APPENDICES

HONOLULU HARBOR
2050 MASTER PLAN

HONOLULU, HAWAIʻI, OʻAHU

FINAL
November 2022

STATE DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

APPENDICES

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APPENDIX A

LIST OF STAKEHOLDER MEETINGS

DATE	Meeting Participants (Stakeholder)
2/2/18	Department of Land and Natural Resources, Division of Aquatic Resources
2/14/18	Department of Land and Natural Resources, Department of Agriculture
3/29/18	Office of Planning, Hawai‘i Housing Finance and Development Corporation, Department of Permitting and Planning Transit Oriented Development
3/6/18	United States Fish and Wildlife Service, United States Department of Agriculture, Animal and Plant Health Inspection Service, United States Customs and Border Protection
3/23/18	Hawai'i Department of Transportation, Highways Division
4/4/18	United States Fish and Wildlife Service
4/11/18	Arnold Fukumoto
4/13/18	Hawaiian Electric
4/13/18	Puni Chee, Tim Sakahara
4/11/18	Arnold Liu
5/7/18	City and County of Honolulu Office of Climate Change, Sustainability and Resiliency, Department of Land and Natural Resources Office of Conservation & Coastal Lands, University of Hawai‘i, School of Ocean and Earth Science and Technology
5/7/18	Honolulu Authority for Rapid Transportation
5/8/18	University of Hawai‘i at Mānoa, Community Design Center, The Trust for Public Land
5/9/18	Hawai‘i Tourism Authority, Hawai‘i Visitors and Convention Bureau, Acess Cruise
5/10/18	Hawaii Community Development Authority
5/10/18	State of Hawaii Historic Preservation Division
5/16/18	Hawai‘i Pilots’ Association
5/17/18	Kirby Offshore
5/18/18	American Marine Corporation/PENCO
6/8/18	Hawai‘i Foreign-Trade Zone No. 9, Department of Business, Economic Development & Tourism
6/20/18	Department of Land and Natural Resources, Division of Boating and Ocean Recreation
6/20/18	Pacific Shipyards International, LLC / Navatek
6/27/18	Sause Brothers
7/3/18	Hawai'i Department of Transportation, Airports Division, Hawai'i Department of Transportation,
6/27/18	Office of Planning
7/20/18	Sea Engineering
8/1/18	City and County of Honolulu-Department of Permitting and Planning
8/7/18	POP Fishing & Marine, Hawaiian Ice Company, Hawai‘i Longline Association, United Fishing
8/7/18	FOSS Maritime Company
9/28/18	O‘ahu Metropolitan Planning Organization
10/4/18	United Fishing Agency, Pacific Fishing
10/5/18	Pier 16 to 18 Fishing Vessel Owners
10/17/18	P & R Water Taxi, Honolulu Marine LLC, P & M Marine Services LLC
10/19/18	State of Hawaii Historic Preservation Division
10/24/18	Hawaiian Electric Industries
12/10/18	Norwegian Cruise Line
12/18/18	Hawai‘i Emergency Management Agency
1/9/19	Hawai'I Department of Transportation, Harbors Division District Operations and Maintenance
1/14/19	Hawai'i Department of Transportation, Highways Division, U.S. Army Corps of Engineers
1/15/19	Division of Aquatic Resources
1/25/19	Young Brothers
1/23/19	National Disaster Preparedness Training Center

DATE	Meeting Participants (Stakeholder)
1/29/19	Iwilei District Participating Parties, Chevron Corporation
2/6/19	Cruise Line International Association, Norwegian Cruise Line Holdings Ltd.
2/19/19	Royal Caribbean Cruises Ltd., Intercruises, McCabe, Hamilton & Renny Co., Ltd.
3/1/19	Matson
3/13/19	Pasha, Hawaii Stevedores
12/5/19	Hawai'i Department of Transportation Office of Civil Rights
5/9/19	Martin & Chock, Inc.
7/1/19	Office of Federal Awards Management, Department of Budget and Finance
7/3/19	Oahu Island Parks Conservancy, Hawaii Communiy Development Authority-Scenic Hawaii
7/11/19	Star of Honolulu
8/1/19	Homeland Security Investigations U.S. Immigration and Customs Enforcement
11/6/19	Mr. Manuel Kuloloio
11/12/19	Lani Maʻa Lapilio, Aukahi
12/10/19	Hawai'i Department of Transportation, Highway Division Planning Branch, Statewide Transportation Planning Office, City and County of Honolulu, Department of Transporation
12/16/19	Aloha Tower Development Corporation
1/10/20	Aloha Tower Development Corporation, Department of Permitting and Planning-Transit Oriented Development, Department of Transportation Services, Hawaii Community Development Authority-Scenic Hawaii, Hawaiian Electric, Hawaiʻi Pacific University, Honolulu Authority for Rapid Transportation, Oahu Island Parks Conservancy,, Star of Honolulu
1/15/20	State of Hawaii Historic Preservation Division
1/23/20	State of Hawaii Historic Preservation Division
2/24/20	Cruise Line International Association
5/14/20	Cruise Line International Association
10/23/20	Cruise Line International Association
11/13/20	Young Brothers
12/23/20	Healy Tibbitts
1/8/21	Aloha Tower Development Corporation
1/13/21	Hawaiʻi Pilots' Association
1/14/21	Pasha
2/2/21	Hawai'i Department of Transportation, Highways Division
2/5/21	University of Hawaiʻi, Sea Grant, Pacific Islands Climate Adaptation Science Center, Hawai'i Department of Transportation, Airports Division Planning Section
2/26/21	Aloha Tower Development Corporation

APPENDIX B

TECHNICAL ADVISORY COMMITTEE (TAC)
MEETING NOTES

Summary of Meeting Coordination and Outcomes

Technical Advisory Committee Meeting #1

Honolulu Harbor 2050 Master Plan

Honolulu, Oʻahu, Hawaiʻi

August 2018

PREPARED FOR:

Department of Transportation
Harbors Division
79 South Nimitz Highway
Honolulu, Hawaiʻi 96813

PREPARED BY:

R.M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, Hawaiʻi 96819
Project No. 1-22628-01

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SUMMARY OF MEETING COORDINATION AND OUTCOMES

Technical Advisory Committee Meeting #1

Honolulu Harbor 2050 Master Plan

Date, Time and Location

- July 18, 2018; 8:00 to 11:00 AM
- Homer Maxey Conference Center (521 Ala Moana Blvd.; Honolulu, HI 96813)

Meeting Invitations

- Four rounds of invitations for the Technical Advisory Committee Meeting #1 (TAC #1) were emailed to stakeholders and representatives for city, state and federal agencies. In total, 182 individuals received email invitations.
    - Meeting invitation #1, May 29 and June 4, 2018, included as **Appendix 1**.
    - Meeting invitation #2, June 29, 2018, included as **Appendix 2**.
    - Meeting invitation #3, July 10, 2018, included as **Appendix 3**.
    - Meeting invitation #4, July 16, 2018, included as **Appendix 4**.

Attendance

- Approximately 90 stakeholders and representatives for city, state and federal agencies attended the TAC #1. The TAC #1 sign-in sheet and invitation list are combined into one document included as **Appendix 5**.

Handouts

- Meeting handouts included the following:
    - Table of contents for handouts
    - Agenda
    - Project flyer
    - General overview of the Technical Advisory Sub-Committees (Sub-TACs)
    - Comment form
    - MeetingSift instructions
    - MeetingSift questions

  TAC #1 meeting handouts are included as **Appendix 6**.

Exhibits

- Exhibits were prepared to provide information on the Honolulu Harbor and recent DOT-H modernization projects including:
    - Map of Honolulu Harbor (1810)
    - Map of Honolulu Harbor (2017)
    - Kalaeloa Barbers Point Harbor Modernization
    - Hilo Harbor Modernization
    - Honolulu Harbor Modernization – Kapālama Container Terminal (Phase 1 and 2)
    - Honolulu Harbor Modernization – Piers 12 and 15

Exhibits are included as **Appendix 7**.

Presentation

- The purpose of the meeting was to provide an overview of the Honolulu Harbor 2050 Master Plan (HHMP), review preliminary analysis by the Project Team, and establish the Technical Advisory Sub-Committee (Sub-TAC) working groups. Key components of the presentation included the following:
    - DOT and Project Team Introductions by Darrell Young / Department of Transportation, Harbors Division (DOT-H) and David Tanoue / R. M. Towill Corporation (RMTC).
    - Overview of the Harbor Project Programming by David Tanoue.
    - HHMP Overview by David Tanoue and Jim Niermann / RMTC.
    - User Survey Initial Responses by Daniel Nahoopii / SMS Hawai'i (SMS).
    - Cargo Capacity by Harold Westerman / Stantec Consulting Ltd. (SCL).
    - Sub-TAC Overviews by Jim Niermann and Linda Colburn / Where Talk Works (WTW).
    - Open House / Sub-TAC Sign-Up by the Project Team.
    - Q & A facilitated by Linda Colburn.

  The TAC #1 presentation slides and outline are included as **Appendix 8** and **9**.

Sub-TAC Sign-Up

- The purpose of the Sub-TAC sign-up stations was to encourage meeting attendees to sign-up for Sub-TAC working groups as well as identify and provide comments on preliminary Sub-TAC issues and ideas. There were eight Sub-TAC sign-up stations including:
    1. Cargo Operations
    2. Vessel Operations
    3. Maritime Support
    4. Adaptation and Resiliency
    5. Cruise and Excursion Operations
    6. Environment
    7. Fishing Industry
    8. Non-Maritime Opportunities

  The Sub-TAC sign-up and ideas/issues sheets are included as **Appendix 10**.

Meeting Records

- The TAC #1 presentation included six MeetingSift questions to provide all meeting attendees with the opportunity to ask questions, provide comments and receive responses from the DOT-H Administration and Project Team. MeetingSift is a web-based interactive collaboration tool. It was used to allow meeting attendees to submit anonymous questions and comments about the HHMP. The MeetingSift responses are included as **Appendix 11**. In addition to the MeetingSift questions, the facilitator, Linda Colburn, followed each MeetingSift question with a brief open Q & A session. At the end of the presentation, commonly themed questions submitted by MeetingSift were addressed by DOT-

H and the Project Team. A summary of the TAC #1's Q & A sessions is included as **Appendix 12**.

- MeetingSift Statistics:
    - Number of Comments Received: 41
    - Participants: 94

Appendix 1

Meeting Invitation #1, May 29 and June 4, 2018

Emailed attachment(s):

- Project Flyer, included as Appendix 6

James Niermann

From: James Niermann
Sent: Tuesday, May 29, 2018 1:14 PM
Subject: Honolulu Harbor Master Plan Update - Save the Date for Technical Advisory Meeting # 1 - July 18, 2018
Attachments: 180525_SAVE THE DATE_TAC #1 MEETING.pdf

Aloha,
On behalf of the Department of Transportation, Harbors Division (DOT-H), we invite you to participate in the first Technical Advisory Committee (TAC) meeting for the *Honolulu Harbor Master Plan Update* (HHMP).
Please save the date:

Wednesday, July 18, 2018 from 8:00 a.m. to 11 a.m.

Homer Maxey Conference Center, Pier 2

More information forthcoming.

We encourage your participation in the TAC meeting as it is an essential component of the HHMP planning process. The first TAC meeting will focus on reviewing preliminary findings by the Project Team, developing a charter and evaluation criteria for alternatives, and establishing Sub-TAC (Technical Advisory Sub-Committee) working groups. The Sub-TACs will provide focused technical input on various aspects of Honolulu Harbor, such as cargo operations, vessel operations, maritime support, cruise and excursion operations, fishing industry, non-maritime opportunities, adaptation / resiliency, and environmental issues. The input provided by the Sub-TACs will be used to formulate preliminary alternatives for the HHMP.

Any questions regarding the TAC meeting can be addressed to:

Jim Niermann, Project Manager
R. M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, Hawai‘i 96819
Ph: (808) 842-1133
jimn@rmtowill.com

Should you have any questions or comments for DOT-H, please contact:

Dean Watase, Project Manager (Non-Maritime)
Department of Transportation Harbors Division
79 S. Nimitz Highway
Honolulu, Hawai‘i 96813
Ph: (808) 587-1883
dean.watase@hawaii.gov

Celia Shen, Project Manager (Maritime)
Department of Transportation Harbors Division
79 S. Nimitz Highway
Honolulu, Hawai‘i 96813
Ph: (808) 587-2013
Celia.Y.Shen@hawaii.gov

For more information about the project, please visit: www.HonoluluHarborMP.com

Mahalo for your participation.

James Niermann, AICP, LEED AP BD+C
mailto:JimN@rmtowill.com

R. M. Towill Corporation
2024 North King Street Suite 200
Honolulu, Hawaii 96819
voice: 808 842 1133 fax: 808 842 1937 web: www.rmtowill.com

Appendix 2

Meeting Invitation #2, June 29, 2018

Emailed attachment(s):

- General Overview of the Sub-TACs, included as Appendix 6
- Project Flyer, included as Appendix 6

James Niermann

From: James Niermann
Sent: Friday, June 29, 2018 10:31 AM
Subject: Honolulu Harbor Master Plan Update - Technical Advisory Meeting #1 - July 18, 2018
Attachments: HHMP TAC #1 Meeting Notice #2_180629.pdf

Aloha,

On behalf of the Hawai'i Department of Transportation (HDOT), Harbors Division (DOT-H), we hope to see you at the first Technical Advisory Committee (TAC) meeting for the Honolulu Harbor Master Plan Update (HHMP) being held:

Wednesday, July 18, 2018 from 8:00 a.m. to 11 a.m.

Homer Maxey Conference Center, Pier 2

Note: Registration starts at 7:30 a.m.

The HHMP will update the *Oahu Commercial Harbors 2020 Master Plan,* prepared in 1997, and will be a critical tool that guides future decision-making for Honolulu Harbor's use and development to best serve the State of Hawaii. We encourage your attendance at the TAC meeting as it is an essential component of the HHMP planning process. The first TAC meeting will focus on providing an overview of the HHMP process, reviewing preliminary findings by the Project Team, developing a charter and evaluation criteria for alternatives, and establishing Technical Advisory Sub-Committee (Sub-TAC) working groups.

Eight Sub-TAC working groups, comprised of maritime and non-maritime stakeholders, are being organized to provide focused technical input on various aspects of Honolulu Harbor, including cargo operations, vessel operations, maritime support, cruise and excursion operations, fishing industry, non-maritime opportunities, adaptation and resiliency, and environmental issues. The input provided by the Sub-TACs will be used by the Project Team to formulate preliminary alternatives for the HHMP.

Sub-TAC meetings will be held September through November 2018. Additional information about the Sub-TAC categories, key issues, scheduled meeting times and locations is attached to help you identify Sub-TACs you may want to join. You or your organization are welcome to participate in as many different Sub-TACs as you would like. There will be an opportunity at the July 18 TAC meeting to sign up. We hope that you will contribute your technical expertise to shape the HHMP by participating on one or more of the Sub-TACs.

If you plan to attend the July 18 TAC meeting, we ask that you **RSVP by Friday, July 6, 2018** to jimn@rmtowill.com.

This meeting is accessible for individuals with disabilities. To request an auxiliary aid or service (e.g., sign language interpreter, designated parking, or materials in alternative format, contact Mr. Dean Watase at (808) 537-1883 or email: dean.watase@hawaii.gov by July 11, 2018, seven (7) days prior to the meeting date. TTY users may use TRS to contact HDOT.

Questions can be addressed to:

Jim Niermann, Project Manager
R. M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, Hawai'i 96819
Ph: (808) 842-1133
jimn@rmtowill.com

Should you have any questions for DOT-H, please contact:

Dean Watase, Project Manager
(Non-Maritime Representative Contact)
Department of Transportation Harbors Division
79 S. Nimitz Highway
Honolulu, Hawai'i 96813
Ph: (808) 587-1883
dean.watase@hawaii.gov

Celia Shen, Project Manager
(Maritime Representative Contact)
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79 S. Nimitz Highway
Honolulu, Hawai'i 96813
Ph: (808) 587-2013
Celia.Y.Shen@hawaii.gov

Carter Luke, Engineering Program Manager
(General Contact)
Department of Transportation Harbors Division
79 S. Nimitz Highway
Honolulu, Hawai'i 96813
Ph: (808) 587-1862
carter.luke@hawaii.gov

For more information about the project, please visit: www.HonoluluHarborMP.com

Mahalo for your participation.

James Niermann, AICP, LEED AP BD+C
mailto:JimN@rmtowill.com

R. M. Towill Corporation
2024 North King Street Suite 200
Honolulu, Hawaii 96819
voice: 808 842 1133 fax: 808 842 1937 web: www.rmtowill.com

Appendix 3

Meeting Invitation #3, July 10, 2018

Emailed attachment(s):

- General Overview of the Sub-TACs, included as Appendix 6
- Project Flyer, included as Appendix 6

James Niermann

From: James Niermann
Sent: Tuesday, July 10, 2018 4:41 PM
Subject: Honolulu Harbor Master Plan Update - Technical Advisory Meeting #1 - July 18, 2018
Attachments: HHMP TAC #1 Meeting Notice #2_180629.pdf

Aloha,

On behalf of the Hawai'i Department of Transportation (DOT), Harbors Division (DOT-H), we are sending a friendly reminder that the first Technical Advisory Committee (TAC) meeting for the Honolulu Harbor Master Plan Update (HHMP) is being held next week:

Wednesday, July 18, 2018 from 8:00 a.m. to 11 a.m.

Homer Maxey Conference Center, Pier 2

Note: Registration starts at 7:30 a.m.

To help us prepare for the event, we ask for your kokua to RSVP to jimn@rmtowill.com. Mahalo to the 34 attendees who have RSVP'd to date. We will send a follow-up email next week with meeting directions and agenda.

The HHMP will update the *Oahu Commercial Harbors 2020 Master Plan,* prepared in 1997, and will be a critical tool that guides future decision-making for Honolulu Harbor's use and development to best serve the State of Hawaii. We encourage your attendance at the TAC meeting as it is an essential component of the HHMP planning process. The first TAC meeting will focus on providing an overview of the HHMP process, reviewing preliminary findings by the Project Team, developing a charter and evaluation criteria for alternatives, and establishing Technical Advisory Sub-Committee (Sub-TAC) working groups.

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This meeting is accessible for individuals with disabilities. To request an auxiliary aid or service (e.g., sign language interpreter, designated parking, or materials in alternative format, contact Mr. Dean Watase at (808)

537-1883 or email: dean.watase@hawaii.gov by July 11, 2018, seven (7) days prior to the meeting date. TTY users may use TRS to contact HDOT.

Questions can be addressed to:

Jim Niermann, Project Manager
R. M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, Hawai'i 96819
Ph: (808) 842-1133
jimn@rmtowill.com

Should you have any questions for DOT-H, please contact:

Dean Watase, Project Manager
(Non-Maritime Representative Contact)
Department of Transportation Harbors Division
79 S. Nimitz Highway
Honolulu, Hawai'i 96813
Ph: (808) 587-1883
dean.watase@hawaii.gov

Celia Shen, Project Manager
(Maritime Representative Contact)
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Ph: (808) 587-2013
Celia.Y.Shen@hawaii.gov

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Department of Transportation Harbors Division
79 S. Nimitz Highway
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Ph: (808) 587-1862
carter.luke@hawaii.gov

For more information about the project, please visit: www.HonoluluHarborMP.com

Mahalo for your participation.

James Niermann, AICP, LEED AP BD+C
mailto:JimN@rmtowill.com

R. M. Towill Corporation
2024 North King Street Suite 200
Honolulu, Hawaii 96819
voice: 808 842 1133 fax: 808 842 1937 web: www.rmtowill.com

Appendix 4

Meeting Invitation #4, July 16, 2018

Emailed attachment(s):

- TAC #1 Meeting Agenda, included as Appendix 6
- Meeting Location and Parking Directions Map

James Niermann

From: James Niermann
Sent: Monday, July 16, 2018 4:44 PM
Subject: Honolulu Harbor Master Plan Update - Technical Advisory Committee Meeting #1 - July 18, 2018
Attachments: HHMP TAC 1 MEETING AGENDA.pdf; HHMP TAC 1_DIRECTIONS.pdf

Aloha,

On behalf of the Hawai'i Department of Transportation (DOT), Harbors Division (DOT-H), attached are **(1) meeting agenda** and **(2) meeting location and parking directions map** for the first Technical Advisory Committee (TAC) meeting for the Honolulu Harbor Master Plan Update (HHMP), being held this week:

Wednesday, July 18, 2018 from 8:00 a.m. to 11 a.m.

Homer Maxey Conference Center, Pier 2

Note: Registration starts at 7:30 a.m.

Limited parking is available near the entrance to the Homer Maxey Conference Center. Additional parking is available at the Pier 2 Cruise Ship Terminal. Parking attendants will be on hand to direct you.

Meeting Overview

The HHMP will update the *Oahu Commercial Harbors 2020 Master Plan,* prepared in 1997, and will be a critical tool that guides future decision-making for Honolulu Harbor's use and development to best serve the State of Hawaii. We encourage your attendance at the TAC meeting as it is an essential component of the HHMP planning process. The first TAC meeting will focus on providing an overview of the HHMP process, reviewing preliminary findings by the Project Team, developing a charter and evaluation criteria for alternatives, and establishing Technical Advisory Sub-Committee (Sub-TAC) working groups.

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537-1883 or email: dean.watase@hawaii.gov and we will endeavor to accommodate your needs. TTY users may use TRS to contact HDOT.

Questions can be addressed to:

Jim Niermann, Project Manager
R. M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, Hawai'i 96819
Ph: (808) 842-1133
jimn@rmtowill.com

Should you have any questions for DOT-H, please contact:

Dean Watase, Project Manager
(Non-Maritime Representative Contact)
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79 S. Nimitz Highway
Honolulu, Hawai'i 96813
Ph: (808) 587-1883
dean.watase@hawaii.gov

Celia Shen, Project Manager
(Maritime Representative Contact)
Department of Transportation Harbors Division
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Ph: (808) 587-2013
Celia.Y.Shen@hawaii.gov

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(General Contact)
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For more information about the project, please visit: www.HonoluluHarborMP.com

Mahalo for your participation.

James Niermann, AICP, LEED AP BD+C
mailto:JimN@rmtowill.com

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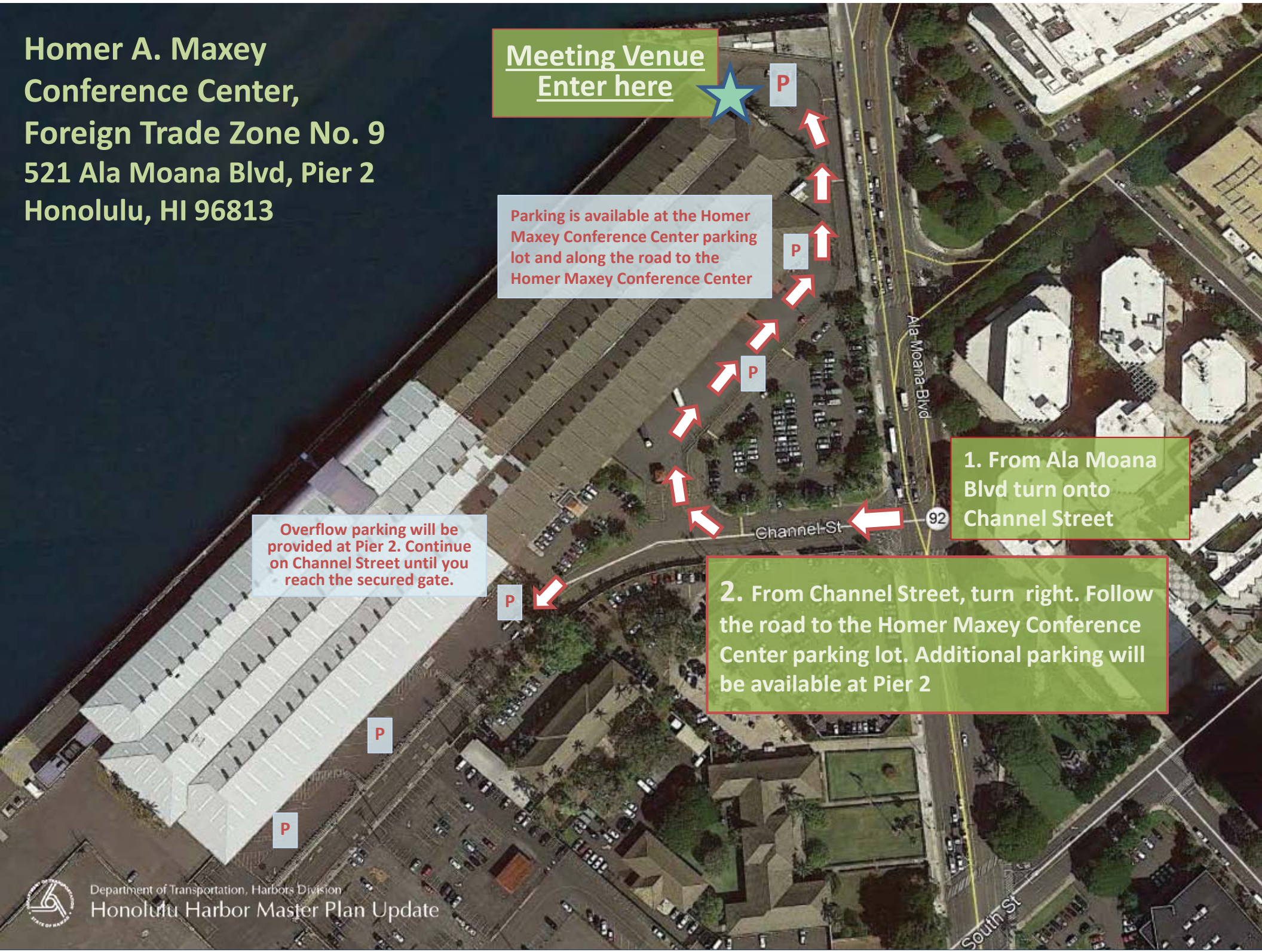
voice: 808 842 1133 fax: 808 842 1937 web: www.rmtowill.com


Homer A. Maxey Conference Center, Foreign Trade Zone No. 9
521 Ala Moana Blvd, Pier 2
Honolulu, HI 96813
Meeting Venue Enter here
P
Parking is available at the Homer Maxey Conference Center parking lot and along the road to the Homer Maxey Conference Center
Ala Moana Blvd
1. From Ala Moana Blvd turn onto Channel Street
92
Channel St
Overflow parking will be provided at Pier 2. Continue on Channel Street until you reach the secured gate.
2. From Channel Street, turn right. Follow the road to the Homer Maxey Conference Center parking lot. Additional parking will be available at Pier 2
South St
Department of Transportation, Harbors Division
Honolulu Harbor Master Plan Update

Appendix 5

TAC #1 Sign-In / Invitation List

TAC Sign-In and Invitation List						
CONTACT LAST NAME	**CONTACT FIRST NAME**	**ORGANIZATION**	**POSITION/TITLE**	**DIVISION/BRANCH/SECTION**	**CATEGORY**	**TAC #1 ATTENDANCE**
Abrams	Mary	US Fish and Wildlife	Field Supervisor	Ecological Services	Federal	
Aila Jr.	William J.	Department of Hawaiian Home Lands	Deputy to the Chair		State	
Ando	Marshall	Department of Transportation	Acting Highways Administrator	Highways Division	State	
Anonsen	William	The Maritime Group, LLC			Business / Orgs	x
Asuncion, Jr.	Leo	Department of Business, Economic Development and Tourism	Director	Office of Planning	State	x
Au	Kendrick	Department of Transportation	Treasuer	Harbors Division	State	
Barnes	Ross	University of Hawai'i Marine Center	Marine Operations Superintend	Marine Center at Pier 35	State	x
Bartlett	Randy	Hawaii Invasive Species Council	Interagency Coordinator		State	x
Beasley	Kim	Clean Island Council	General Manager		Business / Orgs	
Bee	Bob	Department of Transportation	Marine Cargo Specialist	Harbors Division, Oahu District	State	
Belknap	Dave	Aloha Petroleum, Ltd.	Reliability Specialist		Business / Orgs	
Bogardus	Michelle	US Fish and Wildlife	Acting Deputy Field Supervisor (Geographic)	Ecological Services	Federal	
Boivin, Jr.	Joseph	Young Brothers/ Foss Maritime - Hawaii	President		Business / Orgs	
Buelsing	Mike	Pacific Shipyards International, LLC			Business / Orgs	
Butay	Jade	Department of Transportation	Director of Transportation		State	
Calvin	Kris	Marine Spill Response Corporation	Senior Contracts Administrator		Business / Orgs	
Case	Suzanne	Department of Land and Natural Resources	Chairperson		State	
Caswell	Michael	Hawaii Stevedores, Inc. / Pasha Hawaii Transport Lines			Business / Orgs	
Cayetano	Steve	US Army Corps of Engineers	Deputy District Manager for Programs and Project		Federal	
Chee	Howard	Department of Transportation	Project Manager	Harbors Division	State	x
Cheu	Norman	Norko Marine Agency			Business / Orgs	
Chong	Rebecca	US Customs and Border Protection	Seaport Supervisory Agricultural Specialist	Agricultural Inspection Division	Federal	

TAC Sign-In and Invitation List						
CONTACT LAST NAME	**CONTACT FIRST NAME**	**ORGANIZATION**	**POSITION/TITLE**	**DIVISION/BRANCH/SECTION**	**CATEGORY**	**TAC #1 ATTENDANCE**
Chong	Kerwin	Hawaiian Crane & Rigging			Business / Orgs	
Cole	Noelle	Department of Planning and Permitting	Planner	Development and Zone Change Branch	CCH	x
Cottrell	Curt	Department of Land and Natural Resources	Administrator	Division of State Parks	State	
Crabbe	Kamana'opono	Office of Hawaiian Affairs	Chief Executive Officer / Ka Pouhana		State	
Cross	Teal	Pacific Environmental Corporation (PENCO)	Executive Vice President		Business / Orgs	x
Davison	Richard	Star of Honolulu Cruises & Events	Vice President of Operations, CSO		Business / Orgs	
Deogaonkar	Dinesh V.	Norton Lilly International	Vice President		Business / Orgs	
DePonte	David	Department of Accounting and General Services	Public Works Engineer	Public Works Division	State	
Diamond	Hayley	University of Hawai'i at Mānoa	Senior Research Assistant	Community Design Center (UHCDC)	State	x
Doi	Johnlyn	Matson Navigation Company	Executive Assistant		Business / Orgs	
Edsall	Julie	Kirby Offshore Marine	Operations Manager	Hawaii Division	Business / Orgs	x
Escajeda	Summer	Transmarine Navigation Corporation	Operations		Business / Orgs	x
Espiau	Renee	Department of Planning and Permitting	Lead Planner	Transit Oriented Development	CCH	x
Evans	Kimberly	US Department of Transportation, Federal Aviation Adminsitration	Community Planner	Honolulu District Office	Federal	x
Fisher	Joshua	US Fish and Wildlife	Invasive Species Biologist	Pacific Islands Fish and Wildlfie Office	Federal	x
Fletcher	Chip	University of Hawai'i at Manoa	Professor of Geology and Geophysics	School of Ocean and Earth Science and Technology	State	
Friel	Lek	Matson Terminals, Inc.			Business / Orgs	x
Frysztacki	Wes	Department of Transportation Services	Director		CCH	
Funakoshi	Rodney	Department of Business, Economic Development and Tourism	Planning Program Manager	Office of Planning	State	x
Furtado	Gordon	Dependable Hawaiian Express (DHX)	Operations Manager		Business / Orgs	
Furtado	Wesley	Hawaii Longshore Division, ILWU Local 142			Business / Orgs	x
Furtado	Wesley	International Longshore and Warehouse Union			Business / Orgs	

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Furuta	Craig	The Gas Company, LLC (dba Hawai'I GAS)			Business / Orgs	x
Goggins	Justin	Department of Land and Natural Resources	Aquatic Invasive Species Coordinator	Division of Aquatic Resources	State	x
Gonser	Matthew	Office of Climate Change, Sustainability and Resiliency	Coastal and Water Program Manager		CCH	x
Goshi	Laci	Department of Business, Economic Development and Tourism	Tourism Brand Manager	Hawai'i Tourism Authority	State	x
Goto	Dennis	DCL, Inc. (DBA Honolulu Ship Supply Company)			Business / Orgs	
Goto	Michael	United Fishing Agency, Ltd.			Business / Orgs	
Grange	Fenix	Department of Health	Program Manager	Hazard Evaluation and Emergency Response Office	State	
Guard	Matt	McCabe, Hamilton & Renny Co., Ltd.	President/General Manager		Business / Orgs	x
Haneberg	Scott	Department of Transportation	Motor Vehicle Safety Administrator	Highways Division, Motor Vehicle Safety Office	State	
Haole	William	Hawaii Longshore Division, ILWU Local 142	Division Director		Business / Orgs	
Harrington	Vernon	US Department of Agriculture	State Plant Health Director	U.S. Animal Plant Health Inspection Services	Federal	
Haske	Rebecca	US Fish and Wildlife	Wildlife Inspector	Office of Law Enforcement, Hawaii and Pacific Islands	Federal	x
Hepburn	Mark A.	Island Energy Services, LLC	Logistics Manager		Business / Orgs	x
Higashi	Ross	Department of Transportation	Deputy Director of Airports	Airports Division	State	
Hirai	Craig	Department of Business, Economic Development and Tourism	Executive Director	Hawai'i Housing Finance and Development Corporation	State	x
Hiromasa Browning	Joy	US Fish and Wildlife	Fish and Wildlife Biologist	Pacific Islands Fish and Wildlfie Office	Federal	
Hittle	Anukriti	Department of Land and Natural Resources	Hawai'i Climate Change Mitigation & Adaptation Coordinator	Office of Conservation & Coastal Lands	State	
Ho	Jonathan	Department of Agriculture	Acting Manager	Plant Quarantine Branch	State	x
Hong	Lea	The Trust for Public Land	Director		Business / Orgs	
Hong	Glenn	Saltchuk - Hawaii (Tote Maritime)	SVP Saltchuk Hawaii		Business / Orgs	x
Hopkins	Ryan	Hawaii Pilots Association (HPBS, Inc.)	Captain		Business / Orgs	x
Iida	Todd	Hawaii Stevedores, Inc.			Business / Orgs	x
Ip	Joanna	US Immigration and Customs Enforcement	Special Agent in Charge of Honolulu	Homeland Security Investigations	Federal	

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Jin Su	Tong	Dae Han Shipping Agency, Inc.			Business / Orgs	
Kaku	Melvin	Department of Emergency Management	Director		CCH	x
Kalili	DreanaLee	Department of Transportation	Revenue Enhancement Manager	Harbors Division	State	
Kamemoto	Garett	Department of Business, Economic Development and Tourism	Interim Executive Director	Hawai'i Community Development Authority	State	
Kamoe	Richard	Hawaii Longshore Division, ILWU Local 142	Vice Division Director		Business / Orgs	
Kanemoto	Neil	Pacific Ocean Producers			Business / Orgs	
Kennard	David	Department of Defense	State Hazard Mitigation Officer	Hawaii Emergency Management Agency	State	x
Kim	Karl	University of Hawai'i at Mānoa	Executive Director	National Disaster Preparedness Training Center	State	
Kinerney	Kevin	Transmarine Navigation Corporation	District Manager		Business / Orgs	
Kinimaka	Christine	Department of Accounting and General Services	Public Works Manager	Public Works Division	State	
Knauss	John	National Cargo Bureau, Inc.	Senior Surveyor, Port of Honolulu		Business / Orgs	x
Kosciuk	Jim	US Customs and Border Protection	Chief Agricultural Specialist	Agricultural Inspection Division	Federal	
Kuo	Julie	Department of Land and Natural Resources	Ballast Water and Biofouling Coordinator	Division of Aquatic Resources	State	x
Liu	Arnold	Department of Transportation	Planning Engineer	Harbors Division, Engineering Branch, Planning Section	State	
Logan	Arthur	Department of Defense	Adjutant General and Director	Hawaii Emergency Management Agency	State	
Long	Michael	US Coast Guard	Sector Commander	Sector Honolulu	Federal	
Lopez	David	Department of Defense	Planner	Hawaii Emergency Management Agency	State	
Lopez	Anita	University of Hawai'i Marine Center	Director of Research Vessel Ope	Marine Center at Pier 35	State	
Loui	Steven	Pacific Marine / Navatek, Ltd.			Business / Orgs	
Luke	Carter	Department of Transportation	Engineering Program Manager	Harbors Division, Engineering Branch	State	x
Lunday	Kevin	US Department of Homeland Security	Commander	Fourteenth Coast Guard District	Federal	

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MacDonald	Michael	Foss Maritime Company	Director, Marine Operations-Hawaii Region		Business / Orgs	
Maga	Jason	Hawaii Fueling Facilities Corporation	Assistant Treasurer		Business / Orgs	
Manuel	Jeffrey	American Guard Services, Inc. - Hawaii Branch	Maritime Manager		Business / Orgs	x
Marcas	Justin	American Bureau of Shipping			Business / Orgs	
Martin	Christy	Coordinating Group on Alien Pest Species	Public Information Officer		Business / Orgs	x
Martin	Sean	Pacific Ocean Producers	President		Business / Orgs	
Matsueda	Wade	Star of Honolulu Cruises & Events	Chief Captain, VSO		Business / Orgs	x
Mayfield	Brian	Ocean Network Express Pte Ltd. (ONE) (formerly NYK)			Business / Orgs	
McCormick	Michael	Norton Lilly International	Operations Manager		Business / Orgs	
McEwen	Kāne	Dependable Hawaiian Express (DHX)	Vice President of Operations / Pacific Region		Business / Orgs	x
McKee	Shannon	Access Cruise		Access Cruise	Business / Orgs	
Mihlbauer, Jr.	John P.	All Ship and Cargo Surveys	President		Business / Orgs	x
Miller	Chad	Petrospect, Inc.	President / CEO		Business / Orgs	x
Miyasaki	Robert	Department of Transportation	Planning Program Adminstrator	Statewide Transportation Planning Office	State	x
Moku	Sam	Hawaii Pacific University	VP of University Relations		Business / Orgs	
Morita	Steve	P&R Water Taxi LLC			Business / Orgs	x
Moy	Alicia	The Gas Company, LLC (dba Hawai'I GAS)			Business / Orgs	
Mullet	Katherine	US Fish and Wildlife	Deputy Field Supervisor (Geographic)	Ecological Services	Federal	
Mullins	Ulysses	US Coast Guard	Deputy Sector Commander	Sector Honolulu	Federal	x
Murley	Bruce	US Customs and Border Protection	Area Port Director		Federal	x
Nadig	Aaron	US Fish and Wildlife	Oahu, Kauai, NWHI, American Samoa Manager	Ecological Services	Federal	
Nagatani	Leila	US Fish and Wildlife	Fish and Wildlife Biologist	Pacific Islands Fish and Wildlfie Office	Federal	
Neilson	Brian	Department of Land and Natural Resources	Aquatic Invasive Species Coordinator	Division of Aquatic Resources	State	
Neupane	Deepak	Department of Business, Economic Development and Tourism	Director of Planning and Development	Hawai'i Community Development Authority	State	x

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Nikaido	Blayne	Department of Transportation		Statewide Transportation Planning Office	State	x
Nikkhoo	Ali	APL (America), LLC	Vice President - Hawaii		Business / Orgs	
North	Gary	Hawaii Harbor Users Group (HHUG)	Executive Director		Business / Orgs	x
Okamoto	Barbara	Hawai'i Visitors and Convention Bureau		O'ahu Visitors Bureau	Business / Orgs	x
Palmero	Tony	US Fish and Wildlife	Supervisory Wildlife Inspector	Office of Law Enforcement, Hawaii and Pacific Islands	Federal	
Parry	Richard	Hawaii Petroleum Marketers Association			Business / Orgs	
Peacock	John	Par Hawaii Refining, LLC	Manager, Marine Operations		Business / Orgs	
Pierpont	Bill	Aloha Petroleum, Ltd.	Reliability Manager		Business / Orgs	
Pires	Charles	P&R Water Taxi LLC			Business / Orgs	
Polhemus	Dan	US Fish and Wildlife	Habitat Conservation	Pacific Islands Fish and Wildlfie Office	Federal	x
Rinmell	Brad	Sause Bros., Inc.			Business / Orgs	x
Rizzo	Ralph	US Department of Transportation, Federal Highways Administration	Division Administrator	Hawaii Division	Federal	
Rocheleau	Andrew	Sea Engineering, Inc.	Vice President of Marine Operations		Business / Orgs	x
Roer	Mik	Kirby Offshore Marine	Port Captain		Business / Orgs	x
Romine	Bradley	University of Hawai'i at Manoa	Coastal Lands Program Manager	Sea Grant	State	
Roth	Jennifer	US Fish and Wildlife	Special Agent	Office of Law Enforcement, Hawaii and Pacific Islands	Federal	x
Rue	Harrison	Department of Planning and Permitting	Administrator	Transit Oriented Development	CCH	
Sakakida	Gareth	Hawaii Transportation Association			Business / Orgs	x
Sakamoto	Dan	Hawaiian Electric	Director, Key Account Management		Business / Orgs	
Salaveria	Luis	Department of Business, Economic Development and Tourism	Director		State	
Satre	Jon	Aloha Marine Lines (Lynden Transport)	Hawaii Operations Manager		Business / Orgs	
Savusa	Joni	Department of Transportation	Business Services Supervisor II	Harbors Division, Oahu District	State	
Schilling-Wheeler	Noelani	Hawai'i Visitors and Convention Bureau	Executive Director	O'ahu Visitors Bureau	Business / Orgs	

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Shimabukuro	Eric	HC&D, LLC	VP Operations O'ahu		Business / Orgs	x
Shimizu	Paul	Department of Transportation	Marine Cargo Specialist	Harbors Division, Oahu District	State	x
Shon	Carilyn	Department of Business, Economic Development and Tourism	Energy Program Administrator	Energy Office	State	x
Sikkink	David	Department of Business, Economic Development and Tourism	Zone Administrator	Hawaii Foreign-Trade Zone No. 9	State	x
Smith	Thomas	US Army Corps of Engineers	Hydraulic Engineer	Honolulu District, Civil Works Technical Branch	Federal	x
Sniffen	Edwin	Department of Transportation	Deputy Director of Highways	Highways Division	State	x
Sokugawa	Kathy	Department of Planning and Permitting	Acting Director		CCH	x
Speicher	Meredeth	US Department of the Interior, National Park Service	Planner	Rivers, Trails, and Conservation Assistance Program	Federal	x
Stanbro	Joshua	Office of Climate Change, Sustainability and Resiliency	Executive Director and Chief Resilience Officer		CCH	
Stanton	Colby	US Department of Homeland Security	Director	Federal Emergency Management Agency	Federal	
Stilgenbauer	Judith	University of Hawai'i at Mānoa	Associate Professor	Community Design Center (UHCDC)	State	
Swartz	Bruce	Norton Lilly International	P. Manager		Business / Orgs	
Swindell	Randy	Master, Mates & Pilots (Hawaii Ports Maritime Council)			Business / Orgs	
Swindle	Keith	US Fish and Wildlife	Resident Agent In Charge	Office of Law Enforcement, Hawaii and Pacific Islands	Federal	
Szigeti	George	Department of Business, Economic Development and Tourism	President and CEO	Hawai'i Tourism Authority	State	
Takekawa	Neil	Department of Transportation	Oahu District Manager	Harbors Division, Oahu District	State	x
Takenaka	Brooks H.	United Fishing Agency, Ltd.			Business / Orgs	
Tam	Ryan	Honolulu Authority for Rapid Transportation	Assistant Deputy Director of Planning		CCH	x
Tamamoto	Rodney	Aala Ship Service/Aala Produce, Inc.			Business / Orgs	
Tanaka	Lance	Par Hawaii, Inc.	Director, Government and Public Affairs		Business / Orgs	x
Tang	Adeline	Ocean Network Express Pte Ltd. (ONE) (formerly NYK)	General Manager		Business / Orgs	
Tatsuguchi	Ken	Department of Transportation	Engineering Program Manager	Highways Division, Planning Branch	State	

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Thirugnanam	Jeyan	Department of Transportation	Engineering Program Manager	Highways Division, Planning Branch	State	x
Toguchi	Charles	Cruise Lines International Association - North West & Canada (CLIA-NWC)			Business / Orgs	x
Travis	Thomas	Department of Defense	Administrator	Hawaii Emergency Management Agency	State	
Tuiolosega	Herman	Department of Transportation	Planner	Airports Division	State	
Underwood	Edward	Department of Land and Natural Resources	Administrator	Division of Boating and Ocean Recreation	State	x
Vele	Joe	Dependable Hawaiian Express (DHX)	Safety Manager		Business / Orgs	
Victor	Lisa	Office of Hawaiian Affairs	Chief Operating Officer / Ka Pou Nui		State	
Vo	Dung	Department of Transportation	HMP Development Officier	Harbors Division, Engineering Branch Special Projects Section	State	
Vuillemot	Scott	American Marine Corporation	President		Business / Orgs	
Wakayama	Wade	HC&D, LLC			Business / Orgs	
Wang	Ali	Inchcape Shipping Services	Director of Business Development Liner		Business / Orgs	x
Watson	Angela	American Guard Services, Inc. - Hawaii Branch	Operations Manager		Business / Orgs	
Weir	Sandi	Norwegian Cruise Line	Vice President of Destination Dev. & Gov.		Business / Orgs	
Whitworth	Tiffanie	Young Brothers/ Foss Maritime - Hawaii	Manager, Facilities Planning		Business / Orgs	x
Williams	Ronald	Atlantis Adventures			Business / Orgs	
Wirtz	Greg	Cruise Lines International Association - North West & Canada (CLIA-NWC)			Business / Orgs	
Won	Douglas	Sause Bros., Inc.			Business / Orgs	
Wong	Gordon	US Department of Transportation, Federal Aviation Adminsitration	Manager	Honolulu District Office	Federal	
Wright	Eric	Par Hawaii, Inc.	Senior Vice President		Business / Orgs	
Wyatt	Michael	US Army Corps of Engineers	Chief	Honolulu District, Civil and Public Works Branch	Federal	
Yogi	Davis	Department of Transportation	Harbors Administrator	Harbors Division	State	
Yoshimoto	Milton	US Army Corps of Engineers	Program Manager	Honolulu District, Civil and Public Works Branch	Federal	x
Young	Darrell	Department of Transportation	Deputy Director of Harbors	Harbors Division	State	x

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Zane	Jimmy	McCabe, Hamilton & Renny Co., Ltd.	Vice President of Planning & Business Development		Business / Orgs	x
Attendees (Not on the Invitation List)						
Collins	Tom	Hawai'i Pilots			Business / Orgs	x
Cutter	Kevin	McCabe Hamilton & Renny Hawai'i			Business / Orgs	x
Galdeira	Guy	Department of Transportation		Harbors Division, Operations	State	x
Gomes	Gregory	Department of Transportation		Harbors Division, Operations	State	x
Grune	Randy	Pasha Hawaii Transport Lines			Business / Orgs	x
Harter	Robert	City and County of Honolulu Dept. of Emergency Management			CCH	x
Higashi	Wayne	United Fishing Agency, Ltd.			Business / Orgs	x
Hirano	Elmer	Department of Transportation		Harbors Division, Operations	State	x
Inouye	Ken	Department of Transportation		Harbors Division, Operations	State	x
Kimura	Clarence	Department of Transportation		Harbors Division, Operations	State	x
McLean	Robert	Department of Transportation		Harbors Division, Operations	State	x
Minamishin	George	US Customs and Border Protection			Federal	x
Pillone	Peter	Department of Transportation		Harbors Division, Operations	State	x
Prather	Jeffrey	Department of Transportation		Harbors Division, Operations	State	x
Statts	Meghan	Department of Land and Natural Resources		Division of Boats and Ocean Recreation	State	x
Tang	Eric	P and R Taxi			Business / Orgs	x
Tsuji	Russel	Department of Land and Natural Resources			State	x
Yocum	Janet	Federal Emergency Management Agency			Federal	x

Appendix 6

Meeting Handouts

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1

Meeting Handouts

July 18, 2018; 8:00 – 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

1. Agenda
2. General Project Information
3. Technical Advisory Sub-Committees (Sub-TACs) – General Overview
4. General Comment Form
5. MeetingSift Instructions
6. MeetingSift Questions
7. Post-it Notes

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1

Agenda

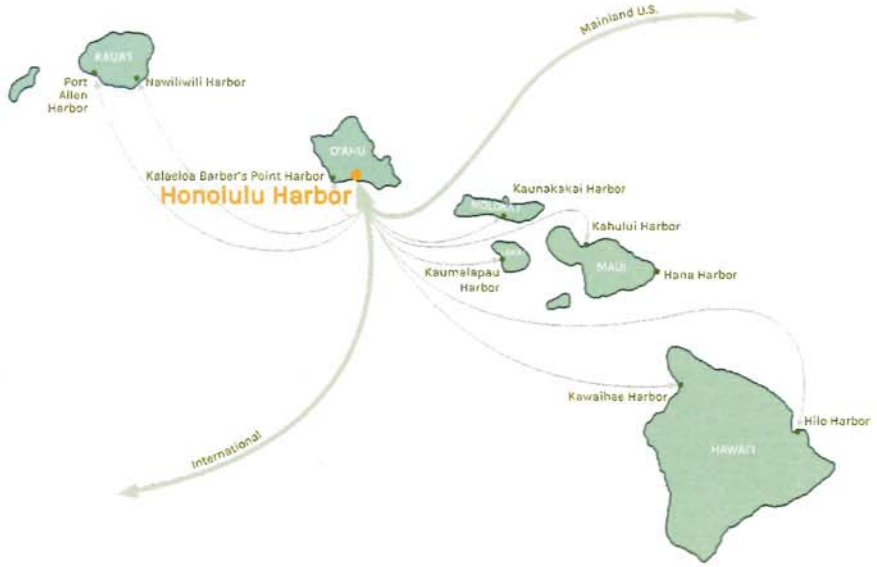
July 18, 2018; 8:00 to 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

Time	Activity	Speaker
7:30 – 8:00	**Part 1: Open House / Registration**	
8:00 – 8:30	**Part 2: Welcome and Introductions**	
5 min	Welcome	Linda Colburn
5 min	Oli	Leighton Tseu
	Introductions: DOT and Project Team	Linda Colburn
6 min	DOT Opening Remarks and Introduce DOT Team	Darrell Young
5 min	Introduce RMTC and Consultant Team	David Tanoue
4 min	Meeting Purpose and Agenda	Linda Colburn
5 min	MeetingSift Tutorial and Practice Questions	Linda Colburn
8:30 – 9:30	**Part 3: Presentation**	
10 min	Harbor Project Programming	David Tanoue
10 min	Master Plan Overview (Purpose, DOT-H Mission, Goals, Evaluation Criteria , Process, Principles and Schedule)	Jim Niermann Linda Colburn
10 min	User Survey Initial Responses (SMS)	Daniel Nahoopii
10 min	Cargo Capacity (Stantec)	Harold Westerman
20 min	Sub-TAC Overview	Jim Niermann Linda Colburn
9:30 – 10:00	**Part 4: Open House / Sub-TAC Sign-up**	
30 min	Sub-TAC Sign-up Stations	Project Team
10:00 – 10:50	**Part 5: Q & A**	
5 min	Recap Outcomes from Sub-TAC Sign-up	Linda Colburn
45 min	Facilitated Q&A	Linda Colburn
10:50 – 10:55	**Part 6: Closing**	
5 min	Next Steps / Invitation to Sub-TACs	Linda Colburn
	(Optional) Additional Q & A	Linda Colburn

ABOUT THE HONOLULU HARBOR MASTER PLAN UPDATE

Today, Honolulu Harbor annually handles over 12 million tons of cargo, including daily essentials such as food and commercial goods that stock our store shelves, as well as less obvious necessities such as aggregate and other construction materials; jet fuel for private, commercial and military aircraft; automobiles; and equipment and machinery for local industry.

To ensure that the primary port-of-entry into the State is prepared to meet the future needs of our community and of the maritime industry, the Department of Transportation, Harbors Division (DOT-H) has embarked on the *Honolulu Harbor Master Plan Update* (Master Plan), which will update the previous, *Oahu Commercial Harbors 2020 Master Plan* completed in 1997. The Master Plan will serve as a critical tool for the strategic development of Honolulu Harbor in terms of its use, infrastructure improvements, and optimization of the port and its facilities to best serve the future cargo handling, storage and distribution requirements for both overseas and inter-island maritime transportation, as well as non-cargo maritime operations such as fishing, passenger and maritime support services. The Master Plan will consider current requirements and challenges with Honolulu Harbor, as well as anticipated user needs and projections to guide new development and harbor usage over its planning horizon.



Honolulu Harbor is the critical central hub of the State's commercial harbor system.

OUR CLIENT

The Hawai'i Department of Transportation, Harbors Division, and ultimately, the people of the State of Hawai'i.

PLANNING PROCESS

The Master Plan is being developed through a public outreach program involving maritime and non-maritime stakeholders including harbor users, adjacent landowners, government agencies, civic organizations and the public. The Master Plan planning process is anticipated to take 2 years to complete. The planning process will follow three general phases of work:

Phase 1: Research, Data Gathering and Studies
Includes research, studies, field visits, user surveys and questionnaires, consultation with stakeholders and input from industry professionals.

Phase 2: Alternatives Development
Master Plan alternatives will be developed through a series of meetings with stakeholders and the public based on the information, issues and opportunities identified in Phase 1.

Phase 3: Draft and Final Master Plan
Alternatives will be vetted and refined with input from the Technical Advisory Committee (TAC) and Planning Advisory Committee (PAC) and with additional input from the public.

CONTACT INFORMATION

For questions or comments, please contact the Project Managers:

Jim Niermann, R. M. Towill Corporation
(808) 842-1133
jimn@rmtowill.com

Celia Shen, DOT-H
(808) 587-2013
celia.y.shen@hawaii.gov

Dean Watase, DOT-H
(808) 587-1883
dean.watase@hawaii.gov

For more information, visit the website:
www.HonoluluHarborMP.com


HONOLULU HARBOR PLANNING AREA
Kalihi
Kalihi Kai
Kapalama Terminal
Iwilei
Ke'ehi Lagoon
Chinatown
Sand Island Terminal
Downtown Business District
Kaka'ako
Fort Armstrong Terminal
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Future 43
Future 42
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51C
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Honolulu Harbor Master Plan Update

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1

July 18, 2018; 8:00 – 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

Technical Advisory Sub-Committees (Sub-TACs) – General Overview

Eight Sub-TAC working groups will provide focused technical input on various aspects of Honolulu Harbor, including cargo operations, vessel operations, maritime support, adaptation and resiliency, cruise and excursion operations, environment, fishing industry, and non-maritime opportunities. Sub-TACs will help identify existing and future conditions, issues and opportunities regarding infrastructure, operations and other aspects of Honolulu Harbor and will help evaluate various conceptual ideas for harbor improvements. The input provided by the Sub-TACs will be used by the project planning team to formulate preliminary alternatives for the *Honolulu Harbor Master Plan Update*.

1. Cargo Operations

   Identify existing and future conditions, issues, needs, opportunities and recommendations to improve terminal infrastructure and operations for autos, RO-RO (roll-on roll-off), neo-bulk, LCL (less-than-container load), dry bulk, project cargos, and liquid bulk / fuel operations.

   Preliminary issues identified include:
   - Cargo terminal operational efficiency and needs
   - Auto piers dispersed throughout the harbor cause operational inefficiencies and liability issues
   - New vessels sizes / requirements (Neo-Panamax)
   - Space constraints in cargo areas
   - Automation / cargo handling technological advances
   - Labor coordination and related spatial needs and operational layouts
   - Scheduling / berth assignments
   - Lack of adequate weigh station coverage and operational hours at major cargo terminals
   - Pier and apron structural integrity
   - Location and strength of mooring bollards
   - Phasing of pier improvements
   - Congestion on adjacent public streets
   - Cargo inspection / port security

   Suggested ideas to address identified issues:

- Develop dedicated piers for autos / RO-RO (e.g., at Piers 1-2A, Piers 19-20, Piers 31-33)
- Develop auto storage/processing (Pier 60)
- Improve piers for mixed-cargo operations (e.g., at Piers 1-2A, Piers 19-20, Pier 29, Piers 31-33)
- Create more flexible pier and yard space (i.e., clear, open yards) (e.g., Piers 19-20, Pier 29, Piers 31-33, Sand Island)
- Develop more layberths at strategic locations (e.g., 53C)
- Develop mixed-use, multi-level structures with high-cube ground level, flat decks for auto storage/light industrial/office in upper floors (e.g., along Nimitz Highway at Piers 19-38)
- Develop strategically placed parking structures to accommodate staff of harbor operators; minimize the use of surface parking lots that eat up precious yard and operational space (e.g., Sand Island, along Libby Street, Piers 24-29 area)
- Develop individual weigh stations at major container terminals
- Develop adequate off-street truck queuing lanes
- Develop a separate area in cargo yard(s) to isolate international cargo for inspection
- Remove non-essential structures to improve yard utilization

2. Vessel Operations

Identify existing and future conditions, issues, needs, opportunities and recommendations to improve navigation, berthing, safety and security.

Preliminary issues identified include:

- Need for additional/enhanced navigational aids
- Need for consistent maintenance dredging / high spots
- Vessel scheduling / lack of berthing
- Safety and port / terminal security
- Larger size vessels (Neo-Panamax) in harbor channel
- Location and strength of mooring bollards
- Bunkering activities
- Vessel operations / activities that affect navigation and safety in the harbor
- Need fire protection service capabilities

Suggested ideas to address identified issues:

- Install range dayboards / lights for vessels transiting Kapalama Channel
- Widen Kapalama Channel by 50 to 75 feet
- Widen Honolulu Harbor entrance channel
- Deepen Honolulu Harbor basin and pier-side draft
- Increase scheduled maintenance dredging, particularly in chronically problem areas (e.g., Piers 15-16, Piers 19-20, Piers 23-25, Pier 38)

- Reevaluate a second harbor entrance at Kalihi Channel
- Provide shoreside power electrical connections for cold ironing
- Consolidate fishing fleet
- Develop additional layberths (e.g., Pier 12, Pier 53 C, Piers 38-39A, the Tyco Pier at Sand Island)
- Use tugboats equipped with firefighting pumps and nozzles as fire protection services
- Provide ability to connect to the municipal sewer system to pump black/gray water

3. Maritime Support

Identify existing and future conditions, issues, needs, opportunities and recommendations for maritime support services.

Preliminary issues identified include:

- Berthing and pier facility assignments are unpredictable and inequitable
- Long-time maritime support service operators in the harbor lack permanent or secure home locations.
- Storage is limited and land for storage is costly in Honolulu Harbor
- Pier utilities and infrastructure is inadequate

Suggested ideas to address identified issues:

- Consolidate similar uses / operations (e.g., Pier 21 or Pier 28 for tug operations)
- Relocate Foss Tugs from Pier 21 to Piers 39-40 to be closer to Young Bros operations
- Consolidate facilities and provide permanent home for maritime support operators (ship agents, tug operators, ship repair, marine construction)
    - Develop multi-tenant office/administrative buildings with shared common areas (e.g., conference/meeting rooms)
- Consolidate fishing fleet and repurpose Piers 16 to 18 for tug and workboat berthing
- Develop more landside storage areas for maritime operations (e.g., at Sand Island)
- Consider land swapping portion of KIPA (triangular parcel near La Mariana) with DLNR land that is better located to support maritime activities
- Extend utilities and infrastructure to support waterside operations (e.g., Pier 25-29)
- Relocate ship building / repair to Kalaeloa

4. Adaptation and Resiliency

Identify existing and future conditions, issues, needs, opportunities and recommendations for improvements to infrastructure and operations in order to prepare and adapt to climate change and recover from natural disasters.

