

APPENDIX B. Environmental Justice Evaluation

Introduction

The U.S. Department of Transportation has issued a final order on Environmental Justice. This final order requires that metropolitan planning organizations, like Anchorage Metropolitan Area Transportation Solutions (AMATS), identify and address disproportionately high and adverse public health and environmental effects of transportation policies, programs, and activities on low-income and minority populations. The purpose of this appendix is to conduct such an evaluation of the 2025 Long-Range Transportation Plan (LRTP) (prepared in 2005). The analysis contains three parts: (1) analysis of the transportation needs of low-income and minority populations; (2) determination of whether the benefits and burdens of the existing and proposed transportation system investments (contained in the LRTP) are distributed equitably among target (low-income and minority) and non-target population within Anchorage; and (3) analysis of the spatial relationship between minority and low-income areas and existing and future employment concentrations to determine whether there is a potential spatial mismatch between employment and these populations that needs to be addressed in the LRTP.

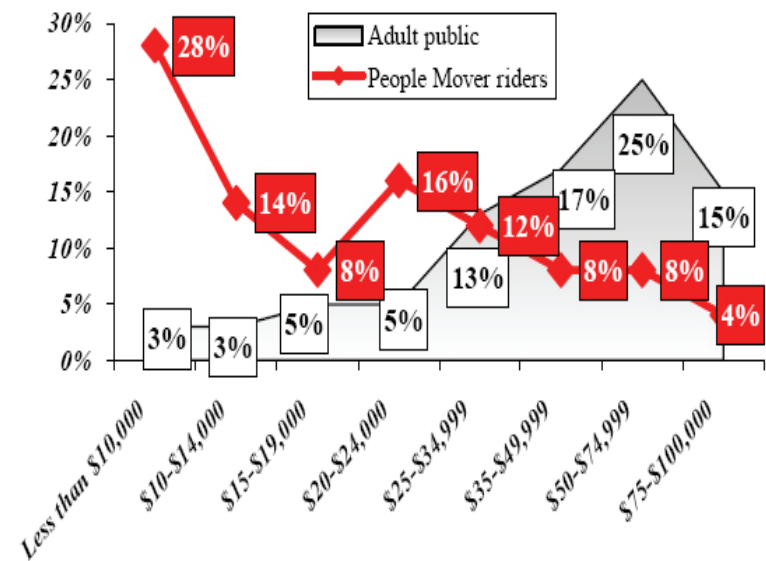
Transportation Needs of Low-Income and Minority Populations

From a review of the 2000 U.S. Census and locally gathered survey information, it appears that low-income and minority populations are disproportionately dependent on the public transportation system. According to 2000 Census data, households that fall in the category of less than 80 percent of the median income are twice as likely to own no vehicle. (Thirteen percent of these households do not own a vehicle, compared to 6.2 percent of the entire population.) The percentage of households without a vehicle is much higher among the very poor. (Twenty-eight percent of households that earn less than \$20,000 per year own no vehicle.)

It is not surprising that as a result of the low vehicle ownership, low-income and minority populations constitute a higher percentage of bus riders.

According to a 2001 telephone survey conducted by People Mover, there is a wide difference between the household income of People Mover riders and the general adult public. Although only 3 percent of the general adult public reported income of less

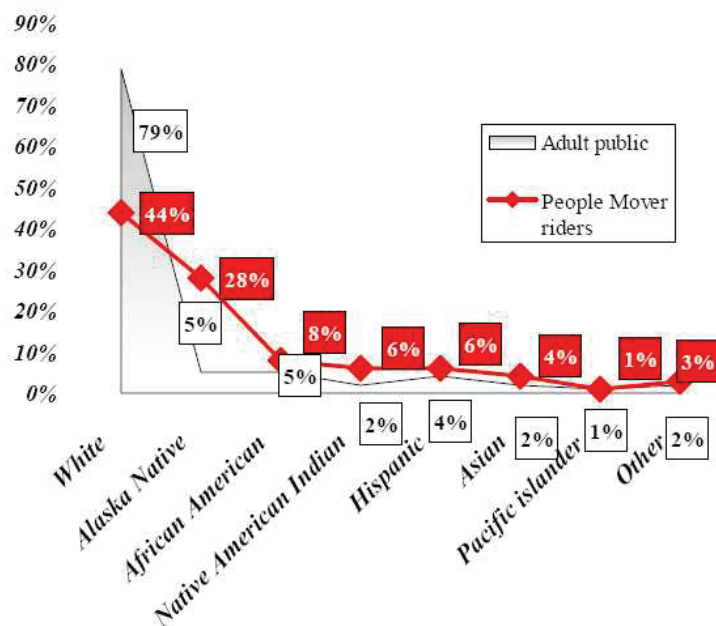
Figure 1. Comparison of People Mover Riders' Income to that of General Adult Public in Anchorage Telephone Sample



Sources: People Mover onboard survey, August 2001, and telephone household survey, July 2001

than \$10,000, 28 percent of People Mover riders reported incomes at that low level (see Figure 1). There is also a substantial difference in the ethnic composition of People Mover riders and the general adult public. Only 44 percent of People Mover riders self-identify as “white” while 79 percent of the adult public identifies itself as “white.” In addition, 28 percent of the riders surveyed identify themselves as “Alaska Natives” while only 5 percent of the general adult public population identifies itself as Alaska Native (see Figure 2).

