



ALAMEDA COUNTY TRANSPORTATION COMMISSION

Countywide Transit Plan

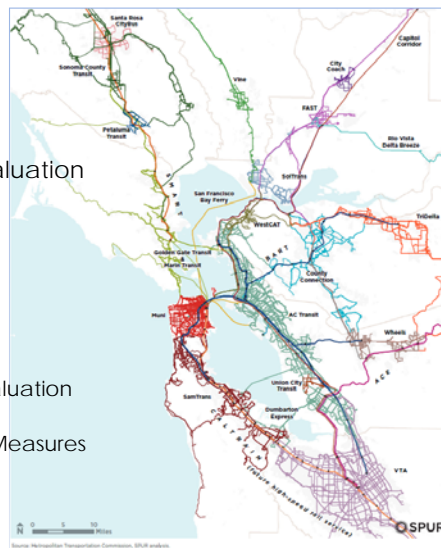
Draft Network Recommendations, Evaluation
Methodology and Performance Measures



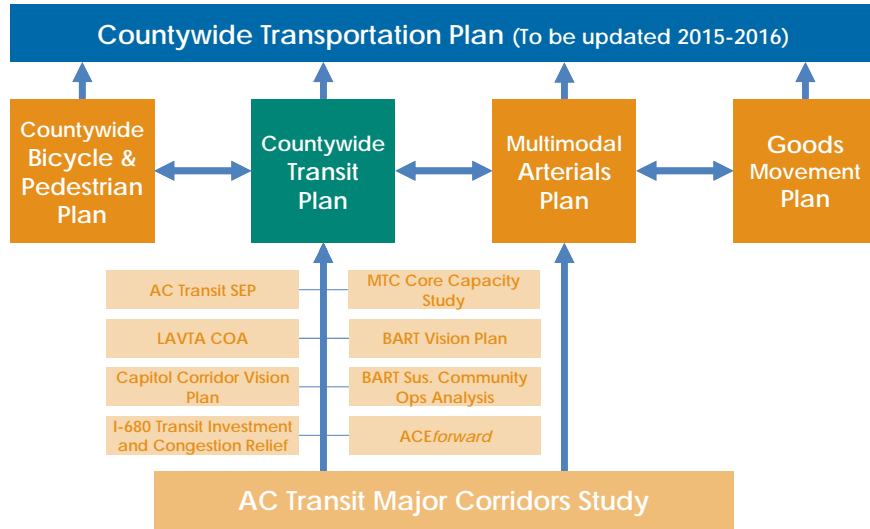

Alameda CTC Planning, Policy and Legislation Committee
October 12, 2015

Overview

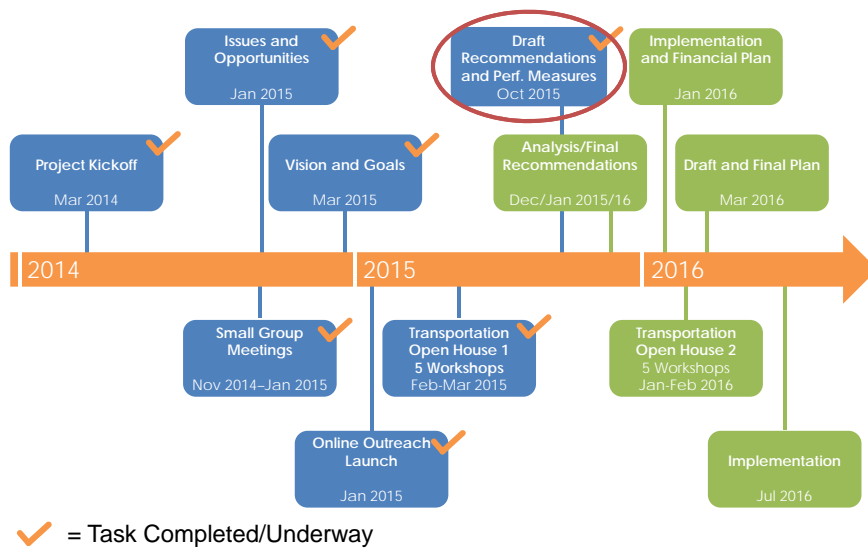
- Context and Purpose
- Approach and Methodology
- Draft Transit Network Recommendations for Further Evaluation
- Evaluation Methodology
- Performance Measures
- Actions Requested:
 - Approve the Draft Network Recommendations for further evaluation
 - Approve the Evaluation Methodology and Performance Measures
- Next Steps



