



Alaska LNG Outlook

**2016 Fall Forum – Illuminating The Path Forward
Alaska State Chamber of Commerce**

October 13, 2016

**Keith Meyer
President, Alaska Gasline Development Corp.**



www.agdc.us

- **Alaska Gasline Development Corporation (AGDC)**

- ✓ Public corporation owned by the State of Alaska.
- ✓ Empowered to expedite, finance, and build natural gas infrastructure.



- **Vision:**

Maximize the benefit of Alaska's vast North Slope natural gas resources through the development of infrastructure necessary to move the gas into local and international markets.

Objectives At AGDC

- **Operate as a corporation.**
- Every decision to be based on **sound business principles.**
- **Cooperative relationship with producers.**
- **Engage major vendors** more strategically.
- Structure for **third-party finance.**
- Secure **long-term customer commitments.**
- Maintain **2023-2025 project in-service window.**
- Expand **in-state gas availability.**
- **Reestablish Alaska as a major LNG supplier.**

Alaska LNG Project Components

- **Integrated gas infrastructure project:**

- ✓ **Gas Treatment Plant:**

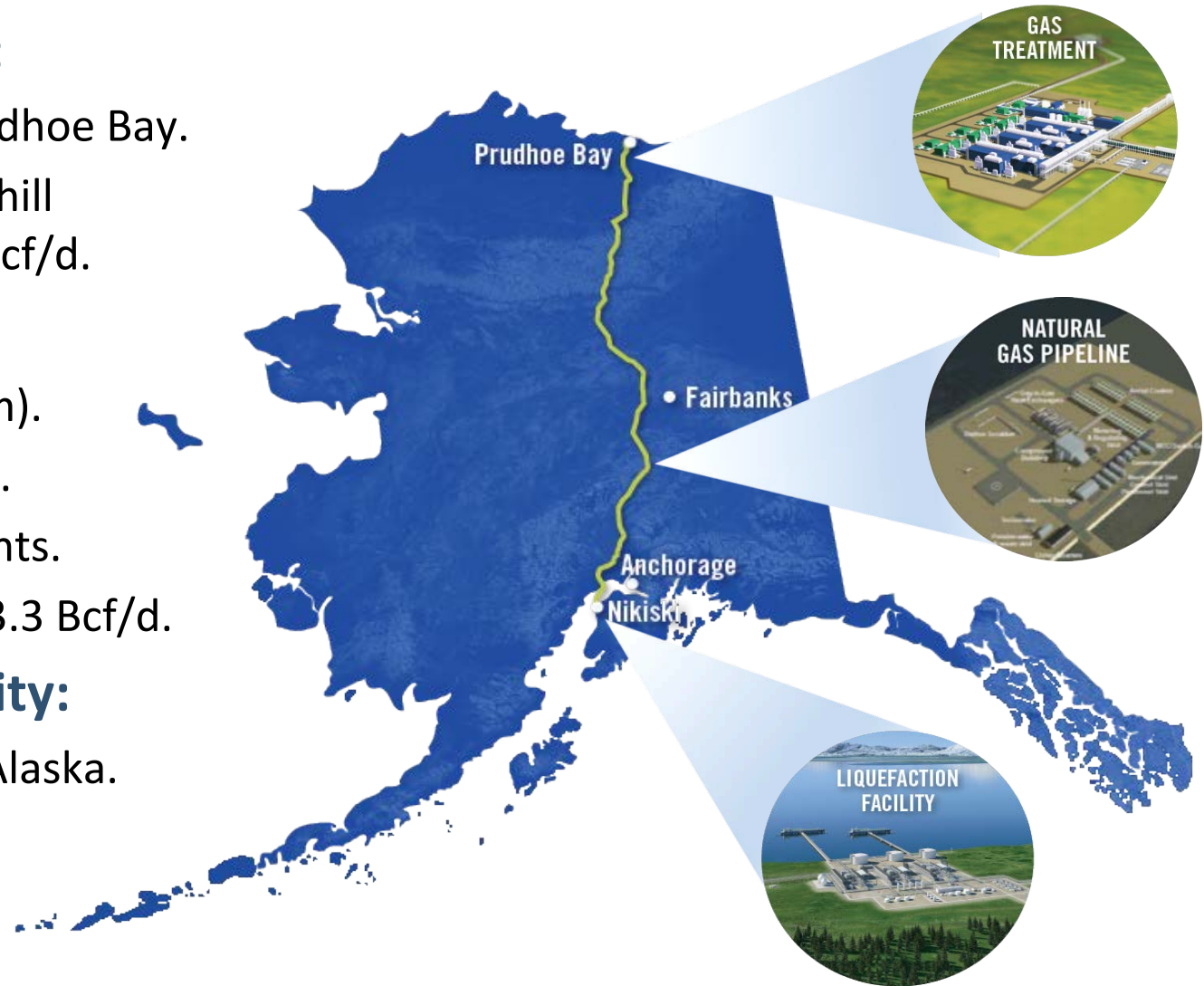
- 200 acre site at Prudhoe Bay.
- Clean, dehydrate, chill and compress 3.5 Bcf/d.

