 intersecting census block groups.

- 440050412.001
- 440050402.002
- 440050402.001
- 440050403.042
- 440050403.021
- 440050405.001
- 440050405.002
- 440050406.001
- 440050405.003
- 440050406.004
- 440050410.001
- 440050411.003
- 440050411.001

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## Resource Definition

According to the Federal Highway Administration (FHWA), environmental justice is defined as: “identifying and addressing disproportionately high and adverse effects of the agency’s programs, policies, and activities on minority and low-income populations to achieve an equitable distribution of benefits and burdens.”<sup>1</sup> The implementation of environmental justice within transportation agencies under the U.S. Department of Transportation (U.S. DOT) includes the pursuit of full and fair participation among all potentially affected communities of transportation projects.

## Methodology

### *Identification of Environmental Justice Geographies*

For the purposes of this environmental justice assessment, the following definitions for minority and low-income populations were utilized. These definitions derive from the U.S. DOT and FHWA EJ Orders.

- **Minority populations:** Persons who identify as something other than “White-Alone” according to the U.S. Census. This includes persons identifying as Black, Hispanic or Latino, Asian American, American Indian and Alaskan Native, Native Hawaiian and Other Pacific Islander.
- **Low-income populations:** Persons whose median household income is at or below the Department of Health and Human Services (“HHS”) poverty guidelines.

The threshold for identifying minority geographies is consistent with guidance provided in the Council on Environmental Quality (“CEQ”) *Environmental Justice Guidance Under the National Environmental Policy Act*. This guidance document states that minority populations are present where either the minority population percentage within an affected area exceeds 50 percent or is “meaningfully” greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.<sup>2</sup> The State of Rhode Island is used as the reference community for the “meaningfully greater” analysis, and the related threshold is 10 percent greater than the reference community. To identify low-income geographies, this analysis identified census block groups that have median household incomes at or below the HHS poverty guidelines based on their average household size (rounded to the next highest whole number). The identification of low-income populations also involved the identification of public and subsidized housing within the Study Area.

Data from the latest American Community Survey (ACS) (*2012-2016 ACS 5-Year Estimates*) informed the identification of minority and low-income geographies. The U.S. Environmental Protection Agency’s (EPA’s) Environmental Justice Screening and Mapping Tool (Version 2018), along with a windshield survey of the Study Area and a search of reputable internet sources, informed the identification of public and subsidized housing.

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<sup>1</sup> FHWA. (2015). *Federal Highway Administration Environmental Justice Reference Guide*. Retrieved 6 November 2018, from [https://www.fhwa.dot.gov/environment/environmental\\_justice/publications/reference\\_guide\\_2015/fhwahep15035..pdf](https://www.fhwa.dot.gov/environment/environmental_justice/publications/reference_guide_2015/fhwahep15035..pdf)

<sup>2</sup> CEQ. (1997). *Environmental Justice Guidance Under the National Environmental Policy Act*. Retrieved 6 November 2018, from [https://www.epa.gov/sites/production/files/2015-02/documents/ej\\_guidance\\_nepa\\_ceq1297.pdf](https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf)

### *Identification and Evaluation of Disproportionately High and Adverse Effects*

To determine whether potential impacts from the Project would have a disproportionately high and adverse effect on affected environmental justice communities, this analysis referred to the U.S. DOT and FHWA EJ Orders to determine whether any identified adverse effect would:

- 1) Be predominantly borne by a minority and/or low-income population; or
- 2) Be suffered by the minority or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by non-environmental justice populations.

Adverse effects include those negative effects that impact individual or cumulative human health or environmental effects, including social and economic effects. Examples include, but are not limited to, displacing residences or commercial establishment, dividing or disrupting community cohesion, resulting in a decline in the community tax base or property values, or creating new or added environmental health risks such as through changes to local air quality, water quality, noise, or hazardous waste. In addition to adverse effects, the Project's beneficial effects on affected communities are identified and described.

