

**Knik Arm Toll Bridge
Anchorage Alaska MSA
Traffic and Toll Revenue
Investment Grade Study**

***Independent Economic Overview
and Development Forecast***

May 2007

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1. PURPOSE AND SCOPE

For many decades, Alaska's residents have considered constructing a bridge to join the City of Anchorage to its neighbor, the Matanuska-Susitna Borough (Mat-Su) via the narrow stretch of water separating the two land areas by less than two miles. The proposed Knik Arm Toll Bridge project has long demanded public and private attention because of its obvious potential. While the logic of a bridge has seemed apparent, both the depth of the water and the climate extremes have presented expensive and persistent engineering challenges to the construction of a fully functioning, weather-hardy bridge capable of carrying commercial traffic year-round.

The transportation link created by the Knik Arm Toll Bridge is expected to offer a vital opportunity to accommodate the future growth and vitality of the City of Anchorage and the entire Anchorage Metropolitan Statistical Area (Anchorage AK MSA). The bridge is also expected to provide a new economic artery to the Mat-Su Borough, now experiencing the fastest population growth in the State, by stimulating access to available commercial property as well as convenience to its residential growth. Offering a more convenient link than ferry service between the region's commercial center in the City of Anchorage, which is currently land-locked, and the Mat-Su Borough side of Knik Arm, the bridge would open the Anchorage AK MSA marketplace to new development potential.

On the Mat-Su side, the proposed Knik Arm Toll Bridge offers opportunities to expand the deep-draft port facilities of publicly owned Port MacKenzie and its 8,000 acres of land. It would also provide faster access to natural resources, improving rail facilities, newly planned road improvements, and both new

development and tourism potential to support the regional economy of the Anchorage AK MSA and enhance the commercial core of the City of Anchorage.

The implementation of this bridge connection has been the focus of the Knik Arm Bridge and Toll Authority (KABATA), which has compiled extensive background on the geographic and design issues and considered various implementation strategies. KABATA has retained the transportation engineering specialists Wilbur Smith Associates (WSA) to determine the traffic volume and toll expectations underlying the financial instruments that could make this connection a reality as a toll bridge.

Insight Research Corporation (Insight), an applied economics research firm specializing in transportation economics, was engaged by WSA in February of 2007 to prepare an independent economic analysis from outside the region to examine and forecast the expected population, employment and economic impacts in the Anchorage AK MSA, including the City of Anchorage and the Mat-Su Borough under two development options:

- (1) **With the Knik Arm Toll Bridge**, using preliminary construction costs and timing consistent with the current environmental impact analysis work, and
- (2) **Without the Knik Arm Toll Bridge**, with assumptions of future land use made with no construction of the bridge, also referred to in this text as the “no build” alternative.

This analysis provides a forecast of land use and resulting population and employment estimates by specific traffic analysis zones under low, mid-range and high economic performance scenarios, providing an independent economic and demographic analysis as a supplement to the previous studies. The analysis also quantifies the economic, employment and tax revenue impact results of these two scenarios to boroughs, cities and to the State of Alaska. These impacts are based on the potential for land use which can be associated with the construction of the Knik Arm Toll Bridge versus the “no build” alternative.

2. DEFINITION OF THE STUDY AREA

The Knik Arm Bridge and Toll Authority (KABATA) serves a region that encompasses the Mat-Su Borough and the City of Anchorage including the Chugiak-Eagle River area. This area is geographically concurrent with the Bureau of Economic Analysis definition of the Anchorage Metropolitan Statistical Area (Anchorage AK MSA). The general area shaded with color in Figure 1 reflects the entire Knik Arm Crossing Study Area.

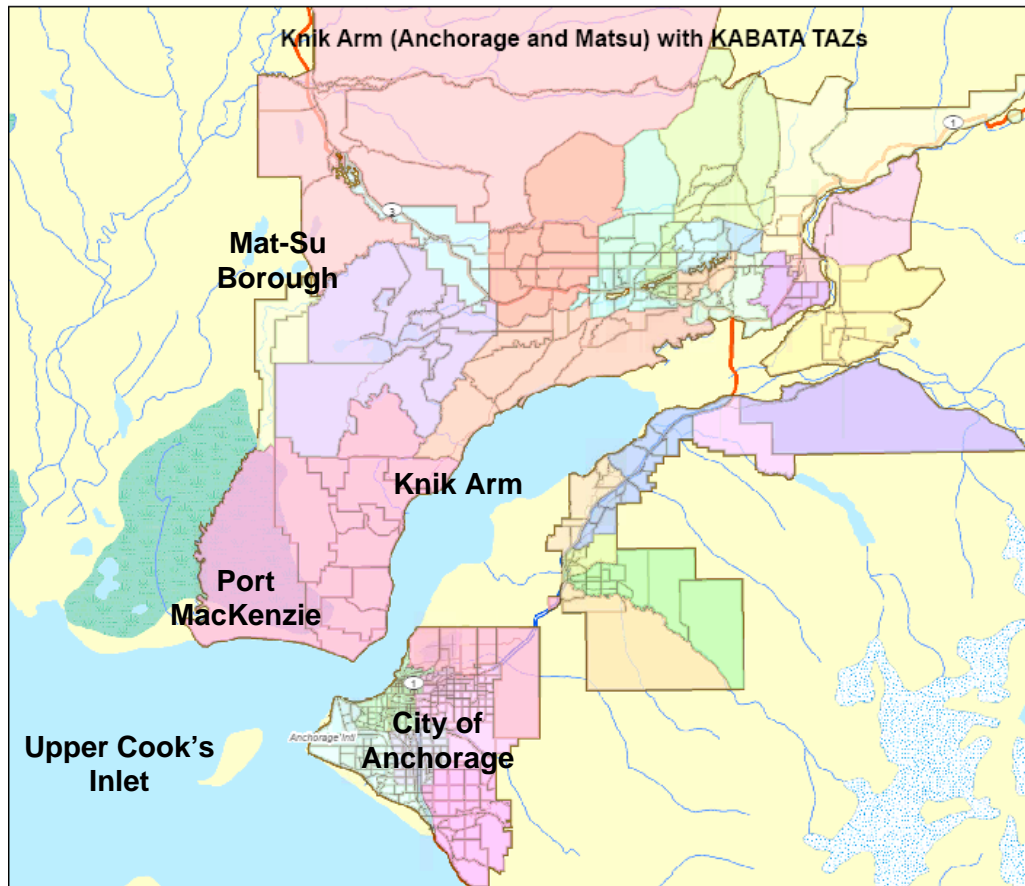


Figure 1: Knik Arm Crossing Study Area

3. SOCIOECONOMIC UPDATE METHODOLOGY

The two options that are the subject of this analysis have been extensively studied. “With Bridge” and “Without Bridge” population and employment forecasts have been prepared by at least two other professional sources, Northern Economics and the Institute of Social and Economic Research of the University of Alaska at Anchorage (ISER). Population and employment forecasts subsequent to those prepared by ISER and Northern Economics were studied from additional sources for updates including the State of Alaska, the Mat-Su Borough, the City of Anchorage, and the U.S. Bureau of Labor Statistics and the U.S. Bureau of the Census. This information was supplemented and expanded with personal and telephone interviews with identified contact persons in the community.

As in other parts of the country, independent economic and demographic studies such as this report are prepared to provide a corroborating examination of the assumptions on which forecast trends are based, offering a cross check on local forecasting methodologies and strengthening the reliability of the forecast of traffic volumes. The following steps were taken by Insight Research Corporation to provide an independent review of population and employment forecasts, described as follows:

- ***Establishing Factors Driving Potential Population or Employment Forecasts to 2030:*** Insight identified potential industrial activity, port expansion, office and retail potential, and residential expansion by TAZ within the designated study area that could clearly affect population or employment forecasts -- either positively or negatively -- thus potentially affecting projections of future traffic volumes, and ultimately, the revenue forecasts underlying the financing options. This step included review of prior studies to determine if circumstances dictating previous forecasts had changed, or were subject to varying interpretations of the data.

The categories of activity for inclusion were defined as any development, project, employer or regional activity that might:

- A. Vary in size or timing from the TAZ-level assumptions of underlying area development currently in use in the updated HDR traffic forecast model,
- B. Contribute to either a gain or loss from the study’s base employment and population estimates, or

C. Affect the regional economic assumptions in any other statistically significant way.

- **Obtaining and Reviewing TAZ Base Data:** Insight was provided with the most recent data set now being used for TAZ population and employment from the updated HDR traffic forecast model for the study area along with accompanying maps. This data is consistent with KABATA's other analyses. Although the traffic study area includes 600 traffic area zones (TAZ's) in both the City of Anchorage and the Mat-Su Borough, only development in selected TAZ's which could clearly be attributed to the presence of the proposed projects was included in the "With Bridge" examination, resulting in a very conservative approach to employment projections.
- **Conducting Interviews:** Key contacts in the affected jurisdictions were identified and contacted in person, by telephone, or by e-mail, to acquaint them with the needed information and solicit their cooperation for project details. Insight interviewed these key contacts and discussed the development patterns and trends being experienced with city planners, economic development officials, tax assessors, real estate development and other professionals, and used project announcements, project web sites and other local news sources to augment the assumptions. A list of projects identified, persons interviewed and sources consulted is part of the appendix of this document. Also incorporated as deliverables in this analysis are electronic files updating records by TAZ, transmitted under separate cover for WSA's further use.
- **Preparing the Project List:** Insight prepared lists of probable development projects and reviewed these with the various source contact persons. A conservative approach was used in identifying projects. Only those projects which were wholly or significantly dependent on the bridge construction, or which were significantly changed in scale, scope or timing by the proposed project were included in the economic models. The variance from the expected result was developed for both options studied: (a) With Bridge or (b) Without Bridge.
- **Defining Other Study Area Influences:** Some projects were profiled and are referenced in this text which are located in the study area, but are not significantly influenced by the proposed bridge project. These projects add to an understanding of the development dynamics of the study area, but are not dependent on the bridge construction. Included are project such as the proposed prison facilities, the fuel farm development, future use of property

controlled by the University of Anchorage, future improvements to the Alaska Rail Road, planned highway improvements in both the City of Anchorage and on the Mat-Su Peninsula, and planned expansions to both Port MacKenzie and the Port of Anchorage.

- **Ferry Improvements:** Interviews and research were conducted into the expansion of the ferry system serving the Anchorage/Mat-Su area, including its business plan forecast for growth with and without the bridge, as a supplement to KABATA information about potential competitive service which might affect traffic volume forecasts for the Knik Arm Toll Bridge.
- **Calculating High and Low Forecast Alternatives:** Insight employed a microeconomic approach to land use by TAZ site to supplement the macroeconomic approach of industry-level demand projections used in prior studies to reinforce findings of employment impact.

In order to bracket the risk inherent in any forecast, the area population and employment growth trends and economic cycles were studied and forecast through 2030. Historic regional business cycle information was compared to that of the State of Alaska and the United States to confirm regionally affected high and low cycle swings as a percentage delta from the average. Further definition of these business cycles is detailed and illustrated in Section 4.c as well as in the appendices of this report.

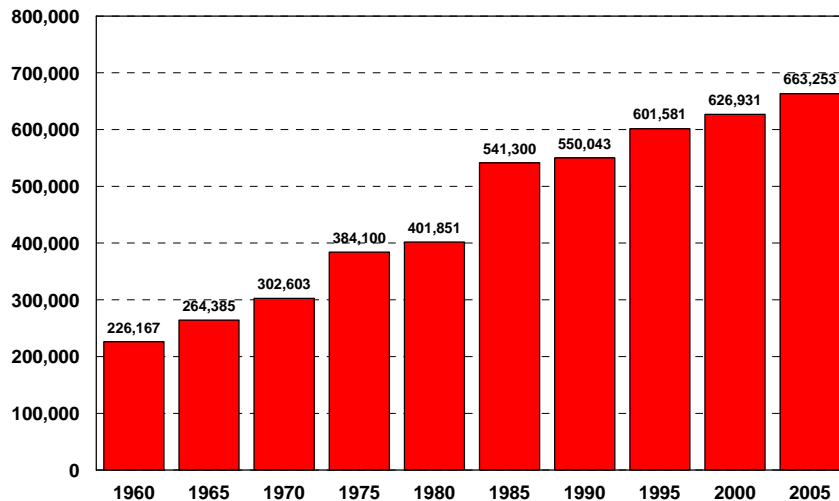
Within the limitations of the required five-year reporting intervals, the probable trend was calculated to incorporate potential cyclical fluctuations in the regional economy which might influence population and employment forecasts. The high and low percentage delta defined the resulting variance possibilities, thus bracketing the probable forecast scenario with an economy-related levels of risk of the projections. The probable case, along with both high and low projections, was provided to WSA in prescribed electronic formats for use in refining traffic forecasts and revenue projections.

4. DEMOGRAPHIC AND ECONOMIC BACKGROUND

Section 4 provides an overview of historic population, employment and the historic economic performance of the Anchorage AK MSA, including background and trends as these affect the socioeconomic conditions in which the Knik Arm Toll Bridge is being proposed.

A. Population Overview: State of Alaska, City of Anchorage and Mat-Su Borough

State of Alaska: Alaska is the largest State in the United States in land area and is also the least densely populated state at about 1.09 persons per square mile according to the U.S. Bureau of the Census and Alaska Department of Labor, and as noted in Figure 2.

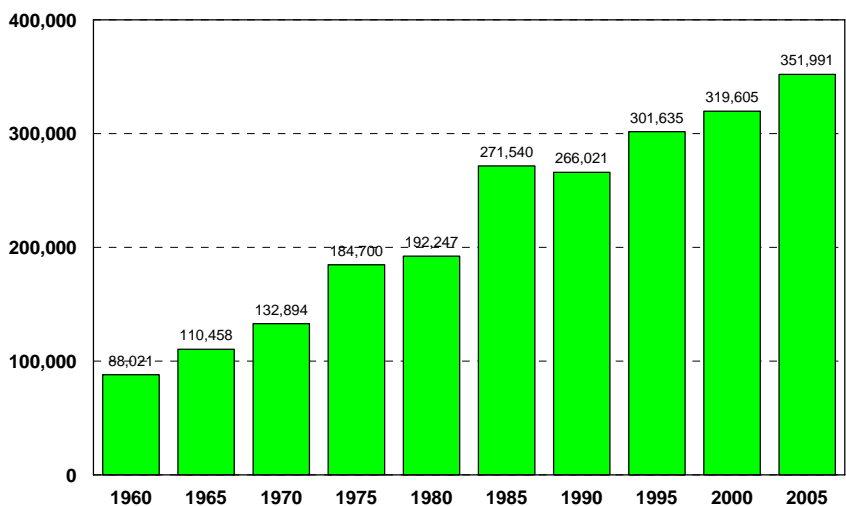


Source: U.S. Census Bureau, Alaska Department of Labor

**Figure 2: Population Growth, State of Alaska
1960 to 2005**

The City of Anchorage and the Mat-Su Borough (Anchorage AK MSA): The City of Anchorage and Mat-Su Borough accounted for over 50 percent of the population of the entire State of Alaska in the U.S. Bureau of the Census reports for 2000. Over the period from 1990 to 2000, the Anchorage AK MSA added about 53,600 people to its

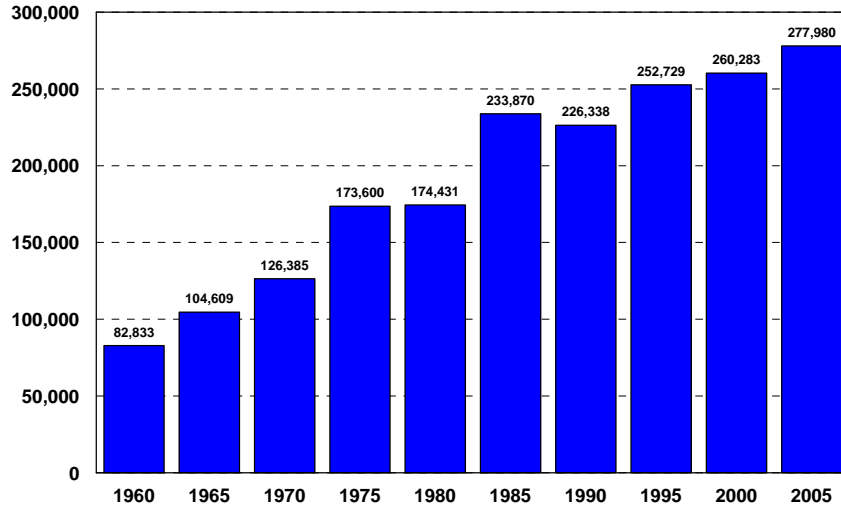
population, accounting for nearly 70 percent of the increase in population for the entire state. This growth has continued to the date of this study, and this analysis finds no overt hindrance to the continuation of the identified trends in public policy, economic conditions and market demand. Population growth for the entire Anchorage AK MSA from 1960 to 2005 is shown in Figure 3.



Source: U.S. Census Bureau, Alaska Department of Labor

**Figure 3: Population Growth, Anchorage AK MSA
1960 to 2005**

City of Anchorage: From 1960 to 2005, Anchorage population increased by 236%, an annual average of 2.8%, although the annual percent of increase has slowed to just over 1% per year due to two factors: first, the increased size of the base against which the percent is calculated; and second, the reduced land area available for new and redeveloping residential and commercial development within the City. Referred to as the Anchorage Bowl because of the limitations of its topography, the City of Anchorage is heavily involved in redevelopment planning, discussions on allowable densities and public transportation issues. Figure 4 illustrates this historic growth.

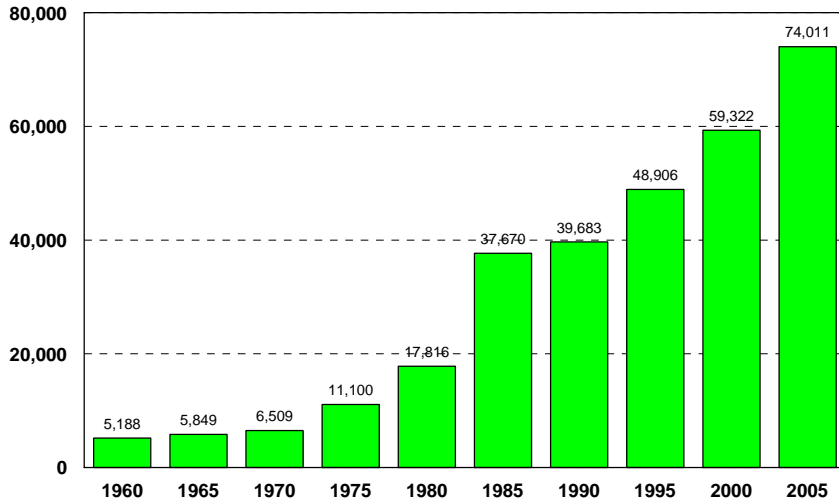


Source: U.S. Census Bureau, Alaska Department of Labor

**Figure 4: Population Growth, City of Anchorage
1960 to 2005**

Mat-Su Borough: The Mat-Su Borough encompasses approximately 24,600 square miles and is roughly the same size as the State of West Virginia. In the Mat-Su Borough, population increased by 1,326% from 1960 to 2005, an annual average of 6.2%, from 5,188 persons to more than 74,000. This population percentage has steadily increased as more development has occurred in Mat-Su.