- ✓ **Pipeline:**

- 800-miles (1,287 km).
- 42-inch pipe (1.1m).
- In-state offtake points.
- Deliver more than 3.3 Bcf/d.

- ✓ **LNG Production Facility:**

- Located in Nikiski, Alaska.
- 600 acre site.

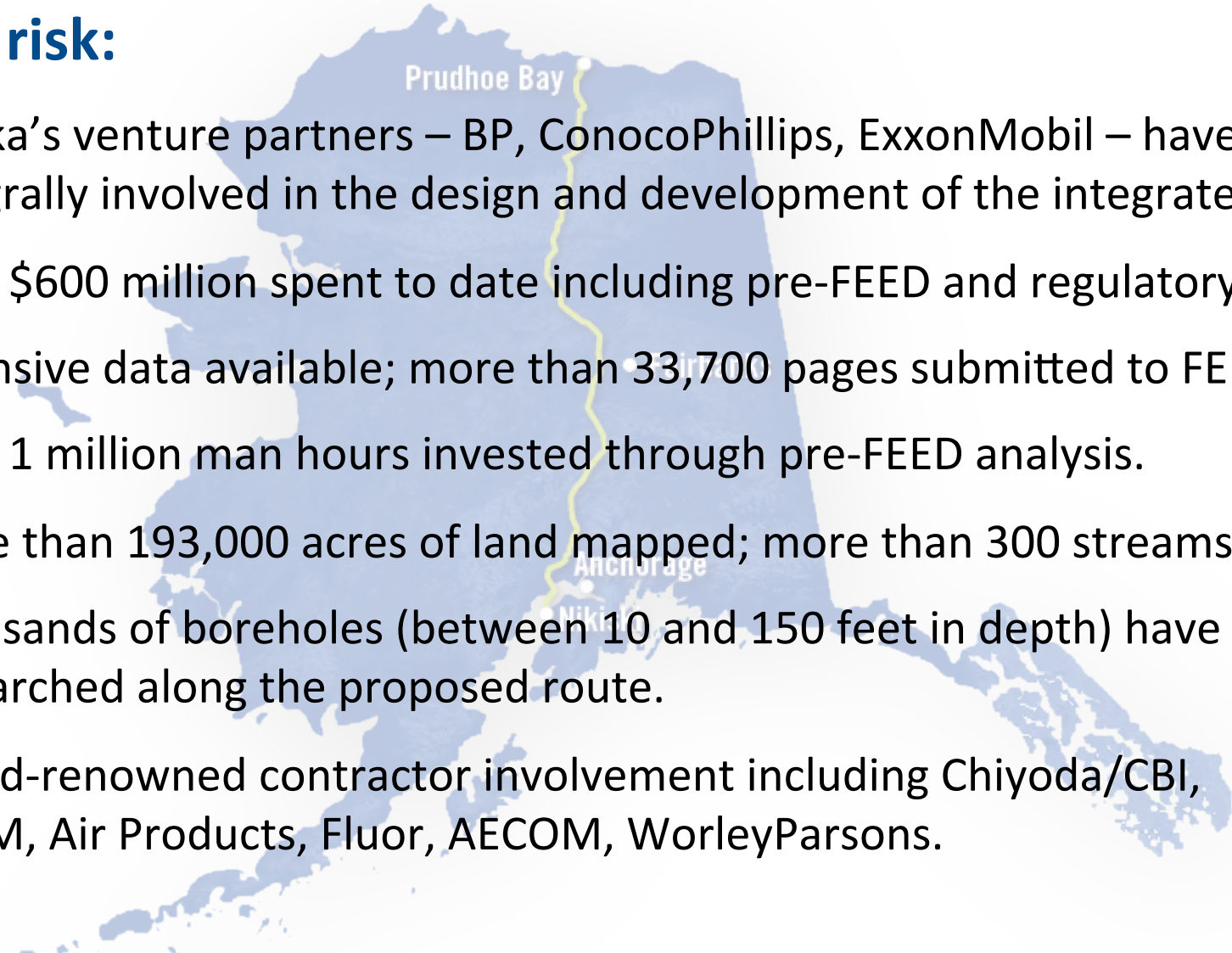


Bcf = Billion cubic feet

Fully-integrated natural gas pipeline and liquefaction system.

