Los Angeles County
Metropolitan Transportation Authority

Bus Rapid Transit Vision & Principles Study

January 2019 – October 2020

Stakeholder Engagement Report

Metro®

Bus Rapid Transit Vision & Principles Study

Table of Contents

Bus Rapid Transit Vision & Principles Study

1. Overview

The Bus Rapid Transit (BRT) Vision & Principles Study was undertaken to establish a cohesive set of guidelines and standards to direct Metro investment in on-street BRT projects. The Study establishes a local definition of BRT, supportive design guidelines and identifies the corridors where BRT can best meet Metro mobility goals as defined in the Vision 2028 Strategic Plan. Through this effort, the standard of a future LA County BRT network will be established and Metro's goal of creating a world-class transportation system will be further supported. Overall, the BRT Vision & Principles Study generated the following guiding deliverables:

> Metro BRT standards

> Metro Design Guidelines Manual

> Final Report with a recommended list of potential BRT corridors

2. Stakeholder and Public Engagement Program

To assist Metro in achieving the goals of the study, the outreach team worked closely with the technical contractor and Metro project management to develop a comprehensive outreach program designed to inform, educate and solicit input from a variety of stakeholders, including municipal transit operators, city officials, elected officials, Metro employees, community and transit organizations and members of the general public. Throughout the project, stakeholder engagement at was conducted to complement and help inform the technical process. Activities have included stakeholder workshops, presentations and project briefings, survey engagement, and formation of a Technical Advisory Committee. The team also worked with Metro's NextGen Bus Plan project staff to leverage opportunities for outreach at public meetings and collaborate where possible to assist in maximizing outreach options and stakeholder relationships and share data relevant for both projects. Outreach was tailored to be inclusive and gather feedback that accurately reflects the diversity of LA County's population including ethnicity, race, age, language, income levels and level of transit access and utilization.

3. Project Communication Resources

Outreach strategies included a number of communications tools to aid in building project awareness and encourage participation. Materials were developed in coordination with the project team and designed to effectively communicate project information. The following outlines the communication materials developed for this study.

3.1. Project Database

The project database served as the primary resource for public and stakeholder notification and communication. Database contacts received invitations to meetings and project updates by email, digital e-blasts, and through extended outreach calls to key stakeholders. To initiate the project, a primary database of contacts was developed with an initial 300+ stakeholders collected from existing project database sources, including the NextGen Bus Plan database, Orange Line Improvements database, and other contacts provided by the Metro technical contractor. Database contact categories included public agencies, transportation agencies, community organizations, neighborhood associations, business associations, academic institutions, special interest groups, Metro staff, interested parties and others.

3.2. Collateral and Educational Materials

Story Map

ESRI "Story Map" is an interactive mapping tool that combines maps with narrative text, images, interactive maps and multimedia content. The Story Map for the BRT Vision & Principles Study served as the main online portal for public project information and provided stakeholder access to:

- Core project information and graphics
- Project contact information as a method of input
- Project interactive maps and technical data, which were updated several times to reflect project milestones
- Links to the project survey in both English and Spanish
- Links to other relevant information, including related projects and Metro initiatives

Fact Sheet

An 8 ½" x 11" branded Fact Sheet was developed by the Project Team in both English and Spanish as a foundational collateral tool. This two-sided project sheet provided a brief project overview and purpose, goals of the study, information on the study process, schedule and project contact information. This handout was reviewed and updated as needed throughout the life of the project.

Comment Card

Comment cards were made available at all Technical Advisory Committee meetings, stakeholder workshops and NextGen Bus Plan public workshops. This method of feedback allowed stakeholders to provide their contact information for future project updates and

information as well as feedback on any aspect of the project. To ensure complete communication with the public, this piece was created in both English and Spanish.

Survey

A survey was developed as the primary mechanism for soliciting general public input on the project. It was designed to gather input on priorities for design elements as well as travel preferences and patterns. The survey was promoted in-person at public and stakeholder workshops and was also shared extensively online via countywide geotargeting and extended outreach partners.

Interactive Mapping Tools

In order to fully immerse the TAC and key stakeholders in the corridor study process, custom interactive mapping tools were created. These tools allowed technical data and specific corridor criteria to be presented on a live platform so that viewers could explore the possibilities and provide informed feedback to the technical team. The tools allowed analyzed BRT corridors to be layered with Metro's planned and existing transit lines as well as the proposed NextGen Bus Plan and other key landmarks and destinations in order to see transit system coverage and connections across the county. Users had the ability in real-time to comment on existing data and lines as well as draw new corridor lines for review and consideration by the technical team.

4. Outreach Activities

The outreach activities conducted provided project stakeholders with the necessary tools and resources to be educated, informed and offer valuable input at major milestones in the study. Identified key stakeholders and the public were given opportunities to connect directly with the BRT Study team, through both in-person and digital interactions. The following summarizes all outreach efforts and activities completed by the project team in support of the study.

4.1. Technical Advisory Committee (TAC)

To help guide the study process, a Technical Advisory Committee (TAC) was established in the early months of the project and was comprised of staff from Metro departments, cities and municipal transit operators. The TAC served as a collaborative discussion forum to provide input and feedback on the guidelines and standards being developed for the project and provided expertise on specific department and/or domain subject matter. The TAC also provided insight on the identification and validation of BRT corridors and direction on the identification of the future BRT network. This body also helped communicate project information and progress made to their respective member organizations, colleagues and

constituents. The TAC convened for the first time in February 2019 and held its final meeting in September 2020. A total of 12 TAC meetings were held over the course of the project and detailed minutes were provided to Metro following each meeting. A listing of dates and topics for those meetings is provided in the table below.

Date	Meeting Topic
2/22/2019	Project kick-off; development of project guiding principles
3/18/2019	Development of project goals & objectives
4/15/2019	Refinement/review of vision, guiding principles & goals
6/4/2019	BRT standards and corridor selection criteria development
7/25/2019	BRT standards & thresholds; elements of design discussion
9/24/2019	Stations & Running Ways
10/24/2019	Corridor Analysis
11/21/2019	Branding, Stations & Running Ways
12/12/2019	Operating, TOC & ITS Characteristics
4/16/2020	Corridor Analysis – Top 15
07/29/2020	Corridor Analysis – Top 7; update on design guidelines
09/03/2020	Strategic Network and Design Guidelines Review

4.2. Stakeholder Workshops

During the course of the study, the project team identified a list of 50+ stakeholders based on shared interests, geographic location, relevant industry/agency groups, local community organization and business representation. These included Valley Industry Commerce Association, Southeast LA Collaborative, Cal State LA, FASTLink DTLA, Pacoima Beautiful, LA Walks, Move LA, BizFed, ACT-LA, and local Councils of Government and Transportation Commissions, to name a few. A total of three workshops were conducted (2/7, 5/20 and 9/1, 2020) with these stakeholders and provided an opportunity to inform and gather insight on their unique perspectives regarding relevant issues and opportunities related to the development of LA County's BRT network. Organizations were also provided with project updates through email and phone calls. Project materials were regularly shared with these stakeholders in an effort to further the reach and distribution of study information and in turn, increase awareness and feedback from the public. Detailed notes from each of the stakeholder workshops is provided in the appendix.

4.3. Stakeholder Briefings and Presentations

To further assist the technical team with narrowing down the corridor recommendations, presentations and briefings were scheduled with key representatives and elected officials, with a specific focus on feedback related to the highest ranked seven corridors. These stakeholders helped the team identify local opportunities, support and constraints or issues. This input allowed the team to ascertain the level of public and/or policy support that might be expected for each of the corridors.

Additionally, throughout the project, updates and presentations were provided to a host of other key groups and Metro committees. A list of all presentations and workshops is provided below.

Date	Organization	Date	Organization
10/17/18	Planning & Programming	8/20/20	CD-1 Cedillo
12/11/18	Policy Advisory Council	8/20/20	CD-5 Koretz
4/9/19	Policy Advisory Council	8/21/20	South Bay Cities COG
4/10/19	General Manager Meeting	8/21/20	CD-11 Bonin
5/21/19	Bus Operations Subcommittee	8/21/20	Gateway Cities COG
6/11/19	Policy Advisory Council	8/21/20	SD-1 Solis
6/20/19	Streets & Freeways	8/24/20	LA Mayor Garcetti
7/18/19	Local Transit Systems Subcommittee	8/24/20	CD-4 Ryu
2/7/20	Key Stakeholder Workshop	8/25/20	SD-3 Kuehl
2/11/20	San Gabriel Valley COG	8/26/20	CD-10 Wesson
3/9/20	South Bay Cities COG	8/28/20	SD-5 Barger
3/10/20	Policy Advisory Council	8/28/20	Board Member Garcia
5/20/20	Key Stakeholder Workshop	8/31/20	City of Bell
5/21/20	BizFed	8/31/20	City of Beverly Hills
8/18/20	CD-13 O'Farrell	09/01/20	Board Member Najarian
8/18/20	SD-4 Hahn	09/02/20	LACDPW
8/18/20	SD-2 Mark Ridley-Thomas	09/03/20	City of West Hollywood
8/19/20	San Gabriel Valley COG	09/03/20	City of Long Beach/Long Beach Transit
8/19/20	CD-14 Staff (vacant)	09/9/20	City of Culver City
8/19/20	CD-9 Price	09/10/10	City of Lynwood
8/19/20	Westside Cities COG	09/11/20	FASTLink DTLA
8/20/20	CD-15 Buscaino		

Bus Rapid Transit Vision & Principles Study

Key Stakeholder Input Themes and Comments

Comment Theme	Comment Theme Summary
Proposed Routes Comments and questions that addressed the proposed routes and top 7 BRT corridors.	> **Atlantic:** Several stakeholders were supportive of the Atlantic BRT Corridor moving forward. > **Broadway:** Minimal issues with the Broadway corridor were voiced and interest was expressed in this corridor moving forward at several of the presentations. > **LA Cienega:** Stakeholders feel that while La Cienega is an important corridor, the LAX-Crenshaw Line will address concerns in that corridor. Others indicated a connection to the new LRT would also be beneficial and were supportive of the La Cienega Corridor. > **Sunset:** Concerns were expressed over the topography of the Sunset Corridor as it has steep inclines within the corridor. The corridor received support from several groups. > **Venice:** It was noted that residents in Palms Neighborhood Council want protected bike lanes on Venice Blvd. Other's also expressed support for the Venice Corridor. > **West Olympic:** Concern was expressed over the politics of selecting this corridor. It was also noted there is existing bus bunching near UCLA within this corridor as well as relevance once the Purple Line extension is completed. Concerns were also expressed by the auto-centric nature of this corridor

	and the unfriendly pedestrian nature of it. Some expressed support for this corridor to alleviate dangerous driving conditions in the corridor. > **Western:** Stakeholders expressed support for this corridor but it was mentioned that this may be too close to the Vermont Corridor. > Several Stakeholders expressed the lack of corridors that were presented that were north-south connections instead of east-west connections. Stakeholders also expressed concerns that the proposed routes were heavily concentrated in downtown Los Angeles and there were limited routes that offered connectivity for San Fernando or San Gabriel Valley residents.
Funding Comments and questions related to the funding of the BRT corridors and ancillary improvements.	> Multiple stakeholders requested cost estimates for what BRT corridors would cost to construct. > Several stakeholders also wanted comparisons to other modes of transit like Light Rail Transit or non-BRT bus transit.
Bike/Pedestrian Accessibility Comments and questions relating to the accessibility of BRT by pedestrians and bicyclists as well as adjacent infrastructure that would tie into a future BRT corridor.	> Interest expressed for standardizing safety features in the corridors including lighting and sidewalks. > Stakeholders expressed that enhanced bicycle and pedestrian safety measures in the corridor would improve the viability of the BRT corridor. > Several jurisdictions expressed interest in or noted there were street-scape improvements planned in the corridors.

