

MAUI COUNTY FERRY FEASIBILITY STUDY

02/20/2025

INTRODUCTIONS

SCOPE OF THIS EFFORT

- **Purpose:** Assess the feasibility of creating an interisland ferry system for the transport of people and goods between Lāhainā Harbor and/or Mā‘alaea Harbor on Maui, Mānele Small Boat Harbor on Lāna‘i, and Kaunakakai Harbor on Moloka‘i
- **Proposed Service Model:** County to purchase required vessels and contract out service, including operations and maintenance of the ferries
- **Proposed Routes:** Lāhainā/Mā‘alaea - Mānele and Lāhainā/Mā‘alaea - Kaunakakai, or Lāhainā-Mā‘alaea-Mānele-Kaunakakai

- **Study Components:**

*Assessment of harbor **infrastructure requirements**, vessel requirements, regulatory and **permitting requirements**, and **environmental constraints***

***Commercial analysis**, including ridership demand and fare prices*

***Financial analysis** including all projected costs, revenues, funding and financing options, the availability of required resources, and its recommendations*

***Operational and personnel impacts** and needs each proposed route will have on the Department’s limited staff*

*Feasibility of using the ferry system **in the event of emergency***



AGENDA

Project Background

Public & Interest Group Engagement

Recommended Services

- Lānaʻi
- Molokaʻi
- Systemwide Recommendations

Environmental Considerations

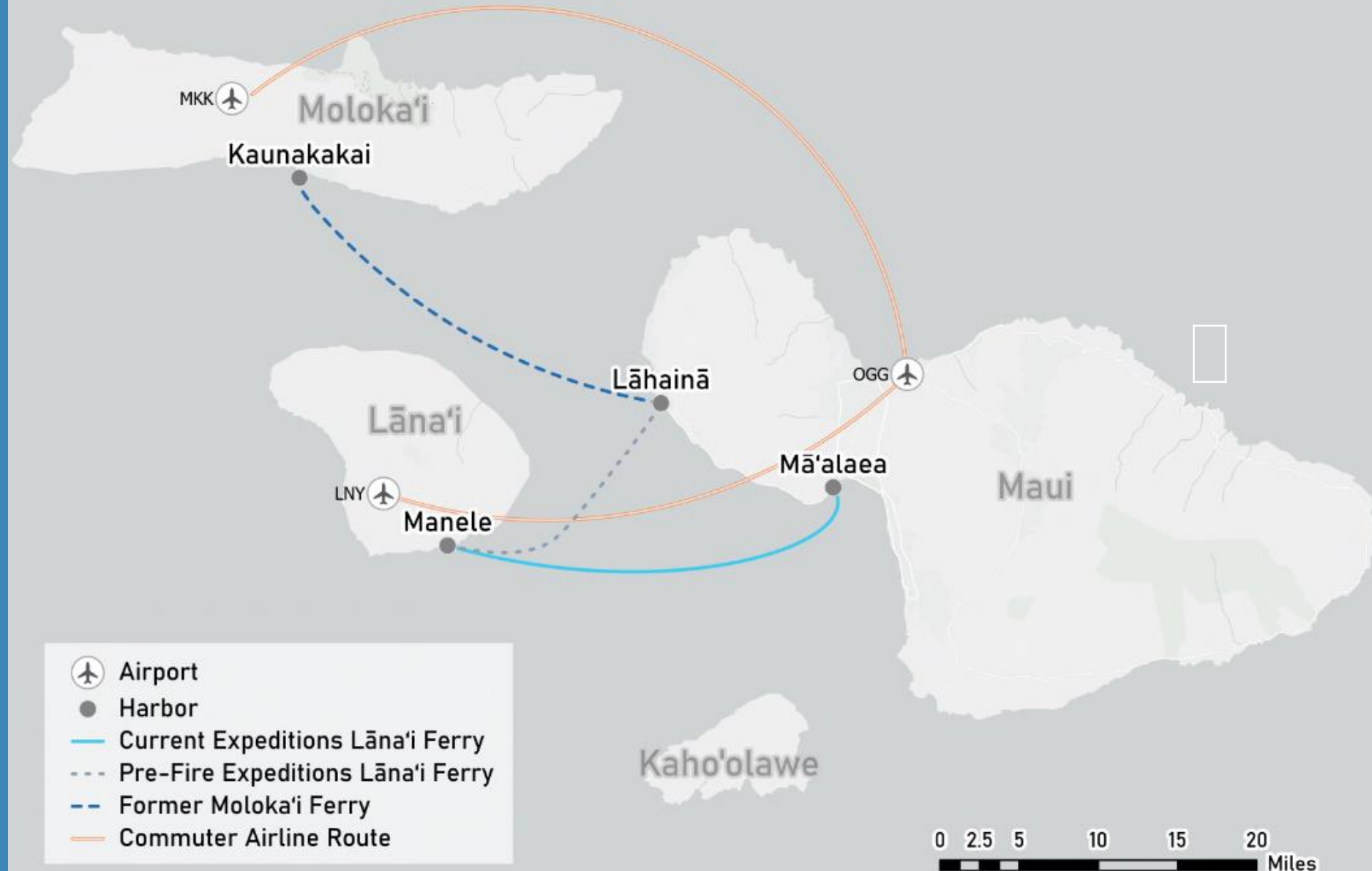
Operations & Management

Implementation

Financial Analysis

PROJECT BACKGROUND

Maui County Interisland Passenger Services



SERVICE CONCEPT DEVELOPMENT

- Service concept options were developed based on multiple factors:

*Travel times by ferry and road to **desired destinations** (Central and West Maui)*

*Potential **ridership***

*Feasible landing options in the **short and long term**, given redevelopment of Lāhainā Harbor & currently available vessels*

***Feedback** from interest groups and the public*

- Initial short and long-term service concepts serving Lānaʻi and Molokaʻi
- Final recommended concepts were selected to balance community feedback with MDOT needs regarding subsidies and staffing.

PUBLIC & INTEREST GROUP ENGAGEMENT

ROUND 1 ENGAGEMENT- JULY/AUGUST 2024

Goal

Listening to obtain input on needs and wants for ferry service

Methods

- **Public and interest group meetings:** 4 locations, County-wide, 155 people
- **Online survey:** over 1,700 responses proportional by island

Feedback Received

General

- Concerns about environment (whales, invasive species, emissions)
- Need for ground transportation links
- Need for kama'āina fares

Lāna'i

- Desire for improved daily service and more ability to take packages
- Desire for better access to terminals including possibly both Mā'alaea and Lāhainā

Moloka'i

- Travel now is difficult, expensive and unreliable
- Concerns about environment and potential to attract too many tourists
- Ensure support by Lāhainā community.

