

ATTACHMENT 1

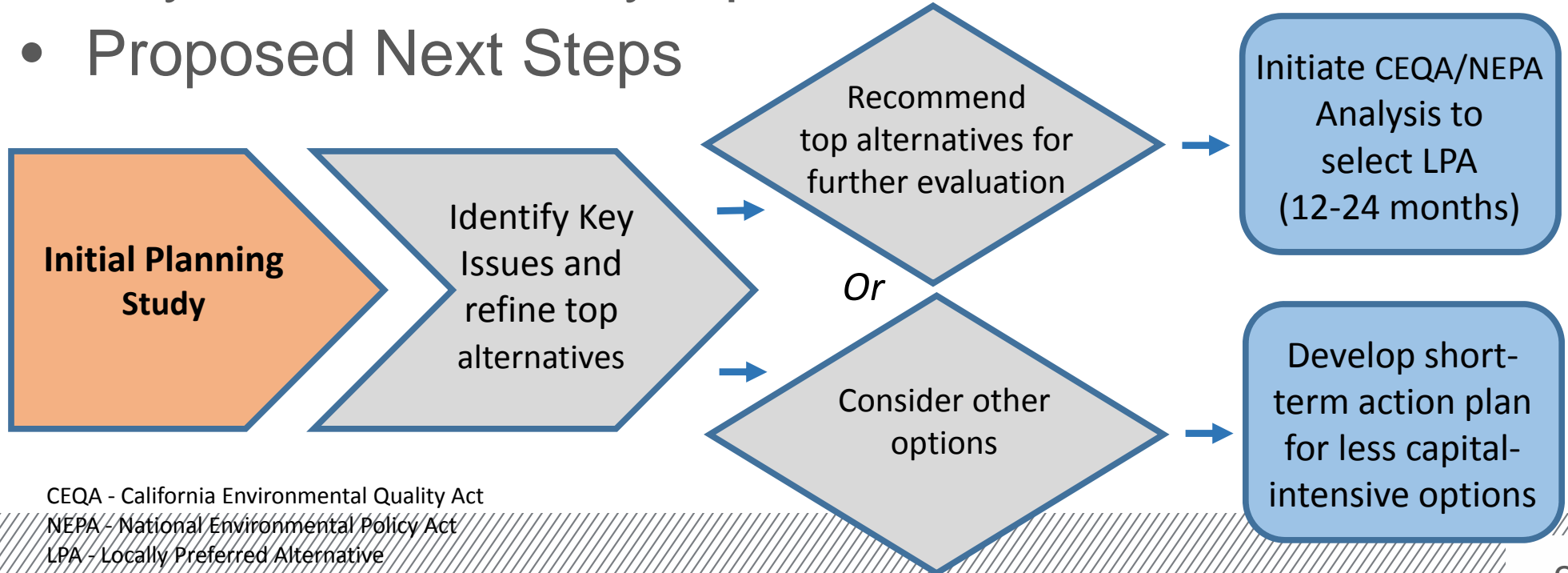


Central Harbor Boulevard Transit Corridor Study

Fullerton City Council
January 16, 2018

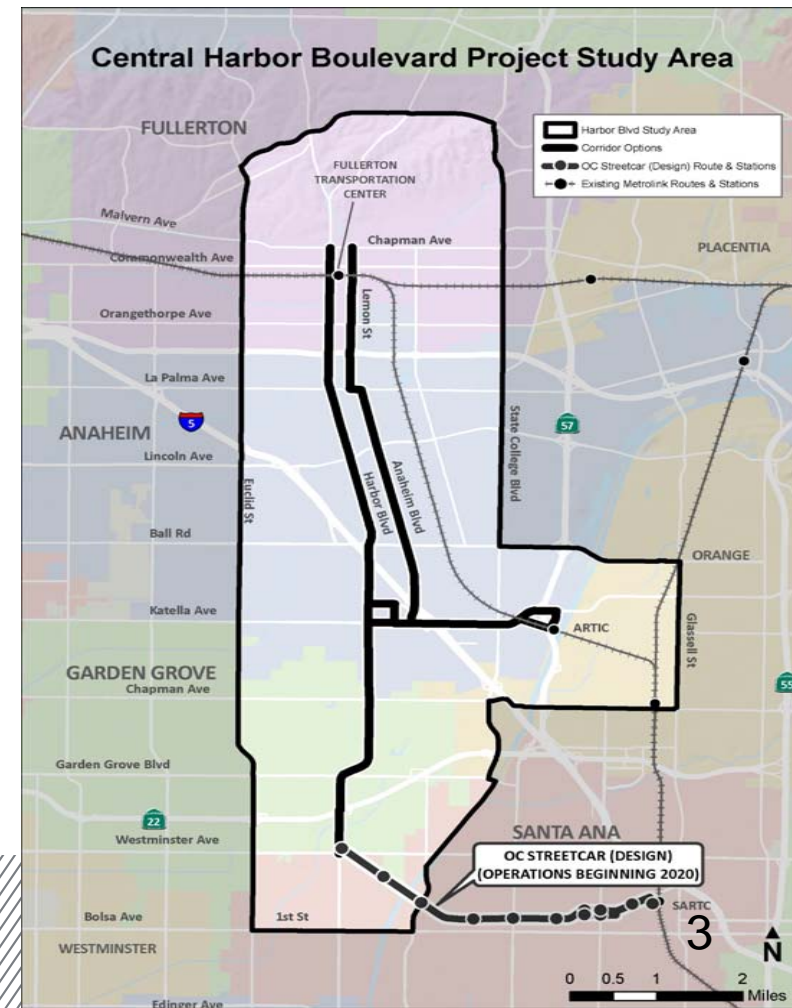
Today's Update

- Performance Results for the 12 Alternatives
- City and Community Input Received to Date
- Proposed Next Steps



Study Focus

- Identify transit improvement strategies for the Harbor Boulevard corridor between Westminster Avenue and the Fullerton Transportation Center
- Consider Anaheim Boulevard/Lemon Street as a viable alternative route
- Evaluate transit connections between Harbor Boulevard and the Anaheim Regional Transportation Intermodal Center



Study Phases and Schedule

- Purpose and Need August 2015 - December 2016
- Outreach 1 February - April 2016
- Alternatives Development February 2016 - April 2017
- Outreach 2 February - April 2017
- Alternatives Evaluation April - September 2017
- **Draft Final Report** **December 2017**
- Final Report Early 2018

Mode/Feature Options

Enhanced Bus



- Shares lanes with other cars
- Receives priority at traffic signals and uses bypass lanes at intersections
- Includes state-of-the-art stops with ticket machines
- Carries around 70 people
- Project Cost: \$

Bus Rapid Transit



- Includes all Enhanced Bus features, but travels on a dedicated bus-only lane
- Carries around 120 people in a longer, 60-foot bus
- Project Cost: \$\$

Streetcar



- Shares lanes with cars but travels on its own track embedded in the road
- Powered by overhead wires
- Includes modern stops with ticket machines and allows riders to board from front or rear doors
- Carries up to 150 people (3x as much as regular buses)
- Project Cost: \$\$\$

“Rapid” Streetcar



- Includes all Streetcar features, but uses a dedicated streetcar-only lane
- Faster than a regular streetcar or bus
- Project Cost: \$\$\$\$

12 Conceptual Alternatives

HARBOR LONG

- H-2: Harbor Long Streetcar
- H-3: Harbor Rapid Streetcar
- H-4: Harbor Enhanced Bus
- H-5: Harbor Bus Rapid Transit (BRT)

