



U.S. Department
of Transportation
**Federal Highway
Administration**

1200 New Jersey Avenue, SE.
Washington, DC 20590

MAY 01 2018

In Reply Refer To: HCR-20
DOT# 2016-0015

[REDACTED]
[REDACTED]
[REDACTED]

James H. Trogon III
Secretary of Transportation
North Carolina Department of Transportation
1 S. Wilmington Street
Raleigh, NC 27601

Subject: Letter of Finding (LOF) DOT 2016-0015
[REDACTED]

Dear [REDACTED] and Secretary Trogon:

The Federal Highway Administration (FHWA) Office of Civil Rights (HCR) has completed its investigation of the above-referenced complaint and issues this Letter of Finding (LOF) to summarize the results. The complaint was filed pursuant to Title VI of the Civil Rights Act of 1964 against the North Carolina Department of Transportation (hereinafter Respondent, Recipient, or NCDOT) by [REDACTED] on behalf of the residents of the Hayestown neighborhood of Durham, North Carolina (Complainant).

Based on the available data and information, FHWA finds that there is insufficient evidence that the Durham East End Connector Project will create adverse, disparate impacts in violation of Title VI. FHWA finds that even if the selection of the Preferred Alternative would result in adverse, disparate impacts, a substantial legitimate justification exists for the Respondent's actions and a less discriminatory alternative has not been identified. In addition, FHWA finds that the Respondent did not intentionally discriminate in its selection of the site for the Project in violation of Title VI.

I. Procedural Background

a. Complaint Processing

On September 25, 2015, [REDACTED] a resident of the Hayestown neighborhood in Durham, North Carolina, filed a written complaint against the Respondent, the North Carolina Department of Transportation, with the Federal Transit Administration (FTA). The FTA transferred the complaint to the FHWA on October 22, 2015.

b. Issues Raised by the Complainant

The Complainant alleged the Respondent discriminated against the African American residents of the Hayestown neighborhood in Durham, North Carolina in violation of Title VI and the USDOT Title VI regulations (collectively Title VI) by selecting the Preferred Alternative for the East End Connector Project (Project). On November 30, 2015, FHWA accepted the complaint for investigation. Specifically, FHWA's investigation focused on the following allegations:

1. The adverse impacts of the Respondent's East End Connector project fall disproportionately on persons on the basis of race; in addition, less discriminatory siting alternatives were available and the Respondent did not pursue them.
2. The Respondent's selection of the site for the East End Connector project constituted intentional discrimination on the basis of race, in violation of Title VI.

c. The Complainant

The named Complainant is [REDACTED] an African American resident of the Hayestown neighborhood in Durham, North Carolina. [REDACTED]. [REDACTED] has been active in the Durham and Hayestown communities, participating in the City of Durham (City) and NCDOT public participation process for transportation in Durham. Regarding the Project, [REDACTED] advocated against constructing the Project prior to the development of the EA. He also served as a member of NCDOT's ad hoc citizen's committee for the Project, which was formed with the intent to minimize impacts to the area.

II. Factual Background

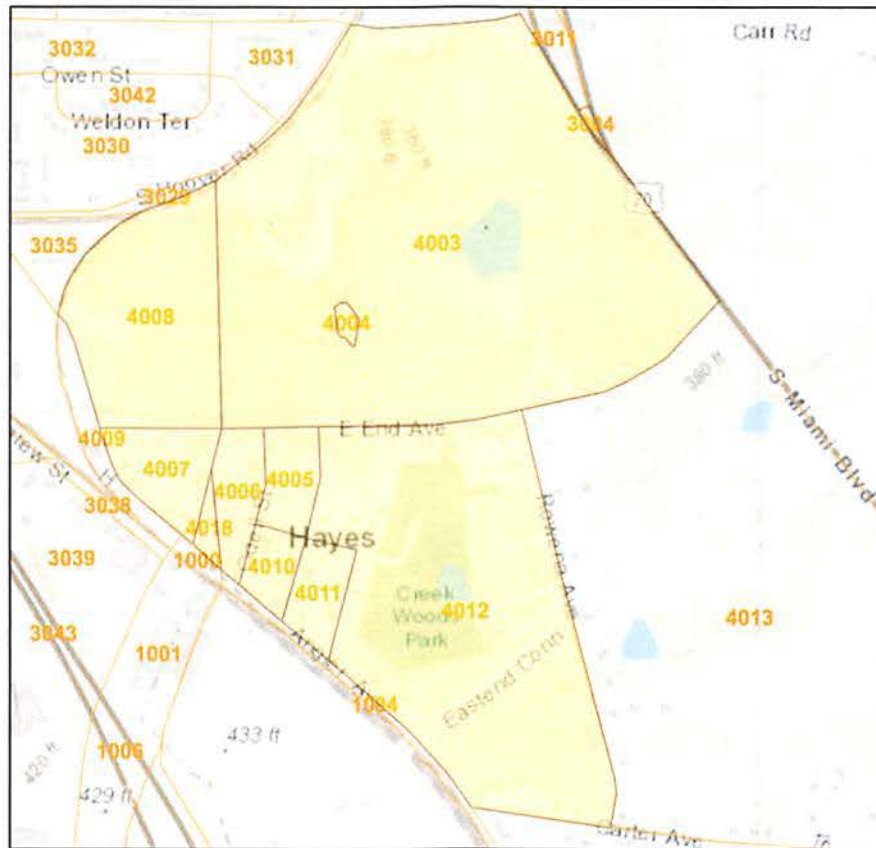
a. Description of the Hayestown Neighborhood and Surroundings

The Hayestown Neighborhood is an area comprised of approximately 145 households in east-central Durham (Hayestown). It is located in the study area identified by the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (MPO) for the Project and is bounded by Angier Avenue to the south, East End Avenue to the north, Rowena Street to the east, and abuts CR Woods park and other city-owned land to the east and south. A depiction of Hayestown is shown in Figure 1.¹

Figure 1

¹ Map source: U.S. Census, American FactFinder website: <http://factfinder.census.gov>. For the purposes of gathering the relevant Census data, and because the precise boundaries are not defined elsewhere, FHWA included the shaded Census Blocks depicted in Figure 1 that are located within, or partially within, the Hayestown neighborhood, as being included in the neighborhood.

Hayestown Neighborhood

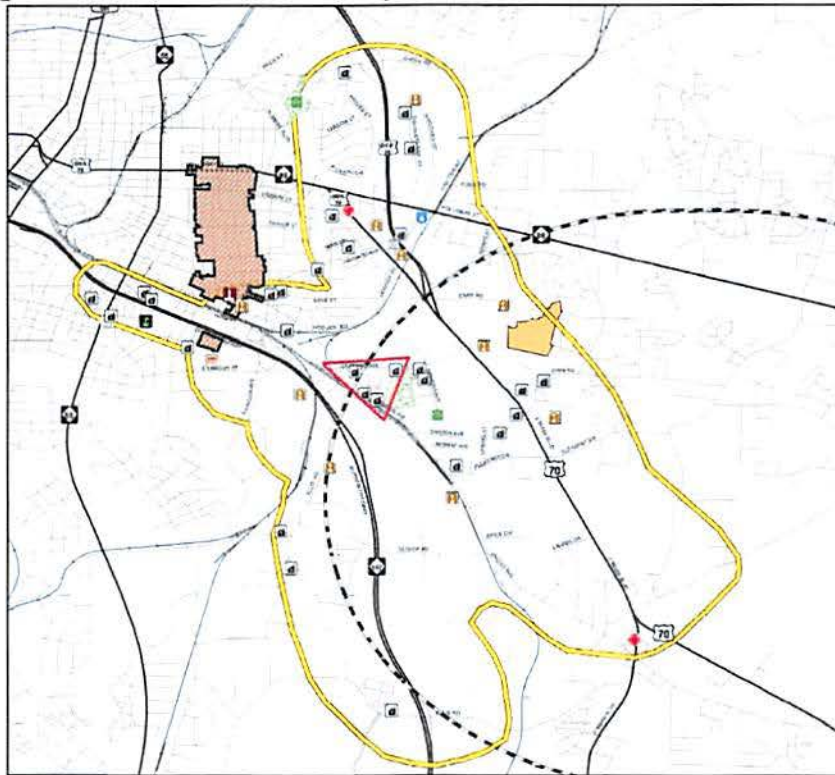


For a comparison to the Project Study Area (outlined in yellow), see Figure 2, where Hayestown is outlined in the red triangle.²

Figure 2

² Map source: East End Connector Community Impact Assessment Report, North Carolina Department of Transportation, Figure 3-1, p. 46 (February 2008).

Haystown Neighborhood in Relation to Project Study Area



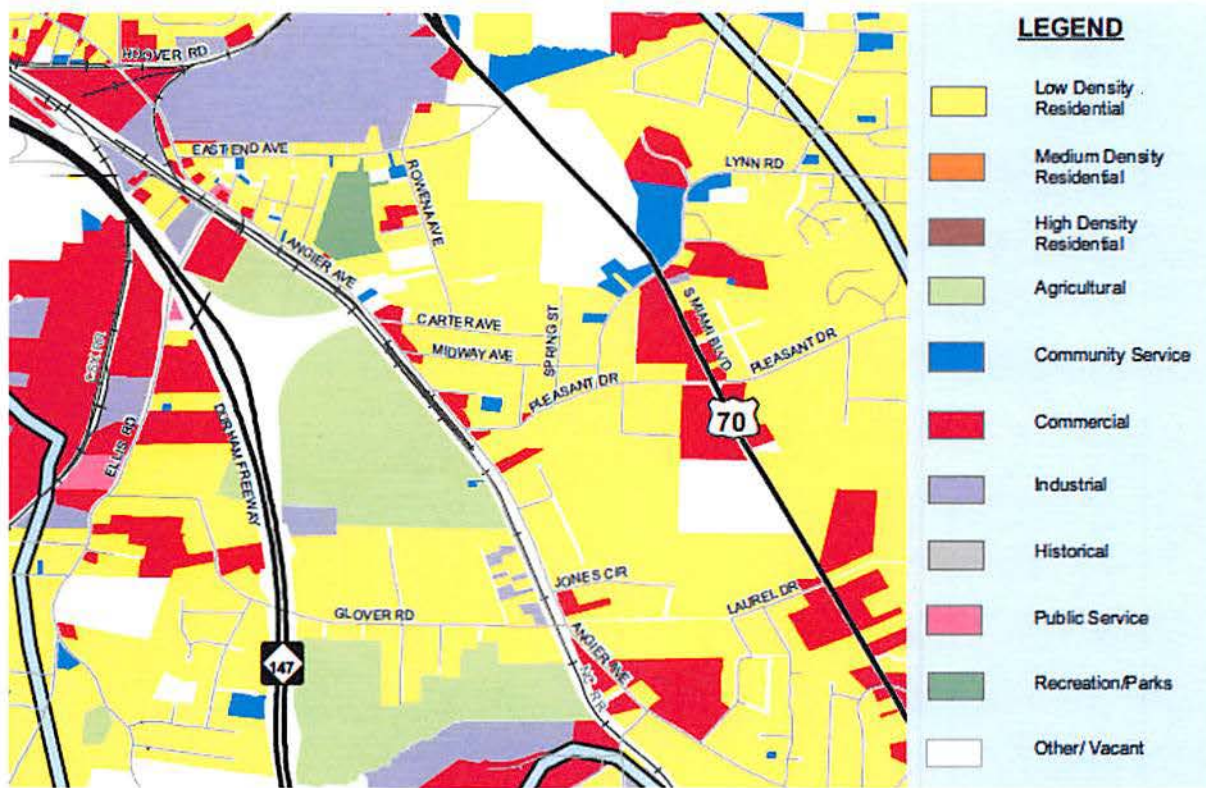
Haystown is currently categorized as “low density residential” by the City. Low density residential is defined as 1 to 4 dwelling units per acre.³ The area where the Preferred Alternative will be constructed is primarily a mixture of low density residential, agricultural, and vacant land. A land use map showing (1) Haystown and (2) the area between NC147 and US 70 where the Preferred Alternative is located (east-west, north of Carter Ave.) is shown in Figure 3.⁴

Figure 3

³ East End Connector Community Impact Assessment Report, North Carolina Department of Transportation, p. 40, (February 2008).

⁴ East End Connector Environmental Assessment, North Carolina Department of Transportation, Figure 3-6, p. 3-26 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

Current Land Use Map for Hayestown Neighborhood and Surrounding Area



Regarding future land use, the City expects Hayestown to move from low density to become medium density residential with some additional commercial use.⁵

b. Hayestown Demographic Profile & Affected Communities

Title VI requires that Recipients collect and analyze demographic data to ensure their programs and activities do not create a disparate impact based on race, color, or national origin.⁶ For construction projects, Recipients must determine the demographics for a reasonable geographic area that encompasses potential direct and indirect effects due to the project. For the Project, the Respondent identified the demographic breakdown of the census tracts and block groups associated with the “study area,” which constitutes an area likely to realize direct and indirect impacts from the Project. The Respondent’s study area for the Project included the Hayestown neighborhood. The relevant 2000 U.S. Census data used in the Respondent’s Environmental Assessment (EA) is shown in Table 1.⁷

Table 1

⁵ East End Connector Environmental Assessment, pp. 3-24 – 3-25 and Figure 3-7 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁶ 23 C.F.R. § 200.9(b)(4).

