

EXPRESS BUS IMPLEMENTATION PLAN

Board Meeting
December 13, 2019



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Background

- Follow-up to High Capacity Transit (HCT) Study (2017)
 - Recommended freeway-based express bus service on I-80
 - New service to Berkeley, Emeryville and Oakland
 - Expanded service to San Francisco
 - Parking upgrades and freeway ramp improvements at Hercules Transit Center and Richmond Parkway Transit Center



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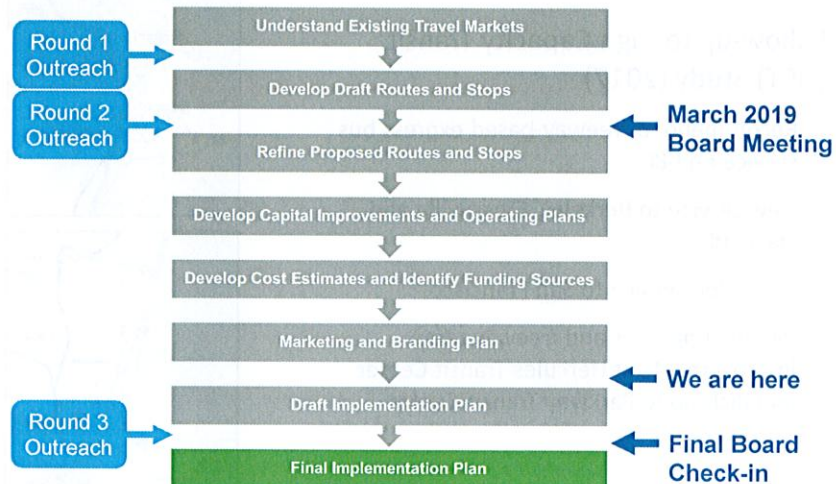
Desired Project Outcomes

- Determine optimal and sustainable express bus routing
- Identify capital improvements necessary for transit access and priority
- Identify operating costs and develop funding plan
- Establish implementation steps
- Engage community and build awareness
- Prepare marketing and branding plan



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Project Process



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EXPRESS BUS IMPLEMENTATION PLAN

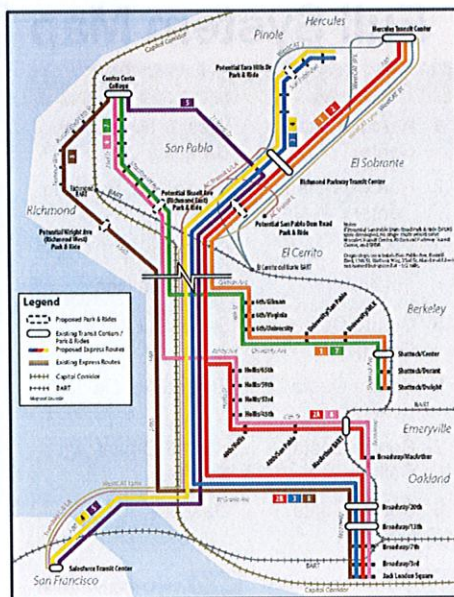
Proposed Routes and Prioritization



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System Summary

- 8 proposed routes
- All operate partially on I-80
- All serve at least one park & ride in West County
- Half originate in WestCAT's and half in AC Transit's service areas



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Service Characteristics

- Peak-period service initially
 - Potential to expand to all-day
- 15-minute frequency during peak-periods
- Proposed fares align with existing service depending on alignment
 - Transbay, Rapid, Local or a blend
- Use commuter coaches
 - Double-decker, WiFi, and other comfort features currently on Transbay services



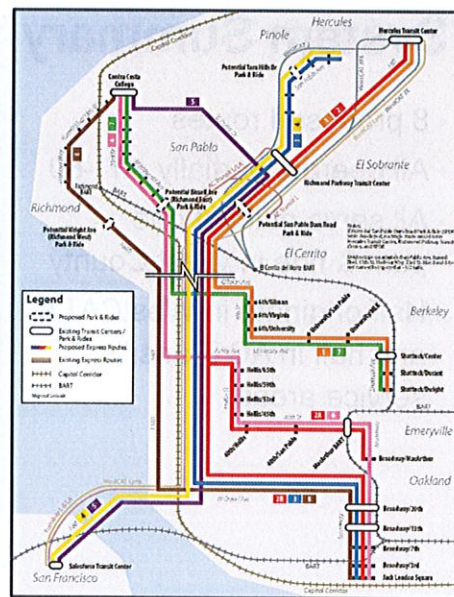
Photo credit: AC Transit

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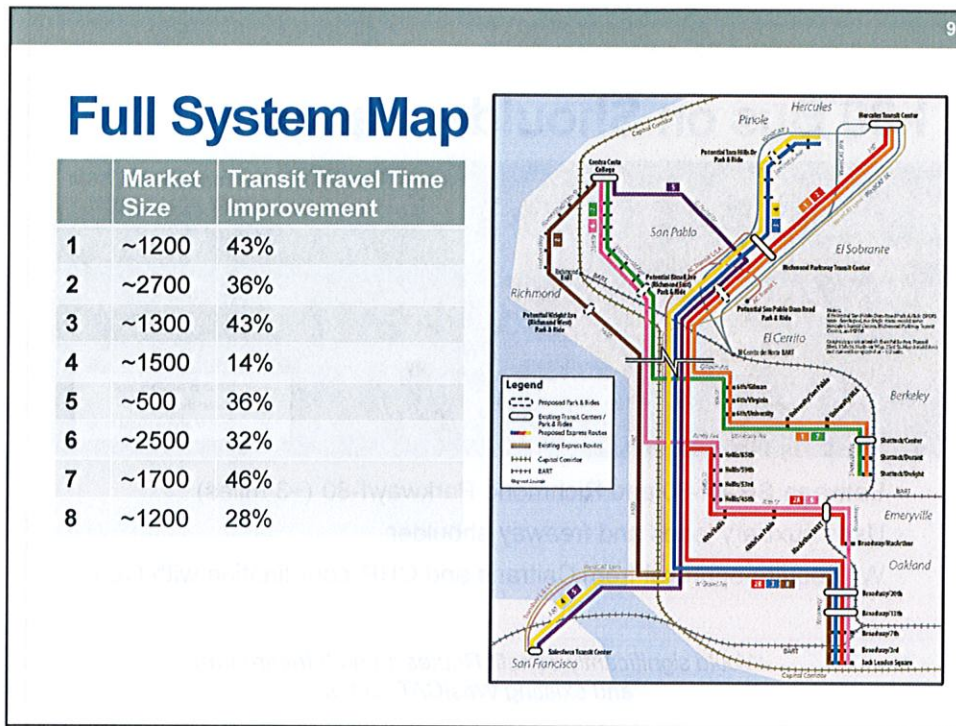
Full System Map

