AGENDA

Transit Committee Meeting

Committee Members
Tim Shaw, Chairman
Al Murray, Vice Chairman
Andrew Do
Steve Jones
Miguel Pulido
Tom Tait
Gregory T. Winterbottom

Orange County Transportation Authority
Headquarters
550 South Main Street
Board Room – Conf. Room 07
Orange, California
Thursday, July 13, 2017 at 9:00 a.m.

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA Clerk of the Board, telephone (714) 560-5676, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Committee may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

All documents relative to the items referenced in this agenda are available for public inspection at www.octa.net or through the Clerk of the Board's office at the OCTA Headquarters, 600 South Main Street, Orange, California.

Call to Order

Pledge of Allegiance

Director Winterbottom

1. Public Comments

Special Calendar

There are no Special Calendar matters.

Consent Calendar (Items 2 and 3)

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.

2. Approval of Minutes

Approval of the Minutes of the Transit Committee meeting of June 8, 2017.

3. Federal Transportation Program Strategic Regulatory and Funding Consulting Services
Richard Teano/Lance M. Larson

Overview

Consultant services are needed to provide high-level strategic advice and consultation to the Orange County Transportation Authority as the subject matter expert for a wide variety of federal transportation programs, regulatory processes, and funding sources at all levels in the Federal Executive branch of government. Proposals were received and evaluated in accordance with the Orange County Transportation Authority's procurement policy and procedures for professional and technical services. Approval is requested to negotiate and execute an agreement for these services.

Recommendations

A. Approve the selection of Cardinal Infrastructure, LLC, as the firm to provide strategic consultation to the Orange County Transportation Authority on federal transportation program development, regulatory, and funding processes.

B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-7-1700 between the Orange County Transportation Authority and Cardinal Infrastructure, LLC, in the amount of $318,000, to provide strategic consultation to the Orange County Transportation Authority on federal transportation program development, regulatory, and funding processes, for a two-year term.

Regular Calendar

4. Fiscal Year 2017-18 Bus Service Improvement Plan
Gary Hewitt/Kurt Brotcke

Overview

Bus system changes to improve productivity are proposed for October 2017 and February 2018. The proposed changes for February 2018 require a public hearing, and staff recommends initiating a public outreach process to gather customer input prior to implementation. Results from the outreach process will be presented to the Board of Directors in September 2017.

Recommendations

A. Direct staff to implement a public outreach program to solicit feedback on the Draft February 2018 Service Change Proposal.

B. Direct staff to return to the Board of Directors on September 25, 2017 with outreach findings.

5. Transit Master Plan - Opportunity Corridors
Gary Hewitt/Kurt Brotcke

Overview

The Transit Master Plan will develop an integrated bus, rail, and paratransit plan for Orange County. This plan will identify future potential transit corridor studies and recommended changes to existing transit service. Staff is presenting the draft Transit Opportunity Corridors for Board of Directors' consideration.

Recommendation

Direct staff to finalize the Transit Opportunity Corridors based on Board of Directors and upcoming stakeholder input, and return to the Board of Directors in November 2017 with a draft Transit Master Plan.

Discussion Items

6. Chief Executive Officer's Report

7. Committee Members' Reports

8. Closed Session

There are no Closed Session items scheduled.

9. Adjournment

The next regularly scheduled meeting of this Committee will be held at **9:00 a.m. on August, 10, 2017**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.

MINUTES

Transit Committee Meeting

Committee Members Present
Tim Shaw, Chairman
Al Murray, Vice Chairman
Andrew Do
Steve Jones
Gregory T. Winterbottom

Staff Present
Ken Phipps, Deputy Chief Executive Officer
Olga Prado, Assistant Clerk of the Board,
Sara Meisenheimer, Deputy Clerk of the Board
James Donich, General Counsel
OCTA Staff and members of the General Public

Committee Members Absent
Miguel Pulido
Tom Tait

Call to Order

The June 8, 2017 meeting of the Transit Committee was called to order by Committee Chairman Shaw at 9:01 a.m.

Pledge of Allegiance

Director Jones led in the Pledge of Allegiance

1. Public Comments

There were no public comments.

Special Calendar

There were no Special Calendar matters.

Consent Calendar (Items 2 through 9)

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.

2. Approval of Minutes

A motion was made by Committee Vice Chairman Murray, seconded by Director Jones, and declared passed by those present, to approve the minutes of the May 11, 2017 meeting.

3. San Juan Creek Bridge Replacement Project Update and Authority to Acquire Right-of-Way

A motion was made by Committee Vice Chairman Murray seconded by Director Jones, and declared passed by those present, to authorize the Chief Executive Offer, or his designee, to initiate discussions with property owners and utility owners, make offers, and execute agreements for the acquisition of all necessary interests in real property and necessary utility relocations for the San Juan Creek Bridge Replacement project.

4. Anaheim Canyon Metrolink Station Improvement Project Update

A motion was made by Committee Vice Chairman Murray, seconded by Director Jones, and declared passed by those present, to receive and file as an information item.

5. Project V Community-Based Transit Circulators Program Ridership Report

A motion was made by Committee Vice Chairman Murray, seconded by Director Jones, and declared passed by those present, to receive and file as an information item.

6. Amendment to Joint Agreement with County of Orange for the Operation, Maintenance, and Financial Management of the Orange County 800 Megahertz Countywide Coordinated Communications System

A motion was made by Committee Vice Chairman Murray, seconded by Director Jones, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Amendment No. 1 to Agreement No. C-4-1256 between the Orange County Transportation Authority and County of Orange, in the amount of $674,231 to share in the cost of operation, maintenance, equipment replacement, and financial management of the Countywide Coordinated Communications System, bringing the total contract value to $957,752.

7. Cooperative Agreement with Anaheim Transportation Network Establishing Roles and Responsibilities as a Subrecipient of Federal Funds

A motion was made by Committee Vice Chairman Murray, seconded by Director Jones, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-7-1760 between the Orange County Transportation Authority and Anaheim Transportation Network, in the amount of $4,205,060, for a term of five years, to establish roles and responsibilities for the distribution of federal grant funds.

8. Amendment to Agreement for the Provision of ACCESS Service

Committee Chairman Shaw pulled this item and asked for an update on the agreement with MV Transportation, Inc. (MV), for the ACCESS service.

Beth McCormick, General Manager, stated that MV has done an excellent job providing service to Orange County Transportation Authority (OCTA) customers. OCTA customers stand by it and the partnership with MV, since 2013, has been a great one.

A public comment was received from George Lee, MV Vice President of Business Development. Mr. Lee stated that due to the minimum wage increase, he requested that OCTA staff revisit the maximum obligation in the contract and to return to the Board with a possible adjustment to the current contract. OCTA staff is currently in discussions with MV.

Director Do asked James Donich, General Counsel, if OCTA approves the contract amendment today, and what vehicle does OCTA have to be able to address this "forced measure event." Mr. Donich explained that if there was a forced measured event; such as the minimum wage increasing, then it would just be a standard contract amendment that staff would bring to the Board for approval. Mr. Donich stated that this is an option year that was built into the contract and OCTA is exercising that option. If OCTA decided to not exercise the option year, it could go out for procurement.

A discussion ensued and Ken Phipps, Deputy Chief Executive Officer (DCEO), explained that the current term runs through the end of the fiscal year, and OCTA needs to move forward into the next fiscal year. Mr. Phipps also stated that moving forward, staff will continue their discussions with the contractor.

A motion was made by Committee Vice Chairman Murray, seconded by Director Do, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Amendment to No. 5 to Agreement No. C-2-1865 between the Orange County Transportation Authority and MV Transportation, Inc., in the amount of $90,982,108, for the management and operation of ACCESS service. This will exercise the two-year option and increase the maximum obligation of the agreement to a total contract value of $255,611,569 through June 30, 2019.

9. Proposition IB California Transit Security Grant Program Authorization for 2017

A motion was made by Committee Vice Chairman Murray, seconded by Director Jones, and declared passed by those present, to:

A. Adopt Orange County Transportation Authority Resolution No. 2017-033 authorizing the Chief Executive Officer, or designee, to file and execute grant-related agreements with the California Governor's Office of Emergency Services as the designated administrative agency of the California Transit Security Grant Program.

B. Approve the candidate project list and authorize staff to amend the Federal Transportation Improvement Program to accommodate grant revenues.

Regular Calendar

10. Award of Agreement for Vanpool Service Providers

Stella Lin, Department Manager of Marketing and Customer Engagement, provided an update on the vanpool program and gave a PowerPoint presentation as follows:

- Characteristics of OC Vanpool Program;
- Origins and Top 10 Destinations;
- Vanpool Program Benefits;
- Public-Private Partnership;
- Number of Vans;
- Annual Passenger Trips;
- Public Transit Comparison (FY 15/16);
- Procurement; and
- Summary.

Ms. Lin noted an error to Slide 8 in the "Total Subsidy Per Boarding" row. However, Attachment A of the Staff Report also refers to the "Total Subsidy Per Boarding" row and provides the accurate data.

A discussion ensued regarding:

- OCTA entering an agreement and being protected in case of theft or damage.
- The prior contractor and the current contractor becoming one firm.
- How the routes in the vanpool program are determined by the Average Vehicle Ridership report and travel patterns and how the majority of vanpools come from employers and universities.

10. (Continued)

A motion was made by Committee Chairman Shaw, seconded by Committee Vice Chairman Murray, and declared passed by those present, to:

A. Approve the selection of Enterprise Rent-A-Car Company of Los Angeles LLC, doing business as Enterprise Rideshare, to provide vanpool and Community Based Transit Circulators program services for the Orange County Transportation Authority's vanpool program.

B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-7-1546 between the Orange County Transportation Authority and Enterprise Rent-A-Car Company of Los Angeles LLC, doing business as Enterprise Rideshare, in the amount of $8,323,888, for a three-year initial term from July 1, 2017 through June 30, 2020, with two, two-year option terms to provide subsidized commuter vanpool services and Measure M Project V Community Based Transit Circulators program services.

Due to a potential conflict of interests under the Levine Act, Director Do did not participate or vote on this item.

11. Transit Division Performance Measurements Report for the Third Quarter of Fiscal Year 2016-17

Beth McCormick, General Manager of Transit, gave a PowerPoint presentation on the third quarter performance measurements for the fixed-route and ACCESS service which included:

- Safety – preventable vehicle accidents;
- Courtesy – customer complaints;
- Reliability – on-time performance and miles between road calls;
- Ridership and productivity;
- Farebox recovery ration;
- Operating cost per revenue vehicle hour; and
- Performance by route.

Ms. McCormick also highlighted several routes that have made service improvements.

Committee Chairman Shaw remarked about on-time performance and miles between road calls, and introduced Nick Promponas, Senior Vice President of First Transit.

11. (Continued)

Mr. Promponas commented on the struggles First Transit had in the Bus Operations and Maintenance areas early on in their contract with OCTA. However, he reported that First Transit has made progress since the beginning of the contract.

Committee Vice Chairman Murray asked about how First Transit is doing with the staff retention and Mr. Promponas responded that they were doing better in the winter; but as of April, the turnover rates have increased due to finding a job that pays more. Mr. Promponas also reported that First Transit has incorporated incentives to recognize employees for doing a good job.

Director Do inquired about bus routes 64 and 64x and asked why they weren't included in the chart on page 13 of Attachment A of the Staff Report. Ms. McCormick stated that the chart is out of date; but, it will be corrected in the next quarterly report and the Express routes could also be highlighted. Director Do also suggested treating those routes as corridors, to group the routes together like Bravo! and the Express routes, and to change the look of the graphs so it is easier to evaluate.

Ms. McCormick reported that the Planning Division will bring forward an item during the next couple of service changes and will be making recommendations for changes.

No action was taken on this receive and file information item.

Discussion Items

12. Fiscal Year 2017-18 Budget Workshop Follow-up

Victor Velasquez, Department Manager of Financial Planning and Analysis, provided opening remarks and referred to a handout provided to the Committee, which listed questions and answers that resulted from the May 8, 2017 Board of Directors' budget workshop.

Mr. Velasquez reported that staff began the next process of the budget development which has been to attend all of the committee meetings between the budget workshop and the public hearing, scheduled on June 12, 2017. The intent was to give Board Members the opportunity to ask any additional questions. OCTA staff have also made themselves available for any one-on-one meetings.

12. (Continued)

Committee Chairman Shaw asked if there's a way to look at each project, such as Project V, and evaluate how much money was "tapped out" and budgeted for by each category. Mr. Phipps, DCEO, stated that there's a table within the Measure M Quarterly Report that addresses that.

13. Chief Executive Officer's Report

Mr. Phipps, DCEO, reported on the following:

- OCTA will be hosting an event on Tuesday, June 20, 2017 at 10:00 a.m. at O'Neill Regional Park to commemorate the finalization of the Natural Community Conservation Plan/Habitat Conservation Plan. This is a part of the Measure M Freeway Environmental Mitigation Program that protects more than 1,300 acres of wilderness preserves and provides habitat restoration for more than 350 acres.

- On Thursday, June 22, 2017, a public information meeting for the State Route-57 Northbound Improvement Project from Orangewood Avenue to Katella Avenue will take place in the cafeteria at Portola Middle School in Orange at 5:00 p.m. Staff will be on hand to provide an overview of the project and discuss the Project Approval/Environmental Document process.

- Darrell Johnson, CEO, is in Sacramento to discuss some of the rules and regulations that might be a part of the Senate Bill-1 legislation. Mr. Johnson will also be meeting with Secretary Kelly.

14. Committee Members' Reports

Director Winterbottom reported that he is glad to be back after a health challenge.

15. Closed Session

There were no Closed Session items scheduled.

16. Adjournment

The meeting adjourned at 10:00 a.m.

The next regularly scheduled meeting of this Committee will be held at **9:00 a.m. on Thursday, July 13, 2017**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.

ATTEST

Tim Shaw
Committee Chairman

Sahara Meisenheimer
Deputy Clerk of the Board

OCTA

July 13, 2017

To: Transit Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Federal Transportation Program Strategic Regulatory and Funding Consulting Services

Overview

Consultant services are needed to provide high-level strategic advice and consultation to the Orange County Transportation Authority as the subject matter expert for a wide variety of federal transportation programs, regulatory processes, and funding sources at all levels in the Federal Executive branch of government. Proposals were received and evaluated in accordance with the Orange County Transportation Authority's procurement policy and procedures for professional and technical services. Approval is requested to negotiate and execute an agreement for these services.

Recommendations

A. Approve the selection of Cardinal Infrastructure, LLC, as the firm to provide strategic consultation to the Orange County Transportation Authority on federal transportation program development, regulatory, and funding processes.

B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-7-1700 between the Orange County Transportation Authority and Cardinal Infrastructure, LLC, in the amount of $318,000, to provide strategic consultation to the Orange County Transportation Authority on federal transportation program development, regulatory, and funding processes, for a two-year term.

Discussion

Since 2011, the Orange County Transportation Authority (OCTA) has benefitted from the guidance and consultation provided by a federal strategic consultant team procured to further the OC Streetcar project through the Federal Transit Administration's (FTA) New Starts process. The FTA-targeted consultant

service provided OCTA with the strategic assistance needed to navigate FTA's design, engineering, and construction phases, as well as assistance in securing a full funding grant agreement in accordance with the New Starts Section 5309 Capital Investment Grant Program. The existing agreement with Cardinal Infrastructure, LLC (Cardinal) expires July 31, 2017.

To broaden the benefits of this service to the agency, the scope of work for a federal strategic consultant was expanded from an FTA-specific consulting service to one that can represent the agency's multimodal interests at all levels throughout the Federal Executive branch of government, including United States Department of Transportation and other federal departments. To ensure the agency's top initiatives are delivered efficiently and cost-effectively, and to maximize the opportunities provided by the federal government, the federal strategic consultant is to provide high-level strategic advice and consultation on a wide variety of federal transportation programs, regulatory processes, and funding sources, including those from FTA and Federal Highways Administration.

Consultant services will also include support on grant and credit assistance programs, such as Transportation Infrastructure Finance and Innovation Act, Railroad Rehabilitation Improvement Financing programs, Transportation Investment Generating Economic Recovery, and Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies programs. The federal strategic consultant team will allow OCTA to maximize opportunities available at the federal level and effectively address potential issues and events occurring in Washington, D.C.

Procurement Approach

This procurement was handled in accordance with OCTA's Board of Directors (Board)-approved procedures for professional and technical services. In addition to cost, many other factors are considered in an award for professional and technical services.

Request for Proposals (RFP) 7-1700 was issued electronically on CAMM NET on April 24, 2017. The project was advertised on April 24 and May 1, 2017, in a newspaper of general circulation. No questions were received on this RFP and no addenda were issued.

On May 22, 2017, only one proposal was received. The proposal was from Cardinal Infrastructure, LLC. The proposal introduced former OCTA employee, Richard Bacigalupo, to the consultant team in October 2017, which is in keeping with Article 21 Prohibited Interests in OCTA's Contract Agreements that restrict

former agency employees from working under contract for a period of one year after departure. The addition of Mr. Bacigalupo brings to the Cardinal team local presence, and an understanding of the agency's local programs, top initiatives and funding needs.

The Government Relations and Contracts Administration and Materials Management (CAMM) departments reviewed the proposal received from Cardinal and determined that it meets the qualifications, staffing needs, and requirements of the scope of work for this project.

In accordance with OCTA's procurement policies and procedures, a single proposal received for a procurement over $50,000 requires OCTA's Internal Audit Department (Internal Audit) to conduct a review to determine if there was adequate competition. Based on Internal Audit's review, the procurement was handled in a fair and competitive manner. In addition, CAMM contacted several vendors who downloaded the RFP from OCTA's CAMM NET website to inquire why they did not submit proposals. Most of the firms contacted indicated that they did not propose either because they did not have the expertise in the scope of work or were busy with other projects on hand.

Furthermore, CAMM also conducted a price analysis. A Best and Final Offer was issued on June 21, 2017, to include an extended term of the contract from 18 to 24 months, which was reviewed by the evaluation committee. The price proposed by Cardinal appears to be fair and reasonable, consistent with the scope of work.

The contract will be firm-fixed priced for a term of two years in the amount of $318,000.

Fiscal Impact

The project was approved in OCTA's Fiscal Year 2017-18 Budget, Government Relations Department, Account No. 0017-7519-M0Z01-TYV.

Summary

Based on the information provided, staff recommends the Board authorize the Chief Executive Officer to negotiate and execute Agreement No. C-7-1700 between OCTA and Cardinal, in the amount of $318,000, to provide strategic consultation to OCTA on federal transportation program development, regulatory, and funding processes, for a two-year term.

Attachment

None.

Prepared by:

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Approved by:

Lance M. Larson
Executive Director
External Affairs
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FOR Virginia Abadessa
Director, Contracts Administration and
Materials Management
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July 13, 2017

To: Transit Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Fiscal Year 2017-18 Bus Service Improvement Plan

Overview

Bus system changes to improve productivity are proposed for October 2017 and February 2018. The proposed changes for February 2018 require a public hearing, and staff recommends initiating a public outreach process to gather customer input prior to implementation. Results from the outreach process will be presented to the Board of Directors in September 2017.

Recommendations

A. Direct staff to implement a public outreach program to solicit feedback on the Draft February 2018 Service Change Proposal.

B. Direct staff to return to the Board of Directors on September 25, 2017 with outreach findings.

Background

The Orange County Transportation Authority (OCTA) implements schedule and route revisions to selected bus routes three times a year, in February, June, and October. The goal is to improve system productivity and reduce fleet requirements. Boardings per revenue hour of service, a systemwide measure of productivity, have declined from 31.4 in 2013 to 25.4 in 2016, a 19 percent drop.

Proposed recommendations for October 2017 were presented to the Transit Committee and Board of Directors (Board) in May 2017. These changes do not require a public hearing, and staff has started the process of implementing these changes in October, which is provided in Attachment A and Attachment B. Staff is soliciting input regarding draft recommendations for February 2018. Several of the recommendations are considered "major service changes" under OCTA policy, and require public outreach and a public hearing prior to Board approval.

Discussion

To address continuing bus ridership declines, in 2015, the Board endorsed a comprehensive action plan, known as OC Bus 360º. This effort included a comprehensive review of current and former rider perceptions, a peer review panel that reviewed the OCTA performance and plans, new branding and marketing tactics tied to rider needs, upgraded bus routes and services to better match demand and capacity, technology changes to improve the passenger experience, and pricing and other revenue changes to stimulate ridership and provide new funding.

With the decline in ridership, productivity for OCTA bus service has declined over the last several years while service levels generally remain constant. There are some indications that the ridership decline is slowing after implementation of the OCBus 360º Program. Staff has developed the February 2018 Service Plan to reallocate additional service to improve productivity. The scope of this effort is approximately a third of the size of the major service changes made in 2016, which reallocated about 10 percent of the bus service or 160,000 annual revenue hours. The service recommendations are consistent with prior OCBus 360º efforts and initial recommendations and findings from the Transit Master Plan.

Final October 2017 Service Change Plan

Staff presented recommendations for the October 2017 service changes to the Transit Committee and Board in May. Some refinements have been made based on timing with other route changes and after receiving a formal request from the City of Newport Beach regarding nighttime service to the Newport Transportation Center (Attachment C). The following changes have been made to the October plan:

- Added elimination of trips on routes 55 and 57 to the Newport Transportation Center between 11:00 p.m. and 5:00 a.m. Trips will be cut back to existing turnaround locations in Costa Mesa and Santa Ana.
- Moved some span trip eliminations on routes 46, 50, and 60 to February 2018 because of other proposed schedule changes on these routes.

Staff is proceeding with the implementation of the October 2017 service changes and will provide the Board with updates at subsequent meetings.

Draft February 2018 Service Change Plan

The draft service plan for February 2018 consists primarily of a redeployment of resources, including both service reductions and improvements. The operating resources required (revenue vehicle hours) will be similar to current levels after implementation. Long-term capital needs will be reduced because the service plan requires less peak buses. The lists below summarize the proposed service improvements and reductions.

Service Improvement Highlights

- Improve evening frequencies on five major routes in the core service area, consistent with the Transit Master Plan proposed service standards.
- Improve weekend frequencies on five major routes in the core service area, consistent with the Transit Master Plan proposed service standards.
- Improve weekday peak frequency to 30 minutes on three south county routes and one central county route, based on the transit demand analysis developed for the Transit Master Plan.

Service Reduction Highlights

- Reduce bus trips in the early morning or late evening that have less than eight boardings per trip.
- Slightly reduce peak and midday service on two core routes operating better than 15 minute frequencies where productivity has decreased over the last several years.
- Reduce weekend peak frequency on two core routes based on productivity.
- Restructure one and eliminate another Stationlink route.
- Eliminate two express routes and reduce trips on two others based on low ridership and high fleet requirements.
- Eliminate weekend service on one route.
- Reduce or eliminate service on some lower-ridership route segments.

More detailed descriptions and ridership impacts are included in Attachment D. Maps of the impacted routes on weekdays and weekends are shown in Attachment E and Attachment F. The proposed service changes would reduce service by about 15,000 annual revenue hours. Staff is currently working on the development of a new service, OC Flex. This would be an on-demand service that would provide transit mobility in lower demand areas, reduce total operating and capital cost, and extend the reach of fixed route and Metrolink services. Staff plans to return to the Board with a recommendation by Fall 2017.

Next Steps

Staff is seeking Board approval to present the proposed February 2018 service changes to the public in August. A public outreach process is required for service changes of this magnitude, and the comments received will be used to refine the recommendations. This process will include three community meetings in the areas impacted by the changes. With Board direction, a public hearing would occur on September 25, 2017, and final recommendations would be presented to the Transit Committee and the Board in October.

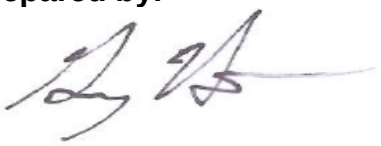
Summary

Staff is seeking Board input on the proposed February 2018 Service Change Plan which will redeploy service to improve productivity and reduce peak vehicle requirements.

