

## **Economics of The Knik Arm Toll Bridge**

Presented to

#### Anchorage Economic Development Corporation

February 19, 2009



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## KABATA Cautionary Statement



This presentation includes forecasts and assumptions subject to risks and uncertainty, the actual outcome of which may be impacted by a number of factors including, but not limited to, the following:

- availability of State and Federal budget appropriations,
- National Environmental Policy Act process and outcome,
- actual traffic and toll revenue realized,
- capital market conditions and acceptance of the project,
- actual construction costs realized, and
- other social, political, environmental and economic factors both known and unknown to KABATA at this time.

KABATA undertakes no responsibility to update this presentation.

## About the Knik Arm Bridge and Toll Authority



The Knik Arm Bridge and Toll Authority (KABATA) was created in 2003 by Alaska Statute 19.75 to

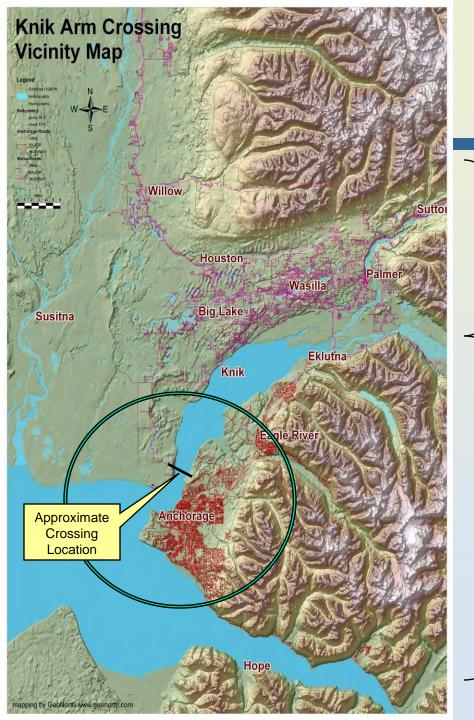
"...develop, stimulate, and advance the economic welfare of the state and further the development of public transportation systems in the vicinity of the Upper Cook Inlet with construction of a bridge to span Knik Arm and connect the Municipality of Anchorage and the Matanuska-Susitna Borough."

# Concept Rendering of the Knik Arm Bridge









#### 82,669 residents \*

Mat-Su in top 1% of fastest growing "counties" in U.S. (35th out of 3,141 this decade)

