



Department of Transportation  
Two Capitol Hill  
Providence, RI 02903

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## MEMO:

**To:** James R. Primeau, P.E., PMP  
Managing Engineer, Project Management- Office of Scoping and Compliance

**From:** Lilliam Abreu *LA*  
Chief Program Development/ Title VI Coordinator / Office of Civil Rights

**Subject:** Title VI Environmental Justice Analysis  
PTS No. 00481- Bridge Group 95-Rt 403 Deferred Ramps  
RIC No. [Click or tap here to enter text.](#)  
FAP No. [Click or tap here to enter text.](#)

**Date:** 7/14/2021

I reviewed the completed Title VI/Environmental Justice Analysis for the above referenced project and assessed, based upon the information submitted and supporting documentation, that:

- Yes**  **No** Significant EJ populations (low-income, minority, age 64 +, individuals with disabilities, and Limited English Proficiency (LEP)) exist within the project area (0.5 miles radius)
- Yes**  **No** Disproportionally high and adverse social, economic, and environmental impacts is expected from this project
- Yes**  **No** Temporary EJ impact is expected during construction of this project

**Comments/Recommendations:** There are no long-term negative Impacts for this project. The project area has a high percentage of low-income population. Ramps are estimated to be completed within one construction period. There will be shifting of travel lanes, which will reduce the need for road closures and detours. There will be lane closures at night for the new ramp tie-ins and micro mill and overlay at the end of the project. This project will have long term positive Impacts as a more direct route to get onto Route 403 is built, decreasing travel time and also reducing congestion, pollution and noise in the project area. Residents in the area must be informed well in advance of the lane closures that will happen during the project, if any, in order for them to plan accordingly.

Should you have any questions, please contact me at x4256

Attachment

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Department of Transportation  
Division of Project Management  
Office of Scoping & Compliance  
Two Capitol Hill  
Providence, RI 02903

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**MEMO:**

**TO:** Lilliam Abreu  
Chief Program Development, Office of Civil Rights

**FROM:** James R. Primeau, P.E., PMP *JRP*  
Managing Engineer, Project Management – Office of Scoping & Compliance

**SUBJECT:** PTS ID: 0048I – Bridge Group 95 – Rt 403 Deferred Ramps  
Title VI Environmental Justice Analysis

**DATE:** July 2, 2021

Attached for your review with Title VI Environmental Justice is the Title VI Report summarizing the demographic data for the Rt 403 Deferred Ramps portion of the project.

A separate Title VI memo for the “Missing Move” component of the project. The EJ Final Determination for that component was completed on January 26, 2021.

Should you have any questions or require additional Information please contact me at Extension 4318 or the Project Manager, Jay McGinn at Extension 4184.

Attachment

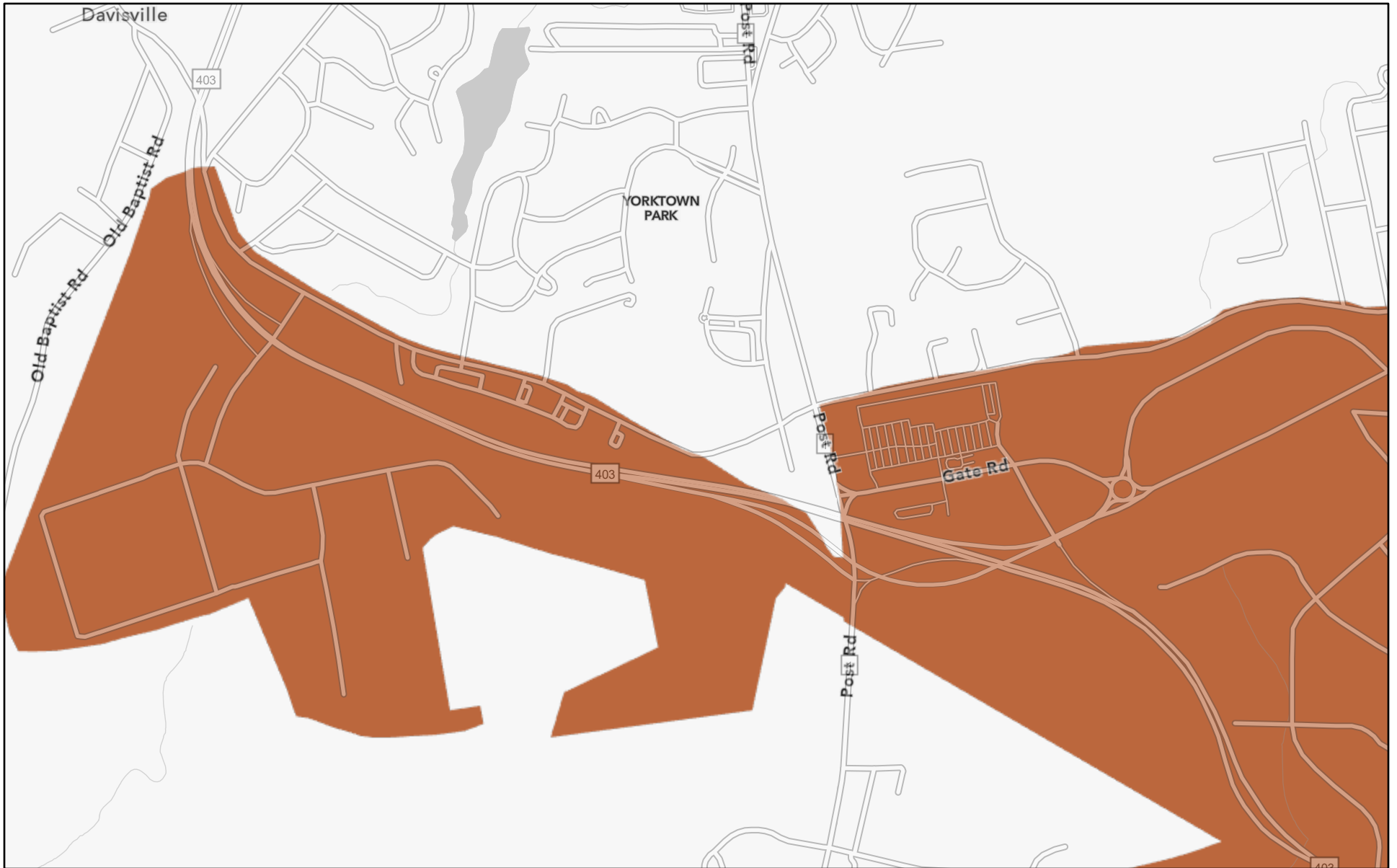
cc: J. McGinn, L. Maccarone, N. Rodriguez; File