Attachments

A. Final October 2017 Service Change Plan
B. October 2017 Bus Service Change
C. Letter from Dave Kiff, City Manager, City of Newport Beach, to Kia Mortazavi, Executive Director of Planning, Orange County Transportation Authority, Dated May 8, 2017
D. Draft February 2018 Service Change Plan
E. Proposed Weekday Route Changes for February 2018
F. Proposed Weekend Route Changes for February 2018

Prepared by:



Gary Hewitt
Project Manager, Transit Planning
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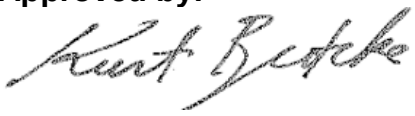
Approved by:



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Final October 2017 Service Change Plan

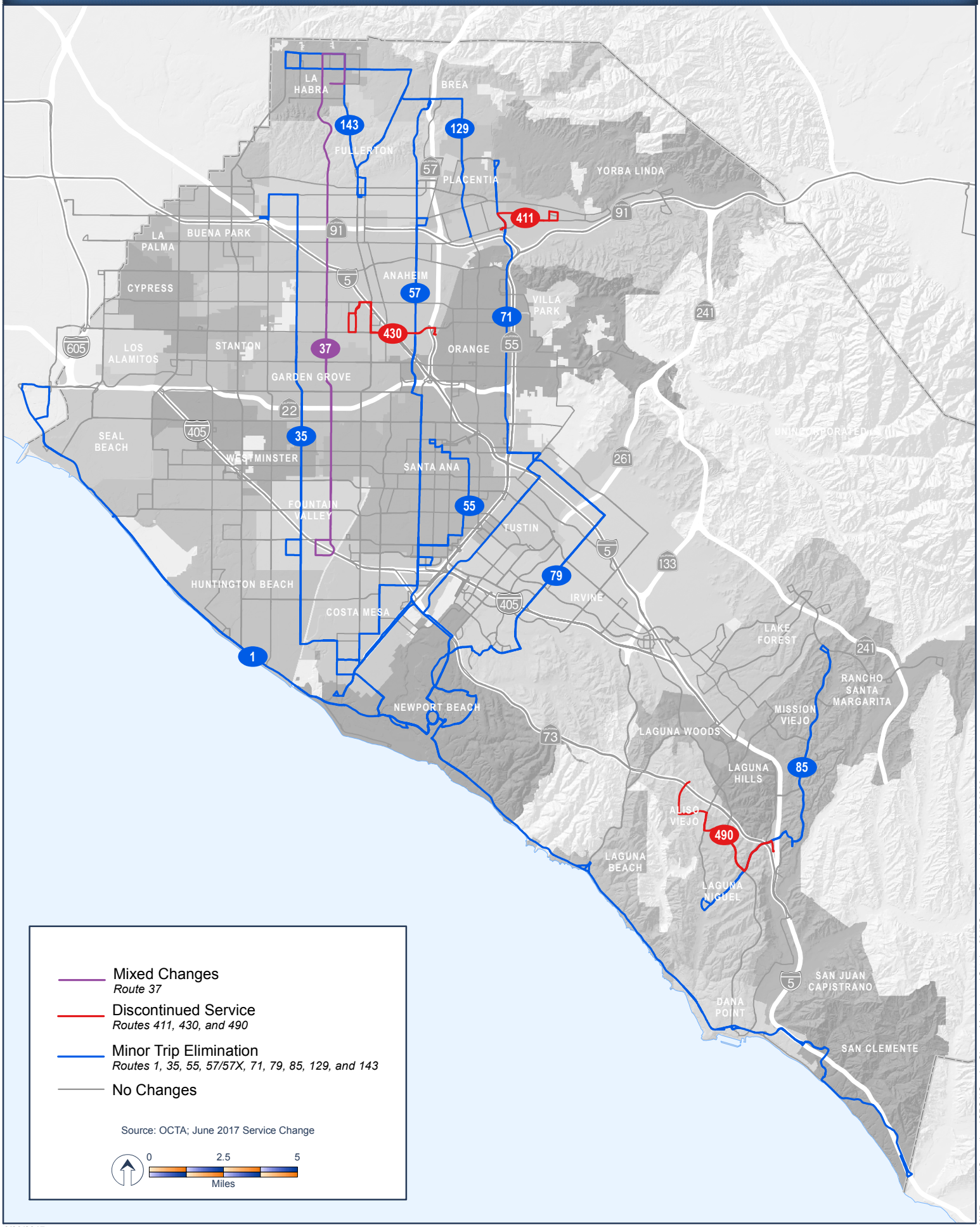
Route	Recommendations			Annual Revenue Hour Change				Annual Boarding Change			
	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total
1: Long Beach – San Clemente *via Pacific Coast Highway*	Eliminate last three northbound trips from non-summer schedule and last trip from summer schedule	-	-	(841.5)	-	-	(841.5)	(5,559)	-	-	(5,559)
35: Fullerton – Costa Mesa *via Brookhurst Street*	Eliminate last northbound trip and last southbound trip	-	Eliminate first northbound trip	(663.0)	-	(69.6)	(732.6)	(7,140)	-	(905)	(8,045)
37: La Habra – Fountain Valley *via Euclid Street*	Eliminate last northbound trip and last southbound trip, improve frequency early a.m. to 30 minute and make routing change (see weekends)	Operate clockwise only in in La Habra and extend south end routing to MacArthur Boulevard & Hyland Avenue	Operate clockwise only in in La Habra and extend south end routing to MacArthur Boulevard & Hyland Avenue	(1,632.0)	77.0	59.2	(1,495.9)	(26,928)	(572)	(928)	(28,428)
55: Santa Ana – Newport Beach *via Standard Avenute / Bristol Street / Fairview Street / 17th Street*	Eliminate trips to Newport Transportation Center (NTC) between 11:00 p.m. and 5:00 a.m. Trips will start and end at Placentia Avenue & 19th Street	-	-	(382.5)	-	-	(382.5)	(3,060)	-	-	(3,060)
57/57X: Brea – Newport Beach *via State College Boulevard / Bristol Street*	Eliminate trips to NTC between 11:00 p.m. and 5:00 a.m. Trips will start and end at Anton Boulevard & Sakioka Drive	Eliminate trips to NTC between 11:00 p.m. and 5:00 a.m. Trips will start and end at Anton Boulevard & Sakioka Drive	Eliminate trips to NTC between 11:00 p.m. and 5:00 a.m. Trips will start and end at Anton Boulevard & Sakioka Drive	(604.4)	(113.4)	(127.6)	(845.3)	(22,440)	(4,784)	(3,712)	(30,936)
71: Yorba Linda – Newport Beach *via Tustin Avenue / Red Hill Avenue / Newport Boulevard*	Eliminate first northbound trip and last northbound trip	Eliminate first northbound trip, last northbound trip and first southbound trip	-	(331.5)	(109.2)	-	(440.7)	(5,712)	(2,361)	-	(8,073)
79: Tustin – Newport Beach *via Bryan Avenue / Culver Drive / University Avenue*	Eliminate first southbound trip and last southbound trip	Eliminate first northbound trip	-	(504.9)	(50.4)	-	(555.3)	(12,087)	(614)	-	(12,701)
85: Mission Viejo – Laguna Niguel *via Marguerite Parkway / Crown Valley Parkway*	Eliminate first northbound trip	-	-	(178.5)	-	-	(178.5)	(1,836)	-	-	(1,836)
129: La Habra – Anaheim *via La Habra Boulevard / Brea Boulevard / Birch Street / Kraemer Boulevard*	Eliminate last two eastbound trips and last two westbound trips	Eliminate last four eastbound trips, first two westbound trips and last three westbound trips	Eliminate first eastbound trip, last three eastbound trips, first two westbound trips and last four westbound trips	(765.0)	(326.0)	(338.7)	(1,429.8)	(11,934)	(4,909)	(4,721)	(21,564)
143: La Habra – Brea *via Whittier Boulevard / Harbor Boulevard / Brea Boulevard / Birch Street*	-	Eliminate last eastbound trip, first westbound trip and last westbound trip	Eliminate first eastbound trip, last two eastbound trips, and last westbound trip	-	(140.4)	(208.8)	(349.2)	-	(2,122)	(2,564)	(4,685)
411: Anaheim Canyon Metrolink Station – Canyon Corporate Center *via Miraloma Avenue / La Palma Avenue*	Eliminate Route	-	-	(867.0)	-	-	(867.0)	(5,355)	-	-	(5,355)
430: Anaheim Regional Transportation Intermodal Center – Anaheim Resort Area *via Katella Avenue / Harbor Boulevard / Ball Road*	Eliminate Route	-	-	(1,734.0)	-	-	(1,734.0)	(4,590)	-	-	(4,590)

ATTACHMENT A

Route	Recommendations			Annual Revenue Hour Change				Annual Boarding Change			
	Weekday	Saturday	Sunday	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total
490: Laguna Niguel/Mission Viejo Metrolink Station – Aliso Viejo *via Crown Valley Parkway / Moulton Parkway /Aliso Viejo*	Eliminate Route	-	-	(1,504.5)	-	-	(1,504.5)	(8,670)	-	-	(8,670)
			Annual Oct-17 Service Change	(10,008.8)	(662.5)	(685.6)	(11,356.8)	(115,311)	(15,361)	(12,830)	(143,501)
			Daily Oct-17 Service Change	(39.3)	(12.7)	(11.8)		(452)	(295)	(221)	

October 2017 Bus Service Change

ATTACHMENT B



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6/30/2017

ATTACHMENT C

CITY OF NEWPORT BEACH
100 Civic Center Drive
Newport Beach, California 92660
949 644-3001 | 949 644-3020 FAX
newportbeachca.gov

May 8, 2017

Mr. Kia Mortazavi
Executive Director of Planning
Orange County Transportation Authority
550 South Main Street
P.O. Box 14184
Orange, CA 92863

Re: Request for Changes to Routes 1, 55, 57 & 79 Servicing the Newport Transit Center

Dear Kia:

First off, I would like to extend my thanks to the Orange County Transportation Authority for their efforts to troubleshoot and collaborate with the Newport Beach Police Department and the City of Newport Beach as a whole; OCTA and OCSD staff have worked diligently with us to address some longstanding issues at the Newport Transit Center (NTC) during this past year.

Because the businesses in Fashion Island area are generally closed by 9 p.m., the City of Newport Beach would like OCTA to strongly consider ceasing the lines going to and from the NTC by no later than 11 p.m., which is also consistent with the current posted closing hours of the NTC (i.e., 11:15 p.m. to 5 a.m.), which the Newport Beach Police Department enforces under our municipal code.

We brought this issue up with OCTA staff and they researched the matter. See attached. Starting in October 2017, OCTA staff is recommending that after 11 p.m. buses going on Routes 1 and 79 will be discontinued as part of the Span Program due to a lack of ridership at those hours. We agree and support this move.

As to Routes 55 and 57, OCTA Staff advised us they would need a written request from the City of Newport Beach by May 10, 2017 to cut back the hours of operation to 11 p.m. due to the fact there is evidence of some ridership past 11 p.m. Therefore, we respectfully request OCTA also reduce the hours of operations for Routes 55 and 57 to 11 p.m. based on the rationale identified above. We thank you in advance for your assistance.

If possible, we would also like to see the bus lines that service the NTC to end at the source as opposed to the NTC, which is located in a remote and isolated business district with no resources for anyone dropped off there that may not have access to housing.

Sincerely,

Dave Kiff
City Manager
City of Newport Beach

Attachment: OCTA Document Showing Ridership at NTC

Draft February 2018 Service Change Plan

	Recommendations			Annual Revenue Hour Change				Annual Boarding Change			
Route	**Weekday**	**Saturday**	**Sunday**	**Weekday**	**Saturday**	**Sunday**	**Total**	**Weekday**	**Saturday**	**Sunday**	**Total**
24: Buena Park – Orange via Malvern Avenue / Chapman Avenue / Tustin Avenue	Cut route back to Anaheim Canyon Metrolink Station, increase frequency to 45 minutes and eliminate first westbound trip	-	-	(943.5)	-	-	(943.5)	20,897	-	-	20,897
29/A: La Habra – Huntington Beach *via Beach Boulevard*	Increase frequency from 50 minutes to 30 minutes from 8:00 p.m. to 12:00 a.m.	Reduce frequency to 20/60 minutes during day and increase frequency to 30/60 minutes from 8:00 p.m. to 12:00 a.m.	Reduce Frequency to 20/60 minutes during day and increase frequency to 30/60 minutes from 8:00 p.m. to 12:00 a.m.	3,855.6	9.4	36.5	3,901.5	78,226	8,554	5,413	92,194
30: Cerritos – Anaheim *via Orangethorpe Avenue*	Eliminate last eastbound trip	-	-	(153.0)	-	-	(153.0)	(2,652)	-	-	(2,652)
43: Fullerton – Costa Mesa *via Harbor Boulevard*	-	Reduce frequency during day from 20 minutes to 25 minutes and increase to 30 minutes frequency from 8:00 p.m. to 12:00 a.m.	Reduce frequency during day from 22 minutes to 25 minutes and increase frequency to 30 minutes from 8:00 p.m. to 12:00 a.m.	-	(1,023.4)	(505.8)	(1,529.1)	-	(4,937)	3,239	(1,697)
46: Los Alamitos – Orange via Ball Road / Taft Avenue	Eliminate last eastbound trip and first westbound trip	Extend service until 10:00 p.m. at 60 minutes frequency	Extend service until 10:00 p.m. at 60 minutes frequency	(433.5)	253.2	301.6	121.3	(6,120)	6,032	4,872	4,784
50: Long Beach – Orange *via Katella Avenue*	Increase frequency to 30 minutes from 8:30 p.m. to 12:00 a.m. and eliminate last eastbound trip	Increase frequency to 30/60 minutes until 12:00 a.m.	Increase frequency to 30/60 minutes until 12:00 a.m. and eliminate last eastbound trip	1,744.2	1,872.0	2,018.4	5,634.6	36,680	33,580	29,501	99,761
53/53X: Anaheim – Irvine *via Main Street*	Increase frequency to 30/60 minutes from 8:30 p.m. to 12:00 a.m.	Increase frequency to 30/60 minutes from 10:00 p.m. to 12:00 a.m.	Increase frequency to 30/60 minutes from 10:00 p.m. to 12:00 a.m.	910.4	217.4	368.9	1,496.6	27,626	3,998	4,973	36,597
54: Garden Grove – Orange via Chapman Avenue	Reduce midday frequency from 15/30 minutes to 20/30 minutes. Coordinate a.m. trip times to Metrolink arrivals	Increase frequency from 35 minutes during day and from 65 minutes during evening to 30 minutes until 10:00 p.m.	Increase frequency from 40 minutes during day and from 65 minutes during evening to 30 minutes until 8:00 p.m. and 60 minutes until 10:00 p.m.	(4,034.1)	832.0	1,160.0	(2,042.1)	(18,922)	12,124	18,441	11,643
56: Garden Grove – Orange *via Garden Grove Boulevard*	Increase frequency from 40 minutes to 30 minutes during a.m./p.m. peak and eliminate last eastbound trip and last westbound trip	-	-	2,601.0	-	-	2,601.0	27,273	-	-	27,273
57/57X: Brea – Newport Beach *via State College Boulevard / Bristol Street*	Reduce frequency during peak from 10/20 to 12/24 minutes	-	-	(3,060.0)	-	-	(3,060.0)	(48,285)	-	-	(48,285)
59: Anaheim – Irvine via Kraemer Boulevard / Glassell Street / Grand Avenue / Von Karman Avenue	-	Extend route to The District at Tustin Legacy at 45 minutes frequency	Extend route to The District at Tustin Legacy at 45 minutes frequency	-	468.0	522.0	990.0	-	11,794	7,726	19,520

ATTACHMENT D

	Recommendations			Annual Revenue Hour Change				Annual Boarding Change			
Route	**Weekday**	**Saturday**	**Sunday**	**Weekday**	**Saturday**	**Sunday**	**Total**	**Weekday**	**Saturday**	**Sunday**	**Total**
60: Long Beach – Tustin via Westminutesster Avenue / 17th Street	Eliminate last eastbound trip and westbound trip and increase frequency to 30 minutes from 10:00 p.m. to 12:00 a.m.	Increase frquency to 30 minutes from 8:00 p.m. to 12:00 a.m.	Eliminate first and last eastbound trips and last westbound trip, increase to 30 minutes frequency from 8:00 p.m. to 12:00 a.m.	841.5	457.6	286.5	1,585.6	19,989	9,152	5,312	34,453
64/64X: Huntington Beach – Tustin *via Bolsa Avenue / 1st Street*		Reduce frequency from 14 minutes to 15 minutes	Reduce frequency from 14 minutes to 15 minutes	-	(356.7)	(265.6)	(622.4)	-	(4,474)	(4,035)	(8,509)
66: Huntington Beach – Irvine *via McFadden Avenue / Walnut Avenue*	Reduce midday frequency from 15/30 minutes to 18/36 minutes	-	-	(2,675.0)	-	-	(2,675.0)	(77,505)	-	-	(77,505)
70: Sunset Beach – Tustin *via Edinger Avenue*	-	Reduce frequency from 20 minutes to 30 minutes and eliminate last eastbound trip	-	-	(1,284.4)	-	(1,284.4)	-	(22,706)	-	(22,706)
72: Sunset Beach – Tustin *via Warner Avenue*	-	Eliminate last eastbound trip and last westbound trip	-	-	(83.2)	-	(83.2)	-	(1,643)	-	(1,643)
86: Costa Mesa – Mission Viejo *via Alton Parkway / Jeronimo Road*	Eliminate last westbound trip	-	-	(280.5)	-	-	(280.5)	(2,193)	-	-	(2,193)
89: Mission Viejo – Laguna Beach *via El Toro Road / Laguna Canyon Road*	Increase frequency from 35 minutes to 30 minutes during peak and midday and eliminate last northbound trip and last southbound trip	-	Eliminate first northbound trip and last southbound trip	1,428.0	-	(87.0)	1,341.0	22,196	-	(1,311)	20,886
90: Tustin – Dana Point *via Irvine Center Drive / Moulton Parkway / Golden Lantern Street*	Increase frequency to 30 minutes peak	Eliminate last eastbound trip and last westbound trip	-	5,100.0	(104.0)	-	4,996.0	94,850	(1,134)	-	93,716
91: Laguna Hills – San Clemente via Paseo de Valencia / Camino Capistrano / Del Obispo Street	Increase frequency from 35 minutes to 30 minutes during peak and midday	Increase frequency from 45 minutes to 30 minutes during midday and afternoon and from 75 minutes to 45 minutes during early evening		3,952.5	1,092.0	-	5,044.5	50,026	12,034	-	62,060
153: Brea – Anaheim *via Placentia Avenue*	-	Eliminate last northbound trip, first southbound trip, and last two southbound trips	Eliminate last northbound trip and last two southbound trips	-	(156.0)	(174.0)	(330.0)	-	(2,527)	(1,891)	(4,418)
177: Foothill Ranch – Laguna Hills *via Lake Forest Drive / Muirlands Boulevard / Los Alisos Boulevard*	-	Eliminate Weekend Service	Eliminate Weekend Service	-	(608.4)	(707.6)	(1,316.0)	-	(8,164)	(7,366)	(15,530)

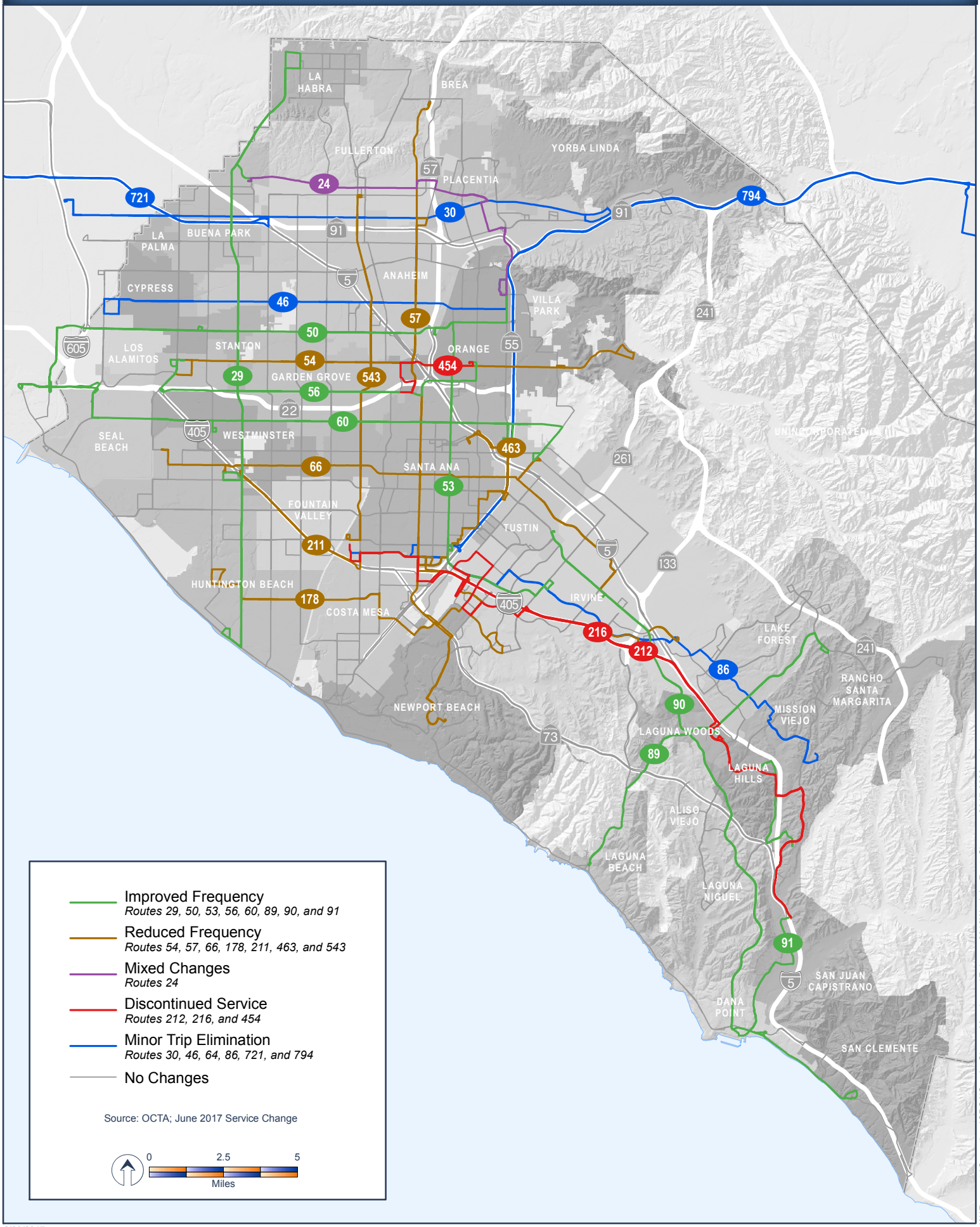
Draft February 2018 Service Change Plan

	Recommendations			Annual Revenue Hour Change				Annual Boarding Change			
Route	**Weekday**	**Saturday**	**Sunday**	**Weekday**	**Saturday**	**Sunday**	**Total**	**Weekday**	**Saturday**	**Sunday**	**Total**
178: Huntington Beach – Irvine via Adams Ave / Birch Street / Campus Drive	Reduce peak frequency from 45 minutes to 60 minutes ane eliminate last eastbound trip and last two westbound trip	-	-	(1,530.0)	-	-	(1,530.0)	(9,985)	-	-	(9,985)
211: Huntington Beach – Irvine Express *via 405 Freeway*	Reduce frequency from 35 minutes to 40 minutes and eliminate first eastbound afternoon trip and first westbound morning trip	-	-	(1,096.5)	-	-	(1,096.5)	(3,363)	-	-	(3,363)
212: Irvine –San Juan Capistrano Express *via 405 Freeway*	Eliminate Route	-	-	(1,377.0)	-	-	(1,377.0)	(10,965)	-	-	(10,965)
216: San Juan Capistrano – Costa Mesa Express *via 405 Freeway*	Eliminate Route	-	-	(612.0)	-	-	(612.0)	(3,315)	-	-	(3,315)
454: Orange Transportation Center – Garden Grove via Chapman Avenue / Metropolitan Drive	Eliminate Route	-	-	(2,218.5)	-	-	(2,218.5)	(48,450)	-	-	(48,450)
463: Santa Ana Regional Transportation Center – Hutton Center *via Grand Avenue*	Eliminate segment on Sunflower west of Bristol Street	-	-	(1,071.0)	-	-	(1,071.0)	(5,786)	-	-	(5,786)
543: Fullerton Transportation Center – Santa Ana *via Harbor Boulevard*	Reduce peak frequency from 12 minutes to 15 minutes and midday frequency from 18 minutes to 20 minutes	Reduce frequency from 20 minutes to 25 minutes	Reduce frequency from 20 minutes to 25 minutes	(5,640.6)	(612.0)	(682.7)	(6,935.3)	(98,472)	(9,709)	(8,639)	(116,820)
721: Fullerton – Los Angeles Express *via 91 Freeway / 110 Freeway*	Eliminate last northbound trip and last southbound trip	-	-	(624.8)	-	-	(624.8)	(3,363)	-	-	(3,363)
794/A: Riverside/Corona – South Coast Metro Express *via 91 Freeway / 55 Freeway*	Eliminate all trips to Canyon Community Church Park-and-Ride (2 a.m. and 2 p.m. trips)	-	-	(1,779.9)	-	-	(1,779.9)	(5,747)	-	-	(5,747)
			Annual February 2018 Service Change	**(7,096.7)**	**973.4**	**2,271.3**	**(3,851.9)**	**32,641**	**41,977**	**56,234**	**130,852**
			Daily February 2018 Service Change	**(27.8)**	**18.7**	**39.2**		**128**	**807**	**970**	

