

Transit Technology Selection - Results

February 22, 2008

Honolulu High-Capacity
Transit Corridor Project

Steve Barsony

Selected Technology: Steel Wheel

- The most mature transit technology
- The most widely used and available transit technology, expected to provide the best competition in procurement
- Has high reliability without compromising the City's requirements

Steve Barsony

- This system has the best potential for vehicle and system interchangeability for future procurement

Ken Knight

Selected Technology: Steel Wheel

- System reliability due to experience and wide range of suppliers
- High operational safety
- High speed service capability
- Non-proprietary systems

Henry Kolesar

Selected Technology: Steel Wheel

- Minimal risk, mature technology
- Highest level of initial competition
- Highest level of future competition

Panos Prevedouros

Alternative: Rubber Tire

- Traffic congestion with Rail will be far worse than today. Door-to-door trips on rail are too long and inconvenient → low ridership in most U.S. systems.
- Rubber tire technology, even with plain buses, offers comparable or superior capacity to SWSR technology. Long term, it will reduce Oahu's dependency on diesel. Rail will require 70-90 MW – new HECO plant = 110 MW (20 bg/y).

Panos Prevedouros

- Rubber tire technology: Much better acceleration, deceleration, turning ability, climbing ability. Lower weight, much lower price.
- Unlike the relative simplicity of HOT lanes and buses, rail is a complex electromechanical system with millions of wearing and weathering components. Mostly foreign technology and entirely “foreign” to Hawaii. It is a magnet for crime and drug trafficking.

Panos Prevedouros

- Advocates for rail who were strong proponent of rail in 2006 include Planners, Architects and College Students (ASUH). Recently these groups have some notable “change of heart.”

Ron Tober

Selected Technology: Steel Wheel

- First major transit system – long term investment, must be successful
- Greatest base of suppliers insuring good competition and long-term support
- Superior operational performance characteristics

Ron Tober

- Better overall cost profile, particularly long term operations and maintenance costs
- Minimal risks associated with implementation and service delivery

Final Results

Technology	Votes
Monorail	0
Rubber Tire	1
Steel Wheel	4
Urban Maglev	0

Chosen Technology: Rubber Tire Technology, on Managed Lanes

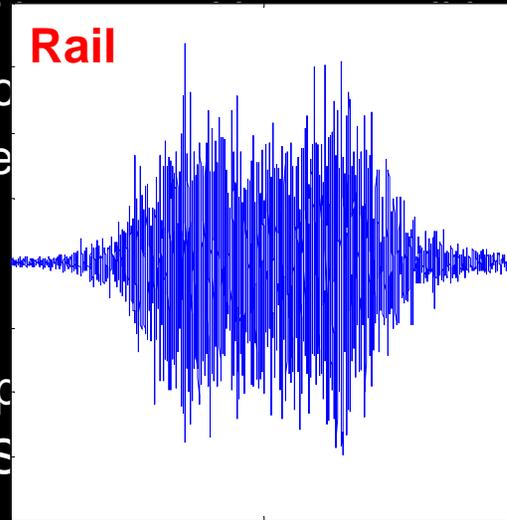
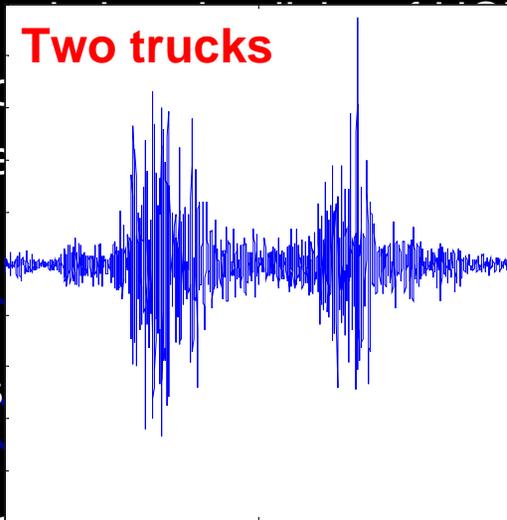
1. managed lanes/HOT lanes = **9.5** → best choice
2. rubber tire = **7.5** → a good technology, suitable for Honolulu
3. steel-wheel on steel-rail = **3.8** → unsuitable for Honolulu

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