Figure 2. Comparison of People Mover Riders’ Ethnic Origins to those of General Adult Public in Anchorage Telephone Sample



Sources: People Mover onboard survey, August 2001, and telephone household survey, July 2001

Similarly, all other minority ethnic groups in the general population form a somewhat greater proportion of the People Mover ridership.

The demonstration of a higher dependence on public transportation by low-income and minority populations should not be construed to mean that these groups do not benefit from highway improvements. After all, 68 percent of households with income less than \$30,000 drive alone to work, compared to 76 percent of all Anchorage

households (2000 U.S. Census). Nevertheless, it is apparent that low-income and minority populations will receive a substantially higher benefit from bus service improvements compared to other non-target populations. (Of households with incomes less than \$30,000, 4.3 percent take the bus to work, compared to 1.6 percent of all households.)

Benefits and Burdens of LRTP Projects

The LRTP contains many recommendations for transportation improvements, including highway, transit, pedestrian, bicycle, and transportation demand management strategies. Recommendations that have the

greatest impact on low-income and minority populations are typically found in the road and public transportation sections of Chapter 8.

Public Transportation

The People Mover bus transit system is the primary means of public transportation available to residents of Anchorage. The LRTP makes many recommendations to improve the existing bus system, including the following:

- Transit service should provide direct connections between homes and key employment and commercial districts.
- The top transit routes that produce the highest ridership—Routes 1, 3, 7, 9, 15, 36, 45, and 102—should move to more frequent service, 15-minute intervals in morning and afternoon commute periods and every 30 minutes in other hours.
- Other routes should operate at 30-minute frequency all day.
- Bus Rapid Transit commuter service on the Glenn Highway during peak periods should be implemented to provide 6- or 10-minute service to ease congestion and deliver riders to employment centers.
- Transit service should be timed to enable easy connections (timed transfers) between routes.
- Routes, the number of stops, and placement of stops should be optimized for convenience and faster service.
- Modern buses should maximize comfort, efficient loading, and accessible design.

- Attractive weather-protective transit hubs with traveler information should be incorporated to provide more user friendly amenities.
- Bus stops should be clearly marked and have sidewalks and pathways connecting them to businesses and neighborhoods.
- Sidewalk snow clearance for transit access should be a high priority in winter months.
- Traffic signal preemption should be implemented to enable buses to increase speed of travel.
- Monthly passes, electronic ticketing, and easy-to-remember schedules should be part of transit service.
- Traveler information should be improved to make transit use easier, faster, and more attractive.
- Employers should be encouraged to incorporate transit incentive programs to reduce automobile dependency

The analysis of the transportation needs of low-income and minority populations discussed in the previous section indicated that the recommended improvements to the bus system listed above will deliver important benefits to low-income and minority populations in Anchorage. Of course, improvements to bus frequency and service must be accessible to the target population to be beneficial.

To determine the accessibility of the existing transit system to the target populations, the existing fixed route system was overlaid on maps of income and minority statistical data. Figure 3 shows the AMATS area's fixed-route transit service network

along with the percentages of households that fall below 80 percent of the median Anchorage income. Figure 4 shows the same fixed-route service network along with the percentages of minority households. The maps demonstrate that areas of low-income and minority populations are currently well served by the bus route network. A more detailed analysis of 2000 Census data revealed that 72 percent of the minority population lives within 1/4 mile of a transit route, compared to 56 percent of the total population. (Good access to transit is generally considered to be 1/4 mile distance from a transit route.)

The transit system improvements recommended in the LRTP build on the existing bus route structure. The major change called for is to increase the frequency of service on the seven most productive routes from 30 to 15 minutes. As Figures 5 and 6 demonstrate, all seven routes (with the possible exception of Route 102) are located in areas that predominately serve low-income and minority populations.

Highway Improvements

Figures 7 and 8 show the recommended LRTP highway projects overlaid on maps showing low-income and minority areas. Most of the highway projects identified in the LRTP would have minimal impacts on adjacent neighborhoods because they either traverse currently vacant land (Dowling Road extension from Lake Otis to Abbott Loop extended) or are expected to be accommodated within the existing right-of-way (Seward Highway

expansion from four to six lanes between 36th Avenue and Rabbit Creek Road).

An exception to the above statement is the highway-to-highway connection linking the existing Glenn Highway, where the controlled access ends at Bragaw Street, with the existing Seward Highway, for which controlled access ends at 36th Avenue. Although the exact alignment of the highway-to-highway connection has not been identified, it likely would follow the general corridor identified in Figures 9 and 10. The illustration of the alignment for the new freeway section shows that it would bisect an area containing higher-than-average low-income and minority concentrations.

The highway-to-highway connection would introduce some benefits as well as some potential burdens for the adjacent neighborhoods. The area located between the existing highways currently experiences some of the worst congestion in Anchorage. Higher-than-average traffic crashes occur because of increased congestion. Cut-through traffic trying to avoid the congested bottlenecks is also cited as a major problem in the adjacent neighborhoods. The construction of the highway-to-highway connection is expected to take a significant amount of traffic (about 100,000 trips per day) off the surrounding arterial and collectors streets, reducing crashes and cut-through traffic problems.