Maui

- Need services to bring day workers to Maui

ROUND 2 ENGAGEMENT- OCTOBER 2024

Goal

Obtain input on service concept options and tradeoffs

Methods

- **Public and interest group meetings:** 4 locations, County-wide, 120 people

Feedback Received

General

- Similar issues to Round 1
- General support for ferry service
- Support for return to Lāhainā when it is open and considering town's development
- General support for considerations and amenities identified

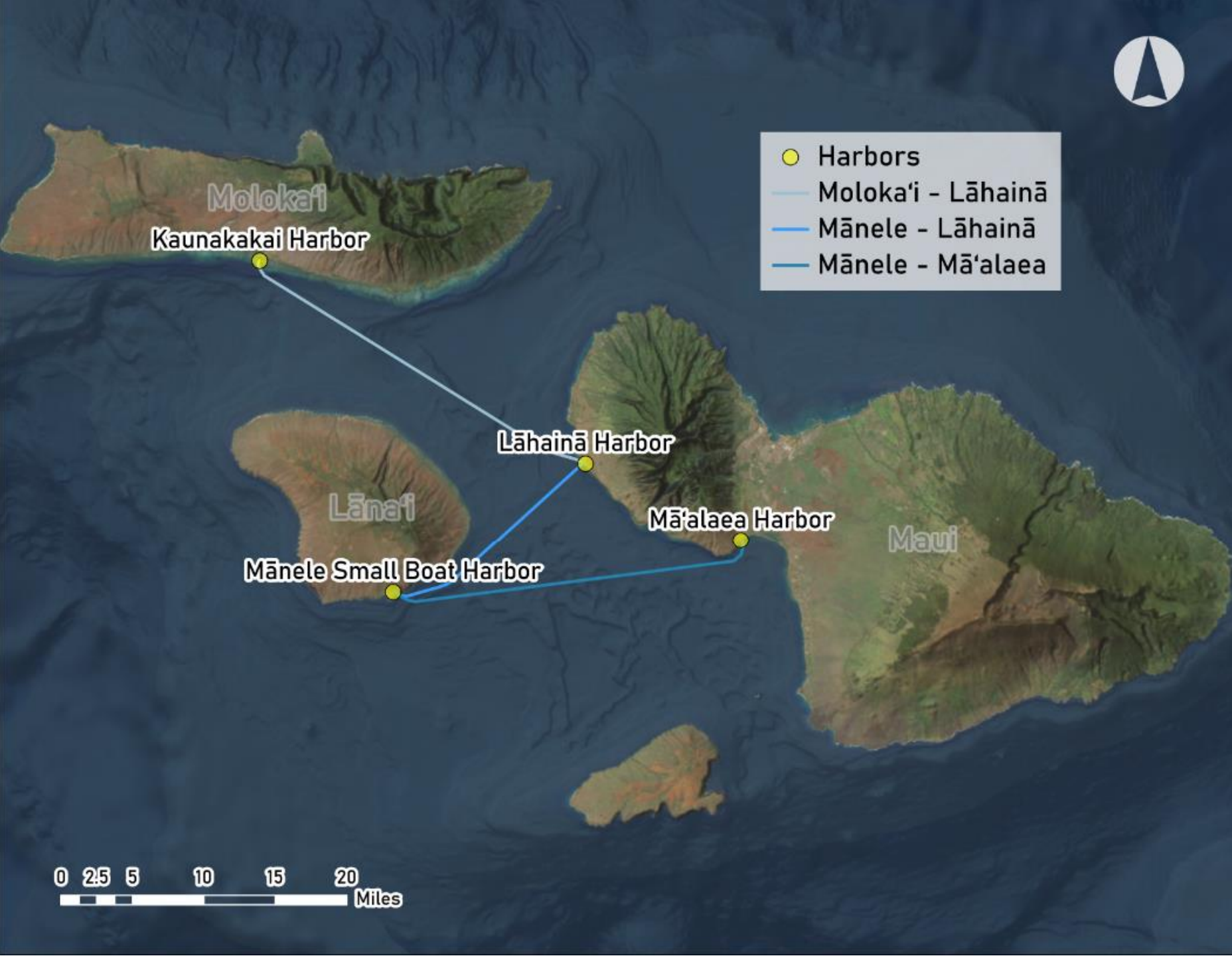
Lānaʻi Route

- Similar issues to Round 1

Molokaʻi Route

- Similar issues to Round 1 including concerns about transport of invasive species and tourist day trippers
- Broad support for ferry service as basic mobility, but no consensus number of daily trips
- Some interested in bringing professional services or day trippers
- Support to start soon with cautions about suitability of previous vessels
- Ferry fares should be lower than air fares

RECOMMENDED SERVICES



Map of Recommended Routes

SUMMARY OF RECOMMENDED SERVICES

Short Term Service

While a purpose-built vessel is not available and Lāhainā is not available for service

LĀNA‘I

- Continue existing service path
- Three round trips daily

Consider delaying the last departure from Maui

MOLOKA‘I

- Align service start up with the reopening of Lāhainā

Due to lack of currently available vessels and community feedback/desire to land at Lāhainā

Long Term Service

After Lāhainā reopens

LĀNA‘I

- Four round trips daily
- Maui side landing could be Mā‘alaea and/or Lāhainā

Conduct additional engagement prior to a final determination

MOLOKA‘I

- Two round trips daily
- Operate b/w Kaunakakai & Lāhainā

RFI PROCESS

- Requests for Information (RFIs) were issued to see if there are any operators willing and able to provide chartered ferry services while the Department sets up its own operations.
- Expeditions responded to say that they are available to provide service between Maui and Lānaʻi.
- No operators responded that they are able to immediately provide service between Maui and Molokaʻi.



LĀNA'I



LĀNA‘I- SHORT TERM

- Mānele - Mā‘alaea

- 3 Round Trips

3 hour and 10-minute sailing time per RT

A later evening sailing is not possible without sailing in the hours of darkness.

- **Vessels:** Purchase and use Expeditions’ existing vessels

Address deferred maintenance needs

Example Schedule

| | Leave Maui | Arrive Lāna‘i | Leave Lāna‘i | Arrive Maui |
|-------------------|------------|---------------|--------------|-------------|
| Lāna‘i - Mā‘alaea | 06:30 | 07:40 | 08:15 | 09:25 |
| | 11:00 | 12:10 | 13:00 | 14:10 |
| | 16:00 | 17:10 | 17:30 | 18:40 |



LĀNA‘I- LONG TERM

Maui-side Landing Considerations

- **Community was split** on Mā‘alaea, Lāhainā, or a mixed service
- A mixed service could go to **Mā‘alaea a few days** a week and **Lāhainā the other days**

RECOMMENDATION: A year out from potential service change, conduct a ridership survey to determine the preferred Maui-side landing approach.