Relationship to Other Plans



What We Have Done So Far



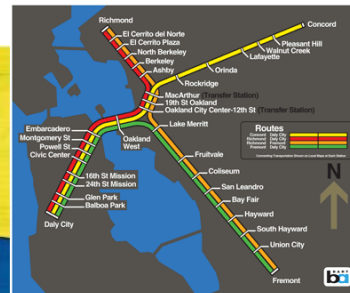
Adopted Vision and Goals

Create an efficient and effective transit network that enhances the economy and the environment and improves quality of life

- Increase Transit Mode Share
- Increase Effectiveness of Inter-regional Transit Travel
- Increase Effectiveness
- Increase Cost Efficiency
- Improve Access to Work, Education, Services & Recreation
- Reduce Emissions
- Achieve State of Good Repair



A Mature Transit System



Importance of Transit Plan

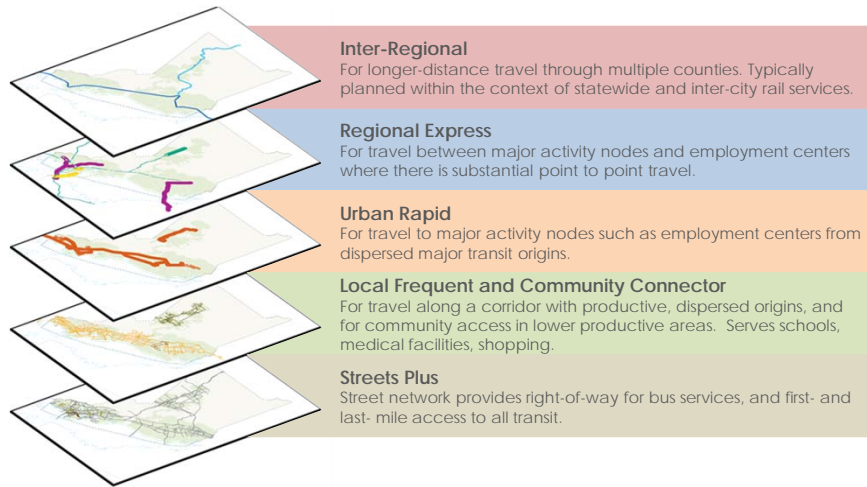
- 72% of all trips stay within the county, but 66% transit trips are regional
- County's transit mode share for work trips is 13%
- Transit usage is not keeping pace with population growth
- Cost of providing transit service is increasing more rapidly than service and ridership
- Anticipated population and employment growth will pose significant challenges
- Alameda County has strong transit market potential
- Access to education, jobs, recreation, and other services

Opportunities for the Future

- Serve strong transit market and future demand especially trips within the county
- Improve speed, frequency and reliability
- Fill service gaps, improve and integrate our existing systems
- Integrate transit services to form a cohesive network
- Capture more riders on transit and better serve those who are already riding
- Form effective partnerships



Transit Service Tiers



What is the market demand for transit in 2040?

- Competitive transit markets
 - Characteristics
 - Frequent, reliable and competitive transit service
 - High transit ridership
 - Conditions
 - Areas with dense development (concentrated origins and destinations)
 - Driving is a less attractive option:
 - Congested roadways
 - Limited, paid parking
 - Identification of Corridors
 - High potential corridors experiencing poor performance
 - Potential new corridors for transit investment