A Project Thoroughly Studied

Project has been thoroughly studied and analyzed, thereby minimizing risk:

- 
- ✓ Alaska's venture partners – BP, ConocoPhillips, ExxonMobil – have been integrally involved in the design and development of the integrated project.
 - ✓ Over \$600 million spent to date including pre-FEED and regulatory.
 - ✓ Extensive data available; more than 33,700 pages submitted to FERC.
 - ✓ Over 1 million man hours invested through pre-FEED analysis.
 - ✓ More than 193,000 acres of land mapped; more than 300 streams surveyed.
 - ✓ Thousands of boreholes (between 10 and 150 feet in depth) have been researched along the proposed route.
 - ✓ World-renowned contractor involvement including Chiyoda/CBI, CH2M, Air Products, Fluor, AECOM, WorleyParsons.

Project has been thoroughly studied; significant data exists.

Alaska LNG Status

- **Excellent technical progress:**
 - ✓ All pre-FEED deliverables received.
 - ✓ Resource Reports being finalized for application.
 - ✓ **FERC application by 1Q2017 is a critical path item.**
- **Slow commercial progress:**
 - ✓ **Low oil prices and soft LNG market create challenges.**
 - ✓ To clear the market, investors must accept modest returns.
 - ✓ **No consensus around starting FEED by mid-2017.**

Two options for Alaska:

1. Take the lead and find ways to reduce cost of delivered supply, or
2. Stop.



Refining the “Stage Gates”



Diagram courtesy of AlaskaLNG – Legislative Update 29Jun2016

New elements in the “Decision to Enter FEED”:

- ◆ Have we **structured the project for tax and other financial efficiencies?**
- ◆ Have we **secured customers** sufficient for financing?
- ◆ Have we identified and **secured parties interested in equity investment** in the infrastructure project?
- ◆ Have we identified and **secured lenders for non-recourse project debt** finance?
- ◆ Have we **secured large EPC companies competent to manage the** construction of the project and shoulder a significant part of the construction related risks?

Joint Key Messages

As part of the effort to improve the project's competitiveness, the Parties are working collaboratively to transition the project to State leadership.

The Parties are also pursuing alternative commercial structures and concepts that have been successfully used in global LNG projects to reduce the Cost of Supply of the project.

The goal is to have a seamless continuation of the project and maintain project momentum.

A New Approach

BP is not giving up on the project. Instead, we need to change gears and figure out how to reduce the cost of supply so that the project can be competitive. We believe that the best way to make that happen is with a State-led project and we support the State's efforts. We are determined to find a way to lower the cost of supply and make Alaska LNG competitive in the global marketplace.

**David Van Tuyl – BP,
AK Joint Resource Comm. Hearings Aug 25, 2016**

Just The Facts – Leading a Team

- AGDC is willing to lead, but that does not mean “go it alone”.
- AGDC has never said, nor will it advocate, the State building this project on its own.
- Lowering the cost of infrastructure through third-party financing and reduced federal taxes through State ownership will raise the netback received by the State and producer parties.