⁷ East End Connector Community Impact Assessment Report, North Carolina Department of Transportation, p. 13, (February 2008); Note: for Hayestown, FHWA used U.S. Census Bureau Table P004, HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE, Census 2000 Summary File 1 (SF 1) 100-Percent Data.

African American Population in Study Area – 2000 Census

	Total Population	White Not Hispanic or Latino Population	White Not Hispanic or Latino Percent	Black / African American Alone Population	Black / African American Alone Percent
Durham County	223,314	113,698	50.91%	88,109	39.46%
Study Area	23,285	7,343	31.54%	13,578	58.31%
Hayestown	362	45	12.43%	289	79.83%

While the geographic boundaries of the Study Area for the 2000 Census are not directly comparable to the 2010 Census, FHWA also reviewed the 2010 Census data for Durham County and the Hayestown neighborhood.⁸ These data are summarized in Table 2.

Table 2
African American Population in Study Area – 2010 Census

	Total Population	White Not Hispanic or Latino Population	White Not Hispanic or Latino Percent	Black / African American Alone Population	Black / African American Alone Percent
Durham County	267,583	112,697	42.12%	100,260	37.47%
Hayestown	404	27	6.68%	270	66.83%

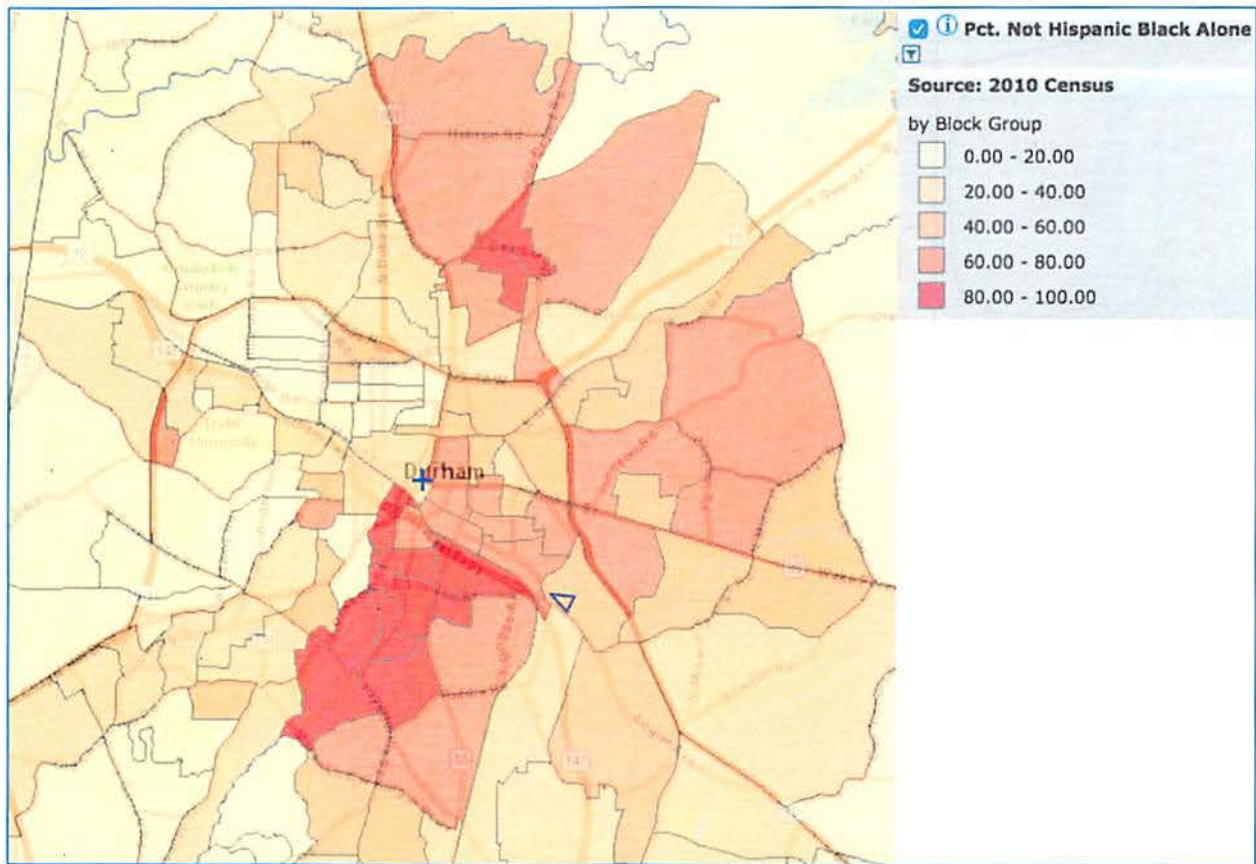
For a visual depiction of the Hayestown African American population in the context of the City, see Figure 4, in which the approximate location of Hayestown is noted by the purple triangle.⁹

Figure 4

⁸ U.S. Census Bureau, Table P9: HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE, 2010 Census.

⁹ EJ Screen map of Durham, NC showing the percentage of the African American population that is not Hispanic based on the 2010 U.S. Census (accessed September 13, 2017) <https://ejscreen.epa.gov/mapper/>.

African American Population in Study Area – 2010 Census



Taken together, these data show that African Americans make up a majority population for both the study area and Hayestown. In addition, the study area and Hayestown feature higher percentages of African Americans compared to Durham County. The similarities between the 2000 and 2010 Census data for Durham County and the Hayestown blocks suggests similar inferences for the Study Area data. Finally, the data show that a large number of the immediate south and eastern block groups in the City, where Hayestown is located, have African American populations that represent 40% or more of the overall population.

c. Project Description

1. History

The Durham, North Carolina East End Connector Project was introduced in 1959 as part of the City of Durham Thoroughfare Plan, remained in Durham city plans, and was established as the City's top priority transportation project in the year 2000.¹⁰ The Project was linked to another high priority project: the East-West Freeway (NC 147 between interstate I-40 and interstate I-85). The two projects were planned simultaneously during the preparation of a 1982 Final

¹⁰ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 1-1 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

Environmental Impact Statement (FEIS), the approval of which allowed the East-West Freeway to be completed in 1992. However, the proposed East End Connector did not receive funding and was not advanced at that time.¹¹

In 2005, the Respondent initiated an Environmental Assessment (EA) to re-evaluate the 1982 FEIS due to renewed City interest in the Project.¹² The Environmental Assessment (EA) included updates to the roadway design alternatives and associated traffic impact analysis, socioeconomic analysis, natural resources, biological resources, historical and cultural resources and right-of-way/relocation impacts for the Project.

The Respondent issued its Final EA in December, 2009. Then, in December, 2011, the FHWA – North Carolina Division issued a Finding of No Significant Impact (FONSI) for the Project. The FONSI stated that the 2009 EA confirmed the project’s purpose and need and alternatives were consistent with the original 1982 FEIS document.¹³ Additionally, the FONSI noted the affected environment of the project area remained consistent with, and the changes in the affected environment did not alter, the selection or evaluations of the alternatives studied in detail in the previous FEIS. The final Project involves building a 1.25-mile freeway from N.C. 147 to U.S. 70 and converting approximately 2.75 miles of U.S. 70 – which will be part of the East End Connector – to a freeway.

Following issuance of the FONSI, the Respondent began property acquisition in April, 2012. Construction for the Project¹⁴ began in February, 2015, with an estimated cost of \$142 million. The Respondent estimates the project will be completed in January, 2020.

2. Purpose and Need

The Durham Freeway (NC 147) begins at I-85 north and west of downtown Durham, runs on the south side of downtown, and connects to I-40 in the Research Triangle Park. In the City, US 70 intersects with I-85 on the northeast side of downtown and runs south and east into Wake County. On the east side of downtown these two roadways parallel each other and come as close as one mile apart within the study area, yet do not connect, as shown by the red boxed area in Figure 5:¹⁵

Figure 5

¹¹ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 1-1 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

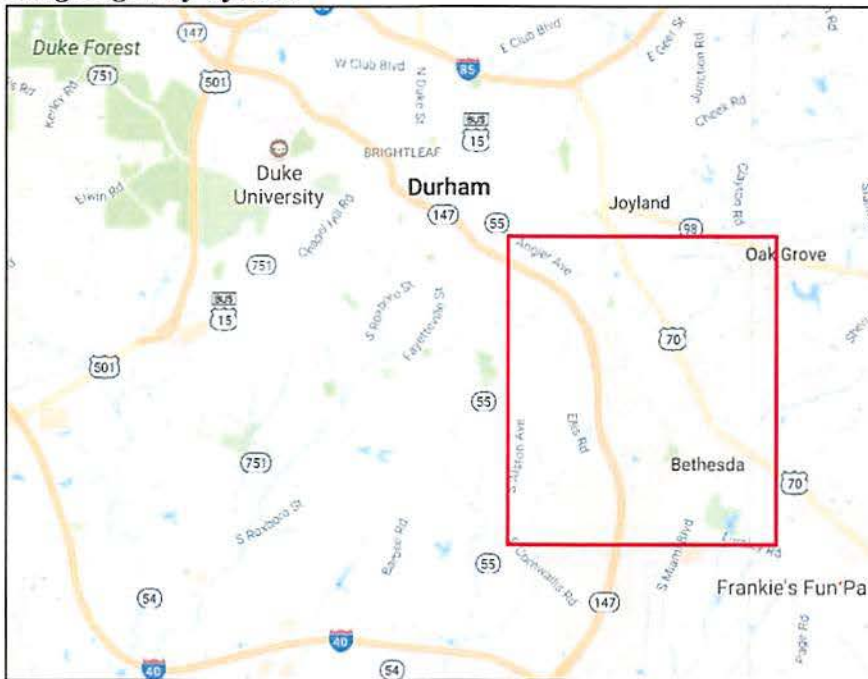
¹² The regulations at 23 C.F.R. § 771.130(c) and FHWA guidance provides that an EA may be prepared as the written re-evaluation for a proposed action where the Administration is uncertain of the significance of the new impacts.

¹³ Finding of No Significant Impact – East End Connector, U.S. Department of Transportation / North Carolina Department of Transportation, p. 33 (December 20, 2011).

¹⁴ The Project is financed with 80% Federal funds and 20% State funds through the National Highway System Program.

¹⁵ Source: Google Maps website, accessed on September 4, 2017, <https://www.google.com/maps>.

Durham – Existing Highway System



The NCDOT Transportation Planning Branch provided the 24-hour traffic forecasts that were used to develop traffic volumes for the 2006 Base Year (current conditions at the time of the EA development), 2035 No Build (i.e. projected conditions if no project is constructed), and 2030 Build Conditions for all alternatives.¹⁶ NCDOT identified the following needs in the existing system:¹⁷

Capacity: by the year 2035, the Project’s design year, traffic demand will approach or exceed roadway capacity on NC 147, US 70, and at nine of the seventeen intersections analyzed. The Respondent’s models show substantial growth in travel demand for the Durham area due to the strategic location of the study area in relation to the nearby urban centers and the Research Triangle Park.¹⁸ The East End Connector Travel Analysis Report (2007) estimates that the future daily traffic volumes along existing NC 147 would increase approximately 200 percent within the study area by the year 2035. The future daily traffic volumes along existing US 70 are projected to increase from approximately 230 to 330 percent within the study area by the year 2035. Travel demand under the 2035 No Build Conditions indicate that all existing freeway mainline segments and merge/diverge junctions and nine out of fourteen intersections analyzed will fail to serve the future travel demand during at least one peak hour of the day.¹⁹

¹⁶ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 2-13 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

¹⁷ *Id.*, pp. 1-7 - 1-10.

¹⁸ East End Connector Community Impact Assessment Report, North Carolina Department of Transportation, p. 56, (February 2008).

¹⁹ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 2-25 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

Connectivity: Over the last 25 years Durham County has had an average population growth rate of two percent per year. Travel demand modeling indicates that without this connector the number of through trips using local arterial streets will increase through the year 2035. This will cause greater delay at signalized intersections, increased travel time on local roadways and reduced quality of life in neighborhoods bordering these roadways.

