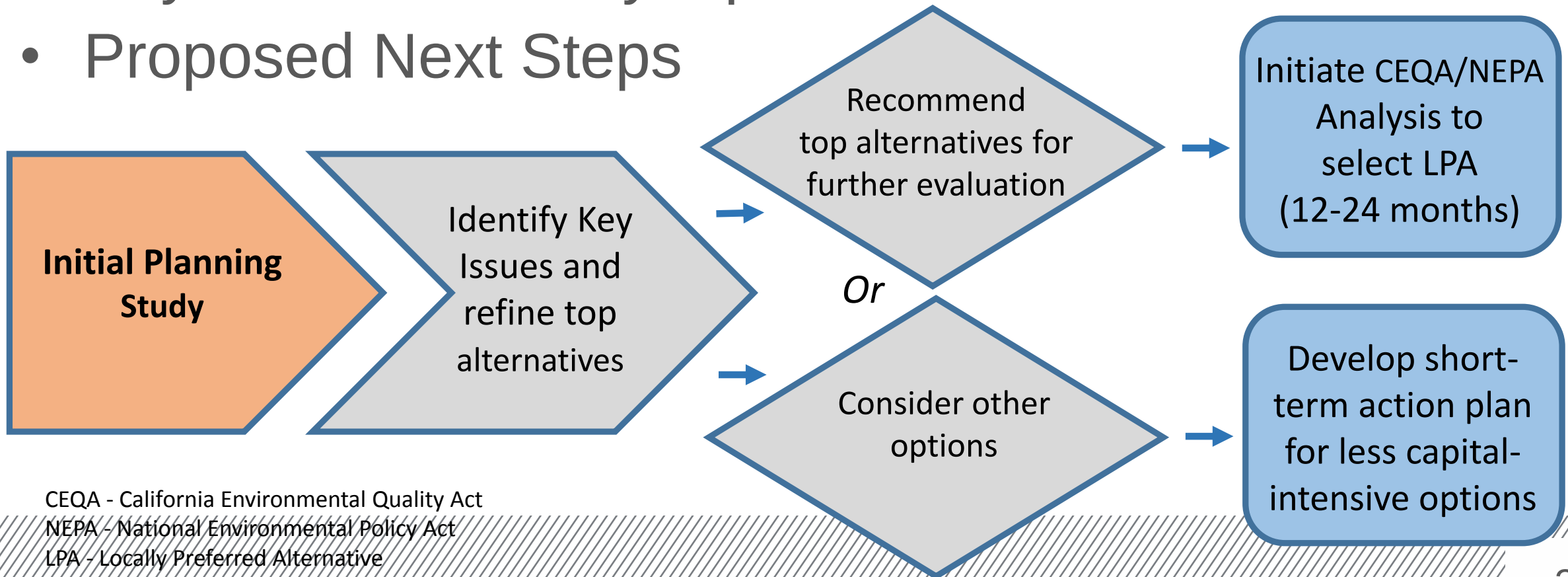


Central Harbor Boulevard Transit Corridor Study

Today's Update

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



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

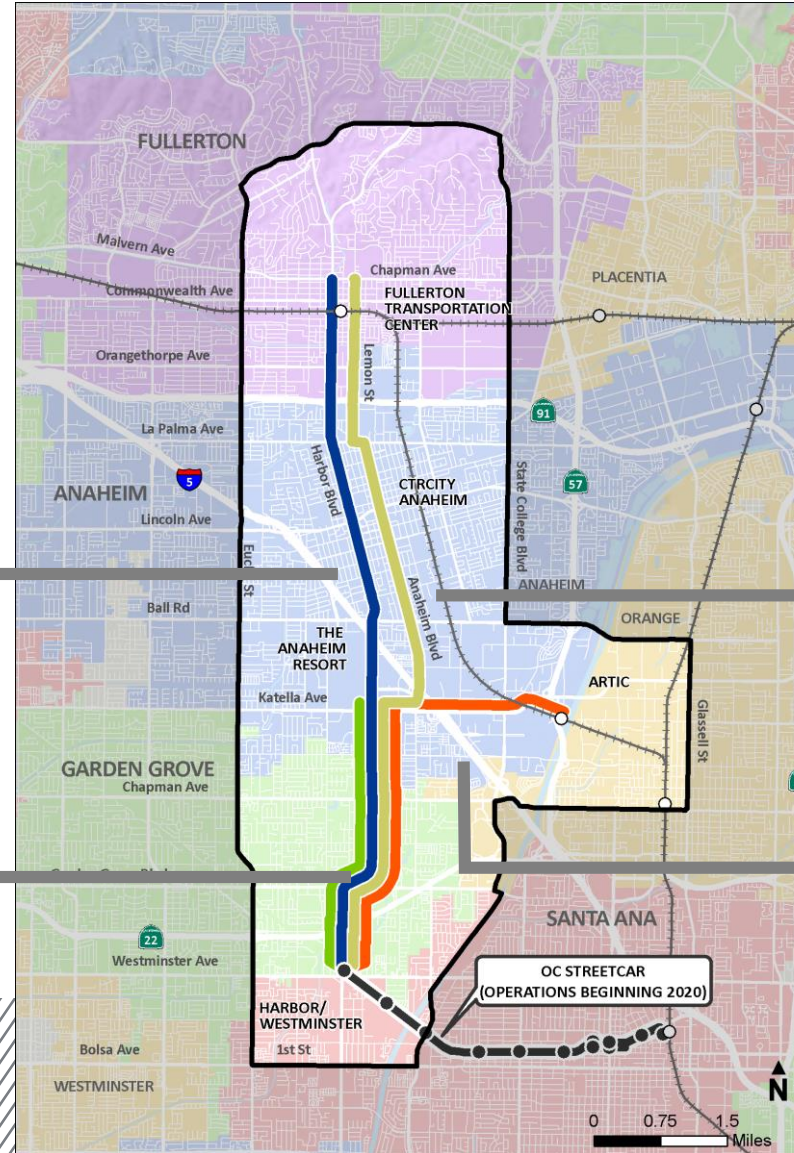
- H-1: Harbor Short Streetcar

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:

- Dedicated transit lanes
- Current and future street capacity (*Master Plan of Arterial Highways*)
- Center-running alignments with center stations – not supported
- Anaheim-Lemon as a viable transit corridor
- Underlying changes to bus service south of Westminster Avenue
- Consideration of complete streets concepts/avoidance of impacts to bike lanes

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, and general support for the study was noted
- **Santa Ana** – Council presentation provided in April, and general support for the study was noted

Community Input



Studies/Central-Harbor-Boulevard-Transit-Corridor-Study/?fmm=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 TVO 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 ranked. 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 92840	Wednesday, April 5 5 to 7 p.m. (Brief presentation at 5:30 p.m.) Gordon 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
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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, llamando 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 연락 하시면 제공될 수 있습니다. 요청은 반드시 예정된 모임 날짜 7일이 내에 하셔야 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    

OCTA **Help Us Improve Harbor Boulevard**

