


ALAMEDA COUNTY TRANSPORTATION COMMISSION

Countywide Multimodal Arterial Plan

Improving multimodal mobility for better economic, health and environmental outcomes



October 12, 2015 PPLC Meeting
Francisco Martin and Matthew Ridgway, Fehr & Peers

Presentation Overview

- Arterial Plan Background and Purpose
- Key Concepts:
 - ✓ Typology
 - ✓ Modal Priority
- Process Overview
- Needs Assessment
- Recommended Improvements
- Requested Action:
 - ✓ Approve Typology Framework and Modal Priorities

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."

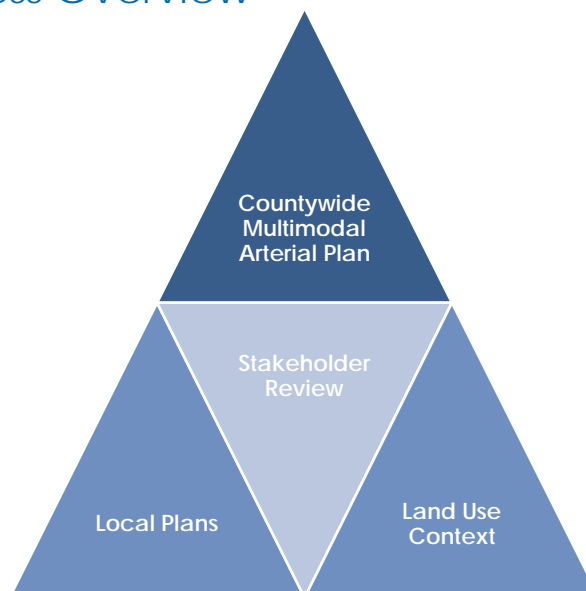


COUNTYWIDE MULTIMODAL ARTERIAL PLAN



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Process Overview



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Typology

Key Components:

- **Auto Function**
- **Multimodal Networks**
- **Land Use**

MMAP
Street
Typology
Framework



Auto Function



Modes of Travel



Land Use Context

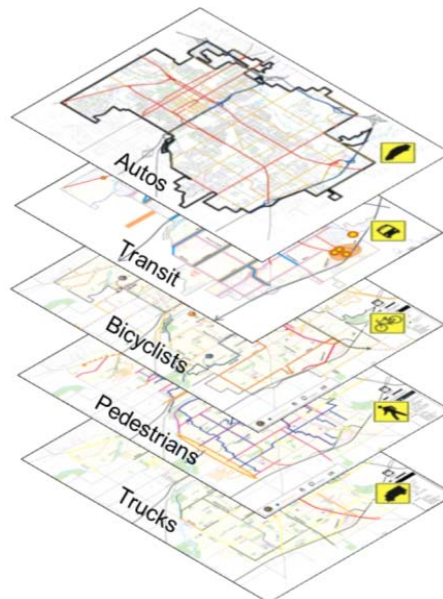
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Why Typology?

- Framework provides the foundation for defining the Complete Streets network
- Reflects:
 - ✓ How streets function for all users
 - ✓ Relationship between streets & buildings fronting onto them
- Expands considerations:
 - ✓ Balances needs of all users
 - ✓ Defines a complete streets network



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Future of Alameda County

- By 2040:
 - ✓ 31% growth in population
 - ✓ 40% growth in employment
 - ✓ 100% increase in proportion of seniors (age 65+)
 - ✓ 18% households with no vehicle

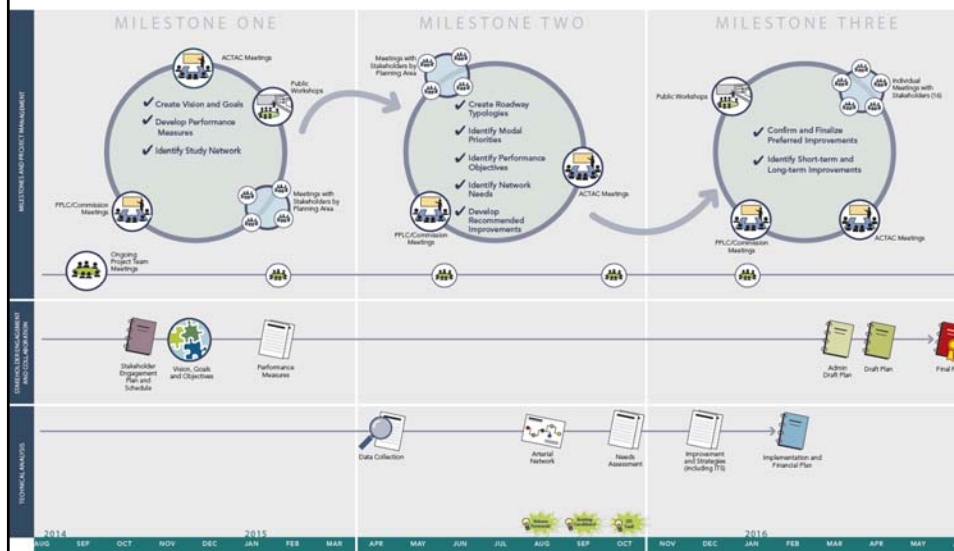


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Arterial Plan Overview



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Process Overview – Outreach

- 50+ meetings held
- Met with agency and non-agency stakeholders, including:
 - All 14 cities and Alameda County
 - Caltrans and MTC
 - Transit agencies and TMA service providers
 - PlanTAC, ACTAC and Alameda CTC Commissioners
 - Bike East Bay, Alameda County Safe Routes to Schools, United Seniors of Oakland and Alameda County, Alameda CTC's PAPCO, trucking industry and emergency responders
 - General public (via public workshops)
- 700+ comments received on the typology/modal priority framework