Shaded area reflect major service changes

Proposed Weekday Route Changes for February 2018

ATTACHMENT E



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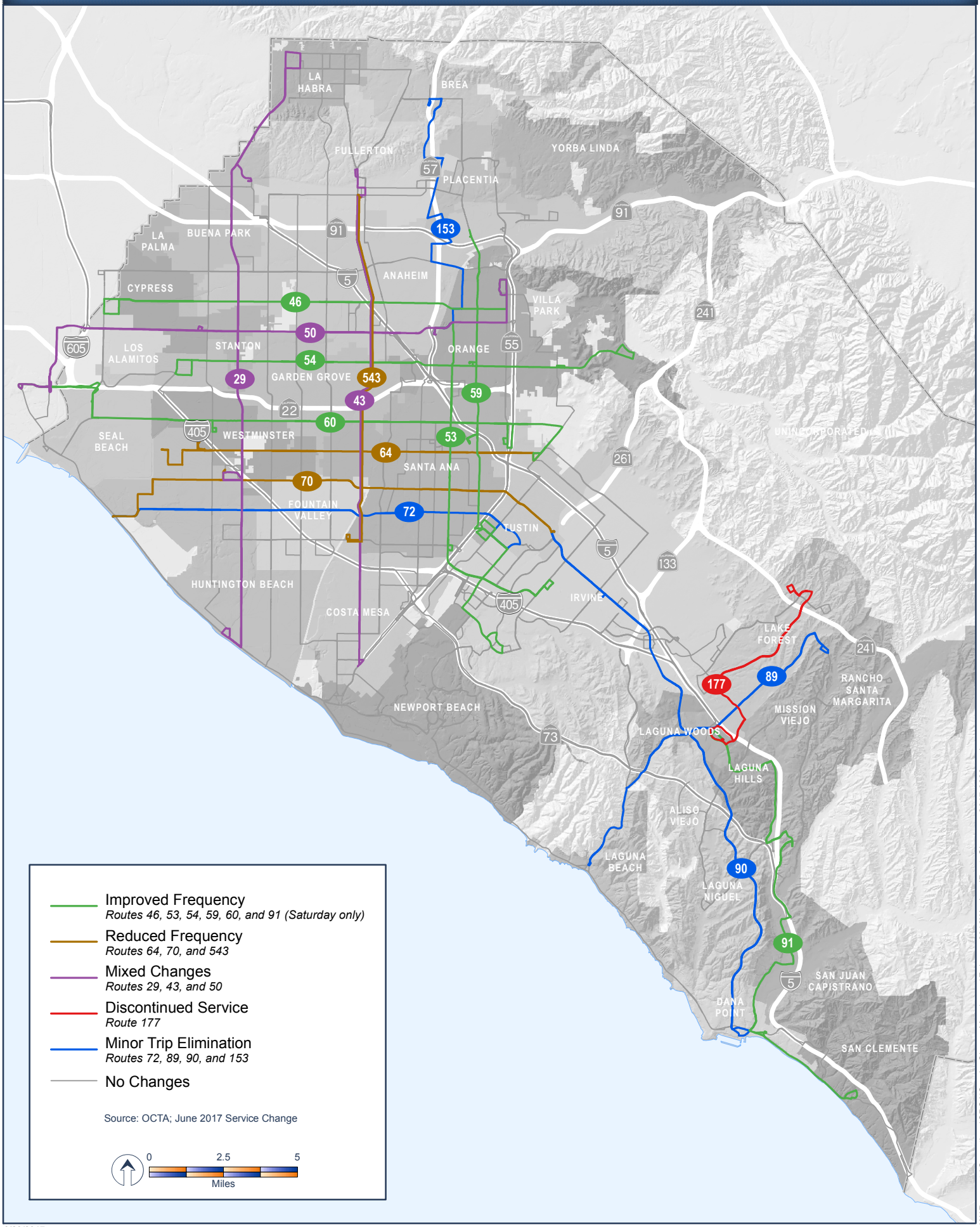
6/30/2017

Proposed Weekend Route Changes for February 2018

ATTACHMENT F



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6/28/2017

Fiscal Year 2017-18
Bus Service Improvement Plan

Overview

- OC Bus 360º Background
- Final October 2017 Service Change Plan
- Draft February 2018 Service Change Plan
- Seeking Board of Directors' (Board) input before public outreach
- "Major Service Change" requires public hearing
- Reduced fleet requirements

OC Bus 360º

Background

- Action plan endorsed by the Board in 2015 to address ridership decline
- Redeployed about 10 percent (160,000 annual RVH) of bus service
- Comprehensive review of current and former rider perceptions
- Peer review panel that reviewed the Orange County Transportation Authority's performance and plans
- New branding and marketing tactics tied to rider needs
- Upgraded bus routes and services to better match demand and capacity
- Technology changes to improve the passenger experience

Final October 2017 Service Change

Service Change Highlights

- Reduce bus trips in the morning and late evening with less than eight boardings
- Change routing of Route 37 in La Habra and Costa Mesa
- Eliminate three rail-feeder routes because of low ridership
- Eliminate trips on routes 55 and 57 to Newport Transportation Center between 11:00 p.m. and 5:00 a.m.

Draft February 2018 Service Change Plan

Service Improvement Highlights

- Improve evening frequencies on five major routes in the core service area, consistent with the Transit Master Plan proposed service standards
- Improve weekend frequencies on five major routes in the core service area, consistent with the Transit Master Plan proposed service standards
- Improve weekday peak frequency to 30 minutes on three south county routes and one central county route, based on the transit demand analysis developed for the Transit Master Plan proposed service standards

Draft February 2018 Service Change Plan

Service Reduction Highlights

- Reduce bus trips in the morning and late evening with less than eight boardings
- Slightly reduce peak and midday frequencies on two core routes operating better than 15 minutes where productivity has decreased over the last several years
- Reduced weekend peak frequency on two core routes based on productivity
- Restructure one and eliminate another Stationlink route
- Eliminate two express routes and reduce trips on two others based on low ridership and high capital requirements
- Eliminate weekend service on one south county route
- Reduce or eliminate service on some lower-ridership route segments

Next Steps

- **Public Outreach**: August 2017
- **Public Hearing**: September 25, 2017
- **Implement October 2017 Service Change Plan**
- **Submit Final February 2018 Plan to Board of Directors**: October 2017
- **Implement February 2018 Service Change Plan**

July 13, 2017

To: Transit Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Transit Master Plan – Opportunity Corridors

Overview

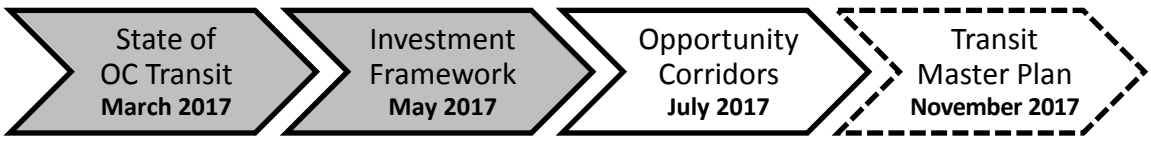
The Transit Master Plan will develop an integrated bus, rail, and paratransit plan for Orange County. This plan will identify future potential transit corridor studies and recommend changes to existing transit service. Staff is presenting the draft Transit Opportunity Corridors for Board of Directors' consideration.

Recommendation

Direct staff to finalize the Transit Opportunity Corridors based on Board of Directors and upcoming stakeholder input, and return to the Board of Directors in November 2017 with a draft Transit Master Plan.

Background

The Orange County Transportation Authority (OCTA) initiated the Transit Master Plan (Plan) in summer 2016. This process is taking a high-level look at long-term transit needs throughout Orange County (County) and recommending a series of corridors suitable for additional transit improvement. In addition, the Plan will help guide future recommendations for fixed-route bus service. Projects identified in the Plan will be considered in the OCTA Long-Range Transportation Plan and position OCTA for upcoming transit funding opportunities.



Discussion

This report presents the draft Transit Opportunity Corridors, which will be further analyzed in the coming months. The corridors were developed based on information gathered from the "State of OC Transit" report and screened using

the "Transit Investment Framework," which were previously presented to the Board of Directors (Board). Staff is also providing an update on the results of the recent public survey.

Build Your Own System Survey Results

As part of the Plan process, OCTA has conducted extensive outreach to stakeholders throughout the County. The most recent effort was a "Build Your Own System" survey where the public was asked to prioritize various options to improve transit services. Over 3,000 surveys were received, representing both existing riders and non-riders. A total of 1,694 respondents completed the Build Your Own System survey, and 1,370 respondents completed the follow-up survey (Attachment A). The top ranked priorities were:

- High-capacity transit/rapid transit service,
- More frequent service,
- Real-time information,
- Service where demand is highest,
- Early-morning and late-night service,
- More weekend service,
- Long-distance service,
- Shelters, seating, lighting, and
- Transit signal priority.

Both riders and non-riders identified high-capacity transit such as Bus Rapid Transit (BRT) and streetcar as the top priority. More frequent, early morning, late-night, and weekend service were also top priorities for existing riders. The results of the survey will be used to develop both short-term bus service recommendations and prioritize capital investments in the draft Transit Master Plan.

Corridor Development

The project development team initially identified over 30 potential Transit Opportunity Corridors. The list was intended to be exhaustive during this initial screening phase. Corridors were added based on previous transit studies, "State of OC Transit" report analysis, connections to other regional transit projects, and existing high-ridership bus routes.

Both arterial and freeway corridors were considered. Service on arterial corridors would consider both bus and/or streetcar. Examples of these modes include the planned OC Streetcar and Bravo! limited-stop bus service. Stops would be spaced a quarter mile to one mile apart, and the service would be provided within existing right-of-way. Service on freeway corridors would be BRT service using

the existing high-occupancy vehicle lanes. Stops for this type of service would generally be spaced five miles apart. Both services would use larger vehicles, have improved stop amenities, and operate frequent service during commute hours.

Corridor Evaluations

The initial screening used a set of 14 criteria recommended in the "Transit Investment Framework". Initial screening criteria are described in table 1 on page 2-2 (Attachment B). The initial corridors were divided into arterial segments and freeway BRT stops for analysis. The analysis zone for arterial corridors was within a quarter mile of the proposed alignment, while the freeway BRT corridors were within a quarter mile of the proposed stop locations. Scoring results by segment and freeway stops are shown in Appendix B of Attachment B.

Draft Corridor Recommendations

The project development team reviewed the results of the initial screening to develop ten draft corridors for consideration. Each corridor includes segments or stop locations that rate highly in the initial screening, although some also include segments that rank somewhat lower. By combining these segments and stop locations into "complete" corridors, with major anchor destinations or transit hubs at each end, it is possible to better represent potential alignments.

The following eight arterial corridors (four north-south and four east-west), and two freeway BRT corridors are recommended for further development and evaluation. A map showing these corridors is shown as Attachment C.

- Arterial Corridors
  - Beach Boulevard: Fullerton Park and Ride to Downtown Huntington Beach.
  - Harbor Boulevard: Fullerton Transportation Center to Hoag Hospital in Newport Beach.
  - State College Boulevard/Bristol Street: Brea Mall to the University of California, Irvine.
  - Main Street: Anaheim Regional Transit Intermodal Center to South Coast Plaza in Costa Mesa.
  - La Palma Avenue/Lincoln Avenue: Anaheim Canyon Station to Hawaiian Gardens.
  - Chapman Avenue: Beach Boulevard to Hewes Street in Orange.
  - 17th Street/Westminster Avenue: Tustin Street to California State University, Long Beach.
  - McFadden Avenue/Bolsa Avenue: Larwin Square in Tustin to Goldenwest Transportation Center in Huntington Beach.

- Freeway BRT Corridors
  - Interstate 5: Fullerton Park-and-Ride to Mission Viejo/Laguna Niguel Station.
  - State Route 55: Santa Ana Regional Transportation Center to Hoag Hospital, Newport Beach.

Next Steps

Staff will return in November 2017 with a draft Transit Master Plan document including ranked Transit Opportunity Corridors. Staff will be soliciting feedback on the draft corridors from stakeholders during the summer.

Summary

This report provides a summary of the draft Transit Opportunity Corridors. Staff is seeking Board input on the draft corridors prior to seeking stakeholder and public feedback.

Attachments

A. Memorandum from Steve Boland and Jennifer Wieland, Nelson Nygaard, to Gary Hewitt and Chad Kim, Build Your Own System (octransitvision.com) Survey Results
B. OC Transit Vision, Transit Opportunity Corridors, Initial Screening and Preliminary Recommendations
C. Map of Draft Transit Opportunity Corridors

Prepared by:

Gary Hewitt
Project Manager, Transit Planning
(714) 560-5715

Approved by:

Kurt Brotcke
Director, Strategic Planning
(714) 560-5742

ATTACHMENT A

NELSON NYGAARD

OC TransitVision

MEMORANDUM

To: Gary Hewitt and Chad Kim

From: Steve Boland and Jennifer Wieland

Date: June 23, 2017

Subject: Build Your Own System (octransitvision.com) Survey Results

This memorandum presents a summary of responses to the Build Your Own System survey (octransitvision.com) and accompanying follow-up survey. The survey was open online from March 31 to June 23, 2017. A total of 1,694 respondents completed the Build Your Own System survey, and 1,370 respondents completed the follow-up survey.

Survey responses were solicited through a wide variety of media, including online and in-person tools, using project business cards, bus cards, and paper and iPad surveys. Online advertisement included email blasts, website postings, digital newsletters and blogs, and social media posts and ads (i.e., Facebook, Twitter, and Instagram). OCTA partnered with the following groups to help announce the survey: Orange County jurisdictions; transportation, business, and diverse community leaders; universities; 91 Express Lanes staff; John Wayne Airport; Metrolink; and the LOSSAN Rail Corridor Agency. OCTA also reached out to bus riders and vanpool and rideshare participants. In-person surveying took place at community events, fairs, and festivals; bus and train stops; and as part of other OCTA project outreach and marketing activities.

BUILD YOUR OWN SYSTEM SURVEY

The Build Your Own System survey is an online, interactive exercise that asks people to prioritize among various options for improving transit service, access, and amenities and for making capital investments. Respondents are given a hypothetical budget of $100, and each improvement has a cost of $5 to $25 relative to actual costs for implementation. In addition to spending their $100 budget, respondents can also attempt to maximize benefits in real time—including speed and reliability, the passenger experience, accessibility, and ridership impacts—based on the improvements selected. A screen capture of the introduction to the Build Your Own System survey is shown in Figure 1, and a screenshot of select response choices for Information and Amenities improvements is shown in Figure 2.

Upon completing the Build Your Own System survey, participants were directed to a follow-up survey that asked questions about their decision-making process when building their own system, their impressions of the interactive exercise, as well as their individual travel behavior and demographic characteristics.

Figure 1 Build Your Own System Survey – Introduction

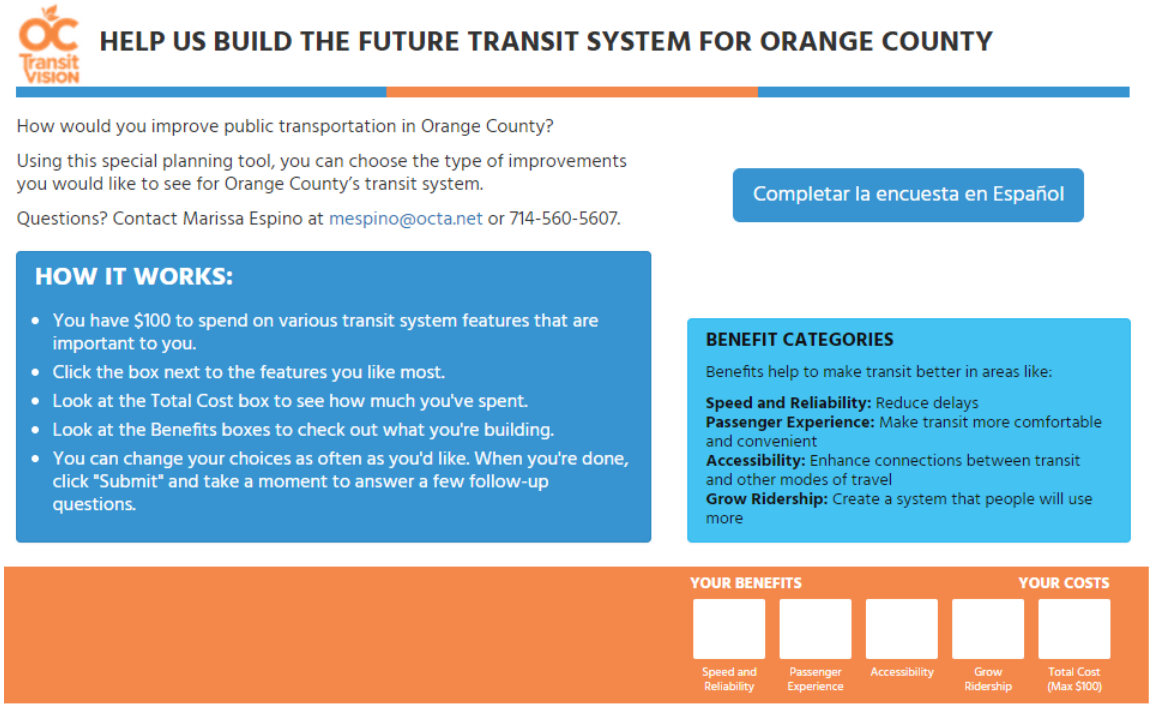
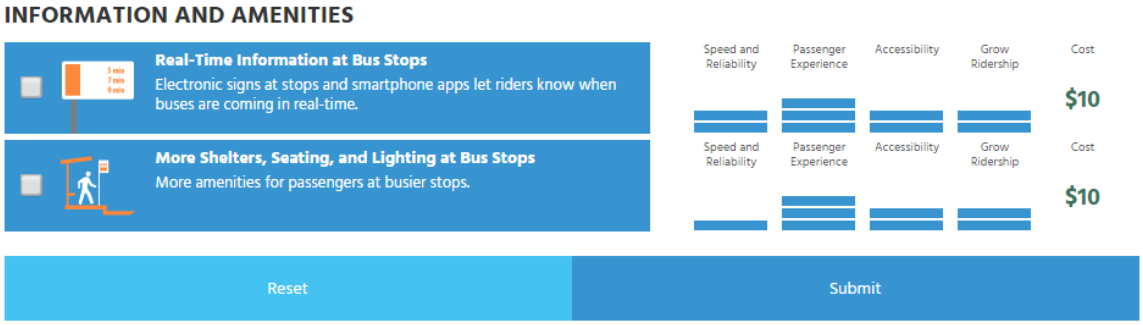


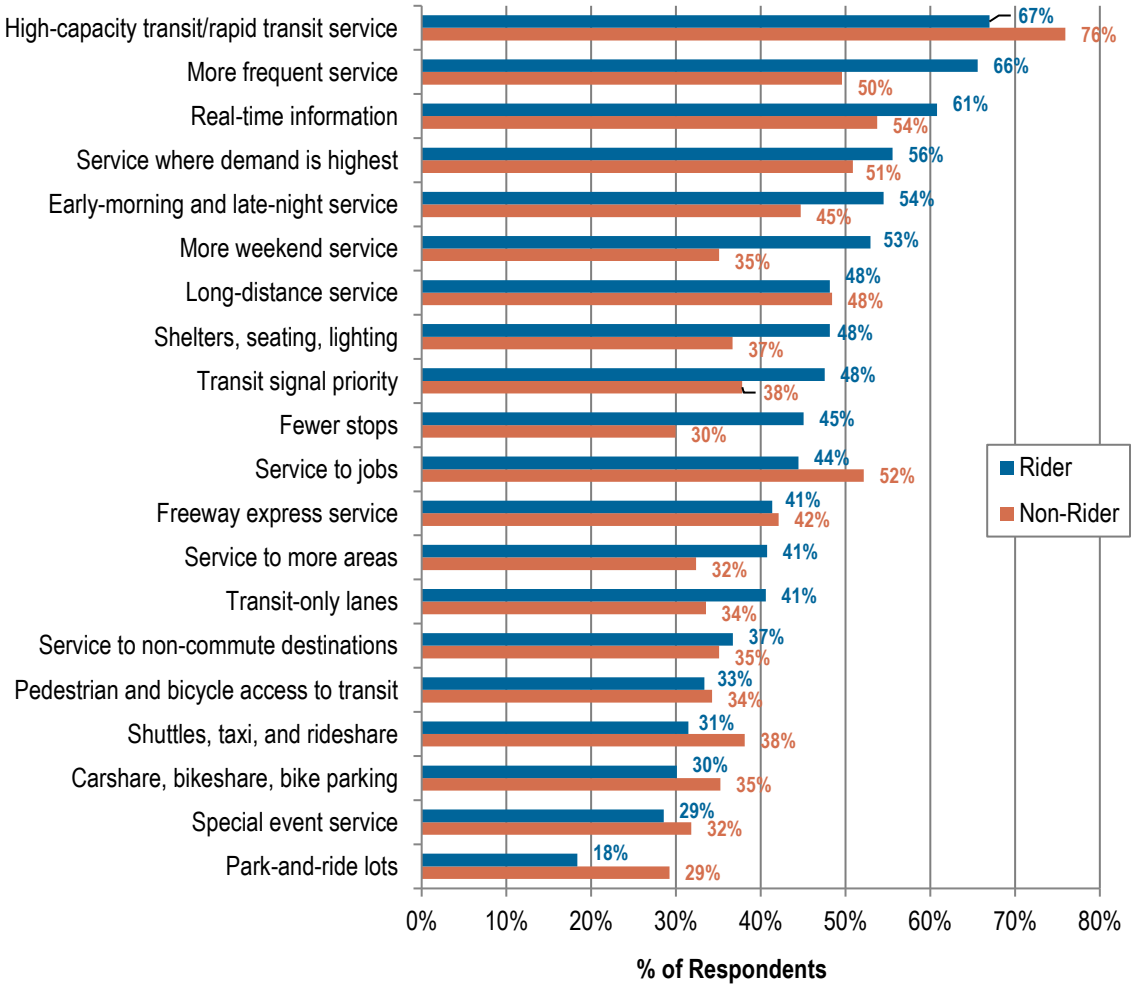
Figure 2 Build Your Own System Survey – Select Improvements



BUILD YOUR OWN SYSTEM SURVEY RESULTS

Figure 3 shows percentages of respondents selecting each improvement, with responses separated based on whether the individual self-identified as someone who does or does not ride transit. The improvement most frequently selected by both existing riders (67%) and non-riders (76%) was "High-Capacity Transit/Rapid Transit Services." This was the most popular despite being the most expensive improvement available at $25, or one-quarter of the total budget for each respondent. The second and third most popular improvements for riders were service and amenities enhancements: "More Frequent Service" (66%) and "Real-Time Information at Bus Stops" (61%). The second and third most popular improvements for non-riders were "Real-Time Information at Bus Stops" (54%) and "Service to Jobs" (52%). The lowest priority improvement for both riders and non-riders was "Park-and-Ride Lots" (18% and 29%, respectively).

Figure 3 Preferred Transit Improvements



To begin exploring how far a budget of $100 would stretch in implementing the top priorities, costs were totaled for the highest-priority options until the budget was expended. The top nine priorities identified by current OCTA riders could be implemented within the survey budget: high-capacity transit/rapid transit service, more frequent service, real-time information, service where demand is highest, early morning and late night service, more weekend service, long-distance service, shelters, seating, and lighting, and transit signal priority.

The top nine priorities identified by non-riders could also be implemented within the survey budget: high-capacity transit/rapid transit service, real-time information, service to jobs, service where demand is highest, more frequent service, long-distance service, early morning and late night service, freeway express service, and transit signal priority.

FOLLOW-UP SURVEY RESULTS

Results from the follow-up survey are described below, focusing on decision-making and impressions of the exercise, individual travel behavior, and demographic characteristics.

Build Your Own System Survey Decision-Making and Impressions

A desire to "make transit more available" ranked as the top consideration in the decision-making process for one-third (33%) of respondents (Figure 4). "Making it easier for more people to use the bus" was the primary decision factor for a quarter (23%) of respondents. Less important factors in people's decision-making processes were "expanding transit access to jobs" and "improving air quality." "Making it easier to access transit on foot or by bike" and "making it more comfortable to wait for and ride the bus" were identified as least important in decision-making.

The majority of respondents (60%) felt that the budget provided in the exercise was adequate (Figure 5). Another 22% indicated they needed more money, while 18% felt they had too much budget for the improvements they wanted to make.