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## Attachment A

Environmental Justice Zone from RIDEM Environmental  
Resource Map

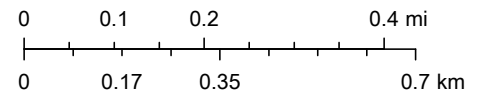
# RIDEM Environmental Resource Map



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 Environmental Justice Area

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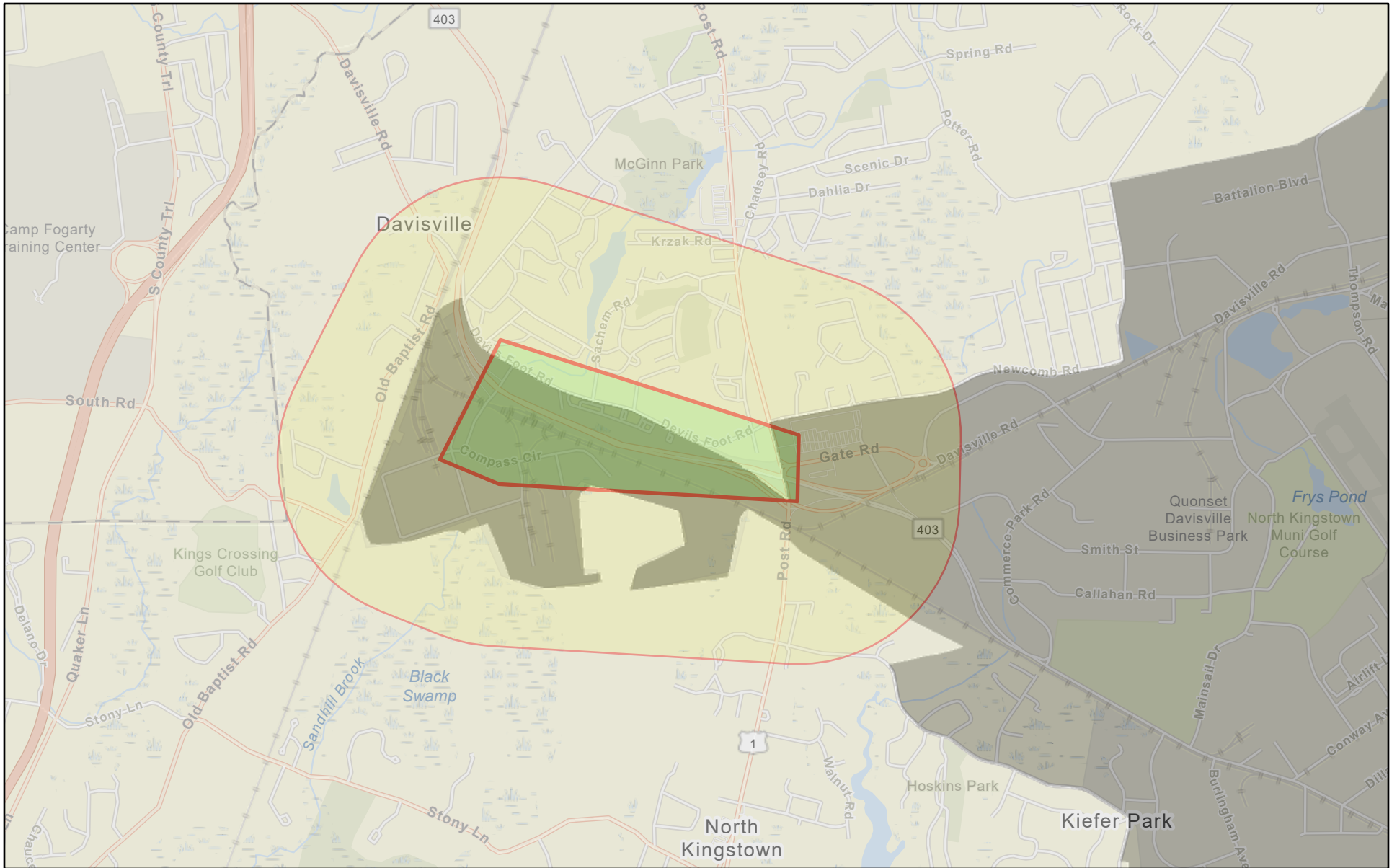


RIDEM, Esri Community Maps Contributors, Esri, HERE, Garmin,

## Attachment B

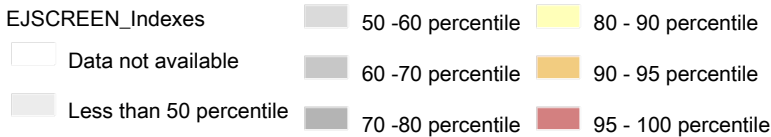
# EPA's Environmental Justice Screening and Mapping Maps and Report

