

Tacoma Link Expansion Infrastructure, Planning and Sustainability Committee Tacoma City Council--Nov. 13, 2013



Timeline



- May, 2013: ST Board selected E1 Corridor serving Stadium and MLK districts
- ST and City staff worked together to identify specific route alignments, and conduct preliminary evaluation of alignments
- Current: Public review of alignments and preliminary evaluation
- Upcoming: ST Board, with City Council input, will determine which potential alignments should be advanced for more detailed evaluation through the environmental process

Project Goals

1. Improve **mobility** and transportation **access** for Tacoma
2. Increase transit **ridership**
3. Serve **underserved neighborhoods**
4. Spur **economic development**
5. **Environmentally sensitive, sustainable** project
6. Be competitive for **federal funding**




Expansion Design Standards

- Expansion will be to Tacoma Link vehicle standards
- Central Link light rail (from Seattle and the Airport) will require a transfer to go downtown/Stadium/Hilltop



Tacoma Link Light Rail • 66'

	LENGTH	WIDTH	HEIGHT	MPH/CARS	NO. PASSENGER	BIKE	WHEELCHAIR
Rail Car	66'	8'-1"	11'-3.5"	35/1	56	YES	YES



Central Link Light Rail • 190' (based on 2 passenger cars) **Opens 2009**

+400 Passengers
Expandable to cars: 4

	LENGTH	WIDTH	HEIGHT	MPH/CARS	NO. PASSENGER	BIKE	WHEELCHAIR
Rail Car	95'	8'-7"	12'-6"	55/4	200/car	YES	YES

Alignments for Screening prior to Env. Review

Tacoma Link Expansion

Alignment and Design Options Overview Alignments A1, A2, A3, B1, and B2

Legend

- Existing Alignment
- Existing Stations
- Potential Stations
- Sound Transit Maintenance Facility

