Why the 2005-2011 Honolulu Rail Proposal Went Nowhere

Panos D. Prevedouros, PhD March 2011



Honolulu's traffic problem

Crowded highways The Capital Beltway has I

The Capital Beltway has been ranked the third most congested freeway in the United States, based on data from 1.5 million GPS devices, mostly in freight trucks.

- Weekly hours of congestion on worst bottleneck
- Speed of worst bottleneck when congested
- 1. Hollywood Freeway, Los Angeles

77 hours

14 mph

2. Lunalilo Freeway, Honolulu

36 hours

16.4 mph

3. Capital Beltway

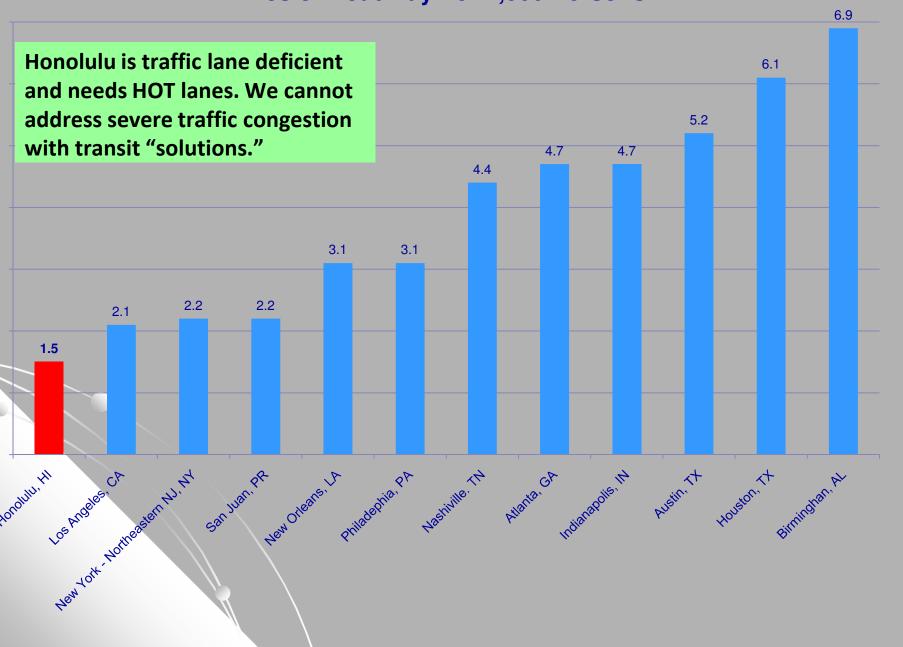
31 hours

21.2 mph

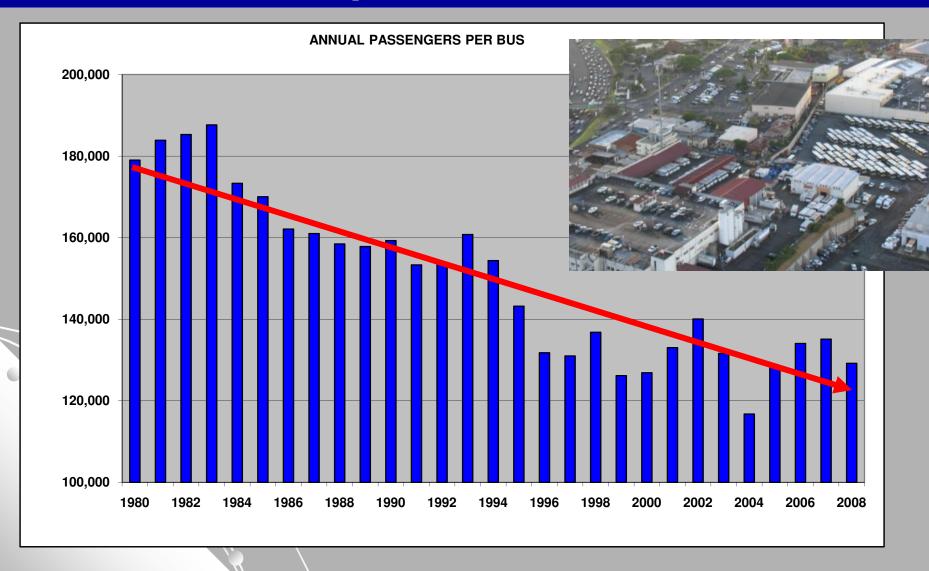
The Washington Post

January 21, 2010

Miles of Roadway Per 1,000 Persons



The Unproductive The Bus



What Did the Voters Approve in 2008?