Through Traffic on Local Streets: Traffic volumes on local roadways are forecasted to increase over the next 25 years for roadways such as Gregson Street/Duke Street (one-way pair), Roxboro Street/Mangum Street (US 15/501 one-way pair), and Alston Avenue/Avondale Drive (NC 55). For a comparison of the no build and build alternatives, see Table 3.²⁰

Table 3
Traffic Demand Projections on Local Roadways

Street Name	2006 Volume	2035 No Build		2035 Build	
		Volume	Percent Increase	Volume	Percent Increase
S. Alston Ave.	21,600	42,000	94%	34,700	61%
S. Mangum St.	9,700	12,300	27%	9,700	0%
S. Roxboro St.	11,800	15,700	33%	15,000	27%
S. Duke St.	13,300	16,500	24%	13,300	0%
S. Gregson St.	13,000	18,400	42%	13,000	0%

Accident Rates

The local roadways that are currently used to connect US 70 to the Durham Freeway—including Alston Avenue/Avondale Drive, Mangum Street/Roxboro Street (one-way pair), and Duke Street/Gregson Street (one-way pair)—have crash rates that are five to seven times higher than the statewide average for similarly classified roadways.²¹

Without the Project, traffic is projected to increase on each of these roadways. As traffic increases on these roadways over the next 30 years, the Respondent expects the probability of more frequent crashes will increase due to more high speed vehicles traveling within closer proximity of one another.

The Project purpose is to address the previously-discussed needs. The EA states that the Project will.²²

²⁰ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 2-25 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

²¹ *Id.* pp. 1-9 – 1-10.

²² *Id.* pp. 1-10 – 1-12.

1. Improve capacity on the Durham Freeway (NC 147) and US 70 to alleviate congestion;
2. Improve connectivity between the Durham Freeway and US 70; and,
3. Provide secondary benefits such as increased safety, access to employment centers, and decreased traffic on surface streets.

3. Summary of Project Alternatives and the Preferred Alternative

The Respondent's "Merger Team"²³ reviewed a range of alternatives to meet the purpose and need, which included existing conditions as well as those identified in the 1982 EIS. The alternatives chosen for review included four that would not entail construction in the study area and four build alternatives.²⁴ What follows is a brief description of each alternative.

No-Build represents future conditions if no transportation improvements are realized to address the purpose and need. The No-Build alternative would involve no right-of-way or construction costs, and travelers between NC 147 and US 70 would continue to use local arterial streets. The Respondent rejected this alternative because it did not meet any of the purposes and needs for the Project. In addition, the Respondent maintained that a no build alternative may adversely impact social and economic conditions in downtown Durham and the area east of downtown, given the increased congestion on NC 147 and increased delay at local intersections.

Improve Existing Roadways would involve roadway widening and intersection improvements along Duke Street/Gregson Street and Mangum Street/Roxboro Street (one-way pairs), Alston Avenue/Avondale Drive, Ellis Avenue, Glover Road, Lynn Road, Pleasant Drive and East End Avenue. Improvements to these local roadways would consist of adding lanes and/or improving intersections to increase capacity between US 70 and NC 147 without connecting them. The Respondent's analysis showed that additional right-of-way acquisition would be required in a highly-urbanized portion of Durham and could require significant relocation of residences and businesses. Moreover, this alternative would not be sufficient to meet 2035 traffic demand, and the potential impacts to the natural resources, cultural and physical impacts would require further environmental review. The Respondent stated this alternative would not satisfy the capacity, connectivity, and consistency needs of the Project.

Transportation Management alternatives would include Transportation Demand Management and Transportation System Management strategies as alternatives to the

²³ NCDOT used its "Merger 01" process for the Project. This process exists to streamline the project development and permitting processes, agreed to by the US Army Corps of Engineers (USACE), North Carolina Department of Environment and Natural Resources (NCDENR), Federal Highway Administration (FHWA) and North Carolina Department of Transportation (NCDOT) and supported by other stakeholder agencies and local units of government. <https://connect.ncdot.gov/resources/Environmental/Pages/Merger-Process-Guide.aspx>.

The "Merger Team" is the group that evaluates which alternatives meet the purpose and need for projects and identifies the Preferred Alternatives.

²⁴ East End Connector Environmental Assessment, North Carolina Department of Transportation, pp. 2-1 – 2-12 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

proposed project. The Recipient determined the effect of these actions would not meet the purposes identified for the project or address any of the needs described in the Purpose and Need Statement.

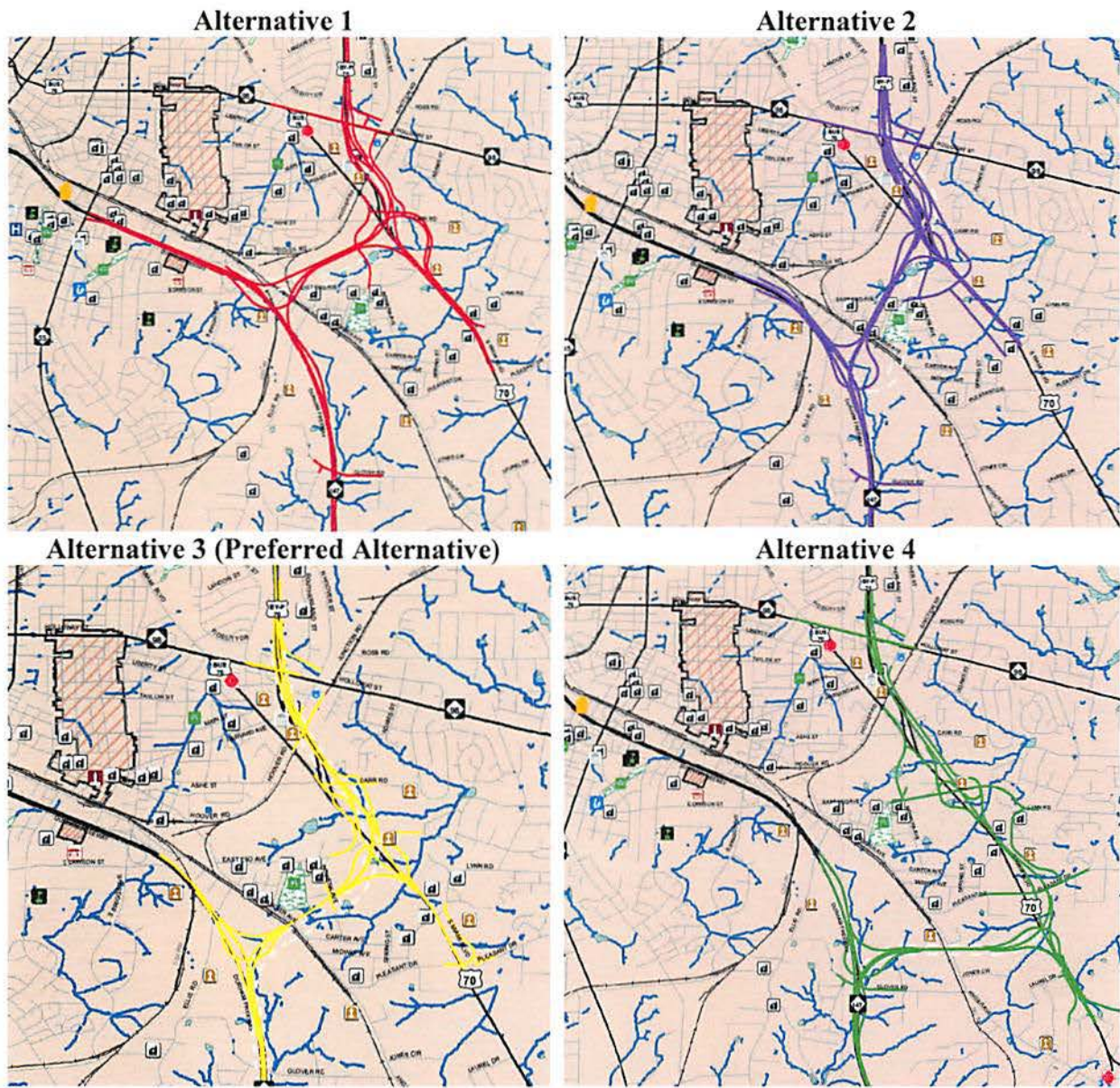
Alternative Transportation Modes would not provide connectivity between NC 147 and US 70, but would service local trips between neighborhoods and employment centers in downtown Durham. The Recipient determined that planned transit system improvements in the region would not provide the capacity or frequency of service to satisfy the demand for travel between NC 147 and US 70. Therefore, the Recipient found this alternative would not meet the purposes and needs identified for the project.

Build Alternatives

- **Alternative 1** - closest to downtown Durham and begins on US 70 south of its interchange with Cheek Road, continues traveling east to west between East End Avenue and Hoover Road, joining NC 147 south of Briggs Avenue. The project terminates south of Glover Road. This alternative would connect NC 147 and US 70 north of the Hayestown neighborhood.
- **Alternative 2** - located just south of Alternative 1 and would begin on US 70 south of its interchange with Cheek Road, continue traveling east to west crossing East End Avenue, and joining NC 147 south of Briggs Avenue. This alternative would connect NC 147 and US 70 directly through the Hayestown neighborhood.
- **Alternative 3** - located south of East End Avenue. It would begin on US 70 south of its interchange with Cheek Road, continue traveling east to west crossing Rowena Avenue, and joining NC 147 south of Briggs Avenue. This alternative would connect NC 147 and US 70 south of the Hayestown neighborhood.
- **Alternative 4** - the southernmost alternative and would be located close to Glover Road. It would begin on US 70 south of its interchange with Cheek Road, continue traveling east to west between Pleasant Drive and Glover Road, further south than Alternative 3 from the Hayestown neighborhood.

Please see Figure 6 for a depiction of each build alternative.

Figure 6
Project Alternative Maps



The Merger Team determined that the EA confirmed the build alternatives previously studied during the 1982 FEIS and found that the Purpose and Need Statement from the 1982 FEIS continued to be valid.²⁵ Alternative 2 was not carried forward due to the significant number of residential and business relocations; impacts to five gravesites and one Environmental Protection Agency (EPA) designated Superfund Site; and the complexity of construction resulting in the

²⁵ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 2-25 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

highest construction costs. The No-Build alternative was not carried forward because it did not meet the project's purpose and need.

After further study of Alternatives 1, 3, and 4, the Merger Team reconvened on June 19, 2007, to select the Least Environmentally Damaging Practicable Alternative (LEDPA/ Preferred Alternative) – Alternative 3. Alternative 3 was selected as the LEDPA/ Preferred Alternative because this alternative has the shortest total project length; the fewest residential and business relocations; minimal natural system impacts; the least amount of required right-of-way; and the lowest project cost. For an illustrated depiction of the Preferred Alternative, see Figure 7.²⁶

Figure 7
Illustration of Alternative 3 in 2007 – Preferred Alternative



d. Anticipated Project Impacts and Alternative Comparisons

1. Right of Way and Relocation

²⁶ Image Source: "Durham city begins construction on East End Connector," North Carolina Construction News, Accessed September 11, 2017, (April 29, 2015) <https://www.ncconstructionnews.com/durham-city-begins-construction-on-east-end-connector/>.

The Respondent estimated the number of business and residential relocations for each alternative in its 2009 Community Impact Assessment:²⁷

Alternative 1 passes through primarily industrial and commercial areas, affecting nine (9) minority residences and three (3) minority businesses scattered throughout the study area. Alternative 3 avoids impacts by passing between three (3) communities, Hayestown, East End, and an unnamed community, and affects six (6) minority residences and three (3) minority businesses scattered throughout the study area. Alternative 4 passes through a predominantly undeveloped or low density area, displacing eighteen (18) minority residences and four (4) minority businesses scattered throughout the study area. These minority and low income relocation impacts are not disproportionate when compared to the non-minority relocation impacts.

For a comparison of the studied alternatives and potential relocations, see Table 4.

Table 4
Projected Relocations Comparison of Alternatives

	Residential		Business		Total		
	Minority	Non-Minority	Minority	Non-Minority	Minority	Non-Minority	All
Alternative 1	9	9	3	12	12	21	33
Alternative 3	6	11	3	6	9	17	26
Alternative 4	18	21	4	6	22	27	49

The Respondent determined that Alternative 3, the Preferred Alternative, would result in the fewest residential and business relocations compared to the other alternatives, overall. In addition, the Preferred Alternative would result in the fewest relocations for all minority²⁸ groups, combined, compared to non-minorities. Relocation impacts are not concentrated in one area but are dispersed throughout the Project corridor.²⁹

Regarding community cohesion and impacts, the Preferred Alternative will impact two churches: the Living Water Christian Church, at the intersection of US 70 and Lynn Road, and the Believers Assembly Christian Church on Harvard Avenue. The construction of the East End

²⁷ East End Connector Community Impact Assessment Report, North Carolina Department of Transportation, p. 80 (February 2008).