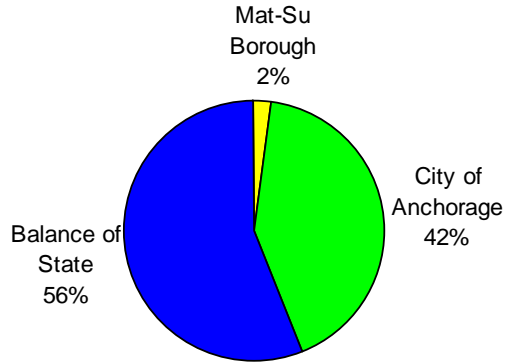
At this time, there are three incorporated cities in the Borough: Wasilla, Palmer and Houston, with many smaller, unincorporated communities throughout the Borough to account for its population total. Now located a distance of one to two hours in driving time from the central city of Anchorage, Mat-Su Borough is expected to become much more attractive for both recreational homes and year-round residential development when the Knik Arm Toll Bridge reduces that commute dramatically by a minimum of 30 to 60 minutes, dependent on the chosen test location within this very large borough. Mat-Su Borough's historic growth is depicted in Figure 5.



Source: U.S. Census Bureau, Alaska Department of Labor

**Figure 5: Population Growth, Mat-Su Borough
1960 to 2005**

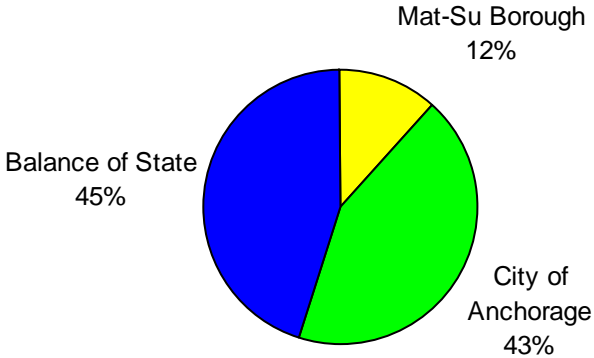
The growing populations of the City of Anchorage and in the Mat-Su Borough are an increasing percentage of Alaska’s total population, illustrated for the years 1970 and 2007 in Figures 6 and 7.



**Figure 6: City of Anchorage,
Mat-Su Borough and State of Alaska
Population Distribution
1970**

In 1970, Mat-Su represented 2% of the State of Alaska’s total population, with the City of Anchorage being home to just over 42% of Alaska’s residents. By 2007, that population had grown to 12% in Mat-Su and

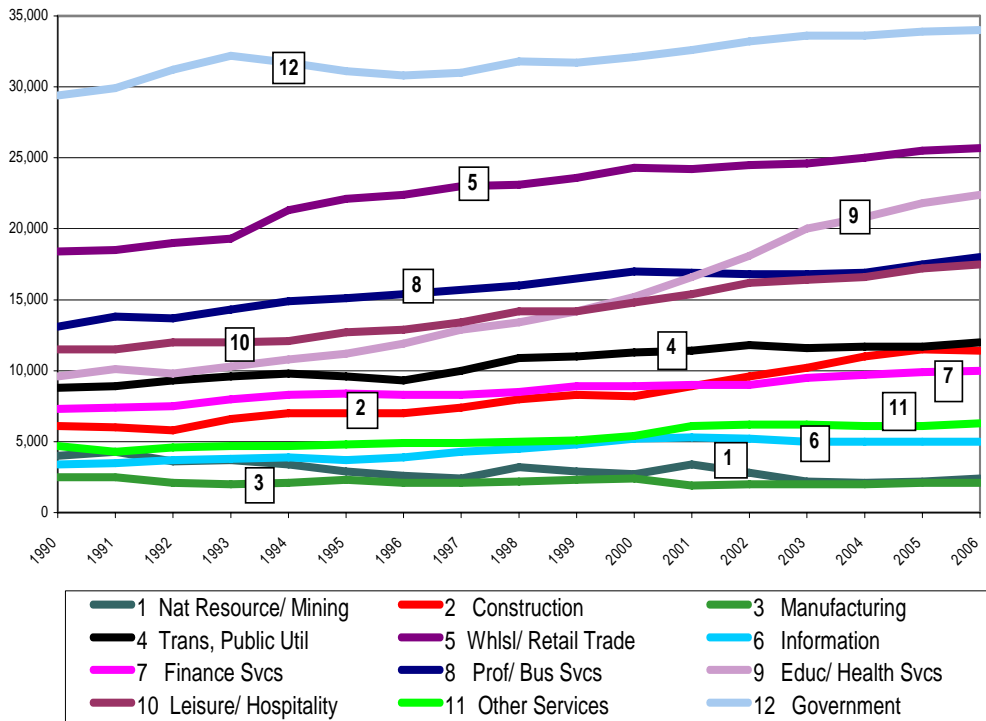
43% in the City of Anchorage, trends which are expected to continue at the same rate of growth under a “no-bridge” scenario.



**Figure 7: City of Anchorage, Mat-Su Borough
and State of Alaska
Population Distribution
2007**

B. Employment Overview – State of Alaska, Anchorage AK MSA

As previously noted, the Anchorage AK MSA (U.S. BEA 11260) includes the City of Anchorage and the Mat-Su Borough. This analysis uses the latest U.S. Bureau of Labor Statistics (BLS) employment classifications under the North American Industrial Classification Standards (NAICS) to indicate the segmentation of Anchorage AK MSA employment sectors and the relative size of the wage and salary employment reported by Anchorage employers in each of the last seventeen years. Annual employment data totals vary slightly dependent on the annual file summary closing dates established by each reporting source. In Figure 8, lines illustrating consistent employment performance of an industry sector are shown in the graph as nearly straight, while industry sectors with more significant employment volatility show as wavy lines. Data tables supporting this graph are found in Table 1.



Source: NAICS 1990 through 2006

**Figure 8: Anchorage AK MSA
Non-Agricultural Wage and Salary Employment
1990 to 2006**

As shown in Figure 8 and the supporting data as Table 1, government employment, making up just over 20% of the MSA labor force, includes two U.S. military bases, Elmendorf Air Force Base and Fort Richardson, which had a combined military presence in 2005 of more than 10,700 military personnel, plus civilian employment of some 2,600 additional positions, added to a substantial federal, state and local government presence in the Anchorage AK MSA. Military personnel are not included in wage and salary counts, and add to the effective total of employed persons within the MSA.

Major industries include petroleum-based mining, construction and professional support services, and a very active tourist and hospitality component.

	Net Resources/ Mining	Construction	Manufacturing	Trans. Public Util	Trade	Information	Financial Activities	Professional/B us Services	Edu/Health Services	Leisure/ Hospitality	Other Services	Government	Total
1990	4,000	6,100	2,500	8,800	18,400	3,400	7,300	13,100	9,600	11,500	4,700	29,400	118,700
1991	4,300	6,000	2,500	8,900	18,500	3,500	7,400	13,800	10,100	11,500	4,300	29,900	120,600
1992	3,600	5,800	2,100	9,300	19,000	3,700	7,500	13,700	9,800	12,000	4,600	31,200	122,300
1993	3,700	6,600	2,000	9,600	19,300	3,800	8,000	14,300	10,300	12,000	4,700	32,200	126,400
1994	3,400	7,000	2,100	9,800	21,300	3,900	8,300	14,900	10,800	12,100	4,700	31,700	130,100
1995	2,900	7,000	2,300	9,600	22,100	3,700	8,400	15,100	11,200	12,700	4,800	31,100	130,700
1996	2,600	7,000	2,100	9,300	22,400	3,900	8,300	15,400	11,900	12,900	4,900	30,800	131,500
1997	2,400	7,400	2,100	10,000	23,000	4,300	8,300	15,700	12,900	13,400	4,900	31,000	135,400
1998	3,200	8,000	2,200	10,900	23,100	4,500	8,500	16,000	13,400	14,200	5,000	31,800	140,800
1999	2,900	8,300	2,300	11,000	23,600	4,800	8,900	16,500	14,200	14,200	5,100	31,700	143,500
2000	2,700	8,200	2,400	11,300	24,300	5,200	8,900	17,000	15,200	14,800	5,400	32,100	147,300
2001	3,400	8,900	1,900	11,400	24,200	5,300	9,000	16,900	16,600	15,400	6,100	32,600	151,600
2002	2,800	9,600	2,000	11,800	24,500	5,200	9,000	16,800	18,100	16,200	6,200	33,200	155,300
2003	2,200	10,200	2,000	11,600	24,600	5,000	9,500	16,800	20,000	16,400	6,200	33,600	158,000
2004	2,100	11,000	2,000	11,700	25,000	5,000	9,700	16,900	20,800	16,600	6,100	33,600	160,600
2005	2,200	11,500	2,100	11,700	25,500	5,000	9,900	17,500	21,800	17,200	6,100	33,900	164,200
2006	2,400	11,400	2,100	12,000	25,700	5,000	10,000	18,000	22,400	17,500	6,300	34,000	166,800

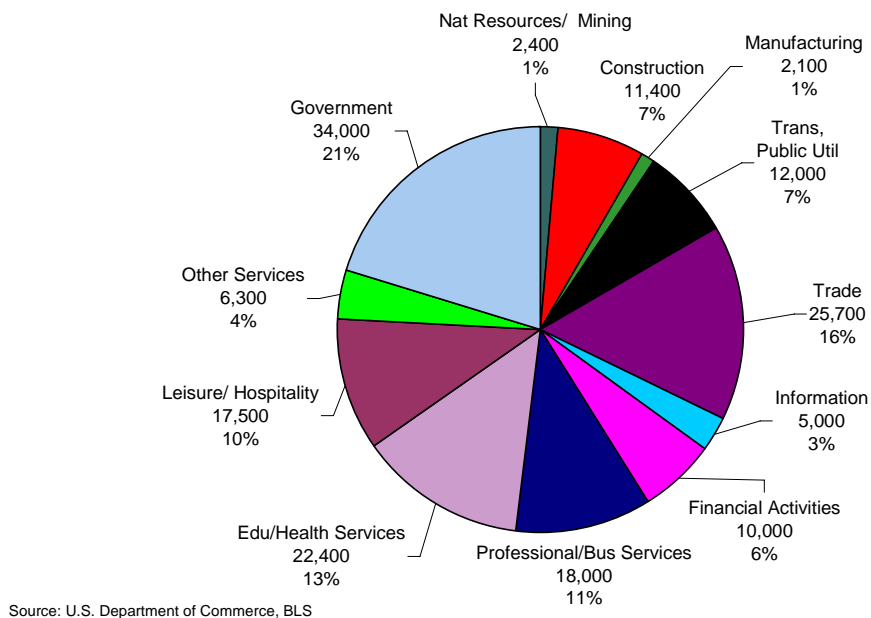
Source: U. S. Bureau of Labor Statistics

**Table 1: Anchorage AK MSA
Non-Agricultural Wage and Salary Employment 1990 to 2006**

Activity and Expansion at the Port of Anchorage and Port MacKenzie: The Port of Anchorage is a major port of call for both freight and recreational cruise passenger traffic, and is expected to continue to serve as the major service port for more than 80% of Alaska's populated area, military installations and consumer goods. Now receiving more than 80% of all shipping traffic entering the State, the Port of Anchorage also serves as freight hub for the Alaska Rail Road (ARR). The Port of Anchorage expansion plan, which is steadily being implemented over the

decade from 2004 to 2012, will add another \$400 million in road, rail, terminal and dock expansion improvements to port facilities. Under this expansion plan, it is expected that additional inbound and outbound capacity will be available for the Port of Anchorage, while outbound shipping of Alaskan natural resources and products such as coal, gravel, wood and wood chips is expected to continue to grow at the deep-draft facilities of Port MacKenzie.

Recent funding commitments were announced by the State of Alaska for additional improvements to the Alaskan Rail Road line extending south in the Mat-Su Peninsula to Port MacKenzie. This will significantly improve the productivity of Port MacKenzie's transportation infrastructure improvements, which are expected to be dramatically enhanced by the opening of the proposed Knik Arm Toll Bridge.



**Figure 9: Anchorage AK MSA
NAICS Total Non-Agricultural Wage and Salary Employment
2006 Percentage by Industry Category**

The Economy of the Anchorage AK MSA: As shown in Figure 9 and referenced again in Table 1, the economy of the Anchorage AK MSA has a labor force diversity and balance that provides both a base of sustained employment stability through its government, education and health

services, and tourism employment plus an entrepreneurial component that fluctuates with the availability of industry-specific capital financing and market conditions, important in examining the region's reaction to economic cycle changes.

Employment volatility is most apparent in the classification of mining and natural resources, which includes gas, petroleum, coal and gravel mining operations, as well as the lumber industry. Their various professional and business service support providers make up a substantial part of the Anchorage AK MSA economy. The NAICS classifications reflecting these business activities that are most affected by market conditions in the Anchorage AK MSA include mining, manufacturing, professional, business services and other services, and a portion of both construction and financial services, for an MSA employment sector that is more likely to be subject to market volatility of from 20% to 26%.

Classifications least affected by economic cycle pressures include government, education, transportation and public utilities, and in Anchorage's case, leisure and hospitality, which perform especially well in an economic downturn, a total of about 51% of the employment base. When Americans do not have the extra money to travel abroad, they prefer domestic travel, and the Alaskan destinations and cruises are high on many Americans' list of preferred places to visit.

The Anchorage AK MSA has a very stable government and educational component, exceptionally financed for a state government. The State of Alaska has insured its employment stability through the continued use of two reserve funds, the Constitutional Budget Reserve and the Alaska Permanent Fund, both of which serve to stabilize the State's annual revenues and assist in inflation-proofing Alaska's public sector employment.

C. Historic Regional Economic Performance and Forecast

The potential risk for any required capital investment is influenced by the way in which a region's population and employment activity responds to national economic cycles.

The graph in Figure 10 illustrates a simple but powerful method of examining economic cycles in the United States. Beginning in 1919, when the BLS began keeping employment data by market segment, the chart illustrates the annual percent of change in total employment from the previous year, shown in blue, as compared to the annual percent of change in construction employment, shown in red. Each year that the line is above zero indicates that employment increased by that percentage over the preceding year. Likewise, a mark below zero indicates that year's percent of loss against the preceding year, while a posting at zero would mean no change in total jobs from the previous year.

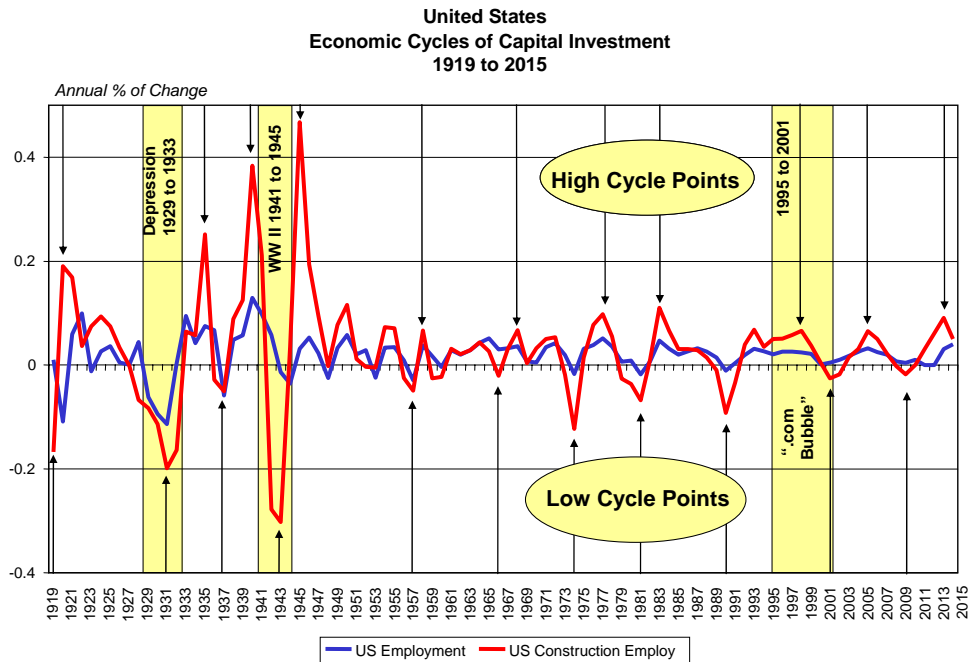


Figure 10: United States Economic Cycles of Capital Investment from 1919 to 2015

While total employment reflects overall activity in the country, construction employment is particularly useful to track because it represents from 3.0 to 8.0 percent of total employment in typical Metropolitan Statistical Areas (MSAs) and in the country as a whole. In the Anchorage AK MSA, that percentage varies from 5.8 to 7.4 percent. Construction employment is the most sensitive to the availability of capital for expenditure in improvements, both public and private. In Figure 10, construction employment acts as the tip of a “whip of change” as the whip is snapped and construction projects are released or slowed when construction capital is withheld by lenders.

Three periods of particular volatility or unpredictability from the expected norm are shown in Figure 10, including the Great Depression in the United States from 1929 to 1933, World War II from 1941 to 1945, and the “dot.com bubble” from 1995 through 2001. In each of these periods, the economic cycle moved in a markedly aberrant manner, reflecting the availability or lack of capital formation for new public and private investment.

In addition, Figure 10 illustrates the high point and low point of each cycle with corresponding arrows. Through 1948, extreme swings in both construction employment and total employment were experienced, as the illustration shows. However, since 1953, cycles in the economy have become much less erratic due to improved federal regulations, money management techniques and the improving integration of the world economy. From 1953 forward, economic cycles at intervals of approximately six to eight years are apparent in the data, allowing a predictive mechanism to be employed in estimating capital formation and the regional reactions to such formation in the future. Detailed employment data from the U.S. Bureau of Labor Statistics is shown in the appendices of this report.

In the absence of a catastrophic economic event, it can be predicted that approximately every six to eight years the U.S. economy will experience a cycle of over-building followed by under-building, over-supply followed by under-supply, and available capital followed by restricted capital.

These economic cycles are documented at the regional level with equal clarity in most metropolitan statistical areas, certainly that of the Anchorage AK MSA, as reflected in Figure 11, and distinctly affect new

construction markets, with the accompanying “ripple effects” of changes in traffic patterns and volumes.

The energy industry exhibits a clear pattern that heavily influences regional economies where oil and gas production employment and support services play a large role in the financial health of the local economy. When the balance of the United States and many industries suffer as energy prices spike upward, especially those that are heavily transportation-related, the energy-heavy economies often flourish with added exploration activity. These economies benefit from the profitability of local energy-related production firms and support companies, which show in the Anchorage AK MSA as component parts of the categories of professional, business and other services, transportation and public utilities.

Like other MSAs that have these heavy energy-related components such as Houston and West Texas, the Anchorage AK MSA’s energy industry heavily influences the State of Alaska’s economy and produces the MSA’s counter cyclical trend as compared to the balance of the United States. These trends are illustrated in Figure 11, in which the United States’ pattern of construction employment shown in red, which is driven by available capital and market confidence, is compared that of the State of Alaska, shown in green.

Unlike many other larger MSAs, such as Chicago, New York and Los Angeles, which follow the national pattern of cyclical performance, the energy-heavy MSAs demonstrate a more counter-cyclical pattern that flourishes when other markets are under stress due to increasing costs. An additional advantage to these MSA’s is that opportunity for raising capital is improved when their business activities are in an upturn and the balance of the U.S. MSAs are in a decline.

An additional counter-cyclical advantage in the Anchorage AK MSA is that its vibrant tourism segment is also bolstered during periods of economic downturn when overseas travel is relatively more expensive and domestic travel for leisure and recreation is often preferred.

