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# 5

# Environmental Justice

This chapter describes the effects of the Proposed Refinements on Environmental Justice (EJ) populations. The documentation was prepared in accordance with Executive Order (EO) 12898; Department of Transportation Order 5610.2(a); and FTA Circular 4703.1 using the same methodologies described in the NEPA documentation for the Previous Design.

## 5.1 Methodology

Concentrations of minority and low-income populations in the study area were identified through analysis of the American Community Survey (ACS) five-year data from 2012 to 2016 at both the county and block group levels. The individual block group data were compared to the respective countywide data to determine whether any of the block groups would qualify as an “EJ area” within the Proposed Refinements study area. Consistent with the NEPA documentation for the Previous Design, the EJ study area for the Proposed Refinements is defined as the area located within ¼-mile on either side of the proposed alignment, and within ½-mile of proposed stations.

An EJ area was defined to include any block group in which the minority or low-income population meets either of the following thresholds:

- The minority or low-income population in the block group exceeds 50 percent.
- The percentage of a minority or low-income population in the affected area is meaningfully greater than the lowest percentage in the respective county.

For this project, it was determined that the minority or low-income population is “meaningfully greater” than the average in the surrounding jurisdictions if it is higher than the average for the corresponding county. The population of Orange County is 30 percent minority, and the population of Durham County is 58 percent minority. The

low-income population in Orange County is 19 percent and in Durham County is 25 percent. The effort to identify EJ populations was supplemented by the extensive public outreach GoTriangle conducted as part of the project.

In Final Circular 4703.1, FTA advises that a small minority or low-income population in the study area does not eliminate the possibility of a disproportionately high and adverse effect on these populations. Therefore, while the analysis of potential disproportionately high and adverse effects focused on areas with high concentrations of EJ population, the analysis considered whether there would be disproportionately high and adverse effects on minority and low-income populations in all block groups within the study area.

The Proposed Refinements result in a different study area compared with the Previous Design, making direct data comparison to the previous NEPA documentation impossible. This section provides updated and best available data to describe existing conditions of EJ populations for the full D-O LRT Project, accounting for changes associated with the Proposed Refinements. The EJ analysis of the Proposed Refinements relies on ACS data from 2012 to 2016.

## 5.2 Affected Environment

**Table 5-1** provides the minority and low-income population data for the project evaluation areas, study area, and counties.

Based on the 2016 data, 39 of the 55 block groups in the study area (71 percent) have higher concentrations of EJ populations than the county in which they are located.

**Table 5-1** shows the overall minority and low-income populations in the study area in 2016.

The minority population within the study area is 43 percent, which is higher than the overall percentage for Orange County (30 percent) but lower than the overall percentage for Durham County (58 percent). In general, the project evaluation areas with higher concentrations of minority populations are located in Durham County (see **Figure 5-1**).

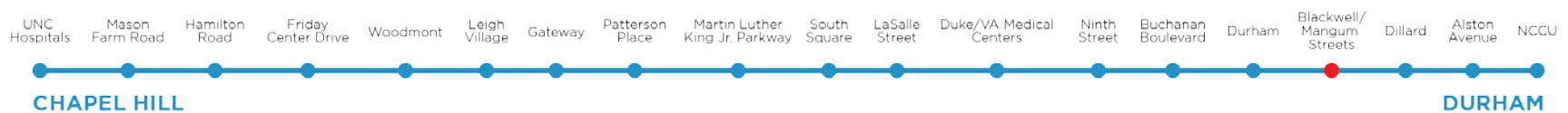
The low-income population in the study area (31 percent) is higher than the low-income population in Durham County (25 percent) and in Orange County (19 percent). The highest concentrations of low-income populations in the study area are in the eastern portion of the study area: Downtown Durham and East Durham.



**Table 5-1: Summary of Minority and Low-Income Populations**

| Geography                        | 2012-2016<br>Total Population | 2012-2016<br>% Minority Population | 2012-2016<br>% Low-income |
|----------------------------------|-------------------------------|------------------------------------|---------------------------|
| <b>Evaluation Area</b>           |                               |                                    |                           |
| UNC Campus Area                  | 6,572                         | 37                                 | 15                        |
| East Chapel Hill                 | 3,203                         | 20                                 | 13                        |
| Leigh Village                    | 1,066                         | 39                                 | 14                        |
| US 15-501 Corridor               | 10,208                        | 56                                 | 30                        |
| Duke West Campus/Medical Center  | 7,186                         | 65                                 | 38                        |
| Old West Durham/Duke East Campus | 5,102                         | 49                                 | 27                        |
| Downtown Durham                  | 3,676                         | 62                                 | 40                        |
| East Durham                      | 5,986                         | 95                                 | 50                        |
| <b>Study Area Total</b>          | <b>43,000</b>                 | <b>43</b>                          | <b>31</b>                 |
| <b>Orange County</b>             | <b>139,807</b>                | <b>30</b>                          | <b>19</b>                 |
| <b>Durham County</b>             | <b>294,618</b>                | <b>58</b>                          | <b>25</b>                 |