### *Public Engagement Process*

Two public meetings targeting environmental justice geographies were held at the Florence Gray Center at 1 York Street in census block group 440050405.001. Outreach for these two meetings was advertised in local newspapers and at community centers in both English and Spanish. The first of the two meetings discussed the existing conditions in the Study Area along with the goals of the Project. The second meeting was to present the seven action alternatives and to receive public input on the alternatives. Input received from these meetings informed the inclusion and acceleration of the resurfacing of J.T. Connell Highway from RK Towne Plaza to West Maine Road. Additional safety improvements, including pedestrian and bicycle accommodations, along J.T. Connell Highway and Admiral Kalbfus Road were also included in the Project. More information on the Project's public engagement efforts can be found in **Chapter 7** of the EA.

## **3. Applicable Regulations and Criteria**

### **Federal Regulations**

Environmental justice has its origins in Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, which President Clinton issued in 1994. According to this EO, "each Federal agency shall 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 populations and low-income populations."<sup>3</sup> Further, EO 12898 requires each Federal agency to develop an

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<sup>3</sup> President of the United States. (1994). Executive Order 12898 of February 11, 1994 - *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Retrieved 8 November 2018, from <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>

agency-wide environmental justice strategy that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on these populations.

Issued in 2012, U.S. DOT Order 5610.2(a), *Final DOT Environmental Justice Order*, sets forth the policy to consider environmental justice principles in all DOT programs, policies, and activities, as well as describes the objectives of how environmental justice is to be integrated into the agency's planning and programming, rulemaking, and policy formulation. It also notes the steps to prevent disproportionately high and adverse effects to minority and low-income populations through environmental justice analyses conducted as part of Federal transportation planning and NEPA provisions and the measures to be taken to address such effects if anticipated.

FHWA Order 6640.23A, *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, establishes the policies and procedures for FHWA to use in complying with EO 12898. It reaffirms the principles of Title VI of the Civil Rights Act of 1964 (Title VI) and related statutes, such as NEPA, and emphasizes the integration of those provisions in the agency's environmental and transportation decision making processes.

Under Title VI of the *Civil Rights Act of 1964*, each Federal agency is required to ensure that "no person on the grounds of race, color, or national origin, is excluded from participation in, denied the benefits of, or subjected to discrimination under any program or activity receiving Federal financial assistance."<sup>4</sup> Although principles under the Title VI statute intersect with EO 12898 and the FHWA and DOT EJ Orders, it has unique requirements. This environmental justice analysis is not intended to fully meet the Rhode Island Department of Transportation's (RIDOT's) obligations and non-discrimination requirements under Title VI, though it does provide data on English language proficiency and calculations to determine if there is a disparate impact to a minority population using the 4/5 Rule. The 4/5 rule compares the selection rate (i.e., who will be impacted by a proposed project) among different groups; if the rate of the most impacted group is less than 80 percent of the rate of the least impacted group or the rate of all other groups combined, then there is likely a disparate impact from the project. Department of Justice Title VI guidance also allows for consideration of statistical significance in considerations of impacts.<sup>5</sup>