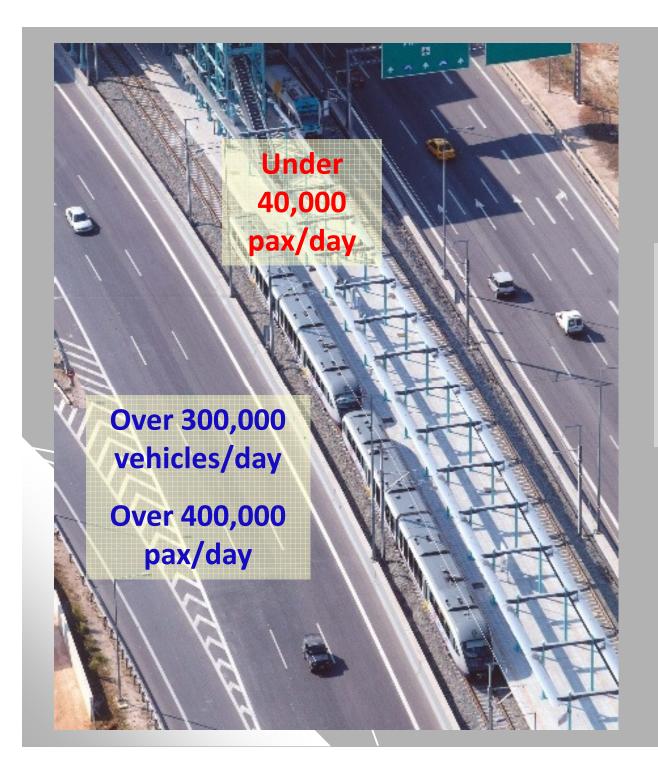
2008 2010

Light Rail Heavy Rail

Under \$5 B Over \$5 B

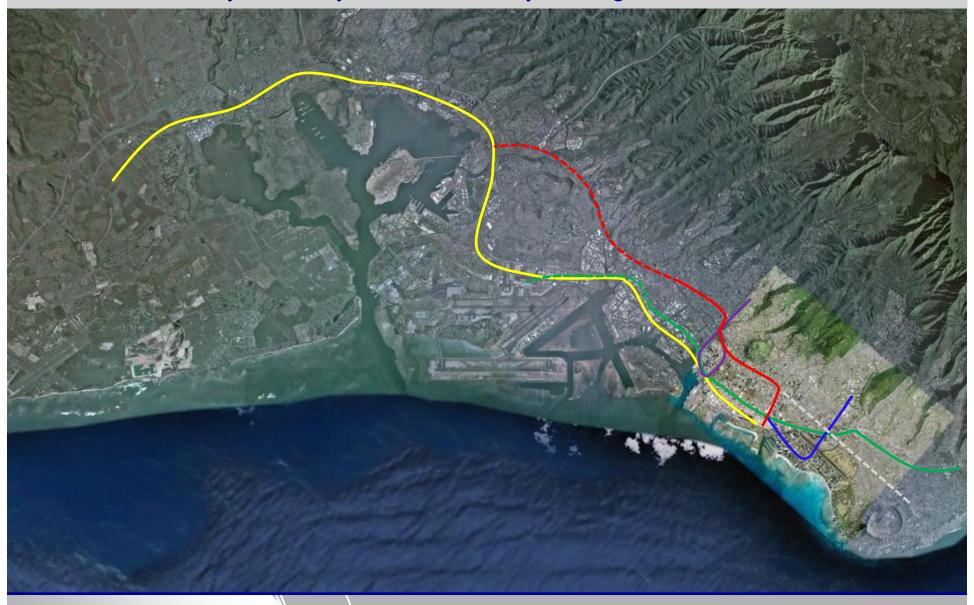
Thru Salt Lake Thru Airport

Honolulu: Ethics Civil Fines		
	212	of 212
YES	223,547	72.5%
NO	53.524	17.4%
Blank Votes: Over Votes:	31,294 78	10.1% 0.0%
Honolulu: Impeachment Circuit Cou	ırts	
	212	of 212
YES	224,363	72.7%
NO	49.300	16.0%
Blank Votes: Over Votes:	34,692 88	11.2% 0.0%
Honolulu: Dept. of Transportation Services		
Transit	212	of 212
YES	156,051	50.6%
NO	140,818	45.7%
Blank Votes: Over Votes:	11,456 118	3.7% 0.0%