Harbor Boulevard, located in one of Orange County's busiest areas, is the busiest north-south travel corridor, providing a vital link for residents, businesses, schools and visiting destinations. The Orange County Transportation Authority (OCTA), with the cities of Fullerton, Anaheim, Garden Grove and Santa Ana, is holding a study to improve transit options in the Harbor Blvd. Corridor area. The study extends south from Chapman Ave. to Harbor Blvd. in Westminster, Calif. Harbor Blvd. with potential connections along Laguna St. or Anaheim Blvd. and could extend east along Harbor Blvd. to I-570.

Please join us for an open house to learn about the 12 transit alternatives that are being studied and provide your thoughts.

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 92840

Wednesday, April 5
 5:00 - 7:00 p.m.
 presentation: 5:30 p.m.
 Gordon Hoyt Conference Room
 Anaheim City Hall West Tower
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Can't make a meeting?
 Join our virtual meeting and take our quick survey.

OCTA **Ayúdenos a Mejorar Harbor Boulevard**

Harbor Boulevard, ubicado en una de las zonas más densas del Condado de Orange, es el corredor de tránsito más vital y el más activo, proporcionando un enlace vital para los residentes, negocios, escuelas y destinos para visitantes. La Autoridad del Transporte del Condado de Orange (OCTA), con las ciudades de Fullerton, Anaheim, Garden Grove y Santa Ana, está realizando un estudio para mejorar las opciones de tránsito en el área del corredor del Boulevard de Harbor Boulevard. El estudio se extiende sur desde Chapman Ave. hasta el Boulevard de Westminster Blvd. en Santa Ana con conexiones potenciales a lo largo de Chapman St. o Anaheim Blvd. y podría extenderse al este a lo largo de Harbor Blvd. hasta la intersección de I-570.

Por favor, acompañarnos en nuestra reunión para aprender acerca de las 12 alternativas de tránsito que se están estudiando, hacer preguntas y proporcionar sus comentarios.