Preliminary issues identified include:

- Port adaptation to sea-level rise due to climate change
- Operational resiliency
- Disaster / Emergency response
- Port reconstitution following an emergency
- Increased intensity in rainfall events and related flooding will increase siltation, sedimentation and debris in harbor
- Rising water table will release petroleum contamination present in groundwater
- Connectivity with other transportation modes
- Funding strategies and prioritization for costly infrastructure adaptations (e.g., raising piers and roads, emergency power systems) over time

Suggested ideas to address identified issues:

- Develop Piers 1-2 as primary emergency staging area
- Develop Piers 19-20 as secondary emergency staging area
- Reevaluate a second harbor entrance at Kalihi Channel
- Consider adaptation strategies (e.g., raising piers and internal roads, developing an independent electrical power plant for harbor operations) and/or managed retreat (e.g., relocate essential facilities and infrastructure inland)
- Coordinate with DOT-Highways to identify key roadways and bridges for connection to intermodal ground transportation
- Integrate with federal, state and county agencies for post-event debris cleanup from waterways and roadways
- Coordinate with county agencies to eliminate or intercept sources of sediment and debris conveyed to the harbor in stream flows
- Develop sediment and debris catchment systems at stream channel outlets into the harbor
- Develop plans and capacity for post-event pollutant discharge response

5. Cruise and Excursion Operations

Identify existing and future conditions, issues, needs, opportunities and recommendations to improve maritime and landside infrastructure and operations in order to accommodate emerging trends and future demands in the cruise industry and associated services.

Preliminary issues identified include:

- Inadequate berths and moorings for cruise ships that call in Honolulu Harbor
- No breasting bollards in Honolulu Harbor
- Risk of large cruise ships with large sail area grounding in Honolulu Harbor entrance channel due to wind drift
- Need alternate terminal(s)-berth(s) to accommodate overflow / unscheduled calls by cruise ships (e.g. if sea conditions prevent calls at other islands)
- Inadequate / inefficient terminal service capabilities to accommodate ship turns and resupply (e.g., staging areas for baggage and supplies, ground transportation, sewer discharge, passenger support services)
- On cruise days, the number of taxis exceeds the designated taxi queue area and creates congestion at Pier 2.
- Inadequate accommodations for anticipated increases in vessel size / passenger count and related needs (port infrastructure, supplies, hotels, ground and air transportation)
- Need for statewide integration of cruise ship ports with air and ground transportation
- Adapting to changing cruise market and its related needs
- Security

Suggested ideas to address identified issues:

- Develop alternate / overflow cruise facilities at Piers 19 & 20, possibly for smaller, “niche” cruise ships
- Develop Honolulu Harbor as a “turn port” for repositioning and re-storing Asia-Pacific cruises
- Install breasting bollards
- Widen and deepen the entrance channel to accommodate larger cruise ships and minimize risk of grounding due to “wind drift”
- Integrate cruise facilities with non-maritime development concepts
- Develop pedestrian connectivity (e.g., promenade) and features to improve authentic visitor experience
    - Develop pedestrian promenade from Pier 2 to Aloha Tower
    - Any development should be designed for local community, as well as for visitors so that there will be activity when cruise ships aren’t in port
    - Develop a maritime museum or other activities close to the cruise terminal for passengers that don’t want to wander far from the harbor
    - Development should recognize Hawaiian history and culture; use authentic place names, opportunity to educate visitors
- Improve traffic circulation and capacity to support cruise terminal activities
    - Consider land swaps to facilitate reconfiguring roadways and traffic flow to improve circulation, operational efficiencies (passenger staging, ship provisioning, etc.), and parking capacity around the Pier 2 area

- Develop cruise terminal that allows debark and embark separately and simultaneously

6. Environment

Identify existing environmental and health regulations that will inform the development of alternatives for all Sub-TACs. Identify existing and future conditions, issues, needs, opportunities and recommendations to meet biosecurity needs and to improve and protect environmental conditions in the harbor.

Preliminary issues identified include:

- Compliance with biosecurity mandates (e.g., invasive species, hull fouling, ballast water)
- Need for increased biosecurity inspection and associated cost impacts to operators and consumers
- Compliance with environmental regulations
- Protected species and habitat in industrial commercial harbor
- Hazardous substances, waste and petroleum contamination in groundwater, soils and aged structures
- Water quality and pollutant sources
- Need for expanded and secure containment zones

Suggested ideas to address identified issues:

- Provide space for the Department of Land and Natural Resources Ballast Water & Hull Fouling program to accommodate pilot studies and long-term presence at the harbor
- Provide flex space within select cargo terminals to conduct invasive species inspection and treatment services
- Develop joint / shared use inspection and treatment facilities at each major cargo terminal, including a snake barrier facility

7. Fishing Industry

Identify existing and future conditions, issues, needs, opportunities and recommendations to improve safety, security and operational efficiencies for the

Preliminary issues identified include:

- Insufficient shoreside support services to support the commercial fishing fleet
- Foreign crew on commercial fishing vessels are unable to leave boats and access basic landside amenities for hygiene, health and respite
- Interface with public at Pier 38 (public access area)
- Mistreatment of fishing crew members (human rights)

Suggested ideas to address identified issues:

- Consolidate fishing fleet at Piers 36-38 or other suitable location
- Extend Pier 36 to the federal project line to accommodate more fishing vessels (e.g., relocation of fishing vessels from Piers 16-18)
- Develop landside amenities for the commercial fishing fleet, such as respite centers and comfort stations
- Outsource fishing marina operations / management
- Provide space and develop infrastructure to accommodate fishing industry support services (e.g., supplies, outfitting, maintenance and repairs)
- Develop non-maritime opportunities in proximity to fishing fleet, explore opportunities to develop commercial uses mauka to Nimitz Highway

8. Non-Maritime Opportunities

Identify appropriate location(s) for non-maritime opportunities. Develop recommendations for enhancing and improving the public interface with Honolulu Harbor to support culture / history, education, multi-modal transportation, and revenue diversification.

Preliminary issues identified include:

- Identify appropriate locations for non-maritime land development
- Need to diversify revenue sources to control maritime fees/tariffs that support maritime uses
- Lack of knowledge and public awareness of cultural and historical resources in the harbor
- Public demand for access to the waterfront
- Potential for conflicts with maritime uses
- Use of limited (finite) lands under DOT-H jurisdiction for non-maritime uses
- Safety of general public in industrial maritime environment
- Security of port operations

Suggested ideas to address identified issues:

- Relocate DOT-H personnel to the Department of Health building at Channel Street, Pier 2 and repurpose the vacated Pier 11 DOT-H admin building for commercial/office use
- Relocated the cruise passenger terminal from Pier 11 to Pier 10 to reestablish the relationship between Aloha Tower and arriving cruise passengers, redevelop Pier 11 for commercial use (e.g., San Francisco's Ferry Terminal)
- Develop conference center on 2nd floor of Pier 10
- Develop a promenade from Walker Park ('Ewa of Topa Tower) to Aloha Tower to help connect Downtown to the waterfront.
- Convert Irwin Park from a park/parking lot to a passive park

- Coordinate with HECO regarding their plans for downtown power station
- Expand Piers 5 and 6 seaward (i.e., replace the dolphins and revetment with a proper pier) to create more pier space for excursion vessels and land area for development
- Redevelop the Piers 5 and 6 peninsula area for higher use (e.g., hotel, commercial, other)
    - Hotel could provide accommodations for cruise passengers before/after their cruise
    - Parking structure would replace existing on-site parking and the parking lot by redeveloping Irwin Park into open/park space
    - Parking structure could also include condominiumized storage
    - Open bottom level to provide space for bus staging for excursion and dinner cruises
- Develop structured parking landside of the Piers 5 and 6 area
- Develop pedestrian connectivity between the Pier 2 Cruise Terminal and Aloha Tower Marketplace and improve visitor experience in the area (concepts include South Shore Promenade and the Lei of Parks)
- Develop mixed-use/parking structures with a pedestrian bridge at the entrance to Pier 2, along Ala Moana Blvd
- Consider land swaps to improve operational efficiencies around the Pier 2 area (e.g., USCG Pier 4 to facilitate promenade from Pier 2 to Aloha Tower Market Place, GSA parcel to facilitate reconfiguring road access and ground transportation for cruise operations)
- Coordinate with the City to take advantage of the harbor's proximity to TOD (e.g., relationship to Iwilei redevelopment)
- Integrate harbor improvements with rail stations at Chinatown and Downtown
- Coordinate with HPU regarding their plans for their Aloha Tower Marketplace campus
- Develop mixed-use, multi-level structures with high-cube ground level, flat deck for auto storage/light industrial/office in upper floors (Along Nimitz Highway at Piers 19-38)
- Utilize concept of land banking; i.e., allowing temporary non-maritime development on underutilized lands to generate revenue until such time as those lands are needed for maritime use
- Develop strategically placed parking structures to accommodate staff of harbor operators; minimize the use of surface parking lots that eat up precious yard and operational space
    - Help relieve parking congestion on nearby streets
- Develop cultural and educational programming, including partnerships with HART, HTA, OHA and others to increase awareness of the harbor's function and its significance to State

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1

General Comment Form

July 18, 2018; 8:00 to 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

Name:

_____

Mailing Address:

_____

City, State, Zip Code:

_____

Email Address:

_____

Comments / Concerns / Suggestions (Please be as detailed as possible):

James Niermann, Planning Project Coordinator
R. M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, HI 96819

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1

MeetingSift Instructions

July 18, 2018; 8:00 – 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

1. Open internet browser on your smart phone e.g. Chrome, Safari, etc.
2. Enter in the web address: sift.ly
3. Enter participant code: *See the PowerPoint Presentation for the participant code.*
4. (Optional) If you want to receive a copy of the questionnaire results, enter your email. Otherwise, skip this step by clicking 'Enter'.
5. You are now ready to participate!

Note: All responses will be anonymous, regardless if you enter your email.

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1

MeetingSift Questions

July 18, 2018; 8:00 – 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

For attendees without a smartphone, please fill in your responses below:

1. How many years have you worked around the Honolulu Harbor?

2. After seeing the mission, goals, and evaluation criteria, please enter any comments or suggestions?

3. Any comments or questions on these survey results or forecasts?

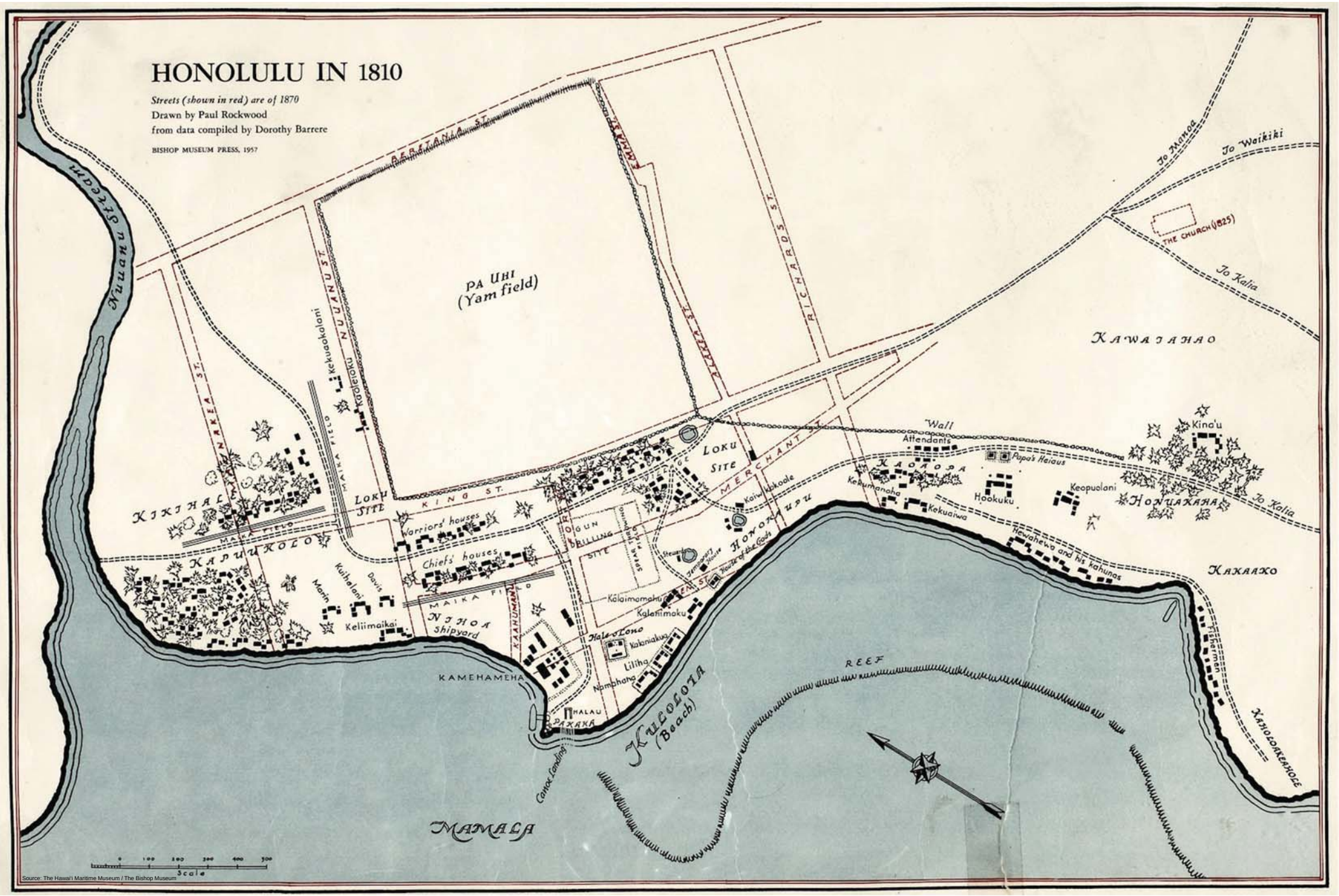
4. Any comments or questions on cargo capacity?

5. What questions or comments do you have re: Sub-TAC categories?

6. What else do you want us to know or consider?

Appendix 7

Exhibits




Kalihi
Kalihi Kai
Kapalama Terminal
Iwilei
Ke'ehi Lagoon
Chinatown
Sand Island Terminal
Downtown Business District
Kaka'ako
Fort Armstrong Terminal
Mamala Bay
60
41
40
39
38
37
36
35
Future 43
Future 42
51A
51B
51C
52
34
33
32
53
31
30
29
28
27
26
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13/14
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2
1
DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION
HONOLULU HARBOR MASTER PLAN UPDATE

KALAELOA BARBERS POINT HARBOR MODERNIZATION

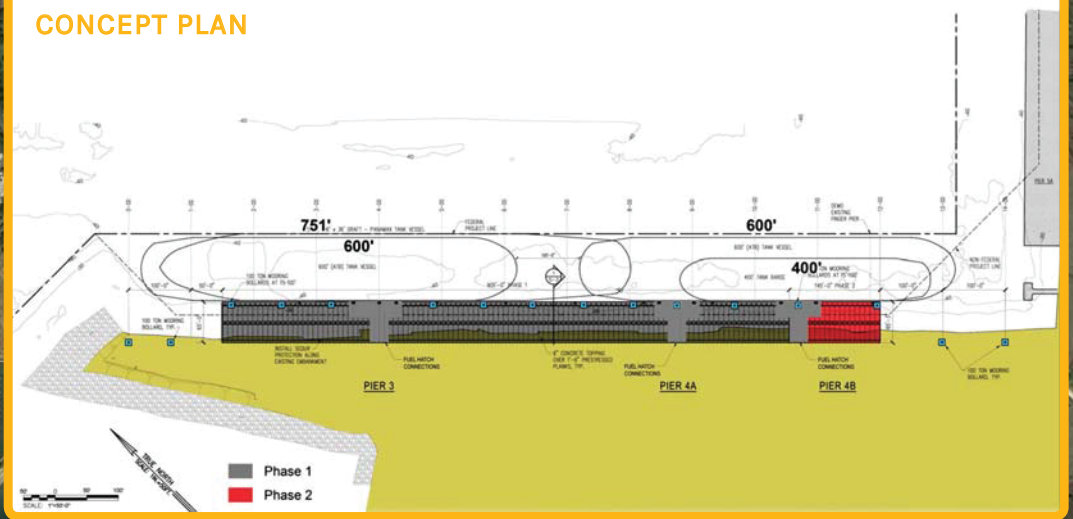
Piers 3 and 4 will be modernized to accommodate various types of fuel vessels and associated products to serve the state's energy needs.

STATUS
Scoping design.

ESTIMATED COST
$60 million

LOCATION
Piers 3 and 4
Kalaeloa Barbers Point Harbor

CONCEPT PLAN



DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

HILO HARBOR MODERNIZATION

Pier 4 Interisland Cargo Terminal modernization includes yard, wharf, access road and dredging.

STATUS
Substantially completed in December 2017.

CONSTRUCTION COST
$65,000,000

LOCATION
Pier 4
Hilo Harbor

DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

HONOLULU HARBOR MODERNIZATION

Kapalama Container Terminal (KCT) Phase 1 and Phase 2 includes yard, wharf and dredging.

STATUS - KCT YARD (PHASE 1)
In construction, estimated completion in November 2020.

CONSTRUCTION COST - KCT YARD (PHASE 1)
$163,521,093

STATUS - KCT WHARF & DREDGING (PHASE 2)
In permitting.

ESTIMATED COST - KCT WHARF & DREDGING (PHASE 2)
$200 - 250 million

LOCATION
Kapalama Container Terminal
Honolulu Harbor

DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

HONOLULU HARBOR MODERNIZATION

Piers 12 and 15 modernization improvements.

STATUS
Completed in August 2016.

CONSTRUCTION COST
$11,700,000

LOCATION
Pier 15
Honolulu Harbor

LOCATION
Pier 12
Honolulu Harbor

PIER 15 -
SITE PHOTO OF MODERNIZATION

PIER 12 - SITE PHOTO OF MODERNIZATION

DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

Appendix 8

TAC #1 Presentation

Welcome

Honolulu Harbor Master Plan Update

Technical Advisory Committee Meeting #1

July 18, 2018

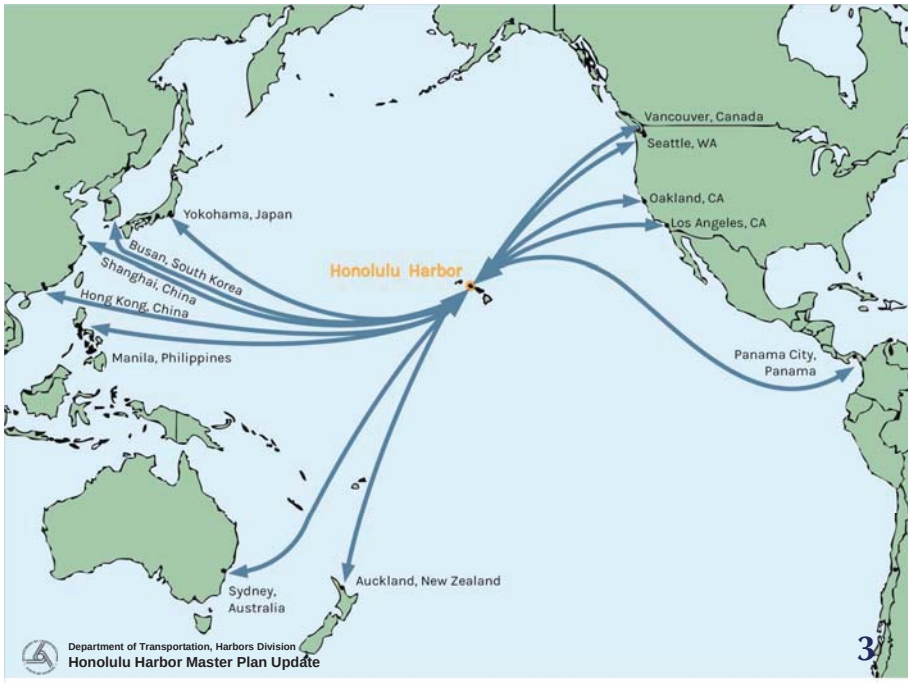
Department of Transportation
Harbors Division

Homer Maxey Conference Center
521 Ala Moana Blvd.
Honolulu, HI 96813

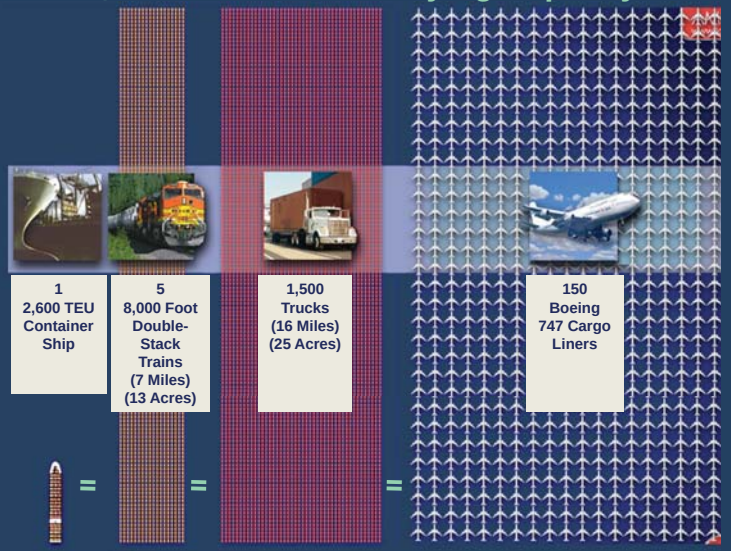
Introductions

Department of Transportation Administration

- Darrell Young, Deputy Director for Harbors
- Davis Yogi, Harbors Administrator
- Edwin Sniffen, Deputy Director for Highways



2,600 TEU Vessel Carrying Capacity



Introductions

Project Team: DOT-Harbors

- Carter Luke, Engineering Program Manager
- Arnold Liu, Planning Engineer
- Dean Watase, Project Manager for Non-Maritime
- Celia Shen, Project Manager for Maritime
- Mike Dichner, Statistician
- Sandra Rossetter, Planner

Introductions

Project Team: R. M. Towill Corporation

- David Tanoue, Project Principal
- Jim Niermann, Project Manager for Maritime
- Laura Mau, Project Manager for Non-Maritime
- Michele Leong, Planner
- Roxanne Lee, Planner

Introductions

Project Team: Specialist Subconsultants

- Linda Colburn, Where Talk Works
- William Anonsen, The Maritime Group
- Harold Westerman, Stantec Consulting, Ltd.
- Faith Rex, SMS
- Daniel Nahoopii, SMS
- Jim Dannemiller, SMS
- Kimi Yuen, PBR Hawai‘i
- Jeff Seastrom, PBR Hawai‘i

Housekeeping

- Registration
- Restrooms
- Pier 2 parking closes at noon
- Slide reference #

Purpose of Today's Meeting

- Collect input from stakeholders who have direct experience with the harbor and harbor operations.
- Set up Sub-TACs and identify issues and ideas.
- Provide information about the Master Plan – its Purpose, Goals, Process, Schedule and Evaluation Criteria.

Agenda

Presentation
- Harbor Project Programming
- Master Plan Overview
- Preliminary Analyses
- Sub-TAC Overview

Open-House: Sub-TAC Sign-up

Q&A Session

Closing

Participate Anonymously with MeetingSift

1. **Open internet browser on your smart phone e.g. Chrome, Safari, etc.**
2. **Enter in the web address: http://sift.ly**
3. **Enter participant code: XXXX**

   Email optional -- If you want to receive a copy of the questionnaire results, enter your email. Otherwise, skip this step by clicking 'Enter'.

   You are now ready to participate!

MeetingSift Question 1

How many years have you worked around the Honolulu Harbor?

Harbor Project Programming

Source: Hawai'i State Archives Digital Collection

Where Projects Come From

- **Input from Harbor Users to District**
- **Input from Harbors Administration**
- **Engineering and District annual meeting**
- **Facility conditions assessments by Engineering**
- **Master Plans**

DISTRICT

- Day-to-Day Maintenance and Repair

MAINTENANCE PROJECTS

- Maintain Existing Facility
- No Expansion
- Requires Engineering
- Annual Budget ($15 M)

CIP PROJECTS

- Relatively permanent, non-recurring improvements for long-term use/possession
- New construction, expansion/major renovation of existing facilities, land acquisition
- Legislative Approval

Where does the MP fit in?

- Long-range, comprehensive road map for the harbor
- Guided by Harbors Mission Statement, core goals and data
- Identifies future needs and opportunities
- Anticipates outside influences on harbor facilities and operations
- Establishes defensible basis for making decisions and allocating funds
- Identifies projects, their sequencing and phasing
- Projects identified in the MP are placed in a queue for prioritization as a Special Maintenance or CIP project

The Master Plan is one of many ways to make a project happen.

Honolulu Harbor Master Plan Overview

Purpose of the Master Plan
Harbors Mission Statement
Goals of the Master Plan
Evaluation Criteria
Planning Process
Planning Principles
Schedule

Source: Hawai'i State Archives Digital Collection

Purpose of the Master Plan

To ensure that Honolulu Harbor, the State of Hawaii's primary port-of-entry, is prepared to meet the future needs of the maritime industry and of our community.

Harbors Mission Statement

Supports DOT-H's Mission

To effectively improve and manage a commercial harbors system that facilitates safe and efficient operations of commercial cargo, passenger, fishing, and other commercial maritime-related services and support activities within the State of Hawaii and which serves to sustain and enhance the State's economic prosperity and quality of life.

Goals of the Master Plan

- Identify current and meet future maritime needs
- Optimize use of the Harbor's finite land resources
- Balance stakeholders' competing needs and interests
- Ensure resiliency in the face of natural and human-made disasters, and climate change
- Consider emerging technologies and trends
- Consider public access and waterfront development opportunities in select locations

Source: Star Compass, Polynesian Voyaging Society

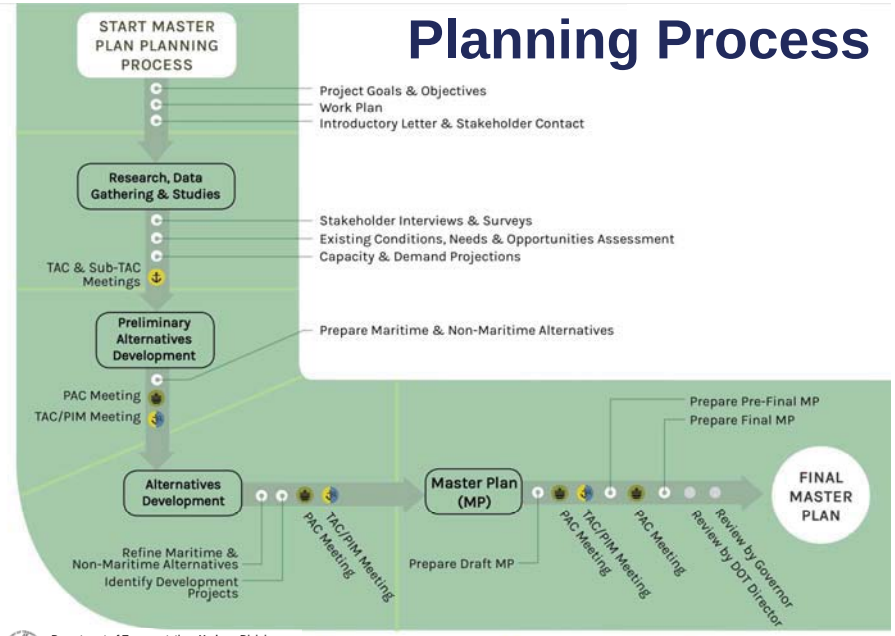
Evaluation Criteria

- To what extent does it align with the Master Plan Goals?
- To what extent is it economically reasonable and feasible, and beneficial to the Harbor and the State?
- To what extent is the project needed and does it improve harbor function?
- To what extent does it benefit or adversely impact the environment?

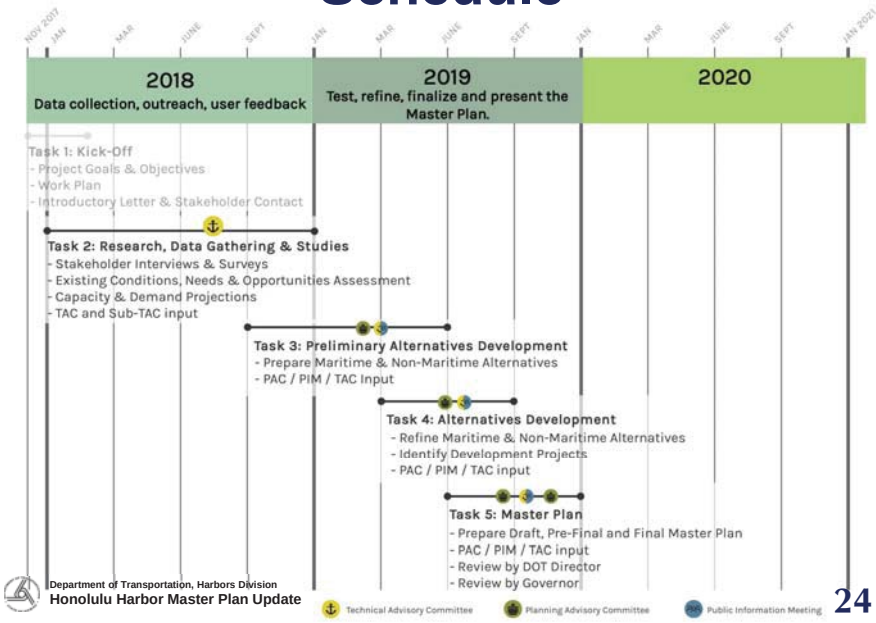
MeetingSift Question 2

After seeing the Mission, Goals, and Evaluation Criteria, please enter any comments or suggestions.

Planning Process



Schedule



Planning Process Principles

- Transparent
- Equitable
- Data-Driven
- Supports Harbors' Mission Statement

Preliminary Analyses

1. **User Survey Initial Responses (SMS)**
2. **Cargo Capacity (Stantec)**
3. **Sub-TAC Overview (RMTC)**

Source: Hawai'i State Archives Digital Collection

User Survey Initial Responses

SMS Research & Marketing Services

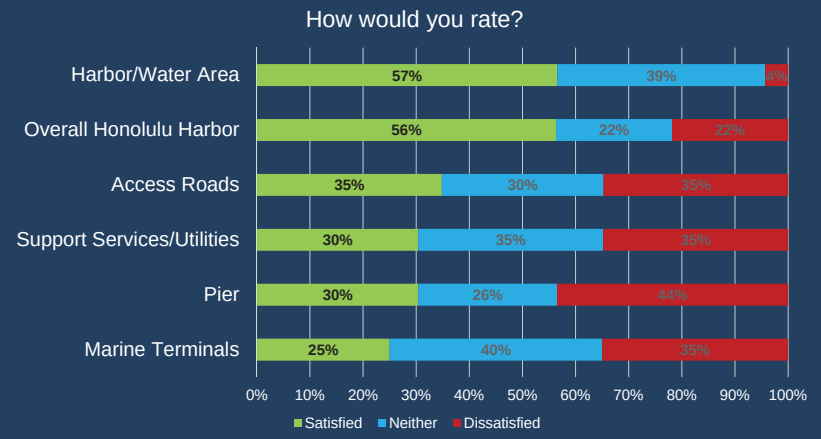
SMS Role

- Conduct the Harbor Users Survey
- Forecast cargo and passenger flow through Honolulu Harbor
  - Becomes the basis for long-range planning
- Assess the economic value of Harbors.

Methodology

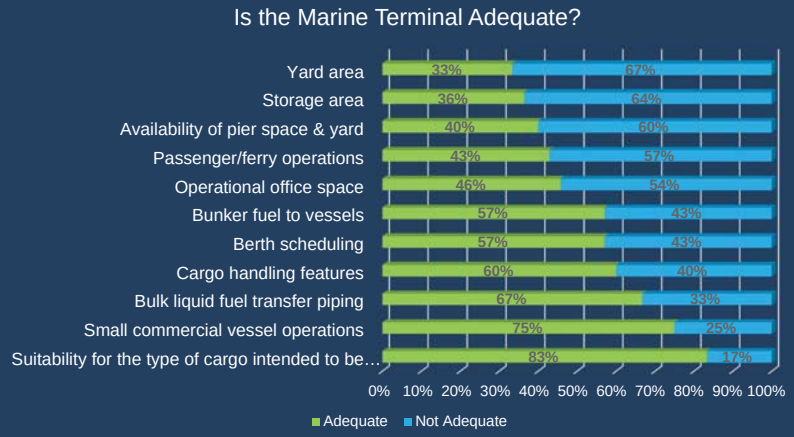
- Surveys were sent to 60 stakeholders.
- The following graphs are the aggregated responses from completed surveys.
  - Cargo (9), Passenger (3), Agent (1), Ship Repair (2), Fishing (1), General Harbor Users (12)
- We encourage the non-respondents to complete a survey as soon as possible.
  - Let us know if you would like us to send you another email with the survey link.

Satisfaction Rating



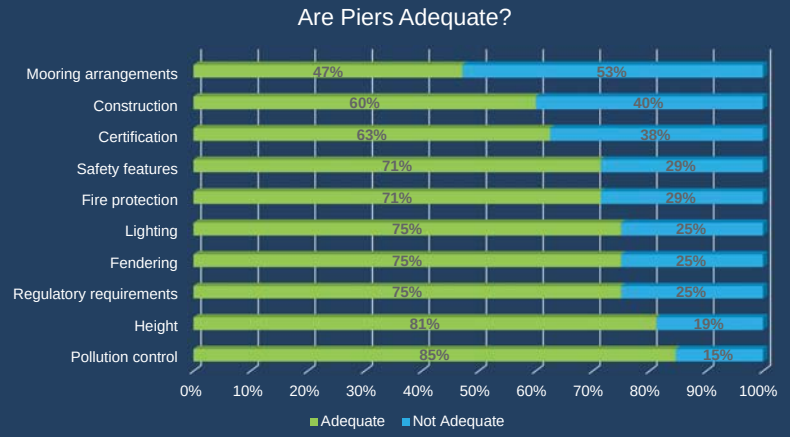
Marine Terminal

In general need more space, in the yard, storage, office space for future volumes.



Piers

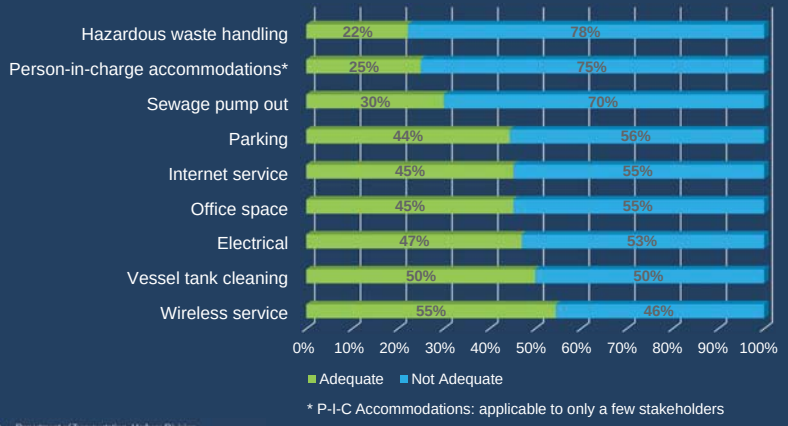
Insufficient number of bollards. Weak pier structure impacts operations.



Support Services/Utilities

Greatest improvement needed in hazardous waste handling. Also better sewage pump out.

Are Support Services/Utilities Adequate?

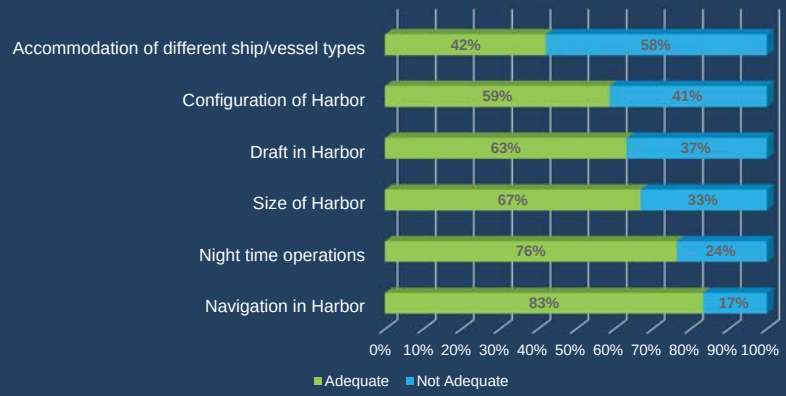


* P-I-C Accommodations: applicable to only a few stakeholders

Harbor / Water Areas

Greatest concerns – ability to accommodate larger draft vessels - requires more channel space and more space for land-side operations. Configure a second opening or channel.

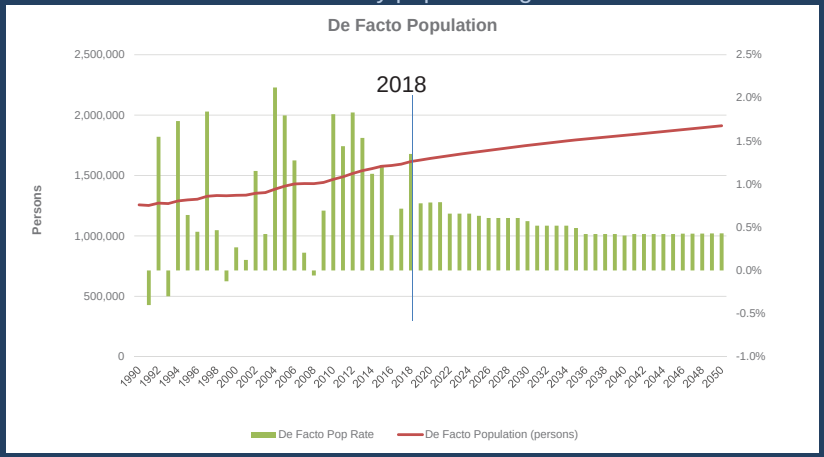
Are Harbor/Water Areas Adequate?



FORECAST

Long-Range Forecast for the State

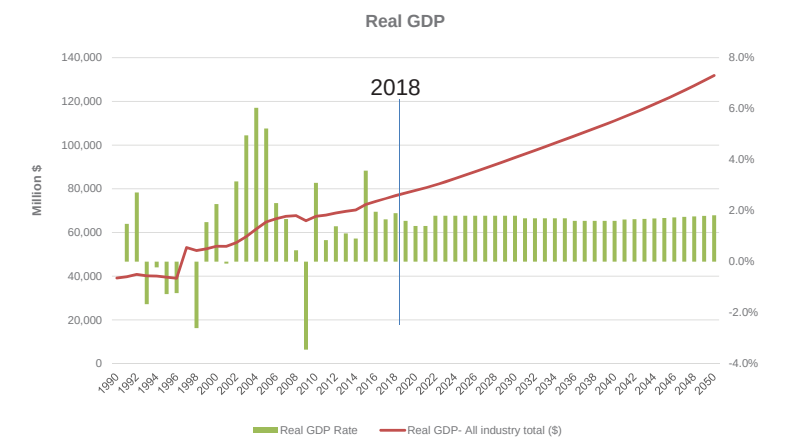
Slower steady population growth



Source: Hawai'i State Databook 1990-2016, DBEDT ACTUAL AND FORECAST OF KEY ECONOMIC INDICATORS FOR HAWAII: 2016 TO 2021, and long range forecast to 2045 from 2022 and on, SMS Research Estimates

Long-Range Forecast for the State

Stronger, accelerating GDP growth



Source: Hawai'i State Databook 1990-2016, DBEDT ACTUAL AND FORECAST OF KEY ECONOMIC INDICATORS FOR HAWAII: 2016 TO 2021, and long range forecast to 2045 from 2022 and on, SMS Research Estimates

MeetingSift Question #3

Any comments or questions on these survey results or forecasts?

Cargo Capacity

Stantec Consulting Ltd.

Stantec's Role

- Evaluate existing port capacity
  - (containers, LCL, RO/RO, autos, break bulk, liquid bulk)
- Determine future capacity demand based on economic forecast by SMS
- Identify opportunities
- Develop alternatives to meet future capacity demand

Cargo/Passenger Capacity Analysis

Primary Sectors to be Examined

- Containers
- LCL's/General Merchandise
- Break-Bulk (Livestock, Lumber, Scrap, etc.)
- Autos & Trucks
- Refined Petroleum Products (Bunker, Gasoline, Jet Fuel, Diesel, Fuel Oil, LPG, etc.)
- Cruise Passengers
- Dry Bulk (Agri., Aggregates, etc.)

2016 Annual Throughputs

Cargo/ Pax Type	Measurement	2016 Throughput	5 Year Change
Containers	TEU	1,212,000	+13%
Autos and Trucks	Unit	213,000	+102%
Refined Petroleum	BBL	7,013,000	+14%
Agri Products	Ton	42,832	-6%
Aggregates	Ton	174,414	+0.3%
General Merchandise	Ton	382,807	-21%
Lumber	MBM	39,895	+115%
Cruise Passengers	Person	407,000	-10%
Livestock	Head	1603	+200%

Berths - Yards – Gates Analysis

The Three Major Terminal Components will be Examined

DATA DRIVEN PROCESS THROUGH SIMULATION MODELLING

- Data comes from you – the users and operators !

- Data and Simulation Inputs Reflect:
  - Physical Characteristics (Space, Stacking, Equipment, etc.)
  - Productivity Levels (Labor, etc.)
  - Market Conditions (Seasons, Stowage, etc.)

Operational Base Plans

Berth Capacity

Berth capacity is primarily a function of:

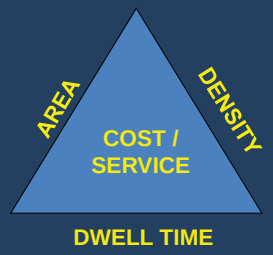
- Available berths and wharf length
- Available/maximum berth occupancy
- Discharge and load rate – amount of labor, equipment (cranes, ramps, ships gear, gangways, etc.) and productivity
- Seasonal fluctuations/peaks

Yard Capacity
Area – Density – Dwell Time

The Three Elements of Yard Capacity

- Static Capacity = Area x Density
- Throughput Capacity = Static Capacity / Dwell Time
- The Modifying Elements
  - Cost
  - Service

Interrelated & Inseparable



Gate Capacity

The capacity of a gate, where used, is primarily a function of:

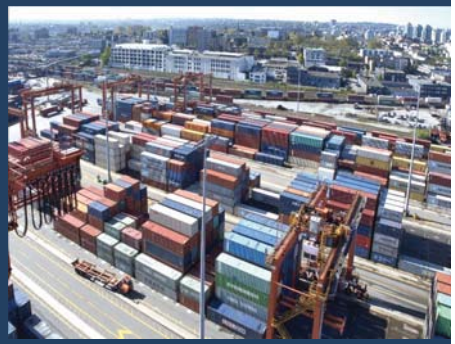
- Opening hours
- Number of lanes
- Staging capacity
- Process rate per truck
- Seasonal and daily peaks and arrivals

- Must correlate number of trucks to facility throughput.

Performance Measurement

We will compare capacity to other ports.

- For example,
  - TEUs/acre of storage
  - Lifts/hour
  - Tons per foot of wharf
  - Trucks/hour/lane
  - Autos/acre/year



Next Steps

- Estimate cargo/pax capacity for each sector – harbor total and by Pier.
- Review existing capacities with users and operators.
- Finalize existing harbor cargo/pax capacities.

MeetingSift Question #4

Any comments or questions on cargo capacity?

Sub-TACs

Purpose
Sub-TAC Categories
Issues & Ideas
Sign-Up

Source: Hawai'i State Archives Digital Collection

Sub-TAC Purpose

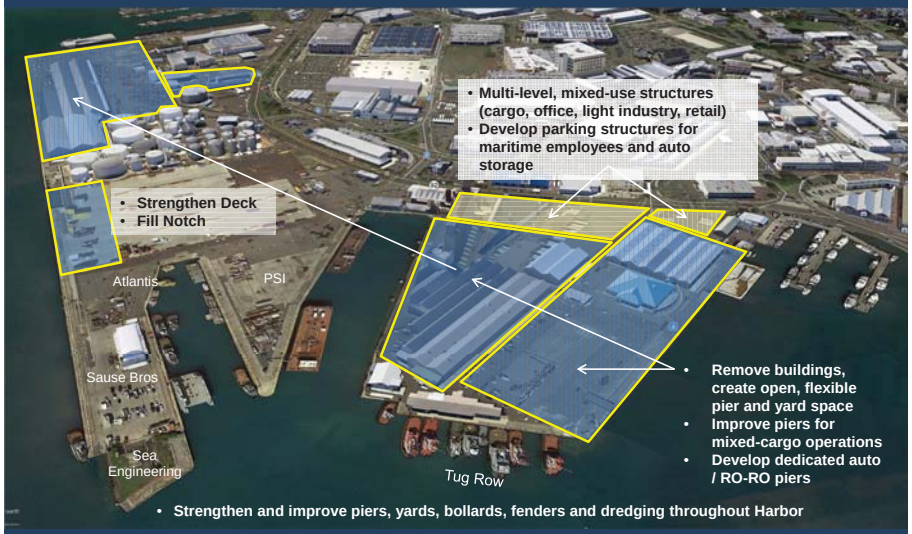
- Provide focused technical input on various aspects of Honolulu Harbor and stakeholder input.
- Identify existing and future conditions, issues and suggested ideas.
- Input will be used to formulate preliminary alternatives for the master plan.

Sub-TAC Categories

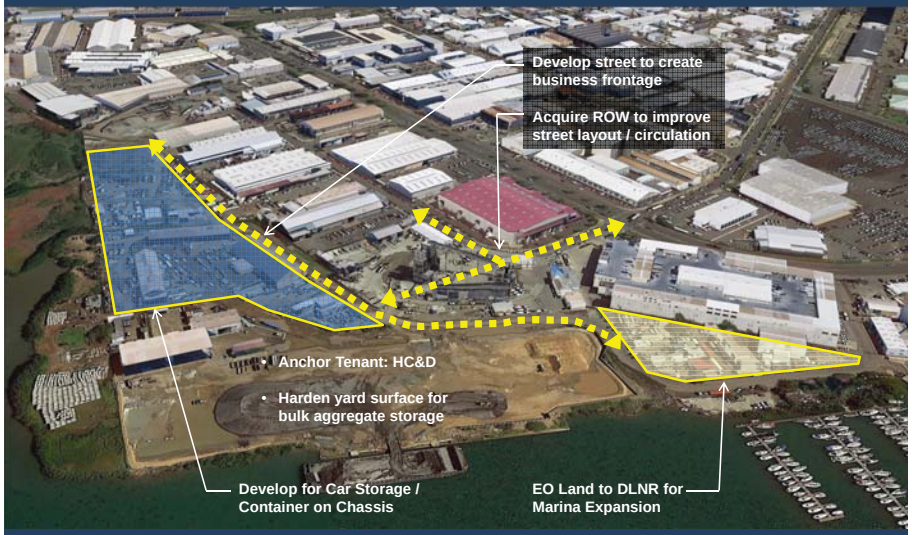
1. Cargo Operations
2. Vessel Operations
3. Maritime Support
4. Cruise and Excursion Operations
5. Fishing Industry
6. Adaptation and Resiliency
7. Environment
8. Non-Maritime Opportunities

Selected Ideas For Sub-TAC Consideration

Cargo Operations



Cargo Operations

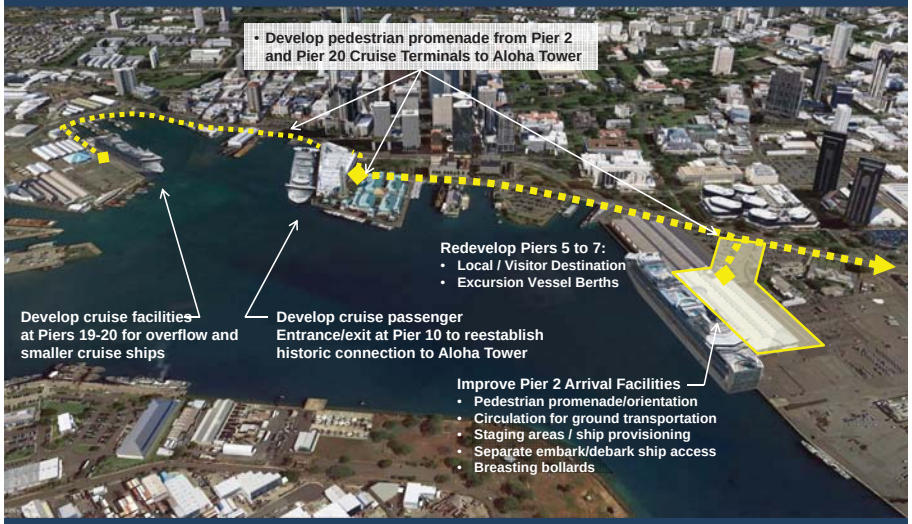


Cargo Operations

Vessel Operations

Maritime Support

Cruise and Excursion

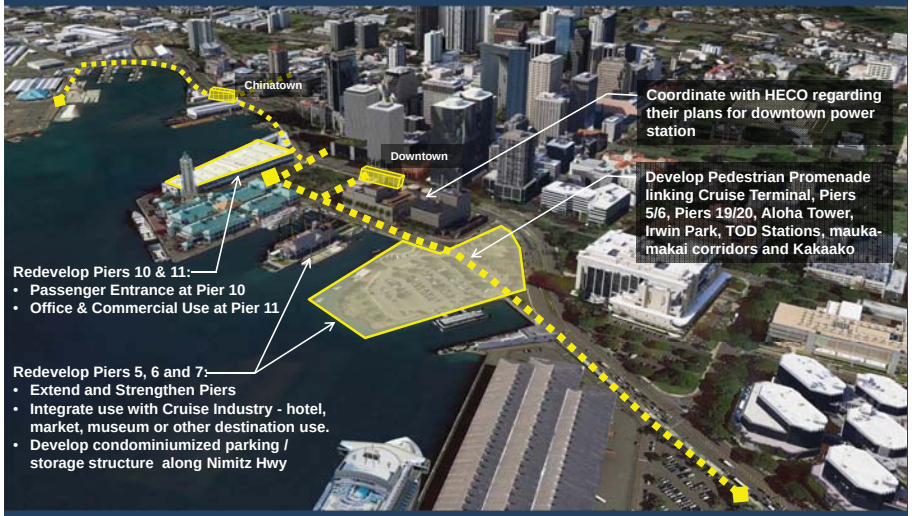


Fishing Industry

Adaptation and Resiliency

Environment

Non-Maritime Opportunities



Participation in Sub-TACs

- Provide technical expertise
- Prepare for and attend meetings as able
- Focus on issues and solutions relevant to the project
- Select Sub-TAC representative for the PAC

Sub-TAC Meeting Recap

1. Cargo Operations
2. Vessel Operations
3. Maritime Support
4. Cruise and Excursion Operations
5. Fishing Industry
6. Adaptation and Resiliency
7. Environment
8. Non-Maritime Opportunities

Source: Hawai'i State Archives Digital Collection

MeetingSift Question #5

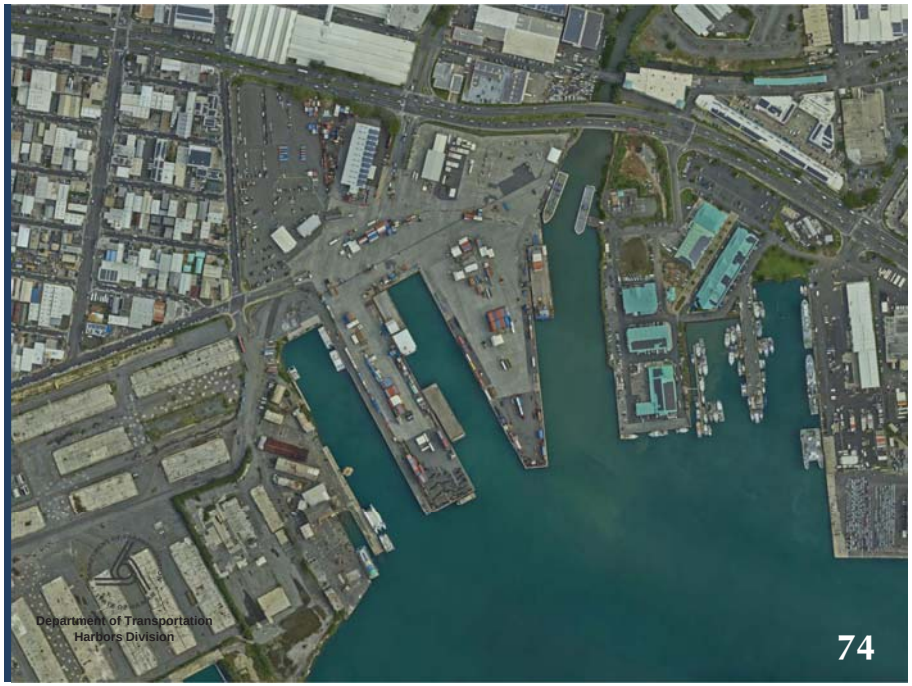
What questions or comments do you have re: subTAC categories?

MeetingSift Question #6

What else do you want us to know or consider?

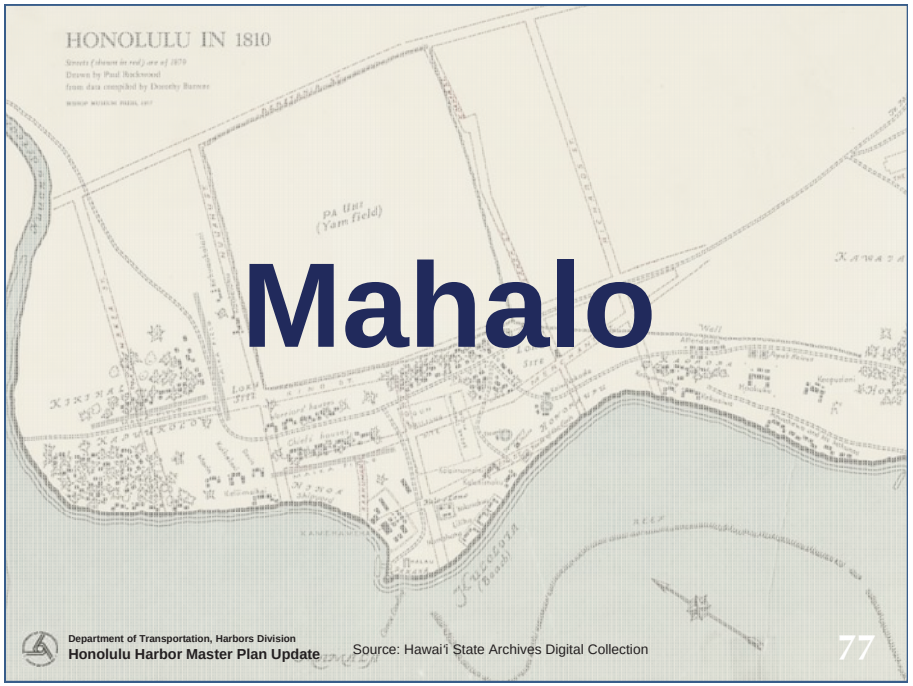
Q&A


Kalihi
Kalihi Kai
Kapalama Terminal
Iwilei
Ke'ehi Lagoon
Chinatown
Sand Island Terminal
Downtown Business District
Kaka'ako
Fort Armstrong Terminal
Mamala Bay
HONOLULU HARBOR MASTER PLAN UPDATE



Next Steps

- Sub-TAC Meetings – September to November
- Preliminary Alternatives Development
- PAC meeting – 1st quarter 2019
- TAC/PIM – 1st quarter 2019



Mahalo

Source: Hawai'i State Archives Digital Collection

Appendix 9

TAC #1 Presentation Outline

PRESENTATION OUTLINE

Technical Advisory Committee Meeting #1

Honolulu Harbor 2050 Master Plan

July 18, 2018; 8:00 to 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

Time	Activity	Speaker
7:30 – 8:00	**Part 1: Open House / Registration**	
8:00 – 8:30	**Part 2: Welcome and Introductions**	
5 min	Welcome	Linda Colburn
5 min	Oli	Leighton Tseu
	Introductions: DOT and Project Team	Linda Colburn
6 min	DOT Opening Remarks and Introduce DOT Team	Darrell Young
5 min	Introduce RMTC Team	David Tanoue
4 min	Meeting Purpose and Agenda	Linda Colburn
5 min	MeetingSift Tutorial and Practice Questions	Linda Colburn
8:30 – 9:30	**Part 3: Presentation**	
10 min	Harbor Project Programming	David Tanoue
10 min	Master Plan Overview (Purpose, DOT-H Mission, Goals, Evaluation Criteria , Process, Principles and Schedule)	David Tanoue Jim Niermann Linda Colburn
10 min	User Survey Initial Responses (SMS)	Daniel Nahoopii
10 min	Cargo Capacity (Stantec)	Harold Westerman
20 min	Sub-TAC Overview	David Tanoue Jim Niermann Linda Colburn
9:30 – 10:00	**Part 4: Open House / Sub-TAC Sign-up / Meeting Sift**	
30 min	Sub-TAC Sign-up Stations	Project Team
10:00 – 10:50	**Part 5: Comments / Q & A**	
5 min	Recap outcomes from Sub-TAC sign-up	Linda Colburn
45 min	Facilitated Q&A	Linda Colburn
10:50 – 10:55	**Part 6: Closing**	
5 min	Next Steps / Invitation to Sub-TACs	Linda Colburn
	(Optional) Additional Q & A	Linda Colburn

FULL OUTLINE

Minutes	Activity	Speaker
7:30-8:00	**PART 1: OPEN HOUSE / REGISTRATION**	
	• Exhibits on easels • Slideshow • Participant Packets	
8:00-8:30	**PART 2: WELCOME AND INTRODUCTIONS**	
	Welcome	
	• Welcome and thank you for attending • Introduce Leighton Tseu who will open our meeting with an oli.	Linda Colburn
	Oli	Leighton Tseu
	Introductions and Opening Remarks	
	• Introduce DOT-H Administrator Darrell Young	Linda Colburn
	Opening Remarks Introduce DOT Administration • Davis Yogi, Harbors Administrator • Edwin Sniffen, Deputy Director for Highways	Darrell Young
	Introduce DOT-H Project Team • Carter Luke, Engineering Program Manager • Arnold Liu, Planning Engineer • Dean Watase, Project Manager for Non-Maritime • Celia Shen, Project Manager for Maritime • Mike Dichner, Statistician • Sandra Rossetter, Planner	Darrell Young
	Introduce RMTC Project Team and Subconsultants • Jim Niermann, Project Manager for Maritime • Laura Mau, Project Manager for Non-Maritime • Michele Leong, Planner • Roxanne Lee, Planner • Linda Colburn, Where Talk Works • Bill Anonsen, The Maritime Group • Harold Westermann, Stantec • Faith Rex, SMS • Daniel Nahoopii, SMS • Jim Dannemiller, SMS • Kimi Yuen, PBR Hawaii • Jeff Seastrom, PBR Hawaii	David Tanoue

	Housekeeping: • Registration / Sign-in • Restroom location (follow directional signs) • We must be out of the Pier 2 parking by noon. • Slide Reference #'s. Please hold your questions to the Q&A session at the end of the presentation.	Linda Colburn
	TAC Meeting Purpose / Desired Outcomes The purpose of the Technical Advisory Committee (TAC) is to: • Collect input from stakeholders who have direct experience with the harbor and harbor operations. o This is your opportunity to identify projects • Set up Sub-TACs and identify issues and ideas. • Provide information about the Master Plan – its Purpose, Goals, Process, Schedule and Evaluation Criteria.	Linda Colburn
	Agenda • **Presentation** o Harbor Project Programming o Master Plan Overview o Preliminary Findings o Sub-TAC Overview • **Open-House: Sub-TAC Sign-up** • **Q&A Session** • **Closing**	Linda Colburn
	Participate Anonymously with Meeting Sift If you can send a text message, you can use MeetingSift. • Open internet browser on your smart phone e.g. Chrome, Safari, etc. • Enter in the web address: http://sift.ly • Enter participant code: XXXX • Email optional -- If you want to receive a copy of the questionnaire results, enter your email. Otherwise, skip this step by clicking 'Enter'. • You are now ready to participate!	Linda Colburn
	Meeting Sift Question No. 1 • How many years have you worked around the Honolulu Harbor?	Linda Colburn
8:30-9:30	**PART 3: PRESENTATIONS**	
	HARBOR PROJECT PROGRAMMING	
	Where Projects Come From Before getting into the Master Planning process, we want to clarify the ways that DOT-H makes projects happen in the harbor, and how the Master Plan fits into those	David Tanoue

	programs. Harbor projects originate in a variety of ways: • Input from Harbor Users to District • Input from Harbors Administration • Engineering and District annual meeting • Facility conditions assessments by Engineering • Master Plans **Project recommendations get directed into one of Harbors' Project Programs:** **1. District** • Day-to-Day Maintenance and Repair Typical O&M projects include painting, light bulb replacement, window repair, plumbing **2. Maintenance Projects** • Maintain Existing Facility • No Expansion • Requires Engineering • Annual Budget ($15 M) Typical Special Maintenance projects include pier repair, repaving yards, roof repairs, LED lighting retrofit, maintenance dredging, utility repairs **3. CIP Projects** • Relatively permanent, non-recurring improvements for long-term use/possession • New construction, expansion/major renovation of existing facilities, land acquisition • Legislative Approval Typical CIP projects have a 6-year look-ahead and include land acquisition, major upgrades to pier facilities, new buildings and structures, utility expansion	
	Where does the MP fit in? • Long-range, comprehensive road map for the harbor • Guided by Harbors Mission Statement, core goals and data • Identifies future needs and opportunities o increased capacity demand tied to population and economic growth o climate change/sea level rise and related impacts o emerging technologies, • Anticipates outside influences on harbor facilities and operations o TOD redevelopment in Iwilei, o TOD Stations Downtown & Chinatown	David Tanoue

	o Kakaako Development • Establishes defensible basis for making decisions and allocating funds • Identifies projects, their sequencing and phasing o This is a key area for stakeholder input – your opportunity to identify projects for consideration. o The MP will identify near-term, mid-term and long-term projects. o Near-term projects don't have to wait for the MP to be completed. DOT-H can pursue them independently. • **Projects identified in the MP are placed in a queue for prioritization as a Special Maintenance or CIP project** The Master Plan is just one of many ways that DOT-H makes a project happen in the harbor. The Master Plan doesn't prevent projects being promoted or progressing as a Special Project or as a CIP project.	
	HHMP OVERVIEW	
	Purpose of the Master Plan The purpose of the Master Plan is: "To ensure that Honolulu Harbor, the State of Hawaii's primary port-of-entry, is prepared to meet the future needs of the maritime industry and of our community." That's the high-level statement. On the ground, this translates to projects. The MP will identify near, mid and long-term projects to ensure we have the facilities and funding mechanisms to support maritime operations.	David Tanoue
	DOT-H Mission Statement: The Master Plan priority is on the maritime users: cargo, fishing, passenger and maritime support services, as guided by DOT-H's Mission Statement: *To effectively improve and manage a commercial harbors system that facilitates safe and efficient operations of commercial cargo, passenger, fishing, and other commercial maritime-related services and support activities within the State of Hawaii and which serves to sustain and enhance the State's economic prosperity and quality of life.* We have to keep the Harbors mandate at the front of our thinking as we work on the project.	David Tanoue
	Goals of the Master Plan The goals of the master plan serve as compass points to guide the master planning work, to keep the focus on	

	what's important and ensure the outcomes align with DOT-H's mission.
	• Meet current and future maritime needs
	  o This ties us back to DOT-H's Mission Statement.
	• Optimize use of the Harbor's finite land resources
	  o If the capacity demand forecasts warrant it, we'll also look at possible areas for expansion, such as at Sand Island or Kalihi Kai.
	• Balance stakeholders' competing needs and interests
	  o Many interests/uses are mutually exclusive, so we have to look at the overall benefits to the State and balance the recommendations so that all stakeholders' interests are give fair and reasonable consideration.
	• Ensure resiliency in the face of natural and human-made disasters, and climate change
	  o Resiliency and adaptation strategies will be a consideration in all of the Sub-TAC categories and in the recommendations.
	• Consider emerging technologies and trends
	  o Such as sea drones, improvements in fishing technology, advances in information systems in operations management, and industry trends such as a move toward larger ships.
	• Consider public access and waterfront development opportunities in select locations
	  o There is strong public demand for waterfront access, and increasing development pressure from Kaka'ako, TOD stations and Iwilei that the harbor needs to plan for.	

