

# MATANUSKA-SUSITNA BOROUGH

# Planning and Land Use Department Planning Division

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## **MEMORANDUM**

DATE: February 25, 2022

FROM: Gerrit Verbeek and Adam Bradway, Planning Division

SUBJECT: Projections of Annual Growth Rates in the Mat-Su Borough, to 2045.

## **Summary**

To help Pre-MPO Steering Committee members make a recommendation for a Mat-Su Borough population forecast to determine an MPA Boundary, the Planning Division submits a shortlist of 4 population forecasts for consideration. Two forecasts were produced by the Alaska Department of Labor (ADOL), one by the public policy institute ISER, and one by private economics consultants Woods & Poole. The Planning Division tentatively recommends selection of the ADOL 2017 forecast as base case forecast for selection of the MPA Boundary.

## **Background**

The establishment of a Metropolitan Planning Organization (MPO) is a requirement under Federal law for regions of the United States which are approaching urban residential densities.

"... a metropolitan planning organization shall be designated for each urbanized area with a population of more than 50,000 individuals" (23 U.S.C. § 134(d)(1))

"Each MPA shall encompass at least the existing urbanized and the contiguous area expected to become urbanized within a 20-year forecast period" (23 CFR 450.312)

Aside from being a legal requirement, an MPO unlocks access to federal funding expected to roughly total \$400-500,000 per year for transportation planning and administration, and an additional \$5-10 million per year for capital projects related to transportation infrastructure. These funds are restricted for use within the boundary of the Metropolitan Planning Area (MPA).

It is expected that the release of 2020 Decennial Census data later this year will show a sufficiently dense population in the Core Area of the Matanuska-Susitna Borough to trigger the formation of an MPO. The 'Pre-MPO Steering Committee' was formed to prepare for that expected outcome, including by recommending a process to estimate the boundary of urbanization at a target year of 2045.

This memo is to fulfill Steps 1 and 2 of the MPA Boundary Development Strategy approved by the Steering Committee on Oct. 20, 2021:

- 1. "Gauge the 20-year projected population growth in the MSB. Review the 2010 and 2020 Census Data [...] Review locally available estimates for population growth [...] Obtain data from private sources..."
- 2. "Determine the annual growth rate for the MSB and total population projection for 2045. Document your process and vet it with the Pre-MPO Steering Committee..."

#### **Data Overview**

To assist the Steering Committee, the Planning Division gathered existing forecasts and their underlying assumptions from public and private institutions. Based on the time and level of expertise required to produce a robust forecast, the Planning Division did not attempt to create their own forecast of population growth.

The set of forecasts considered in this document is believed to be a reasonably comprehensive list of every forecast of Mat-Su Borough population growth produced since 2005. It includes every forecast identified through research and through correspondence with ISER, Pre-MPO Steering Committee members, and members of the Mat-Su Borough Planning and Land Use Department. Sources are attributed in the Appendices.

Recent and impending developments which are not incorporated into any of these forecasts, but might influence the Borough's population growth rate, include changes to the labor and real estate markets due to the COVID-19 pandemic, and the passage of the \$1.2 trillion Infrastructure Investment and Jobs Act in November 2021.

## Alaska Department of Labor (ADOL; ADOLWD)

The Alaska Department of Labor regularly produces population forecasts "based on historical population data and rates of fertility, mortality, and migration." Of those, net migration is the least predictable factor and has the greatest influence on the endpoint of the forecast. The 2019 ADOL population forecast assumes a net migration rate to the Mat-Su Borough of 778 – 1132 individuals per year from 2020 to 2045. The 2017 forecast assumes a 1087 – 1513 individuals per year in the same timeframe.<sup>3</sup>

ADOL projections "do not consider the population effects of potential structural changes to the economy, such as those that might occur with transportation infrastructure development or with large-scale industrial development."<sup>4</sup>

## **Data Overview (Continued)**

## Institute of Social and Economic Research (ISER)

The Institute of Social and Economic Research (ISER) at the University of Alaska (UAA) produces population forecasts typically associated with specific development scenarios for major changes to the local economy such as Knik Arm Bridge construction. Therefore each forecast has significantly different underlying assumptions by design and frequently include near-term boosts to Mat-Su Borough population reflecting assumed completion of a major project.