Figure 4 Importance of Decision-Making Criteria (1 is most important; 6 is least important)

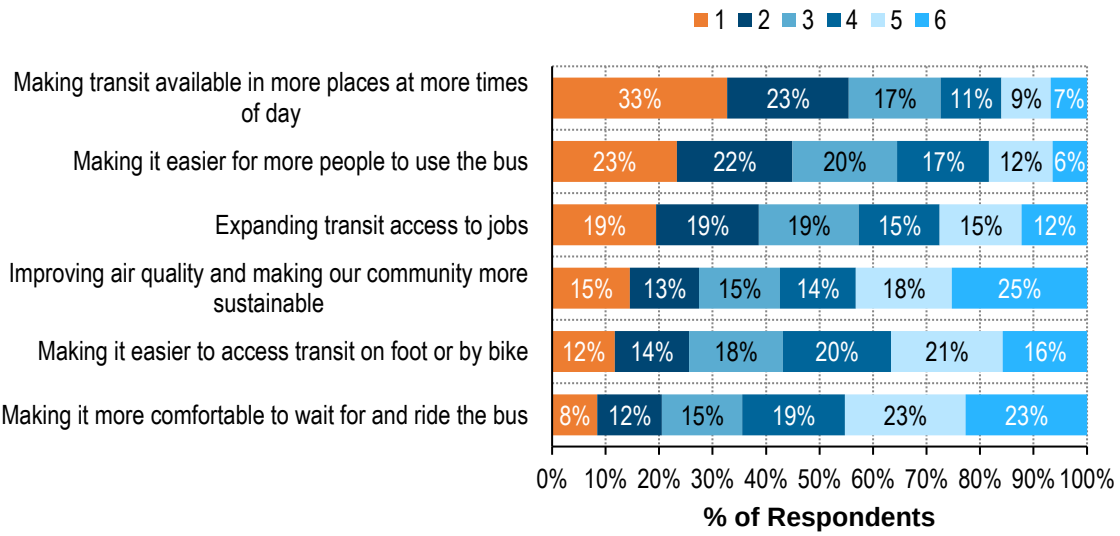
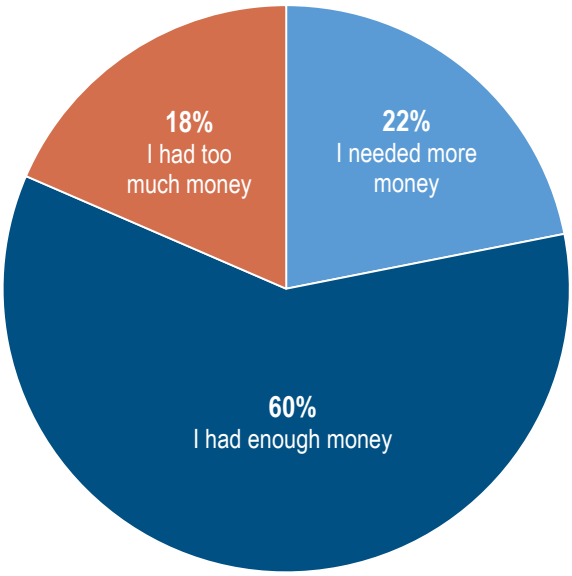


Figure 5 Feelings about Budget Size ($100)



Travel Behavior and Opinions

Participants were asked about their current travel choices, including their primary mode of transportation and the frequency at which they ride an OCTA bus. The majority of survey respondents (62%) reported that driving alone was their primary mode of transportation (Figure 6). Transit was the next most common mode (19%), followed by carpool (11%), and walking and bicycling (4% and 3%, respectively).

Participants were also asked how often they ride any type of OCTA transit service. Approximately half of the respondents (52%) have never used OCTA transit services. One quarter of respondents ride less than once per month, and 13% ride four to seven days per week (Figure 7).

Figure 6 Primary Transportation Mode

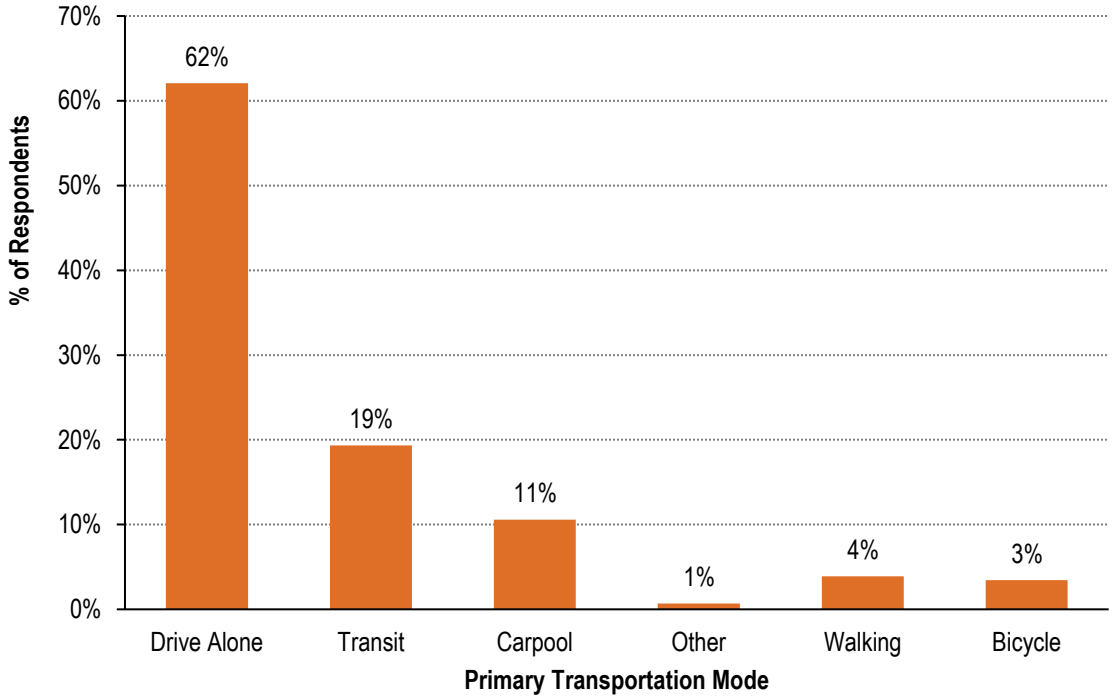
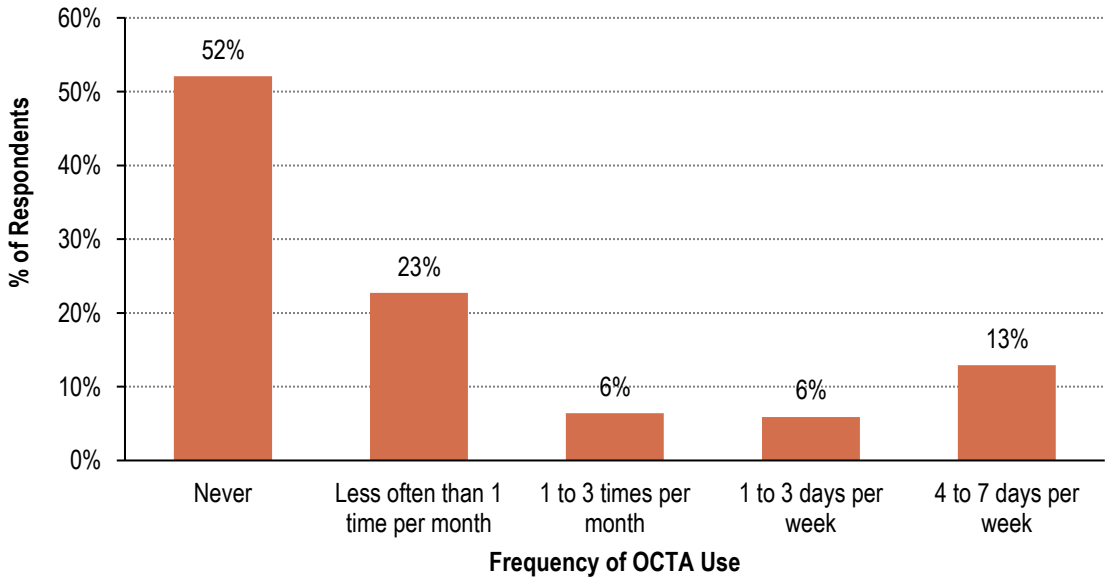


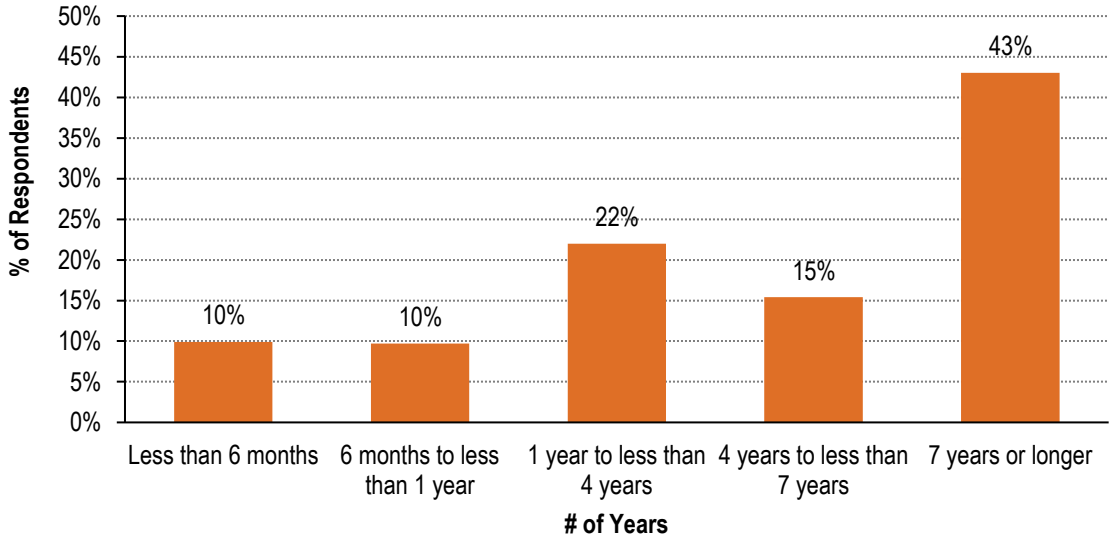
Figure 7 Frequency of OCTA Use



OCTA Riders

Respondents who currently use, or have previously used, an OCTA bus service were asked how long they have used the system. Most (43%) are experienced customers and reported using OCTA for over seven years (Figure 8). Nearly a quarter of respondents (22%) reported using OCTA for one to four years, and 15% have used OCTA from four to seven years. These responses suggest that OCTA riders tend to be long-time customers.

Figure 8 Length of Time Riding OCTA (OCTA Riders)



The respondents who currently use OCTA services were also asked why they ride the bus. The most common reason (37%) that frequent OCTA riders report using the bus is because they save money (Figure 9). Of survey respondents that cited reasons other saving money, avoiding traffic congestion and protecting the environment were the next most common reasons for riding OCTA services.

Lastly, riders were asked what type of trips they make using OCTA services. Work trips are the most common trip purposes (56%), followed by recreation/social visit/entertainment and personal business/errands (Figure 10). Using transit for one's everyday commute can be an indicator of transit dependency, which supports the trend of longer-term use.

Figure 9 Reasons for Using OCTA (OCTA Riders)

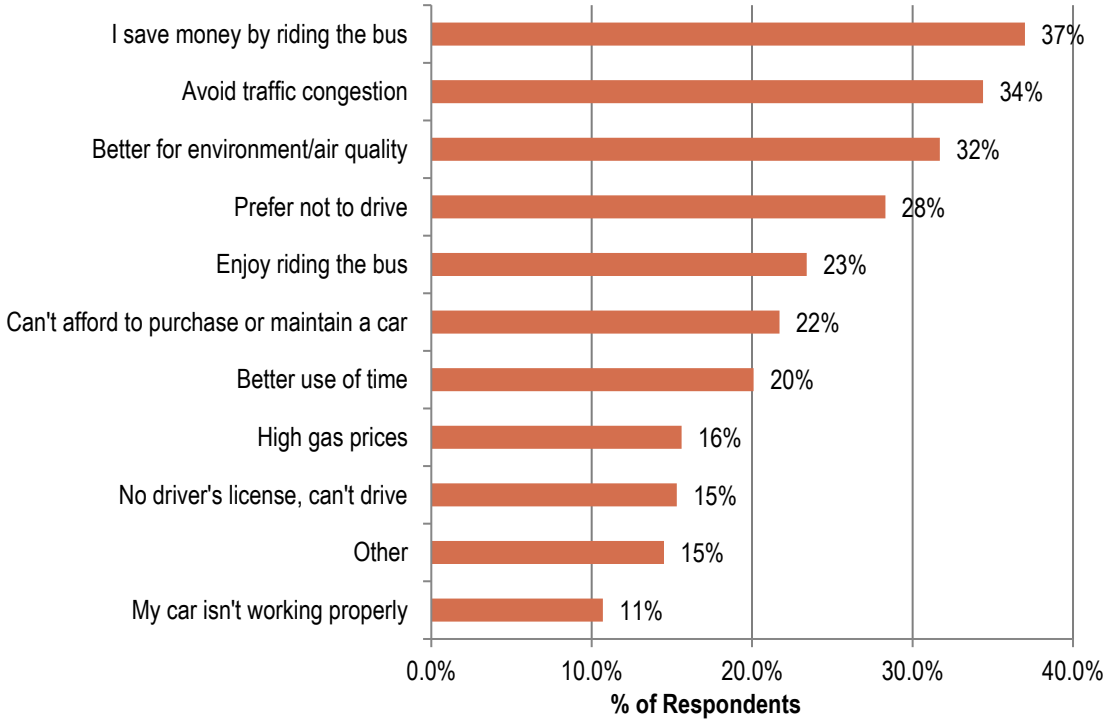
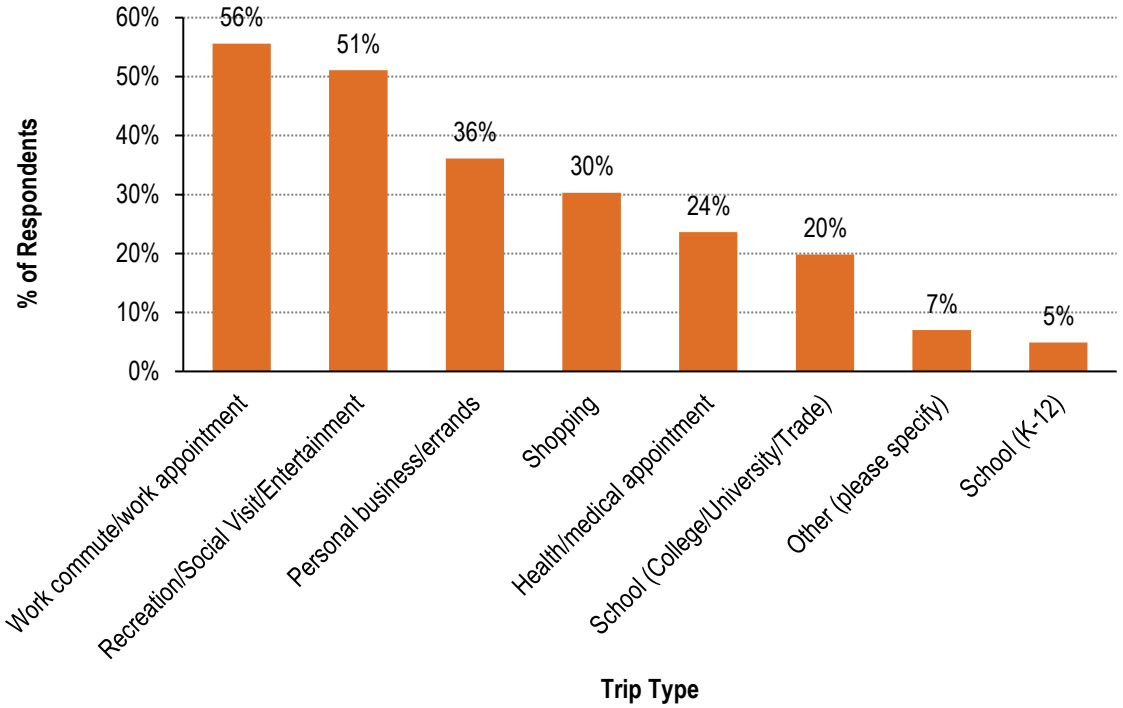


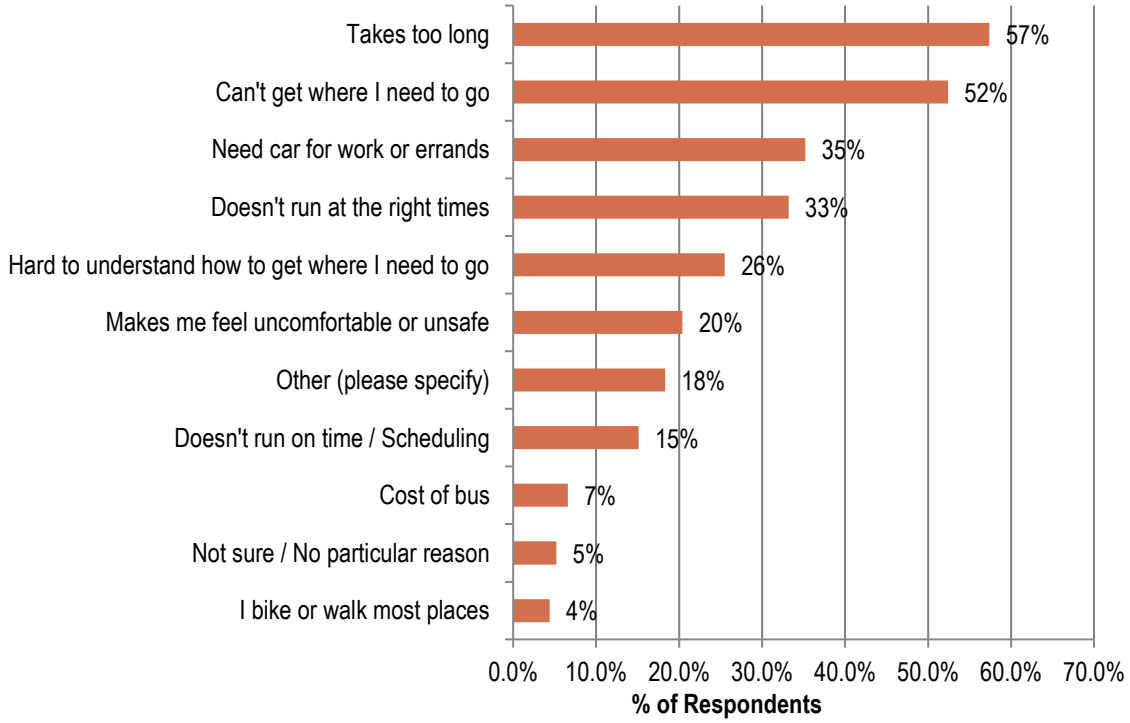
Figure 10 Purpose of Trips Made Using OCTA (OCTA Riders)



Reasons for Not Riding OCTA

All respondents were asked why they do not ride OCTA transit services more often. Figure 11 shows that the most frequently cited reason is because the bus takes too long (57%). This sentiment likely contributed to the priority placed on "High-Capacity/Rapid Transit" in the Build Your Own System survey, an improvement selected by more than half of the respondents. The second most popular reason cited for not using OCTA services is that the bus does not take respondents where they need to go. Many respondents identified the need for a car to get to a job or run errands and inconvenient schedules as other reasons for not riding OCTA.

Figure 11 Reasons for Not Riding OCTA



Respondent Demographics

At the conclusion of the follow-up survey, respondents were asked demographic questions that will be used to inform future analysis about the priorities for different demographic groups. Respondent demographics were also compared to Orange County resident demographics[1] to note any discrepancies between the two:

Age: People between the ages of 25 and 34, 35 and 44, and 45 and 54 each represented 20% of survey respondents. As shown in

- Figure 12, the lowest percentage of participants was under 18 years of age (1%). In Orange County, 14% of residents fall into each of the aforementioned age groups, and 26% are under age 19.

[1] 2011-2015 American Community Survey Five-Year Estimates

- **Household Size:** The most common household size among respondents was two people (30%). Respondents from households of three and four people were evenly distributed, with 19% to 20% in each household size category. Very few respondents indicated that they live in a household of seven or more (Figure 13). This distribution in household size is reflective of Orange County demographics: 31% of households are two-person, and 17% are three-person. On average, there are approximately three people per household in Orange County.
- **Annual Income:** About one-third (34%) of respondents reported an annual household income of at least $100,000, while 13% of respondents have annual household incomes below $30,000 (Figure 14). The median income in Orange County today is $76,509, with 38% of households earning less than $100,000 (38%) and 23% earning below $35,000.
- **Racial/Ethnic Background:** Respondents were asked to describe their racial/ethnic background or backgrounds (Figure 15), and the majority of respondents identify as Caucasian/White (58%) or Hispanic/Latino (17%). Respondents that identified as Asian constituted 10% of respondents. In Orange County, fewer residents are Caucasian/White (42%) than the survey respondents, and more are Hispanic/Latino (34%) or Asian (19%).