	Origin	Destination
1	Hercules Transit Center	West & Downtown Berkeley
2	Hercules Transit Center	Emeryville, Oakland
3	Pinole	Oakland
4	Pinole	San Francisco
5	Contra Costa College	San Francisco
6	Contra Costa College	Emeryville, Oakland
7	Contra Costa College	West & Downtown Berkeley
8	Contra Costa College	Oakland

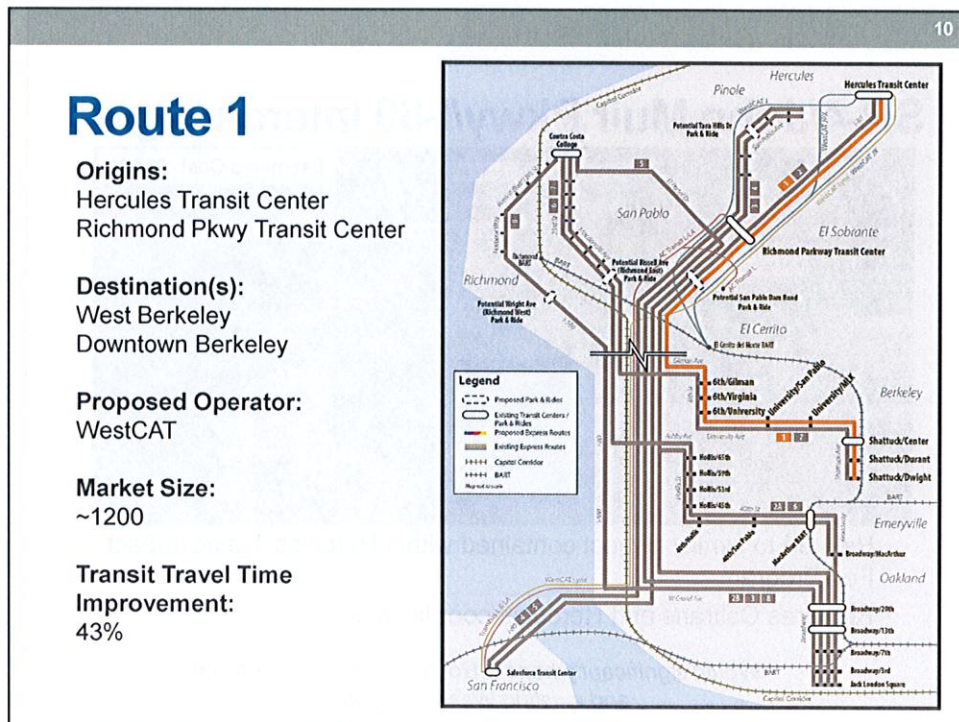
Operated by WestCAT
 Operated by AC Transit



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I-80 Bus on Shoulder Lanes



Estimated Cost: \$6M

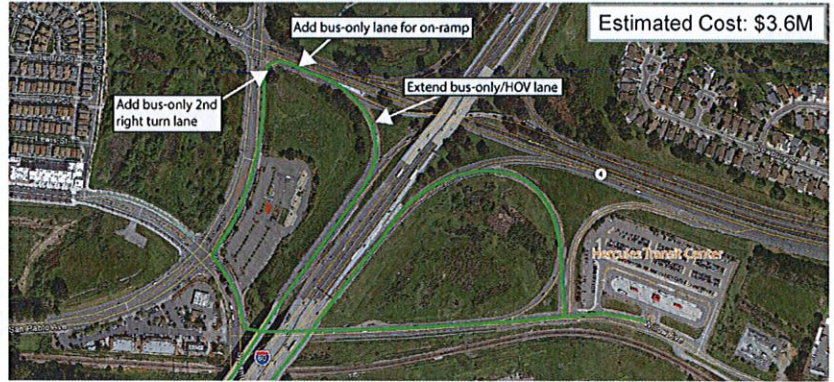
- Between SR-4/I-80 and Richmond Parkway/I-80 (~3 miles)
- Uses auxiliary lanes and freeway shoulder
- Will require approval from Caltrans and CHP, coordination with CCTA

Would significantly benefit Routes 1 and 2 (near-term) and existing WestCAT routes

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SR-4/John Muir Pkwy/I-80 Interchange



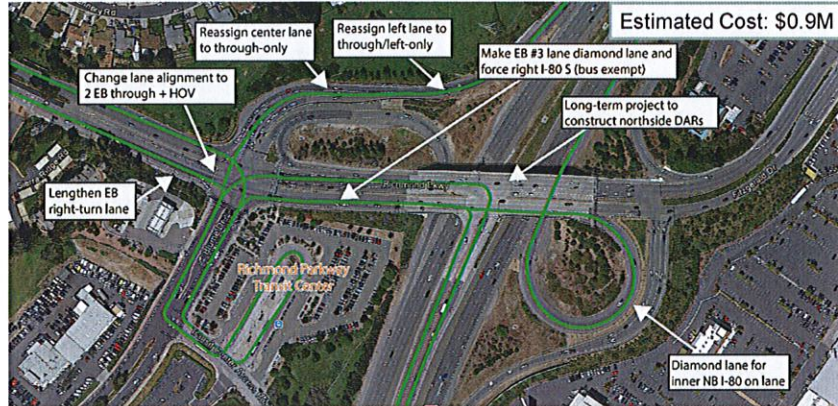
Estimated Cost: \$3.6M

- Related to similar project contained within Hercules Traffic Impact Fee Program
- Requires Caltrans and Hercules coordination