Typology Development

- Following mapping overlays were developed :
 - ✓ Land use
 - ✓ Auto function
 - ✓ Modal emphasis overlays
- Overlays applied to Study Network
 - ✓ Study Network represents major arterials and collectors across the county (about 1,200 miles of roadway)
- Overlays provide basis for identifying Arterials of Countywide Significance (Arterial Network)

Land Use

- Land use context informs appropriate key street elements that support or facilitate serving the land use
- ✓ Example: *Pedestrian priority street in PDA should have a wider sidewalk than a residential street*

• ABAG PDA Place Types

- Regional Center
- City Center
- Suburban Center
- Transit Town Center
- Urban Neighborhood
- Transit Neighborhood

• Alameda CTP SCS Land Use

- Mixed Use
- Commercial
- Business Park/Industrial
- Industrial
- Education/Public/Semi-Public
- Residential
- Rural Residential & Open Space
- Parks/Open Space
- Agriculture/Resource Extraction
- Other/Unknown

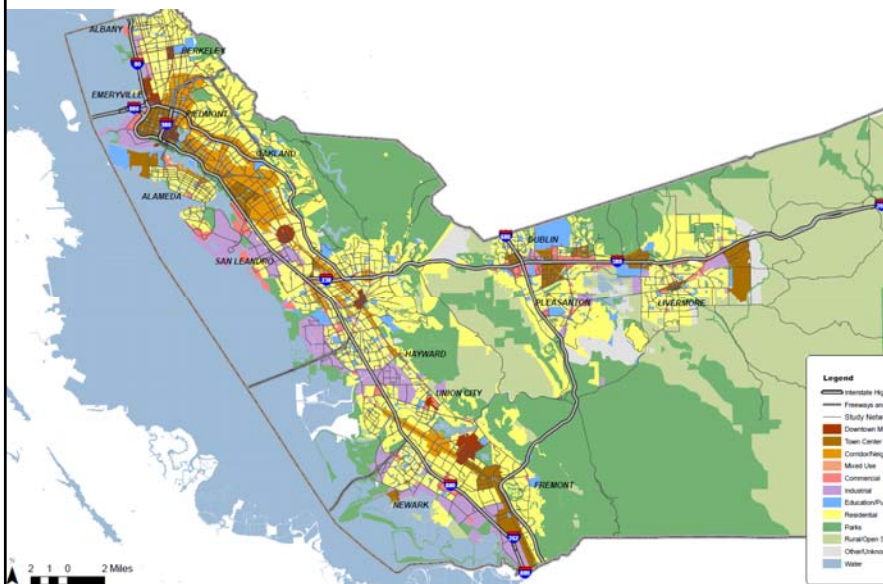
2 1 0 2 Miles

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Land Use



- Legend**
- Interstate Highway
 - Freeway and Expressway
 - Study Network
 - Downtown Mixed Use
 - Town Center Mixed Use
 - Central Neighborhood Mixed Use
 - Mixed Use
 - Commercial
 - Industrial
 - Education/Public/Semi-Public
 - Residential
 - Parks
 - Rural/Open Space
 - Other/Unknown
 - Water

2 1 0 2 Miles

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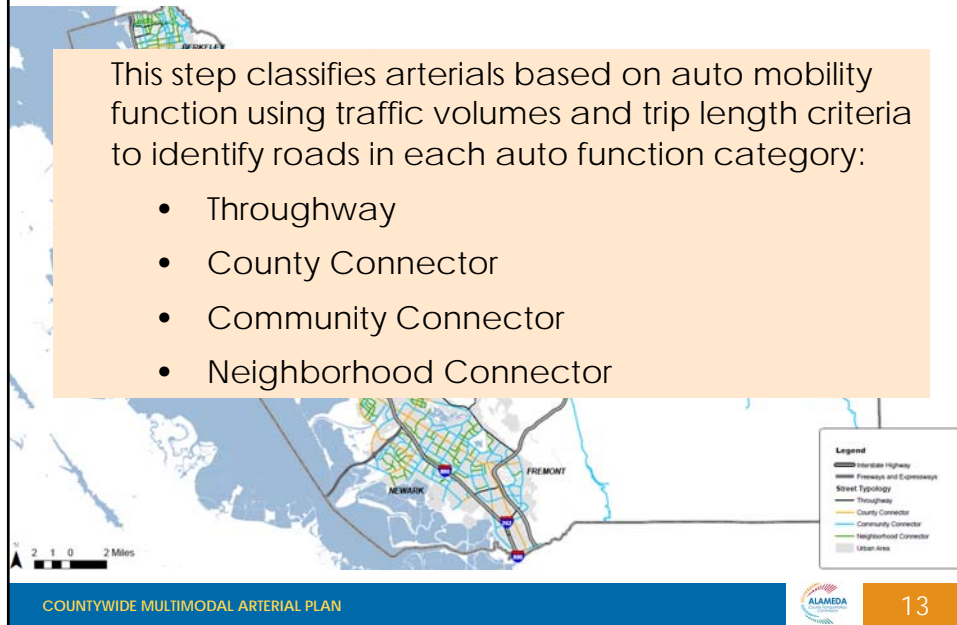