²⁸ Use of the term “minority” in this Letter of Finding and the NCDOT Environmental Assessment documents is based on the race and ethnicity categories established by the Office of Management and Budget in its October 30, 1997 Federal Register Notice: Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity, in addition to the race and ethnicity categories included in the definition of “Minority” provided by the Council on Environmental Quality Environmental Justice Guidance Under the National Environmental Policy Act, the U.S. Department of Transportation (USDOT) Order 5610.2(a), and FHWA Order 6640.23A. These groups include: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander.

²⁹ Finding of No Significant Impact – East End Connector, U.S. Department of Transportation / North Carolina Department of Transportation, p. 28 (December 20, 2011).

Connector will result in the acquisition of the church office of Living Waters Christian Church, formerly a residence near US 70. The Respondent stated that there is sufficient vacant land on church grounds to rebuild the facility closer to the church. This church serves a population of both white and minority members, according to the Respondent. Because a suitable relocation site is available on the church's property and the church sanctuary is unaffected, the Respondent anticipates no significant adverse impacts to minority populations related to community cohesion as a result of the relocation. The construction of the East End Connector will result in the acquisition of the Believers Assembly Christian Church that rents a building on Harvard Avenue just east of US 70. This church also serves a population of both white and minority members. Because suitable relocation sites are available nearby, the Respondent anticipates no significant adverse impacts to minority populations related to community cohesion as a result of the relocation, as well.

2. Noise

Noise can be defined as unwanted or undesired sound, and can affect peoples' daily activities, especially those that occur outdoors. Noise from traffic on roadways can be disruptive at high noise levels if it is not mitigated. For all federal aid projects, recipients must compare projected noise levels to the minimum standards provided by the FHWA and provide mitigation where necessary.³⁰ These minimums are referred to as Noise Abatement Criteria (NAC) standards. A "traffic noise impact" occurs when design year build condition noise levels approach or exceed the NAC standards for future conditions or over existing noise levels.³¹ A "substantial increase" determination is based on a comparison of the existing noise level with the predicted increase with respect to a change to noise levels of between 10 and 15 decibels (dB(A)) or more.

The Respondent conducted an analysis of the probable traffic noise impacts for the project in its Traffic Noise Analysis, dated July 30, 2007 (summarized in the Project EA) as well as in its June 17, 2011 updated Design Noise Report, the latter of which addressed changes to the project design in additional detail. The Respondent's analysis compared current ambient noise levels with predicted future noise levels expected in the vicinity of the project. Future noise levels were based on estimated traffic volumes for the Design Year of 2035. Ambient noise levels ranged from 49 dB(A) the Springwood Park Apartment Complex to as high as 75 at NC 147 from the proposed Project start.³² The ambient noise levels nearest to the Hayestown neighborhood were measured at the Orange Grove Missionary Baptist Church (505 East End Ave, Durham, NC 27703) and Haskel Properties, Inc. (2900 E Pettigrew St, Durham, NC 27703), which were 64 dB(A) and 63, respectively.³³

Regarding the build alternatives, the Respondent found that the Preferred Alternative would have the fewest noise impacts compared to Alternatives 1 and 4, as shown in Table 5:³⁴

³⁰ 23 C.F.R. § 772.3.

³¹ 23 C.F.R. § 772.5.

³² Design Noise Report – East End Connector, North Carolina Department of Transportation, Table A-1, p. A.1 (June 17, 2011).

³³ *Id.*

³⁴ Highway Traffic / Construction Noise Analysis, Proposed Durham East End Connector, North Carolina Department of Transportation, p. 4 (July 30, 2007).

Table 5
Projection of Impacted Noise Receptors Comparison

Alternative	Impacted Residences	Impacted Businesses	Impacted Churches	Total
#1	47	6	3	56
#3 (Preferred)	9	3	1	13
#4	15	7	1	23

Regarding the Preferred Alternative, the Respondent identified a noise-impacted area located on the north side of the Project between the NC 147 and US 70 interchanges in the vicinity of Rowena Avenue.³⁵ The Respondent’s revised traffic study data showed that Design Year 2035 traffic noise is predicted to impact 18 receptors in the vicinity of the Rowena Avenue overpass, a number that was revised upward from 13 in the EA due to design changes.³⁶ These impacts were based on comparisons between the existing ambient noise levels in the vicinity of the Rowena Road overpass and the Big Twig Lane neighborhood (53 dB(A)) and the Design Year 2035 projections.³⁷ The data show an average increase of 14.61 dB(A), or 67.61 total dB(A) in this area.

When recipients identify traffic noise impacts, they must consider noise abatement measures for feasibility and reasonableness.³⁸ Regarding feasibility, recipients must define, and receive FHWA approval for, the number of receptors that must achieve at least a 5 dB(A) reduction for the noise abatement measure to be acoustically feasible and explain the basis for this determination.³⁹ In addition, recipients must determine it is possible to design and construct the noise abatement measure. Factors to consider are safety, barrier height, topography, drainage, utilities, and maintenance of the abatement measure, maintenance access to adjacent properties, and access to adjacent properties.

Recipients must also consider the reasonableness of noise abatement measures, which involves two factors: (1) the viewpoints of the affected community and (2) cost effectiveness.⁴⁰ Recipients must solicit the viewpoints of all of the benefited receptors and obtain enough responses to document a decision on either desiring or not desiring the noise abatement measure. Regarding cost effectiveness, recipients must determine, and receive FHWA approval for, the allowable cost of abatement by determining a baseline cost reasonableness value. This determination may include the actual construction cost of noise abatement, cost per square foot of abatement, the maximum square footage of abatement/benefited receptor and either the cost/benefited receptor or cost/benefited receptor/dB(A) reduction.

³⁵ Highway Traffic / Construction Noise Analysis, Proposed Durham East End Connector, North Carolina Department of Transportation, p. 7 (July 30, 2007).

³⁶ Design Noise Report Revision, North Carolina Department of Transportation, Section 3.0 (October 9, 2013).

³⁷ Design Noise Report – East End Connector, North Carolina Department of Transportation, Table B-1, p. B.1 (June 17, 2011).

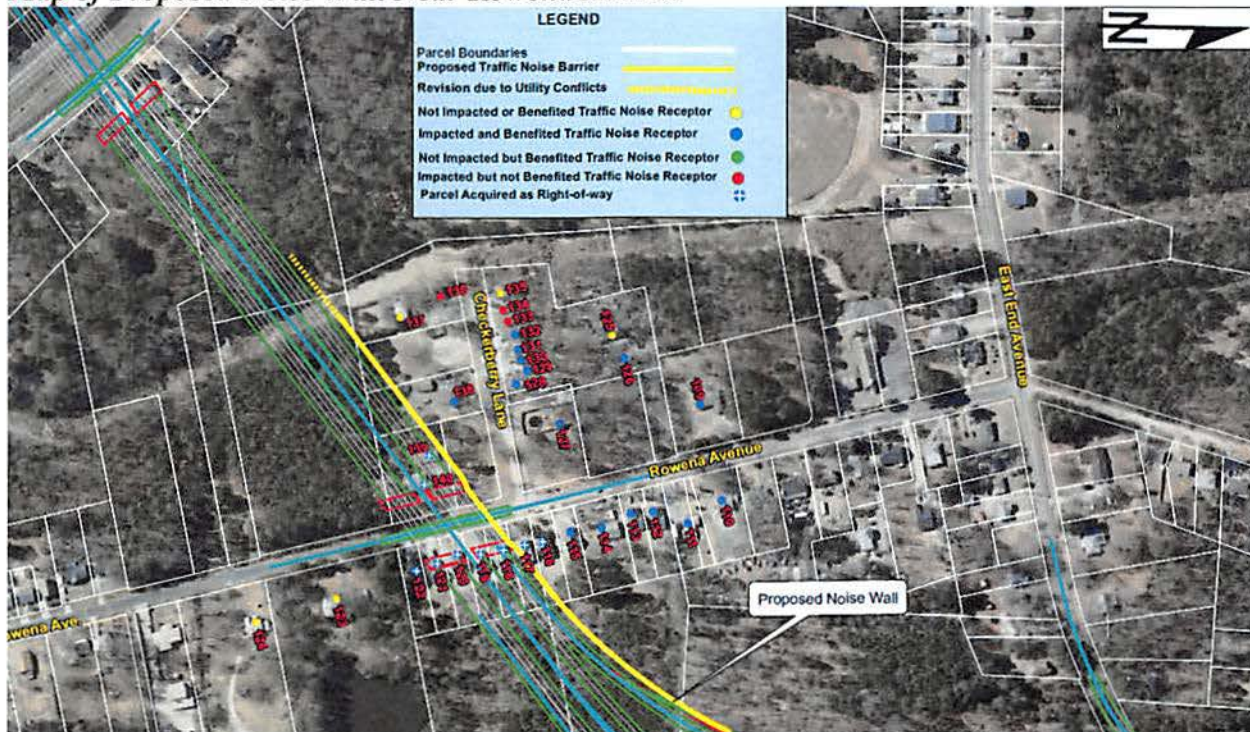
³⁸ 23 C.F.R. § 772.13(a).

³⁹ 23 C.F.R. § 772.13(d)(1) *et seq.*

⁴⁰ *Id.* § 772.13(d)(2).

In order to mitigate the predicted noise impacts, the Respondent recommended a noise barrier. The Respondent will construct a concrete barrier that will be 1,185 feet long, with an exposed height ranging from 8 to 12 feet, and located along the Project's westbound roadway shoulder from approximately 600 feet west of Rowena Avenue to approximately 600 feet east of Rowena Avenue. Figure 8 shows a map of the area (oriented with north facing the right) with the proposed barrier depicted in yellow. Hayestown is located north and west of the map area, with CR Woods Park between the Project and Hayestown.

Figure 8
Map of Proposed Noise Wall Near Rowena Avenue



The Respondent predicted the barrier would benefit 15 of 18 receptors.⁴¹ It is expected to provide at least a 5-7 dB(A) noise level reduction for seven first-row impacted receptors.⁴² Thus, the barrier will bring the average noise increase in the area from 67.61 dB(A) down to 61.56 dB(A).

3. Air Quality

The Clean Air Act of 1970, Section 176(c), requires that federally supported highway and transit projects are consistent with state air quality goals found in the State Implementation Plan (SIP). The process to ensure this consistency is called Transportation Conformity. A transportation project is said to conform to the provisions and purposes of the SIP if the project, both alone and in combination with other planned projects, does not:

⁴¹ Design Noise Report Revision, North Carolina Department of Transportation, Table 2 (October 9, 2013).

⁴² *Id.* p. 11.

- Cause or contribute to new air quality violations of the Environmental Protection Agency (EPA) National Ambient Air Quality Standards (NAAQS) criteria pollutants;
- Worsen existing violations of the NAAQS; or
- Delay timely attainment of the NAAQS or required interim milestones.

Transportation conformity is required for federally supported transportation projects in areas that have been designated by the U.S. Environmental Protection Agency (EPA) as not meeting one or more of the transportation-related NAAQS. *Nonattainment area or nonattainment* means that an area has monitored-air-quality that does not meet the NAAQS.⁴³ Once a nonattainment area meets the standards and additional redesignation requirements, EPA will designate the area as a *maintenance area* or in *maintenance*. Regarding conformity for the area, the EA states:⁴⁴

The Project is located in Durham County, which is within the Raleigh-Durham-Chapel Hill nonattainment area for ozone (O₃) and the Raleigh-Durham nonattainment area for carbon monoxide (CO) as defined by the EPA. The 1990 Clean Air Act Amendments (CAAA) designated these areas as moderate nonattainment areas for CO. However, due to improved monitoring data, these areas were redesignated as maintenance for CO on September 18, 1995. The area was designated nonattainment for O₃ under the eight-hour ozone standard effective June 15, 2004. Section 176(c) of the CAAA requires that transportation plans, programs, and projects conform to the intent of the state air quality implementation plan (SIP). The current SIP does not contain any transportation control measures for Durham County. The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization 2030 Long Range Transportation Plan (LRTP) and the 2009-2015 Metropolitan Transportation Improvement Program (MTIP) conform to the intent of the SIP. The USDOT made a conformity determination on the LRTP on June 29, 2007, and the MTIP on October 1, 2008. The current conformity determination is consistent with the final conformity rule found in 40 C.F.R. Parts 51 and 93. There are no significant changes in the project's design concept or scope, as used in the conformity analyses.

Specifically regarding ozone, the EPA redesignated the Raleigh-Durham-Chapel Hill, NC 8-Hour Ozone Nonattainment Area to attainment status in 2007.⁴⁵

The Respondent studied the current and projected air quality for the Project in May 10, 2007, with an updated analysis for CO and ozone completed on June 5, 2008—which were incorporated into the final EA for the Project. To that end, the Respondent conducted a microscale air quality analysis to determine future CO concentrations resulting from the

⁴³ Frequent Questions about General Conformity, Environmental Protection Agency website, accessed on July 10, 2017, <https://www.epa.gov/general-conformity/frequent-questions-about-general-conformity#8>.