At the moment, ISER does not anticipate producing more population forecasts for the Mat-Su Borough due to lack of funding and demand from the state government. According to Spokesperson Mariah Oxford, "Scott Goldsmith has retired and we now rely on work by David Howell, the state demographer at DOLWD."<sup>5</sup>

## Woods & Poole Economics, Inc.

Woods & Poole Economics is a consulting firm catering to local governments and public utilities. Their projections have previously been used a variety of planning exercises by the Mat-Su Borough, the Municipality of Anchorage, and the Fairbanks North Star Borough.

Woods & Poole produces a nationwide, county-level population and economic forecast publicly available online,<sup>6</sup> and performs consulting work for more specific scenarios. Their claimed advantage is that a nationwide forecast "reflects the flow of economic activity around the country as new industries emerge or relocate in growing areas and as people migrate."<sup>7</sup>

## Misc. Consulting Firms

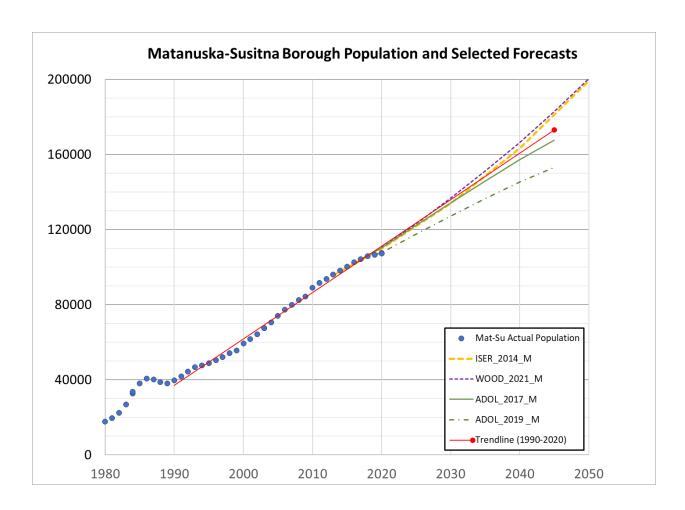
Various contractors have created forecasts for Mat-Su Borough population growth for various projects and development scenarios:

- Insight Research Corporation "Mat-Su Borough Population Without Bridge," forecast for 2007 Fiscal Impact: Knik Arm Toll Bridge Investment Grade Study
- Western Demographics forecast for 2012 Mat-Su Borough Build Out Analysis
- Woods & Poole forecast for 2011 Knik Arm Bridge study\*
- Wilber Smith forecast for 2011 Update of the Traffic and Toll Revenues Study\*

<sup>\*</sup>Referenced in correspondence between Scott Goldsmith (ISER) and Michael Foster (KABATA), but neither Goldsmith or the Planning Team could locate the forecast.

## **Selected Forecasts**

This graph presents a shortlist of the most recent available forecasts which do not assume completion of a specific major project in the nearterm future. The forecasts were produced by a variety of institutions using different methodologies. A linear trendline projecting average historic growth from 1990-2020 is also shown.



Forecast	2030 Estimate	2045 Estimate
	(thousands)	(thousands)
Woods & Poole 2021	136.7	182.6
<b>ISER 2014</b>	134.0	181.2*
ADOL 2017	134.1	167.5
ADOL 2019	127.1	153.1

<sup>\*</sup>Interpolation from 2040 and 2050 estimates

#### Recommendations

The responsibility for recommending a Base Case forecast to the Pre-MPO Policy Board for the determination of an MPA Boundary rests with the Pre-MPO Steering Committee members. This memo incorporates initial feedback received from them at a meeting on Feb. 8, 2022.

The Planning Division encourages the Steering Committee to especially consider the following forecasts, which are shown above under Selected Forecasts:

- Alaska Department of Labor, 2017 forecast
- Alaska Department of Labor, 2019 forecast
- Woods & Poole, 2021 forecast
- ISER, 2014 forecast. This is a base case scenario in a set of land use scenarios, and unlike many ISER forecasts does not assume completion of any major project.

Currently all major infrastructure and economic projects under consideration within the Mat-Su Borough are in conceptual phases. As they become more of a reality they will need to be factored in. The MPO Boundary is open to adjustment every decennial census.