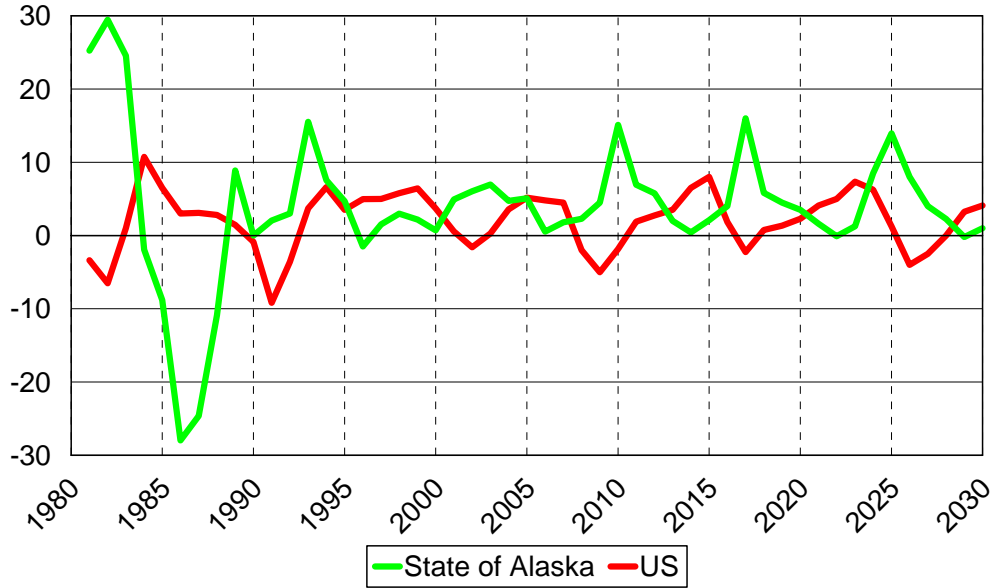


Figure 11: Cycles of Capital Investment: State of Alaska and United States, Historic 1980 to 2006, Projected 2007 to 2030

The expectations of growth cycles for the Anchorage MSA can also be forecast, as shown in Figure 11, with dynamic cycle changes occurring about every six to eight years. Continued in-migration to the State of Alaska and to the Anchorage AK MSA are reflected in increases in annual job growth, followed by pauses in growth during economic downturns.

Alaska's employment continues to grow, and has not shown a loss in total employment for the past two decades despite two national recessions and declining oil production during part of the 90s. The State of Alaska forecasts continued growth in employment for the Anchorage AK MSA, but at a slightly slower rate in the next several years.

D. Land Use and Demand Trends in the Anchorage AK MSA

Land Ownership: The fact that a very small percentage of Alaska’s land mass is actually available for private sector development is important to understanding the population and employment demand issues and the resulting forecasts for land use in the State.

Based on a recent update from ISER in 2005, approximately 64.5% of the State’s land area is in Federal ownership or control such as the Alaskan Wildlife Refuge, another 24.3% is held by State Parks and other State agencies, while another 10% of Alaskan lands is held by Native American Indian tribal interests, and 0.5% is held by other public interests, such as universities and public trusts. Only 0.7% of the land mass of the State is in private hands, less than three-quarters of one percent.

These ownership patterns dramatically influence the availability and market price of land for private development purposes such as home and business ownership in the State of Alaska. The categories of control of Alaskan lands are illustrated in Figure 12.

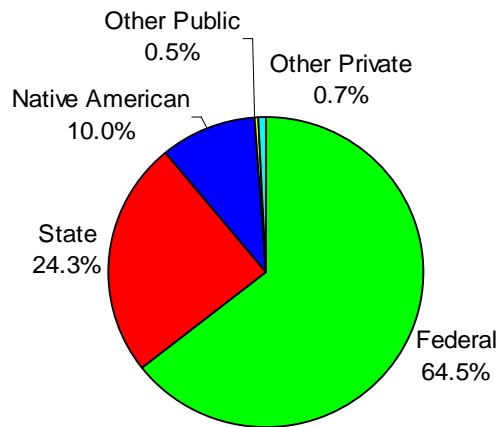


Figure 12: Alaskan Land Ownership

Source: Institute of Social and Economic Research, University of Alaska at Anchorage

Land Price Pressures: New home prices in Mat-Su vary greatly because of their intended use as second homes or recreational cottages versus full time residences, but according to the Mat-Su Borough tax appraisal district, new residential construction averages about \$240,000 per residence, just less than the appraised average of \$265,000 per residence as cited from the appraisal district serving the City of Anchorage.

In Figure 13, the component parts of the U.S. Bureau of Economic Analysis's Consumer Price Index for Alaska indicates the cost of shelter as approximately 32.7 percent of the consumer's expenditures. The Office of Federal Housing Enterprise Oversight produces a separate measurement of the rate of appreciation of housing by MSA. By deducting the shelter cost from the CPI and comparing the remaining components of the CPI to the isolated cost of housing, it is possible to demonstrate the value of housing appreciation as compared to the local cost of living increase. This comparison is provided in Figure 14.

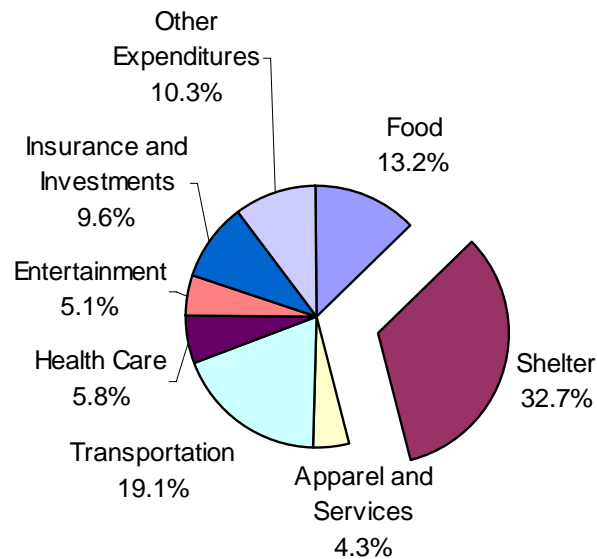
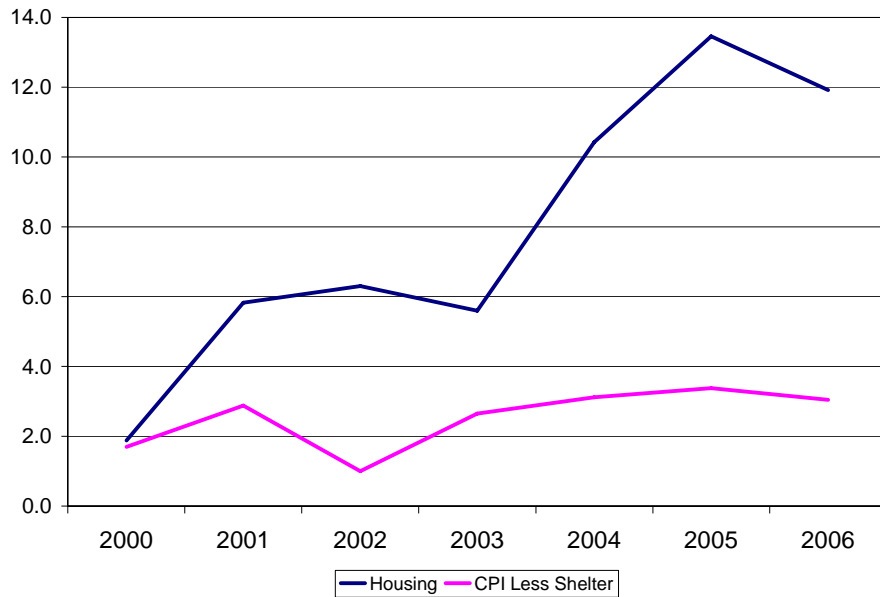


Figure 13: Components of the Consumer Price Index (CPI)



Sources: U.S. Bureau of Economic Analysis; Office of Federal Housing Enterprise Oversight

Figure 14: Housing Price Performance Compared to the Consumer Price Index

As illustrated in Figure 14, the Anchorage AK MSA is experiencing multi-year upward pricing pressure on both new residential and commercial construction, with the market reaction resulting in a price spike for existing residential properties, and by nature of the competition for land use, for commercial property as well. Despite a current slowdown in home price increases in the U.S. housing market, housing in the Anchorage AK MSA has continued to be a valuable investment, with real estate values outpacing the regional inflation rate by from three to five times the increase in the cost of living due to demand for housing in the MSA.

As noted, these demand trends place a consistent upward price pressure on land values for commercial properties as well, particularly in a market such as the land-locked “Anchorage Bowl” where new land for development is scarce and redevelopment is costly relative to typical redevelopment opportunities in most of the balance of the U.S.

Continuing geographic limitations persist for meeting this demand for new housing, crippling the growth of the Anchorage AK MSA, because of the topographic configuration of the land mass on the right side of the Knik Arm where mountain ranges constrict available land for development to

the north of the Anchorage Bowl. The Knik Arm Toll Bridge will clearly provide faster, more convenient access to the scarce Alaskan resources of developable land for both residential and commercial purposes on the Mat-Su Peninsula.

Current and Future Development Patterns in the Immediate Knik Arm Study Area: Current development in the Mat-Su Borough is centered on the towns along the Glenn and Parks highways, from Palmer to Wasilla. In the future, however, residential development is anticipated to flourish north of the Port MacKenzie region to Wasilla with the stimulus of the Knik Arm Toll Bridge and newly developing road systems which provide greater access to the Mat-Su Peninsula.

In the Anchorage area near the proposed bridge connection, the Government Hill neighborhood has received much attention and planning due to the historic nature of some of the properties. A “cut and cover” entrance into the area has been designed into the cost structure for the bridge to protect the neighborhood, with the City of Anchorage expecting that new, neighborhood appropriate retail will be the result of the anticipated road and highway improvements.

The plans provided for analysis address an additional concern that the traffic generated by the proposed bridge be managed by means of a “freeway-to-freeway” couplet. This cost is also included in the estimates for the bridge’s ultimate development and integration into the transportation planning for the City of Anchorage.

As noted by ISER, much of the future growth for the City of Anchorage is expected to occur in and around the center of the City in the Anchorage Bowl, with increasing densities and transit supported development and redevelopment areas. Outside the Anchorage Bowl, the Chugiak-Eagle River area is expected to experience the highest growth in terms of projected household units. Insight expects that this growth will continue during the period of study through 2030 due to the desirability, economic vitality and commercial base of the City of Anchorage.

In the Mat-Su Borough, the areas most likely to be affected by household and population growth are those that have currently demonstrated residential growth patterns that are supported by access to consumer goods and services.

As noted, availability and cost of land for commercial use is another major factor influencing the expectations for development stimulated by the Knik Arm Toll Bridge. For these reasons, it is expected that the proposed land newly available for commercial development in the Port MacKenzie gateway will be very attractive. Terms currently under consideration could make properties in the Port available for modest lease rates. Port MacKenzie industrial and commercial development could also be favorably affected by the current discussions of potential reimbursement, through lease rate offsets, of any infrastructure development required to make the newly available properties usable for commercial development. It is likely that these incentives will be required to stimulate early development and build interest in these Port MacKenzie industrial and commercial areas to acquire the “critical mass” needed to achieve economic expectations.

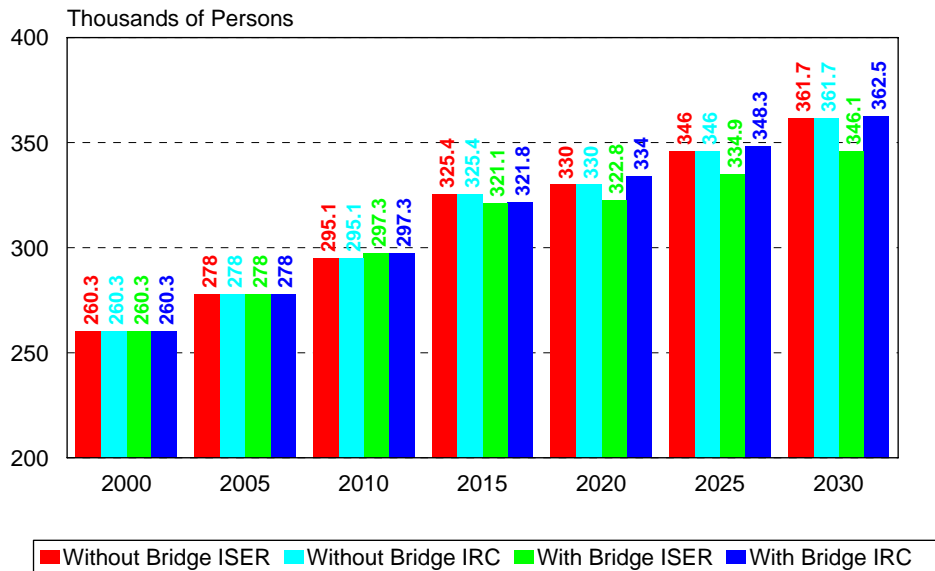
As development patterns for additional employment and commercial activity become more tangible, it is expected that additional residential development in the Mat-Su Borough will continue to increase, with a perceptible increase in activity within the decade after the bridge is operational, slowing to the current pre-bridge pattern of annual population increases thereafter.

While housing price differentials may continue to exist between the City of Anchorage and new housing on the Mat-Su Peninsula, no concern was found that would support the expectation that either housing markets in the City of Anchorage or on the Mat-Su Peninsula would be negatively affected since the draw of the central city and its economic opportunities continue to dominate the Alaskan economic profile.

5. FINDINGS OF NEW PROJECT IMPACT ON TAZ BASE DATA

Insight's projections for new growth in the Anchorage AK MSA, the City of Anchorage and the Mat-Su Borough were prepared for both with and without the Knik Arm Toll Bridge project. Insight's population and employment projections are compared to those of the ISER analysis, released in 2005 and based on actual data available to ISER through the year 2002, and relying on projections thereafter. This analysis incorporates actual population and performance through year end 2006.

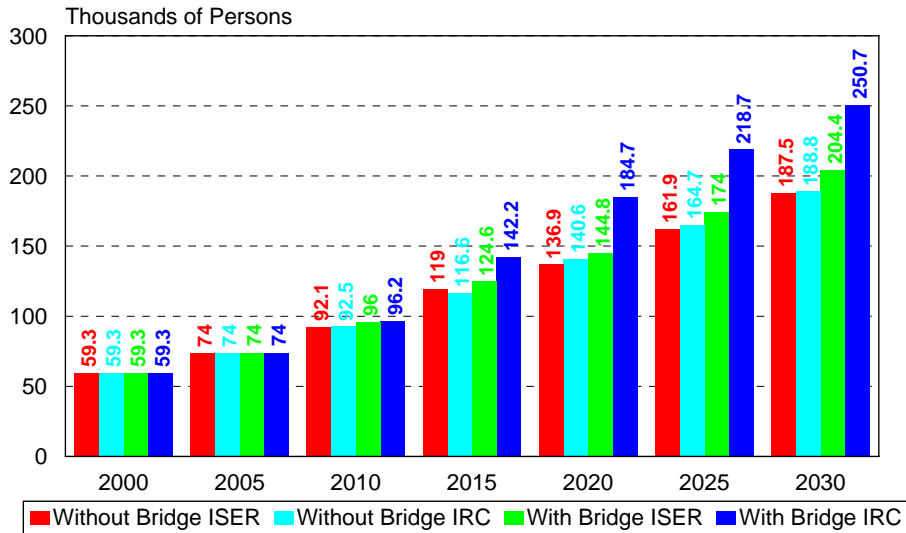
Population: Added study area population from the Project Development Forecast, with detail provided year-to-year showing percent of growth is included as a part of the appendices of this analysis. These projections are compared in Figures 15 and 16 for the City of Anchorage and the Mat-Su Borough respectively.



**Figure 15: City of Anchorage
Population Forecast Comparison
With and Without Bridge**

In Figure 15, the Insight Research forecast for the City of Anchorage with the bridge in 2030 is 362,500, and the prior ISER forecast with the bridge is 346,100, a difference of

16,400 residents. Without the bridge, the forecasts produce virtually the same population expectations when adjusted for updated trends in actual population from 2002 to 2006, a difference in 2006 starting points for forecasts between ISER and Insight.



**Figure 16: Mat-Su Borough
Population Forecast Comparison
With and Without Bridge**

A greater difference is found when examining the population projections with the proposed bridge at 2030, as shown in Figure 16. With the bridge, the 2030 population for the Mat-Su Borough as projected by Insight is 250,700 residents as compared to the earlier ISER estimate of 204,400, a difference of 46,300 persons. Again, without the bridge, the population forecasts are very similar.

Figure 17 and its accompanying Table 2 attribute the forecast population growth to likely TAZs in the study area. The variance by year for each benchmark five-year increment is noted in Table 2, with risk factors of deviations that could be experienced due to economic cycles also shown as the high and low projections. The graph indicates the prior HDR traffic projection model in dark blue, with the Insight probable projection in green based on four years of additional data and updated land use plans.

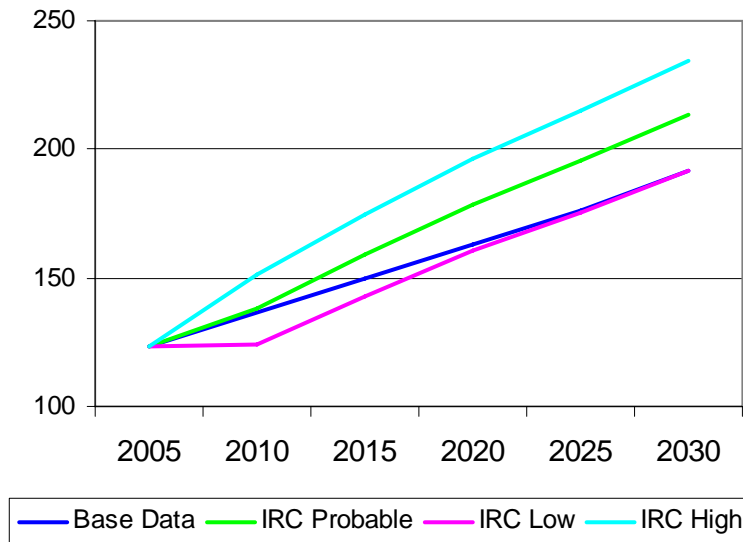


Figure 17: Knik Arm Toll Bridge Study Area Comparative Household Projections (In Thousands) Base Data, Probable, Low and High Scenarios

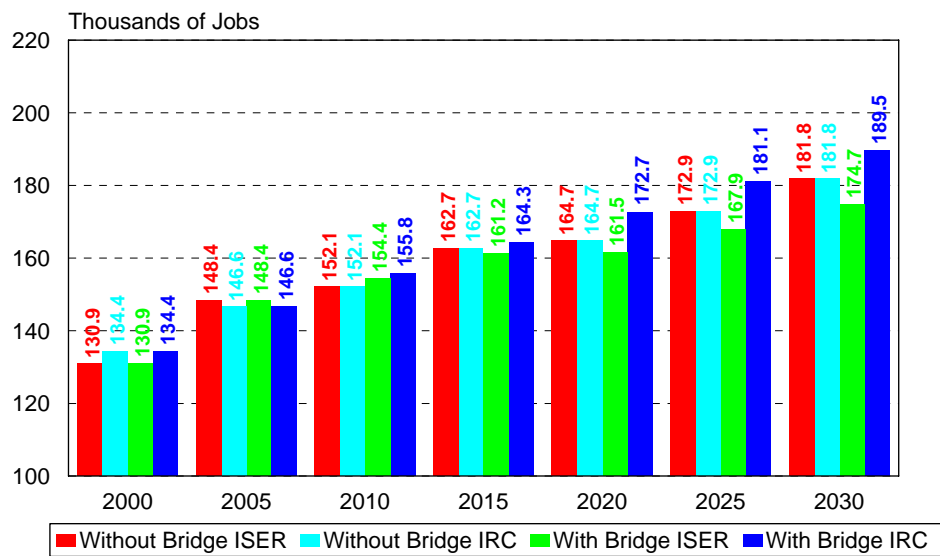
Changes to the population forecast by TAZ are captured in the TAZ update and projection spreadsheets. These forecast data are provided as a part of this analysis in electronic file formats under separate cover for further use by Wilbur Smith Associates.