# People of Color Population

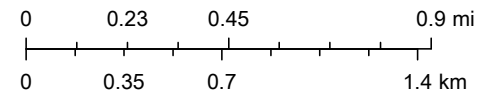


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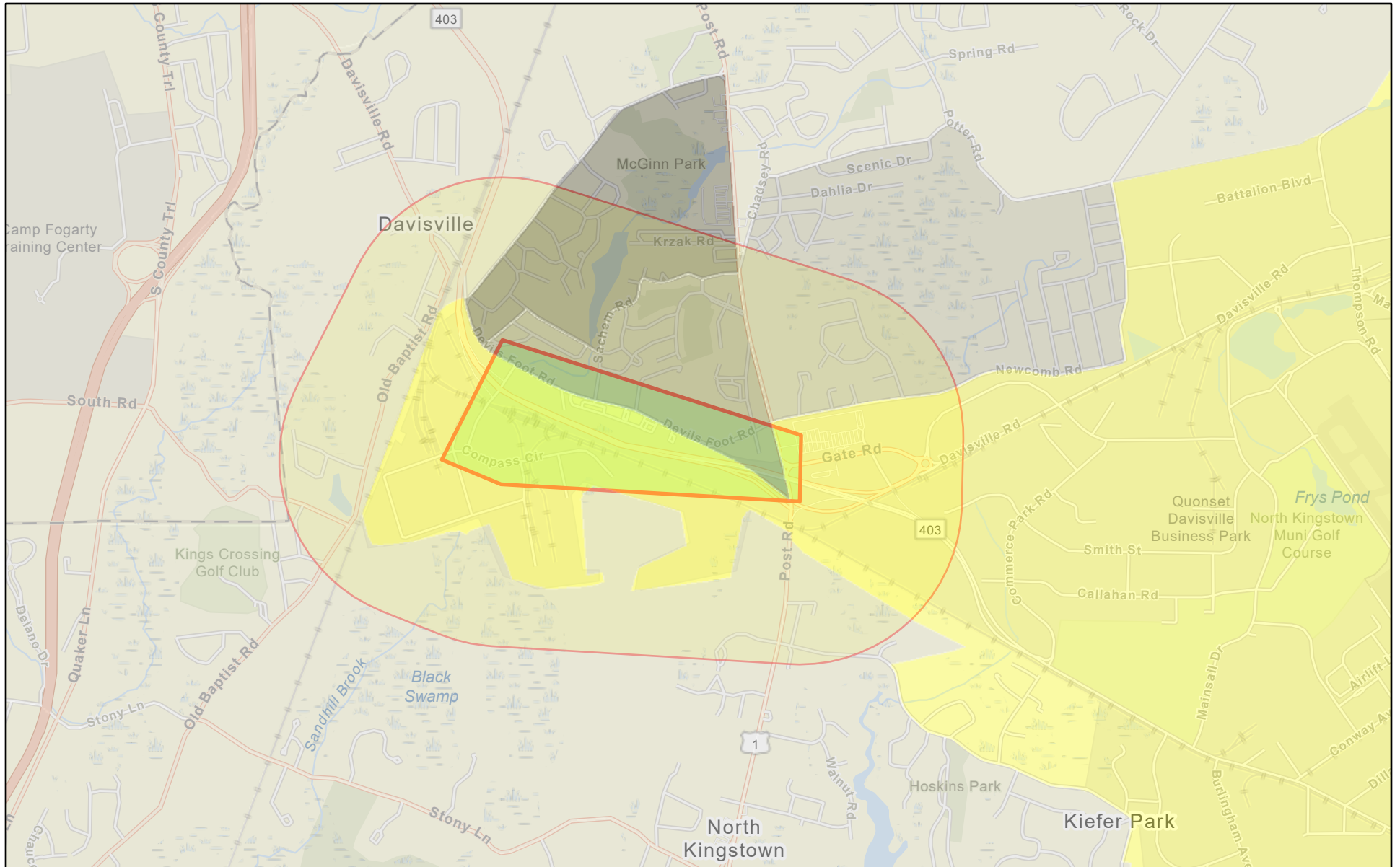


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Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA,