Schedule

- **≥3 Round Trips**

A later evening sailing would be possible if operating from Lāhainā. A fourth round trip could also be possible.

More information about market conditions and potential competitors will be known closer to the re-opening of Lāhainā.

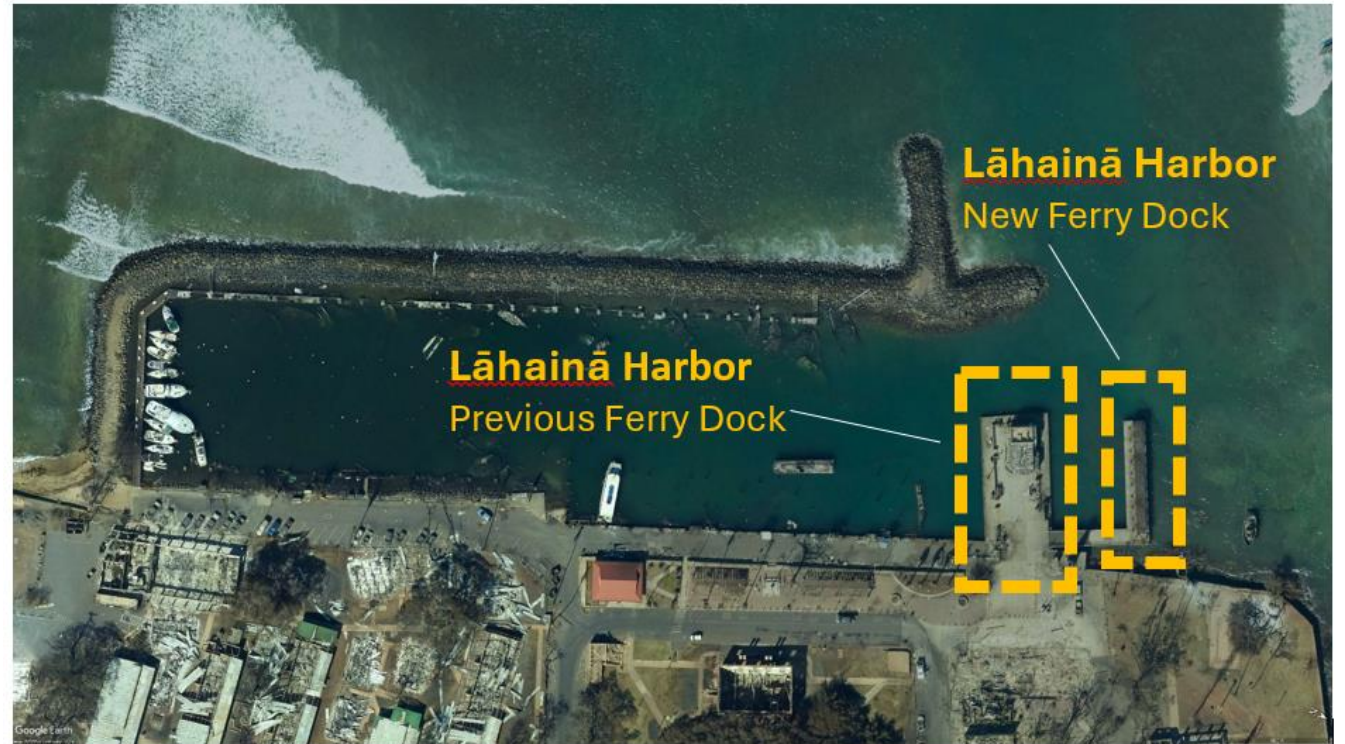
Proof of Concept Schedule

| | Leave Maui | Arrive Lāna‘i | Leave Lāna‘i | Arrive Maui |
|------------------|--------------|---------------|--------------|-------------|
| Lāna‘i - Lāhainā | 06:30 | 07:15 | 08:00 | 08:45 |
| | 11:00 | 11:45 | 13:00 | 13:45 |
| | 16:55 | 17:40 | 17:55 | 18:40 |

LĀNA‘I- LONG TERM CONT.

Terminal

- Due to federal funding, the ferry will be **required to land at the newly constructed ferry dock**.
- Minor modifications will be needed to support landing at the new location.



Vessels

- Procure two replacement vessels for the EXPEDITIONS 4 & 5
- Conduct a major refurbishment on the EXPEDITIONS 6 in 2031

LĀNA‘I- RIDERSHIP DEMAND

- A conservative forecasting approach was selected due to many variables and uncertainties.
- Lāna‘i ridership will likely be **less than previous** peak ridership.

Essential Air Service subsidy was awarded to Mokulele.

Expeditions was granted a major fare increase.

Future Seaglider service may introduce new competition on the route.

Tourist visits to Maui are forecast to be lower than in past.

- Mā‘alaea terminal is less attractive than Lāhainā after redevelopment.
- Ridership on route correlates to economic activity in Maui.

| | |
|---------------------------|----------------------------------|
| 2019 Ridership Peak | ~190,000 |
| 2026 Forecast | 88,000 ~3% annual growth rate |

MOLOKA'I



MOLOKA'I- SHORT TERM

- **INITIAL RECOMMENDATION:** Design and construct new vessels; align service start up with the reopening of Lāhainā

Lack of currently available vessels

Public feedback about previous service vessels

Community desire to land at Lāhainā

- **RECENT CHANGES:** Current circumstances have increased a desire to expedite service start-up.