### **State Regulations**

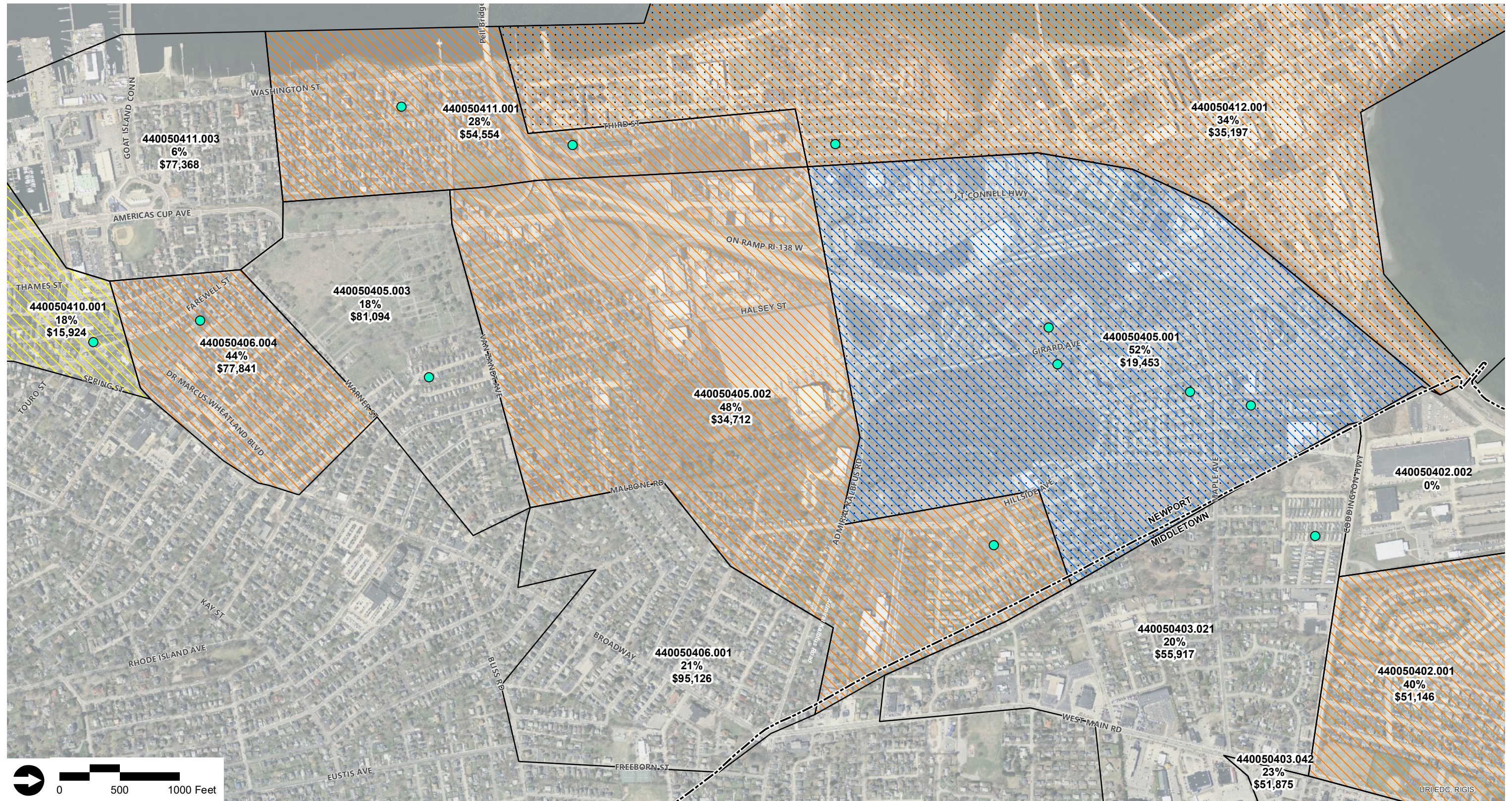
Effective June 26, 2009, the Rhode Island Department of Environmental Management's (DEM's) issued its *Policy for Considering Environmental Justice in the Review of Investigation and Remediation of Contaminated Properties*. This policy provides for the proactive consideration of environmental justice relative to site investigations and property site remediation projects to enable all communities to have meaningful input in environmental decision-making regardless of race, income, national origin or English language proficiency.<sup>6</sup> As part of this policy, DEM is to map the locations of

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<sup>4</sup> FHWA. (2012). Order 6640.23A, *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Retrieved 8 November 2019, from <https://www.fhwa.dot.gov/legsregs/directives/orders/664023a.pdf>

<sup>5</sup> DOJ. (2019). *Title VI Legal Manual*. Retrieved 5 June 2019, from <https://www.justice.gov/crt/case-document/file/934826/download>.

<sup>6</sup> DEM. (2009). *Policy for Considering Environmental Justice in the Review of Investigation and Remediation of Contaminated Properties*. Retrieved 8 November 2018, from <http://www.dem.ri.gov/envequity/pdf/ejfinal.pdf>



Source:RIDOT, RIGIS, US Census, 2012-2016 American Community Survey 5-Year Estimates

**Legend**

□ Census Block Group Boundary

**Census Block Group Information**

440060408.004 ← Census Block Group ID  
 44% ← Minority Percentage  
 \$77,841 ← Median Household Income

**Environmental Justice Criteria Met**

▨ Minority Alone  
 ▨ Low-Income Alone  
 ▨ Minority and Low-Income

▭ RIDEM Environmental Justice Focus Area

● Identified Low-Income Housing

--- Municipal Boundary



Figure 1  
Environmental Justice

**Reconstruction of the Pell Bridge Approaches  
Newport, Rhode Island**

communities of concern, or Environmental Justice Focus Areas, which provide the basis for minimum notice requirements for the investigation and clean-up of contaminated sites; the policy notes that supplemental outreach may be necessary to provide for meaningful community participation.