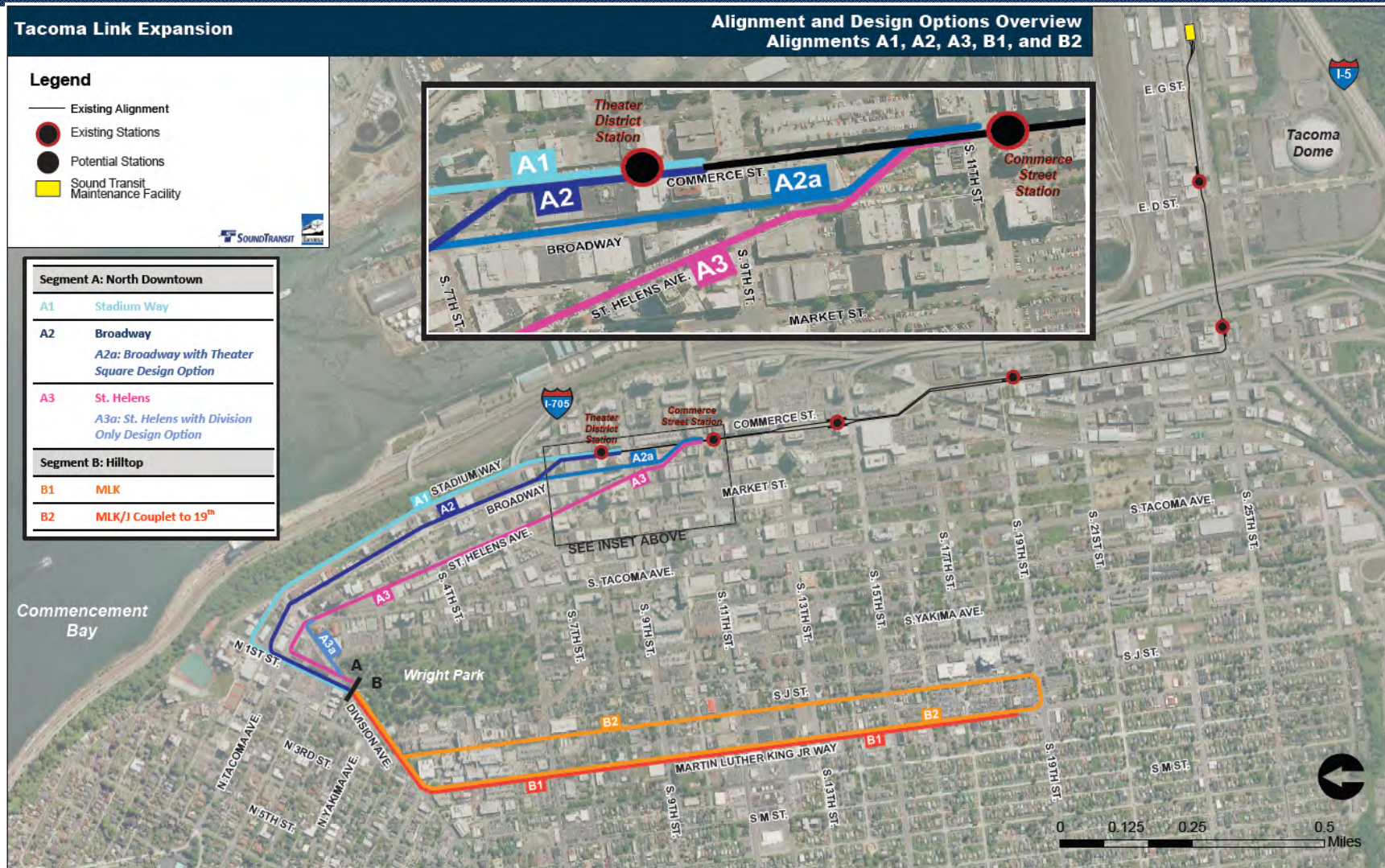


Segment A: North Downtown

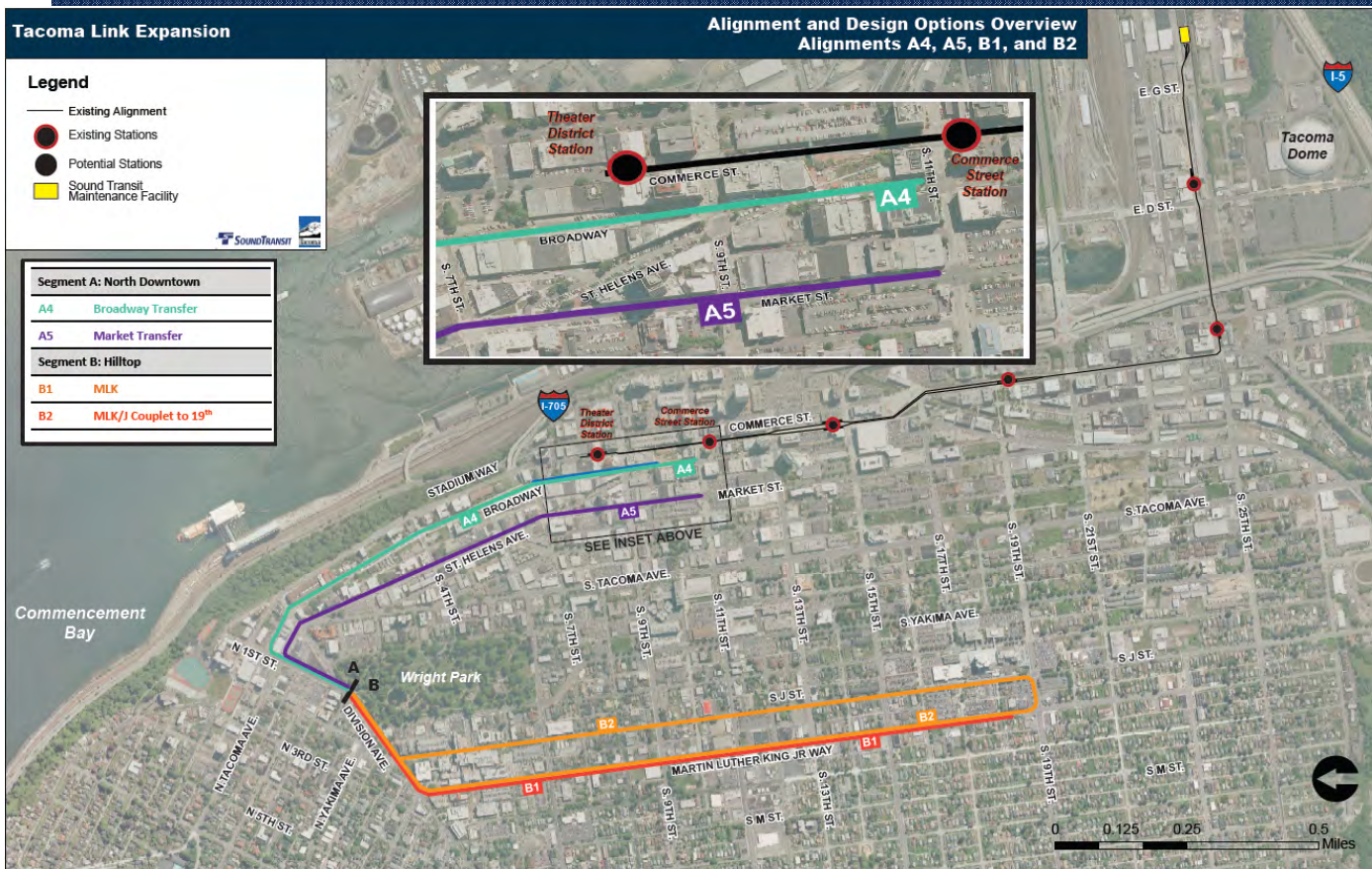
- A1** Stadium Way
- A2** Broadway
A2a: Broadway with Theater Square Design Option
- A3** St. Helens
A3a: St. Helens with Division Only Design Option

Segment B: Hilltop

- B1** MLK
- B2** MLK/J Couplet to 19th



Transfer Alignments



- 30% Reduction in ridership
- Passengers perceive penalty due to inconvenience
- Adds 5 to 10 minutes to travel time

Conclusion: Transfer Alignments do not meet purpose and need of project

Evaluation Criteria

**For each route considered, we asked these questions.
Would this route:**

- Improve travel time to Tacoma Dome Station?



- Avoid major environmental and community impacts?



- Serve community destinations?



- Spur economic development and other types of investments?



- Ensure the project is affordable and cost-effective to construct?



Community & Environmental Impacts

-Differentiating Criteria

Impact categories:

- Property acquisitions, potential displacements
- Parks and community facilities
- Parking
- Transportation
- Utilities
- Construction
- Consistency with land use plans
- Natural resources
- Historic resources
- Visual
- Environmental justice
- Noise Receptors

Community Facilities

- Broadway Design option A2a and St. Helens A3 and A3a impact Theater Square and may interrupt community events, i.e., Broadway Farmer's Market
- All other alignments would have no direct impacts



Transportation – On-Street Parking

Alignment	Number of Potentially Impacted Parking Spaces
A1 Stadium Way	15
A2 Broadway	15
A2a Broadway with Theater Square Design Option	15
A3 St. Helens	65
A3a St. Helens with Division Only Design Option	65
B1 MLK	25
B2 MLK/J Couplet	30

Transportation – Bicycle Operations

Reviewed designated bicycle facilities in Mobility Master Plan:

Segment A:

- Potential conflicts along Broadway, St. Helens between 7th and 9th and N 1st between Stadium and Tacoma Ave.

