CHAPTER 6. Population and Employment Growth

Introduction

The overall scale and geographic distribution of population and employment are the primary drivers of transportation demand and determine travel patterns. Features and constraints such as coastlines, slopes, and stream corridors and established land uses have influenced the development in the Anchorage Bowl and the transportation patterns seen today. Because of the relationship between the distribution of housing and employment and expected daily travel patterns, inventorying existing and predicting future development are key to projecting future transportation demand. Estimates of where new housing units and new employment are expected to occur are important inputs to estimating the magnitude of daily travel that will need to be accommodated by the transportation system.

The MOA has developed a land use forecast that reflects where and how future land development will occur based on planning policies and development trends. Future forecasts are derived from a documented series of assumptions. These assumptions are based on the development

> *Identification of existing and future development is the key to projecting future transportation demand.*

policies and trends likely to occur during the forecast period. This chapter summarizes assumptions and results of the land use forecasts, the anticipated population and employment growth in Anchorage through 2025, and the projected patterns of new development. (For a more detailed description of the methodology used to forecast land use, see the MOA report *Anchorage 2025 Household and Employment Forecast and Allocation for the 2004 Long-Range Transportation Plan*, July 2004.)

The focus of the LRTP is identifying transportation improvements to meet the needs of the MOA in 2025. From the these development forecasts, estimates of magnitude and distribution of future land uses are used to project future trips and travel in the region.

Information Sources

The MOA and other planning entities use population, household, and employment growth projections prepared by the Institute of Social and Economic Research (ISER), University of Alaska Anchorage. Other sources for applicable statistics are the 2000 U.S. Census, a 2002 Alaska Department of Labor wage and salary employment database by specific street address, the 2002 Anchorage Household Survey (*Anchorage Household Travel Survey* by NuStats 2002), MOA building permit records, MOA Assessor parcel property files, and MOA land use planning maps and statistical databases.

Forecast Findings

Population, Housing, and Employment

Table 6-1 shows the population, household, and employment projections for the Southcentral region of Alaska, an area that includes the MOA and the Mat-Su Valley. The growth projections call for 37,000 new housing units and more than 35,000 new jobs within the MOA between 2002 and 2025. About 23 percent of the future MOA household growth is expected to be absorbed by Chugiak-Eagle River; primarily because large tracts of undeveloped land are available (based on the 1993 *Chugiak-Eagle River Comprehensive Plan*).

On a regional scale, job growth through 2025 is projected to occur predominantly in the Anchorage Bowl. The highest rates of residential (population and household) growth are anticipated in the Mat-Su Borough. According to Table 6-1, the Anchorage Bowl will add about 28,440 new housing units

Table 6-1. Projections for 2025 Regional Growth

Area	2002	2025 Forecast	Numeric Change	2002 – 2025 Growth (%)
Population				
Anchorage Bowl	237,160	302,330	65,170	28
Chugiak-Eagle River	31,540	58,870	27,330	87
Mat-Su Borough	65,800	126,600	60,800	92
Total	**334,500**	**487,800**	**153,300**	**46**
Households				
Anchorage Bowl	84,620	113,060	28,440	34
Chugiak-Eagle River	10,580	18,680	8,100	77
Mat-Su Borough	22,800	42,100	19,300	85
Total	**118,000**	**173,840**	**55,840**	**47**
Employment (includes self employed)				
Anchorage Bowl	150,660	186,570	35,910	24
Chugiak-Eagle River	3,980	7,190	3,210	81
Mat-Su Borough	13,700	24,200	10,500	77
Total	**168,340**	**217,960**	**49,620**	**30**

Notes:
The specific data for Chugiak-Eagle River and the Anchorage Bowl were derived from total MOA forecasts based on the 1993 *Chugiak-Eagle River Comprehensive Plan.*
Military base housing and population are included in the Anchorage Bowl figures.

Source: ISER data and projections in *Draft Land Use Forecast Report*, *Anchorage 2025 Household and Employment Forecast and Allocation for the 2004 Long-Range Transportation Plan*, prepared by the MOA Transportation Planning Division in July 2004.

and 35,910 new jobs by 2025. The rest of the region is expected to gain about 27,400 new housing units and only 13,710 new jobs by 2025.

Regional population growth through 2025 can be seen in Figure 6-1. The Mat-Su Valley will experience the most dramatic population growth (92 percent), followed by Chugiak-Eagle River (87 percent), and the Anchorage Bowl (28 percent).

