

## American Planning Association-Hawai'i (APA-HI) Chapter Membership Survey on the Vertical Alignment of a Transit System in Urban Honolulu

The survey was initiated by e-mail invitation to the membership of the APA-HI Chapter on Friday, January 11, 2008, 10:26 AM. The deadline for responding to the survey was Friday, January 18, 2008, 5:00 PM. Included with the invitation was a summary of arguments that have been made in favor of both an at-grade and a grade-separated transit system in urban Honolulu (see attached.) There was also a web link to APA-HI's issue paper on transit for additional reference material. The survey invitation was sent to 270 Chapter members, and 73 completed the survey, for a response rate of 27%.

Following are the survey questions and responses.

**Q1. The first segment of a high-capacity transit system is being planned between Kapolei and Ala Moana Center. APA Hawaii Chapter plans to take a position regarding the vertical alignment of the portion of the system between Iwilei and Ala Moana. Which of the following represents your position?**

Answer Options	Response Percent	Response Count
Street-Grade	49.3%	36
Overhead Guideway	32.9%	24
It does not matter	17.8%	13

**Q2. If your preference is for a street-grade system in urban Honolulu, please indicate below the relative importance of the reasons for your position:** (Results listed in order of identified importance.)

Answer Options	Very important	Moderately important	Less important	Not important
Street-level stations do more to activate the street and stimulate neighborhood revitalization.	30	5	0	0
A street-grade system has direct and convenient pedestrian access and bus connections to stations.	26	9	0	0
It's easier to add extensions for greater coverage (e.g., extension to UH or, Waikiki spur).	25	7	3	0
An elevated system will have too much visual impact on our urban landscape.	23	9	3	0
There are better opportunities for transit-oriented development.	22	11	1	0
The construction costs are less than those for an elevated system.	16	11	6	1
There's greater potential for more frequent stops in the urban center.	13	9	12	1
I like the at-grade in-town systems in cities like Salt Lake City, Denver, Portland, San Diego and elsewhere.	11	11	8	5

Comments:

- Access time from street to 80' high elevated platforms could be significant
- Safer and more energy efficient at or close to grade than overhead
- Hawai'i riders in particular will need a system that is accessible.
- Appropriate for location and blend of urban and rural communities that it will run through.

**Q3. If your preference is for an overhead guideway, please indicate below the relative importance of your reasons for this position:** (Results listed in order of identified importance.)

Answer Options	Very important	Moderately important	Less important	Not important
There is no conflict between trains and other surface transportation such as cars, buses, trucks or bicycles.	20	3	0	1
Elevated trains on their own track have no impediments, so they can travel at higher speeds.	19	5	0	0
The city wouldn't have to alter the current traffic signals or traffic flow patterns too much.	13	8	1	1
An elevated system could be automated, which would reduce labor costs.	12	7	4	1
I like the Vancouver Skytrain.	4	6	3	11
Elevated trains create a new public vantage point from which to enjoy scenic views.	3	11	6	4

Comments:

- An elevated system would require the least space.
- Safer for pedestrians than at-grade
- Why do you keep saying track. The magnetic guideway runs on highways which other vehicles can use.
- Columns piles less intrusive to subsurface excavation- yields better option to protect highly sensitive cultural areas known for traditional burials
- No perfect solution, but above grade is least problematic.
- Safety. In Portland, three deaths a year with an at grade facility was acceptable. In Honolulu three deaths a year should not be an acceptable cost for an at-grade facility.

**Q4. An underground tunnel for the portion of the alignment east of Iwilei has been rejected by City transit engineers due to very high cost and construction challenges. Estimated costs per mile for the tunnel are reportedly up to five times greater than the cost of constructing the proposed overhead guideway. Do you believe this alternative should be further considered, regardless of the cost?**

Answer Options	Response Percent	Response Count
No	50.7%	36
Only for the portion between Iwilei and the eastern edge of the Civic Center	22.5%	16
Yes	18.3%	13
Other (please specify)	8.5%	6

