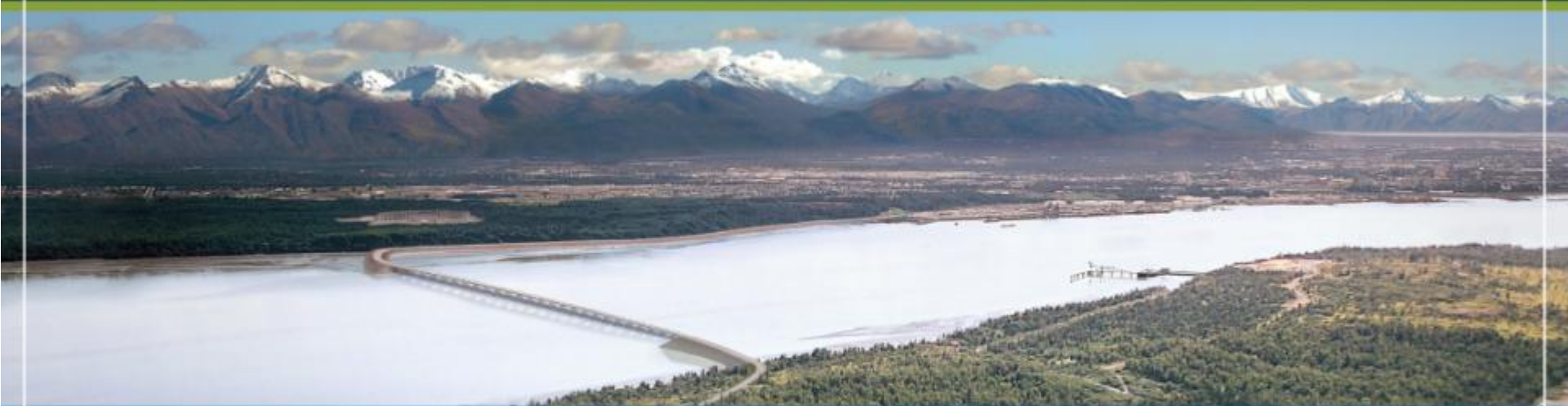




# KNIK ARM CROSSING



Delivering Statewide benefits, regional connectivity and economic growth.

[www.knikarmbridge.com](http://www.knikarmbridge.com)

## Alaska Support Industry Alliance Project Briefing

January 24, 2013

# Mission Statement

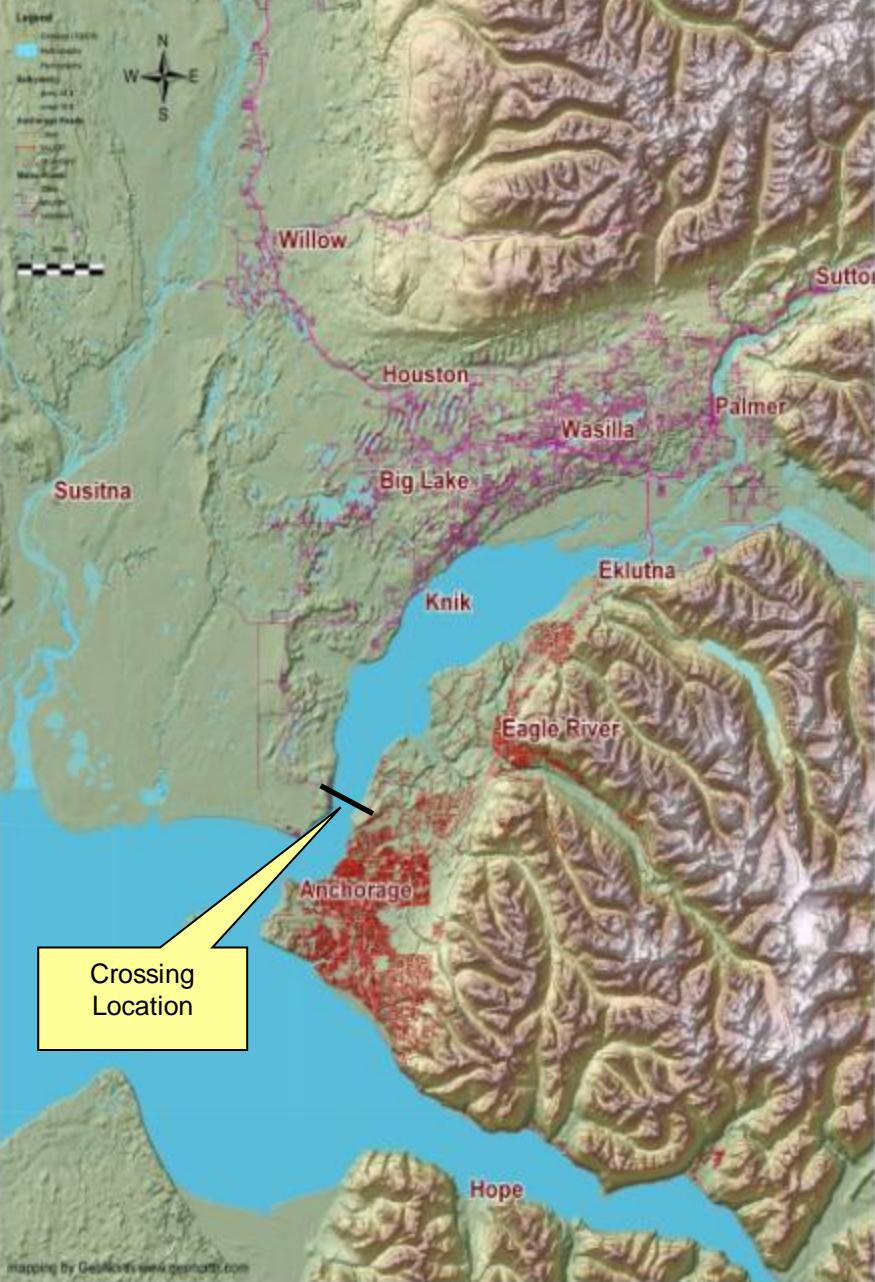
# Knik Arm Bridge and Toll Authority (KABATA)

- Established by Alaska Legislature in 2003 under 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.**”

# Regional Population



# Knik Arm Crossing Vicinity Map



Anchorage Metropolitan  
Statistical Area  
– 387,516 residents  
– 54% of Alaskans

