Call to Order
I. Roll Call
III. Approval of Minutes
IV. Reports
V. Old Business: NONE
VI. OWP Work Element Presentation:
Transit Rider Survey I
Transit Rider Survey I

Honolulu Transit Comprehensive Operations Analysis (COA)

OahuMPO Citizens Advisory Committee
August 2, 2023
Presentation Contents

Survey Overview
Survey Results
Integrated Analysis & Discussion
Questions
Survey Overview
Goals

- Collect reliable data on current bus riders and non-riders - demographic information, travel patterns and behavior, and transit service preferences.
- Data and analysis inform Network Design Strategy and Bus-Rail Integration Plan (BRIP).
- Compare results with post-rail opening (IO1) Transit Rider Survey II (2024)
- Satisfy FTA New Starts Before-and-After Study Requirements

Key Activities/Deliverables

- Market Research Study (MRS) and report
- Stated Preference Survey (SPS) and report
- Onboard Survey (OBS) and data dashboard
- Honolulu Enriched Ridership Data (HERD) dashboard
Objectives

• Provide key transit OD and rider activity-based inputs for OahuMPO and CCH travel demand forecast modeling and analysis.

• Determine journey information and demographic attributes of current transit riders for Title VI reporting.

• Combined with HOLO and APC data, provide meaningful OD input to inform the COA Bus-Rail Integration Plan (BRIP) for Honolulu Rail Transit Project IO2 and IO3.
Honolulu Enriched Ridership Dashboard (HERD) Sample Data: October 2021 – December 2021

Objectives

- Build a data-driven model to capture and infer transit Origin-Destination (OD) flows.
- Enable heuristic transit ridership analysis.
- Continuous monitoring of transit service ridership use, to inform transit service planning and adjustments.

Outputs

- Linked Trips data tables with expansion factors
- Enriched transaction-level HOLO data
- Stop-level boarding and alighting estimates
- User segmentation
- GUI-based data mining, visualization, and report generation of transit transactions, inferred linked trips, and density of boardings by stop (Dashboard)

Honolulu Enriched Ridership Dashboard (HERD) Sample Data: October 2021 – December 2021
Objectives

- In-person and online general population surveys capture bus rider and non-bus rider service improvement preferences/priorities.

- Provide meaningful market segment research inputs (especially among non-bus riders and infrequent bus riders) to inform the COA Transit Network Design Strategy and Bus-Rail Integration Plan (BRIP).
Objectives

- Analyze transit rider elasticities: value of travel time, fare for services, etc.
- Identify revisions to transportation service offerings to maximize mode share.
- Understand resident and visitor reasons for and against riding TheBus; experiences with new transportation modes, impact on riding TheBus.
- Inform the COA Transit Network Design Strategy and Bus-Rail Integration Plan (BRIP)

Stated Preference Survey (SPS)
September 2022
Survey Results
### Key Takeaway:

Reduced travel times and customer experience improvements will drive more ridership than will expanded service and transit affordability, among Non-Bus Riders and Infrequent Bus Riders.