Employment in both the Mat-Su Borough and Chugiak-Eagle River is expected to consist largely of local jobs to meet demand of the growing local populations. In 2025, the Anchorage Bowl will remain the dominant source of employment for the Southcentral region.

In the past few decades, the economy of the Mat-Su Borough has become closely linked to the MOA economy. That connection relies heavily on residents commuting from the Mat-Su Borough to employment in Anchorage. Chugiak-Eagle River residents also travel to Anchorage for jobs. All commuters from the Mat-Su Borough and Chugiak-Eagle River must use the Glenn Highway to get into the Anchorage Bowl. The expected number of commuters will continue to increase, and Figure 6-2 charts the projected Glenn Highway commuters from the Mat-Su Borough and Eagle River to employment sites in the Anchorage Bowl.

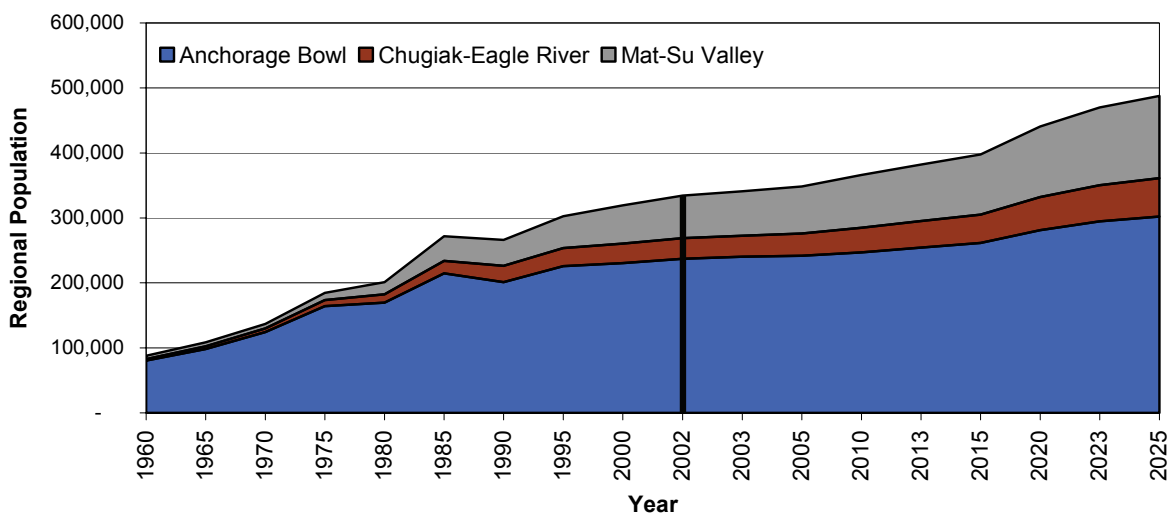## MOA Employment by Industry Sector

Estimating employment by industry sector is an important step in forecasting future travel demand. Each industry sector has characteristics relevant to choices that affect facility location and space requirements and are affected by applicable land use policies and regulations.

The Alaska Department of Labor recognizes 13 industry sectors:

- Health Services
- Universities
- Schools
- Government
- Services
- Finance, Insurance, and Real Estate
- Retail Trade

The highlighting identifies text revised in the 2027 LRTP. See the Revisions chapter at the end of the book.

Figure 6-1. Regional Population Growth

Source: ISER, CH2M HILL

Figure 6-2. Projected Commuters from Chugiak- Eagle River and the Mat-Su Valley to Anchorage Employment

Source: 2000 U.S. Census and CH2M HILL

- Wholesale Trade
- Transportation, Communications, and Utilities
- Manufacturing
- Construction
- Mining
- Agriculture, Forestry, and Fisheries