Mokulele reliability challenges and flight cancellations

Increase in ad-hoc private owner-operated boat trips



MOLOKA‘I- LONG TERM

- Kaunakakai – Lāhainā

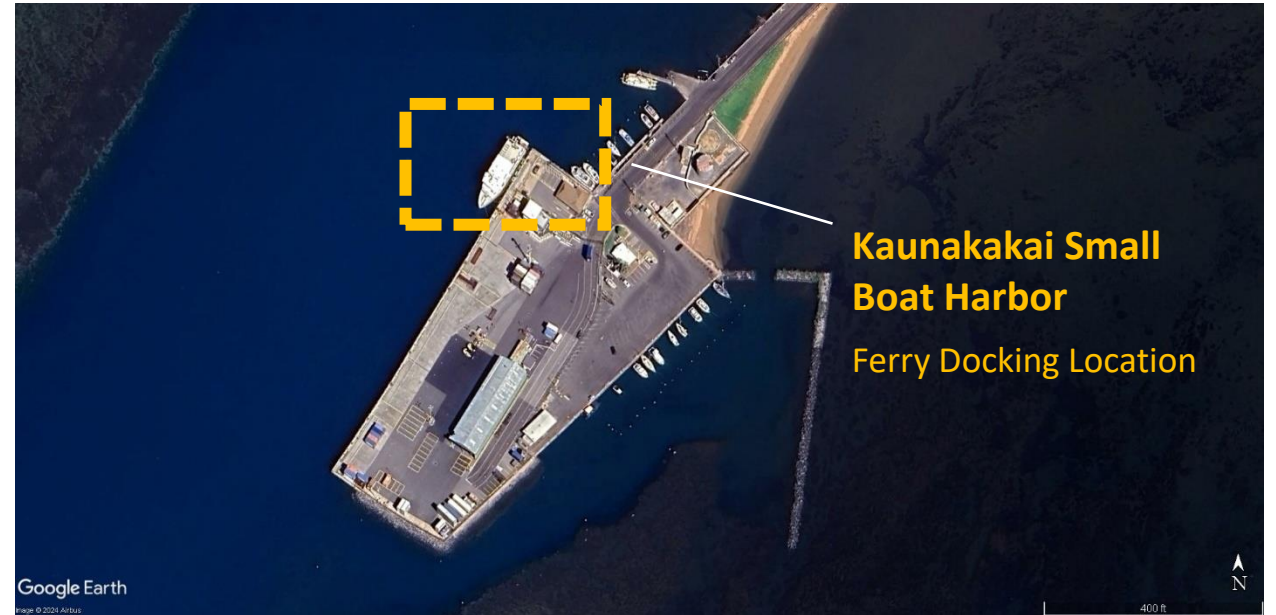
- 2 Round Trips

Balancing local desire for minimal tourists with Maui resident travel needs and County need for farebox recovery.

- **Vessels:** Design & construct two new ferries

3-year timeline

- Align service launch with the re-opening of Lāhainā Harbor



Example Schedule

| | Leave Moloka‘i | Arrive Maui | Leave Maui | Arrive Moloka‘i |
|--------------------|-------------------|-------------|---------------|--------------------|
| Moloka‘i - Lāhainā | 05:30 | 07:00 | 08:00 | 09:30 |
| | 16:00 | 17:30 | 18:00 | 20:00 |

MOLOKA‘I- RIDERSHIP DEMAND

- Historical ridership on this route is estimated to have peaked at 60,000 but by 2014 had dropped to 38,000.

Average fare revenue per passenger was estimated to be \$46.26.

- There is significant uncertainty related to future competition.

No longer an EAS on air service, but the route is eligible for one.

New air carriers and Seaglider could begin service in future.

- **Future ridership was estimated to be lower** due to fewer employment opportunities, limited tourism, and population projections on Moloka‘i.

- Fare structure is assumed to be the same as the service to Lāna‘i.

| | |
|---------------------------|----------------------------------|
| Peak Historical Ridership | 60,000 |
| 2014 Historical Ridership | 38,000 |
| 2026 Forecast | 33,000 ~3% annual growth rate |

SYSTEMWIDE RECOMMENDATIONS

FLEET

- A five-vessel fleet with the EXPEDITIONS 6 and two new vessels for each route (one for operations and one back-up)

LĀNA‘I VESSEL TYPE

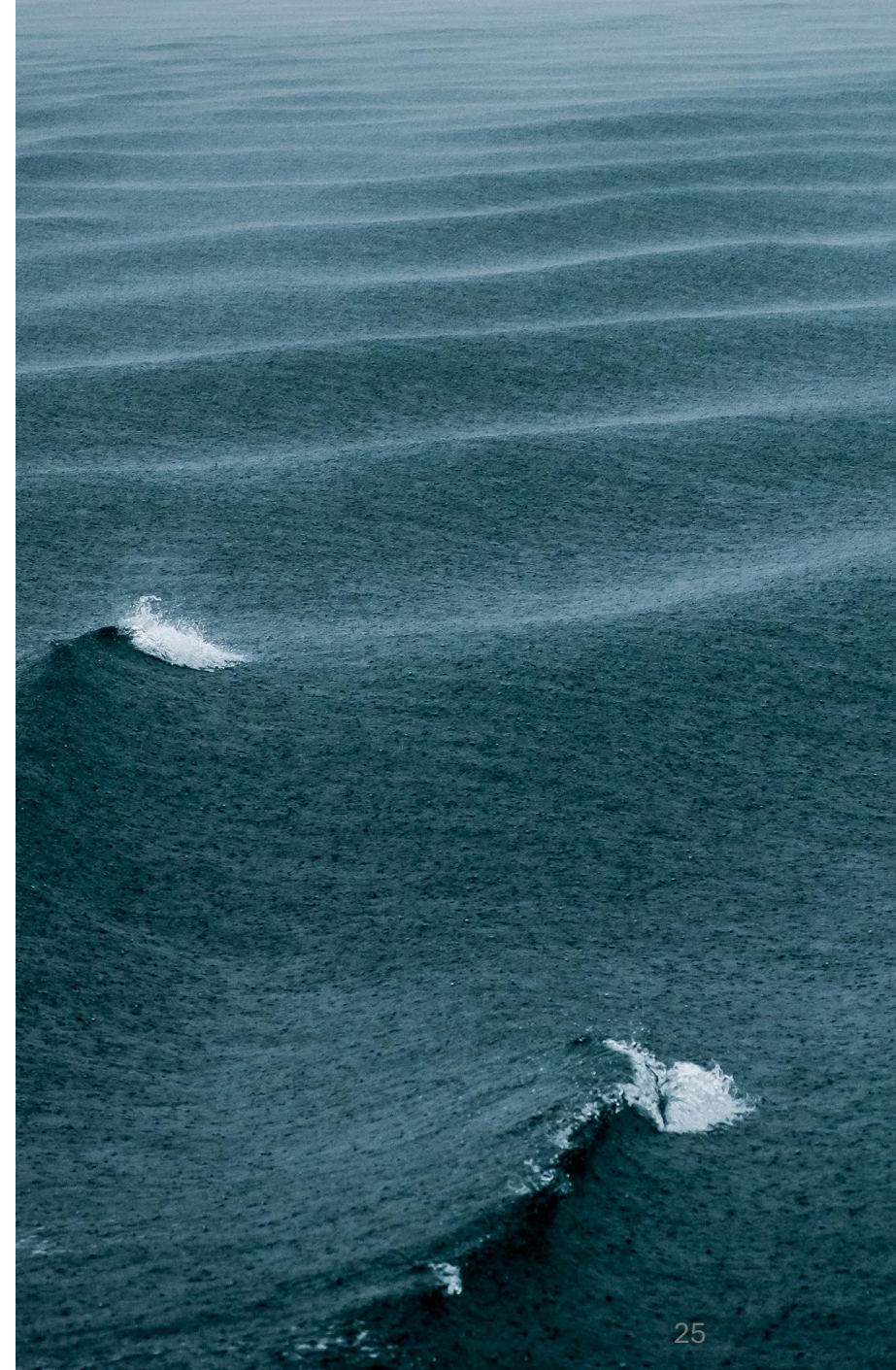
- *60-to-70-foot vessel length*
- *18 to 25 knot service speed*
- *Catamaran hull type*