Safety/Security Comments and questions relating to the safety on the future BRT lines as well as at the stations. Comments and questions also related to traffic safety and emergency access.	> Several stakeholders expressed concerns about security issues on existing Metro BRT lines. > A clarification was also raised as to whether or not emergency vehicle access would be hindered by the inclusion of a BRT line in these corridors.
Community Development Comments and questions related to community development that would support future BRT corridors.	> A suggestion was made for Metro to provide more information to cities on economic development opportunities that will help make them more supportive of future BRT implementation. > Clarifications were also requested as to how community development and TOC factored into the selection of the corridors.
Traffic/Parking Comments and questions related to the impact or benefits the proposed BRT lines would have in their corridors.	> Stakeholders expressed concerns about on-street parking and the possible removal of parking in the La Cienega or Sunset corridors. > Analysis conducted by a stakeholder shows that repurposing the Atlantic Corridor for BRT transit would help improve traffic flow.
Operations/Connectivity Comments and questions related to the future operation of the BRT lines in the proposed corridors as well as connectivity to other modes of existing or future transit.	> Clarification requested regarding the ability to include bus layover zones and mobility hubs. Interest expressed in the connectivity of La Cienega BRT to the North Crenshaw-LAX Project. Multiple stakeholders expressed interest in bus only lanes as a part of any BRT implementation project. > Also expressed support for transit connections with the NoHo to Pasadena BRT and the Glendale Metrolink Station.

	> Concerns expressed over the frequency of BRT service in existing corridors that don't accommodate early morning or late-night workforce.
Outreach/Perception Comments and questions related to the perception of BRT and anticipated support or issues communities may have with the implementation of specific corridors.	> Expressed concern over potential opposition to Venice. > Mentioned importance of coordinating with Atlantic Corridor Cities to gauge support. > Requested clarification on what outreach will be like to neighborhood councils and organizations if the Broadway Corridor is selected.

4.4. Public Workshop Engagement

Between January 2019 and March 2020, a total of 33 public workshops were hosted throughout Los Angeles County related to the Metro NextGen Bus Plan project. Given the ongoing coordination amongst the two projects and the similar target audience, these workshops served as an ideal opportunity to piggyback and share information about the BRT Vision & Principles Study. Study staff attended all NextGen public workshops and distributed project materials and information. The 2019 workshops served as an initial launch and awareness campaign for the project, while the 2020 public workshops allowed the team to engage with the public to a greater degree and further engage them by way of a project survey, one-on-one discussions and an open comment and question & answer forum. Comment cards were also available for those interested in providing a more detailed narrative or written input on the project. During the workshops, a total of 136 surveys and 27 comment cards were collected. A list of workshops dates and locations is provided below as well as a summary of the comments collected at the workshops.

2019 NextGen Workshops Date and Meeting Location by Service Council Area	
January 8, 2019	San Fernando Valley
January 9, 2019	Westside/Central
January 12, 2019	Gateway Cities

January 16, 2019	San Gabriel Valley
January 17, 2019	South Bay Cities
January 23, 2019	Gateway Cities
January 24, 2019	San Gabriel Valley
January 26, 2019	Westside-Central
January 31, 2019	Westside-Central
February 6, 2019	San Fernando Valley
February 28, 2019	San Fernando Valley
March 2, 2019	South Bay
March 4, 2019	Westside-Central
March 5, 2019	South Bay
March 7, 2019	South Bay
March 12, 2019	San Fernando Valley
March 13, 2019	Westside-Central
March 19, 2019	San Gabriel Valley
2020 NextGen Workshops Date and Meeting Location by Service Council Area	
February 2, 2020	All Regions-LATTC
February 4, 2020	South Bay Cities
February 5, 2020	San Fernando Valley
February 10, 2020	San Gabriel Valley
February 12, 2020	Westside-Central
February 13, 2020	Gateway Cities
February 19, 2020	Westside-Central
February 20, 2020	San Gabriel Valley
February 22, 2020	All Regions-Metro Headquarters
February 25, 2020	Gateway Cities
February 26, 2020	South Bay Cities
February 27, 2020	San Fernando Valley
March 5, 2020	Gateway Cities
March 7, 2020	South Bay Cities
March 11, 2020	San Gabriel Valley

Summary of Public Input and Comments

Public comment received during the in-person engagement activities was sorted by themes and catalogued for further review into the project comment log. Overall key themes that organically emerged included the following:

- The overall rider experience while using Metro BRT is lacking. Riders consistently raise concerns over bus cleanliness, bus overcrowding, rude operators and inconsiderate fellow riders. Commenters see the future of BRT as an opportunity to make improvements to these conditions
- Respondents are calling for future BRT lines that stretch across large sections of the county, primarily in the central portion. Regularly referenced corridors included Vermont Ave, Wilshire Blvd, and Santa Monica Blvd. The San Fernando Valley has also been referenced in respect to routes spanning across Sepulveda Blvd and Reseda Blvd. Outside of these specific regions, additional comments called for future BRT routes to link regions of Los Angeles such as San Fernando Valley – West Los Angeles.
- Any future BRT routes in Los Angeles should be more efficient and have better frequency than existing Metro BRT like the Silver Line and Orange Line. Riders regularly reference these lines as the benchmark that future BRT lines in Los Angeles should outperform in efficiency and customer experience.

COVID-19 Transition

Due to the COVID-19 public health crisis, which began in March 2020, eight of the Metro NextGen public workshops were cancelled. As a result, the BRT Vision & Principles Study transitioned the in-person engagement planned for these workshops to a digital outreach program. Geofenced targeted ads were deployed to continue the promotion of the project survey and were tailored to ensure a wide spectrum of reach, both from a geographic and demographic perspective. This included a targeted focus on reaching low-income communities, women, underrepresented ethnicities and stakeholders over the age of 50. A toolkit was prepared for use by the BRT TAC and key stakeholder groups mentioned earlier to share with their respective audiences and networks via social media and other online platforms. The results of this campaign as well as the collective survey effort both in-person and online are detailed in the next section of this report.

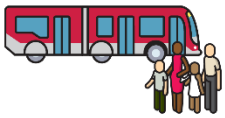
4.5. Project Survey

The project survey was live for input in both English and Spanish between February 1 and May 31, 2020. Surveys were available in a digital and hard copy format at all public meetings. Attendees were able to complete the survey on the spot using provided digital devices or paper copies of the survey. If requested, they were also able to take the survey online at a later time. Following the outreach of the COVID-19 pandemic, the survey was distributed online and through community-based organization and key stakeholder networks, as outlined above. Survey topics included information on the level of familiarity with current Metro BRT service, public transit use and habits, preferences and ranking of BRT features and amenities as well as a series of demographic questions. A total of 513 English and 13 Spanish surveys were submitted at the conclusion of the survey period. Below are highlights of the results from the survey engagement. A detailed report of the survey results is included in the appendix.

Bus Rapid Transit Vision & Principles Study

GENERAL OVERVIEW

Over 88% of respondants are already **familiar with BRT service**, and more than 56% currently use Metro's BRT Service



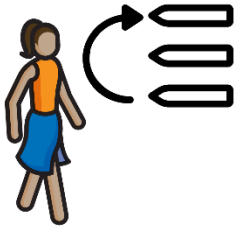
More than 58% of those surveyed use public transit **3 or more days a week**, with over 80% using Metro Bus and Rail services for that travel.

More than 97% of respondents would **support more BRT corridors** as part of the solution to mobility needs in LA County

Segment 1 included a specific reach for **low-income**, **age group 50+**, **Asian and African American populations**; Segment 2 included an additional target of **women** across the county

TOP 5 PRIORITIES FOR BRT FEATURES & AMENITIES

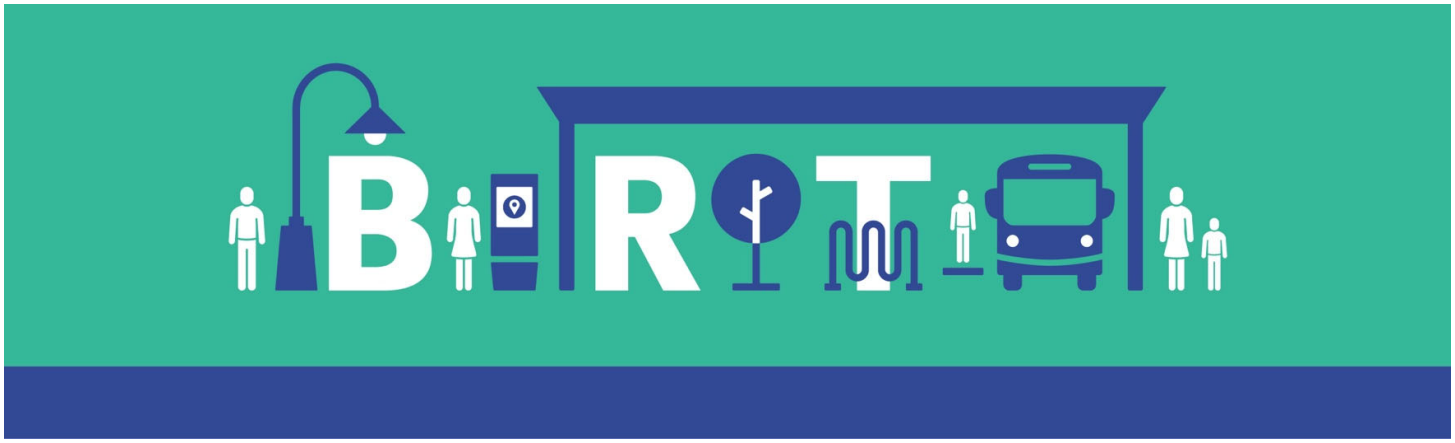
- Frequency
- Dedicated bus lanes
- Reliability
- Real-time information
- Faster travel times (origin to destination)



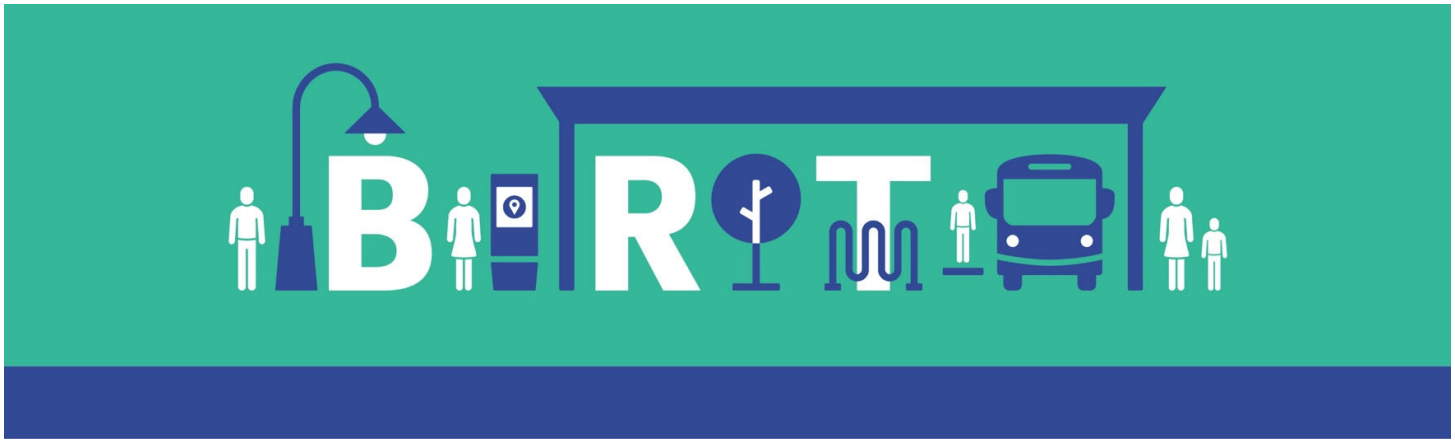
5. Project Outcomes & Next Steps

The BRT Vision & Principles study furthers Metro's first Vision 2028 Strategic Plan goal to "provide high quality mobility options that enable people to spend less time traveling." Upon Board approval, staff will proceed with the application of BRT design guideline manual to Metro's future BRT mobility corridor studies and work to incorporate the design guidelines into select administrative and technical documents where necessary to ensure adherence to the adopted guidance. The study identified a top five BRT corridors recommended for future project implementation. Metro staff will present this top five list to the Metro Board

for consideration, recommending that one of these corridors be taken into project development in the near-term. With Board concurrence on a specific corridor, staff will return to the Board at a later date with recommended programming actions and next steps. This will necessarily involve more detailed corridor level analysis, conceptual design work and public engagement with corridor communities and stakeholders.