Would significantly benefit Routes 1 and 2 (near-term) and existing WestCAT routes

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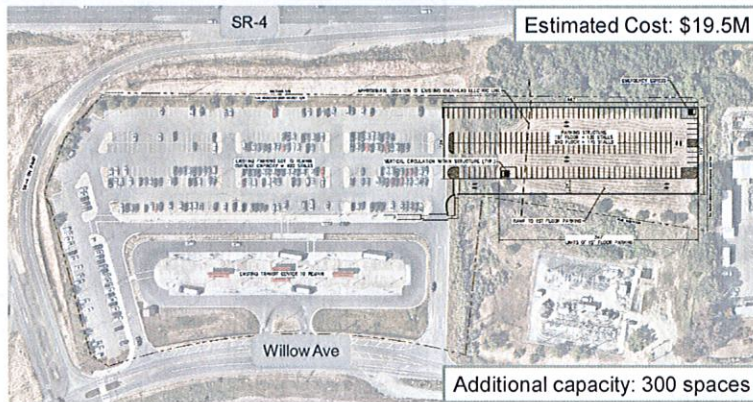
Richmond Parkway/I-80 Interchange



- Requires coordination with Caltrans and Richmond

Would significantly benefit Routes 1, 2 (near-term), 3, and 4 (near-term) and existing WestCAT and AC Transit routes

Hercules Transit Center



- Requires coordination with BART, WestCAT, and Hercules
- Can be constructed with minimal impact to existing parking

Would significantly benefit Routes 1, 2 (near-term) and existing WestCAT routes

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Richmond Parkway Transit Center

Estimated Cost: \$46.5M

Additional capacity: 397 spaces

- Requires coordination with Caltrans, AC Transit, and Richmond
- Would require multi-stage construction plan to minimize impacts

Would significantly benefit Routes 1, 2 (near-term), 3, 4 (near-term) and existing AC Transit and WestCAT routes

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Route 2

Origins:
Hercules Transit Center
Richmond Pkwy Transit Center

Destination(s):
Emeryville
Kaiser Permanente Oakland
Uptown Oakland
Downtown Oakland

Proposed Operator:
WestCAT

Market Size:
~2700

Transit Travel Time Improvement:
36%

Legend

- Proposed Park & Ride
- Existing Transit Centers / Park & Ride
- Proposed Express Routes
- Existing Express Routes
- Capital Corridor
- BART
- Maped routes

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Ashby Ave/I-80 Interchange

- ACTC currently leading a project with Caltrans, Emeryville, and Berkeley to reconfigure Ashby/I-80 interchange
- Construction planned for 2022-2025
- Recommend bus-only lane for EB I-80 on-ramp
- Requires coordination with ACTC and other project partners



Would significantly benefit Routes 2 (near-term) and 6 (near-term)

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Route 2A

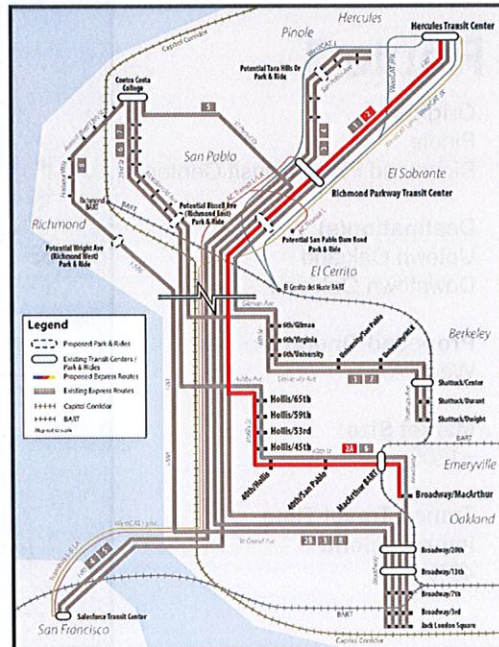
Origins:
Hercules Transit Center
Richmond Pkwy Transit Center