MOLOKA‘I VESSEL TYPE

- *Greater than 90-foot vessel length*
- *18 to 25 knot service speed*
- *Monohull or catamaran hull type*

COMMON CHARACTERISTICS OF BOTH VESSEL TYPES

- *Expanded personal cargo/hand luggage space compared to the current EXPEDITIONS vessels*
- *Meet or exceed current EPA engine emissions standards (Tier IV)*
- *ADA accessible including ADA accessible boarding and alighting*
- *U.S. Coast Guard Certified to carry passengers in Maui waters*
- *Amenities: passenger restrooms, basic refreshments*



ADDITIONAL RECOMMENDATIONS

Terminals

- Consider requesting State authorities to ensure customer service amenities are provided including ADA accessibility, restrooms, shelters and access to refreshments
- Provide in-person ticketing and reservation at docks and online

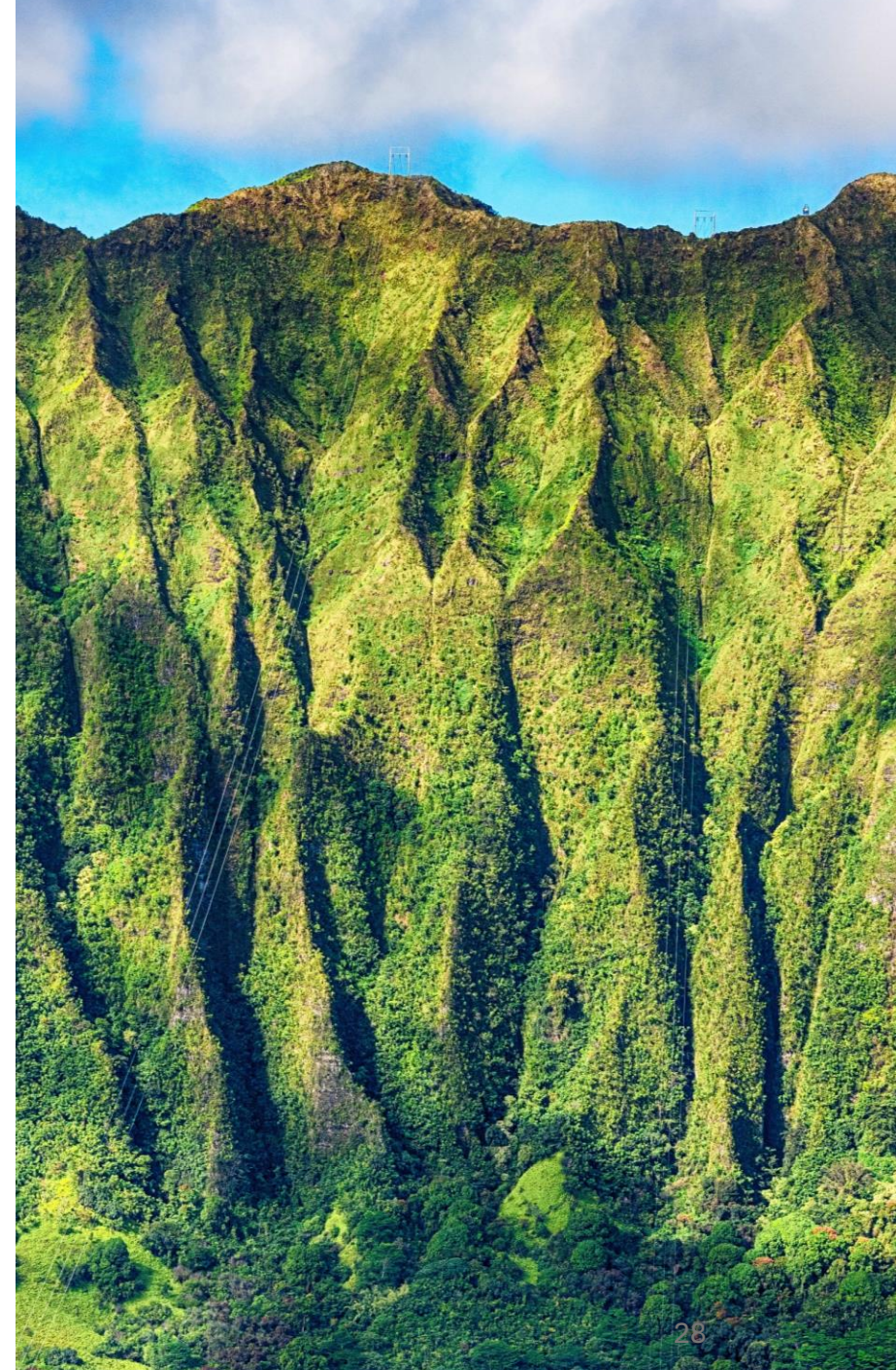
Ground Transport

- Coordinate with Maui Bus
- Parking shuttles on Molokaʻi
- Increase ground transport options on Lānaʻi and Molokaʻi and MEO span and capacity
- Consider optimizing rental car and car share services, and parking at terminals