APPENDIX



Appendix A

Outreach Materials:

Fact Sheet

Comment Card

BUS RAPID TRANSIT VISION & PRINCIPLES STUDY

PROJECT

The Bus Rapid Transit (BRT) Vision & Principles Study is a comprehensive study that will establish the standard of a future Metro BRT network and serve as a pillar for Metro's goal of creating a world-class transportation system.

PURPOSE

This study will develop the overall vision, goals and objectives for BRT in LA County. Specifically, the project will define local BRT operational standards and design guidelines that will guide future development of BRT routes and services, identify & prioritize ideal candidate corridors for BRT implementation and create a network of future potential BRT corridors throughout the county.

WHAT

BRT is a high-quality, high capacity bus-based transit system that delivers fast, comfortable and cost-effective service. Distinct rail-like stations, off-board fare collection, traffic signal priority and dedicated running lanes may all be part of future BRT lines serving Los Angeles County. Local examples of BRT type projects here in Los Angeles County include the Orange Line, serving the San Fernando Valley and the Silver Line serving EL Monte, Downtown LA and San Pedro.

NETWORK

This study will help improve LA County's public transit network. BRT fulfills a distinct role as a mode of transportation that enhances and integrates with existing LA County mobility services and future mobility hubs, as part of the world-class transportation system envisioned for all LA Metro customers.

PROCESS

Key data is one factor in driving the process. We will look at activity centers, population density, employment density, underinvested communities, as well as current, planned and previously studied projects to identify areas in the transportation network that would benefit from BRT service. Input received from the Technical Advisory Committee, key stakeholders and the public will also inform the study.

Metro®

WHEN

This is just the first step. This study began in early 2019 and will continue through summer 2020. Ultimately, the final report will identify and recommend a set of design guidelines and criteria that will define future BRT projects, along with a list of ideal BRT corridors for consideration by the LA Metro Board.

COMPLEMENT

Metro currently has three projects in the early stages of development that are considering BRT as a transit option; Vermont, North Hollywood to Pasadena and North San Fernando Valley Transit Corridors. The BRT system design guidelines developed through the Vision & Principles Study will directly inform and outline service features for all BRT projects moving forward and will tie into other transit improvement studies that are also currently underway.

COORDINATE

The project team are coordinating with Metro's NextGen Bus Plan to share data and better understand the analysis that was completed and outcomes of that study. We are using this information to help inform the BRT Vision & Principles Study.

LEARN MORE

BRT@metro.net
@metrolosangeles
losangelesmetro

Metro®

ESTUDIO DE VISION Y PRINCIPIOS DEL TRANSPORTE RÁPIDO DE AUTOBÚS

PROYECTO

El estudio de visión y principios del transporte rápido de autobús (BRT) es un estudio integral que establecerá las normas para una futura red de BRT de Metro y servirá como pilar para el objetivo de Metro de crear un sistema de transporte de clase mundial.

OBJETIVO

En este estudio, se desarrollará la visión general, los propósitos y los objetivos del BRT en el condado de Los Angeles. Específicamente, el proyecto definirá las normas operativas y las directrices de diseño locales para el BRT que guiarán el desarrollo futuro de las rutas y los servicios del BRT, identificarán y priorizarán los corredores viables ideales para la implementación del BRT y crearán una red de futuros corredores posibles para el BRT en todo el condado.

QUÉ ES

El BRT es un sistema de tránsito de alta calidad y capacidad basado en autobuses que ofrece un servicio de rápido, cómodo y económico. Es posible que estaciones con características similares a las del ferrocarril, el cobro del pasaje antes de subir al autobús, la prioridad de las señales de tráfico y los carriles de circulación exclusivos formen parte de las futuras líneas del BRT que funcionarán en el condado de Los Angeles. Algunos ejemplos locales de proyectos similares al BRT en el condado de Los Angeles incluyen Metro Orange Line, con servicio en el San Fernando Valley, y Metro Silver Line, con servicio en El Monte, el centro de Los Angeles y San Pedro.

RED

Este estudio ayudará a mejorar la red de transporte público del condado de Los Angeles. El BRT cumple una función distintiva como modo de transporte que mejora e integrar con los servicios de movilidad existentes en el condado de Los Angeles y los centros de movilidad futuros, como parte del sistema de transporte de clase mundial imaginar para todos los clientes de Metro.

Metro®

PROCESO

Los datos clave son uno de los factores para avanzar adelante el proceso. Analizaremos los centros de actividad, la densidad de población, la densidad de empleo, las comunidades en las que no se ha invertido lo suficiente, y también los proyectos actuales, planificados y estudiados previamente para identificar áreas en la red de transporte que se beneficiarían del servicio del BRT. Los comentarios recibidos del Comité Asesor Técnico, las principales partes interesadas y el público serán parte del estudio.

CUÁNDO

Este es el primer paso. Este estudio comenzó a principios de 2019 y continuará hasta el verano de 2020. En última instancia, el informe final identificará y recomendará un conjunto de directrices y criterios de diseño que definirán los proyectos futuros del BRT, junto con una lista de los corredores ideales del BRT para que la Junta Directiva de Metro los analice.

COMPLEMENTO

Metro en este momento tiene tres proyectos en las primeras fases de desarrollo que están considerando autobuses de tránsito rápido como opción; Vermont, North Hollywood a Pasadena y North San Fernando Valley Transit Corridors. Las directrices de diseño del sistema del BRT desarrolladas a través del estudio de visión y principios describirán las características del servicio y aportarán información sobre ellas de manera directa para todos los proyectos del BRT de aquí en adelante, y se vincularán a otros estudios de mejora del tránsito que también estén en curso en la actualidad.

COORDINACIÓN

El equipo del proyecto está coordinando con el Plan de Autobuses NextGen de Metro para compartir datos y comprender mejor el análisis que se completó y los resultados de ese estudio. Estamos utilizando esta información para contribuir al estudio de visión y principios del transporte rápido de autobús.

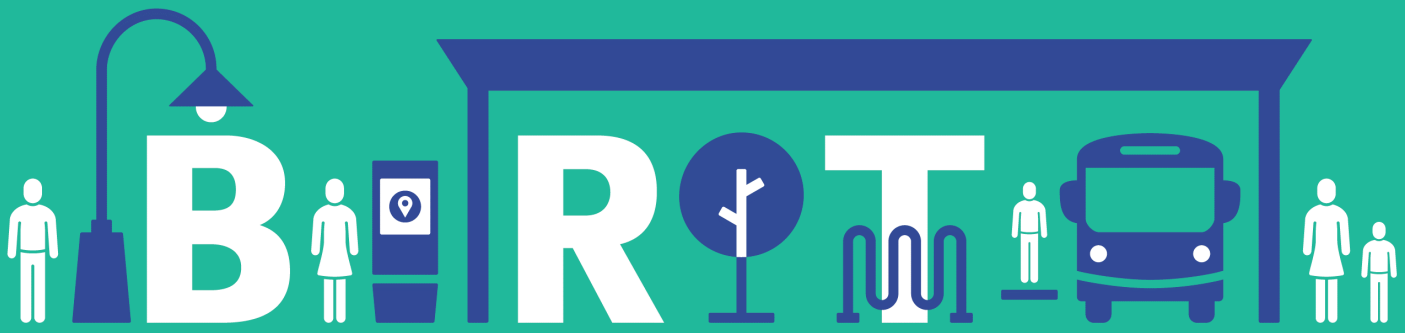
OBTENGA MÁS INFORMACIÓN

BRT@metro.net

@metrolosangeles

losangelesmetro

Metro®



BUS RAPID TRANSIT VISION & PRINCIPLES STUDY

COMMENT CARD (OPTIONAL INFORMATION)

NAME:	DATE:	ZIP:

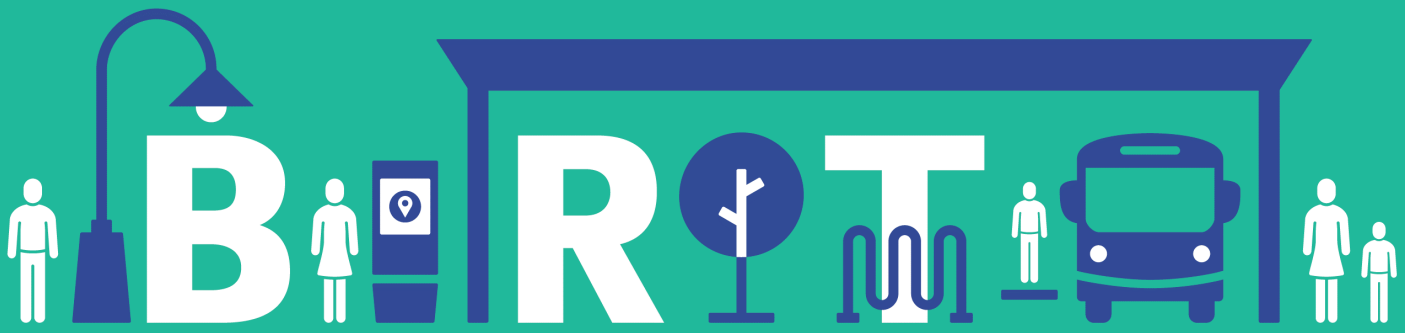
AGE: ☐ Under 18 ☐ 18-24 ☐ 25-34 ☐ 35-49 ☐ 50-64 ☐ 65 or older

GENDER: ☐ Male ☐ Female ☐ Non-binary

AFFILIATION:	EMAIL:

ADDITIONAL COMMENTS:

Metro®



EL ESTUDIO DE VISIÓN Y PRINCIPIOS SOBRE EL AUTOBÚS DE TRÁNSITO RÁPIDO

TARJETA DE COMENTARIOS (INFORMACIÓN OPCIONAL)

NOMBRE: | FECHA: | CÓDIGO POSTAL:

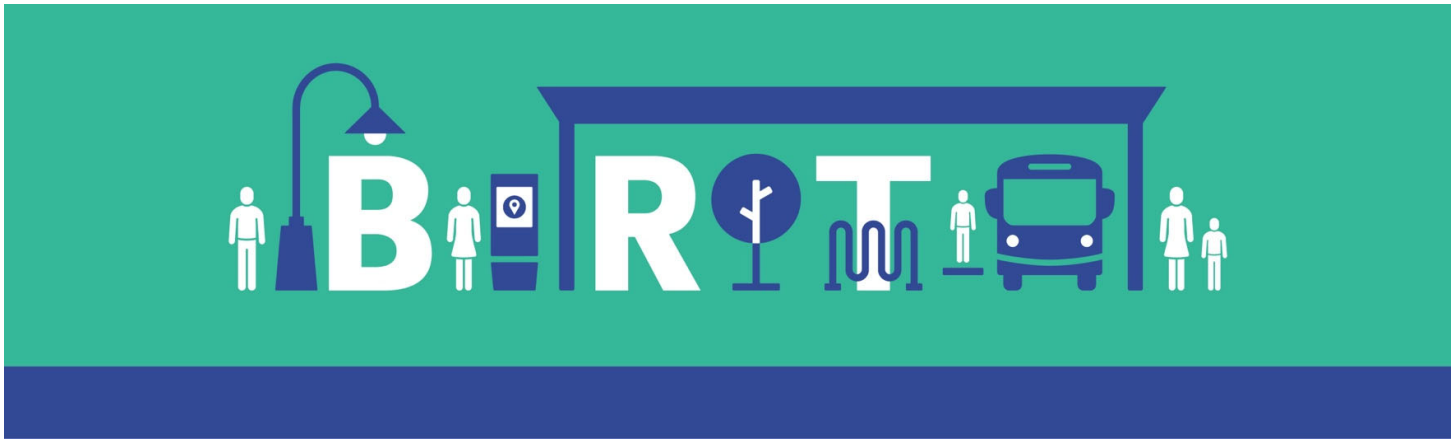
EDAD: ☐ Menor de 18 años ☐ 18-24 ☐ 25-34 ☐ 35-49 ☐ 50-64 ☐ 65 años o mayor

GÉNERO: ☐ Masculino ☐ Femenino ☐ No binario

AFILIACIÓN: | CORREO ELECTRÓNICO:

COMENTARIOS ADICIONALES:

Metro®



Appendix B

Project Survey:

Online Survey

Paper Survey

Survey Report

Metro Bus Rapid Transit Vision & Principles Study

GENERAL USE QUESTIONS:

Page exit logic: Skip / Disqualify Logic
IF: #1 Question "**Are you familiar with Bus Rapid Transit (BRT)?**

" is exactly equal to ("No, BRT is a new concept to me") **THEN:** Jump to page 4 - (untitled)

Min. answers = 1 *(if answered)* Max. answers = 1 *(if answered)*

2

1. **Are you familiar with Bus Rapid Transit (BRT)?**

- [ ] No, BRT is a new concept to me
- [ ] I've heard of BRT, but I don't know much about it
- [ ] Yes, I am familiar with BRT

(untitled)

Min. answers = 1 *(if answered)* Max. answers = 1 *(if answered)*

Show/hide trigger exists.

3

2. **Do you currently use any Metro BRT services?**

- [ ] Yes
- [ ] No

Min. answers = 1 *(if answered)* Max. answers = 2 *(if answered)*

Hidden unless: #2 Question "**Do you currently use any Metro BRT services?** " is one of the following answers ("Yes")

26

3. **What Metro BRT services do you currently use?** *Select all that apply.*

- [ ] Orange Line
- [ ] Silver Line

(untitled)

Max. answers = 6 *(if answered)*

4

4. **Do you use any additional public transit or mobility services?** *If so, please select all that apply.*

- [ ] Metro Bus
- [ ] Metro Rail
- [ ] Metro Bikeshare
- [ ] Other public transit providers (Metrolink, DASH, other local bus services, etc.)
- [ ] Ride hailing services (Uber, Lyft, etc.)
- [ ] Electric scooters (Lime, Byrd, etc.)

Min. answers = 1 *(if answered)* Max. answers = 1 *(if answered)*

5

5. **How many days a week do you usually use public transit services?**

- [ ] <1 day
- [ ] 1-2 days
- [ ] 3-4 days
- [ ] 5 or more days

BRT FEATURES AND AMENITIES:

Page description:
What features of BRT service would be important to you? *Select your top three choices in each category.*

Min. answers = 3 *(if answered)* Max. answers = 3 *(if answered)*

6

6. **Operating Characteristics** *(*Required)*

*

- [ ] BRT vehicles arrive every 5-10 minutes or more frequently
- [ ] BRT vehicles are reliably on time
- [ ] BRT stops spaced approximately every mile so that buses spend less time stopping and starting
- [ ] Traffic Signal Priority: BRT vehicles get an extended green light at intersections thus reducing stop time at red lights
- [ ] Dedicated bus lanes or physically separated busways in which buses can operate free from congestion: Median running lane or Curbside bus lane or Off-set bus lane
- [ ] Enforcement of dedicated bus lanes to ensure other vehicles do not block BRT vehicles

Min. answers = 3 *(if answered)* Max. answers = 3 *(if answered)*

7

7. **Enhanced Station Amenities** *(*Required)*

*

- [ ] Attractive shelters with seating
- [ ] Ample lighting
- [ ] Emergency phones and security cameras
- [ ] Real-time bus arrival information
- [ ] Off-board fare payment option
- [ ] Adequate shelter canopies to provide shade and shelter from rain
- [ ] Trees and landscaping

Min. answers = 3 *(if answered)* Max. answers = 3 *(if answered)*

8

8. **Traveling to the Station** *(*Required)*

*

- [ ] Add signalized crossings/crosswalks
- [ ] Repair sidewalks connecting to BRT stations and replace missing sidewalk segments
- [ ] Enhance facilities for people with disabilities and/or people travelling with strollers
- [ ] Secure bike parking at BRT stations
- [ ] Improved bike facilities connecting to and/or parallel to BRT corridors
- [ ] Connections to bike-share stations or other mobility devices such as scooters

Min. answers = 3 *(if answered)* Max. answers = 3 *(if answered)*

9

9. **Enhanced BRT Vehicle Features** *(*Required)*

*

- [ ] More room for people on BRT Vehicles
- [ ] WiFi on board
- [ ] Level boarding
- [ ] All door boarding

Min. answers = 3 *(if answered)* Max. answers = 3 *(if answered)*

10

10. **Regional Benefits** *(*Required)*

*

- [ ] Faster travel times from origin to destination
- [ ] More reliable and frequent service to major employers and destinations outside of central Los Angeles
- [ ] Zero emission buses that reduce greenhouse gas emissions
- [ ] Provide an attractive alternative to car travel
- [ ] Reduce traffic congestion and contribute to cleaner air
- [ ] Provide seamless connectivity to Metro's entire mobility network

Now rank your top three features and amenities. Click NEXT

13

Action: Page Timer

Page Timer to Auto Submit

Top three features and amenities:

Page exit logic: Skip / Disqualify Logic
IF: #13 Question "**How do you feel about BRT as a part of the solution to mobility needs in Los Angeles County?** *(*Required)*

" is exactly equal to ("I support more BRT corridors","I do not support more BRT corridors") **THEN:** Jump to page 8 - DEMOGRAPHIC QUESTIONS (Optional):

MULTIPUNCH **Min. answers = 3** *(if answered)* Max. answers = 3 *(if answered)*

ID 14

PIPING Piped Values From Question 11. (Secret Question to put all of the previously selected choices in one place.)

12. **Based on your previous responses, please select your top 3 features and amenities.** *(*Required)* *

MULTIPUNCH **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

ID 17

13. **How do you feel about BRT as a part of the solution to mobility needs in Los Angeles County?** *(*Required)* *

- [ ] I support more BRT corridors
- [ ] I do not support more BRT corridors
- [ ] I support more BRT corridors but have some concerns. Please describe:

DEMOGRAPHIC QUESTIONS (Optional):

Page description:
The following information will be kept confidential and used only to ensure that we hear from residents of the diverse county we serve.

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

19

14. **What is your ethnicity?** *Select one.*

- [ ] Native American
- [ ] Hispanic/Latino
- [ ] African American
- [ ] White/Caucasian
- [ ] Asian/Pacific Islander
- [ ] Two or more races
- [ ] Other - Write In

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

20

15. **What is your annual household income?** *Select one.*

- [ ] Under $5,000
- [ ] $5,000-$9,999
- [ ] $10,000-$14,999
- [ ] $15,000-$19,999
- [ ] $20,000-$24,999
- [ ] $25,000-$34,999
- [ ] $35,000-$49,999
- [ ] $50,000- $99,999
- [ ] $100,00 or more

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

21

16. **What is your age?**

- [ ] <18
- [ ] 18-24
- [ ] 25-34
- [ ] 35-49
- [ ] 50-64
- [ ] 65 or more

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

22

17. **What is your gender identity?**

- [ ] Male
- [ ] Female
- [ ] Non-binary

23

18. **What is your 5-digit zip code?** *(*Required)*
Enter a number (Minimum 90000, Maximum 99999). *

24

19. **Please provide an email address if you would like updates regarding Metro's BRT Vision & Principles Study:**

Thank You!

1

Estudio de Visión y Principios sobre el Autobús de Tránsito Rápido de Metro

PREGUNTAS DE USO GENERAL:

Page exit logic: Skip / Disqualify Logic
IF: #1 Question "**¿Está familiarizado con el autobús de tránsito rápido (BRT)?**

" is exactly equal to ("No, el BRT es un concepto nuevo para mí") **THEN:** Jump to page 4 - (untitled)

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

ID 2

1. **¿Está familiarizado con el autobús de tránsito rápido (BRT)?**

- [ ] No, el BRT es un concepto nuevo para mí
- [ ] He oído hablar del BRT, pero no sé mucho al respecto
- [ ] Sí, estoy familiarizado con el BRT

(untitled)

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

LOGIC Show/hide trigger exists.

ID 3

2. **¿Usa actualmente el servicio del BRT de Metro?** *Seleccione todas las opciones que correspondan.*

- [ ] Sí
- [ ] No

LOGIC Hidden unless: #2 Question "**¿Usa actualmente el servicio del BRT de Metro?** *Seleccione todas las opciones que correspondan.*
" is exactly equal to ("Sí")

ID 4

3. **¿Qué servicios de Metro BRT utiliza actualmente?** *Seleccione todas las que correspondan.*

- [ ] "Orange Line" Linea Naranja
- [ ] "Silver Line" Linea Plateada

(untitled)

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 6 *(if answered)*

ID 5

4. **¿Usa algún servicio adicional de transito o movilidad?** *Si es así, seleccione todas las opciones que correspondan.*

- [ ] Metro Bus (Autobús de Metro)
- [ ] Metro Rail (Tren de Metro)
- [ ] Metro Bikeshare (Sistema de bicicletas compartidas de Metro)
- [ ] Otros proveedores de transporte público (Metrolink, DASH, otros servicios locales de autobuses, etc.)
- [ ] Servicios de transporte de pasajeros (Uber, Lyft, etc.)
- [ ] Escuteres eléctricos (Lime, Byrd, etc.)