**Local Regulations**

There are no regulations pertaining to environmental justice that are applicable to the Project at the local level.

**4. Impact Assessment**

**Baseline Conditions**

The Study Area contains 13 census block groups that intersect with a 0.25-mile buffer around the Project’s LOD. **Table 1** lists these census block groups along with their minority population percentages and average household sizes, median incomes. The following sections describe these demographic indicators relative to the environmental justice requirements under the regulatory context **Section 3** describes. **Figure 1** illustrates the presence of identified minority and low-income geographies and localized populations.

*Minority Geographies*

As stated, the thresholds for identifying minority geographies are either the minority population percentage within a census block group exceeding 50 percent or 10 percent greater than the minority population percentage of the State of Rhode Island at 16.8 percent; the meaningfully greater threshold, therefore, is a minority population percentage greater than 26.8 percent. Among the 13 census block groups within 0.25-mile of the Project’s LOD, only one has a minority population percentage greater than 50 percent, while five additional census block groups are meaningfully greater than the State. The identified minority geographies are indicated in **Table 1**.

Across the Study Area, approximately 67 percent of the population is White, 9 percent Black or African American, 13 percent Hispanic or Latino, 2 percent Asian, 1 percent American Indian & Alaska Native, and 10 percent foreign-born.

**Table 1: Environmental Justice Indicators**

| <b>Block Group ID</b>      | <b>Minority %</b> | <b>HH Size<br/>(rounded to next highest whole number)</b> | <b>Median Household Income</b> |
|----------------------------|-------------------|---|--------------------------------|
| 440050412.001 <sup>M</sup> | 34%               | 3   | \$35,197                       |
| 440050402.002              | 0%                | --  | N/A                            |
| 440050402.001 <sup>M</sup> | 40%               | 3   | \$51,146                       |

| <b>Block Group ID</b>         | <b>Minority %</b> | <b>HH Size<br/>(rounded to next highest whole number)</b> | <b>Median Household Income</b> |
|-------------------------------|-------------------|---|--------------------------------|
| 440050403.042                 | 23%               | 2   | \$51,875                       |
| 440050403.021                 | 20%               | 3   | \$55,917                       |
| 440050405.001 <sup>M, L</sup> | 52%               | 3   | \$19,453                       |
| 440050405.002 <sup>M</sup>    | 48%               | 3   | \$34,712                       |
| 440050406.001                 | 21%               | 3   | \$95,126                       |
| 440050405.003                 | 18%               | 2   | \$81,094                       |
| 440050406.004 <sup>M</sup>    | 44%               | 3   | \$77,841                       |
| 440050410.001 <sup>L</sup>    | 18%               | 2   | \$15,924                       |
| 440050411.003                 | 6%                | 2   | \$77,368                       |
| 440050411.001 <sup>M</sup>    | 28%               | 2   | \$54,554                       |

Source: U.S. Census Bureau, 2012-2015 ACS 5-Year Estimates

Notes:

- M Minority geography
- L Low-income geography

### *Low-Income Geographies*

Low-income geographies were identified as census block groups that have a median household income at or below the HHS poverty guidelines based on their average household size (rounded to the next highest whole number). Average household sizes in the Study Area range from 2 to 3. According to HHS, the 2018 poverty guidelines for 2 and 3 person households are \$16,460 and \$20,780, respectively.<sup>7</sup> Based on this threshold, two of the census block groups within 0.25-mile of the Project’s LOD qualify as low-income geographies. These include block group 440050405.001,

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<sup>7</sup> HHS. (2018). *HHS Poverty Guidelines for 2018*. Retrieved 8 November 2018, from <https://aspe.hhs.gov/poverty-guidelines>

which has a median household income of \$19,453 and block group 440050410.001, which has a median household income of \$15,924.