HARBOR SHORT

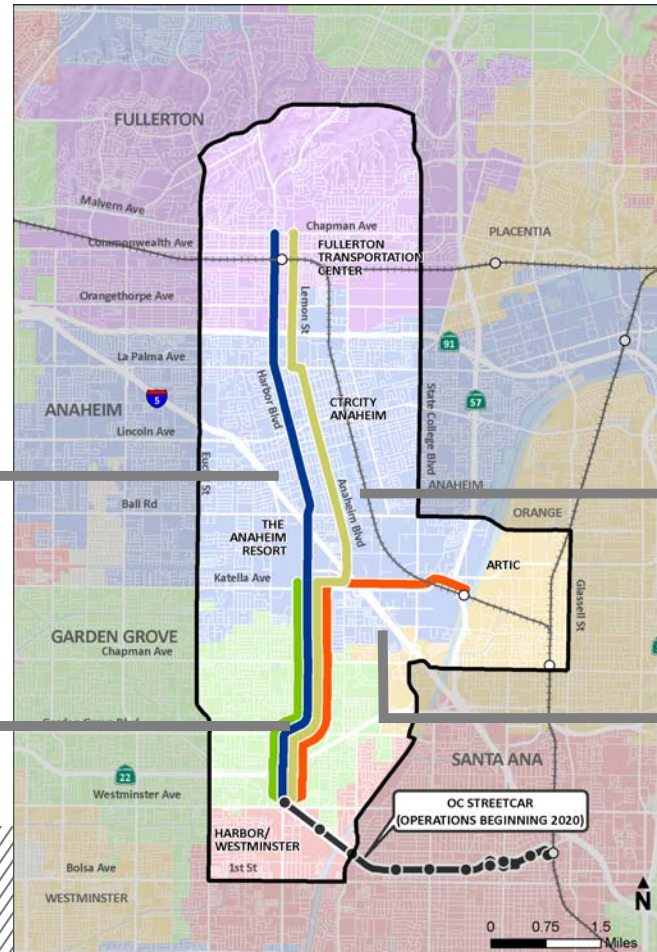
- H-1: Harbor Short Streetcar

ANAHEIM/LEMON

- L-1: Anaheim/Lemon Streetcar
- L-2: Anaheim/Lemon Rapid Streetcar
- L-3: Anaheim/Lemon Enhanced Bus
- L-4: Anaheim/Lemon BRT

KATELLA

- K-1: Katella Streetcar
- K-2: Katella+ Anaheim/Lemon Enhanced Bus
- K-3: Katella + Harbor Hybrid



Evaluation Criteria

- Transit Performance (20%)
- Land Use (15%)
- Connectivity (18%)
- Constraints (15%)
- Mode Choices/User Experience (17%)
- Cost-Effectiveness (15%)
- City and Community Input (Qualitative)

Evaluation Scores

ALTERNATIVE	DESCRIPTION	Average Score						Total Score ²
		Transit Performance	Land Use	Connectivity	Constraints	Choice/User Experience	Cost Effectiveness	
H3	Harbor Rapid Streetcar ¹	18	11	14	7	14	11	74
H2	Harbor Long Streetcar	17	11	12	10	14	10	73
H5	Harbor BRT ^{1*}	17	11	12	8	12	14	73
L1	Anaheim-Lemon Streetcar	17	10	12	8	13	8	68
L4	Anaheim-Lemon BRT ^{1*}	14	11	12	6	12	12	66
L2	Anaheim-Lemon Rapid Streetcar ¹	15	10	14	5	14	8	65
K1	Harbor-Katella Streetcar*	16	11	10	11	12	6	65
H1	Harbor Short Streetcar*	17	9	8	13	10	8	64
K2	Katella + Anaheim-Lem Enhanced Bus	7	11	11	11	7	11	57
L3	Anaheim-Lemon Enhanced Bus*	10	10	9	11	5	11	56
K3	Katella + Harbor Hybrid	9	11	11	10	9	7	56
H4	Harbor Enhanced Bus*	9	10	10	13	4	9	55

¹Operates in a dedicated transit lane for at least 50% of the alignment.

²Due to rounding, the total scores may not equal the sum of the category scores.

*Extends to MacArthur Boulevard, consistent with existing Bravo! Route 543 service area.