Segment B:

- Potential conflict along J street (B2 MLK/J Couplet)



Utilities

- A1 Stadium Way fewer utility conflicts than other alignments due to recent reconstruction
- All other alignments have potential impacts to sewer, storm drain, telecommunications, water, and electrical utilities

Construction

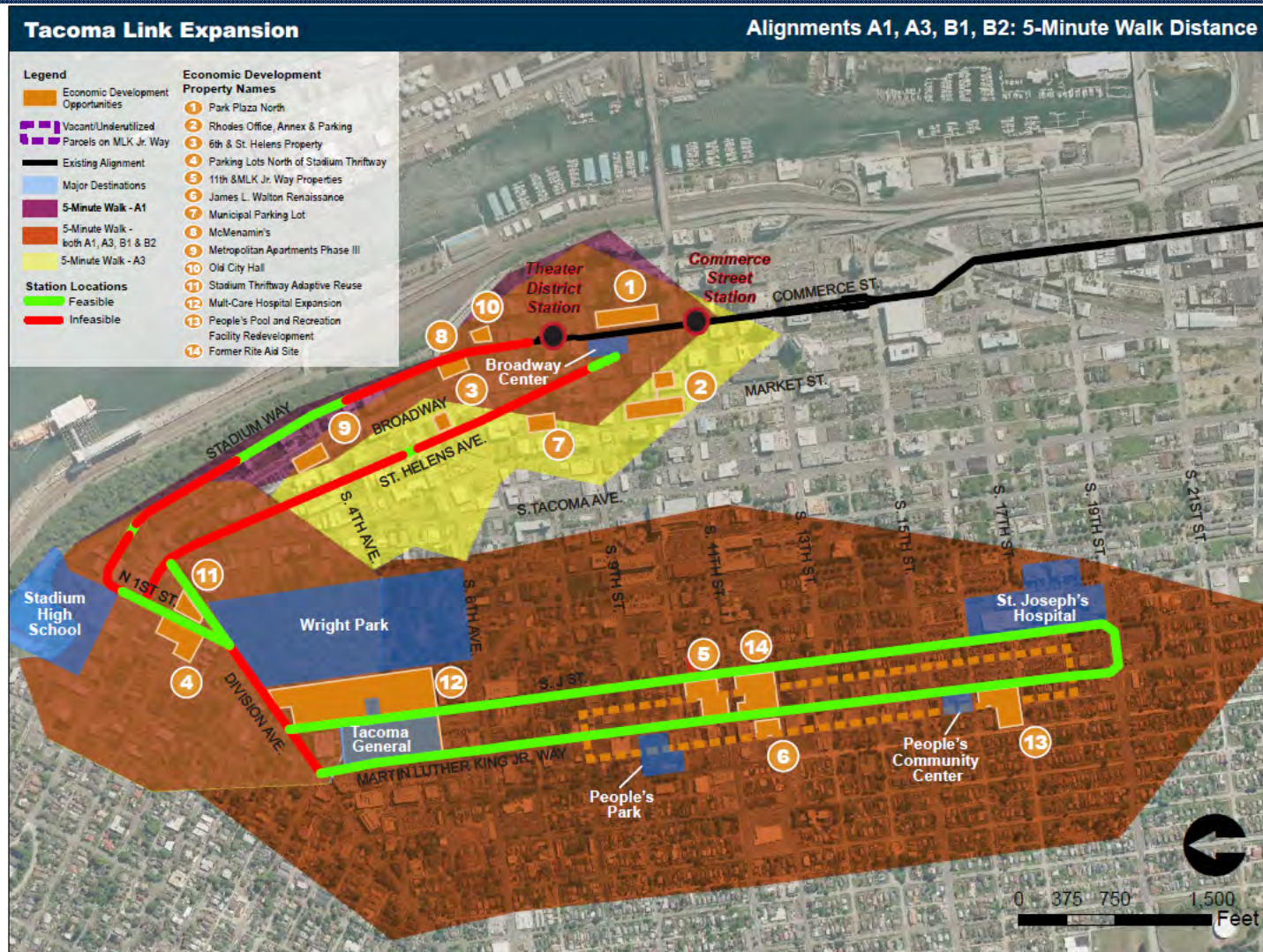
- A2 Broadway would involve construction of a retaining wall and potential impacts to streets and streetscape
- A2a Broadway Design Option and A3 St. Helens options would involve construction of a retaining wall, a reconstructed plaza, and potential impacts to the streets and streetscape
- A3 St. Helens would also involve widening of the street between 7th St and 9th St
- Stadium, Broadway, and a portion of St. Helens have recent street improvements.