Figure 6-3 charts the projected MOA growth in these industry sectors. The services and government sectors are the largest employers in Anchorage.
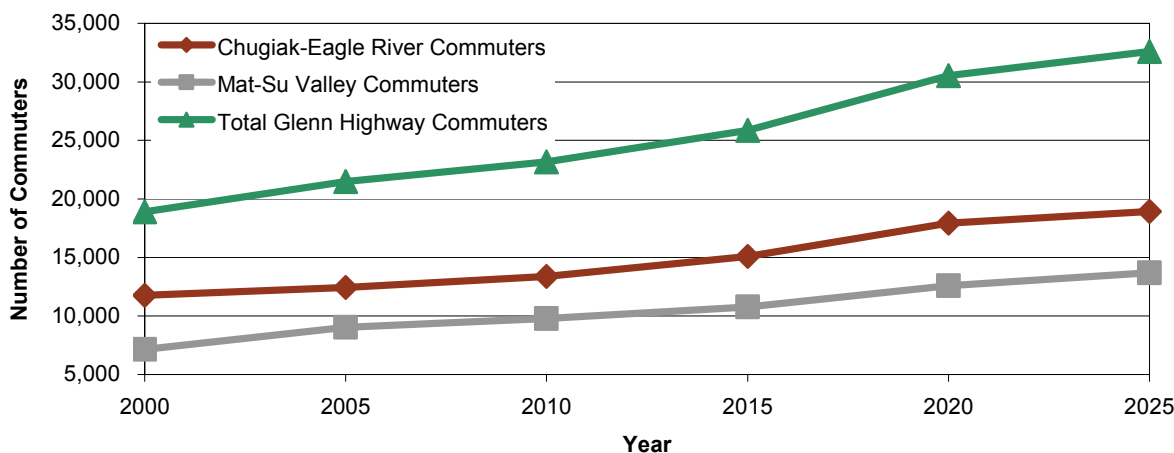
More than half of the total 2002 to 2025 increase in MOA jobs is attributed to employment gains in the health services sector and the services sector.

Distributing Anchorage Bowl Growth

Predicting the locations where growth in the Anchorage Bowl will occur relies on identifying and understanding current patterns and factors that limit or promote development. The existing urban form is a population approaching 240,000 (Anchorage Bowl only) spread out over 64,500 acres and living in primarily low housing density. The distribution of household density is shown in Figure 6-4. The average housing density per acre exceeds 10 dwelling units in only a few areas within the Anchorage Bowl.
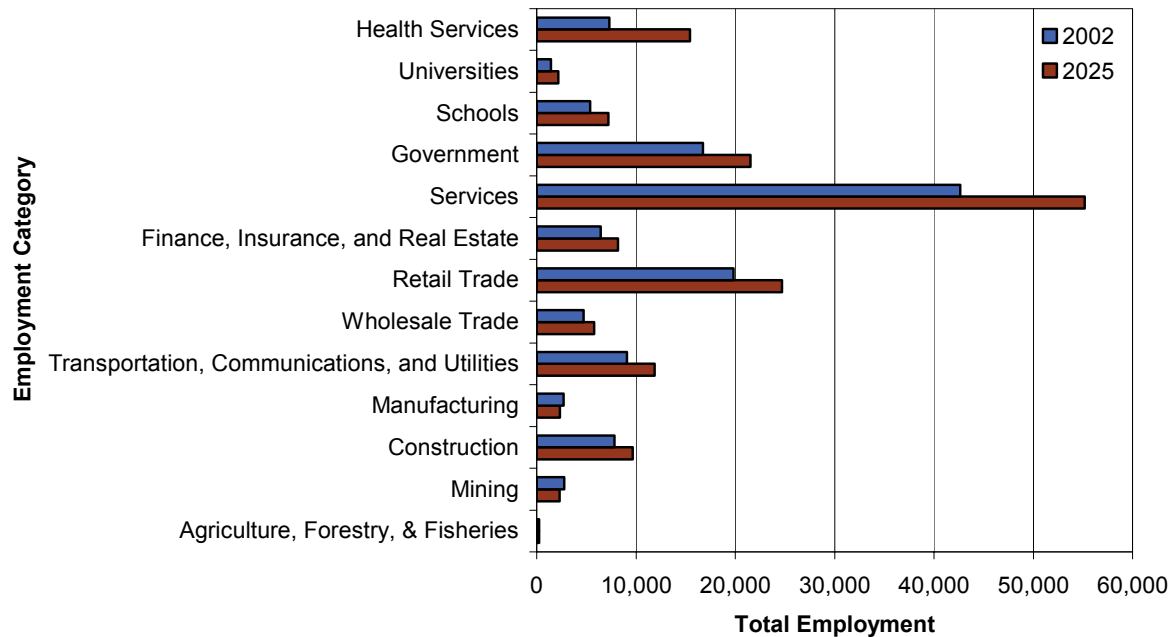
Employment to a lesser degree also is dispersed. The downtown Central Business District, although a significant source of jobs, does not dominate employment or retail activity in the region. Other Anchorage Bowl areas with significant activity

Figure 6-3. Anchorage 2002 and 2025 Employment by Industry Sectors

Source: Alaska Department of Labor, and CH2M HILL

include the military bases, University-Medical District, Midtown, the Ted Stevens Anchorage International Airport (TSAIA) area, and the Dimond Mall. In general, Anchorage development reflects a dispersed pattern.