Figure 12 Respondent Age

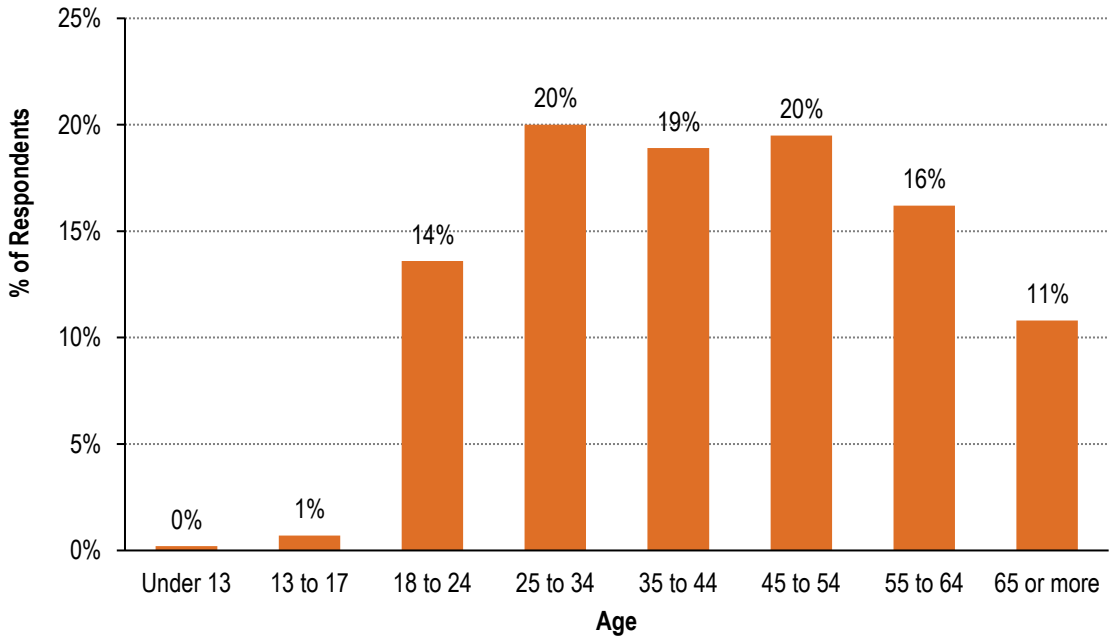


Figure 13 Respondent Household Size

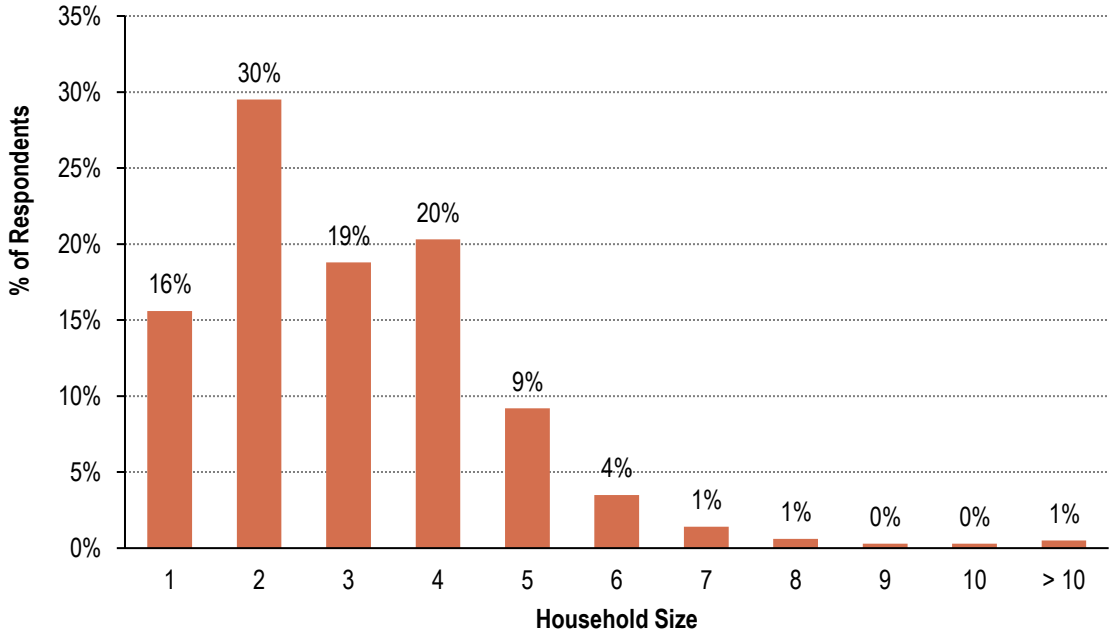


Figure 14 Respondent Annual Household Income

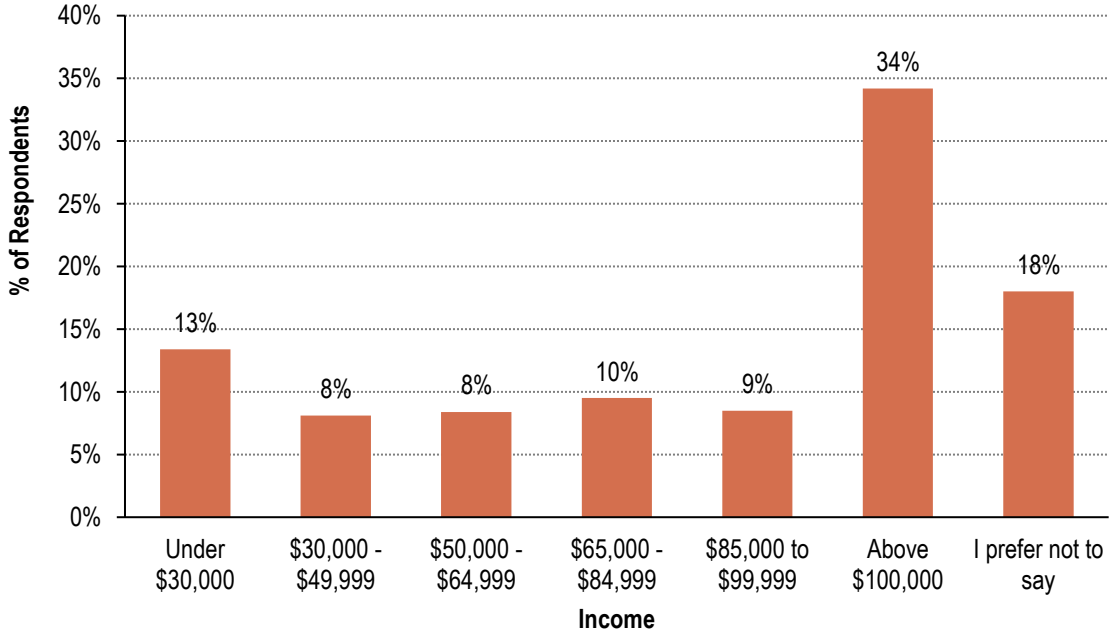
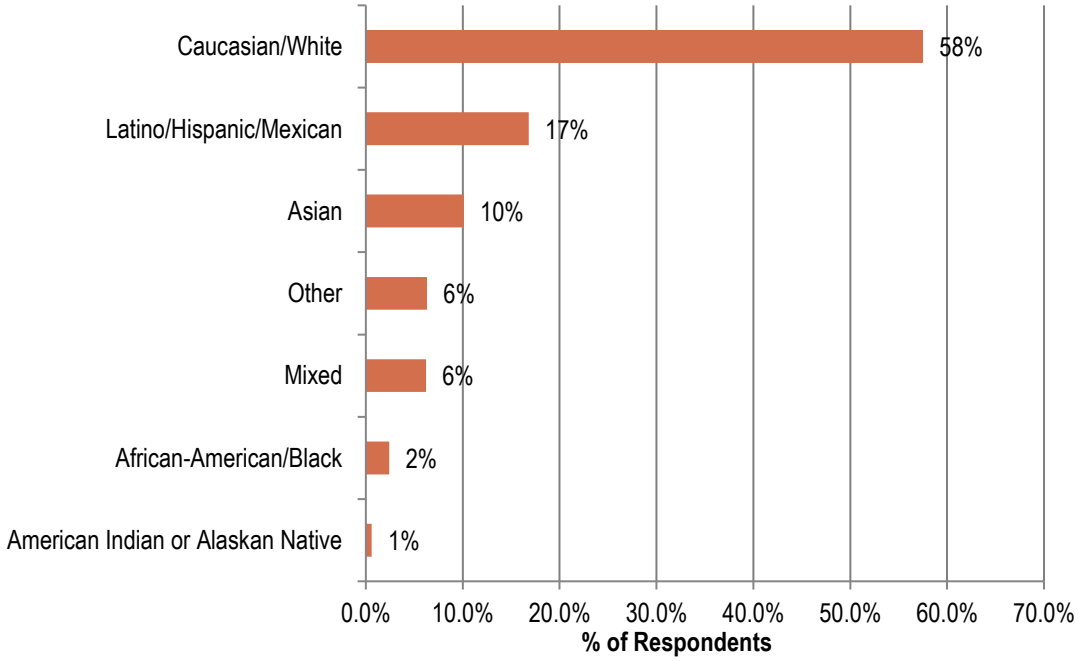


Figure 15 Respondent Race/Ethnicity



ATTACHMENT B

OC TRANSIT VISION

Transit Opportunity Corridors

Initial Screening and Preliminary Recommendations

June 2017

NELSON
NYGAARD

Table of Contents

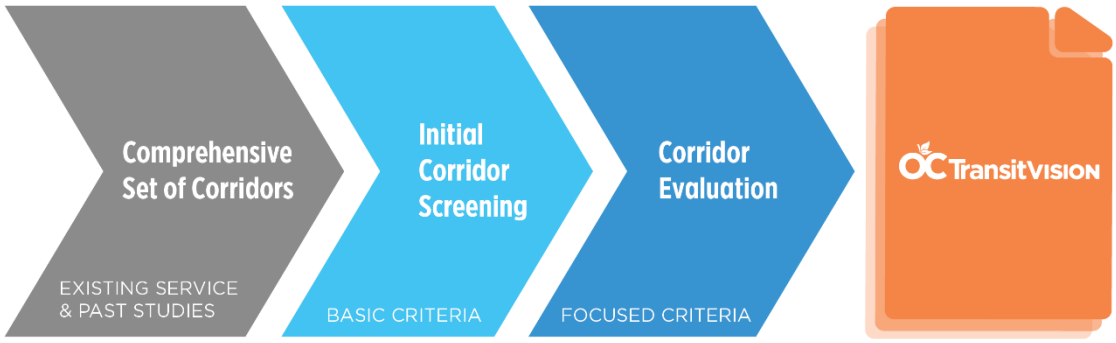
Table of Figures

1 INTRODUCTION

This report describes the initial screening of potential Transit Opportunity Corridors (TOCs) and the evaluation of possible Freeway Bus Rapid Transit (Freeway BRT) routes and stop locations for the OC Transit Vision. The TOCs are those corridors in Orange County that may merit investment in high-quality transit service, including high-capacity or rapid transit service using modes such as streetcar, bus rapid transit, or rapid bus (see the State of OC Transit report for more information on transit modes).

Figure 1 illustrates the screening and evaluation process, which includes the identification of candidate corridors, screening of those corridors (the focus of this report), and detailed evaluation and prioritization of the TOCs. As described in the final section of this report, the TOCs recommended for advancement from screening to evaluation will undergo more detailed analysis to establish a prioritized list of corridor-specific capital and service recommendations for inclusion in the final OC Transit Vision report.

Figure 1 Corridor Evaluation Process



2 SCREENING AND EVALUATION CRITERIA

The corridor screening and evaluation criteria established as part of the OCTA Transit Investment Framework are shown in Table 1. The criteria were designed to help achieve the project's vision and goals. A smaller number of criteria were identified for the initial screening than for the more detailed evaluation, which is standard for a process in which a large number of candidate corridors must be analyzed. For the OC Transit Vision, the complete list of potential corridors has been screened using a subset of criteria to identify the most promising candidates for investment; these 10 corridors then undergo more comprehensive analysis—including ridership modeling—to determine specific recommendations for each.

The screening and evaluation criteria measure both potential project performance as well as corridor characteristics such as population and employment density, transit propensity of the population based on demographic analysis, and other transit-supportive factors. The screening phase focused on corridor characteristics, while the evaluation phase will focus on potential project performance based on preliminary definition of mode, design of the right-of-way, and stop locations.

Table 1 Corridor Screening and Evaluation Criteria

Category	Measures	Initial Screening Methodology	Evaluation Methodology
 Speed & Reliability	% of Route w/ Transit-Only ROW	--	Calculation based on conceptual design
	% of Route w/ Grade Separation	--	Calculation based on conceptual design
	Peak and Base Frequency	--	From conceptual service plan
	Average Speed	--	Input from modeling (travel time)
 Ridership/Mode Shift/VMT Reduction	Weekday Average Boardings	Boardings per corridor mile	Boardings per corridor mile and boardings per hour from model
	New Transit Trips	--	Projected ridership – existing ridership in corridor (from model)
	Transit Mode Share	--	From model
	Per-Capita VMT/CO2 Emissions	--	From model
 Density/Connections to Activity Centers	Population Density Within ½ Mile of Alignment	GIS analysis (Census data)	GIS analysis (Census data)
	Employment/Postsecondary Enrollment Density Within ½ Mile of Alignment	GIS analysis (Census data)	GIS analysis (Census data)
	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	GIS analysis (available sources)	GIS analysis (available sources)
	Additional Major Destinations (e.g., Stadiums & Theme parks) Within ½ Mile of Alignment	GIS analysis (based on assessment of "destinations")	GIS analysis (based on assessment of "destinations")
	Traffic Volumes at Arterial Intersections per Corridor Mile (Within ½ Mile of Alignment)	GIS analysis (available sources)	GIS analysis (available sources)
	% of Employment within 30-min Travel Time on Transit	--	From model

Category	Measures	Initial Screening Methodology	Evaluation Methodology
 Multimodal Connectivity	# of Connections to Existing or Future Metrolink Stations, Transit Centers, and Major Routes, and Park-and-Rides	GIS analysis (available sources)	GIS analysis (available sources)
	Intersection Density per Square Mile	GIS analysis (available sources)	GIS analysis (available sources)
	Pedestrian Network Serving Transit	WalkScore within ½ mile of corridor	WalkScore within ½ mile of corridor
	# of Connections to Existing or Planned High-Quality Bicycle Facilities (Off-Street or Protected On-Street)	--	Based on review of existing routes/plans
 Capacity	Person Throughput	--	Analysis based on vehicle capacity, conceptual service plan, and roadway capacity
 Safety	Potential for Reduction in Collision Rates and Severity	--	Qualitative assessment based on project/corridor design and # of new transit trips (as proxy for VMT reduction)
 Passenger Comfort/Amenities	Passenger Comfort	--	Qualitative assessment based on vehicle capacity, movement (e.g. lateral sway)
	System Legibility	--	Qualitative assessment based on conceptual design (e.g. visibility, alignment)

Category	Measures	Initial Screening Methodology	Evaluation Methodology
Equity	Density of Households with Annual Incomes < $40,000	GIS analysis (Census data)	GIS analysis (Census data)
	Density of Seniors and People with Disabilities	GIS analysis (Census data)	GIS analysis (Census data)
	CalEnviroScreen Scores	Analysis based on EnviroScreen ratings for disadvantaged communities	Analysis based on EnviroScreen ratings for disadvantaged communities
Economic Development	Support for Retail Activity	Density of retail jobs within ½ mile of corridor	Qualitative assessment based on project design (e.g., turn restrictions, additional sidewalk space, parking impacts)
	Support for Transit-Oriented Development	Qualitative assessment based on research	Qualitative assessment based on research
Transit-Supportive Policy	Inclusion of Corridor in Regional and Local Transit-Oriented Plans		Qualitative assessment
	Adoption of Supportive Zoning		Qualitative assessment
Cost-Effectiveness/ Productivity	Capital Cost per Boarding	--	Analysis based on high-level capital cost estimates (based on peer review, service plan and high-level travel time estimates) + ridership from model
	Operating Cost per Boarding	--	From model
	Boardings per Revenue Hour	--	Ridership from model / revenue hours derived from operating cost estimates
	Boardings per Revenue Mile	--	Ridership from model / revenue miles derived from operating cost estimates

3 SEGMENTS AND STOP LOCATIONS

To ensure that the initial screening was conducted on a comprehensive set of corridors, the Project Development Team identified more than 30 potential TOCs. To allow for more refined analysis, these 30-plus corridors were divided into 96 corridor segments and 32 potential locations for Freeway BRT stops. These stops were identified to account for the fact that Freeway BRT would operate over long stretches without stopping, rendering corridor-based analysis irrelevant.

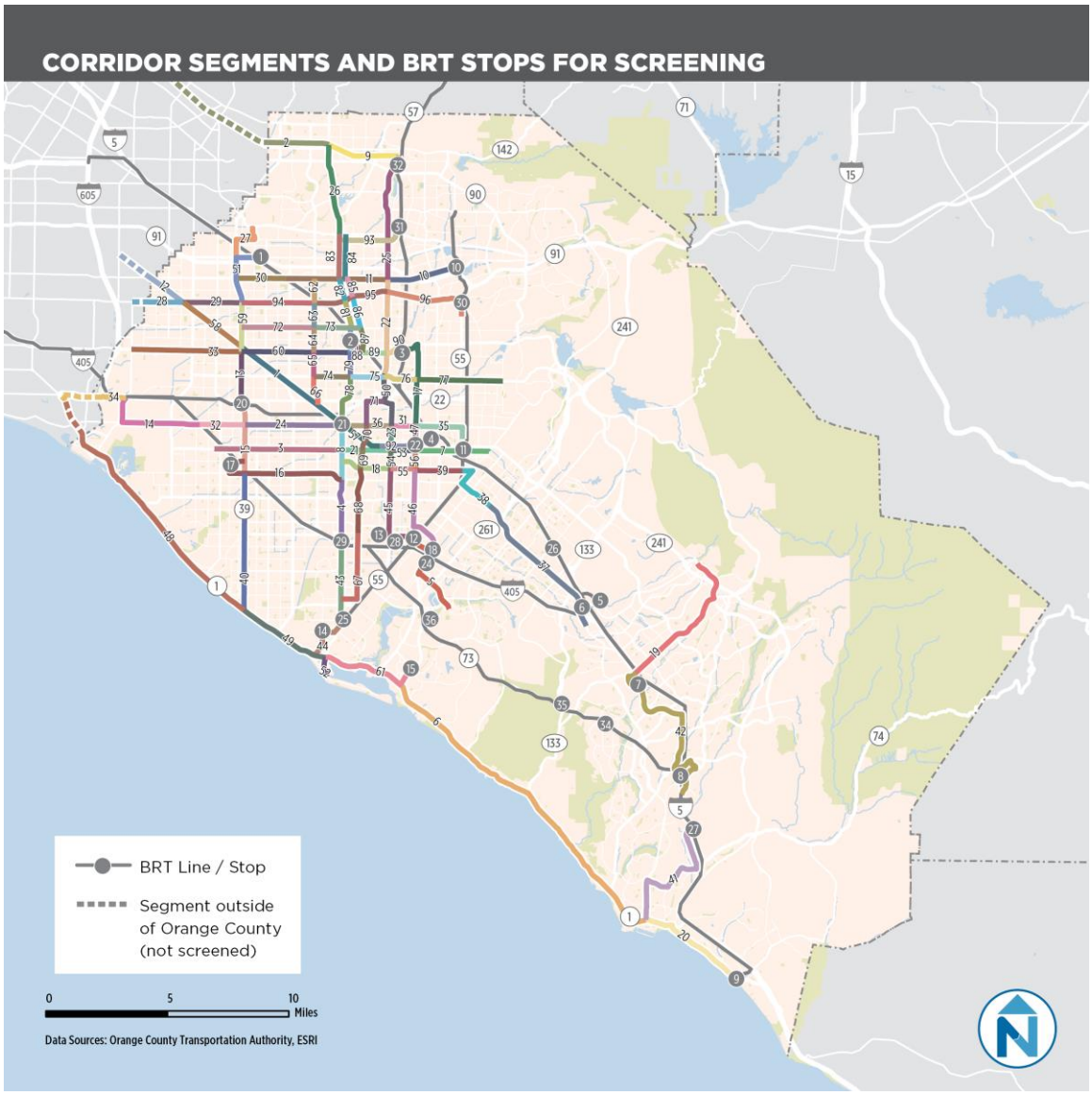
The corridors, segments, and Freeway BRT stop locations were identified based on the following:

- Corridors identified in previous studies, from 1990s proposed CenterLine light rail alignments to the current Central Harbor Boulevard Transit Corridor Study;
- Demographic, land use, and existing transit service analysis conducted as part of the OC Transit Vision and summarized in the State of OC Transit report;
- The Transit Investment Framework, which includes guidance for identifying potential high-capacity transit corridors;
- Discussions with OCTA staff from various departments; and
- Additional OCTA analysis of high-ridership segments of existing bus routes.

The potential corridors, segments, and Freeway BRT stops are located throughout Orange County, although the majority are in the more urbanized north and central parts of the county. Some corridors also extend a short distance into Los Angeles County to provide connections to existing and planned regional transit hubs.

The comprehensive set of corridor segments and stop locations for screening is shown in Figure 2.

Figure 2 Map of Segments and Stop Locations



4 SCREENING RESULTS

The area of analysis for each segment alignment or stop was a half-mile radius. Within this buffer each criterion was measured and assigned a score of 1 to 5. (As there were 14 categories, the maximum possible score was 70, and the minimum was 14.) In most cases, scores were based on natural breaks. For numbers of major transit connections, the score corresponded with numbers of connections (e.g., those segments or stops with more than five connections received a score of 5). For transit-supportive policy, a qualitative assessment of multiple factors led to the assignment of "high," "medium," and "low" values, which were then combined to produce scores.

It is important to emphasize that a screening exercise such as this is one tool for planners and policy makers to use in a decision-making processes; therefore, the results of such a screen should not be viewed as solely determinative. Slight differences in scores and resulting differences in rankings should be viewed as advisory, as slight changes to definitions, such as endpoints of segments, may result in changes to both scores and rankings.

Tables APX-1and APX-2 in Appendix B provides scores by criterion for all segments and stop locations. A full circle corresponds to a score of 5—the highest rating for a criterion—and an empty circle corresponds to a score of 1.

Figures 3 and 4 on the following pages map the overall findings for segments, with higher scoring segments shown in green and lower scoring segments shown in orange and red. Note that segments in Los Angeles County were not included in the analysis as the sole purpose of these segments would be to provide connections to transit hubs in Los Angeles County; this was factored into the analysis of transit connectivity for adjoining segments.

Figure 3 Map of Findings (Segments)

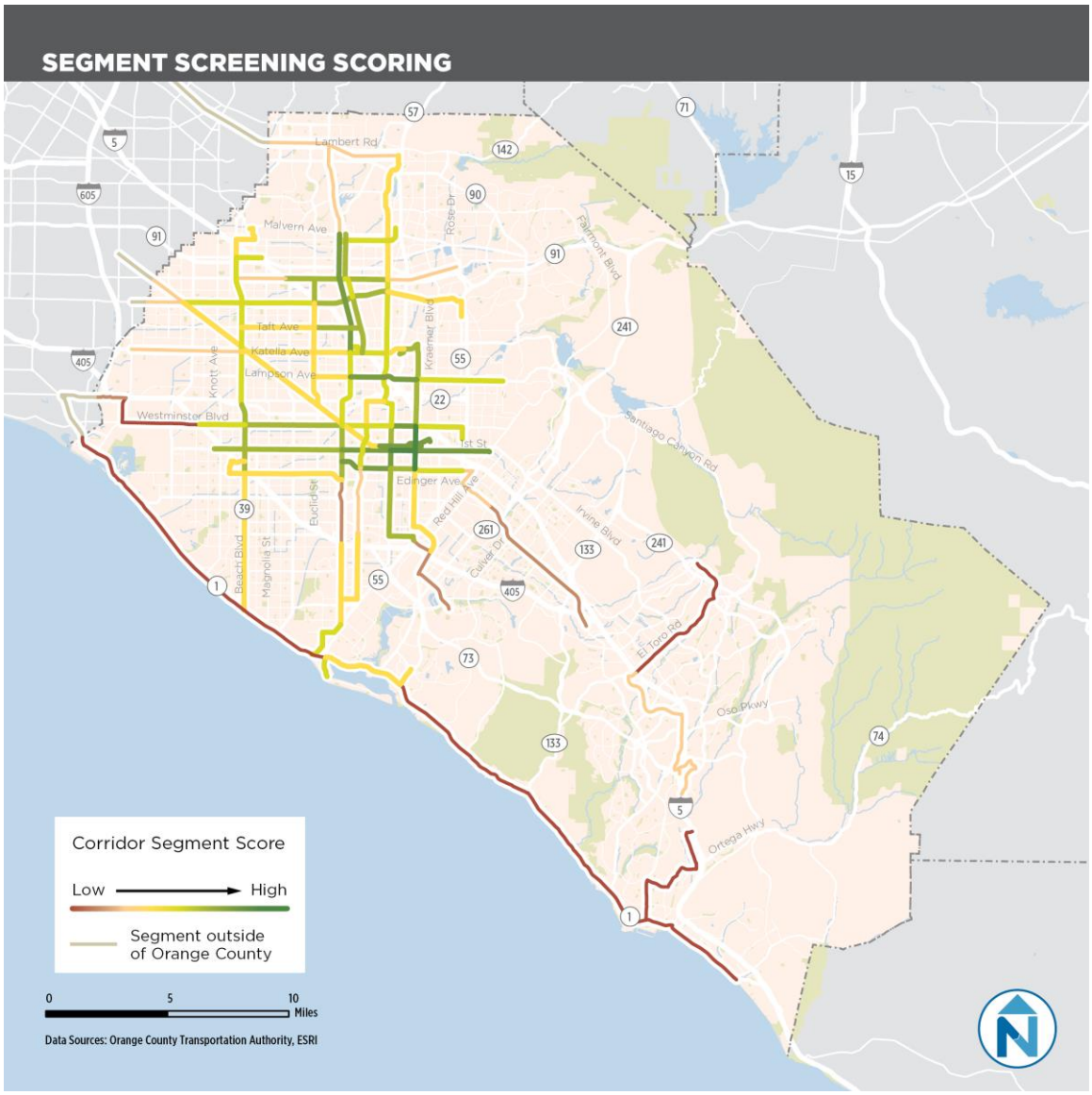
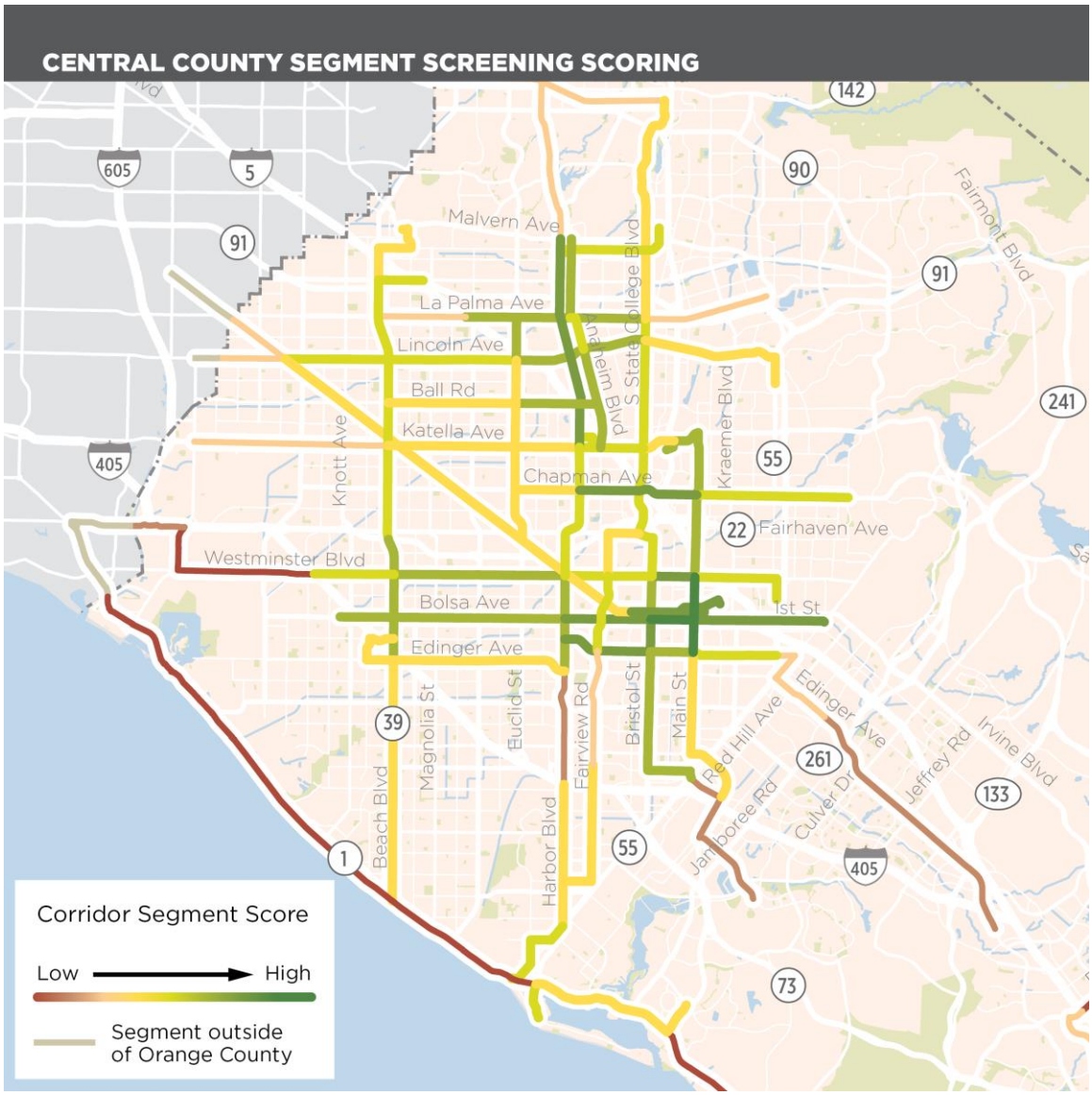