⁴⁴ East End Connector Environmental Assessment, North Carolina Department of Transportation, pp. 4-19 – 4-20 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁴⁵ Redesignation of the Raleigh-Durham-Chapel Hill, NC 8-Hour Ozone Nonattainment Area to Attainment for Ozone, U.S. Environmental Protection Agency, (72 FR 72948 12/26/2007) <https://www3.epa.gov/region4/air/sips/OCE/Raleigh-Durham-Chapel%20Hill%208-hour%20Ozone%20Redesignation%20and%20Maintenance%20Plan.pdf>.

proposed highway improvements.⁴⁶ The worst-case air quality scenario was determined to be in the vicinity of the intersection of US 70 and SR 1815 (Pleasant Drive). The predicted one-hour average CO concentrations for the evaluation years of 2015, 2020, and 2035 are 5.40, 5.20 and 5.90 ppm, respectively. Comparison of the predicted CO concentrations with the NAAQS (maximum permitted for one-hour averaging period =35 ppm; 8-hour averaging period =9ppm) indicates no violation of these standards and without a substantial increase over time. Since the results of the worst-case one-hour CO analysis for the build scenario is less than 9 ppm, the Respondent concluded that the 8-hour CO level would not exceed the standard.

The Respondent also studied Mobile Source Air Toxics (MSATs), which are a subset of the 188 air toxics defined by the Clean Air Act of 1970.⁴⁷ MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned, while other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

FHWA guidance recommends a tiered approach with three categories for analyzing MSAT in NEPA documents, depending on specific project circumstances.⁴⁸ Under the first⁴⁹ level, for projects above 150,000 Annual Average Daily Traffic (AADT), a quantitative analysis is performed. Under the second level, for projects under 150,000 AADT, such as the Project, a qualitative analysis is performed. Under the third level, no analysis is required for small projects or exempt projects. The Respondent's EA and subsequent documentation included a qualitative second-tier analysis of the likely MSAT emission impacts of the Project, in which limitations in available technical tools prevent the Respondent from predicting the project-specific health impacts.⁵⁰ This is because:⁵¹

...[e]valuating the environmental and health impacts from MSATs on a proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

⁴⁶ CAL3QHC - A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections" was used to predict the CO concentration near sensitive receptors. East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 4-19 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁴⁷ Revised Air Quality Analysis for U-0071, North Carolina Department of Transportation, p. 4 (June 5, 2008).

⁴⁸ Finding of No Significant Impact – East End Connector, U.S. Department of Transportation / North Carolina Department of Transportation, p. 10 (December 20, 2011); *See also* Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents Memorandum, Federal Highway Administration, p. 4, *et seq.* (October 18, 2016) https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/2016msat.pdf.

⁴⁹ Note that the first, second, and third tiers are reversed in the 2016 guidance (e.g. first tier indicates no analysis, etc.), but the substance of the categories is unchanged.

⁵⁰ Revised Air Quality Analysis for U-0071, North Carolina Department of Transportation, p. 5 (June 5, 2008).

⁵¹ *Id.* pp. 5-7.

Regarding the quantitative emissions findings, the Recipient concluded that the additional Project travel lanes for all alternatives will have the effect of moving some traffic closer to nearby homes, schools and businesses; therefore, under each alternative there may be localized areas where ambient concentrations of MSAT could be higher under certain Build Alternatives than the No Build Alternative.⁵² The localized increases in MSAT concentrations would likely be most pronounced along US 70, but upon completion of the Project, these would likely decrease due to increases in vehicle speed and reductions in congestion while MSATs will be lower in other locations when traffic shifts away from them.⁵³ The Respondent further stated that, on a regional basis, EPA vehicle and fuel regulations and fleet turnover will cause substantial reductions that will cause significantly lower MSATs, regionally.⁵⁴

4. Other Potential Community Impacts

Regarding economic growth and home/land values, the Respondent discussed potential economic impacts to residents in the Study Area and the region in its EA. The Respondent and City have stated that the increased capacity and connectivity provided by the Project, in conjunction with other City projects, will increase economic growth in the southeastern portion of Durham.⁵⁵ The Respondent's EA notes that the Triangle Region, which includes Durham County:⁵⁶

...is rapidly urbanizing with moderate to high population and employment growth rates, particularly in the suburban areas. The southern portion of Durham County is the mid-point between the cities of Durham and Raleigh and the home of the expanding Research Triangle Park, one of the largest business/information/research and development technology centers in the nation.

The areas that are forecasted to experience the highest rates of population and employment growth are located primarily in the southern zones of Durham County along the US 70 and I-40 corridors and in the vicinity of the RTP. These areas are projected to experience the greatest increases in development over the next 20 years.

The Durham-Chapel Hill-Carrboro MPO 2030 Long Range Transportation Plan projects that employment growth in the MPO area will increase by 73 percent between 2002 and 2030. This increased employment will also create the need for increased housing, public services, and transportation demand on the area roadways and transit systems. Due to this growth, the Respondent expects land use in the area to increase residential density and commercial uses in the future.⁵⁷ Taken together, the Respondent and City view the Project as part of an overall plan to foster economic growth in the area, including Hayestown.

⁵² Revised Air Quality Analysis for U-0071, North Carolina Department of Transportation, p. 9 (June 5, 2008).

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ East End Connector Environmental Assessment, North Carolina Department of Transportation, pp. 4-38 – 4-39 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁵⁶ *Id.* p. 4-39.

⁵⁷ East End Connector Environmental Assessment, North Carolina Department of Transportation, pp. 4-39 – 4-40 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

For similar reasons, the Respondent and City predict the Project will increase property values, particularly for land zoned as industrial or commercial uses.⁵⁸ The Respondent's EA did not speak to residential property values; however, it notes that property value impacts are affected by a myriad of market factors—making qualitative estimates difficult to make.

e. Disparate Impact Information Provided by the Complainant

The Complainant, and other Hayestown neighborhood residents, provided documents and statements in support of the Complainant's allegations. What follows is a summary of that information.

1. University of North Carolina Community Impact Assessment

The University of North Carolina – Chapel Hill Department of City and Regional Planning issued a study report, *Assessing the Social Impacts of the East End Connector Project* (UNC Report) in May, 2007, with the purpose of determining whether the adverse effects of the Project would fall disproportionately on minority and low-income populations.⁵⁹

The UNC Report authors chose a methodology with three components. First, the authors identified their target population⁶⁰ by using a project study area population similar to the Recipient's and a comparator population of Durham County (2000 U.S. Census data). The authors did not appear to compare Hayestown to the study area or any other population. Second, the authors created maps of the four Project build alternatives and mapped them in context of the Hayestown neighborhood.⁶¹

Finally, the authors conducted a written survey of, and interviews with, Hayestown residents.⁶² The authors collected 14 surveys and conducted 5 interviews. The UNC Report did not provide the interview questions asked, but it did include the survey questions. The survey questions entailed information on employment, personal finance, race/ethnicity, age, and family/household statistics. In addition, the survey requested some information regarding the number of community services available in the neighborhood. Finally, the survey asked three questions on respondents' opinions regarding the Project. For example, one question asked: “[d]o you see the connector as having a positive or negative impact on your community? Why or why not?”

⁵⁸ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 4-39 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁵⁹ *Assessing the Social Impacts of the East End Connector Project*, UNC-Chapel Hill, p. 4 (2007); the Complainant sent an electronic copy of the Report to FHWA for this investigation. However, FHWA was unable to locate a website that currently hosts the file. A copy will be kept in FHWA's records.

⁶⁰ The UNC Report authors examined a number of population characteristics that are not directly relevant to Title VI, such as: poverty level, age, and proportion of female-headed households with children. FHWA evaluated the UNC Report regarding race, color, and national origin, only.

⁶¹ At the time of the UNC's work, the Recipient had not identified the Preferred Alternative; therefore, the UNC Report is written assuming that all four build alternatives were equally likely.

⁶² *Assessing the Social Impacts of the East End Connector Project*, UNC-Chapel Hill, p. 22 (2007).

The UNC Report authors did not appear to examine objective data regarding specific potential impacts to the human and natural environment such as air quality, noise, relocations, etc. The only direct impact named by the authors regarded relocations, and no specific data was discussed.

The UNC Report made several conclusions. First, after comparing the study area populations to Durham County, the authors concluded:⁶³

According to the environmental justice analysis, there are disproportionately high adverse impacts on low-income, black and Hispanic populations, as well as female-headed households with children. However, some of these findings are highly dependent on the study area that is chosen and the definition of disproportional.

The authors further qualified their conclusions by noting their study was limited. They noted that populations may have changed since the 2000 decennial census. In addition, the UNC Report stated that it “should not be used to draw specific conclusions and is only an indication that more detailed study needs to be undertaken to see whether this data matches what is actually going on in the study area.”⁶⁴ It further noted the UNC Report “cannot address the way that residents view their community or how they feel about the project itself.”⁶⁵

Regarding the survey and interview results, the authors noted that respondents felt safe in their neighborhoods and generally liked living there.⁶⁶ Respondents offered varying positive and negative answers on whether they had received adequate project information from the NCDOT or City. Finally, the UNC Report noted overall negative views of the project by respondents. Specifically, respondents believed that too many people would be forced to move from their homes and that the project would divide their community.

2. IBM Smarter Cities Challenge Report – Durham, NC

The Complainant requested that FHWA review a report on Durham conducted as part of the IBM Smarter Cities Challenge. The City was one of 33 cities selected worldwide to receive a Smarter Cities Challenge grant from IBM in 2012, as part of IBM’s citizenship efforts to build a Smarter Planet.⁶⁷ A document detailing the effort and conclusions, *the IBM Smarter Cities Challenge Durham Report* (IBM Report) was issued in March, 2012. During three weeks in February and March 2012, a team of six IBM experts worked to deliver recommendations on a key challenge identified by Durham Mayor William “Bill” Bell and his senior leadership team: develop a well-coordinated strategy and roadmap to address youth between the ages of 14–25 who have become disconnected from school or employment pathways, and position them to become positively contributing members of the community by the age of 25. The challenge was also to enhance understanding and reach consensus for how to collectively and comprehensively

⁶³ *Assessing the Social Impacts of the East End Connector Project*, UNC-Chapel Hill, p. 18 (2007).

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.* p. 33-34.

⁶⁷ *IBM’s Smarter Cities Challenge Durham Report*, IBM Corporation, p. 3 (March, 2012).

address the issue of disconnected youth and fragmented services across the public, private and nonprofit sectors.

The IBM Report made a wide-ranging set of recommendations to address Durham's youth problems including city government, education, and labor reforms. However, it did not speak specifically to road and highway transportation, except in the broadest terms, or to the Project.

3. Statements of Concern

The Complainant presented FHWA with a number of letters and news articles that discuss public concerns about the Project. For example, in a letter dated April 11, 2008, a Durham law firm mailed a letter on the Complainant's behalf to Franklin E. Freeman, Jr. and Secretary Lyndo Tippet from the Office of the Governor of North Carolina and the NCDOT, respectively.⁶⁸ The letter expressed the Complainant's Project-related concerns regarding air quality, noise, access to highways, property values and a concern the Project would "destroy the community as a whole." Similarly, one Hayestown resident, in an unsigned letter dated September 8, 2015, expressed concerns about health hazards from the Project regarding air quality and pollutants such as hydrogen sulfide, carbon monoxide, "welding gases," and diesel exhaust.⁶⁹

f. Public Involvement

One of the prevailing principles of transportation planning and project development is need for early, continuous and extensive public involvement, including both access to information and solicitation of public input. Public involvement and a systematic interdisciplinary approach are essential parts of the development process for proposed actions.⁷⁰ Each State must have procedures approved by the FHWA to carry out a public involvement/public hearing program.⁷¹

To these ends, the Respondent's goals were to:⁷²

- Provide public involvement opportunities throughout the process;
- Distribute information in a timely manner to the public and stakeholders;
- Specifically provide information regarding Project alternative development;
- Offer adequate notice of public involvement activities and times for public review and comment at key decision points;
- Provide prompt responses to public input;
- Ensure that neighborhood meetings were held in areas that encouraged participation by those traditionally underserved such as low-income and minority households; and
- Review the Project public involvement process periodically to ensure full and open access for all.

⁶⁸ Letter from Merritt, Flebotte, Wilson, Webb & Caruso, PLLC to the NC Office of the Governor and the NC Secretary of Transportation, April 11, 2008.

⁶⁹ Letter from James A. Dantzier (no addressee) (September 8, 2015).

⁷⁰ 23 C.F.R. § 771.105(c).

⁷¹ 40 CFR 1506.6.