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

ID 6

5. **¿Cuántos días a la semana usa los servicios de transporte público?**

- [ ] Menos de 1 día
- [ ] Entre 1 y 2 días
- [ ] Entre 3 y 4 días
- [ ] 5 días o más

CARACTERÍSTICAS Y COMODIDADES DEL BRT:

Page description:
¿Qué características del servicio del BRT serían importantes para usted? *Seleccione sus tres opciones principales en cada categoría.*

VALIDATION **Min. answers = 3** *(if answered)* Max. answers = 3 *(if answered)*

ID 7

6. **Características operativas** *(*Necesitamos esta información)*

*

- [ ] Vehículos del BRT que lleguen cada 5 a 10 minutos o con más frecuencia
- [ ] Vehículos del BRT confiables en cuanto a la puntualidad
- [ ] Paradas del BRT con una distancia de aproximadamente una milla de manera que los autobuses pasen menos tiempo parando
- [ ] Prioridad de las señales de tráfico: que los vehículos del BRT tengan una luz verde más larga en las intersecciones para reducir el tiempo que el vehículo pasa detenido en la luz roja
- [ ] Carriles exclusivos de autobús o vías de autobús separadas físicamente en los que los autobuses pueden circular sin congestión: carril de circulación central o carril de autobús adyacente a la acera o área de descanso
- [ ] Creación de carriles de autobús exclusivos para garantizar que otros vehículos no bloqueen los vehículos del BRT

VALIDATION **Min. answers = 3** *(if answered)* Max. answers = 3 *(if answered)*

ID 9

7. **Comodidades mejoradas de la estación** *(*Necesitamos esta información)*

*

- [ ] Paradas atrayentes con asientos
- [ ] Amplia iluminación
- [ ] Teléfonos de emergencia y cámaras de seguridad
- [ ] Información de la llegada de los autobuses en tiempo real
- [ ] Opción de pago de billetes antes de subir al autobús
- [ ] Marquesinas adecuadas para dar sombra y refugio contra la lluvia
- [ ] Árboles y paisajismo

VALIDATION **Min. answers = 3** *(if answered)* Max. answers = 3 *(if answered)*

ID 10

8. **Viaje a la estación** *(*Necesitamos esta información)*

*

- [ ] Añadir cruces/cruces peatonales señalizados
- [ ] Reparar las aceras que conectan con las estaciones del BRT y reemplazar los tramos faltantes de las aceras
- [ ] Mejorar las comodidades para las personas con discapacidades y/o las personas que viajan con carriolas
- [ ] Estacionamiento de bicicletas seguro en las estaciones del BRT
- [ ] Mejores instalaciones para bicicletas que conectan y/o que están en paralelo con corredores del BRT
- [ ] Conexiones a estaciones de bicicletas compartidas u otros dispositivos de movilidad como escúteres

VALIDATION **Min. answers = 3** *(if answered)* Max. answers = 3 *(if answered)*

ID 11

9. **Características mejoradas de los vehículos del BRT** *(*Necesitamos esta información)*

*

- [ ] Más espacio para las personas en los vehículos del BRT
- [ ] WiFi a bordo
- [ ] Abordaje a nivel
- [ ] Abordaje en todas las puertas

VALIDATION **Min. answers = 3** *(if answered)* Max. answers = 3 *(if answered)*

ID 25

10. **Beneficios regionales** *(*Necesitamos esta información)*

*

- [ ] Tiempos de viaje más rápidos de origen a destino
- [ ] Servicio más frecuente y confiable para los principales empleadores y destinos fuera del centro de Los Ángeles
- [ ] Autobuses de cero emisiones que reducen las emisiones de gases de efecto invernadero
- [ ] Alternativa atractiva al viaje en automóvil
- [ ] Reducción de la congestión del tránsito y contribución a la limpieza del aire
- [ ] Conectividad fluida a toda la red de movilidad de Metro

Ahora clasifique sus tres características y servicios principales. Continua a la siguiente página.

ID 13

Action: Page Timer

Page Timer to Auto Submit

Las tres características y comodidades principales:

Page exit logic: Skip / Disqualify Logic
IF: #13 Question "**¿Qué opina del BRT como parte de la solución a las necesidades de movilidad en el condado de Los Ángeles?** *(*Necesitamos esta información)*

" is exactly equal to ("Estoy a favor de más corredores del BRT","No estoy a favor de más corredores del BRT") **THEN:** Jump to page 8 - PREGUNTAS SOBRE DATOS DEMOGRÁFICOS (Opcional):

VALIDATION **Min. answers = 3** *(if answered)* Max. answers = 3 *(if answered)*

ID 14

PIPING Piped Values From Question 11. (Secret Question to pull all of the previously selected choices in one place.)

12. **Según sus respuestas anteriores, seleccione sus 3 características y servicios principales.** *(*Necesitamos esta información)* *

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

ID 15

13. **¿Qué opina del BRT como parte de la solución a las necesidades de movilidad en el condado de Los Ángeles?** *(*Necesitamos esta información)*

*

- [ ] Estoy a favor de más corredores del BRT
- [ ] No estoy a favor de más corredores del BRT
- [ ] Estoy a favor de más corredores del BRT, pero tengo algunas preocupaciones. Descríbalas:

PREGUNTAS SOBRE DATOS DEMOGRÁFICOS (Opcional):

Page description:
La siguiente información permanecerá confidencial y se usará únicamente para garantizar que recibimos información de los residentes del condado diverso en el que prestamos servicios.

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

ID 16

14. **¿Cuál es su origen étnico?** *Seleccione una opción.*

- [ ] Nativo estadounidense
- [ ] Hispano/latino
- [ ] Afroamericano
- [ ] Blanco/caucásico
- [ ] Asiático/isleño del Pacífico
- [ ] Dos o más razas
- [ ] Otro:

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

ID 17

15. **¿Cuáles son los ingresos anuales de su casa?** *Seleccione una opción.*

- [ ] Menos de $5,000
- [ ] De $5,000 a $9,999
- [ ] De $10,000 a $14,999
- [ ] De $15,000 a $19,999
- [ ] De $20,000 a $24,999
- [ ] De $25,000 a $34,999
- [ ] De $35,000 a $49,999
- [ ] De $50,000 a $99,999
- [ ] $100,00 o más

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

ID 18

16. **¿Qué es su edad?**

- [ ] Menos de 18
- [ ] 18-24
- [ ] 25-34
- [ ] 35-49
- [ ] 50-64
- [ ] 65 o más

VALIDATION **Min. answers = 1** *(if answered)* Max. answers = 1 *(if answered)*

ID 19

17. **¿Cuál es su identidad de género?**

- [ ] Masculino
- [ ] Femenino
- [ ] No binario

ID 20

18. **¿Cuál es el código postal de 5 dígitos de su casa?** *(*Necesitamos esta información)*

Ingrese un número (Mínimo 90000, máximo 99999).

*

ID 21

19. **Por favor, proporcione una dirección de correo electrónico si desea recibir actualizaciones relacionadas con el estudio de visión y principios sobre el BRT de Metro:**

¡Gracias!

ID 1

Metro Bus Rapid Transit Vision & Principles Study

The Los Angeles County Metropolitan Transportation Authority (Metro) is conducting the Bus Rapid Transit (BRT) Vision & Principles Study. The goal of the study is to develop standards and design criteria that will guide future development of BRT routes and services in Los Angeles County. Simply defined, BRT is a high-quality, high-capacity bus-based transit system that delivers fast, comfortable and cost-effective transit service. Metro's BRT network will fulfill a distinct role within the existing LA County transportation network and serve as a pillar towards Metro's goal of creating a world class transportation system. We want to understand what design elements are most important to you. To date, the project team has examined key information and conducted analysis in order to rank and evaluate corridor feasibility and define BRT standards. The team continues to gather additional input from the public and key stakeholders in order to further inform the study. The final recommendations of the study are targeted to be presented to the Metro Board for consideration in summer 2020. Please take 5-10 minutes to complete the survey and provide your input.

GENERAL USE QUESTIONS:

1) Are you familiar with Bus Rapid Transit (BRT)?

[ ] No, BRT is a new concept to me

[ ] I've heard of BRT, but I don't know much about it

[ ] Yes, I am familiar with BRT

2) Do you currently use any Metro BRT services?

[ ] Yes

[ ] No

3) What Metro BRT services do you currently use? ***Select all that apply.***

[ ] Orange Line

[ ] Silver Line

4) Do you use any additional public transit or mobility services? ***If so, please select all that apply.***

[ ] Metro Bus

[ ] Metro Rail

[ ] Metro Bikeshare

[ ] Other public transit providers (Metrolink, DASH, other local bus services, etc.)

[ ] Ride hailing services (Uber, Lyft, etc.)

[ ] Electric scooters (Lime, Byrd, etc.)

5) How many days a week do you usually use public transit services?

[ ] <1 day><1 day

[ ] 1-2 days

[ ] 3-4 days

[ ] 5 or more days

BRT FEATURES AND AMENITIES:

What features of BRT service would be important to you? ***Select your top three choices in each category.***

6) Operating Characteristics ***(*Required)***

[ ] BRT vehicles arrive every 5-10 minutes or more frequently

[ ] BRT vehicles are reliably on time

[ ] BRT stops spaced approximately every mile so that buses spend less time stopping and starting

[ ] Traffic Signal Priority: BRT vehicles get an extended green light at intersections thus reducing stop time at red lights

[ ] Dedicated bus lanes or physically separated busways in which buses can operate free from congestion: Median running lane or Curbside bus lane or Off-set bus lane

[ ] Enforcement of dedicated bus lanes to ensure other vehicles do not block BRT vehicles

7) Enhanced Station Amenities *(*Required)*

[ ] Attractive shelters with seating

[ ] Ample lighting

[ ] Emergency phones and security cameras

[ ] Real-time bus arrival information

[ ] Off-board fare payment option

[ ] Adequate shelter canopies to provide shade and shelter from rain

[ ] Trees and landscaping

8) Traveling to the Station *(*Required)*

[ ] Add signalized crossings/crosswalks

[ ] Repair sidewalks connecting to BRT stations and replace missing sidewalk segments

[ ] Enhance facilities for people with disabilities and/or people travelling with strollers

[ ] Secure bike parking at BRT stations

[ ] Improved bike facilities connecting to and/or parallel to BRT corridors

[ ] Connections to bike-share stations or other mobility devices such as scooters

9) Enhanced BRT Vehicle Features *(*Required)*

[ ] More room for people on BRT Vehicles

[ ] WiFi on board

[ ] Level boarding

[ ] All door boarding

10) Regional Benefits *(*Required)*

[ ] Faster travel times from origin to destination

[ ] More reliable and frequent service to major employers and destinations outside of central Los Angeles

[ ] Zero emission buses that reduce greenhouse gas emissions

[ ] Provide an attractive alternative to car travel

[ ] Reduce traffic congestion and contribute to cleaner air

[ ] Provide seamless connectivity to Metro's entire mobility network

---

13) How do you feel about BRT as a part of the solution to mobility needs in Los Angeles County? *(*Required)*

[ ] I support more BRT corridors

[ ] I do not support more BRT corridors

[ ] I support more BRT corridors but have some concerns. Please describe:

_____

DEMOGRAPHIC QUESTIONS (Optional):

The following information will be kept confidential and used only to ensure that we hear from residents of the diverse county we serve.

14) What is your ethnicity? *Select one.*

[ ] Native American

[ ] Hispanic/Latino

[ ] African American

[ ] White/Caucasian

[ ] Asian/Pacific Islander

[ ] Two or more races

[ ] Other - Write In: _____

15) What is your annual household income? *Select one.*

[ ] Under $5,000

[ ] $5,000-$9,999

[ ] $10,000-$14,999

[ ] $15,000-$19,999

[ ] $20,000-$24,999

[ ] $25,000-$34,999

[ ] $35,000-$49,999

[ ] $50,000- $99,999

[ ] $100,00 or more

16) What is your age?

[ ] <18

[ ] 18-24

[ ] 25-34

[ ] 35-49

[ ] 50-64

[ ] 65 or more

17) What is your gender identity?

[ ] Male

[ ] Female

[ ] Non-binary

18) What is your 5-digit zip code? ***(*Required)***
Enter a number (Minimum 90000, Maximum 99999).*

_____

19) Please provide an email address if you would like updates regarding Metro's BRT Vision & Principles Study:

_____

Thank You!