A substantial effort during LRTP development investigated potential ways to mitigate the adverse impacts of the highway-to-highway project on

Figure 3. Current Bus System Routes and Concentrations of Low-Income Households

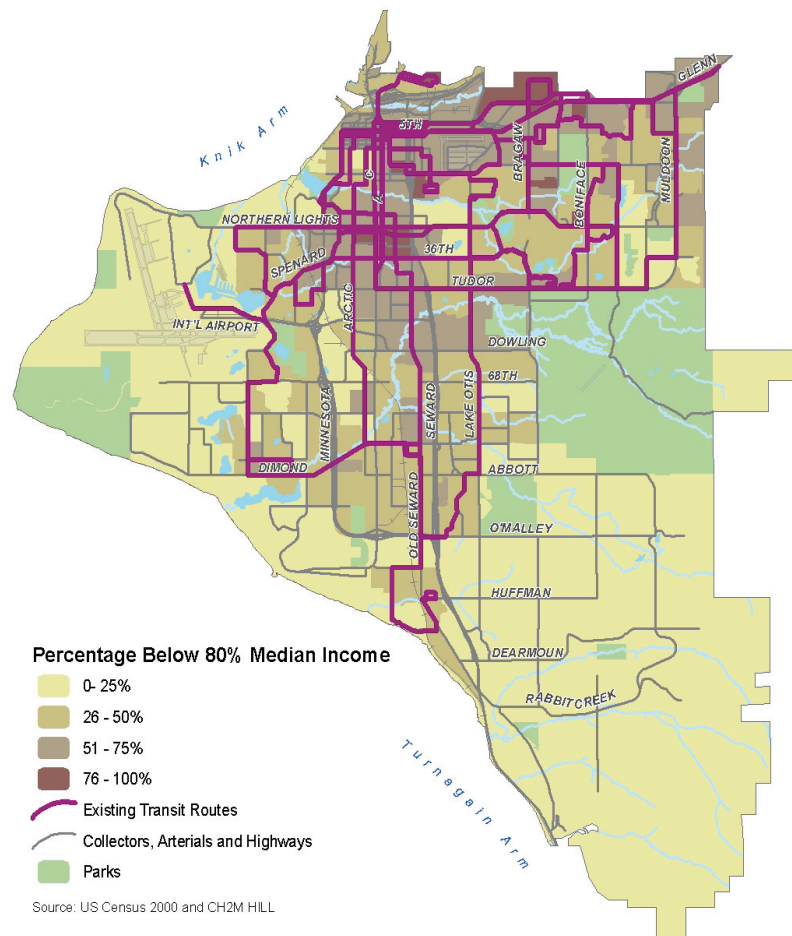


Figure 4. Current Bus System Routes and Concentrations of Minority Households