⁷² East End Connector Environmental Assessment, North Carolina Department of Transportation, pp. 5-2 – 5-3 (December 16, 2000) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

The Respondent engaged in a multifaceted strategy, distributing information through workshops, newsletters, neighborhood meetings, email, a telephone hotline, and the project website. It created a mailing list of 5,000 recipients that included state, local, federal, and private entities, as well as individuals and elected officials.⁷³ The Recipient established a toll-free phone number and responded to 150 calls and 60 emails directly.

Regarding meetings, the Recipient held:⁷⁴

- 3 Citizens Informational Workshops;
- 6 Meetings with Elected Officials; and
- 16 Neighborhood and Small Group Meetings (which included one meeting specifically for the Hayestown neighborhood residents and eight with the Ad Hoc Committee)

Regarding the Informational Workshops, the events were advertised in four local newspapers—two daily papers (*Durham Herald-Sun*, *The Chronicle* at Duke University), one weekly paper (*Durham Independent*) and one Spanish-language weekly paper (*Que Pasa*).⁷⁵ Approximately 5000 meeting notices were mailed to area residents and about 500 people representing a multi-cultural cross-section of the community attended the three workshops. The meetings had an open house format with team members available to answer questions. The intent was to inform the community about the project and receive input on possible alternatives.

Subsequent to the selection of the Preferred Alternative, the Durham City Council recommend that an Ad Hoc Advisory Committee be formed to work with NCDOT in avoiding, minimizing and mitigating any adverse impacts to the greatest extent possible.⁷⁶ The committee addressed relocation policies, noise impact issues, ways of visualizing the project, environmental justice issues, community enhancement and economic development opportunities related to the Project. The Complainant was a member of the Ad Hoc Committee.

The Respondent's public involvement efforts resulted in a large number of comments. For example, one Citizen's Involvement Workshop on September 26, 2006, yielded 71 comment sheets from attendees.⁷⁷ The Respondent also received 148 written comments from attendees on a questionnaire.⁷⁸ The available information shows that, overall, commenters at the Respondent's various meetings represented a wide variety of views regarding the alternatives, project benefits, and concerns regarding impacts. Alternative 1 was preferred by a majority of attendees at the

⁷³ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 5-3 (December 16, 2000) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁷⁴ *Id.* p. 5-4.

⁷⁵ *Id.* p. 5-5.

⁷⁶ East End Connector Environmental Assessment, North Carolina Department of Transportation, p. 5-6 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁷⁷ East End Connector Environmental Assessment, North Carolina Department of Transportation, Appendix E – Public Involvement, p. 5 (December 16, 2000) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁷⁸ *Id.* p. 6.

referenced meeting, while Alternative 3 was preferred at another meeting held on January 30, 2007.⁷⁹

g. Less Discriminatory Alternatives

The Complainant alleged that the Respondent should not have built the Project, in part, because a less discriminatory alternative, the Eno Loop project (Loop), existed and was rejected by the Respondent.⁸⁰ The Loop appears to have been a proposal to construct a 20-mile freeway/parkway connection from I-85 in northeastern Durham County to I-85 near the Durham/Orange County border. The Loop project had been considered for many years in Durham, and was referenced as the “Eno Drive-Gorman Road” in the Durham Area Thoroughfare Plan since 1967.⁸¹ In 1989, the North Carolina General Assembly (NCGA) created the North Carolina Highway Trust Fund that dedicated certain revenue sources for specific highway projects, which included the Loop.⁸² The Respondent carried out an Environmental Impact Study (EIS), the draft of which was published on October 26, 1994.

In 2002, however, the Respondent completed a reevaluation of the Loop, finding that the state legislature had excepted the project from using state highway trust funds, in addition to environmental concerns found in the Respondent’s EIS. A compromise was reached between the Respondent, City, and other stakeholders, to not move forward with the Loop. Instead, the Respondent and City agreed to “Option 7,” which would have included a “Northern Loop” project in addition to other traffic-alleviation projects that included the East End Connector (Option 7). Option 7 projects would have been eligible for state and federal funding, according to proponents.⁸³

FHWA was unable to obtain more specific information regarding the purpose and need for the Loop, as well as specific reasons why the Loop was not moved forward beyond funding concerns. The available information only describes a project that would have stretched 20 miles across the northern part of the City.

III. Legal Background

a. Title VI

⁷⁹ East End Connector Environmental Assessment, North Carolina Department of Transportation, Appendix E – Public Involvement, p. 12 (December 16, 2000)

<https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

⁸⁰ FHWA notes that some information on the Loop from official sources was unavailable due to the 15 to 30 years that have passed since key decisions were made. The lack of this information, however, did not bear on FHWA’s findings, as discussed in the analysis section of this Letter of Finding.

⁸¹ Advisory Opinion: Highway Trust Fund; Northern Durham Parkway Alternative, State of North Carolina Department of Justice, p. 1 (June 11, 2002) <http://www.ncdoj.com/About-DOJ/Legal-Services/Legal-Opinions/Opinions/Highway-Trust-Fund;-Northern-Durham-Parkway-Altern.aspx>.

⁸² *Id.*

⁸³ *The Road That Wouldn't Die: How did a revamped Eno Drive get back on Durham's planning map?*, Barbara Solow, Indy Week Website, Accessed September 11, 2017 (November 6, 2002) <https://www.indyweek.com/indyweek/the-road-that-wouldnt-die/Content?oid=1187857>.

Title VI prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. Specifically, Title VI provides that:

[n]o 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.⁸⁴

The Civil Rights Restoration Act of 1987 clarified Title VI congressional intent, ensuring that when an entity receives Federal financial assistance, all of that recipient's programs and activities fall under the jurisdiction of Title VI. This includes even those programs and activities that do not directly receive Federal financial assistance.⁸⁵

The U.S. Department of Justice (DOJ), as the Federal government's coordinating agency for Title VI, implemented its Title VI program in 28 C.F.R. Part 42, which provides that the responsibility for enforcing Title VI rests with the federal agencies which extend financial assistance, such as the FHWA. The USDOT issued common Title VI regulations for all USDOT modes at 49 C.F.R. Part 21. When individuals file discrimination complaints under Title VI with regards to highways, the HCR will process the complaints. If HCR accepts the complaint, it will investigate and issue a LOF with potential findings and recommendations. Specific provisions regarding the investigation of Title VI complaints are found at 49 C.F.R. § 21.11. FHWA requires State Departments of Transportation (State DOTs) to take specific steps in compliance with Title VI. These are enumerated at 23 C.F.R. § 200.9, and include submitting nondiscrimination assurances, developing policies and procedures, resolving identified areas of noncompliance and collecting demographic data on those impacted by its decision-making. The FHWA's complaint investigation procedures are contained in its Procedures Manual for Processing External Complaints of Discrimination.⁸⁶

b. Discrimination Prohibited

Title VI prohibits two main types of discrimination: (1) disparate treatment and (2) disparate impact. Regarding disparate impact, the U.S. Supreme Court has held that agencies may create regulations to prohibit practices having a disparate impact on protected groups, even if the actions or practices are not intentionally discriminatory.⁸⁷ The USDOT's Title VI implementing regulations state that a recipient "may not utilize criteria or methods of administration which have the effect of subjecting persons to discrimination because of their race, color, or national origin," 49 C.F.R. § 21.5(b)(2). FHWA's Title VI regulations similarly require Title VI compliance by recipients receiving Federal financial assistance from FHWA. 23 C.F.R. Part 200.

⁸⁴ 42 U.S.C. § 2000d.

⁸⁵ Civil Rights Restoration Act of 1987, Pub. L. No. 100-259.

⁸⁶ Procedures Manual For Processing External Complaints of Discrimination, Federal Highway Administration, <http://www.fhwa.dot.gov/civilrights/programs/finalcomplaintmanual110410.cfm>.

⁸⁷ *Guardians Ass'n v. Civil Serv. Comm'n*, 463 U.S. 582, 643 (1983) (Stevens, J., dissenting) (citing *Lau v. Nichols*, 414 U.S. at 568, 571 (1974) (Stewart, J., concurring) and *Fullilove v. Klutznick*, 448 U.S. 448, 479 (1980) (opinion of Burger, C.J.); *Alexander v. Choate*, 469 U.S. 287, 293 (1985).

The first step in analyzing any disparate impact case is determining whether the recipient's criteria or method of administering its programs or activities *adversely* and *disparately* affected members of a protected class. In some cases, federal agencies proceed directly to preliminary findings after this step. The elements of a Title VI disparate impact claim derive from the analysis of cases decided under Title VII disparate impact law.⁸⁸ To establish a prima facie case⁸⁹ of discrimination, the investigating agency must ascertain whether the recipient utilized:

1. A specific, facially neutral policy or practice;
2. That had a disproportionate impact on a protected group; and
3. The policy or practice likely caused the disproportionate impact.

In a Title VI disparate impact analysis, a causal connection must be shown between the facially neutral policy or practice and the disproportionate and adverse impact on the protected group.⁹⁰ To demonstrate causation, evidence that "adequately captures" the impact of the project on similarly situated members of protected and non-protected groups must be shown, using an "appropriate measure."⁹¹

After a prima facie showing is made, the investigating agency must determine whether a "substantial legitimate justification" exists for the allegedly discriminatory practice. To establish a substantial legitimate justification, the investigating agency must determine whether the challenged policy was "necessary to meeting a goal that was legitimate, important, and integral to the [recipient's] institutional mission."⁹² The justification must bear a "manifest demonstrable relationship" to the challenged policy.⁹³

If a substantial legitimate justification is established, the investigating agency must then focus on whether the complainant has identified "less discriminatory alternatives" that meet the recipient's legitimate needs, but that will do so without the same level of disparate effect on a class protected by Title VI.⁹⁴ In a transportation context, courts have analyzed site selection alternatives, particularly where the recipient had already considered and rejected them, establishing a record.⁹⁵ In cases involving site selection, some courts have considered not only

⁸⁸ *New York Urban League v. New York*, 71 F.3d 1031, 1036 (2d Cir. 1995).

⁸⁹ *Larry P. v. Riles*, 793 F.2d 969, 982 (9th Cir. 1984); *Elston*, 997 F.2d at 1407.

⁹⁰ *New York City Envtl. Justice Alliance v. Giuliani*, 214 F.3d 65, 69 (2d Cir. 2000).

⁹¹ *New York Urban League*, 71 F.3d at 1037-38.

⁹² *Sandoval v. Hagan*, 7 F.Supp. 2d 1234, 1278 (M.D. Ala. 1998), *aff'd*, 197 F.3d 484 (11th Cir. 1999), *rev'd on other grounds*.

⁹³ *Georgia State Conference of Branches of NAACP v. Georgia*, 775 F.2d 1403, 1418 (11th Cir. 1985); *See, e.g., Elston*, 997 F. 2d at 1413 (In an education context, the practice must be demonstrably necessary to meeting an important educational goal, i.e. there must be an "educational necessity" for the practice).

⁹⁴ *Elston*, 997 F.2d at 1407.

⁹⁵ *See, e.g., Coalition of Concerned Citizens Against I-670 v. Damian*, 608 F. Supp. 110, 119-20 (S.D. Ohio 1984), (conducting a thorough review of alternatives sites for highway or other methods, such as light rail or public transportation).

whether the construction was necessary to begin with, but also whether the selection of the particular site over alternatives is justified.⁹⁶

Intentional discrimination, or disparate treatment, happens when a recipient acts, at least in part, because of the actual or perceived race, color, or national origin of the alleged victims of discriminatory treatment.⁹⁷ Discriminatory intent need not be the only motive, but a violation occurs when the evidence shows that the entity adopted a policy at issue “‘because of,’ not merely ‘in spite of,’ its adverse effects upon an identifiable group.”⁹⁸ While one must show that the recipient was motivated by an intent to discriminate, the recipient’s decision makers do not have to have acted in “bad faith, ill will or any evil motive....”⁹⁹

To prove disparate treatment, evidence may be direct or circumstantial. Direct evidence of discriminatory intent is evidence that, “if believed, proves the fact [of discriminatory intent] without inference or presumption.”¹⁰⁰ Direct evidence may be found through (1) express classifications or (2) comments or conduct by decision-makers that reveal a discriminatory motive.¹⁰¹

Proof of intentional discrimination may also entail a mosaic of circumstantial evidence that, taken collectively, can demonstrate that the recipient acted, at least in part, because of race, color, or national origin. The legal framework for assessing such evidence comes from the Court’s decision in *Village of Arlington Heights v. Metropolitan Housing Development Corp* (Arlington Heights).¹⁰² Under this method of proving intent, the investigating agency analyzes whether discriminatory purpose motivated a recipient’s actions by examining factors such as statistics demonstrating a “clear pattern unexplainable on grounds other than” discriminatory ones; “[T]he historical background of the decision”; “[T]he specific sequence of events leading up to the challenged decision”; the defendant’s departures from its normal procedures or substantive conclusions, and the relevant “legislative or administrative history.”¹⁰³

⁹⁶See, e.g., *Damian*, 608 F. Supp. at 127; see also *Bryan, Jr., et al., v. Edward I. Koch et al., and District Council 37, American Federation of State, County and Municipal Employees Union, AFL-CIO, et al.*, 627 F.2d 612, 617-18 (1985). Compare with *Darensburg v. Metro. Transp. Comm’n*, 636 F.3d 511 (9th Cir. 2011), in which the court cautioned against using beneficiary populations for different modes of transportation (bus versus rail) as comparators for disparate impact analysis.