ENVIRONMENTAL CONSIDERATIONS

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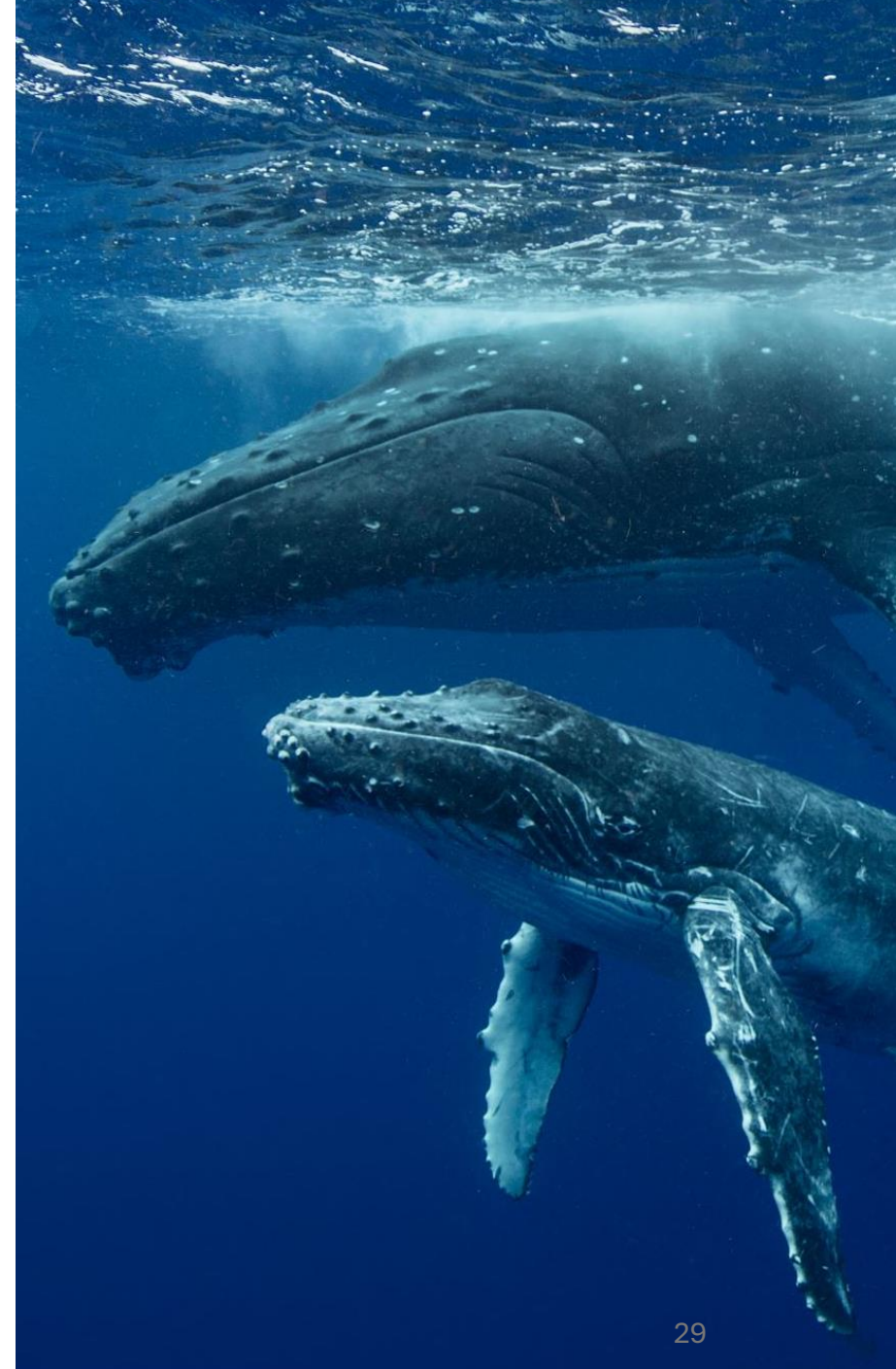
- **Federal Permitting:** NEPA will be required if federal funds are used.
 - *Likely an Environmental Analysis (EA) for both routes*
 - *EA expected to take approximately one year*
- **State Permitting:** HEPA will be required.
 - *Likely an EA for both routes*
- **Invasive Species:** Review will occur as part of NEPA.
 - *Coordination with local invasive species committees on appropriate protocols.*



ENVIRONMENTAL CONSIDERATIONS CONT.

- **Marine Mammals & Endangered Species:** NOAA Incidental Take Permit (ITP) may be required.
 - *Marine Mammals (humpback whales)*
 - *Green Sea Turtles*
 - *Hawksbill Sea Turtles*
 - *Monk Seals*
 - *Seabirds*

DLNR's Division of Boating and Ocean Recreation (DLNR DOBOR) recommendations to reduce collisions will be followed.



OPERATIONS & MANAGEMENT

MDOT RESPONSIBILITIES

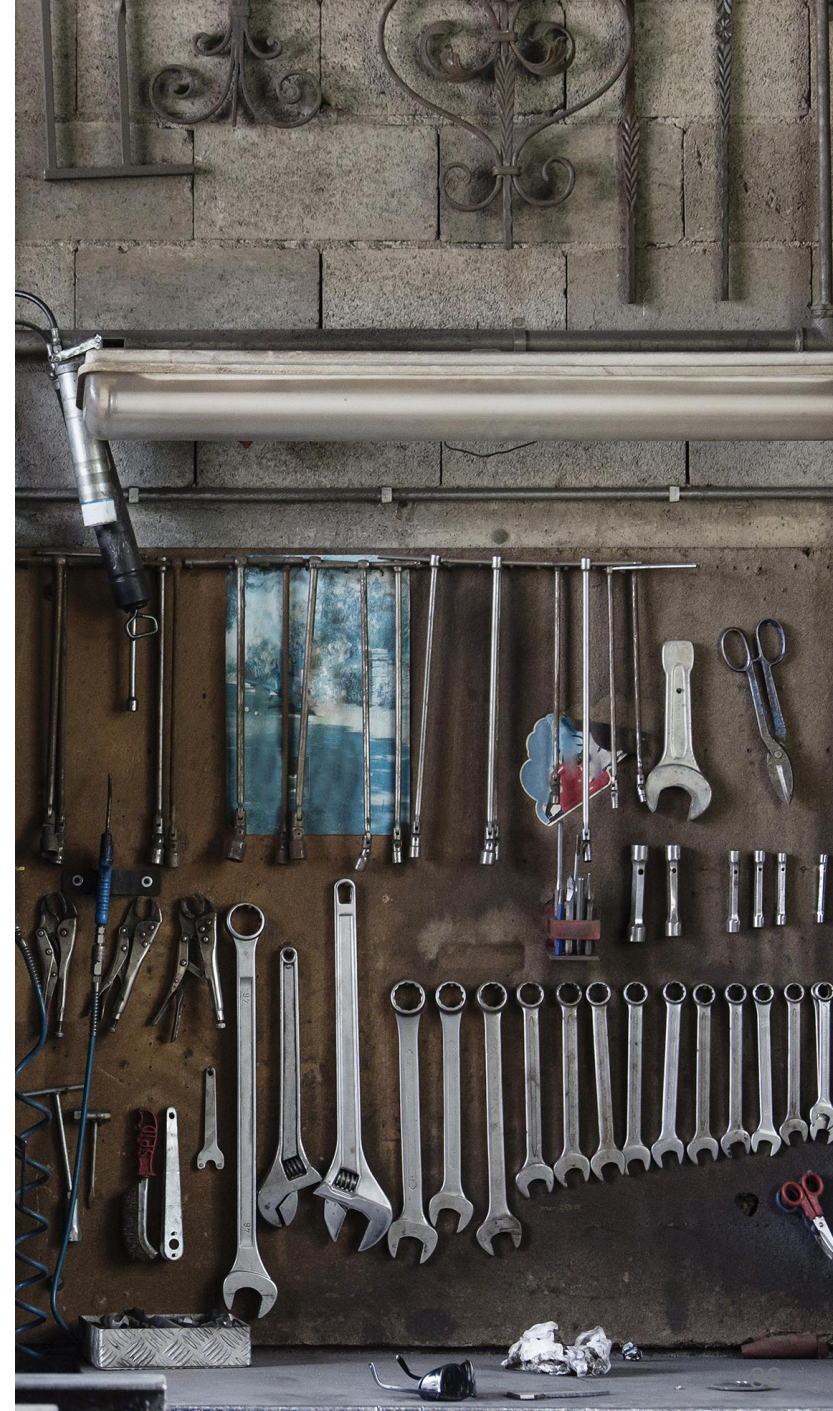
- **Program Management & Administration:** MDOT would oversee the system and provide program direction.
 - *Oversee operations*
 - *Manage programs*
 - *Support implementation activities*
 - *Manage capital projects*
- **Fare Policy:** Fares will be determined by the County not the PUC, using the current fare process with the Mayor's Office and County Council. Fare policy would need to balance multiple factors.
 - *Affordability for residents, equity*
 - *Systemwide perspective & alignment with MDOT bus*
 - *Demand elasticity*
 - *Subsidy requirement*

