**AREA OF NEED SCORE** - also called the Priority Population Score (1 to 5) is a combined weighted score measuring five population characteristics as identified in the Metro Transit Mobility Framework. For each Census Block Group in King County these 5 characteristics are measured and ranked 1 to 5 by quintiles. The quintiles represent the total number of persons within each Census Block Group, within each category. Each score is then combined using a weighting methodology (see below) for a final score of 1 (low need) to 5 (high need).

**Weighting**

1 - Persons of Color - 40 % of score

2 - Poverty - 30% of Score

3 - Limited English Proficiency - 10% of score

4 - Disabled population - 10% of score

5 - Foreign Born Population - 10% of score

*The higher the score, the greater the intensity of these factors within a Census Block Group. Census Block Groups with a score of 5 = the highest areas of need. Data from: 2014 - 2018 American Community Survey. (Census Bureau)*

*Creating Equity Scores for Block Groups*

1. Download block-group level ACS data for the variables defined in the table below:

|  |  |
| --- | --- |
| **Priority Population Metric** | **Census Variable Calculation** |
| **Population living 200% below the federal poverty line** | C17002e1 - C17002e8 |
| **Population that is foreign-born** | B99051e5 |
| **Population that is non-white or Hispanic** | B03002e1 - B03002e3 |
| **Limited-English speaking household** | C16002e4 + C16002e7 + C16002e10 + C16002e13 |
| **Population living with a disability** | B23024e3 +B23024e18 |

1. Create a quintile score for each demographic variable. Each block group received a score of 1-5 for each of the five variables. The quintile is based on total population within each block group meeting the criteria.
2. Each variable was multiplied by the weights in the table below. The weights reflect the County’s commitment to lead with race and our awareness that the margin of error on the foreign born, limited English-speaking household, and disability data is quite large.

|  |  |
| --- | --- |
| **Priority Population Metric** | **Variable Weight** |
| **Population that is non-white or Hispanic** | 40% |
| **Population living 200% below the federal poverty line** | 30% |
| **Population that is foreign born** | 10% |
| **Limited-English speaking household** | 10% |
| **Population living with a disability** | 10% |

1. The weighted scores are then summed to create an equity index for each block group. Each block group has a score of 1-5.

**ROUTE OPPORTUNITY INDEX SCORE**: given to each route based on what percentage of the route’s stops are within the highest areas of need. Scores range from 1 to 5.

**Methodology:**

For each route (school, custom, Community Connections and Sound Transit routes excluded):

1 - calculate the number of stops (both IB/OB) for a route

2 - calculate the number of stops that fall within a highest Area of Need Census Block Group (score of 5).

3 - calculate the percent of all stops on a route that fall within a highest Area of Need census block group

4 - calculate an Opportunity Index Score for each route using the percentiles created in step 3: rank the percentages for all routes into quintiles (1 = lowest/5 = highest) and give each route a score of 1 to 5

An Opportunity Index Score of 1 = the route is within the lowest quintile of percentage of stops within the highest Area of Need

An Opportunity Index Score of 5 = the route is in the highest quintile of percentage of stops in the highest Areas of Need

|  |
| --- |
| **Breakdown of Opportunity Index Scores:**  Full Network March 2020 = 217 routes |
| Routes with Scores = 180  Breakdown by Score |
| 5 = 41 routes |
| 4 = 34 routes |
| 3 = 35 routes |
| 2 = 34 routes |
| 1 = 36 routes |