Markets and Major Destinations Served



- Transit market is considered 5 minute walk distance from potential station locations
- Actual station locations to be determined in next phase
- Potential station locations shown where grades 2% or less

Stadium, St. Helens, Hilltop: 5 Min Walk Distance



A1 Stadium: 5 minute walk distance



A2 Broadway: 5 minute walk distance



PHOTOGRAPH BY GUY LAWRENCE
 COURTESY OF SOUNDTANSIT



A3 St. Helens: 5 minute walk distance



Economic Development Potential

Transit-Oriented Development

“Transit oriented development (TOD) generally refers to higher-density development, with pedestrian priority, **located within easy walking distance** of a major public transit station or stop(s)”

(Transit Cooperative Research Program)

“Typically, a TOD project has the following characteristics: **planning boundaries within a quarter- to a half-mile radius of a transit facility (a comfortable walking distance)**”

(Puget Sound Regional Council)

Economic Development Potential

Methodology:

Identified potentially redevelopable parcels within the walk distances (“underutilized” parcels--ratio of current building value to land value less than 150%)

- Acres
- Percentage of parcels



Economic Development Potential

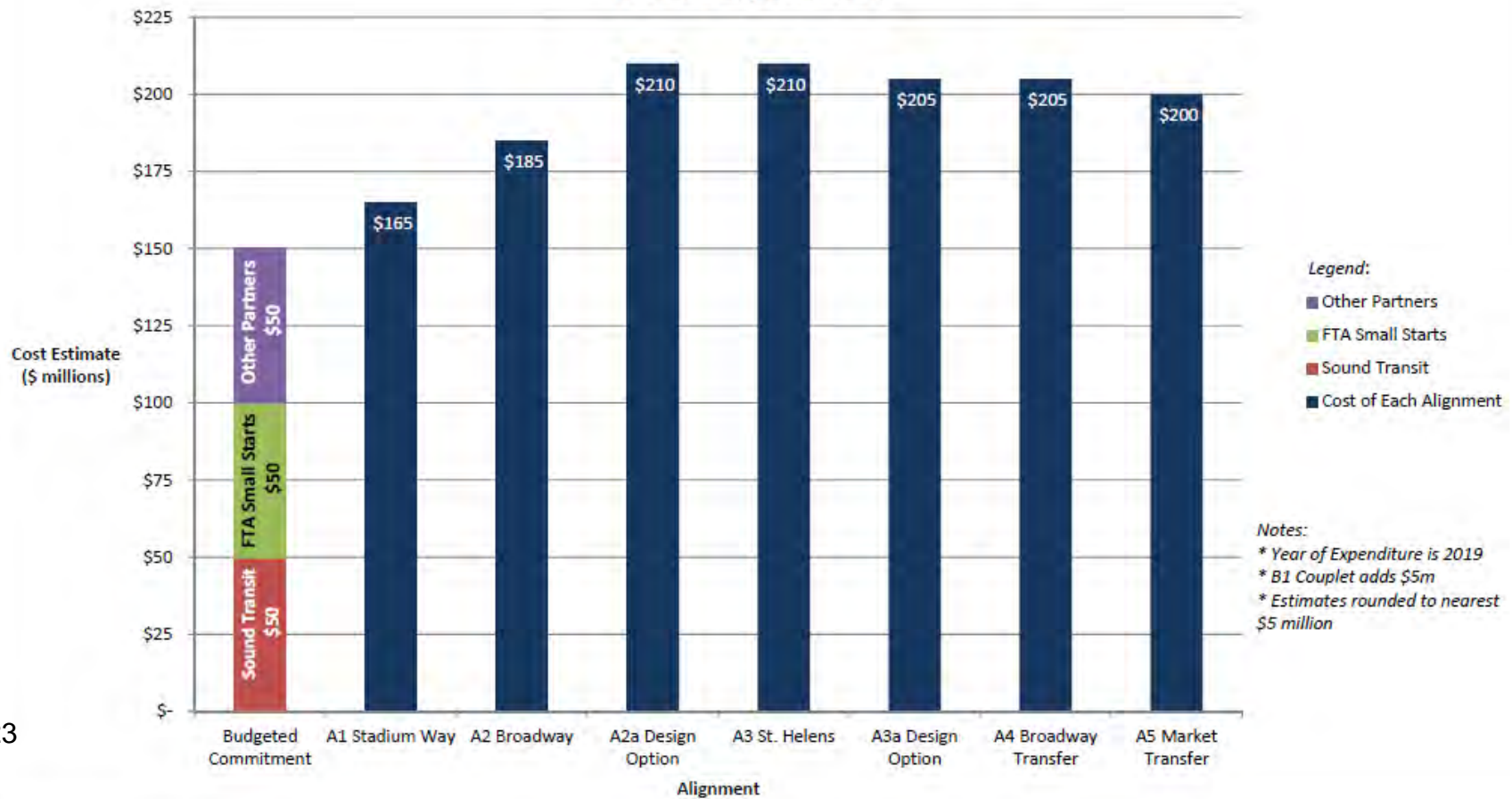
Alignment	Total acres of redevelopable parcels	%age of redevelopable parcels
A1 Stadium Way	30	28%
A2 Broadway	39	31%
A2a Broadway with Theater Square Design Option	39	31%
A3 St. Helens	42	29%
A3a St. Helens with Division Only Design Option	42	29%
B1 MLK	88	36%
B2 MLK/J Couplet	88	36%

Cost