MDOT RESPONSIBILITIES CONT.

- **Ground Transportation Connections:** Ensuring accessibility and connectivity between the ferry and other modes.
 - *Alignment with Maui bus schedules*
 - *Potential MEO and other enhancements*
- **Procurement:** MDOT would need to procure required assets and services to support ferry start-up.
 - *Acquisition of existing vessels*
 - *Vessel engineering and design services for four new vessels*
 - *Construction of four new vessels (could be included with vessel engineering & design)*
 - *Ferry service operator*
 - *Implementation consultant support services*

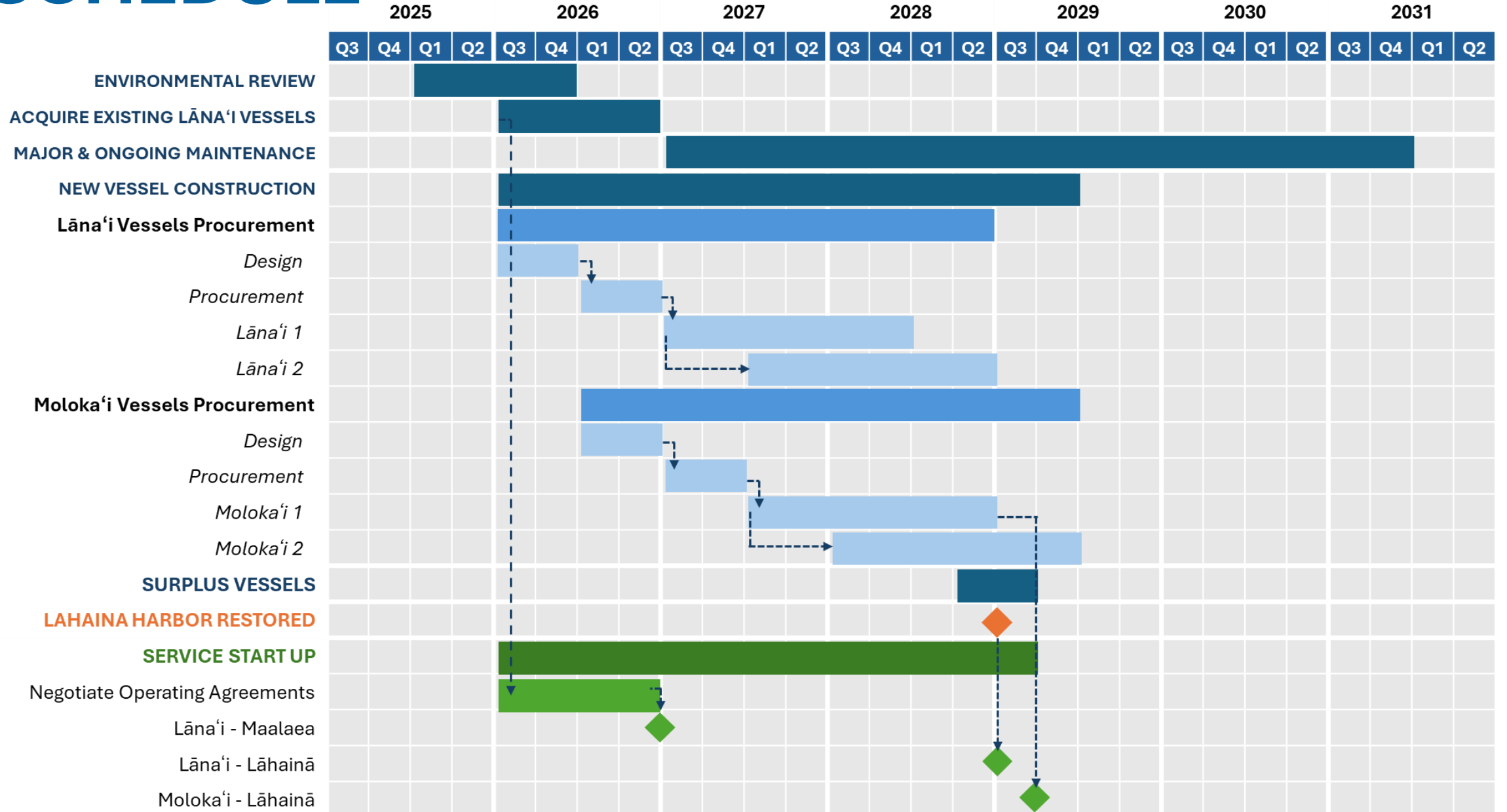
OPERATOR RESPONSIBILITIES

- **Crewing & Daily Operations:** Providing service as scheduled
 - *Ticketing, dispatch, crew scheduling*
 - *Vessel navigation*
 - *Will require administration and support staff*
- **Overnight Moorage:** Ensuring sufficient and secured landing space
 - *Managing tie-up and overnight security*
- **Routine Maintenance:** Activities to keep assets in working order
 - *Weekly and annual*
 - *Excludes repowers and major capital efforts*
 - *Coordinate with MDOT and shipyards for major maintenance and emergency repairs*