91,946 residents \*

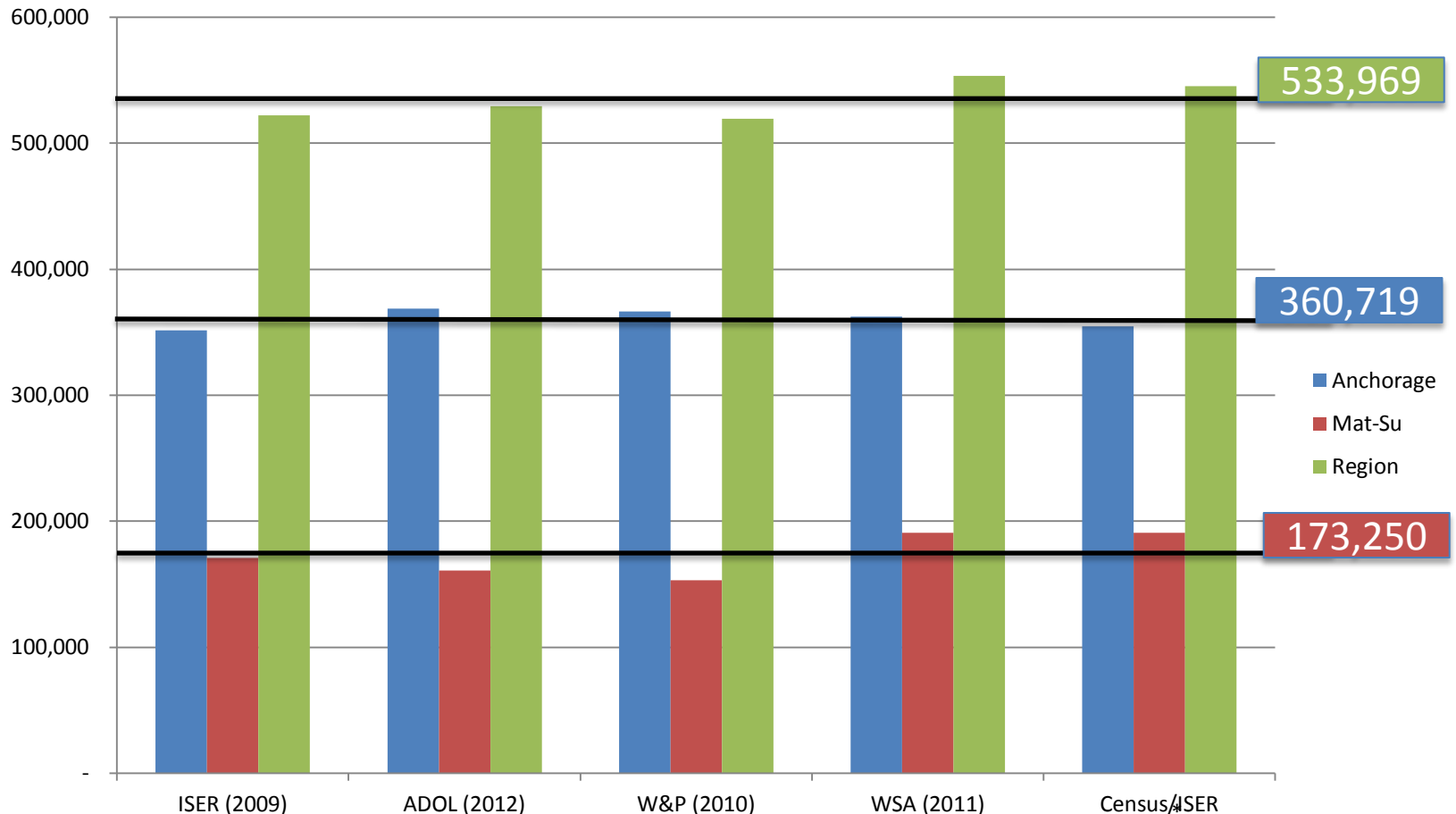
Mat-Su in top 1% of fastest  
growing “counties” in U.S.

295,570 residents \*

Municipality of Anchorage is  
the largest city in Alaska

\* July 2011, population estimate - US Census Bureau.

# 2035 Population Forecasts



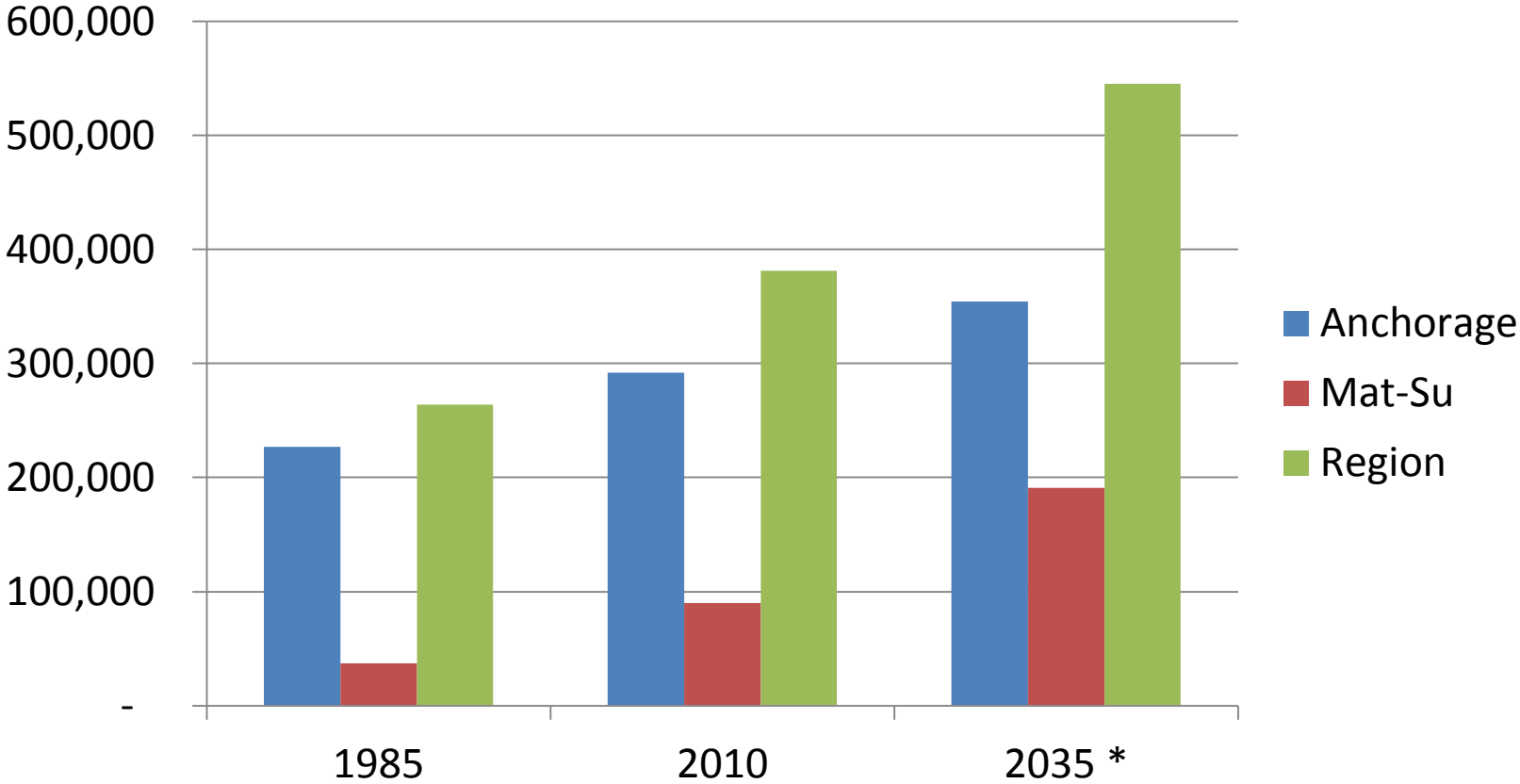
- 2010 Census number increased by ISER annual growth rate for 2035 forecast.
- Forecasts assume completion of the Knik Arm Crossing.