⁹⁷ *Doe ex rel. Doe v. Lower Merion Sch. Dist.*, 665 F.3d 524, 548 (3d Cir. 2011).

⁹⁸ *Pers. Adm’r of Mass. v. Feeney*, 442 U.S. 256, 279 (1979).

⁹⁹ *Elston*, 997 F.2d at 1406 (quoting *Williams v. City of Dothan*, 745 F.2d 1406, 1414 (11th Cir. 1984)).

¹⁰⁰ *Coghlan v. Am. Seafoods Co.*, 413 F.3d 1090, 1095 (9th Cir. 2005).

¹⁰¹ *DOJ Title VI Legal Manual*, Section VI., p. 4. <https://www.justice.gov/crt/fcs/T6manual>.

¹⁰² 429 U.S. 252 (1977).

¹⁰³ *DOJ Title VI Legal Manual*, Section VI., p. 10, <https://www.justice.gov/crt/fcs/T6manual>; *Faith Action for Cmty. Equity v. Hawai’i*, No. CIV. 13-00450 SOM, 2015 WL 751134, at 7 (D. Haw. Feb. 23, 2015) (Title VI case citing *Pac. Shores Props., LLC v. City of Newport Beach*, 730 F.3d 1142, 1158–59 (9th Cir. 2013)); see also *Sylvia Dev. Corp. v. Calvert Cty.*, 48 F.3d 810, 819 (4th Cir. 1995) (adding to the Arlington Heights factors evidence of a “consistent pattern” of actions of decision-makers that have a much greater harm on minorities than on non-minorities).

c. Jurisdiction

A recipient may mean any State, territory, possession, the District of Columbia, or Puerto Rico, or any political subdivision thereof, or instrumentality thereof, any public or private agency, institution, or organization, or other entity, or any individual, in any State, territory, possession, the District of Columbia, or Puerto Rico, to whom Federal financial assistance is extended, directly or through another recipient.¹⁰⁴

The Respondent is a recipient of Federal financial assistance from the FHWA. For example, in 2016 the Respondent was apportioned \$1,079,768,287¹⁰⁵ by the Fixing America's Surface Transportation (FAST) Act.

Any person who believes they, or any specific class of persons, have been subjected to discrimination prohibited by Title VI may by themselves or by a representative file a written complaint with the FHWA.¹⁰⁶ A complaint must be filed not later than 180 days after the date of the alleged discrimination, unless the time for filing is extended by a competent authority.¹⁰⁷ Once a complaint is accepted, FHWA will make an investigation whenever a compliance review, report, complaint, or any other information indicates a possible failure to comply with Title VI. The investigation will include, where appropriate, a review of the pertinent practices and policies of the recipient, the circumstances under which the possible noncompliance occurred, and other factors relevant to a determination as to whether the recipient has failed to comply with Title VI.¹⁰⁸

The Complainant is an African-American, whose residence is in the project area and alleged the Project will disproportionately and adversely impact himself and the African-American members of his neighborhood. The Complainant filed the Title VI complaint timely with the FHWA.

IV. Analysis

This section summarizes FHWA's analysis of the Complainant's allegations in relation to the facts and relevant legal/regulatory standards.

a. Disparate Impacts Based on Race, Color, or National Origin

The Complainant alleged the Preferred Alternative will have a disproportionate and adverse impact on the predominantly African American neighborhood of Hayestown. Specifically, the Complainant expressed concerns that the project will create a disparate, adverse impact on Hayestown by:

¹⁰⁴ 49 C.F.R. § 21.23(f).

¹⁰⁵ *COMPARISON OF ACTUAL FY 2015 APPORTIONMENTS UNDER THE HIGHWAY AND TRANSPORTATION FUNDING ACT OF 2014, AS AMENDED, AND ESTIMATED FY 2016 - FY 2020 APPORTIONMENTS UNDER THE FIXING AMERICA'S SURFACE TRANSPORTATION (FAST) ACT*, Federal Highway Administration Website (accessed 2/4/18) <https://www.fhwa.dot.gov/fastact/estfy20162020apports.pdf>.

¹⁰⁶ 49 C.F.R. § 21.11(b).

¹⁰⁷ *Id.*

¹⁰⁸ *Id.* § 21.11(c).

- Increasing air pollution and associated detrimental health effects;
- Increasing noise levels;
- Decreasing home values; and
- Relocating a disproportionate number of African-American residents and businesses.

FHWA examined the evidence for each listed concern in an effort to assess the Complainant's allegations regarding adverse, disparate impacts as well as regarding intentional discrimination.

1. Disparate Impact

i. Air Quality and Related Health Impacts

The Complainant alleged the Project will increase air pollution and therefore cause a disparate impact on the Hayestown neighborhood. Specifically, the Complainant alleged the Project will increase the Mobile Source Air Toxics (MSATs) near Hayestown, creating adverse and disproportionate effects on the neighborhood regarding asthma, cancer rates, and other negative health effects for the residents. The Complainant presented documents regarding anecdotal concerns from residents and others, such as the UNC Report, as well as general information from the EPA about potential negative health impacts of MSATs. In interviews with FHWA, the Complainant and other Hayestown residents described a fear of potential health problems, such as asthma and cancer.

The record shows that the Preferred Alternative would neither adversely impact the regional or project-level air quality, nor create disparate, adverse impacts to the Hayestown neighborhood. The Project, as part of the SIP, is in conformity with EPA's air quality standards. With regard to carbon monoxide, the Respondent's hotspot analysis determined the project is (1) in conformity with the applicable EPA standard (below 9.0 ppm) and (2) would not create significant increases in CO levels overall: 5.4 ppm in 2015 compared to 5.9 ppm in 2035.

In addition, although the Respondent could not ascertain the probable health impacts of Project MSAT emissions due to limitations in existing science and tools, the available evidence regarding the Respondent's qualitative MSAT analysis indicated that MSATs would likely decrease near I-70 upon completion of the Project due to increases in vehicle speed and reductions in congestion. Additionally, MSATs will likely be lower in other locations when traffic shifts away from them. Even if the increases were significant, however, there is no evidence of a disparity between the projected impacts to the Hayestown neighborhood, or any other identifiable African American population, compared to other populations in the project area.

Based on the foregoing, FHWA finds there is insufficient evidence that the Preferred Alternative would cause adverse, disparate impacts to the Hayestown neighborhood due to air quality.

ii. Right of Way and Relocation

In interviews with FHWA, the Complainant and other residents expressed concerns that the Project relocations would uproot the Hayestown neighborhood and displace it. These concerns were also reflected in the UNC Report.

The data show that the Preferred Alternative would result in 9 total business and residential relocations for all minority groups, and 17 relocations for non-minority residents. In addition, compared to the other two build alternatives, the Preferred would result in the fewest relocations for all minority groups compared to non-minorities (Table 4; 9 relocations compared to 12 or 22). Regarding potential disparate impacts to African Americans with the Preferred Alternative, the data show the Preferred Alternative would relocate roughly two times as many non-Hispanic white residences and businesses compared to all minority groups, combined: 34.62% minority versus 65.38% non-minority. Therefore, the Respondent chose the build alternative with the fewest relocation impacts to African Americans, overall, and the chosen Preferred Alternative will not result in a disparate impact to African American relocations compared to non-minorities. Finally, there is no evidence of a disparity between the projected impacts to the Hayestown neighborhood, or any other identifiable African American population, compared to other populations in the project area.

For the foregoing reasons, FHWA finds there is insufficient evidence that the Preferred Alternative would cause adverse, disparate impacts to the Hayestown neighborhood due to right-of-way acquisition and relocations.

iii. Community Cohesion

According to the available information, the Preferred Alternative for the Project does not cross through the identifiable boundaries of the Hayestown neighborhood. Rather, the Project will cross south of the Hayestown neighborhood, through primarily low density residential and vacant land. The Respondent's EA describes the area south of the Preferred Alternative as a lightly populated loosely-knit community.¹⁰⁹ Regarding community facilities and services, FHWA found the Project is not likely create relocation impacts to schools, parks, or other community facilities, with the exception of right-of-way impacts to two churches in the study area. The two churches the Respondent expects to relocate, Living Waters Christian Church and the Believers Assembly Christian Church, will be rebuilt on church grounds and relocated nearby, respectively. Likewise, there is no evidence the Hayestown community will be cut off from community services south of the Project, as existing routes, such as Angier Avenue, will remain accessible after completion of the Project.

Regarding the UNC Report, the authors did not include data on specific impacts to community cohesion or other Project impacts. Rather, the UNC Report authors reviewed U.S. Census data and discussed the Project in general terms. The authors did conduct a limited survey of Hayestown residents, which posed three Project-related questions regarding: (1) residents' feelings about the adequacy of Project information provided, (2) views on the overall

¹⁰⁹ East End Connector Community Impact Assessment Report, North Carolina Department of Transportation, p. E-4 (February 2008).

positive/negative impact of the Project, and (3) “[i]f you had to leave your neighborhood, where would you go?”¹¹⁰ The authors noted the survey sample was small: 14 household surveys completed for a total population of 145 households.¹¹¹ While the UNC Report authors “feel that given the considerable social cohesion observed within the community much of the information presented can be roughly generalized to the broader neighborhood,” they would need to have received 47 responses to achieve a representative sample of the neighborhood.¹¹² Nonetheless, the UNC Report did not provide sufficient data to establish the potential for specific harms to community cohesion in the neighborhood or project area.

Based on the available evidence, FHWA finds the Preferred Alternative is unlikely to cause adverse, disparate impacts to the Hayestown community regarding community cohesion.

iv. Noise

The Complainant alleged the Preferred Alternative will result in disparate, adverse impacts to the African-American residents of the Hayestown neighborhood regarding noise. The Respondent’s EA stated that it evaluated potential impacts and implemented noise mitigation in compliance with 23 C.F.R. § 772—installing sound walls in areas where noise receptors indicate the need for abatement.

As shown in Table 5, the preferred alternative would create the fewest noise impacts compared to the other two build alternatives, even after the Respondent issued its revised Design Noise Report with the Preferred Alternative impacting 18 sites compared to 56 and 23 for Alternatives 1 and 4, respectively.

Further, the evidence does not show the Project will create substantial noise increases in the Hayestown neighborhood or that Hayestown will be disparately impacted by noise. The Respondent’s noise model predicts that the Preferred Alternative’s impacts will occur on the north side of the Project between the NC 147 and US 70 interchanges in the vicinity of Rowena Avenue south of the Hayestown neighborhood. Noise receptors nearest to the Hayestown neighborhood to the north recorded current noise levels of up to 64 dB(A). The proposed Project noise barrier near Rowena Avenue is projected to benefit 15 of 18 receptors—bringing the average noise level from 67.61 dB(A) down to 61.56 dB(A). This average noise level would be lower compared to the current noise levels at the Angier Avenue at Orange Grove Missionary Church receptor near Hayestown, which was measured at 63.8 dB(A).¹¹³ In addition, the Respondent’s Traffic Noise Model predicted the Project will create 71 dB(A) and 66 dB(A) noise level contours (zones of noise around the project) at 256 and 401 feet, respectively, from the center of the Project.¹¹⁴ Although, according to 23 C.F.R. § 772.9(c) and NCDOT Policy, noise contour lines cannot be used for determining highway traffic noise impacts, it is notable

¹¹⁰ *Assessing the Social Impacts of the East End Connector Project*, UNC-Chapel Hill, p. 43 (2007).

¹¹¹ *Id.* p. 29.

¹¹² This sample size represents a 10% margin of error with a 90% confidence level. A higher confidence level would require a larger sample size. See <http://www.raosoft.com/samplesize.html>.

¹¹³ East End Connector Environmental Assessment, North Carolina Department of Transportation, pp. 3-15: Table 3-8 (December 16, 2009) <https://www.ncdot.gov/projects/eastendconnector/download/Environmental.pdf>.

¹¹⁴ Design Noise Report – East End Connector, North Carolina Department of Transportation, pp. 9-10 (June 17, 2011).

that the Hayestown neighborhood is greater than 500 feet from the Project center. As previously discussed, the current noise levels measured near Hayestown were 63.8 dB(A). This suggests it is unlikely the Hayestown community will encounter significant noise impacts due to its proximity the Project. Regardless, there is no evidence of a disparity between the projected impacts to the Hayestown neighborhood, or any other identifiable African American population, compared to other populations in the project area.

