

# The Glendale Public Library Uses GIS to Plan the Future

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The Glendale Public Library Service Area Study was an important step to implement library service planning improvements that began with the 2001 Glendale Public Library Revisioning Process. In order to tailor library services to meet the specific needs of Glendale residents and businesses, CIVICTechnologies' multi-disciplinary team was retained to 1) provide a 20-year strategic approach for developing and delivering library services for the residents and businesses of the City of Glendale; 2) determine the current library service area and population for the Central Library and four branch libraries; 3) project future 2025 library service areas and populations for the Central Library and for each branch library; 4) provide preliminary building programs in order to guide development of library facilities; and 5) provide order of magnitude construction budget allowances for the development of new and renovated library facilities.

The City of Glendale is the third largest city in Los Angeles County with a 2000 population of 194,973. Located 10 miles north of Downtown Los Angeles, the City's population is expected to grow by 12% to approximately 217,000 people in 2025. The Glendale Public Library has a 92,000 square foot central library, five branch libraries, and a specialty art and music library. With the exception of one branch library that opened in 2004 all library facilities were constructed over 30 years ago when the City's population was approximately one third less than its 2000 count.

The use of GIS was instrumental in developing current and future library service areas and to assess library use patterns and user needs. ArcGIS with Spatial Analyst Extension was used.

Library cardholder data was instrumental in analyzing library use patterns. Data was limited to "active" cardholders who last used their cards within a specified date range. To protect privacy, cardholder names were excluded from the transferred data. Cardholders were mapped according to their street address. 89% or 63,687 out of 71,797 cardholder records extracted from the Library's ILS database were successfully mapped.

Of the 63,687 active cardholders, 12,294 had items on loan as of a specified date. While this represents a "snapshot" in time, Library staff believes that it is a typical representation of borrowing patterns. Because cardholders often use multiple facilities, the facilities they frequent were analyzed based upon where the majority of their items were physically checked out. "Majority" is defined as two-thirds or more of the total items a cardholder had on loan as of the specified date.

Service Areas: To determine new service areas, the proportion of items borrowed by patrons in current service areas from each facility in the library's overall system was examined, *Figure 1 Proportion of Items Borrowed from Each Library*. The size of the circle represents the number of items borrowed relative to the total number of items borrowed system-wide (i.e., the circle or number of items borrowed at Chevy Chase is smaller than the circle or number of items borrowed at the Central Library). This map shows: 1) cardholders in the Central Library service area checked out 82 percent of their items from that facility, about nine percent from the Bookmobile, and a few items from the Casa Verdugo Branch Library; 2) cardholders in the Casa Verdugo service area checked out approximately 57 percent of their items from the Central Library, and only 26 percent from the Casa Verdugo facility itself; and 3) cardholders in the Grandview Branch Library service area checked out approximately 46 percent of their items from that facility, about 33 percent from the Central Library, and about five percent from Casa Verdugo.

The 92,000 square foot Central Library strongly attracts people living in the nearby Casa Verdugo and Grandview service areas. Both facilities are outdated and cannot accommodate large collections, meeting room space, programming spaces or a sufficient number of computers. A plan to consolidate the Casa Verdugo and Grandview branch libraries into one new, larger facility relatively far away from the Central Library was recommended. After analysis, six new service areas were recommended.

In addition to the library use analysis, several demographic categories were analyzed. Three categories yielded unique information to help shape library services.

Age: there are a high percentage of juveniles (ages 0 to 14), *Figure 2 Juvenile Population*, accounting for approximately one-quarter of the total population with pockets up to 60 percent living in the very southern and northern parts of the city. Conversely, there are a high percentage of adults (ages 18 and over), *Figure 3 Adult Population*, north of State Route 134 and in the foothill areas. It was recommended that Library services in the southern and northern parts of the city plan collections and specialty centers that would focus on homework support and meet age-based community needs.

Population density and growth: the highest population density in 2000 and projected for 2025 is located south of State Route 134 and along Glenoaks Boulevard in the northwest portion of the city, *Figure 4: Projected Population Density 2025*.

Based upon population growth, library borrowing patterns, and community input obtained over time, it was recommended that two new branch facilities be developed: one in the southern most portion of the city and the other near Glendale Community College to serve the northeast portion of the city.

