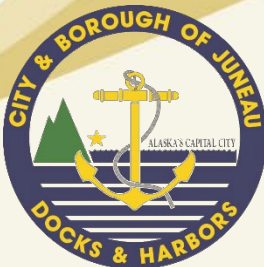


Small Cruise Ship Infrastructure Master Plan

Presentation by CBJ Docks & Harbors
PND Engineers Consultant Team



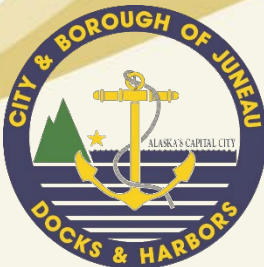
Project Team

- CBJ Docks and Harbors – Owner Representative
- PND Engineers – Project Lead, Marine Design
- McDowell Group – Market Assessment and Economic Analysis
- Corvus Design – Facility Inventory and Planning Documents
- Marine Exchange of Alaska – Vessel Traffic and Nav Assessment
- NorthWind Architects – Renderings and Graphics



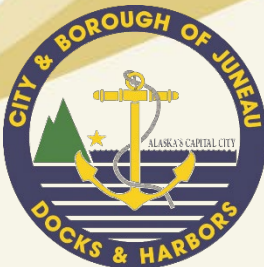
Project Objectives

- Identify small cruise ship forecast and market trends
- Evaluate opportunities for infrastructure investment
- Develop cost estimates and infrastructure options through concept design
- Produce a master plan document to guide D&H for the next decade









Project Schedule/Milestones







- July 2019 – Facility Inventory field work began
- February 2020 – Market Assessment and Economic Analysis completed (prior to COVID). D&H reservations and fleet data was compiled to identify unmet capacity and identify facility size requirements
- March 2020 – Top site concepts began
- June 25, 2020 – Top site concepts shared w/ Harbor Board
- October 2020 – Concept refinements and cost estimates completed, website developed and public meeting planned
- Nov 10, 2020 – Today's public meeting
- December 2020 - Final Master Plan Creation

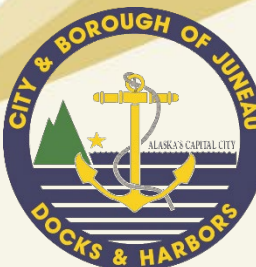


Project Deliverables

- Borough wide review and Facility Inventory site visits
- Site Capability Matrix
- Market Assessment and Economic Analysis
- Concept and cost development for top rated locations
- Juneau Small Cruise Ship Infrastructure Master Plan 2020

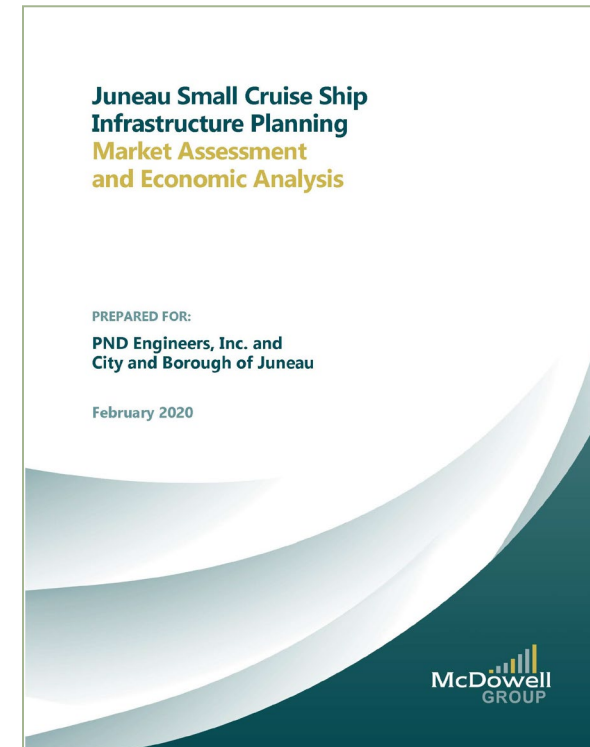
LEGEND		REGULATORY	BIOPHYSICAL	TRANSPORTATION	UTILITIES
	Compatible/no or limited issues		Not applicable/not present		
	Some concerns that need to be addressed/resolved/above average costs		Can be overcome/resolved with higher than typical costs		
	Incompatible/significant concerns/high costs		Sites with highest compatibility		
PROPOSED SITE					
1	Little Rock Dump				
2	National Guard Dock				
3	Intermediate Vessel Float				
4	Inside Cruise Ship Terminal				
5	Port Field Office				
6	Seadrome Dock				
7	NOAA/ADF&G Dock				
8	Gold Creek/Subport				
9	Harris Harbo				
10	Aurora Harbor				
11	Norway Point				
12	Douglas Harbor				
13	Auke Bay Marine Station				

LEGEND		SITE		COSTS	VISITOR EXPERIENCE
	Compatible/no or limited issues		Not applicable/not present		
	Some concerns that need to be addressed/resolved/above average costs		Can be overcome/resolved with higher than typical costs		
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9	Harris Harbor				
10	Aurora Harbor				
11	Norway Point				
12	Douglas Harbor				
13	Auke Bay Marine Station				



McDowell Group Market Assessment & Economic Analysis

- Conducted by McDowell Group in winter 2019-20 (pre-COVID)
- Sources:
 - Interviews with cruise line representatives
 - Cruise passenger traffic database
 - Port of Juneau traffic data
 - Passenger and cruise line spending data



Juneau Small Ship Market Overview, 2019

- Small cruise ship = capacity between 20 and 200 passengers
 - Most small ships fall into 50 to 100 passenger range
 - Only three vessels have capacity of more than 100
- Eight cruise lines, 21 vessels, 272 calls, 18,400 passengers
- Most ships use Juneau as “turnaround” port; embarking and disembarking different groups of passengers at beginning and/or end of voyage
 - Sitka, Ketchikan also used for turnarounds
 - Only two vessels regularly used Juneau as port of call in 2019



Juneau Small Cruise Market Profile, 2019

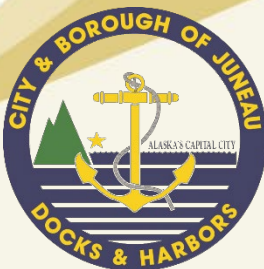
	# of Vessels	# of Port Calls	# of Passengers	Dock
UnCruise	6	80	5,565	Seadrome
Alaskan Dream	5	86	3,014	Allen Marine
Lindblad	4	28	4,332	CT/IVF
Windstar	1	11	2,168	Anchor/AJ/AS
The Boat Company	2	32	754	IVF
Ponant	1	6	620	AJ
American Cruise Line	1	13	1,444	DW
Fantasy Cruises	1	16	512	IVF
Total	21	272	18,400	n/a

Sources: CLAA, cruise lines. AS: Alaska Steamship; CT: Cruiseship Terminal; IVF: Intermediate Vessel Float; DW: Delta Western.