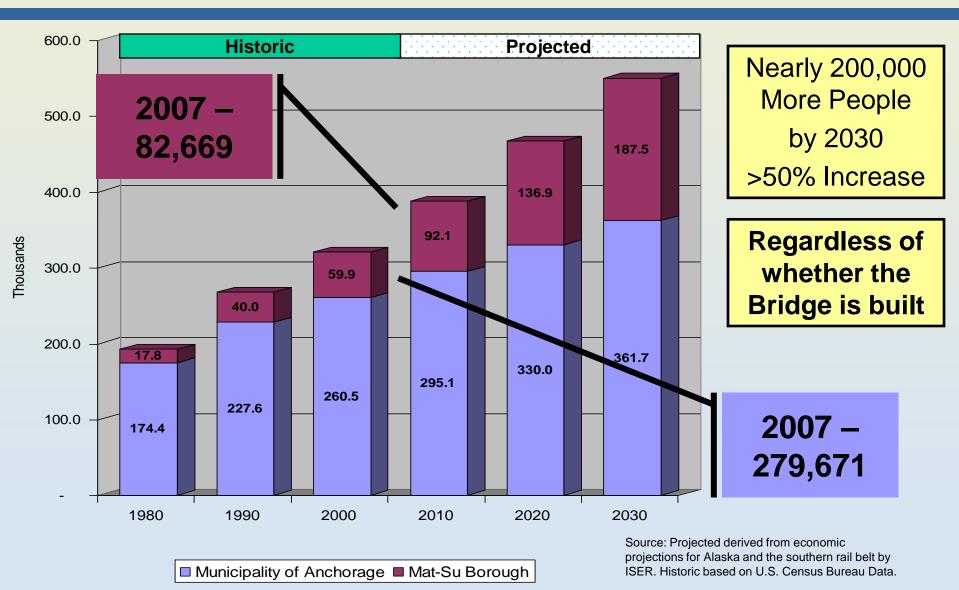
#### 279,671 residents \*

Combined communities represent 53% of Alaska's population

\* July 1, 2007 Population Estimate US Census Bureau

# Regional Population is Growing

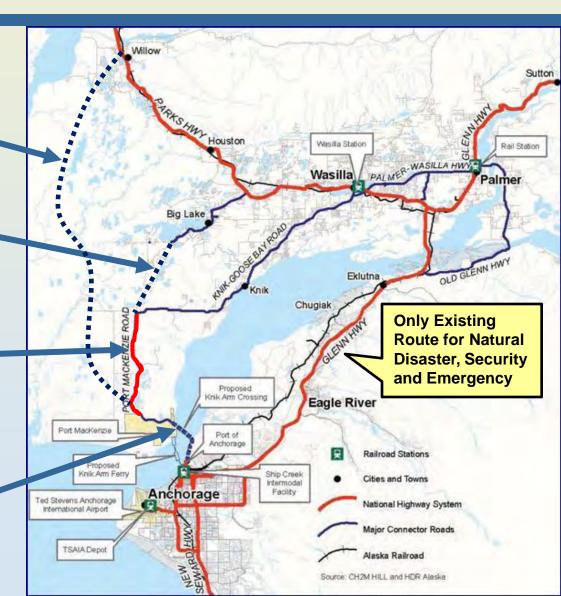




## Knik Arm Bridge – An Important Infrastructure Link

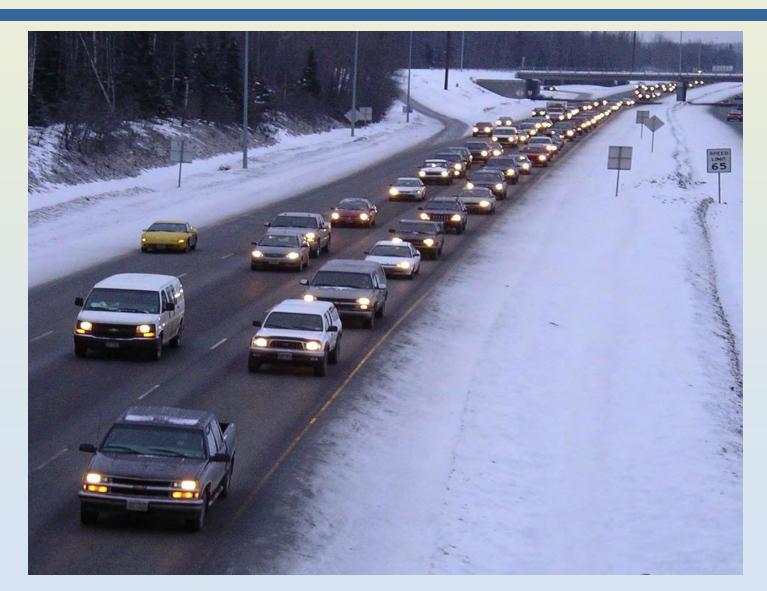


- Potential Future
   Rail Corridor
- South Big Lake and Burma Road
- Point MacKenzie
   Road Upgrade
- Port MacKenzie
   Pipeline/Resource
   Development



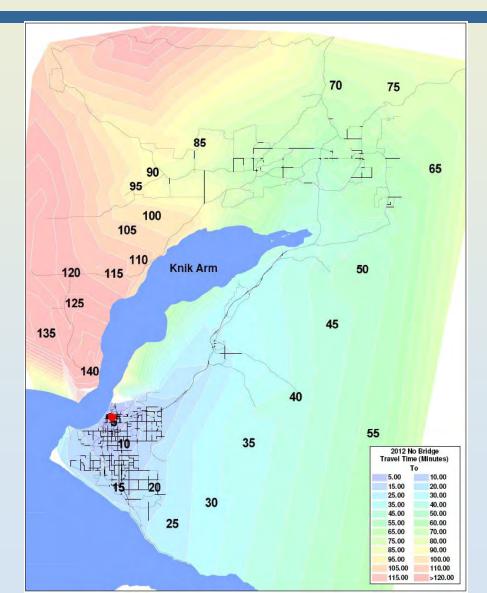
# Glenn Traffic from Mat-Su on a Weekday





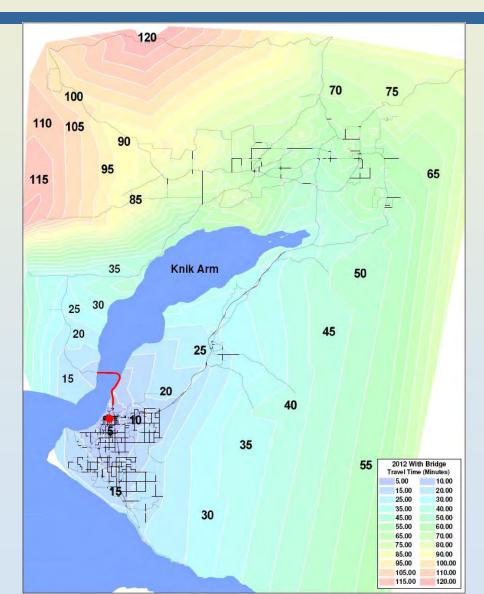
## Approximate Travel Times Without Bridge





