Honolulu High-Capacity Transit Corridor Project
Alternatives Analysis

Community Update Meeting 11
Summary Report

April 6, 2007

Prepared for:
City and County of Honolulu

Prepared by:
Parsons Brinckerhoff Quade & Douglas, Inc.

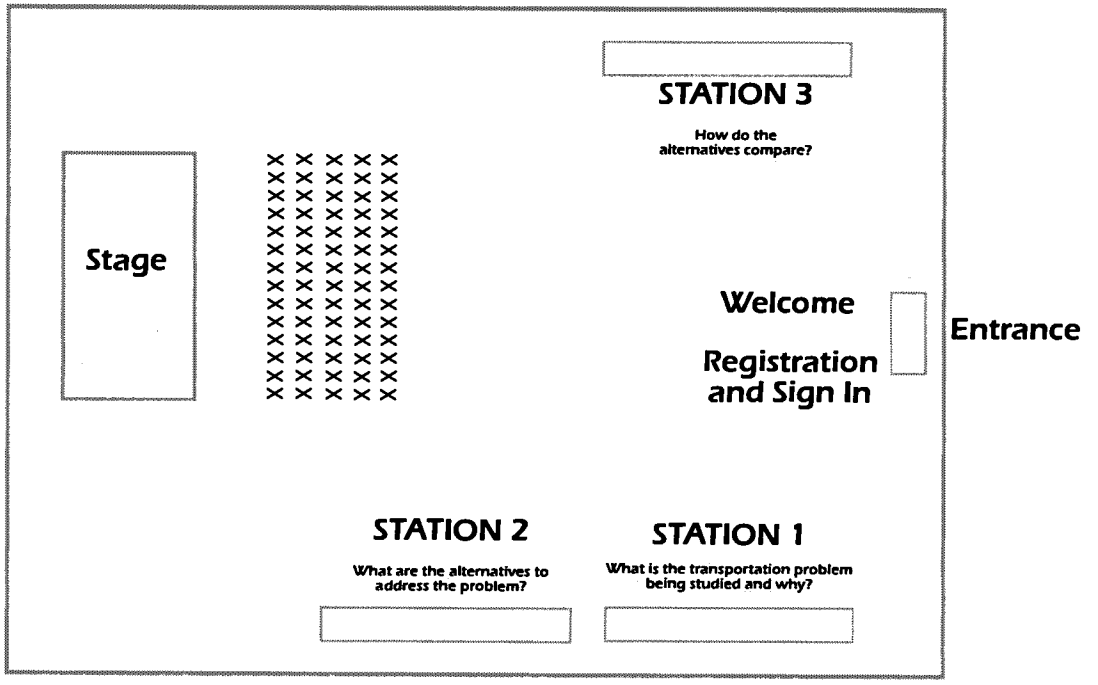
The eleventh Community Update meeting was held on Tuesday, October 24, 2006 at He'eia Elementary School Cafeteria. It was attended by approximately 15 people.

Attached is the meeting agenda, a copy of the PowerPoint presentation and a copy of the sign-up sheet.

COMMUNITY UPDATE AGENDA

Tuesday, October 24, 2006
7:00 p.m. - 8:30 p.m.
Heeia Elementary School Cafeteria

- 7:00 p.m. - 7:30 p.m.
  Registration
  Visit Stations
  Meet with Project Team
- 7:30 p.m. - 8:00 p.m.
  Formal Presentation
- 8:00 p.m. - CLOSING
  Visit Stations for Q & A



Heeia Elementary School Cafeteria Floor Plan

Community Update

October 24, 2006

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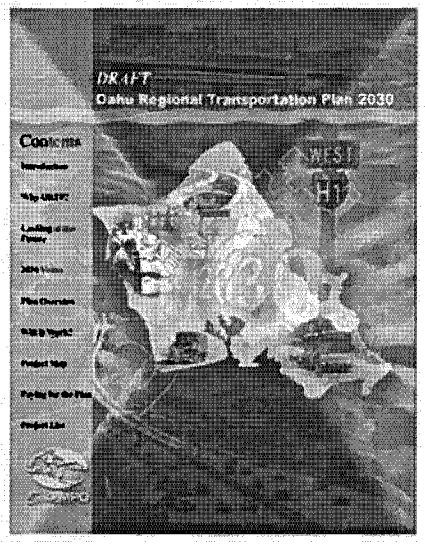
566-2299

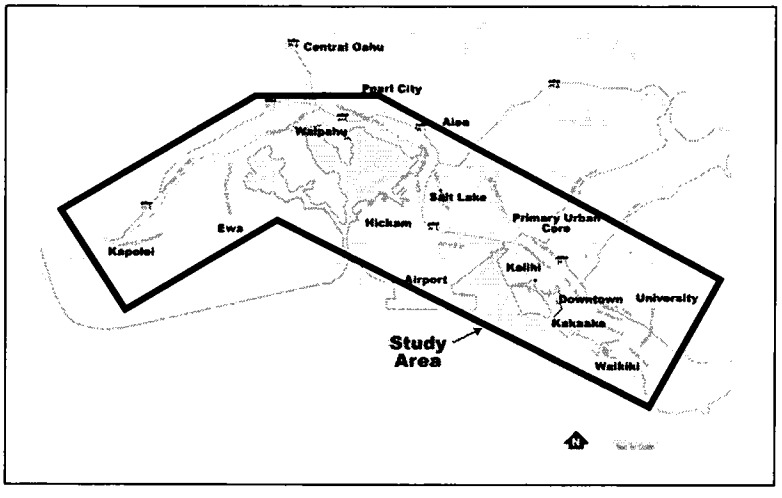
Introduction

- Project Corridor
- Purpose
- Alternatives
- Comparisons of Alternatives
- Schedule

Corridor Designated by the O'ahu Regional Transportation Plan



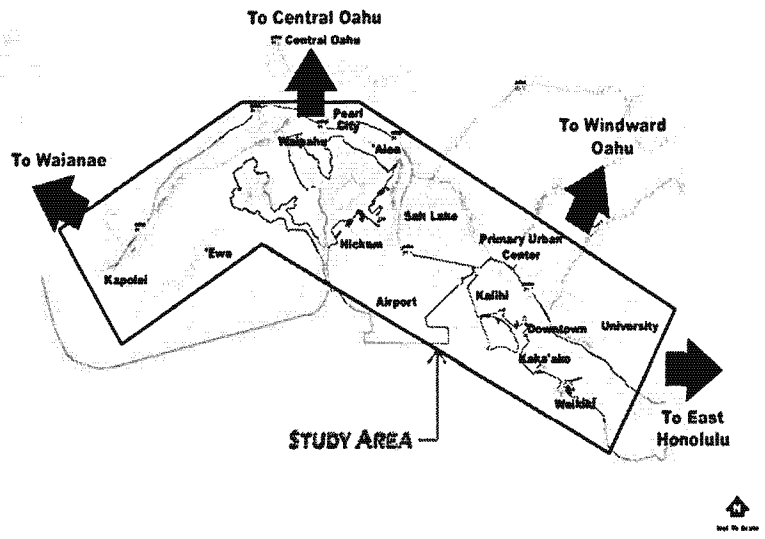
Honolulu High-Capacity Transit Corridor



Honolulu High-Capacity Transit Corridor

- Currently contains 63% of O'ahu's population
- Currently contains 81% of O'ahu's employment
- By 2030 will contain 69% of O'ahu's population
- By 2030 will contain 84% of O'ahu's employment