# Population Statistics

Region	Actual Population 1985 <sup>1</sup>	Actual Population 2010 <sup>1</sup>	Forecast Population 2035 <sup>2</sup>	Actual Change 1985 to 2010	Forecast Change 2010 to 2035	Percent Change 1985 to 2010	Percent Change 2010 to 2035
Anchorage	226,848	291,826	354,490	64,978	62,664	28.6%	21.5%
Mat-Su	37,280	89,737	190,873	52,457	101,136	140.7%	112.7%
Region	264,128	381,563	545,363	117,435	163,800	44.5%	42.9%

1. U.S. Census Bureau July 1, 1985 estimate and April 2010 actual count.
2. ISER population forecast growth rates applied to 2010 decennial census count.

# Historic and Projected Population Trend 1985 to 2035



\* 2010 Census number increased by ISER annual growth rate for 2035 forecast.



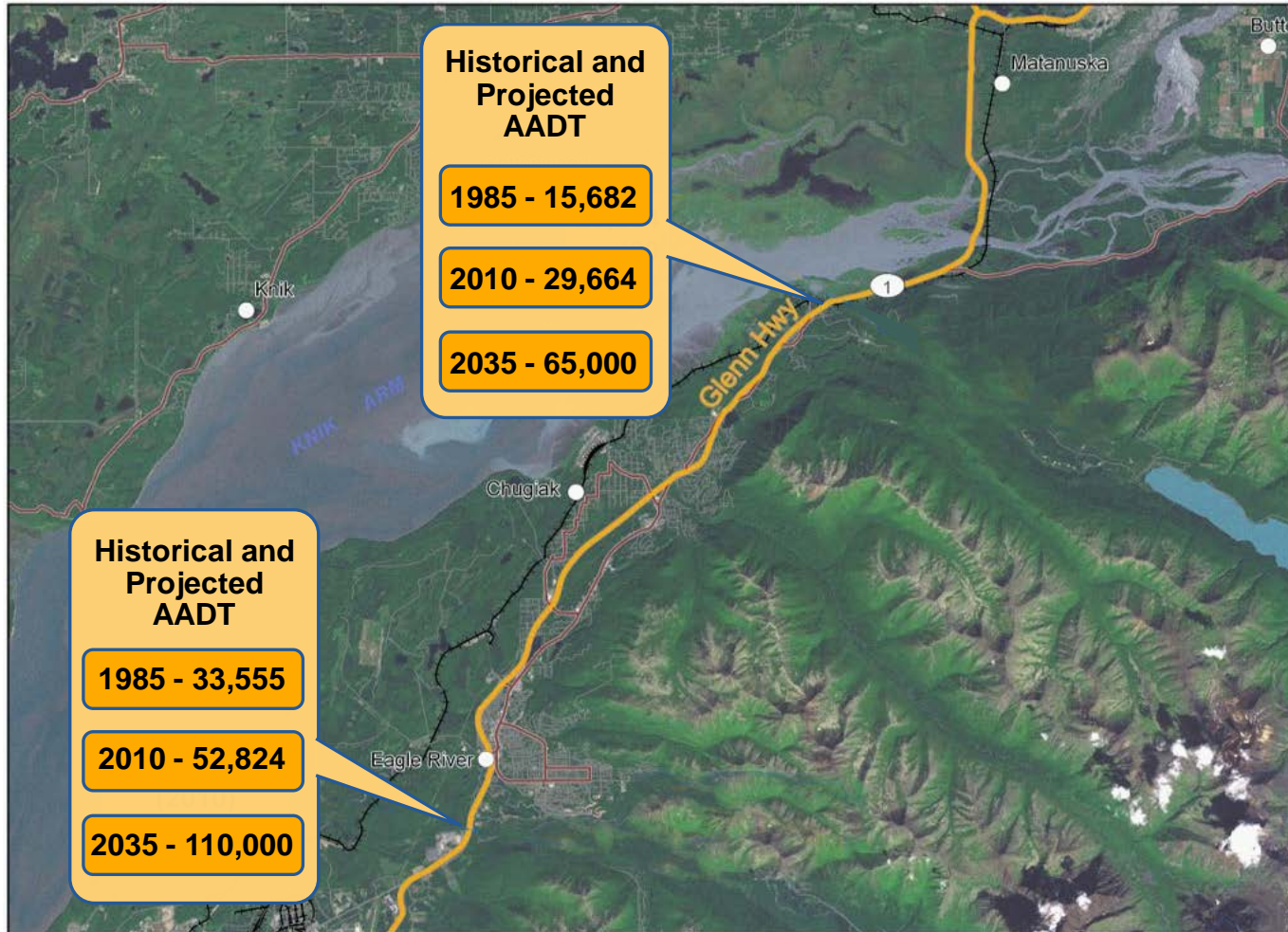
# Historic and Projected Traffic

# Population Growth Drives Traffic Increases

Location	1985 Average Annual Daily Traffic	2010 Average Annual Daily Traffic	2035 Forecast Average Annual Daily Traffic *	Forecast Increase in Daily Traffic 2010-2035
Eklutna	15,682	29,664	65,000	35,336
Hiland Road	33,555	52,824	110,000	57,176

\* Forecast assumes traffic without the bridge.

# Glenn Highway AADT Counts (no bridge)



# No Bridge Alternative

# What Happens Without the Bridge?

- State has to accommodate transportation needs to maintain existing level of service:
  - 6 lane improvements on Glenn Highway from Eagle River to Wasilla
  - 8 lane improvements on Glenn Highway from South Eagle River to 5<sup>th</sup> Avenue
  - Parks Wasilla Bypass
  - Network improvements in Palmer/Wasilla corridor
- ≈\$3 billion total cost with no toll revenue \*