Year	Base Data Trend	IRC Probable Trend	% Variance from Base Data Trend	IRC Low Trend	% Variance from Base Data Trend	IRC High Trend	% Variance from Base Data Trend
2005	123,423	123,423	0.0%	123,423	0.0%	123,423	0.0%
2010	136,590	137,887	0.9%	124,098	-9.1%	151,676	11.0%
2015	149,756	158,774	6.0%	142,897	-4.6%	174,651	16.6%
2020	162,923	178,429	9.5%	160,586	-1.4%	196,271	20.5%
2025	176,199	195,219	10.8%	175,697	-0.3%	214,741	21.9%
2030	191,600	213,400	11.4%	192,060	0.2%	234,740	22.5%

Table 2: Knik Arm Toll Bridge Study Area Comparative Household Projections HDR Base Data, Probable, Low and High Scenarios

Employment: Employment projections were prepared for the City of Anchorage and the Mat-Su Borough as described in the following section.

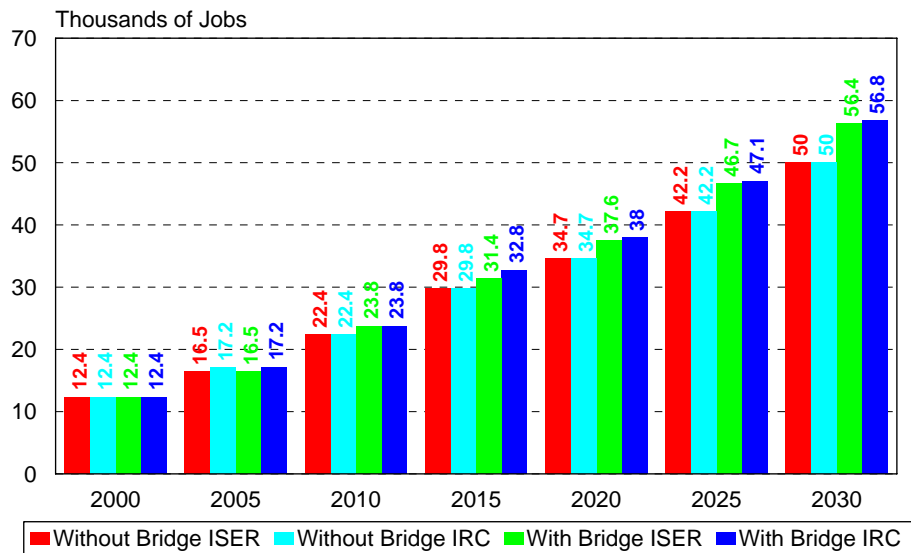
City of Anchorage: A marked difference was in the employment expectations for the City of Anchorage between the ISER and Insight projections. Insight’s review and interpretation of the industry data, supplemented by historic and projected economic and labor force trends, produced a more optimistic outlook for employment in the City of Anchorage, with ISER forecasting a 2030 wage and salaried employment of 174,700 to Insight’s 189,500 as shown in Figure 18. Insight does not envision a loss of employment in the City of Anchorage due to its strong economic position within the State, the City’s important business climate amenities and its inflation-resistant labor force and industry mix.



**Figure 18: City of Anchorage
Employment Forecast Comparison
With and Without Bridge**

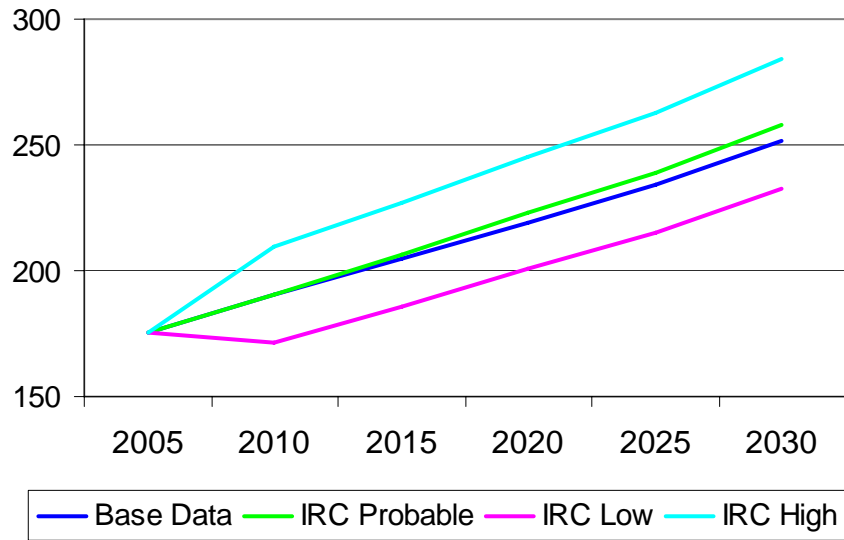
Mat-Su Borough: By using an entirely different forecasting method for employment, Insight arrived at very similar employment projections for employment impact in the Mat-Su Borough with the development of the proposed bridge in its probable scenario. While the ISER projection supplemented by Northern Economics industry analysis developed ratios for employment change

from industry trends, a macroeconomic approach. In contrast, Insight modeled probable land use and the associated employment based on plans defined by officials and contact persons in the Mat-Su Borough and City of Anchorage, using microeconomic analytical techniques. The resulting growth expected is attributed primarily to new business activity stimulated over the more than twenty years of potential development by the improvement in logistics capacity planned for the Port MacKenzie industrial and commercial districts, supported by the continuing population growth and new transportation patterns on the Mat-Su Peninsula, as shown in Figure 19.



**Figure 19: Mat-Su Borough
Employment Forecast Comparison
With and Without Bridge**

Figure 20 and its accompanying data in Table 3 illustrate the findings of Insight Research Corporation’s analysis of employment change from the prior HDR traffic projection model. These projections are also bracketed by low and high employment projection values in five year increments as calculated from the research, and further detailed in Appendix G, again showing the prior HDR projection in blue with the Insight probable projection in green.



**Figure 20: Knik Arm Toll Bridge Study Area
Direct Employment Projections (In Thousands)
Base Data, Probable, Low and High Scenarios**

Year	Base Data Trend	IRC Probable Trend	% Variance from Base Data Trend	IRC Low Trend	% Variance from Base Data Trend	IRC High Trend	% Variance from Base Data Trend
2005	175,717	175,717	0.0%	175,717	0.0%	175,717	0.0%
2010	190,239	190,239	0.0%	171,215	-10.0%	209,263	10.0%
2015	204,761	206,546	0.9%	185,892	-9.2%	227,201	11.0%
2020	219,284	222,754	1.6%	200,478	-8.6%	245,029	11.7%
2025	233,806	238,961	2.2%	215,065	-8.0%	262,857	12.4%
2030	251,306	258,146	2.7%	232,331	-7.6%	283,961	13.0%

**Table 3: Knik Arm Toll Bridge Study Area
Direct Employment Projections
HDR Base Data, Probable, Low and High Scenarios**

6. **ECONOMIC IMPACT ANALYSIS AND COMPARISON: WITH AND WITHOUT THE PROPOSED KNIK ARM TOLL BRIDGE**

As part of this report, an economic impact analysis was prepared which examines various impacts of the construction of the proposed Knik Arm Toll Bridge, as well as the residential and commercial developments which are likely to be encouraged and stimulated by the construction of this bridge. This section transmits findings of economic, employment and tax revenue impact of these developments, showing how their activities will benefit the City of Anchorage, Mat-Su Borough, the general Anchorage AK MSA, and the State of Alaska.

A. Economic Impact Methodology: Detailed assumptions used for these analyses are provided both in the Appendix of this document and in the descriptions which follow. The types of impact examined in this report are defined as follows:

(1) Economic Impact. Economic impact is the benefit to the general economy of the entire Anchorage AK MSA, shown as a multiplier and generally referred to as the "economic ripple effect." This calculation uses U.S. Bureau of Economic Analysis Regional Input-Output Modeling System (RIMS II) multipliers specific to the Anchorage MSA.

(2) Direct and Indirect Employment Impact. This economic impact analysis includes direct and indirect employment for both construction and operating phases of the developments stimulated by the Knik Arm Toll Bridge. Direct employment refers to persons on payrolls of these developments, while indirect employment is generated by the purchases of goods and services by the residents and employees.

(3) Direct and Indirect Tax Revenue Impact. Direct tax revenue impact refers to the taxes paid by the businesses, while indirect taxes are tax benefits to the state and local jurisdictions as a result of employment and other taxable spending. Direct tax revenue streams may be available to investment or financing commitments under certain agreements. Indirect revenue streams are not investment-grade, but reflect the "ripple effect" of potential taxes which can flow to each jurisdiction.

B. Limitations of the Assumptions:

- Total economic impact of the development extends beyond the Anchorage AK MSA area, as some purchases are made outside the region.
- Employment of any part-time workers has been reduced to "full time equivalent" positions (FTE) using a standard work week and benefits. Models use a "constant dollar" analysis, with no property value or tax increases, no depreciation, and no Consumer Price Index (CPI) or Cost of Living Adjustment (COLA) increases assumed.
- Analysis assumes local point of sale on taxable equipment and construction materials.
- Operating costs for the bridge as a toll facility are not included in this analysis at this time.
- Tax revenue impact does not include federal income tax on payroll or on the activities of the business, which are determined as a tax on annual net profits or book values.
- No tax deferrals, incentives or abatements are included in these calculations.
- The proposed lease rate structures and offsetting reimbursements for infrastructure investments under consideration in the Port MacKenzie industrial and commercial parks are excluded from the calculation of taxable values.

C. Project Assumptions: As described in the earlier portion of the socioeconomic analysis methodology description found in Section 3, Insight prepared lists of development and reviewed these with the source contact. A conservative approach was used in including potential projects, and only those projects which were wholly or significantly dependent on the bridge construction, or which were significantly changed in scale, scope or timing by the proposed project were included

in the economic models. A full set of project assumptions is included in the appendix of this document.

The variance of the expected result was developed for both options studied: (a) With Bridge or (b) Without Bridge. Descriptions of these projects are included in the Appendix of this analysis, and assumptions which were reflected in the economic impact models more fully described in the following paragraphs. In each case, the assumptions made for the construction of the Knik Arm Toll Bridge are included first, with the project scope or timing described immediately thereafter if the presence of the proposed bridge materially affected the project's development.

- **Bridge Construction:** Construction of the Knik Arm Toll Bridge itself was assumed to begin in 2008 and continue through 2011 with the bridge projected to be operational in 2012. Although several designs are still under consideration, the KABATA offices in Anchorage provided a potential cost estimate of \$563.9 million including some \$9.9 million for right-of-way acquisition for use in economic impact modeling. Further detail on the construction costs included in this total are found in Table 4.

Port MacKenzie Road Paving	\$15,350,802
Port MacKenzie Northern Route	\$11,222,345
West Approach	\$27,578,746
Bridge	\$280,129,768
East Approach	\$70,807,016
MOA Future Port Expansion Alignment	\$6,482,157
Retaining Wall	\$10,068,750
Cherry Hill	\$21,363,984
Government Hill	\$44,817,722
Toll Technology	\$4,698,523
Engineering	\$31,238,389
Project Management	\$26,031,991
AK DOT Overhead Charge	\$4,084,090
Right of Way	\$9,988,768
Total	\$563,863,051

Table 4: Knik Arm Toll Bridge Construction Cost Estimates

- **Residential:** If the Knik Arm Toll Bridge is constructed as planned, the gradual addition of approximately 21,803 single family homes from 2009 to 2030 is expected to occur throughout the Mat-Su Borough, primarily in City of Houston, the Big Lake

area, the Knik area, Willow and Point MacKenzie areas. These units are assumed to have an average assessed value of \$240,000 each in constant 2007 dollars, resulting in a total added assessed value of \$5.2 billion in new residential investment into the Mat-Su Borough over a 22 year period. This projection for residential growth represents about 1.25% annually over the growth trend for the “no build” scenario.

In the event that the Knik Arm Toll Bridge is not constructed, no new residential development is assumed beyond the existing trend as previously forecast by ISER correcting for actual data to year 2006.

- **Office:** With the construction of the bridge, an expected investment for construction of 653,000 sf of potential office space to support the activities and business growth in the Port MacKenzie area could be experienced. Construction values for the Anchorage AK MSA for this space is estimated at \$112.1 million, with an additional \$17.4 million to be invested in furniture, fixtures and equipment. These office uses, with phased construction assumed from 2010 to 2030, could provide employment for 2,177 persons as full-time equivalents (FTE's) with an average salary of \$33,600 and a total annual payroll at full development resulting in \$73.2 million in added area wages.

Without the bridge construction, only 150,000 sf of office uses are expected to develop from 2010 to 2030. The investment required for construction of this office space is \$25.7 million, with an additional \$4.0 million to be invested in furniture, fixtures and equipment. These anticipated office uses could provide employment for 500 FTE positions with the same annual salary assumptions of \$33,650 and the total annual payroll of \$16.8 million.

- **Tech Flex:** The presence of the Knik Arm Toll Bridge is expected to stimulate construction of some 1.3 million square feet (sf) of tech flex uses in Port MacKenzie from 2010 to 2030 to be used primarily by small businesses with activities related to new development and Port MacKenzie operations in the Mat-Su area, as well as related business interests in the City of Anchorage.

The expected investment for construction of this amount of space over 21 years is estimated to be \$154.4 million, with an additional \$4.2 million to be invested in furniture, fixtures and equipment. These anticipated tech flex uses could provide employment for approximately 520 FTE positions at an average salary of \$33,650, yielding a total annual payroll of \$17.5 million.

Without the bridge, Port MacKenzie may still anticipate the development of 200,000 sf of tech flex uses in the period from 2010 to 2030. The investment for construction of these uses is expected to be \$23.8 million, with an additional \$600,000 to be invested in furniture, fixtures and equipment. This anticipated tech flex development could provide employment for 80 FTE positions at an average salary of \$33,650, with the resulting annual payroll of \$2.7 million.

- **Retail:** A total of 1.79 million sf of retail uses are expected to develop from 2010 to 2030 if the Knik Arm Toll Bridge is constructed and the associated residential and commercial construction occurs. Some 1.74 million sf are assumed to develop in the vicinity of Port MacKenzie and its planned commercial park, with the balance of the development expected to occur in the City of Anchorage in association with the bridge design and integration into the Anchorage traffic patterns.

The investment anticipated for construction of these retail uses is \$284.1 million, with an additional \$44.8 million to be invested in furniture, fixtures and equipment. These retail uses could provide employment for approximately 3,580 FTE positions at an average salary of \$23,300, yielding a total annual payroll of \$83.4 million.

Without the bridge, 50,000 sf of retail uses are still likely to develop in Port MacKenzie from 2014 to 2030, while the Anchorage retail is not assumed to develop in this scenario as any other retail would not be dependent on the construction of the bridge. The expected investment for retail construction in Port MacKenzie is \$7.9 million, with an additional \$1.3 million to be invested in furniture, fixtures and equipment. This retail development could provide employment for 100 FTE positions at

an average salary of \$23,300, resulting in an annual payroll expected to be \$2.3 million.

- **Industrial/Distribution:** The largest volume of use to be stimulated by the proposed bridge is expected to be industrial and distribution space to house and process Alaskan mining, lumber industry and mineral interests in preparation for in and outbound shipping from the deep draft Port MacKenzie facilities, now undergoing development and expansion as are those of the Port of Anchorage.

Construction of the Knik Arm Toll Bridge plus related capital investment incentives may stimulate an estimated 4.5 million sf of industrial/distribution uses in Port MacKenzie from 2010 to 2030. The investment for construction of these industrial uses is expected to be \$237.6 million, with an additional \$234.0 million to be invested in personal property values as furniture, fixtures and equipment. This industrial/distribution complex on the Mat-Su Borough side of the Knik Arm Toll Bridge could provide employment for 563 FTE positions annually with an average salary of \$38,266, resulting in a total annual payroll of \$21.5 million.

Without the bridge, an estimated 450,000 sf of industrial/distribution space may be still expected in Port MacKenzie from 2010 to 2030. The required investment for construction of this industrial space is \$23.8 million, with an additional \$23.4 million to be invested in furniture, fixtures and equipment. These anticipated uses could provide employment for 117 FTE positions at the same average salary of \$38,266, and a total annual payroll of \$4.5 million.

7. FINDINGS OF THE ECONOMIC IMPACT ANALYSIS WITH AND WITHOUT THE KNIK ARM TOLL BRIDGE

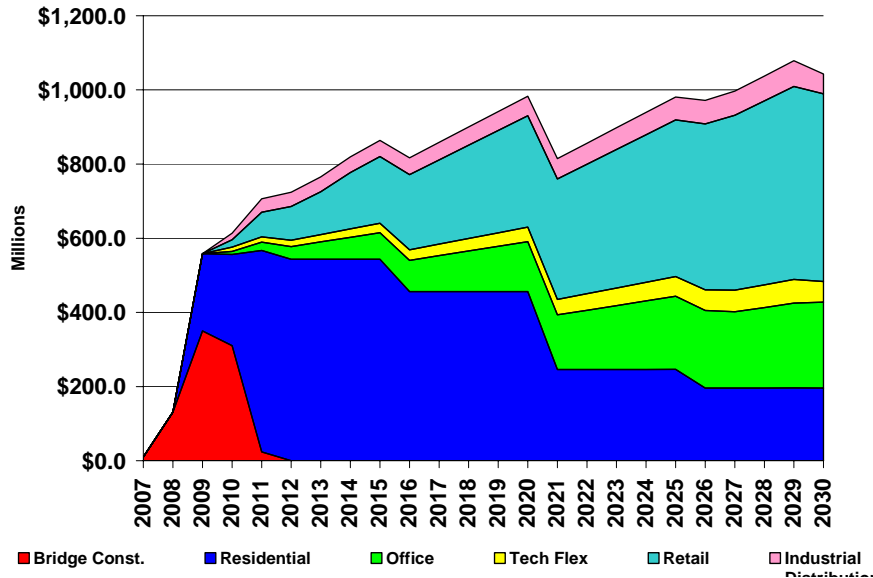
- A. Cumulative Economic Impact 2007 – 2030, \$19.307 Billion:** Economic impact is the benefit to the general economy of the entire Anchorage Metropolitan Statistical Area (MSA) and the Matanuska-Susitna Borough area, shown as a multiplier and generally referred to as the "economic ripple effect."

The economic impact of construction and operation of the Knik Arm Toll Bridge from 2007 through 2030 is expected to be **\$19.307 Billion**. This impact is widely experienced and driven by all areas of construction, payroll, maintenance and operating activities, exclusive of the toll operations of the bridge itself. These comparative economic impact results are cited by development component in Table 5, with figures given in millions of dollars cumulatively over the period of study, and further illustrated over time in Figures 21 and 22.

