Bristol Street Transit Corridor Study - Draft Alternatives

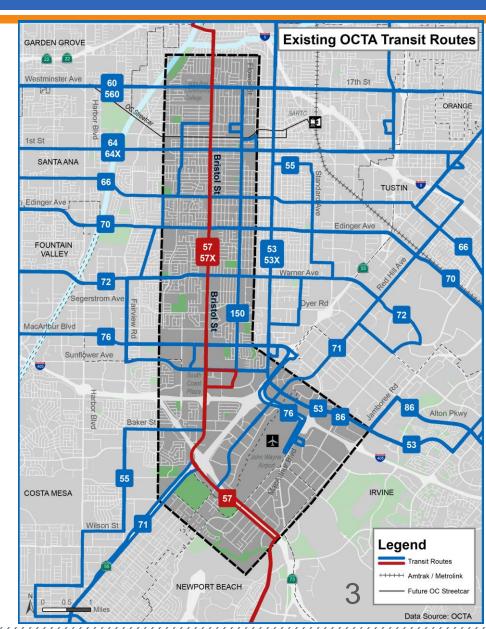


Schedule and Progress

Study Phase	Description	Timeline		
I. Purpose and Need	Corridor Definition and Mobility Needs	April 2019		
II. Alternatives Development	Develop six conceptual transit alternatives	October 2019		
III. Alternatives Evaluation	Evaluate ridership, cost, environmental benefits, and community support	Spring 2020		
IV. Final Report	Present report findings and community input received	Summer 2020		

Developing the Draft Alternatives

- Existing conditions and future planned projects
- Mobility needs and goals
- Agency coordination
 - PDT meetings
 - Stakeholder and public outreach
 - Constraints analysis
 - Airport access (for bus and rail)
 - Project features (signal priority, dedicated lanes, etc.)
- Integration with existing transit services



Agency, Stakeholder, and Public Participation

- Agency coordination meetings
 - Santa Ana, Costa Mesa, Irvine, Caltrans, JWA
- Stakeholder workshop
 - Wednesday, July 31, 10:00 AM @ OCTA
- Open houses
 - Saturday, August 3, 10:00 AM @ Santa Ana Corporate Yard
 - Wednesday, August 7, 5:30 PM @ South Coast Medical Center
- Online survey: July 17 September 13

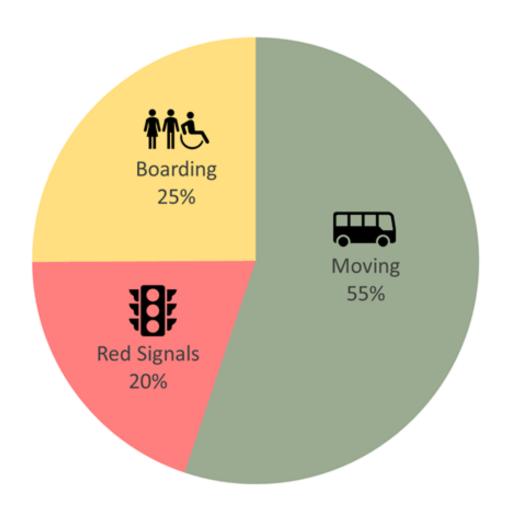
Caltrans – California Department of Transportation
JWA – John Wayne Airport
OCTA – Orange County Transportation Authority

Online Survey Results

- Offered to the stakeholder working group, social media, community/civic organizations, OCTA committees, and bus passengers
- 466 completed surveys
- Travel purposes include shopping, entertainment, work, and medical
- Most desired features:
 - Frequency of service
 - Connectivity to other transit
 - Travel time compared to other options
- Mode preference: modes with dedicated lanes scored the highest

Improving Transit

- Improving Travel Time
 - Moving
 - Boarding
 - Red signals
- Benefits
 - Increased ridership
 - Reduced costs or better frequency
 - Improved productivity
- Improving Stop Amenities
 - Shelter and seating
 - Signage and real-time information



Features By Mode

Feature Scale (None to Full) - 🤇		Moving Imp (55% of	provements f Time)		ding Improvem (25% of Time)	ents	Red Signal Im (20% of			
	Mode	Dedicated Lanes	Limited Stop Spacing	Off-Board Fare Collection	All-Door Boarding	Level Boarding	Transit Signal Priority	Queue Jumps	Stop Amenities	Vehicle Capacity
BFFACO.	Enhanced Bus	0			•	0			•	50 Passenger
	Bus Rapid Transit	•		•	•	•		•	•	75 Passenger
	Streetcar	0		•	•	•		•	•	150 Passenger
	Rapid Streetcar	•			•			•	•	150 Passenger