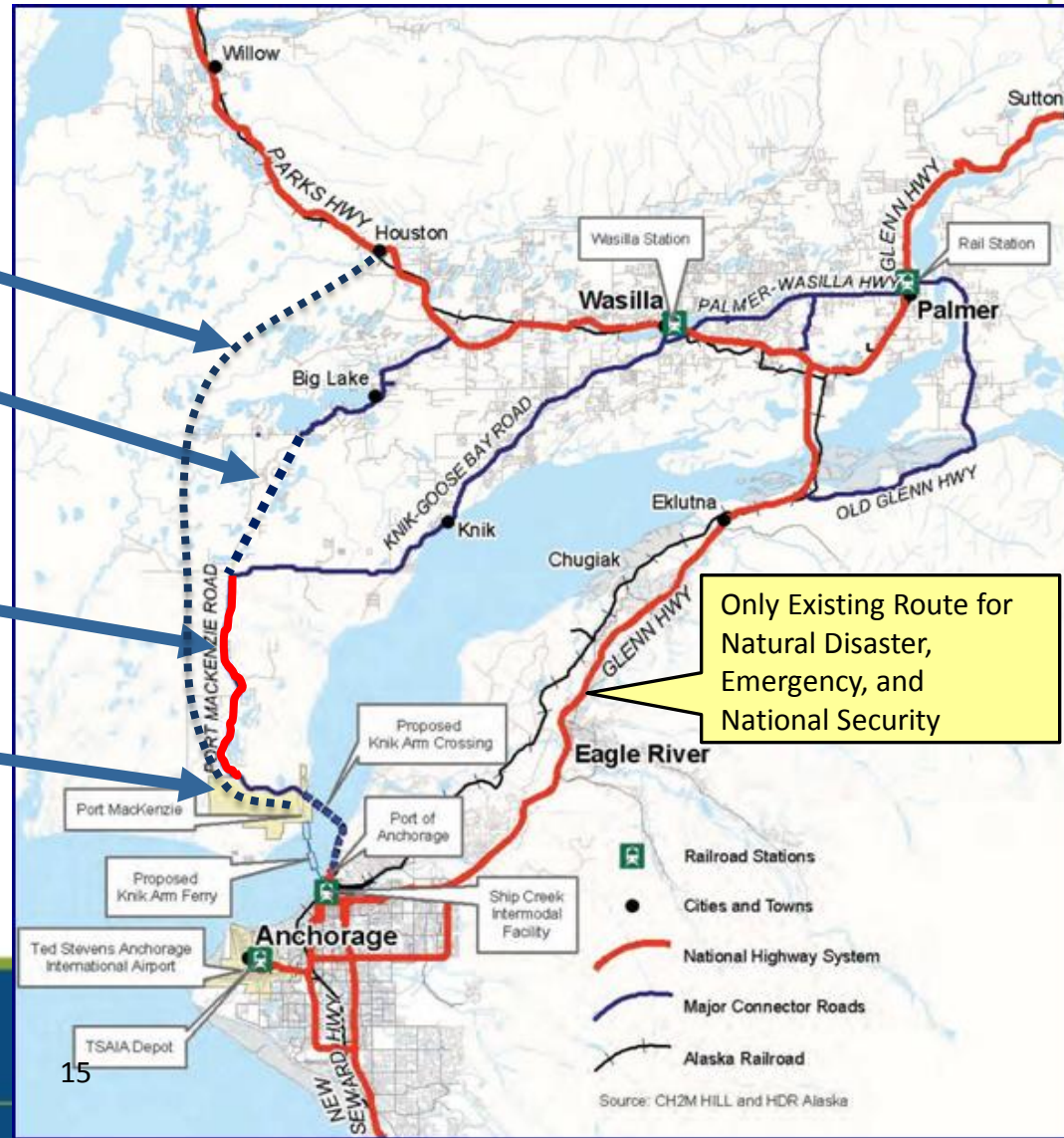
\* Estimate per 2008 Statewide LRTP prepared by ADOT&PF

# Knik Arm Crossing



# Regional Transportation Network

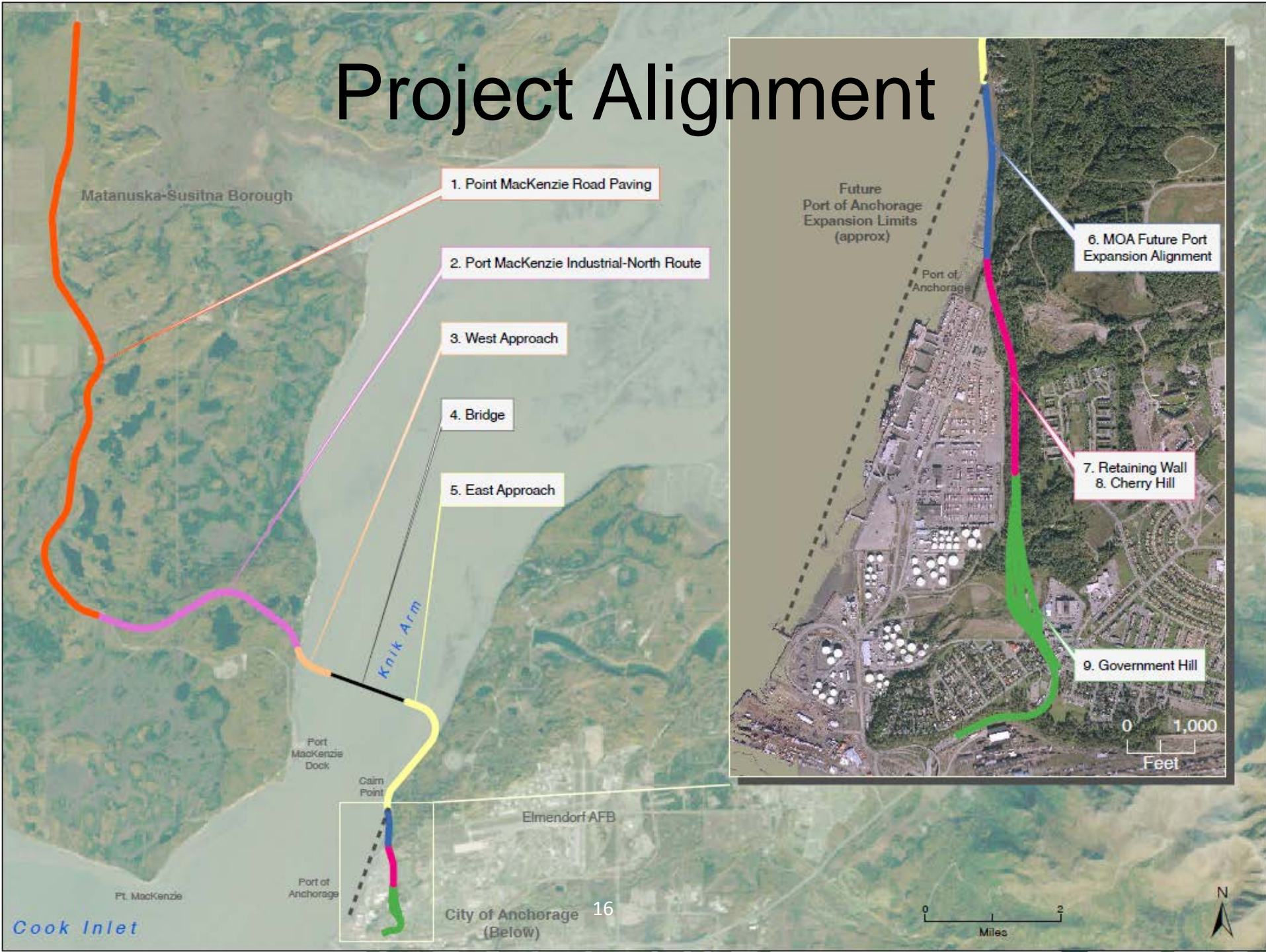
- Port MacKenzie Rail Corridor
- South Big Lake and Burma Road
- Point MacKenzie Road Upgrade
- Port MacKenzie Industrial District



Map source: Anchorage AMATS LRTP public review draft – August 2005.