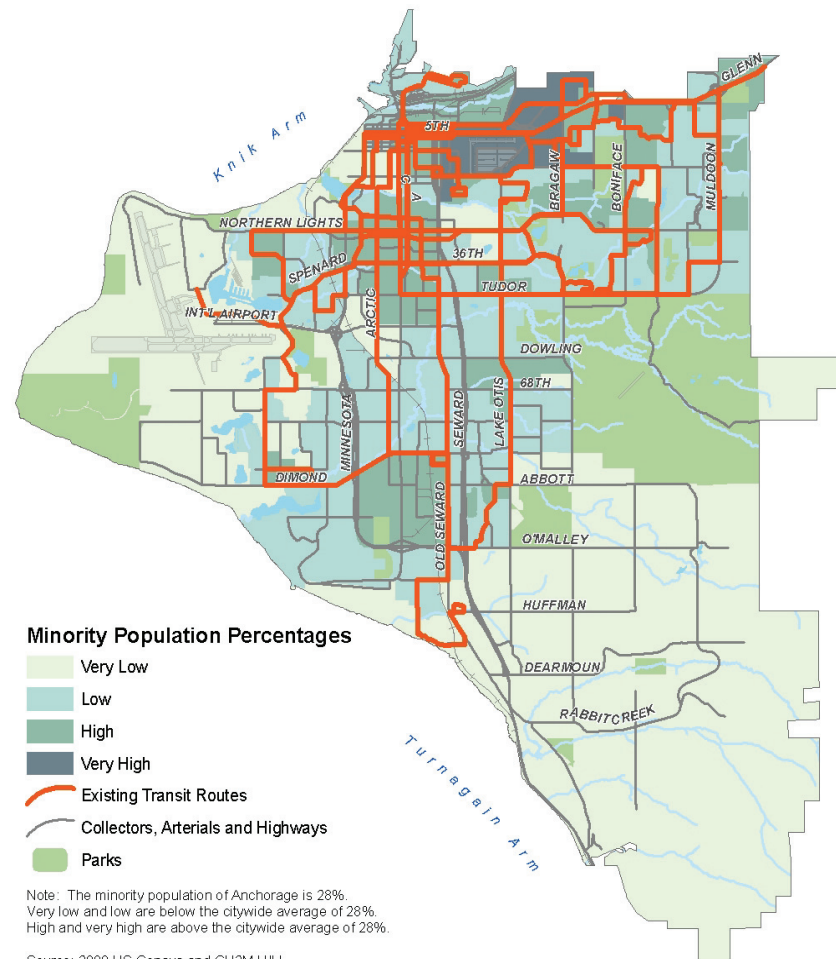


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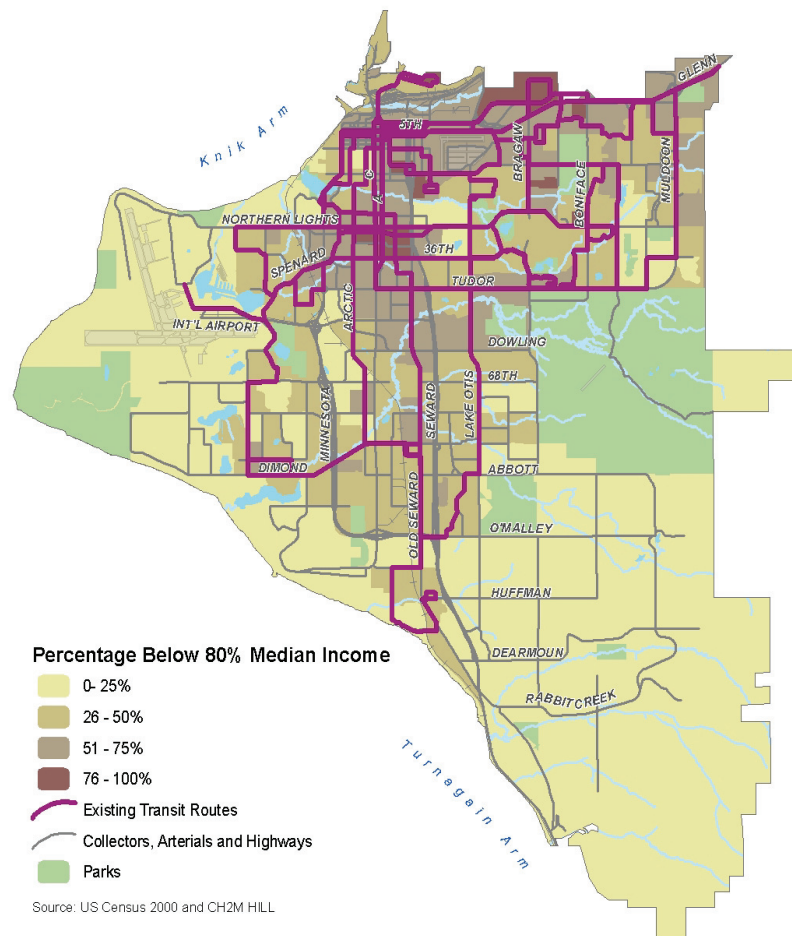


Figure 4. Current Bus System Routes and Concentrations of Minority Households

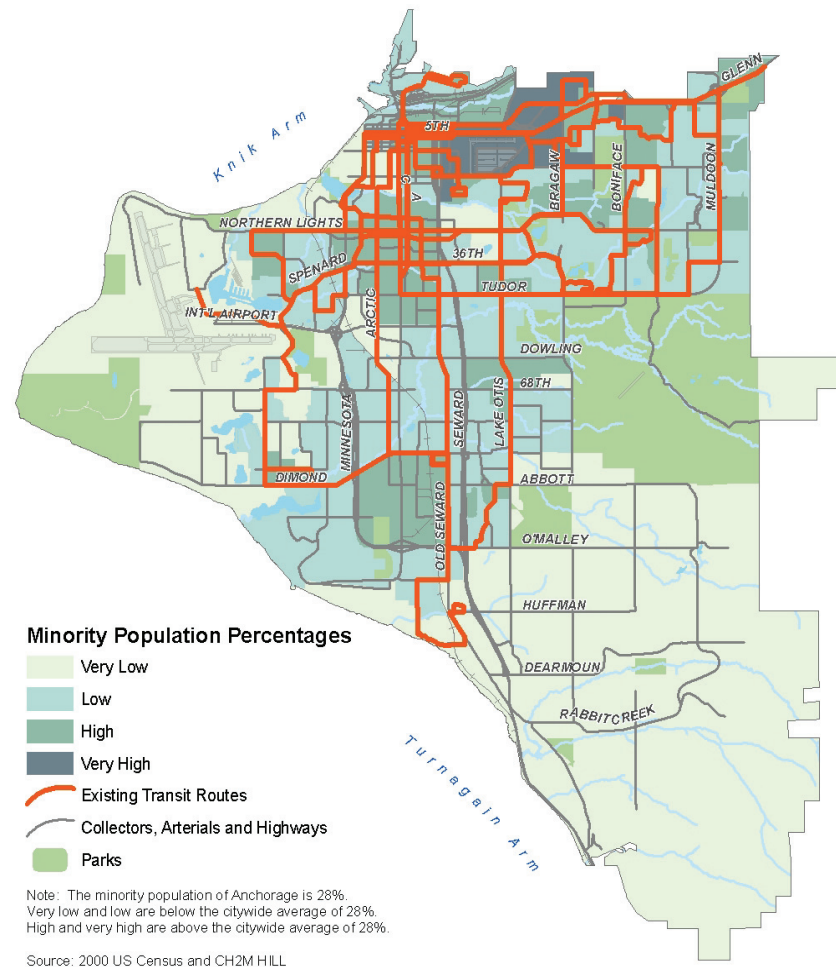


Figure 5. Recommended Bus System Routes and Concentrations of Low-Income Households

