

# The Future of Alaska's Ports and Harbors: Our Perspective

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of the

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Port Administrators

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**Northern**  
Economics

# Agenda and Goals

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## ■ Agenda

- Potential future actions and activities
- Impacts to port and harbor facilities
- Funding

## ■ Goals

- Introduce possible future developments
- Stimulate thinking and discussion
- Encourage translation of possibilities into development plans

# Southeast Alaska

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## ■ Mining (Alaska)

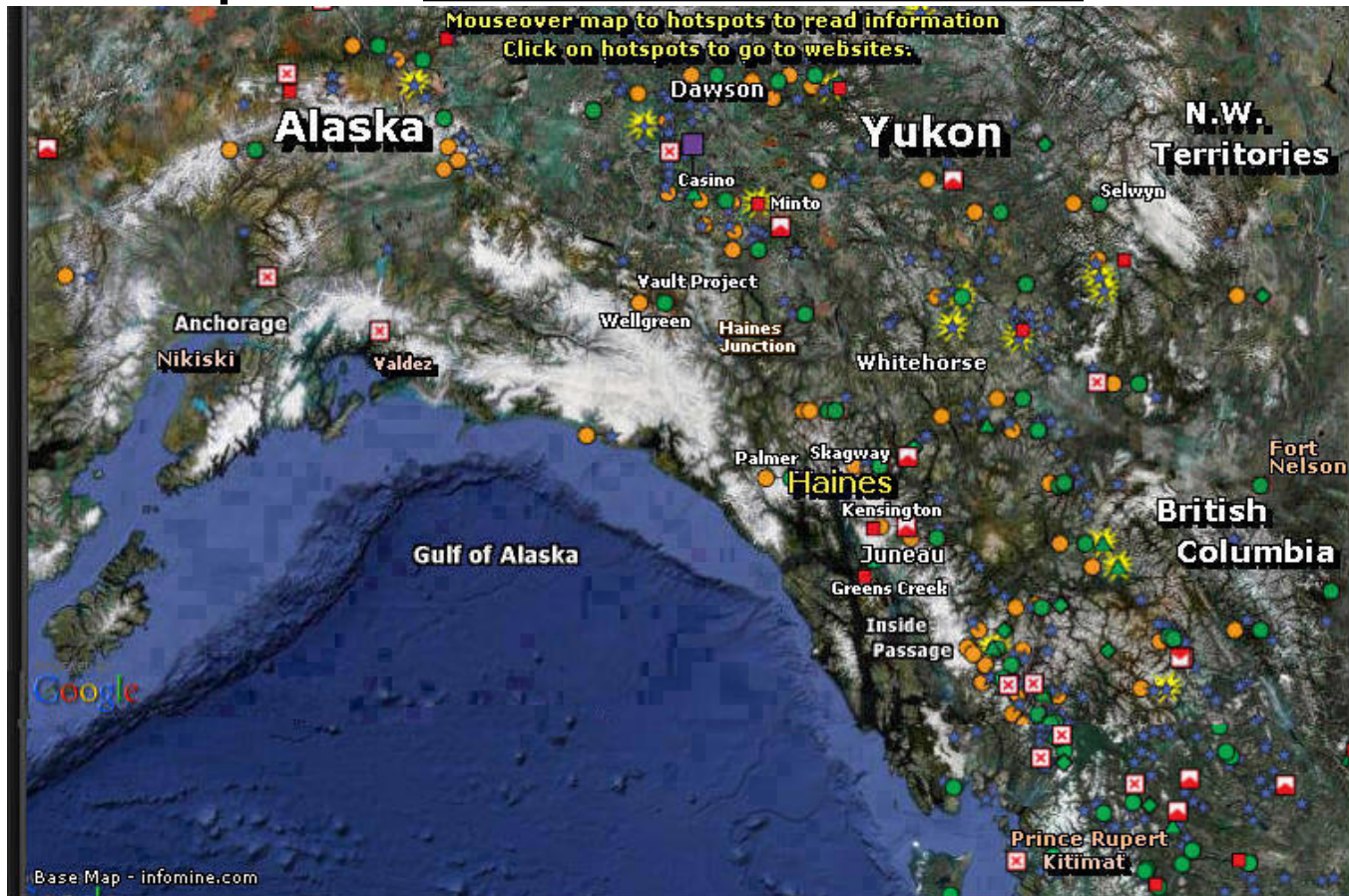
- Palmer VMS (near Haines): estimated 4.12-4.75 million tonnes, including copper, gold, zinc, and silver
- Herbert Glacier (near Juneau): early stages, estimated 128K-260K oz. gold
- Port Snettisham (near Juneau): iron ore deposit under investigation
- Salt Chuck (near Thorne Bay and Kasaan): palladium, copper, gold, and silver
- Niblack (POW): copper, gold, zinc, and silver; on hold due to funding
- Bokan Mountain (POW): rare earth elements; has deep water access