In addition to the identification of low-income geographies above, there are many public or subsidized housing developments – some senior housing - within the Study Area. These developments are largely concentrated in the City of Newport’s North End neighborhood (see **Figure 1**). They include, but may not be limited to:

- Newport Heights, generally bounded by Maple Avenue and Sunset Boulevard and bisected by John H Chafee Boulevard
- Park Holm, generally located east of Hillside Ave and north of Eisenhower Street
- 9 Tilley Avenue
- Mumford Manor, 39 Farewell Street
- Festival Field, 90 Girard Avenue
- Ahepa 245 Apartments, 87 Girard Avenue
- Coddington Point Condominiums, 231 Maple Avenue
- 50 Washington Square
- Harbor House, 111 Washington Street
- Bayside Village, 143 3rd St
- Rolling Green Village, 195 Admiral Kalbfus Road

In addition to the housing developments listed above, a mobile home park, Bay View Park, is situated along Coddington Highway, east of Sherman Lane.

#### *English Language Proficiency*

In accordance with RIDOT’s obligations under Title VI, this analysis also provides data on the English language proficiency. Based on ACS estimates, there are approximately 269 individuals (or 2 percent of the Study Area) age 5 and above who speak English less than well (“not well” or “not at all”). The prevalent non-English language spoken at home is Spanish (13 percent of persons age 5 and above), though Indo-European languages such as Albanian, Lithuanian, Pashto, Romanian, and Swedish (2 percent); Tagalog (1 percent); and French (1 percent) are also spoken. The City of Newport is also known to have a large population of native Portuguese speakers (1 percent [city-wide]).

#### *RIDEM Environmental Justice Focus Areas*

The Project’s LOD intersects with an Environmental Focus Area established by RIDEM. This area encompasses census block groups 440050405.001 and 440050412.001 and is shown in **Figure 1**.

### **Effects Analysis**

#### *Proposed Action*

#### Direct Impacts

Potential effects (burdens and benefits) on minority and low-income populations from transportation projects generally encompass changes to: community cohesion (i.e., access to community facilities and services), employment, the community tax base or property values, aesthetics, as well as traffic patterns, safety, and options. Additionally,



burdens of transportation projects can include residential or commercial displacements or the degradation of environmental conditions as they related to noise, air quality, water quality, and hazardous materials.

As stated, to determine whether potential impacts from the Project would have a disproportionately high and adverse effect on affected environmental justice communities, this analysis referred to the U.S. DOT and FHWA EJ Orders to determine whether any identified adverse effect would:

- 1) Be predominantly borne by a minority and/or low-income population; or
- 2) Be suffered by the minority or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by non-environmental justice populations.

The following summarizes the anticipated impacts of the Project on environmental resource categories related to human health or environmental effects, including social and economic effects.

**Noise:** The noise analysis identified 31 residential receptors where noise levels with the Project would either exceed the FHWA Noise Abatement Criteria (NAC) to protect public health, welfare and livability from excessive vehicle traffic noise or where the Proposed Action would cause a substantial increase in noise (i.e., an increase of 10 dBA or more compared to existing conditions). These impacted receptors are predominantly within identified minority and low-income geographies (census block groups 440050405.001, 440050405.002, and 440050411.001) and a geography where a low-income population was identified (census block group 440050403.021), and thusly represent adverse impacts on minority and low-income populations. Impacted receptors where noise levels would exceed NAC criteria are in block group 440050403.021 in Bay View Park, a mobile home park; in block group 440050405.002 north of Garfield Street and west of Halsey Street; and in block group 440050411.001 west of 3<sup>rd</sup> Street on either side of the Pell Bridge ramp and south of Hunter Park at the intersection of Van Zandt Avenue and 3<sup>rd</sup> Street. Substantial noise increases would occur in block group 440050405.002, north of Garfield Street and east and west of Halsey Street. For details of these noise impacts, please see the **Noise Technical Memorandum**.

As the only environmental resource category with an adverse impact, noise requires further analysis under Title VI. Based on the noise analysis described above and detailed in the **Noise Technical Memorandum**, approximately 85 individuals or 0.6 percent of total persons within the Study Area would be adversely impacted by the Project. Applying the percentages of individuals by race and ethnicity within the Study Area, it is estimated that 54 persons would be white, five would be African American, 15 would be Hispanic or Latino, and one would be Asian. These values all represent less than 1 percent of each of these racial and ethnic groups within the Study Area.

#### **Title VI 4/5 Rule Calculations**

As **Table 2** demonstrates, Hispanic or Latino populations would be the most negatively impacted by the Project. Based on the 4/5 Rule, there would be an apparent disparate impact because the ratio of percentage of all other groups negatively impacted by the Project to the percentage of Hispanic or Latino residents negatively impacted by the Project is less than 80 percent. The supporting calculations to this conclusion are provided below.