**Market Price minus Infrastructure Cost
equals Netback**

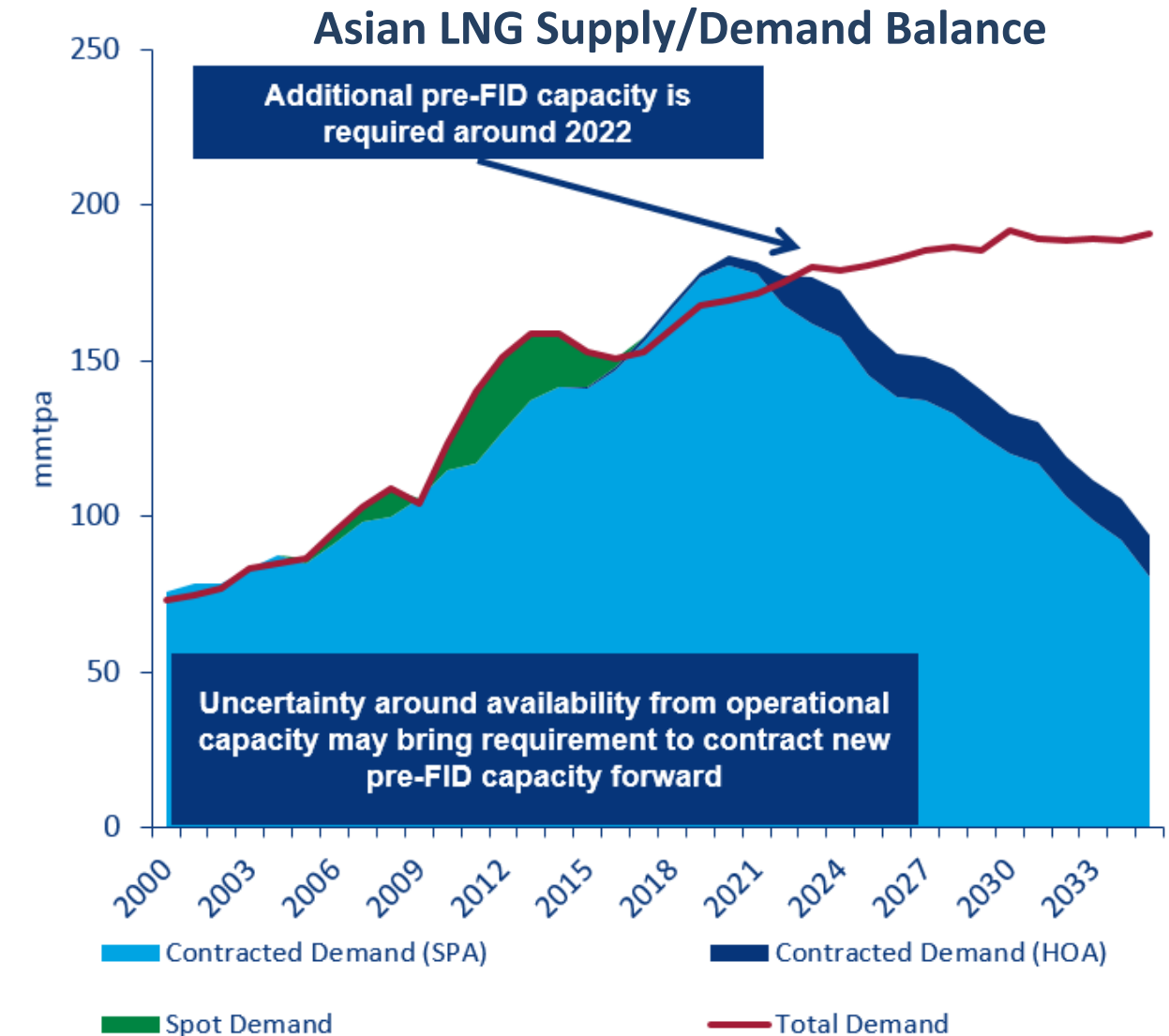
Next Steps: Marketing Efforts

- Recent Asia-Pacific Conference.
- Provided accurate information.
- Reaffirmed market opportunity.
- Positive response.
- Alaska invited back to present at regional leadership summit.



Global LNG Balance

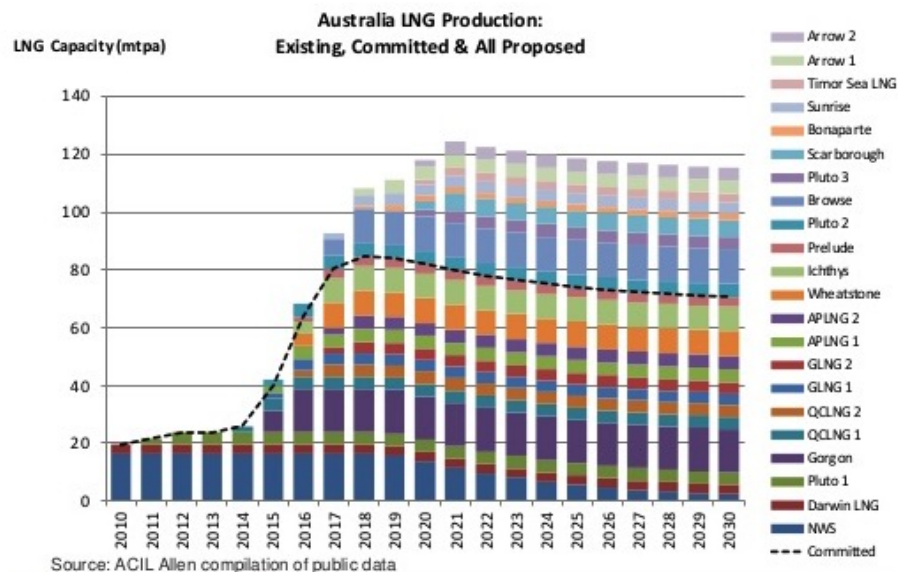
- Current global surplus.
- Equilibrium by 2022; new supply needed 2021-2025.
- Many supply projects chasing demand.
- Sellers must compete on more than just price.