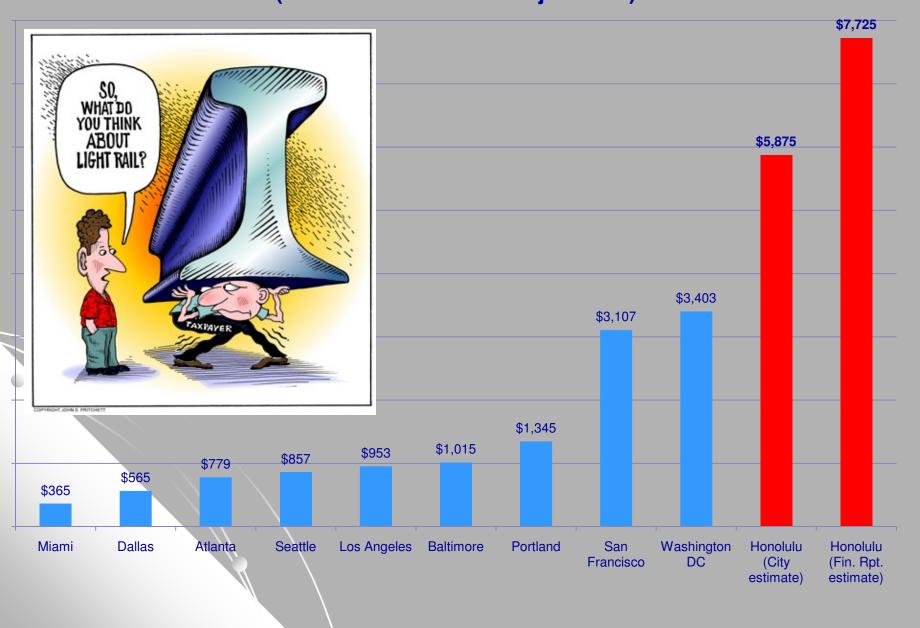


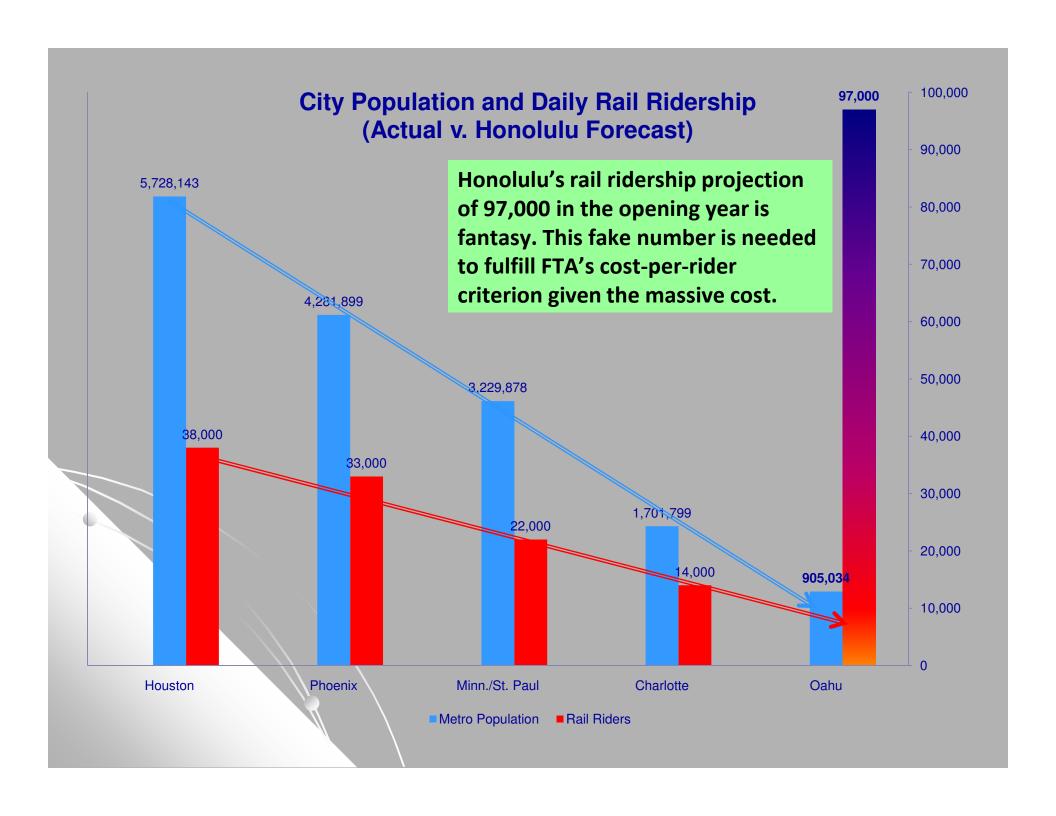
Attica Tollway and the Suburban Railway (Athens, 2009)