# Project Alignment



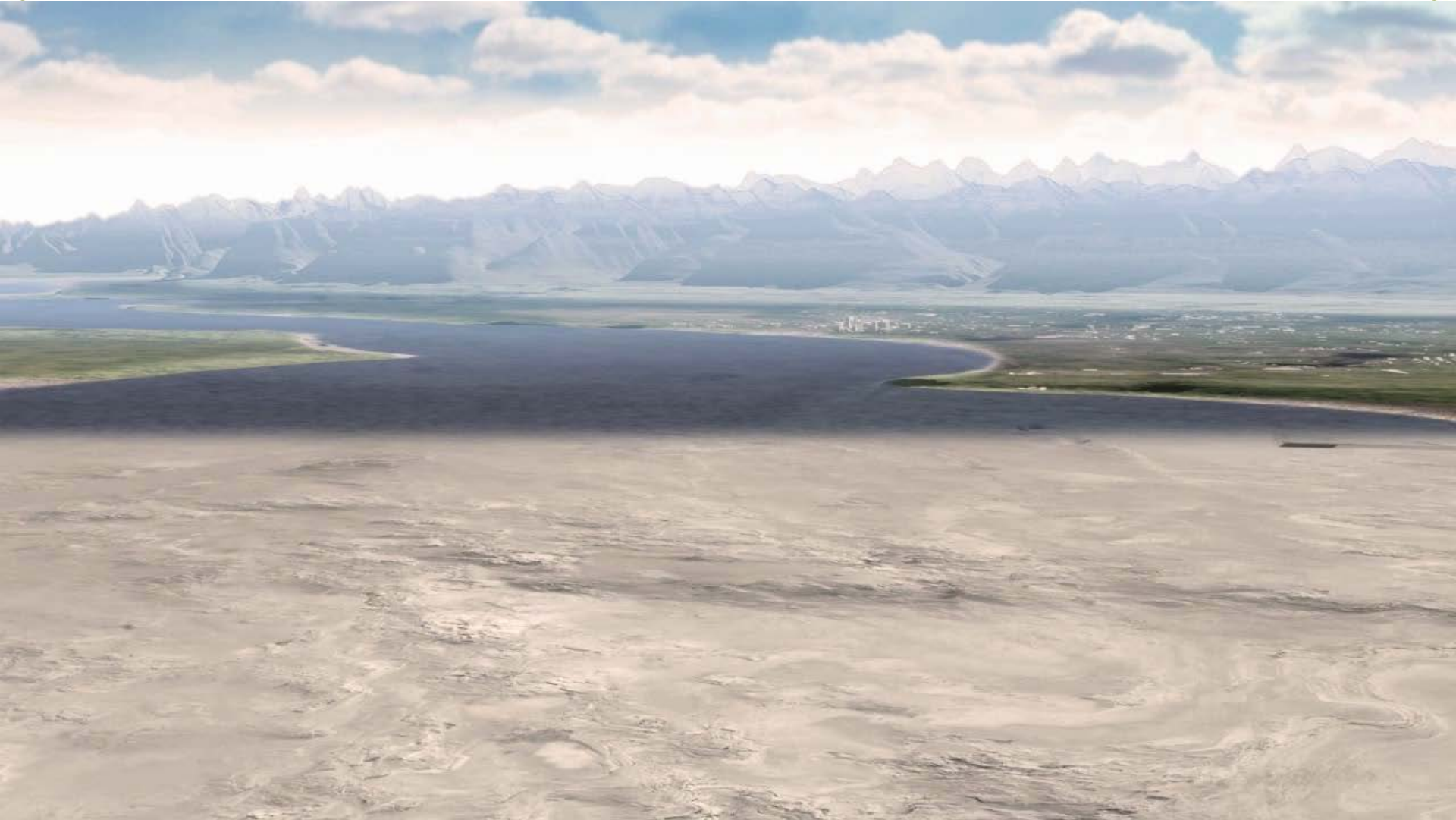
# Knik Arm Crossing

## P3 Partner Scope Phase 1

- Point MacKenzie Road to A/C connector
- 2-4 lane bridge with 4-lane foundation
- Cut-and-cover tunnel under Government Hill neighborhood
- 4 years to construct (+/- 1 year)
- Cost estimate in 2015 dollars:
  - Phase 1a ≈ \$715 million minimum scope (two lanes)
  - Phase 1b ≈ \$125 million additional for four lane build out
- Full build out contractually obligated