# Low Income Population



3/2/2021

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□ Data not available

□ Less than 50 percentile

□ 50 -60 percentile

□ 60 -70 percentile

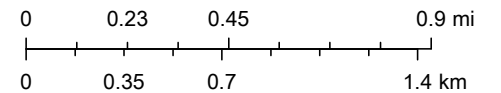
□ 70 -80 percentile

□ 80 - 90 percentile

□ 90 - 95 percentile

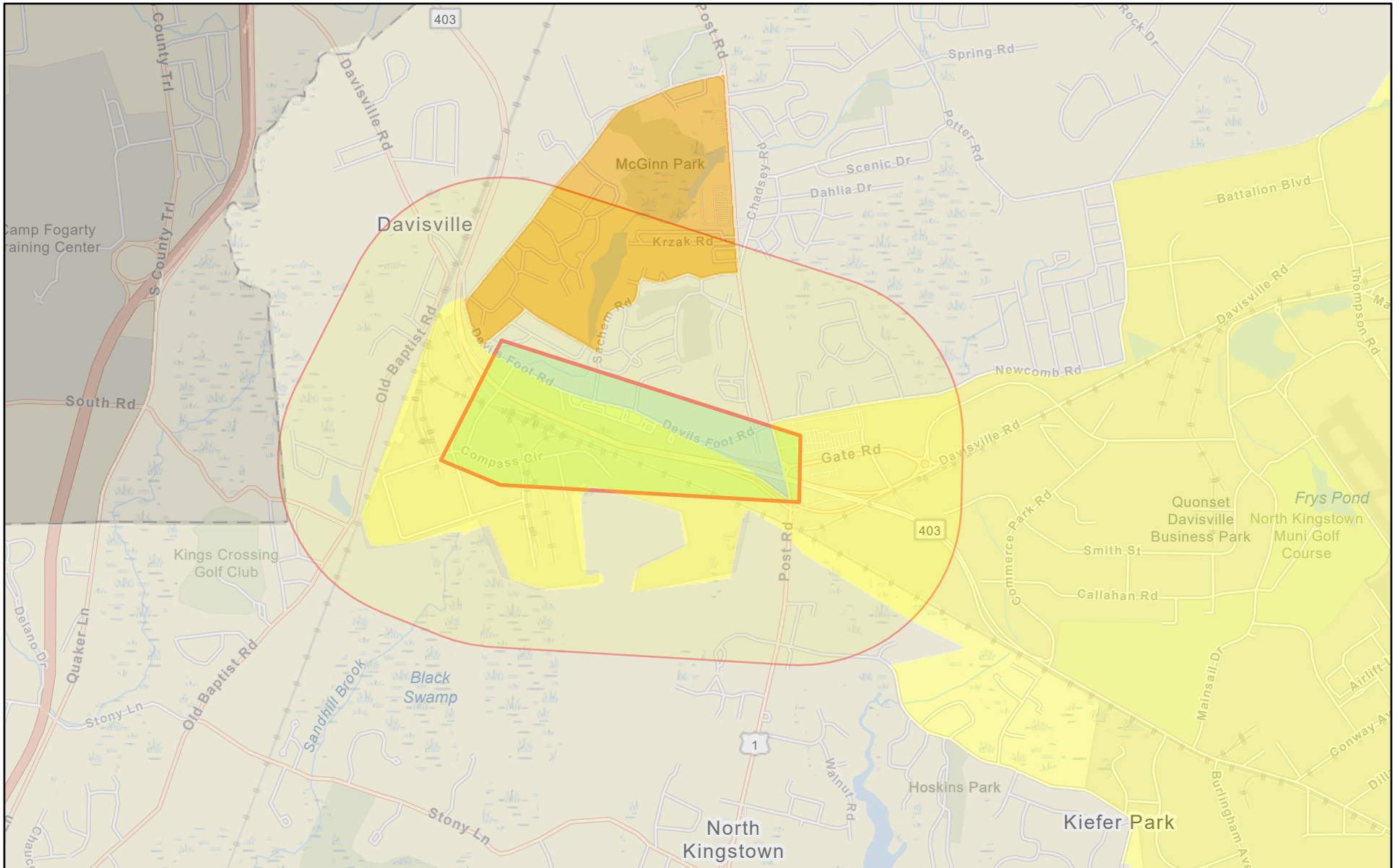
□ 95 - 100 percentile

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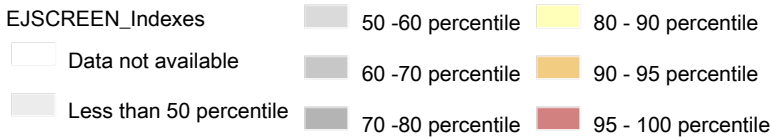
Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA,

# Linguistically Isolated

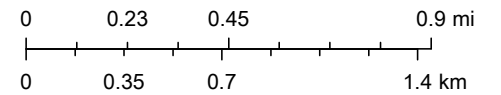


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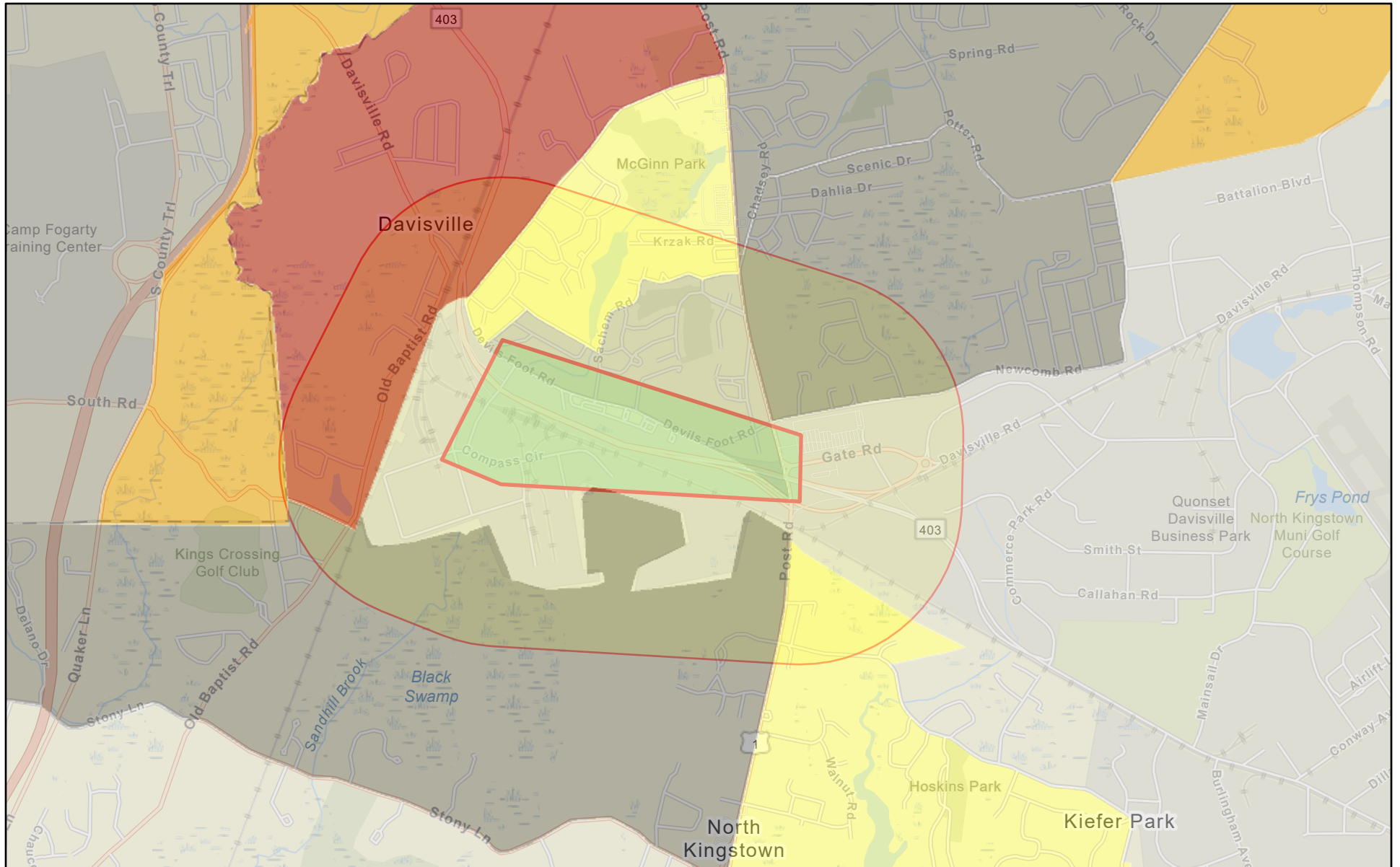
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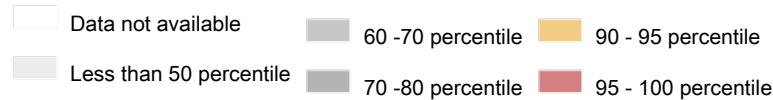