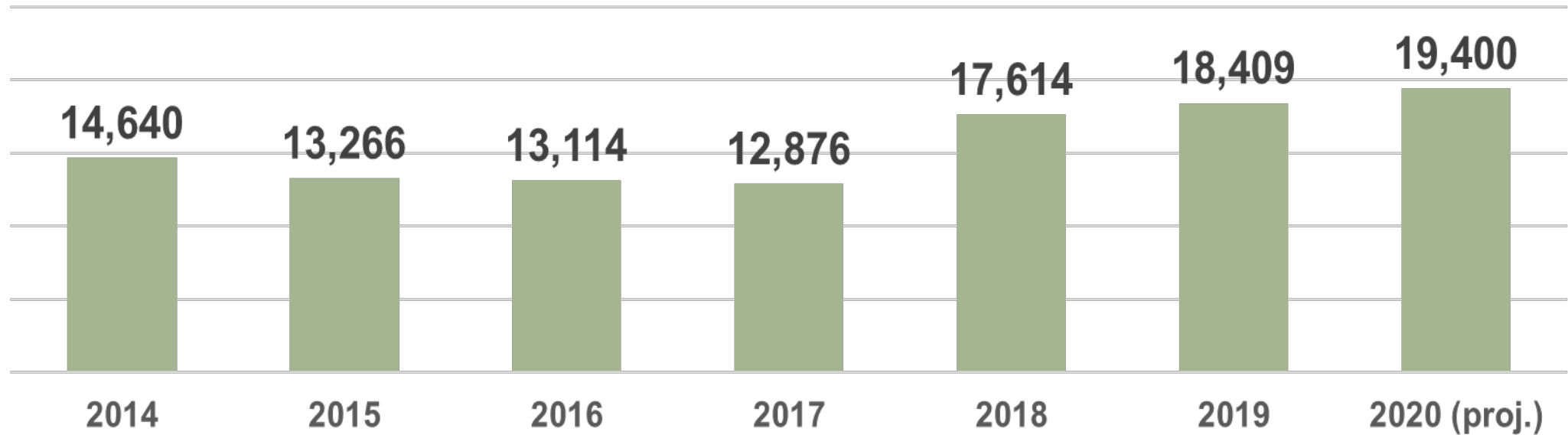


Small Vessel Berth Demand, Sample Week, Summer 2020 (pre-Covid)

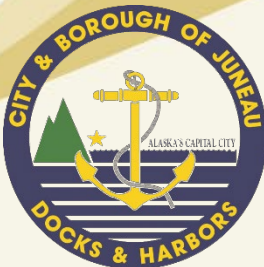
Day	Vessel	Time
Sunday	Safari Endeavor	6am-5pm
	Venture	6am-11pm
	Sea Lion	6am-11pm
	Mist Cove	Midnight-3pm
Tuesday	American Constellation	8pm - (overnight)
Wednesday	American Constellation	(overnight) – 3pm
	Star Breeze	Noon-9pm
	Le Soleal	6am-6pm
Friday	SS Legacy	6am-6pm
Saturday	Wilderness Discoverer	6am-6pm
	Wilderness Adventurer	6am-6pm
	Mist Cove	10am-midnight



Juneau Small Ship Passenger Volume, 2014-2019 (2020 pre-COVID projection)



- Traffic increased by 42% in just two years (2017-2019).
 - New/larger vessels from Lindblad, ACL, Windstar
- In 2000s traffic reached 20,000 before Cruise West stopped operating.
- Pre-COVID projections showed a 5% increase in 2020, mostly due to lengthening of season and larger vessels (not more vessels).



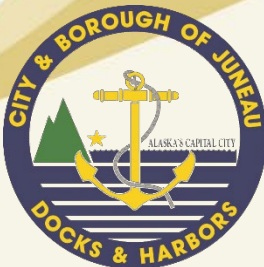
Small Cruise Ship Trends

- Some lines noted “overcapacity” and “soft market” in 2019. 2020 was looking more positive, pre-COVID.
- Current lines did not anticipate introducing more vessels to the market in next several years.
 - Fantasy ceased operations
 - American Queen Steamboat Company planned to start sailing in 2021 with one vessel
- Increase in luxury mid-size options (Hurtigruten, Viking, Silversea) could limit the potential growth of small ship market.
- Post-COVID: small ships resuming operations faster than large ships; reporting strong bookings for 2021 and beyond.
 - Roughly 20 vessels were sailing as of October; about half were small ships; mostly sailing in Europe
 - US market may take longer to recover due to high COVID rates



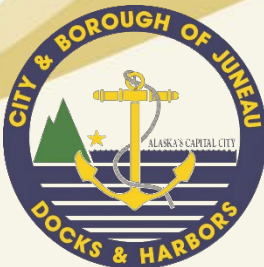
Cruise Line Perspective on Juneau

- Juneau strongly preferred over other ports as turnaround location
 - Frequent, reliable jet service
 - Tours, retail, hotels for passengers
 - Provisions/supplies
- Lines strongly preferred downtown Juneau for docking
 - Convenience/proximity of tours, retail, restaurants, hotels
 - Presence of large cruise ships not seen as a huge drawback
 - Auke Bay seen as too remote, insufficient infrastructure
- Some gaps noted in downtown Juneau
 - Insufficient docking space
 - Inadequate docking infrastructure
 - Insufficient and substandard hotel space
 - Lack of parking



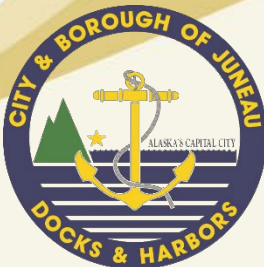
Infrastructure Needs

- Most vessels are 150-250 feet in length.
- Water/sewer needed for most lines.
- Trash/recycling needed for most lines.
- Half the lines need fuel, usually number 2 diesel.
- Shore power not generally needed.
- Parking/staging areas needed; drive-down preferred for luggage and provisions.
- Security needs vary by line and status as foreign-flagged vessel; lockable gate, cameras, barriers requested.
- Line handlers/longshoremen needed for only 3 vessels.



CBJ Capacity Assessment

- IVF Float reservation data assessment:
 - 60 days at or over capacity in 2018
 - 51 days at or over capacity in 2019
- In July and August, the Port turns vessels away about five days a week; once or twice a week in June and September
- Port staff recommended a 350-foot float with berths on both sides.



Economic Analysis

- Total spending for 2019 in small ship sector estimated at \$13 million.
- Passengers/crew spend on hotels, tours, retail, transportation.
- Cruise lines purchase fuel, provisions, laundry services, transportation (vans, rental cars), hotel rooms, dockage fees.

