3. FACTORS AFFECTING TRANSIT RIDERSHIP

Transit ridership levels are affected by population and employment densities and major generators, such as shopping malls, schools and universities. The population groups most likely to use transit include youth, seniors and lower-income households. The price and availability of parking and the amount of congestion in an area also affect transit ridership. This section of the report outlines the factors affecting transit ridership in the Study Area.

Population and Employment Density

Population Density

The Study Area has some of the densest areas of residential population in the region (see **Figure 18)**. The highest residential density in the Study Area is bounded by I-35E, Maryland Avenue, White Bear Avenue and Burns Avenue. Areas of residential density of more than 30 persons per acre are located between Maryland and Larpenteur near I-35E. There are additional pockets of residential density centered on the redeveloped Phalen Village site south of Maryland and Prosperity.

The employment location of those living in the Study Area is also of interest since it significantly affects travel behavior. **Figure 19** displays where those living in the Study Area work.

Employment Density

The majority of the employment density in the region focuses on downtown Minneapolis and St. Paul. As shown in **Figure 20,** employment density in the Study Area is most concentrated in the area bounded by I-35E, Maryland, Arcade and East 7th Street. Additional pockets of high and medium employment are scattered throughout the Study Area. Several of these pockets are adjacent to I-94 between White Bear Avenue and the 3M complex east of McKnight Road.

The residential location of those working in the Study Area provides insight regarding employees' travel patterns. **Figure 21** depicts where those working in the Study Area live.