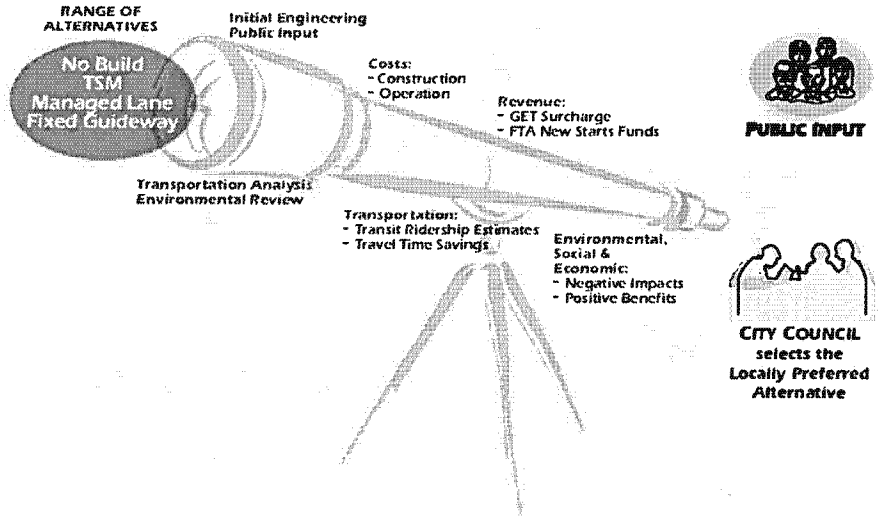
Are other areas served?



Project Development Process

- Alternatives Analysis
  - Begin Environmental Process
  - Selection of a Locally Preferred Alternative
- Preliminary Engineering and Environmental Impact Statement
  - Complete Environmental Process
- Final Design
- Construction
- Operation

Alternatives Analysis



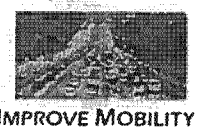
Purpose and Need

IMPROVE RELIABILITY
FASTER
MORE RELIABLE
TRANSIT

NEED

PURPOSE

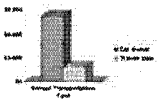
MODERATE
TRAFFIC
CONGESTION



IMPROVE MOBILITY

PROVIDE AN
ALTERNATIVE
TO PRIVATE
AUTO

IMPROVE LINKAGES
Kapolei
UH Mānoa
Urban Center
Waikīkī



IMPROVE EQUITY

SUPPORT GROWTH

Four Alternatives

- No Build
- Transportation System Management (TSM)
- Managed Lane
- Fixed Guideway

No Build Alternative

- Existing bus system, including currently programmed enhancements and expansion to support growth
- Projects included in the O'ahu Regional Transportation Plan - $3 Billion in highway capacity improvements

North–South Road

Fort Weaver Road widening

Nimitz Flyover

Leeward Commuter Ferry

H-1 Improvements:

Waiawa Interchange to Hālawa Interchange widening

H-1 HOV lanes (Makakilo to Waiawa)

Middle Street to Vineyard Boulevard widening

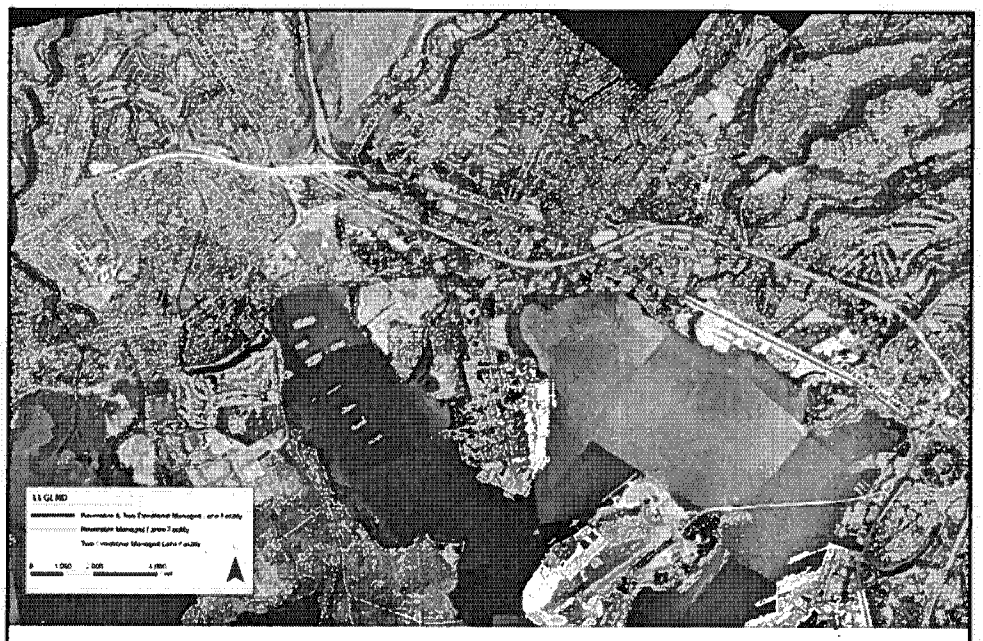
PM Zipper Lane

Transportation System Management Alternative

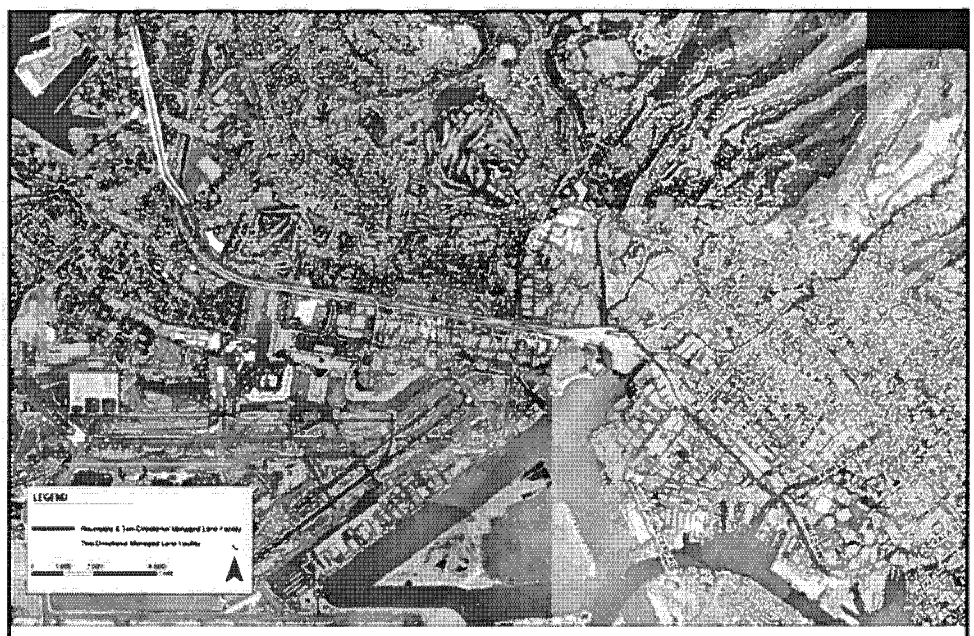
- Construction of new low-cost transit facilities:
  - Park-and-ride lots
  - Transit centers
- Expanded bus service
- Everything included in No Build