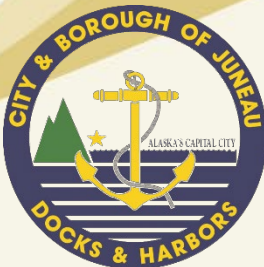
Small Ship Cruise Industry Spending in Juneau, 2019

	Volume	Per Person Spending	Total Spending
Embarking/disembarking pax	16,000	\$575	\$9,200,000
Day passengers	3,000	\$162	\$500,000
Crew members	770	\$400	\$300,000
Cruise lines	n/a	n/a	\$3,000,000
Total			\$13 million



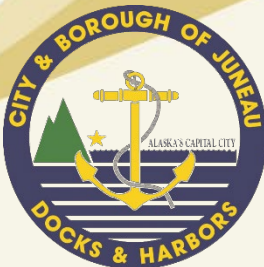
PND Site Development – Key Findings from the Market Assessment & D&H Data

- The McDowell Market Assessment revealed that the small cruise lines prefer to be located in the central downtown waterfront. Their reasons are proximity to services, shopping, available amenities, hotels, bars, restaurants, general convenience & walkability throughout downtown.
- D&H assessed its past reservations, fleet data base & projected itineraries and has estimated a need for 700 LF of new moorage capacity to service the demand without having to turn away vessels.

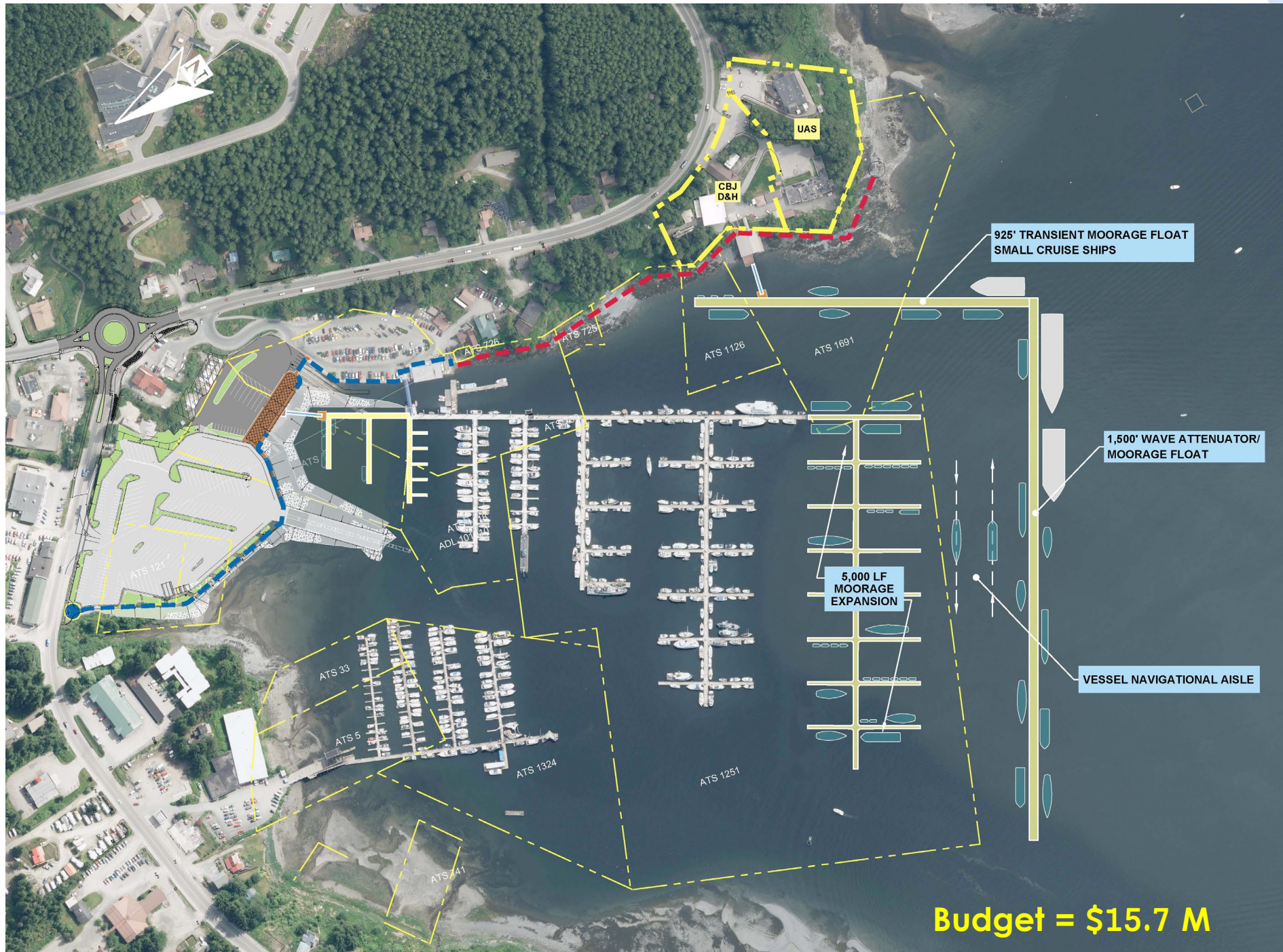


Top site locations assessed for possible development

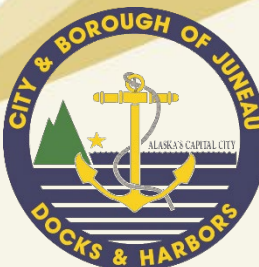
- Auke Bay (even though not downtown)
- Little Rock Dump
- Douglas Harbor
- Harris Harbor
- NCLH / USCG Support
- NOAA/Seadrome – D&H Preferred site