### Comments:

- Iwilei to HMB and Kuhio Avenue
- It will only add more delay to the 30+ years of delay we've already experienced
- High cost and construction challenges are a reality, Honolulu needs to deal with it and get over it!
- Better management of in-town traffic such as co-ordinated traffic lights, left turn tunnels, such as Panos Prevedouros advocates would be effective and cost far less. This is possible with the magnetic guideway for buses which would travel on city streets.
- I'd rather see them go at-grade and use existing lane(s). I'm not opposed to making auto transit more difficult and moving to a more balanced multi-modal system that does not cater so heavily to automobiles.
- Only for downtown

### ***Q5: Further comment?***

- Time to get it built. Should have been done when Fasi was mayor.
- Do it right the first time; Underground it through downtown and the civic center, despite the additional costs. Every other city with a great transit system has done it. Why build a second rate system for a 50-100 year investment?
- Both at-grade and overhead guideway systems have merit. While I am concerned about and dislike the visual impacts of an overhead guideway, I feel an at-grade system poses greater danger to drivers, cyclists and pedestrians. If cost were not a significant factor and barrier, undergrounding the section from Iwilei to Ala Moana would be my preferred option!
- The portion of the system in the urban core needs to be at grade or under ground
- All things considered, an elevated guideway probably won't have too much impact through the CBD to Ala Moana and even as far as Ft. DeRussy in Waikiki (or UH). Everything beyond should be at-grade. The best strategy is for APA to focus on ensuring that vehicles and stations (even on an overhead guideway) are low-floor, low-platform and powered by overhead catenary or dual-mode (catenary + third rail). This'll ensure that we can go at-grade through Kaimuki and up to Central Oahu...
- I fully support a grade separate mass transit system. Those of us old enough to remember that we we're supposed to have a functional system starting operation in 1976 with at that time 90% federal funding. 32 years later we're still arguing the same issues.
- I feel the results were skewed to support the Mayor's goal for a system/
- Trolley public transit should be along on Young Street
- Speed and the integrity of the schedule are two needs best satisfied by overhead guideway.
- Let's build it!
- Don't give up! I spent several years working on the Seattle light rail project, and after lawsuits, public outcry, and false accusations, the system is finally under construction. Look at Portland, Oregon, the same people that sued the agency were begging to have light rail in their neighborhoods after they saw how great it was. Honolulu will figure it out, it just takes time.
- It is hard to respond to this survey because there are so many factors involved in determining a preference for the transit alignment. You can't just ask if you want it elevated or at-grade. Most importantly though, consideration should be give to the fact that these type of discussion, although well intentioned, could confuse and dilute support for a transit system and this City may end up in a situation like last time, where we got no system at all. I would rather have an elevated system than no system at all.

- LET'S DO IT RIGHT INSTEAD OF HAWAII'S USUAL THIRD WORLD APPROACH TO PROBLEMS.....
- Need to go with an option with best possibility of completing and extending - i'm afraid anything besides an at-grade alignment will either stop before completion due to soaring costs (remember how expensive the "big dig" turned out to be??) or will end up being one super-expensive segment that does nothing to relieve traffic congestion
- Above grade is the only option
- Important to move ahead on transit.
- I don't think we should build a fixed rail system at all. It is just a big fat public works project and will not help traffic one iota. Here's to more and better buses!!
- An elevated transit guideway could be problematic considering gusty winds. It was rejected in the early OTS because of this.
- I have too many comments to list in this space.
- Address city policies for bike and luggage on board transit...both issues will affect system effectiveness.
- I have virtually no confidence that the city administration will design a system that works.
- Thank you for doing this survey
- Your survey has entirely dismissed HOT lanes with magnetic guideway for buses.
- An above-grade system while not disturbing existing roadways only furthers us going in the direction of favoring automobiles over all other transportation alternatives. That's one of the reasons I support at-grade deployment in hopes that it would remove some auto lanes. I'd rather pay for and subsidize other transit modes (rail, bus, bike, ped) rather than continue to pour money into roadways and parking lots for cars.
- As a member of APA, I would hope that members on both sides of the transit issue will NOT misrepresent the membership or allow APA to be a pawn of either party. Kodomo no tame ni
- Rail is a vitally needed transportation alternative for Honolulu. Compromise in design is needed to allow rail to happen. "At grade" may be an ideal that is just not realistic. If an "at grade" requirement will kill the rail, or cause significant disruption to rail speed and efficiencies and disruption to traffic patterns, then an "at grade" requirement should not be strongly advocated by APA.
- Please don't frame APA comments in the same context of opposition that AIA comments have been presented.