Estudio de Visión y Principios sobre el Autobús de Tránsito Rápido de Metro

---

La Autoridad de Transporte Metropolitano del Condado de Los Ángeles (Metro) está realizando el Estudio de Visión y Principios sobre el Autobús de Tránsito Rápido (BRT por sus siglas en inglés). El objetivo del estudio es definir normas y criterios de diseño que guiarán el futuro desarrollo de rutas y servicios del BRT en el condado de Los Ángeles. En términos sencillos, el BRT es un sistema de tránsito de alta calidad y capacidad basado en autobuses que ofrecen un servicio de tránsito rápido, cómodo y económico. El BRT de Metro cumplirá una función distinta dentro de la red de transporte existente del condado de Los Ángeles y será un apoyo hacia el objetivo de Metro de crear un sistema de transporte de primera categoría. Queremos entender qué elementos de diseño son más importantes para usted. Hasta la fecha, el equipo del proyecto ha examinado la información clave y realizado análisis para clasificar y evaluar la viabilidad del corredor y definir los estándares BRT. El equipo continúa recabando comentarios adicionales del público y las partes interesadas clave para informar aún más el estudio. Las recomendaciones finales del estudio están dirigidas a la Junta del Metro para su consideración en el verano de 2020. Tómese entre 5 y 10 minutos para completar la encuesta y proporcionar su opinión.

PREGUNTAS DE USO GENERAL:

1) ¿Está familiarizado con el autobús de tránsito rápido (BRT)?

[ ] No, el BRT es un concepto nuevo para mí

[ ] He oído hablar del BRT, pero no sé mucho al respecto

[ ] Sí, estoy familiarizado con el BRT

2) ¿Usa actualmente el servicio del BRT de Metro? ***Seleccione todas las opciones que correspondan.***

[ ] Sí

[ ] No

3) ¿Qué servicios de Metro BRT utiliza actualmente? ***Seleccione todas las que correspondan.***

[ ] "Orange Line" Linea Naranja

[ ] "Silver Line" Linea Plateada

4) ¿Usa algún servicio adicional de transito o movilidad? ***Si es así, seleccione todas las opciones que correspondan.***

[ ] Metro Bus (Autobús de Metro)

[ ] Metro Rail (Tren de Metro)

[ ] Metro Bikeshare (Sistema de bicicletas compartidas de Metro)

[ ] Otros proveedores de transporte público (Metrolink, DASH, otros servicios locales de autobuses, etc.)

[ ] Servicios de transporte de pasajeros (Uber, Lyft, etc.)

[ ] Escuteres eléctricos (Lime, Byrd, etc.)

5) ¿Cuántos días a la semana usa los servicios de transporte público?

[ ] Menos de 1 día

[ ] Entre 1 y 2 días

[ ] Entre 3 y 4 días

[ ] 5 días o más

CARACTERÍSTICAS Y COMODIDADES DEL BRT:

¿Qué características del servicio del BRT serían importantes para usted? *Seleccione sus tres opciones principales en cada categoría.*

6) Características operativas ***(*Necesitamos esta información)***

[ ] Vehículos del BRT que lleguen cada 5 a 10 minutos o con más frecuencia

[ ] Vehículos del BRT confiables en cuanto a la puntualidad

[ ] Paradas del BRT con una distancia de aproximadamente una milla de manera que los autobuses pasen menos tiempo parando

[ ] Prioridad de las señales de tráfico: que los vehículos del BRT tengan una luz verde más larga en las intersecciones para reducir el tiempo que el vehículo pasa detenido en la luz roja

[ ] Carriles exclusivos de autobús o vías de autobús separadas físicamente en los que los autobuses pueden circular sin congestión: carril de circulación central o carril de autobús adyacente a la acera o área de descanso

[ ] Creación de carriles de autobús exclusivos para garantizar que otros vehículos no bloqueen los vehículos del BRT

7) Comodidades mejoradas de la estación ***(*Necesitamos esta información)***

[ ] Paradas atrayentes con asientos

[ ] Amplia iluminación

[ ] Teléfonos de emergencia y cámaras de seguridad

[ ] Información de la llegada de los autobuses en tiempo real

[ ] Opción de pago de billetes antes de subir al autobús

[ ] Marquesinas adecuadas para dar sombra y refugio contra la lluvia

[ ] Árboles y paisajismo

8) Viaje a la estación ***(*Necesitamos esta información)***

[ ] Añadir cruces/cruces peatonales señalizados

[ ] Reparar las aceras que conectan con las estaciones del BRT y reemplazar los tramos faltantes de las aceras

[ ] Mejorar las comodidades para las personas con discapacidades y/o las personas que viajan con carriolas

[ ] Estacionamiento de bicicletas seguro en las estaciones del BRT

[ ] Mejores instalaciones para bicicletas que conectan y/o que están en paralelo con corredores del BRT

[ ] Conexiones a estaciones de bicicletas compartidas u otros dispositivos de movilidad como escúteres

9) Características mejoradas de los vehículos del BRT ***(*Necesitamos esta información)***

[ ] Más espacio para las personas en los vehículos del BRT

[ ] WiFi a bordo

[ ] Abordaje a nivel

[ ] Abordaje en todas las puertas

10) Beneficios regionales ***(*Necesitamos esta información)***

[ ] Tiempos de viaje más rápidos de origen a destino

[ ] Servicio más frecuente y confiable para los principales empleadores y destinos fuera del centro de Los Ángeles

[ ] Autobuses de cero emisiones que reducen las emisiones de gases de efecto invernadero

[ ] Alternativa atractiva al viaje en automóvil

[ ] Reducción de la congestión del tránsito y contribución a la limpieza del aire

[ ] Conectividad fluida a toda la red de movilidad de Metro

13) ¿Qué opina del BRT como parte de la solución a las necesidades de movilidad en el condado de Los Ángeles? ***(*Necesitamos esta información)***

[ ] Estoy a favor de más corredores del BRT

[ ] No estoy a favor de más corredores del BRT

[ ] Estoy a favor de más corredores del BRT, pero tengo algunas preocupaciones. Descríbalas::: _____

PREGUNTAS SOBRE DATOS DEMOGRÁFICOS (Opcional):

La siguiente información permanecerá confidencial y se usará únicamente para garantizar que recibimos información de los residentes del condado diverso en el que prestamos servicios.

14) ¿Cuál es su origen étnico? ***Seleccione una opción.***

[ ] Nativo estadounidense

[ ] Hispano/latino

[ ] Afroamericano

[ ] Blanco/caucásico

[ ] Asiático/isleño del Pacífico

[ ] Dos o más razas

[ ] Otro:: _____

15) ¿Cuáles son los ingresos anuales de su casa? ***Seleccione una opción.***

[ ] Menos de $5,000

[ ] De $5,000 a $9,999

[ ] De $10,000 a $14,999

[ ] De $15,000 a $19,999

[ ] De $20,000 a $24,999

[ ] De $25,000 a $34,999

[ ] De $35,000 a $49,999

[ ] De $50,000 a $99,999

[ ] $100,00 o más

16) ¿Qué es su edad?

[ ] Menos de 18

[ ] 18-24

[ ] 25-34

[ ] 35-49

[ ] 50-64

[ ] 65 o más

17) ¿Cuál es su identidad de género?

[ ] Masculino

[ ] Femenino

[ ] No binario

18) ¿Cuál es el código postal de 5 dígitos de su casa? ***(*Necesitamos esta información)***
Ingrese un número (Mínimo 90000, máximo 99999).
*****

_____

19) Por favor, proporcione una dirección de correo electrónico si desea recibir actualizaciones relacionadas con el estudio de visión y principios sobre el BRT de Metro:

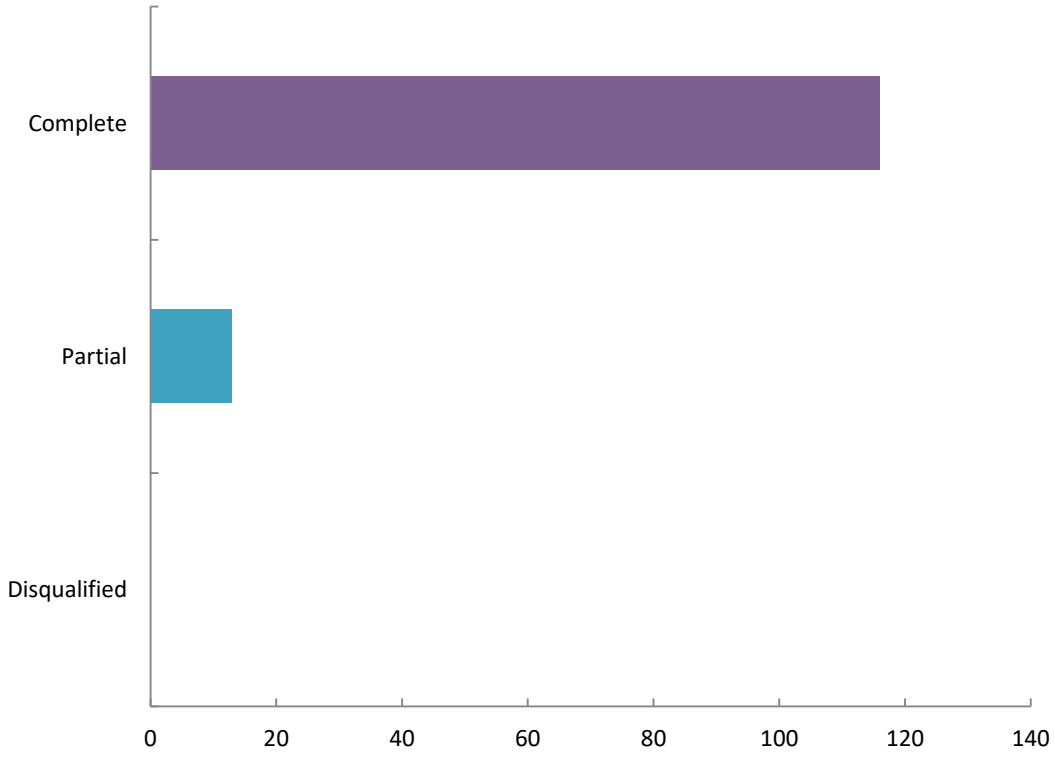
_____

¡Gracias!

Report for Metro Bus Rapid Transit Vision & Principles Study

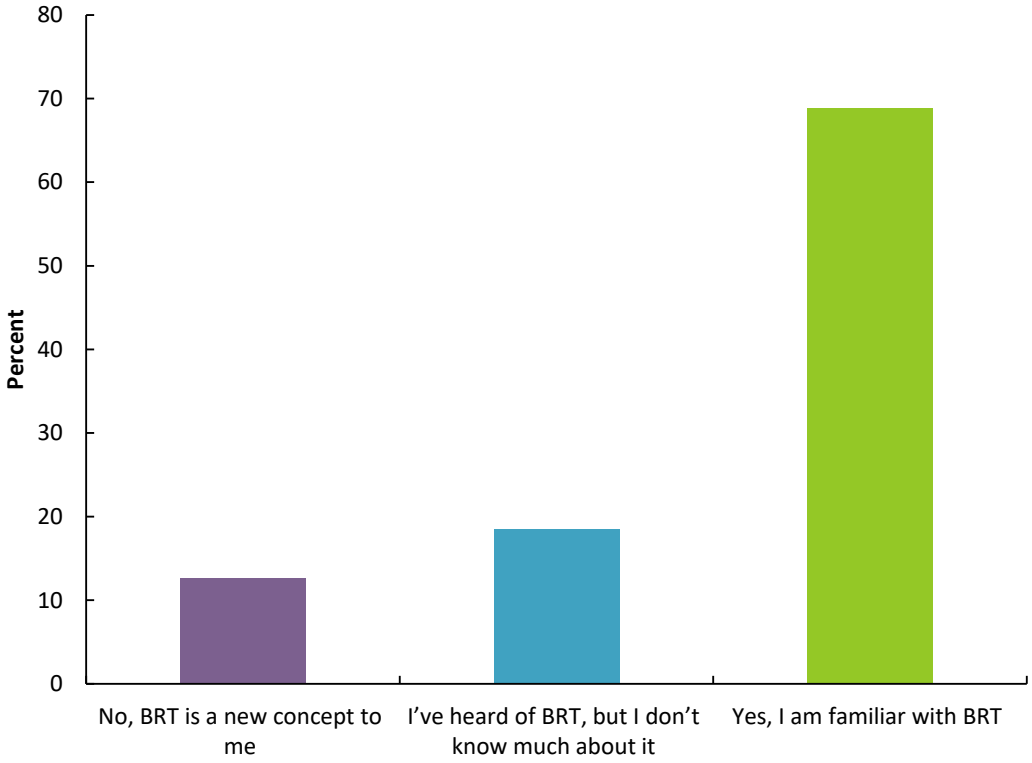
Metro Bus Rapid Transit Vision & Principles Study