Figure 18-Map of Residential Density

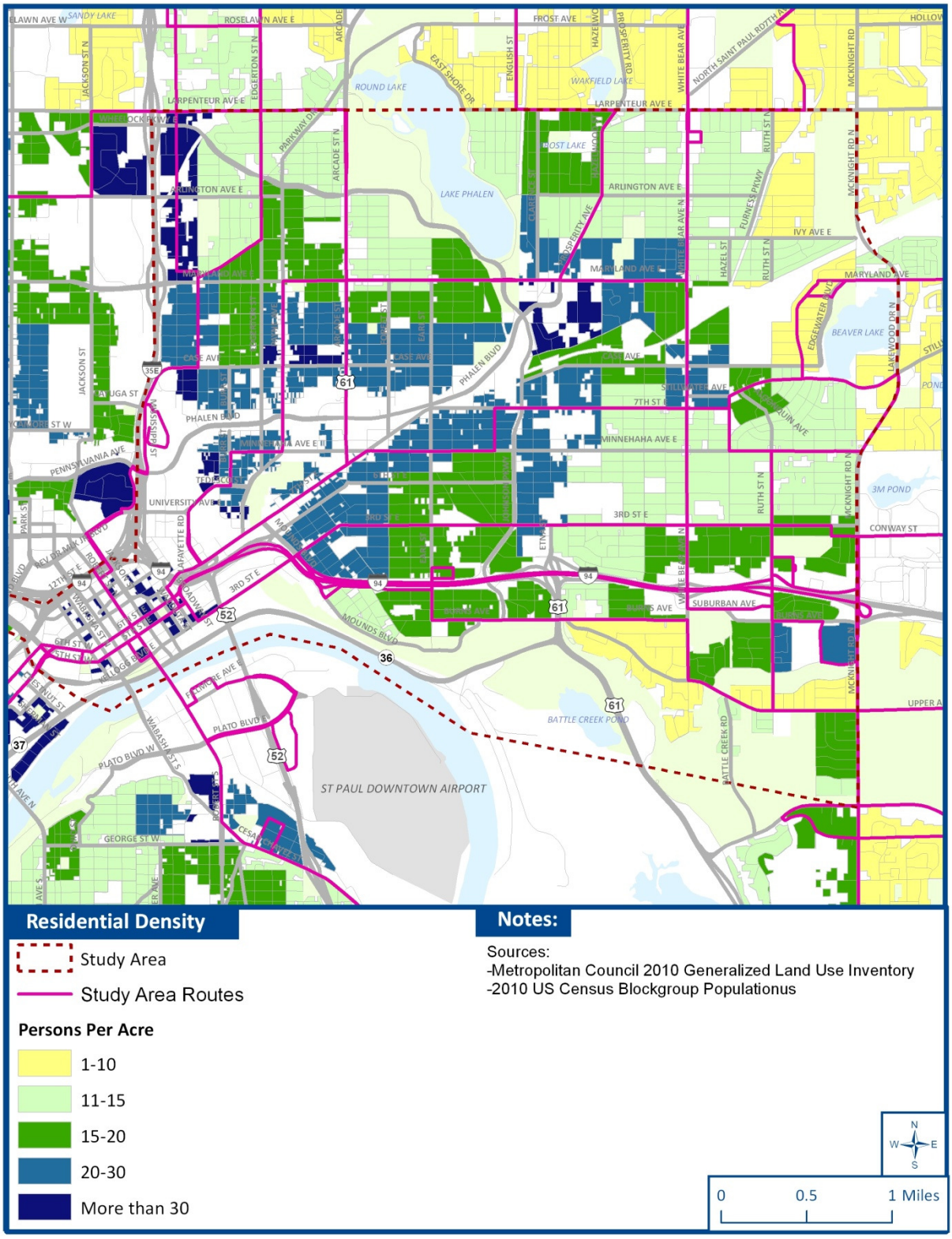