	Evaluation Criteria This is the fundamental criteria that will be used by DOT-H to review and select master plan alternatives. The EC ties back to the Harbors Division mission statement and master plan goals: • To what extent does it align with the HHMP Goals? • To what extent is it economically reasonable and feasible? – Can we afford it? • To what extent do the costs justify the benefit to the Harbor and the State? - Do we need it? • To what extent does it improve harbor function? • To what extent does it benefit or adversely impact	Jim Niermann

	the environment? These are practical, common sense criteria to ensure the decision makers are doing basic due diligence on recommendations for the MP.	
	Meeting Sift Question No. 2 • After seeing the Mission, Goals, and Evaluation Criteria, please enter any comments or suggestions.	Linda Colburn
	Planning Process • Review the planning process flow chart. The MP planning process is iterative and relies heavily on the technical expertise of the harbor users. • Technical Advisory Committee (TAC) Meeting o This is the only stand-alone TAC meeting. After this, we have the Sub-TAC meetings through the Fall 2018 to focus on specific Harbor issues. All of the remaining TAC meetings will be held together with three planned Public Information Meetings. • Sub-TAC Meetings o Issue-specific meetings for focused discussion by technical experts. These meetings will be held from September to November this year. o 8 categories identified based on input received to date through stakeholder interviews and surveys – discussed below. o Encourage today's attendees to sign up. • Planning Advisory Committee (PAC) o Higher-level review of MP recommendations. o Participants include DOT-H Administration. o One representative from each Sub-TAC will be on the PAC, so the Sub-TAC's are an opportunity to participate on the PAC. • Public Information Meeting (PIM) o Three PIMs are planned for 2019. They will be conducted jointly as TAC/PIM meetings to obtain input on the proposed MP alternatives. o Input from each TAC/PIM will be used to refine the MP alternatives in an iterative process.	Jim Niermann
	Schedule • We started in January and have been doing research, site visits, information gathering. We're now starting to work on the analysis. The data gathering and outreach will continue through this	Jim Niermann

	year and likely into next. • The objective is to complete the master plan within a 2-year period, by the end of 2019 / beginning of 2020.	
	Planning Process Principles The planning process will be guided by the following principles: • Transparent Planning analysis, alternatives development, evaluation criteria used for decision-making, and the decision-making process will be documented and open to public review. • Equitable PROCESS - Project information and opportunities to participate in the planning process will be accessible to all interested stakeholders and members of the community regardless of race, color, national origin, gender, language, income level, or physical ability. OUTCOMES - Equitable outcomes mean that selected Master Plan alternatives will provide a well-balanced variety of opportunities for harbor users to fairly compete and prosper, and that all stakeholders will be fairly and reasonably included in the Master Plan. • Data-Driven Alternatives development and recommendations will rely on unbiased, quantifiable outcomes-based data derived from a systematic assessment involving cargo capacity analysis, market forecast, demand projections and a technical assessment of harbor needs. • Supports Harbors' Mission Statement	Jim Niermann
	PRELIMINARY FINDINGS Introduce presentations by the following: • User Survey Initial Responses (SMS) • Cargo Capacity (Stantec) • Sub-TAC Overview (RMTC)	Linda Colburn
	User Survey Initial Responses • SMS's Role o Conduct the Harbor Users Survey o Forecast cargo and passenger flow through Honolulu Harbor	SMS Daniel Nahoopii

	▪ Becomes the basis for long-range planning o Assess the economic value of Harbors. • Methodology o Surveys were sent to 60 stakeholders. o The following graphs are the aggregated responses from completed surveys. ▪ Cargo (9), Passenger (3), Agent (1), Ship Repair (2), Fishing (1), General Harbor Users (12) o We encourage the non-respondents to complete a survey as soon as possible. ▪ Let us know if you would like us to send you another email with the survey link. • Satisfaction Rating o Marine Terminal o Piers o Support Services/Utilities o Harbor/Water Areas • Population and GDP forecast	
	Meeting Sift Question No. 3 • Any comments or questions on these survey results or forecasts?	Linda Colburn
	Cargo Capacity Initial Findings • Stantec's Role o Evaluate existing port capacity ▪ (containers, LCL, RO/RO, autos, break bulk, liquid bulk) o Determine future capacity demand based on economic forecast by SMS o Identify opportunities o Develop alternatives to meet future capacity demand • Primary Sectors to be Examined o Containers o LCL's/General Merchandise o Break-Bulk (Livestock, Lumber, Scrap, etc.) o Autos & Trucks o Refined Petroleum Products (Bunker, Gasoline, Jet Fuel, Diesel, Fuel Oil, LPG, etc.) o Cruise Passengers o Dry Bulk (Agri., Aggregates, etc.) • 2016 Annual Throughput • Berths – Yards – Gates Analysis	Stantec Harold Westermann

- Data-driven process through simulation modelling
  - Data comes from you – the users and operators !
  - Data and Simulation Inputs Reflect:
    - Physical Characteristics (Space, Stacking, Equipment, etc.)
    - Productivity Levels (Labor, etc.)
    - Market Conditions (Seasons, Stowage, etc.)
- Berth Capacity is primarily a function of:
  - Available berths and wharf length
  - Available/maximum berth occupancy
  - Discharge and load rate – amount of labor, equipment (cranes, ramps, ships gear, gangways, etc.) and productivity
  - Seasonal fluctuations/peaks
- Yard Capacity is comprised of three elements Area – Density – Dwell Time:
  - Static Capacity = Area x Density
  - Throughput Capacity = Static Capacity / Dwell Time
  - The Modifying Elements
    - Cost
    - Service
- Gate capacity is primarily a function of:
  - Opening hours
  - Number of lanes
  - Staging capacity
  - Process rate per truck
  - Seasonal and daily peaks and arrivals
  - Must correlate number of trucks to facility throughput
- Performance Measurement - We will compare capacity to other ports:
  - TEUs/acre of storage
  - Lifts/hour
  - Tons per foot of wharf
  - Trucks/hour/lane
  - Autos/acre/year
- Next steps:
  - Estimate cargo/pax capacity for each sector – harbor total and by Pier.
  - Review existing capacities with users and operators.
  - Finalize existing harbor cargo/pax capacities.

	Meeting Sift Question No. 4 • Any comments or questions on cargo capacity?	Linda Colburn
	SUB-TACS	
	Purpose • Provide focused technical input on various aspects of Honolulu Harbor. This is Users' opportunity to provide input on harbor facilities and operations, as well as provide input/response to concepts and ideas proposed by others. • Identify existing and future conditions, issues, needs and opportunities. • Input provided by the Sub-TACs will be used by the project planning team to formulate preliminary alternatives for the master plan.	Jim Niermann
	Sub-TAC Categories Based on the input we received so far and background research, we identified the following Sub-TAC categories for focused, technical attention in the follow-up meetings. Descriptions of the Sub-TAC categories are included in your handout and are on the posters around the room. They include: 1. Cargo Operations *container terminal infrastructure and operations for autos, RO-RO, neo-bulk, LCL, dry bulk, project cargos, and liquid bulk / fuel operations.* 2. Vessel Operations *navigation, berthing and offshore anchorages, and safety and security.* 3. Maritime Support Ship maintenance repair and building, marine salvage, spill response, piloting, tugs, fueling, provisioning, waste disposal, storage, emergency response. 4. Cruise and Excursion Operations *maritime and landside infrastructure and operations in order to accommodate emerging trends and future demands in the cruise industry and associated services.* 5. Fishing Industry *safety, security and operational efficiencies for the commercial fishing fleet and associated services* 6. Adaptation and Resiliency *improvements to infrastructure and operations in order to anticipate, adapt and recover from natural*	Jim Niermann

	disasters and climate change. 7. Environment *biosecurity needs and to improve and protect environmental conditions in the harbor.* 8. Non-Maritime Opportunities *recommendations for enhancing and improving the public interface with Honolulu Harbor to support culture / history, education, multi-modal transportation, and revenue diversification* • Meeting schedules for each of the Sub-TAC's are in your meeting handout and on the posters around the room. • Meetings are scheduled from September through November	
	Select Ideas for Sub-TAC Consideration • The following presentation is a sampling of issues and ideas that we heard from our interviews and the user surveys and data requests. It's not a complete list. • These are all preliminary concepts that will be evaluated through the planning process. • This is just a sample of some of the key ideas/issues we heard from you. Your handouts and the posters on the walls have a more complete list of the issues and ideas we heard from all of you. • This meeting is another opportunity to identify issues and ideas for the Master Plan. Please write other ideas/issues down on the post-its and stick them on one of the sub-TAC posters during the open house.	Jim Niermann
	Cargo Operations – Slide Notes: • Autos, ro-ro, neo-bulk, LCL, dry bulk, project cargos, and liquid bulk / fuel operations • We heard from a lot of users the need for flexible, mixed-use Pier space, and from quite a few that developing Pier 19/20 for dedicated auto/RO-RO is a good idea. Basically, clearing the structures and strengthening an open yard area. • A concept that Admin is considering is to develop multi-story mixed-use structures adjacent to Nimitz hwy. These structures would be designed to accommodate cargo operations as well as auto storage, and office space for maritime operators. • Pier 60 – Operate as a barge terminal, but this is challenging from a navigation and safety standpoint.	Jim Niermann

	Conflicts with moored vessels in the channel, particularly during kona wind conditions. • Pier 60 auto storage can provide reserve and surge capacity that could free up the main pier areas. • KCT Harbor Modernizing – Pasha's new home in 2025. • Sand Island – Matson yard operations, and cargo yard expansion area following completion of KCT.	
	Vessel Operations – Slide Note: • Widen channels to accommodate neo-Panamax ships. • Minimize navigational conflicts and constraints in the harbor. • Combination of near, mid and long-term ideas.	Jim Niermann
	Maritime Support – Slide Notes: • A general theme is to consolidate maritime support sectors in dedicated areas: ship repair, "tug row", joint-use/redevelopment at end of Pier 28. • McCabe building is in good shape – keep it for current use • Develop joint-use buildings for maritime support office and storage. • Stevedore training should be located near the cargo yards, such as at current location at KCT. In the future, new, more advanced gantry cranes will require more advanced training that might be appropriate in a classroom setting/ • Remove silos and expand the area for ship repair by PSI/Honolulu Marine/others.	Jim Niermann
	Cruise and Excursion • Main ideas: o Improve terminal facilities for staging, transportation and passenger convenience and interest o Accommodate additional berthing space and related facilities for cruise ships o Consider Hawai'i's market position in future industry trend toward larger cruise ships • We recognize that some of these ideas are mutually exclusive. For example, developing Pier 19/20 as a cruise terminal constrains the piers' use for multi-use cargo or auto/RO-RO. • These ideas will look very similar to the so-called non-maritime opportunities ideas that we'll discuss in a minute.	Jim Niermann

	Fishing Industry – Slide Notes: • Develop additional berths and consolidate fishing fleet at Pier 38 • Layberths at Pier 38 present a navigation obstacle to the Hawai'i Gas Barges (Sause Bros tow) and YB barges (Kirby tow) at 38/39A and 39B • Extending Pier 36 has potential impact on movements in the turning basin. • Crew respite center would provide health and hygiene services and may help address some of the conditions created by the constraints on foreign fishing crew movements. • The landside areas of Pier 36-38 are part of a CPR with a long-term lease that extends beyond the 2050 planning horizon. For the duration of this master plan, those areas will be developed with non-cargo uses (fishing fleet support, fish auction, restaurants, parking structures, and possibly storage/office/retail structure along Nimitz.) • In the long-term, after the CPR lease expires this area could be brought back into use for cargo operations.	Jim Niermann
	Adaptation and Resiliency – Slide Notes: • Issues: o Critical lifeline function of Honolulu Harbor. o Sea level rise impact on pier operations and landside transportation networks. o Increased intensity of storms – surge into the harbor, debris/pollutants in back-surge and from streams. • Anticipate, adapt and recover from natural disasters and climate change. • In addition to these ideas, we also have to look outside of Honolulu Harbor to alternative emergency staging areas in the event that the harbor cannot be used.	Jim Niermann
	Environment – Slide Notes • Focus is on biosecurity needs and to improving and protecting the environmental conditions in the harbor. • Provide facilities for the agencies responsible for protecting the state against biological and man-made hazards – DOA, DLNR, USDA, USFWS and CBP. • Find space for DLNR-DAR Ballast Water and Hull	Jim Niermann

	Fouling Program. • Ground water contains petroleum and other pollutants that will be released as ground water levels rise with SLR. • The MP will identify environmentally sensitive areas of the harbor (corals, sea grass, turtle habitat) and regulatory requirements for projects in the water.	
	Non-Maritime Opportunities – Slide Notes: • "Non-Maritime" means publicly accessible waterfront development that will generate revenues to support maritime uses. • Two areas everyone is familiar with – Pier 38 fishing village and Aloha Tower. • Identify appropriate location(s) for non-maritime opportunities. Develop recommendations for enhancing and improving public interface with Honolulu Harbor to support culture / history, education, multi-modal transportation, and revenue diversification.	Jim Niermann
9:30-10:00	**PART 4: OPEN HOUSE: SUB-TAC MEETING SIGN-UP**	
	Participation in Sub-TACs: • Prepare for and attend each meeting • Provide technical expertise • Maintain a focus on issues and solutions relevant to the project • Select Sub-TAC representative for the PAC	Linda Colburn
	Sub-TAC Meeting Recap 1. Cargo Operations 2. Vessel Operations 3. Maritime Support 4. Cruise and Excursion Operations 5. Fishing Industry 6. Adaptation and Resiliency 7. Environment 8. Non-Maritime Opportunities	
10:00-10:50	**PART 5: Q&A** • Recap Outcomes from Sub-TAC Sign-up • Facilitated Q&A	Linda Colburn
10:50-10:55	**PART 6: CLOSING** • Next Steps / Invitation to Sub-TACs • Optional – Additional Q&A	Linda Colburn

Appendix 10

Sub-TAC Sign-Up and Issues/Ideas

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

SUB-TAC SIGN-UP
CARGO OPERATIONS

Identify existing and future conditions, issues, needs, opportunities and recommendations to improve container terminal infrastructure and operations for autos, RO-RO, neo-bulk, LCL, dry bulk, project cargos, and liquid bulk / fuel operations.

Please either sign-up yourself or your organization with an attendee to be determined at a later date.

	Name	Phone	Email	Organization
1	Gary North			HHLG
2	Glenn Hong			k.com Saltchuk
3	DAVID SILLINK			FTZ
4	TODD ~~HOK~~			ores.com HSI/Pasha
5	Janet Yocum			PEMA
6	Mik Roer			Kirby Offshore
7	John Mihlbauer			com All Ship and Cargo Surveyors
8	ALi WANG			G.GM ONE
9	Lance Tanaka			com Par Hawaii
10	John Kwans			National Cargo Bureau
11	Gareth Sakakida			HI Trans Assn
12	Kelvin Kaku			City & County of Honolulu-DEM
13	LEK FRIEL			com. MATSON
14	Ferdinand ~~A. Jose~~ Jose			CBP
15	Wesley Furtado			ICWA
16	Randy Grune			s.com HSI
17	Scott Heatherly			S.gov CBP
18	Matt Guard			com MHR
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CARGO OPERATIONS

SUB-TAC ISSUES & IDEAS

What are the existing and / or future issues, and ideas for cargo operations?

Use your post-it notes to add issues and/or ideas.

Issues	Ideas
Preliminary issues identified include: • Cargo terminal operational efficiency and needs • Auto piers dispersed throughout the harbor cause operational inefficiencies and liability issues • New vessels sizes / requirements (Neo-Panamax) • Space constraints in cargo areas • Automation / cargo handling technological advances • Labor coordination and related spatial needs and operational layouts • Scheduling / berth assignments • Lack of adequate weigh station coverage and operational hours at major cargo terminals • Pier and apron structural integrity • Location and strength of mooring bollards • Phasing of pier improvements • Congestion on adjacent public streets • Cargo inspection / port security	**Suggested ideas to address identified issues:** • Develop dedicated piers for autos / RO-RO (e.g., at Piers 1-2A, Piers 19-20, Piers 31-33) • Develop auto storage/processing (Pier 60) • Improve piers for mixed-cargo operations (e.g., at Piers 1-2A, Piers 19-20, Pier 29, Piers 31-33) • Create more flexible pier and yard space (i.e., clear, open yards) (e.g., Piers 19-20, Pier 29, Piers 31-33, Sand Island) • Develop more layberths at strategic locations (e.g., 53C) • Develop mixed-use, multi-level structures with high-cube ground level, flat decks for auto storage/light industrial/office in upper floors (e.g., along Nimitz Highway at Piers 19-38) • Develop strategically placed parking structures to accommodate staff of harbor operators; minimize the use of surface parking lots that eat up precious yard and operational space (e.g., Sand Island, along Libby Street, Piers 24-29 area) • Develop individual weigh stations at major container terminals • Develop adequate off-street truck queuing lanes • Develop a separate area in cargo yard(s) to isolate international cargo for inspection • Remove non-essential structures to improve yard utilization

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

SUB-TAC SIGN-UP
VESSEL OPERATIONS

Identify existing and future conditions, issues, needs, opportunities and recommendations to improve navigation, berthing and offshore anchorages, and safety and security.

Please either sign-up yourself or your organization with an attendee to be determined at a later date.

	Name	Phone	Email	Organization
1	Tom Collins			Hawaii R/ots
2	Meghan Statts			v DLNR-DOBOR
3	RYAN HOPKINS			Hawaii Pilots
4	Tim Wentworth			SB
5	Lance Tanaka			m Par Hawaii
6	Julie Edsall			corp.com Kirby
7	MILTON YOSHIMOTO			.army.mil USACE
8	Tom Smith			USACE HONOLULU DIST
9	ALI WANG			G.COM ONE
10	BRAD RIMELL			SAUSE BROS OCEAN TOWING
11	TODD LIDA			HSI/PASHA
12	Ulysses Mullens			.mil USCG-SECTOR HONO
13	Randy Grune			S.com HSI
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VESSEL OPERATIONS

SUB-TAC ISSUES & IDEAS

What are the existing and / or future issues and ideas for vessel operations?

Use your post-it notes to add issues and/or ideas.

Issues	Ideas
Preliminary issues identified include: • Need for additional/enhanced navigational aids • Need for consistent maintenance dredging / high spots • Vessel scheduling / lack of berthing • Safety and port / terminal security • Larger size vessels (Neo-Panamax) in harbor channel • Location and strength of mooring bollards • Bunkering activities • Vessel operations / activities that affect navigation and safety in the harbor • Need fire protection service capabilities	**Suggested ideas to address identified issues:** • Install range dayboards / lights for vessels transiting Kapalama Channel • Widen Kapalama Channel by 50 to 75 feet • Widen Honolulu Harbor entrance channel • Deepen Honolulu Harbor basin and pier-side draft • Increase scheduled maintenance dredging, particularly in chronically problem areas (e.g., Piers 15-16, Piers 19-20, Piers 23-25, Pier 38) • Reevaluate a second harbor entrance at Kalihi Channel • Provide shoreside power electrical connections for cold ironing • Consolidate fishing fleet • Develop additional layberths (e.g., Pier 12, Pier 53 C, Piers 38-39A, the Tyco Pier at Sand Island) • Use tugboats equipped with firefighting pumps and nozzles as fire protection services • Provide ability to connect to the municipal sewer system to pump black/gray water

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

SUB-TAC SIGN-UP
MARITIME SUPPORT

Identify existing and future conditions, issues, needs, opportunities and recommendations for maritime support services.

Please either sign-up yourself or your organization with an attendee to be determined at a later date.

	Name	Phone	Email	Organization
1	Tiff Whitworth			YB
2	Eric Shimabukuro			dhawaii.com HCPD
3	Janet Yocum			ov FEMA
4	Ed Underwood			Hawaii.gov DLNR
5	Andrew Rochelean			aengineering.com
6	Julie Edsall			.com Kirby
7	Lance Tanaka			n Par Hawaii
8	Steve Morita			PLR / PLM
9	Ferdinand Jose			CBP -
10	Randy Grune			s.com HSI
11	Scott Heatherly			hs.gov CBP
12	Jimmy Zane			.com M4R
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MARITIME SUPPORT

SUB-TAC ISSUES & IDEAS

What are the existing and / or future issues and ideas for maritime support?

Use your post-it notes to add issues and/or ideas.

Issues	Ideas
Preliminary issues identified include: • Berthing and pier facility assignments are unpredictable and inequitable • Long-time maritime support service operators in the harbor lack permanent or secure home locations. • Storage is limited and land for storage is costly in Honolulu Harbor • Pier utilities and infrastructure is inadequate	**Suggested ideas to address identified issues:** • Consolidate similar uses / operations (e.g., Pier 21 or Pier 28 for tug operations) • Relocate Foss Tugs from Pier 21 to Piers 39-40 to be closer to Young Bros operations • Consolidate facilities and provide permanent home for maritime support operators (ship agents, tug operators, ship repair, marine construction) o Develop multi-tenant office/administrative buildings with shared common areas (e.g., conference/meeting rooms) • Consolidate fishing fleet and repurpose Piers 16 to 18 for tug and workboat berthing • Develop more landside storage areas for maritime operations (e.g., at Sand Island) • Consider land swapping portion of KIPA (triangular parcel near La Mariana) with DLNR land that is better located to support maritime activities • Extend utilities and infrastructure to support waterside operations (e.g., Pier 25-29) • Relocate ship building / repair to Kalaeloa

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

SUB-TAC SIGN-UP
ADAPTATION AND RESILIENCY

Identify existing and future conditions, issues, needs, opportunities and recommendations for improvements to infrastructure and operations in order to anticipate, adapt and recover from natural disasters and climate change.

Please either sign-up yourself or your organization with an attendee to be determined at a later date.

	Name	Phone	Email	Organization
1	Matthew Gonser			City/County Office of Climate Change, Sust. & Res.
2	David Kennard			Waii.gov HI-EMA
3	Hayley Diamond			UHCDC
4	Robert Harter			City & County of Honolulu Dept. of Emergency Management (DEM)
5	Lance Tanaka			Par Hawaii
6	Janet Yocum			FEMA
7	John Mihlbauer			.com A&S Ship & Cargo Surveys
8	Tom Smith			USACE Honolulu Dist.
9	DEEPAK NEUPANE			HCDA
10	Tiff Whitworth			DB
11	RANDY BARTLETT			DLNR/Hawaii Invasive Species Council
12	TODD LIDA			s.com Intel/PARHA
13	Jeyan Thirugnanam			ai.gov DOT-HWY-PS
14	Gareth Sakakida			HI Trans Assn.
15	Don Palhemus			U.S. Fish + Wildlife Service
16	George Miyamoto			CBP
17	Ulysses Mullins			USCG Sector Honolulu
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ADAPTATION AND RESILIENCY

SUB-TAC ISSUES & IDEAS

What are the existing and / or future issues and ideas for adaptation and resiliency?

Use your post-it notes to add issues and/or ideas.

Issues	Ideas
Preliminary issues identified include: • Port adaptation to sea-level rise due to climate change • Operational resiliency • Disaster / Emergency response • Port reconstitution following an emergency • Increased intensity in rainfall events and related flooding will increase siltation, sedimentation and debris in harbor • Rising water table will release petroleum contamination present in groundwater • Connectivity with other transportation modes • Funding strategies and prioritization for costly infrastructure adaptations (e.g., raising piers and roads, emergency power systems) over time	**Suggested ideas to address identified issues:** • Develop Piers 1-2 as primary emergency staging area • Develop Piers 19-20 as secondary emergency staging area • Reevaluate a second harbor entrance at Kalihi Channel • Consider adaptation strategies (e.g., raising piers and internal roads, developing an independent electrical power plant for harbor operations) and/or managed retreat (e.g., relocate essential facilities and infrastructure inland) • Coordinate with DOT-Highways to identify key roadways and bridges for connection to intermodal ground transportation • Integrate with federal, state and county agencies for post-event debris cleanup from waterways and roadways • Coordinate with county agencies to eliminate or intercept sources of sediment and debris conveyed to the harbor in stream flows • Develop sediment and debris catchment systems at stream channel outlets into the harbor • Develop plans and capacity for post-event pollutant discharge response

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

SUB-TAC SIGN-UP
CRUISE AND EXCURSION OPERATIONS

Identify existing and future conditions, issues, needs, opportunities and recommendations to improve maritime and landside infrastructure and operations in order to accommodate emerging trends and future demands in the cruise industry and associated services.

Please either sign-up yourself or your organization with an attendee to be determined at a later date.

	Name	Phone	Email	Organization
1	DEEPAK NEUPANE			HCDA
2				[redacted]
3	Laci Goshi			HTA
4	Noelle Cole			DPP
5	Barbara Okamoto			HVCB
6	David Sikkink			FTZ
7	RODNEY FUNAKOSHI			DP
8	Charles Toguchi			CLIA
9	HAWAII OCEAN SAFETY TEAM (HOST)			
10	~~Sara~~ Scott Heatherly			CDP
11	Summer Escajeda			TRANSMARINE
12	Ulysses Mullins			USCG Sector Honolulu
13	Randy Grune			HSI
14	Ferdinand JOSE			CBP
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CRUISE AND EXCURSION OPERATIONS

SUB-TAC ISSUES & IDEAS

What are the existing and / or future issues and ideas for cruise and excursion operations?

Use your post-it notes to add issues and/or ideas.

Issues	Ideas

Preliminary issues identified include:
• Inadequate berths and moorings for cruise ships that call in Honolulu Harbor
• No breasting bollards in Honolulu Harbor
• Risk of large cruise ships with large sail area grounding in Honolulu Harbor entrance channel due to wind drift
• Need alternate terminal(s)-berth(s) to accommodate overflow / unscheduled calls by cruise ships (e.g. if sea conditions prevent calls at other islands)
• Inadequate / inefficient terminal service capabilities to accommodate ship turns and resupply (e.g., staging areas for baggage and supplies, ground transportation, sewer discharge, passenger support services)
• On cruise days, the number of taxis exceeds the designated taxi queue area and creates congestion at Pier 2.
• Inadequate accommodations for anticipated increases in vessel size / passenger count and related needs (port infrastructure, supplies, hotels, ground and air transportation)
• Need for statewide integration of cruise ship ports with air and ground transportation
• Adapting to changing cruise market and its related needs
• Security
	Suggested ideas to address identified issues:
	• Develop alternate / overflow cruise facilities at Piers 19 & 20, possibly for smaller, “niche” cruise ships
	• Develop Honolulu Harbor as a “turn port” for repositioning and re-storing Asia-Pacific cruises
	• Install breasting bollards
	• Widen and deepen the entrance channel to accommodate larger cruise ships and minimize risk of grounding due to “wind drift”
	• Integrate cruise facilities with non-maritime development concepts
	• Develop pedestrian connectivity (e.g., promenade) and features to improve authentic visitor experience
	  o Develop pedestrian promenade from Pier 2 to Aloha Tower
	  o Any development should be designed for local community, as well as for visitors so that there will be activity when cruise ships aren’t in port
	  o Develop a maritime museum or other activities close to the cruise terminal for passengers that don’t want to wander far from the harbor
	  o Development should recognize Hawaiian history and culture; use authentic place names, opportunity to educate visitors
	• Improve traffic circulation and capacity to support cruise terminal activities
	  o Consider land swaps to facilitate reconfiguring roadways and traffic flow to improve circulation, operational efficiencies (passenger staging, ship provisioning, etc.), and parking capacity around the Pier 2 area
	• Develop cruise terminal that allows debark and embark separately and simultaneously

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

SUB-TAC SIGN-UP
ENVIRONMENT

Identify existing environmental and health regulations that will inform the development of alternatives for all Sub-TACs. Identify existing and future conditions, issues, needs, opportunities and recommendations to meet biosecurity needs and to improve and protect environmental conditions in the harbor.

Please either sign-up yourself or your organization with an attendee to be determined at a later date.

	Name	Phone	Email	Organization
1	Dan Polhemus			U.S. Fish + Wildlife Service
2	RANDY BARTLETT			HAWAII INVASIVE SPECIES COUNCIL/DLNR
3	JOHN C. KIVANS			NATIONAL CARGO BUREAU
4	Justin Goggins			DLNR / Div. of Aquatic Resources
5	JONATHAN HO			HDOA / PLANT QUARANTINE
6	Jennifer Roth (Keith Swindle, Anthony Palermo)			USFWS - Law Enforcement
7	Joshua Fisher			USFWS - Pacific Islands - Invasive Species
8	TIFF WENTWORTH			SAS
9	Christy Martin			edu Coordinating Group on Aquatic Invasive Species
10	Ulysses Millens			Pacific Islands
11	Charles Toguchi			CWA
12	Jules Kuo			DLNR/DAR
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HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

ENVIRONMENT
SUB-TAC ISSUES & IDEAS

What are the existing and / or future issues and ideas for the environment?

Use your post-it notes to add issues and/or ideas.

Issues	Ideas
iminary issues identified include: Compliance with biosecurity mandates (e.g., invasive species, hull fouling, ballast water) Need for increased biosecurity inspection and associated cost impacts to operators and consumers Compliance with environmental regulations Protected species and habitat in industrial commercial harbor Hazardous substances, waste and petroleum contamination in groundwater, soils and aged structures Water quality and pollutant sources Need for expanded and secure containment zones	**Suggested ideas to address identified issues:** • Provide space for the Department of Land and Natural Resources Ballast Water & Hull Fouling program to accommodate pilot studies and long-term presence at the harbor • Provide flex space within select cargo terminals to conduct invasive species inspection and treatment services • Develop joint / shared use inspection and treatment facilities at each major cargo terminal, including a snake barrier facility - Better design of piers to encourage native species and reduce introduction of invasives (comments to come from DAR)

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

SUB-TAC SIGN-UP
FISHING INDUSTRY

Identify existing and future conditions, issues, needs, opportunities and recommendations to improve safety, security and operational efficiencies for the commercial fishing fleet and associated services.

Please either sign-up yourself or your organization with an attendee to be determined at a later date.

	Name	Phone	Email	Organization
1	SEAN SULLIVAN			CBP
2	Scott Heatherly		.gov	CBP
3	Michael Goto			U.F.A.
4	Wayne Higashi		gency.com	UFA
5	ROSS BARNES			UHMC
6	ULYSSES MULLENS			USCG-SECTOR HONO
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FISHING INDUSTRY

SUB-TAC ISSUES & IDEAS

What are the existing and / or future issues and ideas for the fishing industry?

Use your post-it notes to add issues and/or ideas.

Issues	Ideas
Preliminary issues identified include: • Insufficient shoreside support services to support the commercial fishing fleet • Foreign crew on commercial fishing vessels are unable to leave boats and access basic landside amenities for hygiene, health and respite • Interface with public at Pier 38 (public access area) • Mistreatment of fishing crew members (human rights)	**Suggested ideas to address identified issues:** • Consolidate fishing fleet at Piers 36-38 or other suitable location • Extend Pier 36 to the federal project line to accommodate more fishing vessels (e.g., relocation of fishing vessels from Piers 16-18) • Develop landside amenities for the commercial fishing fleet, such as respite centers and comfort stations • Outsource fishing marina operations / management • Provide space and develop infrastructure to accommodate fishing industry support services (e.g., supplies, outfitting, maintenance and repairs) • Develop non-maritime opportunities in proximity to fishing fleet, explore opportunities to develop commercial uses mauka to Nimitz Highway

HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

SUB-TAC SIGN-UP
NON-MARITIME OPPORTUNITIES

Identify appropriate location(s) for non-maritime opportunities. Develop recommendations for enhancing and improving the public interface with Honolulu Harbor to support culture / history, education, multi-modal transportation, and revenue diversification.

Please either sign-up yourself or your organization with an attendee to be determined at a later date.

	Name	Phone	Email	Organization
1	RODNEY FUNAKOSHI			State Office to Planning
2	Renee Espiau			DPP
3	DEEPAK NEUPANE			HCDA
4	LAGI GOSHI			HTA
5	RYAN TAM			HART
6	Meredith Speicher			NPS
7	Janet Yocum			V FEMA
8	Ruby Edwards			OP
9	Tiff Montworth			YB
10	Wayne Cole			.hi.gov DPP
11	Jeyan Thirugnanam			hawaii.gov DOT-HWY-PS
12	Randy BARTLETT			DLNR/HI INVASIVE SPECIES COUNCIL
13	Russell Tsuji			DLNR Land Division
14	Randy Grune			res.com HSI
15	Tim Guard			i.com MH&E
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HONOLULU HARBOR MASTER PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE MEETING #1
July 18, 2018; 8:00 to 11:00 AM

NON-MARITIME OPPORTUNITIES

SUB-TAC ISSUES & IDEAS

What are the existing and / or future issues and ideas for non-maritime opportunities?

Use your post-it notes to add issues and/or ideas.

Issues	Ideas
Preliminary issues identified include: • Identify appropriate locations for non-maritime land development • Need to diversify revenue sources to control maritime fees/tariffs that support maritime uses • Lack of knowledge and public awareness of cultural and historical resources in the harbor • Public demand for access to the waterfront • Potential for conflicts with maritime uses • Use of limited (finite) lands under DOT-H jurisdiction for non-maritime uses • Safety of general public in industrial maritime environment • Security of port operations - Shrinking inventory of industrial land in town	**Suggested ideas to address identified issues:** • Relocate DOT-H personnel to the Department of Health building at Channel Street, Pier 2 and repurpose the vacated Pier 11 DOT-H admin building for commercial/office use • Relocated the cruise passenger terminal from Pier 11 to Pier 10 to reestablish the relationship between Aloha Tower and arriving cruise passengers, redevelop Pier 11 for commercial use (e.g., San Francisco's Ferry Terminal) • Develop conference center on 2nd floor of Pier 10 • Develop a promenade from Walker Park ('Ewa of Topa Tower) to Aloha Tower to help connect Downtown to the waterfront. • Convert Irwin Park from a park/parking lot to a passive park • Coordinate with HECO regarding their plans for downtown power station • Expand Piers 5 and 6 seaward (i.e., replace the dolphins and revetment with a proper pier) to create more pier space for excursion vessels and land area for development • Redevelop the Piers 5 and 6 peninsula area for higher use (e.g., hotel, commercial, other) o Hotel could provide accommodations for cruise passengers before/after their cruise o Parking structure would replace existing on-site parking and the parking lot by redeveloping Irwin Park into open/park space o Parking structure could also include condominiumized storage o Open bottom level to provide space for bus staging for excursion and dinner cruises • Develop structured parking landside of the Piers 5 and 6 area • Develop pedestrian connectivity between the Pier 2 Cruise Terminal and Aloha Tower Marketplace and improve visitor experience in the area (concepts include South Shore Promenade and the Lei of Parks) • Develop mixed-use/parking structures with a pedestrian bridge at the entrance to Pier 2, along Ala Moana Blvd • Consider land swaps to improve operational efficiencies around the Pier 2 area (e.g., USCG Pier 4 to facilitate promenade from Pier 2 to Aloha Tower Market Place, GSA parcel to facilitate reconfiguring road access and ground transportation for cruise operations) • Coordinate with the City to take advantage of the harbor's proximity to TOD (e.g., relationship to Iwilei redevelopment) • Integrate harbor improvements with rail stations at Chinatown and Downtown • Coordinate with HPU regarding their plans for their Aloha Tower Marketplace campus • Develop mixed-use, multi-level structures with high-cube ground level, flat deck for auto storage/light industrial/office in upper floors (Along Nimitz Highway at Piers 19-38) • Utilize concept of land banking; i.e., allowing temporary non-maritime development on underutilized lands to generate revenue until such time as those lands are needed for maritime use • Develop strategically placed parking structures to accommodate staff of harbor operators; minimize the use of surface parking lots that eat up precious yard and operational space o Help relieve parking congestion on nearby streets • Develop cultural and educational programming, including partnerships with HART, HTA, OHA and others to increase awareness of the harbor's function and its significance to State Explore development opportunities west of Aloha Tower • POTENTIAL RELOCATION / SITES FOR FUTURE RAIL STATIONS (NEAR PIER 5?) • CONSIDERATION FOR SELF-DRIVING / AUTONOMOUS CARS (PIER 2, COAST GUARD LAND SWAP?)

Appendix 11

MeetingSift Report

MEETINGSIFT REPORT

Summary of Meeting Coordination and Outcomes
Technical Advisory Committee Meeting #1
Honolulu Harbor 2050 Master Plan

July 18, 2018; 8:00 to 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

Responses to participants' comments were generated after the TAC #1 Meeting and are included following each bulleted question below.

Agenda Section 1Start: 06:29

How many years have you worked in or around the Honolulu Harbor?

duration: 00:21:19

Respondent No.	Years Experience
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12	12
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79	30
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81	0
Total	**1089**

Start: 06:50

Re: the mission statement, goals, evaluation criteria, any comments or suggestions?

duration: 01:42:57

Participant Input

1. Transparency of the project - are there regulatory bodies that have weight in the development of alternatives
    - Response: The master planning process includes a constraints analysis that will consider legal mandates and regulatory requirements. Regulatory bodies that have jurisdiction over existing or proposed uses in the harbor are considered stakeholders in the master planning process and can participate through the TAC and Sub-TAC meetings.

2. No
    - Response: n/a

3. Get the plan done quickly so we can start seeing real improvements
    - Response: The goal is to have the Master Plan substantially completed by the end of 2019. However, an Environmental Impact Statement (EIS) needs to be prepared for the improvements recommended in the Master Plan before they can be implemented. To expedite implementation of Master Plan improvements, preparation of the EIS is anticipated to start around mid to late 2019, as the Master Plan process winds down. Earliest implementation of improvements recommended in the Master Plan is likely around 2023, taking into account time needed to complete the EIS and project design. However, DOT-H will continue to identify and undertake projects during the Master Plan and EIS processes; projects identified as being needed immediately can be implemented outside of the Master Plan process (i.e., it doesn't need to wait until the Master Plan and its attendant EIS is completed). Updates on the

status of the Master Plan will be posted on the project website: www.HonoluluHarborMP.com.

4. Will the planning process timeline be published?
    - Response: The Master Plan process and timeline are published on the project website: www.HonoluluHarborMP.com

5. Well focused - ready to move forward.
    - Response: Thank you.

6. What sea level rise scenario are you assuming?
    - Response: The Master Plan will use a projection of 3.2 feet of sea level rise (SLR) by 2060, based on the *Hawai'i Sea Level Rise Vulnerability and Adaptation Report* (DLNR, December 2017).

7. Is the schedule realistic/ reasonable expectation that we can finish in 18 months?
    - Response: The schedule is ambitious, but the Project Team is committed to substantially completing the Master Plan by the end of 2019. Work on the Master Plan's Environmental Impact Statement is anticipated to start around fall 2019, once the range of proposed alternatives have been evaluated to identify those for inclusion in the Master Plan.

8. Consider partnering with the city on harbor access/integration/development projects.
    - Response: The City is a key stakeholder and DOT-H welcomes the City's participation in the master planning process. The Project Team met with the City's Department of Planning and Permitting (DPP) Transit-Oriented Development (TOD) program and the Honolulu Authority for Rapid Transportation (HART) and is considering the City's TOD plans and the Rail in the Master Plan. DOT-H also plans to coordinate with DPP as it updates its Primary Urban Center Development Plan, as well as the City's Department of Transportation Services regarding its bicycle and pedestrian plans/programs. As Master Plan alternatives move forward to become development projects, DOT-H will coordinate with the City and look for mutually beneficial opportunities wherever possible.

9. Where does USACE weigh into the planning process?
    - Response: USACE has two primary roles affecting harbor operations: 1) Maintenance of federal channels and basins in Honolulu Harbor; and 2) Review and approval of federal permits under the U.S. Clean Water Act and U.S. Rivers and Harbors Act and serves as lead federal agency for compliance with related federal statutory consultation. The best opportunity for any organization to weigh into the planning process is to sign-up and participate in one or more of the Sub-TAC working groups. The USACE has signed-up to participate in the Sub-TACs on Vessel Operations, and Adaptation and Resiliency.

10. What are contingency operations in the event of a natural disaster such as tsunami where harbor entrance may be blocked?

- Response: In the event that the Honolulu Harbor entrance is blocked due to a natural or man-made disaster, the contingency plan is to bring cargo to O'ahu through Pearl Harbor and Kalaeloa Barbers Point Harbor while Honolulu Harbor is brought back into operation. Contingency planning for natural and man-made disasters is an important consideration in the Master Plan; however, emergency planning also involves on-going planning coordination among a wide range of agencies at the federal, state and county level that is beyond of the scope of the Master Plan. Within the Master Plan, contingency planning related to port resiliency and reconstitution following an event may include identifying priority piers for hardening to withstand extreme forces and to accommodate RO-RO ramps, and for outfitting to accommodate emergency equipment and utilities, such as mobile heavy-lift cranes, generators and fuel.

11. If there is change in the Governor are we confident that this Master Plan Process will continue?
    - Response: Development of the Master Plan will continue regardless of the outcome of the gubernatorial election.

12. Where and how does the MP sync with JBPHH MP?
    - Response: The Project Team will review the JBPHH Master Plan to identify if there are areas of intersection with the Honolulu Harbor Master Plan. Areas of intersection may include addressing Honolulu Harbor's and the State's resiliency in the event of a natural or man-made disaster, adaptation to sea level rise and port security. The Project Team will coordinate with JBPHH as appropriate.

13. Biosecurity needs to be a major consideration and incorporated into MP i.e. environment, agriculture, health (vectors), quality of life.
    - Response: As part of the planning process, the Project Team has met with the following federal and state agencies responsible for biosecurity and environmental health to understand and address their program needs in the development of the Master Plan alternatives: the U.S. Fish and Wildlife Service (USFWS), U.S. Department of Agriculture (USDOA), U.S. Customs and Border Protection (CBP), State Department of Agriculture (DOA), and Hawaii Department of Land and Natural Resources (DLNR), Division of Aquatic Resources (DAR). The Project Team will continue to coordinate with these and other relevant agencies as the Master Plan process moves forward.

14. Integrate study results into Oahu MPO travel demand model and integrate into islandwide transportation planning efforts.
    - Response: DOT-H is coordinating with State DOT Highways (DOT-HWY) on the development of the Statewide Freight Plan and will be an integral participant in the forthcoming update of the Statewide Transportation Plan. The Project Team will coordinate with the Oahu Metropolitan Planning

Organization (OMPO) and the DOT-HWY on opportunities for integrating with their planning efforts.

15. Is it safe to assume that some of the proposed projects could be funded through the MARAD program under the marine highway designation?
    - Response: DOT-H already receives MARAD funding and could be eligible for more opportunities with the Marine Highway designation.

16. How is the MP integrated with DOD and DHS (USCG) plans?
    - Response: The Project Team will coordinate with the DOD and USCG to understand their plans and potential needs as it relates to Honolulu Harbor and will address those needs, as appropriate in the Master Plan.

Start: 08:33

Any questions or comments on these survey results or forecasts?

duration: 00:01:07

Participant Input

17. What is the predicted maximum draft of the future fleet?
    - Response: Specific drafts of future vessels are unknown at this time. However, Harbor operators have recommended a minimum harbor draft of 45 feet and ideal draft of 50 feet.

18. What is your underlying visitor forecast?
    - Response: The underlying visitor forecast is primarily the most recent projections published by the State of Hawai'i Department of Business Economic Development and Tourism (DBEDT). More specifically, the values from 2016 TO 2021 are as reported in the 2nd Quarter 2018 DBEDT Outlook for the Economy; and the values from 2022 to 2050 are based on the Population and Economic Projections for the State of Hawaii to 2045, published by DBEDT on June 28, 2018, with SMS estimates calculated for years not stated in the projections.

19. By how much is it expected ship traffic will increase and type.
    - Response: The economic forecast and capacity demand forecast analysis is not yet complete. The project team will report on this information in the Cargo and Vessel Operations Sub-TAC meetings as it becomes available.

20. Where are all the cars going? 210K annually!!!

- Response: Many of the cars that pass through Honolulu Harbor are rental cars that are being moved from island to island in response to shifts in demand due to seasonal trends or events, or that are being shipped to and from the mainland as part of routine refreshment of the rental car fleets.

21. No
    - Response: n/a

22. The data shows some current needs. Do we wait for the plan to get these improvements?
    - Response: There is no moratorium on improvement projects while the Master Plan is being prepared. DOT-H will continue to undertake improvement projects, issue permits and enter into lease agreements, as needed.

23. No
    - Response: n/a

24. What is current container capacity (TEUs) of Honolulu Harbor?
    - Response: The current capacity of Honolulu Harbor is to be determined. In Fiscal year 2018 Honolulu Harbor processed 1.2 M TEUs.

Start: 08:34

Any questions or comments on cargo capacity?

duration: 00:03:35

Participant Input

25. Do the forecasts consider state and city sustainability goals re: less fossil fuel needs for electric grid and ground transport?
    - Response: One of the components of the forecast is focused on fuel and various oil demands. In addition, the forecast will integrate data from DBEDT and Hawaiian Electric Company (HECO) studies that integrate the statewide initiative for conversion to non-dependence on fossil fuels. State and City sustainability goals will be reflected in the economic forecast but won't be explicit factors in the port capacity demand analysis. Capacity demands will be determined based on the economic forecast.

26. What accommodations for future sea level rise are being taken under consideration?
    - Response: The Master Plan will use a projection of 3.2 feet of SLR by 2060, based on the *Hawai'i Sea Level Rise Vulnerability and Adaptation Report* (DLNR, December 2017). Specific recommendations to accommodate SLR will be developed through the master planning process and may include

phasing plans for raising critical piers and roads, recommending structural and administrative best management practices to prevent sedimentation, prioritizing response to release of pollutants in groundwater, and other recommendations.

27. Will you break out capacity by peak and non-peak times/seasons?
    - Response: The capacity analysis will investigate peak and non-peak capacities.

28. Potential for capacity "opening up" with different types or fewer vehicles. Same way water use declined post ag which opened up sustainable yield.
    - Response: There is potential for capacity to open up as transportation technologies and trends change, which may reduce the number of vehicles transported through Honolulu Harbor.

29. Do you extend this analysis to look at (a) Harbor-related employment, and (b) impacts to surrounding roadways/transit networks?
    - Response: Harbor related employment will be a factor in the study evaluating the economic value of Honolulu Harbor to the State, but will not be a factor in the forecast analysis. The Master Plan will consider the capacity of surrounding roadways and transit networks to accommodate cargo and the resiliency to natural disasters.

30. Can you make the raw data available?
    - Response: Raw data from both the general user survey and the data request will not be released because it contains sensitive information and the Project Team provided a guarantee that the data provided will remain private. The general user surveys were submitted based on the agreement of confidentiality, but comments received were aggregated and incorporated into the Sub-TACs' issues/ideas lists. A summary report will be prepared that includes comments and aggregated data.

31. Will the process consider the impacts of technology on vessel, terminal and gate operations?
    - Response: Yes.

32. Are you in including the time for inspectors to conduct inspections?
    - Response: Yes, the time needed for agency inspectors in included in the capacity and throughput analyses.

33. Any plans for alternate port capacity analysis (DoD location)?
    - Response: This will not be addressed specifically in the Master Plan because there is already coordination with USCG, DOT-H and HI-EMA in the Marine Transportation Recovery Unit (MITSRU).

34. How do you build resilience for Tsunami type event?
    - Response: Identifying physical improvements to facilitate the Harbor's resiliency and reconstitution after a tsunami or other disastrous event is one

of the objectives of the Master Plan. The Project Team encourages discussion about resiliency issues and ideas in the various Sub-TACS, particularly in the Adaptation and Resiliency Sub-TAC. Additionally, he Master Plan will be informed by efforts of the Resiliency Task Force that is developing alternatives for port resiliency and reconstitution in the event of natural disasters including tsunamis.

35. Again, single channel is blocked with sunken vessel, what is contingency plan?
    - Response: In the event that the Honolulu Harbor entrance is blocked due to a natural or man-made disaster, the contingency plan is to bring cargo to O'ahu through Pearl Harbor and Kalaeloa Barbers Point Harbor while Honolulu Harbor is brought back into operation. Contingency planning for natural and man-made disasters is an important consideration in the Master Plan; however, emergency planning also involves on-going planning coordination among a wide range of agencies at the federal, state and county level that is beyond the scope of the Master Plan. Within the Master Plan, contingency planning related to port resiliency and reconstitution following an event may include identifying priority piers for hardening to withstand extreme forces and to accommodate RO-RO ramps, and outfitted to accommodate emergency equipment and utilities, such as mobile, heavy-lift cranes, generators and fuel.

36. Check with the USCG and HI-EMA and their current work on alternate port planning and exercising.
    - Response: The project team is planning to meet with USCG, HI-EMA, and other relevant agencies as it relates to resiliency and response to disaster events as part of the planning process.

Start: 08:38

What questions or comments do you have re: Sub-TAC categories?

duration: 00:02:16

Participant Input

37. The team include Pearl Harbor as a resiliency option
    - Response: In an emergency event which renders Honolulu Harbor inoperable, use of Pearl Harbor (Kilo Pier), as well as Kalaeloa Barbers Point Harbor, to bring in cargo is already part of the contingency plan. These piers can operate with stick cranes in an emergency.

38. Will contractors be available to support Sub-TAC mtgs and collect minutes and publish?
    - Response: The Sub-TACs will be facilitated by the Project Team. Meeting notes will be prepared by the Project Team and published on the project website.

39. Is there any Sub-TAC focused on alternative funding (grants) opportunities?
    - Response: There will be no stand-alone Sub-TAC that focuses on financing or funding. However, alternative funding opportunities can be discussed within the framework of any of the eight Sub-TACs.

40. Good cross section of Sub-TAC categories
    - Response: Thank you.

During Break...

duration: 00:00:05

Please put your name on the SubTAC(s) that you'd be willing to join.

What questions or issues do you want to be addressed by this SubTAC? (whether you're in it or not)

Start: 08:40

What else do you want us to know or consider?

duration: 00:06:01

Participant Input

41. Will there be separate sub-tac meetings?
    - Response: Yes. There are eight Sub-TACs. Each Sub-TAC will have 1 to 3 meetings, depending on the complexity of the issues.

42. Development of off-site yard capacity options.
    - Response: The Master Plan will look at opportunities for developing storage areas within DOT-H property outside of the traditional cargo yards, such as at Pier 60. Decisions on expansion of off-site yard areas will be determined based on the capacity demand forecast and the availability of those lands.

The Master Plan Project Website

duration: 00:06:50

Please visit the project website for more resources:

www.HonoluluHarborMP.com

Appendix 12

Summary of the Q & A Sessions

SUMMARY OF Q & A SESSIONS

Technical Advisory Committee Meeting #1

Honolulu Harbor 2050 Master Plan

July 18, 2018; 8:00 to 11:00 AM
Homer Maxey Conference Center
521 Ala Moana Blvd.; Honolulu, HI 96813

The Technical Advisory Committee Meeting #1 (TAC #1) presentation included six MeetingSift questions to provide all the meeting attendees with the opportunity to ask questions, provide comments and receive responses from the Department of Transportation, Harbors Division (DOT-H) Administration and Project Team. In addition to the MeetingSift questions, the facilitator, Linda Colburn, followed each MeetingSift question with a brief open Q & A session. At the end of the presentation, commonly themed questions submitted by MeetingSift were addressed by DOT-H and the Project Team. Below is a summary of comments, questions and responses received during the open Q & A sessions. They are organized by MeetingSift question.

MeetingSift Question #1:
How many years have you worked around the Honolulu Harbor? MeetingSift responses are included as **Appendix 11**.

- 1,089 years of combined expertise among the meeting participants.
- No questions were asked during the follow-up open Q & A session.

MeetingSift Question #2:
After seeing the mission, goals, and evaluation criteria, please enter any comments or suggestions. MeetingSift responses are included as **Appendix 11**.

- Where do we find the DOT-H mission statement?
    - Jim Niermann / R. M. Towill Corporation (RMTC): The DOT-H mission statement is on the DOT-H and HHMP websites. After the presentation, we can discuss additional ways to access the DOT-H mission statement.
- The HHMP will identify various classes of projects, will they all be state-funded? Or will they also be federally funded?
    - Jim Niermann: All of the projects will be state funded from the DOT-H Special Fund. However, there may be opportunities to obtain federal funding as well.

MeetingSift Question #3:
Any comments or questions on these survey results or forecasts? MeetingSift responses are included as **Appendix 11**.

- How did you (SMS Hawai‘i [SMS]) determine the projected growth for population and gross domestic product (GDP)?
    - Daniel Nahoopii / SMS: We worked with the Department of Business, Economic Development and Tourism (DBEDT) to develop the forecast

projections for population and GDP. The population forecast is driven by an aging population and outmigration. The population is still growing, but that is primarily due to the visitor population. In general, the population in Hawai'i does not fluctuate that much. In addition, Hawai'i is reaching capacity. The GDP forecast was developed assuming that existing industries will continue. However, they may be new technologies that will replace existing industries.

- The projections assume there will be a lot of transshipments. However, assuming most of the growth will be on neighbor islands, how much of shipments may go directly to Kahului or neighbor islands?
    - Darrell Young / DOT-H Administration: Direct shipments to neighbor islands would require costly investment and political will to develop harbor and roadway facilities to accommodate direct shipping operations. In the near term, we don't see strong enough growth on neighbor islands for a cargo company like Pasha, to bring direct shipments to neighbor islands on a regular basis. DOT-H would still operate on a hub and spoke model. In addition, Honolulu Harbor brings in 77% of DOT-H's revenue, so a majority of the revenue should be invested in Honolulu Harbor.

MeetingSift Question #4:
Any comments or questions on cargo capacity? MeetingSift responses are included as **Appendix 11**.

- Will seasonal hurricanes or natural disasters where the Honolulu Harbor will be operating at a lower or nonoperational level be factored into the capacity analysis?
    - Harold Westerman / Stantec Consulting Ltd. (SCL): The capacity analysis will build in load factors and other factors that account for fluctuations in capacity due to safety issues, surges in volume and reduced productivity.
- When Hurricane Iniki hit Hawai'i, all operations at Honolulu Harbor were shut down, including all the cranes that were needed to distribute interisland cargo. Will the cargo capacity consider scenarios where Honolulu Harbor is nonoperational due to a natural disaster and shipping is moved to Pearl Harbor to be unloaded by RO/RO?
    - Harold Westerman / SCL: We can integrate these scenarios into the cargo capacity. However, it is more important to design resilient and redundant infrastructure and equipment to handle natural disaster events. In Vancouver, all the infrastructure and equipment is designed to withstand major earthquake events.

MeetingSift Question #5:
What questions or comments do you have re: Sub-TAC categories? MeetingSift responses are included as **Appendix 11**.

- Will all the Sub-TAC descriptions be available in one concentrated location?

- Jim Niermann: All the Sub-TAC descriptions and meeting materials will be located on the project website. In addition, the Sub-TAC descriptions include the Sub-TAC meeting schedule in order to give people an idea of the commitment required.

MeetingSift Question #6:
What else do you want us to know or consider? MeetingSift responses are included as **Appendix 11**.

- Is the HHMP timeline realistic?
  - Jim Niermann: The original contract is for 3 years. However, we are trying to compress the timeline as much as possible. We will reevaluate whether we need 3 iterations of the TAC / public information meeting (PIM). By the end of 2019, we should have firmly developed alternatives. This is also to start the environmental impact statement (EIS) process, which takes approximately 18 months. We will try to stick to the schedule, but we understand that it is ambitious.
- How will the HHMP be integrated with content from the U. S. Coast Guard (USCG) Master Plan (MP), Joint Base Pearl Harbor-Hickam MP and other large-scale planning initiatives?
  - Jim Niermann: The analysis hasn't been completed yet, but we will consider federal, state and city plans. It will require coordination across various jurisdictions. Integration of other large-scale plans will depend on discussions with other agencies to see where the HHMP fits, e.g., resiliency and adaptation has to be integrated with the general state policy, which is not set by DOT-H.
- Will there be any impact based on the election outcome on the duration or process of the HHMP?
  - Carter Luke / DOT-H: The HHMP process is independent of the political outcome of the election. Stakeholders input and data will remain regardless of politics.
- Where are financing and funding conversations going to happen?
  - Carter Luke: It is too early in the process to determine the cost and impact of the projects. As the HHMP proceeds, projects will be identified.
  - Darrell Young: Based on information from the Hawai'i Harbor User Group (HHUG), DOT-H knows what the revenue will be for the next 6 years based on tariffs and customer fees. This revenue will be used for Honolulu Harbor modernization projects including the Kapālama Container Terminal and Sand Island. The remaining funds will go to maintenance projects including taking down sheds to provide more operational space, hardening piers and other general maintenance tasks. In the short-term, we can look at ways to increase the budget for special maintenance projects and capital improvement plan (CIP) projects.
- Is the raw data available for review?

  - Daniel Nahoopii: The general user surveys were submitted based on the agreement of confidentiality, but all the comments were added to the Sub-TAC issues/ideas list or aggregated from interviews. There will be a full report that includes comments and aggregated data.
  - Harold Westerman: The data from the data requests will be aggregated. However, raw data will not be released because it contains sensitive information. In addition, we provided a guarantee that the data provided will remain private.

