

**Briefing Paper**  
**Airport Alignment Scope Revision**  
January 29, 2009

**Executive Summary**

The Airport and the Salt Lake alignments differ only in the area between Kamehemaha Highway just west of the Aloha Stadium and the Middle Street Transit Center. The City has determined that the Airport alignment will average over 7,700 additional boardings from the Airport and surrounding areas as well as two significant areas for potential Transit Oriented Development in the Airport and surrounding industrial areas.

The City has reported that there is no change to the project schedule as the Airport alignment would be included in the third phase of the project delivery plan. This phase will begin construction in June 2011 and open in December 2018, thereby providing sufficient time to refine the scope and develop the design. At present the City anticipates releasing RFP Part 1, Request for Qualifications, for the first guideway segment from East Kapolei to Pearl Highlands in early February 2009. Other current critical milestones include issuance of the FEIS by mid-2009, Record of Decision in October 2009 and groundbreaking in December 2009.

The cost for Airport alignment is currently estimated at \$4,125 billion expressed in 2008 dollars, excluding finance charges, \$204 million more than the Salt Lake alignment. In year of expenditure dollars the estimated cost is \$4,927 billion, excluding finance charges. The City intends to increase the New Starts Federal share from \$1.2 billion to \$1.4 billion as stated in the DEIS.

**Project Scope**

The Airport and the Salt Lake alignments differ only in the area between Kamehemaha Highway just west of the Aloha Stadium and the Middle Street Transit Center (Figure 1 and 2). The Airport alignment is an approximately 20-mile portion of the LPA extending from East Kapolei in the west to Ala Moana Center in the east. The alignment is elevated, with the exception of 1,815 linear feet that is at-grade at the Leeward Community College station. The Airport alignment includes 21 stations.

Figure 1

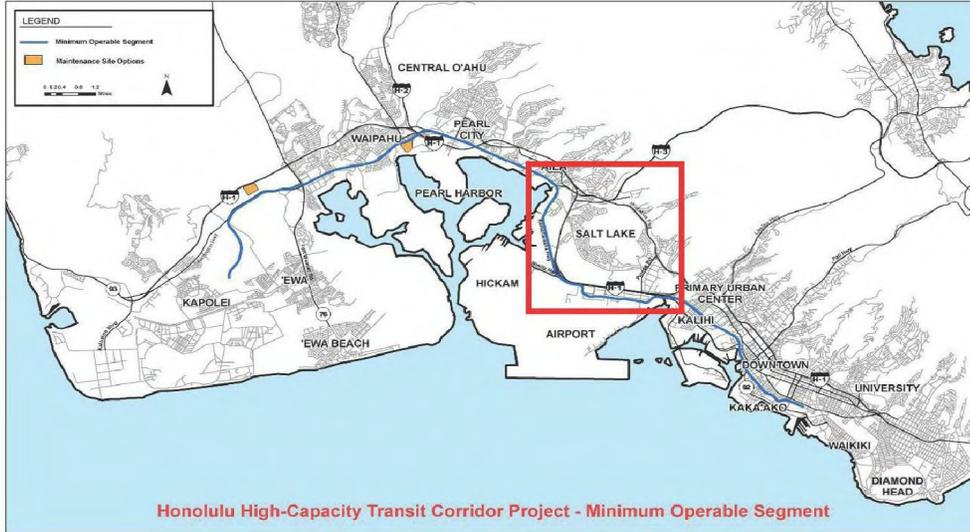
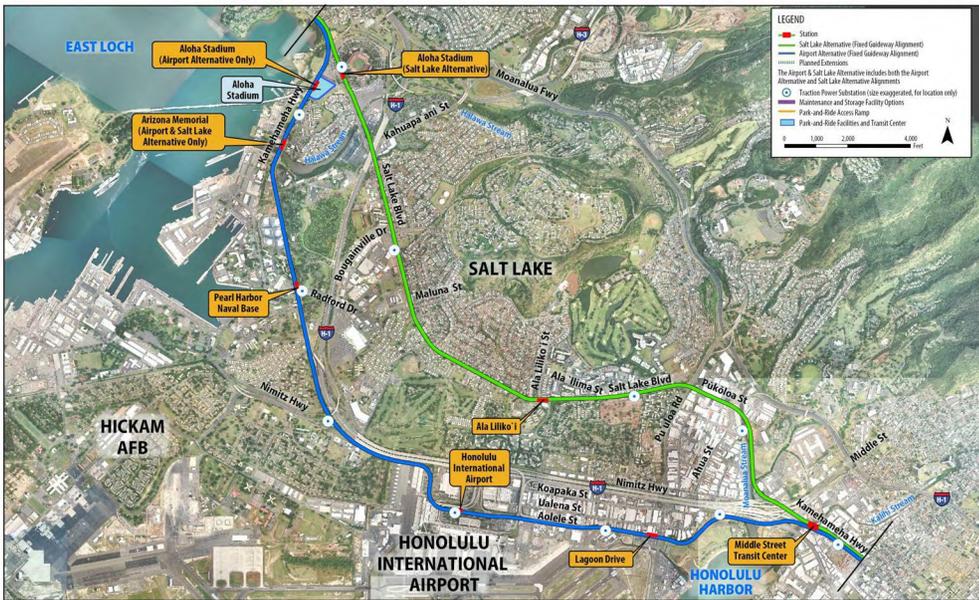