Technical Evaluation Summary

- Higher-capacity, higher-visibility modes offer significant ridership benefits and travel time improvements
 - Rapid streetcar, streetcar, and bus rapid transit
- Top five scoring alternatives:
 - H3 Harbor Rapid Streetcar
 - H2 Harbor Long Streetcar
 - H5 Harbor BRT
 - L1 Anaheim-Lemon Streetcar
 - L4 Anaheim-Lemon BRT

Technical Input on Alternatives

Key technical issues identified by city staff:

- Harbor Boulevard ROW constraints in north Anaheim and Fullerton
- Anaheim-Lemon as a viable alternative corridor for evaluation
- Infrastructure challenges in connecting to Fullerton Transp. Center (FTC): underpasses and grade changes on Harbor Blvd and Lemon Street
- Options for extending one stop beyond FTC to Fullerton College
- Dedicated transit lanes - require more analysis in next study phase
- Center-running alignments with center stations – generally not supported

Council Input on Alternatives

- **Fullerton** –Requested a council presentation for January 2018
- **Anaheim** – Adopted Resolution in January 2017 stating opposition to a streetcar system
- **Garden Grove** – Council presentation provided in February 2017, and general support for the study was noted
- **Santa Ana** – Council presentation provided in April 2017, and general support for the study was noted

Community Input



Study/Central-Harbor-Boulevard-Transit-Corridor-Study/?fm=8969#StayInformed

Online Surveys

OCTA is exploring opportunities to improve mobility in and around Harbor Boulevard as part of the Central Harbor Boulevard Transit Corridor Study. In partnership with Santa Ana, Garden Grove, Anaheim and Fullerton, OCTA has identified 12 different options to improve transit service in the area. We need your help to narrow down the best options for transit in and around Harbor Boulevard!

Here are TWO survey options:

- 1 If you would like to know which option best matches your ideas for improving service in the Harbor Boulevard area, please take this quick 2-minute survey.

WHAT TRANSIT ALTERNATIVE ARE YOU?
- 2 In this questionnaire you will provide feedback on how each option should be evaluated, what features are important, and how each vehicle and route should be ran. This questionnaire will take you approximately 15 minutes to complete.

CENTRAL HARBOR BLVD TRANSIT CORRIDOR STUDY QUESTIONNAIRE

Open House Information

Thursday, March 30 5 to 7 p.m. (Brief presentation at 5:30 p.m.) Garden Grove Community Center 11300 Stanford Ave., Garden Grove 92640	Wednesday, April 5 5 to 7 p.m. (Brief presentation at 5:30 p.m.) Garden Hoyt Conference Room Anaheim City Hall West Tower 201 S. Anaheim Blvd., 2nd Floor Anaheim, CA 92805	Virtual Open House
--	---	---------------------------

- PowerPoint Presentation
- Open House Exhibits

Special accommodations and translations are available to the public by calling (714) 560-5607. Requests must be made within 7 days in advance of the scheduled meeting.

Adaptaciones especiales y traducciones están disponibles para el público. Llámalo al (714) 560-5607. Las solicitudes deben hacerse al menos 7 días antes de la fecha de la reunión programada.

특수권의 및 번역서비스가 필요하신 경우, (714) 560-5607로 연락하십시오. 요청은 반드시 예정된 회의일 전날까지 이루어져야 합니다.

Các tiện ích đặc biệt hoặc các bản dịch đều có sẵn cho công chúng. Xin vui lòng gọi (714) 560-5607. Các yêu cầu phải được thực hiện trong vòng 7 ngày trước khi cuộc họp dự kiến diễn ra.

SUBMIT GENERAL COMMENTS

SIGN-UP FOR UPDATES AND ALERTS **GET CONNECTED** STAY CONNECTED f t y i

Help Us Improve Harbor Boulevard

Public Open House
Thursday, March 30
5:00 - 7:00 p.m.
Presentation: 5:30 p.m.

Garden Grove Community Center
11300 Stanford Avenue
Garden Grove, CA 92640

Wednesday, April 5
5:00 - 7:00 p.m.
Presentation: 5:30 p.m.