Ethnicity: Glendale is a highly ethnically diverse city and has a large foreign-born population. Each census tract in the City has no less than 25 percent of the total population as foreign-born, *Figure 5: Foreign-Born Population*. The highest percentage is located south of State Route 134 with at least 46 percent foreign-born and one high concentration area with up to 75 percent foreign-born. Glendale is home to a large Armenian population and a large Iranian population that is ethnically Armenian, among others. Library services and facilities should be planned to account for the unique services of large foreign-born populations.

The library services strategy builds upon the strengths of the Library system (a large Central Library); corrects deficiencies (small branch libraries on small sites that will not accommodate expansions and the lack of branch service in the most densely populated southeastern part of the City); accounts for current improvements (the new Pacific Park Branch Library); and takes into account projected population growth. GIS played a central role in developing study recommendations accepted by the Glendale City Council including 2025 library service areas, *Figure 6: Recommended Service Area Map*, and the user needs assessment that underlies preliminary building programs for new facilities.

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Figure 1. Proportion of Items Borrowed from Each Library

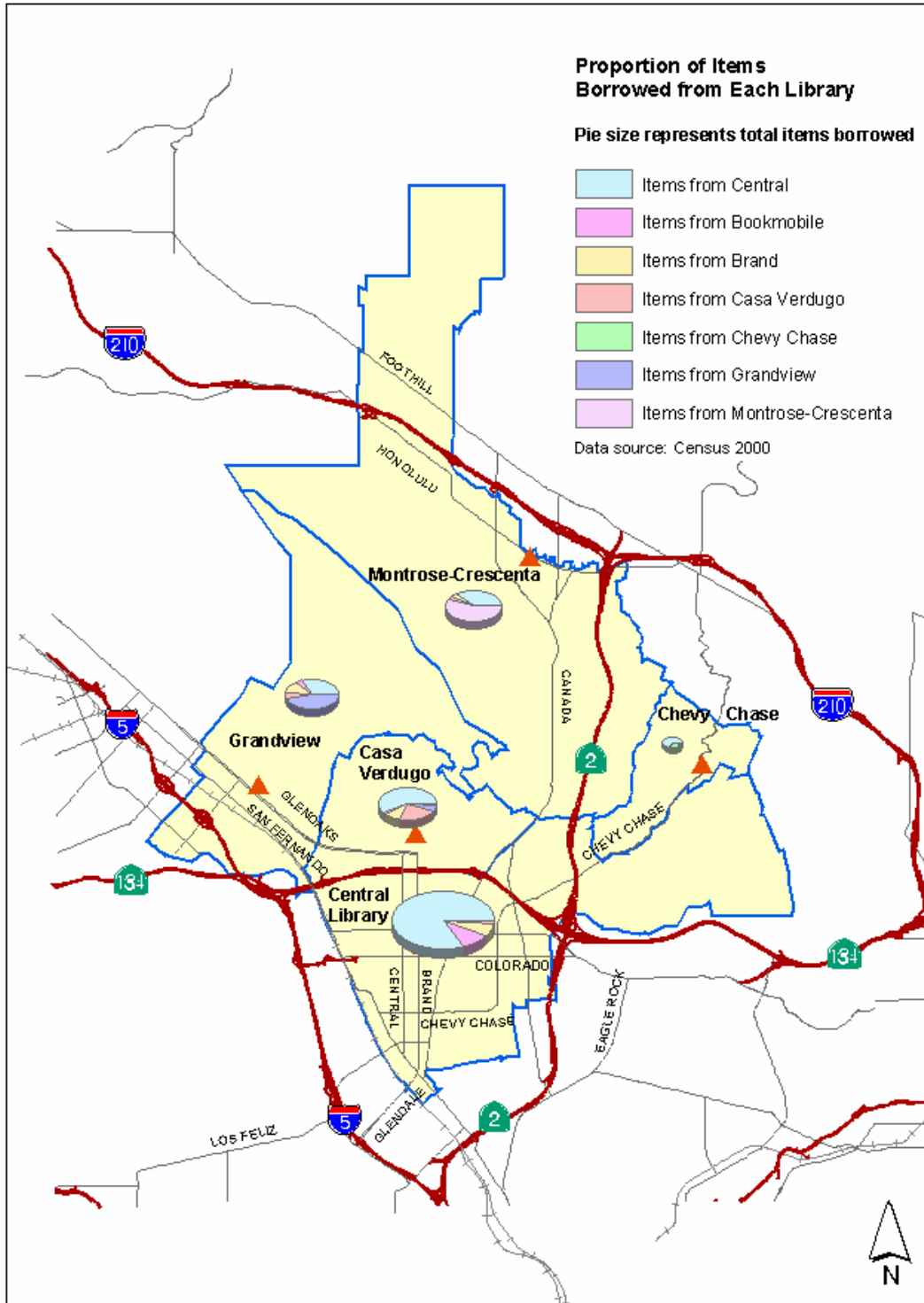


Figure 2. Juvenile Population

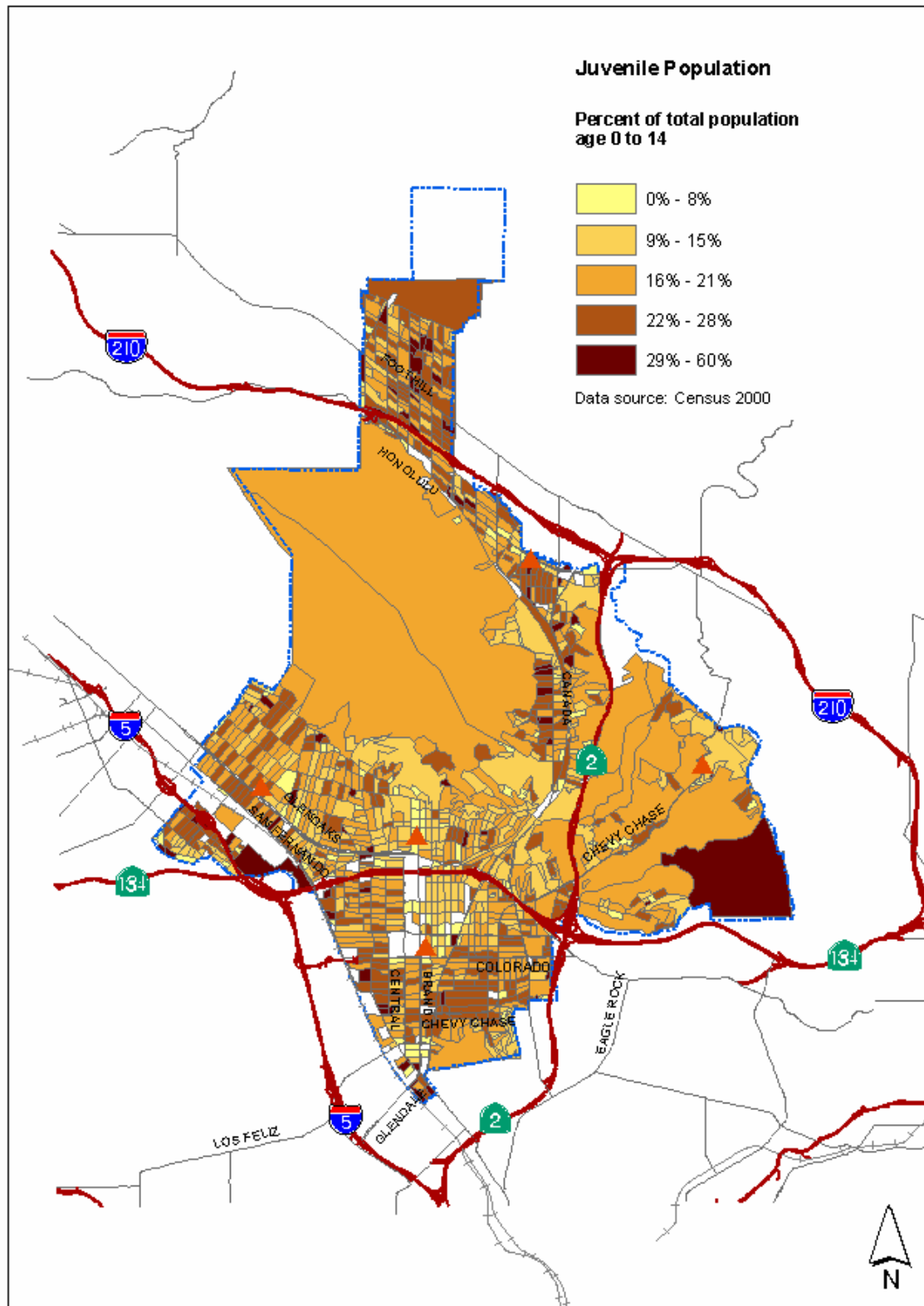


Figure 3. Adult Population

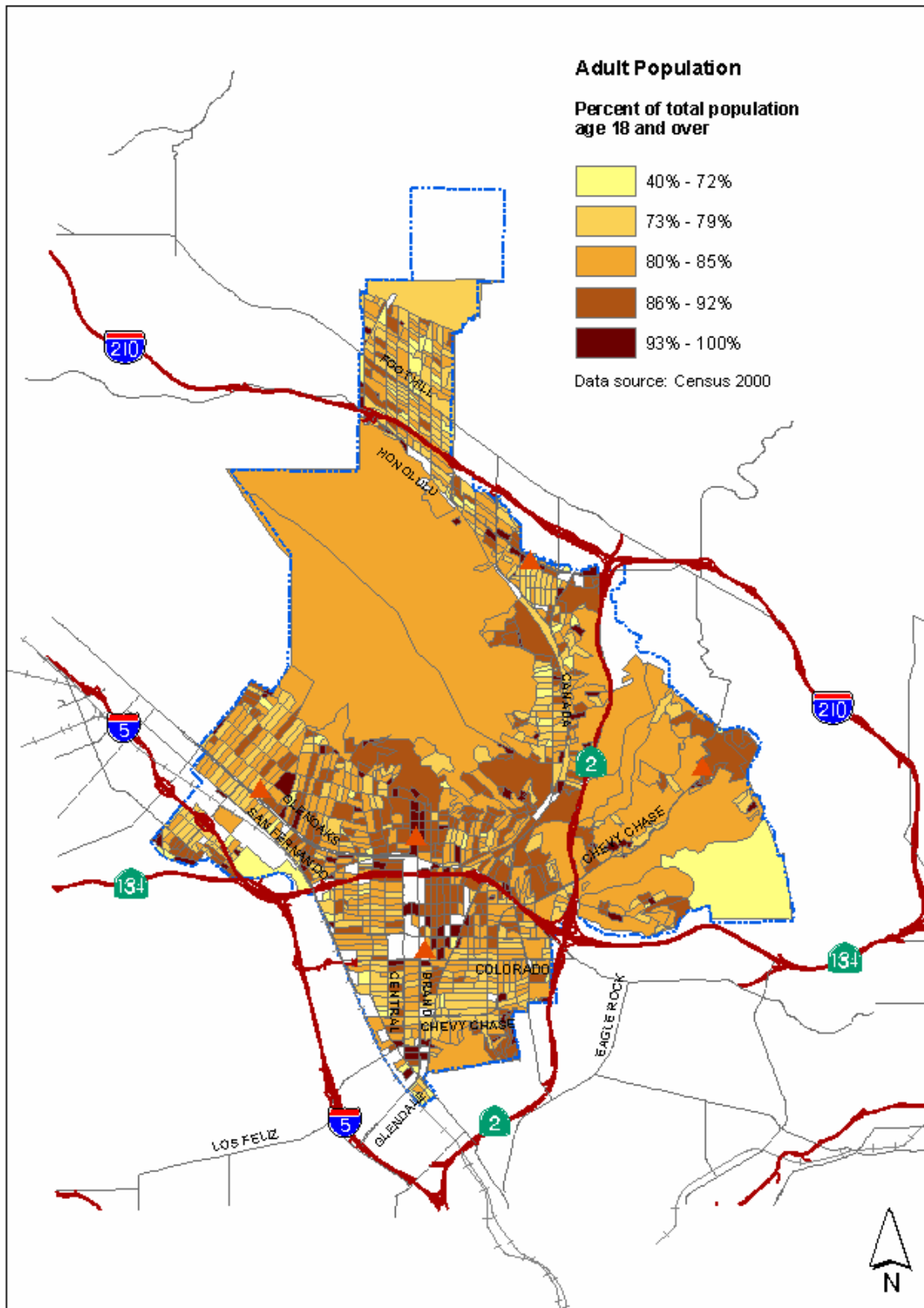


Figure 4. Projected Population Density 2025

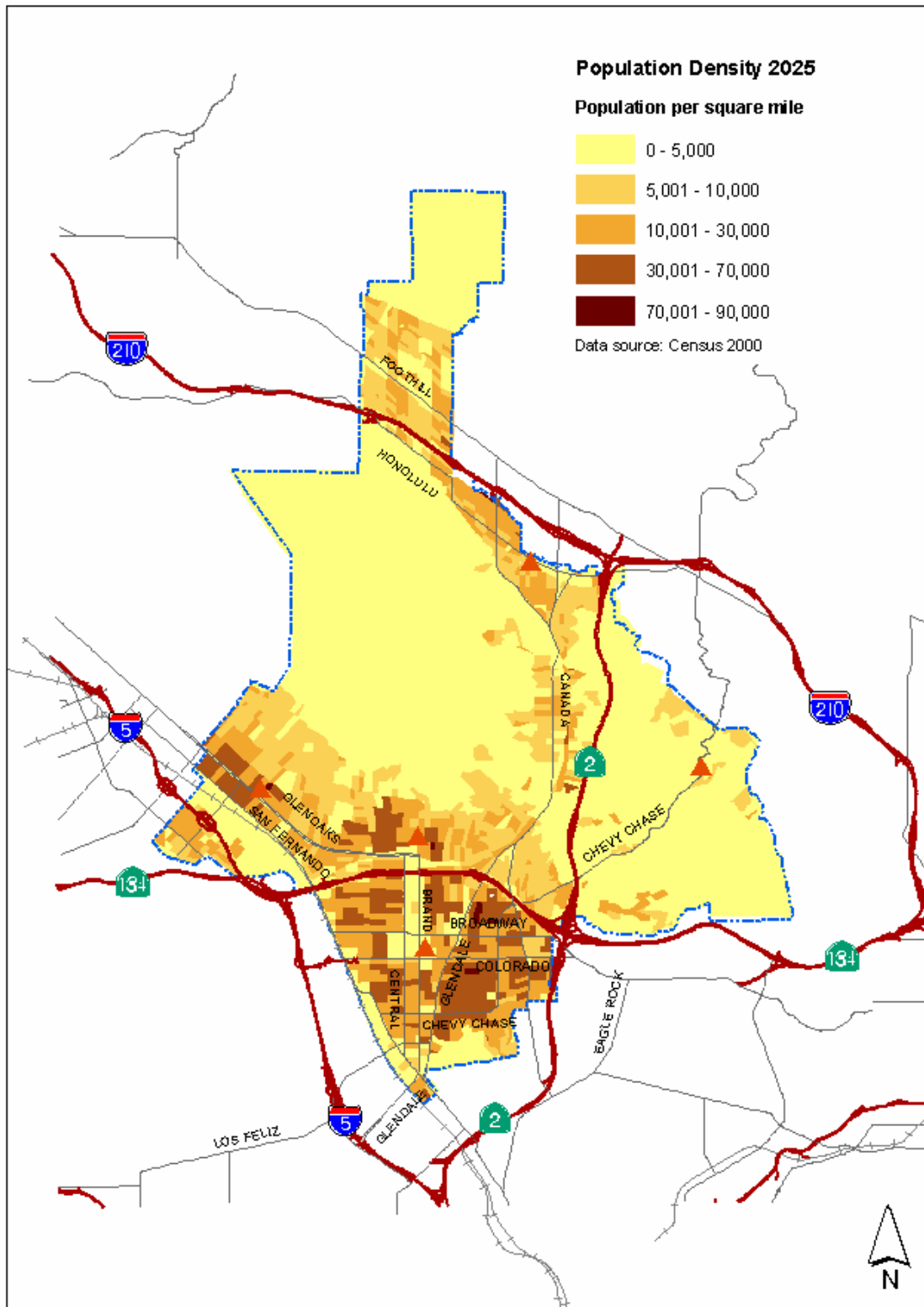




Figure 6. Recommended Library Service Area Map