# Over Age 64

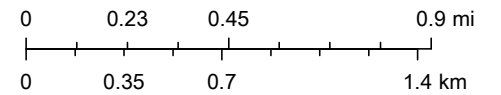


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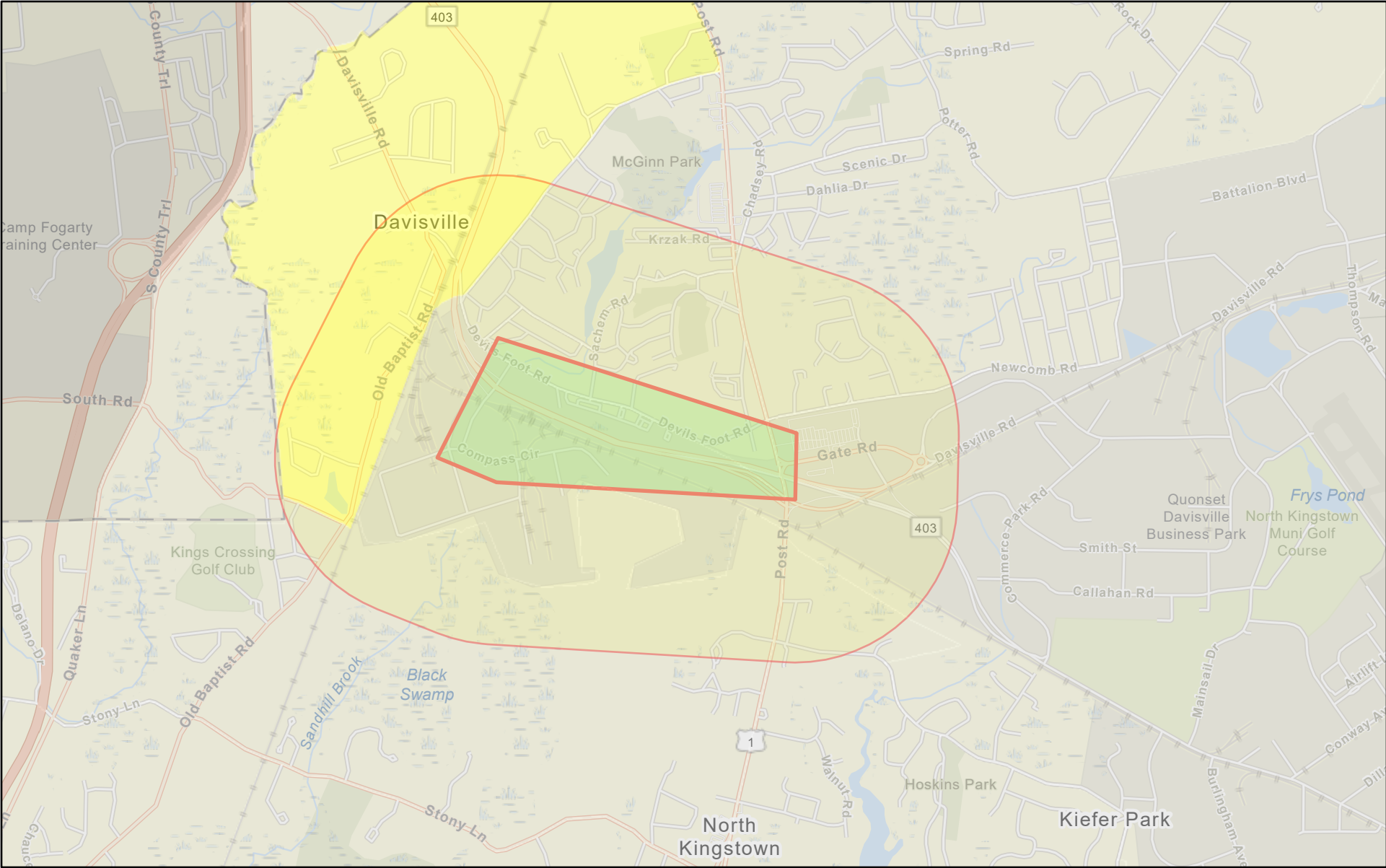


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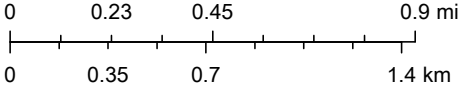
# Less Than HS Education



3/2/2021

- EJScreens\_Indexes
- - 
  -
- 50 -60 percentile
  80 - 90 percentile  
 Data not available
  60 -70 percentile
  90 - 95 percentile  
 Less than 50 percentile
  70 -80 percentile
  95 - 100 percentile

1:36,112



Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA,

Location: User-specified polygonal location  
 Ring (buffer): 0.5-miles radius  
 Description: Quonset Connector Ramps and Roundabout

Summary of ACS Estimates		2014 - 2018
Population		3,257
Population Density (per sq. mile)		1,953
People of Color Population		531
% People of Color Population		16%
Households		1,480
Housing Units		1,537
Housing Units Built Before 1950		264
Per Capita Income		33,750
Land Area (sq. miles) (Source: SF1)		1.67
% Land Area		90%
Water Area (sq. miles) (Source: SF1)		0.18
% Water Area		10%

	2014 - 2018 ACS Estimates	Percent	MOE (±)
<b>Population by Race</b>			
Total	3,257	100%	351
Population Reporting One Race	3,005	92%	641
White	2,805	86%	333
Black	1	0%	16
American Indian	15	0%	33
Asian	120	4%	86
Pacific Islander	0	0%	13
Some Other Race	64	2%	160
Population Reporting Two or More Races	252	8%	266
Total Hispanic Population	143	4%	131
Total Non-Hispanic Population	3,114		
White Alone	2,726	84%	327
Black Alone	1	0%	16
American Indian Alone	15	0%	33
Non-Hispanic Asian Alone	120	4%	86
Pacific Islander Alone	0	0%	13
Other Race Alone	0	0%	13
Two or More Races Alone	252	8%	266
<b>Population by Sex</b>			
Male	1,553	48%	215
Female	1,704	52%	212
<b>Population by Age</b>			
Age 0-4	153	5%	86
Age 0-17	706	22%	159
Age 18+	2,551	78%	291
Age 65+	565	17%	151