Figure 19-Map of Study Area Labor Shed

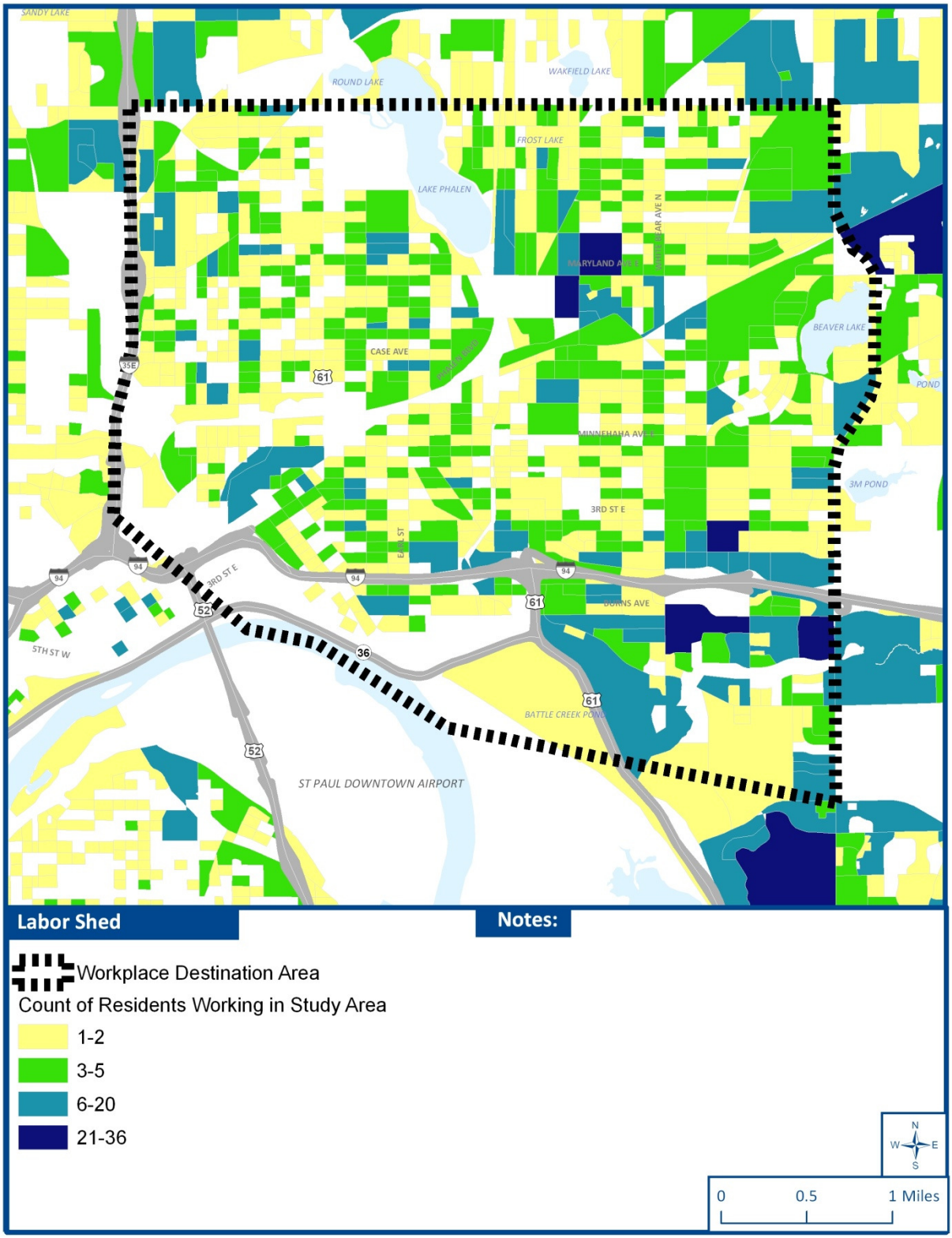


Figure 20-Map of Employment Density