# Approximate Travel Times With Bridge





## The Transportation Connection to Highway to Highway

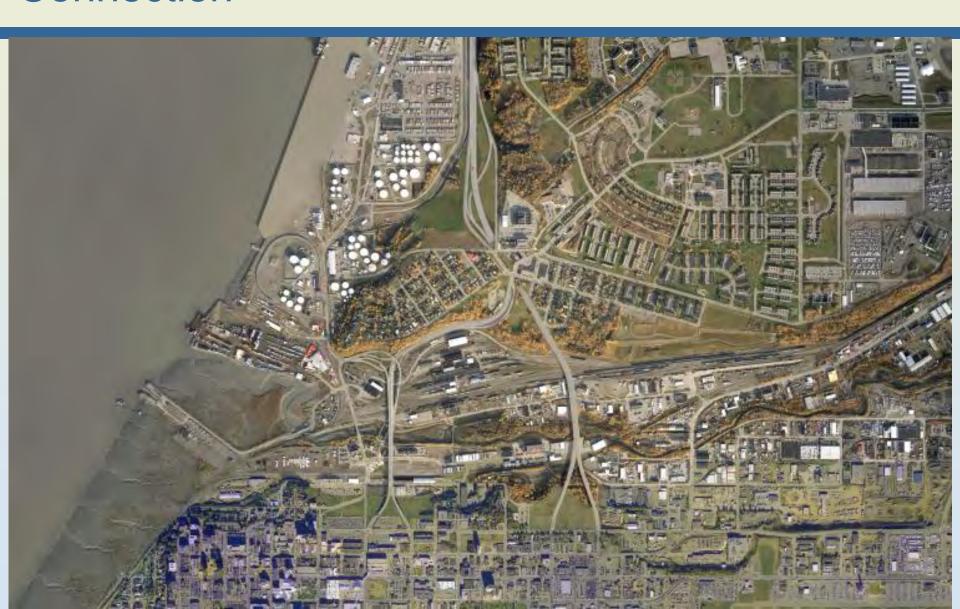


- Complementary to H2H project
- 8,400 ADT at opening, growing to 45,000 ADT
- Northbound freight from POA avoids MOA



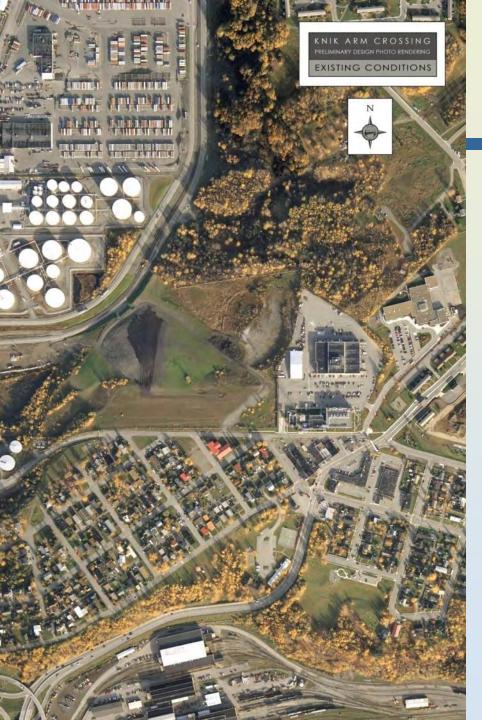
## Phase 2 with Ingra/Gambell Connection







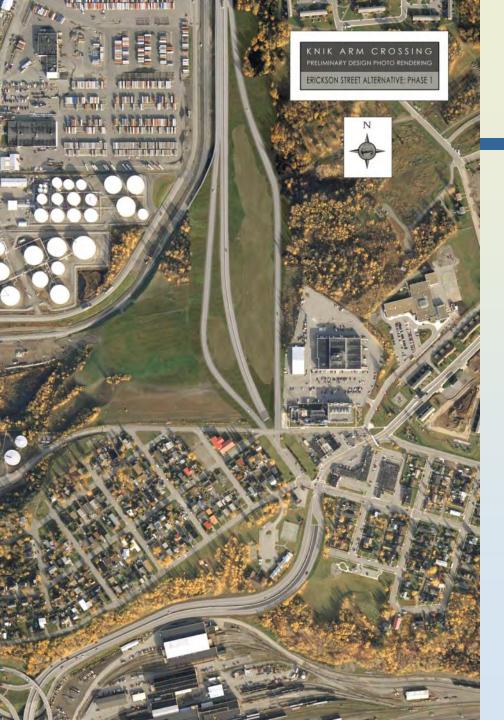
# What About the Impacts to Government Hill?





#### **Government Hill**

**Existing Conditions** 

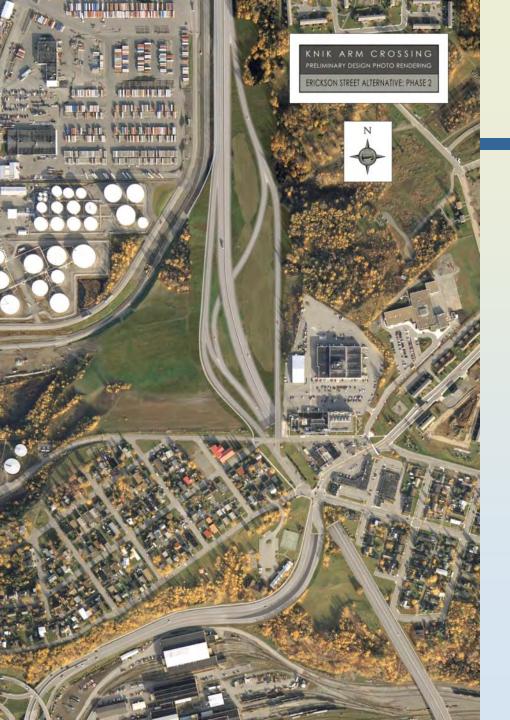




#### **Government Hill**

#### Phase 1:

- Cut-and-cover tunnel below ground
- Connects to A/C Couplet
- Only two occupied residential properties





#### **Government Hill**

#### Phase 2:

- Addition of Ingra/Gambell connector
- Additional interchanges
- Only seven occupied residential properties