## Survey Invitation

As a member of APA-HI, you are invited to participate in a short survey to **express your opinion on whether the City's proposed high-capacity transit system should consider technologies that can operate at street-grade in the portion of the alignment in urban Honolulu – i.e., east of Iwilei.** The survey should take no longer than 10 minutes, including the review of this introduction. The results of this survey will be used as the basis of APA-HI's position on this issue. Therefore, **the survey is limited to APA-HI members only.** Please honor that restriction.

The City has begun the procurement process to select a transit technology. As discussed in APA-HI's *Transit and Transit-Oriented Development* issue paper, which is available on our website at [http://www.hawaiiapa.org/pdf/transit\\_and\\_tod\\_paper\\_rev.pdf](http://www.hawaiiapa.org/pdf/transit_and_tod_paper_rev.pdf), some technologies (e.g., "third rail") can operate only on a grade-separated or dedicated alignment, while others (e.g., "light rail") can also run also within the street system. The Request for Information (RFI) that the City has distributed to potential transit vendors appears to allow only technologies that require grade separation for the entire alignment. While it is conceptually possible to consider an underground transit tunnel through urban Honolulu, the cost of this alternative is very high. At present, a street-grade segment through urban Honolulu appears to be the most viable alternative to an overhead guideway from a construction cost standpoint.

This topic is covered more thoroughly in the APA-HI issue paper, but a summary of the "pros" and "cons" for at-grade vs. overhead in urban Honolulu is provided below.

The following arguments have been made in favor of an overhead viaduct (or underground tunnel):

- A transit vehicle operating on a grade-separated guideway can potentially be fully automated. Over the long term, this reduces labor costs and the risk of stoppage due to a labor dispute.
- Because the overhead guideway (or underground tunnel) allows the transit vehicle to travel outside the mix of grade-level traffic, the operating speed of the transit vehicles is higher and schedules are more reliable.
- Since no travel lanes need to be removed or dedicated exclusively or semi-exclusively for transit, and no adjustments are required to traffic control signs and signals to give priority to transit, the traffic capacity of existing streets can be maintained.
- An elevated alignment (but not a tunnel, obviously) will create a new public vantage point from which to enjoy scenic views.

Arguments in favor of an at-grade system within Honolulu, eastward from Iwilei, include:

- The construction cost per mile for an overhead viaduct in the urban core is much higher than in outlying areas.
- An at-grade transit system allows greater potential for future extensions and additional routes to provide greater coverage to high-density areas (e.g., Waikiki, UH-Mānoa, the King-Beretania corridor) because it is cheaper and faster to build, and is generally more acceptable to adjoining urban neighborhoods.
- Direct and convenient pedestrian access and bus connection to stations is more important in the urban core than in outlying areas, where commuters are more likely to drive to the stations. Grade-level stations tend to activate the street, which in turn can stimulate more transit ridership and economic vitality within the neighborhood.
- An overhead viaduct running along the downtown waterfront and through the older, narrower streets of urban Honolulu has adverse impact on adjacent land uses. It discourages improvement of adjacent properties between stations and diminishes the quality of the streetscape. Since it is very difficult to retrofit an overhead viaduct into a densely built urban core, engineers must resort to awkward solutions: e.g., the flyover above the H-1 viaduct near UH Mānoa, or the station placed at 80 feet above grade at Ala Moana Center.
- Virtually all transit cities bring their system either underground or at-grade as it passes through the urban core. Even Vancouver's Skytrain goes underground as it passes through downtown.

**PLEASE RESPOND TO THE SURVEY NO LATER THAN 5:00 p.m. ON FRIDAY, JANUARY 18, 2008**

**THE SURVEY LINK:** [https://www.surveymonkey.com/s.aspx?sm=BPpINN8\\_2bPUqPm76O4J4\\_2fZO\\_3d\\_3d](https://www.surveymonkey.com/s.aspx?sm=BPpINN8_2bPUqPm76O4J4_2fZO_3d_3d)