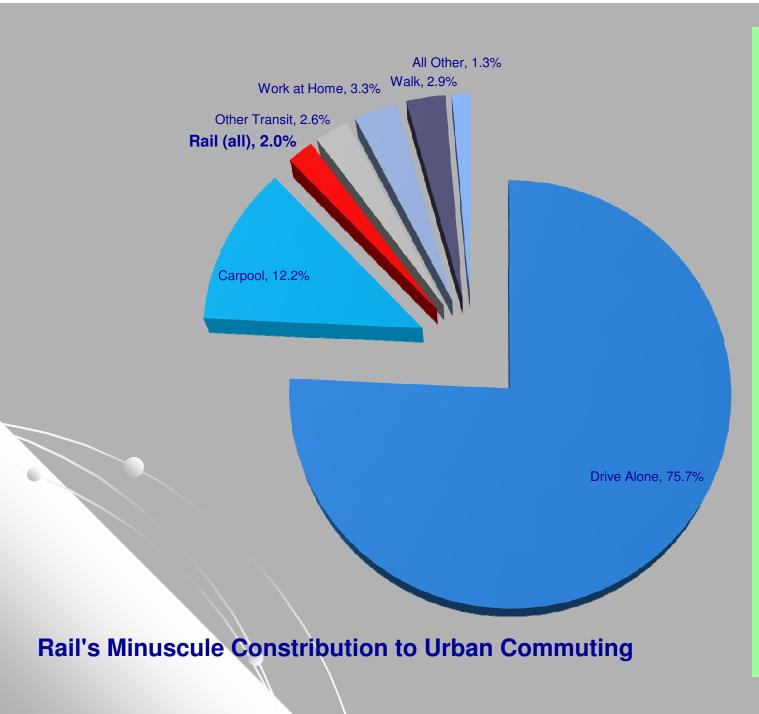
London, Paris, New York, Tokyo ... Honolulu?



Construction Rail Cost Per Capita in 2006\$ (Actual v. Honolulu Projections)