- Can you talk about the forecast and how they will integrate state and county sustainability goals re: fossil fuels and power grid requirements?
  - Daniel Nahoopii: One of the components of the forecast is focused on fuel and various oil demands. In addition, the forecast will integrate data from DBEDT and Hawaiian Electric Company (HECO) studies that integrate the statewide initiative for conversion to non-dependence on fossil fuels.
  - Harold Westerman: State and city sustainability goals will be reflected in the economic forecast, but there won't be explicit factors in the analysis that Stantec is conducting. Capacity demands will be determined based on the forecast.

- Will the HHMP consider resiliency plans developed by the Honolulu Harbor Security Group?
  - Darrell Young: DOT-H is coordinating with the USCG and the Maritime Administration (MARAD) to fund a separate effort to develop a decision tree that will identify various disaster scenarios and response actions.

- What is the deadline for signing up for the Sub-TACs?
  - Jim Niermann: The deadline for signing up for Sub-TACs is by the end of August. We'd appreciate that you sign up sooner so that we can anticipate the number of participants for each Sub-TACs and prepare accordingly. You can contact us directly to sign-up for Sub-TACs.

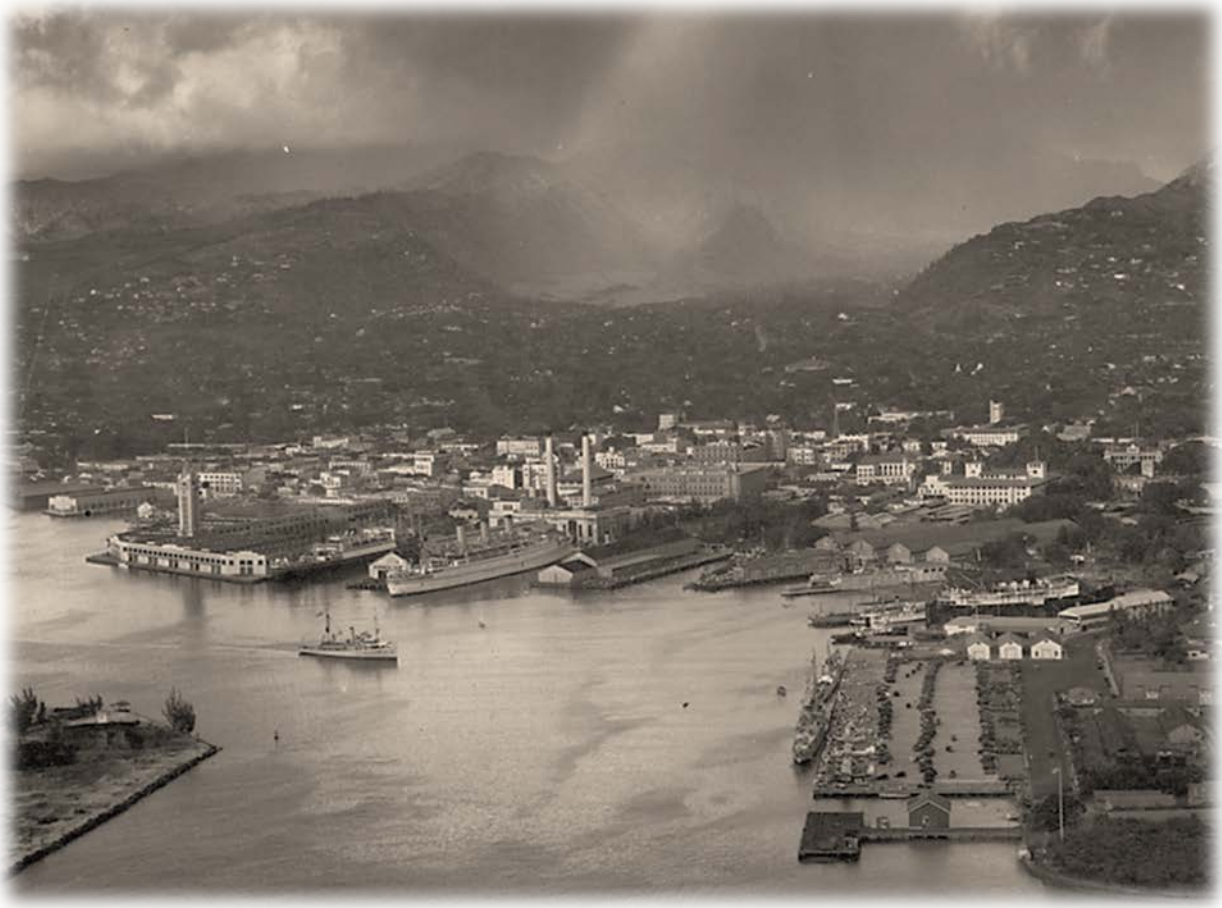
- Can you post the minutes from all the Sub-TACs, so people can be kept abreast of what is happening in other Sub-TACs?
  - Jim Niermann: Yes, they will be available on the project website. The website will have a dedicated page for Sub-TAC meeting minutes and materials.

- Will the dedicated page for Sub-TACs provide an opportunity to comment on another Sub-TAC that may not be within your expertise?
  - Jim Niermann: Yes, the website has a comment form that will automatically forward your comment to the DOT-H and RMTC project managers, as well as be documented in a spreadsheet. You can also contact any of the project managers directly.

Summary of Meeting Coordination and Outcomes

Technical Advisory Committee Meeting #2

Honolulu Harbor 2050 Master Plan



Honolulu, O‘ahu, Hawai‘i

December 2020

PREPARED FOR:

Department of Transportation
Harbors Division
79 South Nimitz Highway
Honolulu, Hawai‘i 96813

PREPARED BY:

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Project No. 1-22628-01

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Appendix 5 Meeting Resources
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Appendix 7 Meeting Notes

SUMMARY OF MEETING COORDINATION AND OUTCOMES

Technical Advisory Committee Meeting #2

Honolulu Harbor 2050 Master Plan

Date, Time, and Location

- December 18, 2020; 1:00 to 4:30 AM
- Virtual Meeting via Zoom

Meeting Invitations

- Three rounds of invitations for the Technical Advisory Committee Meeting #2 (TAC #2) were emailed to stakeholders and representatives for city, state, and federal agencies. In total, 288 individuals received email invitations.
    - Meeting invitation #1, December 1, 2020, included as **Appendix 1**.
    - Meeting invitation #2, December 14, 2020, included as **Appendix 2**.
    - Meeting invitation #3, December 17, 2020, included as **Appendix 3**.

Attendance

- Approximately 95 stakeholders and representatives for city, state and federal agencies attended the TAC #2. The TAC #2 attendees are included as **Appendix 4**.

Resources

- Meeting resources are provided through the Honolulu Harbor Master Plan website and include the following:
    - Agenda (included as **Appendix 5**)
    - TAC #2 – PowerPoint Presentation (included as **Appendix 6**)

  Notes from previous TAC, TAC Sub-Committees and Planning Advisory Committee (PAC) meetings, and additional reference materials can be accessed through the Honolulu Harbor Master Plan website at: www.honoluluharbormp.com/resourcelibrary.

Presentation

- The purpose of the meeting was to review and discuss the Honolulu Harbor 2050 Master Plan (HHMP) preferred alternatives and preliminary project prioritization. Key components of the presentation included the following:
    - Opening remarks by Derek J. Chow, Deputy Director for Department of Transportation Harbors Division (DOT-H)
    - Introductions and Housekeeping by Linda Colburn, Where Talk Works (WTW)
    - Zoom Instructions by Sam Dorios, Hawai‘i Leadership Forum
    - Purpose, TAC’s Role, Expected Outcomes, and Agenda by Linda Colburn

- DOT-H Project Programming and Master Planning Process by Jim Niermann, R. M. Towill Corporation (RMTC)
- Annual Throughput and Estimated Capacity Needs by Roslin Arbuckle, Stantec Consulting Ltd. (SCL)
- Maritime Alternatives by Jim Niermann
- Non-Maritime Alternatives – Aloha Tower Area by Laura Mau (RMTC)
- Preliminary Project Prioritization and Next Steps by Jim Niermann
- Participant Comments and Q&A facilitated by Linda Colburn

The TAC #2 PowerPoint presentation slides are included as **Appendix 6**.

Meeting Records

- Meeting notes documented for the TAC #2 include a summary of the TAC #2 discussions, questions, comments, and closing remarks from the TAC participants. The meeting notes are included as **Appendix 7.**
- The TAC #2 presentation used Zoom's web-based chat feature to provide all meeting attendees with the opportunity to ask questions, provide comments and receive responses from the DOT-H Administration and Project Team. Comments and questions from Zoom's chat were received and documented in the meeting notes.

Appendix 1

Meeting Invitation #1, December 1, 2020

From: James Niermann
Subject: Honolulu Harbor Master Plan 2050 - Technical Advisory Committee Meeting #2
Date: Tuesday, December 1, 2020 4:05:39 PM
Attachments: image001.png

Aloha,

The Department of Transportation, Harbors Division (DOT-H) invites your participation in the Technical Advisory Committee (TAC) Meeting #2 for the Honolulu Harbor2050 Master Plan project (HHMP). The HHMP will update the Oahu Commercial Harbors 2020 Master Plan, prepared in 1997, and will be a critical tool that guides future decision-making for Honolulu Harbor's use and development to best serve the State of Hawaii. It will consider current requirements and challenges facing Honolulu Harbor, and project future demands and formulate a plan for guiding new improvements and harbor usage to meet those demands over the planning horizon.

Since the TAC meeting #1 in July 2018, the Project Team has been conducting technical analysis and working with the TAC Sub-committees, the Planning Advisory Committee, other stakeholders and DOT-Harbors to develop and refine Master Plan alternatives. At the TAC #2 Meeting, the Project Team will present the planning process, outcomes of the analyses and the preferred Master Plan alternatives for review and discussion with the TAC members. We encourage your participation in the TAC meeting as it is an essential component of the HHMP planning process.

The meeting will be held Friday, December 18, 2020, from 1:00 p.m. to 4:30 p.m.

In light of the ongoing COVID-19 pandemic and recent increases in infection rates, protecting the health and safety of the TAC participants is a priority. Therefore, we will be conducting the TAC meeting by Zoom. We will send a follow-up email later this\ week with a Zoom meeting invitation and additional information.

In the meantime, any questions regarding the TAC meeting #2 can be submitted by using the 'Contact' form on the project website (www.honoluluharbormp.com/contact). The message will be forwarded directly to the HHMP project managers. You are also welcome to contact me directly by email or phone.

For more information about the project, please visit: www.honoluluharbormp.com.

The Project Team remains committed to moving forward with the HHMP planning process as the situation with the COVID-19 pandemic evolves. We are also committed to maintaining the principles of transparency, consultation, and inclusiveness that have been established by the project to date.

We greatly appreciate your participation in the HHMP planning process and look forward to seeing you virtually at the TAC #2 meeting in December.

Mahalo!

Jim Niermann, AICP, LEED AP BD+C
Planning Project Coordinator
mailto:JimN@rmtowill.com

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Appendix 2

Meeting Invitation #2, December 14, 2020

From: James Niermann
Subject: Honolulu Harbor 2050 Master Plan - Technical Advisory Committee Meeting #2
Date: Monday, December 14, 2020 8:58:47 AM
Attachments: image001.png

Aloha,

We look forward to your participation in the Honolulu Harbor 2050 Master Plan (HHMP) Technical Advisory Committee (TAC) Meeting #2 on:

Friday, December 18, 2020

1:00 p.m. – 4:30 p.m.

The meeting will be conducted by Zoom phone conference.

RSVP / Meeting Registration

Please note that the TAC meeting is by invitation only. Please do not forward the invitation and Zoom link to others. The future Public Information Meeting will be open to others who may be interested.

Please RSVP / Register for the meeting using the following link. You will be asked to provide first and last name and email to register.

https://hawaiileadershipforum.zoom.us/meeting/register/tJUudeyuqD0oEtzAZf70ZrjH3zqOimEtEFTj

After registering, you will receive a confirmation email containing information about how to join the meeting.

We will start the meeting promptly at 1:00 p.m. The meeting will include a presentation of the proposed draft master plan and preliminary phasing plan, with moderated discussion and question and answer sessions, and additional opportunities for input by chat and email. We expect to conclude the meeting between 4:00 p.m. and 4:30 p.m.

We will send a reminder email and additional Zoom participation instructions

closer to the event date.

Notes from previous TAC, TAC Sub-Committees and Planning Advisory Committee (PAC) meetings, as well as additional reference materials, are available for review on the project website: www.honoluluharbormp.com.

Any questions regarding TAC #2 or the HHMP in general can be submitted by using the 'Contact' form on the project website (www.honoluluharbormp.com/contact). The message will be forwarded directly to the HHMP project managers. You are also welcome to contact me directly by email or phone.
We greatly appreciate your participation in the HHMP planning process and look forward to seeing you virtually at the TAC #2 meeting on December 18.
Mahalo!

Jim Niermann, AICP, LEED AP BD+C
Planning Project Coordinator
mailto:JimN@rmtowill.com

R. M. Towill Corporation
2024 North King Street Suite 200
Honolulu, Hawaii 96819
voice: 808 842 1133 fax: 808 842 1937 web: www.rmtowill.com

-

Appendix 3

Meeting Invitation #3, December 17, 2020

Emailed attachment:

- 201218_HHMP 2050 TAC 2_AGENDA.pdf (see **Appendix 5**)

From: James Niermann
Subject: Honolulu Harbor 2050 Master Plan - Technical Advisory Committee Meeting #2 - Agenda
Date: Thursday, December 17, 2020 2:27:04 PM
Attachments: image001.png
201218_HHMP 2050 TAC 2_AGENDA.pdf

Aloha,

For those of you who are able to attend, we look forward to your participation in the Honolulu Harbor 2050 Master Plan (HHMP) Technical Advisory Committee (TAC) Meeting #2 on:

Friday, December 18, 2020

1:00 p.m. – 4:30 p.m.

The meeting agenda is attached. The PowerPoint presentation is available to download from the project website www.honoluluharbormp.com/resource-library. Notes from previous TAC, TAC Sub-Committees and Planning Advisory Committee (PAC) meetings, as well as additional reference materials, are also available for review on the project website.

If you are unable to attend the meeting, we still encourage your input on the plan. Comments can be submitted by using the 'Contact' form on the project website (www.honoluluharbormp.com/contact). The message will be forwarded directly to the HHMP project managers.

Friday's meeting will be conducted by Zoom phone conference.

RSVP / Meeting Registration

Please note that the TAC meeting is by invitation only. Please do not forward the invitation and Zoom link to others. The future Public Information Meeting will be open to others who may be interested.

Please RSVP / Register for the meeting using the following link. You will be asked to provide first and last name and email to register.

Registration for TAC # 2 (Friday, Dec. 18th 1300-1600/1630 hrs.)

After registering, you will receive a confirmation email containing information about how to join the meeting.

We will start the meeting promptly at 1:00 p.m. The meeting will include a presentation of the proposed draft master plan and preliminary phasing plan, with moderated discussion and question and answer sessions, and additional opportunities for input by chat and email. We expect to conclude the meeting between 4:00 p.m. and 4:30 p.m.

Any questions or comments regarding TAC #2 or the HHMP in general can be submitted by using the 'Contact' form on the project website (www.honoluluharbormp.com/contact). You are also welcome to contact me directly by email or phone.
We greatly appreciate your participation in the HHMP planning process and look forward to seeing you virtually at the TAC #2 meeting on December 18.
Mahalo!

Jim Niermann, AICP, LEED AP BD+C
Planning Project Coordinator
mailto:JimN@rmtowill.com

R. M. Towill Corporation
2024 North King Street Suite 200
Honolulu, Hawaii 96819
voice: 808 842 1133 fax: 808 842 1937 web: www.rmtowill.com

Appendix 4

TAC #2 Attendees

Master Technical Advisory Committee (TAC) #2 Attendees			
Name	**User Email**	**Group**	**Affiliation**
Ali Nikkhoo	usa.anikkhoo@cma-cgm.com	TAC	APL (America), LLC
Alvin Au	alvin.au@oahumpo.org	TAC	Oahu Metropolitan Planning Organization
Amy Ford-Wagner	amy.ford-wagner@dot.gov	TAC	U.S. Department of Transportation (USDOT), Federal Highways Administration (FAA)
Andrew Rocheleau	arocheleau@seaengineering.com	PAC - Maritime Support	Sea Engineering
Anita Lopez	drvo@soest.hawaii.edu	TAC	University of Hawai'i (UH) Marine Center, Director of Research Vessel Operations
Anu Hittle (Anukriti Hittle)	anukriti.s.hittle@hawaii.gov	TAC	Department of Land and Natural Resources (DLNR), Office of Conservation & Coastal Lands (OCCL), Hawai'i Climate Change Mitigation & Adaptation Coordinator
Arnold Liu	arnold.liu@hawaii.gov	Project Team	Department of Transportation, Harbors Division (DOT-H)
Ben Wilbur	ben.wilbur@kirbycorp.com	TAC	Kirby Corporation
Bill Anonsen	wmanonsen@themaritimegroupllc.com	Project Team	The Maritime Group (TMG)
Blaine Gemeno	blaineg@sause.com	PAC - At-Large (Sause Brothers)	Sause Bros.
Blue Kaanehe	bluekaanehe@hawaii.gov	PAC - Agency (DLNR)	Administrator, DLNR
Cameron Black	cameron.b.black@hawaii.gov	TAC	Hawai'i State Energy Office
Carlos Salas	carlos.h.salas@faa.gov	TAC	U.S. Department of Transportation, Federal Aviation Adminsitration, Honolulu District Office
Carol Mitsuyasu	carol.mitsuyasu@idppgroup.org	TAC	Iwilei District Participating Parties (IDPP)
Carter Luke	carter.luke@hawaii.gov	Project Team	DOT-H
Celia Shen	celia.y.shen@hawaii.gov	Project Team	DOT-H
Chip Young	cwyoung@hawaii.edu	TAC	Pacific Islands Ocean Observing System (PacIOOS)
Chris Martin	cmartin@htbyb.com	TAC	Young Brothers (YB)
Chris Rogers	rogers@msrc.org	TAC	Marine Spill Response Corporation
Christy Martin	christym@rocketmail.com	PAC - Environment	Coordinating Group on Alien Pest Species
Craig Furuta	cfuruta@hawaiigas.com	TAC	The Gas Company, LLC (dba Hawai'i GAS)
Curtis Chee	curtis.chee@mcadmc.com	TAC	Mary Charles and Associates, Inc.
Dan Polhemus	dan_polhemus@fws.gov	PAC - Environment	U. S. Fish and Wildlife Service (USFWS)
Dan Sakamoto	dan.sakamoto@hawaiianelectric.com	TAC	Hawaiian Electric
David Sikkink	david.j.sikkink@ftz9.org	PAC - Agency (DBEDT-Foreign Trade Zone)	Foreign Trade Zone, Department of Business, Economic Development & Tourism, State of Hawai'i (DBEDT)
David Tanoue	davidt@rmtowill.com	Project Team	R. M. Towill Corporation (RMTC)
Dean Watase	dean.watase@hawaii.gov		DOT-H
Deepak Neupane	deepak.neupane@hawaii.gov	TAC	DBEDT
Denise Kekuna	kekunad001@hawaii.rr.com	TAC	Friends of Hokulea and Hawaiiloa
Dennis Goto	dg@honship.com	TAC	DCL, Inc. (DBA Honolulu Ship Supply Company)
Derek Chow	derek.j.chow@hawaii.gov		Deputy Director, DOT-H
Derrick Carne	derrick.j.carne@hawaii.gov		DOT-H
Ed Enos	capt.edenos@gmail.com	PAC - Vessel Operations	Hawai'i Pilots Association
Ed Underwood	ed.r.underwood@hawaii.gov	TAC	DLNR, Division of Boating and Ocean Recreation
Eric Leong	eric.leong@hawaii.gov		Property Manager, DOT-H
Faith Caplan	faith.r.caplan@hawaii.gov	TAC	DOT, Highways Division (DOT-HWY)

Master Technical Advisory Committee (TAC) #2 Attendees			
Name	**User Email**	**Group**	**Affiliation**
Gabrielle Fenix Grange	gabrielle.grange@doh.hawaii.gov	TAC	Department of Health (DOH), Hazard Evaluation and Emergency Response (HEER) Office
Gareth Sakakida	gareth@htahawaii.org	TAC	Hawai'i Transportation Association, Director
Gary Fukumoto	gary.fukumoto@hawaiianelectric.com	TAC	Hawaiian Electric
George Minamishin	george.h.minamishin@cbp.dhs.gov	TAC	U.S. Customs and Border Protection
Harrison Rue	hrue@honolulu.gov	PAC - Non-Maritime Opportunities	City and County of Honolulu (CCH), Department of Planning and Permitting (DPP) , Transit-oriented development
Herman Tuiolosega	herman.tuiolosega@hawaii.gov	TAC	DOT, Airports Division
Iris van der Zander	iris.vanderzander@doh.hawaii.gov	TAC	DOH HEER Office
Jade Butay	jade.butay@hawaii.gov	TAC	DOT, Director
James Zane	jzane@mhrhawaii.com	PAC - Cargo Operations	McCabe Hamilton & Renny Co.
Jim Niermann	jimn@rmtowill.com	Project Team	RMTC
Jay Ana	jana@htbyb.com	TAC	YB, President
Janet Yocum	janet.yocum@fema.dhs.gov	PAC - Adaptation & Resiliency	Federal Emergency Management Agency (FEMA)
Jeffrey Seastrom	jseastrom@pbrhawaii.com	Project Team	PBR Hawai'i (PBR)
Jennifer Tomita	jennifer.dh.tomita@hawaii.gov		Property Manager, DOT-H
Jimmy Yao	jimmy.yao@hawaiianelectric.com	TAC	Hawaiian Electric
John F Tobon	john.f.tobon@dhs.gov	TAC	U.S. Immigration and Customs Enforcement, Homeland Security Investigation
John Mihlbauer	contact@ascshawaii.com	TAC	All Ship and Cargo Surveys, President
Jonathan Ho	jonathan.k.ho@hawaii.gov	TAC	Department of Agriculture, Plant Quarantine Branch
Jonathan Mauri	j.mauri@securebikeshare.com	TAC	Secure Bike Share
Joni Savusa	joni.savusa@hawaii.gov		Property Manager, DOT-H
Joshua Fisher	joshua_fisher@fws.gov	TAC	USFWS, Pacific Islands Fish and Wildlife Office
Joshua Williams	joshua.b.williams@uscg.mil	PAC - Agency (USCG)	U.S. Coast Guard (USCG)
Kalani Fronda	kalanif@oha.org	TAC	Office of Hawaiian Affairs (OHA), Land Department Director
Kamakana Kaimuloa	kamakana.k.kaimuloa@hawaii.gov		DOT-H, Aloha Tower Development Corporation (ATDC)
Karl Kim	karlk@hawaii.edu	TAC	UH at Manoa, National Disaster Preparedness Training Center
Katherine Hernandez	k.hernandez@honolulu.gov	TAC	DPP, Community Planning Branch
Kevin Kinerney	k.kinerney@transmarine.com	TAC	Transmarine Navigation Corporation
Kim Lu	kimlu@vakfisheries.com	PAC - Fishing Operations	VAK Fisheries, LLC
Kimberly Evans	kimberly.evans@faa.gov	TAC	USDOT FAA, Honolulu District Office
Kimi Yuen	kyuen@pbrhawaii.com	Project Team	PBR
Kyle Ensley	kyle.l.ensley@uscg.mil	PAC - Agency (USCG)	USCG
Laura Mau	lauram@rmtowill.com	Project Team	RMTC
Lek Friel	lfriel@matson.com	PAC - At-Large (Matson)	Matson
Linda Butzer	linda.butzer@kirbycorp.com	TAC	Kirby Corporation
Linda Colburn	wheretalkworks@gmail.com	Project Team	Where Talk Works (WTW)
Lucia Cabral-DeArmas	lucia.cabral-dearmas@ice.dhs.gov	TAC	U.S. Immigration and Customs Enforcement
Manuel Kuloloia	manuel.kuloloio@baesystems.com	Non-Maritime Opportunities	Kuloloio Ohana
Mark Want	mark.s.want@hawaii.gov	TAC	Hawai'i State Energy Office

Master Technical Advisory Committee (TAC) #2 Attendees			
Name	**User Email**	**Group**	**Affiliation**
Meredith Speicher	meredith_speicher@nps.gov	TAC	U.S. Department of the Interior, National Park Service, Rivers, Trails, and Conservation Assistance Program
Michael Buelsing	mbuelsing@pacmarhawaii.com	TAC	Pacific Shipyards International, LLC
Michael Caswell	michael.caswell@psterminals.com	TAC	Pasha Hawaii Transport Lines
Michael Dichner	michael.l.dichner@hawaii.gov	Project Team	DOT-H
Michelle Marchant	michellem@rmtowill.com	Project Team	RMTC
Miyuki Cleary	mimi.cleary@kirbycorp.com	TAC	Kirby Corporation
Natalie Dunn	natalie.m.dunn@hawaii.gov	TAC	DLNR, Division of Aquatic Resources
Noelani Wheeler	noelani@visit-oahu.com	PAC - Cruise & Excursion Operations	O'ahu Visitors Bureau
Noelle Cole	noelle.cole@honolulu.gov	TAC	DPP, Development and Zone Change Branch
Olivia Pham	olivia.n.pham@hawaii.gov		Property Manager, DOT-H
Peter Pillone	peter.pillone@hawaii.gov	PAC - Agency (DOT-H)	Commercial Harbors Manager, DOT-H O'ahu District
Randal Lui-Kwan	randal.luikwan@hawaiianelectric.com	TAC	Hawaiian Electric
Randy Grune	rgrune@hawaiistevedores.com	PAC - Cargo Operations	Hawai'i Stevedores
Rick Heltzel	raheltzel@healytibbitts.com	TAC	Healy Tibbitts Builders, Inc., President
Rob James	rjames@hhf.com	TAC	HHF Planners
Robert Harter	rharter@honolulu.gov	PAC - Adaptation & Resiliency	CCH, Office of Climate Change, Sustainability and Resiliency/CCH Department of Emergency Management
Rodney Funakoshi	rodney.y.funakoshi@hawaii.gov	PAC - Agency (State Office of Planning)	Office of Planning, DBEDT
Rosanna Prieto	rosanna.prieto@tpl.org	TAC	The Trust for Public Land Hawai'i
Roslin Arbuckle	roslin.arbuckle@stantec.com	Project Team	Stantec Consulting, Ltd. (SCL)
Roxanne Lee	roxannel@rmtowill.com	Project Team	RMTC
Roy Catalani	prcatalani@gmail.com	PAC - Cruise & Excursion Operations	Cruise Lines International Association (CLIA)
Ruby Edwards	ruby.m.edwards@hawaii.gov	PAC - Agency (State Office of Planning)	Office of Planning, DBEDT
Sam Dorios	samdorios@hawaiileadershipforum.org	Project Team	Hawai'i Leadership Forum
Shannon McKee	shannon@accesscruiseinc.com	TAC	Access Cruise
Steve Morita	smorita@pmtugs.com	TAC	P&R Water Taxi LLC
Steven Dale	steven.r.dale@hawaii.gov		DOT-H
Tiffanie Whitworth	tiff@htbyb.com	PAC - Maritime Support	YB
Tom Heberle	tom.heberle@gmail.com	PAC - Vessel Operations	Hawai'i Pilots Association
Tomo Murata	masatomo.murata@hawaii.gov	PAC - Agency (DOT, Statewide Transportation Planning Office)	Statewide Transportation Planning Office, DOT, State of Hawai'i

Note: In addition to the list above, there were six unidentified participants.

Appendix 5

Meeting Resources

- Agenda

AGENDA

HONOLULU HARBOR 2050 MASTER PLAN

TECHNICAL ADVISORY COMMITTEE MEETING #2
Friday, December 18, 2020, 1:00 p.m. to 4:30 p.m.

Time	Activity	Speaker
1:00 – 1:20	**Part 1: Welcome and Introductions**	
	Welcome	Linda Colburn
	DOT Opening Remarks	Derek Chow
	Introductions: DOT and Project Team	Linda Colburn
	Housekeeping	Linda Colburn
	Zoom Instructions	Sam Dorios
	Meeting Purpose, TAC Role and Agenda	Linda Colburn
1:20 – 1:40	**Part 2: DOT-H Project Programming and Master Planning Process**	
	Harbor Project Programming	Jim Niermann
	Master Plan Overview (Purpose, DOT-H Mission, Goals, Planning Process, Evaluation Criteria and Process)	Jim Niermann
1:40 – 3:10	**Part 3: Maritime Alternatives**	
	Harbor-Wide Improvements	Jim Niermann
	Annual Throughput and Estimated Capacity Needs	Roslin Arbuckle
	Harbor Land Use Overview	Jim Niermann
	Dedicated Container Terminals (Sand Island, KCT, Interisland)	Jim Niermann
	Piers 12 to 38	Jim Niermann
	Aloha Tower, Piers 1 and 2, Cruise Terminal, Pier 60	Jim Niermann
3:10 – 3:40	**Part 4: Non-Maritime Alternatives – Aloha Tower Area**	
	Considerations	Laura Mau
	Conceptual Interpretive Themes	Laura Mau
	Design Guidelines	Laura Mau
	2050 Vision Alternatives	Laura Mau
	Harbor Boundary Treatments	Laura Mau
3:40 – 3:55	**Part 5: Preliminary Project Prioritization**	
	Prioritization Criteria	Jim Niermann
	Preliminary Project Prioritization	Jim Niermann
3:55 – 4:00	**Part 6: Next Steps and Closing Remarks and Q&A**	Jim Niermann
4:00 – 4:30	**Q&A**	

Appendix 6

TAC #2 PowerPoint Presentation

Welcome

Honolulu Harbor 2050 Master Plan

Technical Advisory Committee

Meeting #2

December 18, 2020

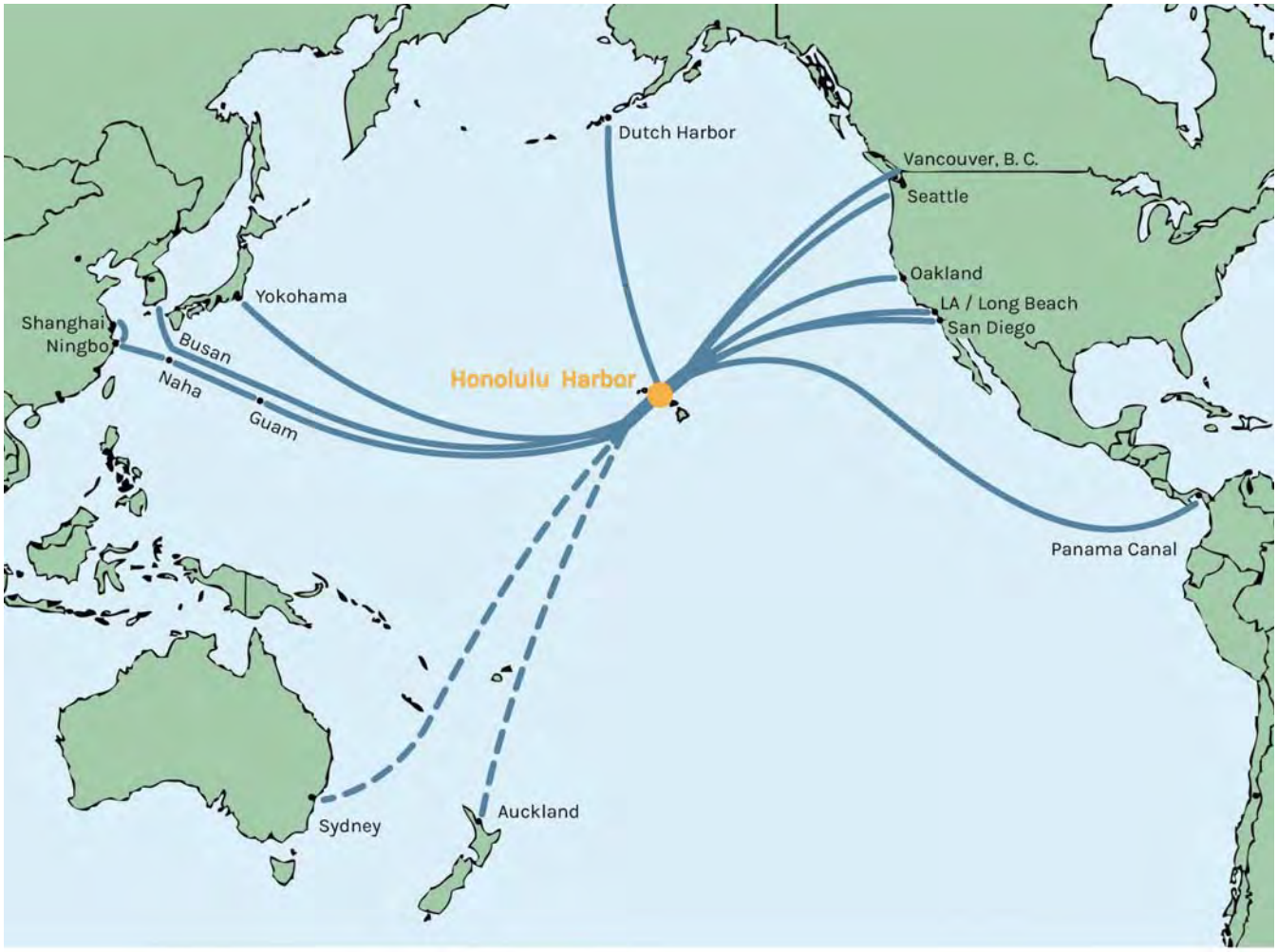
1:00 p.m. to 4:30 p.m.

Department of Transportation
Harbors Division

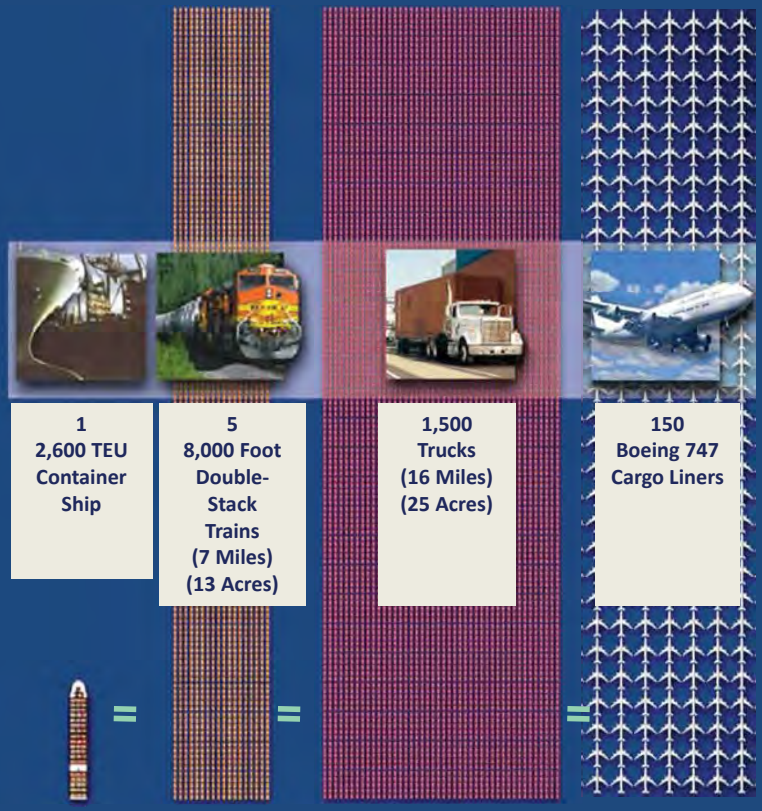
Zoom Conference

Opening Remarks

Derek Chow
Deputy Director for Harbors



2,600 TEU Vessel Carrying Capacity



1 2,600 TEU Container Ship	5 8,000 Foot Double-Stack Trains (7 Miles) (13 Acres)	1,500 Trucks (16 Miles) (25 Acres)	150 Boeing 747 Cargo Liners

Introductions

Department of Transportation Administration

- Davis Yogi, Harbors Administrator
- Neil Takekawa, Oahu District Manager
- Peter Pillone, Oahu District, Commercial Harbor Manager

Project Team: DOT-Harbors

- Carter Luke, Engineering Program Manager
- Arnold Liu, Planning Engineer
- Celia Shen, Project Manager for Maritime
- Mike Dichner, Statistician

Introductions

Project Team: R. M. Towill Corporation

- David Tanoue, Project Principal
- Jim Niermann, Project Manager for Maritime
- Laura Mau, Project Manager for Non-Maritime
- Michelle Marchant, Planner
- Roxanne Lee, Planner

Introductions

Project Team: Specialist Subconsultants

- Linda Colburn, Where Talk Works
- William Anonsen, The Maritime Group
- Harold Westerman, Stantec Consulting, Ltd.
- Roslin Arbuckle, Stantec Consulting, Ltd.
- Faith Rex, SMS
- Daniel Nahoopii, SMS
- Jim Dannemiller, SMS
- Kimi Yuen, PBR Hawai‘i
- Jeff Seastrom, PBR Hawai‘I
- Sam Dorios, Hawaii Leadership Forum

Housekeeping

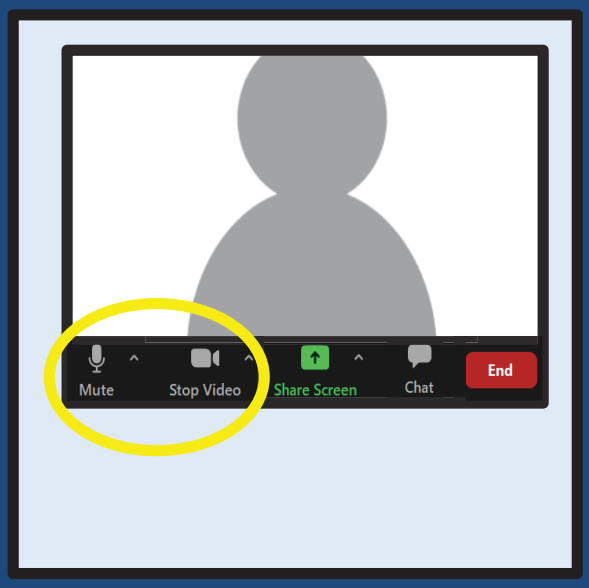
- Register attendance through Zoom
- How to participate/comment
- Slide reference #
- Recording the meeting
- End meeting by 4:30 p.m.

Web Address

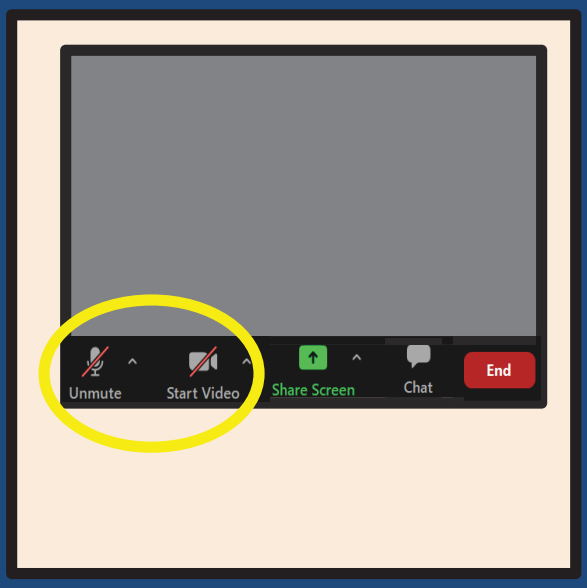
https://honoluluharbormp.com/contact

Zoom Instructions

Unmuted



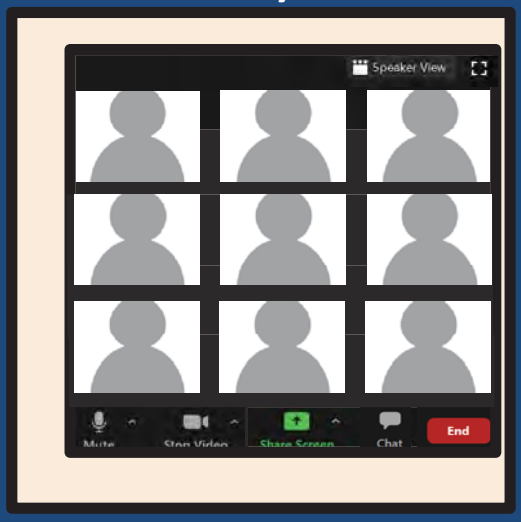
Muted



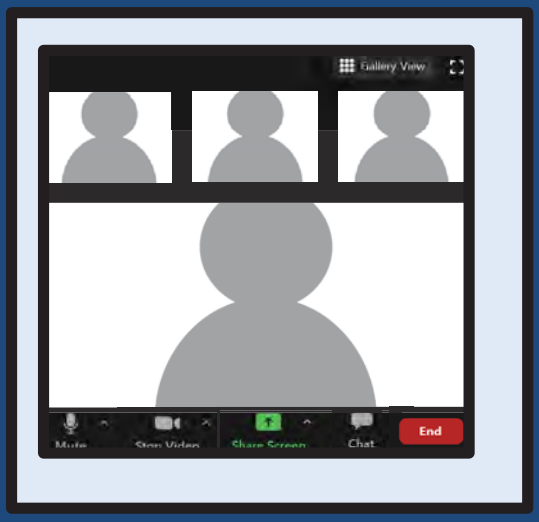
Press the *Microphone* icon to mute or unmute yourself.
Press the *Camera* icon to stop or start your video.
It is preferred that your mic stays on mute unless you are speaking, but please keep your camera on so everyone can still see each other.

Zoom Instructions

Gallery View



Speaker View

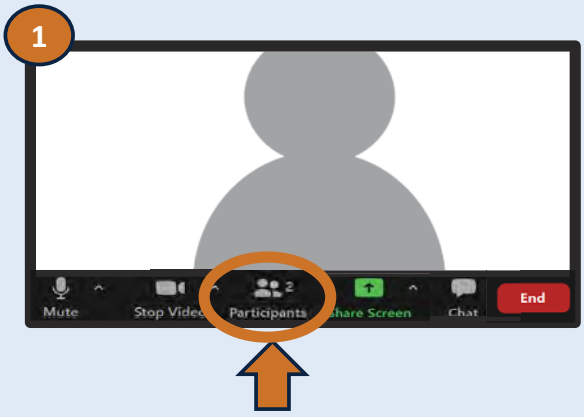


To change which view you see, look for the button on the top right-corner of your screen.

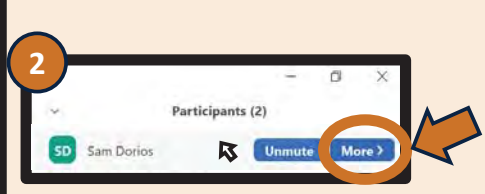
NOTE:
In some meetings, the view may be changed automatically by the host during certain moments. But you can always change it back to the perspective you prefer.

Zoom Instructions

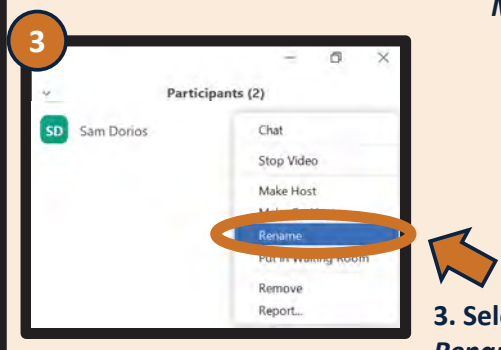
Rename Yourself



1. Press the *Participants* icon to open up the participants window.



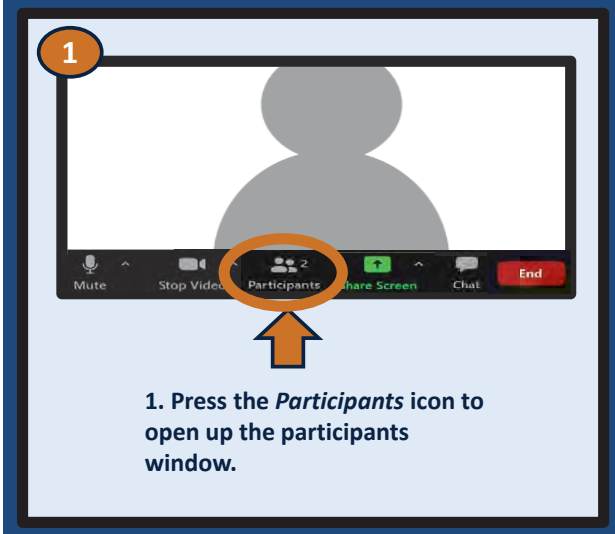
2. Hover your mouse above yourself. Then select *More*.



3. Select *Rename*.

Zoom Instructions

Raise Your Hand to Ask a Question



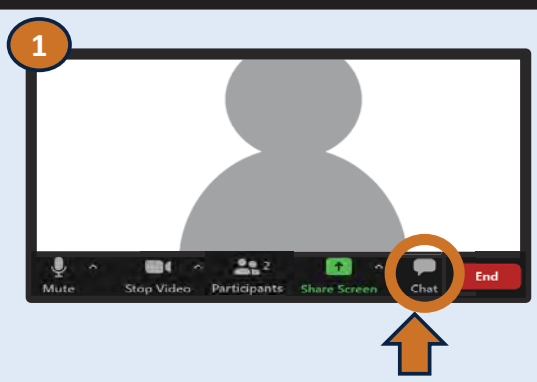
1. Press the *Participants* icon to open up the participants window.

2. Below the list of participants are colored icons. Press the blue *Raise Hand* button.

3. A blue hand will appear next to your microphone. The host can see this, letting them know you have a question or comment.

Zoom Instructions

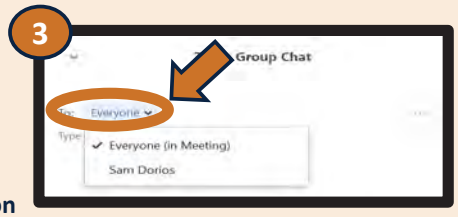
Using Chat



1. Press the *Chat* icon to open up the chat window.

2. You can type messages for everyone to see.

3. If a meeting allows it, you can send a private message to a specific person. Click the *To:* button and select the person you wish to privately message.



Zoom Instructions – Cell Phones

Unmuted

Microphone and camera are on, so people can hear and/or see you.

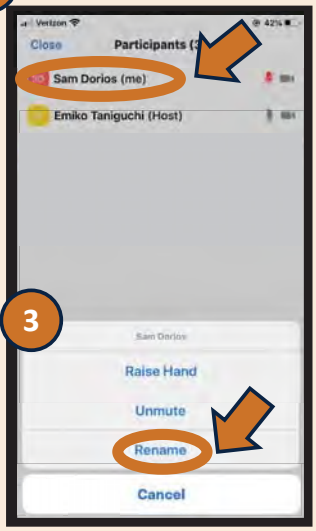
Muted

Microphone and camera are off, so people can not hear and/or see you.

Zoom Instructions – Cell Phones

Rename Yourself

1. Tap *Participants*.



2. Tap your own name.

3. A menu will appear. Tap *Rename*.

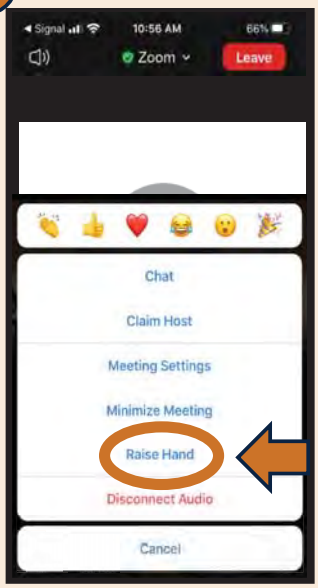
Zoom Instructions – Cell Phones

Raise Your Hand to Ask a Question

1

1. Tap *More*.

2

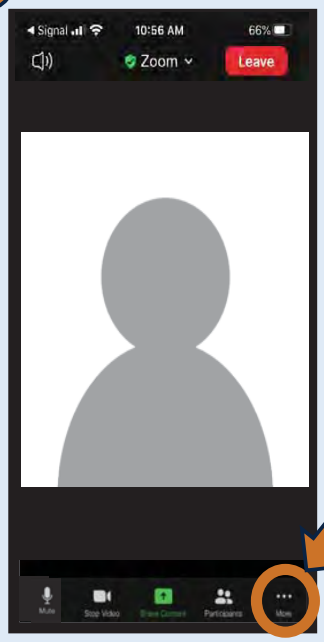


2. Tap ***Raise Hand.*** **A blue hand will appear which the host can see, letting them know you have a question or comment.**

Zoom Instructions – Cell Phones

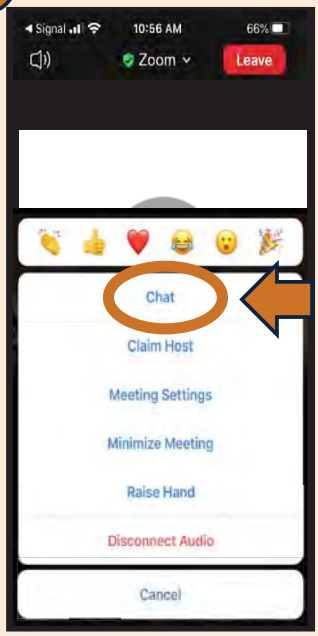
Using Chat

1



1. Tap *More*.

2



2. Tap *Chat*.

Purpose of Today's Meeting

- Review preferred draft master plan alternatives
- Review preliminary project prioritization.
- Collect Technical Advisory Committee (TAC) input to refine the Master Plan alternatives and preliminary project prioritization.
- Prepare for:
  - Public Information Meeting (PIM) in first Quarter 2021.

Technical Advisory Committee's Role

- The Technical Advisory Committee is advisory only. It is not a decision-making body.
- Provides guidance to the Project Team to refine master plan alternatives and the project prioritization.
- Where there are differences or competing proposals, DOT-H will make the final decision.

Expected Outcomes for Technical Advisory Committee Meeting #2

- Obtain input and criteria for further refining preferred alternatives and project prioritization.
- Identify areas of alignment and differing points of view.
- Done today by 4:30 pm.

Agenda

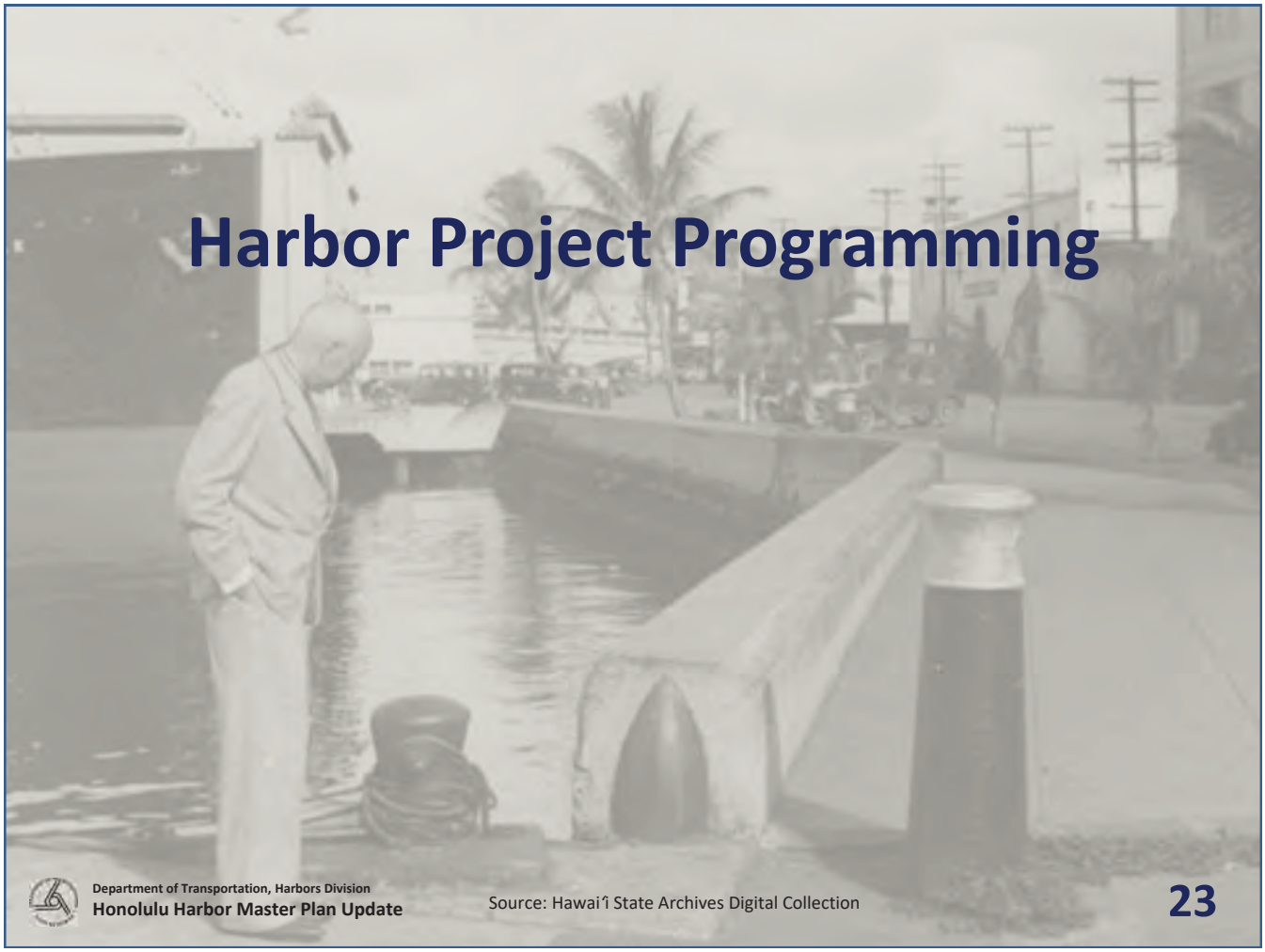
Presentation/Discussion:

- Harbor Project Programming
- Master Plan Overview
- Planning Process
- Maritime Alternatives
- Non-Maritime Alternatives
- Preliminary Project Prioritization

Conclusion & Follow-Up

Done by 4:30

Source: Hawai'i State Archives Digital Collection



Harbor Project Programming

Source: Hawai'i State Archives Digital Collection

Where Projects Come From

- Input from Harbor Users to Oahu District
- Input from Harbors Administration
- Engineering and Oahu District annual meeting
- Facility conditions assessments by Engineering
- Master Plans

DISTRICT

- Day-to-Day Maintenance and Repair

MAINTENANCE PROJECTS

- Maintain Existing Facility
- No Expansion
- Requires Engineering
- Annual Budget ($15 M)

CIP PROJECTS

- Relatively permanent, non-recurring improvements for long-term use/possession
- New construction, expansion/major renovation of existing facilities, land acquisition
- Legislative Approval

Where does the MP fit in?

- Long-range, comprehensive road map for the harbor
- Guided by Harbors Mission Statement, core goals and data
- Identifies future needs and opportunities
- Anticipates outside influences on harbor facilities and operations
- Establishes defensible basis for making decisions and allocating funds
- Identifies projects and recommends sequencing and phasing
- Projects identified in the MP are placed in a queue for prioritization as a Special Maintenance or CIP project

The Master Plan is one of many ways to make a project happen.

Honolulu Harbor Master Plan Overview

Purpose of the Master Plan
Harbors Mission Statement
Goals of the Master Plan
Planning Principles
Planning Process
Evaluation Criteria

Source: Hawai'i State Archives Digital Collection

Purpose of the Master Plan

To ensure that Honolulu Harbor, the State of Hawaii's primary port-of-entry, is prepared to meet the future needs of the maritime industry and of our community.

Harbors Mission Statement

Supports DOT-H's Mission

To effectively improve and manage a commercial harbors system that facilitates safe and efficient operations of commercial cargo, passenger, fishing, and other commercial maritime-related services and support activities within the State of Hawaii and which serves to sustain and enhance the State's economic prosperity and quality of life.

Goals of the Master Plan

- Identify current and meet future maritime needs
- Optimize use of the Harbor's finite land resources
- Balance stakeholders' competing needs and interests
- Ensure resiliency in the face of natural and human-made disasters, and climate change
- Consider emerging technologies and trends
- Consider public access and waterfront development opportunities in select locations

Source: Star Compass, Polynesian Voyaging Society

Planning Process Principles

- Transparent
- Consultative
- Equitable
- Data-Driven
- Supports Harbors' Mission Statement

Planning Process

- Technical Advisory Committee (TAC)
- TAC Sub-Committee (8 groups) (Sub-TAC)
- Planning Advisory Committee (PAC)
- Stakeholders – Maritime and Non-Maritime
- DOT-H Administration
- Oahu District
- Aloha Tower Development Corporation
- Public Information Meeting (PIM)

Planning Process

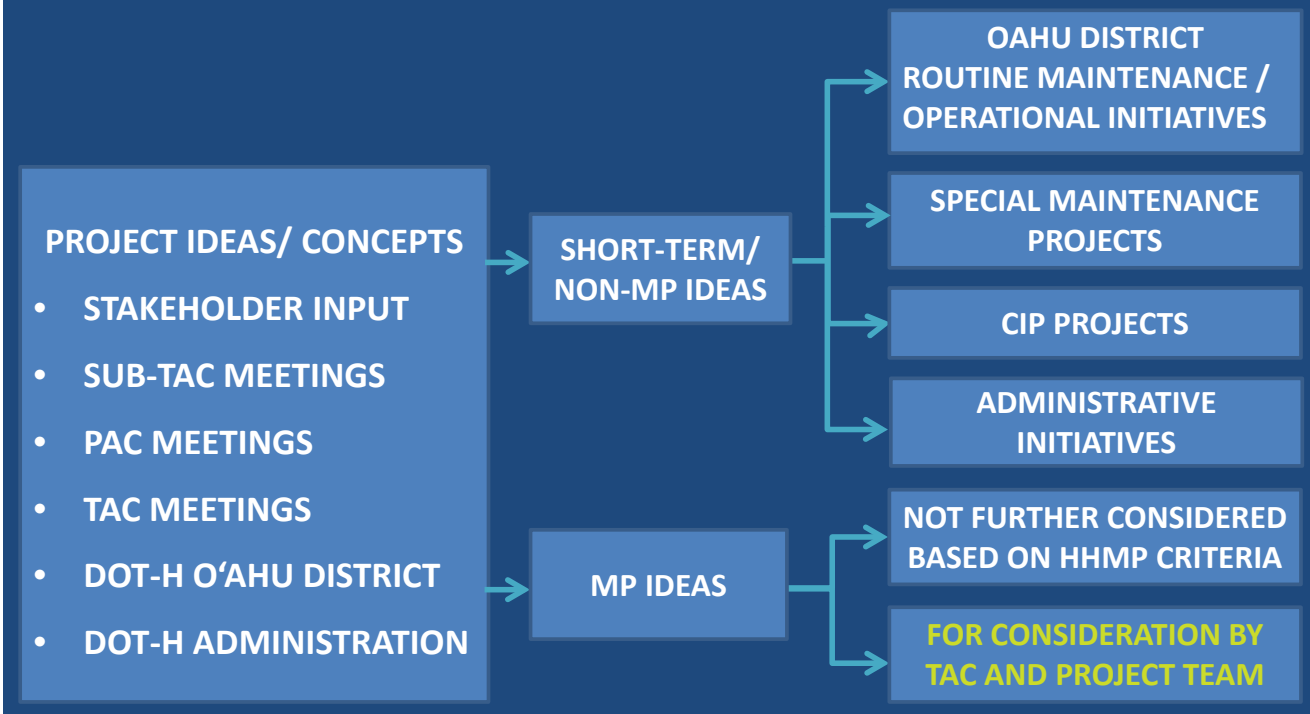
Planning Process

- 86 Stakeholder Meetings

Special Studies:

- Cargo Projections
- Harbor Capacity Analysis
- Harbor Needs Assessment
- Berth / Layberth Analysis
- Channel Widening Analysis
- Traffic Assessment
- Infrastructure Assessment
- Archaeological Study
- Historic Architecture Study
- Economic Value Analysis

Master Plan Idea Vetting Process



Evaluation Criteria

- *To what extent does it align with the Master Plan Goals?*
- *To what extent does it improve the function of the harbor, and by extension, the community's economic security and quality of life?*
- *To what extent is it reasonable and feasible (economically, operationally and politically), and beneficial to the Harbor and the State?*
- *To what extent does it benefit or adversely impact the environment?*

Evaluation Criteria

- *To what extent does it align with the Master Plan Goals? Does the improvement:*
  - Respond to the best available information about future conditions and evolving practices?
  - Support cargo and terminal capacity and throughput projections?
  - Support commercial maritime use (cargo, passenger, fishing and maritime support services)?