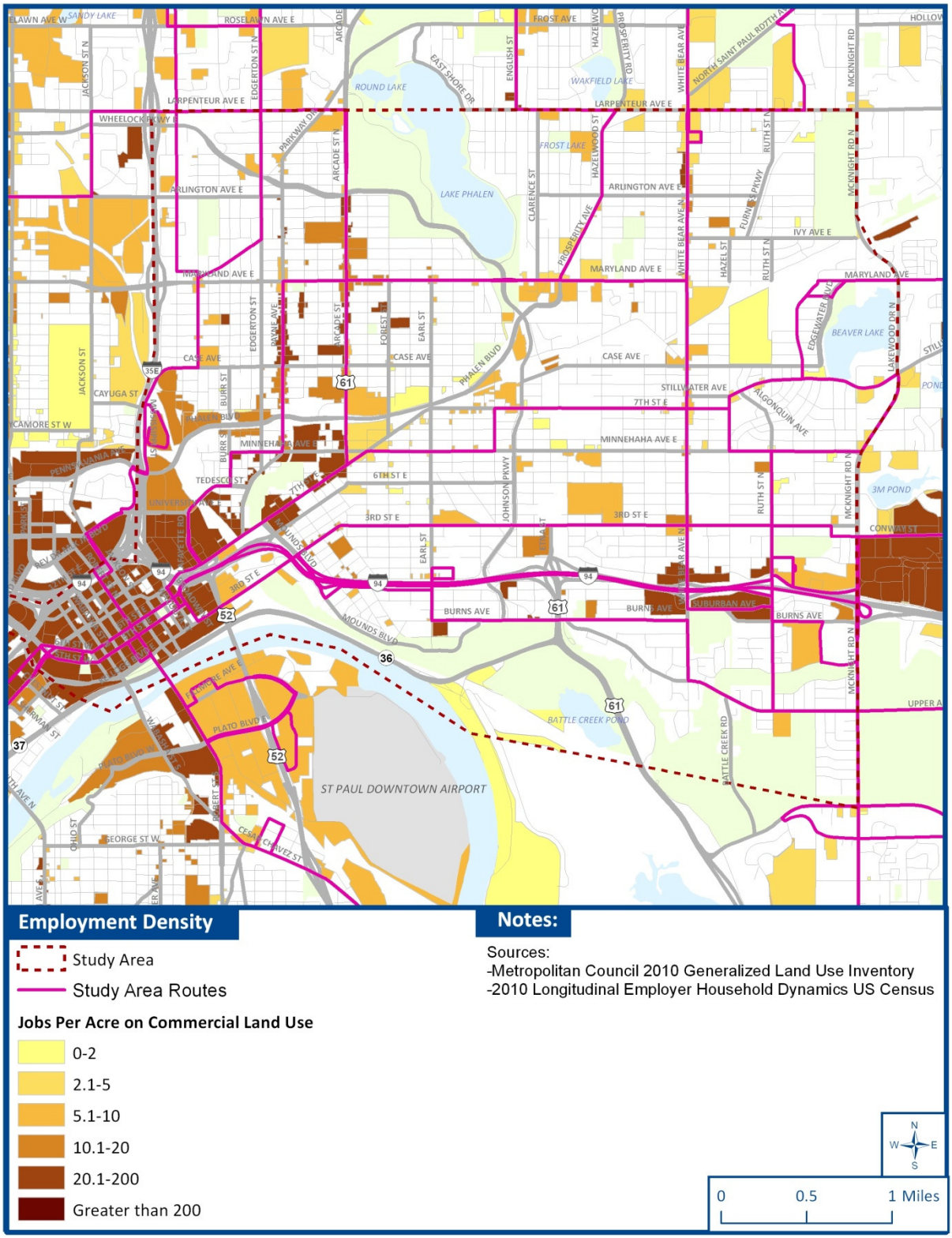
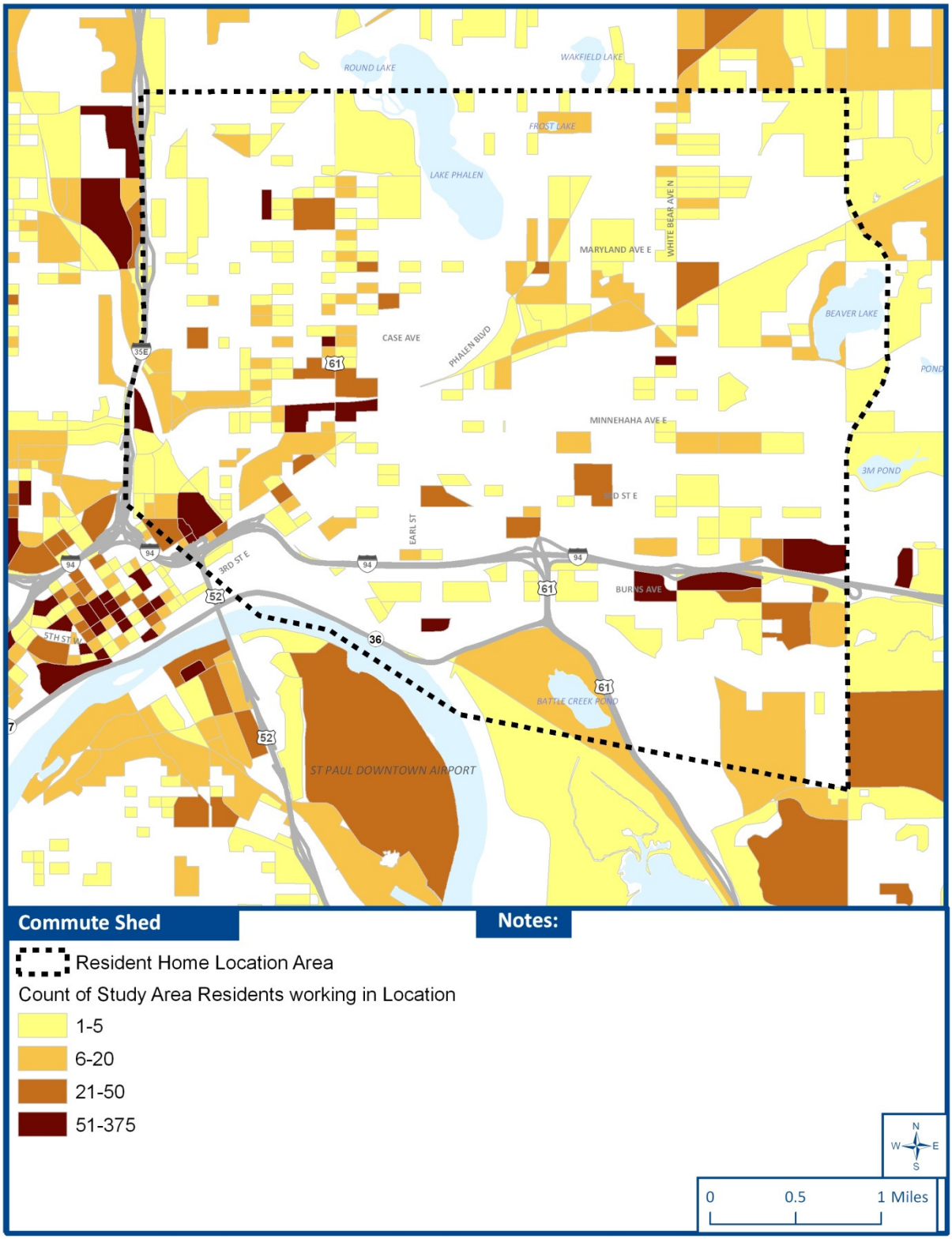