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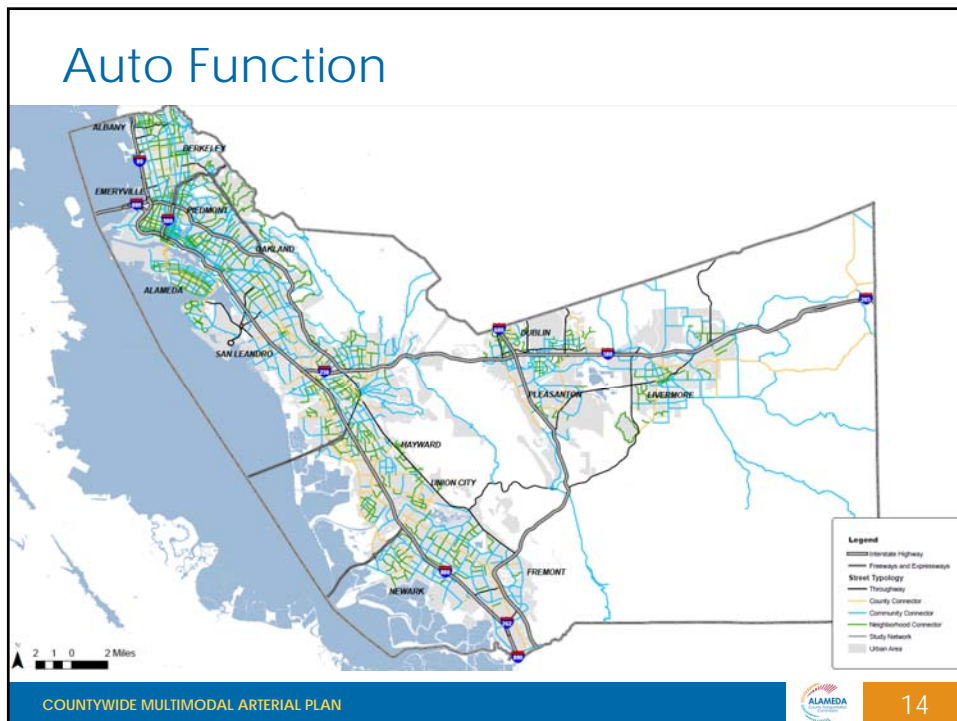
Auto Function

This step classifies arterials based on auto mobility function using traffic volumes and trip length criteria to identify roads in each auto function category:

- Throughway
- County Connector
- Community Connector
- Neighborhood Connector



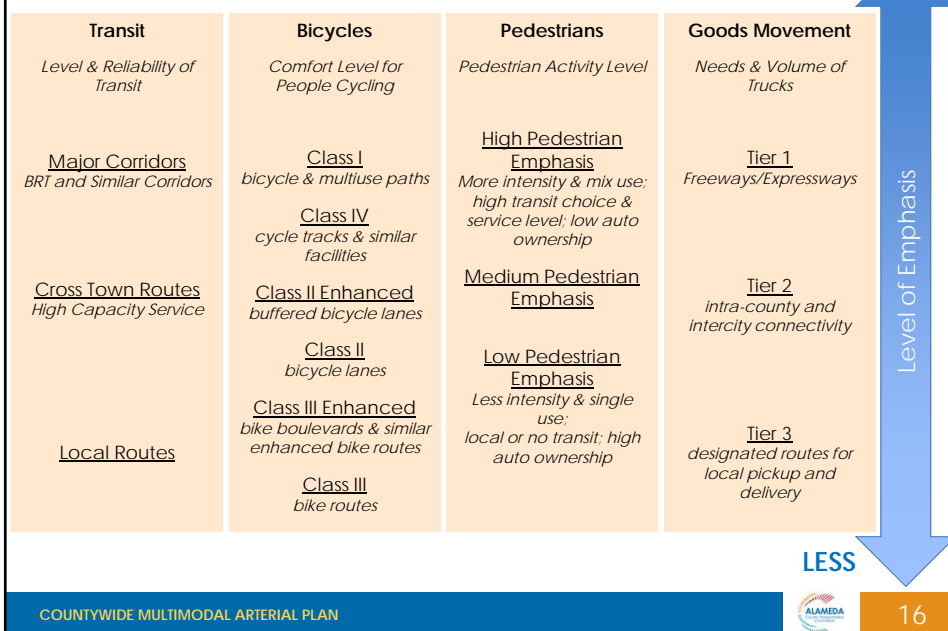
Auto Function



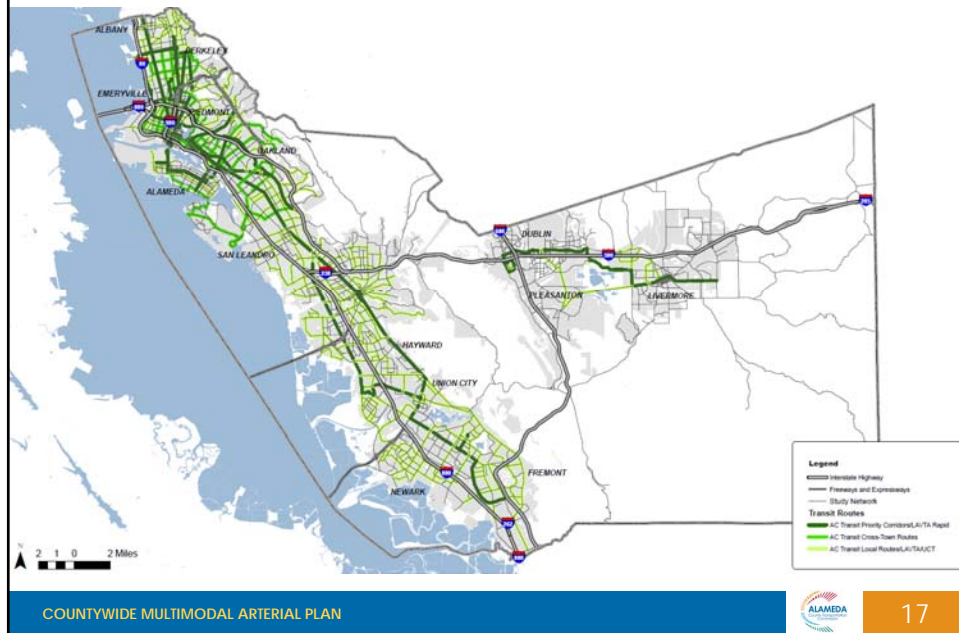
Modal Emphasis Maps

- Mapping overlays developed for:
 - ✓ Transit network
 - ✓ Bicycle network
 - ✓ Pedestrian network
 - ✓ Goods movement network
- Provide basis for developing Complete Streets network
- Inform street element improvement recommendations by mode