Figure 4 Map of Findings (Central County Segments)



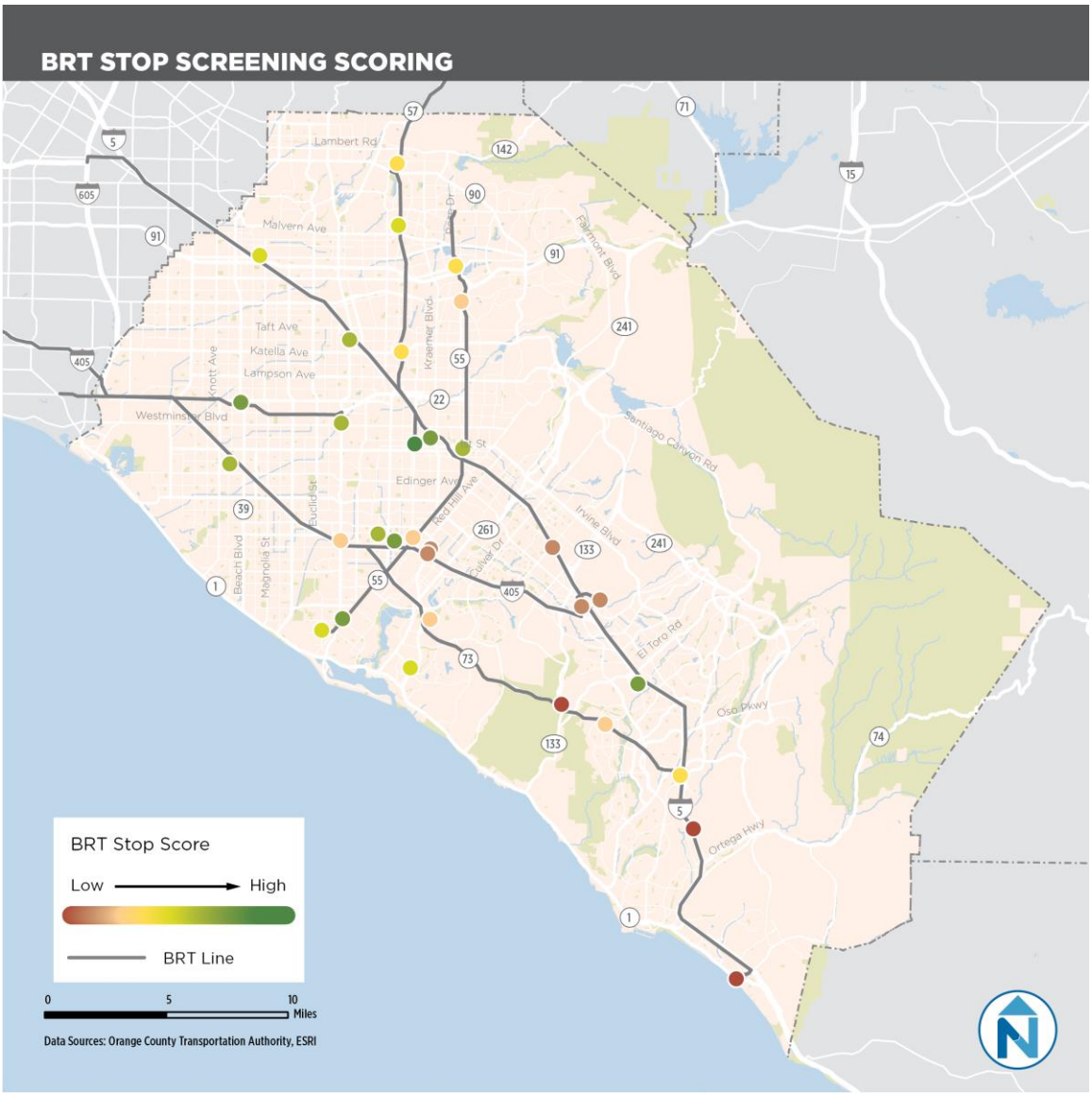
The segments that scored highest overall were located in the northern part of the county, primarily in Santa Ana and Anaheim. This area has some of the highest population densities in the county as well as relatively low incomes and other factors indicative of transit use. Existing transit services in this area include the highest-ridership OC Bus routes, consistent with the land uses and demographics. The top quartile of segments is shown in Table 2.

Table 2 Top Quartile of Segments by Corridor

Corridor	From	To	Primary Existing Route	ID
1st St/Bolsa Ave	Newport Ave	Main St	64/64X	7
	Main St	Bristol St		53
	Bristol St	Harbor Blvd		21
	Harbor Blvd	Westminster Mall		3
17th St/Westminster Ave	Main St	Bristol St	60/560	31
Anaheim Blvd	Chapman Ave	La Palma Ave	47	84
	Lincoln Ave	Ball Rd		86
	Ball Rd	Katella Ave		87
Ball Rd	Anaheim Blvd	Euclid St	46	73
Beach Blvd	SR-22	Edinger Ave	29	15
Chapman Ave	Main St	The City Dr	47/54	76
	The City Dr	Harbor Blvd		75
Harbor Blvd	Chapman Ave	La Palma Ave	43/543	83
	La Palma Ave	Lincoln Ave		82
	Lincoln Ave	Ball Rd		81
	Ball Rd	Katella Ave		80
	Westminster Ave	Edinger Ave		8
La Palma Ave	State College Blvd	I-5	38	11
Main St	17th St	1st St	53/53X	47
	1st St	McFadden Ave		56
McFadden Ave	Main St	Bristol St	66	55
	Bristol St	Harbor Blvd		18
State College Blvd/ Bristol St	17th St	1st St	57	23
	1st St	McFadden Ave		54
	McFadden Ave	Sunflower Ave & Main St		45
OC Streetcar (E of Pacific Electric right-of-way)			n/a	92

Figure 5 maps the results of the screening of Freeway BRT stop locations, with the stops shown in green ranked the highest and those in orange and red ranked the lowest.

Figure 5 Map of Findings (Freeway BRT Stop Locations)



While several of the potential stop locations are along or near the highest-ranking segments in the northern part of the county, stop locations in Downtown Costa Mesa and near Laguna Hills Mall also ranked highly. The top quartile of Freeway BRT stop locations included the following:

- Santa Ana Civic Center (I-5 corridor)
- Santa Ana Station (I-5)
- Triangle Square in Costa Mesa (SR-55 corridor)
- The Laguna Hills Transit Center (I-5)
- South Coast Metro in Costa Mesa (SR-55)
- First Street and SR-55 in Tustin (SR-55)
- South Coast Plaza Park-n-Ride in Costa Mesa (SR-55)
- Beach and SR-22 in Garden Grove (SR-22)

5 PRELIMINARY RECOMMENDATIONS

Based on the analysis and discussions with OCTA staff, ten TOCs are recommended for detailed evaluation and prioritization. Each of these corridors includes segments or stop locations that rated highly in the initial screening, although some also include segments that ranked somewhat lower. By combining these segments and stop locations into "complete" corridors with major anchor destinations or transit hubs at each end, it is possible to better represent potential alignments and design more effective and efficient transit services and capital improvements.

Eight arterial corridors (four north-south and four east-west) and two Freeway BRT corridors—several of which follow or closely follow existing OC Bus routes—are recommended for further development and evaluation. This mix of corridor types provides flexibility for analysis and potential implementation. For example, the Freeway BRT corridors would require a partnership with Caltrans and could leverage existing and planned investments in managed lanes, supporting rapid transit travel throughout the county. Arterial corridors, meanwhile, could be developed by OCTA through FTA processes.

The ten recommended corridors for further study are the following:

On-street corridors:

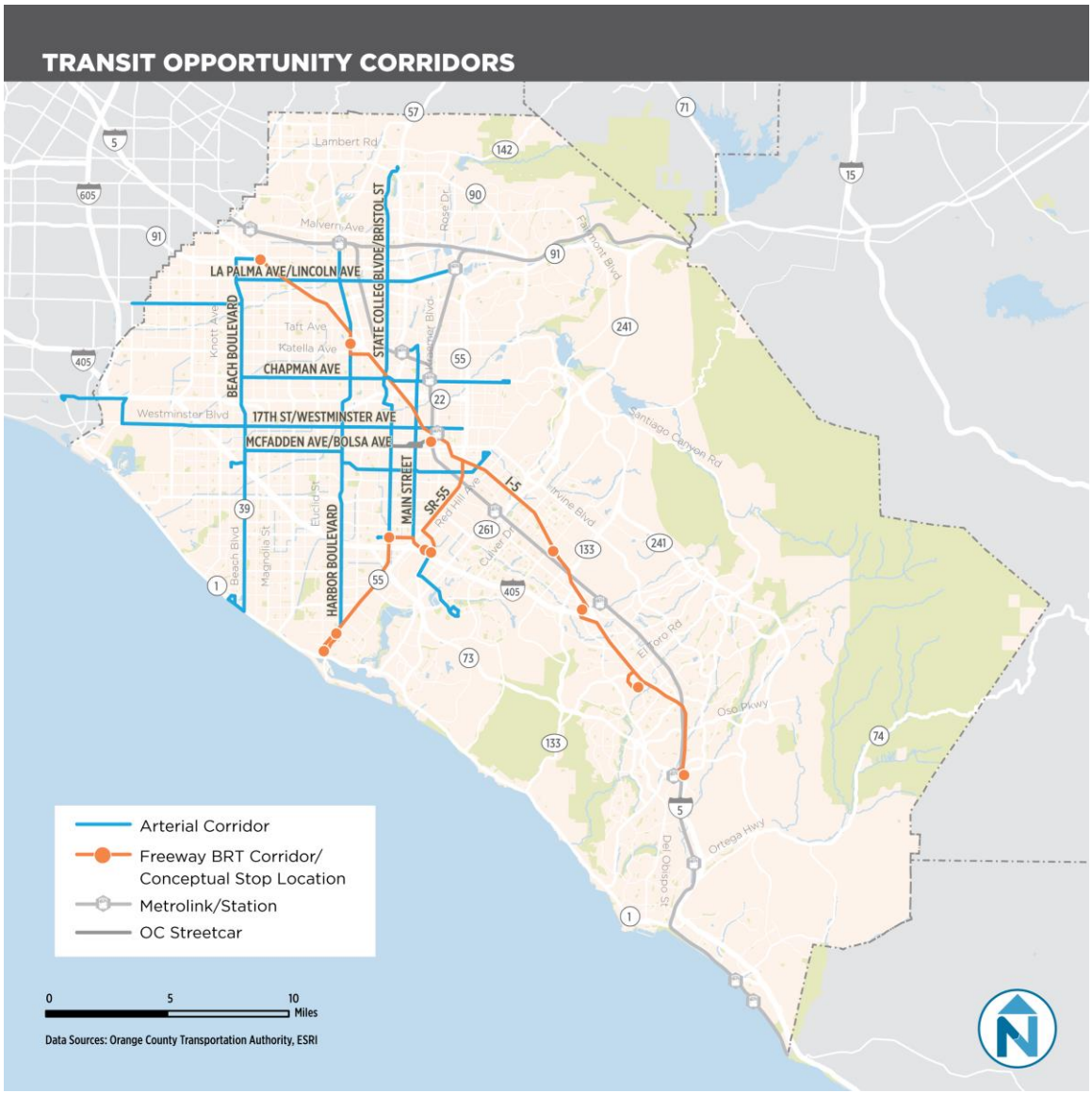
- Beach Boulevard from Fullerton Park-and-Ride to Downtown Huntington Beach
- Harbor Boulevard from Fullerton Transportation Center to Hoag Hospital Newport Beach
- State College Boulevard/Bristol Street from Brea Mall to the University of California, Irvine
- Main Street from Anaheim Regional Transit Intermodal Center (ARTIC) to South Coast Plaza Park-and-Ride
- La Palma Avenue/Lincoln Avenue from Anaheim Canyon Station to Hawaiian Gardens
- Chapman Avenue from Beach Boulevard to Hewes Street
- 17th Street/Westminster Avenue from Tustin Street to Cal State Long Beach
- McFadden Avenue/Bolsa Avenue from Larwin Square to Goldenwest Transportation Center

Freeway BRT corridors:

- I-5 from Fullerton Park-and-Ride to Mission Viejo/Laguna Niguel Station
- SR-55 from Santa Ana Regional Transportation Center to Hoag Hospital Newport Beach

The ten recommended Transit Opportunity Corridors are shown in Figure 6. Maps of each individual corridor are provided in Appendix A.

Figure 6 Recommended Transit Opportunity Corridors



APPENDIX A: CONCEPTUAL MAPS OF RECOMMENDED TRANSIT OPPORTUNITY CORRIDORS

Alignments and stop locations are conceptual and may be revised during the more detailed phase of corridor evaluation based on feedback from the OCTA Board of Directors, the Citizens Advisory Committee, and the public.