Evaluation Criteria

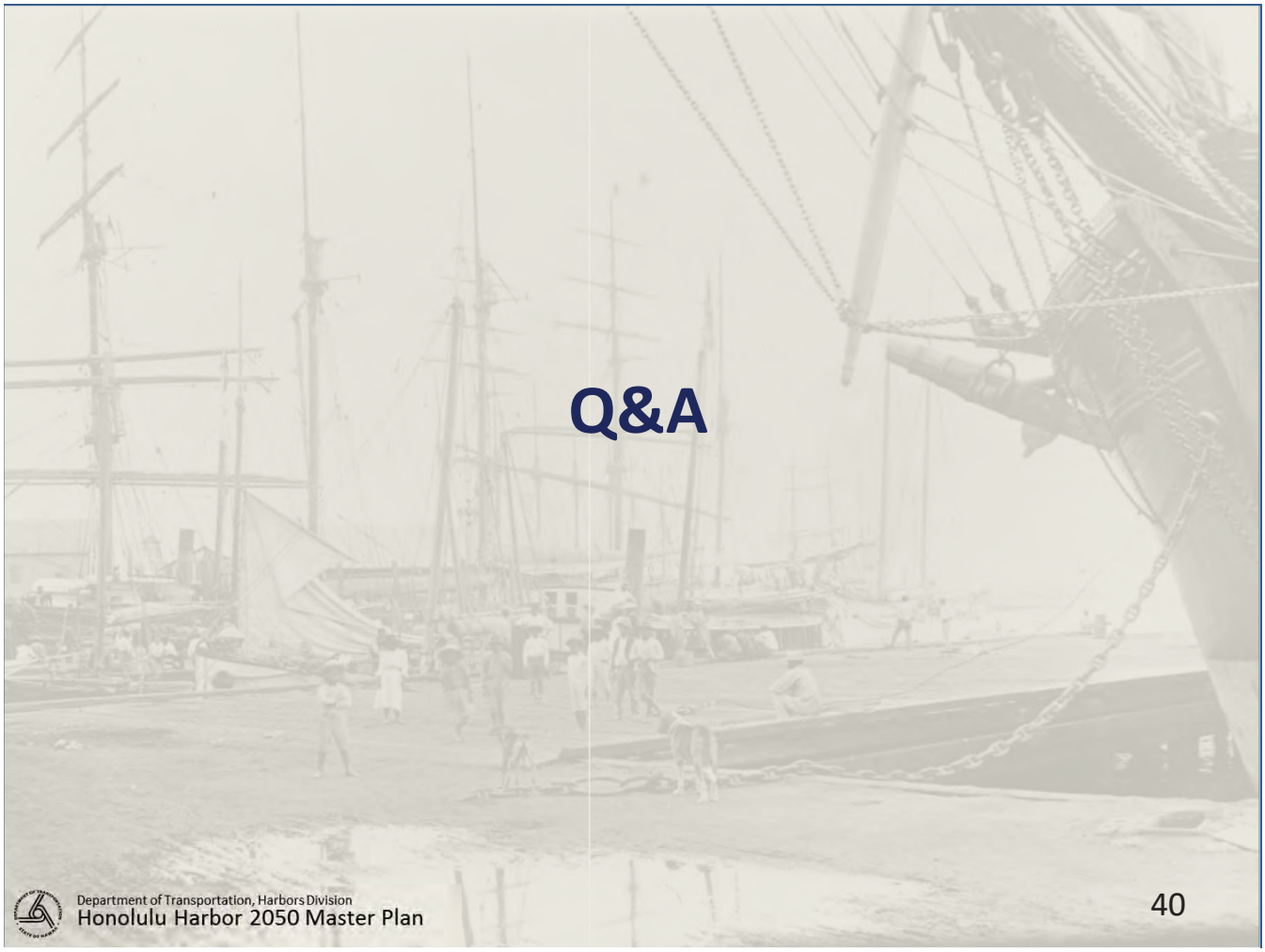
- *To what extent does it improve the function of the harbor, and by extension, the community's economic security and quality of life? Does the improvement:*
    - Address an existing or future deficiency, or need (e.g., lack of layberth space, congested berths or cargo yards)?
    - Enhance safety and security for harbor users and maritime operations?
    - Make the harbor more resilient in response to disasters and climate change / sea level rise?

Evaluation Criteria

- *To what extent is the improvement reasonable and feasible (economically, operationally and politically), and beneficial to the Harbor and the State?*
    - To what extent can the State finance the improvement from its tariffs or federal grants?
    - Will the improvement make maritime operations more efficient and minimize cost increases to the community?
    - Is it within DOT-H jurisdiction or control?
    - Does it recognize existing long-term leases and other land agreements?

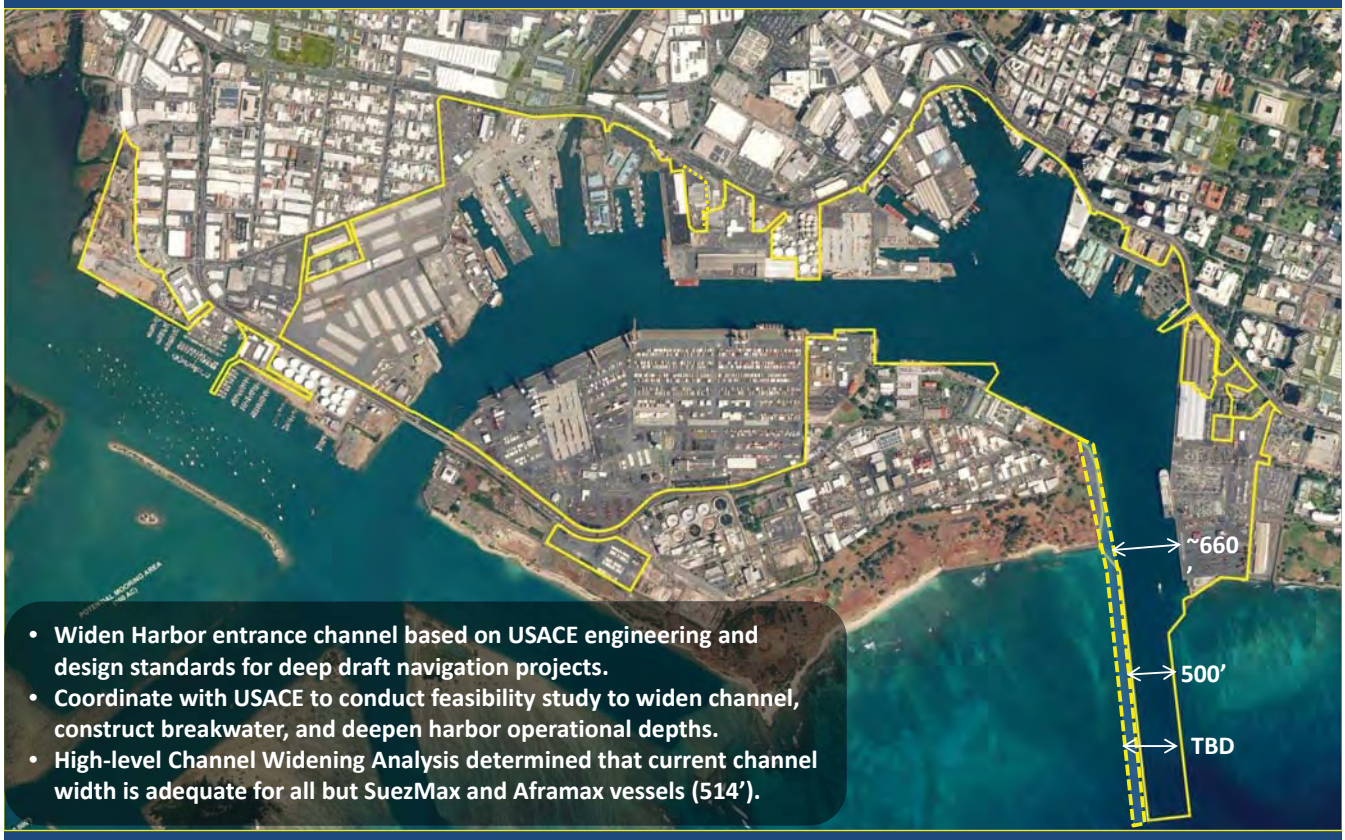
Evaluation Criteria

- *To what extent does it benefit or adversely impact the environment?*
    - Does the improvement balance marine resource conservation objectives with the needs of a commercial harbor?
    - Does the improvement strengthen the State's biosecurity?



Maritime
General Improvements

Harbor Entrance Widening



- Widen Harbor entrance channel based on USACE engineering and design standards for deep draft navigation projects.
- Coordinate with USACE to conduct feasibility study to widen channel, construct breakwater, and deepen harbor operational depths.
- High-level Channel Widening Analysis determined that current channel width is adequate for all but SuezMax and Aframax vessels (514').

Kapalama Channel Analysis

- Request USACE to conduct feasibility study to widen channel.
- Channel Widening Analysis:
  - Required depth = 42.9’ (41 existing).
  - Required transit width = 372’ with 228’ remaining for berthing on one or both sides of channel.
- Short-term: Scheduling/berth assignments, navigational aids and tug assistance as alternatives to channel widening.
- Long-term: Sea Level Rise may compel need to reconstruct Piers 31 to 33 and cut back to fast land, due to diminished access under pier required for inspection and maintenance.

Second Harbor Entrance

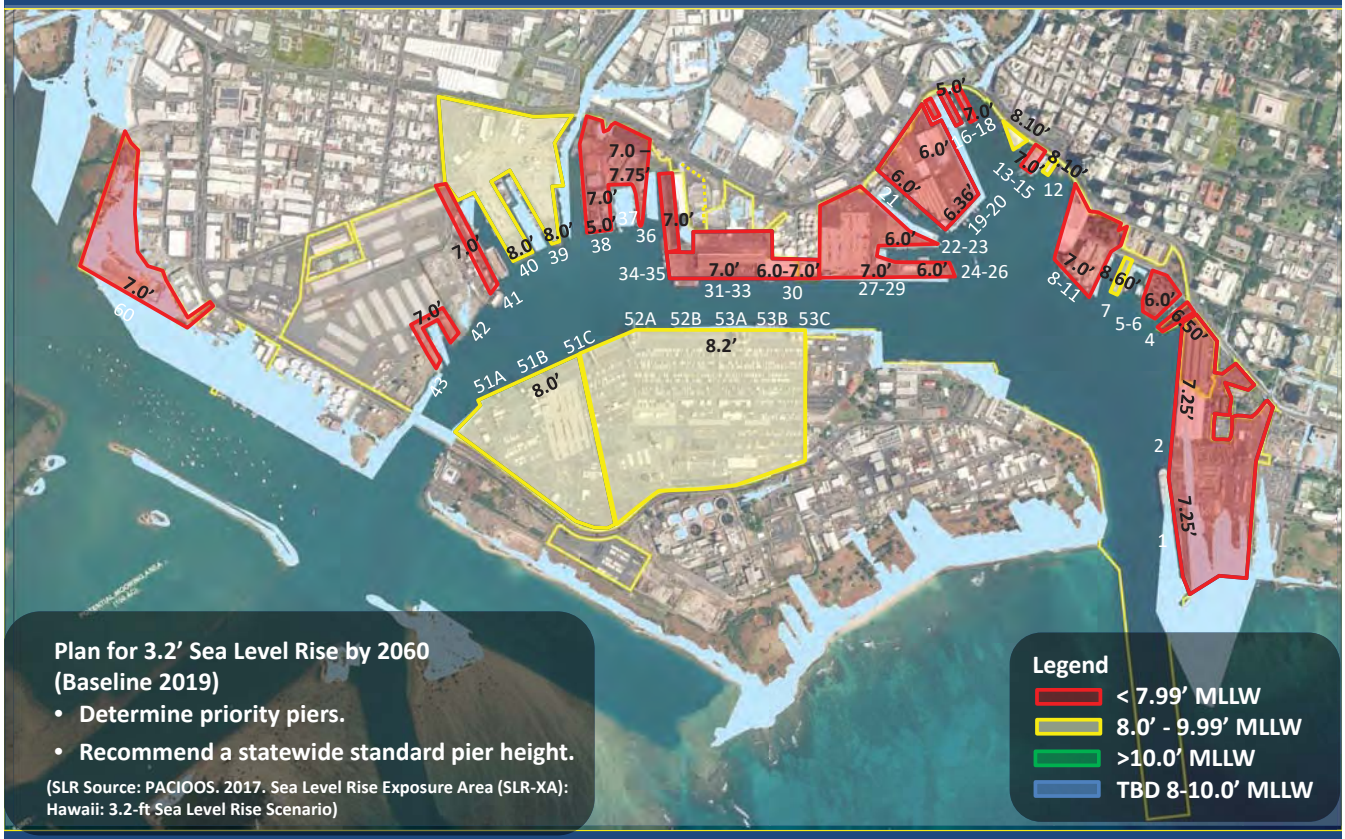
Re-open Second Harbor Entrance During Emergencies

- Alternative A: Movable bridge to accommodate full-size cargo vessels.
- Alternative B: Fixed bridge with air draft to accommodate tug & barge & fishing vessels.
- Alternative C: Hybrid – moveable bridge with air draft for tug & barge & fishing vessels.

Note: All options require dredging/deepening the Kalihi Channel. Current depth is approx. 22 feet. Authorized depth is 23 feet. Recommend depth of 45 feet minimum for cargo vessels.

- Request USACE to conduct feasibility study to replace bridge and reopen Kalihi Channel.

Sea Level Rise - Raise Pier Heights



Vessel Operational Heights

Type of Vessel / Operations	Minimum Height of Pier Deck Above MLLW	Maximum Height of Pier Deck Above MLLW
Barge (Ro/Ro)	6	10
Barge (Pass-Pass)	6	12
Bulk Carrier	6	15
Container	6	15
Cruise	5	10
Fishing/Workboats	3	8
Tanker	6	15
Tugs	3	9

https://honoluluharbormp.com/contact

Sea Level Rise - Raise Pier Heights

Alternatives to Raising Yard

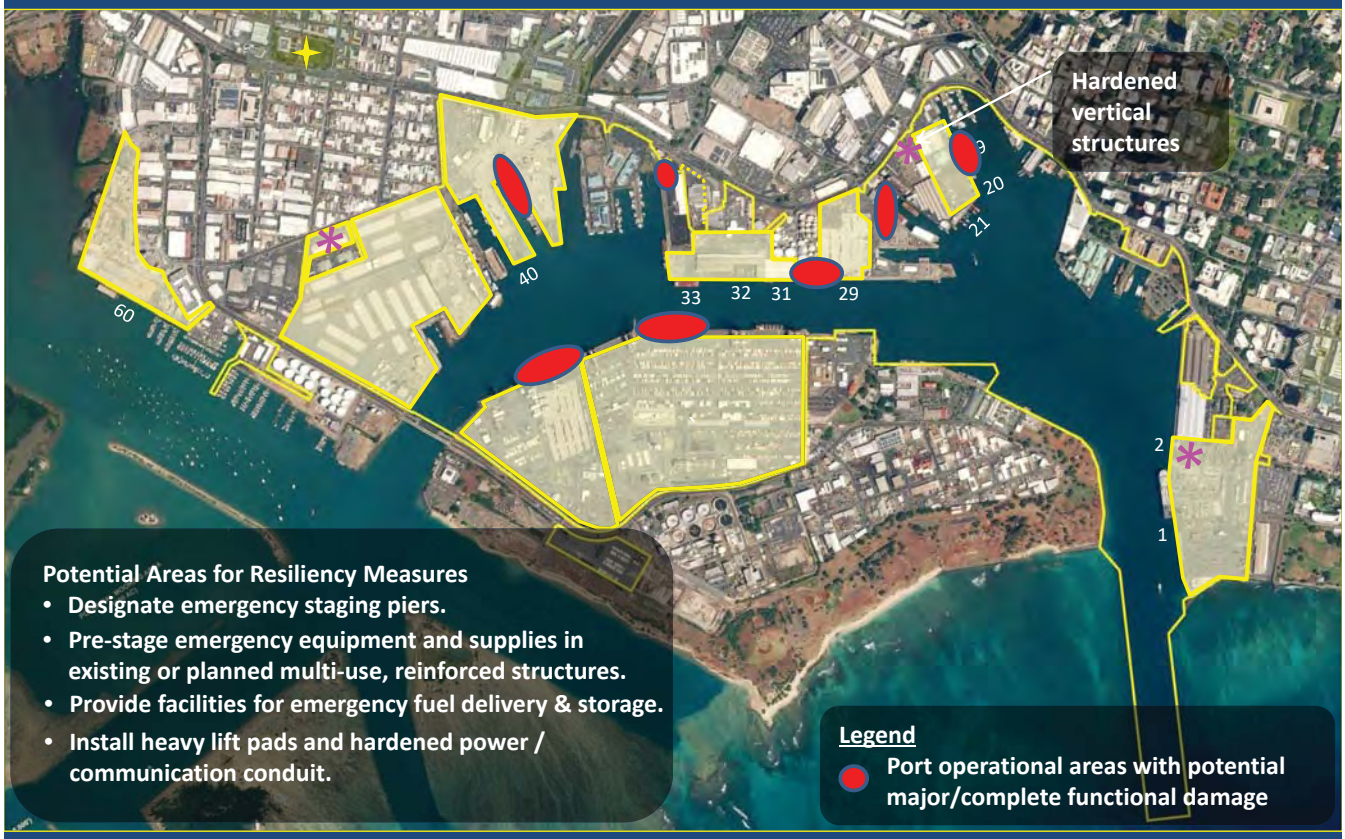
1. Raise solid bull rail, curbing or apron along pier edge.
   - Raised edge must be strong enough to moor a cargo vessel and handle lateral and vertical pull on the bollard system.
   - Design must accommodate cargo movement operations.
   - Impact on RO-RO operations. Ramp support struts need to rest flat on the pier apron.
   - Requires drainage system for yard area. Consider use of pumps.
   - Currently researching design precedence.

2. Modified mooring dolphin system incorporated into pier face.
   - Examples include sliders/columns used in areas with large tidal range.
   - Difficult for cargo vessel operations.

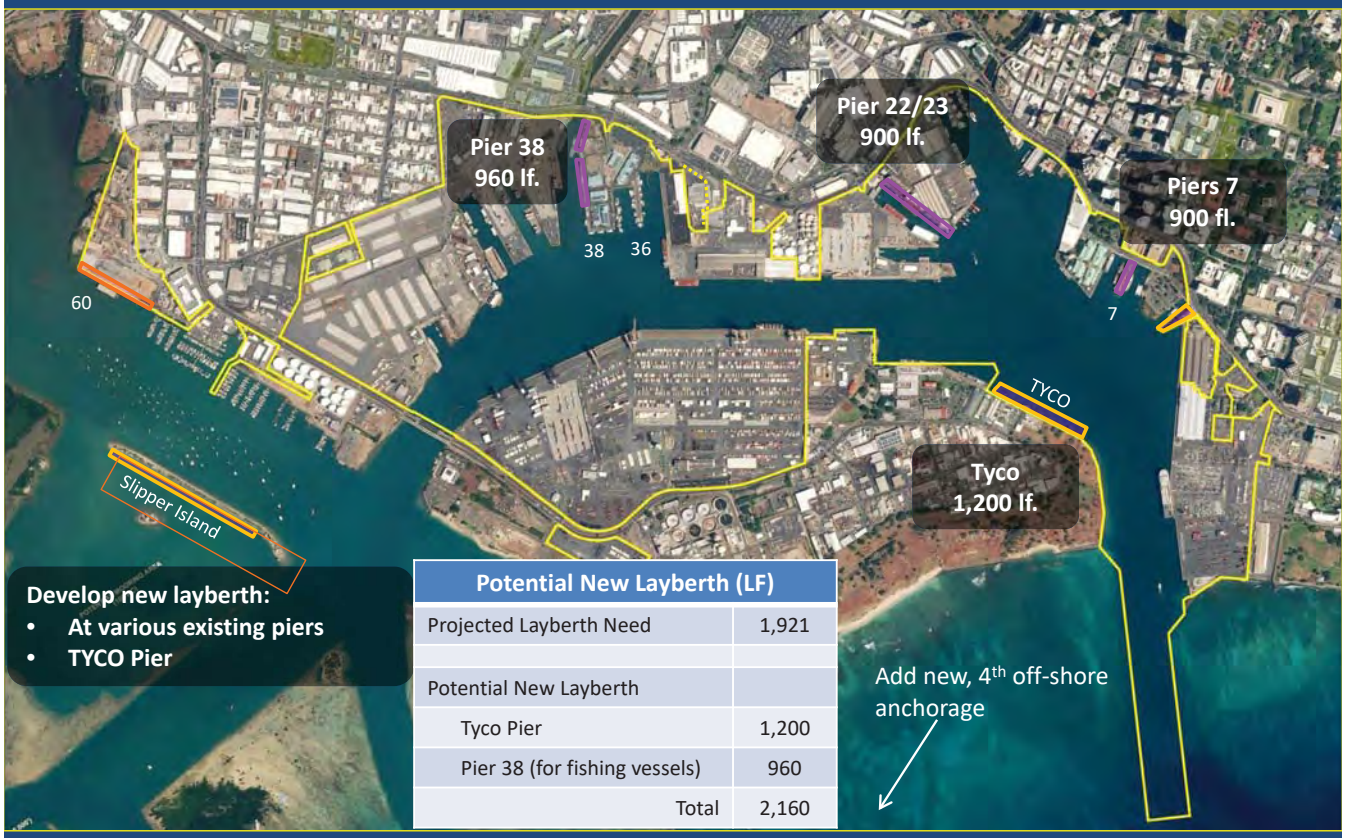
Consider:

- Establish a working group to address this issue: include academic resource experts, industry representatives, port planners and government agency representatives.
- Look at other regions with extreme tidal ranges (Alaska, Canada, Europe)

Resiliency Piers



Layberth



Potential New Layberth (LF)	
Projected Layberth Need	1,921
Potential New Layberth	
Tyco Pier	1,200
Pier 38 (for fishing vessels)	960
Total	2,160

Q&A

2050 ANNUAL THROUGHPUT

AND

ESTIMATED CAPACITY NEEDS

HHMP TAC #2

Stantec Consulting Ltd.

Stantec's Role

- Evaluate existing harbor capacity
  - (containers, autos, break bulk, liquid bulk, aggregates)
- Determine future capacity demand based on throughput projections by SMS
- Identify opportunities to add capacity
- Develop alternatives to meet future throughput demand

Cargo Operations

Throughput Capacity

Terminal 1

Berth:
150,000 Units

Storage:
200,000 Units

Terminal Capacity:
150,000 Units

Terminal 2

Berth:
125,000 Units

Storage:
100,000 Units

Terminal Capacity:
100,000 Units

Harbor Berth Capacity:	**275,000 Units**
Harbor Storage Capacity:	**300,000 Units**
Overall Harbor Capacity:	**250,000 Units**

Existing Capacity vs. 2017 Throughput

Sector	Unit	Existing Capacity	2017 Throughput	2017 Percent Utilization
Containers	TEU	1,430,000	1,204,200	84%
		1,860,000 (w/KCT)	n/a	n/a
RO/RO (Automobiles)	Units	367,000	177,600	48%
Break-Bulk/Neo-Bulk	Tons	763,000	471,300	62%
Liquid-Bulk*	Bbls	14,490,000	7,071,800	49%
		20,630,000 (w/KCT)	n/a	n/a
Dry-Bulk (Aggregate)*	Tons	500,000	83,300	17%

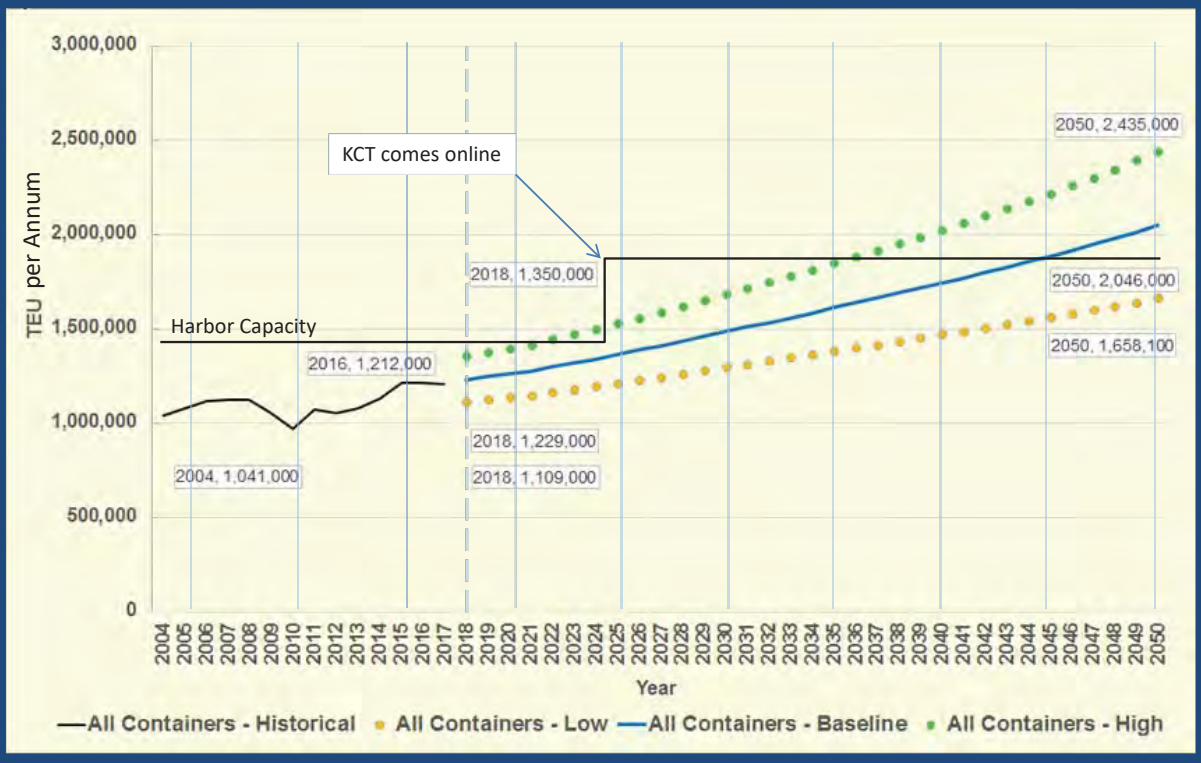
* Represents berth throughput capacity only.

Existing Capacity vs. Projected 2050 Throughput

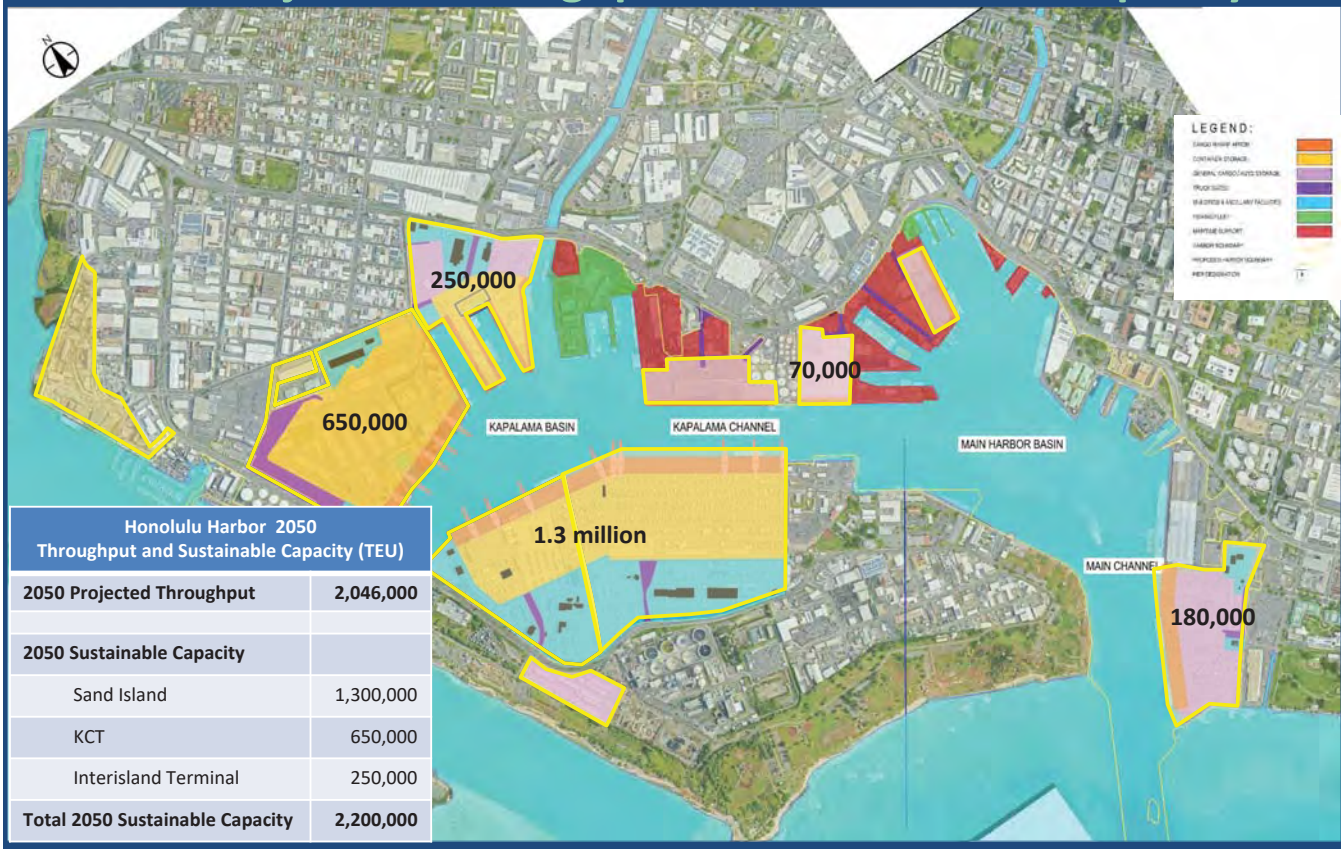
Sector	Unit	Existing Capacity	Annual Throughput Projection 2050	Difference
Containers	TEUs	1,860,000 (w/ KCT)	2,046,000	**-186,000**
RO/RO (Automobiles)	Units	367,000	225,000	+142,000
Liquid Bulk*	Bbls	20,630,000 (w/ KCT)	10,080,000	+10,550,000
Break-Bulk/Neo-Bulk	Tons	763,000	368,000	+395,000
Dry-Bulk (Aggregate)*	Tons	500,000	< 10,000	+500,000

* Represents berth throughput capacity only.

Projected Container Throughput and Capacity

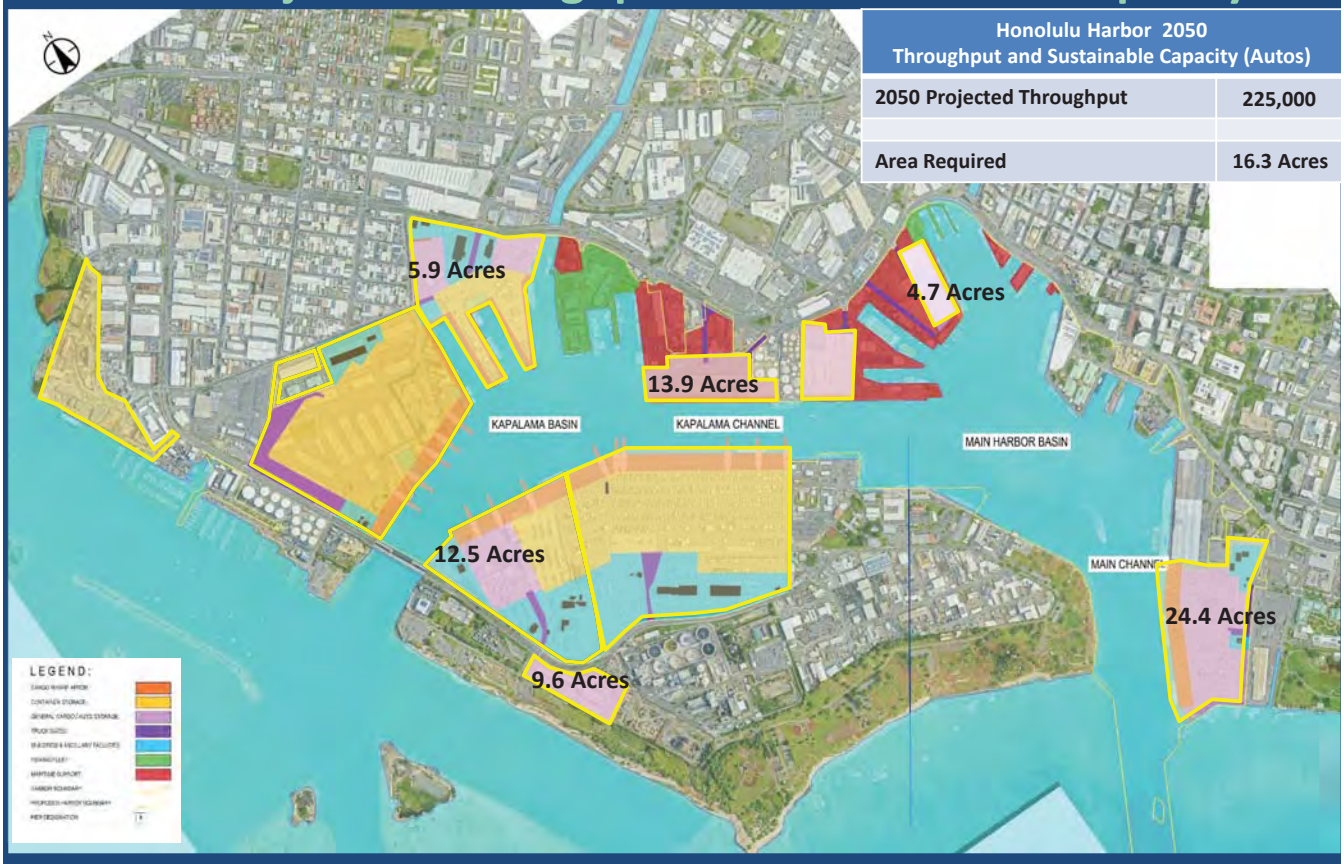


2050 Projected Throughput and Sustainable Capacity



Honolulu Harbor 2050 Throughput and Sustainable Capacity (TEU)	
2050 Projected Throughput	**2,046,000**
2050 Sustainable Capacity	
Sand Island	1,300,000
KCT	650,000
Interisland Terminal	250,000
Total 2050 Sustainable Capacity	**2,200,000**

2050 Projected Throughput and Sustainable Capacity



Honolulu Harbor 2050 Throughput and Sustainable Capacity (Autos)	
2050 Projected Throughput	**225,000**
Area Required	**16.3 Acres**

Q&A

Land Use Overview

General Overview

Cargo Terminals

General Overview

Maritime Support

General Overview

Fishing Piers

General Overview

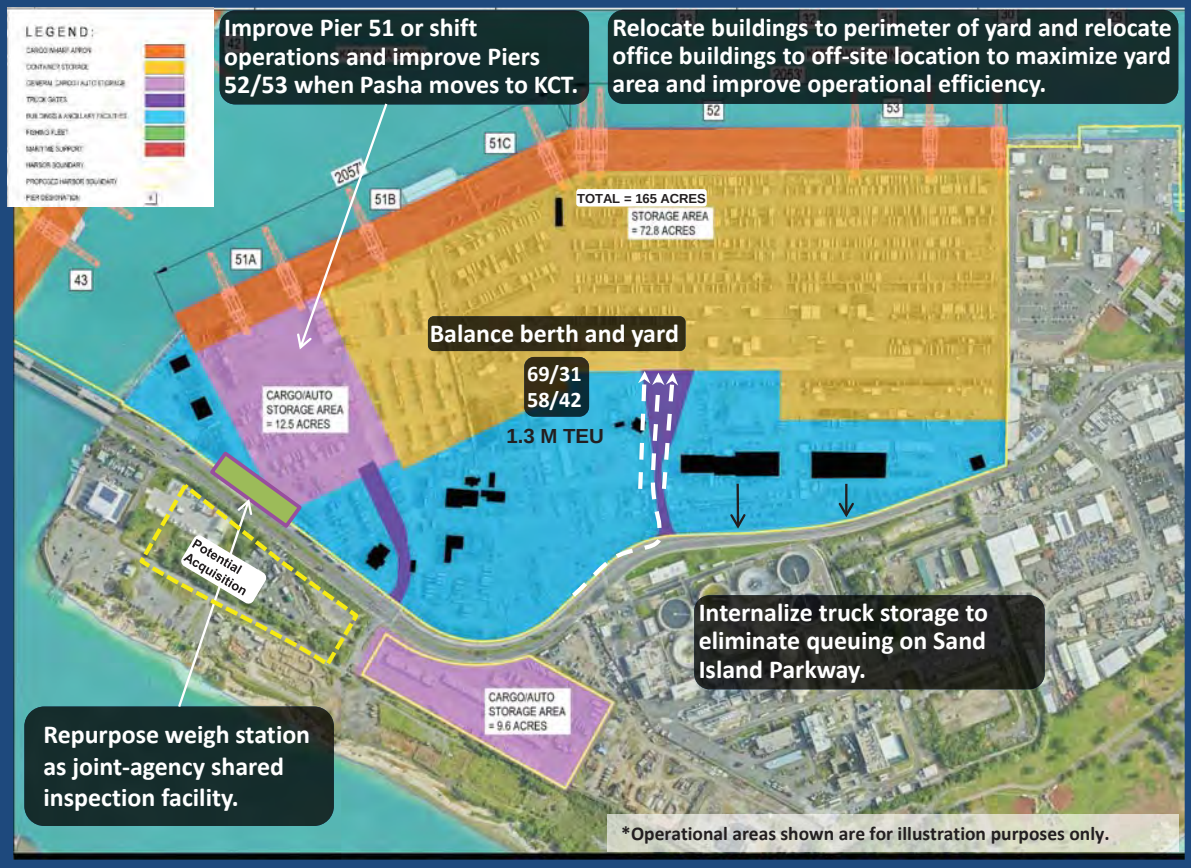
Passenger Operations

General Overview

Non-Maritime

Sand Island Terminal

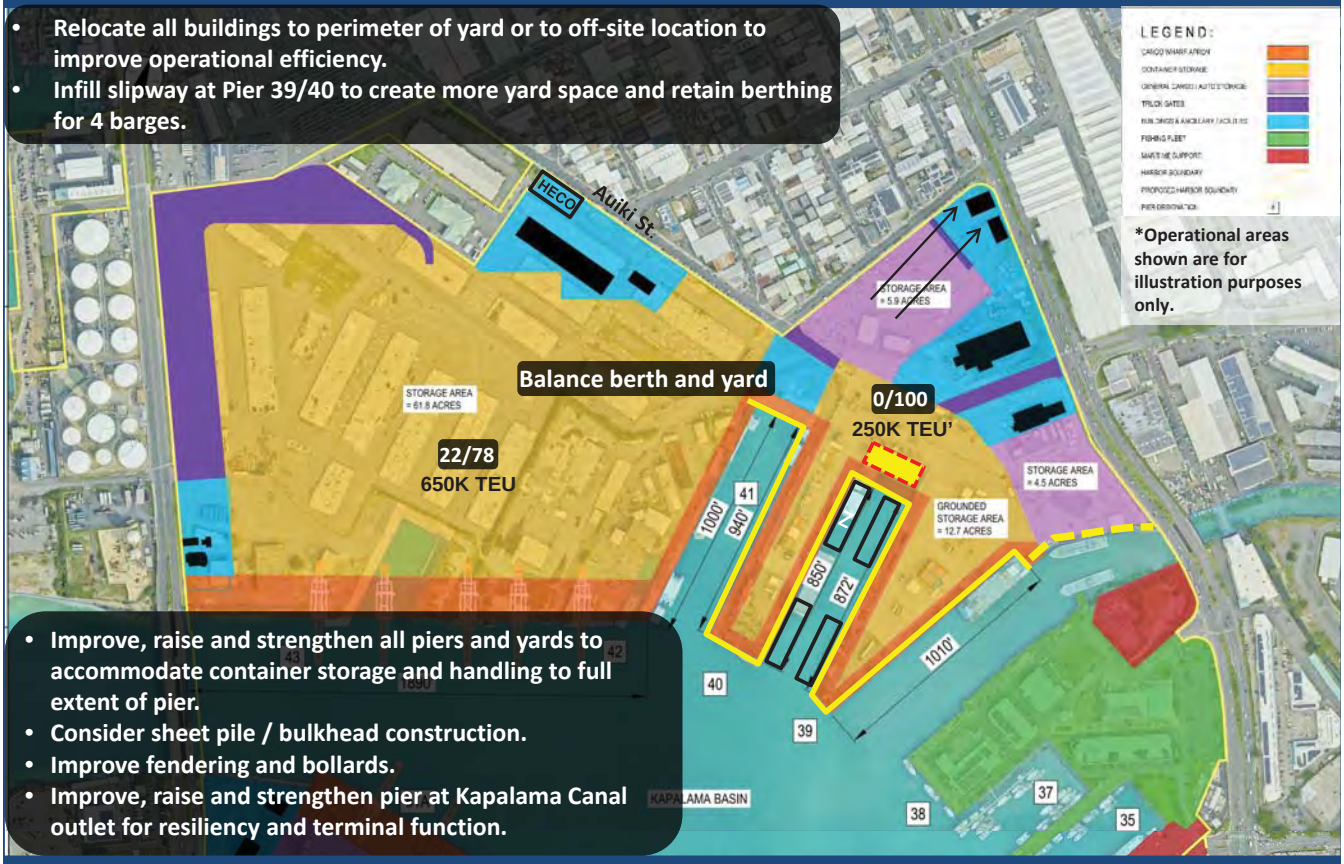
Sand Island – 2050



Kapalama Container Terminal (KCT)
&
Interisland Terminal

KCT and Interisland Terminal - 2050

- Relocate all buildings to perimeter of yard or to off-site location to improve operational efficiency.
- Infill slipway at Pier 39/40 to create more yard space and retain berthing for 4 barges.



- Improve, raise and strengthen all piers and yards to accommodate container storage and handling to full extent of pier.
- Consider sheet pile / bulkhead construction.
- Improve fendering and bollards.
- Improve, raise and strengthen pier at Kapalama Canal outlet for resiliency and terminal function.

KCT and Interisland Terminal

- Internalize truck queuing to eliminate traffic impacts on public streets.
- Create new Libby Street entrance for staff and customers.
- Provide internal truck queuing on Auiki Street.
- Consider one-way in and one-way out vehicle circulation.
- Consider relocating Livestock and/or LCL to off-site location (such as Triple-F Building or other nearby site).

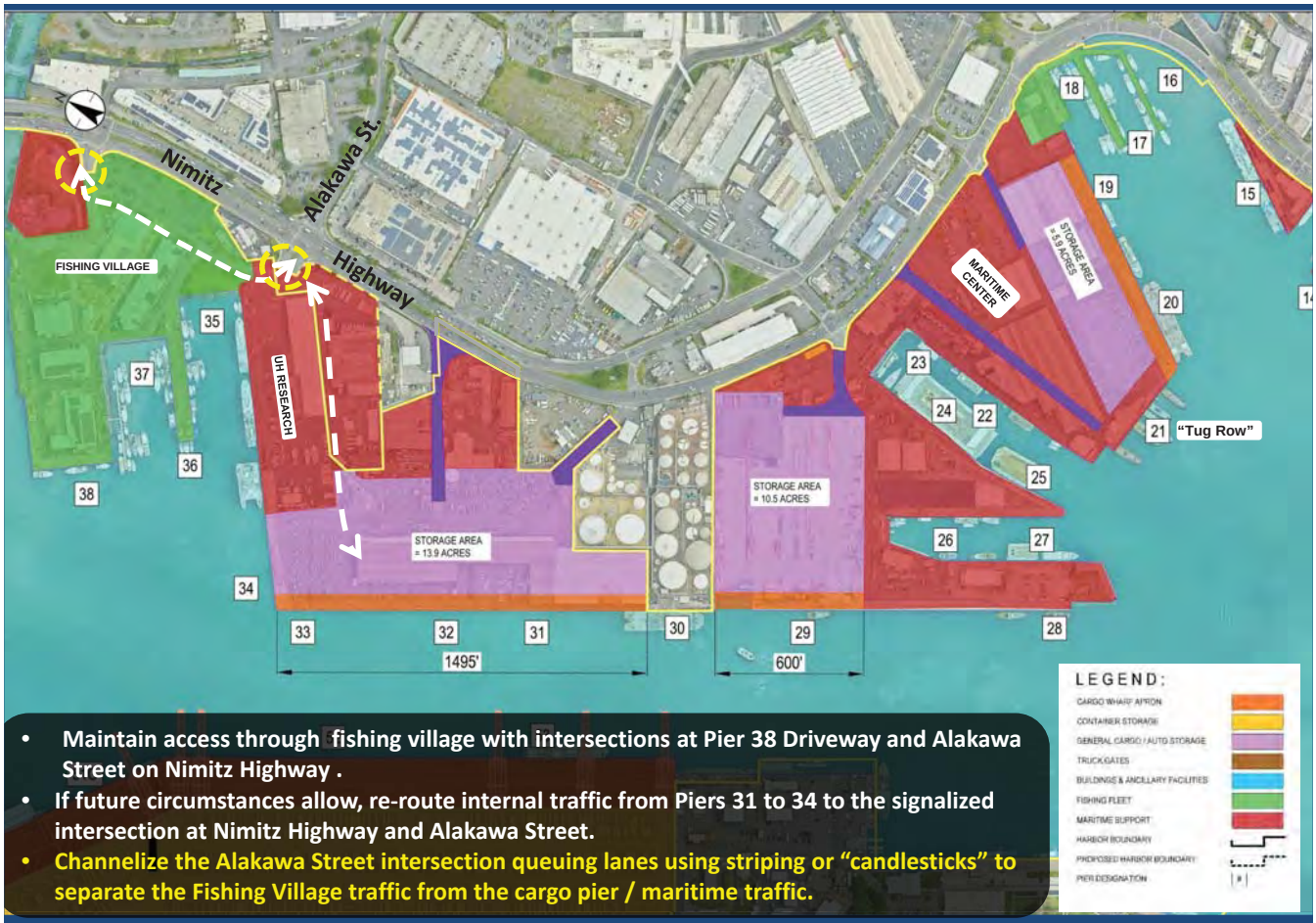
Q&A

Piers 12 to 38

- Improve cargo piers for mixed-use cargo operations.
- Create opportunities for maritime tenants through long-term lease agreements, public private partnerships and capital advancement program funding.
- Develop dedicated tug boat pier - "Tug Row" at Piers 21-22.
- Develop new maritime center at Piers 22-23.

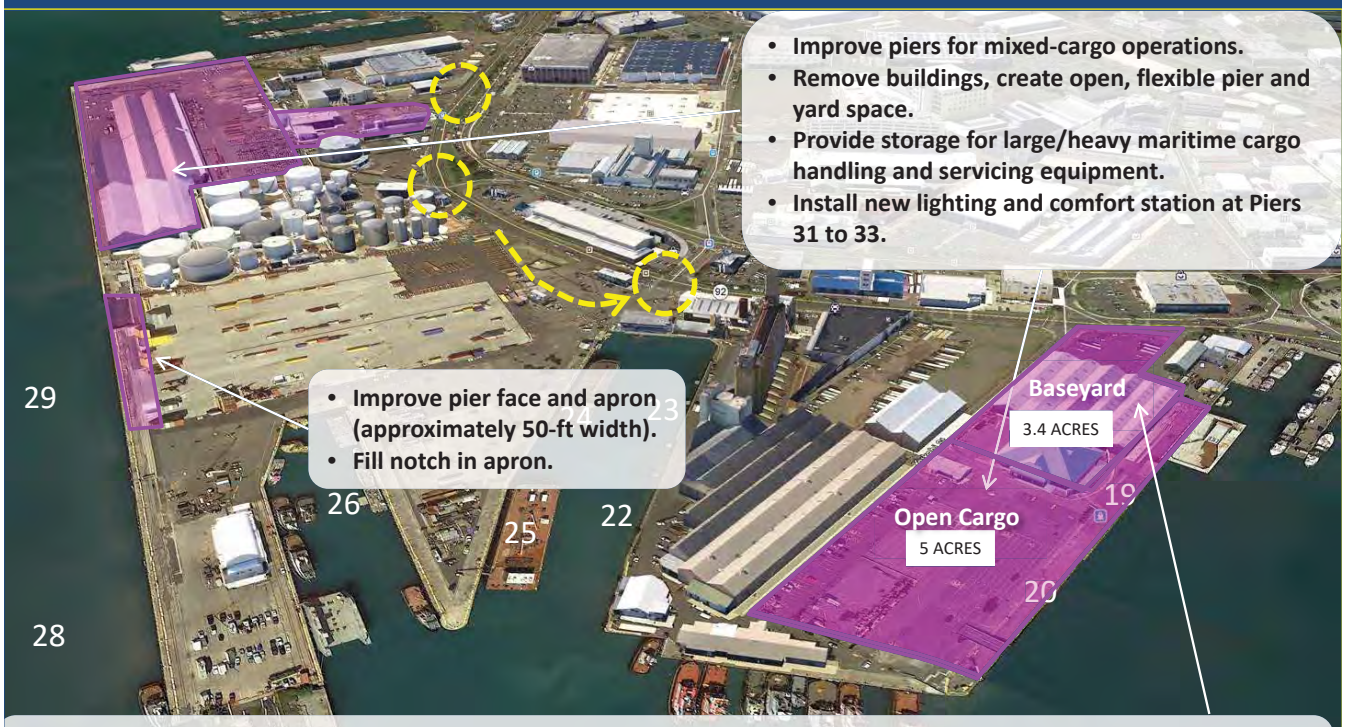
Piers 36 to 38 – Fishing Village

- Extend pier improvements at Pier 38 for fishing vessel off-load and provisioning and for layberth.
- Develop new pier adjacent to maritime support area for work boats and layberth.
- Consider reconstructing existing fuel barge pier.
- Consider floating dock design for fishing vessels and work boat piers.
- Extend Pier 36.



- Maintain access through fishing village with intersections at Pier 38 Driveway and Alakawa Street on Nimitz Highway .
- If future circumstances allow, re-route internal traffic from Piers 31 to 34 to the signalized intersection at Nimitz Highway and Alakawa Street.
- Channelize the Alakawa Street intersection queuing lanes using striping or "candlesticks" to separate the Fishing Village traffic from the cargo pier / maritime traffic.

Piers 19 to 33



- Improve piers for mixed-cargo operations.
- Remove buildings, create open, flexible pier and yard space.
- Provide storage for large/heavy maritime cargo handling and servicing equipment.
- Install new lighting and comfort station at Piers 31 to 33.

- Improve pier face and apron (approximately 50-ft width).
- Fill notch in apron.

Consolidate DOT-H Sand Island Baseyard and Custodial Operations at Pier 19

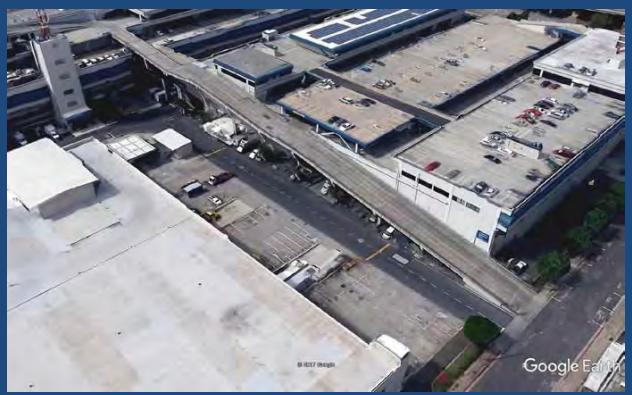
- Renovate Pier 19 sheds and Ferry Terminal Building for maintenance and repair shop, storage and office space.
- Repave the yard for parking, fleet vehicles and equipment.

Piers 19 to 33

Maritime Center

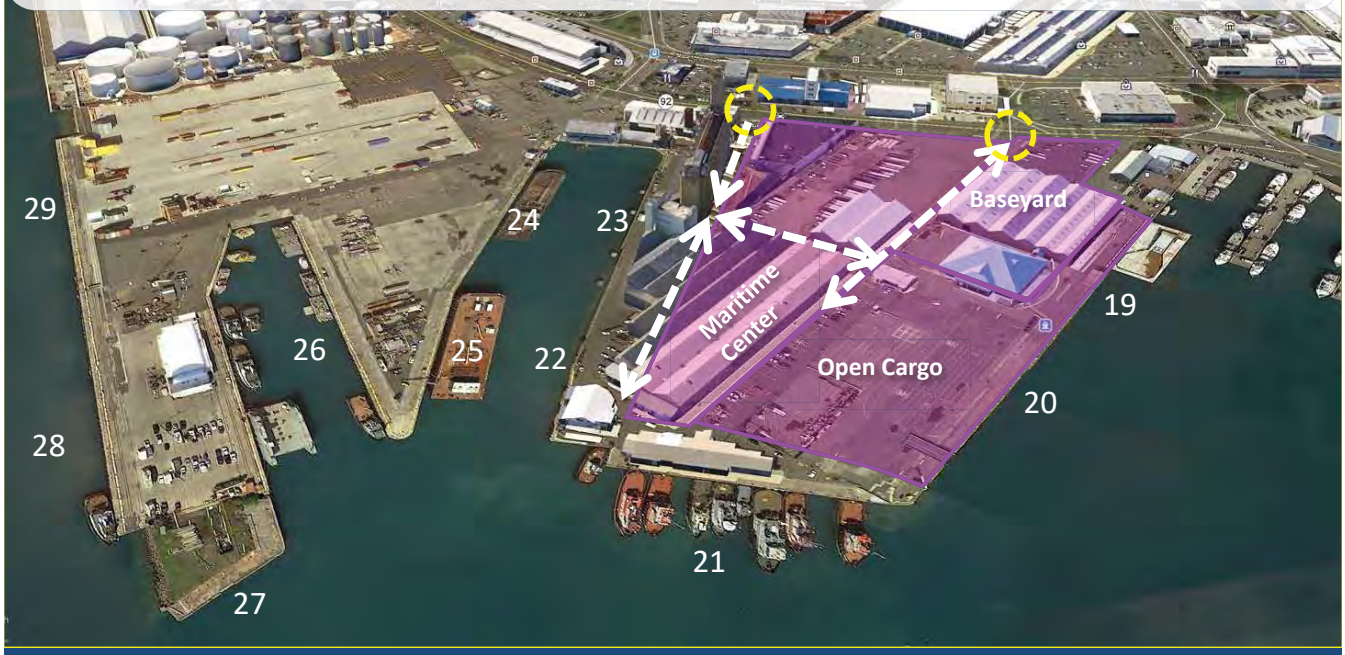
- **Develop multi-level, mixed-use structure to accommodate office, ship agents, parking, auto storage, and high-cube cargo operations at ground level. Incorporate existing McCabe building.**
- **Include commercial / retail on Nimitz Highway frontage.**
- **Provide storage area for large/heavy maritime cargo handling equipment and emergency equipment.**
- **Integrate parking and auto storage with Piers 19/20 cargo operations.**

Multi-story Structure Examples



Piers 19 to 33

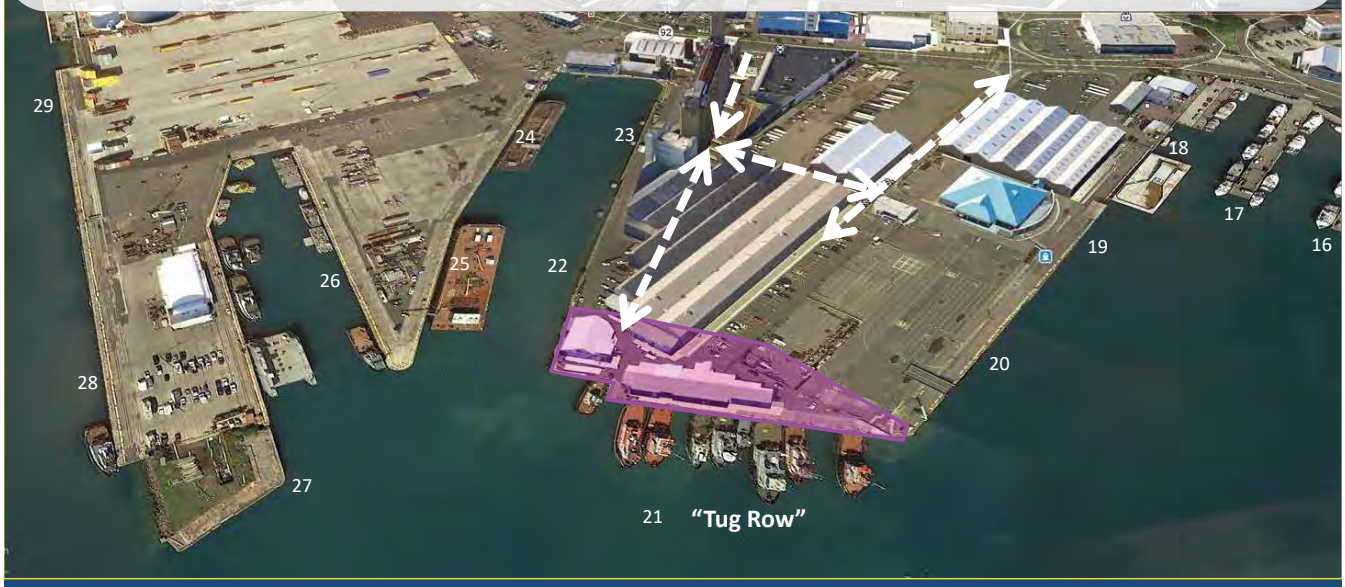
- Reauthorize driveway entrance at Pier 23 to provide access to Pier 21, "Tug Row," and to maritime uses and proposed maritime center at Piers 22 and 23.
- Develop existing Piers 21-23 driveway as primary access to new maritime center and Piers 19/20 cargo terminal.
- Signalize intersection. Coordinate with DOT-Highways for warrant study.
- Construct a channelizing island on the makai-Ewa corner to improve pedestrian safety.



Piers 19 to 33

Tug Row at Piers 21-22

- Demolish existing buildings.
- Consolidate tug operators in shared office, warehouse, parking and maintenance facilities
- Improve and strengthen pier, apron and yard. Consider sheetpile / bulkhead construction.
- Provide shoreside power.
- Reopen driveway on Nimitz Highway to provide primary access.
- Phase improvements so as not to disrupt tug operations.

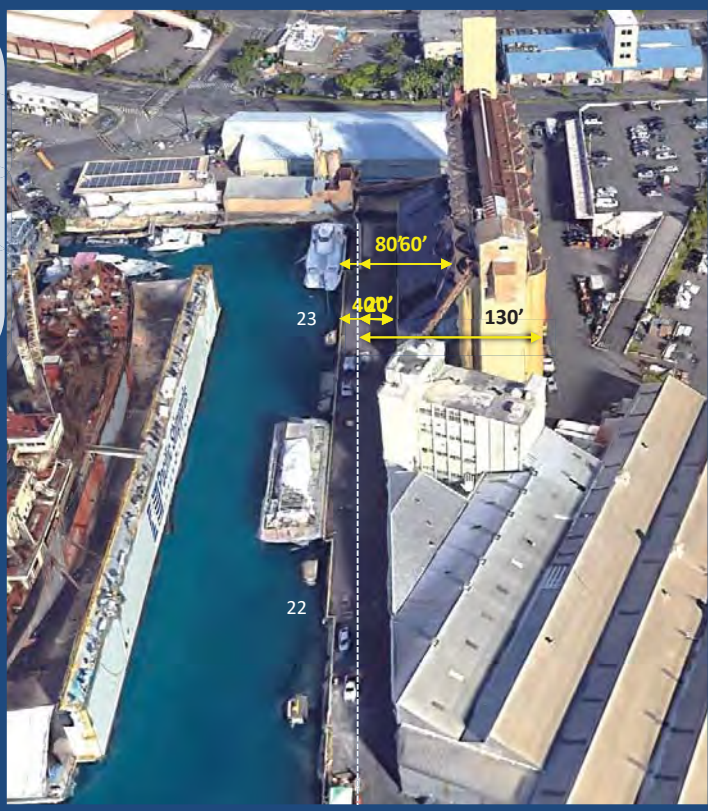


Piers 22-23

- Reconstruct pier. Consider sheet pile / bulkhead construction. Strengthen pier foundation to support construction of the proposed maritime center.
- Clear out subsurface coral and rocks and cut back pier face by 20 to 40 feet to widen slipway.
- Dredge full extents of slipway to 35-foot depth.
- Demolish silos, warehouses and miscellaneous buildings to accommodate driveway access, and efficient layout of yard area for maritime uses.
- Reopen driveway access on Nimitz Highway to provide primary access to Piers 21 to 23, and to proposed Maritime Center.
- Improve Pier 23 for use by maritime tenant and as layberth.