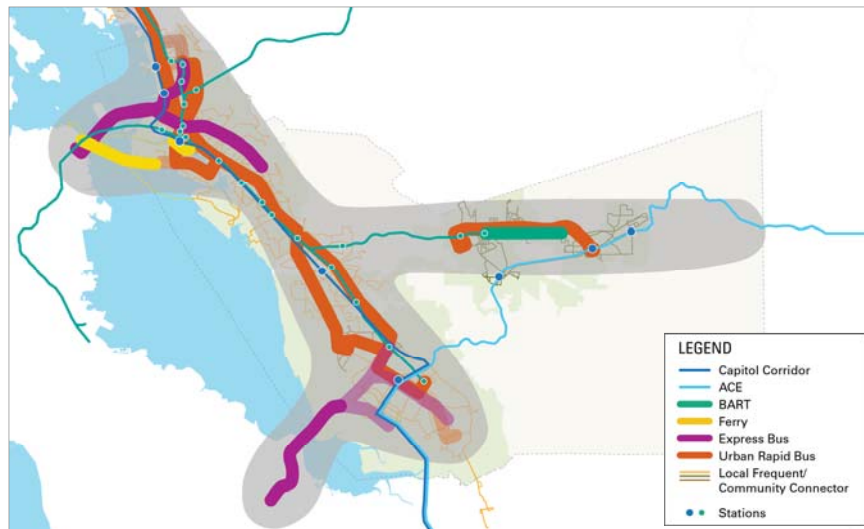
Draft Recommendations for Evaluation

- Inter-Regional Tier
 - Capitol Corridor Vision Plan
 - ACEforward
- **Regional Express**
 - Market Analysis
 - BART Sustainable Communities Operations Analysis
 - BART Vision Plan
 - MTC Core Capacity Study
- **Urban Rapid**
 - Market Analysis
 - AC Transit Major Corridors Study
- Local Frequent/Community Connector
 - AC Transit Service Expansion Plan
 - LAVTA Comprehensive Operations Analysis
- Streets Plus
 - Key areas of our roadway network needed to support efficient transit operations and access to transit facilities



- Focus of Draft Recommendations for Evaluation
- Final Plan will incorporate all tiers and address integration and coordination strategies

Introduction of Draft Recommendations – 2040



LEGEND

- Capitol Corridor
- ACE
- BART
- Ferry
- Express Bus
- Urban Rapid Bus
- Local Frequent/Community Connector
- Stations

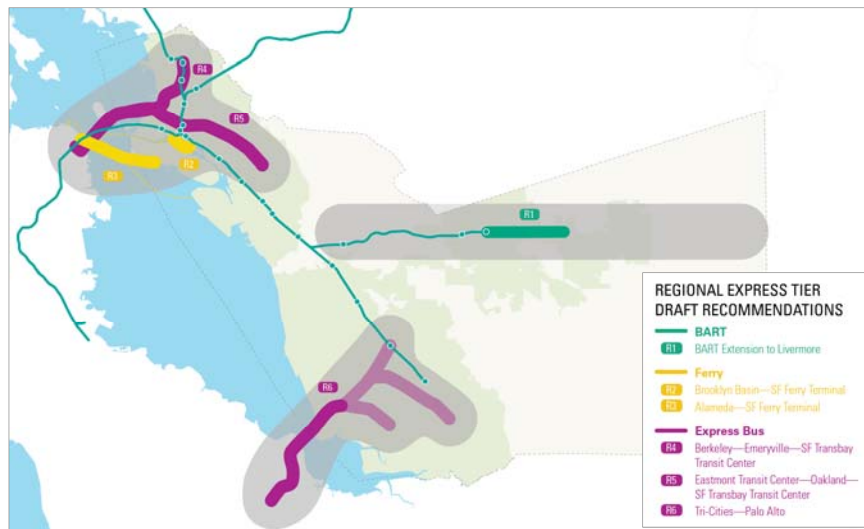
Note- The Draft Recommendations presented here are for conceptual purposes. Specific routing alignments and termini will be determined in future analyses.

Inter-regional Tier



- ACEforward and Capitol Corridor Vision Plan
 - Increase frequency and reduce travel times
 - Direct connection to BART
 - ACE service expansion to Merced
 - Potential realignment of Capitol Corridor service
- White paper on integrated strategy for goods movement and passenger rail

Regional Express Tier – 2040



Note: The Draft Recommendations presented here are for conceptual purposes. Specific routing alignments and termini will be determined in future analyses.

What is "Urban Rapid"?



Source: Metro Library and Archive



Source: Mariana Gil/ EMBARQ Brasil



Source: Erik Weber
COUNTYWIDE TRANSIT PLAN



Source: Parsons Brinckerhoff



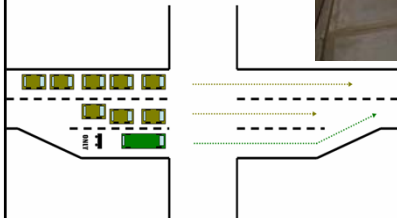
What is "Urban Rapid"?



