

APPENDIX A - ALIGNMENT EVALUATION PROCESS

Table 1. Alignment Options - Summary Evaluation Table

Evaluation Category	North/South		East/West			Loop	
	A N/S Franklin Street	B N/S Tampa Street- Florida Avenue Couplet	C E/W West River- Ybor City	D E/W North Hyde Park-Channel District	E E/W North Hyde Park-Convention Center Couplet	F Loop Downtown- Channel District	G Loop Downtown- Ybor City
Alignment Information							
Track Miles	2.67	2.60	4.66	4.94	3.27	2.46	4.12
Number of Vehicles	4	4	7	7	5	4	6
Capital Costs (\$2017)	\$94 million	\$97 million	\$174 million	\$180 million	\$124 million	\$91 million	\$138 million
Annual O&M Costs	\$3.6 million	\$3.6 million	\$6.2 million	\$6.2 million	\$4.4 million	\$3.6 million	\$5.3 million
Average Weekday Boardings (2020)	2,200	2,200	2,450	2,700	1,500	2,300	2,300
Population & Employment within 1/4 mile (2020)	20,600	24,100	29,900	31,200	15,100	20,400	22,000
Purpose & Need Considerations							
Connect Downtown Districts	●	●	●	●	●	●	●
Serve Diverse Travel Markets	●	●	●	●	●	●	●
Improve First Mile/Last Mile Connections	●	●	●	●	●	●	●
Support Economic Development	●	●	●	●	●	●	●
Expand Sustainable Transportation Options	●	●	●	●	●	●	●
Performance & Impact							
Population & Employment Served	●	●	●	●	●	●	●
Capital & Operating Costs	●	●	●	●	●	●	●
Cost Effectiveness	●	●	●	●	●	●	●
Constructability/Operational Constraints	●	●	●	●	●	●	●
Traffic & Parking Impacts	●	●	●	●	●	●	●
Community & Environment Impacts	●	●	●	●	●	●	●
OVERALL RATING							
	●	●	●	●	●	●	●

Table 2. Alignment Options - Detailed Evaluation Table

CATEGORY MEASURES SUBMEASURES	Alignment A N/S Franklin		Alignment B N/S Tampa-Florida Couplet		Alignment C E/W West River-Ybor		Alignment D E/W North Hyde Park-Channel District		Alignment E E/W North Hyde Park- Convention Center Couplet		Alignment F Loop Downtown-Channel District		Alignment G Loop Downtown-Ybor	
	MEASURE	RATING	MEASURE	RATING	MEASURE	RATING	MEASURE	RATING	MEASURE	RATING	MEASURE	RATING	MEASURE	RATING
Purpose & Need Considerations														
Connect Downtown Districts														
Serves Downtown Core	yes	5.0 ●	yes	5.0 ●	yes	5.0 ●	yes	5.0 ●	no	1.0 ●	yes	5.0 ●	yes	5.0 ●
Serves emerging subdistricts		1.8 ●		1.8 ●		3.0 ●		2.6 ●		1.8 ●		1.8 ●		2.2 ●
Tampa Heights	yes	5	yes	5	no	1	no	1	no	1	no	1	yes	5
Grand Central/UT	no	1	no	1	partial	3	partial	3	partial	3	no	1	no	1
Central Park/Encore!	no	1	no	1	partial	3	partial	3	no	1	yes	5	partial	3
North Hyde Park	no	1	no	1	partial	3	yes	5	partial	3	no	1	no	1
West River	no	1	no	1	yes	5	no	1	no	1	no	1	no	1
	AVERAGE RATING	3.4 ●		3.4 ●		4.0 ●		3.8 ●		1.4 ●		3.4 ●		3.6 ●
Serve Diverse Travel Markets														
Serves the greatest population/employment within 1/4 mile (2020) - extension only		3.0 ●		3.0 ●		4.0 ●		4.0 ●		1.0 ●		4.0 ●		3.0 ●
Population/employment within 1/4 mile (2020) - extension only	20,639	3	24,080	3	29,865	5	31,202	5	15,075	1	20,393	3	21,962	3
Acreage within 1/4 mile buffer - extension only	434	*	483	*	626	*	640	*	569	*	231	*	486	*
Average Activity Density within 1/4 mile (2020) - extension only	48	3	50	3	48	3	49	3	26	1	88	5	45	3
Provides access for transit-dependent population within 1/4 mile		2.0 ●		2.0 ●		3.0 ●		2.0 ●		1.0 ●		1.5 ●		2.5 ●
High (Central Park/Encore)	no	1	no	1	partial	3	no	1	no	1	partial	3	partial	3
High (West River)	no	1	no	1	yes	5	no	1	no	1	no	1	no	1
Moderate (Tampa Heights)	yes	5	yes	5	no	1	no	1	no	1	no	1	yes	5
Moderate (North Hyde Park)	no	1	no	1	partial	3	yes	5	no	1	no	1	no	1
Connects major destinations and parks within 1/4 mile	11	5.0 ●	12	5.0 ●	12	5.0 ●	11	5.0 ●	3	1.0 ●	8	3.0 ●	11	5.0 ●
# cultural/entertainment/tourism venues	6	*	6	*	7	*	7	*	2	*	5	*	6	*
# educational institutions (UT, Stetson, Brewster)	2	*	2	*	1	*	1	*	0	*	0	*	2	*
# parks	3	*	4	*	4	*	3	*	1	*	3	*	3	*
	AVERAGE RATING	3.3 ●		3.3 ●		4.0 ●		3.7 ●		1.0 ●		2.8 ●		3.5 ●
Improve First Mile/Last Mile Connections														
Provides connection to existing regional transit hubs		5.0 ●		5.0 ●		4.0 ●		2.0 ●		1.0 ●		2.0 ●		5.0 ●
# blocks from Marion Transit Center (MTC)	2	5	1	5	3	4	6	2	12	1	6	2	2	5
Provides connection to existing regional & local transit services		2.7 ●		4.0 ●		4.7 ●		4.0 ●		2.3 ●		3.7 ●		3.7 ●
# blocks from Tampa Union Station	6	2	5	3	1	5	1	5	12	1	0	5	6	2
# blocks from Greyhound station	3	4	2	5	1	5	4	4	10	1	1	5	3	4
# bus stops located within 2 blocks of alignment	23	2	30	4	33	4	26	3	39	5	16	1	38	5
Provides connection to potential new regional transit hubs		5.0 ●		5.0 ●		4.0 ●		4.0 ●		2.0 ●		3.0 ●		5.0 ●
# regional transit corridors serving Downtown intersected (4 max)	4	5	4	5	3	4	3	4	1	2	2	3	4	5
	AVERAGE RATING	4.2 ●		4.7 ●		4.2 ●		3.3 ●		1.8 ●		2.9 ●		4.6 ●