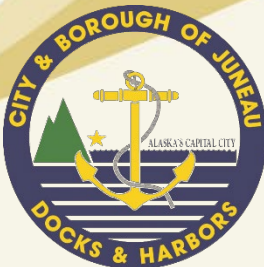
Auke Bay



Budget = \$15.7 M



Top Downtown Vicinity Sites



Little Rock Dump



Budget = \$21.9 M



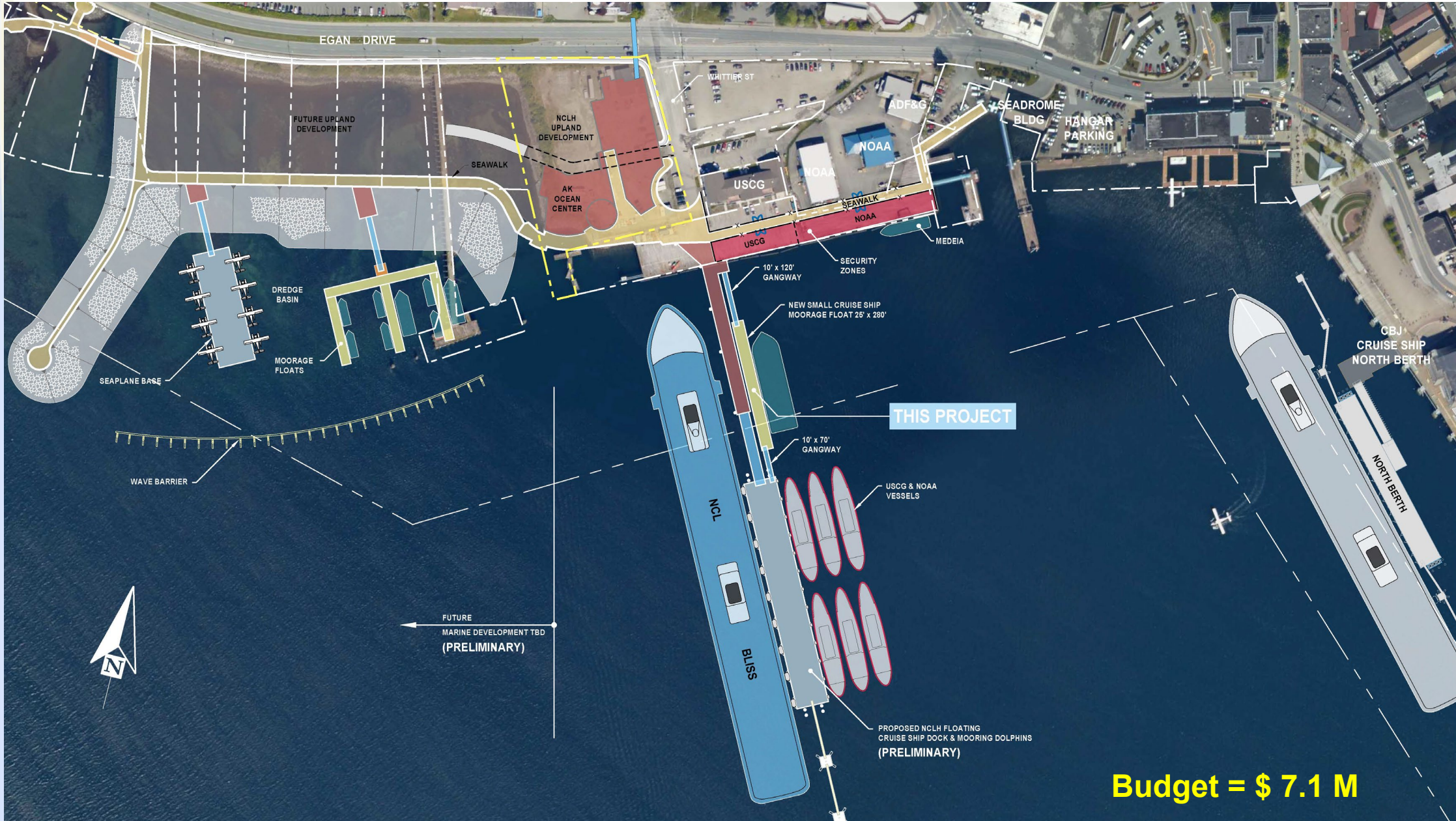
Douglas Harbor



Harris Harbor



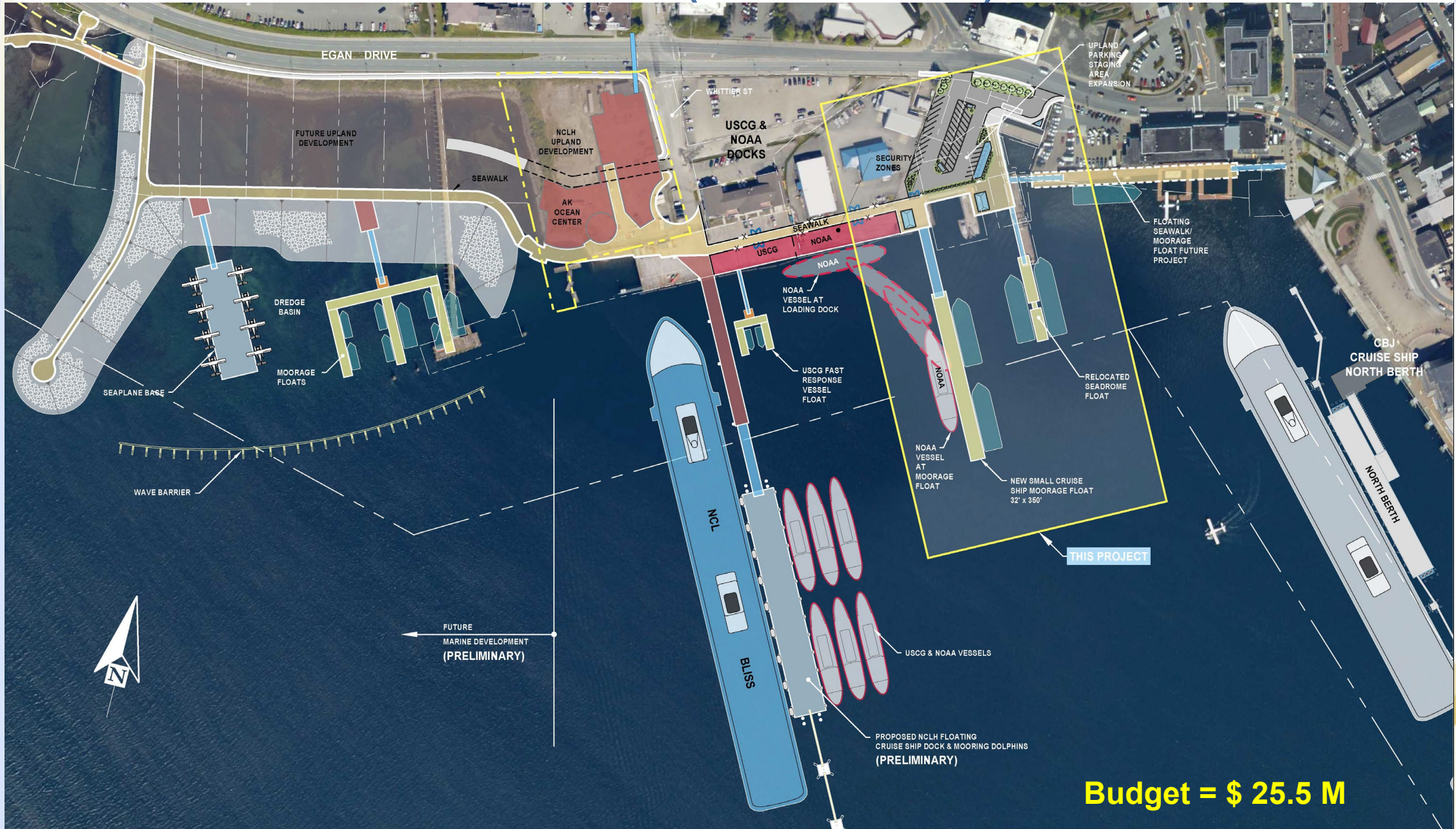
NCLH / USCG Support



Budget = \$ 7.1 M



NOAA / Seadrome (Preferred Plan)



Budget = \$ 25.5 M



EGAN DRIVE

MAIN STREET

DEVELOP JUNEAU NOW LLC
JUNEAU SUBPORT
LT C2A

STREET R.O.W.