### Government Hill Mitigation



- \$40-\$60 million cut-and-cover tunnel
  - Avoids bisecting neighborhood with surface highway
  - Maintains air quality and contains noise
  - Represents about \$0.50 of toll per crossing or \$40,000 per GH residence in mitigation
- Qualified private parcels fairly compensated under Uniform Relocation Act
  - Less than 10 occupied residential properties
- Context Sensitive Design and Historic Preservation



# What Are the Potential Economic Benefits to Alaskans?

## Knik Arm Bridge brings Economic Stimulus

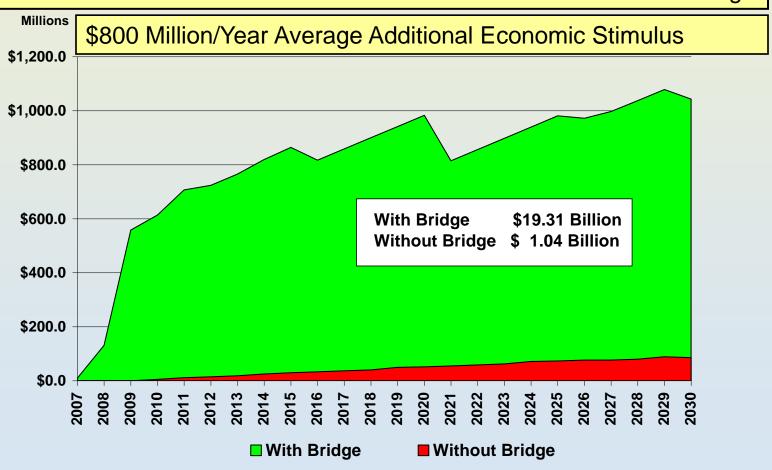


- Facilitates Movement of People and Goods
- Supports Alaska Gas Line and Other Resource Development Projects
- New Economic Corridor for Business and Only Alternative Highway Safety Route North
- Connects Port of Anchorage and Port MacKenzie
- Access to Planned Goose Creek Correctional Ctr
- Abundant Private Land for Development Close to Anchorage Supports Population Growth

## Knik Arm Toll Bridge Enables Economic Stimulus



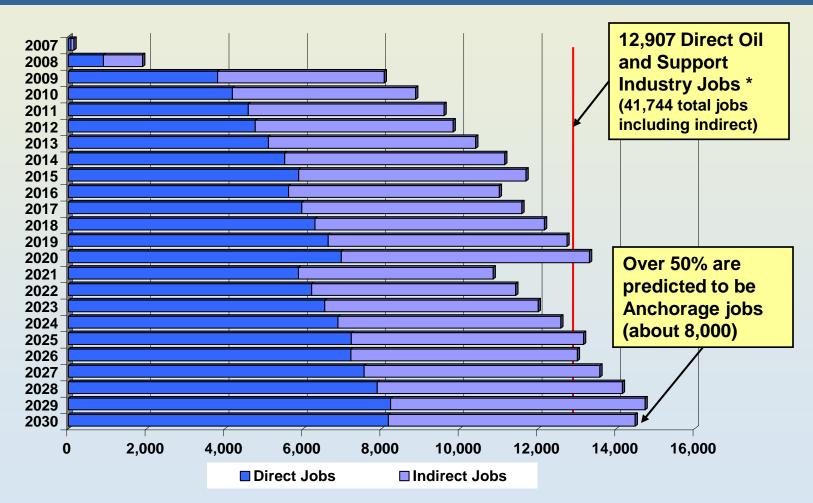
\$18.3 Billion Additional Economic Stimulus over First 23 Years with Toll Bridge



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# Knik Arm Toll Bridge – Additional Jobs (23 Years)





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# Value of Savings to Bridge Patrons – Opening Year



<u>Gasoline</u> <u>Price</u>	<u>Daily Travel</u> <u>Savings</u>	Annual Travel Savings
\$2.55	\$224,600	\$81,979,000
\$3.53	\$247,600	\$90,374,000
\$4.00	\$259,800	\$94,827,000
\$5.00	\$285,400	\$104,171,000
\$6.00	\$311,000	\$113,515,000

- Travel Savings are based on Value of Time saved and Vehicle Operating Costs avoided, net of tolls paid<sup>1</sup>
  - Savings to the public increase as fuel prices rise and traffic volume increases

<sup>1.</sup> Wilbur Smith Associates Travel Savings to the Bridge Patrons in the First Year of Operations letter dated May 30, 2008

## Improved Network Provides Environmental Benefits



- Reduced miles traveled results in significant carbon emissions reduction<sup>1</sup>
  - 80,000 metric tons in first year and growing (bridge patrons only)
  - Does not consider improved mobility and reduced congestion elsewhere in network
- Smaller human footprint closer to Anchorage as population grows



## Summary of Selected Economic Benefits



- \$18.3 Billion Additional Economic Stimulus<sup>1</sup>
- \$82 Million/year Public Travel Savings<sup>2</sup>
- 14,000 Additional Jobs Enabled<sup>1</sup>
- \$1.2 Billion Additional Local Tax Receipts<sup>1</sup>
- \$1.4 Billion additional O&M and CapEx<sup>3</sup>
- 80,000+ Metric Tons of Carbon Emissions Avoided<sup>2</sup>

# Economic Benefits for Alaskans enabled by building the Knik Arm Toll Bridge

<sup>1.</sup> First 23 years of operation (Insight Research Corporation).