Figure 21-Map of Study Area Commute Shed



Schools and Student Population

Student Population

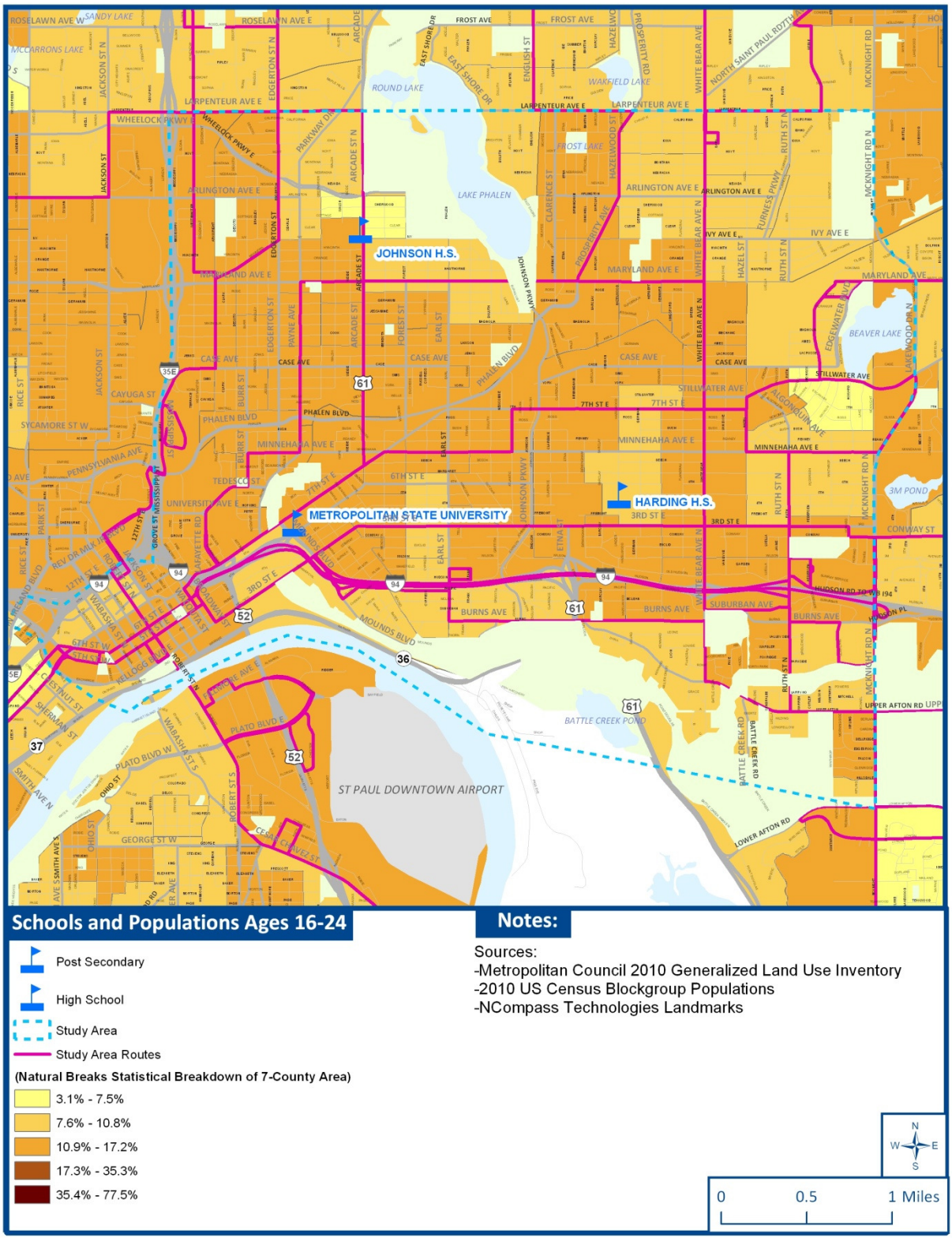
Students contribute to transit ridership since many do not own cars, cannot afford to pay for fuel and parking or would prefer to take transit. **Figure 22** shows Fall 2011 enrollment of 11,016 students at all St. Paul high schools and post-secondary schools in the Study Area. **Figure 23** presents the current locations of high schools and post-secondary schools in the Study Area, as well as the percentage of the population in the age category, 16 years to 24 years of age. There are two large high schools in the Study Area: Harding High School, near East 3rd Street & Hazelwood; and Johnson High School, on Arcade Street & Ivy Avenue.

The youth market is particularly important to transit in both the short term and long term. In the short term, youth are dependent on others for mobility making them a prime market for transit, especially with after-school travel. The long-term potential is based on retaining them as riders into their adult lives by providing superior service that meets their changing mobility needs. A key element for refining transit service in this sector will be consideration that universities, colleges and high schools have good connections to their student communities.