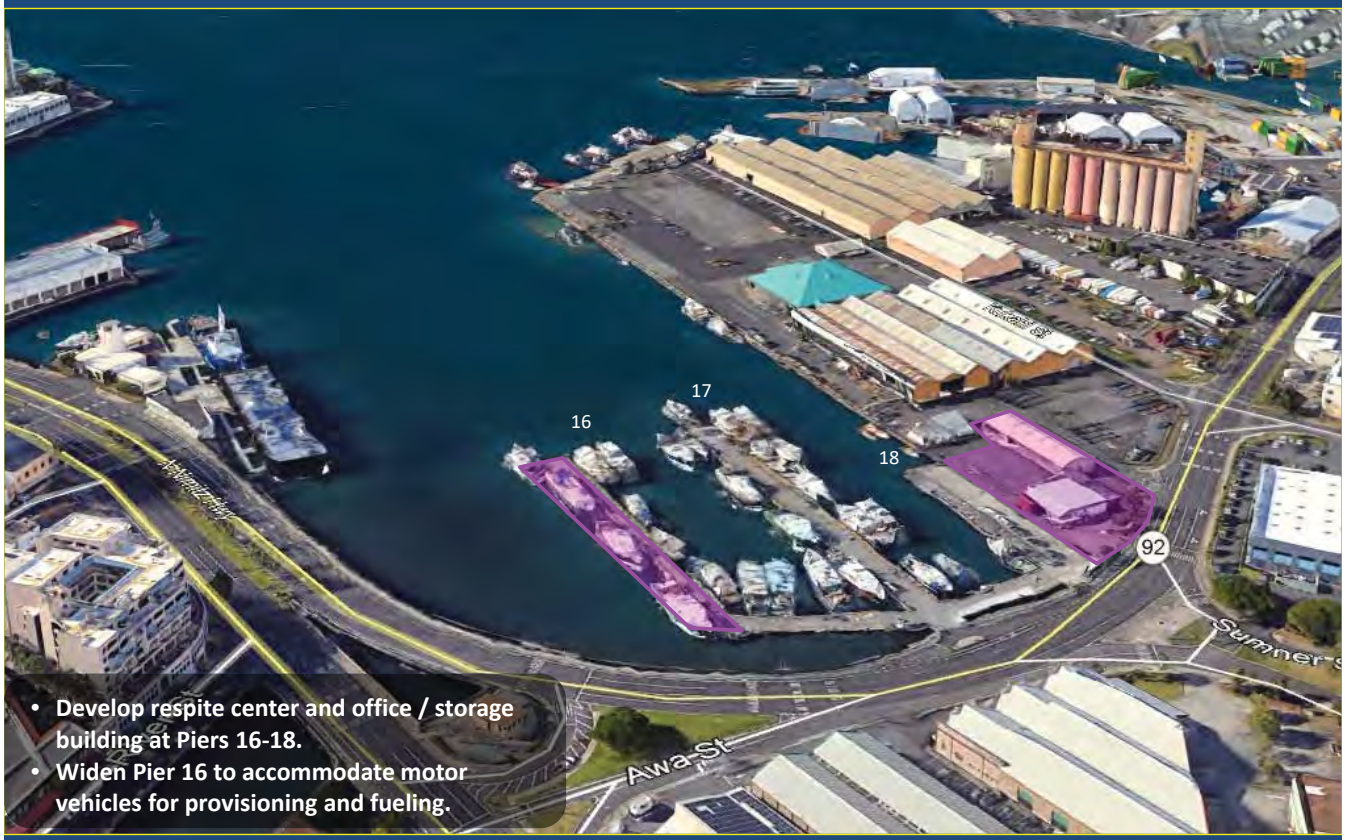
Piers 22-23

- Existing silos and related structures constrain efficient use of Piers 22 and 23.
- Existing space between the pier face and silo buildings is limited.
- With the silos, the reconstructed pier would further reduce functional maritime use area.
- Removing the silos and related structures adds 110’ of additional width adjacent to the pier face and thereby improves yard efficiency.



Piers 19 to 33

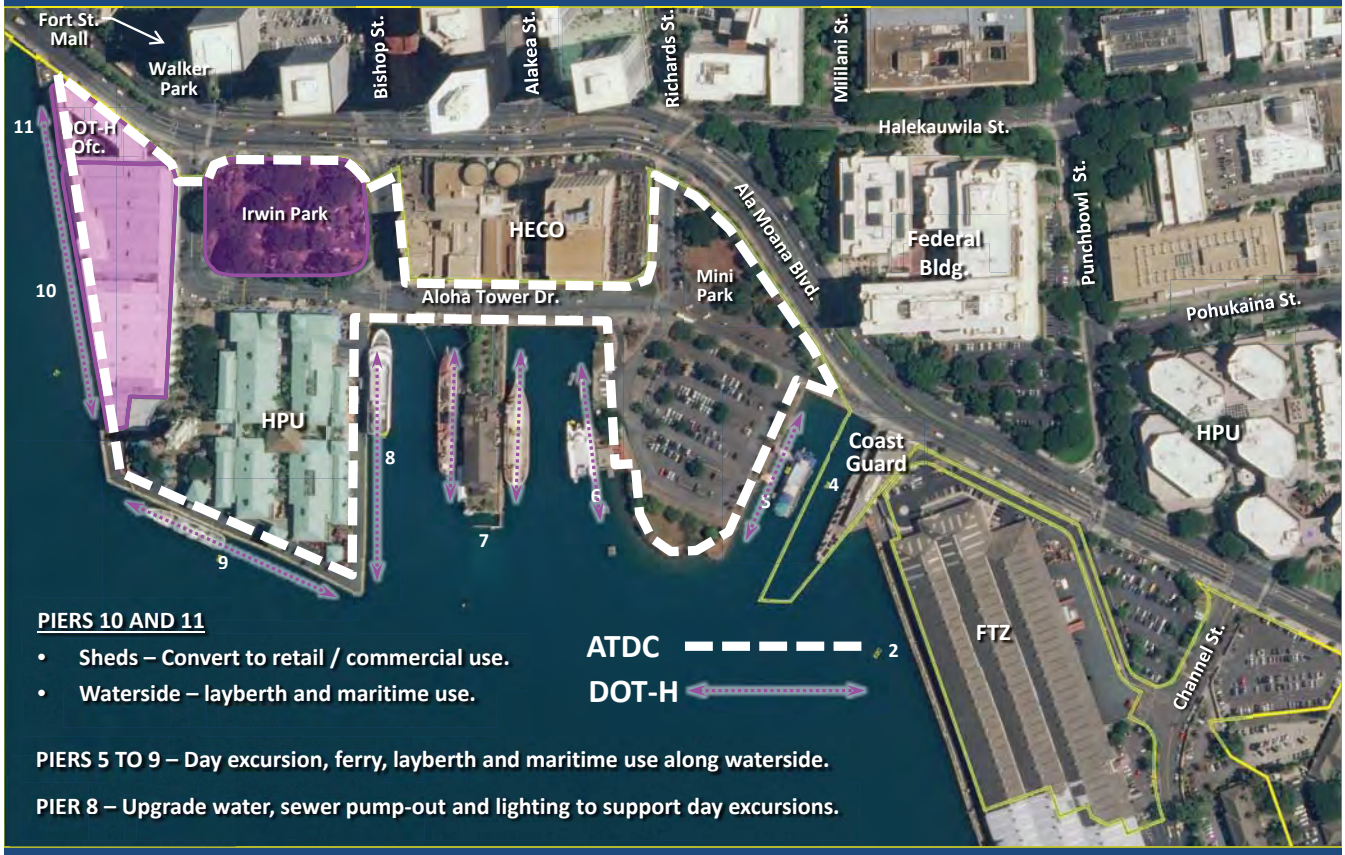
Piers 16 to 18 – Fishing Fleet



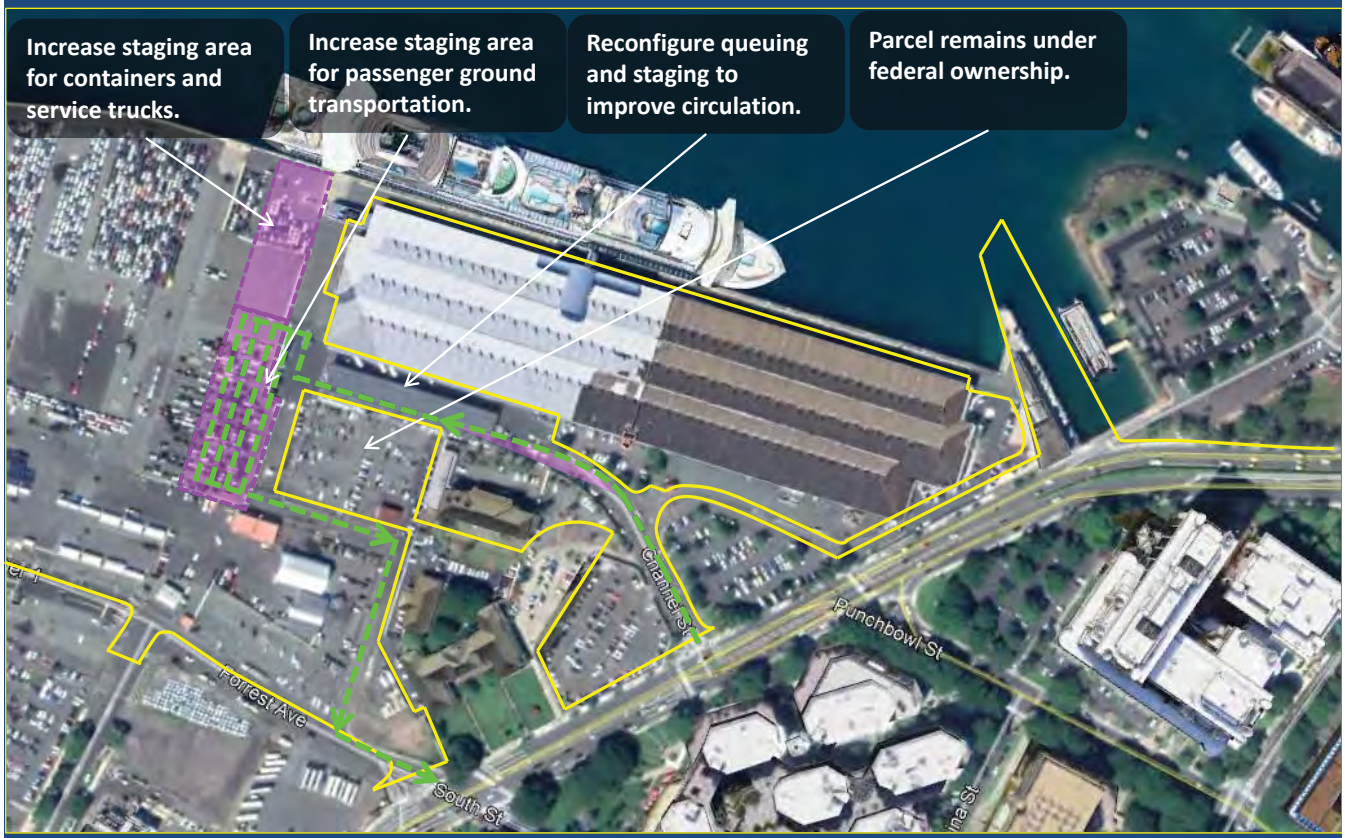
- **Pier 15- Harbor Police.**
- **Use long-term leases and public private partnership agreements to incentivize investment in maritime facilities, including pier reconstruction and development of support buildings.**
- **Pier 13-14–Maritime Tenant. Remove warehouse building to create an open yard or redevelop into a multi-story building with high-cube ground level and upper level space for office and storage.**
- **Pier 12- Replace segmented pier with a continuous pier or floating dock. Consider extending Pier 12 on ewa side. Use for layberth or Maritime Tenant.**

Q&A

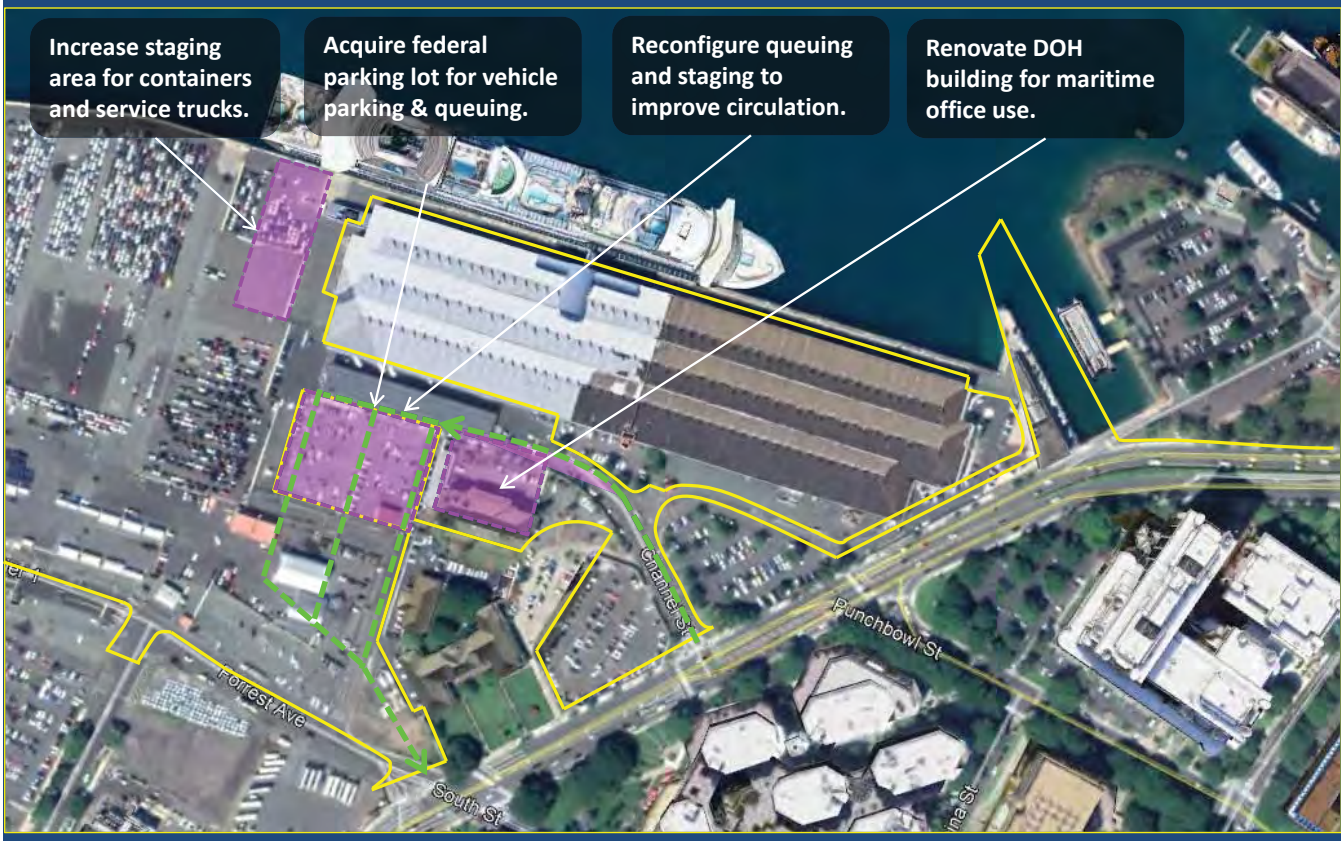
Maritime Use - Aloha Tower Area



Pier 2



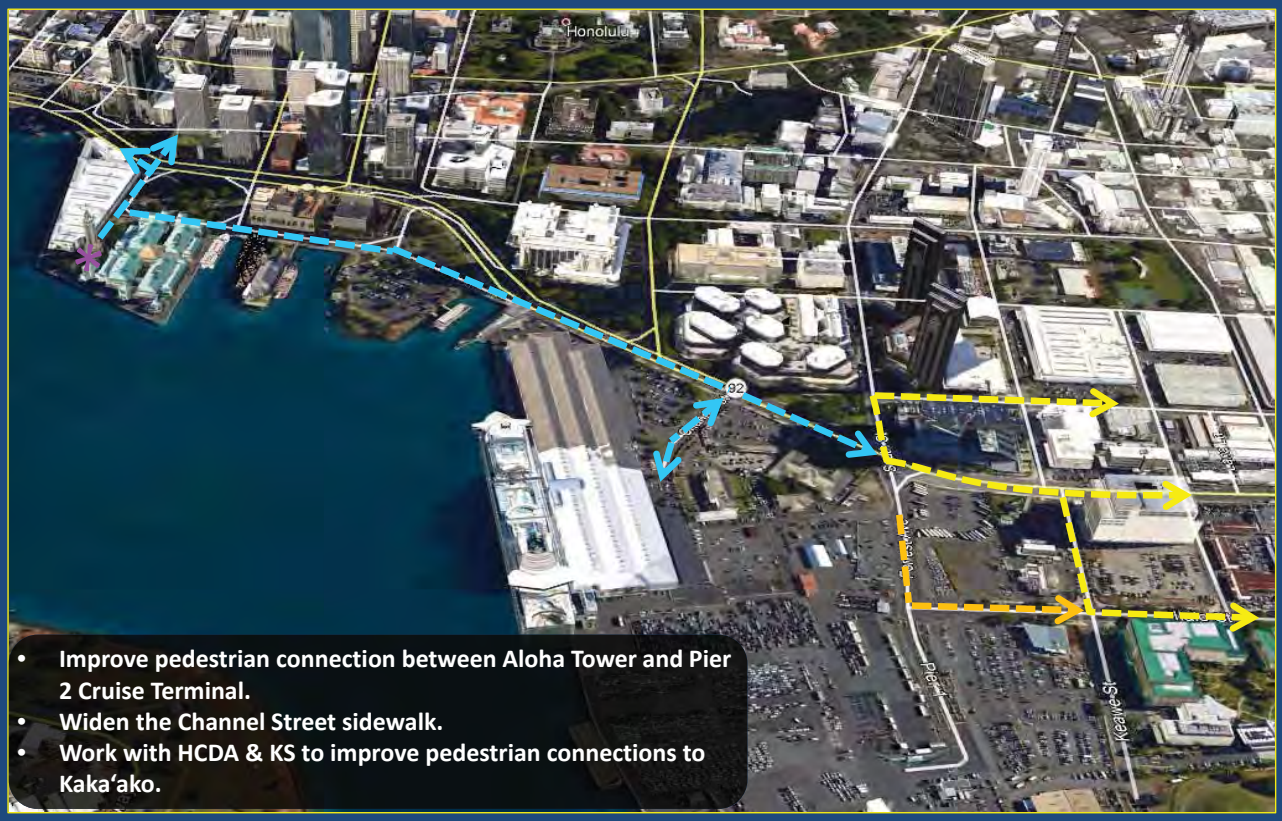
Pier 2



Pier 2 Cruise Terminal

- Provide shoreside sewer connection for cruise vessel discharge to municipal collection system.
- Improve shoreside water connection for cruise vessels to take on water (pressure and flow). Consider upsizing existing lines and providing pumps.
- Provide shoreside power to reduce carbon emissions from idling vessels.

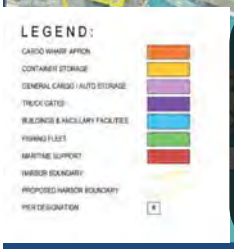
Cruise Terminal Pedestrian Connectivity



- Improve pedestrian connection between Aloha Tower and Pier 2 Cruise Terminal.
- Widen the Channel Street sidewalk.
- Work with HCDA & KS to improve pedestrian connections to Kaka'ako.

Piers 1 & 2

Piers 1 and 2 – Cargo and Resiliency Pier

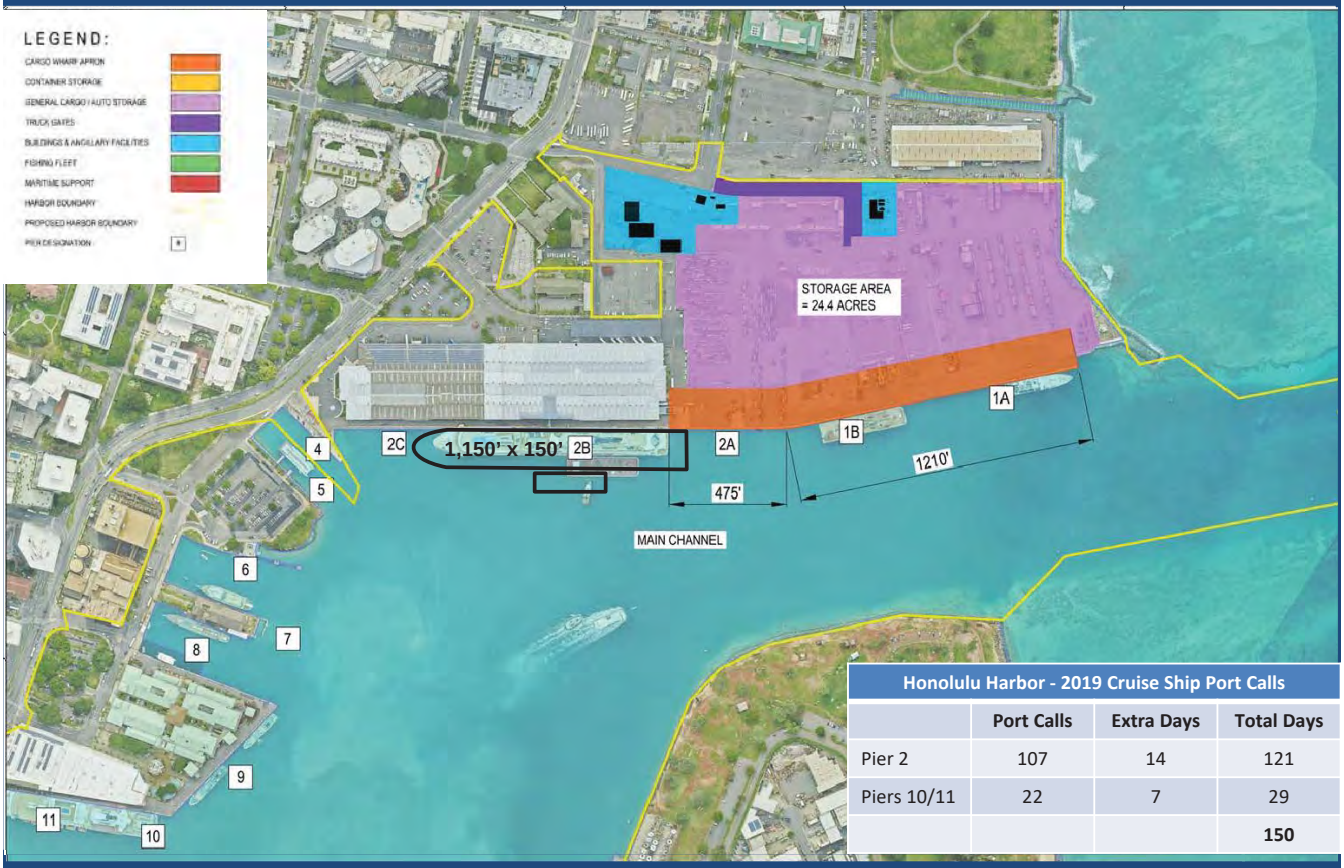


- **Improve pier and yard to serve as primary resiliency pier and multi-use cargo pier. Improve pier and yard to address SLR.**
- **Consider sheet pile/bulkhead construction. Include wave energy diffusion with pier design.**
- **Consider cutting back pier face to fast land and thereby widen the channel.**
- **Construct heavy lift pads and reinforced utility conduit for function as resiliency pier.**
- **Coordinate with OHA for possible DOT-H use of 5-acre parcel.**
- **Acquire 0.8-acre HCDA remnant parcel to expand yard and improve operational function.**

Cruise Terminal Alternatives

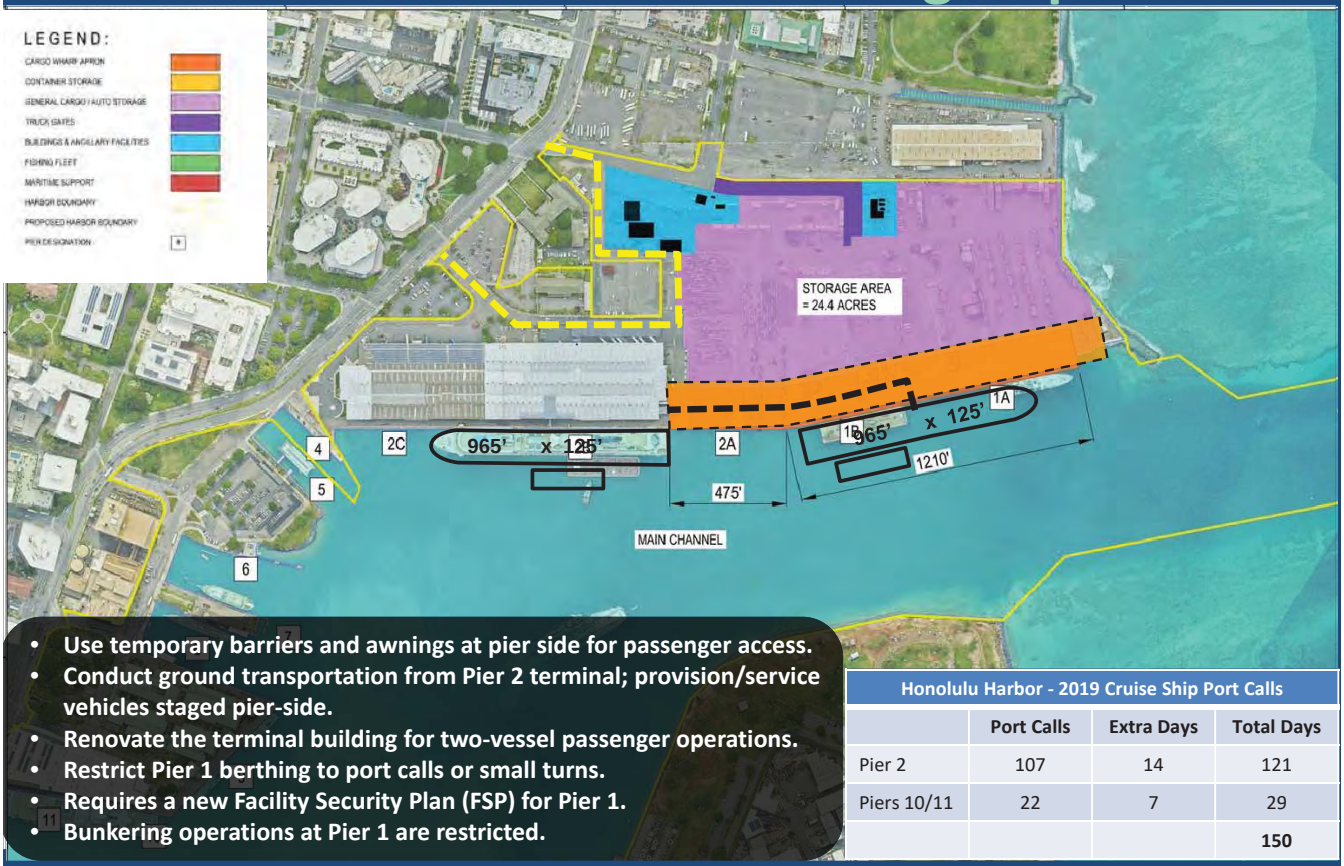
1. Eliminate cruise operations from Piers 10/11.
2. All cruise operations at Pier 2 Cruise Terminal.
3. Option to use Pier 1 as a second cruise berth.
4. Piers 19/20 – Contingency Cruise Ship Berth. No improvements for cruise operations. Open pier only.

Pier 2 - Cruise Terminal



Honolulu Harbor - 2019 Cruise Ship Port Calls			
	Port Calls	Extra Days	Total Days
Pier 2	107	14	121
Piers 10/11	22	7	29
			150

Pier 1 - Combined Cruise and Cargo Operations

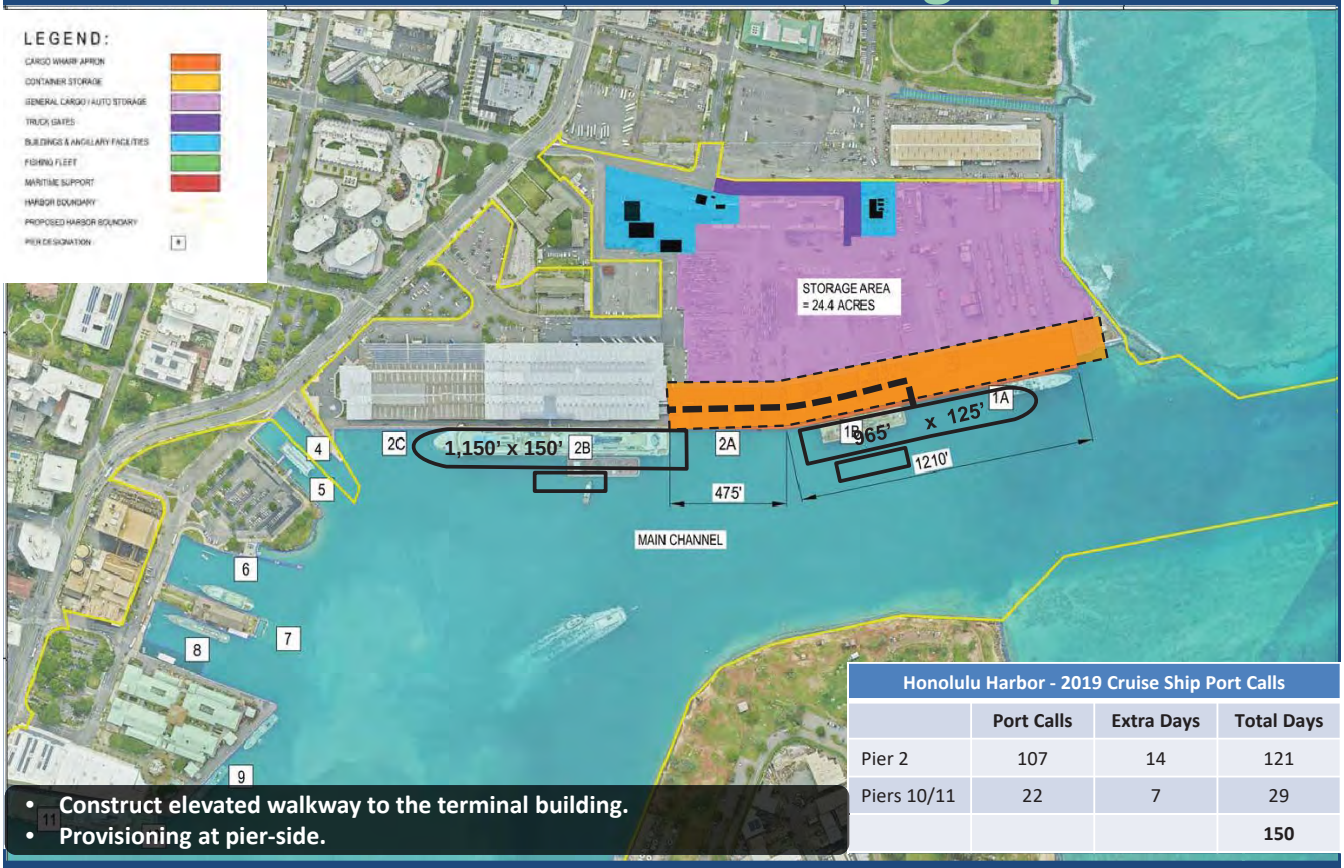


- **Use temporary barriers and awnings at pier side for passenger access.**
- **Conduct ground transportation from Pier 2 terminal; provision/service vehicles staged pier-side.**
- **Renovate the terminal building for two-vessel passenger operations.**
- **Restrict Pier 1 berthing to port calls or small turns.**
- **Requires a new Facility Security Plan (FSP) for Pier 1.**
- **Bunkering operations at Pier 1 are restricted.**

Honolulu Harbor - 2019 Cruise Ship Port Calls			
	Port Calls	Extra Days	Total Days
Pier 2	107	14	121
Piers 10/11	22	7	29
			150

Temporary Cruise Facilities

Pier 1 - Combined Cruise and Cargo Operations



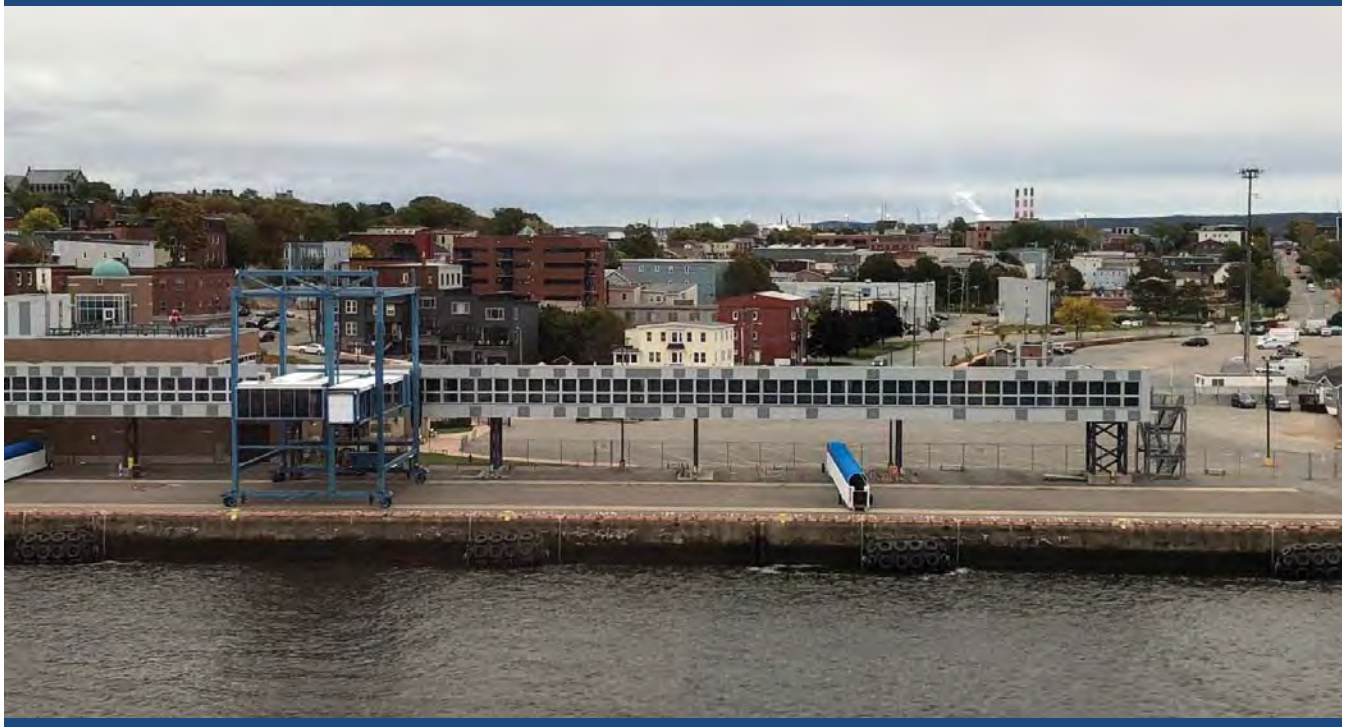
- Construct elevated walkway to the terminal building.
- Provisioning at pier-side.

Honolulu Harbor - 2019 Cruise Ship Port Calls

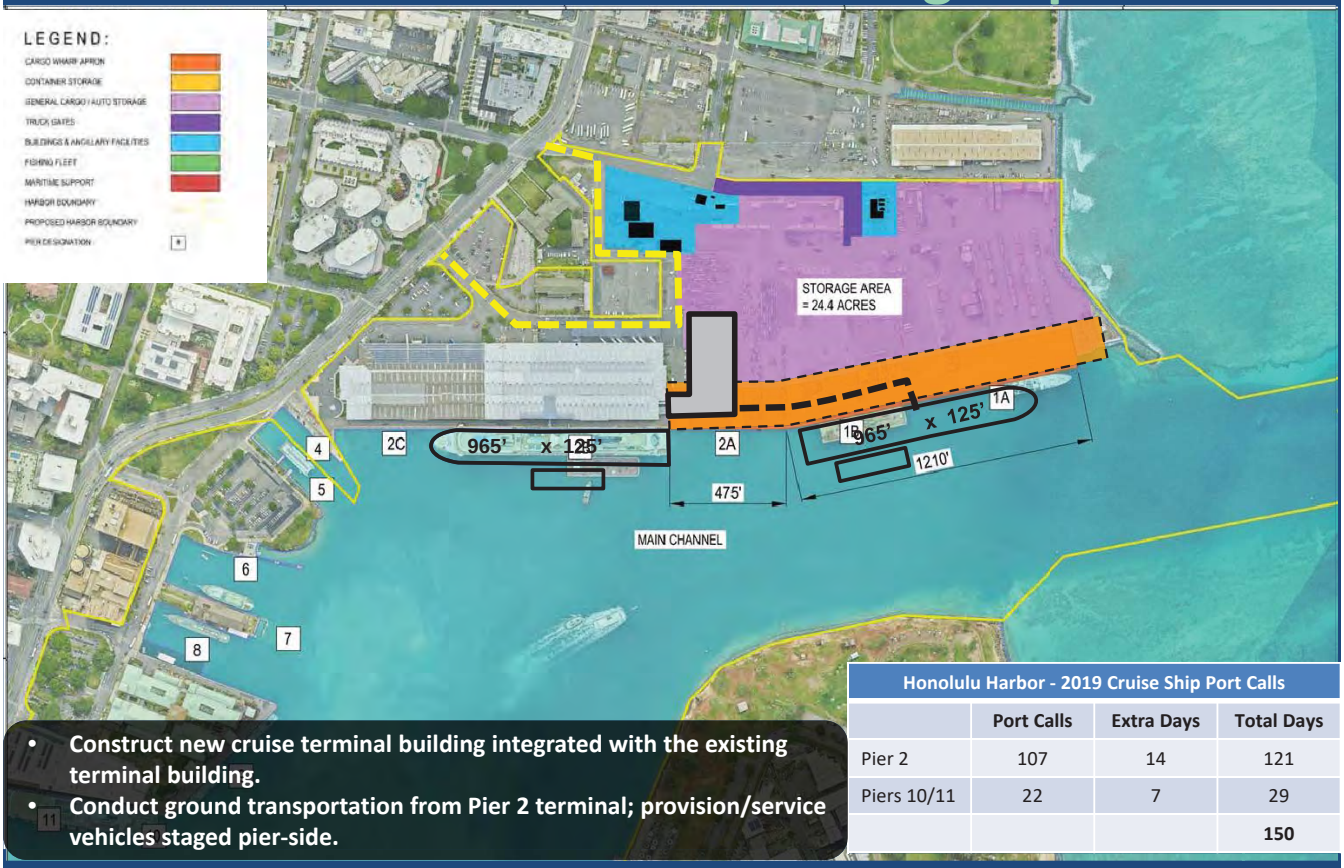
	Port Calls	Extra Days	Total Days
Pier 2	107	14	121
Piers 10/11	22	7	29
			150

Permanent Cruise Facilities

Port of Saint John, NB, Canada



Pier 1 - Combined Cruise and Cargo Operations



- **Construct new cruise terminal building integrated with the existing terminal building.**
- **Conduct ground transportation from Pier 2 terminal; provision/service vehicles staged pier-side.**

Honolulu Harbor - 2019 Cruise Ship Port Calls

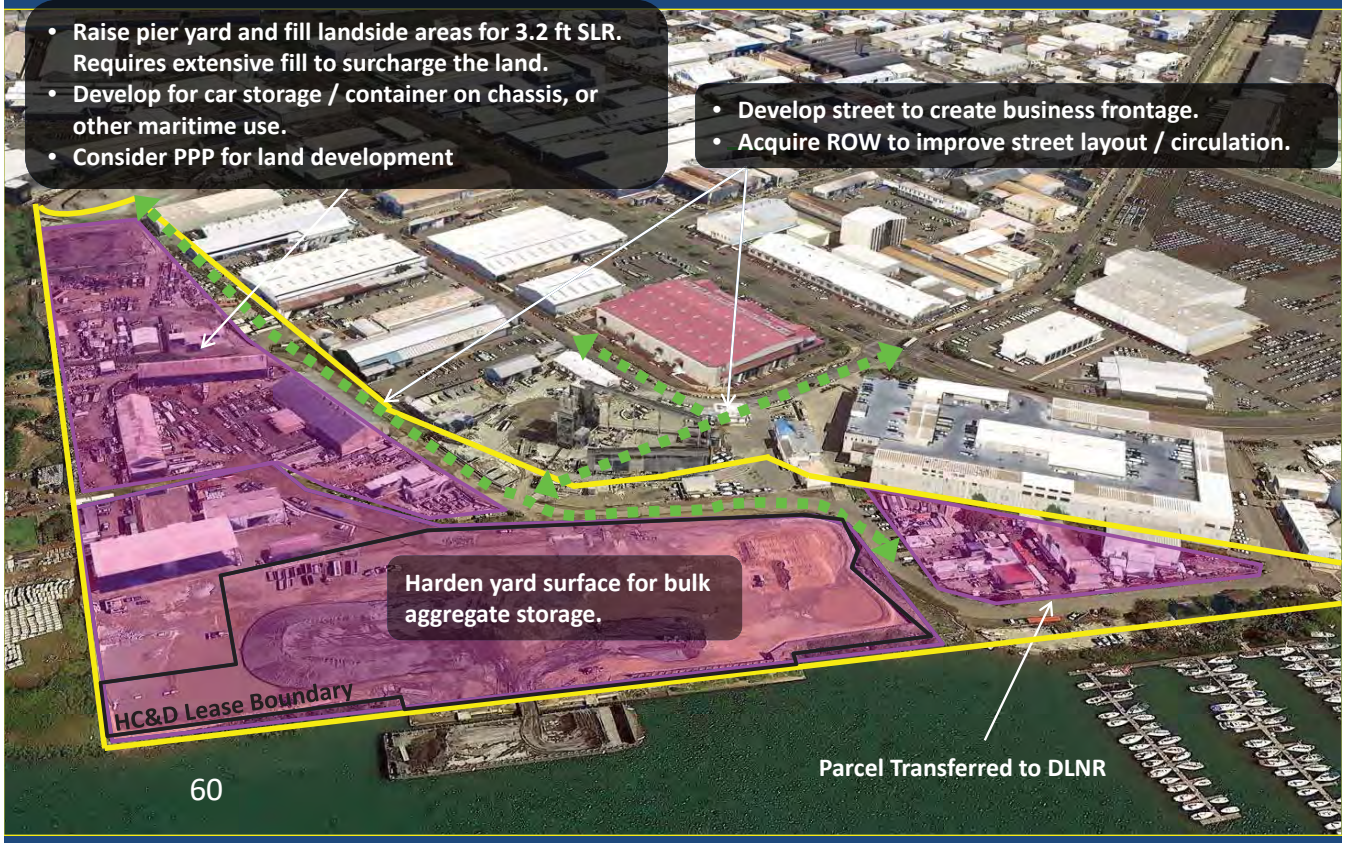
	Port Calls	Extra Days	Total Days
Pier 2	107	14	121
Piers 10/11	22	7	29
			150

Temporary Cruise Facilities

Port of Los Angeles

Pier 60

PIER 60


• Raise pier yard and fill landside areas for 3.2 ft SLR. Requires extensive fill to surcharge the land.
• Develop for car storage / container on chassis, or other maritime use.
• Consider PPP for land development
• Develop street to create business frontage.
• Acquire ROW to improve street layout / circulation.
Harden yard surface for bulk aggregate storage.
HC&D Lease Boundary
60
Parcel Transferred to DLNR

Q&A

Non-Maritime Alternatives
Aloha Tower Area

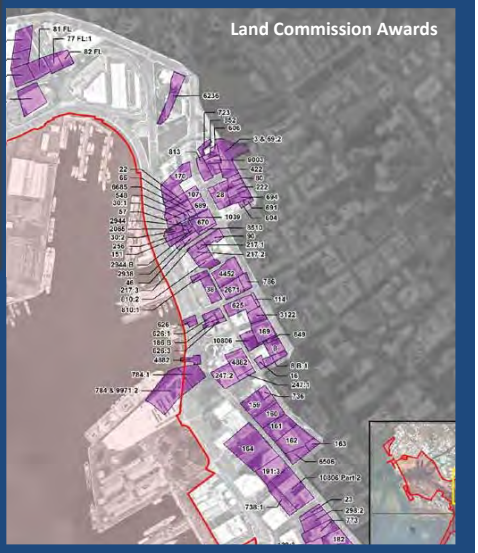
Considerations

- Lack of adequate, convenient parking.
- Inadequate connectivity to Chinatown, Downtown, and Kakaako Mauka due to Nimitz Hwy. / Ala Moana Blvd.
- Restricted access to shoreline.
- Traffic congestion during cruise ship port calls.

* Timing of Irwin Park restoration and replacement parking.

Aloha Tower Area - 2050 Vision
Conceptual Interpretive Themes – Early History

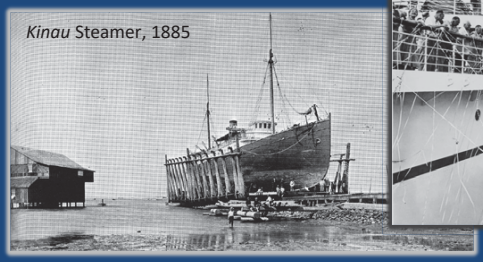

King Kalakaua's Boathouse, 1890



- Kou – Honolulu, Royal Center for Ali'i
- Piko - Honolulu Harbor
- Pier 7 - Kalākaua Boathouse
- Kamehameha Pier
- Pākākā Canoe Landing at Pier 11
- Polynesian Voyaging Society

Aloha Tower Area - 2050 Vision
Conceptual Interpretive Themes – Modern History


Ft. Armstrong, cs. 1911-1920

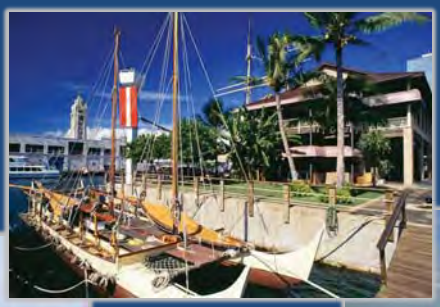

Kinau Steamer, 1885

- Whaling/Trade/Shipping
- Dredging
- Military Shipbuilding
- Cargo/Stevedores
- Pilots/Navigation
- Cruise Ships/Boat Days/Aloha Tower

Aloha Tower Area - 2050 Vision
Conceptual Interpretive Themes

Celebrate Honolulu Harbor as "Piko" – Past, Present, and Future

- Strengthen and reconnect community to the shoreline.
- Reinvigorate the harbor with annual celebrations, such as canoe regattas, PVS educational events, or Boat Days.
- Include a new cultural heritage center with permanent exhibits that honors the rich multi-faceted history of the harbor.


Aloha Tower Area - 2050 Vision
Design Guidelines

Historic design considerations for materials, scale, context, views, and orientation

- Similar materials between historic and new structures
- Level and quality of textures and details to create relatable human scale
- Variety of massing and streetscape to leverage visual and physical connections throughout the area
- Appropriate setbacks as they affect visibility or prominence from the street, i.e., sightlines to Aloha Tower
- Permanent additions to the area will change its character; minimize destruction to identified historic resources
- Reference Secretary of the Interior's (SOI) Standards for Historic Properties: https://www.nps.gov/tps/standards.htm

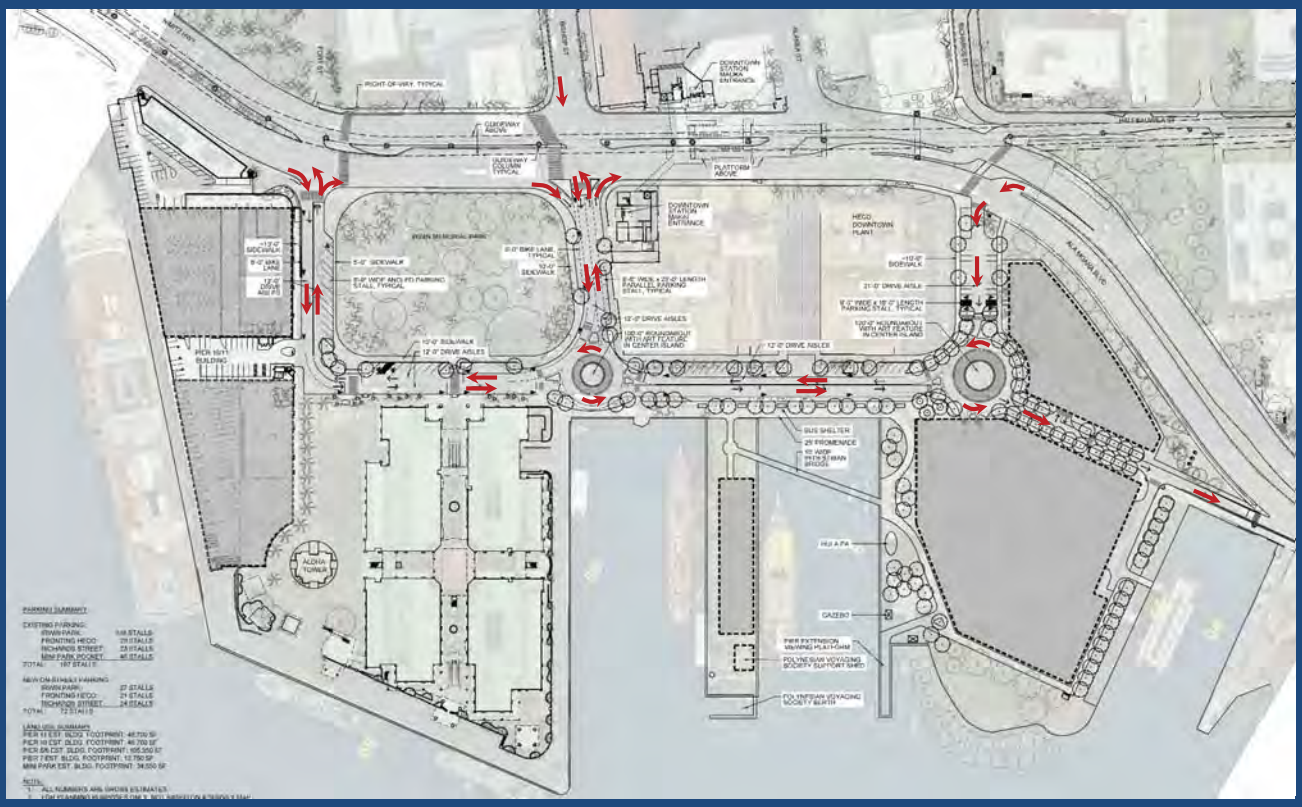
Aloha Tower Area - 2050 Vision
Design Guidelines – Piers 5/6 Redevelopment

- Include multi-level, mixed use parking structure.
- Wrap mixed uses around the structure to activate pedestrian spaces.
- Consider potential mixed uses within the structure:
  - Retail/commercial/office
  - Cultural heritage/education center
  - Day excursion/tour retail front/offices
  - Boutique hotel
  - Maritime museum
- Incorporate flat decks within the parking structure to allow for repurposing should future parking demand decrease.
- Maintain existing park space at the end of 5/6.
- Improve waterfront with continuous pedestrian path and landscaping.

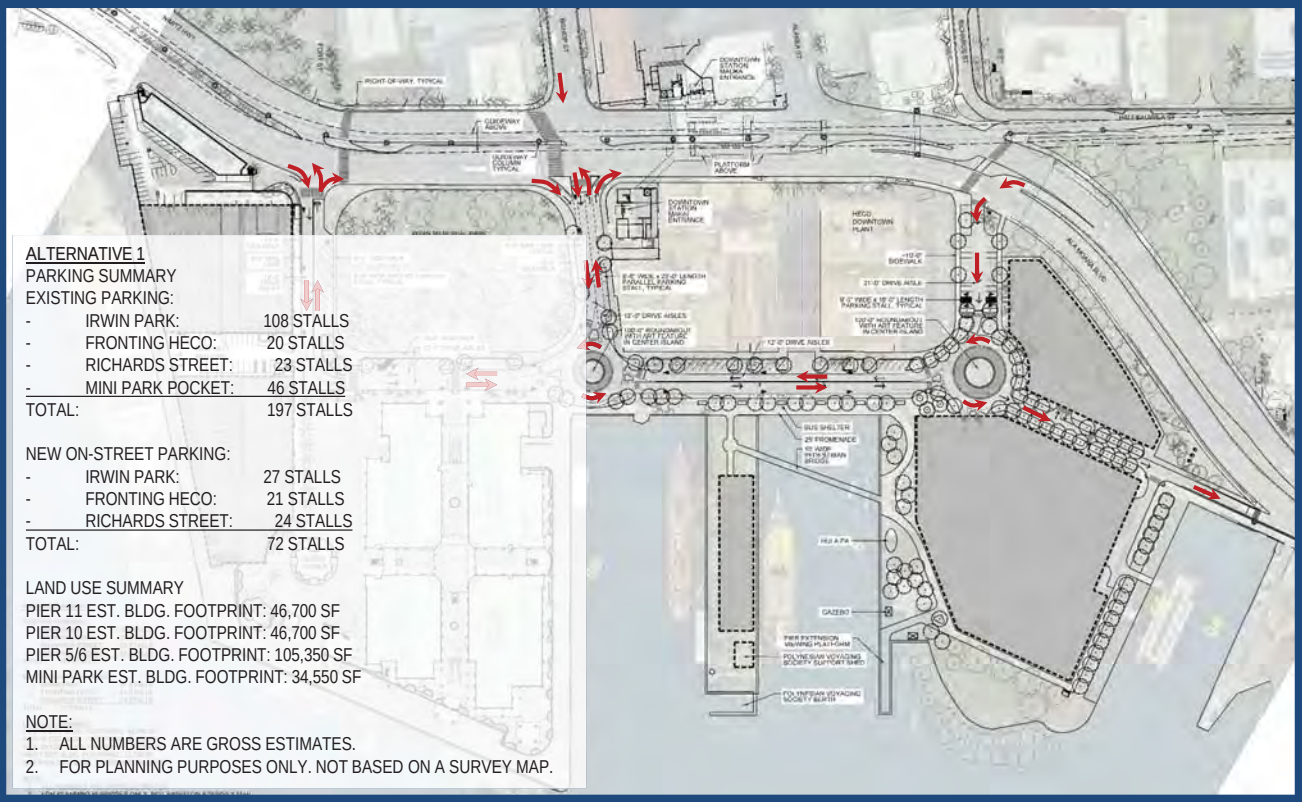
Aloha Tower Area - 2050 Vision
Design Guidelines – Waterfront Promenade / Streetscape

- Incorporate 25-foot wide (min.) sidewalks fronting Pier 7 to support bus drop off/pick up area and street festivals.
- Enhance streetscape with:
  - Street trees - native kou to honor historic name for the area.
  - Benches and bus shelters at the extended bus pullout near Pier 7.
  - Interpretive displays and/or signage to share the rich and diverse history of the harbor.
  - Artistic pavements relevant to the history/culture of the harbor on the sidewalks to highlight the pedestrian spaces and activate the streetscape.
- Add design features in the center islands of the proposed roundabouts.
- Plant native, hardy, easy-to-maintain landscaping species.