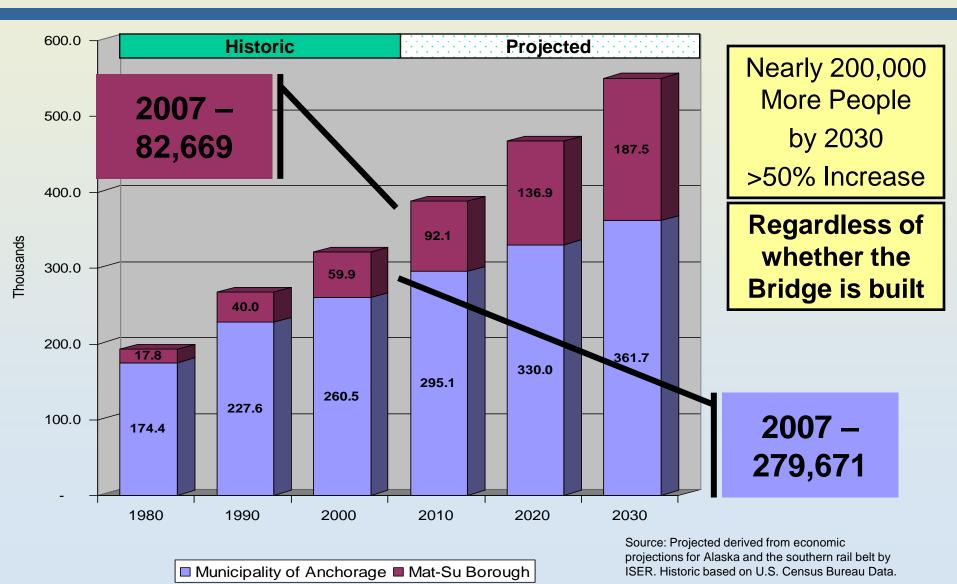
<sup>2.</sup> First year of operation and growing with traffic volume. Based on Wilbur Smith Associates and USDOE calculation methodology.

<sup>3.</sup> First 60 years of projected operations, maintenance and renewal capital expenditures for bridge.

## Robust Investment Thesis

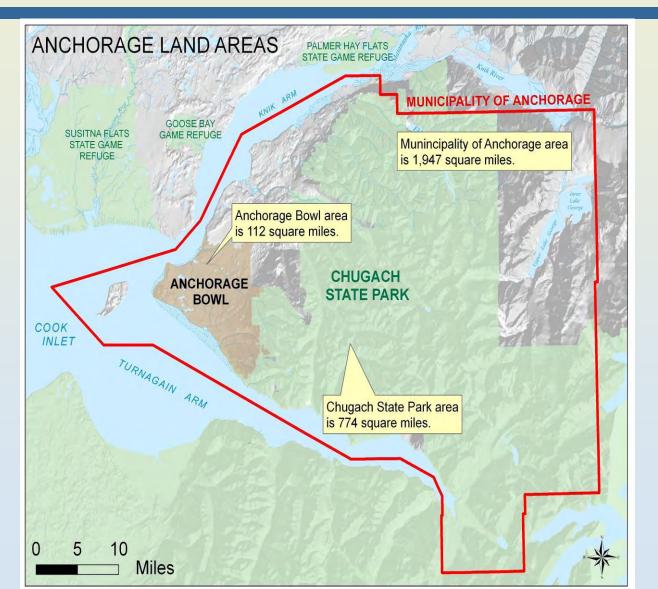
# Regional Population is Growing





## Anchorage Growth is Geographically Constrained

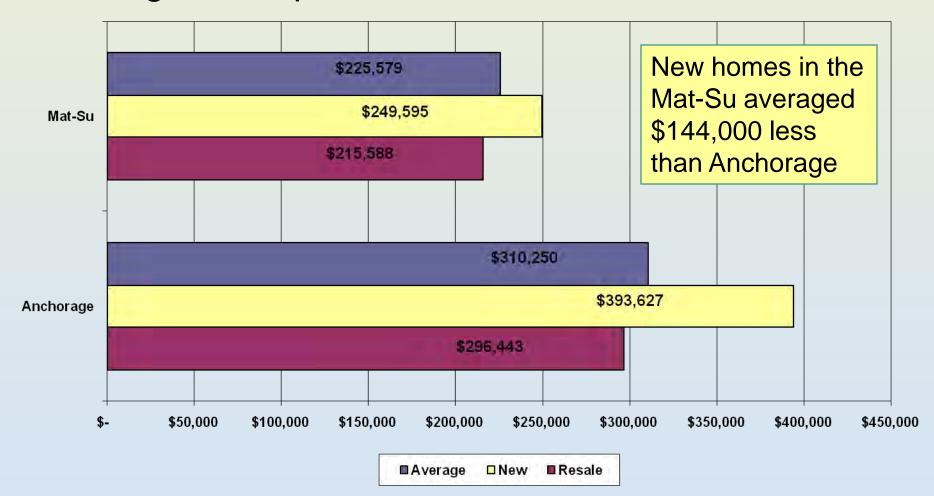




# Housing Prices and Land Availability Favor Mat-Su



#### Average sales price, 2<sup>nd</sup> half 2007\*



<sup>\*</sup> Derived from Alaska Department of Labor's Alaska Economic Trends, August 2008 issue.