- All Other (Non-Hispanic or Latino) Groups Negatively Impacted:  $(85-15)/(14812-1948) = 0.5$  percent
- Most Impacted/All Other Groups:  $0.8 \text{ percent}/0.5 \text{ percent} = 1.6$

- All Other Groups/Most Impacted: 0.5 percent/0.8 percent < 0.80

**Table 2: Population Negatively Impacted by Project by Racial/Ethnic Group**

|                                       | Total       | White       | Black or African American | American Indian | Asian       | Hispanic or Latino |
|---------------------------------------|-------------|-------------|---------------------------|-----------------|-------------|--------------------|
| Total Population                      | 14,812      | 9,864       | 1,375                     | 108             | 287         | 1,948              |
| Estimated Impacted Population         | 85          | 54          | 5                         | 0.3             | 1           | 15                 |
| <b>Percentage Negatively Impacted</b> | <b>0.6%</b> | <b>0.5%</b> | <b>0.4%</b>               | <b>0.3%</b>     | <b>0.5%</b> | <b>0.8%</b>        |

Because the values of negatively impacted individuals are small (approximately one half of one percent of the total population of the Study Area), this assessment of disparate impacts under Title VI uses the comparison of the most impacted racial/ethnic group to all other groups, rather than the alternative approach of comparing against the least impacted racial/ethnic group.

Despite the apparent disparate impact, Department of Justice Title VI guidance allows for consideration of statistical significance in considerations of impacts.<sup>8</sup> Because the impacted populations are so small (85 impacted individuals out of a Study Area total population of 14,812 individuals and 15 Hispanic or Latino impacted individuals out of a total Study Area Hispanic or Latino population of 1,948 individuals), these impacts are not likely to be significantly disparate.

**Air Quality:** Based on the FHWA categorical hotspot finding, the Project is not anticipated to have direct significant adverse air quality impacts. It would not cause carbon monoxide (CO) concentrations to exceed the National Ambient Air Quality Standards (NAAQS) at intersections proximate to the Project. As no significant adverse air quality impacts are anticipated, there can be no disproportionately high and adverse effects on minority and low-income populations. For more information on the expected impacts of the Project on air quality, please see the **Air Quality Technical Memorandum**.

**Water Quality:** The Proposed Action will increase impervious surface area, which can impact downstream water and associated water quality. Impacts to water quality may include increases in suspended and deposited sediments;

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<sup>8</sup> DOJ. (2019). *Title VI Legal Manual*. Retrieved 5 June 2019, from <https://www.justice.gov/crt/case-document/file/934826/download>.

sediment transports other pollutants including nutrients, metals, and hydrocarbons. For more information on the expected impacts of the Project on stormwater, please see the **Stormwater Technical Memorandum**.

**Hazardous Materials:** Contaminated subsurface soils containing total petroleum hydrocarbons (TPHs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals above RIDEM thresholds have been identified proximate to the Project in locations where excavation or other intrusive construction activities are anticipated. Soil borings with found exceedances of RIDEM standards are within census blocks groups identified as minority and low-income geographies, including block groups 440050411.001, 440050405.001, and 440050405.002. Subsurface debris may be encountered during intrusive construction activities, especially in the area of the former Newport City Dump. There is some potential for new releases to occur or to be identified during construction, such as a release of oil or diesel from construction equipment. The Project's LOD intersects with an identified Environmental Justice Focus Area, and accordingly, all appropriate notification measures will be taken as per RIDEM's *Policy for Considering Environmental Justice in the Review of Investigation and Remediation of Contaminated Properties*. For more information on the expected impacts of the Project on hazardous materials, please see the **Hazardous Materials Technical Memorandum**.

**Land Use:** The Project, along with its required property acquisitions, are not expected to significantly change local land use patterns or impede the functions of existing lands uses. It is consistent with State and local land use planning and will have the beneficial impact of better connecting land uses within the Study Area through new or improved north-south linkages. These benefits would be realized equally across population groups. No disproportionately high and adverse effects on minority and low-income populations are anticipated. For more information on the expected impacts of the Project on land use, please see the **Land Use Technical Memorandum**.

