Appendix C - HUB COMPARISON MATRIX

Factor Measured	Associated Goals and Objectives	Metric	ACE–BART Hubs			ACE–Capitol Corridor Hubs			ACE-only Hubs
			Union City BART	Shinn	Warm Springs BART	Ardenwood	Newark Junction	South of Newark Junction	Fremont-Centerville
Connecting Regional Services									
Connecting Rail and Major Bus Services	① Enhance Regional Connectivity and Equitable Access *Objectives: 1C*	BART	✓	✓	✓				
		Capitol Corridor				✓	✓	✓	
		ACE	✓	✓	✓	✓	✓	✓	✓
		Dumbarton Express	✓	✓	✓	✓	✓	✓	✓
		AC Transit (U-Line)				✓			
		Stanford Marguerite Shuttle	✓			✓			
Connectivity to Key Travel Markets and Destinations									
Regional Connectivity	① Enhance Regional Connectivity and Equitable Access *Objectives: 1B, 1C, 1D*	Service quality • Frequency • Service hours per day • Weekend / holiday service • Bi-directionality • Reliability and on-time performance	High	High	High	Medium	Medium	Medium	Low
		One-seat ride coverage	High	High	High	Medium	Medium	Medium	Low
		Employment catchment (# of jobs accessed efficiently)	High	High	High	Medium	Medium	Medium	Low to medium
		Connectivity to other key destinations • Hospitals • Colleges / universities • Airports • Sports venues • Convention centers and fairgrounds	High	High	High	Medium	Medium	Medium	Low
Local Connectivity and Land Use	④ Serve Surrounding Communities and Shape Growth *Objective: 4C*	• Future employment catchment • Land use and TOD potential • Specific plan approved or underway • Within or near identified PDAs	High	Low to Medium	High	Medium to High	Low	Medium	Medium to High
Equity Considerations									
Benefits and Burdens to Surrounding Disadvantaged Populations	① Enhance Regional Connectivity and Increase Equitable Access *Objective: 1A*	• Low-income populations • Minority populations • Elderly populations • Disabled populations • Nearby Communities of Concern • Housing vacancy • Rental communities • Rent-burdened households • Zero-vehicle households	Medium	Low	Medium	Medium	Low	Low to Medium	Low
Service Reliability									
Travel Times to Key Destinations*	② Enhance Service Reliability and Safety *Objective: 2C*	Downtown San Francisco	Fast	Fast	Medium	Slow	Slow	Slow	Slow
		Jack London Square (Oakland)	Medium	Medium	Slow	Fast	Fast	Fast	Slow
		Downtown Oakland	Fast	Fast	Medium	Slow	Slow	Slow	Slow
		Downtown Palo Alto	Medium	Medium	Slow	Fast	Medium	Slow	Fast
		Diridon Station (San Jose)	Medium	Fast	Fast	Slow	Slow	Slow	—
		Downtown San Jose	Medium	Fast	Fast	Slow	Slow	Slow	—
Level of Difficulty in Accommodating Anticipated Service Levels and Hub Facilities	② Enhance Regional Connectivity and Increases in Equitable Access ④ Serve Surrounding Communities and Shape Growth ⑤ Develop Feasible Infrastructure Improvements *Objectives: 2D, 4B, 5B*	Track expansion (for approach track and at the hub sites)	Low	Medium	Low	High	Medium	Medium	Medium
		Space for new station platform (including access facilities)	Low	Low	Low	Medium	Medium	Low	Low
		Space for connecting modes • Bus services • Employer shuttles • Pick-up / drop-off • Parking	Low	Low	Low	Low	Medium	Low	High
Potential Capital Improvement Cost									
Potential Capital Cost	⑤ Develop Feasible Infrastructure Improvements *Objective: 5A*	Low = less than $25 million Medium = $25–100 million High = more than $100 million	Medium	High	Medium	Medium	Medium	Medium	Low
Consistency with CSRP and Operator Plans for Midterm Horizon									
Consistency with Mid-Term Operator Plans	② Enhance Service Reliability and Safety *Objective: 2A*		High	Low to Medium	High	High	Low	Low	Low

*Travel times included an origin point at Pleasanton ACE Station and include transfers from ACE to connecting rail and bus services.

Objectives Key

Goal #1: Enhance Regional Connectivity and Equitable Access
Objective 1A: Provide enhanced access for priority populations across the Northern California Megaregion
Objective 1B: Increase connections to destinations, including major employers, healthcare facilities, higher education, and entertainment
Objective 1C: Enhance transit connections to provide seamless service between key markets
Objective 1D: Provide opportunities for multimodal access

Goal #2: Enhance Service Reliability and Safety
Objective 2A: Maximize consistency with 2018 CSRP and contribute to the 2022 CSRP
Objective 2B: Achieve operator service frequency goals in the Mid-Term and Long-Term Horizons
Objective 2C: Reduce travel times and increase reliability of megaregional and regional trips
Objective 2D: Maintain freight rail reliability and/or capacity
Objective 2E: Avoids significant impacts to passenger loading on BART
Objective 2F: Ability of hub to provide necessary station staff access, and emergency vehicle and personnel access and egress

Goal #3: Promote Sustainability and Resiliency
Objective 3A: Provide environmental benefits and avoids impacts
Objective 3B: Provide a resilient and sustainable hub location(s)
Objective 3C: Reduce vehicle miles traveled
Objective 3D: Reduce greenhouse gas and improve air quality

Goal #4: Serve Surrounding Communities and Shape Growth
Objective 4A: Provide compatibility with current and/or future land uses
Objective 4B: Provide convenient access to the rail network from surrounding community
Objective 4C: Conform with local and regional plans and priorities
Objective 4D: Promote transit-supportive land use potential
Objective 4E: Increase opportunities for economic development potential

Goal #5: Develop Feasibility Infrastructure Improvements
Objective 5A: Deliver a cost-effective hub with a favorable cost-benefit ratio that can be delivered in the Mid-Term
Objective 5B: Define a constructible hub that can be delivered in the Mid-Term
Objective 5C: Deliver a hub that avoids or minimizes impacts to existing rail operations for rail operators and BART