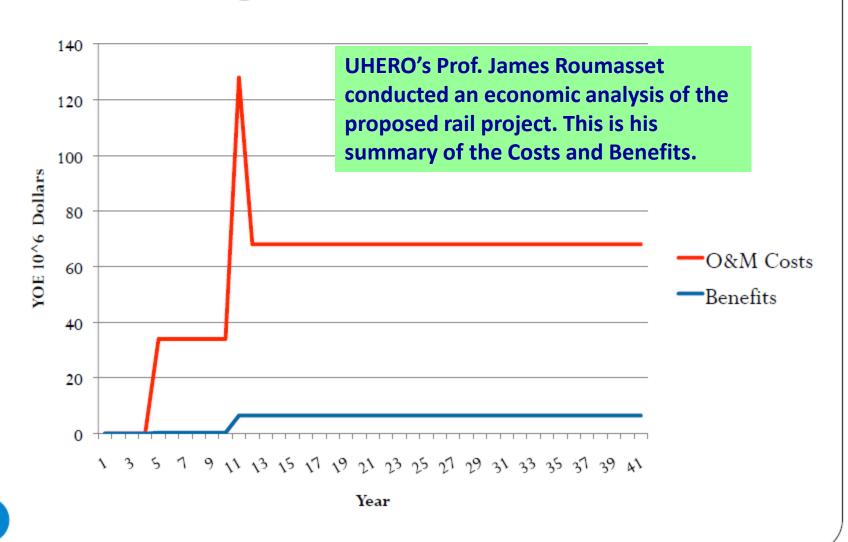




UC professor Charles Lave insisted on observing the "Law of Large Proportions."

Investing one billion on the option used by 87.9% of the people (Drive Alone and Carpool) will produce far more benefits than investing the same billion on the option used by 2.0% of the people (Rail).

O&M costs vs. benefits: \$4.3 billion in construction costs buys a negative income stream!



Tren Urbano (San Juan, PR)



There is little doubt that Honolulu, HI will be San Juan, PR but 3x worse.

Island	City	Population Island	Population City	Median Household Income	Motor Vehicles per Capita	City Population Density
Oahu	Honolulu	909,863	371,657	\$54,714	1.5	4,337
Puerto Rico	San Juan	3,808,610	434,374	\$17,184	0.6	3,507