The density and pattern of development strongly influence the range of transportation solutions available to meet future transportation demand. One result of the dispersed land use development pattern is a "many-to-many" pattern of trip making to multiple centers. (Chapter 5 discusses the impacts of transfers and distance from transit corridors on travel by transit. Chapter 7 provides information about how employment and population distribution affect transit operations.)

Incorporating Anchorage 2020 Land Use Policies

Anchorage 2020, the official policy framework for guiding growth and development within the Anchorage Bowl, is expected to correct some shortcomings of the existing land use pattern. The intent of Anchorage 2020 is to create a city in which there will be more opportunities to live a less automobile dependent lifestyle by selectively increasing housing densities, consolidating employment, and encouraging mixed-use development to improve walkability within the Anchorage Bowl and to encourage bus and transit use. Housing density increases are specifically called for along four transit corridors; within seven town centers; and, in the three redevelopment areas near major employment centers. (Chapter 3 describes transit corridors, town centers, and redevelopment areas, and Figure 3-1 shows their locations.) New policies will help focus employment growth within the three existing major employment centers: Downtown, Midtown, and the University-Medical District.

Also influencing the locations and development of new housing and employment will be countless decisions made by landowners, developers, financial institutions, government agencies, homebuyers, prospective tenants, and business firms. Collectively, a total of between $8 billion and $12 billion (in 2004 dollars) will be invested in new housing and employment sites during the next 20 years. Despite the magnitude of investment, changes to the existing patterns of development and the urban form will be gradual.

Applying Land Use Allocations

Anchorage 2020 called for changes in the development decision processes for future land uses within the Anchorage Bowl. Approximations of the Anchorage 2020 detailed development distribution were forecast by modeling factors affecting allocation. The land-use allocation model utilizes information about current land use,

economic trends, environmental conditions, and site availability. This model uses a set of systematic rules and careful accounting procedures to estimate future development locations and allocate new housing units and jobs for a range of land use types.

The 2025 Anchorage Bowl housing forecast is a shift from the current growth areas, south and central areas of the Anchorage Bowl, to the northeast and northwest planning areas (see Figure 6-5). Two major factors explain this change: (1) assumptions about higher densities in the Anchorage 2020 policy areas, town centers, transit corridors, and areas near the employment centers and (2) the combined effects of less vacant land in the southeast and southwest and more use of redevelopable land in the northeast and northwest.