Source: Mariana Gil/ EMBARQ Brasil



Source: Mariana Gil/ EMBARQ Brasil



Case Study: King County RapidRide

- Short Headways
 - 10 minutes during peak periods
 - 15 minutes during off-peak periods
- Late night / early morning service
- Full service everyday
- Results
 - Reliability improvement (headway adherence of 78% to 87%)
 - Ridership increase of 20% to 81%
 - Travel time reduction of 3% to 19%

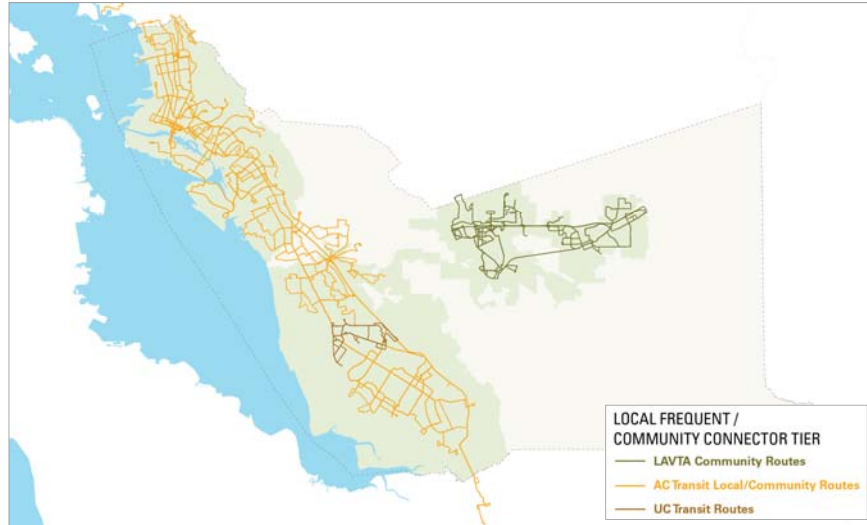


Urban Rapid Tier – 2040



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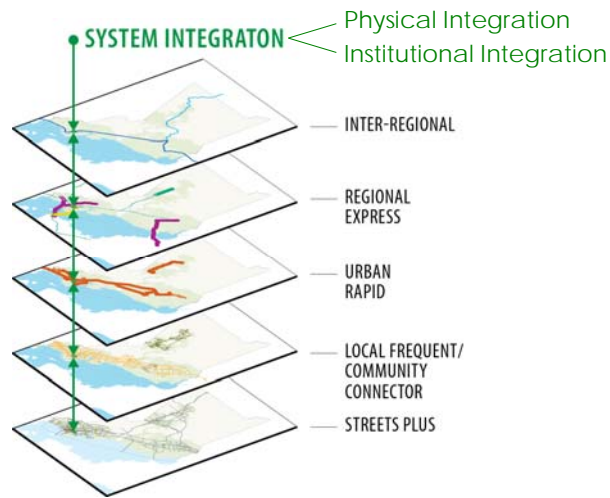
Local Frequent/ Community Connector Tiers



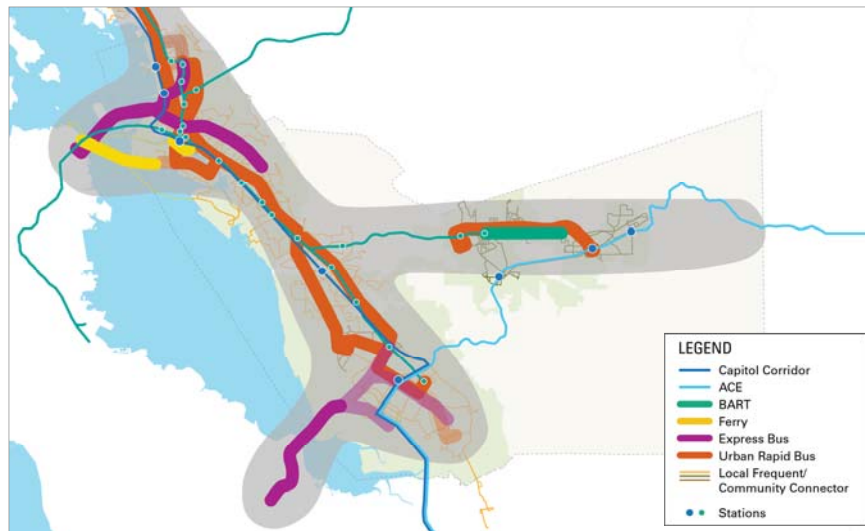
Streets Plus

- Street network
 - Provides public right-of-way for bus services
 - Provides access to and from transit stops and stations
- Certain segments are particularly critical for transit
 - Convergence of multiple bus lines
 - Improvements would benefit multiple lines
- Identification of
 - Transit priority zones
 - Network priority opportunities
 - Improvements to east/west corridors