Reunión Pública
Jueves, 30 de marzo
 5:00 - 7:00 p.m.
 presentación: 5:30 p.m.
 Garden Grove Community Center
 11300 Stanford Avenue
 Garden Grove, CA 92840

Miércoles, 5 de abril
 5:00 - 7:00 p.m.
 presentación: 5:30 p.m.
 Gordon Hoyt Conference Room
 Anaheim City Hall West Tower
 201 S. Anaheim Blvd., 2nd Floor
 Anaheim, CA 92805

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

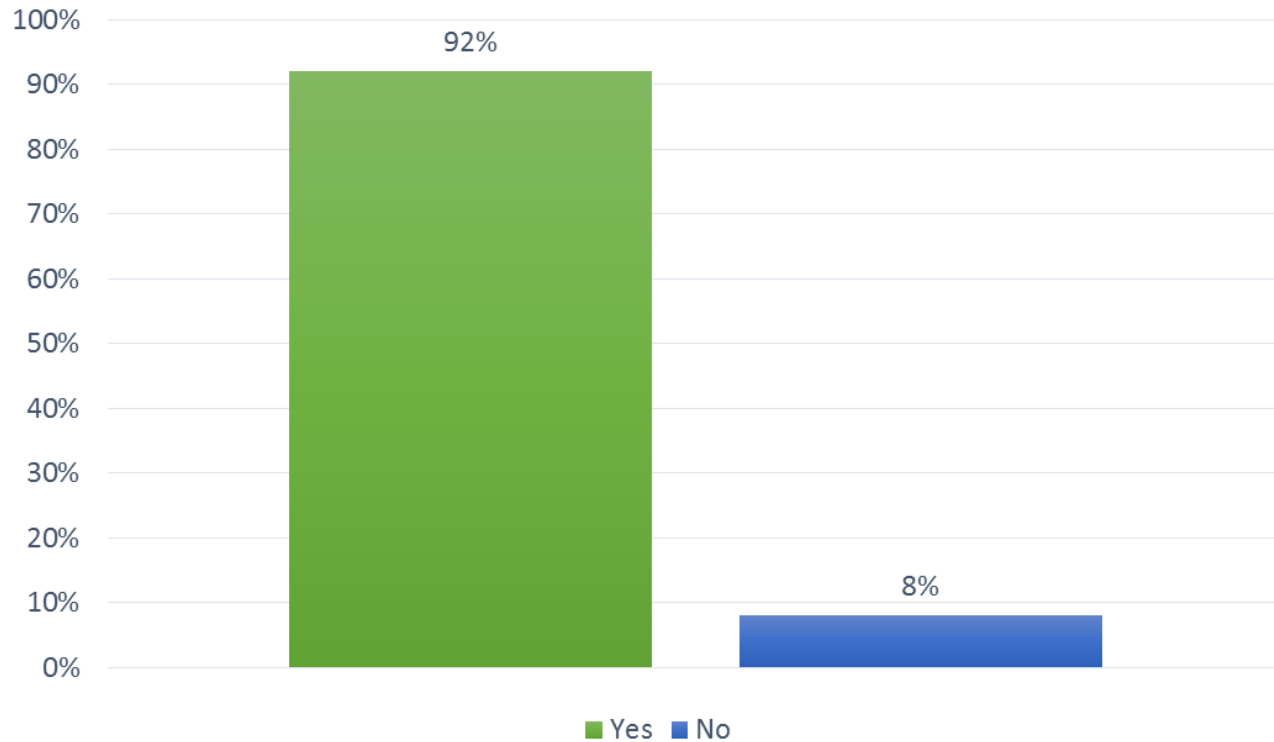
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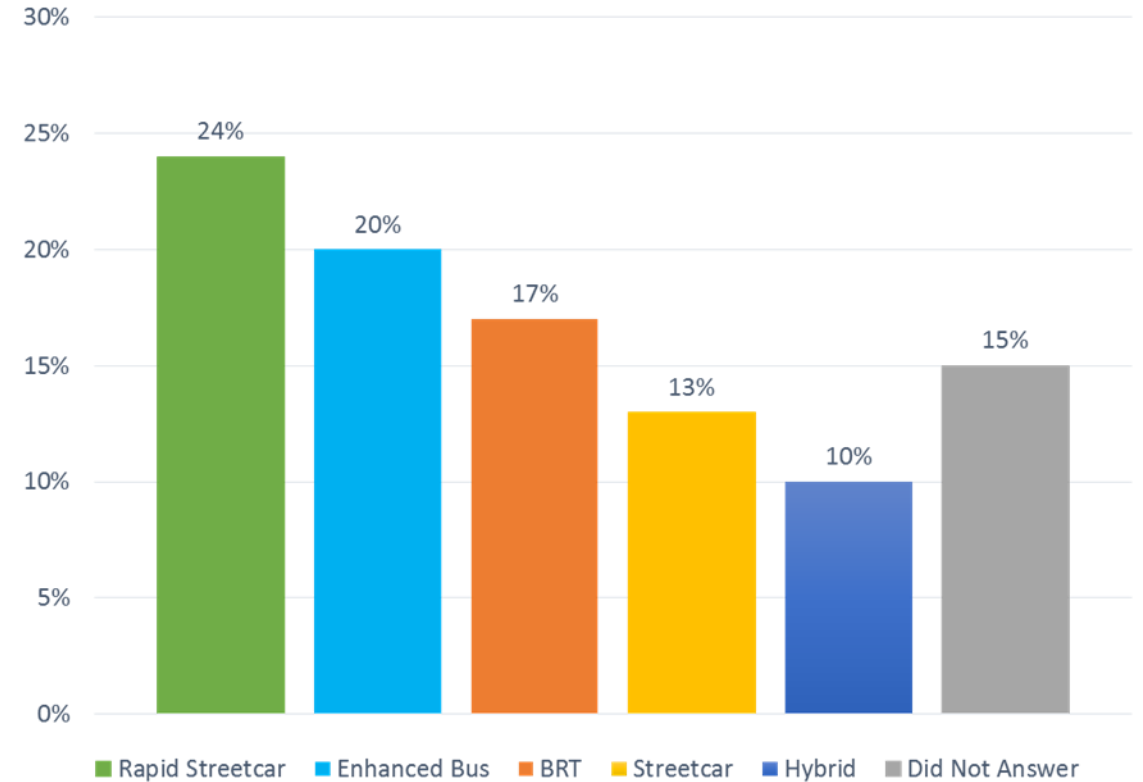
¿No puede asistir a la reunión?
 Únase a nuestra reunión virtual y complete nuestra encuesta rápida.

