


ALAMEDA COUNTY TRANSPORTATION COMMISSION

Countywide Multimodal Arterial Plan

Improving multimodal mobility for better economic, health and environmental outcomes



PlanTAC Meeting – June 9th
Francisco Martin and Matthew Ridgway, Fehr & Peers

Presentation Overview

- Arterial Plan – Purpose and Process
- Key Concepts
 - ✓ Typology
 - ✓ Modal Priority
 - ✓ Proposed Improvements by Mode
- Requested Actions
 - ✓ Approve proposed improvements
 - ✓ Approve Draft Multimodal Arterial Plan

Future of Alameda County

- By 2040:
 - ✓ 31% growth in population
 - ✓ 42% growth in employment
 - ✓ 100% increase in proportion of seniors (age 65+)
 - ✓ 18% households with no vehicle
- Arterials carry 40% of countywide ADT and provide key opportunities to address future demand



COUNTYWIDE MULTIMODAL ARTERIAL PLAN



3

Arterial Plan Purpose

- Identify multimodal Arterial Network improvements to accommodate increasing demands on transportation system
- Provide countywide framework for jurisdictions to meet mandated Complete Street policies
- Build upon local and regional planning efforts, including Countywide Transit and Goods Movement Plans



COUNTYWIDE MULTIMODAL ARTERIAL PLAN



4

Arterial Plan Key Concepts

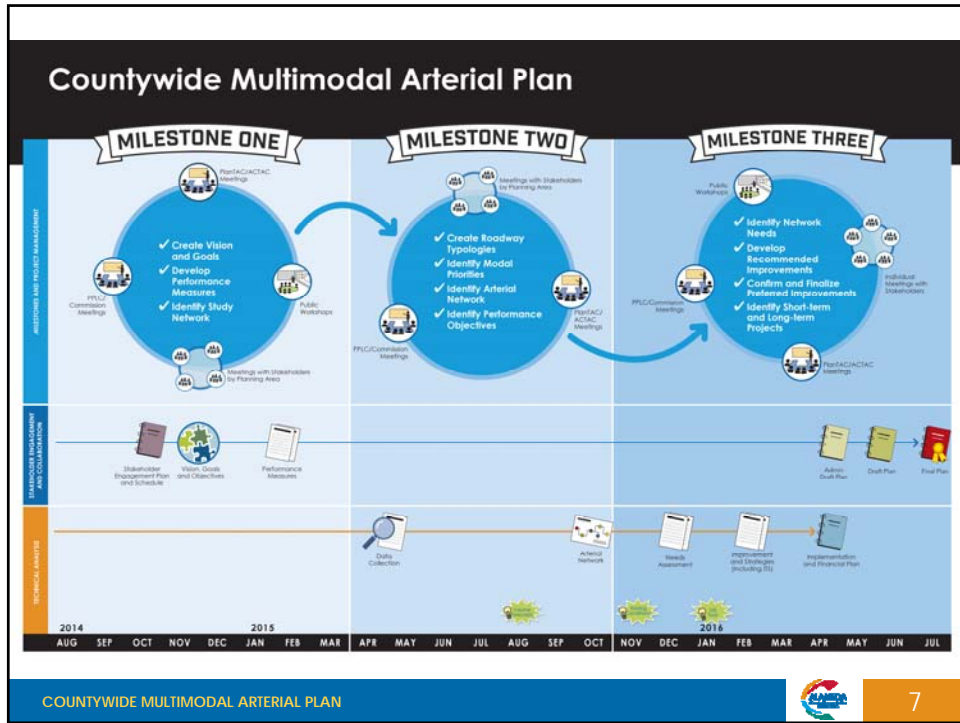
- Typology framework provides the foundation for defining the Complete Streets network and modal priority
- MAP identifies infrastructure improvements to develop continuous and connected multimodal networks that will:
 - ✓ Increase transit/walking/biking mode share
 - ✓ Manage increasing auto demand
 - ✓ Decrease VMT per capita
 - ✓ Support local context and economy



Arterial Plan Vision Statement

“Alameda County will have a network of efficient, safe and equitably accessible arterials that facilitate the multimodal movement of people and goods, and help create a strong economy, healthy environment and vibrant communities, while maintaining local contexts.”