Table 6-2 shows housing growth by planning area, and Figure 6-6 shows further allocation into traffic analysis zones (TAZs). (The TAZs serve as the basis for predicting origins and destinations of travel with the transportation forecasting model.) Although existing areas of rapid development (such as Southport, Sand Lake gravel pits, the Abbott Loop areas, and subdivisions off Goldenview Drive) are predicted to continue to grow, a substantial amount of the future growth is projected to occur in and around town centers, transit-supportive development corridors, and redevelopment areas. For example, town centers are forecast to attract more than 3,300 new housing units during the next 20 years and accommodate about 12 percent of all new housing development in the Anchorage Bowl.
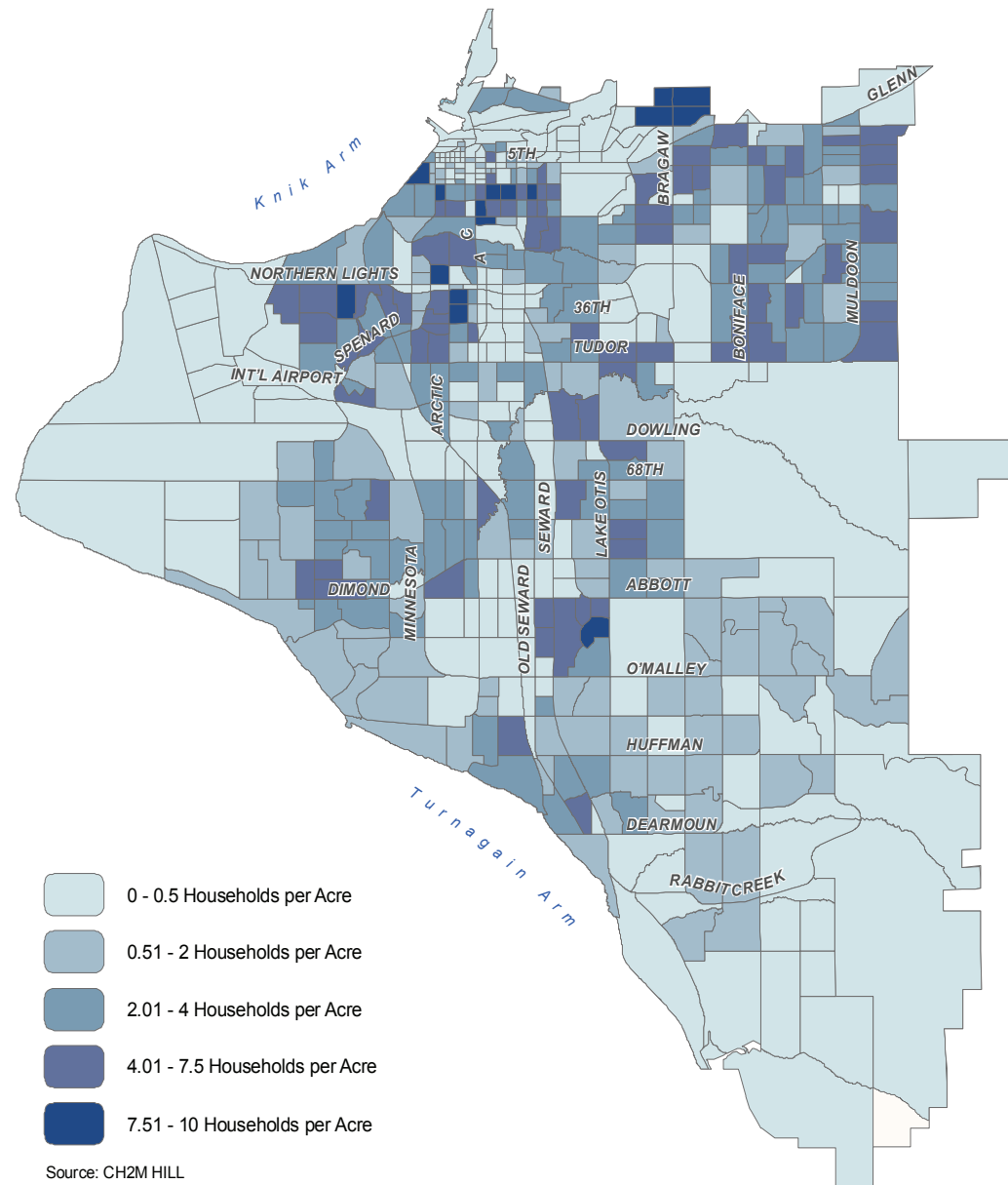