# Bathymetry and Tides



# Late Season 1



# Oscillated Drilled Shaft Operation

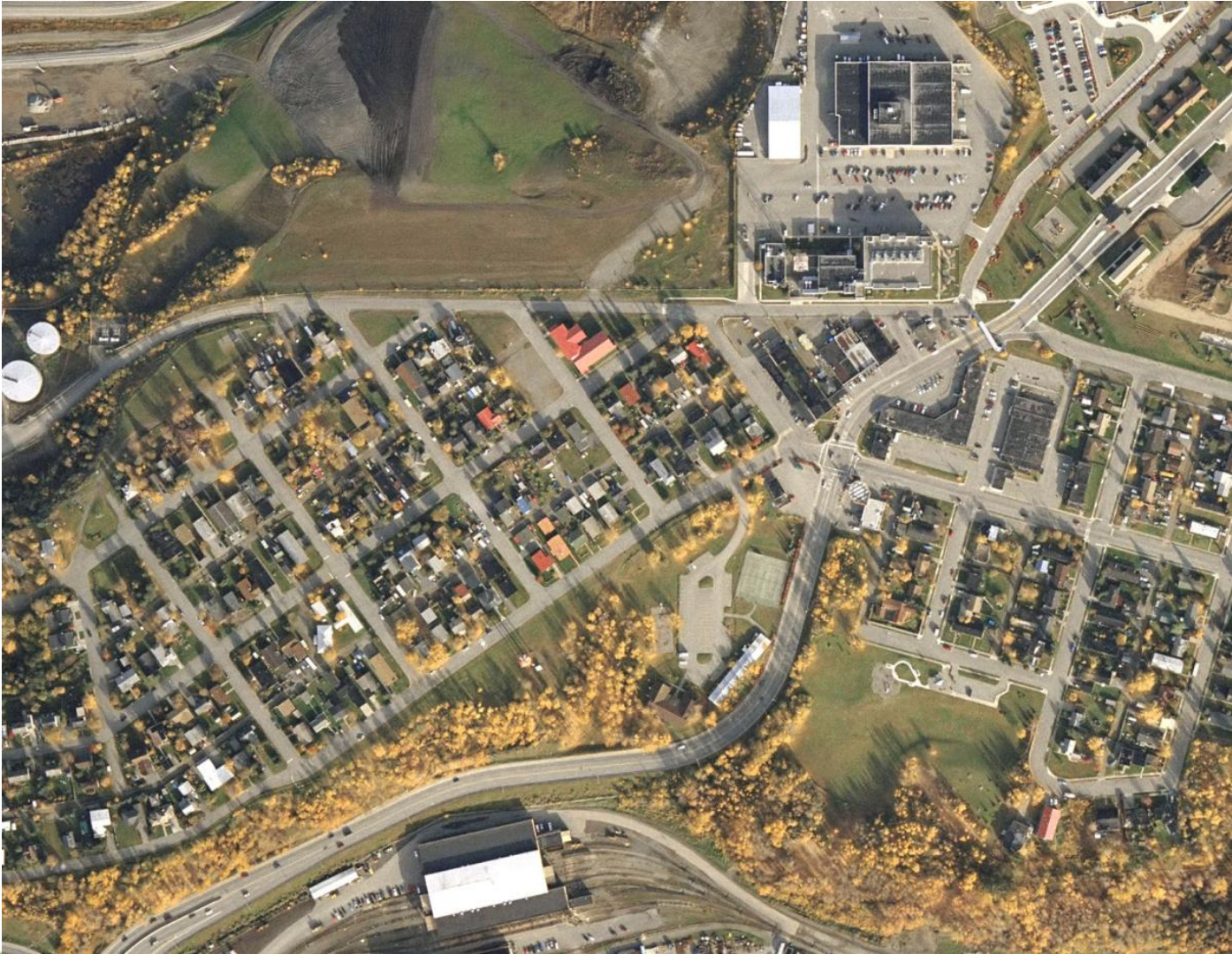




# Foundation Wrap Up - Season 2

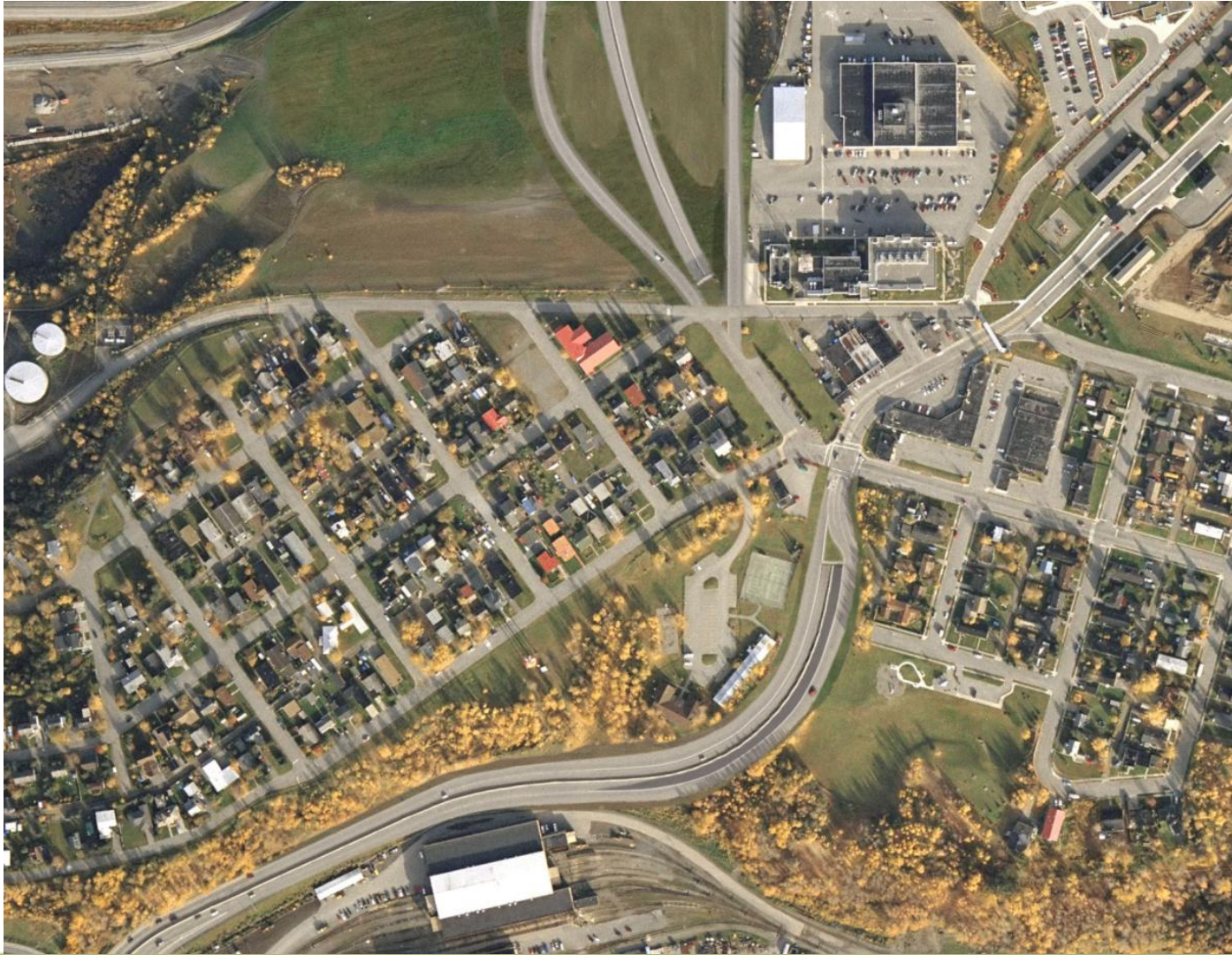


# Government Hill Before





# Government Hill After



# Knik Arm Crossing KABATA Build Out Scope Phase 2

- New viaduct connection to Ingra-Gambell
- 4-lane upgrade to Point Mackenzie Road

**Total Cost Estimate in 2015 dollars:  
≈ \$276 million**

\* Timing based on recently updated traffic and population forecast.



# KABATA Ingra-Gambell Connector



Existing A/C Couplet (Phase 1)

New Ingra-Gambell Connector (Phase 2)

# Public-Private Partnership (P3)



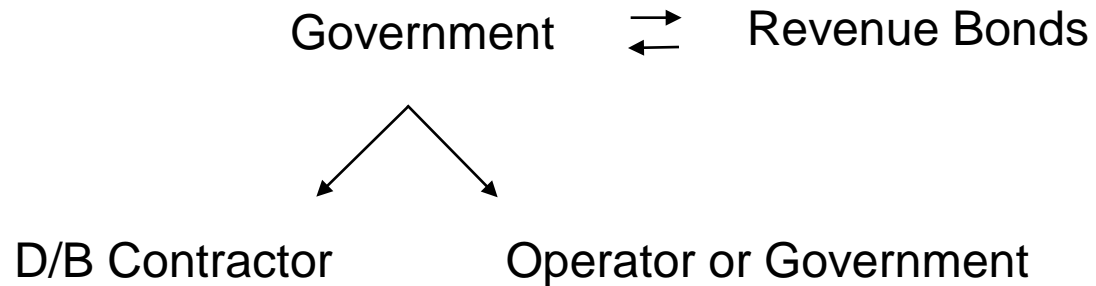
# Private Partner Responsibilities under a FDBOM P3 Contract

- Finance,
- Design,
- Build,
- Operate, and
- Maintain

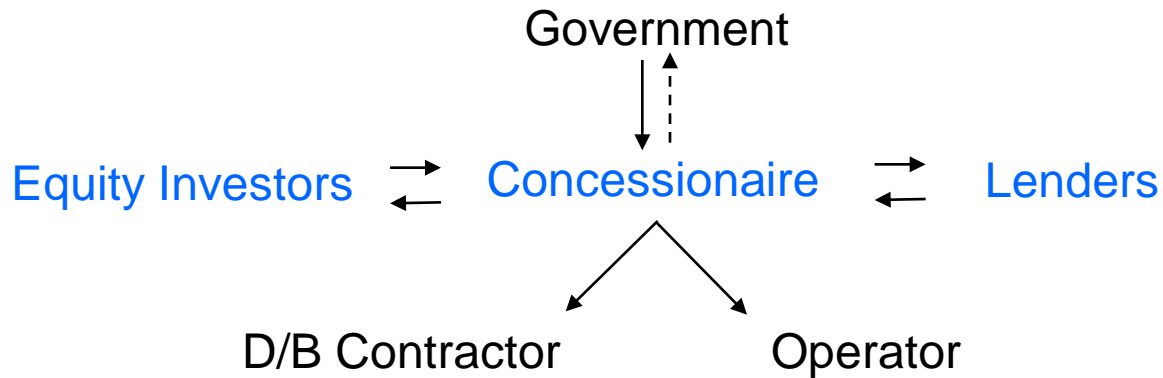
the project over the term of the partnership  
(FDBOM)

# Conventional Public Finance vs. Public-Private Partnership

Design-Build



DBFOM



# P3 Risk Allocations

	<u>State</u>	<u>Private</u>
• Financing/Refinancing		●
• Design		●
• Build		●
• Operations and Maintenance		●
• Toll Collection		●
• Toll Revenue	●	
• Capacity improvements <sup>1</sup>	●	●

1. KABATA responsible for Ingra-Gambell connection and Point Mackenzie Road upgrade to four lane. Developer responsible within concession alignment.