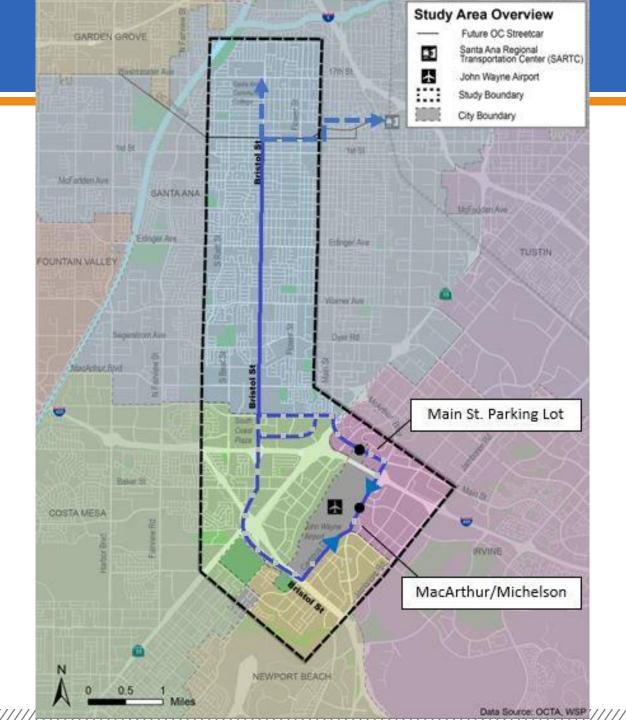
Draft Alternatives

Components

- Alignment
- Termini
- Stop locations
- Modes and features

Assumptions

- Limited stop spacing
- Bus alternatives to serve 57X service area
- Streetcar alternatives to use consistent technology



Enhanced Bus

Fullerton – JWA via Anton Boulevard

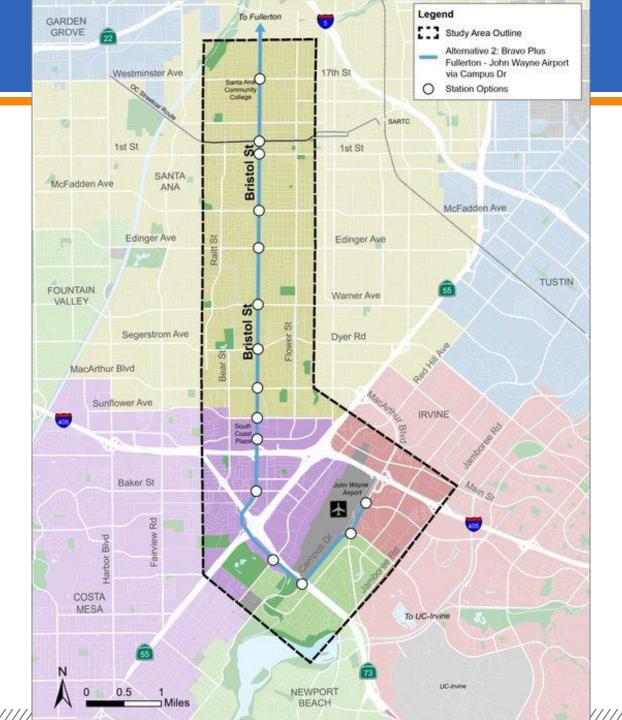
- Shares lane with cars
- Transit signal priority
- Off-board fare collection
- Can carry up to 50 people
- Stops outside JWA
- \$\$\$\$



Enhanced Bus

Fullerton – JWA via Campus Drive

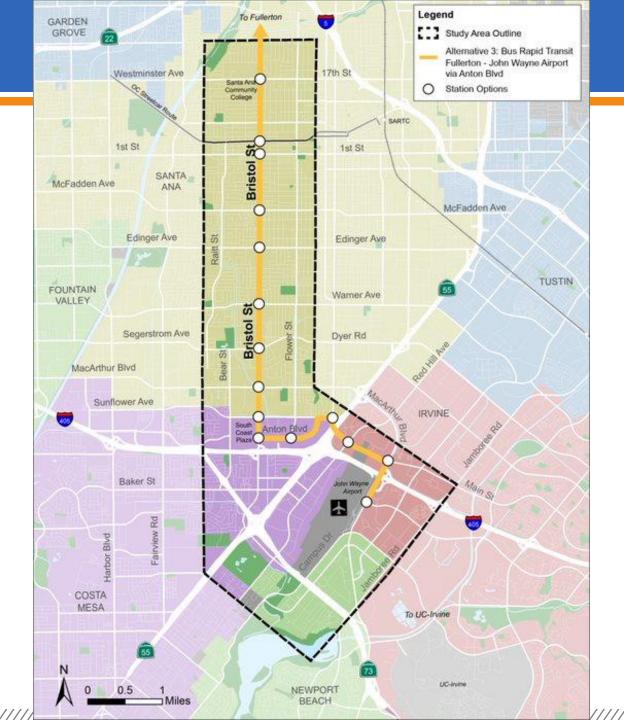
- Shares lane with cars
- Transit signal priority
- Off-board fare collection
- Can carry up to 50 people
- Stops in JWA terminal
- \$\$\$\$