Multimodal Network

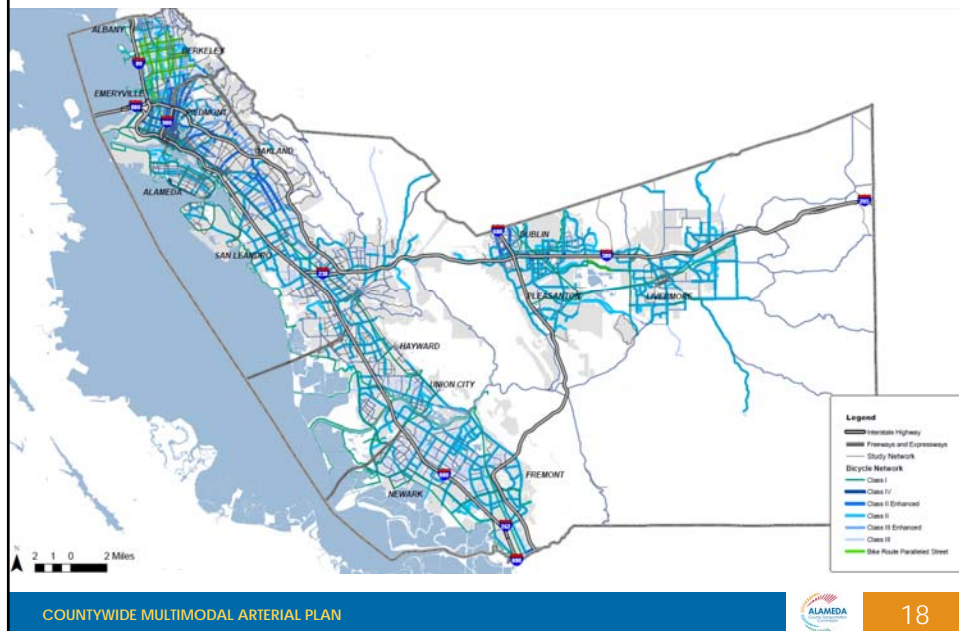


Transit



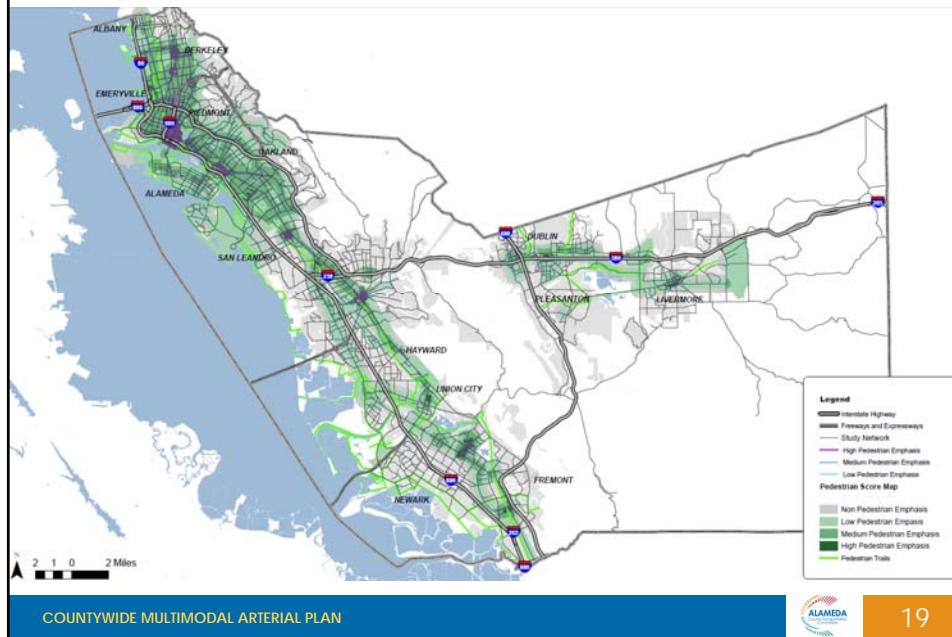
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Bicycle

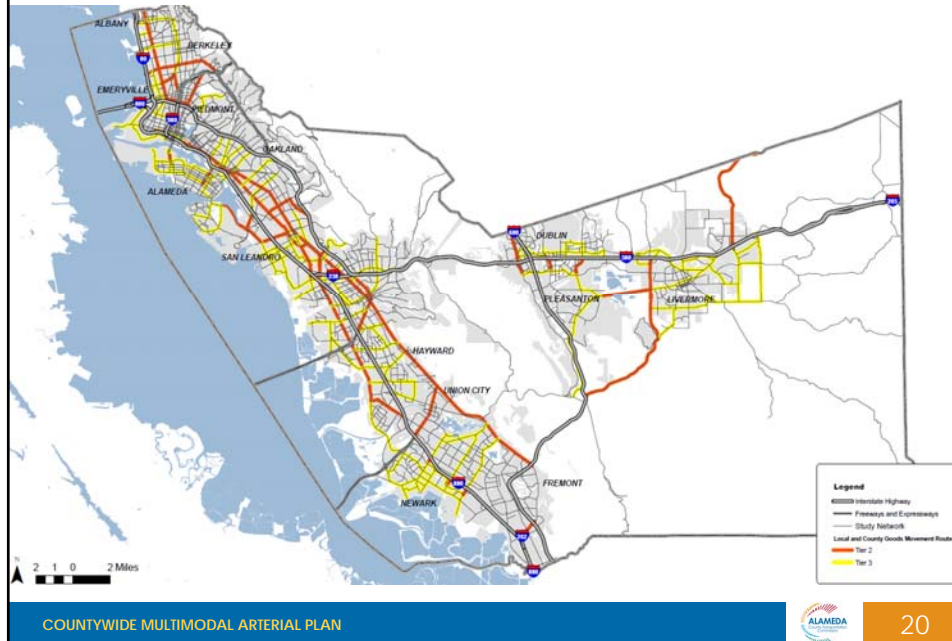


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Pedestrian



Goods Movement



Modal Priority

- Method for balancing modes
- Informs needs assessment and recommended improvements

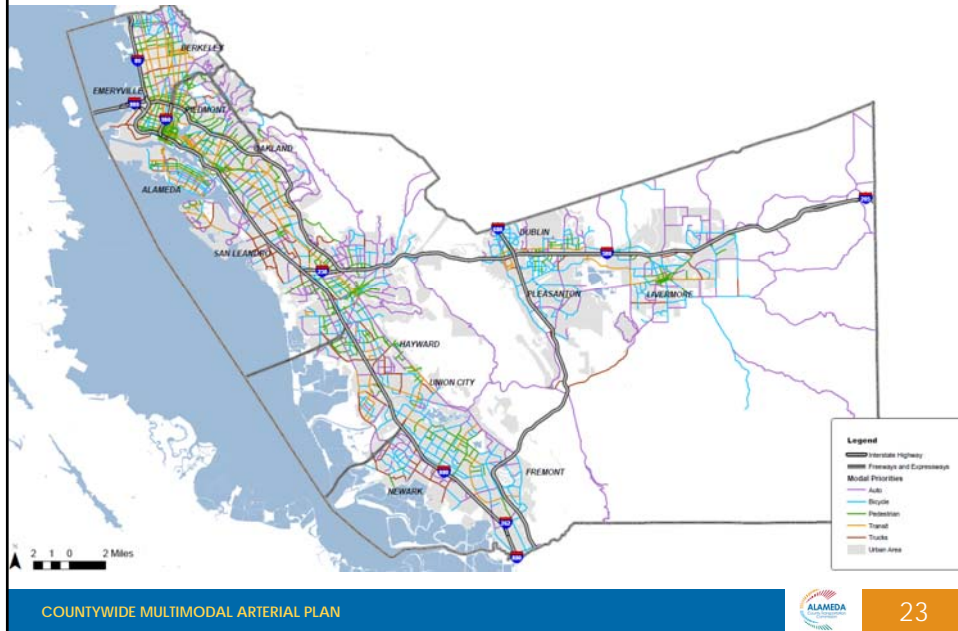


Balancing Modes

Urban Land Use Context Types	Suburban Land Use Context Types	Industrial Land Use Context Types
Associated Modal Emphasis	Associated Modal Emphasis	Associated Modal Emphasis
Transit	Transit	Transit
Pedestrian	Auto	Goods Movement/Truck
Bicycle	Goods Movement/Truck	Auto
Auto	Bicycle	Bicycle
Goods Movement/Truck	Pedestrian	Pedestrian

*Note: Jurisdictions have final say on Modal Priorities.