Anaheim City Hall West Tower
201 S. Anaheim Blvd., 2nd Floor
Anaheim, CA 92805

Can't make a meeting?
Visit our website for a presentation schedule and/or contact our public affairs.

Ayúdenos a Mejorar Harbor Boulevard

Publico Publico
Thursday, March 30
5:00 - 7:00 p.m.
Presentation: 5:30 p.m.

Garden Grove Community Center
11300 Stanford Avenue
Garden Grove, CA 92640

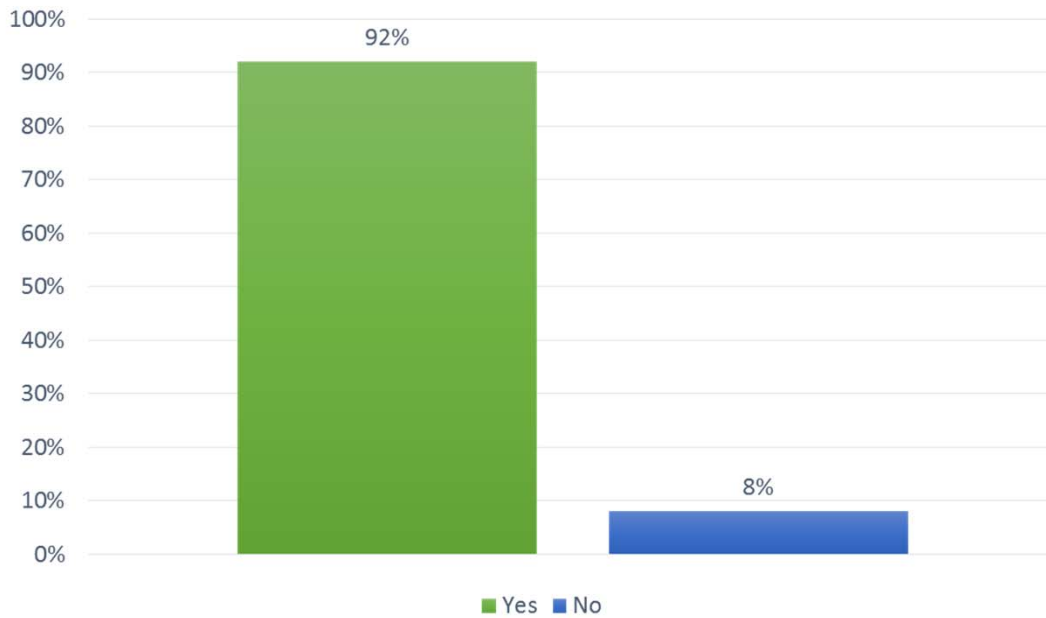
Wednesday, April 5
5:00 - 7:00 p.m.
Presentation: 5:30 p.m.