Figure 22-Enrollments in High Schools and Post-Secondary Schools - Fall 2011

High Schools and Post-Secondary Schools	Weekday Students
Metro State University, East 7th Street, St. Paul	6,969
Harding High School, 6th Street East, St. Paul	2,400
Johnson High School, Arcade Street, St. Paul	1,647
Total	**11,016**

Figure 23-Map of High Schools and Post-Secondary Schools and Population Ages 16 to 24 Years Old



Demographics

Senior Population

Like the youth population, the senior population is a market segment that has special mobility needs that can be served well by transit. Transit can supplement driving at night or in poor weather and replace the personal vehicle when driving is no longer possible. Seniors generally use transit to access community activities, medical appointments and shopping.

Areas with the greatest senior population density are distributed throughout the study area. **Figure 24** shows the senior population concentrations within the Study Area as well as senior housing sites and nursing homes. St. Paul has a notable concentration of seniors living in downtown and south of downtown near Robert and Plato. Concentrations of seniors can also be found in Hi-Rise residential centers along East 3rd Street and Burns Avenue and at the north east corner of the study area near White Bear and Larpenteur avenues.

Households in Poverty

The areas with greatest amount of poverty are situated near the downtown/urban core of St. Paul. The Census Bureau uses a set of income thresholds that vary by family size and composition to determine who is in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation. **Figure 25** shows the greatest concentrations are located just north of downtown St. Paul. These areas of high poverty are also known for their ethnic diversity and are often homes to first generation immigrants. Effective transit can be the substitute for the expense of automobile ownership and contribute in a strong way to the climb out of poverty. **Figure 26** maps household incomes to complete the picture of the economic situation of residents in all parts of the Study Area.

Minority Population

The Federal Transit Administration defines minority persons as persons who identify themselves as American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino Populations, and Native Hawaiian and Other Pacific Islander. **Figure 27** shows minority populations using 2010 Decennial Census Data.