Modal Priorities



Improvements Driven by Needs



Improvements Driven by Needs



High Priority



High Priority



Mid Priority



Mid Priority



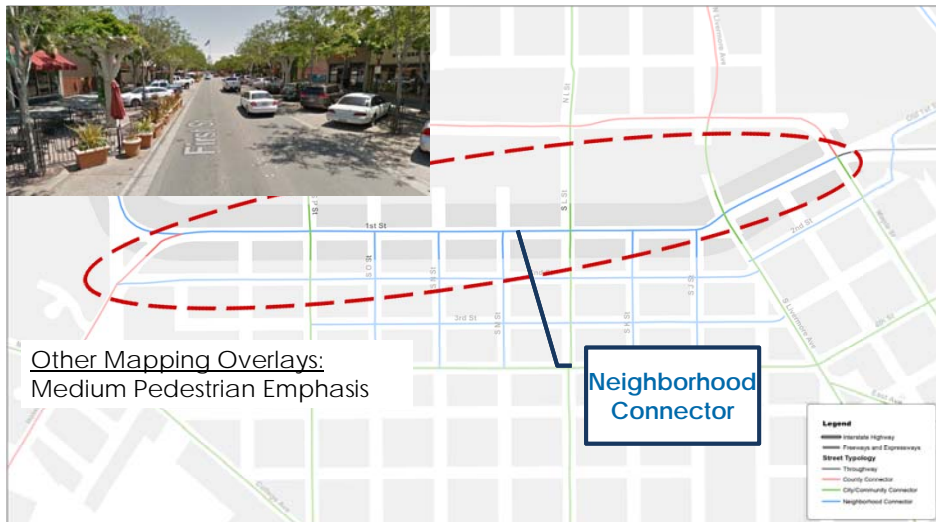
Mid Priority

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Typology – East County Example



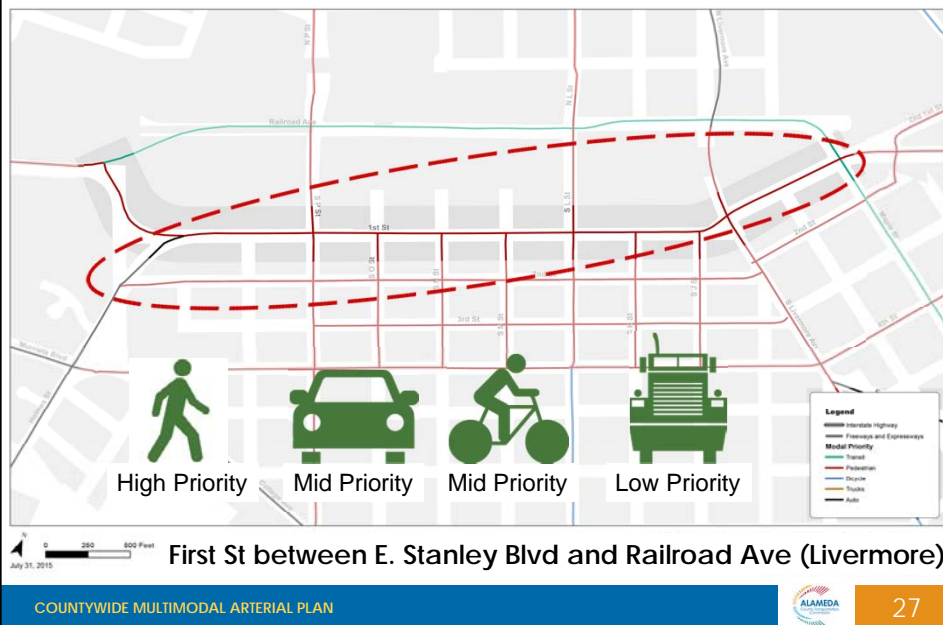
First St between E. Stanley Blvd and Railroad Ave (Livermore)