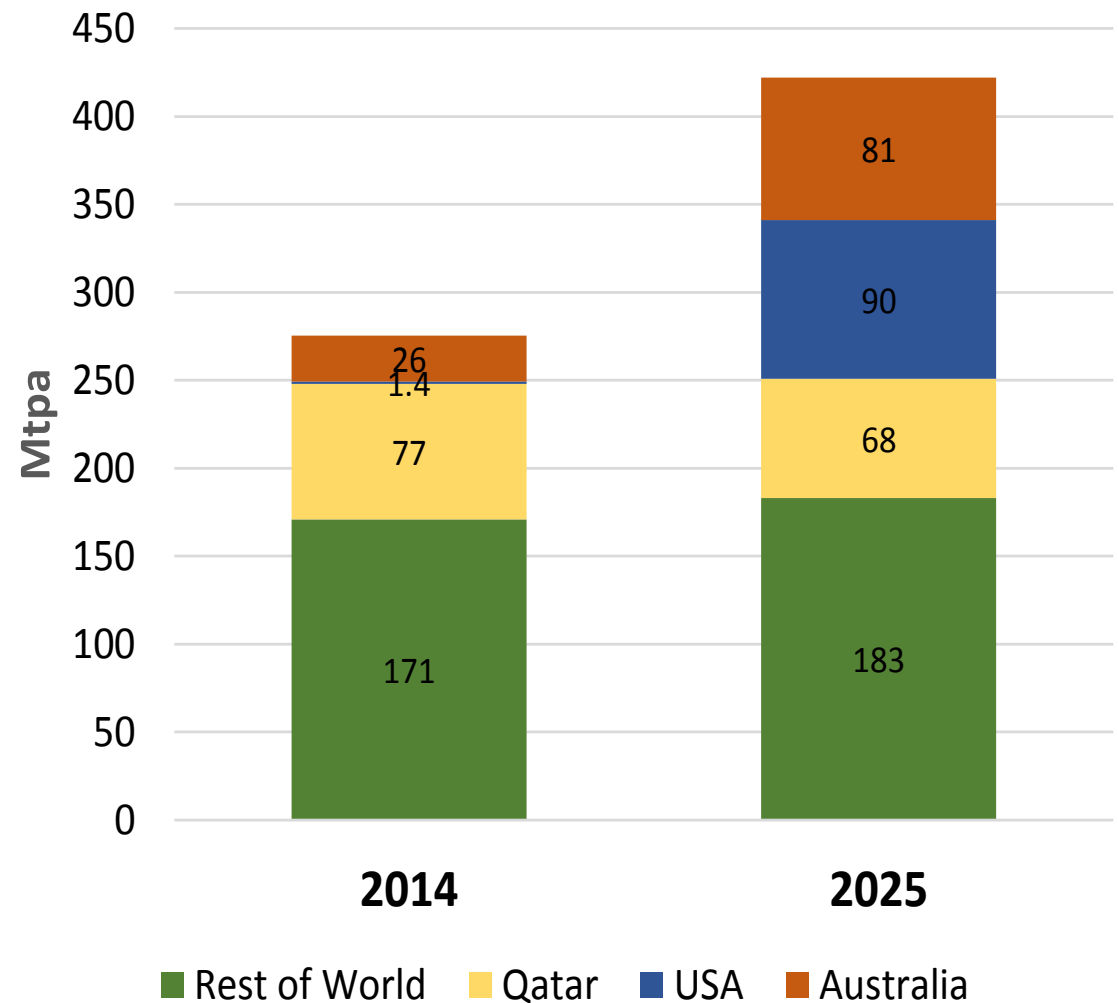
Source: Wood Mackenzie

The Competition

- Global competition comes from known sources.
- Alaska can compete, but has to get in the ring and fight.
- Alaska is in the best position to fight for Alaska's project.



Potential LNG Supply Forecast



Alaska's Competitive Advantage

MARKET PROXIMITY

ALASKA'S CLOSE PROXIMITY TO ASIA —
THE VAST SUPPLY AND QUALITY OF OUR NATURAL GAS —
MAKES ALASKA THE PERFECT SUPPLIER FOR THE GROWING
ENERGY DEMANDS OF THE ASIA PACIFIC.



- Enormous proven and potential gas resource.
- Known and stable regulatory and governmental process.
- Installed production infrastructure.
- Equipment efficiency.
- Proximate, country-to-country direct transport.
- Four decades of LNG export.

Alaska offers one of the closest LNG supplies to Asia-Pacific markets.

Benefits to Alaskans

✓ Jobs

- 9,000-12,000 jobs during peak construction.
- 1,000 ongoing jobs related to project.
- Additional industry support related jobs

✓ Gas for Alaskans

- Multiple off-takes.
- Price stability.
- Supply certainty.