Anaheim City Hall West Tower
201 S. Anaheim Blvd., 2nd Floor
Anaheim, CA 92805

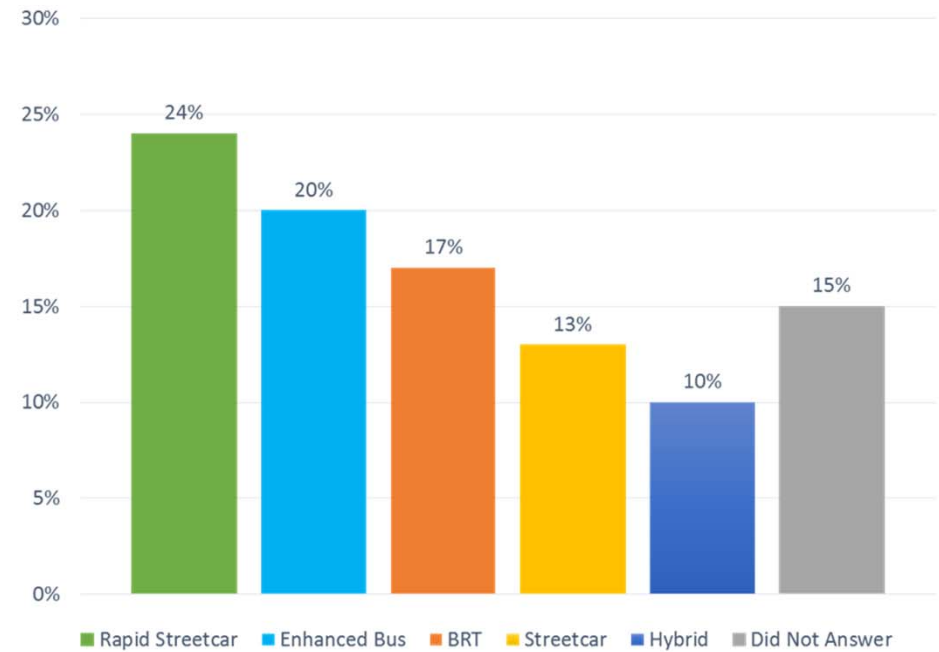
No puede asistir a la reunión?
Visite nuestro sitio web para ver el horario de presentaciones y/o contacte a nuestro departamento de asuntos públicos.

Online Survey

Improvements to Transit Desired

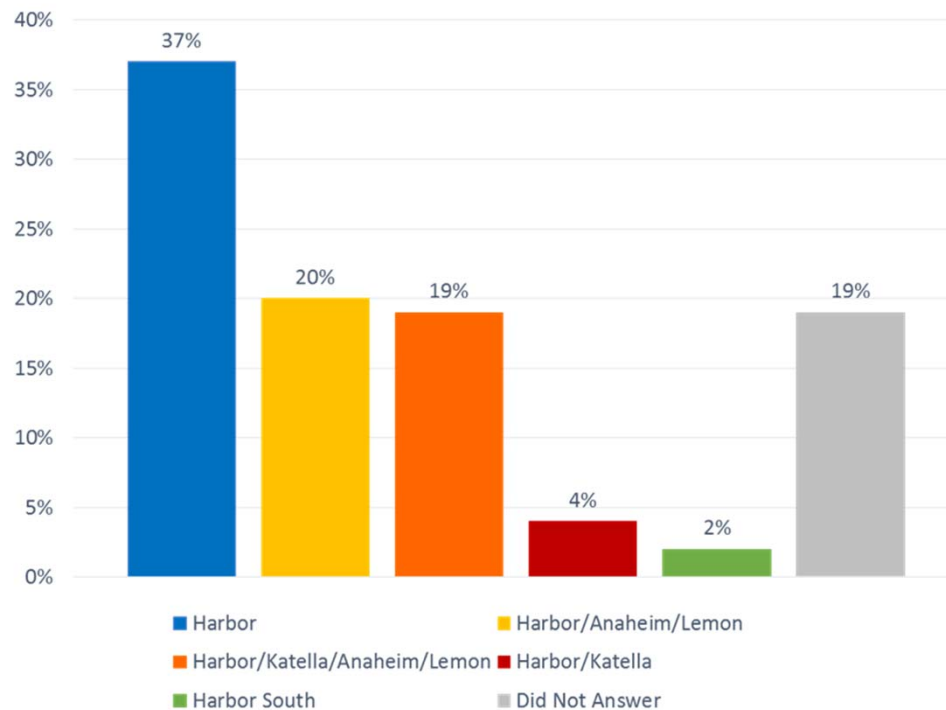


Mode Preference



Online Survey

Route Preference



Most Preferred Transit Characteristics

- Frequency of Service (68%)
- Hours of Operation (49%)
- Overall Travel Time (41%)
- Stop Locations (29%)
- Cost to Ride (28%)
- Real-Time Information (24%)

Next Steps

- A. Offer council presentations to each of the corridor cities for further input
- B. Continue to work with corridor cities technical staff to identify key issues for any subsequent efforts
- C. Finalize the report and incorporate feedback received from the cities, stakeholders, and public; and report feedback to the Board of Directors