<table>
<thead>
<tr>
<th>Bus Network/Service Improvement</th>
<th>Non Bus Riders</th>
<th>Infrequent Bus Riders</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus travel times that are comparable to or better than driving</td>
<td>54%</td>
<td>60%</td>
<td>57%</td>
</tr>
<tr>
<td>Shorter wait times for TheBus</td>
<td>48%</td>
<td>66%</td>
<td>57%</td>
</tr>
<tr>
<td>Comfortable waiting places with shade and seating</td>
<td>50%</td>
<td>62%</td>
<td>56%</td>
</tr>
<tr>
<td>Bus service that can be relied on to arrive on-time every day</td>
<td>50%</td>
<td>63%</td>
<td>56%</td>
</tr>
<tr>
<td>Buses that are clean inside and less noisy</td>
<td>52%</td>
<td>59%</td>
<td>55%</td>
</tr>
<tr>
<td>Safety improvements at bus stops</td>
<td>48%</td>
<td>60%</td>
<td>54%</td>
</tr>
<tr>
<td>Real-time information about routes and schedules</td>
<td>45%</td>
<td>60%</td>
<td>53%</td>
</tr>
<tr>
<td>An easy to understand network</td>
<td>44%</td>
<td>59%</td>
<td>51%</td>
</tr>
<tr>
<td>Easy bus connections to the planned rail system</td>
<td>47%</td>
<td>54%</td>
<td>51%</td>
</tr>
<tr>
<td>Less crowded buses</td>
<td>48%</td>
<td>51%</td>
<td>50%</td>
</tr>
<tr>
<td>Service to more destinations</td>
<td>37%</td>
<td>60%</td>
<td>49%</td>
</tr>
<tr>
<td>Bus transfers that require waiting no more than 10 minutes</td>
<td>43%</td>
<td>53%</td>
<td>48%</td>
</tr>
<tr>
<td>Safety improvements onboard</td>
<td>50%</td>
<td>46%</td>
<td>48%</td>
</tr>
<tr>
<td>Employer provided bus passes</td>
<td>42%</td>
<td>53%</td>
<td>48%</td>
</tr>
<tr>
<td>Lower fares</td>
<td>47%</td>
<td>44%</td>
<td>45%</td>
</tr>
<tr>
<td>Parking available at a transit center or rail station</td>
<td>46%</td>
<td>41%</td>
<td>44%</td>
</tr>
<tr>
<td>Ability to take luggage onboard the bus</td>
<td>39%</td>
<td>44%</td>
<td>41%</td>
</tr>
<tr>
<td>More weekend service</td>
<td>28%</td>
<td>54%</td>
<td>41%</td>
</tr>
<tr>
<td>Stops within a 10 min walk of my home &amp; my destination</td>
<td>34%</td>
<td>47%</td>
<td>41%</td>
</tr>
<tr>
<td>Easier access to final destination by bike-share, car share, etc</td>
<td>37%</td>
<td>38%</td>
<td>37%</td>
</tr>
<tr>
<td>Later evening service</td>
<td>22%</td>
<td>49%</td>
<td>36%</td>
</tr>
<tr>
<td>Earlier morning service</td>
<td>24%</td>
<td>37%</td>
<td>31%</td>
</tr>
</tbody>
</table>
Market Research Study (MRS)
October 2021 – January 2022

Retaining Frequent and Very Frequent Bus Riders

Key Takeaway:
Very Frequent Bus Riders and Frequent Bus Riders were slightly more concerned than Non-Bus Riders and Infrequent Bus Riders about customer experience and expanded service, but travel time-related improvements still ranked high.
Stated Preference Survey (SPS)
Key Findings

Transit Users

- User Experience and Cost are the major contributing factors that lead people to continue to use TheBus

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riding TheBus is less expensive than driving and parking</td>
<td>46%</td>
</tr>
<tr>
<td>Stress related to driving in congested traffic</td>
<td>45%</td>
</tr>
<tr>
<td>Transit helps the environment</td>
<td>28%</td>
</tr>
<tr>
<td>Transit provides free time to read or relax</td>
<td>22%</td>
</tr>
<tr>
<td>The availability of discounted bus passes to address affordability</td>
<td>21%</td>
</tr>
<tr>
<td>Availability of fee parking available at transit centers and exchanges</td>
<td>20%</td>
</tr>
<tr>
<td>Driving and parking is slower that riding TheBus</td>
<td>18%</td>
</tr>
<tr>
<td>Instills a connection to the community</td>
<td>7%</td>
</tr>
</tbody>
</table>

Non-Transit Users

- User Experience and Travel Time Considerations are the leading factors that lead people to not use transit

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Errands requiring a car for travel versatility</td>
<td>59%</td>
</tr>
<tr>
<td>Long travel times</td>
<td>48%</td>
</tr>
<tr>
<td>Comfort and safety at stops (especially women and higher-income groups)</td>
<td>48%</td>
</tr>
<tr>
<td>The negative impact of transfers</td>
<td>46%</td>
</tr>
<tr>
<td>Lack of reliability</td>
<td>39%</td>
</tr>
</tbody>
</table>
Onboard Survey (OBS)  
October 2021 - January 2022

Key Findings

- Over 96,000 TheBus average daily boardings
- Ridership driven by residents (~7.6% non-residents)
- Main transit purposes
  - 48% home-based
  - 25% work-based
  - 18% for shopping and errands
- Over 80% one-seat rides.
- Travel not concentrated to specific time period
  - ~50% during AM and PM peaks, ~45% midday
  - Major passenger activity in urban core of Honolulu
Honolulu Enriched Ridership Dashboard (HERD)
Sample Data: October 2021 – December 2021

Key Findings – Transfer Activity

- Majority of trips do not include a transfer:
  - 1 transfer: 23%
  - 2+ transfers: 4%

- 4 Routes (1, 2, 3, and 13) account for nearly 80% of transfers. 27 stops account for 50% of all transfers.