✓ Reduced barriers to North Slope exploration and development

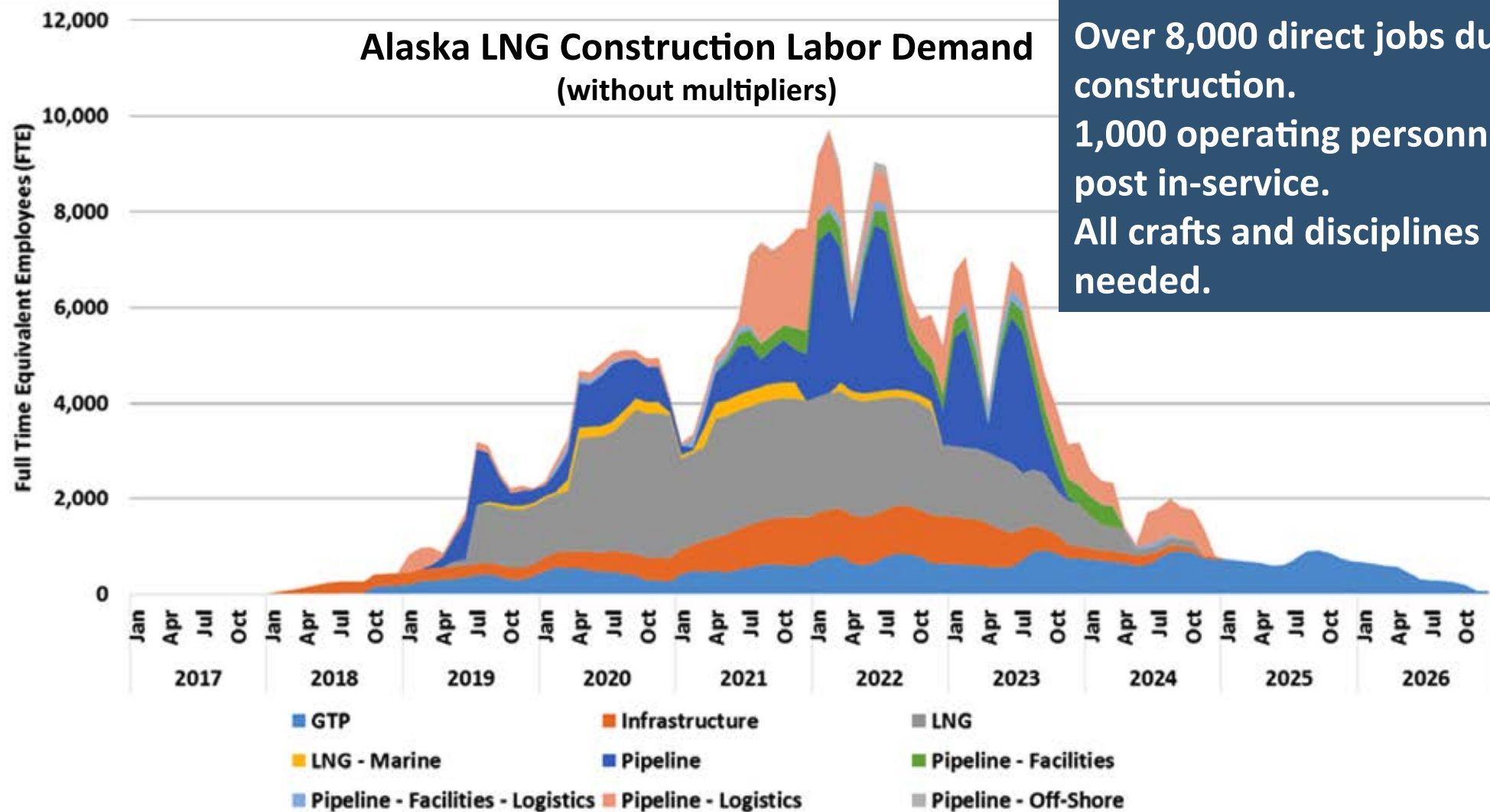
✓ Economic Diversity

- Potential for billions in revenue for the State of Alaska.