IMPLEMENTATION

SCHEDULE



IMPLEMENTATION SUPPORT

- To support implementation of ferry services, it is recommended that MDOT hire a full-time **Program Manager**.
- A half-time **Capital Project Manager** is also recommended to support and oversee ferry-related projects and procurements.
- Other support may be needed from the following disciplines to support successful service start-up and long-term operations.
 - *Grant Applications and Management*
 - *Community Outreach and Engagement*
 - *Service Planning (schedule bus service, shuttle bus service, and ferry service)*
 - *Accounting*
 - *Procurement*
 - *Legal*

FINANCIAL ANALYSIS

FINANCIAL ANALYSIS

- A **consolidated** pro forma was developed for start-up and operation of both routes, covering 2026 to 2036.

*County operating responsibility for **Lānaʻi** assumed to begin in **2027**.*

*County operating responsibility for **Molokaʻi** assumed to begin in **2029**.*

- **Capital investment needs** and **operating expenditures** were both included in the pro forma.

Capital costs were estimated from various data sources, including a conditions assessment of the current Expeditions' vessels, input from shipyards, and previous cost data from similar expenditures.

Operating expenditures were developed based upon the proposed service schedules and were informed by input from MDOT and cost information from similar ferry services.

- ***The pro forma is not financially constrained.***

FINANCIAL PRO FORMA

\$'s in thousands

| OPERATIONS | 2026-2030 | 2026-2036 |
|-------------------------------------|----------------|----------------|
| Fare Revenue | | |
| Maui - Lānaʻi | 15,589 | 44,373 |
| Maui - Molokaʻi | 5,775 | 24,298 |
| Total Revenue | 21,364 | 68,671 |
| Expenditures | | |
| Maui - Lānaʻi Vessel | 11,550 | 31,064 |
| Maui - Molokaʻi Vessel | 6,020 | 26,011 |
| Shoreside | 2,774 | 9,368 |
| Management & Support | 7,992 | 20,798 |
| Total Expenditures | 28,112 | 87,242 |
| Net Operating Income (-Loss) | -6,972 | -18,571 |
| CAPITAL | | |
| Vessels | | |
| Existing Lānaʻi Vessels Acquisition | 4,801 | 4,801 |
| New Vessels | | |
| Lānaʻi | 16,302 | 16,302 |
| Molokaʻi | 20,598 | 20,598 |
| Refurbishment- Lānaʻi | 1,817 | 3,250 |
| Total Vessels | 43,518 | 44,951 |
| Other Capital Investments | 1,377 | 1,377 |
| Total Capital Investments | 44,895 | 46,328 |
| NET PROGRAM POSITION | -51,867 | -64,889 |

- Ferry services are expensive to start up. **These costs align with those experienced by the start-up of similar services.**
- Approximate annual operating subsidy of **\$1.8M to \$1.9M, assuming current fares.**

FAREBOX RECOVERY

| Ferry System | Service Type | Farebox Recovery Rate (Year) |
|-----------------------------|----------------------------------|------------------------------|
| NYC Ferry | Walk-on Passengers | 25.8% (2024) |
| San Francisco Bay Ferry | Walk-on Passengers | 24% (2024) |
| King County Water Taxi (WA) | Walk-on Passengers | 13.7% (2023) |
| Kitsap Fast Ferries (WA) | Walk-on Passengers | 16% (2022) |
| Washington State Ferries | Automobiles & Walk-on Passengers | 50.6% (FY2023) |
| Pierce County Ferry (WA) | Automobiles & Walk-on Passengers | 39.9% (2022) |
| Skagit County Ferry (WA) | Automobiles & Walk-on Passengers | 41.7% (2022) |
| Whatcom County Ferry (WA) | Automobiles & Walk-on Passengers | 29.9% (2022) |

FUNDING OPPORTUNITIES

To support funding needs, **MDOT could pursue numerous federal funding opportunities**, particularly to support capital investments.

Department of Transportation

- RAISE and other future competitive grants
- Ferry Boat Discretionary (formula)

Federal Transit Authority

- Section 5307 (h), Passenger Ferry Program
- Capital Investments Grant Program: Small Starts & Very Small Starts
- Community Project Funding/Congressionally Directed Spending
- Electric or Low Emitting Ferry IJA 71102
- Section 5311 - Rural Area Formula Grants

THANK YOU!

APPENDIX

VESSEL OWNERSHIP

Purchase

- Considered a **capital cost**
- Often **easier** to get federal funding
- County has ultimate **control** of the vessel

Charter or Lease

- Considered an **operating cost**
- May be **harder** to get federal funding
- **Potential service disruption** if vessel owner changes their mind

ADEPT Committee

From: Cora-Lyn Dumlao <Coralyn.Dumlao@co.maui.hi.us>
Sent: Wednesday, February 19, 2025 11:59 AM
To: ADEPT Committee
Subject: RE: Request for Personnel-ADEPT Committee / DOT Confirmation
Attachments: 022025_Updated_MDOT_Ferry_Feasibility_Study (Council Presentation 2025 Feb 20).pdf

Aloha ADEPT Committee,

Deputy Director Diane Yogi and Neil Nakamoto (Transportation Program Specialist) will be attending in-person on behalf of the Department of Transportation for Item Rule 7(B) (ADEPT-1(4)).

Also confirming the Ferry Feasibility Study Presentation group for Item Rule 7(B) (ADEPT -1(1)):

In-Person

Diane Yogi (Department of Transportation) – Deputy Director
Neil Nakamoto (Department of Transportation) – Program Specialist III
Kauanoë Batangan (Maui Metropolitan Planning Organization) – Executive Director
Andy Bennett (KPFF)- Principal, Waterfront Services
Dan Levy (Dantec)- Principal

Virtual

Martha Hart (KPFF)- Project Manager / Sustainability Lead
Brian Mills (Dantec)- Senior Consultant

Also, please find the attached copy of the Ferry Feasibility Study presentation (PDF).

Mahalo,

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