Bus Rapid Transit

Fullerton – JWA via Anton Boulevard

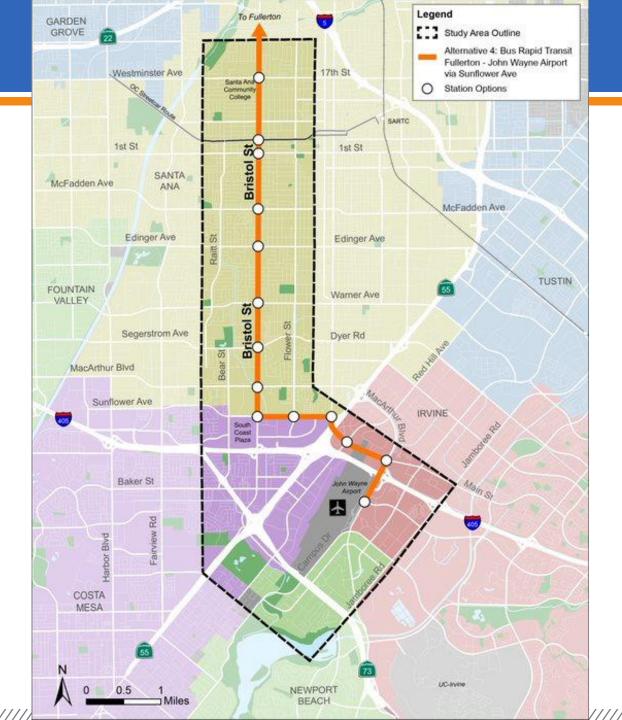
- Dedicated bus-only lanes
- Transit signal priority
- Queue jumps
- Enhanced stop amenities
- Off-board fare collection
- Can carry up to 75 people on longer buses
- Stops in JWA terminal
- \$\$\$\$



Bus Rapid Transit

Fullerton – JWA via Sunflower Avenue

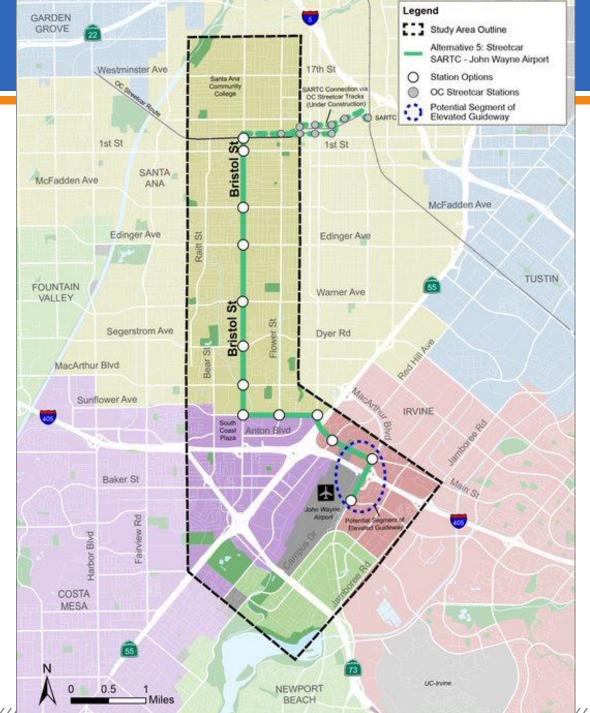
- Dedicated bus-only lanes
- Transit signal priority
- Queue jumps
- Enhanced stop amenities
- Off-board fare collection
- Can carry up to 75 people on longer buses
- Stops outside JWA
- · \$\$\$\$