# Housing Prices and Land Availability Favor Mat-Su



- Strong regional economy and poor economy elsewhere attracting in-migration to area
- Mat-Su has an estimated ≈20% of private and borough owned lands in Alaska
- Close proximity to Alaska's economic and transportation hub – Anchorage
- = 35<sup>th</sup> fastest growing county in U.S. this decade out of 3,141

## Job Availability and Wages Favor Anchorage



- **Airport**
- Port of Anchorage
- Alaska Railroad
- Universities







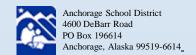




- Regional Healthcare
- Oil Industry HQ
- Military Installations
- Retail
- **Tourism**
- Government















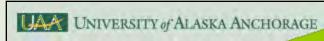












## Job Availability and Wages Favor Anchorage



- 20 straight years of economic and job growth
- 3<sup>rd</sup> largest air cargo port in the world
- 90% of container freight arriving in Alaska via Port of Anchorage
- Half of all tourists to Alaska visit Anchorage
- High median household and family income
- Two military bases with 12,000 stationed troops
- Center of Federal, State and Local government employment
- = Average wage of \$46,363 37% higher than Mat-Su

# Robust Commuter Model w/ Only one Competing Corridor KNIK ARM CROSSING ONLY ONLY





# Other Consideration and Upside Catalysts



- Corridor is gateway to and from points north for
  - One million tourist annually
  - Freight to and from POA and Port MacKenzie
- Alaska's rich potential for resource and energy development, gas pipeline, mining, etc.
- Only alternative to the Parks/Glenn Highway and more efficient for many travelers
- = Minimal downside risk with significant potential upside



# Attractive Toll Project Economics

# Leveraging Public Funds with Toll-Backed Financing



\$1.2 Billion Local Tax Receipts

14,000 New Jobs

\$18 Billion of Additional Economic Stimulus

\$1.4 Billion O&M

Total Infrastructure Delivered ≈\$600-\$700 MM

Depending on financial markets and policy choices:

Every \$1 of public funds invested generates \$3+ to \$10 of infrastructure and associated economic stimulus

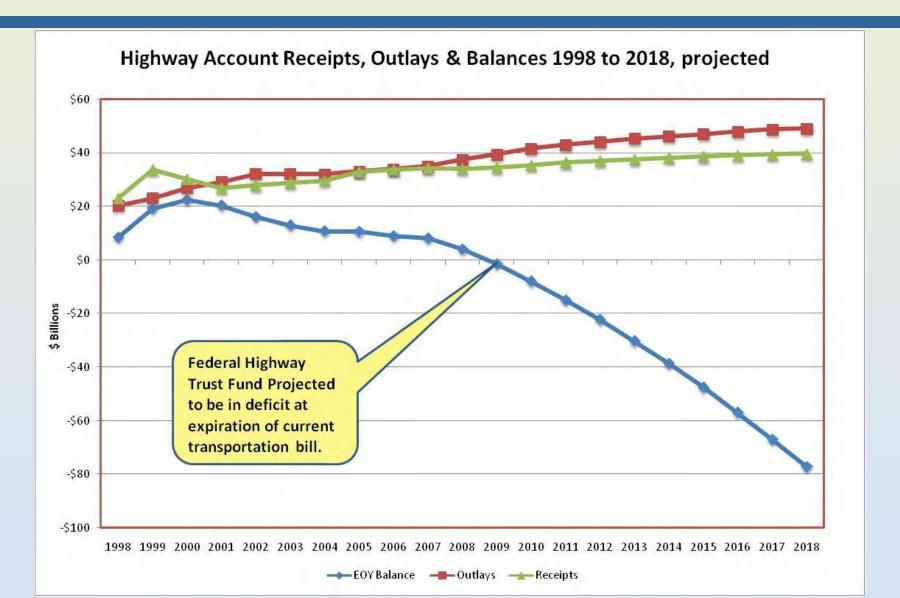
Toll Bridge Pays ≈ 70-90%

State
Pays
≈ 10-30%

Leverage

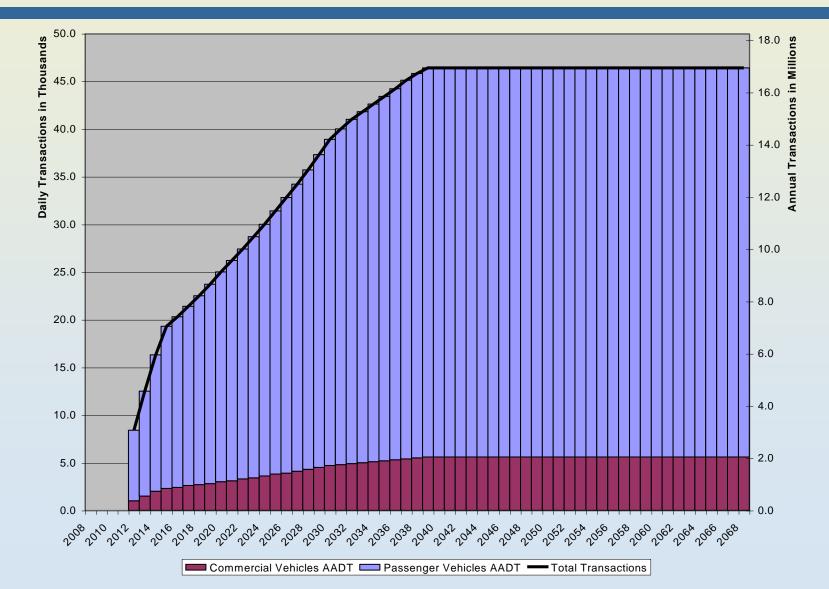
## Growing Need to Leverage Limited Public Funds