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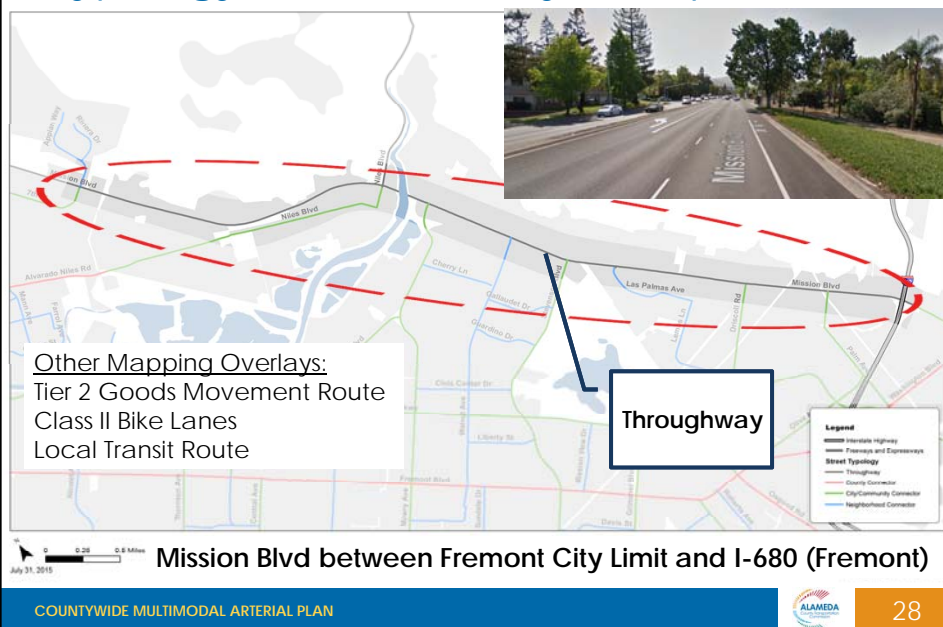


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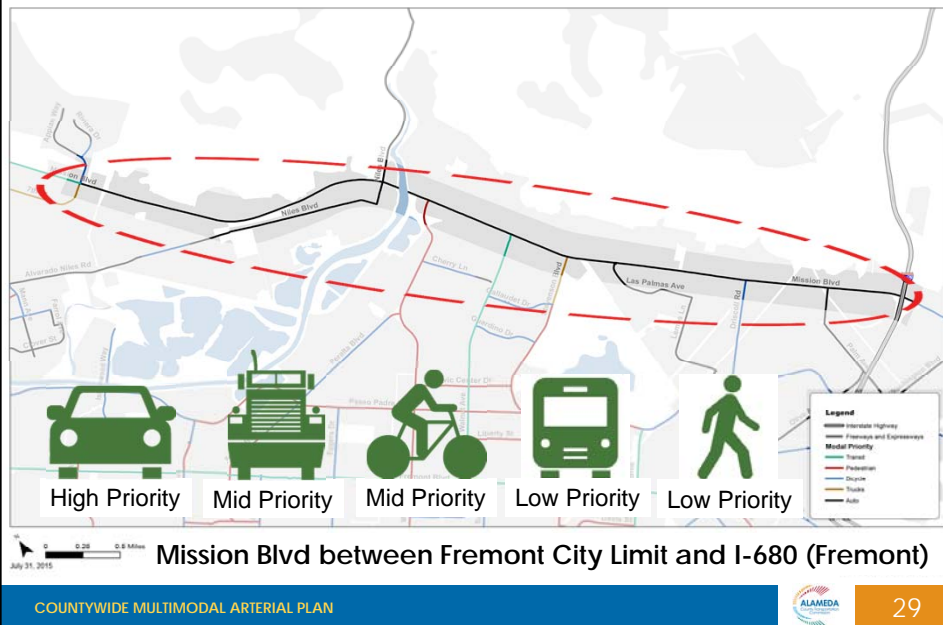
Modal Priority – East County Example