ALASKA MENTAL HEALTH TRUST AUTHORITY
JUNEAU SUBPORT
LT C2B

USCG
USS 3566
FR

USCG
USS 3566
FR

NOAA

NOAA

US DEPT OF COMMERCE
NOAA
USS 3566
LT6 FR

ADF&G

CELLS AND RESOURCES JUNEAU
SUBPORT LTD

CULTURAL PRESERVATION INC
TIDELANDS ADDITION
BL 76 LT 1

CULTURAL PRESERVATION INC
TIDELANDS ADDITION
BL 76 LT 1

PRESERVATION INC
TIDELANDS
ADDITION
BL 76 LT 1

CULTURAL PRESERVATION INC
TIDELANDS ADDITION
BL 76 LT 4

CULTURAL PRESERVATION INC
TIDELANDS ADDITION
BL 76 LT 6A

SEADROME BLDG

HANGAR
PARKING LOT

MERCHANTS WHARF LLC
TIDELANDS ADDITION
BL 76 LT 6A

CULTURAL PRESERVATION INC
C&DH
AT&SR

NOAA
USS 3566
LT6 FR

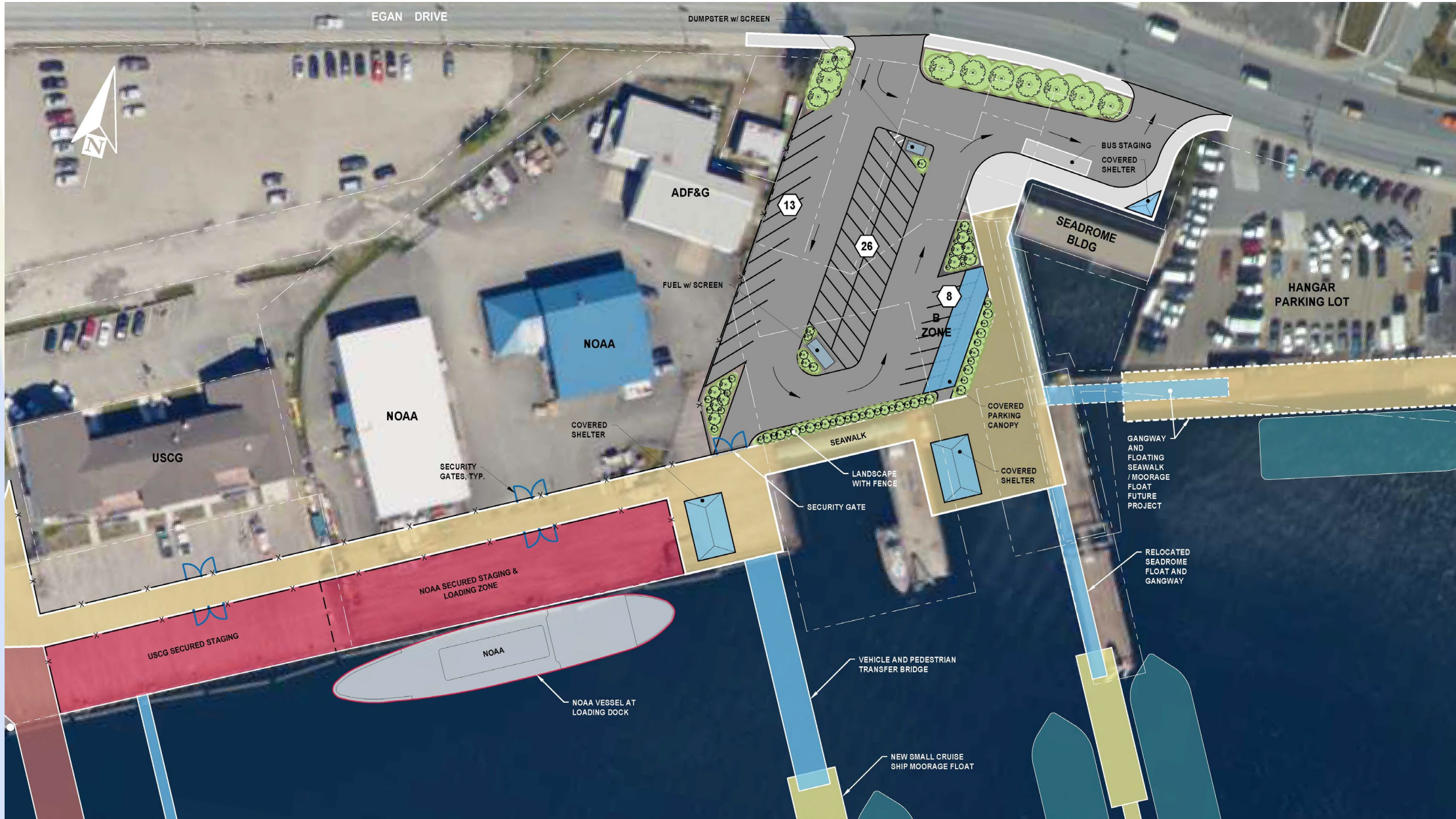
A.T.S. 3

USCG SMALL VESSEL OPERATIONS

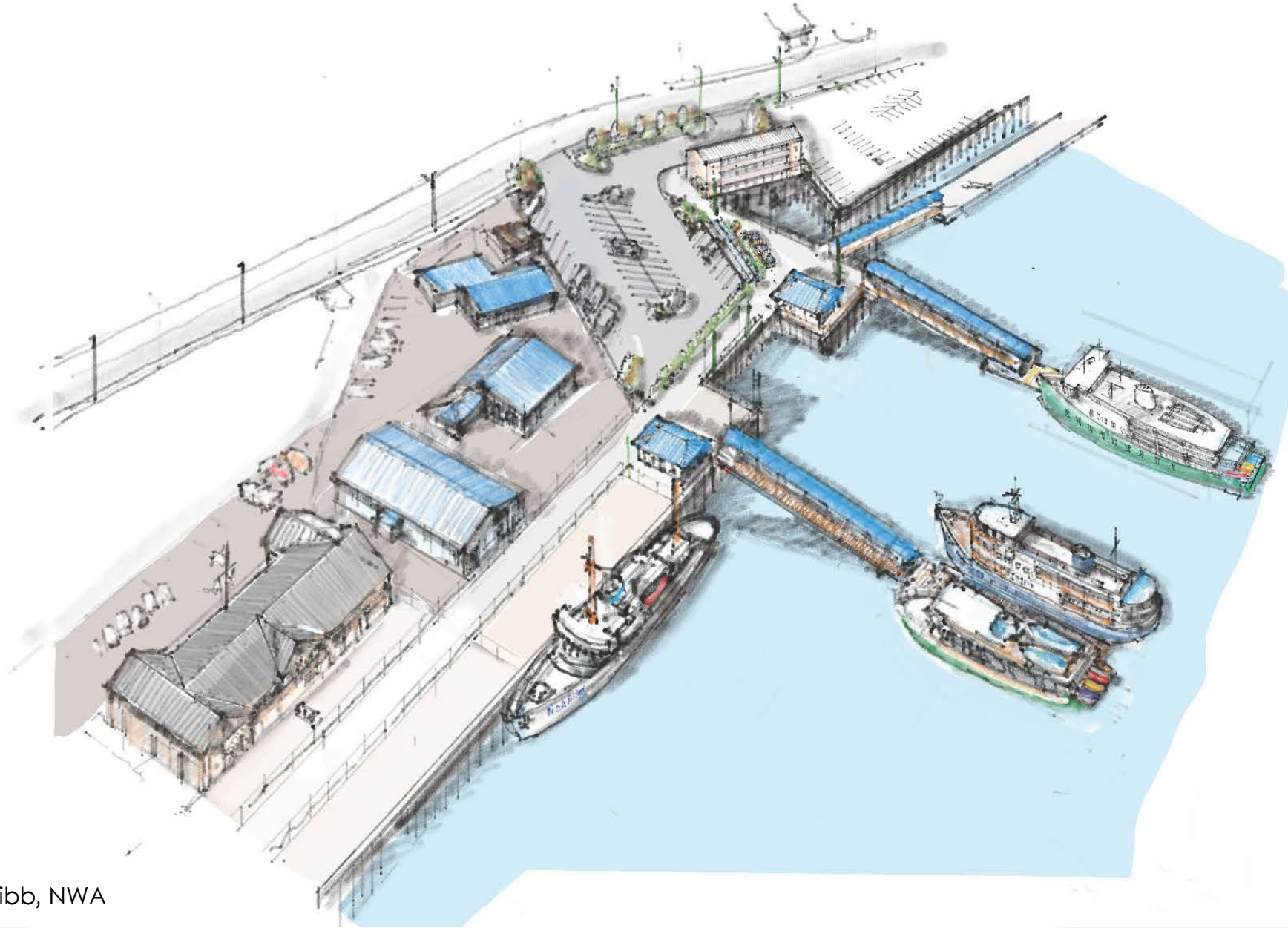
SEADROME FLOAT



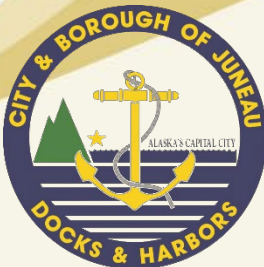
NOAA / Seadrome Developed Uplands



NOAA / Seadrome – Site Rendering



James Bibb, NWA



NOAA / Seadrome Facility Advantages

- Provides 700 LF Moorage
- Provides ample uplands for parking, staging & pedestrian circulation
- Provides flexibility for Seawalk extension
- Meets small cruise lines objectives for central downtown location