**Socioeconomics:** The Project would have the beneficial impact of improving neighborhood connectivity through new north-south linkages and multimodal transportation options. It would also improve neighborhood cohesion through improved surface transportation infrastructure that enhances access and the safety of that access to community facilities. These benefits would be realized equally across population groups. The Project would require the acquisition of several privately- and municipally-owned properties within a census block group identified as a minority geography and as having low-income populations (block group 440050405.002); such acquisitions are not anticipated to significantly affect the community tax base. Property values within the Study Area are not anticipated to be negatively affected, as adjacent neighborhoods have largely developed around the Pell Bridge approaches and ramps since its construction commenced in 1966. Project construction will likely result in temporary disruptions to local businesses. Based on this information, no disproportionately high and adverse effects minority and low-income populations are anticipated. For more information on the expected impacts of the Project on socioeconomics, please see the **Socioeconomics Technical Memorandum**.

**Traffic:** The Project will improve travel time and delays by eliminating/shifting existing queuing on the ramp to Downtown. Delays and queues at J.T. Connell Highway at Van Zandt Avenue, however, will continue to increase due to increased traffic flow along J.T. Connell Highway (improved throughput), new traffic generated by the induced development within the anticipated "Innovation Hub" (see *Indirect Impacts* below), and a lack of capacity improvements at the intersection with Van Zandt Avenue. The impacts of these changes would be experienced across the Study Area. Accordingly, there would be no disproportionately high and adverse effects on minority and low-

income populations, nor would these impacts be disproportionately allocated to certain racial/ethnic groups. In accordance with the Project's purpose and need, the Proposed Action would improve safety; provide multimodal access for all roadway users (transit, bicyclists, pedestrians); and improve traffic circulation and connections near the Project. These benefits would be realized equally across population groups. For more information on the expected impacts of the Project on traffic, please see the **Traffic Technical Memorandum**.

**Climate:** Based on a review of climate change studies and analyses pertinent to the region, the Project's LOD is not vulnerable to impacts from 3 feet of sea level rise, though current and future storm surge conditions in addition to 3 feet of sea level rise would occasionally inundate the area. The Project itself is not expected to worsen anticipated impacts from climate change in the Study Area, including for its minority and low-income populations, and is therefore, not expected to have disproportionately high and adverse effects. For more information on the implications of climate change relevant to the region, please see the **Climate Technical Memorandum**.

**Cultural Resources:** As part of the Section 106 consultation process, no adverse effects from the Project on any historic resources were identified. Further, as the Pell Bridge approaches and ramps are existing infrastructure, their reconfiguration is not anticipated to negatively impact neighborhood aesthetics. No related disproportionately high and adverse effects on minority and low-income populations are anticipated. For more information on the scope of the Section 106 process, please see the **Cultural Resources Technical Memorandum**.

#### Indirect Impacts

The Project will indirectly result in new development opportunities associated with the anticipated Innovation Hub. Any new development is not expected to have a disproportionately high and adverse effect on minority and low-income populations, as such development would conform to the City of Newport's existing and future land use planning and regulations. Furthermore, new development opportunities under the Project are expected to result in new employment opportunities for persons living in the Study Area. These employment benefits would be realized across population groups.

Lands redeveloped as an indirect result of the Project will provide positive effects to local water quality, as new stormwater controls and best management practices for water quality, in adherence with RIDEM regulations, will be installed.

Potential indirect impacts on hazardous materials would arise if the Project has the potential to affect the ongoing remediation of existing subsurface contamination or would produce additional sources of contamination or waste materials. This is currently not anticipated to occur as a result of the Project but could be the case if previously undiscovered contaminants are encountered during construction. Another potential indirect impact, albeit unlikely, is the accidental mismanagement of regulated soil or groundwater waste materials outside the Study Area, such as dumping of contaminated, regulated soils at an unlicensed facility or location. The Project may also result in an indirect beneficial impact if it results in the removal and disposal of contaminated materials in accordance with Federal and State regulations.

A mesoscale analysis of the Project shows that it will result in a net benefit to air quality. It will successfully relieve congestion overall and result in lower emissions of multiple criteria pollutants – a benefit that would be realized equally across population groups.

No indirect impacts are anticipated under the other related environmental resource categories, and therefore, there are no related disproportionately high and adverse indirect effects on minority and low-income populations.