# Wilbur Smith Associates Traffic Projection





# Comparative Indicative Initial Toll Rates per Crossing

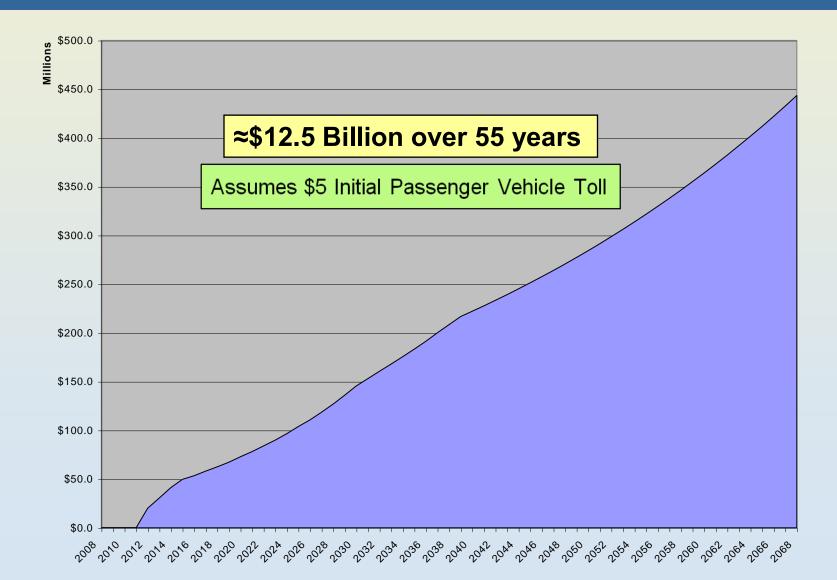


Vehicle Classifications	Initial Toll Rate <sup>1</sup>	Mat-Su Ferry <sup>2</sup>
0 axle - Foot traffic / Ferry passenger	Free?	\$10.00
2 axle – Passenger vehicle, motorcycle	\$5.00	\$25.00
3 axle – Commercial vehicle, passenger vehicle with trailer	\$10.00	\$250.00
4 axle – Commercial vehicle	\$15.00	\$250.00
5 axle - Commercial vehicle	\$20.00	\$500.00
6 axle - Commercial vehicle	\$25.00	\$500.00

- 1. Knik Arm Toll Bridge rates proposed to escalate at Anchorage CPI annually
- 2. ADN article January 31, 2008

## Projected Toll Revenue





### Toll Facility Revenue "Waterfall" Flow of Funds



#### Toll Revenues



**Operation & Maintenance** 

Senior Debt Service

Subordinated Debt Service

Project Reserve Requirements

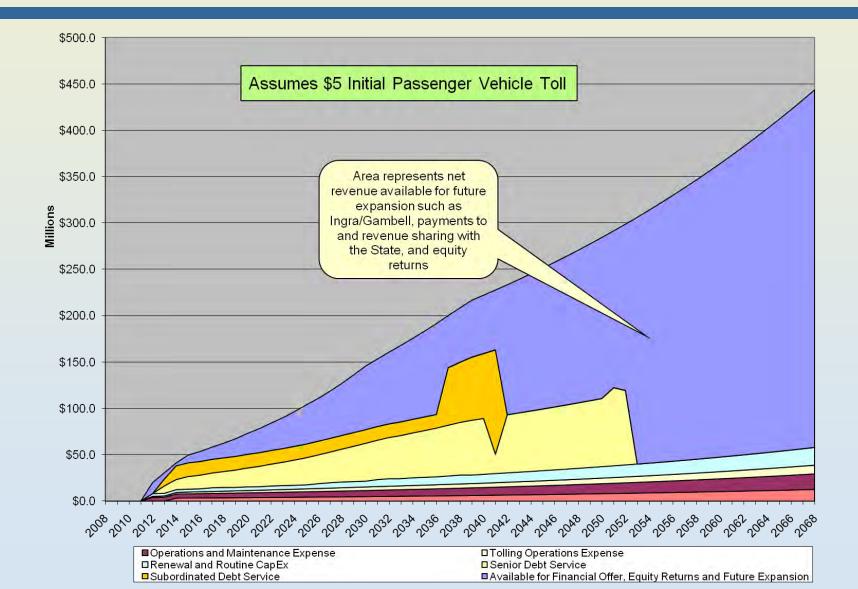
Free Cash Flow

Tee cash flow for future expansion, construction of other

Free cash flow for future expansion, construction of other infrastructure, and equity returns