**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) 2014 - 2018

Location: User-specified polygonal location  
 Ring (buffer): 0.5-miles radius  
 Description: Quonset Connector Ramps and Roundabout

	2014 - 2018 ACS Estimates	Percent	MOE (±)
<b>Population 25+ by Educational Attainment</b>			
Total	2,316	100%	229
Less than 9th Grade	77	3%	124
9th - 12th Grade, No Diploma	80	3%	54
High School Graduate	560	24%	139
Some College, No Degree	664	29%	145
Associate Degree	295	13%	94
Bachelor's Degree or more	936	40%	152
<b>Population Age 5+ Years by Ability to Speak English</b>			
Total	3,104	100%	343
Speak only English	2,844	92%	310
Non-English at Home <sup>1+2+3+4</sup>	261	8%	188
<sup>1</sup> Speak English "very well"	148	5%	107
<sup>2</sup> Speak English "well"	89	3%	70
<sup>3</sup> Speak English "not well"	24	1%	88
<sup>4</sup> Speak English "not at all"	0	0%	13
<sup>3+4</sup> Speak English "less than well"	24	1%	88
<sup>2+3+4</sup> Speak English "less than very well"	113	4%	96
<b>Linguistically Isolated Households*</b>			
Total	51	100%	62
Speak Spanish	7	13%	53
Speak Other Indo-European Languages	11	21%	20
Speak Asian-Pacific Island Languages	33	66%	57
Speak Other Languages	0	0%	13
<b>Households by Household Income</b>			
Household Income Base	1,480	100%	140
< \$15,000	371	25%	119
\$15,000 - \$25,000	129	9%	88
\$25,000 - \$50,000	145	10%	71
\$50,000 - \$75,000	384	26%	105
\$75,000 +	451	30%	106
<b>Occupied Housing Units by Tenure</b>			
Total	1,480	100%	140
Owner Occupied	741	50%	102
Renter Occupied	739	50%	136
<b>Employed Population Age 16+ Years</b>			
Total	2,675	100%	304
In Labor Force	1,753	66%	248
Civilian Unemployed in Labor Force	123	5%	99
Not In Labor Force	922	34%	211

**Data Note:** Detail 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): 0.5-miles radius

Description: Quonset Connector Ramps and Roundabout

	2014 - 2018 ACS Estimates	Percent	MOE (±)
<b>Population by Language Spoken at Home*</b>			
Total (persons age 5 and above)	2,212	100%	443
English	1,960	89%	479
Spanish	102	5%	93
French	52	2%	36
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	0	0%	18
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	52	2%	91
Chinese	0	0%	18
Japanese	N/A	N/A	N/A
Korean	0	0%	18
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	0	0%	18
Other Asian	19	1%	65
Tagalog	26	1%	67
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%	18
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	0	0%	18
Total Non-English	252	11%	652

**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) 2014 - 2018.

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

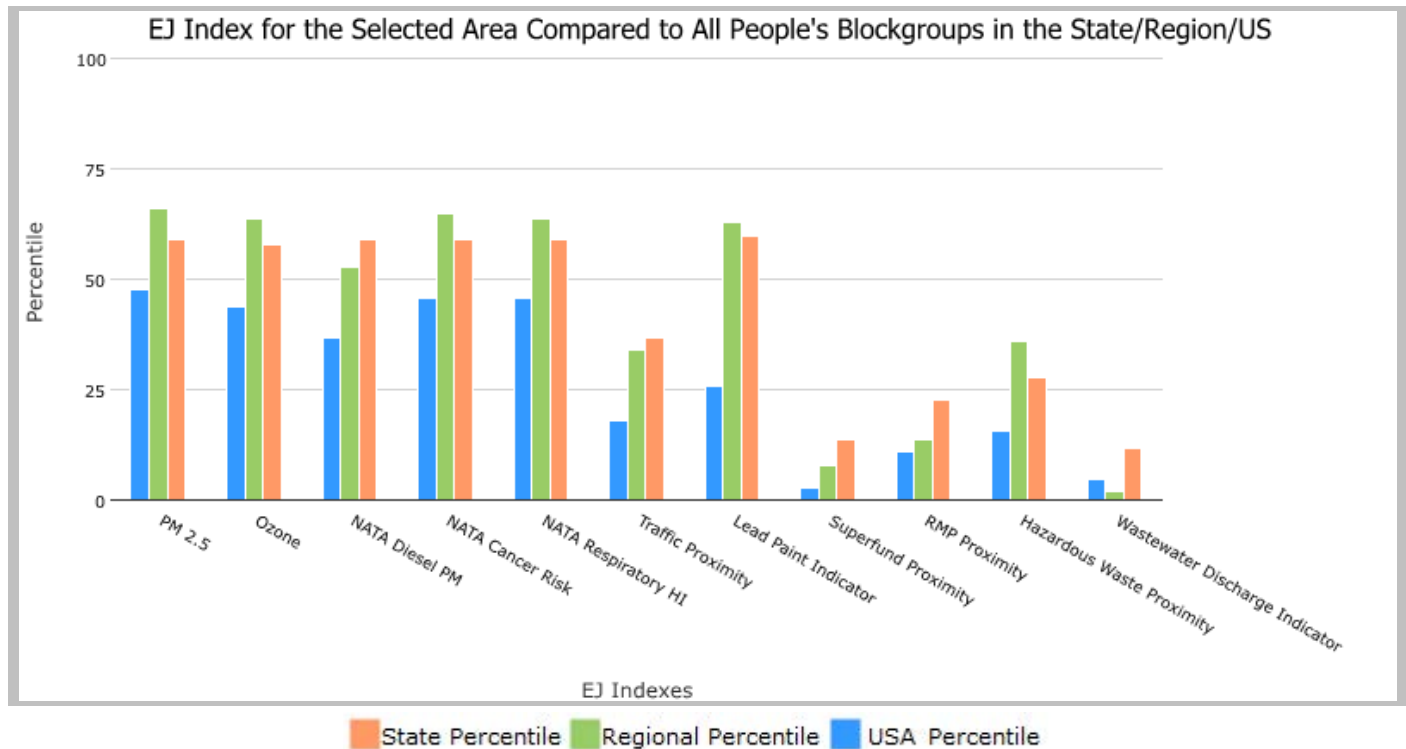
0.5 miles Ring around the Area, RHODE ISLAND, EPA Region 1