Figure A-1 Beach Boulevard Corridor

Figure A-2 Harbor Boulevard Corridor

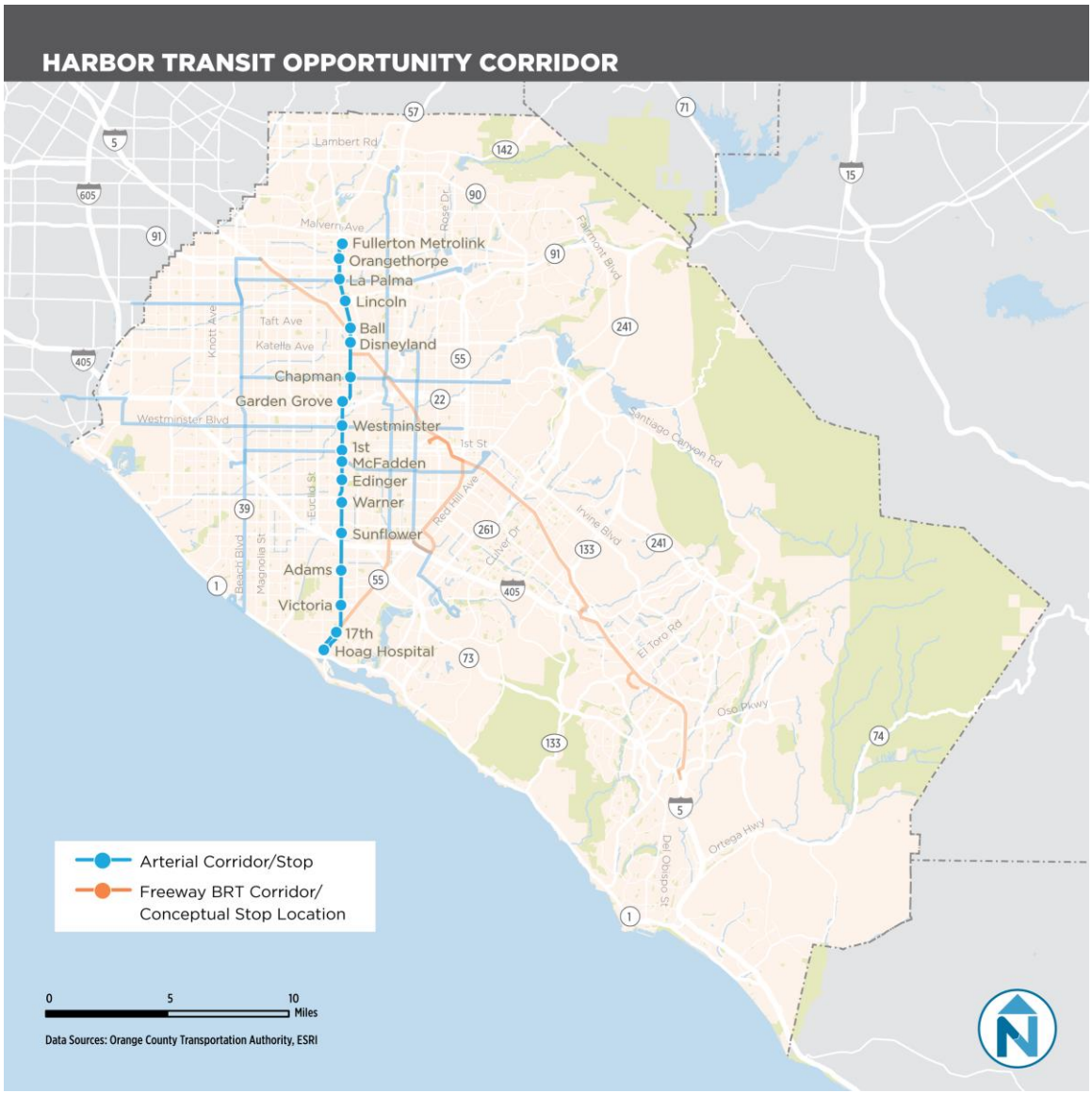


Figure A-3 State College Boulevard/Bristol Street Corridor

Figure A-4 Main Street Corridor

Figure A-5 La Palma Avenue/Lincoln Avenue Corridor

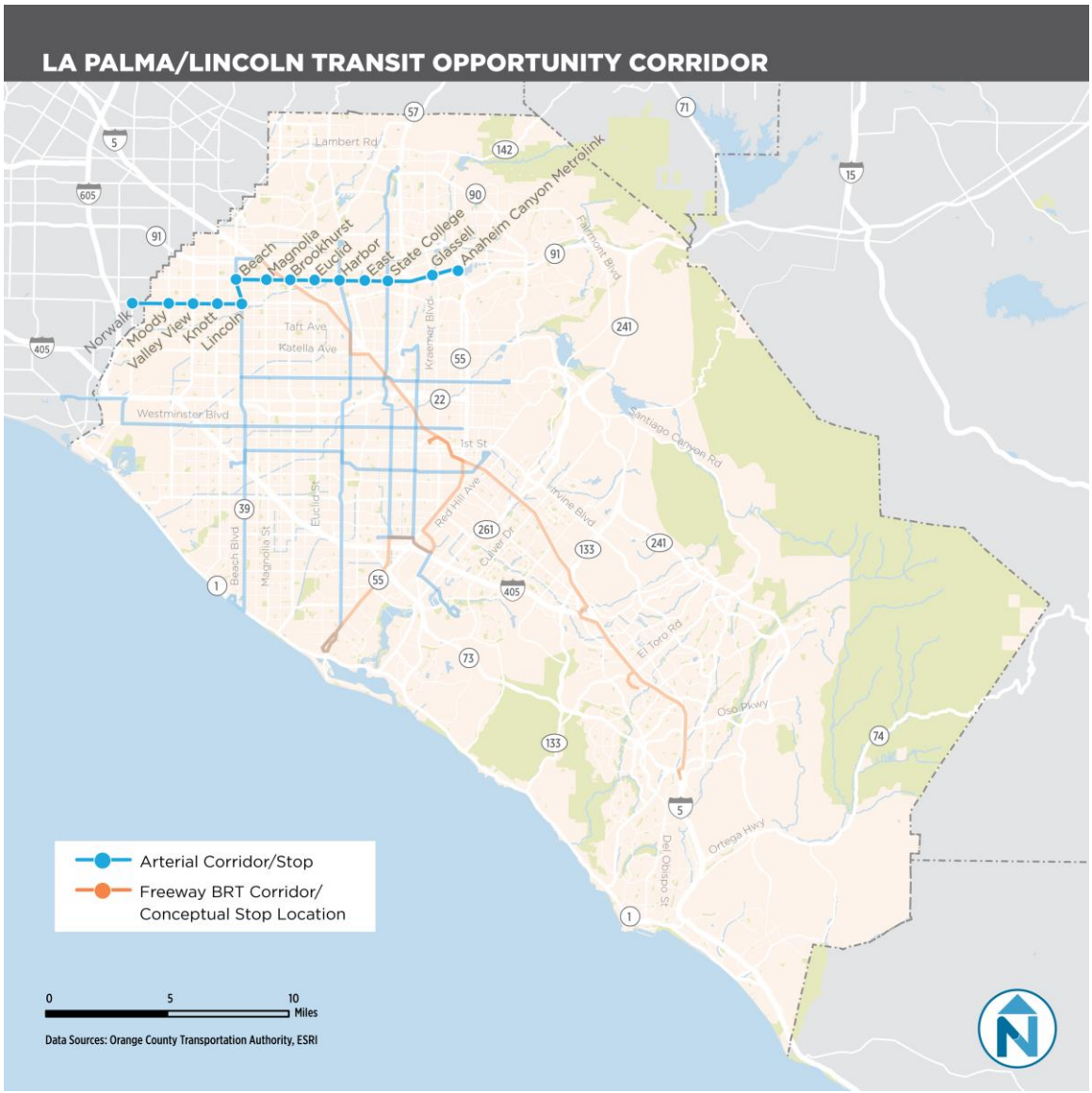


Figure A-6 Chapman Avenue Corridor

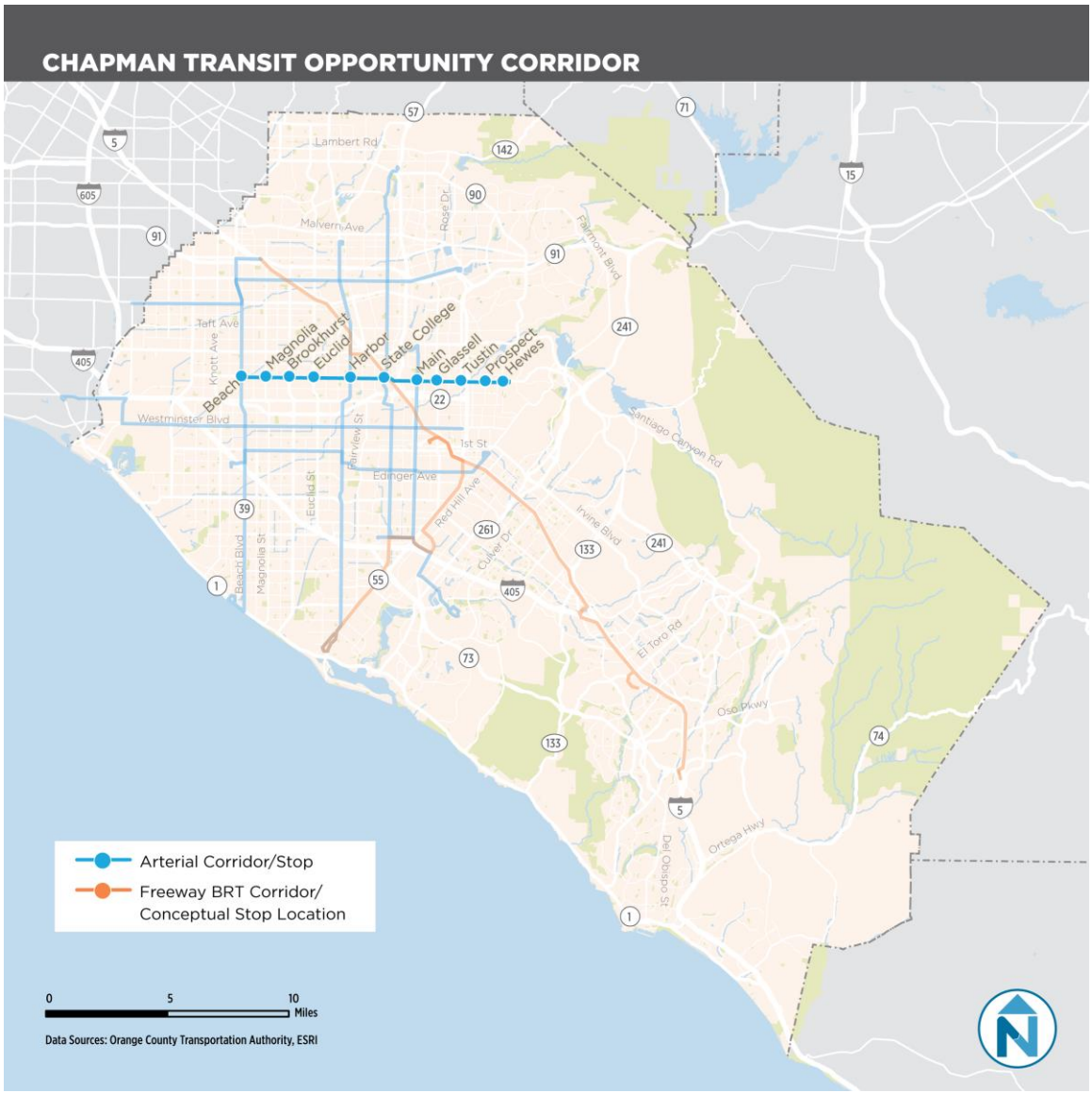


Figure A-7 17th Street/Westminster Avenue Corridor

Figure A-8 McFadden Avenue/Bolsa Avenue Corridor

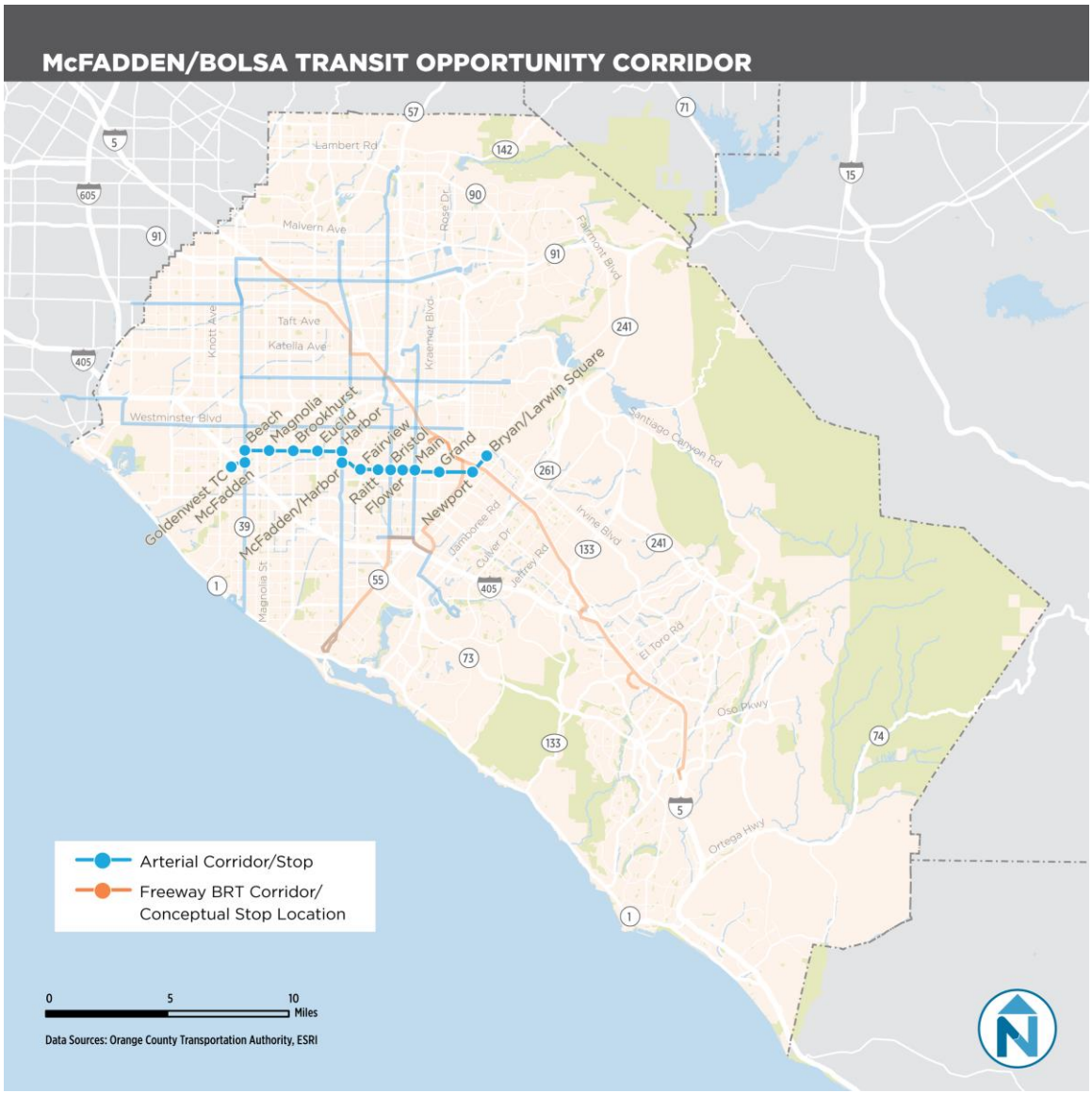
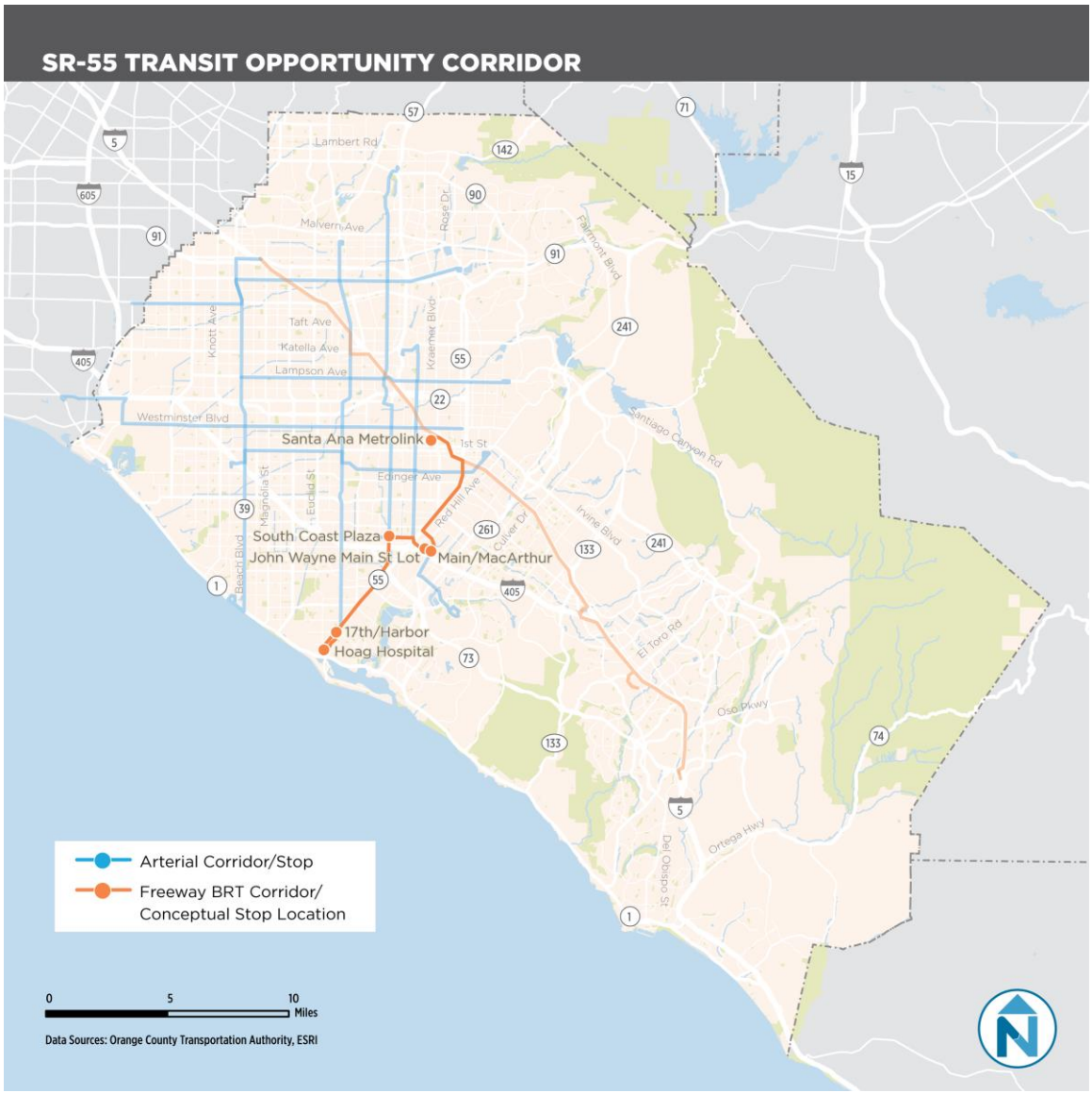


Figure A-9 I-5 Freeway BRT Corridor

Figure A-10 SR-55 Freeway BRT Corridor



APPENDIX B: SCREENING RESULTS BY CRITERIA, SEGMENT, AND STOP LOCATION

Table B-1 Matrix of Results by Segment

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
47	**Main St** from 17th St to 1st St	●	●	●	○	○	◔	●	◔	●	●	●	◔	◑	●	56
53	**1st St** from Bristol St to Main St	●	●	●	○	○	◔	◔	◔	●	●	●	●	◑	●	56
56	**Main St** from 1st St to McFadden Ave	●	●	◔	○	○	◔	◔	◔	●	◔	●	●	◑	◔	53
83	**Harbor Blvd** from Chapman Ave to La Palma Ave	◑	◑	◔	◔	○	◑	●	◑	◔	◑	◑	●	●	●	48
92	**OC Streetcar** E of PE ROW	◑	◔	◔	○	○	◑	●	◔	◑	◔	◔	●	◔	●	47
31	**17th St** from Bristol St to Main St	●	◔	●	○	○	◔	●	◔	●	◔	◑	◔	◔	◔	46
7	**1st St** from Main St to Newport Ave	◑	◑	◔	◔	○	◑	●	◑	●	◑	◑	◔	◑	◔	45
18	**McFadden Ave** from Harbor Blvd to Bristol St	◔	●	○	○	○	◑	●	◔	◔	◑	◔	◔	◑	◑	44

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
21	**1st St** from Harbor Blvd to Bristol St															44
75	**Chapman Ave** from Harbor Blvd to The City Dr															44
81	**Harbor Blvd** from Lincoln Ave to Ball Rd															44
54	**Bristol St** from 1st St to McFadden Ave															43
76	**Chapman Ave** from The City Dr to Main St															43
80	**Harbor Blvd** from Ball Rd to Katella Ave															43
82	**Harbor Blvd** from La Palma Ave to Lincoln Ave															43
23	**McFadden Ave** from Bristol St to Main St															42
55	**Ball Rd** from Euclid St to Anaheim Blvd															42
73	**Lemon St** from Chapman Ave to La Palma Ave															42

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
84	**Harbor Blvd** from La Palma Ave to Lincoln Ave															42
3	**1st St/Bolsa Ave** from Harbor Blvd to Westminster Mall															42
8	**Harbor Blvd** from Westminister Ave to Edinger Ave															41
11	**La Palma Ave** from Santa Ana Fwy to State College Blvd															41
15	**Beach Blvd** from Garden Grove Fwy to Edinger Ave															41
45	**Bristol St** from McFadden Ave to Sunflower Ave **Sunflower Ave** from Bristol St to Main St **Main St** from Sunflower Ave to Costa Mesa Fwy															41
86	**Anaheim Blvd** from Lincoln Ave to Ball Rd															41

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
87	**Anaheim Blvd** from Ball Rd to Katella Ave															41
17	**Katella Ave** from ARTIC to Main St **Main St** from Katella Ave to 17th St															40
24	**Westminster Ave** from Beach Blvd to Harbor Blvd															40
62	**Euclid St** from La Palma to Lincoln Ave															40
95	**Lincoln Ave** from Euclid St to State College Blvd															40
44	**The City Dr** from Santa Ana Fwy to Memory Ln **Memory Ln** from The City Dr to Bristol St **Bristol St** from Memory Ln to 17th St															39
50	**Newport Blvd** from PCH to 22nd St															39

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
52	**Beach Blvd** from Lincoln Ave to Garden Grove Fwy															39
59	**Harbor Blvd** from Westminister Ave to Edinger Ave															39
69	**Fairview St** from 1st St to McFadden Ave															39
22	**State College Blvd** from La Palma Ave to Santa Ana Fwy															38
32	**Westminister Ave** From San Diego Fwy to Beach Blvd															38
35	**Westminister Ave/17th St** from Harbor Blvd to Bristol St															38
36	**McFadden Ave** from Main St to Costa Mesa Fwy															38
39	**Fairview St** from 1st St to McFadden Ave															38
78	**Harbor Blvd** from Chapman Ave to Westminister Ave															38

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
79	**Harbor Blvd** from Katella Ave to Chapman Ave															38
85	**La Palma Ave** from Lemon St to Anaheim Blvd **Anaheim Blvd** from La Palma Ave to Lincoln Ave															38
88	**Katella Ave** from Harbor Blvd to Haste St															38
89	**Katella Ave** from Haster St to State College Blvd															38
91	**Disney Way** from Harbor Blvd to Clementine St **Clementine St** from Disney Way to Katella Ave															38
93	**Pomona Ave** from Santa Fe Ave to Commonwealth Ave **Commonwealth Ave** from Pomona Ave to Nutwood Ave															38

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
29	**Lincoln Ave** from Walker St to Beach Blvd															37
51	**Beach Blvd** from Lincoln Ave to Orangethorpe Ave **Orangethorpe Ave** from Beach Blvd to Campus Dr															37
13	**Beach Blvd** from Katella Ave to Garden Grove Fwy															36
70	**Fairview St** from Westminister Ave/17th St to 1st St															36
77	**Chapman Ave** from Main St to Hewes St															36
94	**Lincoln Ave** from Beach Blvd to Euclid St															36
43	**Harbor Blvd** from San Diego Fwy to Newport Blvd															35
60	**Katella Ave** from Beach Blvd to Harbor Blvd															35
63	**Euclid St** from Lincoln Ave to Ball Rd															35

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
72	**Ball Rd** from Beach Blvd to Euclid St															35
74	**Chapman Ave** from Euclid St to Harbor Blvd															35
1	**PE ROW** from Monroe Ave and Beach Blvd to Newhope St and Garden Grove Fwy															34
40	**Beach Blvd** from Edinger Ave to PCH															34
46	**Main St** from McFadden Ave to MacArthur Blvd **MacArthur Blvd** from Main St to Main St															34
65	**Euclid St** from Ball Rd to Chapman Ave															34
66	**Euclid St** from Chapman Ave to Sherman Ave															34

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
71	**Fairview St** from Westminister/17th St to Garden Grove Ave **Garden Grove Ave** from Fairview St to The City Dr															34
90	**Katella Ave** from State College Blvd to Douglas Rd															34
96	**Lincoln Ave** from State College Blvd to Tustin St **Tustin St** from Nohl Ranch Rd to Village Way															34
25	**State College Blvd** from Avocado St to La Palma Ave															33
67	**Wilson St** from Harbor Blvd to Fairview Rd **Fairview Rd** from Wilson St to Sunflower Ave															33

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
16	**McFadden Ave** from Beach Blvd to Gothard St **Gothard St** from McFadden to Edinger Ave **Edinger Ave** from Gothard to Harbor Blvd															32
27	**Dale St, Commonwealth Ave & Beach Blvd** from Buena Park Station to Orangethorpe Ave															32
57	**PE ROW** from Garden Grove Fwy and Newhope St to Santa Ana Blvd and Raitt St (incl. OC Streetcar W segment)															32
58	**PE ROW** from Walker St and Lincoln Ave to Beach Blvd and Monroe Ave															32
61	**PCH** from Newport Blvd to Avocado Ave to NPTC															32

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
64	**Euclid St** from Ball Rd to Chapman Ave															32
30	**La Palma Ave** from Beach Blvd to Santa Ana Fwy															31
10	**La Palma Ave** from State College Blvd to Anaheim Canyon Station															30
26	**Harbor Blvd** from Electric Ave to Chapman Ave															30
33	**Katella Ave** from Los Alamitos Blvd to Beach Blvd															30
42	**El Toro Rd, Paseo De Valencia, Cabot Rd, Crown Valley Pkwy, Medical Center Rd & Marguerite Pkwy** from I-5 to I-5															30
2	**Whittier-Brea Rail ROW** from Los Angeles County to Harbor Blvd and Superior Ave															30

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
9	**Whittier-Brea Rail ROW** from Harbor Blvd and Superior Ave to State College Blvd and Avocado St															29
68	**Fairview St** from McFadden Ave to Sunflower Ave															28
28	**Lincoln Ave** from Los Angeles County to Walker St															27
38	**McFadden Ave** from Costa Mesa Fwy to Newport Ave **Newport Ave** from McFadden Ave to Edinger Ave **Edinger Ave** from Newport Ave to Tustin Ranch Rd															27
12	**PE ROW** from Los Angeles County to Lincoln Ave and Walker St															27
4	**Harbor Blvd** from Edinger Ave to San Diego Fwy															26

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
34	**SR-22** from Los Angeles County to Seal Beach Blvd															25
37	**Edinger Ave/Irvine Center Dr** from Tustin Ranch Rd to Hubble															25
5	**Main St** from Costa Mesa Fwy to MacArthur Blvd **MacArthur Blvd** from Main St to Campus Dr **Campus Dr** from MacArthur Blvd to Bridge Rd															23
41	**Junipero Serra Rd, Camino Capistrano, Del Obispo St, Camino Del Avion & Street of the Golden Lantern** from I-5 to PCH															22
6	**PCH** from Channel Dr to Beach Blvd															20
19	**Portola Pkwy and El Toro Rd** from Market Pl to I-5															20

ID	Segment Extent	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Density of Retail Jobs	Transit-Supportive Policy	Total
48	**PCH** from Los Angeles County to Beach Blvd															20
14	**Seal Beach Blvd** from San Diego Fwy to Westminster Ave **Westminster Ave** from Seal Beach Blvd to San Diego Fwy															19
49	**PCH** from Beach Blvd to Newport Blvd															18
20	**PCH** from Street of the Golden Lantern to Doheny Park Rd and Coast Hwy **El Camino Real** to Calle Deshecha															17

Table B-2 Matrix of Results by Stop Location

ID	Stop Name	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Retail Jobs	Land Use	Total
22	Santa Ana Civic Center															54
4	Santa Ana Stn															46
25	Triangle Square															45
7	Laguna Hills TC															43
28	South Coast Metro															43
20	SR-22/Beach															43
11	SR-55/McFadden															42
13	South Coast Plaza PNR															42
2	Disneyland															41
17	Goldenwest TC															40
21	Harbor/Westminster															40
31	Cal State Fullerton															39
1	Fullerton PNR															39
14	Costa Mesa															37
15	Newport TC															36
3	ARTIC															35

ID	Stop Name	Weekday Boardings per Mile	Population Density Within ½ Mile of Alignment	Employment/ Postsecondary Enrollment Density Within ½ Mile of Alignment	Density of Hospital Beds/Retail Stores Within ½ Mile of Alignment	Additional Major Destinations, e.g., Stadiums & Theme Parks Within ½ Mile of Alignment	Traffic Volumes at Arterial Intersections Within ½ Mile of Alignment	Existing/Future Connections to Regional Rail, Metrolink Stations, Transit Centers, Major Routes and Park-and-Rides	Intersection Density	Walkscore	Density of Households with Annual Incomes < $40,000	Density of Seniors and People with Disabilities	CalEnviro Screen	Retail Jobs	Land Use	Total
32	Brea Mall															35
8	Laguna Niguel/Mission Viejo Stn															32
10	Anaheim Canyon Stn															32
30	Lincoln PNR															31
34	Aliso Viejo Town Center															31
12	SR-55/Main															30
29	Harbor Blvd															28
36	UCI/Research Park															27
6	Irvine Spectrum															26
26	Jeffrey PNR															26
5	Irvine Stn															25
18	Main Plaza															24
24	Irvine Business Complex															23
9	San Clemente Stn															22
27	Junipero Serra PNR															21
35	Laguna Canyon															15

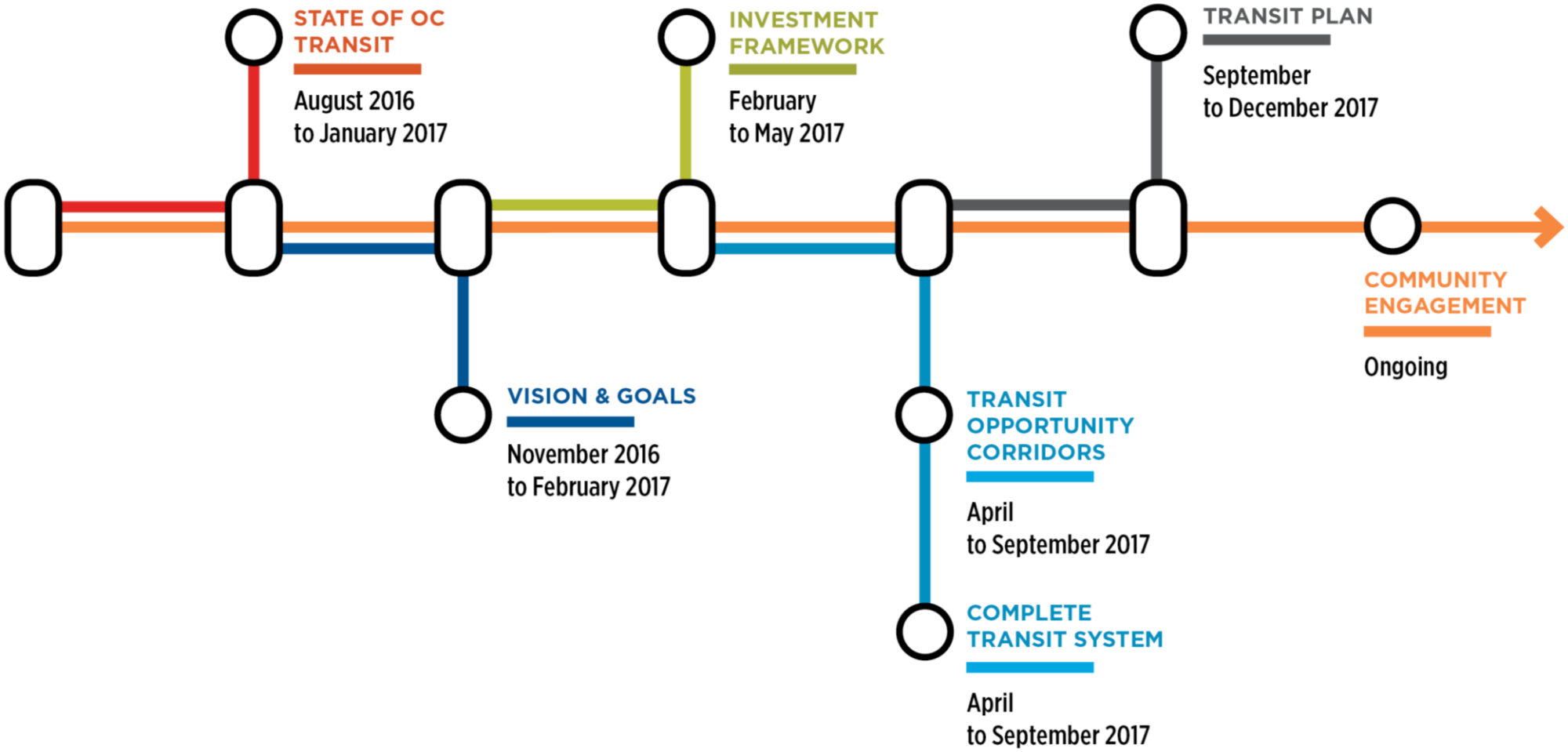
ATTACHMENT C

MAP OF DRAFT TRANSIT OPPORTUNITY CORRIDORS

Transit Master Plan - Opportunity Corridors

OC TransitVISION

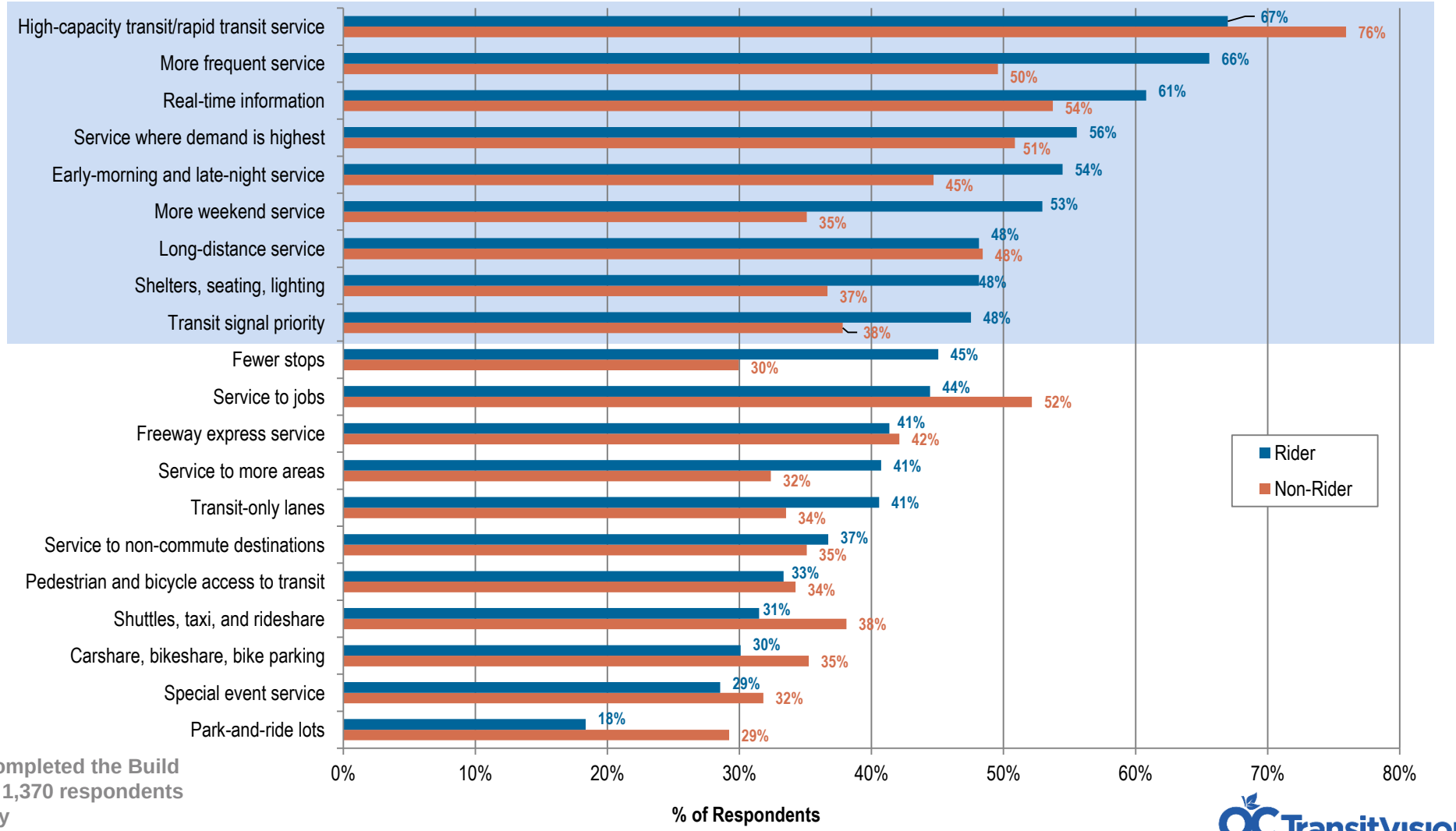
Project Schedule



OC TransitVision

Survey Results

$100 Survey Budget



A total of 1,694 respondents completed the Build Your Own System survey, and 1,370 respondents completed the follow-up survey