Source: US Census Bureau, ACS 5-year Estimates (2012 to 2016); low-income populations are represented by populations living below the poverty level



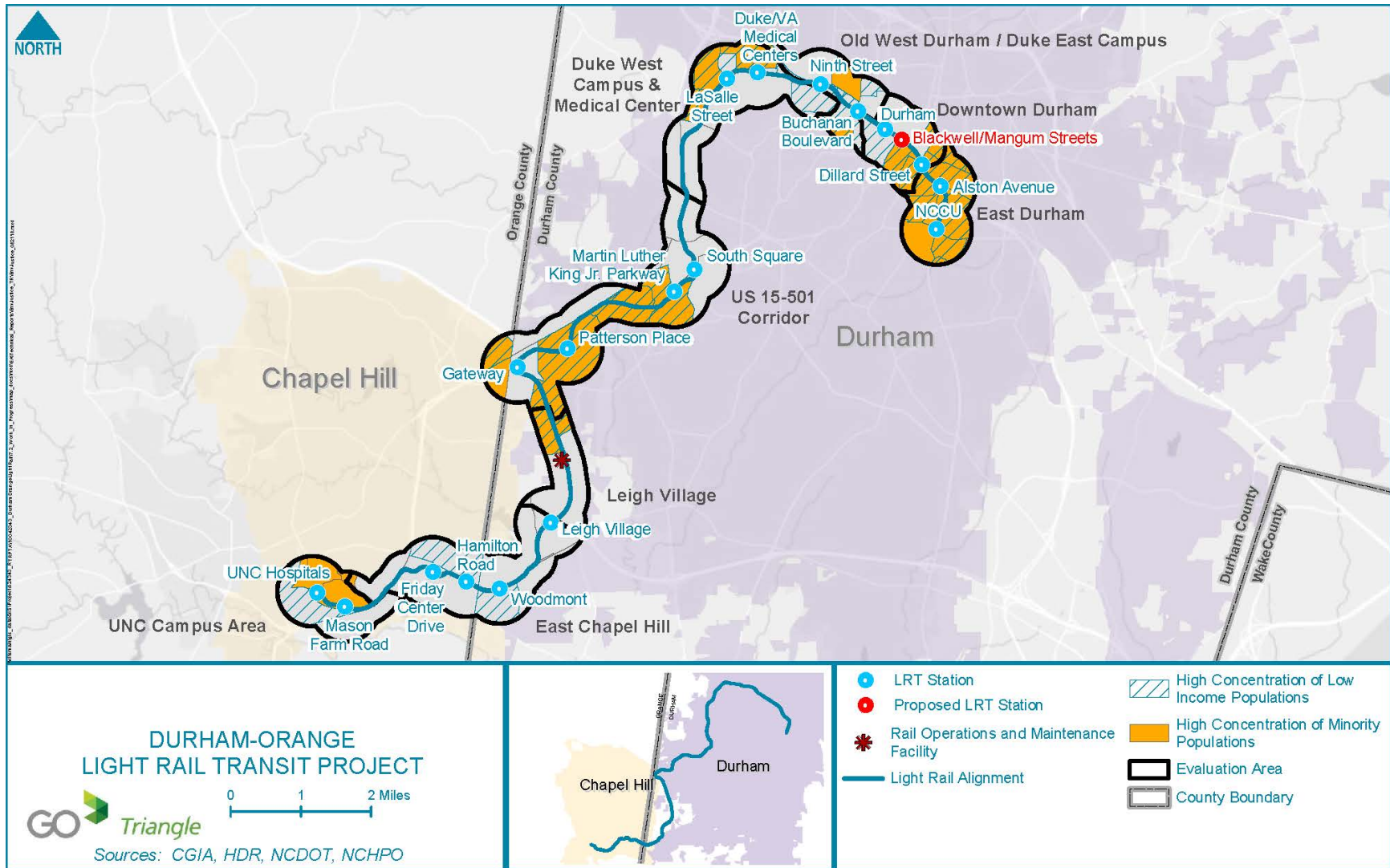


Figure 5-1: Environmental Justice Populations



### 5.2.1 Outreach to EJ Populations

GoTriangle has continued a robust public outreach program with an emphasis on meaningful interaction and communication with EJ populations as a key element of the proposed D-O LRT Project and the Proposed Refinements. The engagement of local residents, business owners, and other stakeholders began in 2012 with scoping and is ongoing. The outreach program was conducted in accordance with the D-O LRT Project Public Involvement Plan, EO 12898, and guiding principles contained in FTA Circular 4703.1.

Outreach efforts are described in detail in chapter 6 and **appendix K**.

### 5.2.2 Feedback Received from Communities with EJ Populations

Questions and comments received from EJ outreach meetings and public open house events are summarized in the tables in **appendix K**. Comments received from communities with EJ populations were positive. The most common comments and concerns expressed by communities with EJ populations related to:

- Displacement and property acquisition, particularly along Alston Avenue, with an emphasis on the timeline of acquisitions and the real estate process.

- The fare structure for the light rail system.
- Improvements to existing bus stops and bus shelters, including measures to improve accessibility, introducing new stops when the light rail system is online, and improving safety through proper lighting and placement.
- Future accessibility to Durham Technical Community College from the NCCU Station.
- The project’s potential to affect property values.

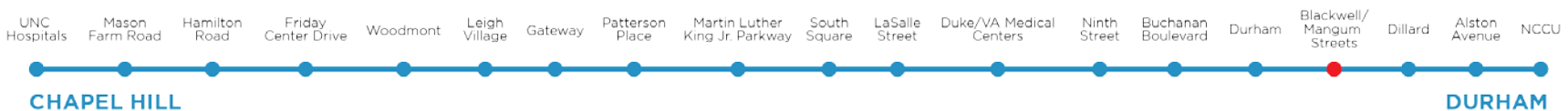