Aloha Tower Area 2050 Vision – Preliminary Alt 1. Split-Block



Aloha Tower Area 2050 Vision – Preliminary Alt 1. Split-Block



ALTERNATIVE 1

PARKING SUMMARY

EXISTING PARKING:

-	IRWIN PARK:	108 STALLS
-	FRONTING HECO:	20 STALLS
-	RICHARDS STREET:	23 STALLS
-	MINI PARK POCKET:	46 STALLS
TOTAL:		197 STALLS

NEW ON-STREET PARKING:

-	IRWIN PARK:	27 STALLS
-	FRONTING HECO:	21 STALLS
-	RICHARDS STREET:	24 STALLS
TOTAL:		72 STALLS

LAND USE SUMMARY

PIER 11 EST. BLDG. FOOTPRINT: 46,700 SF
PIER 10 EST. BLDG. FOOTPRINT: 46,700 SF
PIER 5/6 EST. BLDG. FOOTPRINT: 105,350 SF
MINI PARK EST. BLDG. FOOTPRINT: 34,550 SF

NOTE:

1. ALL NUMBERS ARE GROSS ESTIMATES.
2. FOR PLANNING PURPOSES ONLY. NOT BASED ON A SURVEY MAP.

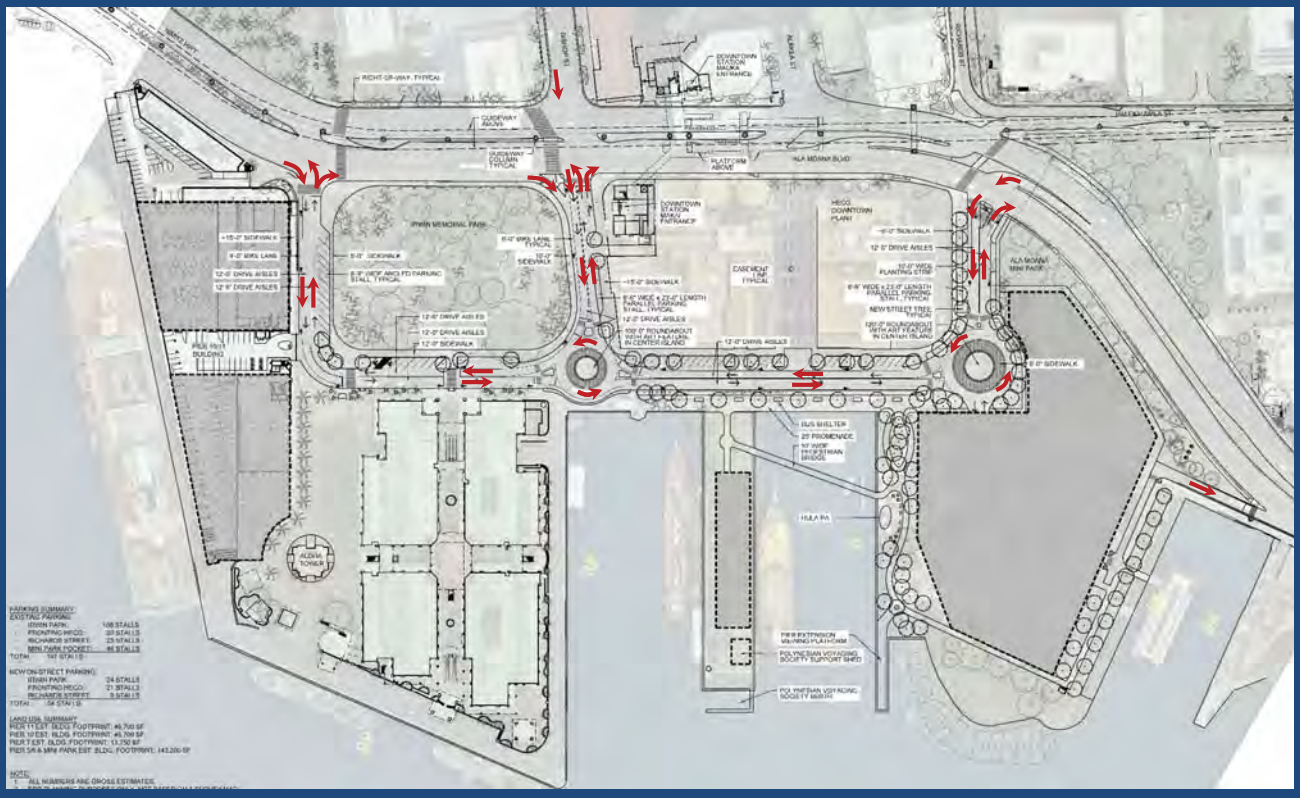
Aloha Tower Area - 2050 Vision Alt. 1 – Split-Block Conceptual Massing Model

Aloha Tower Area
Former Vehicular-Pedestrian Ramp to Upper Gallery of Passenger Terminal

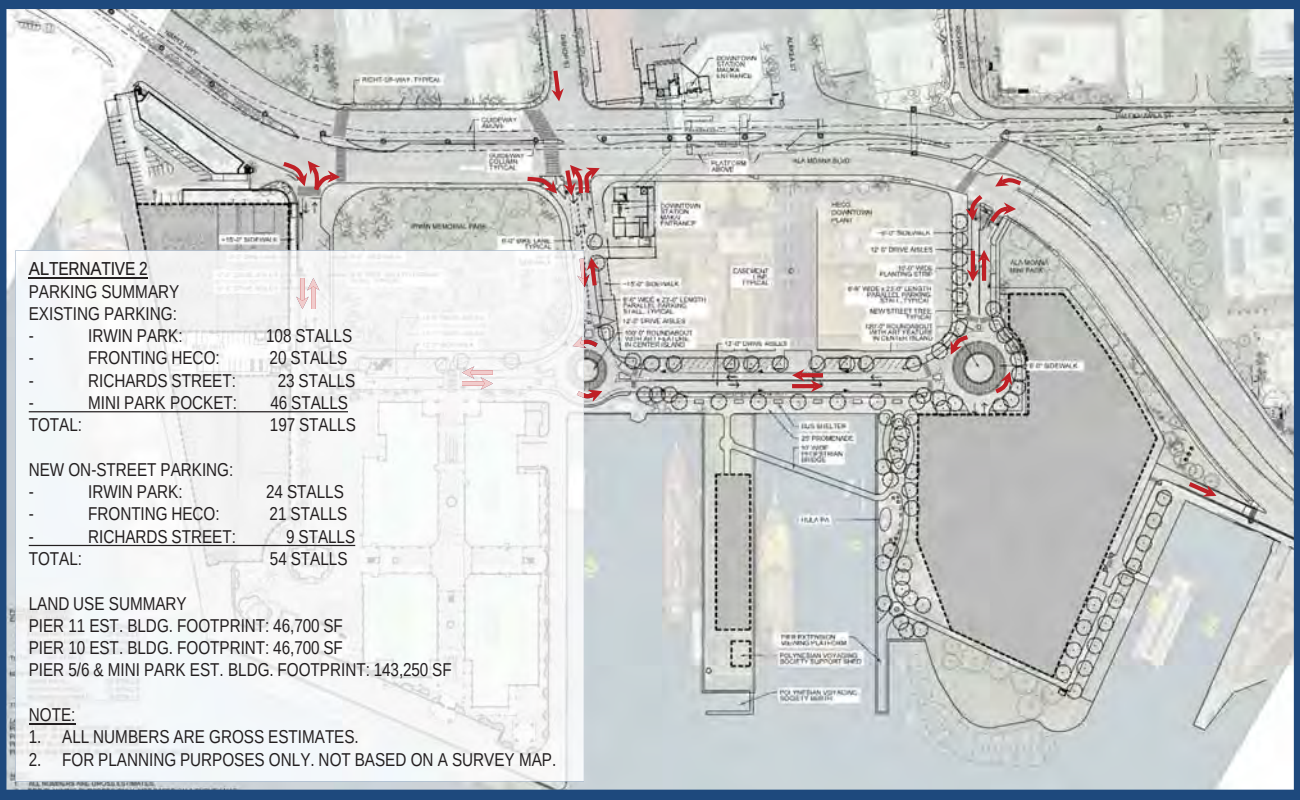
Aloha Tower Area - 2050 Vision Alt. 1 – Split-Block Conceptual Massing Model

Aloha Tower Area - 2050 Vision Alt. 1 – Split-Block Conceptual Massing Model

Aloha Tower Area 2050 Vision – Preliminary Alt 2. Superblock



Aloha Tower Area 2050 Vision – Preliminary Alt 2. Superblock



ALTERNATIVE 2

PARKING SUMMARY

EXISTING PARKING:

-	IRWIN PARK:	108 STALLS
-	FRONTING HECO:	20 STALLS
-	RICHARDS STREET:	23 STALLS
-	MINI PARK POCKET:	46 STALLS
TOTAL:		197 STALLS

NEW ON-STREET PARKING:

-	IRWIN PARK:	24 STALLS
-	FRONTING HECO:	21 STALLS
-	RICHARDS STREET:	9 STALLS
TOTAL:		54 STALLS

LAND USE SUMMARY

PIER 11 EST. BLDG. FOOTPRINT: 46,700 SF

PIER 10 EST. BLDG. FOOTPRINT: 46,700 SF

PIER 5/6 & MINI PARK EST. BLDG. FOOTPRINT: 143,250 SF

NOTE:

1. ALL NUMBERS ARE GROSS ESTIMATES.
2. FOR PLANNING PURPOSES ONLY. NOT BASED ON A SURVEY MAP.

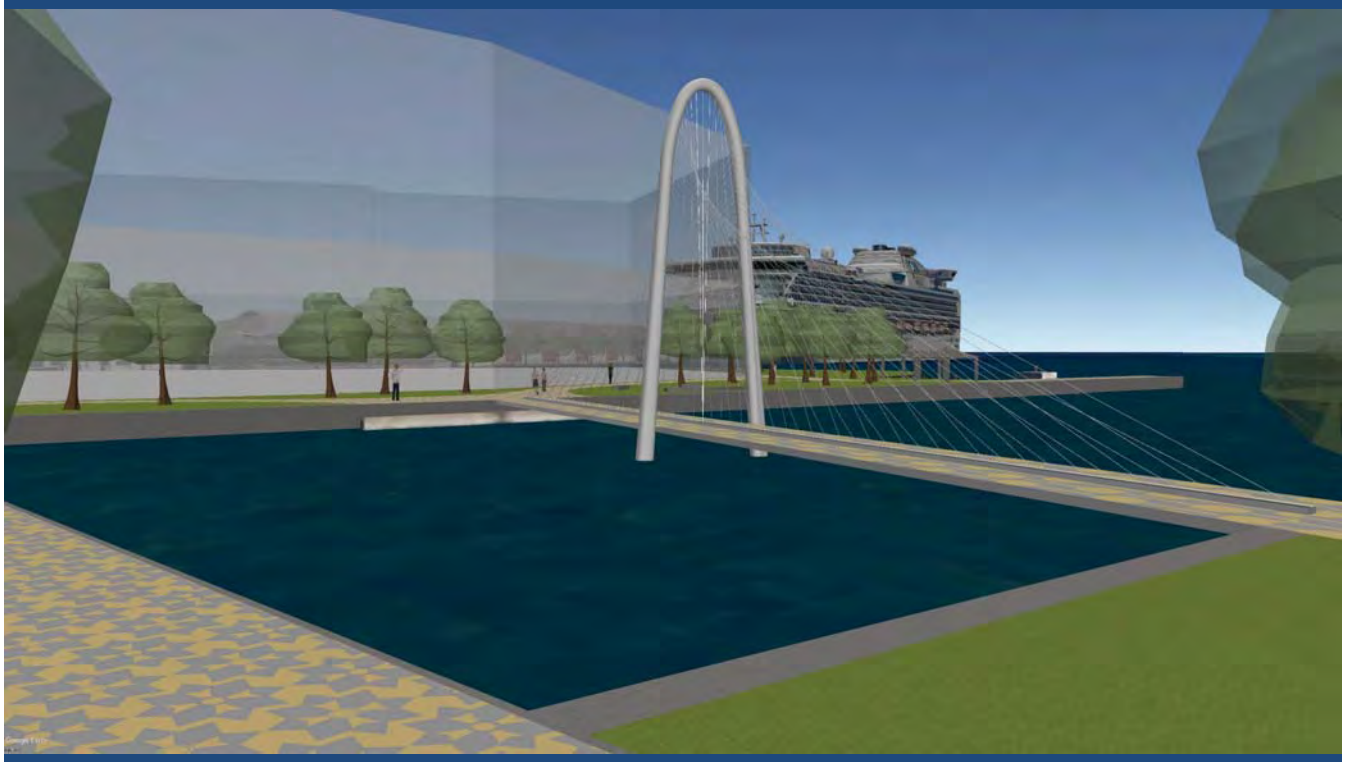
Aloha Tower Area - 2050 Vision Alt. 2 – Superblock Conceptual Massing Model

Aloha Tower Area - 2050 Vision Alt. 2 – Superblock Conceptual Massing Model

Aloha Tower Area - 2050 Vision Alt. 2 – Superblock
Conceptual Massing Model

Aloha Tower Area - 2050 Vision Alt. 2 – Superblock
Open Profile Swing Bridge

Aloha Tower Area - 2050 Vision Alt. 2 – Superblock Open Profile Swing Bridge



Aloha Tower Area - 2050 Vision Streetscape

Aloha Tower Area - 2050 Vision Streetscape

Aloha Tower Area - 2050 Vision Streetscape

Aloha Tower Area - 2050 Vision Streetscape

Aloha Tower Area - 2050 Vision Streetscape

Aloha Tower Area - 2050 Vision
Design Concepts

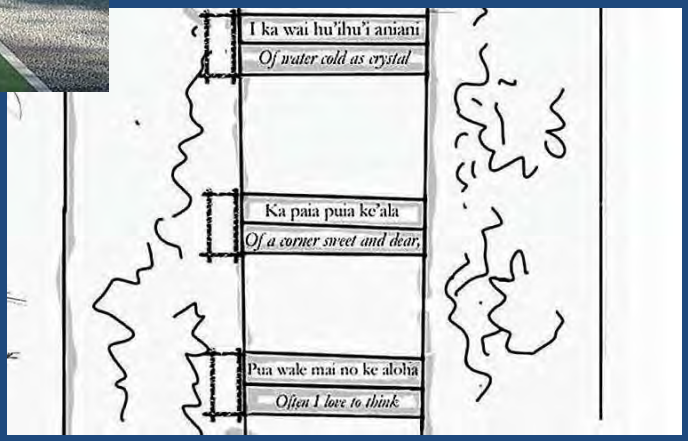
Kalamazoo, MI

Baltimore, MD

Woonerf / Shared-Street Concept

- Shared pedestrian / vehicle space.
- Use different pavement textures and colors to indicate travelways and flexible-use areas (e.g., convert parking stalls to seating, food trucks, event space).

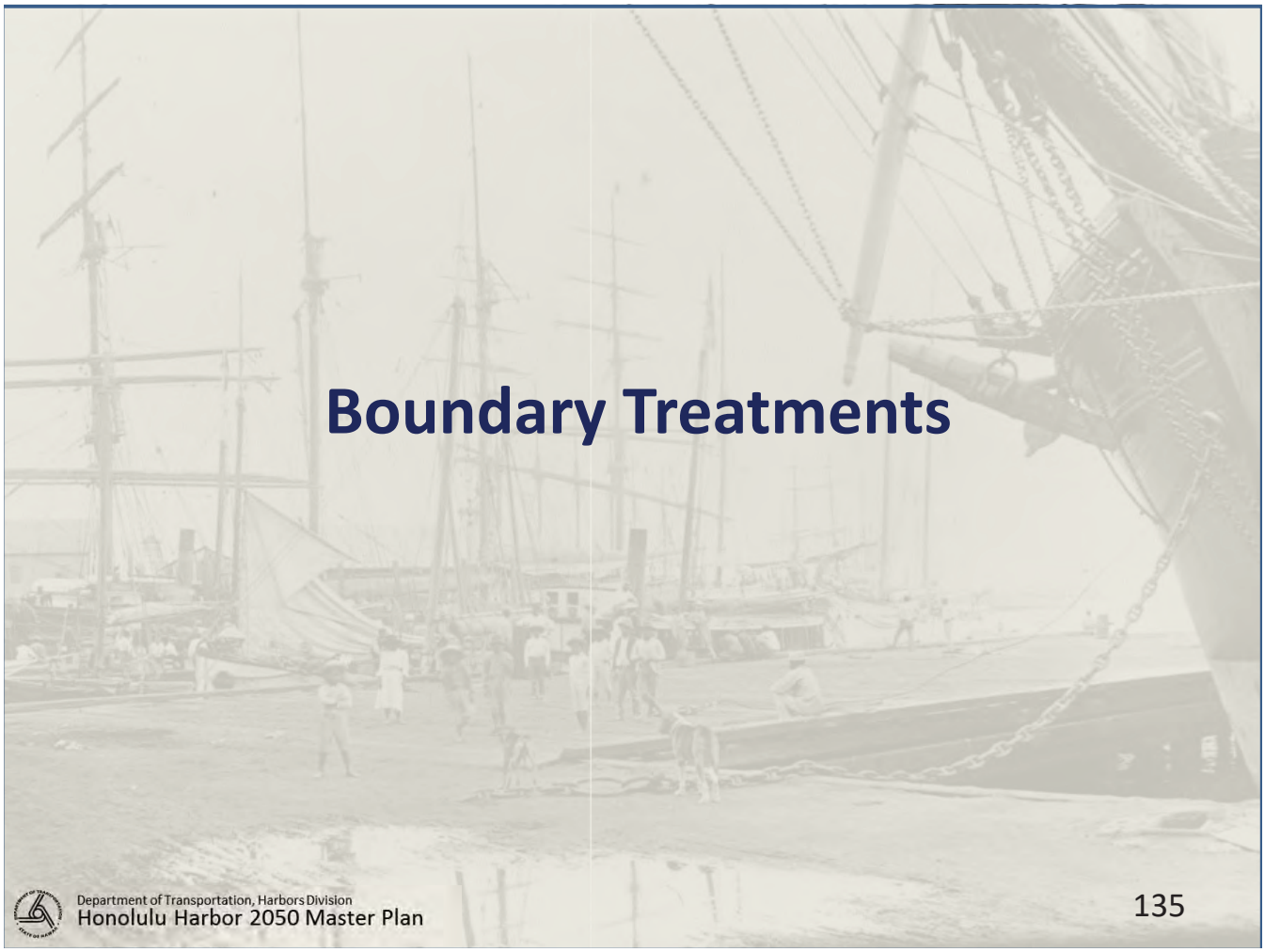
Aloha Tower Area - 2050 Vision
Design Concepts



Sidewalk / Pavement Design

- Incorporate patterns, colors, materials, text and/or images to highlight historic and cultural themes

Renderings via Honolulu Star-Advertiser, Sept. 14, 2020



Boundary Treatments

Boundary / Edge Treatments

- Suggested boundary edge treatments
- Provides aesthetic consistency along Nimitz Hwy. boundary
- Ensures secured areas
- Considerations
  - Cost
  - Maintenance requirements
  - Public visibility

Boundary / Edge Treatments - Utility

Interisland Terminal

Pier 52

- Chain link fence, green rubber coating with barbed wire top.
- Standard treatment along industrial harbor areas.
- Ensures security requirements.
- Low-cost and easy to maintain.

Boundary / Edge Treatments - Decorative

Pier 12

FBI Building - Kapolei

- Anodized, marine-grade aluminum picket fence, with or without concrete footing.
- Use in high-visibility areas and at special facilities such as Aloha Tower area, future maritime center, Pier 38 fishing village.
- High-cost, difficult and costly to maintain.

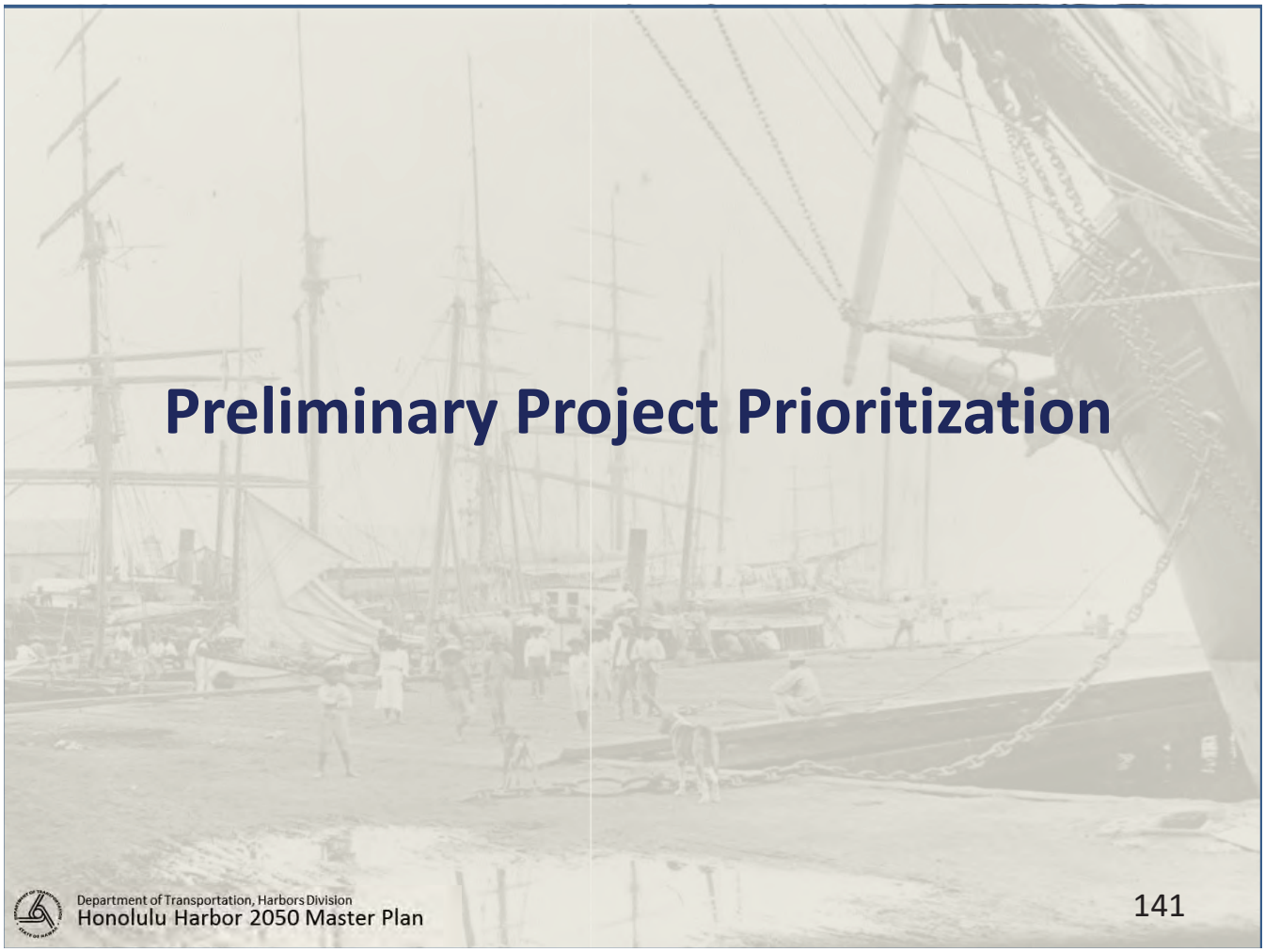
Boundary / Edge Treatments - Landscape

PBS at Sand Island Access Road / Nimitz Highway

Pier 38 Fishing Village

- Landscaping can be used along non-secure areas to improve appearance and at major driveway entrances to provide landmarks / visual cue.
  - Use low-maintenance, drought-tolerant native plant species where possible. Consider:
    - Naupaka or Kokiʻo keʻokeʻo (Hawaiian white hibiscus) for hedges;
    - Kou trees, coconut, or plumeria trees for shade and visual cues.

Q&A



Preliminary Project Prioritization

Prioritization Criteria

1. Logical sequence
2. Conditions assessment / end of asset life cycle
3. Synergy with other project(s)
4. Public Private Partnership (PPP) opportunity
5. DOT-H CIP Criteria
   - Safety
   - Operational Efficiency
   - Court Mandate
   - Revenue Generation
   - Preservation of Assets
   - Energy Efficiency
6. Affordability – including ability to generate revenue
7. Sea Level Rise
8. ROM cost estimates

Prioritization: High-Medium-Low

High

- Pier 1 Reconstruction
- Interisland Terminal Improvements
- Piers 19/20 Reconstruction
- Pier 21-22 “Tug Row” Improvements
- Pier 29 Apron Reconstruction
- Pier 51 Improvements
- Piers 52/53 Improvements

Medium

- Demolish Silos
- Piers 22/23 Reconstruction
- Piers 5/6 Reconstruction
- Pier 60 Improvements
- “Tyco Pier” – Layberth Dolphins
- Pier 31-34 Reconstruction

Low

- Pier 16 Widening
- Pier 36 Extension
- Pier 38 New Berth Construction

Opportunistic

- Non-Maritime Improvements
- Cruise Terminal Consolidation
- Pier 23 Maritime Center
- Piers 12 and 13-14 Improvements

Sequence – High Priority

- Interisland Terminal Improvements
- Pier 29 Apron Reconstruction
- Piers 19-20 Reconstruction
- Pier 21-22 “Tug Row” Improvements

  - Poor condition of piers.
  - Opportunity for revenue generation through wharfage fees.
  - Do not need to wait for KCT to open.
  - Prepare for future development of “Maritime Center”.

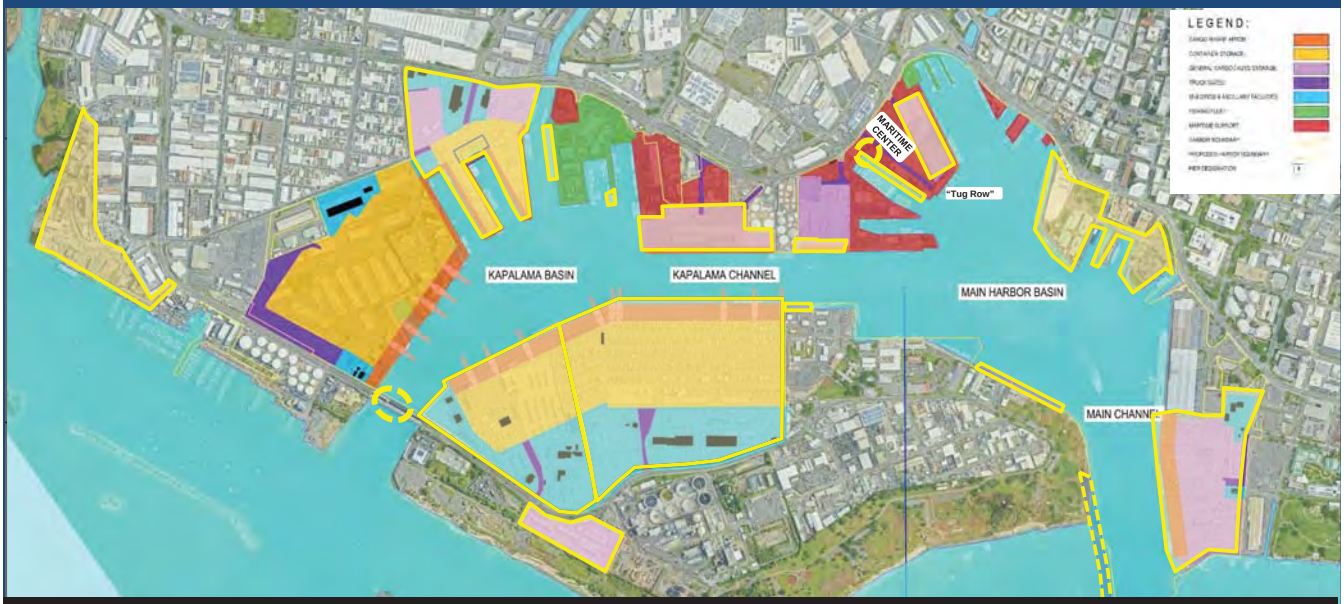
- Pier 1 and 2 Reconstruction → Opportunity when vacated. Poor condition. Low utilization/revenue.
- Pier 51 Improvements → Opportunity when vacated. According to terminal operator’s requirements.
- Piers 52/53 Improvements → According to terminal operator’s requirements.

Sequence – High Priority

- Initiate Harbor Entrance Widening Study
- Initiate Kalihi Channel Bridge Replacement Study

} Requires long lead time for feasibility study, environmental review and financing.

Sequence – Medium Priority

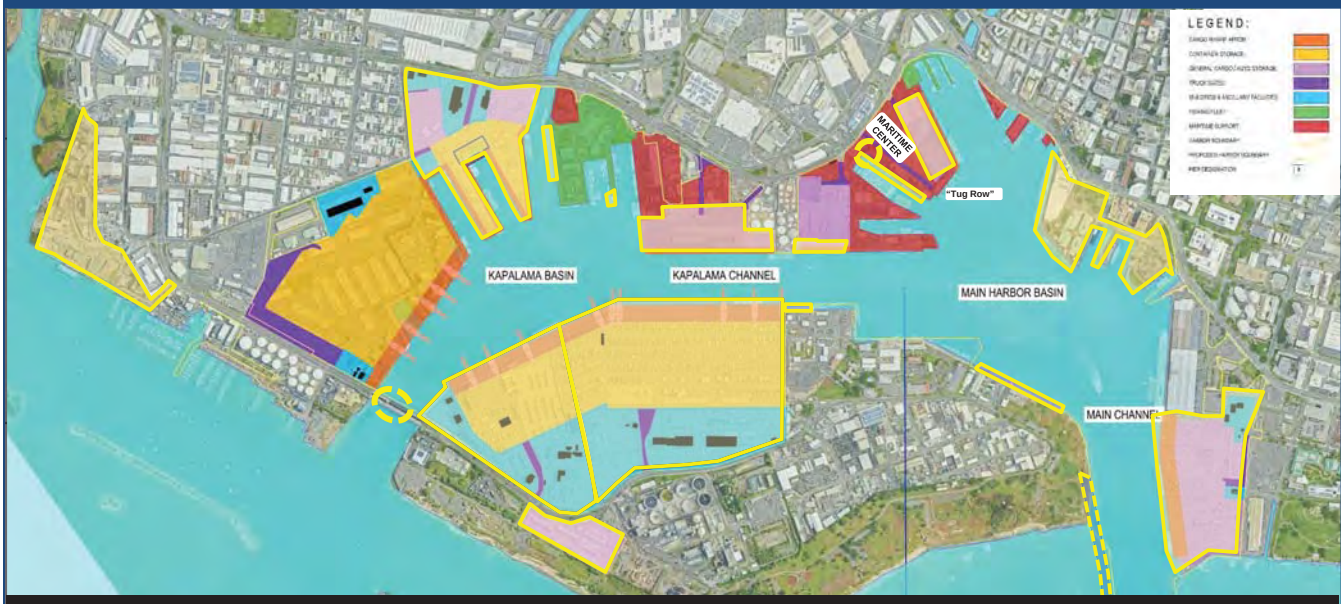


- "Tyco Pier" – Layberth Construction → Acquisition initiated.
- Demolish Silos
- Piers 22/23 Reconstruction
- Pier 23 Maritime Center

} Silos constrain efficient use of valuable port facility. Piers are underutilized due to narrow slipway and poor pier condition. Long lead time to plan and finance Maritime Center development. Possible PPP.

- Pier 60 Improvements → Long-term revenue potential. Lower priority than cargo terminal improvements.
- Piers 31-34 Reconstruction → Ongoing projects to improve pier and yard function for general cargo use.
- Piers 5/6 Reconstruction → Develop concurrent with redevelopment of landside area. Possible PPP opportunity.

Sequence – Low Priority



- Pier 16 Widening → Undertake when piers reach end of functional life.
- Pier 36 Extension → Existing work-arounds, high cost, and added berthing from P&R taxi relocation.
- Pier 38 New Berth Construction → High construction cost and added berthing from P&R taxi relocation from Pier 36.

Next Steps

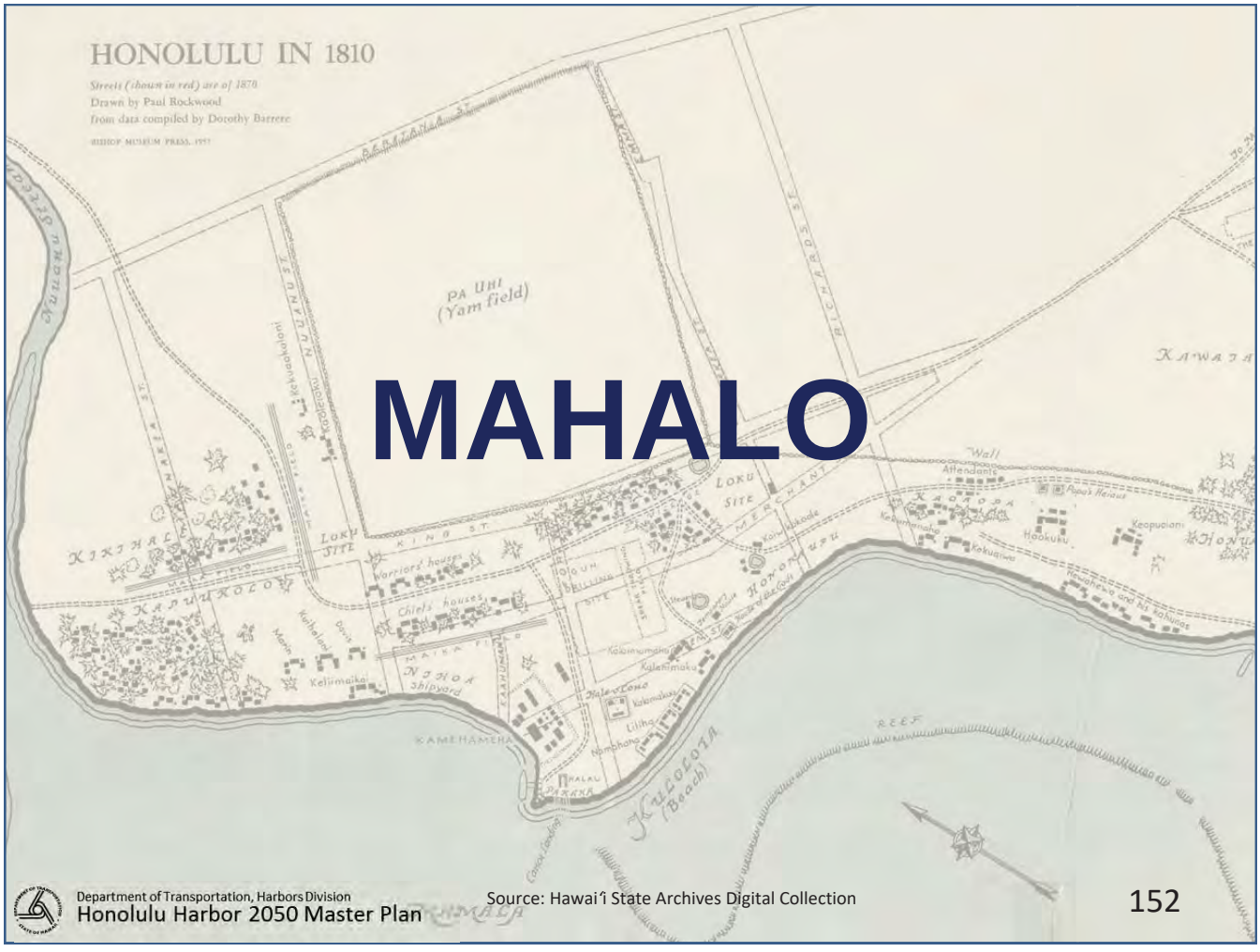
NEXT STEPS

1. Refine Preferred Alternatives and Project Prioritization
2. Early Engagement with Cultural Stakeholders
3. Public Information Meeting in first quarter 2021.
4. Finalize Master Plan
5. Planning Advisory Committee (PAC) Meeting #4 for MP endorsement in February/March - with TAC spectation.

MORE INFORMATION

https://honoluluharbormp.com/contact

Closing Remarks / Q&A



MAHALO

Source: Hawai'i State Archives Digital Collection


Kalihi
HONOLULU HARBOR PLANNING AREA
Kalihi Kai
Kapalama Terminal
Iwilei
Ke'ehi Lagoon
Chinatown
Sand Island Terminal
Downtown Business District
TYCO
Kaka'ako
Fort Armstrong Terminal
Department of Transportation, Harbors Division
Honolulu Harbor Master Plan Update

Q&A

Appendix 7

TAC #2 Meeting Notes

MEETING NOTES

Project:	*Honolulu Harbor 2050 Master Plan* (HHMP)
Date/Time:	Friday, December 18, 2020; 1:00 p.m. to 4:30 p.m.
Location:	Virtual Meeting via Zoom
Purpose:	Technical Advisory Committee (TAC) Meeting #2
Host:	Department of Transportation, Harbors Division (DOT-H)
Attendees:	Please view **Appendix 4** of the Meeting Documentation.

- Notes in [bracketed blue text] indicate supplemental information not explicitly discussed during the meeting.
- *Brown italicized text* indicates comments or questions by TAC participants.
- Brown regular text indicates a comment or response from the Project Team.

A. Welcome/Introductions Presentation Slides 2 – 7.

1. Opening Remarks (presented by Derek Chow, DOT-H Deputy Director)
   a. DOT-H and the Project Team are grateful to all the TAC members for their time and participation in the HHMP planning process. Since the first TAC meeting in July 2018, the Project Team conducted several specialized studies, numerous meetings with the Sub-TACs and Planning Advisory Committee and continued outreach to stakeholders. Through this process, the Project Team has considered the challenges and opportunities facing the Honolulu Harbor and coalesced the multitude of ideas that they have heard into the preferred Master Plan alternatives.
   b. Honolulu Harbor is the State's primary port-of-entry and serves as the hub of the State's commercial harbor system. From Honolulu Harbor, cargo is distributed to commercial harbors on neighboring islands. In Fiscal Year 2019, 1.6 million Twenty-foot Equivalent Units (TEUs) of containerized cargo, 279,000 automobiles, over 4.1 million tons of bulk cargo, over 36 million barrels of liquid cargo (through pipelines), and over one million passengers moved through the Port of Hawai'i commercial harbor system.
   c. A vast ocean surrounds Hawai'i, and shipping by ocean vessel is the most economical method for Hawai'i to import and export goods. By way of comparison, the amount of cargo carried by one 2,600 TEU container

ship is equivalent to five 8,000-foot double-stack trains, 1,500 trucks, or 150 Boeing 747 cargo liners.

d. The Master Plan is an important tool to guide Honolulu Harbor's future to continue to efficiently serve as the hub of Hawai'i's commercial harbors system and the critical role of supporting the State's well-being and economy.

B. Zoom Instructions (presented by Sam Dorios, Hawai'i Leadership Forum) Presentation Slides 10 – 18.

1. Use Raise Hand and the Chat features to ask questions and provide comments. [Note: Questions and comments received through chat are documented in the discussion sections.]

C. Meeting Overview (presented by Linda Colburn, Where Talk Works [WTW]) Presentation Slides 8 – 9 and 19 – 21.

1. The TAC Meeting #2 purpose is to review the preferred draft HHMP alternatives and preliminary project prioritization. Input from the TAC will be used to refine the Master Plan alternatives and preliminary project prioritization in preparation for the Public Information Meeting (PIM) #1.
2. The TAC is an advisory committee, not a decision-making body. The purpose of the TAC is to provide guidance to the Project Team to refine the Master Plan alternatives and project prioritization. DOT-H will make the final decision on master plan alternatives and project prioritization.
3. The expected outcome for the TAC Meeting #2 is to obtain input and criteria for further refining of the preferred alternatives and project prioritization and to identify areas of alignment and differing points of view for each alternative.

D. Harbor Project Programming (presented by Jim Niermann, R. M. Towill Corporation [RMTC]) Presentation Slides 23 – 25.

1. Where Projects Come From (Slide 24)
   a. Harbor projects originate in a variety of ways:
      i. Input from Harbor Users to District
      ii. Input from Harbors Administration
      iii. Engineering and District annual meeting
      iv. Facility conditions assessments by Engineering
      v. Master Plans
2. Project recommendations get directed into one of DOT-H's existing project programs:
   a. Oahu District
      i. Day-to-Day Maintenance and Repair - Typical District projects include painting, light bulb replacement, window repair, plumbing

b. Maintenance Projects – Typical Special Projects include pier repair, repaving yards, roof repairs, LED lighting retrofit, maintenance dredging, utility repairs
   i. Maintain Existing Facilities
   ii. No Expansion
   iii. Requires Engineering
   iv. Annual Budget ($15 M)
c. Capital Improvement Projects (CIP) - Typical CIP projects have a 6-year look-ahead and include land acquisition, major upgrades to pier facilities, new buildings and structures, utility expansion.
   i. Relatively permanent, non-recurring improvements for long-term use/possession
   ii. New construction, expansion/major renovation of existing facilities, land acquisition
   iii. Legislative Approval

3. Where does the Master Plan fit in? (Slide 25)
   a. The Master Plan provides a long-range, comprehensive view and identifies future needs, trends, and opportunities for the Honolulu Harbor. Projects identified in the Master Plan will be placed in a queue for prioritization as a Special Maintenance or CIP project.
   b. The Master Plan will contain recommendations for prioritization but will not dictate the prioritization of projects.

E. Honolulu Harbor Master Plan Overview (presented by Jim Niermann, RMTC) Presentation Slides 26 – 39.

1. Purpose of the Master Plan (Slide 27)
   a. To ensure that Honolulu Harbor, the State of Hawai'i's primary port-of-entry, is prepared to meet the future needs of the maritime industry and of our community.
2. Harbors Mission Statement (Slide 28)
   a. To effectively improve and manage a commercial harbors system that facilitates safe and efficient operations of commercial cargo, passenger, fishing, and other commercial maritime-related services and support activities within the State of Hawai'i and which serves to sustain and enhance the State's economic prosperity and quality of life.
3. Goals of the Master Plan (Slide 29)
   a. Identify current and meet future maritime needs.
   b. Optimize use of the Harbor's finite land resources.
   c. Balance stakeholders' competing needs and interests.
   d. Ensure resiliency in the face of natural and human-made disasters, and climate change.
   e. Consider emerging technologies and trends.
   f. Consider public access and waterfront development opportunities in select locations.

4. Planning Principles (Slide 30) – The planning team adopted the following planning principles to guide the planning process.
   a. Transparent
   b. Consultative
   c. Equitable
   d. Data-Driven
   e. Supports Harbors' Mission Statement
5. Planning Process (Slide 31 – 34)
   a. Since TAC Meeting #1, the Project Team has conducted 86 individual meetings with maritime and non-maritime stakeholders, numerous Sub-TAC meetings in the fall of 2018, three Planning Advisory Committee (PAC) Meetings, and numerous meetings with Harbor Administration and Oahu District. Based on the input from these meetings, the Project Team developed and refined the Master Plan alternatives through an iterative review process.
   b. In addition, the Project Team has conducted numerous special studies to support the Master Plan, including: Cargo Projections, Harbor Capacity Analysis, Harbor Needs Assessment, Berth / Layberth Analysis, Channel Widening Analysis, Traffic Assessment, Infrastructure Assessment, Archaeological Study, Historic Architecture Study, and Economic Value Analysis.
   c. The Project Team will be working on the Master Plan document over the next four months and preparing for PIM #1, which is tentatively scheduled for the first quarter of 2021.
   d. After PIM #1, the Project Team will develop the pre-final Master Plan for presentation at PAC Meeting #4, tentatively scheduled in the first quarter of 2021. At the PAC Meeting #4, the Project Team will request the PAC members' endorsement of the HHMP and/or HHMP planning process. TAC members will be invited to spectate the meeting. After the PAC Meeting #4, the Project Team will submit the Draft HHMP to the Harbor's Deputy Director for review and acceptance and forwarding to the Governor for approval as the Final Master Plan. Once the Final Master Plan is completed, an optional TAC/PIM meeting may be held to present the Final Master Plan.

   [Note: Notes from the TAC, Sub-TAC and PAC meetings are available on the project website: https://honoluluharbormp.com/ .]
6. Idea Vetting Process
   a. Master Plan ideas are evaluated according to specific criteria developed by the Project Team with input from stakeholders. Some ideas were determined to be more appropriate to direct to one of DOT-H's existing project programs. Those that were advanced for consideration in the Master Plan are being presented at today's TAC Meeting #2. A list of all the ideas received and an accounting of those that have been advanced to the Master Plan, redirected to one of DOT-H's existing project programs, or eliminated from further consideration, along with a rationale

underlying each ideas' status, is documented for inclusion in the Master Plan.

b. Evaluation Criteria (Slide 35 – 39) – The following criteria were used to evaluate Master Plan ideas:
   i. To what extent does it align with the Master Plan Goals?
   ii. To what extent does it improve the function of the harbor, and by extension, the community's economic security and quality of life?
   iii. To what extent is it reasonable and feasible (economically, operationally, and politically), and beneficial to the Harbor and the State?
   iv. To what extent does it benefit or adversely impact the environment?

F. Maritime General Improvements (presented by Jim Niermann, RMTC)
Presentation Slides 41 – 29.

1. Harbor Entrance Widening (Slide 42)
   a. DOT-H is coordinating with the U.S. Army Corps of Engineers (USACE) to conduct a feasibility study to widen the harbor entrance channel based on USACE engineering and design standards for deep draft navigation projects, construction of a breakwater, and deepening the harbor operational depth. DOT-H and USACE have allotted funds for the next fiscal year to conduct the feasibility study.
   b. The Project Team conducted a High-Level Channel Widening Analysis, which indicates that all design vessels can navigate within the existing 500-foot wide (FT) channel entrance, except the SuezMax and AfraMax vessels that infrequently call at Honolulu Harbor. Post-Panamax cruise vessels (e.g., Ovation Class) with a 135 FT beam require a channel width of 439 FT. However, the SuezMax and AfraMax vessels require a channel width of 514 FT. There is a desire from the Hawai'i Pilots and other stakeholders to widen the channel for safety.
2. Kapālama Channel Analysis (Slide 43)
   a. DOT-H has requested the USACE to conduct a feasibility study on widening the Kapālama Channel.
      i. In the short-term, DOT-H can address navigational issues through scheduling berth assignments, installing navigational aids, and using additional tug assistance.
      ii. In the long-term, sea level rise (SLR) may eliminate access beneath the piers for inspection and maintenance. A long-term recommendation may be to cut Piers 31 to 33 back to fast land and reconstruct the pier with bulkheads or sheet piles. This would widen the channel by 50 to 75 FT with benefits to navigation.
   b. The Project Team included the Kapālama Channel in the High-Level Channel Widening Analysis. The Kapālama Channel has a physical channel width of 600 FT from pier face to pier face and a defined transit channel width of 400 FT. Cargo container vessels with 115-FT beam

require 372 FT for one-way transit, resulting in 228 FT remaining for berthing on one or both sides of the channel. The analysis indicates that the operational depth should be maintained at 42.9 FT (41 FT existing).

3. Second Harbor Entrance (Slide 44)
   a. DOT-H has requested the USACE to conduct a feasibility study to reopen the second harbor entrance and replace the existing bridge with one of the following options:
      i. Moveable bridge to accommodate full-size cargo vessels in emergency events only;
      ii. Fixed bridge with air draft to accommodate tug, barge, and fishing vessels on a routine basis; or
      iii. Hybrid – moveable bridge to accommodate full-size cargo vessels in emergency events only with air draft for tug, barge, and fishing vessels.

      Alternatives that accommodate full-size cargo vessels require dredging/deepening of the Kalihi Channel to a depth of 45 FT out to the open sea. The current depth is approximately 22 FT, and the current authorized depth is 23 FT. The channel depth would have to be reauthorized by the USACE to a depth of 45 FT and dredged.

   Discussion:
   - *[via chat] Was there a traffic study done for the Sand Island Bridge and the projected traffic, given the known anticipated growth at Sand Island?*
     - The Project Team has not conducted a traffic study to look at traffic impacts to Sand Island Bridge from increased cargo throughput. When in operation as a lift bridge (bascule bridge), the Sand Island bridge blocked traffic to and from Sand Island while vessels transited through Kalihi Channel; therefore, the bridge was converted into a fixed bridge. The Master Plan concept is to ensure traffic is maintained during construction and normal operations of the new bridge; the bridge would only be opened under an emergency to accommodate full-sized cargo vessels.

4. Sea Level Rise - Raise Pier Heights (Slides 45 – 47)
   a. The Project Team will plan for 3.2 FT of SLR by 2060 based on the 2017 Hawai‘i Sea Level Rise Vulnerability and Adaptation Report and is considering the following recommendations:
      i. Determine priority piers based on pier conditions and life cycles, programmed improvements, and public-private partnerships (PPP) opportunities.
      ii. Establish a statewide standard pier height. This is outside of the scope of the HHMP but may be included as a recommendation to DOT-H.

      [Note: The Master Plan will recommend planning for adaptive design for future flexibility in pier use.]

b. DOT-H and the Project Team consulted with port operators and engineers to determine the minimum and maximum pier deck heights based on vessel type (see table below). [Note: The Project Team encourages the maritime operators to review and comment on the vessel operational heights.]

Type of Vessel / Operations	Minimum Height of Pier Deck Above MLLW	Maximum Height of Pier Deck Above MLLW
Barge (RO/RO)	6	10
Barge (Pass-Pass)	6	12
Bulk Carrier	6	15
Container	6	15
Cruise	5	10
Fishing/Workboats	3	8
Tanker	6	15
Tugs	3	9

c. Based on the operational table, the alternative to raise the gantry-supported cargo pier decks and yards to a consistent height of 10 FT above the mean lower low water (MLLW) and all working piers to a height appropriate to the vessel type and operational needs would be costly, cause disruption to the pier operations, and create issues with connection to the adjacent roads.

d. Alternatives to Raising Yard (Slide 48)
   i. The Project Team recognizes the extraordinary cost to raise the piers/yards and to redesign all the associated infrastructure and surrounding facilities. The challenge can be reduced to two issues: (i) protecting the yard and landside facilities from inundation and (ii) ensuring that mooring heights meet the operational needs of the various vessels.
   ii. The Project Team is considering the following alternatives to raising the piers/yards:
      a. Raise solid bull rail, curbing, or apron along pier edge. A solid, continuous barrier would increase protection against inundation. The raised edge would need to be strong enough to moor a cargo vessel and handle lateral/vertical pull on the bollard system. The design must also accommodate cargo movement operations over

the berth. However, raising the edge may conflict with RO/RO operations, which require a flat pier deck for the ramp support struts to rest flat. This alternative would require a drainage system for the yard to mitigate flooding that could occur during intense storms, hurricanes, and tsunami by impoundment behind raised pier edges, and that will occur as the existing drainage outfalls become inundated due to SLR. Pumps might be required as part of the drainage system. [Note: Many of the more than 100 existing drainage outfalls into Honolulu Harbor have outlets that are currently near or below MLLW. As SLR increases, many outfalls will become submerged, causing drainage water to backup and contribute to flooding in the terminal yards.]

b. Modified mooring dolphin system incorporated into the pier face to ensure that the mooring height is within the vessel's operational range as SLR reduces the freeboard to the pier deck. This type of system is used in ports with extreme tidal ranges; however, this design may be more difficult for cargo vessel operations due to differential in the pier deck and vessel deck heights. Under this alternative, essential structures, utilities and infrastructure in the yard would be relocated and/or elevated as required. The existing yard surface height would remain unmodified, with improvements to the drainage system including the possible use of pumps.

iii. The Project Team is recommending that DOT-H establish a working group with academics, industry representatives, port planners, private sector and government agencies to identify design solutions to address SLR impact on pier and yard facilities and to research examples from other regions for applicability to Hawai'i.

Discussion:

- *[via chat and discussion] Science is showing an increasing rate of SLR. The latest projections for SLR go beyond 3.2 FT. National Oceanic and Atmospheric Administration (NOAA) projections are up to 10 FT by 2100 in the extreme. How are the new projections incorporated into the Master Plan?*
  - The Project Team is adopting the State policy and direction on SLR and understands that changes in SLR projections are constantly being updated with expected increases in SLR rates. There will be more agency coordination to address SLR for the harbor, roads, and drainage beyond the Master Plan planning horizon. Presently, Honolulu Harbor is the primary port for Hawai'i and must maintain vessel operations at berth, and have dry and functioning yards.
  - *It would be good to find a way to channel the new SLR information into the Master Plan and update the Project Team. The government is lagging reality, and the Master Plan lags behind the government, making the information in the Master Plan almost obsolete.*

- The Project Team will discuss SLR updates with the state's Climate Change Mitigation & Adaptation Coordinator.
  [Note: On 2/5/2021, the Project Team met with Brad Romine, PhD, Coastal Management and Resilience Specialist, University of Hawaii Sea Grant College Program, University Consortium Deputy Director, Pacific Islands Climate Adaptation Science Center (PI-CASC) to discuss current status of SLR projections and State policy on SLR adaptation strategies. Mr. Romine confirmed that the SLR projection of 3.2 feet by 2060 is consistent with NOAA's current, upper SLR projections and consistent with State guidance for planning for critical infrastructure. For planning purposes, SLR is viewed as a threat multiplier that must be considered together with impacts from storm surge, tsunamis, groundwater rise, and drainage/flooding.]

- *[via chat and discussion] It was suggested in a prior meeting to make the pier face/sea wall (if original at 3.2 FT) adaptable with a planned approach to add sections in the future, similar to the Kapālama Canal seawall approach. In slide 47, the Project Team incorporated it as a bullet, "Plan for adaptive design for future flexibility in pier use."*
  - Planning for adaptive design for the future will help in addressing SLR and protect the facilities to allow continuous operations without foreclosing on future modifications, improvements, and harbor needs. There are numerous challenges to address SLR for the harbor infrastructure, drainage system and roadway system which will require multi-agency coordination to keep the infrastructure functioning.
- *[via chat] Regarding dealing with SLR in the actual building and site design, see the "Climate Adaptation Design Principles for Urban Development" that the City and County of Honolulu (CCH) just released, at:* http://www.honolulu.gov/tod

5. Resiliency Piers (Slide 49)
   a. The Project Team is identifying piers to be designated as emergency staging piers. As a priority, resiliency improvements are focused on non-dedicated piers that do not have regularly scheduled operations, i.e., Piers 1 and 2 [Note: Assuming regular liner service moves from Piers 1 and 2 to Kapalama Container Terminal (KCT) when the improvements are complete], 19 and 20, 29 and 31 to 33. Of these, the Project Team favors Piers 1 and 2 and Pier 29 as a priority for resiliency improvements.
      i. The findings of Martin & Chock, Inc.'s 2017 *Honolulu Port Analyses for the Hawai'i Tsunami Scenarios* study indicate that Piers 1 and 2 would suffer less damage from tsunamis than other piers in the harbor interior. On this basis, Piers 1 and 2 make sense as priority piers for resiliency improvements. In addition, Piers 1 and 2 are best suited to serve as resiliency and emergency response piers due to their location at the harbor entrance, where there is a lower potential

for incoming supply vessels to encounter debris and damage compared to piers in the harbor interior.

ii. Pier 29 is also a candidate for resiliency improvements because it already has an improved yard and needs only the pier face, apron, and notch to be improved and strengthened to serve as a resiliency pier. Compared to other piers, such as Pier 19, the scope and cost of improving Pier 29 are significantly less.

iii. Other factors for prioritizing resiliency improvements include cost, affordability, potential for revenue generation to finance the improvements, opportunities to piggy-back on other necessary pier improvement projects, and opportunities for PPP.

b. Pier improvements may include strengthening piers and decks, installing sheet-pile/bulkhead, installing heavy-lift pads, and hardening power/communication conduit.

c. Pre-staging emergency equipment and supplies (e.g., fuel, generators, heavy equipment, materials) will be in existing or planned multi-use, reinforced structures (e.g., the proposed maritime center at Pier 23). The reinforced structures could serve as command posts following a natural disaster. [Note: The Triple F building is also being considered as an emergency equipment pre-staging site. In addition, the DOT-H O'ahu District has an informal agreement with Pu'uhale Elementary School to relocate motor vehicles and equipment from the DOT-H base yard to the elementary school grounds in the event of a tsunami or hurricane event.]

6. [Layberth (Slide 50)

a. The Project Team conducted a layberth analysis, which indicates approximately 1,900 linear feet (LF) of additional layberth will be required by 2050 to maintain the target utilization rates.

i. The Tyco pier will provide the majority of the layberth needed and is currently being acquired by DOT-H. Additional mooring dolphins would extend the existing 600 LF to 1,200 LF of layberth space.

ii. Pier 38 provides the opportunity for developing an additional 960 LF of layberth space for shallow-draft vessels. The new berthing could be used by fishing vessels for offloading and provisioning. This layberth space would have restrictions for vessel size and duration of berthing.

a. A floating dock design for fishing vessels and workboats should be considered.

iii. Piers 7 and 22/23 could each provide an additional 900 LF of layberth space.

a. Pier 7 would be used for excursion vessels.

b. Piers 22 and 23 would be suitable for tugs and water taxis.

b. Layberth alternative at Pier 60 and mooring installation at the makai side of Slipper Island is eliminated from consideration for new layberth improvements due to requirements for costly dredging, challenging

environmental regulatory clearances and exposure to south wells and kona winds.

c. A fourth offshore anchorage is recommended.

Potential New Layberth (LF)	
Projected Layberth Need	1,921
Potential New Layberth	
Tyco Pier	1,200
Pier 38	960
Total	**2,160**

Discussion:

- *[via chat] Regarding the channel widening initiative, there is existing coral (in and around the channel entrance) that will need to be addressed as well as establishing new positions for Aids-To-Navigation (ATON). Additionally, with the proposal for a new anchorage, that process will have to go through the Coast Guard District 14 Admiral.*
  - [via chat] Although the Project Team did not have ample time during this presentation to elaborate in detail, we are taking into consideration the navigation improvements and process, to include local D14-Sector approval of any proposed future designation of an additional (4th) offshore anchorage.

G. 2050 Throughput and Capacity Needs (presented by Roslin Arbuckle, Stantec Consulting Ltd. [SCL]) Presentation Slides 52 – 60.

1. Stantec's Role (Slide 53)
   a. Evaluate existing harbor capacity for five cargo types: Containers, Automobiles (Autos), Break-Bulk, Liquid-Bulk, and Aggregates.
   b. Determine future capacity demand based on 2050 throughput projections by SMS Hawai'i (SMS).
   c. Identify opportunities to add capacity if needed.
   d. Develop alternatives to meet future throughput demand.
2. Throughput Capacity (Slide 55)
   a. Throughput capacity is primarily a function of berth capacity and storage capacity, where the most constrained element defines the terminal capacity.

b. The berth and storage capacity were determined through extensive surveys, interviews and questionnaires completed by operators and stakeholders. Stantec then analyzed the facilities, operators' capacity, and the ability to handle different cargo types. This data was processed in simulations to model and estimate the current capacity and utilization rates. The sustainability capacity for each terminal was determined by the lower berth or storage capacity.

3. Review of Existing Capacity vs. 2017 Throughput (Slide 56)
   a. Existing capacity, 2017 throughput and percent utilization are presented in the table below.

Sector	Unit	Existing Capacity	2017 Throughput	2017 Percent Utilization
Containers	TEU	1,430,000	1,204,200	84%
		1,860,000 (w/KCT)	n/a	n/a
RO/RO (Automobiles)	Units	367,000	177,600	48%
Break-Bulk/Neo-Bulk	Tons	763,000	471,300	62%
Liquid-Bulk*	Bbls	14,490,000	7,071,800	49%
		20,630,000 (w/KCT)	n/a	n/a
Dry-Bulk (Aggregate)*	Tons	500,000	83,300	17%
* Represents berth throughput capacity only.				

4. Existing Capacity vs. 2050 Throughput (Slide 57) and Projected Container Throughput and Capacity (Slide 58)
   a. The existing capacity for Roll-On/Roll-Off (RO/RO) (Automobiles), liquid bulk, break-bulk, and dry-bulk (aggregate) is adequate to meet the projected throughput for 2050. The projections indicate a container capacity shortfall of 186,000 TEUs (1,860,000 TEU capacity accommodating 2,046,000 TEU throughput) by 2050 with the addition of Kapalama Container Terminal (KCT).
   b. Honolulu Harbor's capacity with KCT and 2050 Annual Throughput Projection is presented in the table below:

Sector	Unit	Existing Capacity	Annual Throughput Projection 2050	Difference
Containers	TEUs	1,860,000 (w/ KCT)	2,046,000	**-186,000**
RO/RO (Automobiles)	Units	367,000	225,000	+142,000
Liquid Bulk*	Bbls	20,630,000 (w/ KCT)	10,080,000	+10,550,000
Break-Bulk/Neo-Bulk	Tons	763,000	368,000	+395,000
Dry-Bulk (Aggregate)*	Tons	500,000	< 10,000	+500,000

c. The Projected Container Throughput and Capacity graph on Slide 58 shows a baseline (blue line), high (green line), and low (yellow line) projections for future container throughput. Following the baseline projection, Honolulu Harbor will have adequate capacity to handle container throughput until early 2040 with no terminal operation changes. By early 2040, harbor capacity for container operations will have to increase to make up for the container capacity shortfall. This can be accomplished in several ways, such as:
   i. Increasing the yard operational efficiency and density by grounding and stacking containers;
   ii. Reducing dwell times;
   iii. Incorporating the use of additional Ship-to-Shore (STS, also known as gantry) cranes; or
   iv. Increasing productivity by increasing moves per hour.

5. Throughput and Sustainable Capacity Summary (Slides 59 – 60)
   a. Based on relatively minor operational changes and yard densification, the 2050 sustainable capacity for the three main cargo terminals is shown in the table below. These three terminals alone can accommodate the projected 2050 throughput of 2,046,000 TEU.

Honolulu Harbor 2050 Throughput and Sustainable Capacity (TEU)	
2050 Projected Throughput	**2,046,000**
2050 Sustainable Capacity	
Sand Island	1,300,000
KCT	650,000
Interisland Terminal	250,000
Total 2050 Sustainable Capacity	**2,200,000**

b. Additional container cargo capacity is available at Piers 1 and 2 (180,000 TEU throughput), 19 and 20, 29 (70,000 TEU throughput), and 31 to 33. [Note: Piers 1, 2, and 29 throughput capacity is based on existing operations.]
c. The projected 2050 throughput for autos is 225,000 units, which would require 16.3 acres (AC) of area. There is ample space to handle this throughput within Honolulu Harbor at Piers 1 and 2, 19 and 20, 29 and 31 to 33.
    i. Matson intends to bring their entire auto operation onto Sand Island.
    ii. Based on the Interisland operations, there will be some number of autos handled at the Interisland Terminal.

Discussion:

There were no further comments and/or questions from the TAC participants.

H. General Overview (presented by Jim Niermann, RMTC) Presentation Slides 62 – 67.

1. Cargo Terminals (Slide 63)
    a. Piers 1, 2, 19, 20, 29, and 31 to 34 are general use cargo.
    b. Pier 39 to 40 (Interisland Terminal) is operated by Young Brothers (YB) for interisland barge operations.
    c. KCT will be operated by Pasha Hawai‘i (Pasha) (currently operating out of Pier 51).
    d. Piers 52 and 53 are currently operated by Matson. Additionally, Matson will likely take over Pier 51 when Pasha relocates.

e. Pier 60 is primarily an aggregate base yard and pier. It is currently under lease to HC&D LLC.

2. Maritime Support (Slide 64)
   a. Ship provisioners, tug operators and repairs, ship construction, Hawaii Pilots and other support are identified in Piers 12 to 15, 19, 21 to 28, 35, and near Pier 38.
3. Commercial Fishing Piers (Slide 65)
   a. Fishing piers are located at Piers 16 to 18 and 36 to 38.
4. Passenger Operations (Slide 66)
   a. Pier 2 is the Cruise Terminal. Piers 10 and 11 are also currently used for Cruise operations.
   b. Piers 5 to 9 are used by the day-excursion vessels and potential Ferry services.
5. Non-Maritime (Slide 67)
   a. Non-maritime development opportunities are focused on the landside areas of Piers 5 to 11.

Discussion:

There were no further comments and/or questions from the TAC participants.