- Work with the City and the community to identify a project that is the right fit for Tacoma.
- ST's cost estimates during the Alternatives Analysis (AA) phase were high-level estimates based on generalized unit costs from other projects
- AA cost estimates were used to compare corridors
- Currently, developing cost estimates based on 5% engineering and specific street alignments. However, no survey or field work has been performed yet.

Capital Cost Comparison

Tacoma Link Expansion
Capital Cost by Alignment
Year of Expenditure



Cost estimates for three of the alignments & Cost Savings Options

- The project is at **5%** engineering and the cost estimates will continue to be refined.
- Depending on the alignment, the budget and revenue assumptions may need to be revisited.

	A1-B1 Stadium-MLK	A2-B1 Broadway-MLK	A3-B1 St Helens-MLK
Terminus at 19th	\$165M	\$185M	\$210M
Interim Terminus at 11 th	\$150M	\$170M	\$190M
Interim Terminus at 6 th	\$135M	\$155M	\$175M
Single Track, MLK to 19th	\$160M	\$180M	\$205M
20 min. headway	\$150M	\$170M	\$190M

B2 Couplet adds \$5M

All above are rounded to nearest \$5 million. YOES\$ assuming midpoint of construction in year 2019.

All design options impact ridership, 20 minute headways have the most impact on ridership.

Single Track would reduce the planned 10-minute headways to 12-15 minutes.

Involving the Community

Sound Transit is looking to involve the community through:

- Neighborhood council and business district briefings
- Stakeholder Roundtable discussions
- Online survey
- Website
- Mailings, print and online ads
- Community Open House

Jan. 9, 4-7 p.m. at Stadium High School,
Auxiliary Gym





Questions?