### 5.3 Environmental Consequences

**Table 5-2** presents a summary of the potential environmental effects and benefits in EJ areas associated with the Proposed Refinements based on the analyses presented in this Supplemental EA (see **Figure 5-1**). The Proposed Refinements would not change the beneficial effects identified in the NEPA documentation for the Previous Design; namely, the improved connectivity and mobility; access to jobs, services, education, and entertainment; pedestrian and bicycle conditions; access to transit; and reliability of transit service for all communities, including low-income and minority populations.

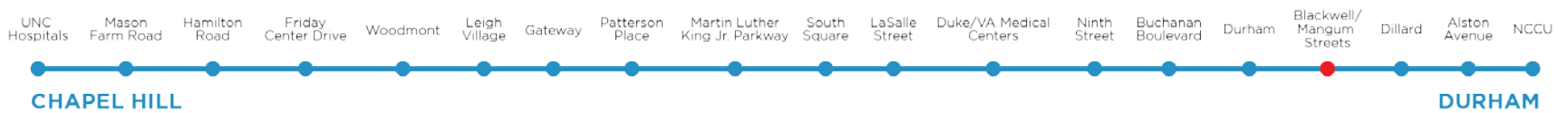
As noted in **Table 5-2**, the Proposed Refinements would result in the following

impacts on specific resources located in EJ areas:

- Parking** - Additional loss of 55 on-street parking spaces in EJ areas; 39 existing on-street parking spaces to convert Ramseur street to a two-way street and 16 existing on-street parking spaces for intersection changes and to reduce residential property impacts along Linwood Avenue, Massey Avenue, Cox Avenue, and Dupree Street.
- Access** - Additional access changes associated with the shift in the alignment and station locations at Patterson Place Station, Martin Luther King Jr. Parkway Station, and the Duke/VA Medical Centers Station; the closure of Blackwell Street at Pettigrew Street and addition of a signature civic space approximately mid-block between Blackwell Street and Mangum Street; the conversion of Dillard Street at the NCCR crossing to one-way southbound for automobiles; and the advancements in the roadway design along Alston Avenue.
- Visual and Aesthetics** - A change from low to moderate visual impacts in the Downtown Durham area resulting from the addition of the proposed Blackwell/Mangum Streets Station. The proposed Blackwell/Mangum Streets Station and signature civic space would introduce new visual elements to the area; however, the station would be



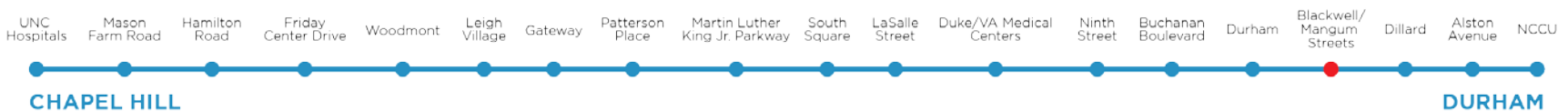
consistent with the multi-story, urban  
character of downtown Durham.