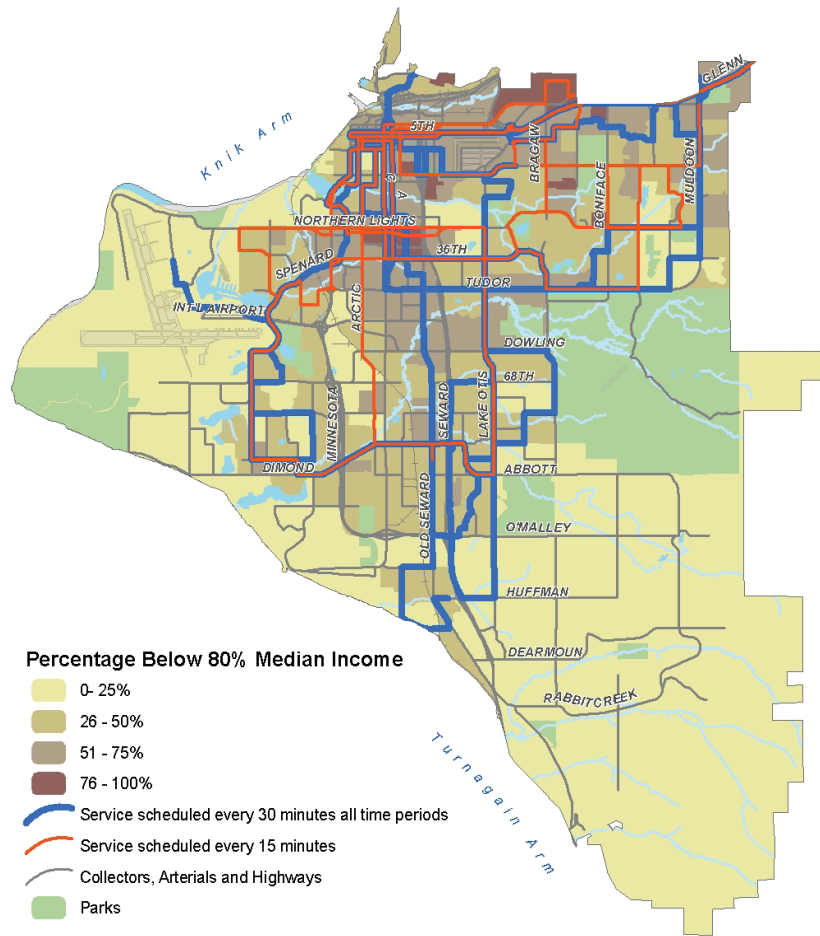


Figure 6. Recommended Bus System Routes and Concentrations of Minority Households

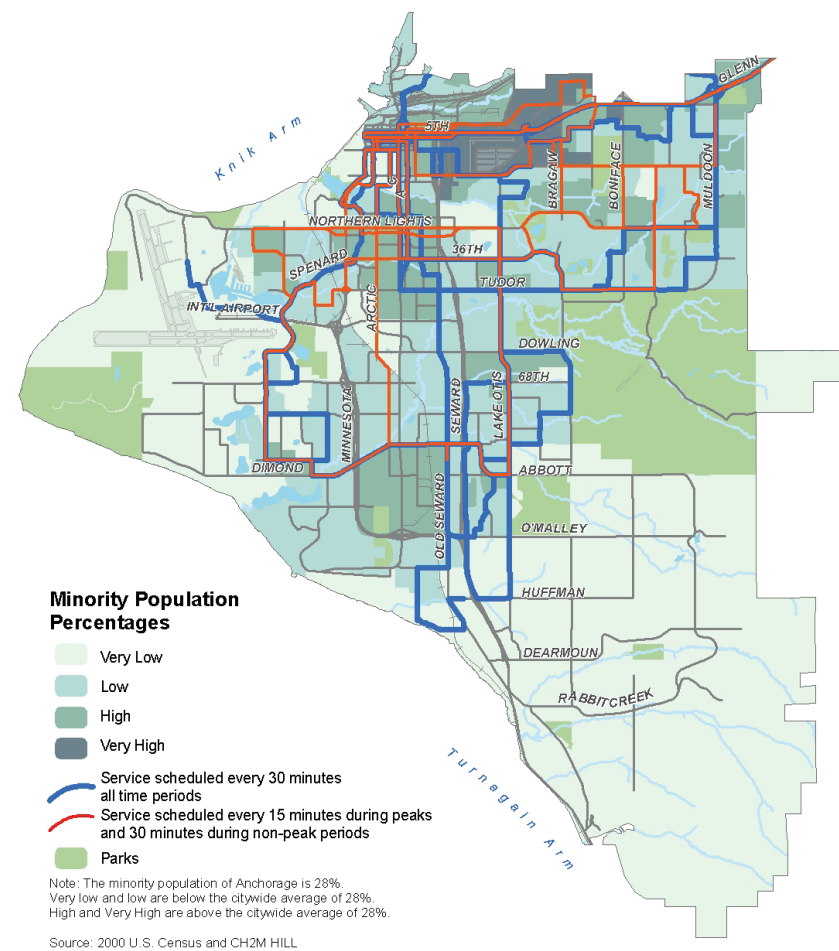


Figure 7. Recommended Highway Improvements and Concentrations of Low-Income Households