Approximate Population: 3,257

Input Area (sq. miles): 2.47

Quonset Connector Ramps and Roundabout

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
<b>EJ Indexes</b>			
EJ Index for PM2.5	59	66	48
EJ Index for Ozone	58	64	44
EJ Index for NATA* Diesel PM	59	53	37
EJ Index for NATA* Air Toxics Cancer Risk	59	65	46
EJ Index for NATA* Respiratory Hazard Index	59	64	46
EJ Index for Traffic Proximity and Volume	37	34	18
EJ Index for Lead Paint Indicator	60	63	26
EJ Index for Superfund Proximity	14	8	3
EJ Index for RMP Proximity	23	14	11
EJ Index for Hazardous Waste Proximity	28	36	16
EJ Index for Wastewater Discharge Indicator	12	2	5



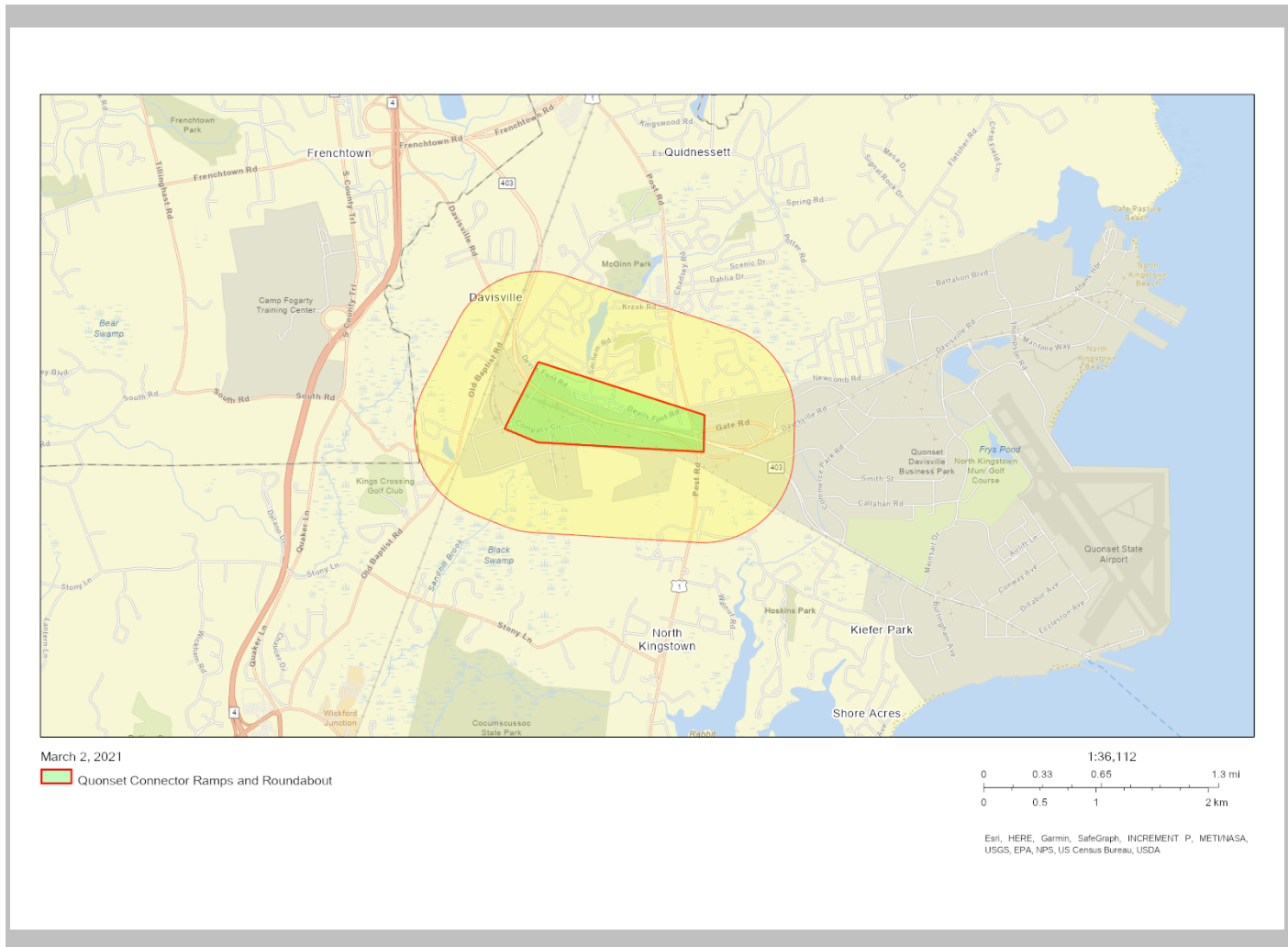
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

0.5 miles Ring around the Area, RHODE ISLAND, EPA Region 1

Approximate Population: 3,257

Input Area (sq. miles): 2.47

**Quonset Connector Ramps and Roundabout**



Sites reporting to EPA	
Superfund NPL	1
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