Managed Lane Alternative

- Everything included in No Build
- Construction of a two-lane grade-separated roadway from Waipahu to Iwilei
- Two options:
  - Two-lane reversible
  - One-lane in each direction
- "Manage" use of lanes, to maintain free-flow speeds for buses
- Allow up to available capacity:
  - High-occupancy vehicles (HOVs)
  - Toll-paying single-occupant vehicles (with variable pricing)



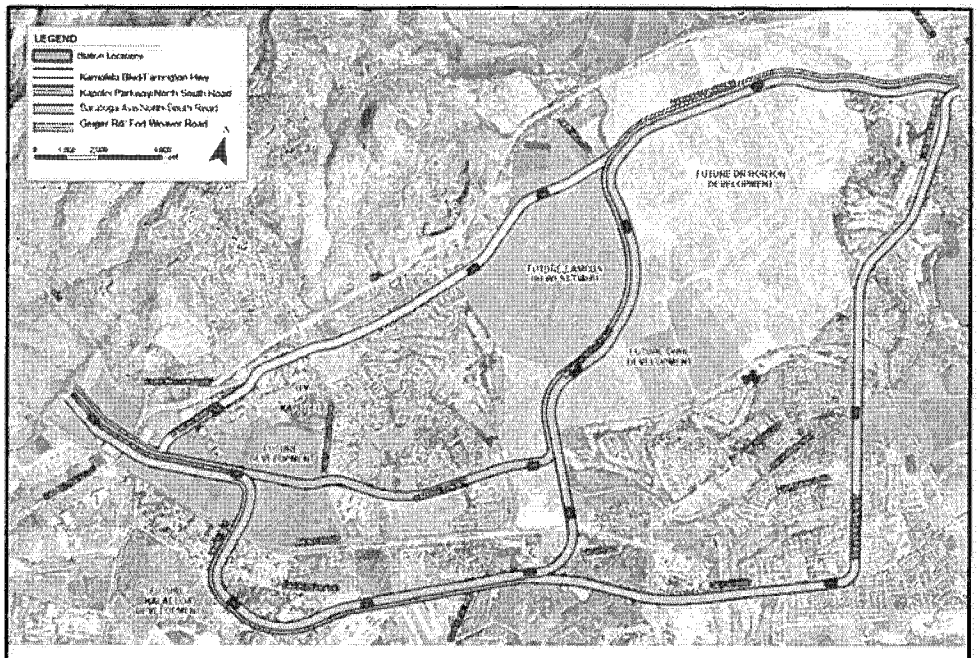
Managed Lane Alternative –
Pearl City / 'Aiea



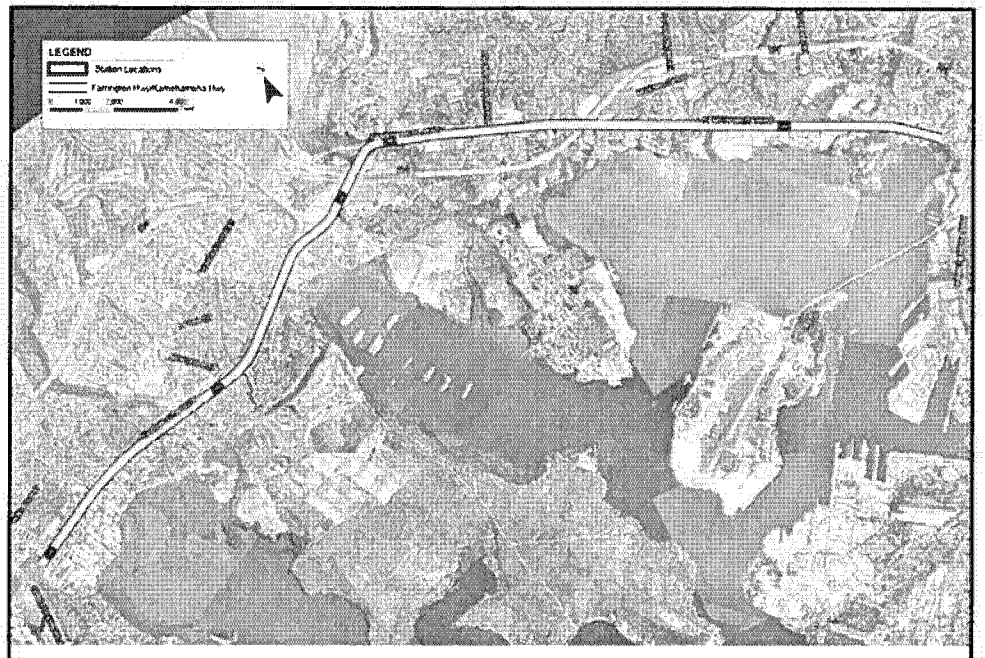
Managed Lane Alternative –
Airport / Kalihi

Fixed Guideway Alternative

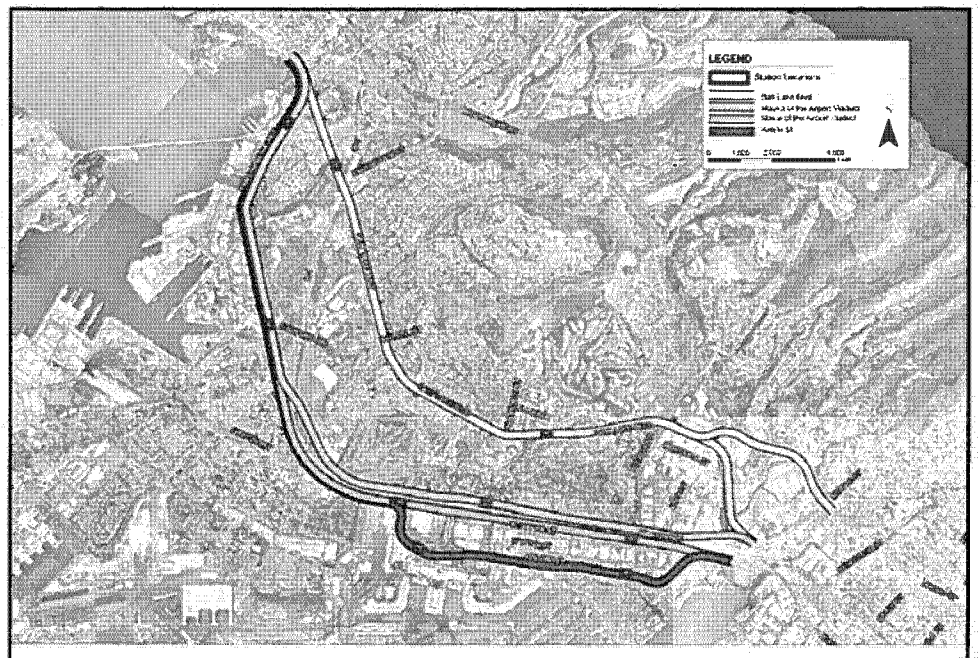
- Fixed guideway system
  - High Capacity
  - Reliable travel times
  - Integrated with bus, parking, bicycling and walking
- Multiple alignment options by geography
- Four technologies being considered