Destination(s):
Emeryville
Kaiser Permanente Oakland

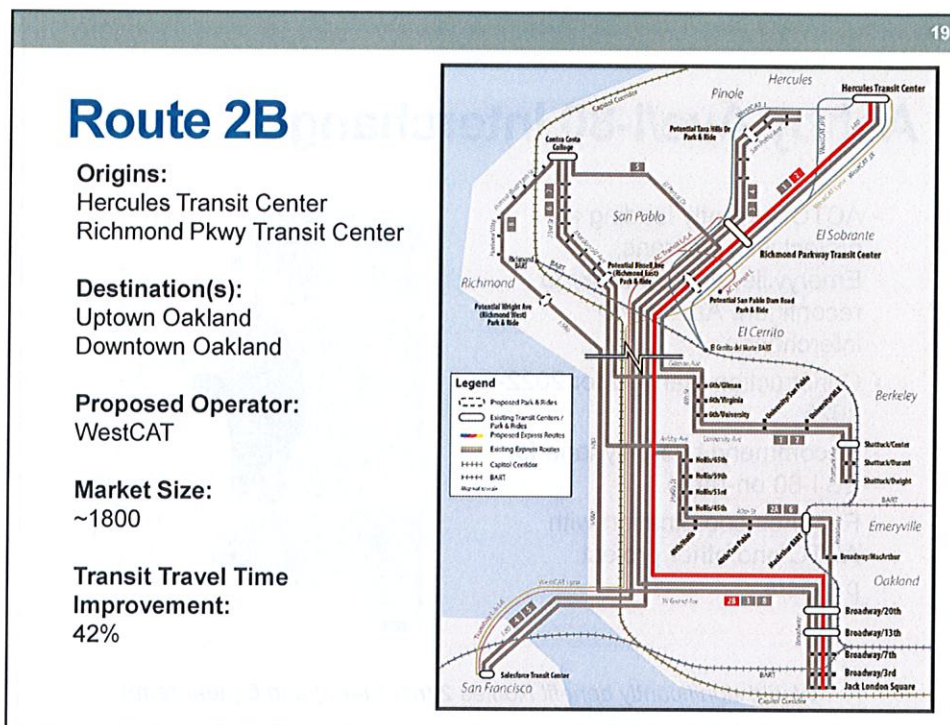
Proposed Operator:
WestCAT

Market Size:
~900

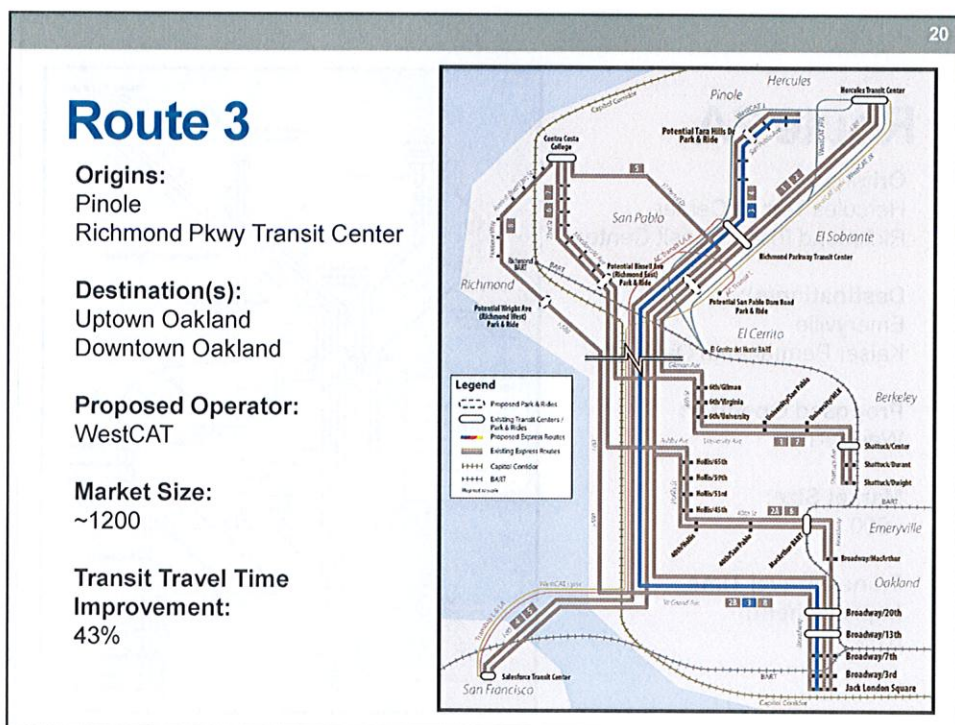
Transit Travel Time Improvement:
61%



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Tara Hills Drive Park & Rides

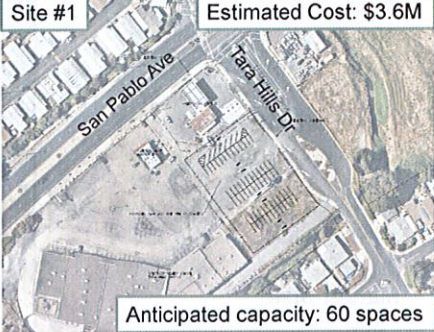
Site #2



Estimated Cost: \$13.3M

Anticipated capacity: 210 spaces

Site #1



Estimated Cost: \$3.6M

Anticipated capacity: 60 spaces

- Two sites at San Pablo Ave/Tara Hills Drive (unincorporated County)
- Serves Pinole and unincorporated County
- Richmond Parkway at capacity and Hercules Transit Center requires backtracking

Required for effective deployment of Routes 3 and 4 (near-term)

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Route 4

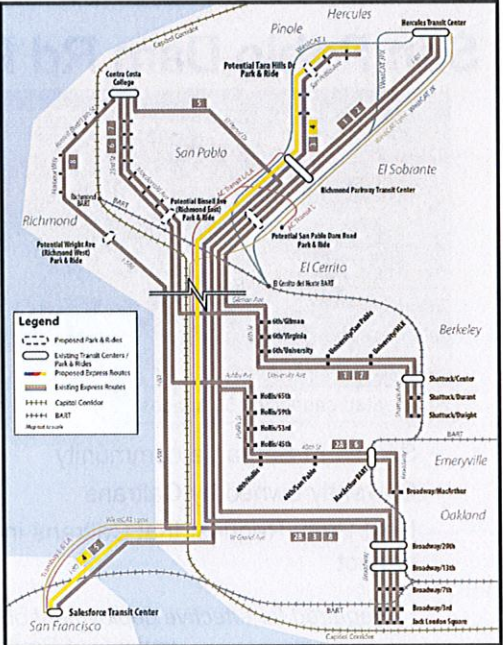
Origins:
Pinole
Richmond Pkwy Transit Center