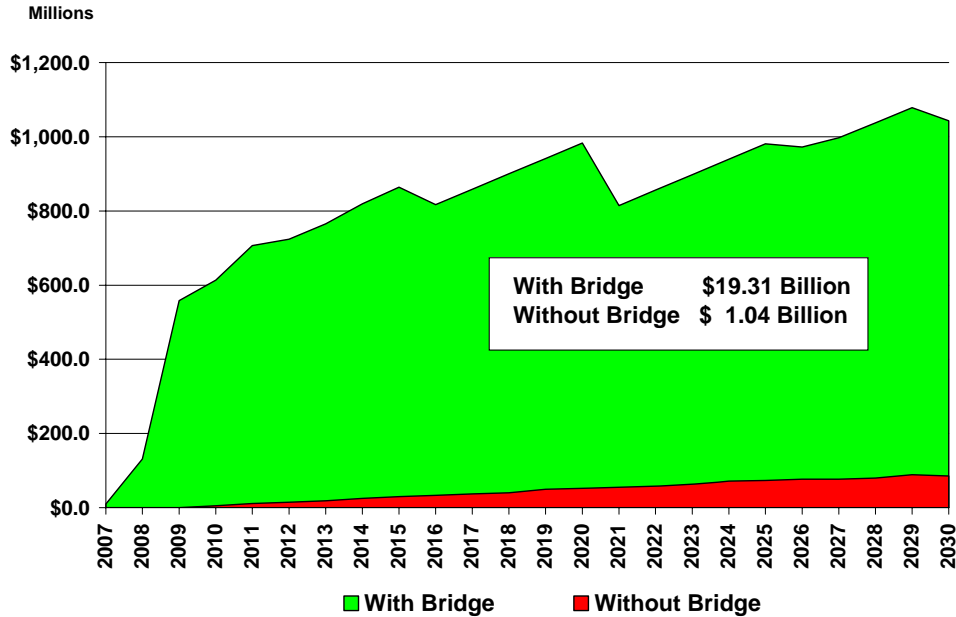
	With Bridge	Without Bridge
Bridge Construction	\$825.4	\$0.0
Residential	\$7,660.0	\$0.0
Office	\$2,745.7	\$630.7
Tech Flex	\$811.3	\$124.8
Retail	\$6,192.3	\$140.8
Industrial/Distribution	\$1,072.5	\$148.5
TOTAL	\$19,307.3	\$1,044.9

**Totals may vary due to rounding.*

Table 5: Cumulative Economic Impact by Land Use Component, 2007 - 2030



**Figure 21: Cumulative Economic Impact
Public and Private Investments
Knik Arm Toll Bridge, 2007 – 2030**



**Figure 22: Comparative Economic Impact
With & Without the Knik Arm Toll Bridge
2007 – 2030**

B. Employment Impact, 6,839 new jobs annually at 2030, and 262,450 new years of work from 2007 to 2030: The projects stimulated by the construction of the Knik Arm Toll Bridge may employ **6,839** persons at full development of the associated land examined in this analysis and provide **262,450** new years of work, or work years, from 2007 through 2030. One job for one year is one work year.

This economic impact analysis includes direct and indirect employment for construction and operating phases of these developments. Direct employment refers to persons on the payroll of the businesses, while indirect employment is generated by the purchases of goods and services by the businesses and their employees. Permanent new job totals are as shown in Table 6 are associated with each development component, with total direct and indirect employment shown in Table 7:

	With Bridge	Without Bridge
Office	2,177	500
Tech Flex	520	80
Retail	3,580	100
Industrial/Distribution	563	117
Total	6,839	797

Table 6: Direct New Jobs at 2030

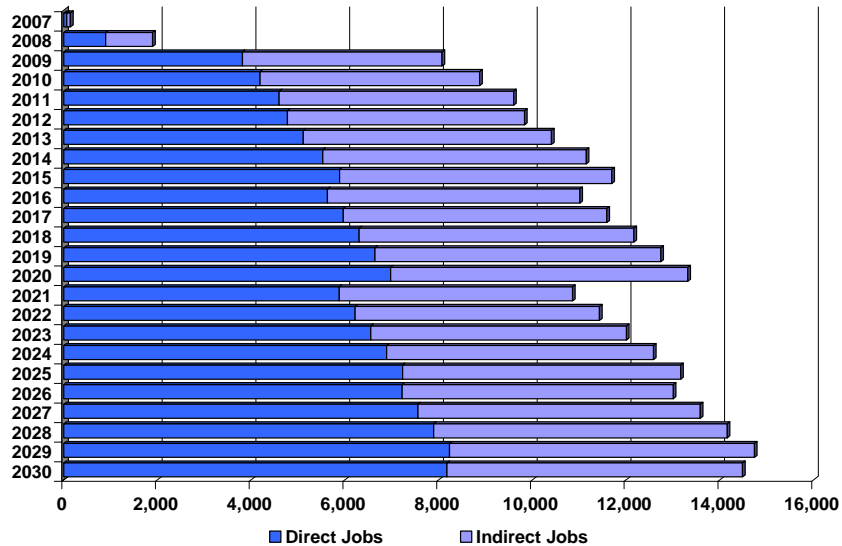


Figure 23: Annual Employment Impact of Knik Arm Toll Bridge 2007 - 2030

	With Bridge	Without Bridge
Direct*	8,176	797
Indirect	6,304	791
Total	14,480	1,588

**Direct employment includes construction jobs.*

Table 7: Direct & Indirect Employment at 2030

Figure 23 depicts annual direct and indirect employment resulting from these land uses and business activities, while Figure 24 compares the resulting employment for build-out at a single year, 2030, under the two scenarios, With and Without the Knik Arm Toll Bridge.

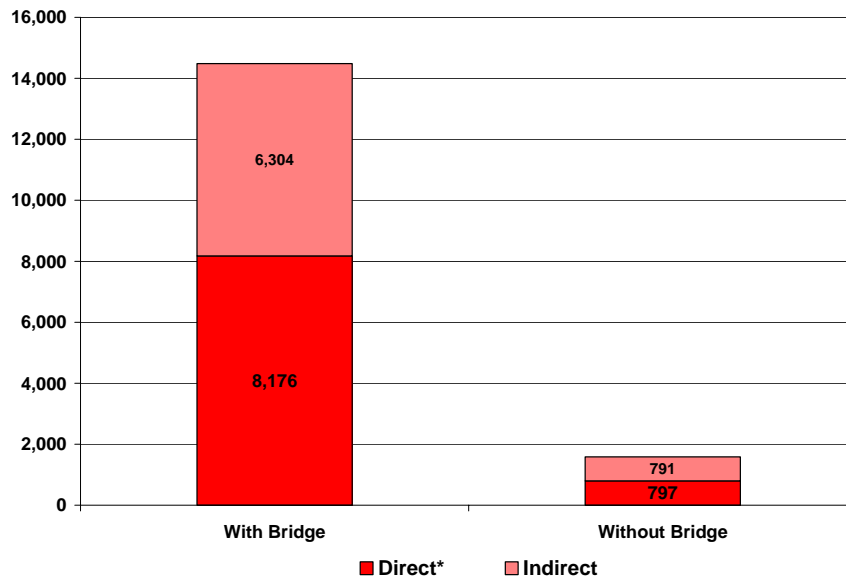


Figure 24: Direct & Indirect Jobs With and Without the Knik Arm Toll Bridge at 2030

C. Cumulative Tax Revenue Impacts 2007 - 2030, \$1.174 Billion: Direct tax revenue impact refers to the taxes paid by these new businesses and residences, while indirect taxes are tax benefits to the state and local jurisdictions as a result of employment and other “ripple effect” taxable spending stimulated by the commercial and residential development. Direct tax revenue streams may be available to investment or financing commitments under certain agreements. Indirect revenue streams are not investment-grade, but reflect the “ripple effect” of potential taxes which can flow to each jurisdiction.

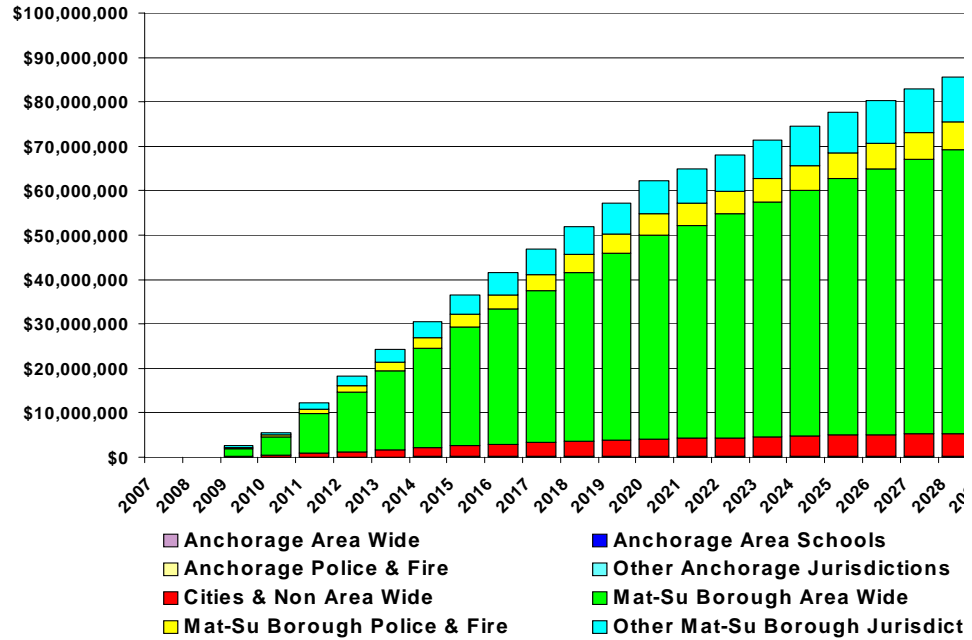
Tax advantages expected from the development activities stimulated by the bridge from 2007 to 2030 are as shown in Table 8 in millions of dollars, with direct and indirect taxes as generated by the facilities and staffing yielding **\$1.174 Billion** in cumulative tax revenues to the applicable jurisdictions from 2007 through 2030:

	Direct	Indirect	Total Direct & Indirect
Anchorage Area Wide	\$0.07	\$0.06	\$0.13
Anchorage Area Schools	\$0.98	\$0.92	\$1.91
Anchorage Police & Fire	\$0.60	\$0.56	\$1.16
Other Anchorage Jurisdictions	\$0.46	\$0.44	\$0.90
Mat-Su Cities & Non Area Wide	\$51.53	\$21.20	\$72.73
Mat-Su Area Wide (Including Schools)	\$695.96	\$172.77	\$868.73
Mat-Su Police & Fire	\$80.28	\$8.08	\$88.37
Other Mat-Su Jurisdictions	\$127.00	\$12.79	\$139.79
Totals	\$956.88	\$216.83	\$1,173.71

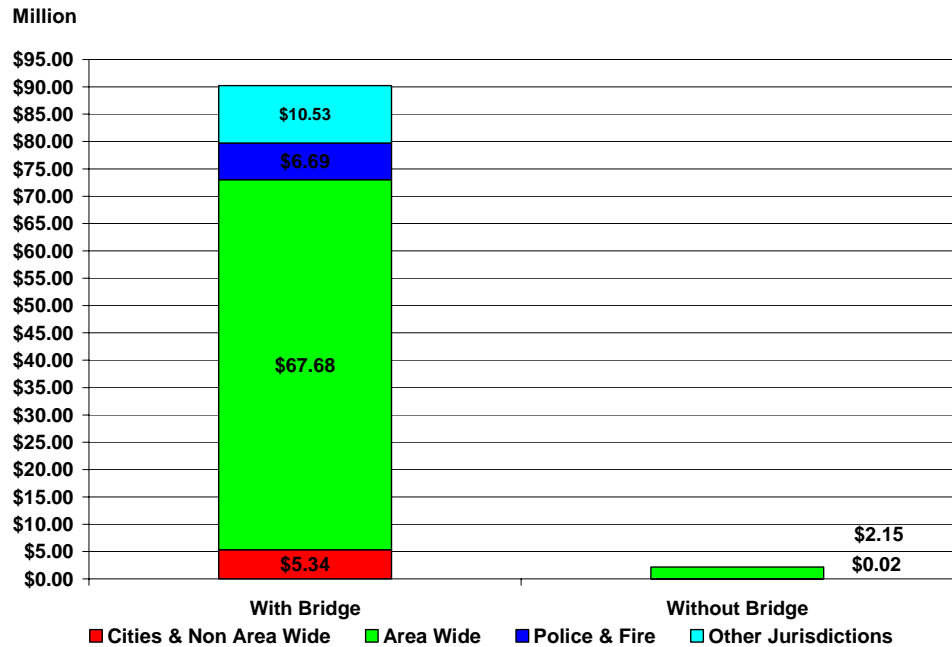
**Totals may vary due to rounding.*

**Table 8: Cumulative Direct and Indirect Taxes by Jurisdiction
2007 – 2030 (In Millions)**

Figures 25 and 26 depict the tax revenue outcomes to the affected jurisdictions resulting from the construction of the bridge.



**Figure 25: Cumulative Direct and Indirect Taxes by Jurisdiction
\$1.173 Billion from 2007 – 2030**



**Figure 26: Direct and Indirect Taxes by Jurisdiction at Year 2030
With Bridge \$90.23 Million
Without Bridge \$2.18 Million**

D. Additional Detail: Appendices A through G are a part of this analysis, providing additional detail of the research findings:

- **Appendix A:** Elected officials, city representatives, real estate, transportation and economic development professionals who were contacted to provide information for this development update.
- **Appendix B:** U.S. Bureau of Labor Statistics (US BLS) historic employment data, plus Insight Research Corporation's forecast.
- **Appendix C:** The Project Development Forecast, providing five-year increment estimates of direct population and employment additions by city, TAZ and project size for the Knik Arm Toll Bridge study area.
- **Appendix D:** Comparative Population Forecasts, 2000 to 2006 Historic, 2007 to 2030 Forecast, With and Without the Knik Arm Toll Bridge, ISER to Insight Research Corporation.
- **Appendix E:** Comparative Employment Forecasts, 2000 to 2006 Historic, 2007 to 2030 Forecast, With and Without the Knik Arm Toll Bridge, ISER to Insight Research Corporation.
- **Appendix F:** Development assumptions with and without the Knik Arm Toll Bridge used in Insight Research Corporation's economic impact analysis model.
- **Appendix G:** Tax rate and jurisdictional assumptions used for the economic impact model.

**Knik Arm Toll Bridge
Anchorage Alaska MSA
Traffic and Toll Revenue
Investment Grade Study**

***Independent Economic Overview
and Development Updates***

Appendix

- A. Contact List for This Analysis
- B. United States Economic Cycle Data
- C. Project Development Forecast
- D. Comparative Population Forecasts, 2000 to 2006 Historic, 2007 to 2030 Forecast, With and Without the Knik Arm Toll Bridge, ISER to Insight Research Corporation
- E. Comparative Employment Forecasts, 2000 to 2006 Historic, 2007 to 2030 Forecast, With and Without the Knik Arm Toll Bridge, ISER to Insight Research Corporation
- F. Economic Impact Development Assumptions With and Without Bridge Construction
- G. Applicable Tax Rates for Economic Impact Analysis

Appendix A

Knik Arm Toll Bridge Contact List

**Knik Arm Toll Bridge
Contact List**

Name	Title	Address	Phone	Email
Henry Springer	Executive Director	KABATA 550 7th Avenue, Suite 1850 Anchorage, AK 99501	907-269-6698	
Kevin Hemenway	Chief Financial Officer	KABATA 550 7th Avenue, Suite 1850 Anchorage, AK 99501	907-269-6510 (o) 907-269-6697 (fax)	www.knickarmbridge.com kevin.hemenway@ dot.state.ak.us
Darryl Jordan	Deputy Executive Director	KABATA 550 7th Avenue, Suite 1850 Anchorage, AK 99501	907-269-6496 (o) 907-269-6697 (fax)	darryl.jordan@dot.state.ak.us
John Duffy	Borough Manager	Matanuska-Susitna Borough 350 Dahlia Avenue Palmer, AK 99645	907-745-9689	jduffy@matsugov.us
Murph O'Brien	Director of Planning	Matanuska-Susitna Borough 350 Dahlia Avenue Palmer, AK 99645	907-745-9851	murph.o'brien@mastugov.us
Dave Hanson	Economic Development Director	Matanuska-Susitna Borough 350 Dahlia Avenue Palmer, AK 99645	907-745-9508	dave.hanson@matsugov.us
Mark Van Dongen	Director	Port MacKenzie 350 Dahlia Avenue Palmer, AK 99645	907-745-4801	
Tom Nelson	Planning Director	Municipality of Anchorage 4700 S. Bragaw Street Anchorage, AK 99507	907-343-7909	tnelson@ci.anchorage.ak.us
Lance Wilber	Traffic Department Director	Municipality of Anchorage 4700 S. Bragaw Street Anchorage, AK 99507	907-343-8411	wilberlr@ci.anchorage.ak.us
Howard Holtan	Municipal Engineer	Municipality of Anchorage 4700 S. Bragaw Street Anchorage, AK 99507	907-343-8109	holtanhc@ci.anchorage.ak.us

**Knik Arm Toll Bridge
Contact List**

Name	Title	Address	Phone	Email
Dennis LeBlanc (secretary Joy)	Municipal Manager	Anchorage City Hall 632 W. 6th Avenue Anchorage, AK 99501	907-343-7110	leblancdc@muni.org
Mike Abbott	Asst. Municipal Manager	Anchorage City Hall 632 W. 6th Avenue Anchorage, AK 99501	907-343-7107	abbottmk@muni.org
Mary Jane Michael	Director, Economic and Community Development	Anchorage City Hall 632 W. 6th Avenue Anchorage, AK 99501	907-343-4365 (Lisa)	michaelmj@muni.org
Major General Charles H. Jacoby, Jr.,	Commanding General	Fort Richardson (Army)	907-384-1110	
Carl Tinsley	Base Commander	Elmendorf Air Force Base	907-552-0300	
Donna Baltz	Deputy Port Director	Port of Anchorage 2000 Anchorage Port Road Anchorage, AK 99501	907-343-6203	
Kevin Bruce	Dir. of Facilities Development	Port of Anchorage 2000 Anchorage Port Road Anchorage, AK 99501	907-343-6219	
Jim Holycross	Director of Planning	City of Wasilla 290 E. Herning Ave. Wasilla, AK 99654	907-373-9010	
Sandra Garley	Director of Economic Developr	City of Wasilla 290 E. Herning Ave. Wasilla, AK 99654	907-373-9030	
Dr. Paul Metz		University of Alaska at Fairbanks	907-474-6749	

**Knik Arm Toll Bridge
Contact List**

Name	Title	Address	Phone	Email
Scott Hattenburg		Hattenburg Dilley & Linnell 3335 Arctic Blvd., Ste. 100 Anchorage, AK 99503	907-564-2120	
Mike Williams		Alaska Department of Revenue 550 W. 7th Avenue, Ste. 500 Anchorage, AK 99501	907-269-6620	
Chris Mekins	BPP Tax Division	Municipality of Anchorage 632 W. 6th Avenue Anchorage, AK 99501	907-343-6695	
Michelle Wheeler	Real Property Department	Matanuska-Susitna Borough Division of Assessment 350 E. Dahlia Avenue Palmer, AK 99645	907-745-9642	
Kathi Johns	Personal Property Department	Matanuska-Susitna Borough Division of Assessment 350 E. Dahlia Avenue Palmer, AK 99645	907-745-9637	
Jennifer Dallinger	Finance Department	Matanuska-Susitna Borough 350 E. Dahlia Avenue Palmer, AK 99645	907-745-9568	

Appendix B

United States Economic Cycle Data

Appendix B
United States Economic Cycle Data
Total Employment and Construction Employment
1919 – 2015