Direct Construction Labor

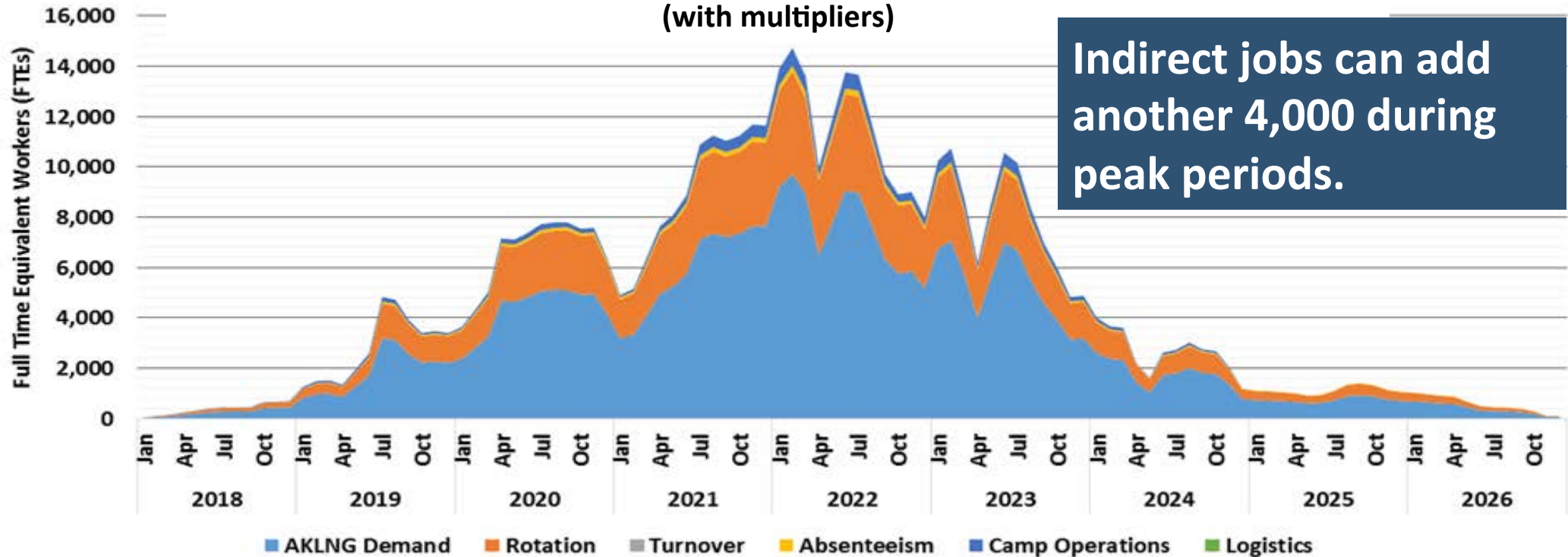
**Alaska LNG Construction Labor Demand
(without multipliers)**

Over 8,000 direct jobs during construction.
1,000 operating personnel post in-service.
All crafts and disciplines needed.