The Planning Division tentatively recommends selection of the ADOL 2017 forecast as base case forecast for selection of the MPA Boundary, based on the following reasons:

- The ADOL 2017, Woods & Poole 2021, and ISER 2014 forecasts are essentially equal until 2030, and also closely follow the historic linear trendline.
- Because all ADOL forecasts assume no large projects or structural changes, the ADOL 2019 forecast represents a 'lowest growth rate, lowest development' projection. It seems prudent to select a higher-growth forecast based on the probability of some additional growth in the next decade. As mentioned above, emerging impacts of the COVID-19 pandemic and the Infrastructure Bill are possible examples of higher growth drivers.
- As a state institution, there is high confidence that an updated ADOL forecast will be available if needed for any future updates to the MPA Boundary.
- ISER does not anticipate producing more population forecasts in the near-term future, and plans to use ADOL forecasts.
- Mat-Su Borough staff with expertise in demographics, districting, and census data endorse ADOL forecasts as having the best historic track record.
- The Municipality of Anchorage also selected an ADOL forecast over ISER forecasts as the base case for their 2017 Anchorage 2040 Land Use Plan.

#### **Footnotes**

- 1. Howell, David. *Alaska Population Projections: 2019-2045* (Alaska Department of Labor and Workforce Development, April 2020): 2. <a href="https://live.laborstats.alaska.gov/pop/projections/pub/popproj.pdf">https://live.laborstats.alaska.gov/pop/projections/pub/popproj.pdf</a>.
- 2. Howell, David. "Matanuska-Susitna Borough, Projected Components of Population Change" in *Alaska Population Projections: 2019-2045* (Alaska Department of Labor and Workforce Development, April 2020): 33. https://live.laborstats.alaska.gov/pop/projections/pub/popproj.pdf.
- 3. Hunsinger, Eddie. "Matanuska-Susitna Borough, Projected Components of Population Change" in *Alaska Population Projections: 2017-2045* (Alaska Department of Labor and Workforce Development, June 2018): 33. https://live.laborstats.alaska.gov/pop/projections/pub/popproj1745.pdf.
- 4. Municipality of Anchorage, *Anchorage 2040 Land Use Plan*, *Appendix B-2: 2015-2040 Population*, *Household*, *and Employment Forecast* (June 5, 2017): 2. <a href="https://www.muni.org/Departments/OCPD/Planning/Pages/Anch2040LUPFutureGrowthReport.aspx">https://www.muni.org/Departments/OCPD/Planning/Pages/Anch2040LUPFutureGrowthReport.aspx</a>
- 5. Mariah Oxford (Communications Specialist, ISER), email message to author, February 9 2022.
- 6. "Interactive Map," Woods & Poole Economics, Inc. Accessed February 24, 2022. https://www.woodsandpoole.com/interactive-map/
- 7. Woods & Poole Economics, Inc., Summary Technical Description of the Woods & Poole Economics, Inc.
- 2021 Regional Projections and Database (2021): 1.

## **Appendix - Available Data**

#### Actual Data

- Decennial Census data (Federal: U.S. Census Bureau)
- Annual estimates (State: Dept. of Commerce, Community, and Economic Development)
- Annual estimates (State: Dept. of Labor and Workforce Development)

## **Population Forecasts**

UAA Institute of Social and Economic Research (ISER), various studies

- Steve Colt. "Fiscal Impacts of Alternative Land Use Scenarios for the Matanuska-Susitna Borough, Alaska." 2014. <a href="https://iseralaska.org/publications/?id=1351">https://iseralaska.org/publications/?id=1351</a>
- Scott Goldsmith. "Economic and Demographic Projections for Alaska and Greater Anchorage 2010–2035." 2009. https://pubs.iseralaska.org/media/0672c4ff-6a40-456c-8a61
  - https://pubs.iseralaska.org/media/0672c4ff-6a40-456c-8a61-144f3e9746bd/EconDemProjectionsAnchorage\_v4.pdf
- Scott Goldsmith. "Memorandum On The Economic And Demographic Impacts Of A Knik Arm Bridge." 2005.
  <a href="https://pubs.iseralaska.org/media/515211e9-f3c9-47b5-a192-1bef39af46e2/knikarmcrossing">https://pubs.iseralaska.org/media/515211e9-f3c9-47b5-a192-1bef39af46e2/knikarmcrossing</a> 092008.pdf
- Scott Goldsmith. "Economic Projections For Alaska And The Southern Railbelt 2000-2025." 2001.
  https://scholarworks.alaska.edu/bitstream/handle/11122/12064/ceatest.pdf?sequence=1
- Going forward, ISER will "rely on work by David Howell, the state demographer at DOLWD." – Mariah Oxford, Communications Specialist, ISER (2/8/22)