**Table 5-2: Summary of Potential Environmental Impacts and Benefits in or near EJ Areas Resulting from Proposed Refinements**

| Resource                          | Impact of Proposed Refinements   | Benefits of Proposed Refinements   |
|-----------------------------------|--|--|
| Parking Facilities                | An additional 55 on-street public parking space displacements as compared to the Previous Design: 39 on-street spaces lost due to configuration of Ramseur Street for two-way traffic and 16 on-street spaces lost along Linwood Avenue, Massey Avenue, Cox Avenue, and Dupree Street  | No new or additional benefits.   |
| Pedestrian and Bicycle Facilities | Closure of Blackwell Street to vehicle, pedestrian, and bicycle access between Ramseur Street and Pettigrew Street.  | Improvements to 9 pedestrian facilities, 5 multi-use paths, and 1 bicycle facility. Addition of signature civic space over Pettigrew Street, the light rail tracks, NCCR tracks, and Ramseur Street approximately mid-block between Blackwell Street and Mangum Street.  |
| Access and Mobility               | Closure of Blackwell Street to vehicle, pedestrian, and bicycle access between Ramseur Street and Pettigrew Street; the intersection of Blackwell Street with one-way Pettigrew Street would become a T-intersection limited to right-in/right-out movements for vehicles (see Safety and Security benefits below); and the intersection of Ramseur Street with two-way Pettigrew Street would become a T-intersection. Dillard Street would be converted to one-way southbound at the NCCR crossing (see Safety and Security benefits below). Closure of the Pettigrew Street driveway at the Smith/Avery Center (John Avery) Boys and Girls Club would reduce driveway access; however, access would remain through the Grant Street driveway. Closure of intersections of Massey Avenue and Price Avenue with Alston Avenue would limit direct vehicular access to Alston Avenue, but existing street network provides alternative vehicular access. Bus service would be altered due to the roadway modifications. | Improvements to access and mobility with the addition of pedestrian and bicycle facilities (see Pedestrian and Bicycle Facilities benefits above). Duke/VA Medical Centers Station moved to just west of Fulton Street. The elevated structure improves direct access to the platform from the sidewalks. Direct pedestrian access to Alston Avenue from Massey Avenue and Price Avenue would be maintained with the addition of sidewalks from Alston Avenue to Massey Avenue and Price Avenue. |
| Land Use                          | No changes to land uses as compared to Previous Design.  | No changes to land uses as compared to Previous Design.  |
| Community Cohesion                | Altered travel patterns due to the closure of Blackwell Street between Ramseur Street and Pettigrew Street and conversion of Dillard Street to one-way southbound at the NCCR crossing. Reduced vehicular connectivity on Massey Avenue and Price Avenue.  | Increased connectivity related to addition of pedestrian and bicycle facilities (see Pedestrian and Bicycle Facilities benefits above); improved connectivity for neighborhoods surrounding Blackwell/Mangum Streets Station.  |
| Employment                        | No new or additional impacts.  | Similar employment increases as compared to the Previous Design.   |
| Community Facilities              | Access changes associated with the shift in the location of the Duke/VA Medical Center Stations. Closure of the Pettigrew Street driveway at the Smith/Avery Center (John Avery) Boys and Girls Club would reduce circulation flexibility.   | No new or additional benefits.   |
| Visual and Aesthetic              | Visual effects would increase (from low to moderate) by adding Blackwell/Mangum Streets Station.   | Visual effects would be reduced by changing from a parking garage to a surface lot at the Alston Avenue Park and Ride  |