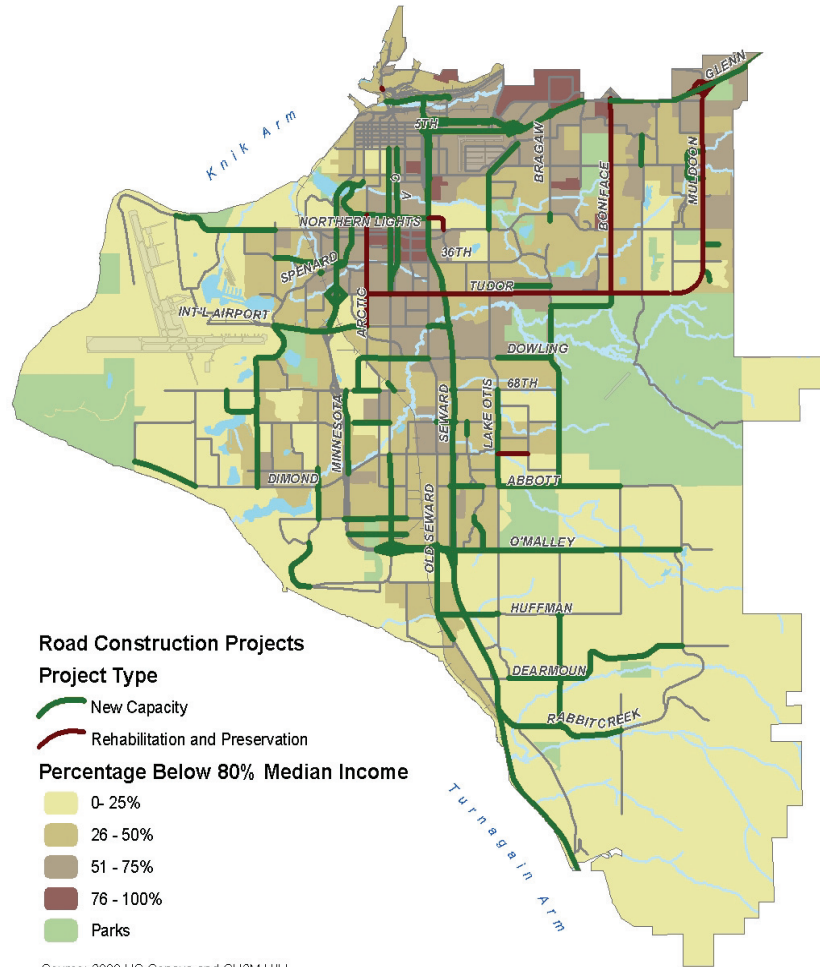


Figure 8. Recommended Highway Improvements and Concentrations of Minority Households