- Has preliminary support from NOAA and Goldbelt although many details would need to be worked out to move this forward.





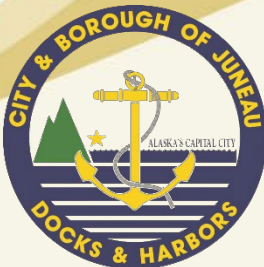
Marine Exchange of Alaska Navigational Assessment

- Factors that impact safe transit to and from proposed moorage facilities
 - Maneuverability of vessel
 - Dimensions and type of propulsion
 - Sail area (surface area subject to winds)
 - Environmental Factors
 - Wind strength and direction
 - Tidal current direction and velocity
 - Physical maneuvering room and position of the dock/float



Marine Exchange of Alaska Navigational Assessment

- Maneuverability of vessels that will use the new facilities
 - Less than 275' length
 - Propulsion comprised of twin propellers and or bow/stern thrusters
 - Sail area substantially less than large cruise ships

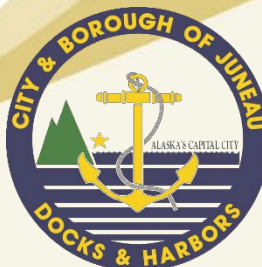
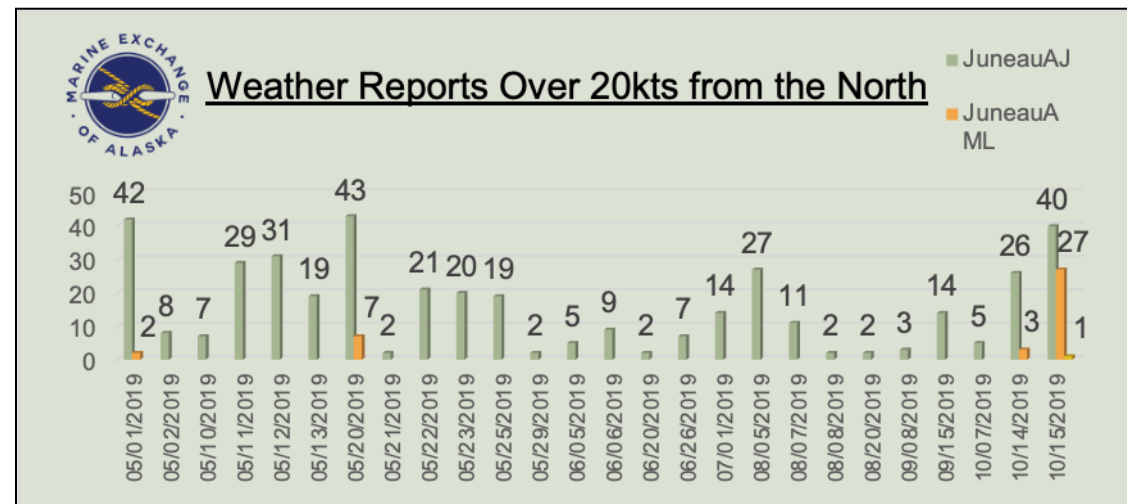


Marine Exchange of Alaska Navigational Assessment

- Prevailing local winds have less impact on vessel's maneuvering when aligned with vessel's bow or stern during approach and departure