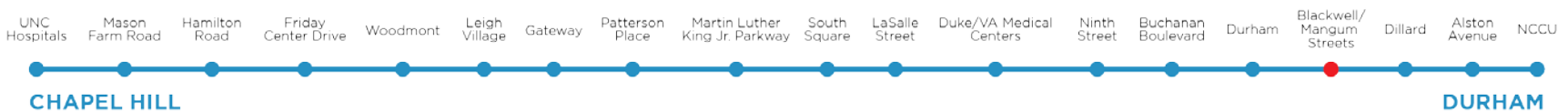
**Table 5-2 (Cont'd): Summary of Potential Environmental Impacts and Benefits in or near EJ Areas Resulting from Proposed Refinements**

| Resource                       | Impact of Proposed Refinements   | Benefits of Proposed Refinements   |
|--------------------------------|--|--|
| Parklands                      | Impacts to Downtown Durham Trail users as a result of closure of Blackwell Street NCRR crossing from Pettigrew Street to Ramseur Street. Construction of the light rail alignment along Pettigrew Street and the construction of the proposed signature civic space would temporarily affect the Downtown Durham Trail; connectivity would be maintained on a signed detour route.   | Addition of signature civic space over Pettigrew Street, the light rail tracks, NCRR tracks, and Ramseur Street approximately mid-block between Blackwell Street and Mangum Street to maintain Downtown Durham Trail connectivity. Improvements to enhance access to the Bryant Bridge Trail, including the conversion of an existing sidewalk to a multi-use path with lighting and wayfinding.   |
| Noise & Vibration              | Moderate noise impacts at 11 multi-family residential buildings representing 375 units, one single-family residence and 1 institutional site (Duke – Center for Documentary Studies). Severe noise impacts at 2 multi-family residences (one near SW Durham Drive, the other near Snow Crest Trail) with a combined total of 34 affected units. No vibration impacts.  | No new or additional benefits.   |
| Safety and Security            | No new or additional impacts.  | Reduced pedestrian/vehicle conflicts and improved conditions for accessing stations with the addition of bicycle, pedestrian, and multi-use facilities. Reduced vehicle/pedestrian/light rail vehicle conflicts by changing from at-grade to underpass crossing Shannon Road/University Drive. Eliminated potential ambulances/light rail vehicle conflict with elevated alignment along Erwin Road. Eliminated vehicle, pedestrian, and bicycle crossing of Pettigrew Street, light rail track, freight rail track, and Ramseur Street at Blackwell Street. Dillard Street would be converted to one-way southbound at the NCRR crossing to improve the safety of pedestrians, bicyclists, and motorists. |
| Acquisitions and Displacements | An additional 19 full displacements: 3 residential displacements at Patterson Place Station, 2 commercial displacements on Garrett Road between Patterson Place and Martin Luther King Jr Parkway Station, 1 multi-family residential and 3 commercial displacements at Martin Luther King Jr Parkway Station, 1 institutional use (Indigo Montessori School) between Buchanan Boulevard and Durham Stations, 6 residential and 1 commercial displacements near Alston Avenue Station, and 2 residential displacements along the Alston Avenue corridor. | No new or additional benefits.   |



**Table 5-2 (Cont'd): Summary of Potential Environmental Impacts and Benefits in or near EJ Areas Resulting from Proposed Refinements**

| Resource                | Impact of Proposed Refinements  | Benefits of Proposed Refinements  |
|-------------------------|---|---|
| Construction            | Proposed new construction techniques at Farrington Road Bridge Underpass, Shannon Road/University Drive Underpass, and Erwin Road Elevated Structure would occur near or in EJ areas; temporary reroute of the Downtown Durham Trail during construction of the Blackwell/Mangum Streets Station; temporary re-route of local bus services during construction; measures to mitigate construction impacts from Proposed Refinements in EJ areas, including closure of Alston Avenue intersections with Massey Avenue and Price Avenue, would be the same as those identified in the Amended ROD and section 3.15.2 of this Supplemental EA. | No new or additional benefits.  |
| Indirect and Cumulative | No new indirect or cumulative impacts in EJ areas as compared to Previous Design.   | No new indirect or cumulative impacts in EJ areas as compared to Previous Design. |



- **Acquisitions and Displacements** - The shift in location of Patterson Place Station would result in one additional residential acquisition on Southwest Durham Drive and two additional residential displacements on Sayward Drive.
- A design refinement along the elevated section between Patterson Place Station and Martin Luther King Jr. Parkway Station would result in the acquisition of two additional commercial properties on Garrett Road, a tile store and a warehouse.
- The shift in location of the alignment and the station at Martin Luther King Jr. Parkway Station would result in the acquisition of one multi-family residential building and the acquisition of a commercial building and bank. A reconfiguration of the layout of the park-and-ride lot at Martin Luther King Jr. Parkway Station would require the acquisition of a second bank and a vacant NCDOT parcel.
- Between Buchanan Boulevard and Durham Stations, a commercial building identified for acquisition in the previous NEPA documentation was recently converted to institutional use (Indigo Montessori School). This property acquisition would still be required under the Proposed Refinements; as such, a

new community resource in this area would be relocated.

