

6.5 Main Line Track Populations

Analysis of the longest section of mainline route from the Bowden rail yard to the Hialeah Yard was accomplished by filtering all sections of the FECR rail line (from the GIS rail map layer) to include only the rail sections from the approximate southern boundary of the Bowden Yard to the approximate northern boundary of the Hialeah Yard. A query of the census layer data was run to identify only the relevant census blocks that were within 1.6 miles (2500 m) of either side of the rail line. The results of this map query identified 37,837 census blocks that met the criterion. The routes to the Port of Miami and Port Everglades intermodal facilities are largely covered by this analysis, except for the individual port lead tracks.

The mainline census blocks were then grouped into one latitudinal-mile sections (north to south) along the rail line resulting in 314 consolidated census blocks. These consolidated census blocks, referred to here as “mile markers,” represent the population per mile along the FECR mainline. The FECR mainline runs approximately north and south, but these mile markers are not the same as their rail mile markers.⁶¹ The population densities of these 314 larger consolidated census blocks were directly used in the QRA analysis to represent the population along the rail line.

A plot showing the population density from the Bowden Yard (Mile Marker 1) to the Hialeah Yard (Mile Marker 314) is provided in Figure 40. The highest population densities are near the Hialeah Yard, which lies approximately ten miles northwest of Miami. The maximum population density was found at Mile Marker 308, with a population density of approximately 11,800 people/mile².

The population density profile is overlaid on an aerial image of the FECR rail line map, provided in Appendix E.

⁶¹ The mainline from Hialeah Yard to Bowden Yard is actually 364 miles long; however, by using latitude to estimate mile marker, the analysis resulted in 314 latitudinal miles which do not correspond to the FECR mile markers.