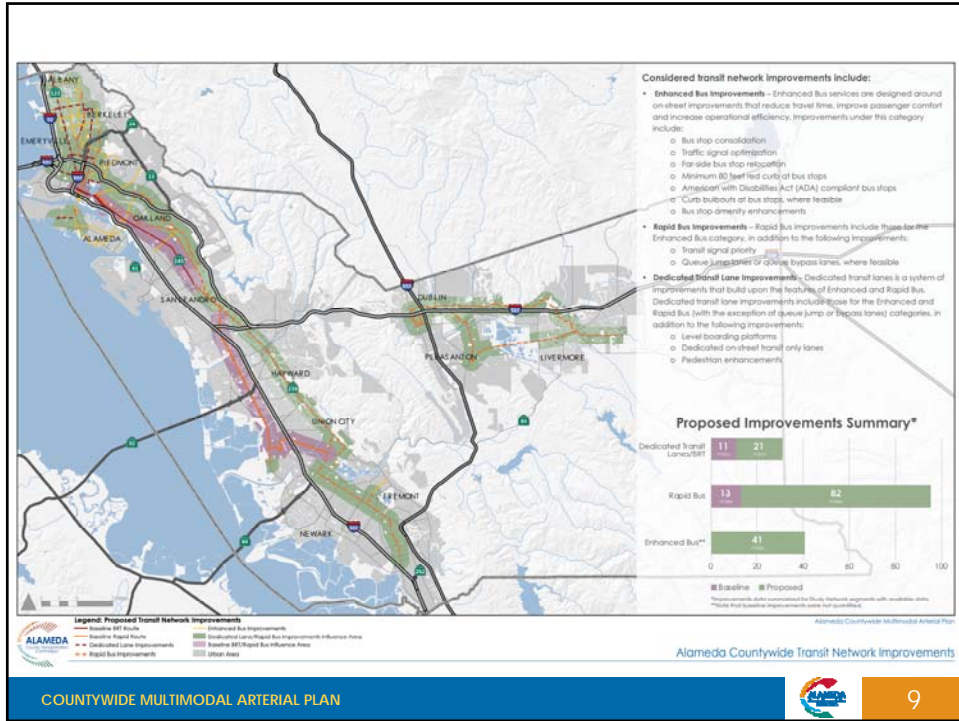




Transit Network Improvements

- Considered Improvements
 - ✓ Enhanced Bus Improvements
 - ✓ Rapid Bus Improvements
 - ✓ Dedicated Transit Lane Improvements