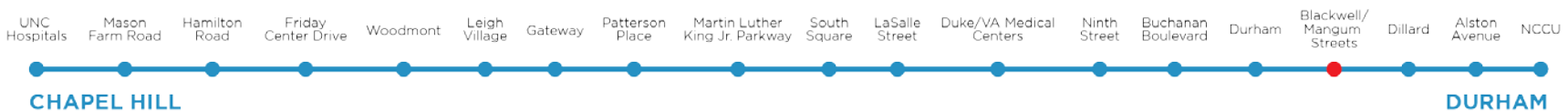
- The additional roadway and parking around the Alston Avenue Station to improve pedestrian and vehicular movements would require the acquisition of one vacant property on Gann Street, two additional residential properties along Colfax Street, one additional residential property on Grant Street, three additional residential properties along Gillette Avenue, and a commercial property (gas station) on Alston Avenue.
- Based on new design information and the advancement in roadway design, additional rights-of-way would be required along the intersections with Alston Avenue. These changes would result in one residential acquisition on Linwood Avenue and one residential acquisition on Dupree Street.
- **Noise and Vibration** - Moderate noise impacts at 11 residential buildings affecting 375 units, one single-family residence and 1 institutional site; severe noise impacts at 2 multi-family structures, affecting an estimated 34 residential units.

As with the Previous Design, the potential adverse impacts of the Proposed Refinements on EJ populations would be minimal compared with the project’s benefits of improved connectivity and mobility; access to jobs, services, education, and

entertainment; pedestrian and bicycle facilities; access to transit; and reliability in transit service. There is also the potential for economic opportunities associated with development near the light rail stations.

## 5.4 Mitigation

The mitigation measures included in the Amended ROD would be applied to the Proposed Refinements and would address EJ impacts resulting from impacts to access and mobility, community cohesion, visual and aesthetics, noise, and displacements. GoTriangle recognizes that some of the specific impacts of the Proposed Refinements may adversely affect EJ populations, particularly with regards to potential displacements. GoTriangle is committed to working with all affected residents to ensure that they are compensated in accordance with provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act. GoTriangle will continue to provide outreach to EJ populations to implement the proposed mitigation strategies effectively.



## 5.5 Assessment of Disproportionately High and Adverse Impacts

The USDOT/FTA definition of a disproportionately high and adverse effect on minority and low-income populations means an adverse effect that: (1) is predominately borne by a minority population and/or a low-income population, or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

**Table 5-3** summarizes the assessment of the potential for disproportionately high and adverse effects associated with the Proposed Refinements. While there are identified impacts to EJ populations, none of these impacts are considered to be disproportionately high or adverse once mitigation measures specified in the Amended ROD and this Supplemental EA are applied.

## 5.6 Offsetting Benefits of Proposed Refinements

The effects and benefits described above would occur in communities with EJ populations as well as non-EJ populations.

The Proposed Refinements would improve vehicular and pedestrian access to and from the D-O LRT and associated facilities. The addition of the proposed Blackwell/Mangum Streets Station would provide greater access to the central business district of Durham, the American Tobacco Campus, and other destinations within the corridor.

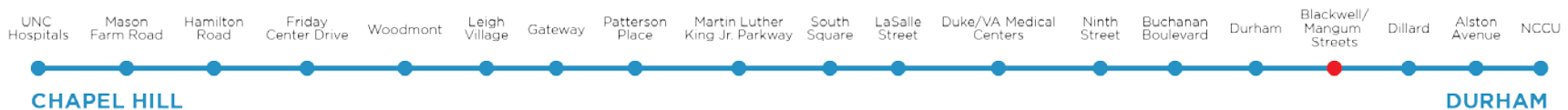
The following main benefits of the Previous Design would apply to, and may increase incrementally with, the Proposed Refinements:

- Employment opportunities due to construction and the potential redevelopment/development opportunities in the areas surrounding stations, which would result in positive economic gains in the form of increased wages and spending.
- Competitive advantages for existing and future businesses located along the corridor due to the additional transportation capacity and accessibility for customers, particularly surrounding the proposed Blackwell/Mangum Streets Station.
- The benefits of pedestrian and bicycle enhancements, connections, and access with the Proposed Refinements would be greater than the Previous Design.
- Relative to the Previous Design the Proposed Refinements would improve:

- Mobility through the project vicinity; connections to existing transit as well as to employment, education, shopping, medical services, recreation, and cultural opportunities; and
- Opportunities to walk and bike to stations and surrounding areas along the corridor, which can provide a health benefit.