# P3 Procurement

# Shortlisted Teams

	<b>Alaska Infrastructure Access Partners</b>	<b>Cook Inlet Passage Partners</b>	<b>North Star Mobility Group</b>
<b>Equity</b>	Infrared Partners, Bouygues, Colaska, Weeks	Meridiam	HOCHTIEF PPP Solutions, ACS Infrastructure
<b>Design-Builder</b>	Bouygues, Weeks Marine	Kiewit, Manson Construction	Flatiron, Dragados, Traylor Brothers
<b>Operations and Maintenance</b>	Colaska	Transfield Services	HOCHTIEF, ACS
<b>Design</b>	URS, Moffatt Nichols	Parsons Transportation Group	HNTB, CH2M HILL
<b>Financial Advisor</b>	Macquaire Capital	KPMG Corporate Finance	ACS, HOCHTIEF

# Alaska Firms Well Represented

Alaska Interstate Construction LLC

URS Alaska, LLC

Golder Associates Inc.

Denali Drilling

R&M Consultants, Inc.

Dowl HKM

Colaska, Inc. dba QAP

Kiewit

USKH, Inc.

Kodiak Map

CH2M HILL, Inc.



# Procurement Process Following Shortlisting

- RFP issued
- Proposals submitted
- Evaluation and selection of best value proposer
- Award and execution of PPA / financial close

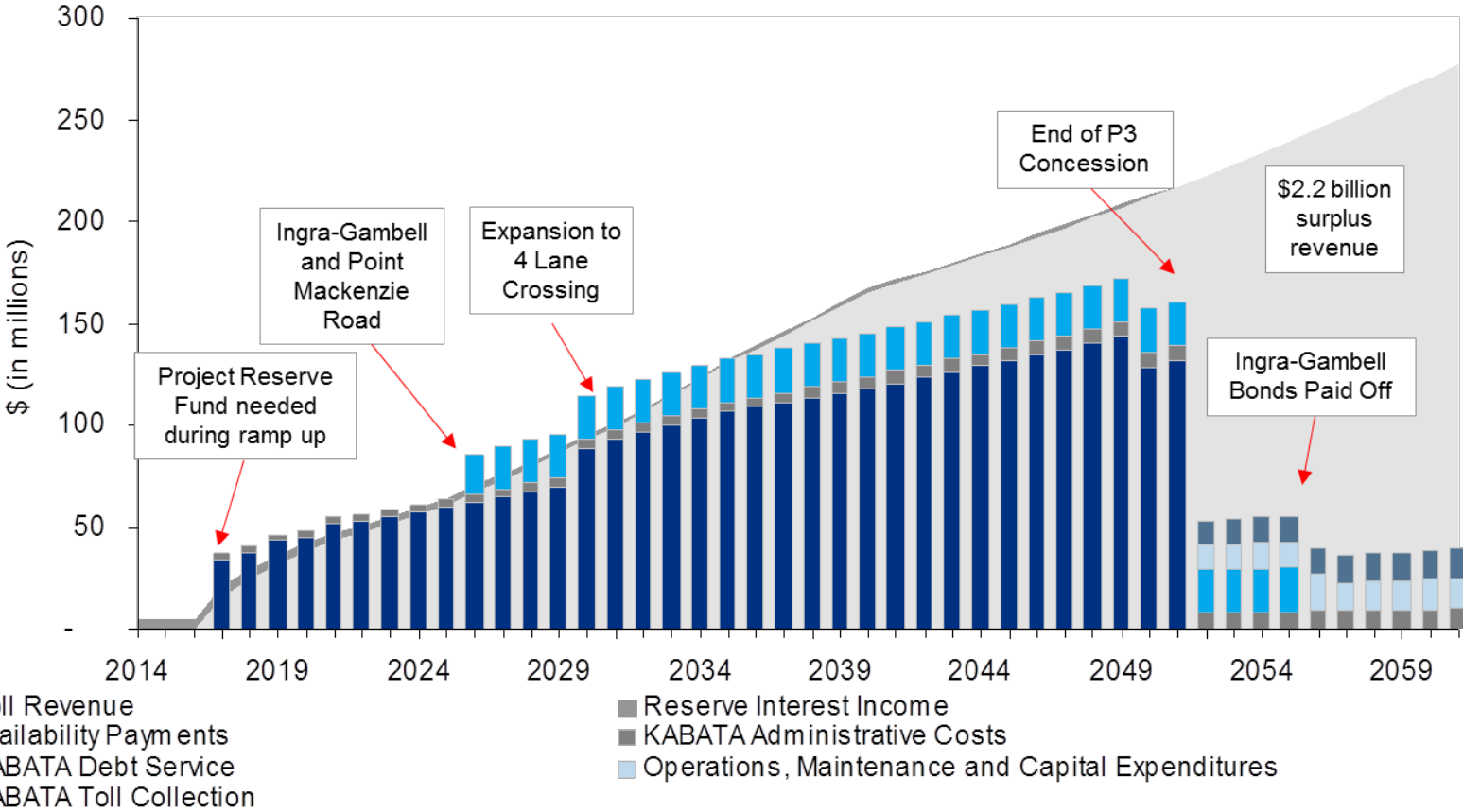
# P3 Terms

- **Scope**
  - FDBOM in exchange for periodic availability payments
  - Future capacity improvements in segments operated by private partner
  - Includes tolling operations on behalf of Authority
- **Term - 35 years after substantial completion**
- **Potential Financial / Credit Support:**
  - \$150 million funded project reserve (SB 13 / HB 23)
  - \$600 million SAFETEA-LU Private Activity Bonds allocation
  - \$500 million TIFIA loan letter of interest submitted for Knik Arm Crossing
- **Termination for Convenience Clause**

# Why Reserve Fund Needed

- Similar to a line of credit that is paid back
- Cover forecasted revenue shortfall during early years ramp-up period
- Reduces availability payment by reducing cost of capital