I. Sand Island Terminal (presented by Jim Niermann, RMTC) Presentation Slides 68 – 69.

1. Sand Island has plenty of yard space but is a berth-constrained terminal.
2. Recommendations:
   a. Balance berth and yard – improve the cargo movements' efficiency over the berth and/or increase cargo volume across the berth by mid-2040 to accommodate 1.3 million TEUs. Options include:
      i. Increase the number of gantry cranes [Note: from 6 existing to between 7 and 9].
      ii. Improve cargo handling efficiency and increase the number of moves per hour by RO/RO/barge operations.
      iii. Adding gantry cranes or other methods to improve cargo movement efficiency will be determined by the terminal operator.
   b. Densify the yard by increasing the percentage of grounded containers. [Note: As shown on slide 69, between 25 and 30 percent of the terminal is still allocated for auxiliary space (parking, miscellaneous buildings, maintenance, and storage). The industry standard for auxiliary space is typically 10 to 15 percent of the total terminal area, so some of this space could be allocated to container storage to reduce the overall proportion of grounded containers.]
      i. For container-only operations, increase grounded/stacked containers to 31 percent, with a reduction of wheeled operations to 69 percent (from existing 100 percent wheeled operation).

ii. For containers with auto operations, increase grounded/stacked containers to 42 percent, with a corresponding reduction in wheeled operations to 58 percent.

c. Allocate 12.5 AC for autos (85,000 units per annum) and project cargo. The site plan shows the acreage at Pier 51A, but it can go anywhere in the yard based on the operator's requirements. The terminal operator will determine the amount and location area.

d. Internalize truck storage to eliminate queuing on Sand Island Parkway.

e. Relocate buildings near the end of their service life to the perimeter of the yard and relocate office buildings to an off-site location to maximize yard area and improve operational efficiency.

f. Consider repurposing the existing Sand Island weigh station to serve as a joint-agency shared inspection station. The weigh station will become obsolete with the imminent installation of weigh-in-motion technology at each cargo terminal.

3. Matson has informally shared preliminary proposed terminal improvements with DOT-H. The improvements are consistent with the suggested general recommendations presented. DOT-H is currently reviewing the recommended improvements as part of the on-going discussions with Matson.

4. DOT-H is looking at a potential acquisition of an 11-AC DLNR-owned lot on Sand Island that is currently leased to the CCH for the Hale Mauliola transitional housing program. DOT-H is not actively pursuing this acquisition as it is not a priority and DOT-H has no interest in displacing the CCH program. [Note: A 2018 Environmental Assessment was prepared to extend the lease for an additional 4 years, to 2022.]

Discussion:

There were no further comments and/or questions from the TAC participants.

J. Kapalama Container Terminal (KCT) & Interisland Terminal, (presented by Jim Niermann, RMTC) Presentation Slides 70 – 72.

1. To meet the 650,000-TEU throughput capacity needed by 2050, KCT requires a wheeled-to-grounded ratio of 22 to 78 percent. If Pasha brings all their auto operations to KCT, it will occupy approximately 9 acres of the yard and container operations would have to be 100 percent grounded to balance berth and yard.

a. The Master Plan is presenting the KCT Harbor Modernization improvements as-is and does not recommend further improvements to KCT, with one exception: the installation of a navigational range to assist in-bound (west-bound) navigation through Kapālama Transit Channel. An additional range is recommended on the east side of the harbor to assist out-bound (east-bound) vessels through the Kapālama Channel.

2. The Interisland Terminal is currently 100 percent grounded operations. Sustainable capacity for Interisland throughput will be anywhere from 225,000 to 250,000 TEUs by 2050.
3. Interisland Terminal Recommendations:
   a. Relocate all buildings to the perimeter of the yard or to an off-site location to improve operational efficiency.
   b. Infill a portion of the slipway at Pier 39 and 40 to create approximately 0.5 acres of additional yard space yet retain berthing for four (4) barges.
   c. Reconstruct, raise, strengthen, and improve all piers and yards to accommodate container storage and handling to the pier's full extent. Consider sheet pile/bulkhead construction. Improve fendering and bollards.
   d. Reconstruct, raise, and strengthen the revetment at Kapālama Canal outlet for resiliency and terminal function.
   e. Internalize truck queuing to eliminate traffic impacts on adjacent public streets.
   f. Create a new Libby St. entrance for staff and customers outside of the secured area. This improvement will be determined by the operator.
   g. Provide internal truck queuing adjacent to Auiki Street to eliminate truck congestion on the public street system. Truck queuing lanes have been created at this location as part of the KCT improvements. The Master Plan recommends maintaining these lanes into the future for container truck traffic to the Interisland Terminal.
   h. Consider one-way in and one-way out vehicle circulation. Determined by the operator.
   i. Consider relocating livestock and/or less than container load (LCL) operations to an off-site location, such as the Triple F Building near KCT or another nearby site.
      i. The terminal operator has indicated that livestock operations will remain on the terminal.
      ii. LCL relocation may occur under a scenario where LCL is removed from the Public Utilities Commission (PUC) requirements for the Interisland Terminal operator. Third-party consolidators would handle LCL. Relocating LCL would free up terminal yard space to improve the yard's efficiency.
      iii. Removing LCL will require parallel changes on the neighbor islands and will incur additional costs due to handling cargo more than once.

Discussion:

There were no further comments and/or questions from the TAC participants.

K. Piers 12 to 38 (presented by Jim Niermann, RMTC) Presentation Slides 74 – 87.

1. Piers 12 to 38 Overview (Slide 75)

a. Piers 12 to 38 contain most of the maritime support operations in the harbor. This area includes general cargo piers at Piers 19 and 20, 29, and 31 to 34 and the fishing fleet at Piers 16 to 18 and 36 to 38.
b. General recommendations for this area include:
    i. Improve cargo piers for mixed-use cargo operations.
    ii. Create opportunities for maritime tenants through long-term lease agreements, PPP, and capital advancement program funding.
    iii. Develop dedicated tugboat pier - "Tug Row" at Piers 21 and 22.
    iv. Develop a new maritime center at Piers 22 and 23.

2. Piers 36 to 38 – Fishing Village (Slides 76 – 77)
    a. The Fishing Village's landside property at Pier 38 is leased from DOT-H and managed by a tenants' association (Association). The leases extend beyond the HHMP planning horizon; therefore, the Master Plan will not propose any landside improvements.
    b. Waterside improvements include:
        i. Extending the pier improvements at Pier 38 for fishing vessel offload and provisioning and for layberth. This will add approximately 630 LF of new berth for shallow-draft vessels.
            a. Many fishing vessels left the harbor due to COVID-related issues. The Project Team anticipates a return of a thriving fishing fleet again. The capacity for the fishing fleet will be dictated by the permits that are issued (164 permits total).
    c. Develop a new pier adjacent to the maritime support area (former Chevron site) for workboats and layberth. This will add approximately 330 LF of new berth for shallow-draft vessels.
    d. Consider reconstructing the existing fuel barge pier. The fuel barge is nearing the end of its useful life and may be replaced or moved to another layberth location. It is not dependent on the current pier location.
    e. Consider floating dock design for fishing vessels and workboat piers. Floating docks are less expensive to construct and may be more resilient to tug boat propeller/thruster wash, tidal fluctuations and outfall from Kapālama Canal. There will need to be restrictions for no rafting and double berthing to maintain space for cargo operations at Pier 39.
        i. The Project Team reviewed with YB concerns about prop-wash from tug boats operating at Pier 39 impacting vessels berthed at Pier 38.
    f. Extend Pier 36 to the federal project limit. This will add approximately 320 LF of new berthing for fishing vessels and workboats. [Note: This recommendation is not a high priority.]
    g. Recommended Access Improvements
        i. Maintain access through the fishing village with connections at the existing full-movement signalized intersections at the Pier 38 Driveway and Alakawa St. on Nimitz Hwy.
        ii. Create a new access driveway to Piers 31 to 34 with a connection to the signalized intersection at Alakawa St. and Nimitz Hwy. [Note: A new driveway connection between Piers 31 to 34 and the Alakawa St.

intersection would be dependent of several preconditions, including acquisition of the Honolulu Freight Services parcel as well as reconfiguration of the structures and uses in the area.]

iii. No changes are proposed to the two existing access driveways to Piers 31 to 34. These driveways will continue to be east-bound right-in and right-out only.

iv. Channelize the Alakawa St. intersection queuing lanes using striping or "candlesticks" to separate the Fishing Village traffic from the cargo pier / maritime traffic.

3. Piers 19 to 33 (Slides 78 – 82, and 85)
   a. Cargo Piers (Piers 19 and 20, 29, and 31 to 34)
      i. Clear buildings and structures to create open, general purpose, mixed-use cargo terminals. Improve lighting and strengthen pavement to handle heavy maritime cargo handling equipment.
         a. At Piers 31 to 34, continue existing improvement projects: install new lighting, strengthen pavement and construct new comfort station.
      ii. At Pier 29, improve the pier face and apron to an approximately 50-FT width. Fill the existing notch in the apron. Combined with the recently strengthened yard pavement, the proposed improvements would essentially result in a new, improved pier.
      iii. Recommended Access Improvements
         a. Currently underway: reauthorize and reconstruct the east-bound Nimitz Highway exit lane connecting to the Pacific St. intersection and access to Piers 27 to 29. At the Pacific St. exit, container trucks leaving Pier 29 should be restricted to right-out only to avoid blocking the Pacific St. intersection. [Note: The Master Plan will reference the in-progress reauthorization of the Nimitz Highway east-bound exit driveway to Pacific St.]
   b. Pier 19 DOT-H Ops Base Yard
      i. Consolidate DOT-H Sand Island Base yard and custodial operations at Pier 19. The base yard would occupy approximately 3.4 AC, including most of the Pier 19 shed, Super Ferry Terminal, and the open space areas fronting Nimitz Highway.
      ii. Renovate the Pier 19 shed and Super Ferry Terminal building for maintenance and repair shop, storage, and office space.
      iii. Repave the yard for parking, fleet vehicles, and equipment storage.
      iv. The existing DOT-H base yard is increasingly inundated by tidal flooding that is exacerbated by SLR. DOT-H investigated ways to mitigate flooding, but the most economical option is to relocate to Pier 19 as an interim location until a permanent location can be found elsewhere in the harbor and/or increased cargo demand requires the use of the entire Pier 19 yard, at which time the ferry terminal and Pier 19 warehouse can be demolished to create open yard space that extends the entirety of Pier 19 and 20.

v. The makai edge of the Pier 19 shed, all of Pier 20, and the full apron would continue to be used for cargo and auto operations.

c. Maritime Center at Piers 22 and 23
   i. Develop a multi-level, mixed-use reinforced concrete building to accommodate office, ship agents, parking, auto storage, with high-cube cargo operations at ground level. Incorporate the existing McCabe building into the new maritime center.
   ii. Include commercial/retail on Nimitz Hwy. frontage.
   iii. Provide storage area for large/heavy maritime cargo handling equipment and emergency equipment.
   iv. Integrate parking and auto storage with Piers 19 and 20 cargo operations. There should be separate public and secure access areas. The parking levels should be designed with flat decks so they can be repurposed to occupied space in the future if necessary.
   v. The consolidated DOT-H base yard will be integrated with the maritime center.
   vi. Examples of the type of structure being contemplated for the maritime center include Walmart/Sam's Club on Keʻeaumoku St. and the Airport Industrial Center (Slide 80).
   vii. Recommended Access Improvements
      a. Reauthorize the driveway entrance at Pier 23 to provide right-turn-in only access to "Tug Row" (Piers 21 and 22) and the proposed maritime center at Piers 22 to 23.
      b. Develop the existing Kukahi St. driveway entrance as the primary access to the new maritime center and Piers 19 and 20 cargo terminal. Construct a channelizing island on the makai-ʻEwa corner of Nimitz Highway and Kukahi St. intersection to improve pedestrian safety. Signalize the intersection. Coordinate with DOT-HWY for a signalization warrant study.
      c. Maintain the existing driveway access to the Pier 19 warehouse and Hawaiʻi Pilots at Pier 18. Maintain existing driveway access to Piers 16 to 18 Fishing Fleet.

d. Tug Row at Piers 21 and 22
   i. Demolish existing buildings and consolidate tug operators in a new shared office, warehouse, parking, and maintenance facilities.
   ii. Reconstruct and strengthen the pier, apron, and yard.
   iii. Consider sheet pile/bulkhead construction.
   iv. Provide shoreside power.
   v. Reauthorize Pier 23 driveway entrance on Nimitz Hwy. to provide primary access. The exit will be at the Kukahi St. intersection.
   vi. Phase improvements so as not to disrupt tug operations.
   vii. Consolidate maritime operators in shared facilities where possible.
   viii. Recommend long-term leases to facilitate tenant investment in harbor facilities. Consider PPP as an alternative method of funding harbor improvements.

Discussion:

- *People from Kirby, YB, Sause Bros., and tug crews have limited, unsecured parking. Tug crews, as many as 18 tugs or more, park their cars down the center street of Pier 21 (extension of Kukahi Street) and are gone for days at a time. The need for parking extends to tug crew, staff, and maintenance shift workers who work between Piers 21 and 28. There may be up to 100 people in the yard at a given time. Many people are working in a small area with limited parking.*
  - The maritime center concept includes a parking structure for maritime employee parking.

4. Piers 22 and 23 (Slides 83 – 84)
   a. Improve Pier 23 for use by maritime tenants and as layberth.
   b. Reconstruct the pier due to its dilapidated condition and strengthen the pier foundation, which also may be needed to support the proposed maritime center's construction.
      i. Consider sheet pile/bulkhead construction.
   c. Clear out subsurface coral and rocks and cut back pier face by 20 to 40 FT to widen the slipway.
   d. Dredge the full extent of the slipway to 35 FT depth.
   e. Demolish silos, warehouses, and miscellaneous buildings to accommodate driveway access and efficient yard area layout for maritime uses.
      i. Existing silos and related structures constrain the efficient use of Piers 22 and 23. Space between the existing pier face and silo buildings is limited. Cutting the pier back would further reduce the functional use of the area. Removing the silos and related structures add 110 FT of additional width adjacent to the pier face and improve yard efficiency.
5. Piers 16 to 18 – Fishing Fleet (Slide 86)
   a. Develop a new respite center and office/storage building at Piers 16 to 18. This project is currently being planned outside of the master planning process and in consultation with the fishing fleet operators.
   b. Widen Pier 16 to accommodate motor vehicles for provisioning and fueling. This is a low priority project, as there are existing workarounds. Recommend programming this improvement when the current pier reaches the end of its designed life cycle.

   Discussion:

   - *[via chat] Are there any future requirements for a Department of Homeland Security (DHS) facility in the respite center area because of foreign fishermen safety, security, and the like?*
     - [via chat] The respite center is intended for use by foreign fishermen on vessels at Piers 16 to 18. A respite center project is also being undertaken at Piers 36 to 38.

- There is no space allocated in the fishing fleet areas or within the respite centers for Homeland Security. The respite center would be in a restricted, secure area. Planning for the respite centers is underway.
- *[via chat] Please include Customs and Border Protection in discussions regarding the fishermen's respite centers.* [Note: DOT-H Oahu District will consult with CBP on design of the respite centers.]

6. [Piers 12 to 15 (Slide 87)
   a. Recommend long-term leases and PPP agreements to incentivize investment in maritime facilities, including pier reconstruction and support buildings development.
   b. Piers 12 to 15 will continue to be used for maritime support operations.
      i. Pier 15 – Used by the Harbor Police over the entire planning horizon.
      ii. Piers 13 and 14 – Maritime Tenant
         a. Remove warehouse building to create an open yard or redevelop into a multi-story building with high-cube ground level and upper-level space for office and storage.
      iii. Pier 12 – Layberth or Maritime Tenant
         a. Replace segmented pier with a continuous pier or floating dock. Consider extending Pier 12 on the ‘Ewa side.

Discussion:

There were no further comments and/or questions from the TAC participants.

L. Maritime Use – Aloha Tower Area and Pier 2, (presented by Jim Niermann, RMTC) Presentation Slides 89 – 93.

1. All the landside areas around Aloha Tower, from Piers 5 to 11, are under the jurisdiction of the Aloha Tower Development Corporation (ATDC). DOT-H has jurisdiction over the waterside area. Part of ATDC’s mission is to generate revenue through land development to benefit DOT-H’s Special Funds and the State. Driven by that mission, the landside recommendations include:
   a. Use Piers 10 and 11 waterside areas for layberth and maritime uses.
   b. Convert Piers 10 and 11 sheds to retail and commercial uses.
   c. Eliminate cruise operations from Piers 10 and 11. Supporting rationale includes:
      i. Cruise operations underutilize Piers 10 and 11 for revenue generation. Based on 2019 Port Call data, cruise ships called at Piers 10 and 11 approximately 30 days out of the year. The rest of the year the cruise terminal area is not used or is minimally used. The ATDC has determined that the best use for the Pier 10 and 11 landside areas for revenue generation is retail and commercial use.
      ii. Cruise operations are already challenged by current space and vehicle access/circulation constraints. Post-COVID-19 passenger health and safety screening will require increased space compared to

pre-COVID conditions, which will exacerbate current space limitations at Piers 10 and 11.

[Note: The Master Plan will also include an alternative for a shared-use cruise terminal with retail and commercial use at Piers 10 and 11.]

d. Use Piers 5 to 9 for day excursions, ferry, layberth and maritime use along the waterside.
e. Improve Pier 8 with water, sewer pump-out, and lighting utilities to support day excursions.
f. Extend and straighten Pier 6. Incorporate the pier extension with a public viewing platform adjacent to the coral out-planting site. Consider undertaking the improvements as part of the Piers 5 and 6 landside development PPP. (see **Section O, Non-Maritime Alternatives Aloha Tower Area** for further details).

2. Pier 2 Cruise Terminal (Slides 90 – 93)
   a. Pier 2 Cruise Terminal improvements without the acquisition of the General Services Administration (GSA) lot: (Slide 90)
      i. Utilize approximately 1 to 2 AC of the mauka end of the Pier 2A to increase the staging area for passenger ground transportation and ship provisioning/servicing vehicles.
      ii. Reconfigure queuing and staging to improve circulation.
   b. Pier 2 Cruise Terminal recommendations with the acquisition of the GSA lot: (Slide 91)
      i. Acquire federal GSA lot and use the area to improve vehicle queuing, parking, and motor vehicle circulation.
      ii. Utilize approximately 0.5 to 1 AC of the mauka end of the Pier 2A yard to increase the staging area at the makai side of the existing cruise terminal building to expand and improve circulation for containers and trucks that service cruise vessels.
      iii. Renovate the historic Department of Health (DOH) building for maritime office uses.
   c. Utility Upgrades to the Pier 2 Cruise Terminal (Slide 92)
      i. Provide shoreside sewer connection for cruise vessel discharge to municipal collection systems.
      ii. Improve shoreside water connection for cruise vessels to take on water (pressure and flow). Consider upsizing existing lines and providing pumps.
      iii. Provide shoreside power to reduce carbon emissions from idling vessels.
   d. Cruise Terminal Pedestrian Connectivity (Slide 93)
      i. Improve pedestrian connection between Aloha Tower Marketplace, Downtown, Chinatown, and the Pier 2 Cruise Terminal.
      ii. Widen the Channel St. sidewalk.
      iii. Work with the Hawai‘i Community Development Authority (HCDA) and Kamehameha Schools to improve pedestrian connections to Kaka‘ako.

Discussion:

- *[via chat] Is there coordination with DOT-H on any plans for roadway improvements for DOT, Highways Division freight planning?*
  - Not at this time. DOT-H and the Project Team are available to coordinate with DOT, Highways Division, to understand harbor operations and freight movement impact on the highway system. The Project Team met with DOT, Highways Division during the planning process. [Note: The Hawaii Statewide Freight Plan was completed in 2018 by DOT-HWY; DOT-H participated in the preparation of that plan. The 2018 Freight Plan will be referenced in the Master Plan.]
- *[via chat] Multiple ships at Pier 2 will require that vehicle and traffic concerns be addressed. A larger staging area for the added volume of taxis, rideshare vehicles, and buses would be needed. Traffic entering from Channel St. may overflow onto Ala Moana Boulevard.*
  - [Reference to Slide 90] The Project Team is recommending that space from Pier 2A be used to increase the ground staging area under the scenario where DOT-H does not acquire the GSA lot. The recommendations for the area are suggestive. No analysis was completed to determine the specific spatial requirements. [Note: When KCT opens up, much of the cargo operations at Piers 1 and 2 will shift to KCT which will allow area at Pier 2A to be allocated to the cruise operation staging area.]

M. Piers 1 & 2 (presented by Jim Niermann, RMTC) Presentation Slides 94 – 103.

1. Piers 1 and 2 – Cargo and Resiliency Pier (Slide 95)
   a. Improve pier and yard to serve as primary resiliency pier and multi-use cargo pier. Improve the pier and yard to address SLR.
      i. SLR adaptation alternatives include reconstructing and raising the pier and yard deck height to 8 to 10 feet above the MLLW, raising the apron/berthing at the pier face and the critical facilities in the yard only while keeping the yard at the existing height.
   b. Consider sheet pile/bulkhead construction. Include wave energy diffusion/absorption in the pier face design.
   c. Consider cutting back the pier to fast land (approximately 75 FT inland) and thereby widen the main entrance channel. Entrance channel widening alternatives will be evaluated as part of the joint DOT-H and USACE study.
   d. Construct heavy-lift pads and reinforced utility conduit for function as resiliency pier. [Note: Reinforced utility conduits are conceived to be designed to be waterproof and resistant to impact and seismic forces so that power and communication lines have a higher likelihood of surviving a disaster event and function can be restored quickly and without major repair work.]

e. If a mutually beneficial agreement can be reached, acquire use of the 5-acre Office of Hawaiian Affairs (OHA) parcel and 0.8-acre HCDA remnant to expand the yard and improve operational function.

Discussion:

- *[via chat] Is there an overview of a high-level contingency plan for Hawai'i transitioning to a full import of finished petroleum products if refineries are closed? Is there a forecast for more petroleum vessels coming into Pier 51, Pier 30, or elsewhere?*
  - The Project Team does not have any information regarding the subject, nor have they done a study of future petroleum vessel traffic if refineries are closed. The Project Team will investigate future petroleum vessels and contingency plans.
    [Note: The Project Team evaluated petroleum products (liquid bulk) under business-as-usual conditions as one of the categories of cargo when determining harbor capacity and future throughput projections. In 2018, liquid bulk throughput at Honolulu Harbor was approximately 7,970,000 barrels (Bbls). The annual liquid-bulk cargo throughput, harbor wide, from 2015 to 2050 is projected to decrease 5 percent in the low scenario and grow by 32 percent in the medium scenario and 69 percent for the high scenario. Annual sustainable capacity for liquid-bulk product in Honolulu Harbor is 20,630,000 Bbls. The projected annual throughput in 2050 is 7,265,000 Bbls (low), 10,080,000 Bbls (medium) and 12,895,000 Bbls (high). Increases in petroleum product throughput will be accommodated at the existing fuel manifold at Pier 51 and a new fuel manifold planned as part of the KCT improvements. In addition, the private Pier 30 fuel manifold is available to receive or deliver fuel. Aside from Honolulu Harbor, finished fuel products can be imported to Kalaeloa Barbers Point Harbor and through the off-shore single-point mooring.]
- *[via chat] [Reference to Slide 95] Is OHA's property, referred to as Lot L, referenced in the context of interest to acquire?*
  - DOT-H's interest in acquisition is not to take the property away from OHA but create a mutual agreement that is beneficial for OHA and DOT-H to use the OHA parcel in coordination with the Piers 1 and 2 cargo use. The Project Team is not familiar with the "Lot L" reference for the OHA property.
  - *[via chat] OHA is open to discussing this matter further regarding the area next to the 34.5-acre storage area and the HCDA area. Mahalo.*

2. Cruise Terminal Alternatives (Slide 96)
   a. Eliminate cruise operations from Piers 10 and 11.
   b. Conduct all cruise operations at the Pier 2 Cruise Terminal.
   c. Include an option to use Pier 1 as a second cruise berth.
   d. Use Piers 19 and 20 as a contingency cruise ship berth with no cruise facility improvements at the pier, open pier only.

   i. Piers 19 and 20 are currently designated as a contingency cruise terminal. The existing Piers 19 and 20 cruise Facility Security Plan (FSP) remains in place.

3. Piers 1 and 2 Combined Cruise and Cargo Operations (Slides 97 and 98)
   a. Piers 1 and 2 can accommodate two standard-sized cruise vessels simultaneously (Length = 965 FT and Beam = 125 FT).
   b. Piers 1A and 1B have a berth utilization rate of 30 percent based on 2017-2018 Port Call data and are projected to have a utilization rate of approximately 50 percent by 2050, assuming no changes in operations at Pier 1 after KCT opens. (The 2050 projection uses an annual growth rate of 1.7 percent). The relatively low utilization rate indicates that there is capacity at the berth to accommodate approximately 30 cruise ship berth days per year that would be displaced from Piers 10 and 11 (based on the 2019 Cruise Ship Port Call data, pre-COVID conditions).
      i. Piers 1 and 2 can still handle the projected cargo throughput projections with cruise port calls at these piers. [Note: After KCT opens, PASHA intends to shift all container operations to KCT and to continue to use Piers 1 and 2 for RO-RO, break-bulk and special project cargo operations.]
   c. No permanent cruise facility improvements will be constructed makai of the Pier 2A knuckle.
   d. Pier 1 cruise ship berthing will be restricted to port calls or partial turns (i.e., turnover no more than 500 passengers).
   e. Use of Pier 1 for cruise operations will require a new Facility Security Plan (FSP) for Pier 1.
   f. Bunkering operations at Pier 1 are restricted. Operating a Bunker barge (approximately 100-FT beam) adjacent to a cruise vessel (approximately 125 to 134-FT beam) will encroach into the harbor entrance transit channel and impact navigation. However, with scheduling workarounds bunkering operations currently occur at Pier 1. Bunkering is not permitted to occur while large vessels are entering or exiting the harbor. Bunkering will have to be worked out through scheduling unless and until the harbor entrance channel is widened. [Note: Cruise ships are typically in port for approximately 10 to 12 hours. Bunkering operations to deliver a full fuel load typically take approximately 8 hours. Therefore, the window in which a cruise vessel at Pier 1 could take on bunkers is narrow and could be disrupted by priority cargo vessel traffic. Possible mitigation includes ship scheduling, requiring cruise vessels to arrive with sufficient fuel to pass through Hawaii without fueling. Cruise vessels could also take on fuel by shifting to a different berth within the harbor for fueling, however this option would preclude allowing passengers to embark/debark the vessel, thus is not compatible with normal passenger operations.]
   g. Alternative Option 1

i. Pier 1 cruise facilities will use temporary barriers and awnings at pier side to direct passengers along the apron to the Pier 2 Cruise Terminal (see Slide 99).
ii. Conduct all ground transportation from the Pier 2 Terminal. Ship provisioning and service vehicles would access through the Pier 1 yard and be staged pier-side adjacent to the vessel.
iii. Renovate the existing Pier 2 terminal building for two-vessel passenger operations.
    a. Renovation costs may be prohibitively expensive given the relatively limited revenue contributed to the Harbor Special Fund by cruise activity. The renovation and cost will need to be justified and discussed between DOT-H and the cruise industry.

h. Alternative Option 2
    i. Construct a partially retractable elevated walkway to the existing Pier 2 terminal building or a new terminal building at Pier 2A (see Slide 101 for an example from Port of Saint John, NB, Canada).
        a. The elevated walkway would extend approximately 1,200 FT from the middle of Pier 1 to Pier 2A and have sufficient height to allow vehicles and container-on-chassis to pass underneath. It would be retractable to a storage area mauka of the Pier 2A knuckle.

i. Alternative Option 3
    i. Consider constructing a new cruise terminal building integrated with the existing terminal building.
        a. The new cruise terminal building can be a temporary facility or a permanent structure (see Slide 103 for an example of a temporary structure from Port of Los Angeles).
        b. A new, integrated, hardened terminal structure could also serve as a resiliency storage facility and staging area.
    ii. Conduct ground transportation from the Pier 2 Terminal. Ship provisioning and service vehicles would occur through the Pier 1 yard and be staged pier-side adjacent to the vessel.

Discussion:

- *Cruise Lines International Association (CLIA) and others are surprised by some of the content. Whoever made the recommendation to eliminate cruise operations at Piers 10 and 11 has rejected the points made in the separate meetings regarding the conflicts and constraints that would result from operating cruise vessels at Pier 1. It is interesting having an unidentified retail use supplant an existing maritime harbor use. What type of user is contemplating taking Piers 10 and 11 space, and when would that take place? Will it take place after all Piers 1 and 2 improvements are completed?*
    - ATDC is currently speaking with an interested entity for space at Piers 10 and 11. The entity cannot be identified at this time, but

ATDC is looking generally at the use of the Piers 10 and 11 sheds for commercial and retail use to increase revenue generation.

- *What is the timing for moving the existing harbor user? Would it occur under the normal port of calls schedule on the engineering and planning side, or would it occur after Piers 1 and 2 are improved?*
- *[via chat] How far into the future would cruise operations cease at Piers 10 and 11?*
  - At this point, DOT-H does not have a definite timeline of when relocation would occur. DOT-H is taking into consideration the current cruise ship schedules at Piers 10 and 11 to avoid disrupting already scheduled cruises. Ideally, DOT-H will complete any necessary improvements at Piers 1 and 2 before ending cruise vessel operations at Piers 10 and 11. DOT-H will coordinate with the cruise industry to implement the changes.
- *The first question is, if we are moving a harbor user out of Piers 10 and 11, what are the commercial retail interests and the nature of that interest that is supplanting the cruise industry? The second question is, what is the timing for moving the cruise industry? Based on the understanding of what is recommended and the usual DOT-H planning, (the maritime community assumes) DOT-H would not move a harbor user out of the Piers 10 and 11 space until the new space and improvements are completed. (Can you) confirm that the improvements contemplated at Piers 1 and 2 and the staging improvements will be completed before cruise operators are required to leave Piers 10 and 11?*
  - The Project Team cannot commit on DOT-H's behalf, but yes, ideally, any necessary improvements at Piers 1 and 2 would be completed before cruise operations transition out of Piers 10 and 11. [Note: Decisions on the timing of the transfer of cruise operations, and improvements at Piers 1 and 2, will be made by DOT-H Administration in coordination with ATDC, DOT-H O'ahu District and stakeholders. When the transition takes place, accommodations will be made at Piers 1 and 2 to handle two cruise vessels simultaneously; however, what those accommodations will look like is unknown as yet.]
- *Most cruise vessels berthing in Honolulu Harbor stay for a short-term and take on provisioning. If DOT-H starts making improvements at Piers 1 and 2, there has to be more thought put into the process for overall improvements, not just extending berthing for another cruise ship. There are lots of logistics at Piers 1 and 2. DOT-H has been putting their best foot forward with larger cruise turnarounds, and we [the maritime community] can make it happen as a collective industry. The danger presented is that the passengers might be overwhelmed by the third world greeting in Hawai'i. This may impact Hawai'i in a larger sense. If DOT-H is going to make an investment in the cruise*

industry, things must be put in place before ATDC considers restricting cruise ships from berthing at Piers 10 and 11. Otherwise, cruise ship capacity in the harbor might be lost altogether, which would be bad for the industry.

- Thank you for highlighting those concerns. It would be beneficial to have more dialogue among the stakeholders for these issues, needs, and interests.

- *[via chat] The Pilots have concerns that placing cruise ships at Pier 1 presents potential navigation safety issues for other vessels in transit through the entrance channel adjacent to fueling operations (cruise vessel fuel bunkering) at Pier 1 at the mouth of the harbor.*

N. Pier 60 (presented by Jim Niermann, RMTC) Presentation Slides 104 – 105.

1. Raise the Pier 60 pier and yard and fill landside areas for 3.2-FT SLR.
   a. Raising the pier and yard requires extensive fill to surcharge the land. This may be prohibitively costly, particularly under the current revenue constraints. It would also require a long period to allow the fill to settle and stabilize. However, without raising these areas, they will eventually become even more susceptible to flooding and groundwater saturation as SLR increases, and ultimately would become unusable.
      i. The Project Team will revisit the SLR assumptions based on recently updated SLR projections that may supersede the recommendations in the 2017 *Hawaii Sea Level Rise Vulnerability and Adaptation Report*.
2. Develop raised inland areas for car storage, containers on chassis storage, or other maritime use.
3. Acquire right-of-way (ROW) to improve street layout/circulation and develop a new public access commercial street to create business frontage along the inland landside areas.
4. Pave and harden the HC&D yard surface for bulk aggregate storage to reduce comingling of aggregates with native soils and reduce discharge of sediments and contaminants.
5. Consider a PPP to redevelop this area.

Discussion:

- *When discussing Climate Change and SLR, should the harbor priority focus on low-lying areas to begin improvements and strengthening?*
  - Yes. For example, the Oahu District Sand Island Base Yard is in a bad location due to SLR and the frequency of flooding. There are parties that are interested in that location and its access to the water. It would be better to have an operator that needs those site characteristics to use that area rather than have DOT-H Oahu District maintain operations at the Sand Island Base Yard as the cost to mitigate the flooding would be tremendous.

- The Project Team has completed a rough order of magnitude (ROM) cost estimate for raising the Pier 60 area, and it is expensive. The Project Team has not assessed when Pier 60 and other areas of the harbor will become unusable due to increased SLR. The Project Team will consider including analysis of projected inundation areas, the timing of priority improvements to maintain facility function in low-lying areas, and the possibly of managed retreat from some areas of the harbor area unless and until they can be adapted to SLR conditions.

- *This brings to light that many harbor users and stakeholders are continuously looking for where to invest moving forward. To know where to invest resources and time, users need to have a visual roadmap that indicates where certain types of activities are taking place versus where work is being conducted. Right now, there is a significant imbalance in that area because there are countless numbers of stakeholders involved in the process of cargo movement or auto usage that goes beyond the waterfront. Everybody is getting squeezed [with SLR], so the alternatives need to be clearer on how it will impact everybody down the road.*
- *Is Pier 60 land either in the possession of or will be transferred back to the Department of Land and Natural Resources (DLNR) and no longer DOT-H land?*
  - DOT-H transferred a portion of the lower Keehi Industrial Park Association (KIPA) parcel [refer to Slide 105 lower right triangular property adjacent to the Keehi Small Boat Harbor] to DLNR.
- *Will the remainder of the other yard with aggregate remain as DOT-H property?*
  - Yes, that will remain as DOT-H property. The investment to redevelop the land could potentially be undertaken with a PPP.
- *DOT-H is still trying to resolve the layberth issues in the upcoming years, and a barge at the waterside of Pier 60 [refer to Slide 105] could remain a long-term alternative with the existing basin and channel. Barges could use Pier 60 as a viable alternative for layberth and get barges out of the primary harbor. This could be implemented with just mooring dolphins.*
  - That is a good idea, and we can introduce it back into layberth alternatives.
- *[via chat] It would be advantageous to set up some of the Pier 60 areas to receive material excavated or dredged to widen the channels and piers. With the PVT Landfill closing in five (5) years, there will be limited opportunities to dispose of this excavated material, which can eventually be used to raise the existing grade of the Pier 60 area.*

O. Non-Maritime Alternatives Aloha Tower Area (presented by Laura Mau, RMTC) Presentation Slides 107 – 139.

1. Considerations (Slide 108)
    a. Several areas of concern that inhibit the development potential of the Aloha Tower Marketplace Area are identified as:
        i. Lack of adequate and convenient parking.
            a. Adequate and convenient parking is needed to support retail and commercial uses within the area.
            b. Historically, the lack of parking has been challenging, particularly in terms of attracting local residents.
            c. Parking provisioning may change when the rail station is completed.
        ii. Inadequate connectivity to Chinatown, Downtown, and Kakaʻako exists due to the visual and physical barrier created by Nimitz Hwy./Ala Moana Blvd.
            a. The road is under DOT, Highways Division jurisdiction, and is a major State transportation corridor and freight route.
        iii. Restricted access to the shoreline. Opportunities for public shoreline access are available but limited to Aloha Tower and Pier 38. Access is largely restricted for most of Honolulu Harbor to ensure the security of maritime operations.
        iv. Traffic congestion during cruise ship port calls.
        v. Irwin Park – DOT-H is proceeding with plans to relocate parking and restore the park. The timing of these plans must be coordinated between the DOT-H, Hawaiʻi Pacific University (HPU), and the Irwin Family Trust.
2. Conceptual Interpretive Themes (Slides 109 – 111)
    a. The vision of the Aloha Tower area is based on a healthy appreciation for the layers of harbor history. There are two main areas: early history (Slide 109) and modern history (Slide 110). The HHMP recommendations will consider the most appropriate way to interweave and incorporate the history of maritime use and pre-maritime Hawaiian cultural resources and practices within the harbor.
        i. The Honolulu area was a highly established habitation area, particularly a royal center for the *Aliʻi*. The harbor area was originally named *Kou*.
        ii. Honolulu Harbor is the *Piko,* that is the historic, economic and social central point for the State of Hawaiʻi, particularly Oʻahu.
        iii. Notably, the area located mauka (northeast) of the Aloha Tower Marketplace, approximately at the location of Pier 11, was the original shoreline and was referred to as Kuloloia Beach and Pākākā (Canoe Landing).
            a. A map shown on the top left corner of Slide 109 depicts the current shoreline at the Aloha Tower Marketplace area overlain

by a historical shoreline map from 1810 (The historical map was shared by Mr. Manny Kuloloio, a member of the PAC).

iv. King Kalakaua's Boathouse at Pier 7 (photograph is shown in the top right corner of Slide 109) is another touchstone to the King's presence and influence on the harbor area.
v. There are numerous Land Commission Awards throughout the Honolulu Harbor (map is shown in the bottom right corner of Slide 109), noting the area's significance and ties to the native Hawaiian communities.
vi. The modern history of the Honolulu Harbor includes:
    a. Whaling/Trade/Shipping
    b. Dredging
    c. Military Shipbuilding
    d. Cargo/Stevedores activities
    e. Pilots/Navigation
    f. Cruise Ships/Boat Days/Aloha Tower
vii. [Note: Other opportunities to highlight Honolulu Harbor history include The Hōkūleʻa, tied to the Polynesian Voyaging Society (PVS) and Kamehameha Pier.]

b. As a preface, the Aloha Tower area is under ATDC jurisdiction. The vision presented is the Project Team's concept for the area. Ultimately, decisions regarding development and specific improvements will be made by ATDC and their development partners. The Master Plan's 2050 vision provides suggested development concepts and themes for ATDC's consideration.
c. The interpretive themes for the Aloha Tower area are based on the concept of Honolulu Harbor as the *Piko* of the islands, in terms of the past, present, and future. The idea of *Piko* would include:
    i. Strengthen and reconnect the community to the shoreline.
    ii. Reinvigorate the harbor with annual celebrations such as canoe regattas, Hōkūleʻa/PVS educational events, or Boat Days.
    iii. Include a new cultural heritage center with permanent exhibits that honors the rich, multi-faceted history of the harbor and Hawaii's maritime traditions.

3. Aloha Tower Area – 2050 Vision Design Guidelines (Slides 112 – 114)
    a. Any proposed plan or development should be mindful of the area's historical context.
    b. Proposed design guidelines, referenced from the Secretary of the Interior's (SOI) Standards for Historic Properties (https://www.nps.gov/tps/standards.htm), for the Aloha Tower area with historical considerations for the materials, scale, context, views, and orientation are:
        i. Using similar materials between historic and new structures to create continuity.

ii. Being mindful of the level and quality of textures and details to create a relatable human scale.
iii. Using a variety of massing and streetscape to leverage visual and physical connections throughout the area.
iv. Observing appropriate setbacks as they affect visibility or prominence from the street, i.e., sightlines to Aloha Tower.
v. Being mindful that permanent additions to the area will change its character; minimize destruction to the identified historic resources.

c. Piers 5 and 6 Redevelopment (Slide 113)
   i. It is anticipated that Piers 5 and 6 will be redeveloped through a PPP with ATDC, DOT-H (for waterfront facilities), and a third party.
   ii. Piers 5 and 6 redevelopment concepts include a mixed-use structure with a multi-level parking structure and various improvements to activate pedestrian spaces. Potential uses within the mixed-used structure include:
      a. Retail/commercial/office
      b. Cultural heritage/education center
      c. Day excursion/tour retail front/offices
      d. Boutique hotel
      e. Maritime museum
   iii. Parking decks within the parking structure should be flat to allow for repurposing should future parking demand decrease.
   iv. Maintain existing park space at the end of Piers 5 and 6.
   v. Improve the waterfront with a continuous pedestrian path, landscaping, and other pedestrian features.
d. Waterfront Promenade / Streetscape (Slide 114)
   i. Consider 25-FT wide (minimum) sidewalks fronting Pier 7 to support bus drop off/pick up area and street festivals.
   ii. Enhance streetscape with:
      a. Street trees, such as native kou to honor historical name for the area.
      b. Benches and bus shelters at the extended bus pullout near Pier 7.
      c. Interpretive displays and/or signage to share the rich and varied history of the harbor.
      d. Artistic sidewalk pavements relevant to the history/culture of the harbor that highlight the pedestrian spaces and activate the streetscape.
   iii. Consider design features in the center islands of the proposed roundabouts, such as public art features or maritime artifacts.
   iv. Consider landscape materials that are native, hardy, easy-to-maintain species.

4. Aloha Tower Area – 2050 Vision – Alternative 1. Split-Block (Slides 115 – 120)

a. The concept includes PPP development of separate multi-use structures at Piers 5/6 and at the adjacent Mini Park, divided by the east-bound only Aloha Tower Drive lane that exits onto Ala Moana Blvd, thus splitting the block.
b. A traffic assessment conducted for the project recommends that the Project Team be mindful of keeping Aloha Tower area circulation internal to the area, thus keeping traffic off Nimitz Highway and Ala Moana Boulevard. To achieve this, two roundabouts are recommended at Bishop St. (100-FT in diameter) and Richard St. (120-FT in diameter). Directional traffic flow pattern will be two-ways on Aloha Tower Drive. Access and exit points and traffic direction on Richards St. and Bishop St. remain unchanged in this alternative.
c. Pier 7 is considered for potential redevelopment opportunities, particularly for a cultural and maritime center or conference center. The end of Pier 7 remains unchanged in this alternative, for possible use as a sailing canoe berth during special community festivals and educational events. [Note: HPU is considering use of Pier 7 for academic programs and possible dormitory use.]
d. Piers 5 and 6 space surrounding the multi-use structure would be retained for public access with improved pedestrian walkways, gathering spaces and landscaping.
e. Proposed Pier 6 waterside improvements include extending and straightening the existing pier for day excursion operations, and creating a viewing platform and educational signage at the coral transplant site at the end of Pier 6.
f. A pedestrian bridge is proposed to connect Piers 6 and 7. The swing bridge would serve as a point of interest and interpretation for visitors to the harbor. The bridge alignment is based on existing column remnants that were used to support a motor vehicle ramp to the upper gallery of the former cruise passenger terminal (see Slide 118 photo of a former vehicular-pedestrian ramp).
g. Irwin Park will be restored for park use based on its historic plan. All internal parking will be eliminated. The park could be used for various public and private events.
h. Existing on-street and Irwin Park parking will be reduced from 197 stalls to 72 on-street parking stalls along Aloha Tower Drive, Bishop St., and Richards St. The remaining parking would be provided in a new structure at Piers 5 and 6, and possibly in the Pier 10 and 11 sheds.
i. Estimated developable building footprint includes:
    i. Pier 11: 46,700 square feet (SF)
    ii. Pier 10: 46,700 SF
    iii. Piers 5 and 6: 105,350 SF
    iv. Mini Park: 34,550 SF
    v. The land use program at the time of implementation will be determined by ATDC rules which govern zoning within the Aloha

Tower area. The ATDC rules are anticipated to be reviewed and updated in the near future.

j. Slides 117, 119, and 120 are renderings of the conceptual massing model for the Alt. 1 – Split-Block scenario.
   i. The building massing model at Piers 5 and 6 is depicted with ten (10) stories to match the existing HECO building for context. Current rules allow for a higher building height. ATDC is currently reconsidering the rules. The new rules could increase or decrease the allowable buildable height.
   ii. The Downtown Rail Station is also shown integrated into the Aloha Tower area. [Note: The 3-D rail model is an older version and may not accurately reflect HART's current plans.]

5. Aloha Tower Area – 2050 Vision – Alternative 2. Superblock (Slides 121 – 127)
   a. Alternative 2 Superblock consists of a consolidated parcel and structure that spans the Mini Park and Piers 5 and 6. The Superblock alternative has the same recommendation for Pier 6's pier extension, Pier 7, pedestrian bridge (see Slides 126 and 127 renderings), and Irwin Park.
   b. Alternative 2 traffic pattern will be similar to Alternative 1, except for:
      i. Two-way traffic on Richards St. with an east-bound exit onto Ala Moana Blvd.
      ii. The Aloha Tower Drive exit driveway to eastbound Ala Moana Blvd. near Pier 5 would remain. The driveway would serve as a Piers 5/6 parking garage exit and possibly allow for Aloha Tower Drive through traffic east bound to Ala Moana Blvd.
   c. Existing on-street and Irwin Park parking will be reduced from 197 stalls to 54 on-street parking stalls along Aloha Tower Drive and Bishop St. The remaining parking would be provided in the new structure at Piers 5 and 6, and possibly in the Pier 10 and 11 sheds.
   d. Estimated developable building footprint includes:
      i. Pier 11: 46,700 SF
      ii. Pier 10: 46,700 SF
      iii. Piers 5 and 6 and Mini Park: 143,250 SF
   e. Slides 123 to 127 are renderings of the conceptual massing model for the Alt. 2 – Superblock scenario.
   f. Aloha Tower Area – 2050 Vision Streetscape Renderings (Slides 128 to 132). The streetscape renderings show a pavement motif that incorporates culturally, and historically appropriate designs added along the pedestrian walkway to improve the pedestrian experience. The use of motifs and any cultural and historical designs will be determined through consultation with cultural practitioners and lineal descendants from families with ties to the harbor area.
      i. Slide 129 and 132 shows a closer view of the 100-FT roundabout on Bishop St. A visual monument or public art piece can be added to the center of the roundabout.

ii. Slide 130 shows the view from the larger 120-FT roundabout at Aloha Tower Drive and Richard St. intersection. The bus pullout near Pier 7 would allow better traffic flow in the Aloha Tower area (see Slide 131).

6. Aloha Tower Area – 2050 Vision Design Concepts (Slides 133 – 134)
   a. The HHMP is looking at Woonerfs (Dutch concept of a "living street") / Shared-Street Concept) as a model for the Aloha Tower area's streetscape.
      i. Develop shared pedestrian and vehicle space along Aloha Tower Drive, particularly the segment between Bishop Street and Richards Street.
      ii. Use different pavement textures and colors to indicate travel ways and flexible-use areas (e.g., convert parking stalls to seating, food trucks, and event space).
      iii. See Slide 133 photo examples from Kalamazoo, MI, and Baltimore, MD.
   b. Sidewalks and Pavement Design
      i. Incorporate patterns, colors, materials, text, and/or images to highlight historical and cultural themes.
      ii. The Aloha Tower area can integrate patterned designs and Hawaiian lyrics into sidewalks and pathways, similar to what is planned for the Ward Village sidewalks along Auahi St.

Discussion:

- *[via chat] Good to see the roundabouts included, and they will work well in this location. The CCH does not typically take the bike lane through the roundabout as they make the lanes too wide which encourages cars to go faster. The CCH-DPP can provide design details and alternatives. Same for the shared streets – good strategy here.*
- *Has ATDC participated in the planning discussion with the Project Team?*
  - Yes, the Project Team has met with ATDC several times to discuss the alternatives.
- *ATDC should be aware that there is some sensitivity to maintaining Piers 10 and 11 for cruise vessels. One should not put "all their eggs in one basket" (by focusing solely on retail/commercial), so ATDC might want to consider creating some synergy at the Aloha Tower area by accommodating cruise passenger offloading days in a commercial area.*
- *Has it been ruled out that the commercial user for Piers 10 and 11 and the cruise lines might be able to share Piers 10 and 11? Is it not workable for the two types of users to figure out how to use that much space in a collaborative effort?*
  - It is never too late to consider good alternatives. The Project Team's direction heading into the TAC #2 meeting was that the cruise would

relocate to Pier 2. It is still the early stages of planning and discussion; therefore, it would be appropriate for the cruise industry to sit down with ATDC and discuss those possibilities. That is something that the Project Team can help coordinate by bringing these comments to ATDC's attention. The program, decisions, and direction will go beyond the Master Plan period, but the Project Team can assist with the initial coordination through the planning process and reflect the viable options in the Master Plan.

- *[via chat] ATDC should be looking at the cruise industry as a future "partner," not a competitive force for the Piers 10 and 11 area. There are ample examples in many other ports worldwide where retail and cruise facilities complement one another. Consider our airports. The aviation industry works well with retail outlets if well thought out and planned "together." There is no reason why the retail and commercial effort at Piers 10 and 11 should exclude a cruise facility.*
- *[via chat] Agree. Now is a good time [to look to the cruise industry as a development partner].*
- *[via chat] Agree that there should be collaboration to incorporate cruise industry facilities. Great opportunity to create a win-win.*
- *[via chat] Encourage a view of the relationship (of planned buildings/structures at Aloha Tower) to approach and departure (corridors) to Honolulu International Airport runways.*
- *[via chat] Is the PowerPoint and renderings available?*
  - [via chat] The PowerPoint is available on the project website. https://honoluluharbormp.com/resource-library

P. Boundary Treatments (presented by Laura Mau, RMTC) Presentation Slides 135 – 139.

1. The suggested boundary edge treatments provide aesthetic consistency along Honolulu Harbor property boundaries, particularly along the Nimitz Highway boundary, and ensure security for the restricted maritime areas.
2. Considerations for implementation are:
   a. Cost
   b. Maintenance requirements
   c. Public visibility
3. Utility Fence (Slide 137)
   a. Chain link fence with green rubber coating and barbed wire top.
   b. Standard treatment along the industrial harbor areas.
   c. Meets security requirements.
   d. Low-cost and easy to maintain.
4. Decorative Fence (Slide 138)
   a. Anodized, marine-grade aluminum picket fence, with or without a concrete footing.

b. Use in high-visibility areas, and special facilities such as the Aloha Tower area, future maritime center, cruise terminal and Pier 38 fishing village.
c. High-cost to install, difficult and costly to maintain.

5. Landscape (Slide 139)
   a. Landscaping can be used along non-secure areas to improve the appearance and at major driveway entrances to provide landmarks and a visual cue for orientation.
   b. Use low-maintenance, drought-tolerant native plant species where possible.
      i. Consider using Naupaka or Kokiʻo keʻokeʻo (Hawaiian white hibiscus) for hedges; and
      ii. Kou trees, coconut, or plumeria trees for shade and visual cues.

Discussion:

There were no further comments and/or questions from the TAC participants.

Q. Preliminary Project Prioritization (presented by Jim Niermann, RMTC)
Presentation Slides 141 – 147.

1. Prioritization Criteria (Slide 142)
   a. Project prioritization in the Master Plan does not dictate which harbor projects will come first. DOT-H will make an assessment based on available finances, revenue, and the harbor's priorities as part of their regular project programming. The Master Plan will provide DOT-H information to consider when it comes time to assess the projects for execution.
   b. Master Plan project prioritization considers the following criteria:
      i. Logical sequence – For example, after KCT opens, there will be opportunities to work on the vacated areas where there will be reduced impact on harbor operations
      ii. Conditions assessment/end of asset life cycle
      iii. Synergy with other project(s)
      iv. PPP opportunities
      v. DOT-H CIP Criteria (in order of priority)
         a. Safety
         b. Operational Efficiency
         c. Court Mandate
         d. Revenue Generation
         e. Preservation of Assets
         f. Energy Efficiency
      vi. Affordability – including the ability to generate revenue
         a. COVID conditions have decreased revenue generation and significantly affected the Special Fund and DOT-H budgets. The ability to pay and finance projects and the ability of the improved facility to generate revenue will be crucial in determining project

priority. Improvements at piers with a high utilization rate that can generate wharfage fees or other revenues might be deemed higher priority projects.

i. For example, the Pier 1 and 2 improvements will be costly. Due to the relatively low utilization at Piers 1 and 2, after Pasha moves to KCT, the ability to generate revenue from those piers to support financing the improvements will be severely constrained. However, the Pier 1 and 2 improvements might be prioritized because it is a resiliency pier. [Note: If Pasha continues RO-RO, break bulk and special project cargo at Piers 1 and 2, the potential revenue generation from those operations could be an additional factor in selecting and financing Piers 1 and 2 improvements.]

vii. SLR – Improvements to address SLR will, under certain conditions, require priority attention to ensure that the harbor can continue to function.

viii. Rough Order of Magnitude (ROM) cost estimates will be used to assess relative cost and affordability among the projects but may not necessarily be used to determine priorities.

2. Prioritization: High-Medium-Low (Slide 143)
   a. The preliminary prioritization is sequenced in high, medium, low, and opportunistic categories. Specific time frames are difficult to determine at the master plan phase and will ultimately be determined by DOT-H. Projects may be moved forward sooner or be delayed. The Project Team encourages the TAC participants to share their feedback on the criteria and the preliminary project prioritization. Preliminary high, medium, and low priority projects are listed below.
   b. High Priority
      i. Pier 1 Reconstruction
      ii. Interisland Terminal Improvements
      iii. Piers 19 and 20 Reconstruction
      iv. Piers 21 and 22 “Tug Row” Improvements
      v. Pier 29 Apron Reconstruction
      vi. Pier 51 Improvements
      vii. Piers 52 and 53 Improvements
   c. Medium Priority
      i. Demolish Silos
      ii. Piers 22 and 23 Reconstruction
      iii. Piers 5 and 6 Reconstruction
      iv. Pier 60 Improvements
      v. “Tyco Pier” – Layberth Dolphins
      vi. Piers 31 to 34 Reconstruction
   d. Low Priority
      i. Pier 16 Widening

ii. Pier 36 Extension
iii. Pier 38 New Berth Construction

e. Opportunistic (a category that will need a PPP, private investments, or a long-term lease with a maritime partner)
i. Non-Maritime Improvements
ii. Cruise Terminal Consolidation
iii. Pier 23 Maritime Center
iv. Piers 12 to 14 Improvements
v. Pier 60 improvements [Development of industrial property.]

3. Sequence – High Priority (Slides 144 – 145)
a. Interisland Terminal Improvements
i. Based on the poor condition of the piers and yards.
ii. The terminal generates revenue as an active cargo pier. The wharfage fees will continue to generate revenue for DOT-H.
iii. Improvements do not depend on completion of KCT to start.
iv. The timing and phasing of specific improvements will be based on the terminal operator's requirements.

b. Pier 29 Apron Reconstruction
i. Relatively smaller investment to upgrade the apron to make it a fully functioning pier, compared to more costly improvements required at other general use cargo piers. This improvement complements the recently completed yard strengthening project.
ii. The lower construction cost is easier to cover through the wharfage fees than larger improvement projects, such as Pier 1 reconstruction.

c. Piers 19 and 20 Reconstruction
i. Piers 19 and 20 reconstruction may be a prerequisite for the maritime center to ensure that the pier foundation can support the maritime center structure. [Note: The 2012 Conditions Assessment Study of Harbor Waterfront Structures, prepared by DOT-H rated Piers 19 and 20 condition as "satisfactory."]
ii. Piers 19 and 20 are highly utilized by Cargo carriers, therefore, the development cost is easier to recover through the wharfage fees.

d. Piers 21 and 22 "Tug Row" Improvements
i. Improvements are necessary due to the buildings and pier condition and the essential function that the tug operators serve in the harbor.

e. Piers 1 and 2 Reconstruction
i. Piers 1 and 2 improvements are prioritized to support the piers' function as a primary resiliency pier.
ii. Improvements are dependent on KCT opening and the Piers 1 and 2 to be partially vacated to begin reconstruction.

f. Pier 51 Improvements
i. Improvements are dependent on KCT opening and the Pier 51 to be vacated to begin reconstruction.
ii. The timing of specific improvements will be based on the terminal operator's requirements.

g. Piers 52 and 53 Improvements
    i. Improvements will be based on the terminal operator's requirements.
h. Initiate Harbor Entrance Widening Study and the Kalihi Channel Bridge Replacement Study with USACE
    i. This improvement will require a long lead time, starting with the USACE feasibility study, and including conducting the environmental regulatory review, and arranging financing.
    ii. DOT-H already initiated the request to the USACE to conduct the feasibility study.

4. Sequence – Medium Priority (Slide 146)
    a. "Tyco Pier" – Layberth Construction
        i. The acquisition of Tyco Pier is already initiated. DOT-H will acquire jurisdiction over the waterside; DLNR will have jurisdiction over the landside.
        ii. This pier will provide layberth for the harbor in the long-term, but there are workarounds in the short-term.
    b. Demolish Silos
        i. Silos constrain efficient use of valuable port facilities.
        ii. This may be a prerequisite for developing the maritime center.
    c. Piers 22 and 23 Reconstruction
        i. These piers are underutilized due to the narrow slipway and poor condition of the pier structures.
        ii. This may be a prerequisite for developing the maritime center.
    d. Pier 23 Maritime Center
        i. A long lead time is required to plan and finance the maritime center development.
        ii. Potentially dependent on a PPP.
    e. Pier 60 Improvements
        i. The improvements have a long lead time with a high cost.
        ii. The industrial property development may potentially generate substantial revenue in the long-term.
        iii. Lower priority than cargo terminal improvements.
    f. Piers 31 to 34 Reconstruction
        i. There are on-going projects to improve the pier and yard function for general cargo use. On-going projects include improving pavements and providing lighting and comfort stations. [Note: All the Piers 31 to 33 sheds have been removed.]
        ii. Cutting back the piers and reconstructing with bulkheads may be a long-term improvement, but it may advance into a higher priority as maintenance and inspection space under the pier diminishes with SLR.
    g. Piers 5 and 6 Waterside Reconstruction
        i. Develop concurrently with the redevelopment of the landside area.
        ii. Improve Piers 5 and 6 by replacing the dolphins with continuous concrete piers.

iii. May occur in coordination with PPP landside development.

5. Sequence – Low Priority (Slide 147)
   a. Pier 16 Widening
      i. Undertake when the pier reaches the end of its functional life.
   b. Pier 36 Extension
      i. There are existing workarounds for berthing in the short-term as there is added berthing if P&R taxi relocates.
      ii. Extension of the pier is a high-cost improvement.
   c. Pier 38 New Berth Construction
      i. Low priority due to high construction cost and existing, available workarounds.
      ii. There will be added berthing if P&R Water Taxi relocates from Pier 36.

Discussion:

There were no further comments and/or questions from the TAC participants.

R. Next Steps (presented by Jim Niermann, RMTC) Presentation Slides 148 – 150.

1. The Project Team will refine the Master Plan alternatives and Project Prioritization based on the TAC members' comments. The Project Team will follow up with TAC members for additional feedback on the Master Plan alternatives.
2. The Project Team will conduct early engagement with cultural stakeholders prior to the PIM.
3. The first PIM will occur in the first quarter of 2021.
4. The Project Team will start to finalize the Master Plan document in the next four (4) months.
5. The Project Team will present the pre-final Master Plan in the fourth PAC meeting with TAC spectating in the first quarter of 2021.
   a. The Project Team will respectfully request the PAC members to endorse the HHMP and the planning process in PAC Meeting #4.
   b. After PAC Meeting #4, the HHMP will be sent to the DOT-H Deputy Director and then the Governor for review and approval.
6. HHMP will be substantially complete by April 2021.

End of Presentations

S. Conclusions and Follow-Up

1. Jim expressed his gratitude for the participants. The Project Team will take all the participants' comments to heart and continue doing so through the end of the project. The Project Team relies on the participants' expertise and is essentially channeling the information provided by the participants to form the best plan possible. Jim encourages the participants to contact the Project Team through the Honolulu Harbor website and/or directly to the project managers by phone or email. The Project Team welcomes participants' comments on the Master Plan and process.

2. The Project Team will follow up with the TAC for further discussion or feedback and notify them of the TAC Meeting #2 notes' availability and future meeting dates. The PAC Meeting #4 will be held in the first quarter of 2021. See the Honolulu Harbor Master Plan webpage for updates and additional information at: https://honoluluharbormp.com/

3. Any additional questions or comments can be sent through the Honolulu Harbor website and by phone or email to the Project Team. Comments from the website will be directed to Jim Niermann, Laura Mau, and Celia Shen and will be part of the project record. Honolulu Harbor contact page: https://honoluluharbormp.com/contact

U. Officially adjourned (4:30 PM)