Destination(s):
Salesforce Transit Center

Proposed Operator:
WestCAT

Market Size:
~1500

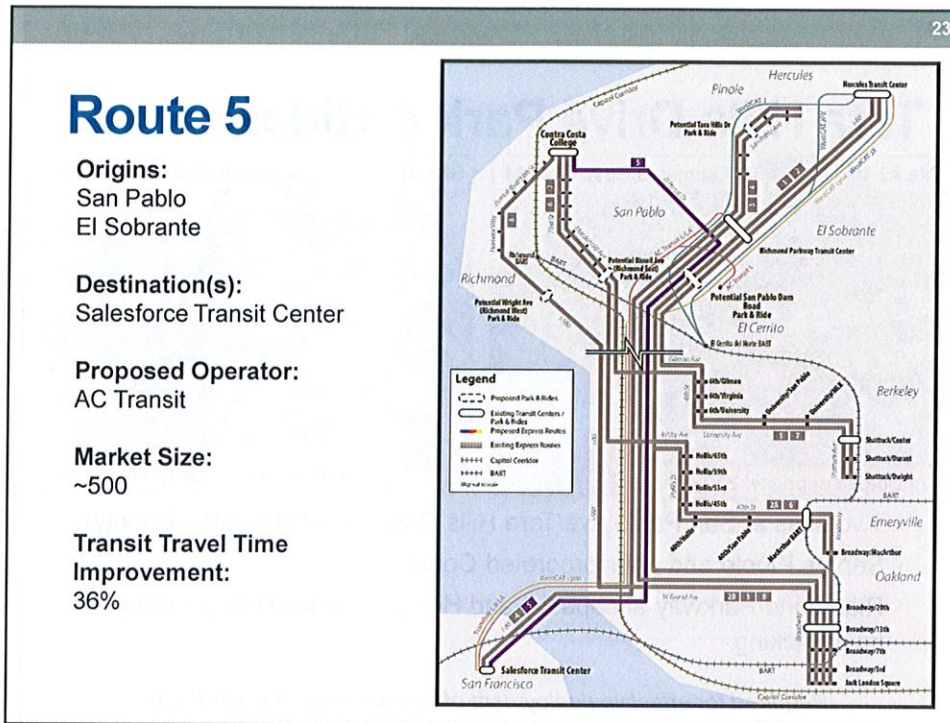
Transit Travel Time Improvement:
14%



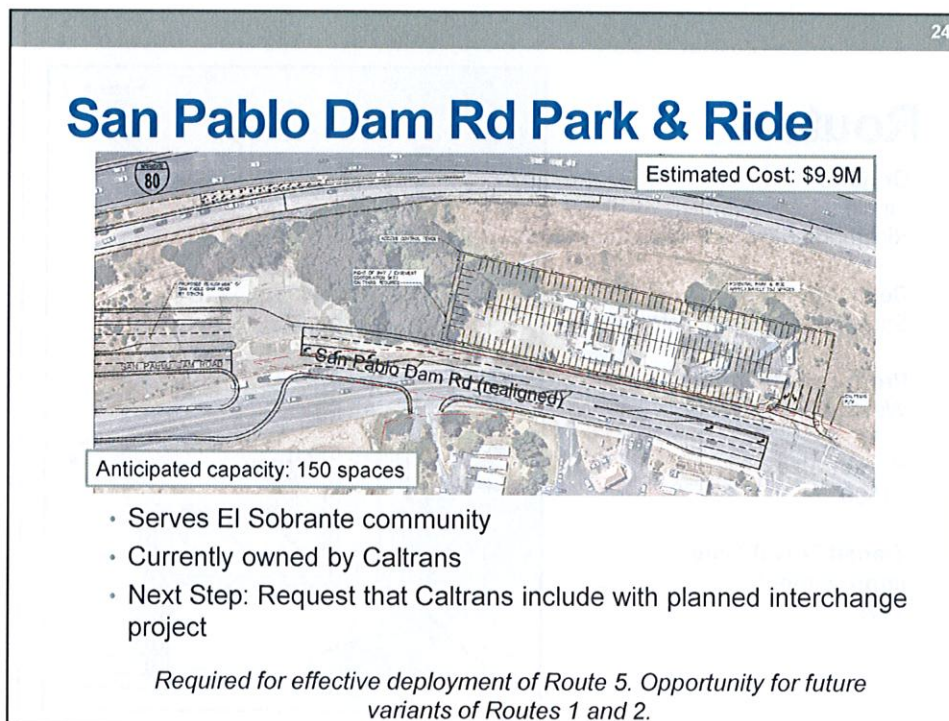
Legend

- Proposed Park & Rides
- Existing Transit Centers / Park & Rides
- Proposed Express Routes
- Existing Express Routes
- Capital Corridor
- BART
- Map data source

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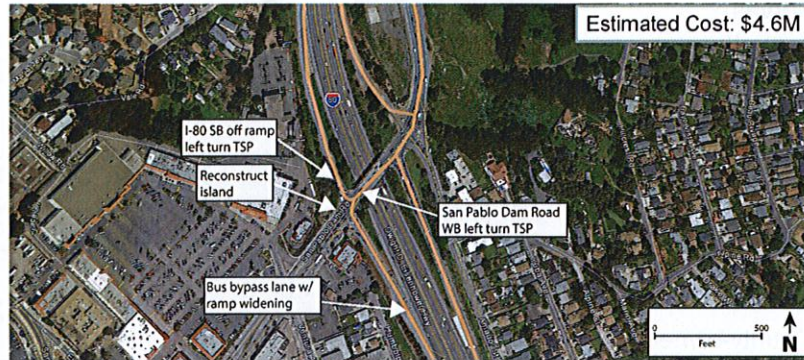


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San Pablo Dam Road/I-80 Interchange



- For consideration if interchange project does not advance or as elements to incorporate into interchange project
- Next step: Communicate request to Caltrans

Would significantly benefit Route 5 and existing AC Transit routes

Route 6

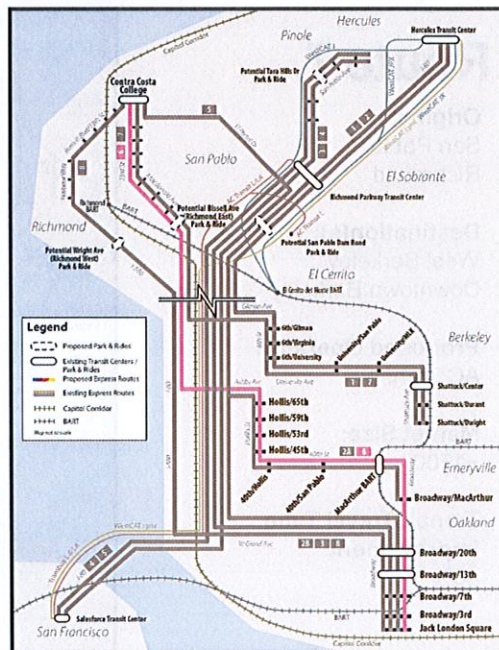
Origins:
San Pablo
Richmond

Destination(s):
Emeryville
Kaiser Permanente Oakland
Uptown Oakland
Downtown Oakland