Online Survey

Improvements to Transit Desired

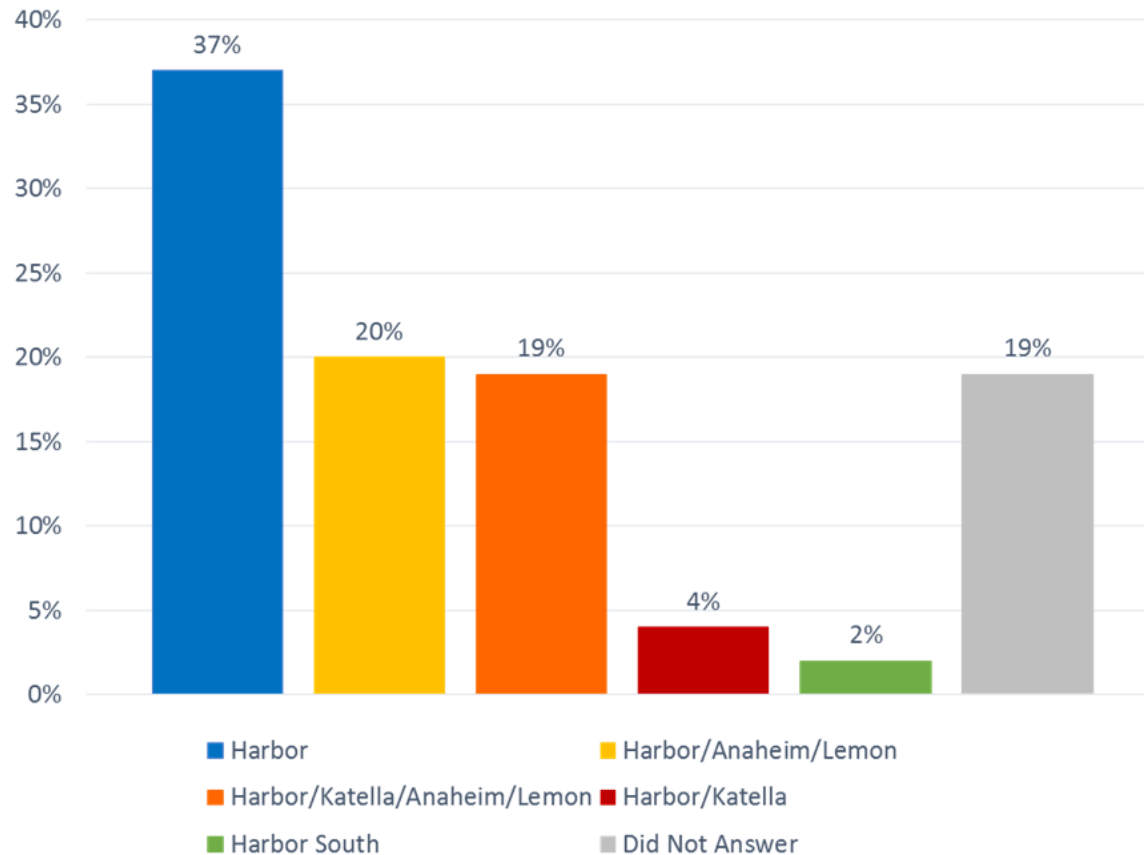


Mode Preference



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