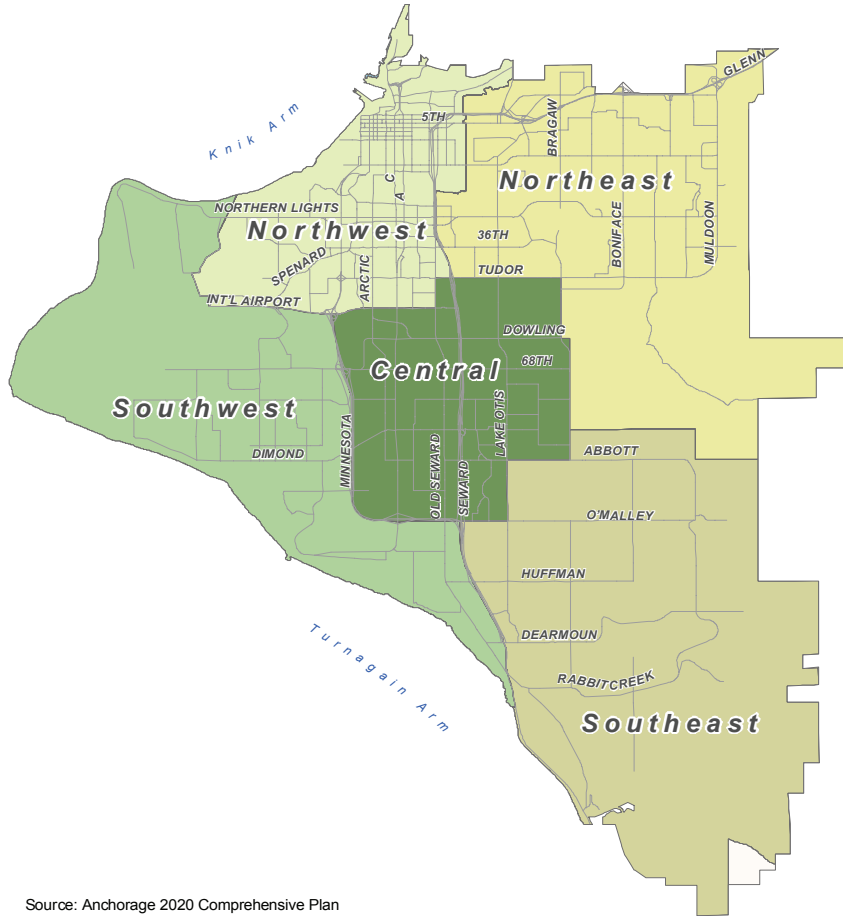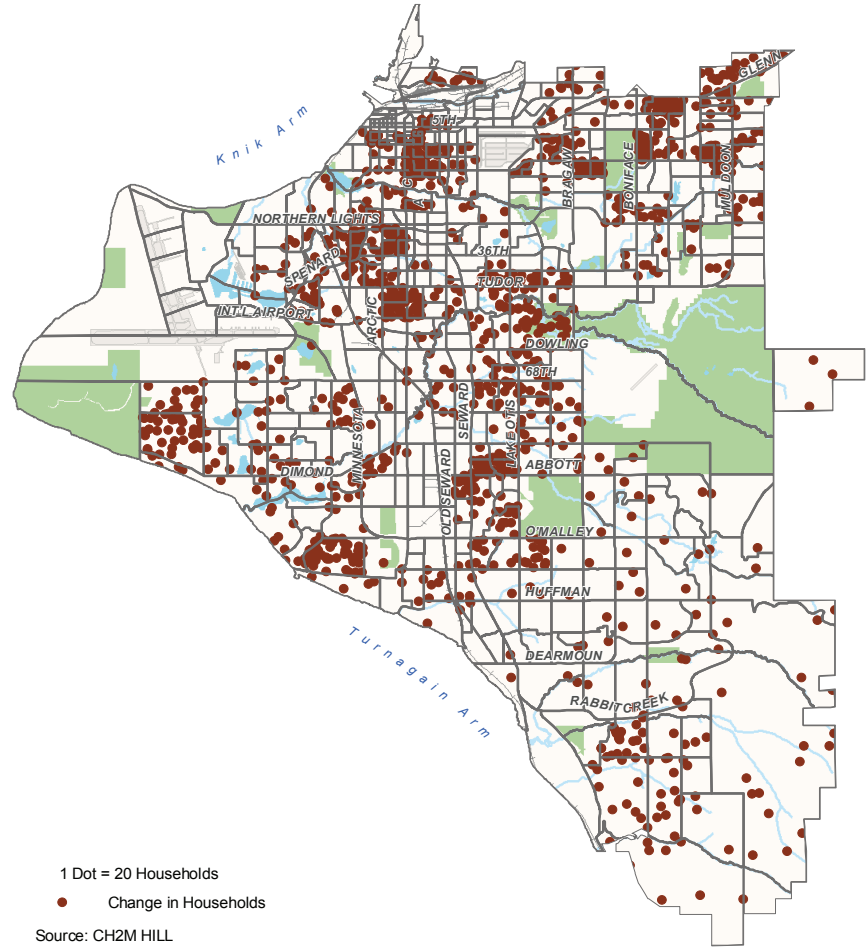Figure 6-4. 2002 Household Density

Legend:
- 0 - 0.5 Households per Acre
- 0.51 - 2 Households per Acre
- 2.01 - 4 Households per Acre
- 4.01 - 7.5 Households per Acre
- 7.51 - 10 Households per Acre