## ■ Mining (Yukon)

- Several mines under evaluation that could use Haines and/or Skagway

# Southeast Alaska

- Mines map from [HainesAlaskaPort.com](http://HainesAlaskaPort.com):



# Southeast Alaska

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## ■ Fisheries

- All limited entry/rationalized

## ■ Tourism

- No big changes unless new destinations are developed (like Hoonah)

## ■ *Marine Facility Developments*

- *Sawmill Cove Industrial Park planning underway*

# Implications for Southeast Alaska Ports

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- Development of Marine Services Center in Sitka could change the landscape of marine repair services in Southeast Alaska.
- Some ports could see increased activity if nearby mines undergo development.
- Haines and Skagway have the greatest potential for mining-related activity, especially for mines located in Yukon.

# Southcentral Alaska

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## ■ Fisheries

- Gulf of Alaska fisheries have not been rationalized.
- Rationalization would mean fewer commercial fishing vessels operating in the region.

## ■ Homeporting of CDQ Vessels

- There has been interest in relocating Western Alaska Community Development Quota (CDQ) fleets to Southcentral Alaska.
- Coastal Villages Region Fund has been in discussion with the City of Seward and developing a facility at the Seward Marine Industrial Center.
- The City of Valdez has also examined the feasibility of homeporting CDQ vessels.

# Southcentral Alaska

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## ■ *Harbor Planning and Development*

- *Valdez is in the planning process for construction of a second harbor.*

## ■ **Port Planning and Development**

- *The Port of Anchorage is undergoing its expansion project, as well as business planning and other efforts.*
- *Anchorage's planning will consider areas for growth, in addition to its traditional activities.*
- Port MacKenzie and Alaska Railroad Corporation have proposed a rail extension to Port MacKenzie, which should be completed by 2016.

## ■ **Cook Inlet Risk Assessment (CIRA)**

- Study to "examine the risk of oil spills posed by the marine vessels transiting through, near and/or servicing the region."



# Southcentral Alaska

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## ■ Usibelli Coal's Wishbone Hill mine

- If developed, this would be a low-volume mine.
- Usibelli has proposed to truck coal to Port MacKenzie.
- Timing is unknown due to challenges in the permitting process.

## ■ Pebble Mine

- If developed, the project would include a new port in Cook Inlet.

## ■ LNG-powered vessels

- Totem Ocean Trailer Express (TOTE) is converting its ships that call the Port of Anchorage to liquefied natural gas (LNG).
- Is there potential for an LNG storage or micro-production facility at the Port of Anchorage?
- If there is enough gas, an LNG plant in Southcentral Alaska could also ship LNG to Kodiak and Unalaska/Dutch Harbor for local use.