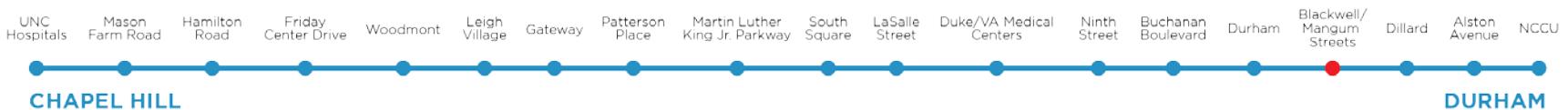
One offsetting benefit identified in the Previous Design was the provisions for commercial business space in the parking deck at Alston Avenue Station. This offset would not be possible with the Proposed Refinement due to the elimination of the parking deck.

While these benefits are distributed throughout the Proposed Refinements study area, they would be experienced to a higher degree by minority and low-income populations due to a higher reliance on transit. The D-O LRT Project will place 13 of the 19 stations in EJ areas, directly improving access and mobility for those populations. The addition of the proposed Blackwell/Mangum Streets Station would further benefit EJ populations by providing increased access to surrounding communities.



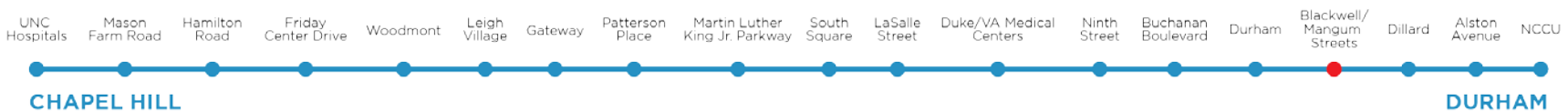
**Table 5-3: Assessment of Disproportionately High and Adverse Impacts to EJ Populations**

| Resource                          | Analysis of Proposed Refinements   | Is Impact Disproportionately High and Adverse? |
|-----------------------------------|--|--|
| Parking Facilities                | An additional 55 public on-street parking space displacements in EJ areas as compared to the Previous Design; however, the Proposed Refinements also would require displacements of parking spaces in non-EJ areas. The intensity of these impacts would not be high and adverse in light of the access improvements provided by the light rail system and availability of parking on adjacent streets. In addition, the parking spaces would be displaced to improve bus operations and service at the Durham Bus Station, which is in an EJ area. Therefore, no disproportionately high and adverse impacts would occur within EJ areas. | No   |
| Pedestrian and Bicycle Facilities | Closure of Blackwell Street to vehicle, pedestrian, and bicycle access between Ramseur Street and Pettigrew Street; connectivity maintained with a signature civic space. Improvements to 9 pedestrian facilities, 5 multi-use paths and 1 bicycle facility within EJ communities included in the Proposed Refinements would be a benefit. No disproportionately high and adverse impacts would occur within EJ areas.   | No   |
| Access and Mobility               | Improvements to access and mobility with the addition of the pedestrian and bicycle facilities included in the Proposed Refinements would benefit EJ populations. Proposed Refinements that avoid adverse effects to historic resources along Pettigrew Street would improve the safety of pedestrians, bicyclists, and motorists. Reduced access to the Boys and Girls Club and intersections of Massey Avenue and Price Avenue with Alston Avenue would occur; however, existing street networks would provide alternative vehicular access. Impacts on EJ populations would not be disproportionately high and adverse.                 | No   |
| Land Use                          | No changes to land uses in EJ areas as compared to Previous Design.  | No   |
| Community Cohesion                | Increased connectivity related to addition of pedestrian and bicycle facilities (noted above) and Blackwell/Mangum Streets Station would benefit EJ populations in the areas of those improvements. The closure of Blackwell Street between Ramseur Street and Pettigrew Street, conversion of Dillard Street to one-way southbound at the NCRR crossing, and reduced vehicular connectivity on Massey Avenue and Price Avenue, while altering travel patterns, would improve safety for travelers. These changes would not result in high and adverse impacts to community cohesion in EJ areas.  | No   |
| Employment                        | Employment benefits to EJ populations would be similar to the Previous Design.   | No   |
| Community Facilities              | Access changes associated with the shift in the location of the Duke/VA Medical Center Stations would not disproportionately affect EJ populations. Closure of the Pettigrew Street driveway at the Smith/Avery Center (John Avery) Boys and Girls Club would reduce circulation flexibility; however, alternative access would be available. The effects of the Proposed Refinements on community facilities would not be high and adversely or disproportionately borne by EJ populations.   | No   |
| Visual and Aesthetic              | Visual effects would increase (from low to moderate) by adding Blackwell/Mangum Streets Station. However, the visual effects of the station in this EJ area would not be high and adverse.   | No   |
| Parklands                         | Impacts to Downtown Durham Trail users as a result of closure of Blackwell Street crossing from Pettigrew Street to Ramseur Street and Trail access provided via a signature civic space would not be limited to low-income and minority populations; therefore, impacts on parklands would not be disproportionately borne by EJ populations.   | No   |