Source: CH2M HILL

Figure 6-5. Anchorage Bowl Planning Areas

Source: Anchorage 2020 Comprehensive Plan

Figure 6-6. Household Growth by Traffic Analysis Zone, 2002–2025

1 Dot = 20 Households

● Change in Households

Source: CH2M HILL

Table 6-2. Projected Household Growth by Planning Area, 2002–2025

Planning Area	Household Growth	Percentage of Total Growth
Central	5,090	14.2
Northeast	7,830	21.9
Northwest	7,520	21.0
Southeast	3,070	8.6
Southwest	4,180	11.7
Chugiak-Eagle River	8,100	22.6
Total	**35,790**	**100.0**

A substantial amount of housing also was allocated to the redevelopment areas identified in the Anchorage 2020 comprehensive plan. Residential areas in redevelopment areas near the three major employment areas (Downtown, Midtown, and the University-Medical District) is predicted to attract more than 3,120 new housing units, and an additional 1,000 housing units are forecast within the Central Business District of Downtown (in an area representing only a small part of the downtown redevelopment area identified in Anchorage 2020).

Housing development and increased household densities along the four transit-supportive development corridors (Arctic, DeBarr, Spenard/Jewel Lake, and Lake Otis) is also predicted. These corridors are expected to attract more than 14,000 new housing units.

Figure 6-7 illustrates that half of the employment growth from 2002 to 2025 is forecast to occur in the three major employment centers identified in Anchorage 2020. The largest amount of employment growth is allocated to Midtown, where more than 9,840 new jobs are projected by 2025 (17 percent of the total). Effects of this new development will result in more concentrated employment with densities closely matching the densities in Downtown. The higher employment density, combined with a more diversified mix of office and retail uses, will help to encourage carpooling and transit use in the midtown area, as well as to enhance the attraction of Midtown as an employment and retail destination.

A large share of the employment growth is projected to occur in the downtown redevelopment area, where the number of jobs is expected to increase by nearly 5,225 (13 percent of the total), 3,345 of which are in the Central Business District. Employment in the University-Medical District redevelopment area is expected to increase by nearly 3,310 jobs (7 percent of the total).
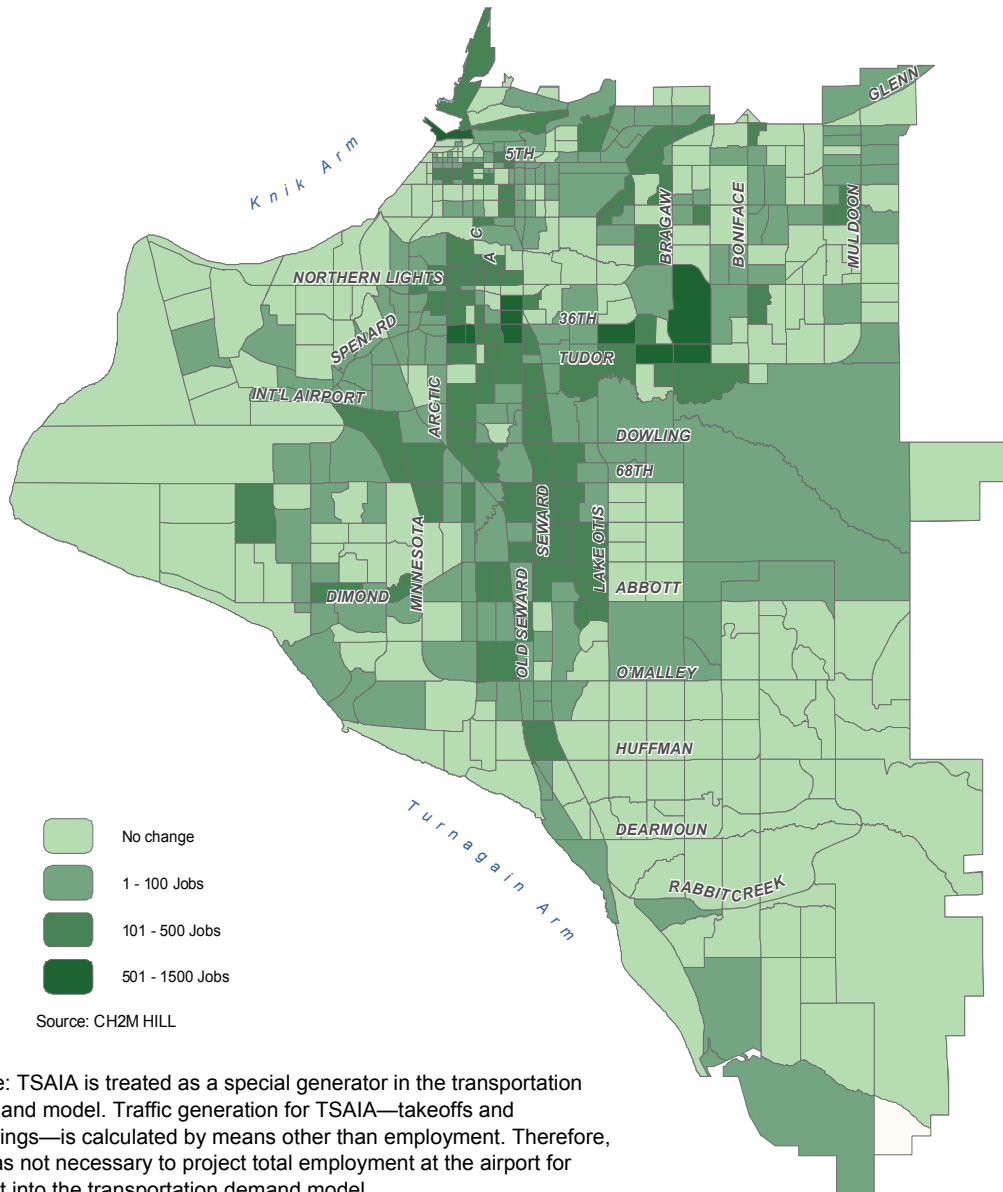
Considering the Knik Arm Crossing