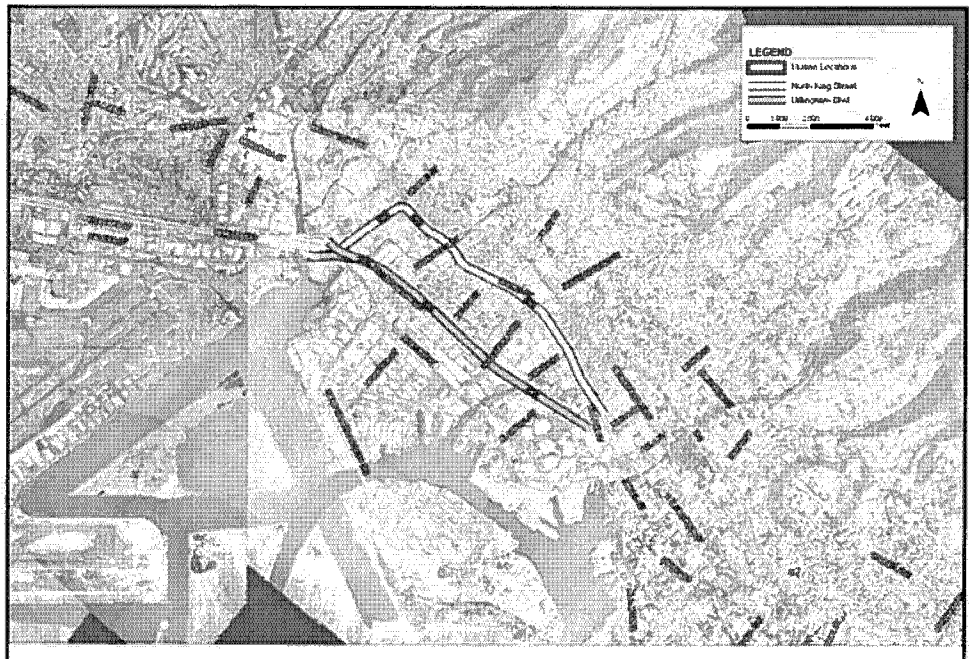
Kapolei / 'Ewa



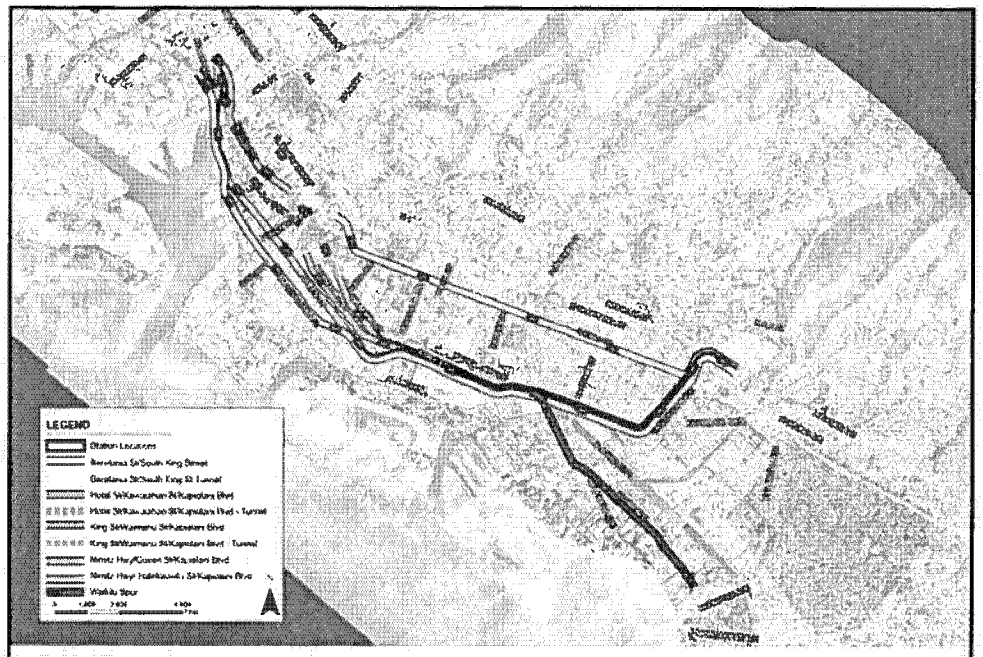
Waipahu / Pearl City / 'Aiea



Pearl Harbor / Salt Lake / Airport



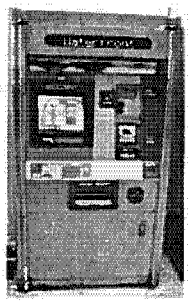
Kalihi / Iwilei

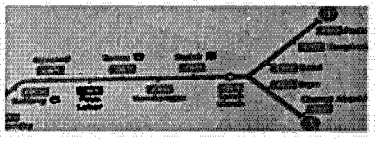


Downtown / Ala Moana / UH Mānoa

What are the operating details?

- When will it run?
  - From 4 a.m. to midnight, every 3 to 10 minutes.
- How much will it cost?
  - Same as TheBus, can use a transfer from one to the other.
- What about bicycles?
  - Bicycles permitted during non-peak times.
- How fast will it be…

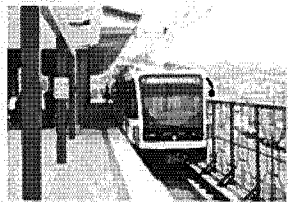




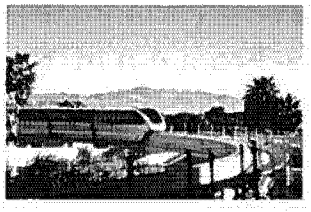
How long will it take?

From	To	Time	Current Bus Time
Kapolei	Downtown	~ 38 minutes	~ 60 minutes
Waipahu	Ala Moana Center	~ 28 minutes	~ 55 minutes
Pearl Highlands	Downtown	~ 22 minutes	~ 50 minutes
Airport	Waikīkī	~ 19 minutes	~ 50 minutes
UH Mānoa	Downtown	~ 10 minutes	~ 25 minutes

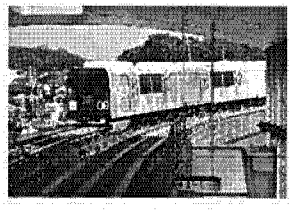
What transit technologies are being considered?