**Table 5-3 (Cont'd): Assessment of Disproportionately High and Adverse Impacts to EJ Populations**

| Resource                       | Analysis of Proposed Refinements  | Is Impact Disproportionately High and Adverse? |
|--------------------------------|---|--|
| Noise and Vibration            | Moderate noise impacts at 11 multi-family residential buildings affecting 375 units, one single-family residence and 1 institutional site (Duke – Center for Documentary Studies). Severe noise impacts at 2 multi-family residences (1 near SW Durham Drive, the other near Snow Crest Trail) with a combined total of 34 affected units. GoTriangle will develop a noise mitigation policy to address mitigation for transit noise impacts, including those at the moderate level, based on FTA's guidance on mitigation. Once this policy is enacted, specific mitigation measures, such as installation of sound barriers, earth berms, sound insulation, or other measures, will be determined at locations that qualify for mitigation. No high and adverse noise impacts would occur with mitigation in place.   | No   |
| Safety and Security            | Reduced pedestrian/vehicle conflicts and improved conditions for accessing stations with the addition of bicycle, pedestrian, and multi-use facilities in EJ areas would be a benefit from safety and security changes included in the Proposed Refinements. No high and adverse impacts would occur.   | No   |
| Acquisitions and Displacements | An additional 19 full displacements in EJ areas: 3 residential displacements at Patterson Place Station, 2 commercial displacements on Garrett Road between Patterson Place and Martin Luther King Jr Parkway Station, 1 multi-family residential and 3 commercial displacements at Martin Luther King Jr Parkway Station, 1 institutional use (Indigo Montessori School) between Buchanan Boulevard and Durham Stations, 6 residential and 1 commercial displacements in EJ areas near Alston Avenue Station and 2 residential displacements along the Alston Avenue corridor. However, an additional + 12 full displacements would occur within non-EJ areas as well, a similar number of affected properties. The mitigation commitments identified in the Amended ROD would be applicable and appropriate to address the acquisition impacts of the Proposed Refinements. Therefore, high and adverse impacts to EJ populations are not expected. | No   |
| Construction                   | Measures to mitigate construction impacts from Proposed Refinements in EJ areas, including new construction techniques at Farrington Road Bridge Underpass, Shannon Road/University Drive Underpass, and Erwin Road Elevated Structure, closure of Alston Avenue intersections with Massey Avenue and Price Avenue, and temporary reroute of the Downtown Durham Trail during construction of the Blackwell/Mangum Streets Station would avoid high and adverse impacts in EJ areas.  | No   |
| Indirect and Cumulative        | No new indirect or cumulative impacts in EJ areas as compared to Previous Design.   | No   |



## 5.7 Summary

Taking all factors described above into account, the Proposed Refinements would not have “disproportionately high and adverse effects” on EJ populations. As previously stated, mitigation measures identified in the Amended ROD would address impacts from light rail operations and construction activities that may affect EJ populations. Nonetheless, GoTriangle recognizes that some of the specific impacts of the Proposed Refinements may adversely affect EJ populations, particularly with regards to potential displacements. GoTriangle is committed to working with all affected residents to ensure that they are compensated in accordance with provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act. GoTriangle will continue to provide outreach to communities with EJ populations to implement the proposed mitigation strategies effectively.