- Top 30 Routes account for 65% of all rides
  - Top 5 stops for transfers are in the Primary Urban Core
<table>
<thead>
<tr>
<th>Route(s)</th>
<th>Description</th>
<th>% of Total</th>
<th>Linked Trips</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Waikiki-School-Middle</td>
<td>9.83%</td>
<td>6,677</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Kaimuki-Kalihi</td>
<td>6.57%</td>
<td>4,467</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Liliha-Waikiki-University</td>
<td>6.13%</td>
<td>4,166</td>
<td>3</td>
</tr>
<tr>
<td>40</td>
<td>Honolulu-Makaha</td>
<td>4.09%</td>
<td>2,777</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Kaimuki-Salt Lake</td>
<td>3.75%</td>
<td>2,550</td>
<td>5</td>
</tr>
<tr>
<td>42</td>
<td>Ewa Beach-Waikiki</td>
<td>3.66%</td>
<td>2,488</td>
<td>6</td>
</tr>
<tr>
<td>A Express</td>
<td>City Express! A</td>
<td>3.42%</td>
<td>2,325</td>
<td>7</td>
</tr>
<tr>
<td>60</td>
<td>Honolulu-Kaneohe-Haleiwa</td>
<td>2.52%</td>
<td>1,710</td>
<td>8</td>
</tr>
<tr>
<td>20</td>
<td>Waikiki-Airport-Pearlridge</td>
<td>2.48%</td>
<td>1,684</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Pauoa-Woodlawn</td>
<td>2.22%</td>
<td>1,509</td>
<td>10</td>
</tr>
</tbody>
</table>

**Ranked 1-10 Subtotals**
44.67% 30,352
Transit Cost Recovery by Neighborhood Board

Cost recovery for transit fares is highest in and around Downtown Honolulu.

Kalihi-Palama (15) and Downtown (13) Neighborhood Boards have the highest cost recovery.
Integrated Analysis & Discussion
Transit Rider Survey I - Integrated Analysis

❖ To gain the most potential new ridership, maximize transit competitiveness with other modes by affecting reduced total travel times and significantly improved customer experience.
  - Reduced travel times with higher route frequencies and improved on-time performance (system-wide, but especially on key bus-rail and express routes)
  - Better bus stop amenities (pre-payment, seating, shelter, etc.)
  - Improved waiting experience (lighting and security)
  - Clean, comfortable, quiet buses and rail cars

❖ To retain existing ridership, focus on customer experience, expanded service, and coverage improvements targeted to transit-dependent populations.
  - Improved/integrated real-time information for bus and rail
  - Quicker and more convenient transfers
  - Weekend and evening hours on key routes
  - More hospitality and service worker employment destinations
Financial Sustainability

❖ Affect improved farebox recovery ratios, island-wide, through increase ridership and more efficient routes.

❖ Study and plan for microtransit replacement of underperforming routes circulator and neighborhood routes.
COA Next Steps
Comprehensive Operations Analysis Workflow

Workshop 1: Core network (Mid September)
- Develop Test Core Network Scenarios
  - 3 scenarios by multiple teams, including baseline HART recovery plan
  - Scenarios include infrastructure improvements

Workshop 2: Feeder Network (Early November)
- Develop Test Feeder Networks scenarios

Recommended IOS3 Network Options
- High Subsidy
- Mid Subsidy
- Low Subsidy

Electrification Baseline
- Electrification Final
Questions

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Pamela.Bailey-Campbell@stantec.com
Mahalo
Requested Action:

Recommend the Policy Board approve the report as evidence that the work was carried out, submit the final report to the USDOT for approval, and incorporate study findings into the metropolitan transportation planning process.
VII. Pearlridge Station/Kamehameha Highway Pedestrian Infrastructure
Requested Action:

Approve the draft resolution as presented for distribution to relevant parties
VII. CAC Member Attendance
IX. Invitation to interested members of the public to be heard on matters not included on the agenda
X. Announcements
XI. Adjournment