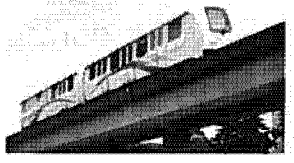
Light Rail



Monorail

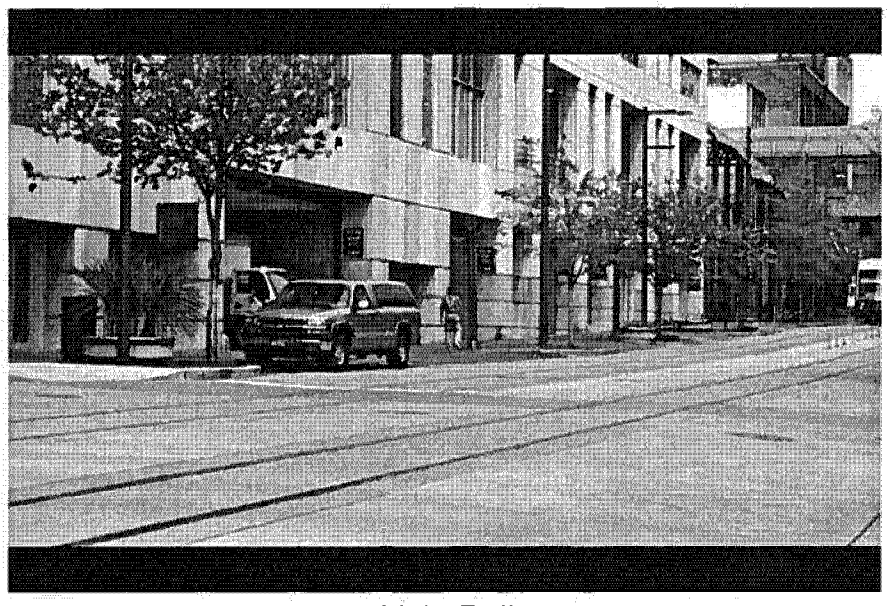


Maglev



Rapid Rail

Fixed Guideway Alternative



Light Rail

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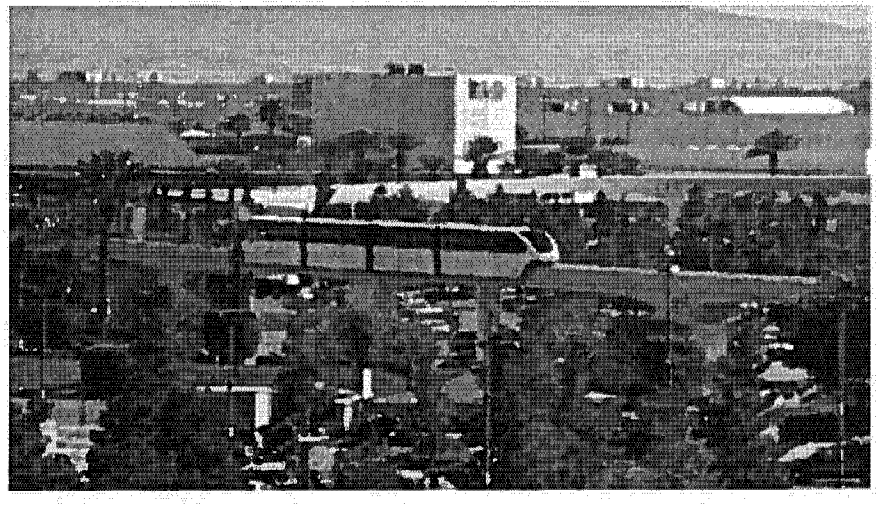

Monorail

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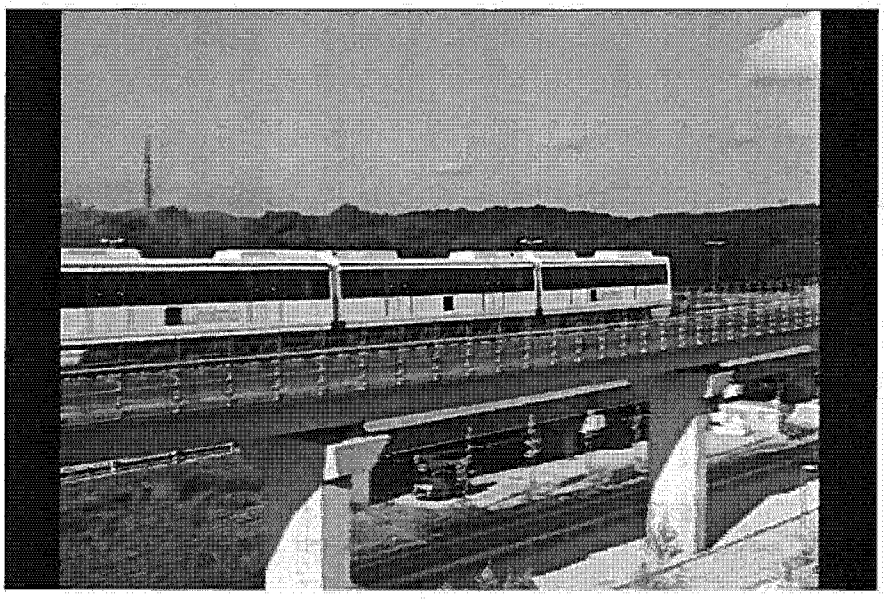
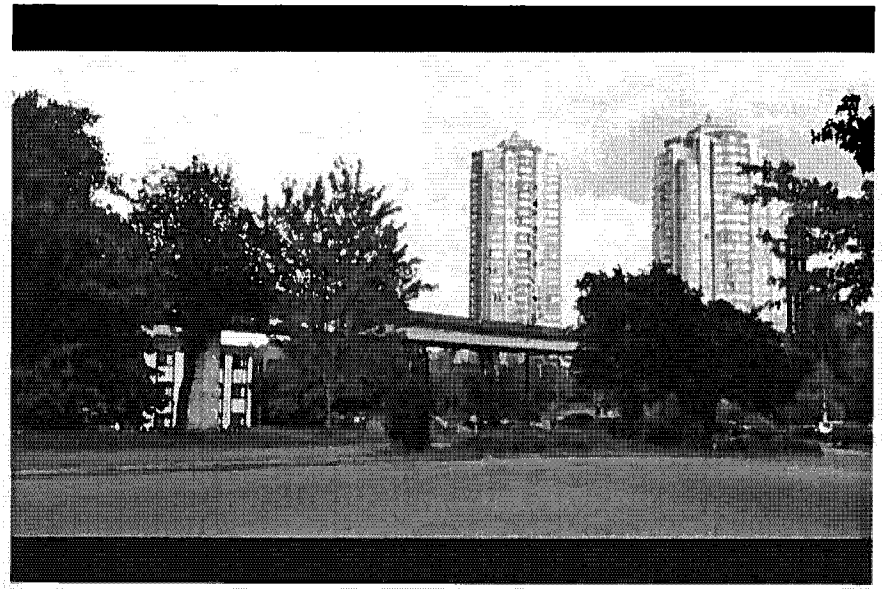