Table 3. Preferred Alternative - Detailed Evaluation Table

Decision Factor	Measure	Florida Brorein to Harrison				Florida Harrison to Palm	Tampa Palm to Harrison		Tampa Tyler to Kennedy		Tampa Kennedy to Whiting	Franklin Tyler to Palm
		1.1	1.2	1.3	1.4	2.1	3.1	3.2	4.1	4.2	5.1	6.1
		W Exclusive	W Shared	E Exclusive	E Shared	E Shared	E Exclusive	E Shared	E Exclusive	E Shared	E Shared	E Shared
Maximizes Transit Travel Time Reliability		● 5.0	● 2.3	● 5.0	● 3.0	● 2.0	● 5.0	● 3.7	● 5.0	● 2.3	● 1.0	● 1.7
Transit Travel Time Reliability	5 if exclusive / 1 if shared	5.0	1.0	5.0	1.0	1.0	5.0	1.0	5.0	1.0	1.0	1.0
Potential for Parking to Block Guideway	5 if no shared lane adjacent to parking / 1 if adjacent	5.0	1.0	5.0	3.0	N/A	5.0	5.0	5.0	1.0	1.0	1.0
Turning Que Conflicts	5 if avoids turning ques and ramps / 3 if modest conflicts / 1 if significant	5.0	5.0	5.0	5.0	3.0	5.0	5.0	5.0	5.0	1.0	3.0
Minimizes Traffic, Bike Lane, & Parking Impacts		● 3.5	● 4.0	● 3.5	● 4.0	● 3.7	● 3.0	● 4.0	● 4.0	● 4.0	● 3.0	● 3.7
Traffic Impacts	5 if no lanes removed and exclusive / 3 if shared or exclusive lane removed / 1 if lane removed	5.0	3.0	5.0	3.0	3.0	5.0	3.0	5.0	3.0	3.0	3.0
Bike Lane Impacts	5 if remain / 3 if relocated / 1 if removed	3.0	5.0	3.0	5.0	3.0	3.0	5.0	3.0	3.0	3.0	N/A
On-Street Parking Impacts	5 if min loss or potential to add parking / 3 if mod loss / 1 if max loss	3.0	5.0	3.0	5.0	N/A	1.0	5.0	3.0	5.0	5.0	5.0
Driveway/Alley Access Crossings	5 if low number of curb cuts relative to segment / 3 if moderate / 1 if high	3.0	3.0	3.0	3.0	5.0	3.0	3.0	5.0	5.0	1.0	3.0
Allows for Shared Transit Use		● 5.0	● 1.0	● 3.0	● 5.0	● 5.0	● 5.0	● 1.0	● 5.0	● 1.0	N/A	● 5.0
Guideway Supports Shared Use	5 if all right side shared stop / 3 if both side stops required / 1 if no right side stop	5.0	1.0	3.0	5.0	5.0	5.0	1.0	5.0	1.0	N/A	5.0
Minimizes Costs for ROW & Street Reconstruction		● 2.7	● 3.3	● 2.0	● 3.3	● 2.7	● 2.0	● 2.7	● 3.3	● 3.3	● 5.0	● 2.0
Minimizes ROW Requirements	5 if no ROW / 3 if limited for stops / 1 if significant for alignment or turns	5.0	5.0	3.0	5.0	3.0	3.0	3.0	5.0	5.0	5.0	3.0
Minimize Street/Streetscape Reconstruction	5 if minimal impact (shared lane) / 3 if modest (transit lane) / 1 if significant	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	5.0	5.0	3.0
	TOTALS	● 4.0	● 2.7	● 3.4	● 3.8	● 3.3	● 3.8	● 2.8	● 4.3	● 2.7	● 3.0	● 3.1