Integrated System



Draft Recommendations – 2040



Note- The Draft Recommendations presented here are for conceptual purposes. Specific routing alignments and termini will be determined in future analyses.

Evaluation Methodology

- Measure relative performance to refine draft recommendations
- Evaluate individual recommendations as well the entire network with respect to adopted Vision and Goals
- Use Quantitative and Qualitative Performance Measures
- Evaluate and rank
 - High
 - Medium
 - Low

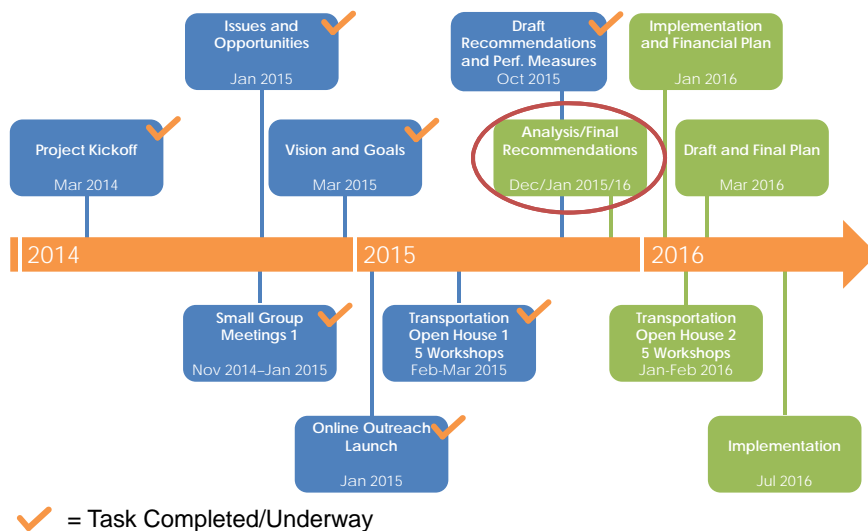
Quantitative Performance Measures

#	Goals	Performance Measures		
		Network-Level	Project-Level Capital	Project-Level Operating
1	Increase transit mode share	Per capita daily transit ridership	Net new riders	
		Percentage of intra-county trips on transit		
2	Increase effectiveness (including inter-regional travel)	Passenger trips per revenue vehicle mile		Passenger trips per revenue vehicle mile
		Miles of dedicated right-of-way (proxy for travel time reliability)	Miles of dedicated right-of-way (proxy for travel time reliability)	
		Daily transit trips (unlinked)	Daily transit trips (unlinked)	
			Reduction in transit travel time (peak/off-peak)	
			Number of transit hubs served, including inter-regional hubs	
3	Increase cost efficiency	Operating cost per boarding	Capital cost per net new rider	Operating cost per boarding
4	Improve access	Number of HH/jobs within half-mile of rail stations or quarter-mile of bus stops within each service tier	Number of HH/jobs within half-mile of rail stations or quarter-mile of bus stops	
		Number of Communities of Concern affected		
5	Reduce emissions	GHG emissions		
6	State of good repair		Cost of mid-life overhaul and/or replacements before 2045 to be included in cost estimates	

Qualitative Performance Measures

Performance Measures
• Support TOD Strategy
• Number of Existing or Planned Major Activity Nodes
• Intermodal Connectivity
• Customer Experience
• Compatibility with Multimodal Arterials Plan

Next Steps



Requested Actions

- Approve Countywide Transit Plan Draft Network Recommendations for further analysis
- Approve the Evaluation Methodology and Performance Measures
 - The Draft Network Recommendations, evaluation methodology and performance measures were unanimously approved by ACTAC with one abstention

Thank you!