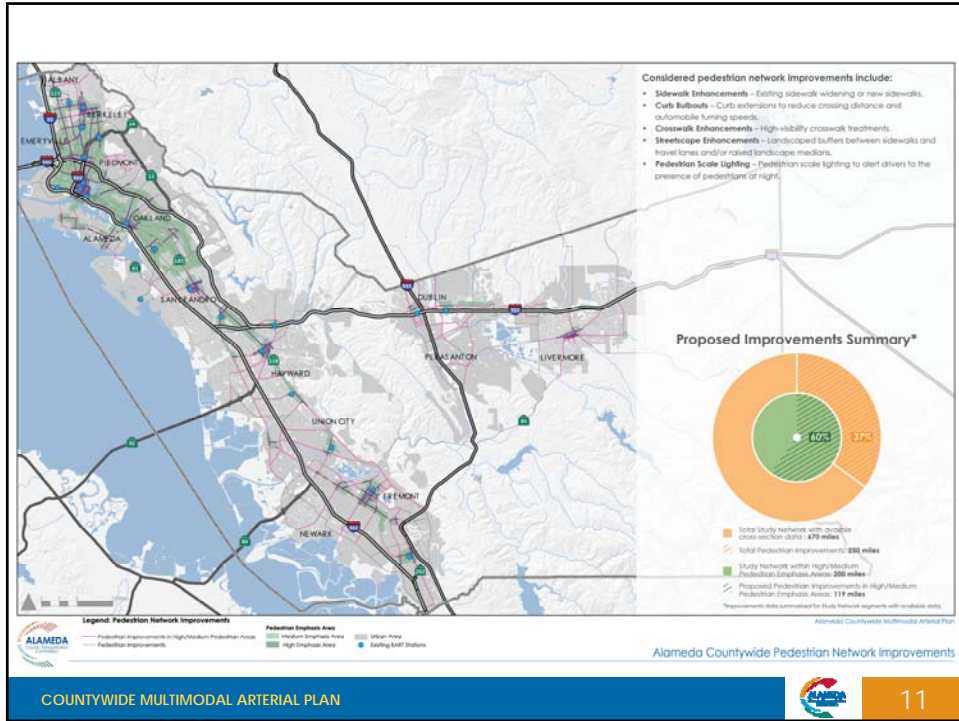


Pedestrian Network Improvements

Considered Improvements:

- ✓ Sidewalk Enhancements
- ✓ Curb Bulbouts
- ✓ Crosswalk Enhancements
- ✓ Streetscape Enhancements
- ✓ Pedestrian Scale Lighting



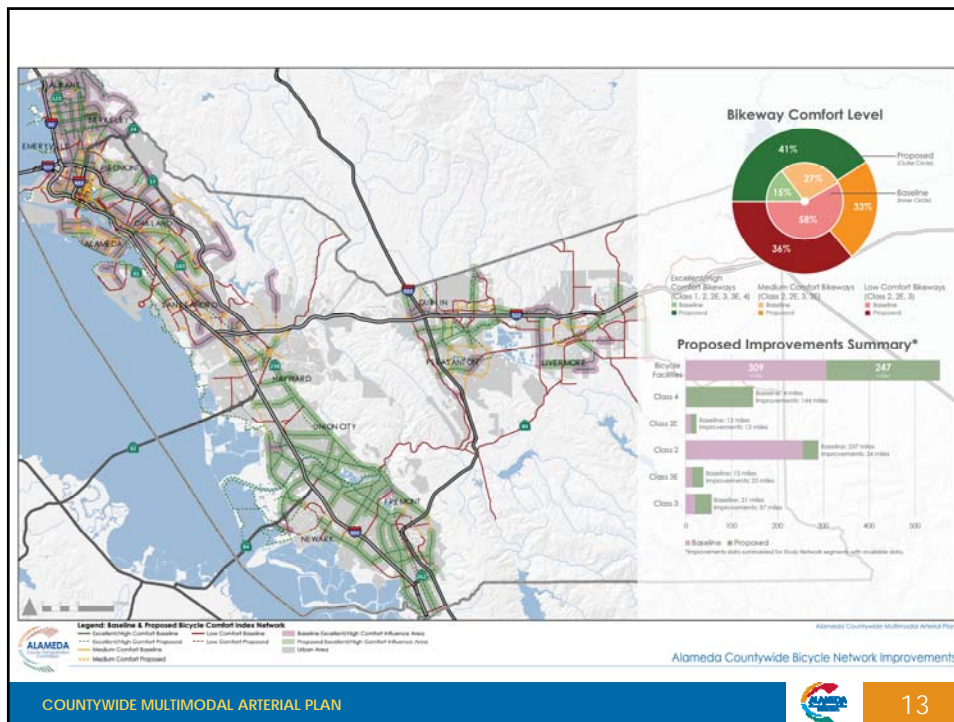


Bicycle Network Improvements

Considered Improvements:

- ✓ Class 2 Bicycle Lanes
- ✓ Class 2 Enhanced Buffered Bicycle Lanes
- ✓ Class 3 Bicycle Routes
- ✓ Class 3 Enhanced Bicycle Boulevards
- ✓ Class 4 Protected Bicycle Lanes



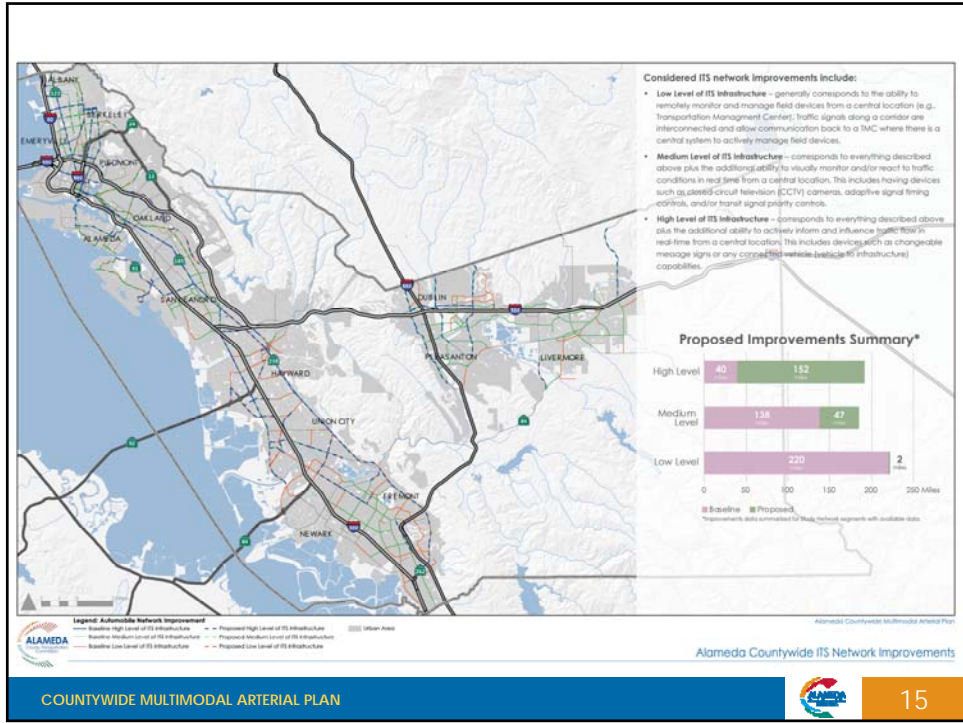


Auto Network Improvements

Considered ITS Improvements:

- ✓ **Low Level of ITS Infrastructure** – field-to-Center communications with ability to remotely monitor and manage traffic signals.
- ✓ **Medium Level of ITS Infrastructure** – Low Level plus CCTV cameras, time-of-day signal timing, adaptive signal control, transit signal priority.
- ✓ **High Level of ITS Infrastructure** – Medium Level plus changeable message signs, trailblazer signs, connected vehicle technologies.