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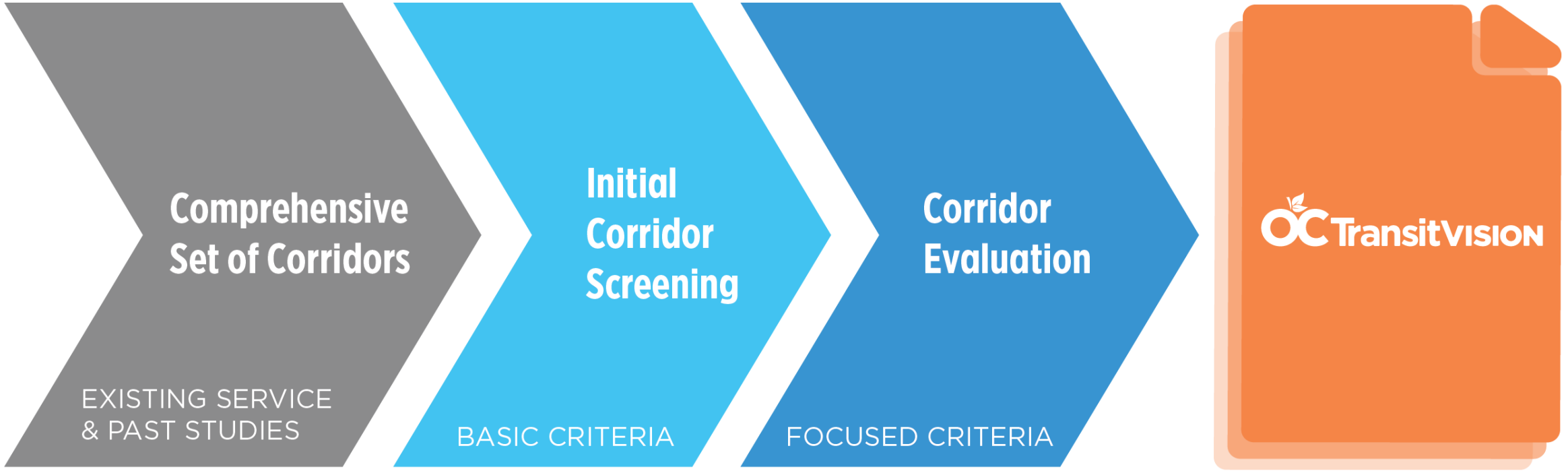
Opportunity Corridor Evaluation



WE ARE HERE

Transit Corridor Types Screened

- Arterial Corridor
  - Could be bus or rail
  - Utilize existing rights-of-way
  - Alignment level analysis

Bristol Street

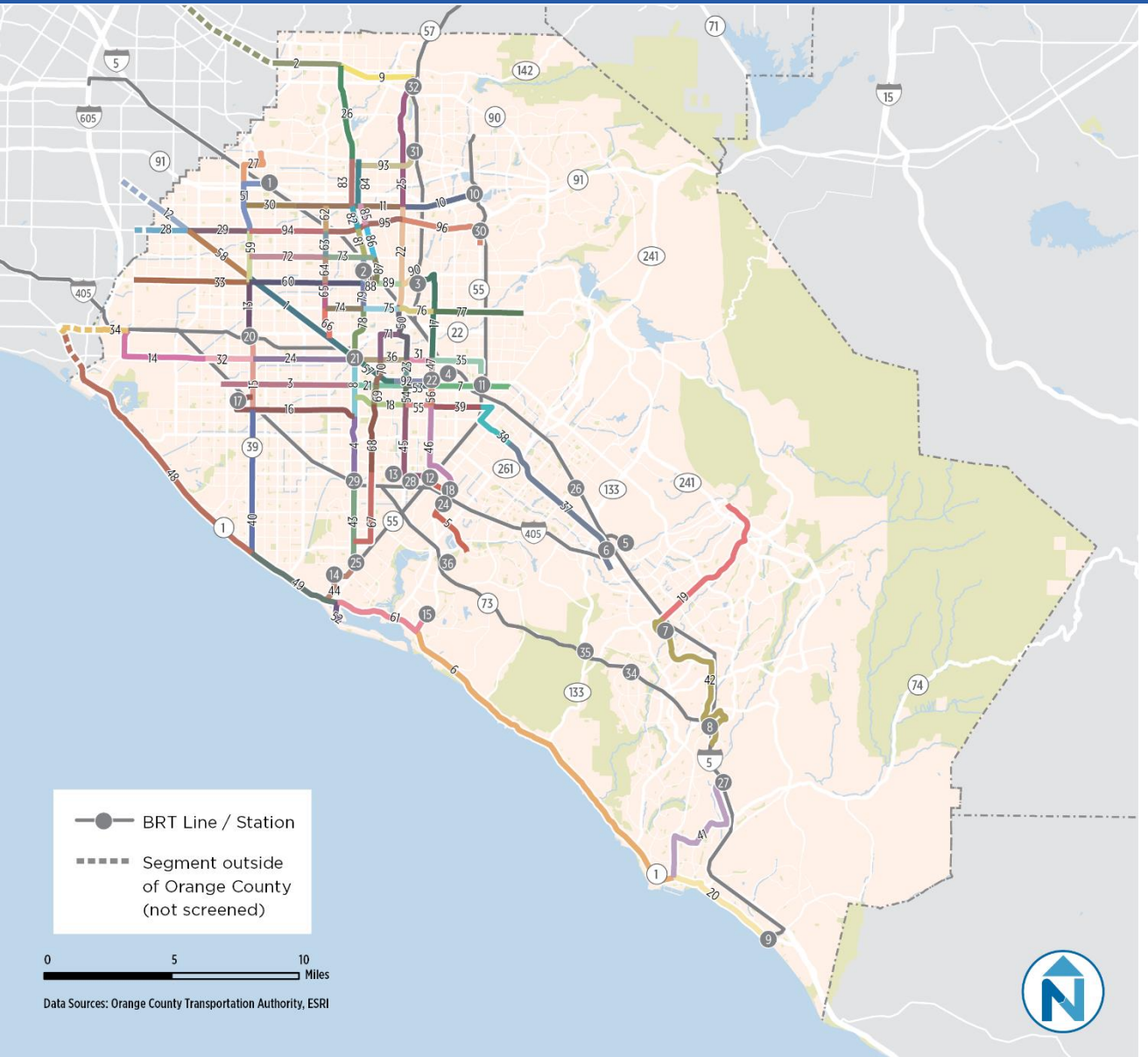
- Freeway BRT
  - Uses HOV system
  - BRT
  - Direct access or freeway stations
  - Station level analysis

San Diego I-15 Station Design

BRT – Bus Rapid Transit
HOV – High-occupancy vehicle
I-15 – Interstate 15

OC TransitVISION

Corridor Segments Screened



- Comprehensive list developed by project team
- Includes connections to Los Angeles County
- 96 arterial corridor segments
- 32 freeway BRT stations

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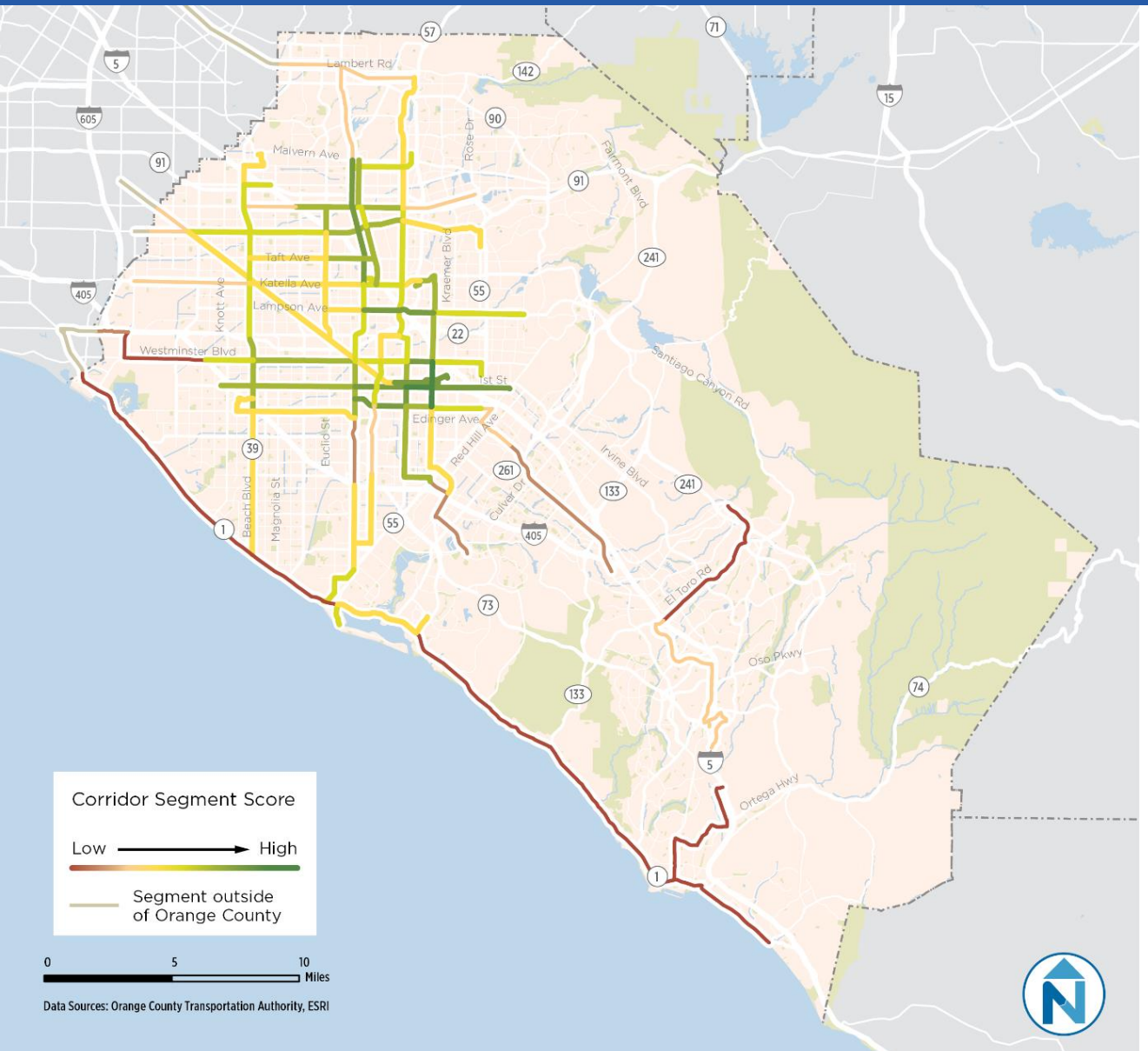
Corridor Screening Results



- Analyzed areas within ½ mile of segment
- Ranked from 1 to 5 for 14 criteria
- Highest performing segments correlate with existing ridership levels and locations

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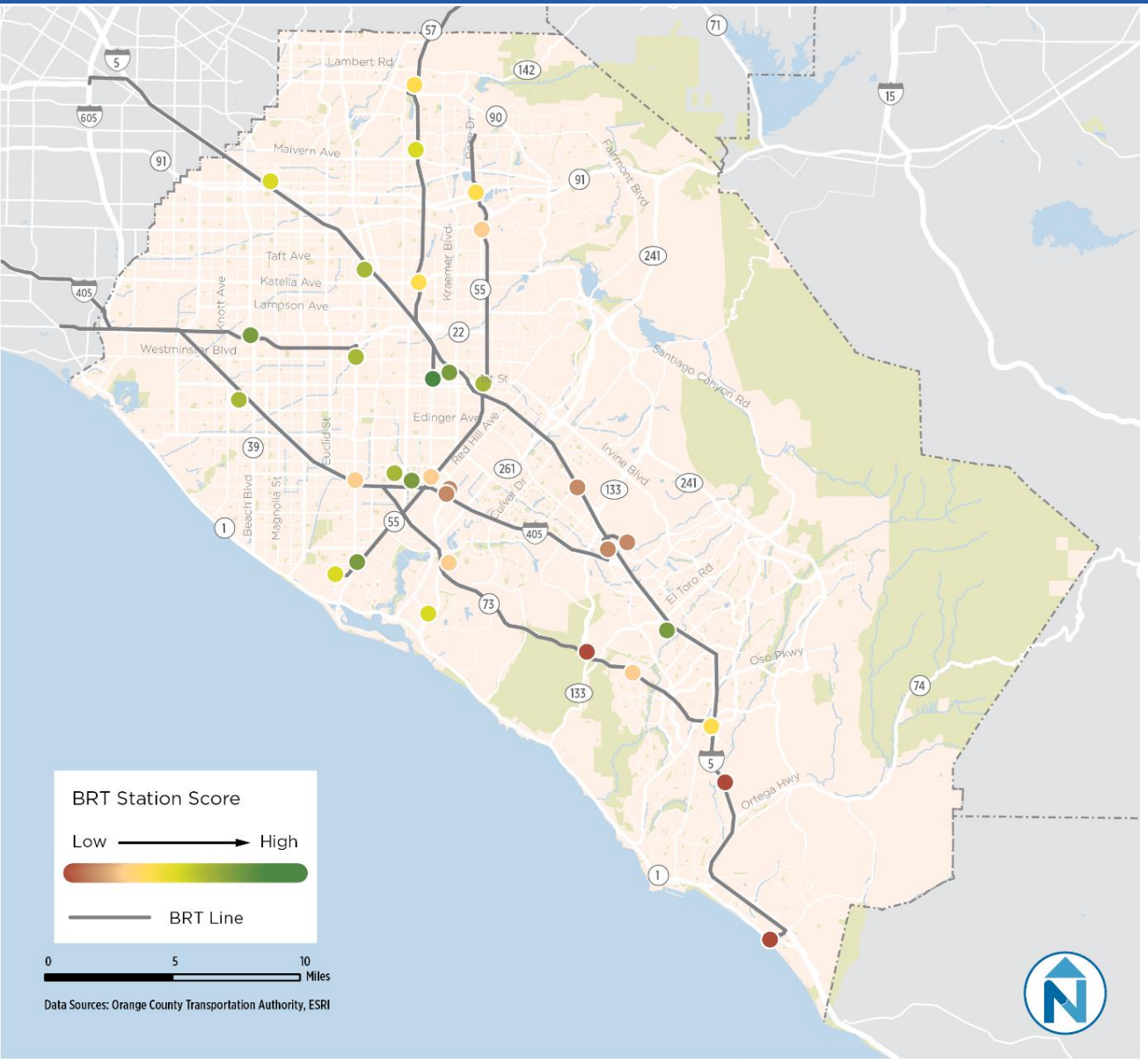
Freeway BRT Screening Results

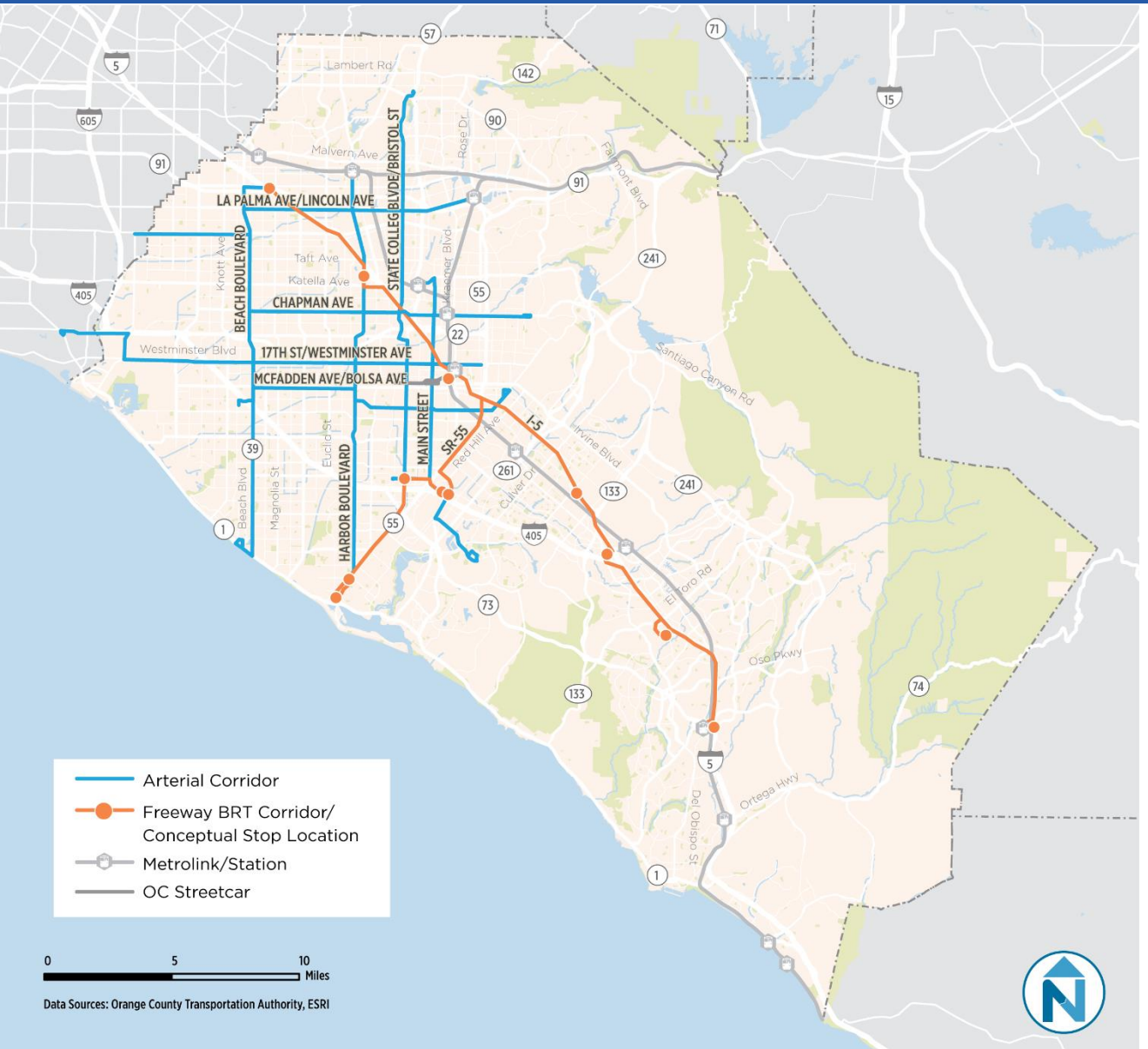


- Analyzed areas within ½ mile of stations
- Stations along most freeways at key hubs and trip generators
- Ranked from 1 to 5 for 14 criteria
- Highest performing stations along I-5, SR-55, and SR-22

I-5 – Interstate 5
SR-55 – State Route 55
SR-22 – State Route 22

OC TransitVISION

Draft Opportunity Corridors



- High-performing segments assembled into logical corridors
- Four north-south and four east-west arterial corridors, two freeway BRT
- Some extend beyond high-performing segments to make connections

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Draft Opportunity Corridors

Arterial Corridors (not ranked)

- **Beach Boulevard:** Fullerton Park and Ride to Downtown Huntington Beach
- **Harbor Boulevard:** Fullerton Transportation Center to Hoag Hospital in Newport Beach
- **State College Boulevard/Bristol Street:** Brea Mall to the University of California, Irvine
- **Main Street:** Anaheim Regional Transit Intermodal Center to South Coast Plaza in Costa Mesa
- **La Palma Avenue/Lincoln Avenue:** Anaheim Canyon Station to Hawaiian Gardens
- **Chapman Avenue:** Beach Boulevard to Hewes Street in Orange
- **17th Street/Westminster Avenue:** Tustin Street to California State University, Long Beach
- **McFadden Avenue/Bolsa Avenue:** Larwin Square in Tustin to Goldenwest Transportation Center in Huntington Beach

Freeway BRT Corridors (not ranked)

- **I-5:** Fullerton Park-and-Ride to Mission Viejo/Laguna Niguel Station
- **SR-55**: Santa Ana Regional Transportation Center to Hoag Hospital, Newport Beach

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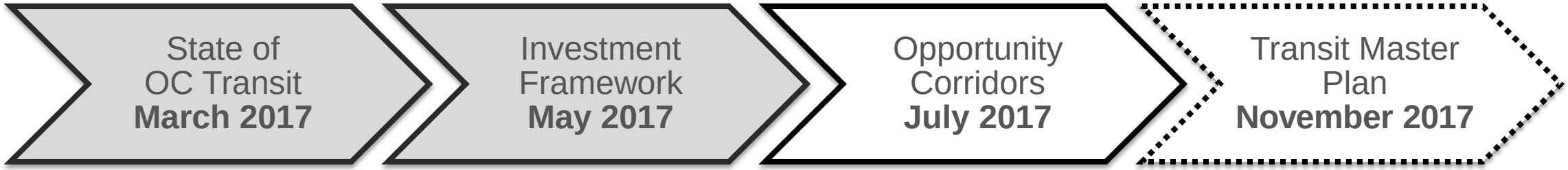
Next Steps

- Use Investment Framework and survey results to guide short-term bus service recommendations
- Solicit feedback on the draft Transit Opportunity Corridors from stakeholders
- Return to Transit Committee and Board of Directors in October with Draft Transit Master Plan for consideration



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