Transit Master Plan -Corridor Line Evaluation



OC Transit Vision - Corridor Line Evaluation





Nelson\Nygaard

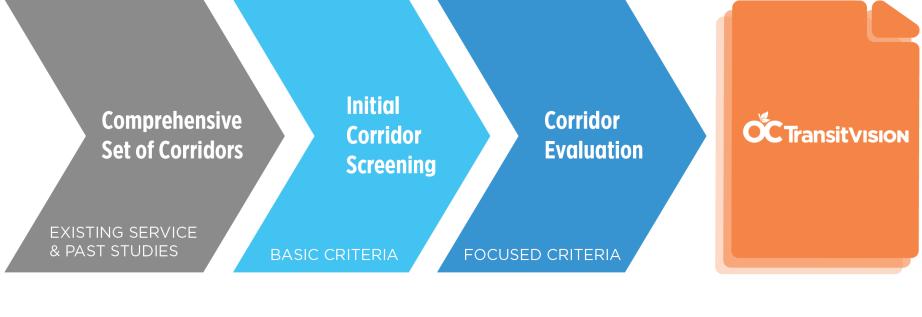
October 2017

Context of Transit Master Plan

- Countywide Study of Long-Term Transit Needs
- Input for Long-Range Transportation Plan
- Guides Future Bus Service Recommendations
- First Step in Project Development Process
 - Master Plan
 - Feasibility Studies
 - Environmental Review
 - Engineering/Design