Figure 24-Map of Population Aged 65+

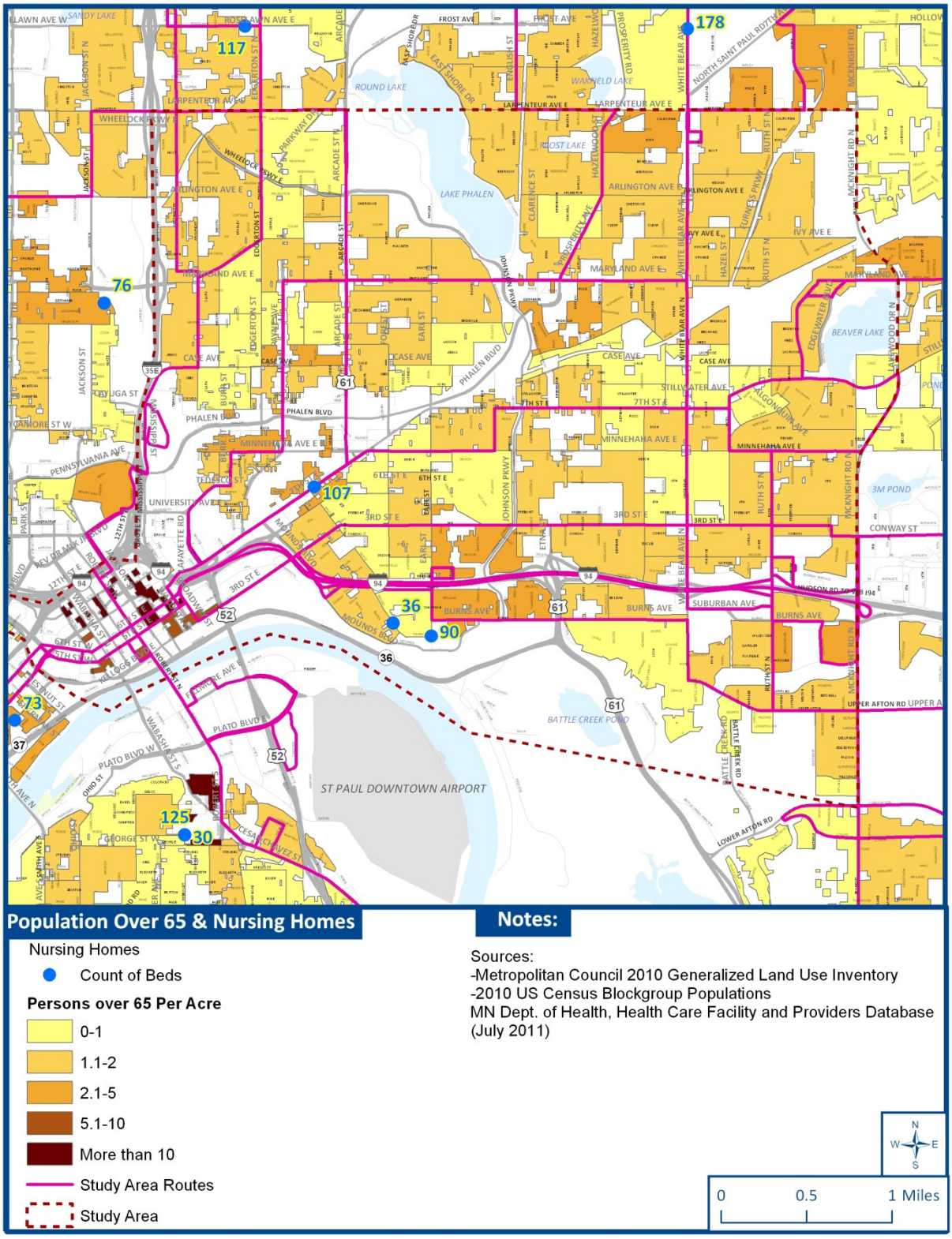


Figure 25-Map of Population in Poverty