A perfectly matched comparison

Honolulu San Juan

Island

Heavy Rail

FTA

PB

Island

|Heavy Rail

FTA

PB

Lesson from recent island rail

COST

PB estimated \$1.25 B

FTA approved

Actual cost

\$2.25 B

RIDERS

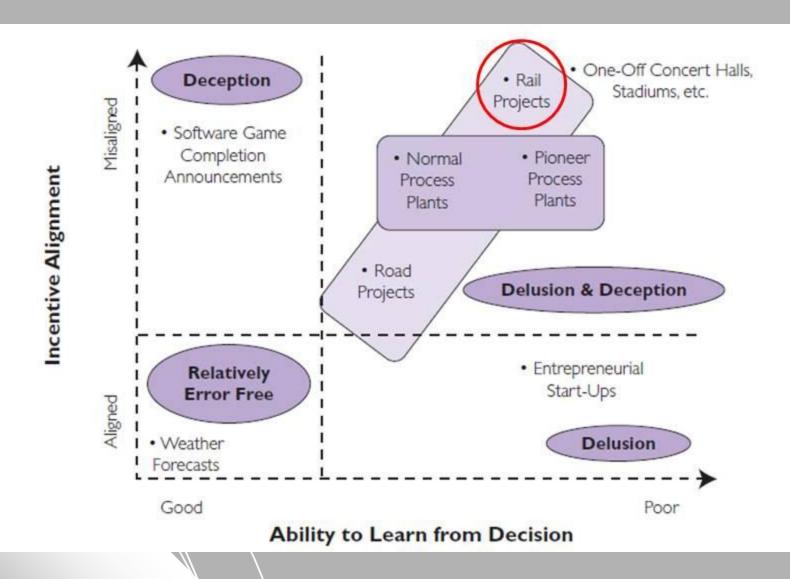
PB estimated 80,000

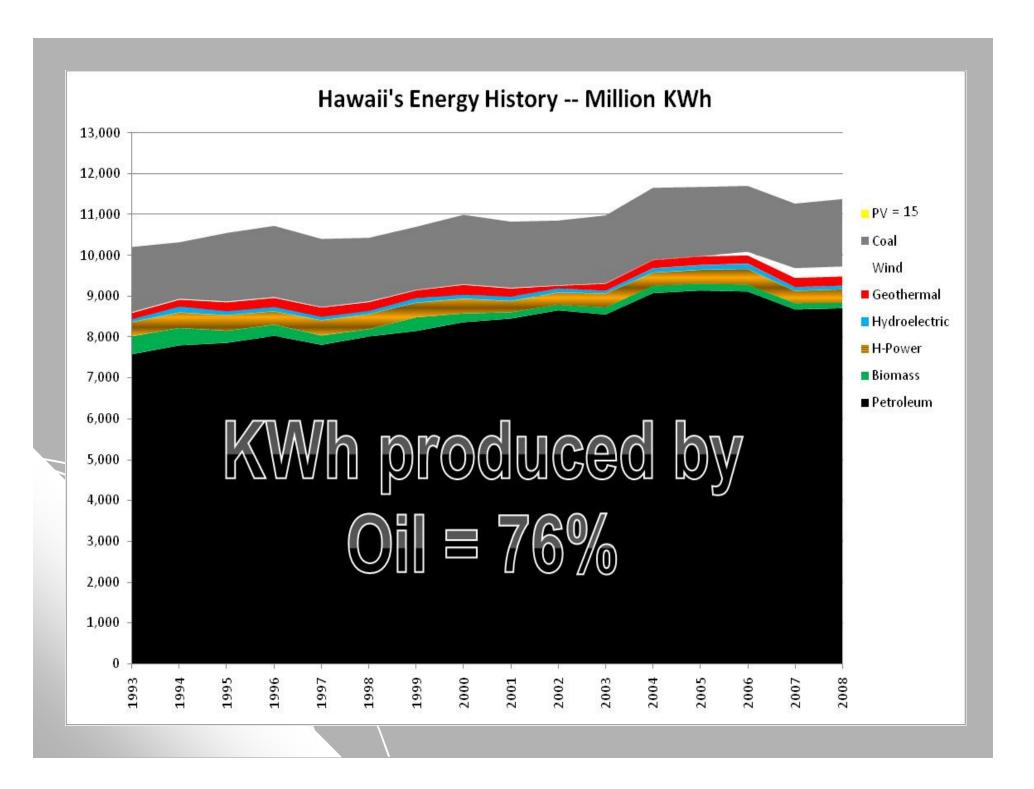
FTA approved

Actual riders

Under 25,000

Internationally renown megaproject specialist professor Bent Flyvbjerg (Oxford University) has discovered that rail advocates intentionally deceive the public with low construction costs and high forecasts, and most of them are deluded in believing their own estimates.





Real Solutions: Goal ... 20 Minute Commutes

IMMEDIATE (1 to 4 years)

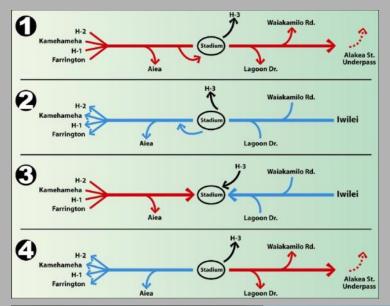
- 1. Pearl Harbor Ferry
- 2. Underpasses
- 3. Nimitz Viaduct
- 4. Traffic Signal Optimization
- 5. In-town BRT
- 6. Middle St. merge fix

LONGER TERM (5 to 12 years)

- 1. 11 mi. HOT Lanes
- 2. Tunnel: Alexander St. to Pali Hwy.
- 3. Complete Plan for ORL Light Rail
- 4. Pearl Harbor ferry and cut-and-cover tunnel thru airport



A complete plan for reversible HOT lanes in Honolulu is available and a segment of 2 out of 11 miles has an approved EIS







HOT: 100 buses, 400 vanpools, 4000 cars = 12,000 ppl/hr, seated

Rail: $20 \times 300 = 6,000$ ppl/hr, crash load, $^{2}/_{3}$ are standees

Relative scores based on National Transportation Policy Project (NTPP), Bipartisan Policy Center (2009)

TRANSPORTATION GOAL	PERFORMANCE METRIC	FAIL	HOT LANES
Economic Growth	Access to jobs and labor	2	10
	Access to non-work activities	5	10
Energy and Environment	Petroleum consumption	3	10
	CO2 emissions	2	10
Safety	Fatalities and injuries per capita	7	10
	Fatalities and injuries per VMT	8	10
TOTAL SCORE	Equal Weights	27	60
	Safety First	32	60