Year	Total Employment	Annual % Change	Total Construction	Annual % Change
1919	27,078,000		1,036,000	
1920	27,340,000	0.97%	863,000	-16.70%
1921	24,372,000	-10.86%	1,027,000	19.00%
1922	25,816,000	5.92%	1,200,000	16.85%
1923	28,382,000	9.94%	1,244,000	3.67%
1924	28,028,000	-1.25%	1,336,000	7.40%
1925	28,766,000	2.63%	1,461,000	9.36%
1926	29,806,000	3.62%	1,570,000	7.46%
1927	29,962,000	0.52%	1,623,000	3.38%
1928	29,986,000	0.08%	1,621,000	-0.12%
1929	31,324,000	4.46%	1,512,000	-6.72%
1930	29,409,000	-6.11%	1,387,000	-8.27%
1931	26,635,000	-9.43%	1,229,000	-11.39%
1932	23,615,000	-11.34%	985,000	-19.85%
1933	23,699,000	0.36%	824,000	-16.35%
1934	25,940,000	9.46%	877,000	6.43%
1935	27,039,000	4.24%	927,000	5.70%
1936	29,068,000	7.50%	1,160,000	25.13%
1937	31,011,000	6.68%	1,127,000	-2.84%
1938	29,194,000	-5.86%	1,070,000	-5.06%
1939	30,645,000	4.97%	1,205,000	12.62%
1940	32,407,000	5.75%	1,352,000	12.20%
1941	36,600,000	12.94%	1,852,000	36.98%
1942	40,213,000	9.87%	2,234,000	20.63%
1943	42,574,000	5.87%	1,627,000	-27.17%
1944	42,006,000	-1.33%	1,152,000	-29.19%
1945	40,510,000	-3.56%	1,190,000	3.30%
1946	41,759,000	3.08%	1,724,000	44.87%
1947	43,945,000	5.23%	2,051,000	18.97%
1948	44,954,000	2.30%	2,241,000	9.26%
1949	43,843,000	-2.47%	2,236,000	-0.22%
1950	45,287,000	3.29%	2,405,000	7.56%
1951	47,930,000	5.84%	2,678,000	11.35%
1952	48,909,000	2.04%	2,709,000	1.16%
1953	50,310,000	2.86%	2,700,000	-0.33%
1954	49,093,000	-2.42%	2,688,000	-0.44%

Source: U.S. Bureau of Labor Statistics

Appendix B (Continued)

Year	Total Employment	Annual % Change	Total Construction	Annual % Change
1955	50,744,000	3.36%	2,881,000	7.18%
1956	52,473,000	3.41%	3,082,000	6.98%
1957	52,959,000	0.93%	3,007,000	-2.43%
1958	51,426,000	-2.89%	2,862,000	-4.82%
1959	53,374,000	3.79%	3,050,000	6.57%
1960	54,296,000	1.73%	2,973,000	-2.52%
1961	54,105,000	-0.35%	2,908,000	-2.19%
1962	55,659,000	2.87%	2,997,000	3.06%
1963	56,764,000	1.99%	3,060,000	2.10%
1964	58,391,000	2.87%	3,148,000	2.88%
1965	60,874,000	4.25%	3,284,000	4.32%
1966	64,020,000	5.17%	3,371,000	2.65%
1967	65,931,000	2.99%	3,305,000	-1.96%
1968	68,023,000	3.17%	3,410,000	3.18%
1969	70,512,000	3.66%	3,637,000	6.66%
1970	71,006,000	0.70%	3,654,000	0.47%
1971	71,335,000	0.46%	3,770,000	3.17%
1972	73,798,000	3.45%	3,957,000	4.96%
1973	76,912,000	4.22%	4,167,000	5.31%
1974	78,389,000	1.92%	4,095,000	-1.73%
1975	77,069,000	-1.68%	3,608,000	-11.89%
1976	79,502,000	3.16%	3,662,000	1.50%
1977	82,593,000	3.89%	3,940,000	7.59%
1978	86,826,000	5.13%	4,322,000	9.70%
1979	89,932,000	3.58%	4,562,000	5.55%
1980	90,528,000	0.66%	4,454,000	-2.37%
1981	91,289,000	0.84%	4,304,000	-3.37%
1982	89,677,000	-1.77%	4,024,000	-6.51%
1983	90,280,000	0.67%	4,065,000	1.02%
1984	94,530,000	4.71%	4,501,000	10.73%
1985	97,511,000	3.15%	4,793,000	6.49%
1986	99,474,000	2.01%	4,937,000	3.00%
1987	102,088,000	2.63%	5,090,000	3.10%
1988	105,345,000	3.19%	5,233,000	2.81%
1989	108,014,000	2.53%	5,309,000	1.45%

Source: U.S. Bureau of Labor Statistics

Appendix B (Continued)

Year	Total Employment	Annual % Change	Total Construction	Annual % Change
1990	109,487,000	1.36%	5,263,000	-0.87%
1991	108,374,000	-1.02%	4,780,000	-9.18%
1992	108,726,000	0.32%	4,608,000	-3.60%
1993	110,844,000	1.95%	4,779,000	3.71%
1994	114,291,000	3.11%	5,095,000	6.61%
1995	117,298,000	2.63%	5,274,000	3.51%
1996	119,708,000	2.05%	5,536,000	4.97%
1997	122,776,000	2.56%	5,813,000	5.00%
1998	125,930,000	2.57%	6,149,000	5.78%
1999	128,993,000	2.43%	6,545,000	6.44%
2000	131,785,000	2.16%	6,787,000	3.70%
2001	131,826,000	0.03%	6,826,000	0.57%
2002	130,341,000	-1.13%	6,716,000	-1.61%
2003	129,999,000	-0.26%	6,735,000	0.28%
2004	131,435,000	1.10%	6,976,000	3.58%
2005	133,703,000	1.73%	7,336,000	5.16%
2006	136,174,000	1.85%	7,689,000	4.81%
2007	141,280,525	3.75%	8,035,005	4.50%
2008	144,600,617	2.35%	7,874,305	-2.00%
2009	141,853,206	-1.90%	7,480,590	-5.00%
2010	140,647,453	-0.85%	7,342,199	-1.85%
2011	140,647,453	0.00%	7,481,701	1.90%
2012	142,405,547	1.25%	7,687,447	2.75%
2013	145,965,685	2.50%	7,956,508	3.50%
2014	150,782,553	3.30%	8,473,681	6.50%
2015	154,175,160	2.25%	9,151,575	8.00%

Source: U.S. Bureau of Labor Statistics

Appendix C

Project Development Forecast

**Employment and Household Additions
Project Development Forecast
Knik Arm Toll Bridge Study Area**

	City/County	Description/Use Type	Bridge Impact	Year	Square Feet			Employment			Households			TAZ
					Low	Mid	High	Low	Mid	High	Low	Mid	High	
1	Port MacKenzie	Industrial - 800 Acres	Bridge	2015	1,012,500	1,125,000	1,237,500	127	141	155				593
				2020	1,012,500	1,125,000	1,237,500	127	141	155				
				2025	1,012,500	1,125,000	1,237,500	127	141	155				
				2030	1,012,500	1,125,000	1,237,500	127	141	155				
				Total	4,050,000	4,500,000	4,950,000	506	563	619				
2	Port MacKenzie	Office - 180 Acres 4 Buildings	Bridge	2015	146,925	163,250	179,575	490	544	599				136
				2020	146,925	163,250	179,575	490	544	599				
				2025	146,925	163,250	179,575	490	544	599				
				2030	146,925	163,250	179,575	490	544	599				
				Total	587,700	653,000	718,300	1,959	2,177	2,394				
3	Port MacKenzie	Retail - 160 Acres	Bridge	2015	391,500	435,000	478,500	783	870	957				136
				2020	391,500	435,000	478,500	783	870	957				
				2025	391,500	435,000	478,500	783	870	957				
				2030	391,500	435,000	478,500	783	870	957				
				Total	1,566,000	1,740,000	1,914,000	3,132	3,480	3,828				
4	Port MacKenzie	Tech Flex - 180 Acres	Bridge	2015	163,250	325,000	490,000	65	130	196				136
				2020	163,250	325,000	490,000	65	130	196				
				2025	163,250	325,000	490,000	65	130	196				
				2030	163,250	325,000	490,000	65	130	196				
				Total	653,000	1,300,000	1,960,000	261	520	784				
5	Mat-Su Borough	Residential	Bridge	2010							245	272	299	59
				2015							1,481	1,646	1,811	
				2020							1,256	1,396	1,536	
				2025							684	760	836	
				2030							547	608	669	
				Total							4,214	4,682	5,150	
6	Mat-Su Borough	Residential	Bridge	2010							147	163	179	96
				2015							887	986	1,085	
				2020							752	836	920	
				2025							410	455	501	
				2030							328	364	400	
				Total							2,524	2,804	3,084	

**Employment and Household Additions
Project Development Forecast
Knik Arm Toll Bridge Study Area**

	City/County	Description/Use Type	Bridge Impact	Year	Square Feet			Employment			Households			TAZ
					Low	Mid	High	Low	Mid	High	Low	Mid	High	
7	Mat-Su Borough	Residential	Bridge	2010							61	68	75	97
				2015							374	416	458	
				2020							320	356	392	
				2025							176	195	215	
				2030							140	155	171	
				Total									1,071	
8	Mat-Su Borough	Residential	Bridge	2010							41	45	50	98
				2015							241	268	295	
				2020							204	227	250	
				2025							111	123	135	
				2030							88	98	108	
				Total									685	
9	Mat-Su Borough	Residential	Bridge	2010							14	16	18	99
				2015							91	101	111	
				2020							78	87	96	
				2025							43	48	53	
				2030							34	38	42	
				Total									261	
10	Mat-Su Borough	Residential	Bridge	2010							39	43	47	100
				2015							221	245	270	
				2020							182	202	222	
				2025							97	108	119	
				2030							75	83	91	
				Total									613	
11	Mat-Su Borough	Residential	Bridge	2010							46	51	56	102
				2015							266	295	325	
				2020							219	243	267	
				2025							117	130	143	
				2030							90	100	110	
				Total									737	

**Employment and Household Additions
Project Development Forecast
Knik Arm Toll Bridge Study Area**

	City/County	Description/Use Type	Bridge Impact	Year	Square Feet			Employment			Households			TAZ	
					Low	Mid	High	Low	Mid	High	Low	Mid	High		
12	Mat-Su Borough	Residential	Bridge	2010							72	80	88	103	
				2015							412	458	504		
				2020							339	377	415		
				2025							181	201	221		
				2030								140	155		171
				Total									1,144		1,271
13	Mat-Su Borough	Residential	Bridge	2010							18	20	22	104	
				2015							101	112	123		
				2020							81	90	99		
				2025							42	47	52		
				2030								32	36		40
				Total									275		305
14	Mat-Su Borough	Residential	Bridge	2010							64	71	78	105	
				2015							354	393	432		
				2020							285	317	349		
				2025							150	167	184		
				2030								115	128		141
				Total									968		1,076
15	Mat-Su Borough	Residential	Bridge	2010							34	38	42	106	
				2015							180	200	220		
				2020							141	157	173		
				2025							73	81	89		
				2030								56	62		68
				Total									484		538
16	Mat-Su Borough	Residential	Bridge	2010							46	51	56	107	
				2015							268	298	328		
				2020							222	247	272		
				2025							120	133	146		
				2030								95	105		116
				Total									751		834

**Employment and Household Additions
Project Development Forecast
Knik Arm Toll Bridge Study Area**

	City/County	Description/Use Type	Bridge Impact	Year	Square Feet			Employment			Households			TAZ
					Low	Mid	High	Low	Mid	High	Low	Mid	High	
17	Mat-Su Borough	Residential	Bridge	2010							67	74	81	111
				2015							346	384	422	
				2020							266	296	326	
				2025							136	151	166	
				2030							104	116	128	
				Total									919	
18	Mat-Su Borough	Residential	Bridge	2010							56	62	68	112
				2015							302	335	369	
				2020							240	267	294	
				2025							126	140	154	
				2030							97	108	119	
				Total									821	
19	Mat-Su Borough	Residential	Bridge	2010							12	13	14	113
				2015							59	66	73	
				2020							44	49	54	
				2025							22	24	26	
				2030							17	19	21	
				Total									154	
20	Mat-Su Borough	Residential	Bridge	2010							7	8	9	115
				2015							32	36	40	
				2020							23	26	29	
				2025							11	12	13	
				2030							9	10	11	
				Total									83	
21	Mat-Su Borough	Residential	Bridge	2010							123	137	151	130
				2015							755	839	923	
				2020							646	718	790	
				2025							354	393	432	
				2030							283	314	345	
				Total									2,161	

**Employment and Household Additions
Project Development Forecast
Knik Arm Toll Bridge Study Area**

	City/County	Description/Use Type	Bridge Impact	Year	Square Feet			Employment			Households			TAZ	
					Low	Mid	High	Low	Mid	High	Low	Mid	High		
22	Mat-Su Borough	Residential	Bridge	2010							36	40	44	131	
				2015							266	295	325		
				2020							247	274	301		
				2025							141	157	173		
				2030								116	129		142
				Total									806		895
23	Mat-Su Borough	Residential	Bridge	2010							36	40	44	132	
				2015							279	310	341		
				2020							266	295	325		
				2025							155	172	189		
				2030								127	141		155
				Total									862		958
24	Mat-Su Borough	Residential	Bridge	2010							4	4	4	133	
				2015							23	26	29		
				2020							22	24	26		
				2025							13	14	15		
				2030								10	11		12
				Total									71		79
25	Mat-Su Borough	Residential	Bridge	2010							2	2	2	134	
				2015							9	10	11		
				2020							5	6	7		
				2025							3	3	3		
				2030								2	2		2
				Total									21		23
26	Anchorage	Retail - Redevelopment	Bridge		22,500	25,000	27,500	45	50	55				203	
27	Anchorage	Retail - Redevelopment	Bridge		22,500	25,000	27,500	45	50	55				204	
28	Port MacKenzie	Industrial - 80 Acres	No Bridge	2015	101,250	112,500	123,750	13	14	15				593	
				2020	101,250	112,500	123,750	13	14	15					
				2025	101,250	112,500	123,750	13	14	15					
				2030	101,250	112,500	123,750	13	14	15					
				Total	405,000	450,000	495,000	51	56	62					

**Employment and Household Additions
Project Development Forecast
Knik Arm Toll Bridge Study Area**

	City/County	Description/Use Type	Bridge Impact	Year	Square Feet			Employment			Households			TAZ
					Low	Mid	High	Low	Mid	High	Low	Mid	High	
29	Port MacKenzie	Office - 1 Building	No Bridge	2015	33,750	37,500	41,250	113	125	138				136
				2020	33,750	37,500	41,250	113	125	138				
				2025	33,750	37,500	41,250	113	125	138				
				2030	33,750	37,500	41,250	113	125	138				
				Total	135,000	150,000	165,000	450	500	550				
30	Port MacKenzie	Retail - 5 Acres	No Bridge		11,250	12,500	13,750	23	25	28				136
					11,250	12,500	13,750	23	25	28				
					11,250	12,500	13,750	23	25	28				
					11,250	12,500	13,750	23	25	28				
					45,000	50,000	55,000	90	100	110				
31	Port MacKenzie	Tech Flex - 18 Acres	No Bridge	2015	45,000	50,000	55,000	18	20	22				136
				2020	45,000	50,000	55,000	18	20	22				
				2025	45,000	50,000	55,000	18	20	22				
				2030	45,000	50,000	55,000	18	20	22				
				Total	180,000	200,000	220,000	72	80	88				
32	Port MacKenzie	Fuel Farm - 150 Acres	Minimal											593
33	Port MacKenzie	Prison - 1250 Beds	Minimal	2010										

Appendix D

Population Forecast Detail

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Mat-Su Borough Population With Bridge, 2000 – 2030	Page A18

**Anchorage AK MSA
Population Without Bridge
2000 – 2030**

	ISER Projection			Insight Projection		
	Population	% Change	HH	Population	% Change	HH
2000	319,600		119,479	319,605		119,480
2001	325,900	1.97%	121,798	326,668	2.21%	122,090
2002	333,000	2.18%	124,421	332,175	1.69%	124,107
2003	341,100	2.43%	127,404	340,556	2.52%	127,197
2004	348,200	2.08%	130,019	348,028	2.19%	129,951
2005	358,400	2.93%	133,818	351,991	1.14%	131,356
2006	363,800	1.51%	135,800	359,987	2.27%	134,300
2007	370,100	1.73%	138,098	366,574	1.83%	136,702
2008	377,100	1.89%	140,635	373,574	1.91%	139,260
2009	381,500	1.17%	142,181	380,074	1.74%	141,629
2010	387,200	1.49%	144,210	387,589	1.98%	144,347
2011	395,700	2.20%	147,294	395,804	2.12%	147,330
2012	411,100	3.89%	152,937	408,919	3.31%	152,170
2013	429,800	4.55%	159,826	425,134	3.97%	158,183
2014	439,800	2.33%	163,494	435,449	2.43%	161,962
2015	444,400	1.05%	165,159	441,964	1.50%	164,301
2016	446,400	0.45%	165,855	446,479	1.02%	165,883
2017	449,900	0.78%	167,093	451,494	1.12%	167,654
2018	454,100	0.93%	168,588	456,909	1.20%	169,577
2019	460,100	1.32%	170,749	463,524	1.45%	171,954
2020	466,900	1.48%	173,204	470,639	1.53%	174,521
2021	473,900	1.50%	175,736	477,954	1.55%	177,163
2022	481,600	1.62%	178,524	485,669	1.61%	179,957
2023	490,000	1.74%	181,573	493,884	1.69%	182,940
2024	499,100	1.86%	184,876	502,399	1.72%	186,037
2025	507,900	1.76%	188,068	510,714	1.66%	189,058
2026	515,900	1.58%	190,967	518,629	1.55%	191,928
2027	523,600	1.49%	193,756	526,344	1.49%	194,722
2028	531,800	1.57%	196,726	534,259	1.50%	197,592
2029	540,400	1.62%	199,842	542,374	1.52%	200,537
2030	549,200	1.63%	203,029	550,489	1.50%	203,483

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**Anchorage AK MSA
Population With Bridge
2000 – 2030**

	ISER Projection			Insight Projection		
	Population	% Change	HH	Population	% Change	HH
2000	319,600		119,479	319,605		119,480
2001	325,900	1.97%	121,798	326,668	2.21%	122,090
2002	333,000	2.18%	124,421	332,175	1.69%	124,107
2003	341,100	2.43%	127,404	340,556	2.52%	127,197
2004	348,200	2.08%	130,019	348,028	2.19%	129,951
2005	358,400	2.93%	133,818	351,991	1.14%	131,356
2006	363,800	1.51%	135,800	359,987	2.27%	134,300
2007	370,200	1.76%	138,133	366,574	1.83%	136,702
2008	377,600	2.00%	140,816	373,574	1.91%	139,260
2009	385,100	1.99%	143,478	381,074	2.01%	142,007
2010	393,300	2.13%	146,416	393,474	3.25%	146,478
2011	403,400	2.57%	150,082	406,574	3.33%	151,200
2012	416,100	3.15%	154,759	423,774	4.23%	157,462
2013	431,500	3.70%	160,406	441,674	4.22%	163,988
2014	441,500	2.32%	164,034	454,674	2.94%	168,673
2015	445,700	0.95%	165,502	463,924	2.03%	171,936
2016	447,500	0.40%	166,085	473,274	2.02%	175,251
2017	450,800	0.74%	167,239	484,624	2.40%	179,324
2018	454,800	0.89%	168,666	495,974	2.34%	183,396
2019	460,700	1.30%	170,781	507,324	2.29%	187,469
2020	467,600	1.50%	173,259	518,674	2.24%	191,541
2021	474,600	1.50%	175,771	530,024	2.19%	195,614
2022	482,300	1.62%	178,539	539,268	1.74%	198,945
2023	490,900	1.78%	181,639	548,504	1.71%	202,273
2024	500,000	1.85%	184,918	557,739	1.68%	205,601
2025	508,900	1.78%	188,124	566,980	1.66%	208,931
2026	516,900	1.57%	190,999	576,217	1.63%	212,259
2027	524,600	1.49%	193,764	585,460	1.60%	215,590
2028	532,800	1.56%	196,710	594,700	1.58%	218,919
2029	541,600	1.65%	199,872	603,950	1.56%	222,252
2030	550,500	1.64%	203,070	613,200	1.53%	225,585