Rapid Streetcar

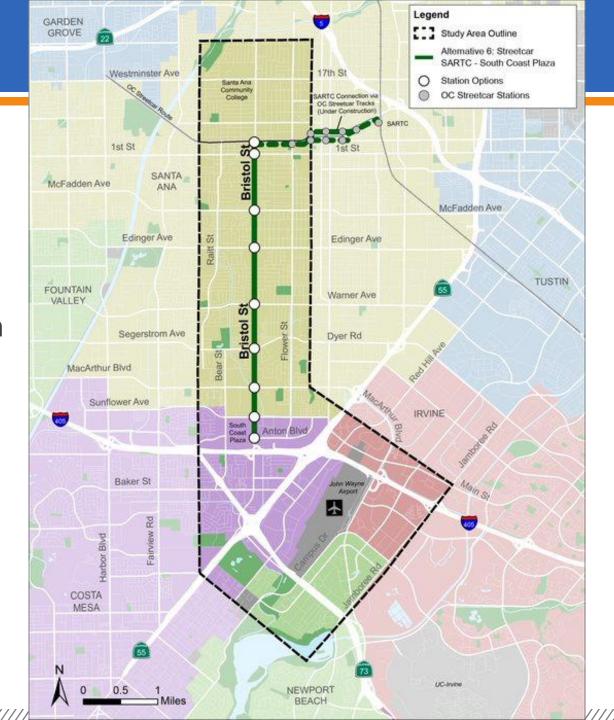
SARTC - JWA

- Travels on its own tracks in shared or partially dedicated lanes
- Powered via overhead power system
- Enhanced stop amenities
- Off-board fare collections and multi-door boarding
- Can carry up to 150 people (3x as many as regular buses)
- Elevated station near the airport entrance
- May exceed vehicle capacity at existing maintenance facility
- \$\$\$\$



Rapid Streetcar SARTC – South Coast Plaza

- Travels on its own tracks in shared or partially dedicated lanes
- Powered via overhead power system
- Enhanced stop amenities
- Off-board fare collection and multi-door boarding
- Can carry up to 150 people (3x as much as regular buses)
- No direct airport connection
- \$\$\$\$



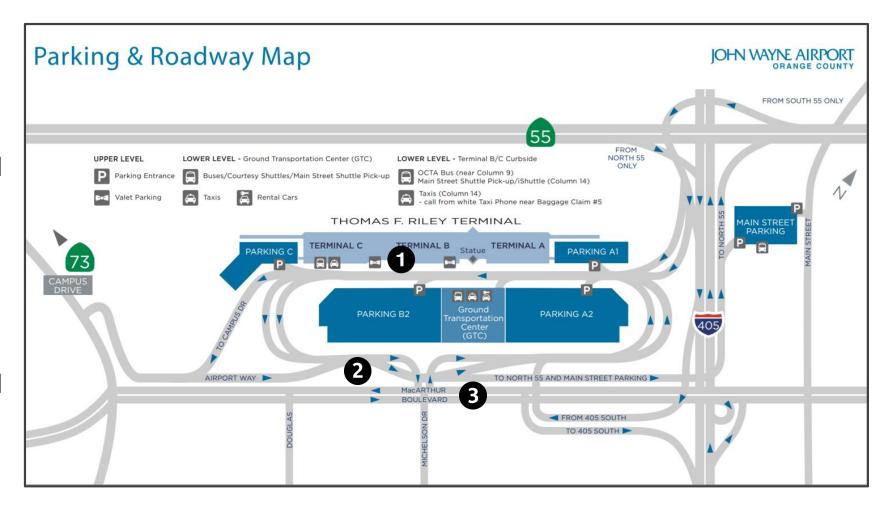
Airport Access - Bus and Rail

Bus Options

- 1 In Terminal
- MacArthur Boulevard
 Turnout

Rail Option

MacArthur Boulevard
Elevated



Draft Evaluation Criteria

GOALS	DRAFT PERFORMANCE MEASURES			
1. Enhance Transit Performance	Travel time improvement			
	Regional connections			
2. Support Local Land Use Plans and Policies	Population and employment densities			
	Affordable housing units			
3. Enhance Customer Experience and Improve Mode Choices	Level of stop amenities			
	Transit ridership on project			
4. Support Air Quality Goals and Minimize Environmental Impacts	Potential reductions to greenhouse gases			
	Potential impacts to roadway operation and person throughput			
	Potential environmental impacts			
5. Ensure Cost-Effectiveness	Capital and O&M cost			
	Capital and O&M cost per new rider			
6. Incorporate Community Input	Summary of outreach activities performed and input received			

O&M – Operations and Maintenance

Next Steps

- Present draft alternatives to cities and external agencies
- Conduct a second round of outreach
- Finalize draft alternatives based on feedback from the Board, city councils, stakeholders and public
- Perform technical evaluation of alternatives
- Return to the Board in spring 2020 with evaluation results

Bristol Study webpage: www.octa.net/bristol