Proposed Operator:
AC Transit

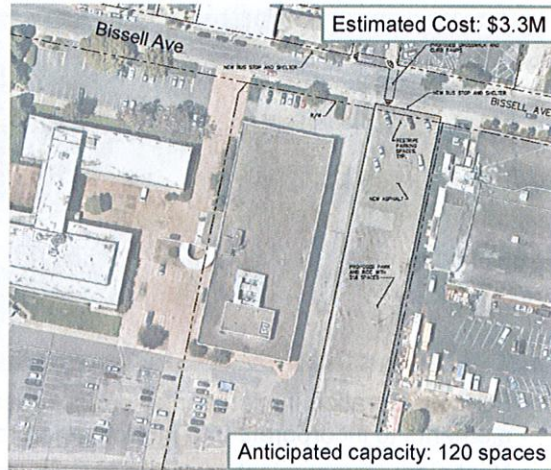
Market Size:
~2500

Transit Travel Time Improvement:
32%



Bissell Avenue Park & Ride

- Serves central/eastern Richmond (located south of Macdonald Ave west of Target)
- Would require minimal improvement over existing conditions
- County-owned, currently pursuing redevelopment opportunities



Required for effective deployment of Routes 6 and 7 (both near-term)

Route 7

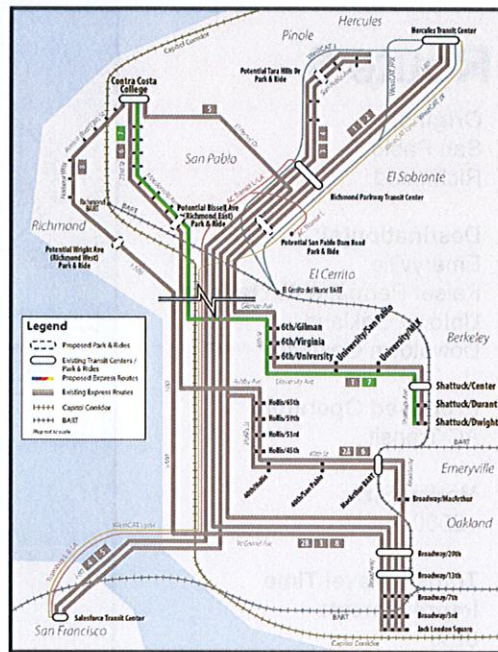
Origins:
San Pablo
Richmond

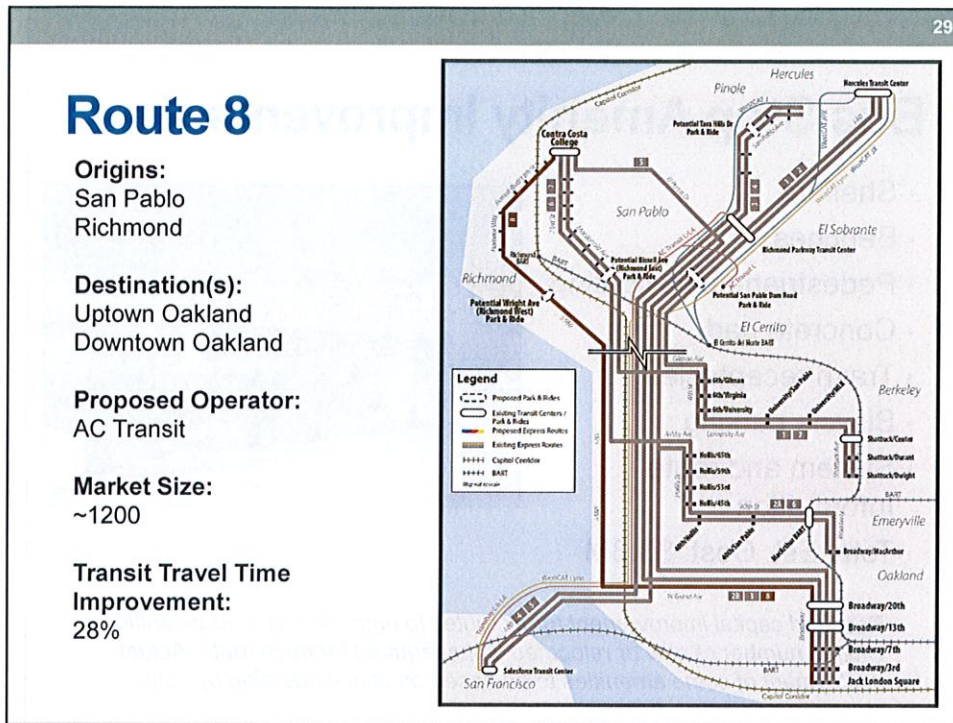
Destination(s):
West Berkeley
Downtown Berkeley