# Indicative Use of Revenue for Operations and Debt Service





## Project Challenges

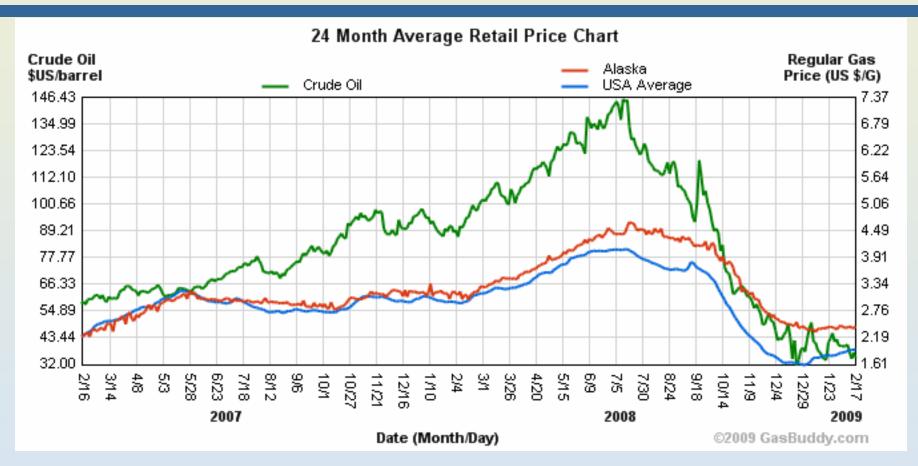
## Knik Arm Toll Bridge Project Challenges



- Completion of environmental clearance under NEPA
  - All legal hurdles cleared for issuance of Record of Decision – now in FHWA hands
- Permitting
  - USACE §404 permit, ESA beluga restrictions
- Anchorage Politics / Anchorage Metropolitan Area Transportation Solutions (AMATS)

# Long Range Policy Shouldn't be Based on Temporary Conditions!





- National average gasoline price per gallon has declined 53% since the high on July 7, 2008 (five-year low on January 2, 2009)
- Oil is down 76% after peaking at \$147.27 per barrel in July (\$35.00 on February 17, 2009)



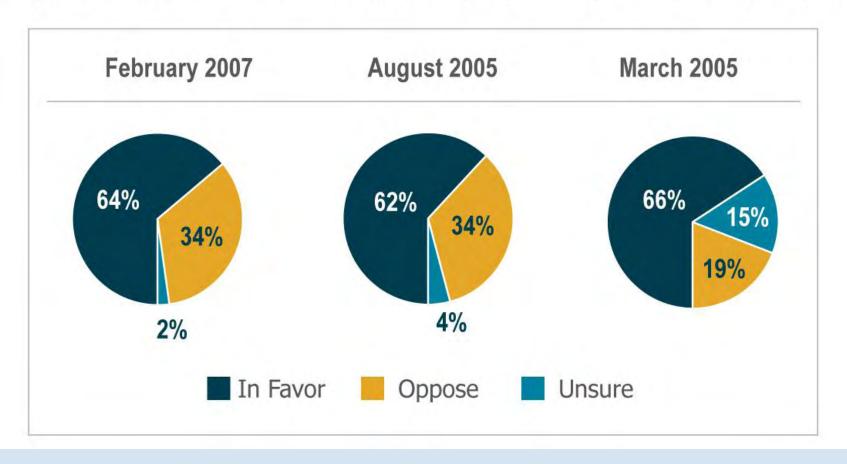
# Strong Value Proposition Supported by Alaskans

## Continuous Local Project Support



#### Almost two-thirds of Southcentral residents want the Knik Arm Bridge built

"What's your personal opinion about the Knik Arm Crossing project – are you mostly in favor, or opposed?"

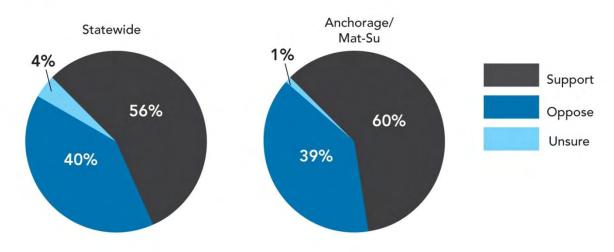


## Support Confirmed by 2009 Statewide Survey



#### Support for Knik Arm Crossing remains high

Q: Overall, when you weigh the reasons for and against, do you support or oppose building the Knik Arm Crossing toll bridge?



✓ Survey results also indicate 70% of residents in Anchorage / Mat-Su support keeping the project in the AMATS LRTP

# Knik Arm Toll Bridge Value Proposition



#### Substantial Economic Value to Alaskans

- \$18.3 Billion Additional Economic Stimulus First 23 Years
  - \$800 Million/Year Average Additional Economic Stimulus
- 14,000 Additional Jobs First 23 Years
- \$1.2 Billion Additional Local Tax Receipts
- \$1.4 Billion Additional O&M and Capital Expenditures

#### Affordable and Financially Feasible

- Leverage allows the State to buy the Toll Bridge by paying a fraction of the Construction Cost
- \$261mm TIFIA funding, \$600mm of Private Activity Bonds Capacity

#### Environmentally Friendly

- Reduced CO<sup>2</sup> emissions
- Smaller future human footprint
- Neighborhood mitigation

## **Concept Rendering**