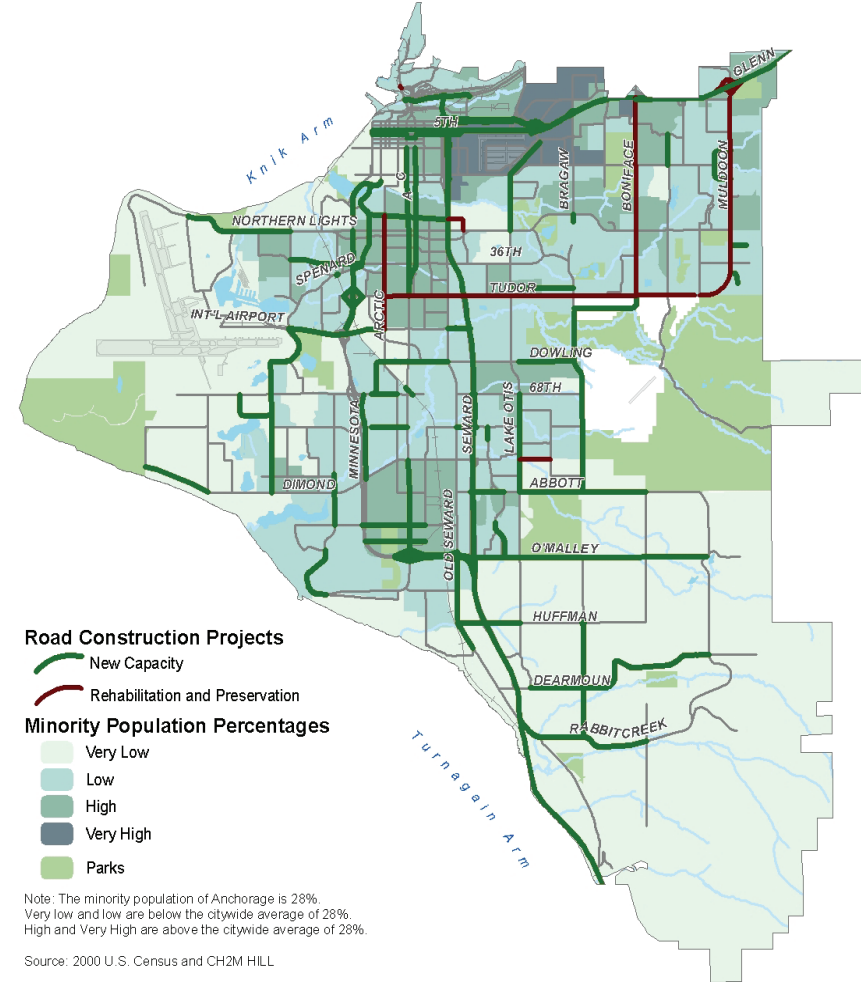
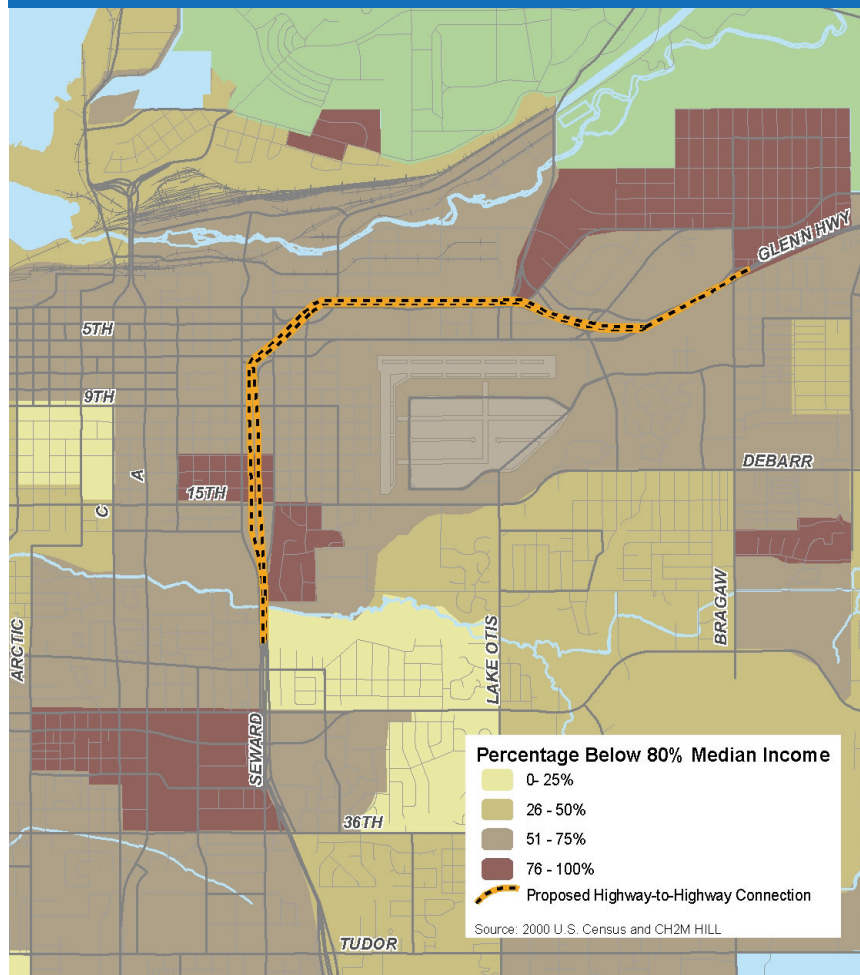
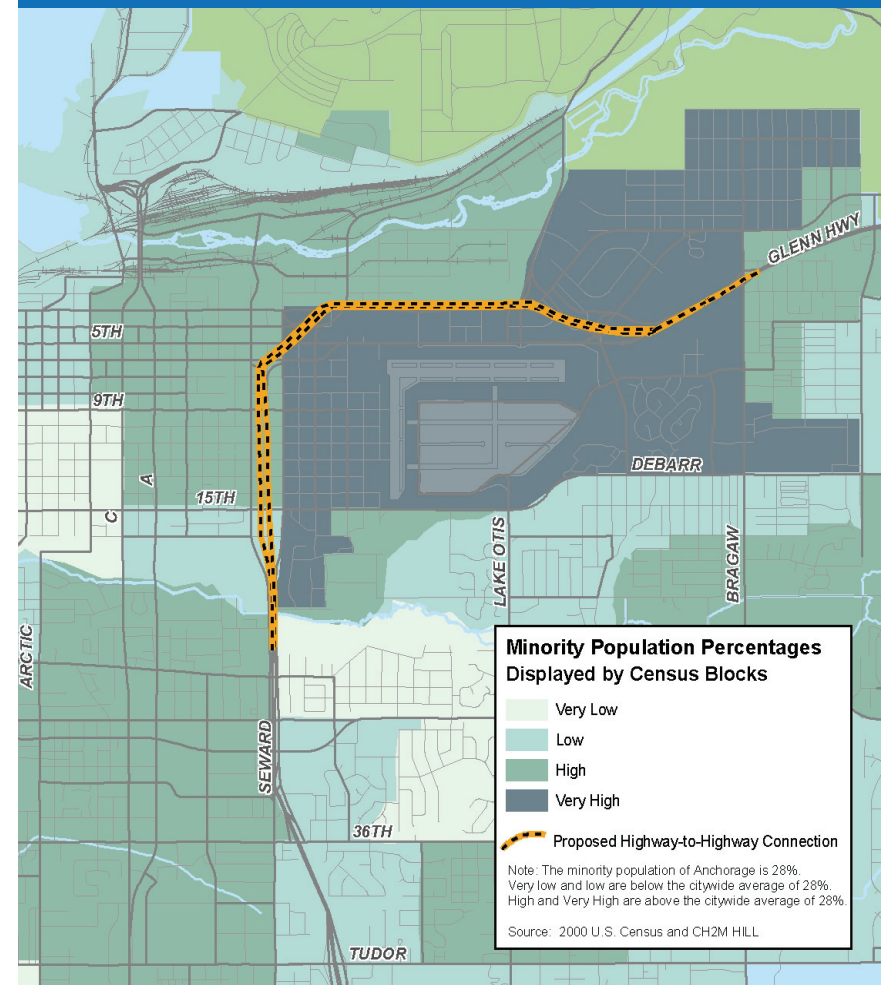


Figure 9. Proposed Highway-to-Highway Connection and Concentrations of Low-Income Households



Note: The exact route of the highway-to-highway connection has not been determined.