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**City of Anchorage
Population Without Bridge
2000 – 2030**

	ISER Projection			Insight Projection		
	Population	% Change	HH	Population	% Change	HH
2000	260,300		98,598	260,283		98,592
2001	264,100	1.46%	100,038	264,903	1.77%	100,342
2002	268,700	1.74%	101,780	267,824	1.10%	101,448
2003	273,600	1.82%	103,636	273,024	1.94%	103,418
2004	277,900	1.57%	105,265	277,627	1.69%	105,162
2005	285,700	2.81%	108,220	277,980	0.13%	105,295
2006	288,700	1.05%	109,356	282,813	1.74%	107,126
2007	291,700	1.04%	110,492	285,900	1.09%	108,295
2008	294,400	0.93%	111,515	289,400	1.22%	109,621
2009	294,300	-0.03%	111,477	292,400	1.04%	110,758
2010	295,100	0.27%	111,780	295,100	0.92%	111,780
2011	298,500	1.15%	113,068	298,500	1.15%	113,068
2012	306,800	2.78%	116,212	306,800	2.78%	116,212
2013	318,200	3.72%	120,530	318,200	3.72%	120,530
2014	323,700	1.73%	122,614	323,700	1.73%	122,614
2015	325,400	0.53%	123,258	325,400	0.53%	123,258
2016	325,100	-0.09%	123,144	325,100	-0.09%	123,144
2017	325,300	0.06%	123,220	325,300	0.06%	123,220
2018	325,900	0.18%	123,447	325,900	0.18%	123,447
2019	327,700	0.55%	124,129	327,700	0.55%	124,129
2020	330,000	0.70%	125,000	330,000	0.70%	125,000
2021	332,500	0.76%	125,947	332,500	0.76%	125,947
2022	335,400	0.87%	127,045	335,400	0.87%	127,045
2023	338,800	1.01%	128,333	338,800	1.01%	128,333
2024	342,500	1.09%	129,735	342,500	1.09%	129,735
2025	346,000	1.02%	131,061	346,000	1.02%	131,061
2026	349,100	0.90%	132,235	349,100	0.90%	132,235
2027	352,000	0.83%	133,333	352,000	0.83%	133,333
2028	355,100	0.88%	134,508	355,100	0.88%	134,508
2029	358,400	0.93%	135,758	358,400	0.93%	135,758
2030	361,700	0.92%	137,008	361,700	0.92%	137,008

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**City of Anchorage
Population With Bridge
2000 – 2030**

	ISER Projection			Insight Projection		
	Population	% Change	HH	Population	% Change	HH
2000	260,300		98,598	260,283		98,592
2001	264,100	1.46%	100,038	264,903	1.77%	100,342
2002	268,700	1.74%	101,780	267,824	1.10%	101,448
2003	273,600	1.82%	103,636	273,024	1.94%	103,418
2004	277,900	1.57%	105,265	277,627	1.69%	105,162
2005	285,700	2.81%	108,220	277,980	0.13%	105,295
2006	288,700	1.05%	109,356	282,813	1.74%	107,126
2007	291,700	1.04%	110,492	285,900	1.09%	108,295
2008	294,600	0.99%	111,591	289,400	1.22%	109,621
2009	295,400	0.27%	111,894	293,400	1.38%	111,136
2010	297,300	0.64%	112,614	297,300	1.33%	112,614
2011	301,400	1.38%	114,167	301,400	1.38%	114,167
2012	309,100	2.55%	117,083	309,100	2.55%	117,083
2013	317,500	2.72%	120,265	317,500	2.72%	120,265
2014	321,500	1.26%	121,780	321,500	1.26%	121,780
2015	321,100	-0.12%	121,629	321,750	0.08%	121,875
2016	319,200	-0.59%	120,909	322,600	0.26%	122,197
2017	318,900	-0.09%	120,795	325,450	0.88%	123,277
2018	319,600	0.22%	121,061	328,300	0.88%	124,356
2019	321,000	0.44%	121,591	331,150	0.87%	125,436
2020	322,800	0.56%	122,273	334,000	0.86%	126,515
2021	324,600	0.56%	122,955	336,850	0.85%	127,595
2022	326,700	0.65%	123,750	339,700	0.85%	128,674
2023	329,400	0.83%	124,773	342,550	0.84%	129,754
2024	332,200	0.85%	125,833	345,400	0.83%	130,833
2025	334,900	0.81%	126,856	348,250	0.83%	131,913
2026	337,100	0.66%	127,689	351,100	0.82%	132,992
2027	339,100	0.59%	128,447	353,950	0.81%	134,072
2028	341,300	0.65%	129,280	356,800	0.81%	135,152
2029	343,700	0.70%	130,189	359,650	0.80%	136,231
2030	346,100	0.70%	131,098	362,500	0.79%	137,311

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**Mat-Su Borough
Population Without Bridge
2000 – 2030**

	ISER Projection			Insight Projection		
	Population	% Change	HH	Population	% Change	HH
2000	59,300		20,880	59,322		20,888
2001	61,800	4.22%	21,761	61,765	4.12%	21,748
2002	64,300	4.05%	22,641	64,351	4.19%	22,659
2003	67,500	4.98%	23,768	67,532	4.94%	23,779
2004	70,300	4.15%	24,754	70,401	4.25%	24,789
2005	72,700	3.41%	25,599	74,011	5.13%	26,060
2006	75,100	3.30%	26,444	77,174	4.27%	27,174
2007	78,400	4.39%	27,606	80,674	4.54%	28,406
2008	82,700	5.48%	29,120	84,174	4.34%	29,639
2009	87,200	5.44%	30,704	87,674	4.16%	30,871
2010	92,100	5.62%	32,430	92,489	5.49%	32,567
2011	97,200	5.54%	34,225	97,304	5.21%	34,262
2012	104,300	7.30%	36,725	102,119	4.95%	35,957
2013	111,600	7.00%	39,296	106,934	4.72%	37,653
2014	116,100	4.03%	40,880	111,749	4.50%	39,348
2015	119,000	2.50%	41,901	116,564	4.31%	41,044
2016	121,300	1.93%	42,711	121,379	4.13%	42,739
2017	124,600	2.72%	43,873	126,194	3.97%	44,435
2018	128,200	2.89%	45,141	131,009	3.82%	46,130
2019	132,400	3.28%	46,620	135,824	3.68%	47,825
2020	136,900	3.40%	48,204	140,639	3.55%	49,521
2021	141,400	3.29%	49,789	145,454	3.42%	51,216
2022	146,200	3.39%	51,479	150,269	3.31%	52,912
2023	151,200	3.42%	53,239	155,084	3.20%	54,607
2024	156,600	3.57%	55,141	159,899	3.10%	56,302
2025	161,900	3.38%	57,007	164,714	3.01%	57,998
2026	166,800	3.03%	58,732	169,529	2.92%	59,693
2027	171,600	2.88%	60,423	174,344	2.84%	61,389
2028	176,700	2.97%	62,218	179,159	2.76%	63,084
2029	182,000	3.00%	64,085	183,974	2.69%	64,780
2030	187,500	3.02%	66,021	188,789	2.62%	66,475

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**Mat-Su Borough
Population With Bridge
2000 – 2030**

	ISER Projection			Insight Projection		
	Population	% Change	HH	Population	% Change	HH
2000	59,300		20,880	59,322		20,888
2001	61,800	4.22%	21,761	61,765	4.12%	21,748
2002	64,300	4.05%	22,641	64,351	4.19%	22,659
2003	67,500	4.98%	23,768	67,532	4.94%	23,779
2004	70,300	4.15%	24,754	70,401	4.25%	24,789
2005	72,700	3.41%	25,599	74,011	5.13%	26,060
2006	75,100	3.30%	26,444	77,174	4.27%	27,174
2007	78,500	4.53%	27,641	80,674	4.54%	28,406
2008	83,000	5.73%	29,225	84,174	4.34%	29,639
2009	89,700	8.07%	31,585	87,674	4.16%	30,871
2010	96,000	7.02%	33,803	96,174	9.70%	33,864
2011	102,000	6.25%	35,915	105,174	9.36%	37,033
2012	107,000	4.90%	37,676	114,674	9.03%	40,378
2013	114,000	6.54%	40,141	124,174	8.28%	43,723
2014	120,000	5.26%	42,254	133,174	7.25%	46,892
2015	124,600	3.83%	43,873	142,174	6.76%	50,061
2016	128,300	2.97%	45,176	150,674	5.98%	53,054
2017	131,900	2.81%	46,444	159,174	5.64%	56,047
2018	135,200	2.50%	47,606	167,674	5.34%	59,040
2019	139,700	3.33%	49,190	176,174	5.07%	62,033
2020	144,800	3.65%	50,986	184,674	4.82%	65,026
2021	150,000	3.59%	52,817	193,174	4.60%	68,019
2022	155,600	3.73%	54,789	199,568	3.31%	70,270
2023	161,500	3.79%	56,866	205,954	3.20%	72,519
2024	167,800	3.90%	59,085	212,339	3.10%	74,767
2025	174,000	3.69%	61,268	218,730	3.01%	77,018
2026	179,800	3.33%	63,310	225,117	2.92%	79,267
2027	185,500	3.17%	65,317	231,510	2.84%	81,518
2028	191,500	3.23%	67,430	237,900	2.76%	83,768
2029	197,900	3.34%	69,683	244,300	2.69%	86,021
2030	204,400	3.28%	71,972	250,700	2.62%	88,275

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

Appendix E

Employment Forecast Detail

Anchorage AK MSA Employment Without Bridge, 2000 - 2030	Page A19
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Mat-Su Borough Employment Without Bridge, 2000 - 2030	Page A23
Mat-Su Borough Employment With Bridge, 2000 – 2030	Page A24

**Anchorage AK MSA
Employment Without Bridge
2000 – 2030**

	ISER Projection		Insight Projection	
	Employment	% Change	Employment	% Change
2000	143,300		146,800	
2001	147,800	3.14%	151,100	2.93%
2002	151,800	2.71%	154,700	2.38%
2003	155,700	2.57%	157,300	1.68%
2004	160,800	3.28%	160,200	1.84%
2005	164,900	2.55%	163,800	2.25%
2006	168,600	2.24%	166,400	1.59%
2007	170,800	1.30%	170,800	2.64%
2008	172,200	0.82%	172,200	0.82%
2009	172,900	0.41%	172,900	0.41%
2010	174,500	0.93%	174,500	0.93%
2011	178,200	2.12%	178,200	2.12%
2012	185,100	3.87%	185,100	3.87%
2013	189,700	2.49%	189,700	2.49%
2014	192,900	1.69%	192,900	1.69%
2015	192,500	-0.21%	192,500	-0.21%
2016	193,100	0.31%	193,100	0.31%
2017	193,700	0.31%	193,700	0.31%
2018	194,700	0.52%	194,700	0.52%
2019	197,200	1.28%	197,200	1.28%
2020	199,400	1.12%	199,400	1.12%
2021	201,800	1.20%	201,800	1.20%
2022	204,700	1.44%	204,700	1.44%
2023	208,300	1.76%	208,300	1.76%
2024	211,700	1.63%	211,700	1.63%
2025	215,100	1.61%	215,100	1.61%
2026	218,100	1.39%	218,100	1.39%
2027	221,000	1.33%	221,000	1.33%
2028	224,500	1.58%	224,500	1.58%
2029	228,200	1.65%	228,200	1.65%
2030	231,800	1.58%	231,800	1.58%

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**Anchorage AK MSA
Employment With Bridge
2000 – 2030**

	ISER Projection		Insight Projection	
	Employment	% Change	Employment	% Change
2000	143,300		146,800	
2001	147,800	3.14%	151,100	2.93%
2002	151,800	2.71%	154,700	2.38%
2003	155,700	2.57%	157,300	1.68%
2004	160,800	3.28%	160,200	1.84%
2005	164,900	2.55%	163,800	2.25%
2006	168,600	2.24%	166,400	1.59%
2007	170,900	1.36%	168,800	1.44%
2008	172,500	0.94%	171,783	1.77%
2009	175,500	1.74%	175,666	2.26%
2010	178,200	1.54%	179,649	2.27%
2011	182,500	2.41%	184,332	2.61%
2012	186,900	2.41%	187,415	1.67%
2013	190,700	2.03%	190,498	1.65%
2014	193,300	1.36%	193,881	1.78%
2015	192,600	-0.36%	197,064	1.64%
2016	193,000	0.21%	199,047	1.01%
2017	193,500	0.26%	201,730	1.35%
2018	194,400	0.47%	204,413	1.33%
2019	196,900	1.29%	207,496	1.51%
2020	199,100	1.12%	210,679	1.53%
2021	201,400	1.16%	213,862	1.51%
2022	204,300	1.44%	217,245	1.58%
2023	207,800	1.71%	220,828	1.65%
2024	211,200	1.64%	224,511	1.67%
2025	214,600	1.61%	228,194	1.64%
2026	217,500	1.35%	231,577	1.48%
2027	220,400	1.33%	235,060	1.50%
2028	223,900	1.59%	238,743	1.57%
2029	227,400	1.56%	242,426	1.54%
2030	231,100	1.63%	246,300	1.60%

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**City of Anchorage
Employment Without Bridge
2000 – 2030**

	ISER Projection		Insight Projection	
	Employment	% Change	Employment	% Change
2000	130,900		134,400	
2001	134,900	3.06%	138,200	2.83%
2002	137,900	2.22%	140,800	1.88%
2003	140,700	2.03%	142,300	1.07%
2004	145,000	3.06%	144,100	1.26%
2005	148,400	2.34%	146,600	1.73%
2006	151,500	2.09%	148,800	1.50%
2007	152,800	0.86%	152,800	2.69%
2008	153,000	0.13%	153,000	0.13%
2009	152,200	-0.52%	152,200	-0.52%
2010	152,100	-0.07%	152,100	-0.07%
2011	154,200	1.38%	154,200	1.38%
2012	159,000	3.11%	159,000	3.11%
2013	161,900	1.82%	161,900	1.82%
2014	163,700	1.11%	163,700	1.11%
2015	162,700	-0.61%	162,700	-0.61%
2016	162,600	-0.06%	162,600	-0.06%
2017	162,600	0.00%	162,600	0.00%
2018	162,600	0.00%	162,600	0.00%
2019	163,700	0.68%	163,700	0.68%
2020	164,700	0.61%	164,700	0.61%
2021	165,800	0.67%	165,800	0.67%
2022	167,300	0.90%	167,300	0.90%
2023	169,300	1.20%	169,300	1.20%
2024	171,100	1.06%	171,100	1.06%
2025	172,900	1.05%	172,900	1.05%
2026	174,500	0.93%	174,500	0.93%
2027	176,000	0.86%	176,000	0.86%
2028	177,900	1.08%	177,900	1.08%
2029	179,900	1.12%	179,900	1.12%
2030	181,800	1.06%	181,800	1.06%

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**City of Anchorage
Employment With Bridge
2000 – 2030**

	ISER Projection		Insight Projection	
	Employment	% Change	Employment	% Change
2000	130,900		134,400	
2001	134,900	3.06%	138,200	2.83%
2002	137,900	2.22%	140,800	1.88%
2003	140,700	2.03%	142,300	1.07%
2004	145,000	3.06%	144,100	1.26%
2005	148,400	2.34%	146,600	1.73%
2006	151,500	2.09%	148,800	1.50%
2007	152,900	0.92%	150,800	1.34%
2008	153,200	0.20%	152,483	1.12%
2009	154,000	0.52%	154,166	1.10%
2010	154,400	0.26%	155,849	1.09%
2011	156,700	1.49%	157,532	1.08%
2012	159,700	1.91%	159,215	1.07%
2013	162,100	1.50%	160,898	1.06%
2014	163,000	0.56%	162,581	1.05%
2015	161,200	-1.10%	164,264	1.04%
2016	160,300	-0.56%	165,947	1.02%
2017	159,800	-0.31%	167,630	1.01%
2018	159,700	-0.06%	169,313	1.00%
2019	160,800	0.69%	170,996	0.99%
2020	161,500	0.44%	172,679	0.98%
2021	162,300	0.50%	174,362	0.97%
2022	163,500	0.74%	176,045	0.97%
2023	165,100	0.98%	177,728	0.96%
2024	166,500	0.85%	179,411	0.95%
2025	167,900	0.84%	181,094	0.94%
2026	169,100	0.71%	182,777	0.93%
2027	170,200	0.65%	184,460	0.92%
2028	171,700	0.88%	186,143	0.91%
2029	173,200	0.87%	187,826	0.90%
2030	174,700	0.87%	189,500	0.89%

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**Mat-Su Borough
Employment Without Bridge
2000 – 2030**

	ISER Projection		Insight Projection	
	Employment	% Change	Employment	% Change
2000	12,400		12,400	
2001	12,900	4.03%	12,900	4.03%
2002	13,900	7.75%	13,900	7.75%
2003	15,000	7.91%	15,000	7.91%
2004	15,800	5.33%	16,100	7.33%
2005	16,500	4.43%	17,200	6.83%
2006	17,100	3.64%	17,600	2.33%
2007	18,000	5.26%	18,000	2.27%
2008	19,200	6.67%	19,200	6.67%
2009	20,700	7.81%	20,700	7.81%
2010	22,400	8.21%	22,400	8.21%
2011	24,000	7.14%	24,000	7.14%
2012	26,100	8.75%	26,100	8.75%
2013	27,800	6.51%	27,800	6.51%
2014	29,200	5.04%	29,200	5.04%
2015	29,800	2.05%	29,800	2.05%
2016	30,500	2.35%	30,500	2.35%
2017	31,100	1.97%	31,100	1.97%
2018	32,100	3.22%	32,100	3.22%
2019	33,500	4.36%	33,500	4.36%
2020	34,700	3.58%	34,700	3.58%
2021	36,000	3.75%	36,000	3.75%
2022	37,400	3.89%	37,400	3.89%
2023	39,000	4.28%	39,000	4.28%
2024	40,600	4.10%	40,600	4.10%
2025	42,200	3.94%	42,200	3.94%
2026	43,600	3.32%	43,600	3.32%
2027	45,000	3.21%	45,000	3.21%
2028	46,600	3.56%	46,600	3.56%
2029	48,300	3.65%	48,300	3.65%
2030	50,000	3.52%	50,000	3.52%

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

**Mat-Su Borough
Employment With Bridge
2000 – 2030**

	ISER Projection		Insight Projection	
	Employment	% Change	Employment	% Change
2000	12,400		12,400	
2001	12,900	4.03%	12,900	4.03%
2002	13,900	7.75%	13,900	7.75%
2003	15,000	7.91%	15,000	7.91%
2004	15,800	5.33%	16,100	7.33%
2005	16,500	4.43%	17,200	6.83%
2006	17,100	3.64%	18,300	6.40%
2007	18,000	5.26%	18,800	2.73%
2008	19,300	7.22%	19,300	2.66%
2009	21,500	11.40%	21,500	11.40%
2010	23,800	10.70%	23,800	10.70%
2011	25,800	8.40%	26,800	12.61%
2012	27,200	5.43%	28,200	5.22%
2013	28,600	5.15%	29,600	4.96%
2014	30,300	5.94%	31,300	5.74%
2015	31,400	3.63%	32,800	4.79%
2016	32,700	4.14%	33,100	0.91%
2017	33,700	3.06%	34,100	3.02%
2018	34,700	2.97%	35,100	2.93%
2019	36,100	4.03%	36,500	3.99%
2020	37,600	4.16%	38,000	4.11%
2021	39,100	3.99%	39,500	3.95%
2022	40,800	4.35%	41,200	4.30%
2023	42,700	4.66%	43,100	4.61%
2024	44,700	4.68%	45,100	4.64%
2025	46,700	4.47%	47,100	4.43%
2026	48,400	3.64%	48,800	3.61%
2027	50,200	3.72%	50,600	3.69%
2028	52,200	3.98%	52,600	3.95%
2029	54,200	3.83%	54,600	3.80%
2030	56,400	4.06%	56,800	4.03%