Typology – South County Example



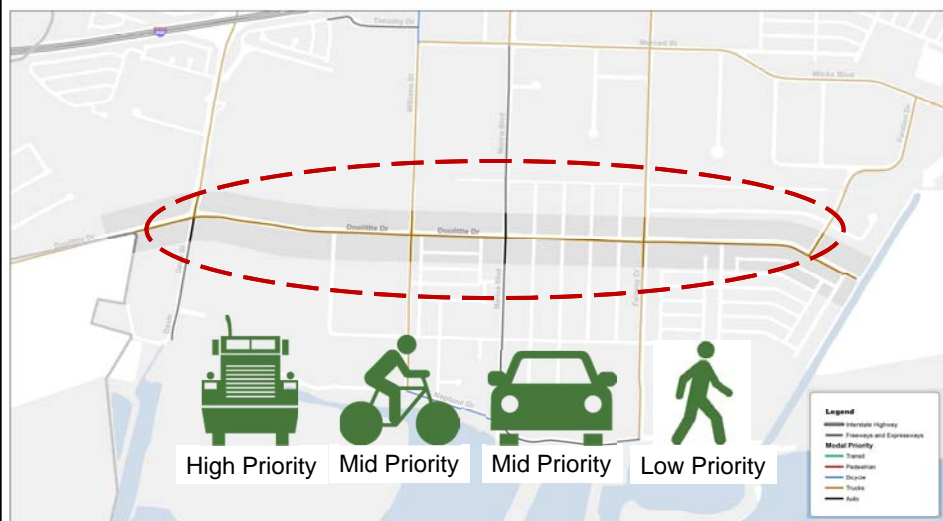
Modal Priority – South County Example



Typology – Central County Example



Modal Priority – Central County Example



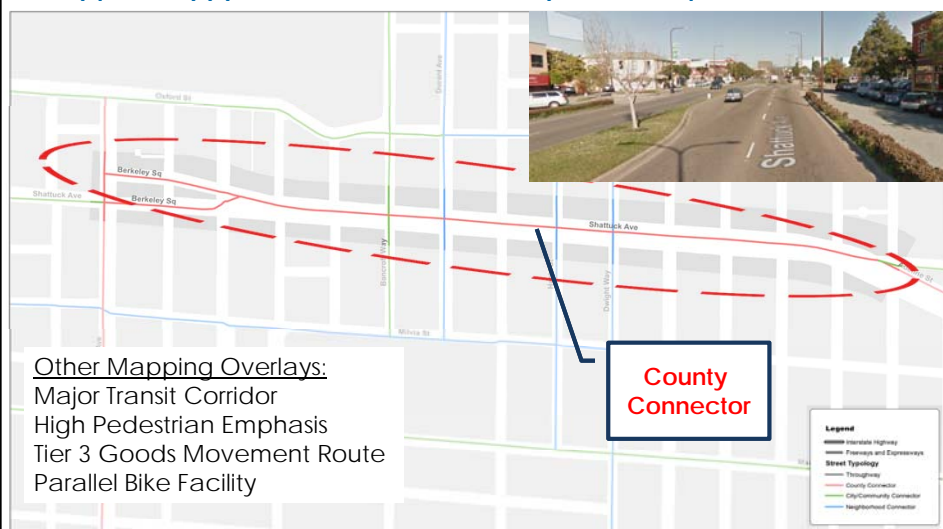
July 31, 2015 Doolittle Dr between Oakland City Limit and Farallon Dr (San Leandro)

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Typology – North County Example



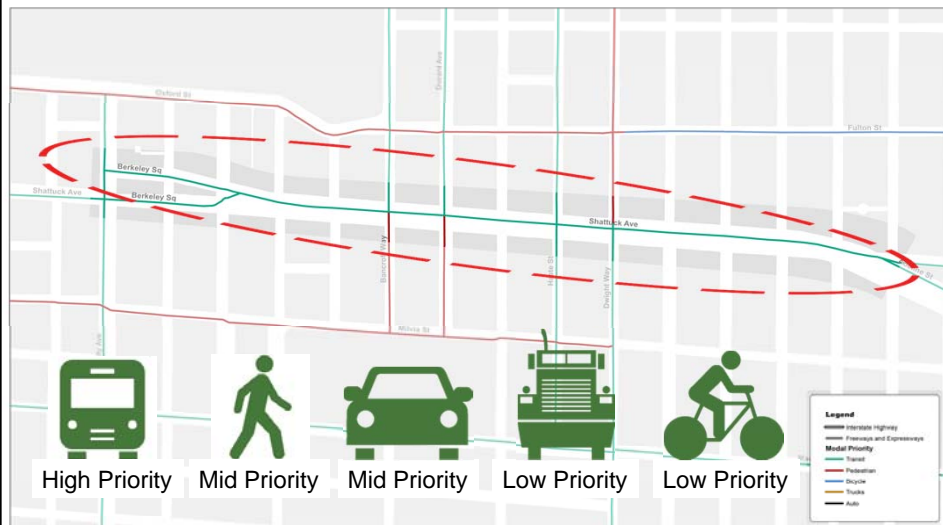
July 31, 2015 Shattuck Ave between University Ave and Derby St (Berkeley)

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Modal Priority – North County Example



Shattuck Ave between University Ave and Derby St (Berkeley)

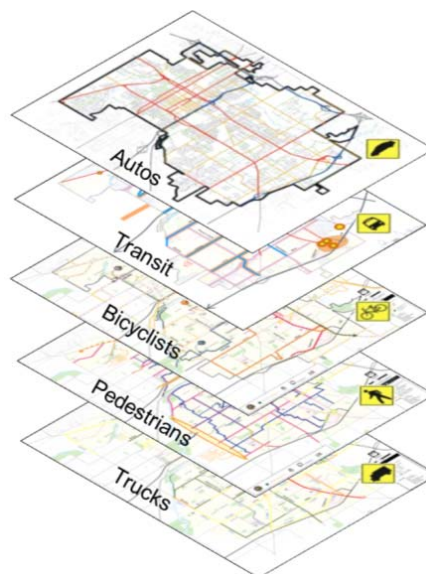
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Needs Assessment

- Modal priorities inform Study Network needs assessment for each mode
- Existing and future year (2020 and 2040) transportation conditions for each mode assessed by applying approved performance measures
- Study Network needs for each mode are identified by applying thresholds to performance measure results



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Preferred Improvements

- Recommended improvements will be identified to adequately address network needs for each mode
- Consultant team will meet with stakeholder agencies individually to develop set of preferred improvements

Next Steps

- Needs Assessment – November 2015
- Recommended Improvements – December 2015
- Individual Meetings with Jurisdictions – January 2016
- Preferred Improvements – February 2016
- Requested Actions:
 - ✓ Approve Typology Framework and Modal Priorities

Questions?