Maglev

Fixed Guideway Alternative

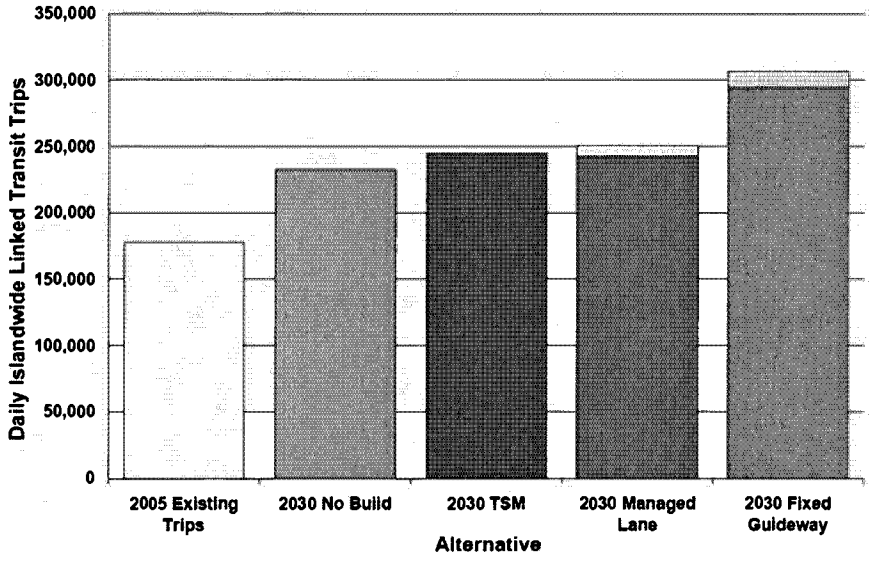


Rapid Rail

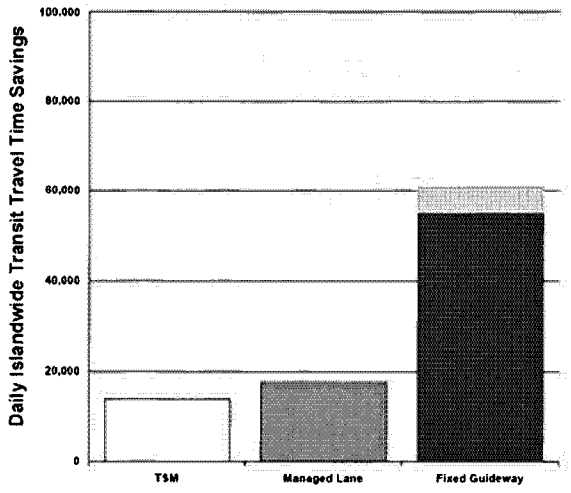
How do the alternatives compare?

- Transportation Benefits
- Cost
- Environmental Impacts

How many trips will be made using transit in 2030?

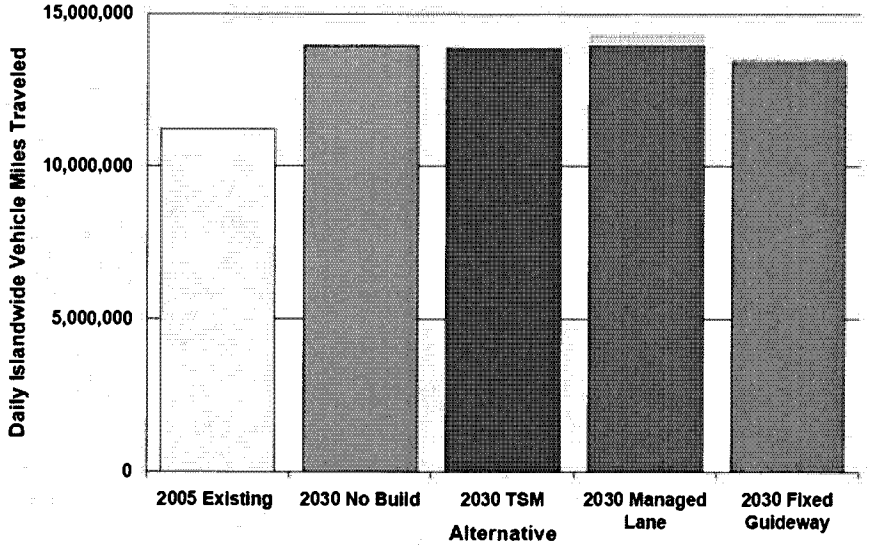


How much time will transit riders save?

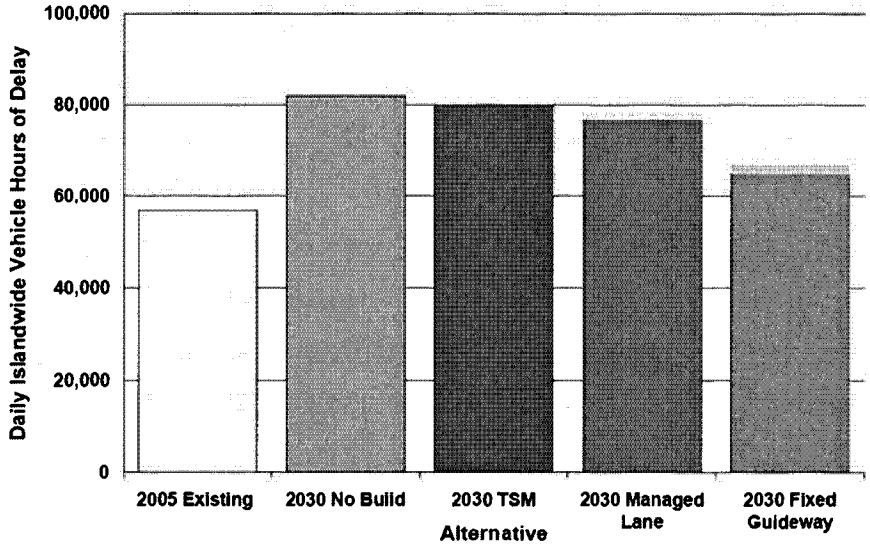


Year 2030 Daily Hours of Transit User Benefits Compared to No Build Alternative

How much will people drive everyday?



How much time will be lost due to traffic congestion?



How do the alternatives compare?

- Transportation Benefits
- Cost
- Environmental Impacts

What will the alternatives cost?

- No Build Alternative: $600 million in bus replacement costs
- TSM Alternative: Cost of No Build Alternative + less than $300 million in transit improvements
- Managed Lane Alternative: Cost of No Build Alternative + over $2 billion in project costs
- Fixed Guideway Alternative: Cost of No Build Alternative + over $3 billion in project costs

For Fixed Guideway - is there a financially prudent first project?

The analysis should include options that:

- Meet FTA guidance to consider a range of intermediate-cost alternatives –
- Are conscientious about expending taxpayer money
- Provide substantial benefit within a limited cost

Define the first project as a portion of the corridor that best meets project goals and objectives with a project budget of about $3 billion.

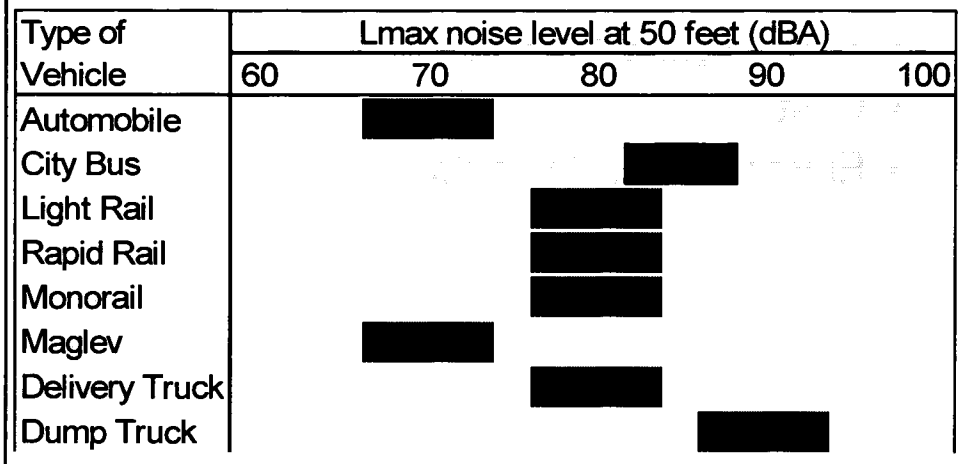
How do the alternatives compare?