# KABATA Projected Obligations and Toll Revenues (33% TIFIA)



# Project Benefits

# Benefits for Alaskans

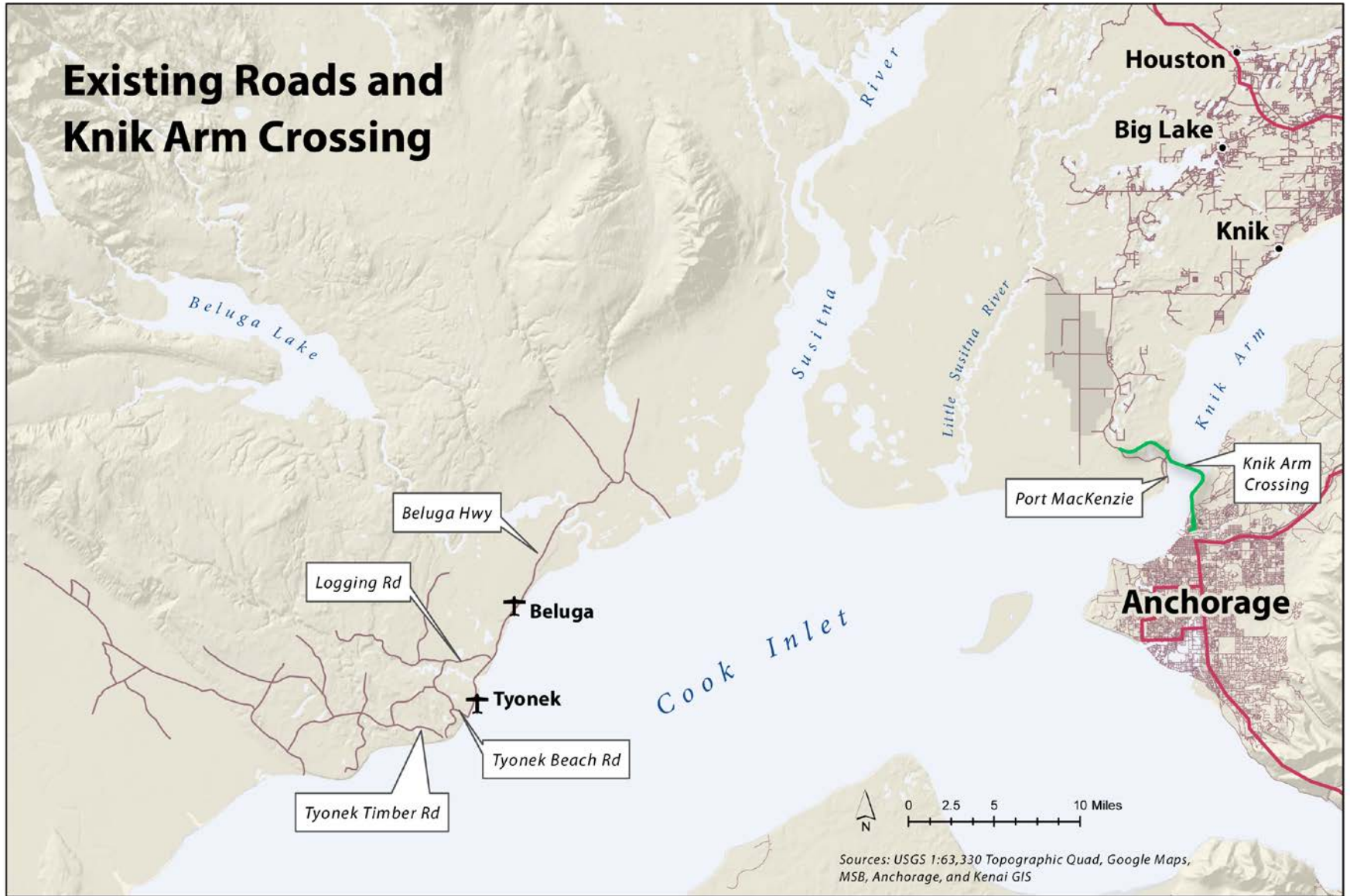
- Economic stimulus:
  - \$715 million of new infrastructure
  - 1,500 jobs for 4 years of construction
- Lowers cost for freight to Interior – \$300 million truck freight savings first 10 years
- Lowers cost for Alaskan drivers – \$300 million pocketbook savings first 10 years
- Reduced carbon emissions - Over 650,000 metric tons first 10 years

# Benefits for Alaskans (continued)

- Alternative to Glenn Highway for safety, security, emergency, and accidents
- Access to land for commercial, industrial and residential development and to support population growth
- Improved access for Goose Creek Correctional Center - \$30 million savings first 10 years
- Connects Port of Anchorage and Port MacKenzie to better serve the State
- First leg for access to western Cook Inlet resources (Coal, Oil and Gas, Geothermal, Hydroelectric)



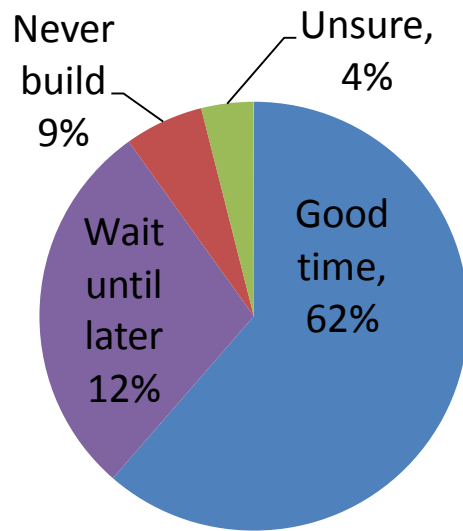
# Existing Roads and Knik Arm Crossing



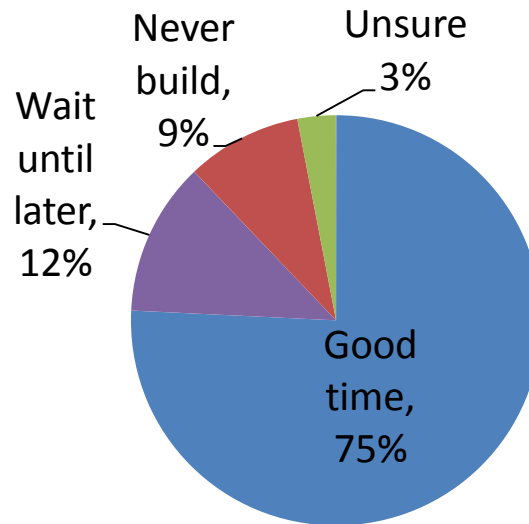
# Alaskans Recognize Bridge Value

Overall, when everything is considered, would you say now is a good time to build the Knik Arm Bridge, should we wait until later, or should it never be built?

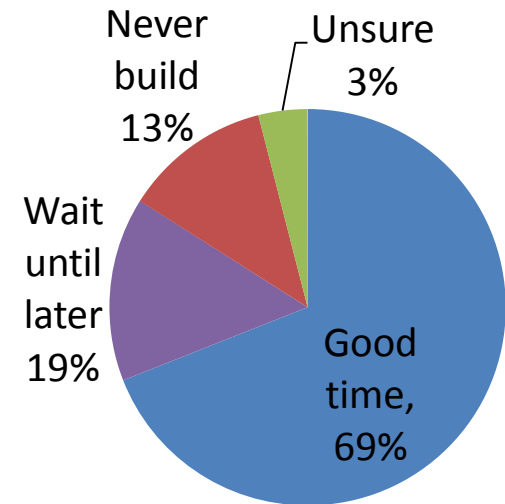
**Rural Alaska**



**Interior Results**



**Southcentral Results**



Dittman Research and Communications Alaskan Attitudes and Perceptions Survey, November - December 2011.



# The Future





# Concept Rendering