The projections shown in Table 6-1 and discussed in this chapter do not take into account the potential effects of a Knik Arm bridge on regional population and employment distribution. During preparation of the most recent ISER population and employment projections, a preliminary analysis was conducted to test the sensitivity of regional population and employment distribution to the opening of a Knik Arm crossing in the year 2009.

Results indicate that a bridge would reduce the growth of the Anchorage population by about 19,000, or 5 percent, by 2025. This shift would start slowly and increase in the later years of the planning period, closer to 2025. Opening a Knik Arm bridge likely would have less effect on employment growth in Anchorage, with about 6,000 jobs expected to go elsewhere in the region.

It should be noted that the change in growth rates is very sensitive to the year that the bridge is opened. The date is uncertain and subject to many variables. Population and employment changes that could result from the Knik Arm bridge will be analyzed as part of the Environmental Impact Statement for the project. Depending on findings, the Knik Arm crossing may be considered for a subsequent amendment to the LRTP.

The highlighting identifies text revised in the 2027 LRTP. See the Revisions chapter at the end of the book.

Figure 6-7. Employment Growth, 2002–2025

Knik Arm

GLENN

5TH

NORTHERN LIGHTS

BRAGAW

BONIFACE

MULDOON

A C

SPENARD

36TH

TUDOR

INTL AIRPORT

ARCTIC

DOWLING

68TH

SEWARD

LAKE OTIS

MINNESOTA

DIMOND

OLD SEWARD

ABBOTT

O'MALLEY

HUFFMAN

Turnagain Arm

DEARMOUN

RABBITCREEK

No change

1 - 100 Jobs

101 - 500 Jobs

501 - 1500 Jobs

Source: CH2M HILL

Note: TSAIA is treated as a special generator in the transportation demand model. Traffic generation for TSAIA—takeoffs and landings—is calculated by means other than employment. Therefore, it was not necessary to project total employment at the airport for input into the transportation demand model.

Summary

The Southcentral region covering both the MOA and the Mat-Su Borough will become an urbanized region with a population approaching 500,000 by 2025. Suburban population is growing more rapidly in the Mat-Su Borough and Chugiak-Eagle River than in the Anchorage Bowl, and employment growth is forecast to occur predominantly in Anchorage. The growth of suburban residential uses portends longer trips and heavier future commuting into and within the Anchorage Bowl, particularly around areas of high employment growth, such as Midtown.

The 2025 land use forecast shaped by the Anchorage and Chugiak-Eagle River planning policies results in an estimated 400,000 more weekday trips on the transportation system than occurred in 2002, a 40 percent increase. Trips will be somewhat longer in length because more trips will be linked to suburban locations.

The next issue is how well the transportation infrastructure sustains reasonable mobility and access under the higher future demand. What transportation investments will be needed to support mobility and economic vitality of the region? Chapter 7 addresses these questions.