#### *No Action Alternative*

Under the No Action Alternative, the Project would not occur. As a result, minority and low-income populations within the Study Area would not see the anticipated benefits of the Project that include improved safety on local surface transportation infrastructure; multimodal access for all roadway users (transit, bicyclists, pedestrians); and traffic circulation and connections. The community would not see related enhancements to community connections and cohesion resulting from such improvements.

No adverse impacts are anticipated under the related environmental resource categories under the No Action Alternative. Noise levels under the No Action Alternative would be similar to existing conditions.

No significant amount of land would be made available for redevelopment in support of the State and City's economic goals under the No Action Alternative, and no related employment opportunities for minority and low-income populations would be realized.

## 5. Cumulative Impacts

No past, present, or reasonably foreseeable future actions are known that would result in the Project having adverse cumulative effects to human health and the environment, including social and economic effects, within the Study Area. Accordingly, no disproportionately high or adverse cumulative effects on minority and low-income populations are anticipated.

The potential redevelopment of the Newport Grand would generate new employment opportunities within the Study Area, and therefore, add to the number of potential jobs resulting from the redevelopment of the parcels freed up by the Project. The building program for the former casino includes a 250-room hotel and 150,000 square feet of new retail.

## 6. Mitigation

The feasibility and reasonableness of noise abatement measures were reviewed based on standard RIDOT criteria included in its Noise Policy. The criteria address 1) engineering feasibility, 2) viewpoints of benefited receptors, 3) cost effectiveness, 4) acoustic feasibility, and 5) date of development. Based on this review, noise abatement measures would not be feasible and reasonable for impacted receptors in identified environmental justice areas. The **Noise Technical Memorandum** outlines the findings of this review.

Existing and proposed drainage plans have been developed to an extent that the change in impervious surface is identified and best management practices are sited and sized to capture and treat stormwater associated with the impervious surface.

The Project will require property acquisitions within identified environmental justice geographies. RIDOT will work with property owners to ensure fair compensation and relocation assistance in accordance with 49 CFR Part 24 requirements.

Construction activities may impact the use of properties within identified environmental justice geographies in the Study Area due to noise generation, disruptions to traffic patterns, and vehicular and equipment emissions and inhalable dust concentrations. Such impacts are temporary and not considered to be significantly adverse, though RIDOT will work with property owners and employ best management practices and other requirements to minimize or mitigate these impacts.

## 7. Regulatory Coordination and Required Permits

This environmental justice analysis was developed in accordance with EO 12898 and the FHWA and DOT EJ Orders, and should inform RIDOT's obligations and non-discrimination requirements under Title VI. As stated, under Title VI, RIDOT is required to ensure that "no person on the grounds of race, color, or national origin, is excluded from participation in, denied the benefits of, or subjected to discrimination under any program or activity receiving Federal financial assistance."<sup>9</sup> No Federal, State, or local permits are required relative to environmental justice.

## 8. Summary of Impacts

Although the Project would adversely impact identified minority and low-income populations with regard to noise, considering its collective direct and indirect benefits to these populations, the Project overall is not considered to have a disproportionately high and adverse effect on an environmental justice population. Further, while there is an apparent disparate impact based on the 4/5 calculation performed relative to Title VI, the number of potentially impacted individuals is so small that it can be determined there likely would be no significantly disparate impact on a racial or ethnic group. The Project would have direct beneficial impacts related to traffic, as it would improve safety, multimodal access for all roadway users (transit, bicyclists, pedestrians), and traffic circulation and connections near the Project. Relatedly, the Project would improve neighborhood connectivity and cohesion. Indirectly, the Project would generate new employment opportunities and potential increases in property values due to the redevelopment of parcels freed up by the Project. Regional air quality will also be improved through lessened traffic congestion overall. Water quality impacts associated with an increase in impervious surfaces will be mitigated through best management practices sited and sized to capture and treat stormwater. The Project would require the acquisition of several privately- and municipally-owned properties within an identified environmental justice geography, but such acquisitions will be performed in accordance with 49 CFR Part 24 requirements.

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<sup>9</sup> FHWA. (2012). Order 6640.23A, *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Retrieved 8 November 2019, from <https://www.fhwa.dot.gov/legsregs/directives/orders/664023a.pdf>