# Southcentral Alaska

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## ■ Susitna-Watana Hydroelectric Facility

- Development of the Susitna-Watana Dam will require a lot of material and equipment.
- Whittier will likely handle the most freight via rail barge service, based on a 2010 report and cost evaluation.
- Other ports, especially Anchorage, will likely see light cargo shipments.
- Construction of the dam could start in 2017/2018 and take five years

## ■ North Slope Natural Gas Line

- Materials will be brought in via regional ports to support construction of the line and LNG export facility.
- The recent announcement that Nikiski has been chosen for an LNG export facility means a Parks Highway route.
- Anchorage and Port MacKenzie are likely ports for supporting at least the southern portion of the line.
- Construction would likely start a few years after the Susitna-Watana facility

# Implications for Southcentral Alaska Ports

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- Southcentral Alaska stands to see a lot of inbound project cargo over the next decade if large projects occur, especially at Port MacKenzie, Port of Anchorage, and Whittier.
- Completion of a rail extension could launch bulk exports and other industrial traffic at Port MacKenzie within the next few years.
- NPFMC is evaluating options for rationalization of the Gulf of Alaska fisheries; if instituted, rationalization could reduce the size of the commercial fishing fleet, which would affect harbors that serve the fleet.
- Homeporting of CDQ vessels could provide a boost to harbors with large vessel moorage, though seasonality will be a challenge.

# Southwest Alaska

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## ■ Aleutian Island Risk Assessment (AIRA)

- Completed in 2011, "Phase A included the development of a risk report analyzing the likelihood of spills based on vessel traffic through the Aleutians, then creating a risk matrix to analyze the potential consequences of vessel-source spills, and finally conducting a qualitative assessment and prioritization of risk reduction options."
- Phase B is currently underway and "will further evaluate and also implement the risk reduction options recommended during Phase A and will report on the implementation process and findings."

## ■ Large Tug Stationed in Unalaska/Dutch Harbor

- Magone Marine Service merged with Resolve Marine Services
- The large tug Resolve Pioneer is now stationed in Unalaska, along with the salvage barge RMG 300.
- Resolve Pioneer meets the minimum requirements set forth in the AIRA report.

# Southwest Alaska

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## ■ Seafood Processing

- We expect to see a slow expansion of onshore processors.
- Atka Pride Seafoods opened a small plant in Atka this year.
- After Icicle Seafoods closed its plant in Adak, the City purchased the assets. The City sold the plant and its assets to Adak Cod Cooperative LLC.

## ■ Liquefied Natural Gas

- With processors as anchor tenants, natural gas could become viable for local needs as well as marine traffic.

## ■ Outer Continental Shelf (OCS) Exploration, Development

- Unalaska / Dutch Harbor has served as a staging area for support of OCS activities, and could continue in this role in the future.
- Adak has also expressed interest in serving the OCS industry
- Offshore Systems, Inc. (OSI) is pursuing a 600-foot dock and warehouse to support commercial fishing, though the dock could also serve oil support vessels.

# Implications for Southwest Alaska Ports

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- We expect investment in the region to manage the risk of increased marine vessel traffic.
- OCS exploration and development would bring a variety of vessels in to the region, though the timing of these activities and where the companies would choose to place their support vessels is unknown.
  - We've been told by the oil companies that no one should build based on the expectation of supporting OCS activities.

# Western Alaska

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## ■ OCS Exploration and Development

- OCS activities will require staging areas and increased emergency response and support capability.
- Northern Economics is currently doing work for a regional Alaska Native Corporation to look at the feasibility of using their land to support OCS, among other uses.
- The Alaska Deep Draft Arctic Port Study report shortlisted four sites:
  - ◆ Nome
  - ◆ Port Clarence (north of Nome)
  - ◆ Cape Darby (south of Nome)
  - ◆ Barrow

# Western Alaska

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## ■ Fisheries

- Western Alaska fisheries are rationalized, so no changes are expected in the fleets.