Proposed Operator:
AC Transit

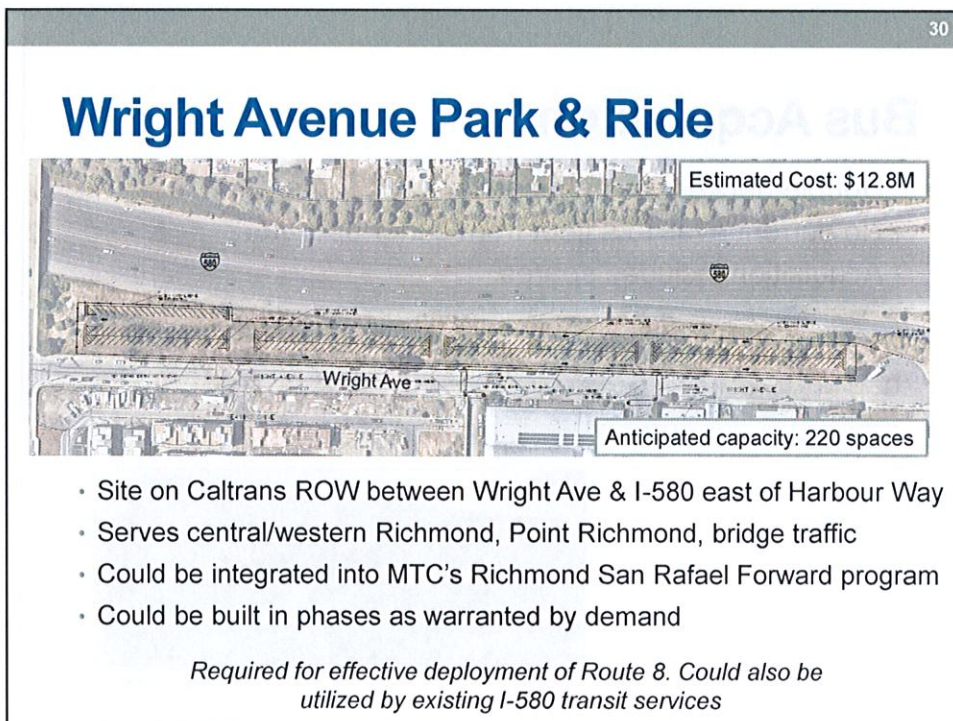
Market Size:
~1700

Transit Travel Time Improvement:
46%





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Bus Stop Amenity Improvements

- Shelters
- Benches
- Pedestrian-scale lighting
- Concrete pad
- Trash receptacles
- Bicycle parking
- System and route Information
- Total Est. Cost: \$3.3M



Required capital improvement for all routes to upgrade bus stop amenities. Limited number of new or relocated stops required for each route. Actual deployment of some amenities to be based on actual ridership by stop.

Bus Acquisition

- Double-decker coach buses for each route
- No current available fleet from either operator
- Acquisition includes spares

Phase	Routes	Buses Required	Est. Cost
Near-Term	2, 4, 6, 7	36	\$36M
Long-Term	1, 3, 5, 8, Route 2 split to become 2A and 2B	43	\$43M
Full System	1-8	79	\$79M

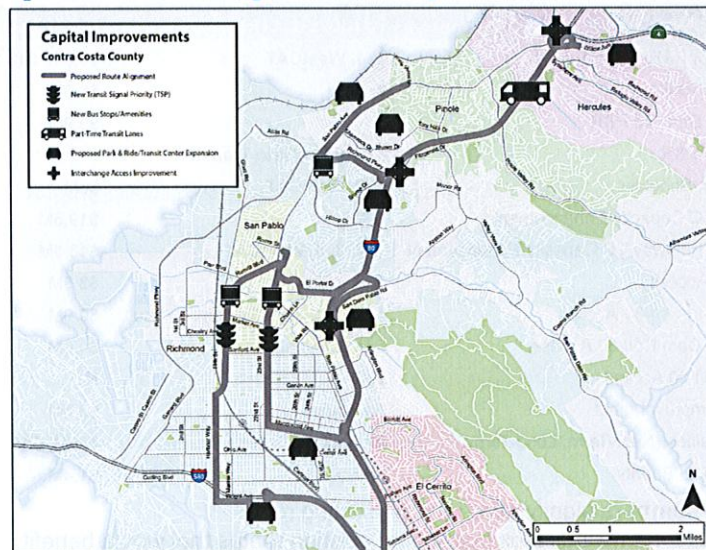


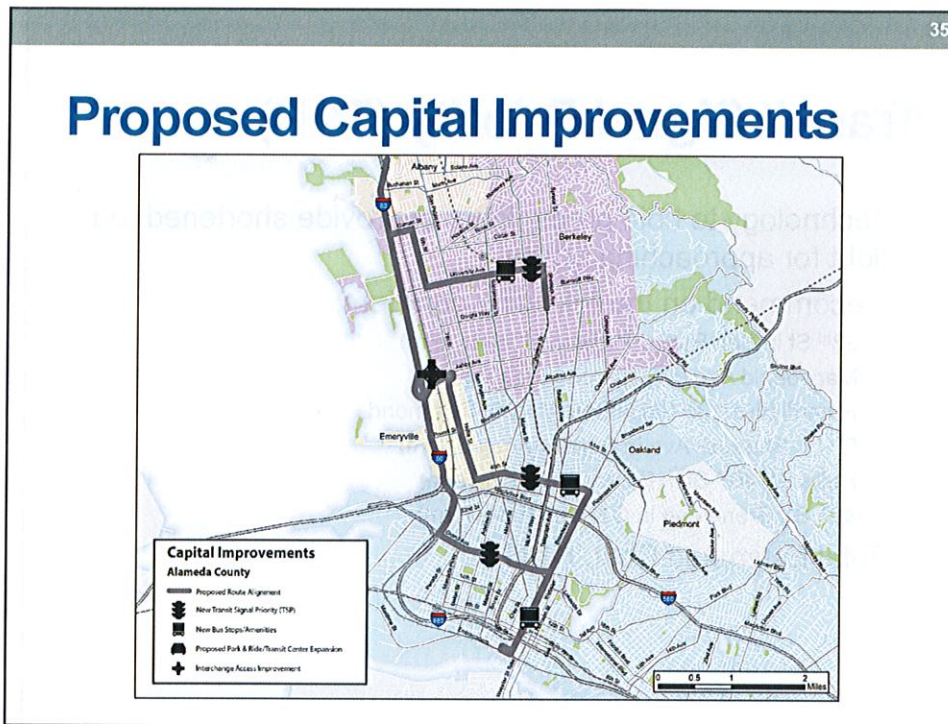
Photo credit: WestCAT

Transit Signal Priority (TSP)

- Technology to hold green lights or provide shortened red light for approaching buses
- Recommend on the following corridors:
 - 23rd St in San Pablo, Richmond (near-term)
 - Macdonald Ave in Richmond (near-term)
 - Rumrill Blvd/13th St/Harbour Way in Richmond
 - 6th St, Shattuck Ave in Berkeley (near-term)
 - Hollis St, 40th St in Emeryville (near-term)
 - 40th St, Grand Ave in Oakland (near term)
- Total Estimated Cost: \$1.4M