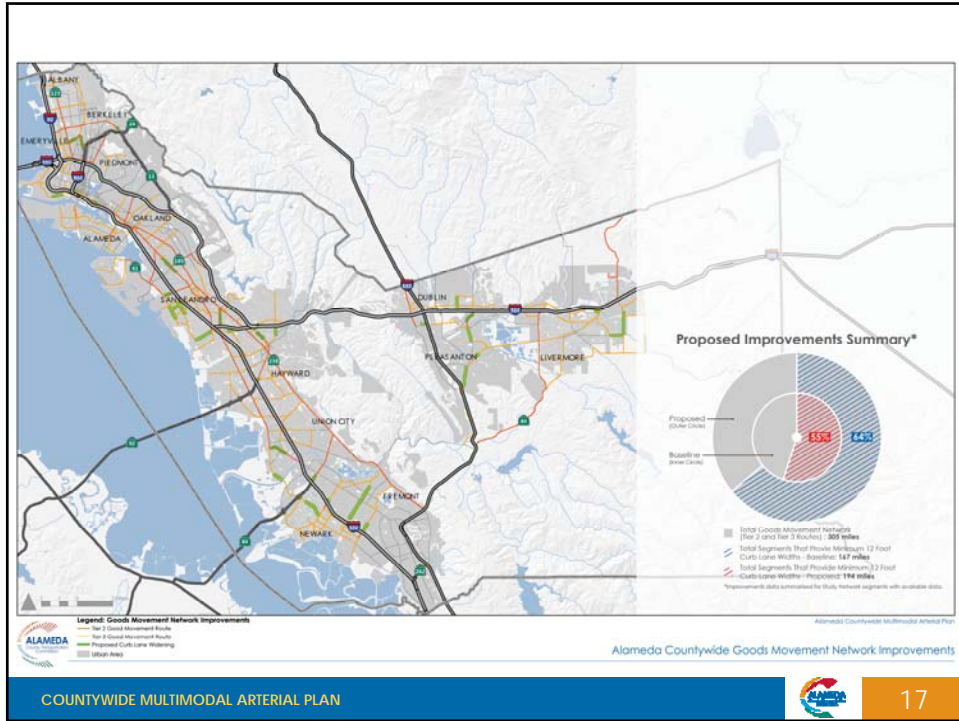


Goods Movement Network Improvements

Considered Goods Movement Improvements:

- ✓ Curb lane widening to 12 ft or greater along Goods Movement routes





Arterial Network – Performance Objective Results/Benefits

- 24% transit ridership increase estimated along transit improvement corridors
- 150% increase in bicycle riders estimated as a result of implementing proposed bicycle network improvements

| Performance Measures | Arterial Network Miles That Meet Performance Objective Along High Modal Priority Segments – 2040 Conditions | | |
|---------------------------------|---|------------------------------------|------------------------|
| | Without Proposed Improvements (miles) | With Proposed Improvements (miles) | Net Difference (miles) |
| Transit Travel Speed | 21 | 45 | +24 |
| Transit Reliability | 56 | 112 | +56 |
| Transit Infrastructure Index | 27 | 127 | +100 |
| Pedestrian Comfort Index | 133 | 188 | +55 |
| Bicycle Comfort Index | 35 | 146 | +111 |
| Truck Route Accommodation Index | 83 | 105 | +22 |

Operational Strategies

- Transportation Demand Management (TDM)
 - ✓ Transportation Management Association (TMA)
- Parking Management Strategies
 - ✓ On-street parking
 - ✓ Off-street parking
- ITS Strategies
 - ✓ Multi-jurisdictional partnerships
 - ✓ Maintenance considerations



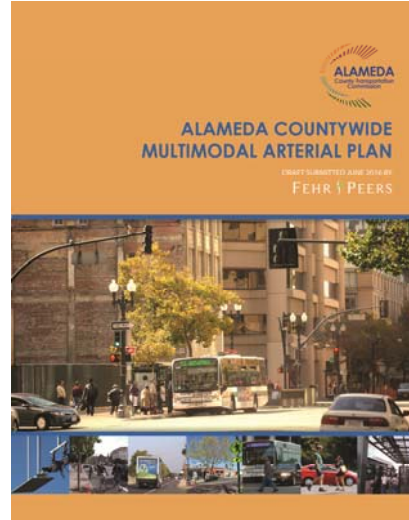
Trends that Support Multimodal Improvements

- Next generation vehicles and technology
 - ✓ Connected Vehicles and Autonomous Vehicles
 - ✓ Vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I), vehicle-to-everything (V2X)
 - ✓ Can improve safety and maximize arterial capacity
 - ✓ Transportation network companies



Actions Requested and Next Steps

- Approve proposed improvements
- Approve Draft Multimodal Arterial Plan
- Next Steps: Final Multimodal Arterial Plan – July 2016



Questions?