Policy Goal → **Sustainability**

Rail

Transit	6.6
Drive Alone	63.0
Carpool	21.1
Other	9.3

Transit	5.6
Drive Alone	63.8
Carpool	21.2
Other	9.4

HOT BRT TeleC BikeW

Transit	7.0
Drive Alone	57.0
Carpool	25.0
Other	11.0

50%

The Table of Shame

Excludes current city deficit of \$0.3 Billion

Excludes current biennial State deficit of \$1.5 Billion

SOURCE OF FUTURE DEBT (All of Hawaii)		MILLION	
Hawaii Employee Retirement System (HERS)	\$	9,500	
HERS Retiree Health Care	\$	10,800	
20 Miles of Elevated Rail	\$	4,600	
Sewer Mains and Secondary Treatment Plants	\$	4,700	
Water Mains	\$	2,000	
Airport Upgrades	\$	2,800	
Highway Repairs and Congestion Projects	\$	4,100	
Undersea Cable for Power Transmission	\$	1,500	
SUM	\$	40,000	

- Tiny Hawaii has a 40 Billion Dollar liability!
- State and City have large budget deficits
- * Rail and Undersea Cable are the only optional projects on the list
- **Both need to be eliminated on fiscal grounds alone**

So If We Get Rail ... Then What? Impacts to Businesses and Community

- \Leftrightarrow GET \rightarrow 5%
- ❖ Property tax ↑ means rents ↑
- **❖** Electricity costs ↑
- Cuts to TheBus will affect the most loyal riders
- **❖** Congestion ↑ but resources left to mitigate it ↓ because rail will consume transportation funds for two decades
- Huge congestion impacts during construction
- Permanent damage to tourist appeal of Oahu
- **❖ 20+** years of added city debt
- Neighbor Islands get more than their share of state taxes now they will be forced to help close Oahu's multibillion rail hole to maintain solvency





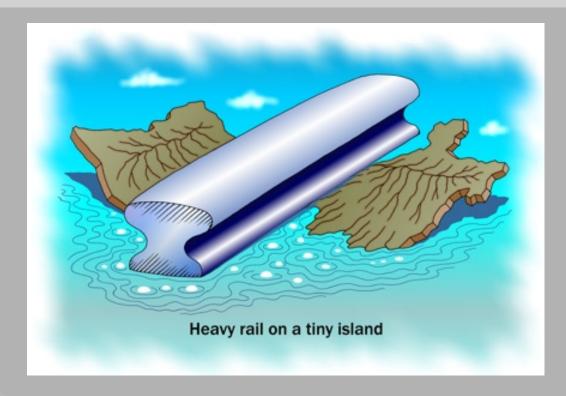




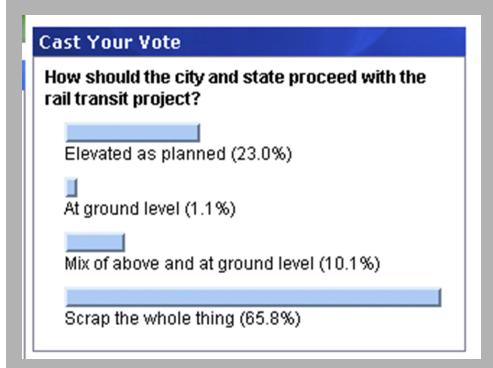
Waipahu and Honolulu Oceanfront... Any Questions?

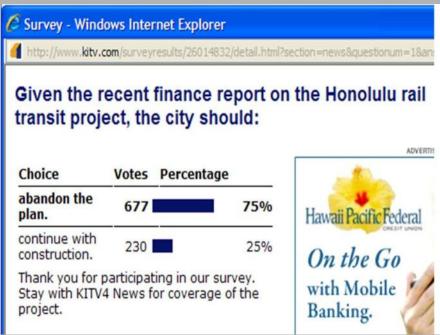
Prepared by anonymous Hawaii Architects.

PANOS. PREVEDOUROS @ GMAIL. COM



MAHALO!





KHON 1/18/2009

KITV 12/7/2010

- Public sentiment is strongly against the rail and the project's champion, mayor Mufi Hannemann, was defeated in 2010 elections.
- Two city charter amendments on the ballot were strongly influenced by misleading advertising, outright lies and union-controlled voting. Recall Peter Clarlisle's <u>HART will cost us nothing</u>. It's costing over \$2 M per year!
- Hawaii has mail-in ballots with <u>no</u> safeguards to privacy.