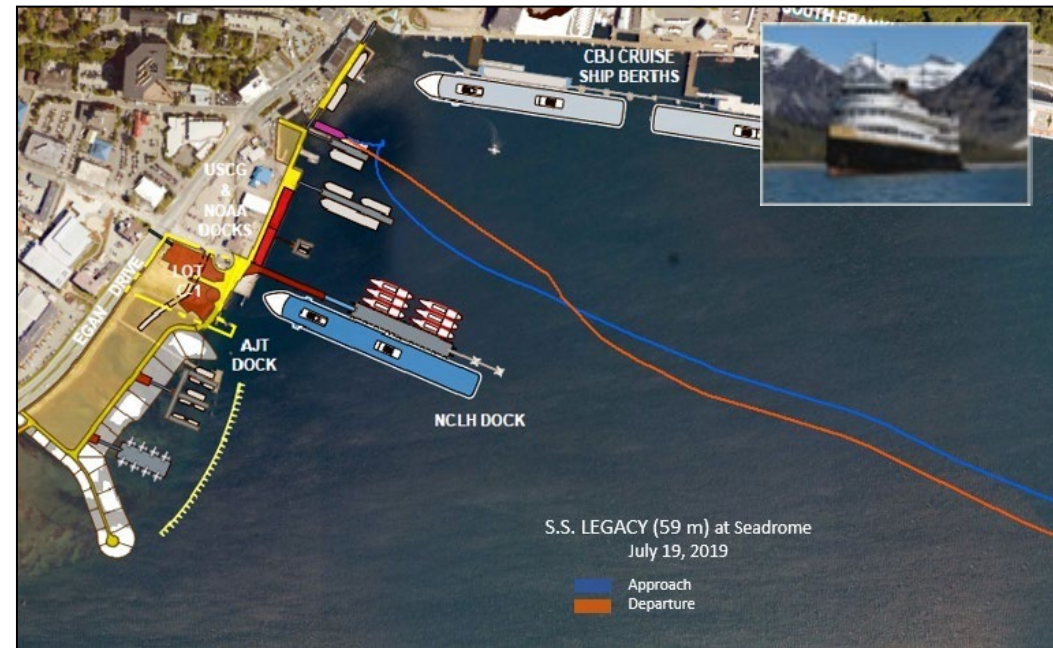
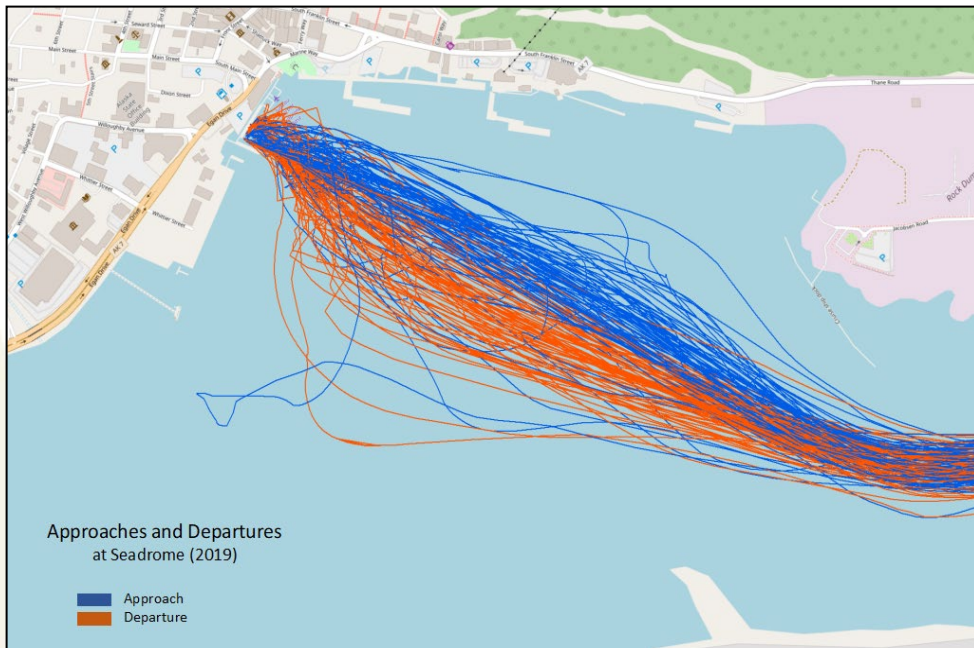
Winds in the vicinity of the proposed facilities are primarily from the southeast or northwest at less than 20 knots and aligned with the position of the docks.



Marine Exchange of Alaska Navigational Assessment

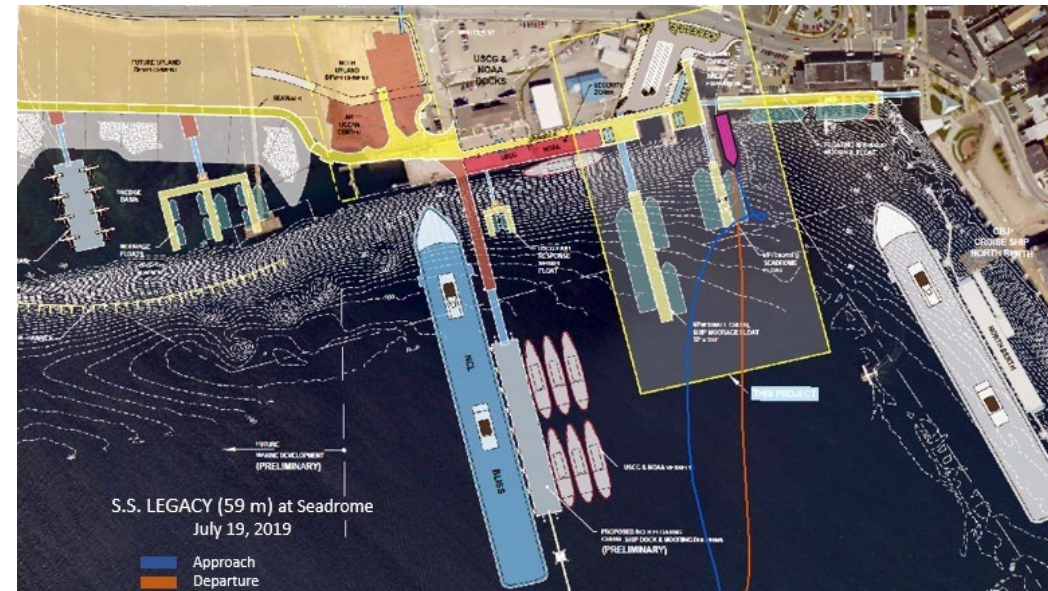
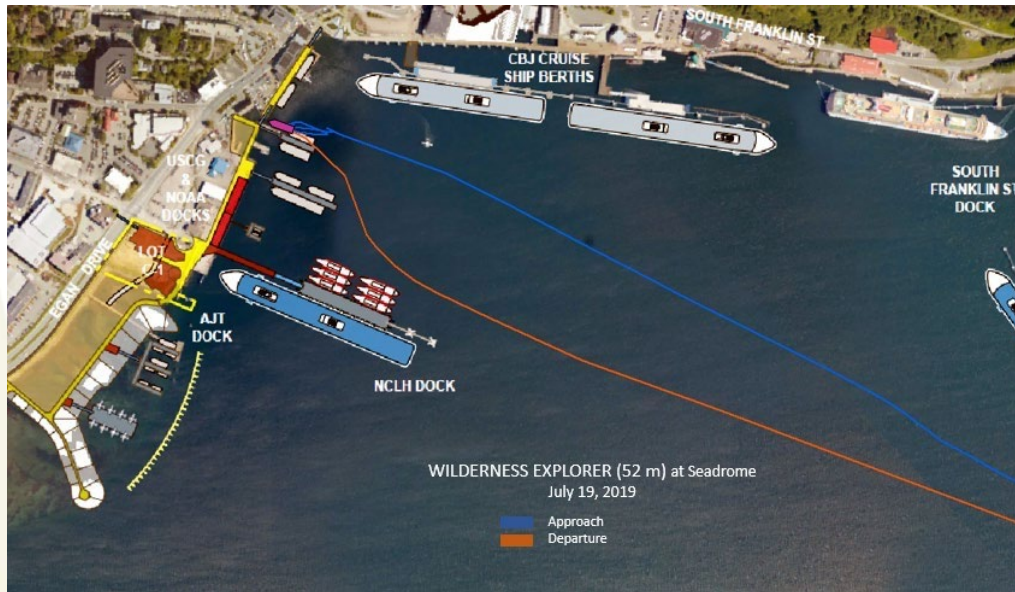
- Maneuvering room in the port area