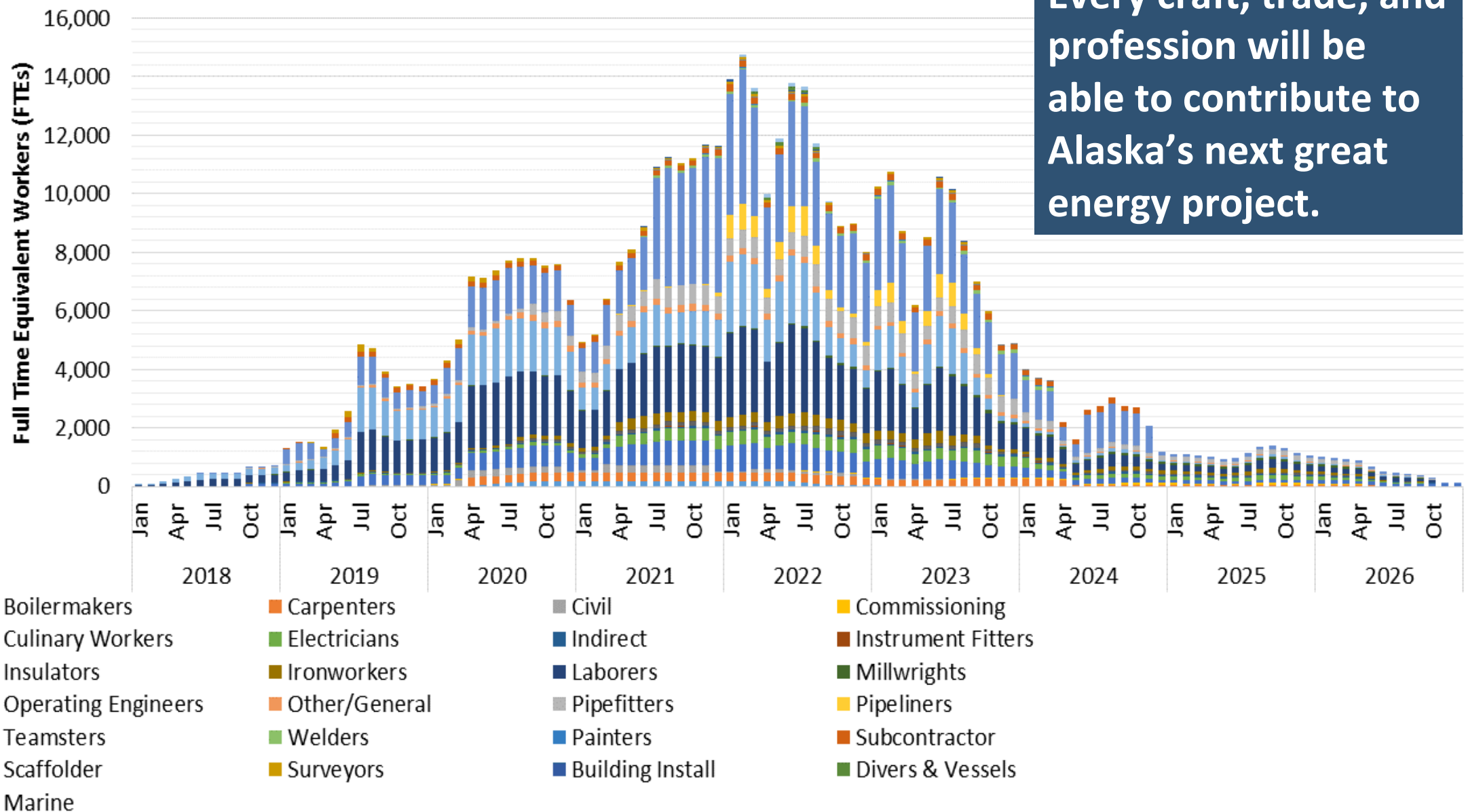
Total Construction Labor

**Alaska LNG Construction Labor Demand
(with multipliers)**

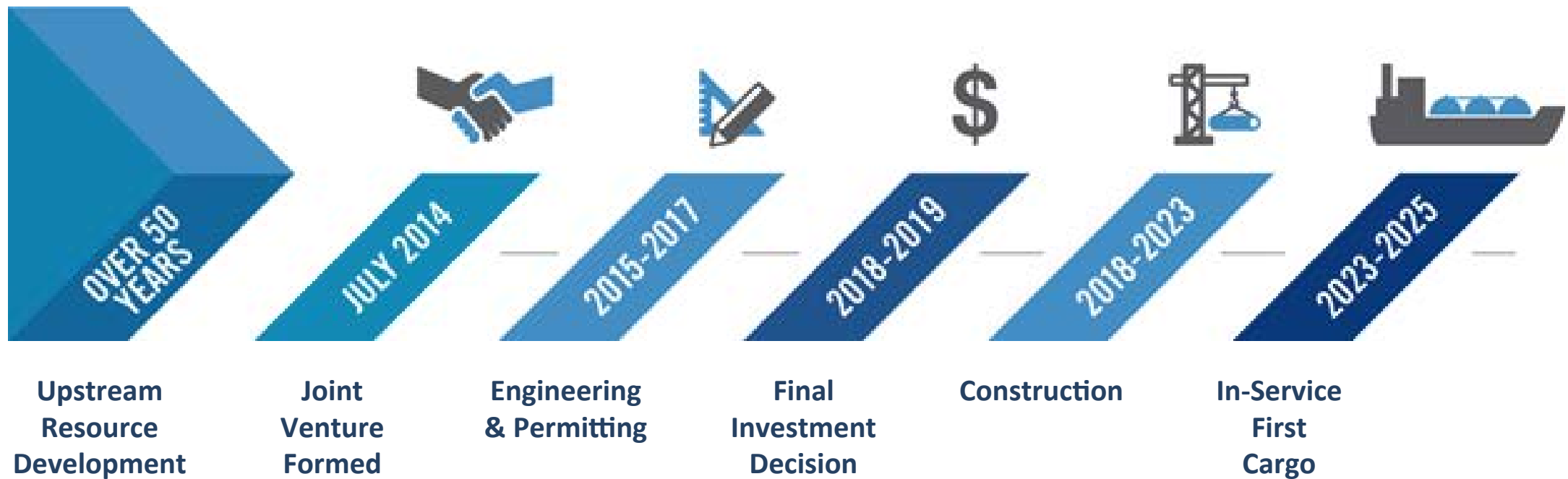


Data aggregation of the raw craft peak information was performed and a multiplier factor was applied against the raw data to achieve a calculated expected peak craft demand.

Craft Labor Distribution



Target Completion Timeline



AGDC is targeting a 2023-2025 in-service window.

Conclusion

- ✓ A project with major benefits for the State of Alaska.
 - ✓ Economic diversity.
 - ✓ Long term energy supply stability for homes and new industries.
 - ✓ Direct and indirect quality jobs.
 - ✓ Increased oil and gas production.
- ✓ Competitive global landscape, but Alaska can compete.
- ✓ Will not be built at risk, will not use the permanent fund; the project must attract customers and investors.
- ✓ Alaska needs only to show its support for the effort.



Questions?

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