Figure 2



**Comment [JB1]:** Please provide a copy of Figure 2-7 in the DEIS showing both alignments.

As with the Salt Lake alignment, East Kapolei is the western terminus for the Airport alignment. Just west of the Aloha Stadium, the Salt Lake and Airport alignments deviate. The Airport alignment would continue past the Aloha Stadium along Kamehameha Highway to Nimitz Highway and turn south into Aolele Street. The alignment then follows Aolele Street to the east to reconnect to Nimitz Highway near Moanalua Stream and continues to the Middle Street Transit Center. Stations which would be constructed for the Airport alignment include Aloha Stadium, Pearl Harbor Naval Base, Honolulu International Airport, and Lagoon Drive.

From this point the Airport alignment remains the same as the Salt Lake alignment. From the Middle Street Transit Center, the alignment would then continue to Nimitz Highway to Halekauwila Street.

**Summary Table**

	<b>Airport Alignment</b>	<b>Salt Lake Alignment</b>
<b>Miles</b>	19.94	19.11
<b>Stations</b>	21	19
<b>Aerial Structure</b>	19.60 miles	18.77 miles
<b>At-Grade</b>	0.34 miles	0.34 miles
<b>Estimated Cost (2008\$)*</b>	\$3,921	\$4,125
<b>Number of Boardings</b>	95,310	87,570
<b>Property Acquisitions</b>	179 Parcels	190 Parcels
<b>Cost-Effectiveness Index</b>	\$17.78	\$17.53

\*Estimated cost excluding Finance Charges as reported in the Draft EIS dated November 2008.

**Comment [JB2]:** Please provide the number of miles of aerial structure for the Airport alignment.

### Station Comparison

Airport Alignment	Salt Lake Alignment
East Kapolei	East Kapolei
UH West Oahu	UH West Oahu
Ho'opili	Ho'opili
West Loch	West Loch
Waipahu Transit Center	Waipahu Transit Center
Leeward Community College	Leeward Community College
Pearl Highlands	Pearl Highlands
Pearlridge	Pearlridge
Aloha Stadium	Aloha Stadium
Pearl Harbor Naval Base,	Ala Liliko'i
Honolulu International Airport	Middle Street Transit Center
Lagoon Drive	Kalihi
Middle Street Transit Center	Kapalama
Kalihi	Iwilei
Kapalama	Chinatown
Iwilei	Downtown
Chinatown	Civic Center
Downtown	Kaka'ako
Civic Center	Ala Moana Center
Kaka'ako	
Ala Moana Center	
<b>21 Total Stations</b>	<b>19 Total Stations</b>

**Comment [JB3]:** Please confirm the number of stations to be included in the Airport alignment. It appeared that the Arizona Memorial Station would be included based on discussions during the Council meeting yesterday.

### Project Cost

The cost estimate for the Salt Lake alignment, expressed in 2008 dollars, excluding finance charges, is currently \$3,921 billion. The current cost estimate for the Airport alignment expressed in 2008 dollars, excluding finance charges, is currently \$4,125 billion. The difference in cost is \$204 million in 2008 dollars. Including finance charges the difference in cost is \$226 million in 2008 dollars.

**Comment [JB4]:** Please confirm the \$220 million difference stated in the City Council meeting.

### Schedule

At present there is no change to the project schedule as the Airport alignment would be included in the third phase of the project delivery plan currently planned to be delivered using the Design-Bid-Build delivery method with FTA New Starts assistance. This section will begin construction in June 2011 and open in December 2018, thereby providing sufficient time to refine the scope and develop the design.

**Comment [s5R4]:** The material reported at the City Council is a bit inconsistent with the DEIS and we recognize this. We will resolve all of these discrepancies with revised estimates during preliminary engineering (assuming we get into that phase sometime soon.)

Construction of the project is planned to begin in December 2009 at the western end of the alignment at East Kapolei. The guideway section from East Kapolei to Pearl Highlands, including the Maintenance and Storage Facility (MSF), are scheduled to open in December 2013.

Construction of Pearl Highlands to Aloha Stadium, including stations, is planned to be delivered using the Design-Bid-Build delivery method with FTA New Starts assistance. This section is scheduled to begin construction in June 2011 and open in February 2017.

As of January 29, 2009, The City has begun implementing the Airport alignment in lieu of the Salt Lake alignment. The City will have to revise and resubmit the PMP based on the revised project MOS scope, contracting strategy and project delivery plan. The City plans to resubmit the PMP before the end of February, 2009. ~~March 1, 2009.~~

**Comment [JB6]:** Please provide a date for resubmittal.

Vehicle specifications are still being developed...[The City is working towards specifications for an automated light metro car, similar to those used in Vancouver, Copenhagen and Oslo. The car would have three doors per side and be approximately 60 feet long. Each car would carry between 160 and 200 passengers. It would and run in two, three or four car trains. The DEIS budget is sufficient to cover up to 69 or 70 cars in the Airport Alignment and the City deems this to be adequate for its purposes. Further refinements including a complete operating plan will be developed during preliminary engineering.

**Comment [JB7]:** Please provide a brief status on the vehicle procurement.