Alaska Department of Labor (ADOL; ADOLWD), various forecasts (2019, 2017, 2015, 2012, 2010, and 2007)

 "Alaska Population Projections," Alaska Department of Labor and Workforce Development. Accessed January 13, 2022.
 <a href="https://live.laborstats.alaska.gov/pop/projections.html">https://live.laborstats.alaska.gov/pop/projections.html</a>

## Woods & Poole Economics

• "Interactive Map," Woods & Poole Economics, Inc. 2021. Accessed February 24, 2022. https://www.woodsandpoole.com/interactive-map/

## Population Forecasts (Continued)

#### Consultants

- Insight Research Corporation, "Mat-Su Borough Population Without Bridge 2000-2030." In Fiscal Impact: Knik Arm Toll Bridge Investment Grade Study. May 2007. https://knikbridgefacts.org/documents/IndependentEconomicOverviewandDevelopmentForecast07022007.pdf
- Western Demographics, "Mat-Su Borough 2010, 2035 & Build-out Population by Community Council." June 25, 2012.

## Missing/Not Included

 Wilber Smith, "Update of the Traffic and Toll Revenues Study." 2011. Referenced in: Scott Goldsmith, "Distribution of Misinformation Regarding KABATA Population. Predictions", memo to Michael Foster, March 22, 2011. <a href="http://www.akleg.gov/basis/get\_documents.asp?session=28&docid=2581">http://www.akleg.gov/basis/get\_documents.asp?session=28&docid=2581</a>

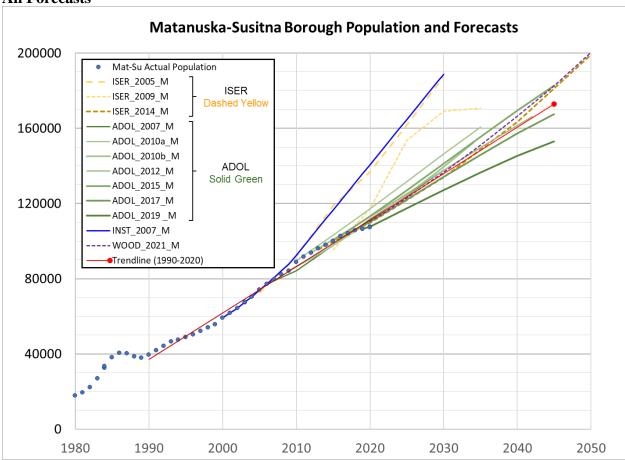
"One [missing] is the population projections used in the most recent Wilber Smith Update of the Traffic and Toll Revenues Study (2011) done for KABATA. Whatever those projections may be, to the best of my knowledge, they have never been made public. They certainly are not in the published report" - Scott Goldsmith

Woods & Poole Economics, Inc. 2011. Referenced in:
 Scott Goldsmith, "Distribution of Misinformation Regarding KABATA Population.

 Predictions", memo to Michael Foster, March 22, 2011.
 <a href="http://www.akleg.gov/basis/get\_documents.asp?session=28&docid=2581">http://www.akleg.gov/basis/get\_documents.asp?session=28&docid=2581</a>

"The other missing projection is the Woods & Poole projection that you mention on the KABATA website on March 12 of this year, implying that it is "in line" with the KABATA projection. However that projection does not, to the best of my knowledge, appear on your website nor can it be found elsewhere in the public domain." - Scott Goldsmith

## **All Forecasts**



This graph is intended to provide a visual representation of the full scope of population forecasts created for the Mat-Su Borough over the last 20 years.

Among them, only the ISER\_2009 forecast assumes a major infrastructure project ("The Knik Arm Crossing bridge is constructed and becomes operational in 2015". Even the ISER\_2005 and INST\_2007 (Insight Research Corp.) projections, which forecasted Mat-Su Borough populations near 190,000 individuals by 2030, were considered base case scenarios with no bridge or other major projects at the time of publication.

In general, population projections for the Mat-Su Borough completed from 2005 to the present have forecasted progressively lower growth rates. This reflects lower actual growth rates, and may serve as a cautionary note against selecting an overly bullish forecast as the basis for the MPA boundary.