Safe maneuvering room with respect to other vessels and docks in the port.

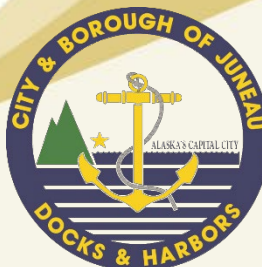


Marine Exchange of Alaska Navigational Assessment

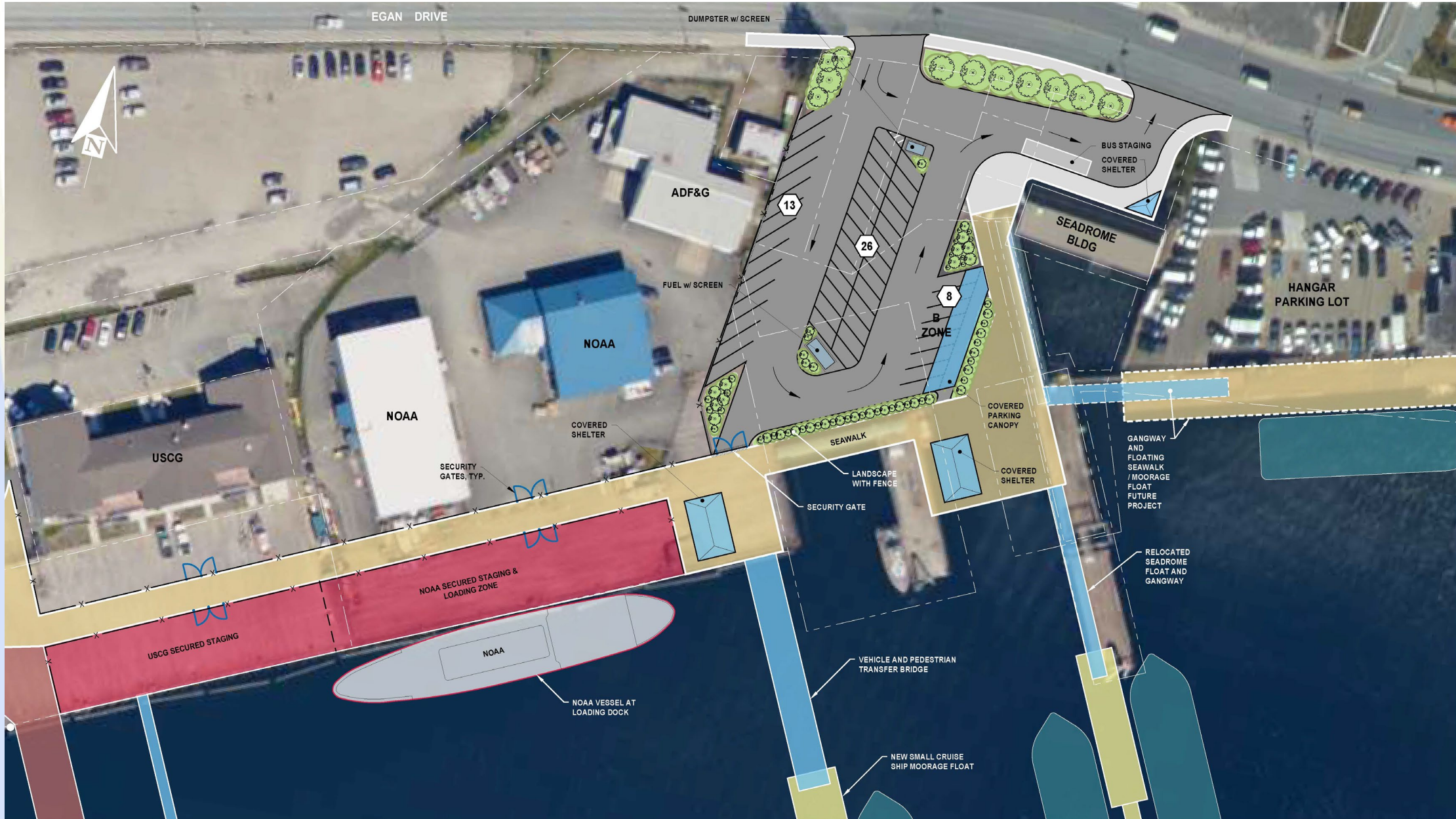
Physical maneuvering room and position of the proposed docks/floats



Conclusion: The proposed moorage facilities are optimally oriented and located to facilitate safe maneuvering of small cruise ships to and from the Port of Juneau.



NOAA / Seadrome Developed Uplands



Corvus Design

Public Participation

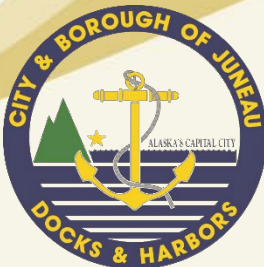
- What are your three concerns that we need to be aware of for the upland facilities (seawalk, shelters, parking, landscaping)?



Corvus Design

Public Participation

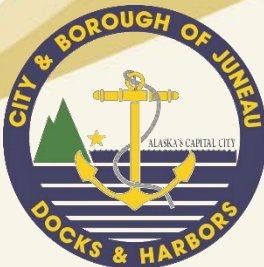
- What opportunities do we need to capitalize that reduces potential conflicts between local use and tourist use?



Corvus Design

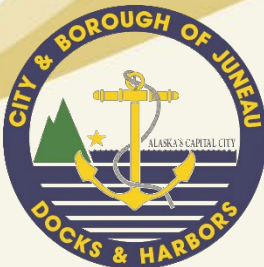
Public Participation

- What are the successes of the existing Juneau seawalk and waterfront that we should consider incorporating?



Corvus Design Public Participation

- What improvements can we make to the uplands to create a better experience for year-round use?



CBJ Docks & Harbors – Questions & Closing