Opportunity Corridor Evaluation

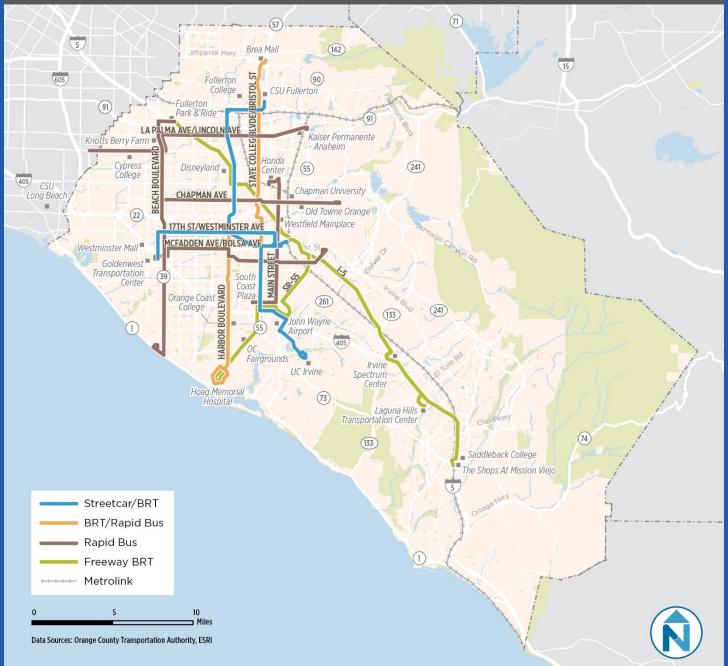


30 Corridors

13 Criteria > 10 Corridors 29 Criteria > 11 Transit Lines



POTENTIAL TRANSIT MODES



Corridor Evaluation- Modes

| Corridor | Limits | Rapid Streetcar | Bus Rapid Transit (BRT) | Rapid Bus |
|--|--|--------------------|-------------------------------|--------------|
| Harbor Boulevard/ Santa Ana Boulevard | California State University, Fullerton to Santa Ana Regional Transportation Center | \checkmark | \checkmark | |
| Westminster Avenue/ Bristol Street | Goldenwest Transportation Center to UC Irvine | \checkmark | \checkmark | |
| Harbor Boulevard (South) | 17th Street/Westminster to Hoag Hospital Newport Beach | | \checkmark | \checkmark |
| State College Boulevard | Brea Mall to Downtown Santa Ana | | \checkmark | \checkmark |
| Beach Boulevard | Fullerton Park-and-Ride to Downtown Huntington Beach | | | \checkmark |
| Main Street | Anaheim Regional Transportation Intermodal Center to South Coast Plaza Park-and-Ride | | | \checkmark |
| La Palma Avenue/Lincoln Avenue | Hawaiian Gardens to Anaheim Canyon Station | | | \checkmark |
| Chapman Avenue | Hewes Street to Beach Boulevard | | | \checkmark |
| McFadden Avenue/Bolsa Street | Goldenwest Transportation Center to Larwin Square | | | \checkmark |
| Interstate 5 Freeway | Fullerton Park-and-Ride to Mission Viejo/Laguna Niguel Station | | \checkmark | |
| State Route 55 Freeway | Santa Ana Regional Transportation Center to Hoag Hospital | 15 | \checkmark | |

OCTransitVISION

Corridor Evaluation: Criteria

- Speed and Reliability
- Ridership/Mode Shift/Vehicle Miles Traveled Reduction
- Density/Connections to Activity Centers
- Multimodal Connectivity
- Capacity
- Safety
- Passenger Comfort/Amenities
- Equity
- Economic Development
- Transit-Supportive Policy
- Cost-Effectiveness/Productivity



Corridor Evaluation: Assumptions

Right-of-Way

- Streetcar/BRT Corridors: Priority Transit Lane
- Rapid Bus: Mixed-Flow
- Freeway BRT: High-Occupancy Vehicle Lanes

Weekday Frequencies

- Streetcar, BRT, Rapid Bus: 10 minutes peak, 15 minutes off-peak
- Freeway BRT: 15 minutes peak, 30 minutes off-peak



Key Findings: Streetcar / BRT

Harbor Boulevard/Santa Ana Boulevard and Westminster Avenue/Bristol Street had highest projected ridership compared to other corridors

Key factors:

- Streetcar modeled corridors projected to have higher ridership than BRT/Rapid Bus
- Modes have inherent advantages (capacity, system visibility)
- Highest existing ridership bus segments and major regional destinations are included in these corridors



Key Findings: BRT / Rapid Bus

Freeway BRT

- Much faster speeds
- Provides access to major destinations
- More conceptual work needed for station locations/design

BRT/Rapid Bus

- Main Street and Beach Boulevard corridors ranked highest
- La Palma Avenue/Lincoln Avenue had highest ridership, but weaker in other measures



Corridor Potential Next Steps

Corridor Studies for Harbor Boulevard/Santa Ana Boulevard and Westminster Avenue/Bristol Street Lines

- Harbor Study underway with results in December
- Determine next segment to study
- Implement Rapid Bus Service on Beach Boulevard (Bravo! 529)
 - Project to be implemented in 2019
- Study Upgrading Main Street Corridor to Rapid Bus
- Develop Strategy for Incremental Speed and Amenity Improvements for Rapid Bus (Bravo!) Corridors
 - Near/medium term: off-board fare payment, all-door boarding, signal priority
 - Long term: queue jumps, improved shelters, business access/transit lanes
- Conduct Freeway BRT Network Study
 - Determine cost-benefit of dedicated infrastructure (ramps, stations)
 - More focused analysis of corridors (specific to freeway BRT)
 - Conceptual design for priority corridors (e.g., where to add ramps/stations)



Other Potential Next Steps

- Consider Additional Areas for OCFlex Service
 - Pending results of pilot project
- Improve Bus Service Routes Countywide Based on Transit Investment Framework Standards
 - Some improvements for February 2018 service change
- Supplement Orange County Transportation Authority (OCTA) Year-Round Bus Service with Special Event and Seasonal Shuttles
- Work with Local Jurisdictions to Enhance Transit Access and Develop Transit-Supportive Projects
 - Guidelines in development for final plan



Upcoming Study Timeline

- Public/Stakeholder Survey Through November
- Present to the Transit Committee and the Board of Directors (Board) in November
- Return to the Board in January with Final Report and Action Plan