Source: Institute of Social and Economic Research, University of Alaska Anchorage, Alaska Dept. of Labor

Appendix F

Economic Impact Development Assumptions With and Without Bridge Construction

**Development with Knik Arm Bridge
Assumptions Used for this Analysis**

**Knik Arm Bridge Construction
State of Alaska
Impact Analysis
Preliminary Assumptions**

Bridge Construction

Added Capital Investments

Infrastructure Improvements		\$563,863,051
Port MacKenzie Road Paving	\$15,350,802	
Port MacKenzie Northern Route	\$11,222,345	
West Approach	\$27,578,746	
Bridge	\$280,129,768	
East Approach	\$70,807,016	
MOA Future Port Expansion Alignment	\$6,482,157	
Retaining Wall	\$10,068,750	
Cherry Hill	\$21,363,984	
Government Hill	\$44,817,722	
Toll Technology	\$4,698,523	
Engineering	\$31,238,389	
Project Management	\$26,031,991	
AK DOT Overhead Charge	\$4,084,090	
Right of Way	\$9,988,768	
Total		\$563,863,051
Construction Workers		5,639

**Anchorage Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Retail

Added Capital Investments

Land	4.59 Acres	\$600,000
Building Construction	50,000 Square Feet	\$7,920,000
Furniture, Fixtures & Equipment		<u>\$1,250,000</u>
Total		\$9,770,000

Construction Workers		79
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Annual Operating Costs at Full Development

Gross Retail Sales		\$12,500,000
Inventory		\$546,875
Wholesale Purchases		\$5,000,000

Annual Employment

Number of Employees as FTEs (Domestic Employment)		100
Average Wages Excluding Benefits		\$23,300
Annual Payroll		\$2,330,000

Annual Purchases

Taxable Purchases		\$500,000
Non Taxable Purchases		<u>\$625,000</u>
Total Purchases		\$1,125,000

**Anchorage Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Employee Residence Assumptions

State of Alaska	100%
Anchorage Area Wide	90%
Anchorage Area Schools	90%
Anchorage Police & Fire	90%
Other Anchorage Jurisdictions	90%

Tax Assumptions

Property Taxes (per \$1000 of Value)	Residential	Business Real Estate	Business Personal Property
Anchorage Area Wide	\$0.48000	\$0.48000	\$0.48000
Anchorage Area Schools	\$7.13000	\$7.13000	\$7.13000
Anchorage Police & Fire	\$4.33000	\$4.33000	\$4.33000
Other Anchorage Jurisdictions	<u>\$3.36000</u>	<u>\$3.36000</u>	<u>\$3.36000</u>
Total	\$15.30000	\$15.30000	\$15.30000
 Income Taxes		Individual	Corporate
State of Alaska		0.0%	1% to 9.4%

**Big Lake Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Residential

Added Capital Investments

New Home Construction	6,037 Homes	\$1,448,880,000
Construction Workers		14,489

Employee Residence Assumptions

State of Alaska	100%
Big Lake Area Wide	75%

Tax Assumptions

Property Taxes (per \$1000 of Value)	Residential	Business Real Estate	Business Personal Property
Big Lake Area Wide	\$9.64400	\$9.64400	\$0.00000
Big Lake Police & Fire	\$1.82000	\$1.82000	\$0.00000
Other Big Lake Jurisdictions	<u>\$2.41000</u>	<u>\$2.41000</u>	<u>\$0.00000</u>
Total	\$14.24400	\$14.24400	\$0.00000
 Income Taxes		Individual	Corporate
State of Alaska		0.0%	1% to 9.4%

**Houston Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Residential

Added Capital Investments

New Home Construction	2,471 Homes	\$593,040,000
Construction Workers		5,930

Employee Residence Assumptions

State of Alaska	100%
Houston Area Wide	75%

Tax Assumptions

Property Taxes (per \$1000 of Value)	Residential	Business Real Estate	Business Personal Property
Houston Area Wide	\$9.64400	\$9.64400	\$0.00000
City of Houston	<u>\$3.00000</u>	<u>\$3.00000</u>	<u>\$0.00000</u>
Total	\$12.64400	\$12.64400	\$0.00000
Sales Taxes			
City of Houston			<u>2.00%</u>
Total			2.00%
Income Taxes		Individual	Corporate
State of Alaska		0.0%	1% to 9.4%

**Knik Area Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Residential

Added Capital Investments

New Home Construction	11,077 Homes	\$2,658,480,000
Construction Workers		26,585

Employee Residence Assumptions

State of Alaska	100%
Knik Area Wide	75%

Tax Assumptions

Property Taxes (per \$1000 of Value)	Residential	Business Real Estate	Business Personal Property
Knik Area Wide	\$9.64400	\$9.64400	\$0.00000
City & Non Area	\$0.37000	\$0.37000	\$0.00000
Knik Police & Fire	\$1.46000	\$1.46000	\$0.00000
Other Knik Jurisdictions	<u>\$2.54000</u>	<u>\$2.54000</u>	<u>\$0.00000</u>
Total	\$14.01400	\$14.01400	\$0.00000
Income Taxes		Individual	Corporate
State of Alaska		0.0%	1% to 9.4%

**Point MacKenzie Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Residential

Added Capital Investments

New Home Construction	1,955 Homes	\$469,200,000
Construction Workers		4,692

Employee Residence Assumptions

State of Alaska	100%
Point MacKenzie Area Wide	75%

Tax Assumptions

Property Taxes (per \$1000 of Value)	Residential	Business Real Estate	Business Personal Property
Point MacKenzie Area Wide	\$11.10400	\$11.10400	\$0.00000
City & Non Area	<u>\$0.37000</u>	<u>\$0.37000</u>	<u>\$0.00000</u>
Total	\$11.47400	\$11.47400	\$0.00000
Income Taxes		Individual	Corporate
State of Alaska		0.0%	1% to 9.4%

**Port MacKenzie Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Office

Added Capital Investments

Land	44.09 Acres	\$0
Building Construction	653,000 Square Feet	\$112,054,800
Furniture, Fixtures & Equipment		\$17,413,333
Corridor Law Assessment		\$0
Total		\$129,468,133
Construction Workers		1,121

Annual Operating Costs at Full Development

Annual Employment

Number of Employees as FTEs	2,177
Average Wages Excluding Benefits	\$33,650
Annual Payroll	\$73,244,833

Annual Purchases

Taxable Purchases & Services	\$11,318,667
Non Taxable Purchases	<u>\$23,943,333</u>
Total Purchases	\$35,262,000

**Port MacKenzie Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Tech Flex

Added Capital Investments

Land	85.27 Acres	\$0
Building Construction	1,300,000 Square Feet	\$154,440,000
Furniture, Fixtures & Equipment		<u>\$4,160,000</u>
Total		\$158,600,000

Construction Workers		1,544
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Annual Operating Costs

Annual Employment

Number of Employees as FTEs	520
Average Wages Excluding Benefits	\$33,650
Annual Payroll	\$17,498,000

Annual Purchases

Taxable Purchases	\$2,704,000
Non Taxable Purchases	<u>\$5,720,000</u>
Total Purchases	\$8,424,000

**Port MacKenzie Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Retail

Added Capital Investments

Land	159.78 Acres	\$0
Building Construction	1,740,000 Square Feet	\$275,616,000
Furniture, Fixtures & Equipment		<u>\$43,500,000</u>
Total		\$319,116,000

Construction Workers	2,756
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Annual Operating Costs

Gross Retail Sales	\$435,000,000
Wholesale Purchases	\$174,000,000

Annual Employment

Number of Employees as FTEs (Domestic Employment)	3,480
Average Wages Excluding Benefits	\$23,300
Annual Payroll	\$81,084,000

Annual Purchases

Taxable Purchases	\$17,400,000
Non Taxable Purchases	<u>\$21,750,000</u>
Total Purchases	\$39,150,000

**Port MacKenzie Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Industrial/Distribution

Added Capital Investments

Land	295.2 Acres	\$0
Building Construction	4,500,000 Square Feet	\$237,600,000
Furniture, Fixtures & Equipment		<u>\$234,000,000</u>
Total		\$471,600,000

Construction Workers		2,376
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Annual Operating Costs

Annual Employment

Number of Employees as FTEs (Domestic Employment)	563
Average Wages Excluding Benefits	\$38,266
Annual Payroll	\$21,524,625

Annual Purchases

Taxable Purchases	\$337,500
Non Taxable Purchases	<u>\$450,000</u>
Total Purchases	\$787,500

**Port MacKenzie Development With Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Employee Residence Assumptions

State of Alaska	100%
Port MacKenzie Area Wide	90%
Port MacKenzie Area Schools	90%
Port MacKenzie Police & Fire	90%
Other Port MacKenzie Jurisdictions	90%

Tax Assumptions

Property Taxes (per \$1000 of Value)	Residential	Business Real Estate	Business Personal Property
Port MacKenzie Area Wide	\$11.10400	\$11.10400	\$0.00000
City & Non Area	<u>\$0.37000</u>	<u>\$0.37000</u>	<u>\$0.00000</u>
Total	\$11.47400	\$11.47400	\$0.00000
 Income Taxes		Individual	Corporate
State of Alaska		0.0%	1% to 9.4%

Willow Development With Knik Arm Bridge State of Alaska Impact Analysis Preliminary Assumptions

Residential

Added Capital Investments

New Home Construction	263 Homes	\$63,024,000
Construction Workers		630

Employee Residence Assumptions

State of Alaska	100%
Willow Area Wide	75%

Tax Assumptions

Property Taxes (per \$1000 of Value)	Residential	Business Real Estate	Business Personal Property
Willow Area Wide	\$9.64400	\$9.64400	\$0.00000
City	\$0.37000	\$0.37000	\$0.00000
Willow Police & Fire	\$0.96000	\$0.96000	\$0.00000
Other Willow Jurisdictions	<u>\$2.66000</u>	<u>\$2.66000</u>	<u>\$0.00000</u>
Total	\$13.63400	\$13.63400	\$0.00000
Income Taxes		Individual	Corporate
State of Alaska		0.0%	1% to 9.4%

Assessed valuation is based on 100% of market value

Source: U S Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics online, www.bls.gov.

Source: Alaska Department of Revenue, 907-269-6620.

Source: Municipality of Anchorage, BPP Tax Division, Chris Mekins, 907-343-6695.

Source: Matanuska-Sustina Borough Assessment Department website, www.matsugov.us

Source: Matanuska-Sustina Borough Assessment Department, Michelle, 907-745-9642.

Source: Matanuska-Sustina Borough Assessment Department, Ms. Johns, 907-745-9637.

Source: Matanuska-Sustina Borough Division of Assessment, Personal Property 907-745-9637

Source: Matanuska-Sustina Borough Division of Assessment, Personal Property 907-745-9637

Source: Matanuska-Sustina Borough Division of Assessment, Real Property 907-745-9642

Source: Matanuska-Sustina Borough Finance Department, Jennifer, 907-745-9568 (ext 0)

Source: RSMMeans, Building Construction Cost Data, 2007.

**Development without Knik Arm Bridge
Assumptions Used for this Analysis**

**Port MacKenzie Development Without Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Office

Added Capital Investments

Land	10.13 Acres	\$0
Building Construction	150,000 Square Feet	\$25,740,000
Furniture, Fixtures & Equipment		\$4,000,000
Corridor Law Assessment		\$0
Total		\$29,740,000
Construction Workers		257

Annual Operating Costs at Full Development

Annual Employment

Number of Employees as FTEs	500
Average Wages Excluding Benefits	\$33,650
Annual Payroll	\$16,825,000

Annual Purchases

Taxable Purchases & Services	\$2,600,000
Non Taxable Purchases	<u>\$5,500,000</u>
Total Purchases	\$8,100,000

**Port MacKenzie Development Without Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Tech Flex

Added Capital Investments

Land	13.12 Acres	\$0
Building Construction	200,000 Square Feet	\$23,760,000
Furniture, Fixtures & Equipment		<u>\$640,000</u>
Total		\$24,400,000

Construction Workers		238
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Annual Operating Costs

Annual Employment

Number of Employees as FTEs	80
Average Wages Excluding Benefits	\$33,650
Annual Payroll	\$2,692,000

Annual Purchases

Taxable Purchases	\$416,000
Non Taxable Purchases	<u>\$880,000</u>
Total Purchases	\$1,296,000

**Port MacKenzie Development Without Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Retail

Added Capital Investments

Land	4.59 Acres	\$0
Building Construction	50,000 Square Feet	\$7,920,000
Furniture, Fixtures & Equipment		<u>\$1,250,000</u>
Total		\$9,170,000

Construction Workers		79
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Annual Operating Costs

Gross Retail Sales		\$12,500,000
Inventory		\$0
Wholesale Purchases		\$5,000,000

Annual Employment

Number of Employees as FTEs (Domestic Employment)		100
Average Wages Excluding Benefits		\$23,300
Annual Payroll		\$2,330,000

Annual Purchases

Taxable Purchases		\$500,000
Non Taxable Purchases		<u>\$625,000</u>
Total Purchases		\$1,125,000

**Port MacKenzie Development Without Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Industrial/Distribution

Added Capital Investments

Land	29.5 Acres	\$0
Building Construction	450,000 Square Feet	\$23,760,000
Furniture, Fixtures & Equipment		<u>\$23,400,000</u>
Total		\$47,160,000

Construction Workers		238
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Annual Operating Costs

Annual Employment

Number of Employees as FTEs (Domestic Employment)	117
Average Wages Excluding Benefits	\$38,266
Annual Payroll	\$4,476,137

Annual Purchases

Taxable Purchases	\$70,185
Non Taxable Purchases	<u>\$93,579</u>
Total Purchases	\$163,764

**Port MacKenzie Development Without Knik Arm Bridge
State of Alaska
Impact Analysis
Preliminary Assumptions**

Employee Residence Assumptions

State of Alaska	100%
Port MacKenzie Area Wide	90%
Port MacKenzie Area Schools	90%
Port MacKenzie Police & Fire	90%
Other Port MacKenzie Jurisdictions	90%

Tax Assumptions

Property Taxes (per \$1000 of Value)	Residential	Business Real Estate	Business Personal Property
Port MacKenzie Area Wide	\$11.10400	\$11.10400	\$0.00000
City	<u>\$0.37000</u>	<u>\$0.37000</u>	<u>\$0.00000</u>
Total	\$11.47400	\$11.47400	\$0.00000
 Income Taxes		Individual	Corporate
State of Alaska		0.0%	1% to 9.4%

Assessed valuation is based on 100% of market value

Source: U S Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics online, www.bls.gov.

Source: RSMMeans, Building Construction Cost Data, 2007.

Source: Matanuska-Sustina Borough Division of Assessment, Real Property 907-745-9642

Source: Matanuska-Sustina Borough Division of Assessment, Personal Property 907-745-9637

Source: Matanuska-Sustina Borough Division of Assessment, Personal Property 907-745-9637

Source: Matanuska-Sustina Borough Finance Department, Jennifer, 907-745-9568 (ext 0)

Source: Matanuska-Sustina Borough Assessment Department, Michelle, 907-745-9642.

Source: Matanuska-Sustina Borough Assessment Department, Kathy, 907-745-9637.

Source: Matanuska-Sustina Borough Assessment Department website, www.matsugov.us

Appendix G

Applicable Tax Rates for the Economic Impact Analysis

Knik Arm Bridge

State of Alaska

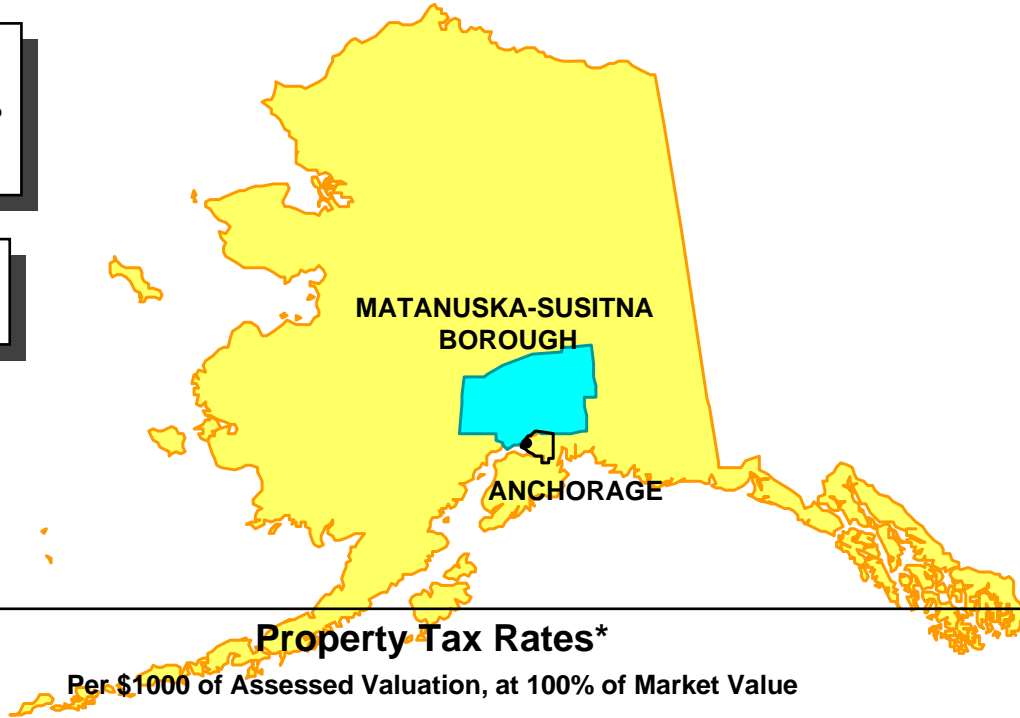
Applicable Tax Structure

Income Tax Rate

Corporate Rate 1% to 9.4%
 Individual Rate 0.0%

Sales Tax Rates

City of Houston 2.00%



Property Tax Rates*

Per \$1000 of Assessed Valuation, at 100% of Market Value

	Anchorage City	Big Lake	Houston	Knik Area	Point MacKenzie	Port MacKenzie	Willow
City & Non Area Wide		\$00.370	\$03.000	\$00.370	\$00.370	\$00.370	\$00.370
Area Wide	\$00.480	\$09.644	\$09.644	\$09.644	\$11.104	\$11.104	\$09.644
Schools	\$07.130	**	**	**	**	**	**
Police/Fire	\$04.330	\$01.820	**	\$01.460	**	**	\$00.960
Other Jurisdictions	\$03.360	\$02.410	**	\$02.540	**	**	\$2.660
Total	\$15.300	\$14.244	\$12.644	\$14.014	\$11.474	\$11.474	\$13.634

*Anchorage imposes a property tax on business personal property and inventory.

*The Mat-Su Borough does not tax business personal property and allows a \$250,000 exemption on inventory.

**Schools, police and fire funds not specifically identified are included in the area wide taxes.