For the foregoing reasons, FHWA finds there is insufficient evidence that the Preferred Alternative would cause adverse, disparate impacts to the Hayestown neighborhood due to noise.

v. Other Potential Community Impacts

The Complainant alleged the Project would create adverse, disparate impacts to the African-American residents of Hayestown by hindering economic growth and depressing home/land values. The available evidence shows that the Recipient and City are planning for growth in the Project area in addition to the Durham region. Part of the purpose and need of the Project is to foster economic growth, connecting major employment centers, including downtown Durham and the Research Triangle Park areas. In fact, the evidence shows the Respondent and City have planned for future land use near the Project to reflect increased residential density—moving from low density to medium density residential—as well as more commercial and industrial uses. This is consistent with the Durham-Chapel Hill-Carrboro MPO 2030 Long Range Transportation Plan, which forecasts high economic growth throughout the region.

Regarding property values, the Respondent expects increases as the population density and commercial investments increase over time. FHWA finds that, with the available data and information on future land use, development, and population increases, it is reasonable to infer that property values would either tend to increase or tend to not decrease. In addition, there is no evidence of a disparity between the projected impacts to the Hayestown neighborhood, or any other identifiable African American population, compared to other populations in the project area.

For the foregoing reasons, FHWA finds there is insufficient evidence that the Preferred Alternative would cause adverse, disparate impacts to the Hayestown neighborhood regarding economic growth or property values.

vi. Public Involvement

The Complainant alleged that Respondent failed to provide adequate consultation with the minority communities in the selection of the Preferred Alternative. The record shows the Respondent engaged in a multifaceted public involvement strategy, distributing information through workshops, newsletters, neighborhood meetings, email, a telephone hotline, and the project website and included state, local, federal, and private entities, as well as individuals and elected officials. The Recipient established a toll-free phone number and responded to 150 calls and 60 emails directly.

The Recipient held numerous public meetings during the development of the Project. It held three Citizens Informational Workshops and 16 neighborhood and small group meetings, with one of the latter specifically for the Hayestown neighborhood. In addition, the Respondent held eight meetings with the Ad Hoc Committee, on which the Complainant participated directly. According to the available information, the meetings appear to have been substantive, with the Recipient discussing with attendees the potential direct and indirect impacts of the Project.

The record also shows that the Respondent accepted numerous formal and informal public comments, including from the Complainant and Hayestown residents. The comments appear to show a wide variety of views regarding the alternatives, project benefits, and concerns regarding impacts—and that negative comments were considered by the Recipient.

For the foregoing reasons, FHWA finds there is insufficient evidence that the Respondent's public involvement activities for the Project resulted in adverse, disparate impacts to the Hayestown neighborhood.

vii. Conclusion Regarding Adverse, Disparate Impacts

After examining the likely impacts of the selection of the Preferred Alternative, and considering project benefits and mitigation, FHWA finds that there is insufficient evidence that the Project will create adverse, disparate impacts to the Hayestown neighborhood.

2. Substantial Legitimate Justification

FHWA's determination that there is insufficient evidence of disparate impacts ends the Title VI analysis of this matter. FHWA finds, however, that even if the selection of the Preferred Alternative resulted in adverse, disparate impacts, the Respondent has provided a substantial legitimate justification for its actions. After a prima facie showing of disparate impact, the investigating agency must determine whether a "substantial legitimate justification" exists for the allegedly discriminatory practice. The investigating agency must determine whether the challenged policy is "necessary to meeting a goal that was legitimate, important, and integral to the [recipient's] institutional mission."¹¹⁵ The justification must bear a "manifest demonstrable relationship" to the challenged policy.¹¹⁶ This analysis is similar to the "business necessity" part of the Title VII disparate impact analysis.

As stated in more detail in Section II(b) of this document, the overall purposes and needs for the Project stem from limited capacity, limited connectivity, local traffic volumes, and the resulting safety concerns. For example, the Respondent's traffic model showed that, by the year 2035, the traffic demand will approach or exceed roadway capacity on NC 147, US 70, and at nine of the 17 intersections analyzed. The Respondent's models show substantial growth in travel demand for the Durham area due to the strategic location of the study area in relation to the nearby urban centers and the Research Triangle Park.¹¹⁷ Future daily traffic volumes along existing NC 147

¹¹⁵ *Elston*, 997 F.2d at 1413.

¹¹⁶ *Georgia State Conf.*, 775 F.2d. at 1418; See, e.g., *Elston*, 997 F. 2d at 1413.

¹¹⁷ East End Connector Community Impact Assessment Report, North Carolina Department of Transportation, p. 56, (February 2008).

will increase approximately 200 percent within the study area by the year 2035 under the no build alternative. The future daily traffic volumes along existing US 70 are projected to increase from approximately 230 to 330 percent within the study area.

Additionally, traffic volumes on local roadways are forecasted to increase over the next 25 years, and the Project would alleviate these issues. For example, the 2035 no build option will result in a 94% increase on Alston Avenue, which would be kept to a 61% increase under the build option. Other local roads expected to experience a 24 - 42% increase under the 2035 no build option would be kept to 0% with the Project.

The Recipient also showed a need for improved safety. The local roadways that are currently used to connect US 70 to the Durham Freeway—including Alston Avenue/Avondale Drive, Mangum Street/Roxboro Street (one-way pair), and Duke Street/Gregson Street (one-way pair)—have crash rates that are five to seven times higher than the statewide average for similarly classified roadways. Because traffic is projected to increase on each of these roadways over the next 30 years, as previously discussed, it is probable the Project would mitigate these safety issues.

For the foregoing reasons, FHWA finds that, even if the Project resulted in adverse, disparate impacts, there is a substantial legitimate justification for the Respondent's actions. The data and information available support that the Respondent has established purposes and needs that are legitimate, important, and integral to its institutional mission and that the Preferred Alternative bears a manifest demonstrable relationship to those needs.

3. Less Discriminatory Alternatives

FHWA does not find evidence that a less discriminatory alternative exists in this case. If a substantial legitimate justification for the recipient's discriminatory policy or practice is identified, the investigating agency must also determine whether there are alternative practices that may be comparably effective with less disparate impact. Title VI requires recipients to implement a "less discriminatory alternative" if it is feasible and meets their legitimate objectives.¹¹⁸ If a substantial legitimate justification for the recipient's discriminatory policy or practice is identified, the investigating agency must also determine whether there are alternative practices that may be comparably effective with less disparate impact. Title VI requires recipients to implement a "less discriminatory alternative" if it is feasible and meets their legitimate objectives.¹¹⁹

The alternative to the project suggested by the Complainant, the Loop project, appears to have entailed a 20-mile highway that stretched across the entire northern part of the City. While there may have been linkages in the City between the Loop and the Project area, they are clearly separate projects designed to solve separate problems. In fact, the Project first entered the City's transportation plan in 1959, and existing evidence suggests the Loop did not become part of the Durham Area Thoroughfare Plan until 1967. The original purpose and need for the Project was developed prior to the completion of the final EIS in 1982. That purpose and need was then

¹¹⁸ *Elston*, 997 F.2d at 1407, 1413; *Georgia State Conf.*, 775 F.2d at 1417.

¹¹⁹ *Id.*

reaffirmed by the completion of the reevaluation EA in 2009. This indicates that the Project, as conceived over 50 years ago, had a purpose and need that remained substantively unchanged from 1982 to the present. There is no evidence to suggest the Project or the Loop were alternatives to one another. Rather, the evidence shows the Project was conceived, developed, and carried out separately from the Loop.

For the foregoing reasons, FHWA finds that there is insufficient evidence to show that a less discriminatory alternative to the Project existed that met the recipient's legitimate needs, but that would have done so without the same level of disparate impacts based on race, color, or national origin.

b. Disparate Treatment Based on Race, Color, or National Origin

The FHWA reviewed the available record for direct and indirect evidence regarding disparate treatment of African-Americans, or any other demographic group, related to the Project. Regarding direct evidence, the record does not show the Respondent used express classifications based on race, color, or national origin, or directed adverse action to be taken based on race, color, or national origin. Likewise, the record does not show any oral or written statements made by Respondent decision-makers that express a discriminatory motive related to the Project.

Finally, FHWA did not find that Recipient decision-makers "placed substantial negative reliance on an illegitimate criterion in reaching..."¹²⁰ decisions related to the Project. The criteria used by Respondent decision-makers drew from legitimate sources. For example, the Respondent appears to have relied upon regulations and guidance from the EPA and FHWA regarding its air quality and project selection analysis, in addition to the SIP and MPO planning documents such as the TIP and LRTP.

Proof of intentional discrimination may also entail a mosaic of circumstantial evidence that, taken collectively, may demonstrate the recipient acted, at least in part, with intent to discriminate based on race, color, or national origin (*Arlington Heights*). Here, FHWA found insufficient evidence to establish intentional discrimination. First, as discussed previously in this Letter of Finding, FHWA did not find statistical evidence that African-Americans, or any other demographic group, is disparately impacted by the Project. There is also no evidence to show the Respondent deviated from normal procedures or policies in the development of the Project.

Regarding the historical background for the Project, the Complainant alleged the Project was developed as part of a long history of discriminatory actions by the state of North Carolina and the City. In support of this, the Complainant cited a number of sources. For example, he noted North Carolina House Joint Resolution 1311 from April 5, 2007, titled: "Expressing the General Assembly's Profound Regret for the Institution and Lasting Effects of Slavery."¹²¹ This resolution traced the history of slavery in North Carolina—the continuing effects of which carried through reconstruction, the Jim Crow era of the 20th Century, and to the present—and

¹²⁰ *Price Waterhouse v. Hopkins*, 490 U.S. 228, 277 (1989) (O'Connor, J., concurring); *Venters v. City of Delphi*, 123 F.3d 956, 972 (7th Cir. 1997) (direct evidence includes "evidence which in and of itself suggests" that someone with managerial authority was "animated by an illegal ... criterion.").

¹²¹ See <https://www.ncleg.net/Sessions/2007/Bills/House/HTML/H1311v0.html>.

expressed an apology. The Complainant has also cited economic development and unemployment statistics in Durham, as well as previously-mentioned documents such as the IBM and UNC Reports. The Complainant also cited to other civil rights complaints and lawsuits filed against state and local government. For example, he noted the U.S. Supreme Court's decision in *Cooper v. Harris*,¹²² where the Court affirmed the district court's finding that the North Carolina General Assembly violated the Equal Protection Clause of the Fourteenth Amendment by separating its citizens into different voting districts on the basis of race absent a sufficient justification. The Complainant similarly cited a 2013 Title VI complaint filed by Legal Aid of North Carolina against the Durham Public School District alleging the District's student suspension policies created a disparate, adverse impact against African-American students.¹²³

While this information is useful in evaluating the local and statewide history of African-Americans' treatment by governmental and private actors, there is insufficient evidence to show how the aforementioned facts and events are causally related to the Project. For example, there is no sequence of events or legislative history to tie matters such as gerrymandering, school detention policies, or general declarations regarding discrimination to this Project. This, coupled with a lack of statistics showing a clear pattern of discriminatory effects with regard to the Project, suggests no mosaic of circumstantial evidence exists to demonstrate intentional discrimination under *Arlington Heights*.

For the foregoing reasons, FHWA finds that there is insufficient evidence that the Respondent intentionally discriminated against African-Americans when it advanced the Project and selected the Preferred Alternative.

V. Conclusion

Based on the available data and information, FHWA finds that there is insufficient evidence that the Project will create adverse, disparate impacts on the African-American residents of Hayestown or throughout the project area. FHWA finds, however, that even if the selection of the Preferred Alternative would result in adverse, disparate impacts, a substantial legitimate justification exists for the Respondent's actions, and a less discriminatory alternative could not be identified. Finally, FHWA finds that there is insufficient evidence that the Respondent intentionally discriminated against the African-American residents of Hayestown or throughout the project area.

This letter concludes FHWA's investigation, and the case will be closed with no further action. If you have any questions regarding this matter, please contact Kevin Resler, FHWA National Title VI Coordinator, at (202) 366-2925, or kevin.resler@dot.gov.

¹²² *Cooper v. Harris*, 137 S.Ct. 1455 (2017).

¹²³ Letter from Legal Aid of North Carolina, Inc. to the U.S. Dept. of Education Office of Civil Rights (April 16, 2013).

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Irene Rico', with a large, stylized flourish at the end.

Irene Rico
Associate Administrator for Civil Rights

cc: John F. Sullivan, III, Division Administrator, FHWA NC Division Office
Edward T. Parker, Assistant Division Administrator, FHWA NC Division Office
Lynise DeVance, Civil Rights Program Manager, FHWA NC Division Office
James Esselman, Senior Attorney Advisor, FHWA Office of Chief Counsel (HCC-30)
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