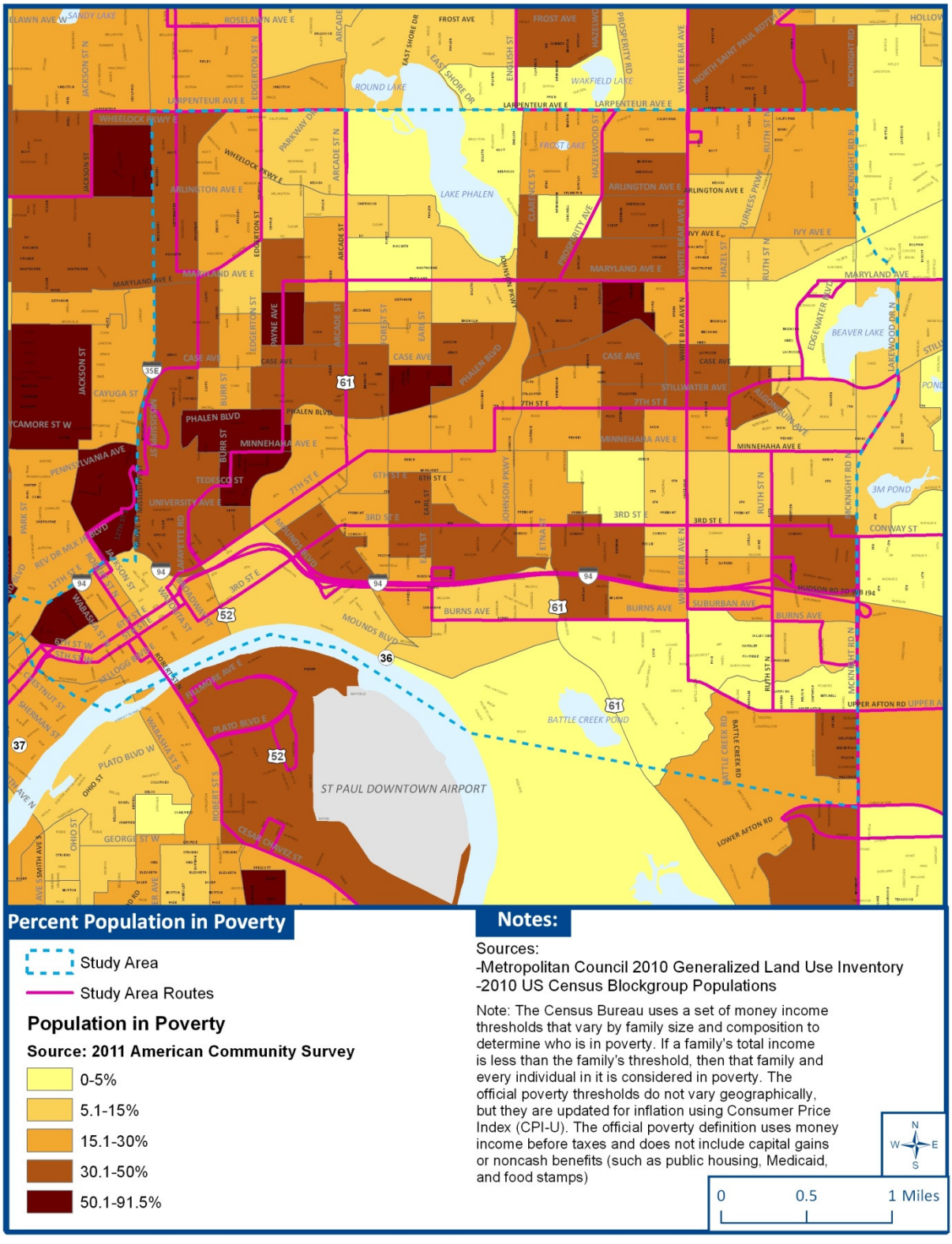


Figure 26-Map of Household Income

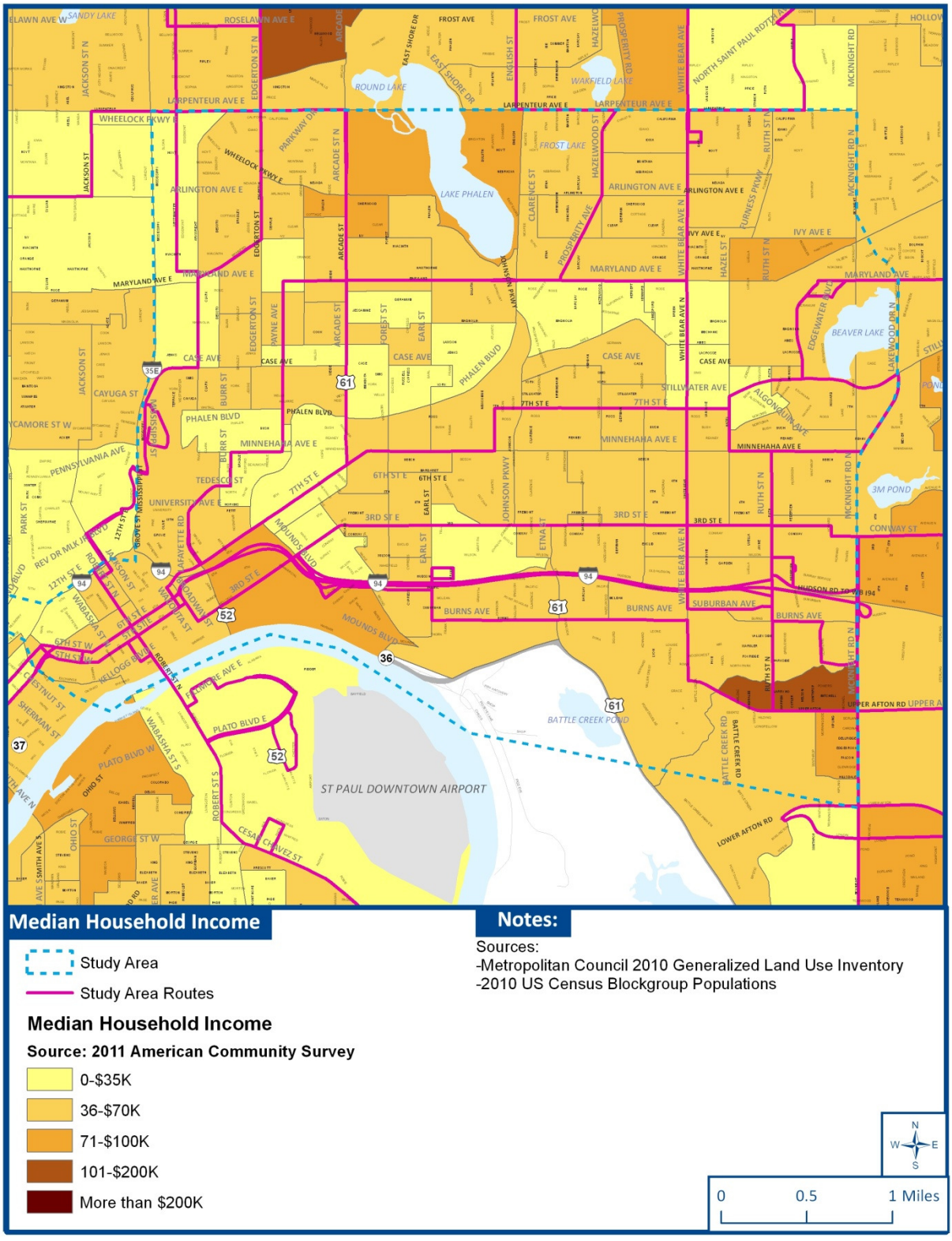


Figure 27-Map of Minority Population