## ■ Mining

- Donlin Gold would have a large impact on Bethel, even if a natural gas line is built for power. There would be a 15 acre lay down yard in the Bethel area.
- There is talk of a road to Ambler, but port access for exports is key. A road might be a first step, but there would be no development until a road or rail line makes it to tidewater.
- Other non-gold, landlocked mines are in a similar situation. These mines could ship out through Golovin or another location east of Nome.

## ■ Cape Blossom

- If constructed, a road from Kotzebue to a new barge facility at Cape Blossom would provide deep water access to Kotzebue and the communities in the region.



# Implications for Western Alaska Ports

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- If OCS activities move toward development and production, the oil companies will evaluate options for support ports.
- If Donlin Mine moves forward, Bethel would see increased activity.
- If resource development occurs in the Ambler Mineral Belt, it will require tidewater access. Options under consideration range from the DMTS port and Cape Blossom in the north to Nome and Cape Darby in the south.

# Interior Alaska

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## ■ Road to Tanana

- A Roads to Resources project, the road could also shift some riverine cargo activity from Nenana to Tanana.

## ■ Road Between Yukon and Kuskokwim Rivers

- With a port on each side, shipments could go down the Yukon, across land, and up the Kuskokwim.
- The Donlin Mine could benefit from shipments transported by road or rail and then down the Yukon.

# Implications for Interior Alaska Ports

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- We don't expect to see any changes in Interior Alaska unless a Yukon-Kuskokwim Road is built.
- A Y-K Road would likely cause an increase in downriver shipments of cargo and fuel, which would likely be diverted from Southwest Alaska.
- A road to Tanana would cause a shift of some activity from Nenana to Tanana, though the magnitude of activity between the two ports would be unchanged.

# Northern Alaska

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## ■ Oil and Gas

- Prudhoe will continue as a hub, including for exploration
- Many locations along the coast could be used for staging areas and for emergency response and support
- Shallow-draft facilities would be built closer to platforms if development occurs.
- As industry expands across the coast, docks and shallow-draft vessels will likely be spaced along the coast.
- Wainwright is likely to be a support center for the Chukchi Sea, but it is shallow and will need deep draft support.
- UIC has plans for development at the Barrow Airport, likely in anticipation of increased OCS activity and possibly the USCG.
- The Alaska Deep Draft Arctic Port Study named Barrow as one of the sites for further consideration for supporting OCS activity.

# Northern Alaska

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## ■ Northern shipping routes

- Increased shipping in the Arctic will require a U.S. Coast Guard presence
- It will also create the need for search and rescue support.

## ■ Conflicts with subsistence activities

# Implications for Northern Alaska Ports

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- Northern Alaska ports will see an increase in ground- and water-based OCS activity, but we don't expect to see port development until the oil companies decide to move to production.
- There will be an increased federal presence for safety, security, customs, research, and other purposes.

# Funding

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- Fiscal conditions suggest it will be more challenging to secure funding in the future.
- Interest rates are likely to remain relatively low, however.
- Projects that boast strong economic benefits are likely to stand out.
- Exceptions always exist.
- The greatest challenges to fiscal sustainability that we have seen in projects within the state are:
  - Seasonality of use
  - Inertia with respect to rates
- Port facilities tied to large anchor tenants and harbors with a diverse set of users are likely to fare the best financially.

# Funding

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- When setting rates, need to balance competing objectives:
  - Enterprise
  - City/community/region



# Discussion

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- Other developments to share with the group?
- What does this mean for your facilities?
- What does this mean for your region?

# Thank You!

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**Northern  
Economics**

Following the conference, this presentation will be posted at [www.harbormodel.com](http://www.harbormodel.com).

# Further Reading

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- <http://www.alaska-e.com/cgi-bin/start.cgi/hainesalaskaport/indexsub.html>
- <http://www.groundtruthtrekking.org/mines/>
- <http://www.sawmillcove.com/>
- <http://cityofseward.us/index.aspx?NID=911>
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