Figure 10. Proposed Highway-to-Highway Connection and Concentrations of Minority Households



Note: The exact route of the highway-to-highway connection has not been determined.

adjacent neighborhoods. Members of the LRTP planning staff met several times with the community councils of these neighborhoods to discuss these issues. (See the LRTP public involvement summary available on the website at www.muni.org/transplan.)

Several strategies resulting from this work have been recommended for inclusion in the project scope. Depressing the highway through the majority of the corridor is one of the main strategies designed to mitigate noise and visual impacts. The freeway would also be covered at strategic locations, allowing opportunities to develop parks or open spaces on top of the freeway. Extensive use of bridges is expected to improve pedestrian access and reconnect neighborhoods currently divided and isolated. After the connection is complete, streets that are now heavily traveled (such as Ingra and Gambell streets) could be converted into pedestrian-friendly main streets.

Inevitably in a project such as the highway-to-highway connection, low- to moderate-income housing would be lost. It is the intent of AMATS to actively explore replacing low- and moderate-income housing through the construction of new housing utilizing the federal housing provisions of the Uniform Relocation and Real Property Acquisition Policy Act of 1970.

Location of Existing and Future Employment in Relation to Areas of Low-Income and Minority Concentrations

It is expected that future job growth will continue to gravitate toward the areas of existing job concentrations such as Downtown, Midtown, and the University-Medical District. Existing (2002) employment is shown in Figure 11. If the map of projected 2025 job locations (Figure 12) is compared to the maps of low-income and minority household concentrations, it becomes apparent that there is no problem with respect to the potential spatial mismatch between future employment centers and areas with high concentrations of low-income and minority populations. In fact, low-income and minority areas probably have better access to areas of high employment growth than do higher-income areas such as Chugiak-Eagle River and the Hillside.

One potential area of concern is the Ted Stevens International Airport. According to the University of Alaska Anchorage, Institute of Social and Economic Research, the airport is expected to be a major engine of economic growth in the next few decades. Currently only one bus route serves the airport (Route 7), and it only stops at the airport once an hour. (Every other bus on this route skips this stop.).

Conclusion

On the basis of the analysis described above, AMATS has determined that the recommendations contained in the 2025 LRTP do not have a disproportional impact on areas of high concentration of low-income and minority populations. Furthermore, the LRTP duly considers the transportation needs of low-income and minority populations and provides many recommendations that will substantially benefit these populations.

Figure 11. 2002 Employment

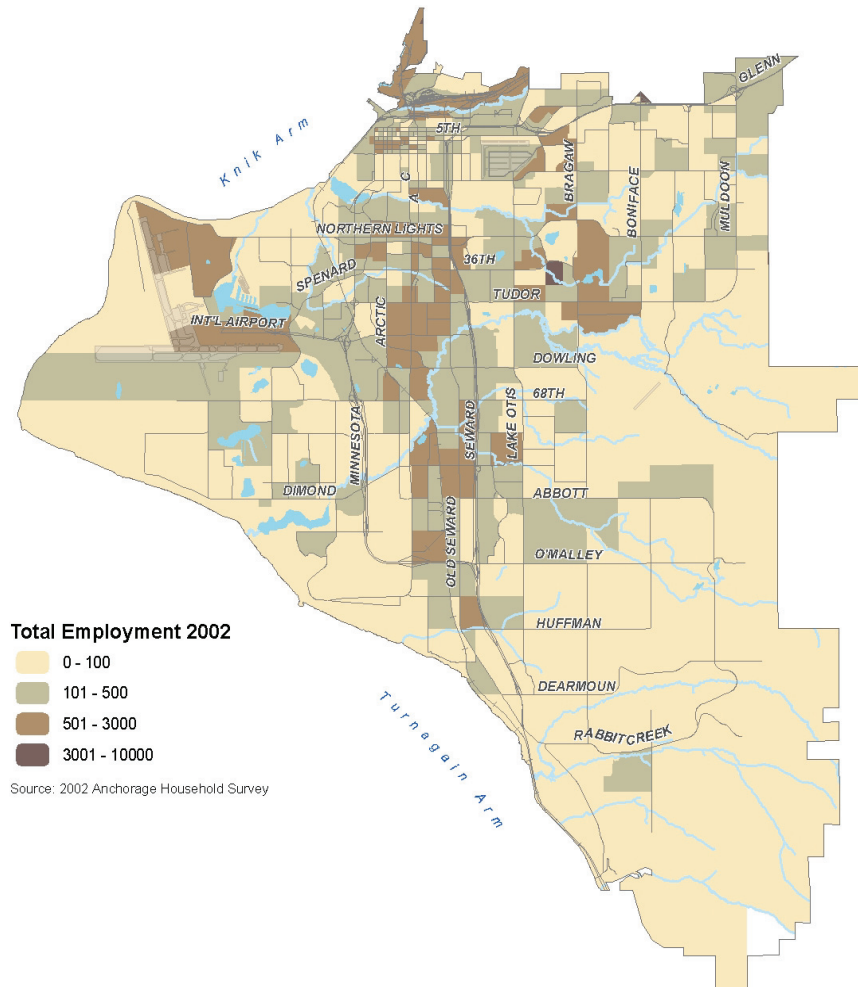


Figure 12. Projected 2025 Employment