- Transportation Benefits
- Cost
- Environmental Impacts

How much islandwide air pollution would be generated by transportation?

Alternative	Air Pollutant Emissions (kg/day)				
	VOC	CO	NOx	PM_{10}	$PM_{2.5}$
No Build Alternative	8,040	143,000	4,780	424	203
TSM Alternative	7,980	142,000	4,750	420	201
Managed Lane Alternative					
Minimum	8,030	143,500	4,800	424	203
Maximum	8,340	147,000	4,930	438	210
Fixed Guideway Alternative					
Minimum	7,760	139,000	4,640	410	196
Maximum	7,800	139,700	4,670	412	197
Pollutant emissions reported in Kilograms per day					

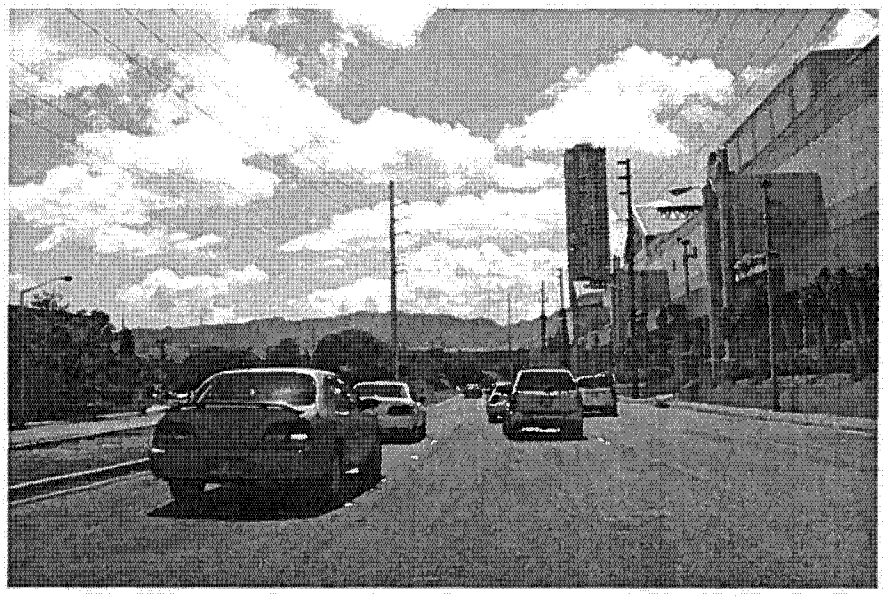
How loud are the alternative technologies ?



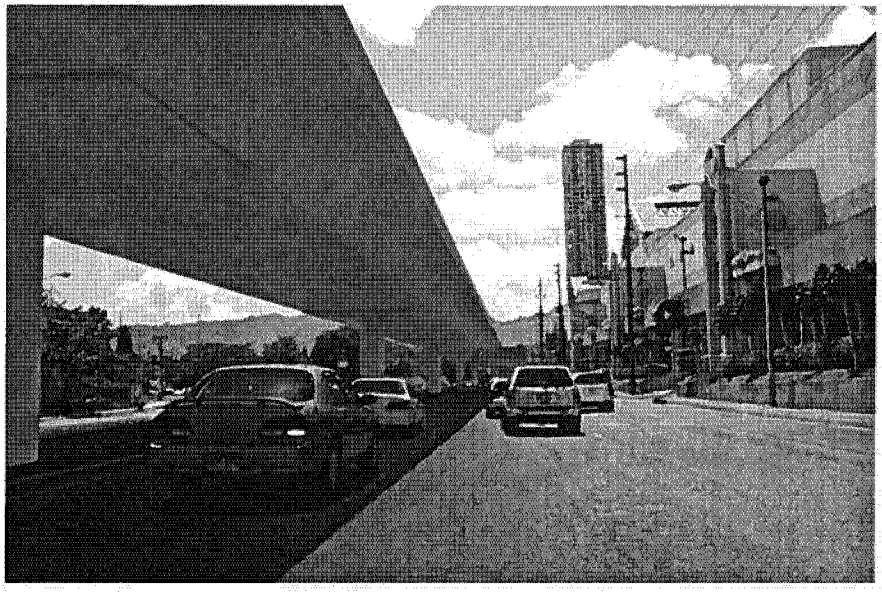
Lmax is the maximum noise level when a single vehicle passes by.

What would the alternatives look like?

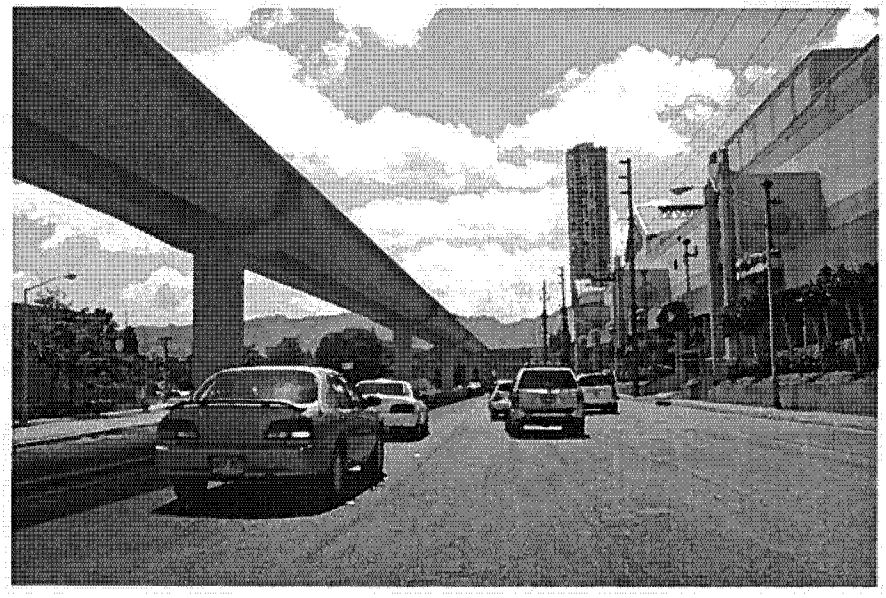
Existing View - Kamehameha Highway at Acacia