## EJSCREEN Report (Version 2020)



0.5 miles Ring around the Area, RHODE ISLAND, EPA Region 1

Approximate Population: 3,257

Input Area (sq. miles): 2.47

### Quonset Connector Ramps and Roundabout

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
<b>Environmental Indicators</b>							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$ )	5.76	6.17	19	6.14	29	8.55	3
Ozone (ppb)	40.8	41	26	39.5	66	42.9	34
NATA* Diesel PM ( $\mu\text{g}/\text{m}^3$ )	0.37	0.503	35	0.345	60-70th	0.478	<50th
NATA* Cancer Risk (lifetime risk per million)	23	25	30	25	<50th	32	<50th
NATA* Respiratory Hazard Index	0.29	0.32	33	0.31	<50th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	580	850	59	930	64	750	71
Lead Paint Indicator (% Pre-1960 Housing)	0.34	0.51	31	0.44	40	0.28	66
Superfund Proximity (site count/km distance)	0.9	0.21	96	0.15	98	0.13	98
RMP Proximity (facility count/km distance)	1.5	1	69	0.58	88	0.74	85
Hazardous Waste Proximity (facility count/km distance)	3.3	3.5	62	4.1	65	5	77
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.21	7.6	85	0.7	96	9.4	91
<b>Demographic Indicators</b>							
Demographic Index	26%	28%	61	24%	68	36%	43
People of Color Population	16%	27%	52	24%	54	39%	31
Low Income Population	36%	28%	69	24%	76	33%	62
Linguistically Isolated Population	4%	6%	64	5%	67	4%	67
Population With Less Than High School Education	7%	12%	37	9%	51	13%	39
Population Under 5 years of age	5%	5%	52	5%	50	6%	38
Population over 64 years of age	17%	16%	58	17%	59	15%	66

\* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.



## Project Description

This project will construct the previously deferred Quonset Connector Ramps on Route 403 that will connect the major districts of the Quonset Business Park, as well as a roundabout to promote business expansion (see Figure 1). The project components consists of:

- New ramp connecting Route 403 Westbound to West Davisville Road (Ramp WD-C)
- New ramp connecting West Davisville Road to Route 403 Eastbound (Ramp WD-D)
- New ramp connecting Post Road to Route 403 Westbound (Ramp C)
- Roundabout at the intersection of West Davisville Road and Compass Circle



*Figure 1 - Proposed Quonset Connector Ramps and Roundabout*

This portion of Route 403 was built in 2008, however, the three ramps were deferred until it was warranted by the traffic volumes. Today, Quonset Business Park, which houses over 200 businesses and has plans to grow, extends from the Amtrak railroad west of West Davisville Road to Port of Davisville and Quonset Waterfront (see Figure 2).

Currently, commuter and freight traffic uses Devil's Foot Road to travel between the west and east side of Quonset Business Park. This project will eliminate the thru-traffic on Devils Foot Road and provide a more direct access to the freeway for the freight and commuter traffic from the businesses, as well as the residential traffic that live near the project area. The new roundabout at West Davisville Road and Compass Circle will allow businesses in that area to expand, bringing in more jobs in North Kingstown.



Figure 2 – Quonset Business Park, Image from Quonset Business Park Master Land Use and Development Plan Adopted September 17, 2019

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (EO12898) requires Federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health, social, economic, and environmental effects of their actions on minority populations and low-income populations in the United States. The methodology that is used to determine effects to the minority and low-income population is to first determine if they are located in the project area, then determine the potential project impacts to these populations, and then determine whether the potential project impacts would disproportionately affect them.

Identifying minority and low-income population within the project area

The project area is located within an Environmental Justice (EJ) Zone according to the RIDEM Environmental Resource Map, with an EJ Status of low income (See Attachment A).

The project area has been identified in the EPA’s Environmental Justice Screening and Mapping Tool (See Attachment B). The table below summarizes the comparison of demographic indicators between the project area, the state, and the country.

Demographic (0.5 mile buffer from Project Area)	Project Area	State Average	%ile in State	USA Average	%ile in USA
People of Color Population	16%	27%	52	39%	31
Low Income Population	36%	28%	69	33%	62
Linguistically Isolated Population	4%	6%	64	4%	67

The area of concern is Devil's Foot Road, which is a residential road that houses subsidized, low-income residents, many of whom have children who walk to school.

Potential project impacts on minority and low-income populations in the project area

The removal of additional commuter and freight traffic from the surrounding businesses will have a long term positive impact for the residents of Devil's Foot Road. With the decrease in heavy vehicle traffic, it will result in a reduction of the wear and tear of the local roads, as well as a reduction in congestion, pollution, and noise. There will be an improvement in the overall safety of the roadway for the residential drivers, as well as pedestrians. The addition of the Route 403 ramps will also provide local residents a more direct route to get onto Route 403, which will reduce their travel time.

The new roundabout will allow businesses at West Davisville to expand and accommodate the additional commuter traffic and large vehicles going to and from this area. Although the roundabout will not have a direct impact for the residents of Devil's Foot Road, it will allow the businesses around West Davisville Road to expand and provide additional job opportunities for the residents in the area.

The negative impacts for the residents of Devil's Foot Road will be short term during construction. It is estimated that the new ramps can be completed within one construction season. During this time, the majority of the construction can be completed by shifting the travel lanes, which will reduce the need for road closures or detours. It is anticipated that periodic lane closures may be needed on Route 403 at night for the new ramp tie-ins and micro mill and overlay at the end of the project. Construction noise will also be a negative impact for the residents of Devil's Foot Road, however, there are construction practices that the contractor can use to minimize construction noise. There are no long term negative impacts for the residents of Devil's Foot Road.

Quonset Business Park has been steadily expanding throughout the years, and are expected to continue to expand, which will result in more traffic on their routes. If these ramps are not built, there will be more traffic on the local roads and will magnify the negative impacts to the low-income residents.

There may be some right-of-way taking for the proposed roundabout. The surrounding area is currently owned by Quonset Development Corporation, who are in support of constructing the roundabout. In addition, Ramp WD-D's proposed alignment currently goes through the Seaview Engine House, however, they are planning to be relocated by the end of 2021. There are no other anticipated property acquisitions for this project.

Determination whether potential project impacts would disproportionately affect them

Based on the above, this project will have an overall positive impact to the public, including minority and low-income populations. Impacts during construction have been minimized to the extent possible. Notifications about the project and changes in travel patterns will be available through different media for the greater public awareness and will be available in different translations upon request.