Response Statistics



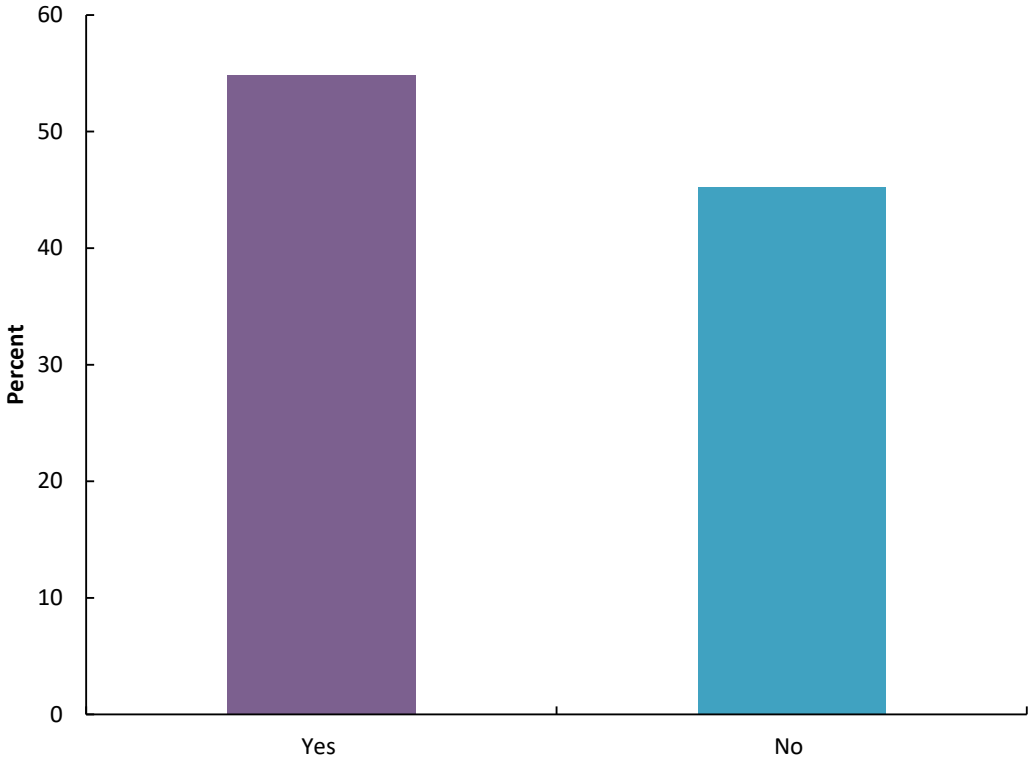
	Count	Percent
Complete	116	89.9
Partial	13	10.1
Disqualified	0	0
Totals	129	

1.Are you familiar with Bus Rapid Transit (BRT)?



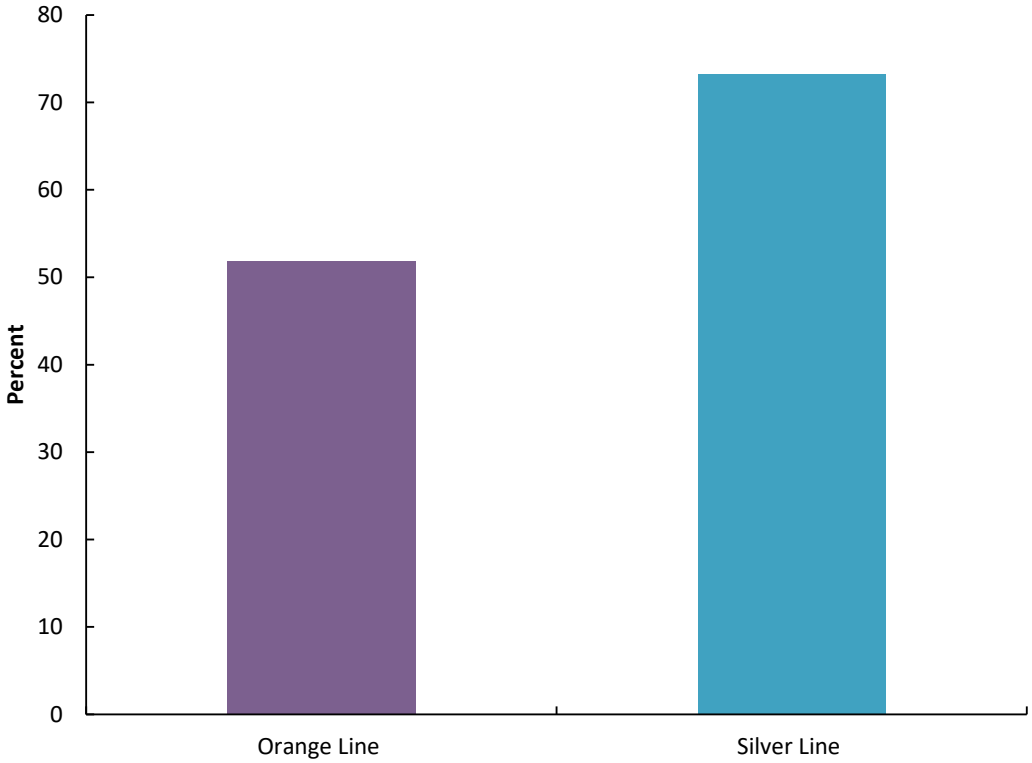
Value	Percent	Count
No, BRT is a new concept to me	12.6%	15
I've heard of BRT, but I don't know much about it	18.5%	22
Yes, I am familiar with BRT	68.9%	82

2.Do you currently use any Metro BRT services?



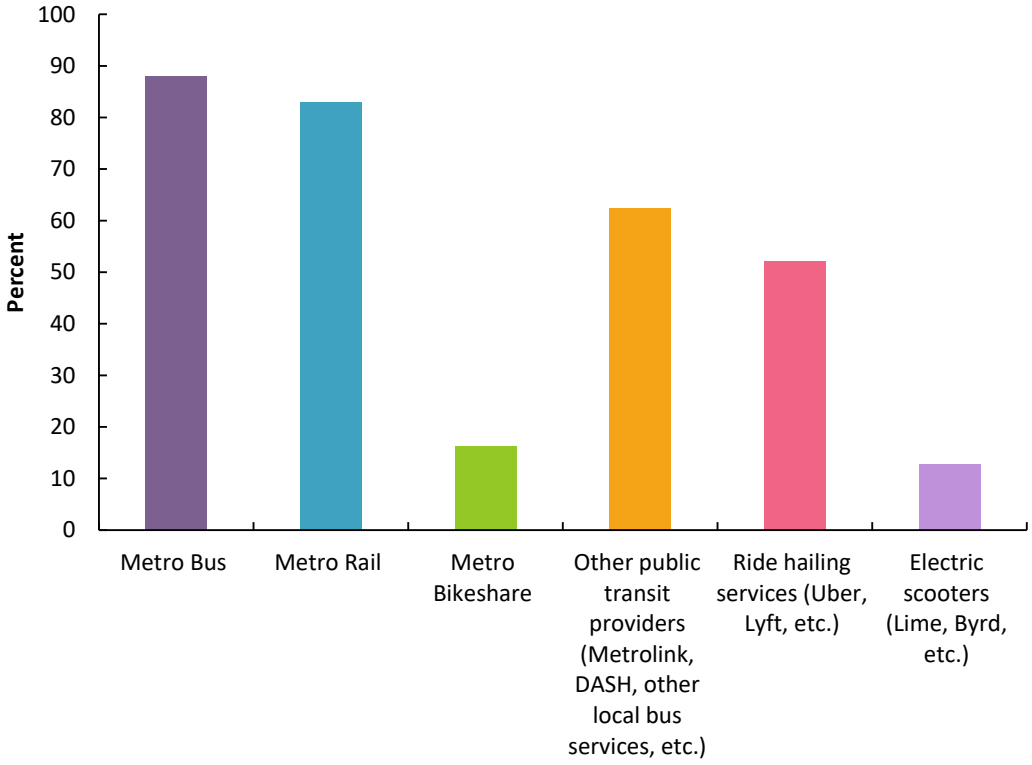
Value	Percent	Count
Yes	54.8%	57
No	45.2%	47

3.What Metro BRT services do you currently use? Select all that apply.



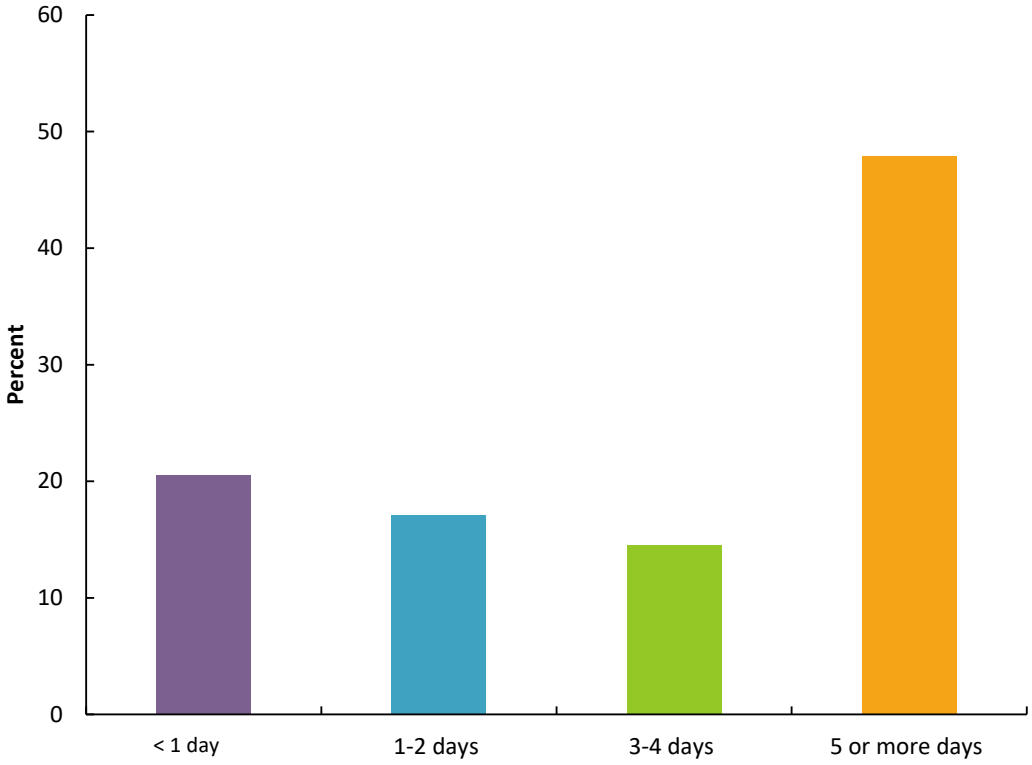
Value	Percent	Count
Orange Line	51.8%	29
Silver Line	73.2%	41

4.Do you use any additional public transit or mobility services? If so, please select all that apply.