Proposed Capital Improvements





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Capital Improvements

Improvement	Routes Benefiting	Cost (2019\$)
Tara Hills Dr P&Rs (Site 1 & Site 2)	3, 4, WestCAT	\$3.6M, \$13.3M
Bissell Ave P&R	6, 7	\$3.3M
San Pablo Dam Rd P&R	5	\$9.9M
Wright Ave P&R	8, Golden Gate Transit	\$12.8
I-80 Bus on Shoulder	1, 2, WestCAT	\$6M
Hercules TC Capacity Enhancement	1, 2	\$19.5M
Richmond Parkway TC Capacity Enhancement	1, 2, 3, 4, WestCAT	\$46.5M
SR-4/I-80 Access	1, 2, WestCAT	\$3.6M
Richmond Pkwy/I-80 Access	1, 2, 3, 4, WestCAT, AC Transit	\$0.9M
San Pablo Dam Rd/I-80 Access	5, AC Transit	\$4.6M
Ashby Ave/I-80 Access	2, 6	N/A
Bus Stop Improvements	All Routes	\$3.3M
Bus Acquisition (Near-Term, Long-Term)	All Routes	\$36M, \$43M
Transit Signal Priority	All Routes	\$1.4M

Bold numbers signify near-term or existing route
 Operator name indicates operator of existing routes that would benefit

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Proposed Prioritization Methodology

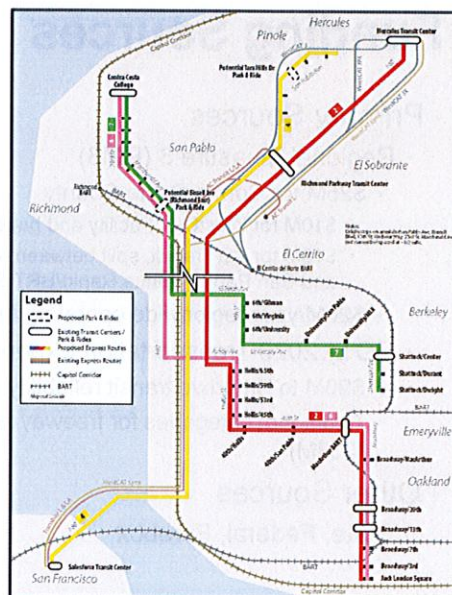
Routes prioritized based on a combination of existing **commute market size** (i.e. ridership potential) and **travel time benefits** relative to existing transit

Route #	Market Size	Travel Time Improvement
1	~1200 Medium	43% High
➔ 2	~2700 High	36% Medium
3	~1300 Medium	43% High
➔ 4	~1500 High	14% Low
5	~500 Low	36% Medium
➔ 6	~2500 High	32% Medium
➔ 7	~1700 High	46% High
8	~1200 Medium	28% Medium

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System Map (near-term)

- Routes with largest commute market and travel time benefits
- Service to Hercules, Pinole, San Pablo, Richmond, and unincorp. County
- Service to Oakland, Emeryville, Berkeley, and San Francisco
- Two routes in WestCAT service area and two in AC Transit service area



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Funding Opportunities & Constraints



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Funding Sources

- Primary Sources
 - Regional Measure 3 (RM3)
 - \$25M for Contra Costa County
 - \$10M for WestCAT Facility and buses
 - \$15M for AC Transit, split between I-80 Express Bus Capital Improvements and San Pablo Avenue Rapid/BRT Service Capital Improvements
 - \$20M/year regionwide operating funds for express bus
 - CCTA 2020 Transportation Expenditure Plan (TEP)
 - \$90M to "Improve transit reliability along the I-80 corridor"
 - Additional categories for freeway access (\$57M) and major roads (\$38M)
- Other Sources
 - State, Federal, Farebox

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Funding Scenarios

Funding Scenario	RM3	TEP	Projected Outcome
1	X	X	Project not viable, without additional funding
2	✓	X	Operating funds available but insufficient capital to acquire bus fleet or implement supporting capital improvements, without additional funding
3	✓	✓	Operating and capital funding to operate up to four routes and most required capital improvements

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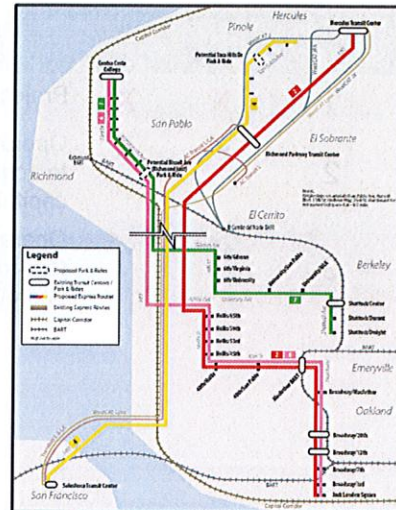
Funding Approach

- All new service requires some level of capital investment (buses, stops, park & rides)
- With RM3 and TEP funding, options range between:
 - Prioritize funds to operate greatest number of routes with limited supporting infrastructure, or
 - Implement limited number of routes but make them more effective through supporting infrastructure (*Project Management Team recommendation*)
- Identify unfunded projects for future funding sources as they become available (e.g., SB1 Congested Corridors, FASTER)

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Funding Scenario 3

- If RM3 is upheld and TEP passes
 - Sufficient funding for required improvements, buses, and operations for up to four new routes for 10+ years
 - Additional funds available for either
 - Covering future inflation of operating costs, or
 - Constructing additional capital improvements
- Additional funds needed to operate more than these four routes and construct full set of capital improvements



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Key Steps to Implementation

- RM3 legal resolution
- CCTA TEP voter approval
- Resolving operator maintenance and storage capacity needs and purchasing buses
- Determining park & ride implementation and operations approach
- Coordination between funding partners, transit operators, Caltrans, and local jurisdictions to implement capital improvements

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Next Steps

- Project TAC Meeting
- Complete Financial Plan, Marketing and Branding Plan, and Draft Plan
- Outreach Round #3 (distribute Draft Plan)
- Presentation to Boards (WCCTAC, AC Transit, WestCAT)
- February 2020 – Study completion
- Future efforts:
 - Partner with MTC and CCTA to support RM3 and TEP efforts and obtain funds if made available
 - Partner with Caltrans, cities, and transit operators to implement capital improvements

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Transportation
Advisory Committee

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