Managed Lane Alternative - Kamehameha Highway at Acacia



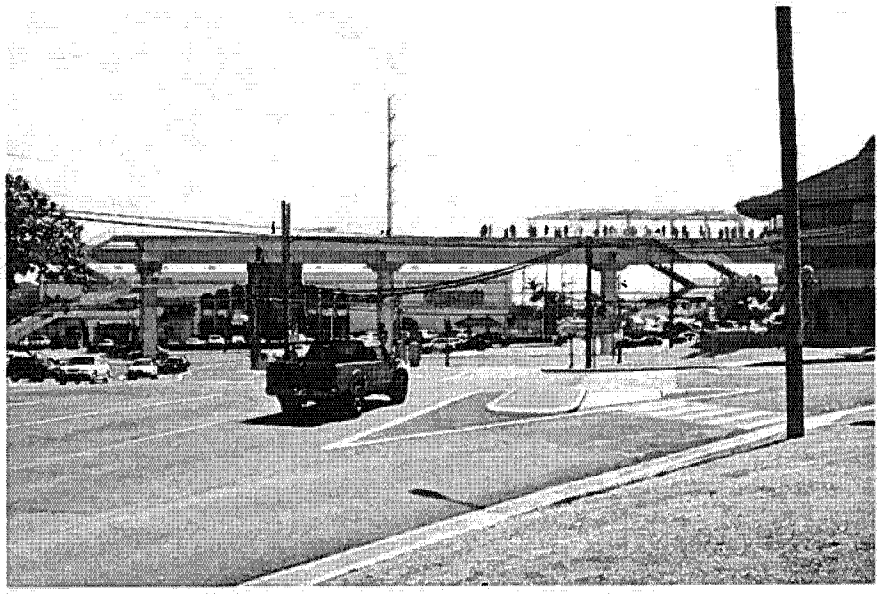
Fixed Guideway Alternative - Kamehameha Highway at Acacia



Existing View – Pearlridge Center

Reversible Managed Lane – Pearlridge Center

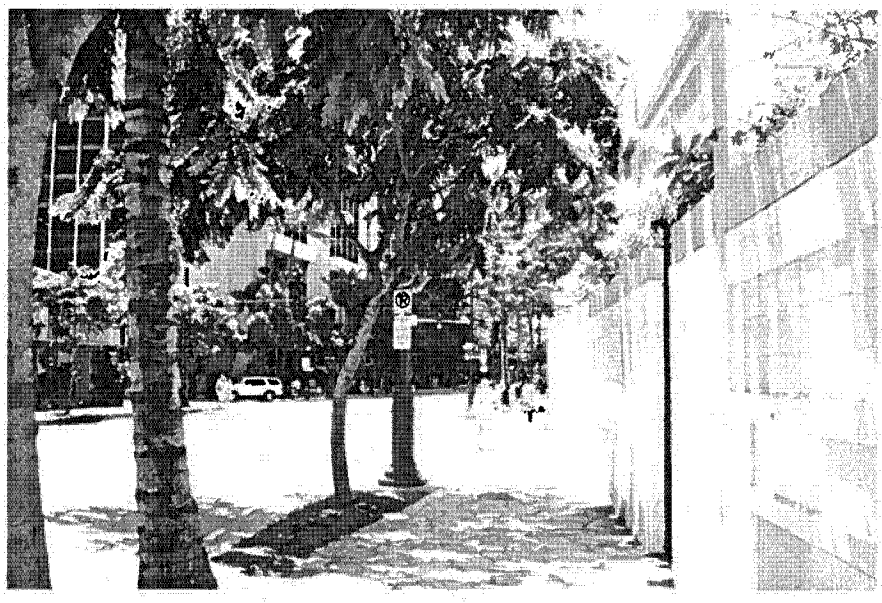
Fixed Guideway Station – Pearlridge Center



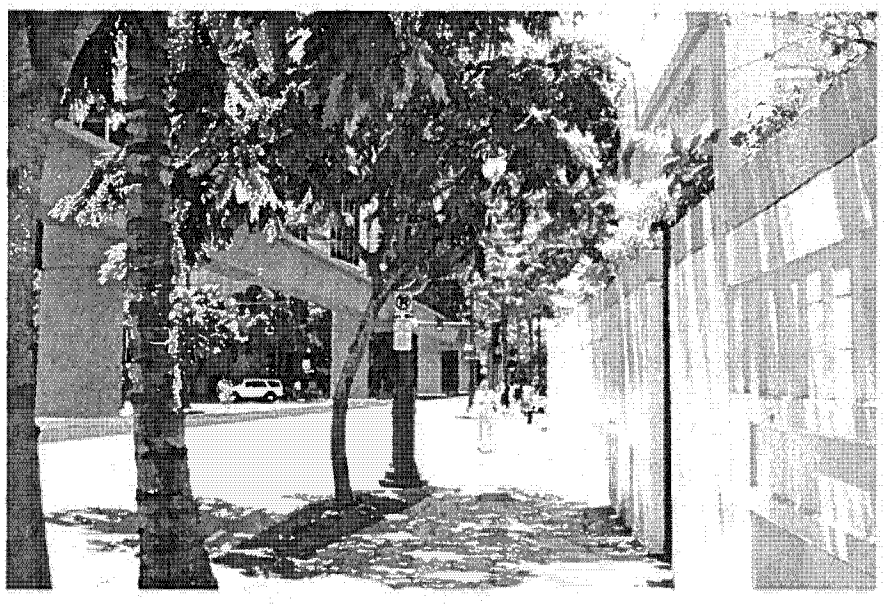
Existing View – Aloha Tower

Fixed Guideway (Halekauwila Alignment) – Aloha Tower

Existing View – Kūhiō Avenue at Lili'uokalani (Waikīkī)



Fixed Guideway – Kūhiō Avenue at Lili'uokalani (Waikīkī)



September and October Community Updates

September 18, 12:00 noon	**U.H. Mānoa, Campus Center Ballroom**
September 18, 7:00 p.m.	**August Ahrens Elementary, Waipahu**
September 19, 7:00 p.m.	**Holomua Elementary, 'Ewa**
September 20, 7:00 p.m.	**Alvah Scott Elementary, 'Aiea**
October 24, 7:00 p.m.	**He'eia Elementary, Kāne'ohe**
October 30, 7:00 p.m.	**Nānāikapono Elementary, Nānākuli**

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Schedule

December 2005	Scoping Meetings - Completed
January 2006-October 2006	Technical Studies and Public Outreach
November 2006	Issue Alternatives Analysis Report
November/December 2006	Public Hearing on Alternatives Analysis
December 2006	City Council selects Locally Preferred Alternative

www.honolulutransit.org

Get Involved

- Receive mailings
- Visit www.honolulutransit.org
- Call 566-2299
- Stay informed with *accurate* information

The Honolulu High-Capacity Transit Corridor Project

Project Contact Sign-up

NAME	COMPANY/ ORGANIZATION	MAILING ADDRESS	EMAIL ADDRESS
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Jennifer Camp	Group70 Inc		jcamp@group70int.com.
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Darren Wong		Kaneohe 96744 4057 46121 Hinapu St	

Date: 10/24/06 Organization: HEEIA ELEMENTARY, KAILUA

The Honolulu High-Capacity Transit Corridor Project

Project Contact Sign-up

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Katherine Fokesa	DMD	City Hall	—
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Karen Kumabe	resident		
Russell Honma		P.O. Box 1201 Hon 96807	

Date: 10/24/06 Organization: HEEIA ELEMENTARY, KAILUA