5.0 Recommended Alternative

The recommended alternative for connecting the Marquam Hill area with the North Macadam District is Alternative 3, Gibbs Street Tram with Monocable Tram to Barbur. The rationale for this recommendation includes:

Travel Time - The Gibbs Street Tram exhibits the best and most reliable travel time of the six alternatives examined, and is well within the range of acceptable travel times for linking the two campuses.

Transit access - The Monocable Tram provides additional benefit by linking directly to the Barbur transit corridor, and is projected to carry around ____ passengers between Marquam Hill and Barbur Boulevard by 2020.

Neighborhood Livability - Out of the aerial alternatives, the Gibbs Street Tram provides the lowest level of impact on the adjacent neighborhood due to the lack of structures, noise, and the reduced number of vehicles moving overhead.

Maintenance considerations - Tram technology is the most reliable and mechanically simple of the aerial systems.

Long term cost analysis - Over the course of a thirty year period, the two tram system is the next to least costly of the six alternativs analyzed, and is only 10% more costly than the Shuttle Bus option over that period. The additional benefit derived for the marginal cost increase is a fast and reliable system with travel times at the end of the 30 year period the same as at the beginning.

Development impacts - An effective aerial system provides the economic spark for the North Macadam District, an area languishing for the past 15 years as an urban brownfield but now primed for redevelopment activity with OHSU as the central catalyst.

Table 5.1 provides a summary overview of the Alternatives Analysis presented in Chapter 4.

		Alternatives					
		1	2	3	4	5	6
	Travel Demand	0	Θ		Θ		
	Travel Time	0	lacksquare	ullet	$igodoldsymbol{\Theta}$	\bigcirc	0
Neighbrohood Impacts	Visual impacts (views to systems) Visual impacts – privacy Sound impacts Property Acquisition Property Values						
	Historic Resources Natural Resources Parking – in neighborhood		•		\bigcirc	00	00
	Terwilliger Character and Views	$\overline{\mathbf{\Theta}}$	Θ	\bigcirc	0	0	0
Transportation Access and Efficiency	Effect on Transit Choice Capacity Energy efficiency Accessibility (ADA) Existing Transit Connections Future Transit Connections Parking – at terminals						
Feasibility	Land availability Compatibility with Development Timely Implementation					000	000
	Implementation Costs	•	Θ	Θ	Θ	0	0
Maintenance/ Operations	Cost to operate Reliability Operation in Weather	• • •	○●	•	0		00
Public Safety	Disaster Relief/Operations Security Public Safety in Cabins Earthquake		•••••••••••••••••••••••••••••••••••••••	•	$\begin{array}{c} \bullet \\ \bullet \\ \bullet \\ \circ \\$	•	
Development Impacts	Support of related uses Catalyst for North Macadam Supports Economic Development	000	•	•			000
	SUMMARY	Θ	\bullet	\bullet	Θ	Θ	0
	AA AA	Table 5.1	Alternatives Analysis Summary Table				

5.1 Potential Mitigation Strategies

The recommended alternative, while the best among those examined, is not free of neighborhood impacts. As part of the continuing work on this process, potential mitigation strategies and efforts should continue to be explored, especially with an eye towards the following issues:

- Property Values along the alignment

- Views of the tram from within the surrounding neighborhood

- Views from the tram to the surrounding neighborhood

- Historic District issues

- Neighborhood traffic impacts

- Views from Terwilliger Parkway

Specific ideas have been discussed that may address these issues, including:

- South Portland Circulation Study Implementation (Figure 5.1)

- Utility Undergrounding in the Historic District

- Improved pedestrian access for South Portland neighborhoods to North Macadam, the Willamette River Greenway, Marquam Hill and Terwilliger Parkway (Flgure 5.2)

- Property value guarantees for properties along the tram alignment

These ideas, and others, should be explored in more detail as the project progresses to the Design Development level.



Figure 5.2 Potential Tower/Pedestrian Bridge over I-5



Figure 5.1 - South Portland Circulation Study - Recommended Street Improvements



5.2 Next Steps

PDOT recommends that the following steps be taken in the further consideration of the Gibbs Street Tram and Barbur Monocable Tram:

City Council should accept, by Resolution, this report and recommendation of the City Engineer.

City Council should **consider policy issues** related to the development of the recommended tram to determine whether sufficient policy is currently in place to address the recommendation, and whether further policy development is requred.

Mitigation strategies related to the tram and neighborhood livability improvements should be identified and developed, in concert with the community, in greater detail and presented to City Council as the process progresses.

The **Design Development phase** of the process should be initiated, including the establishment of design and historic resources criteria and the establishment of a potential design competition to generate design ideas for the tram.

Funding for continuing work on the process should be identifed. Until an established funding agreement is in place for implementing and operating the Tram, costs for further consideration of this recommendation should be recovered from OHSU, Portland Aerial Transportation, Inc., or other sources outside of the City.

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