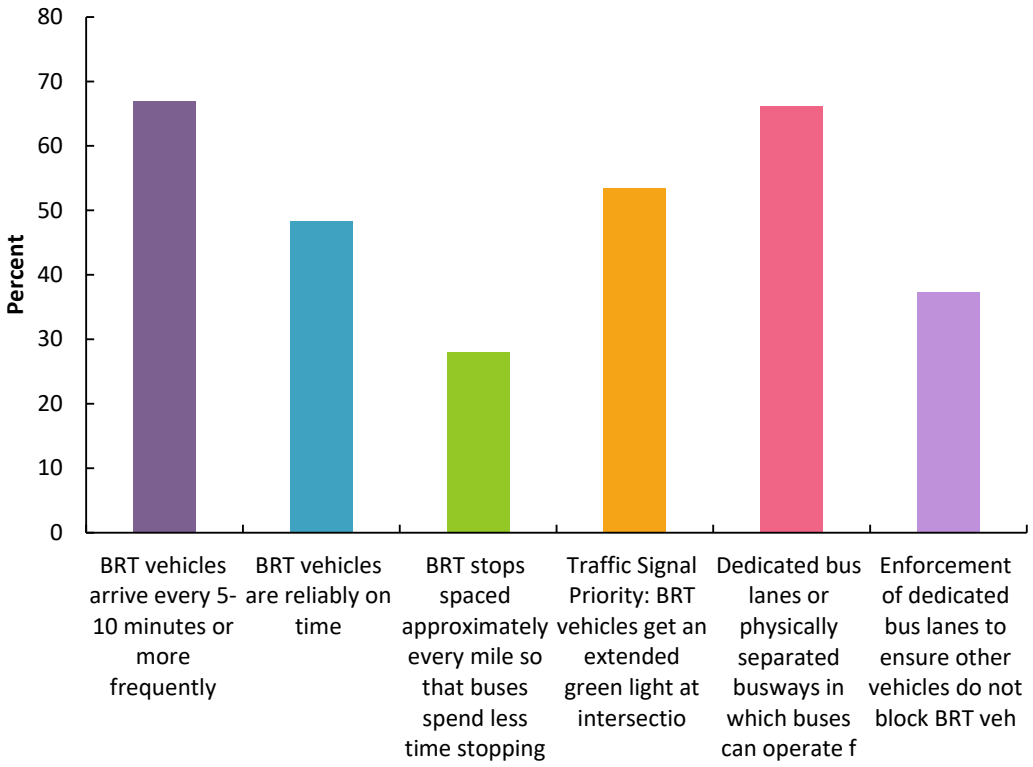
Value	Percent	Count
Metro Bus	88.0%	103
Metro Rail	82.9%	97
Metro Bikeshare	16.2%	19
Other public transit providers (Metrolink, DASH, other local bus services, etc.)	62.4%	73
Ride hailing services (Uber, Lyft, etc.)	52.1%	61
Electric scooters (Lime, Byrd, etc.)	12.8%	15

5.How many days a week do you usually use public transit services?



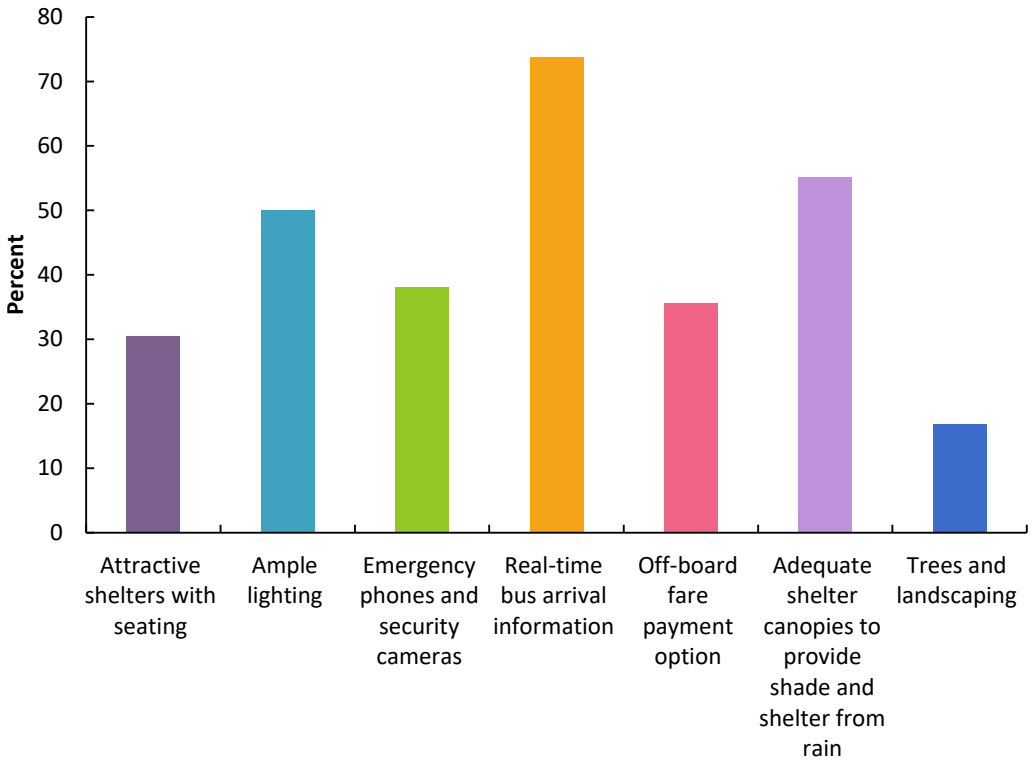
Value	Percent	Count
< 1 day	20.5%	24
1-2 days	17.1%	20
3-4 days	14.5%	17
5 or more days	47.9%	56

6.Operating Characteristics (*Required)



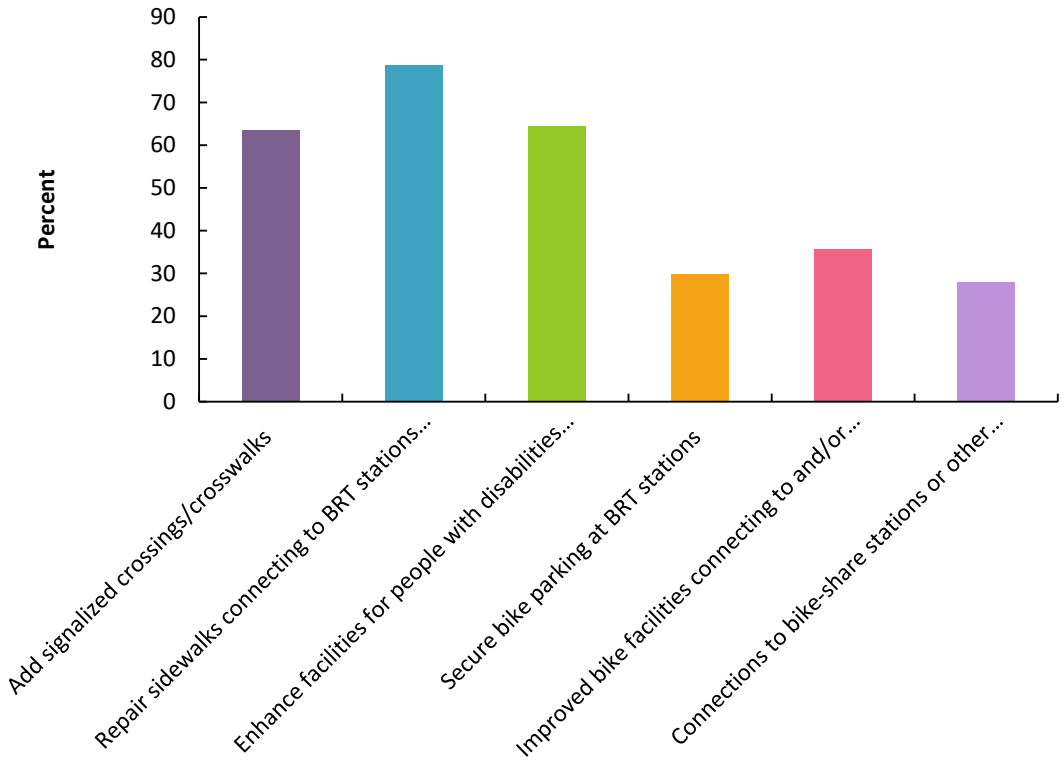
Value	Percent	Count
BRT vehicles arrive every 5-10 minutes or more frequently	66.9%	79
BRT vehicles are reliably on time	48.3%	57
BRT stops spaced approximately every mile so that buses spend less time stopping and starting	28.0%	33
Traffic Signal Priority: BRT vehicles get an extended green light at intersections thus reducing stop time at red lights	53.4%	63
Dedicated bus lanes or physically separated busways in which buses can operate free from congestion: Median running lane or Curbside bus lane or Off-set bus lane	66.1%	78
Enforcement of dedicated bus lanes to ensure other vehicles do not block BRT vehicles	37.3%	44

7.Enhanced Station Amenities (*Required)



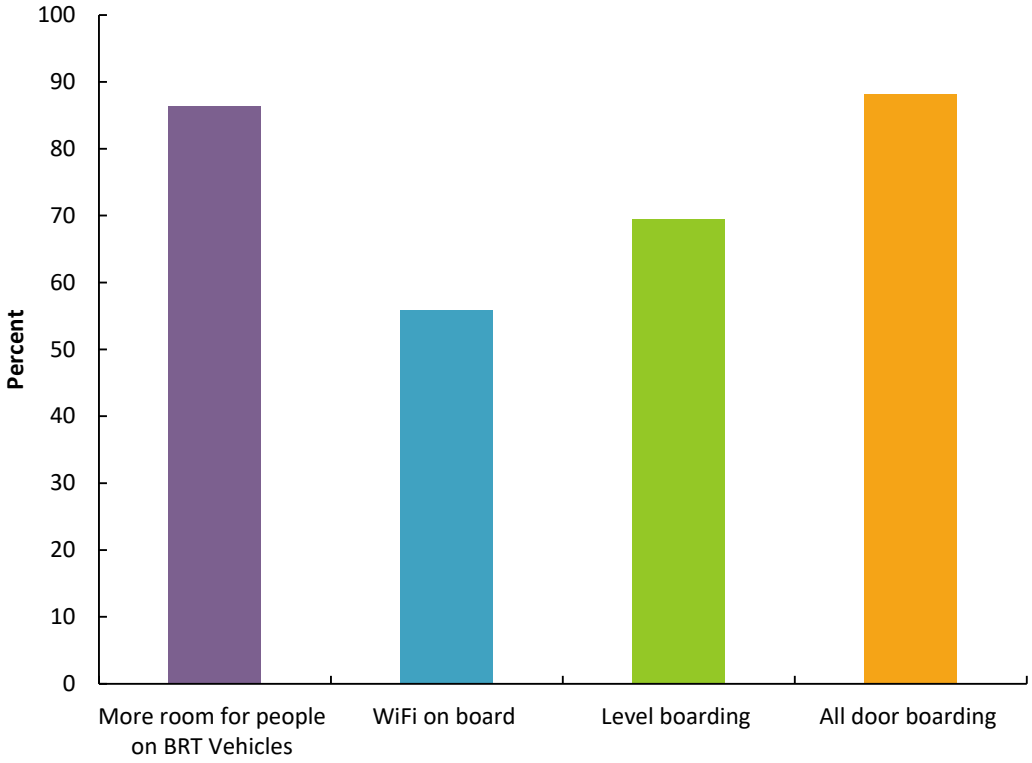
Value	Percent	Count
Attractive shelters with seating	30.5%	36
Ample lighting	50.0%	59
Emergency phones and security cameras	38.1%	45
Real-time bus arrival information	73.7%	87
Off-board fare payment option	35.6%	42
Adequate shelter canopies to provide shade and shelter from rain	55.1%	65
Trees and landscaping	16.9%	20

8.Traveling to the Station (*Required)



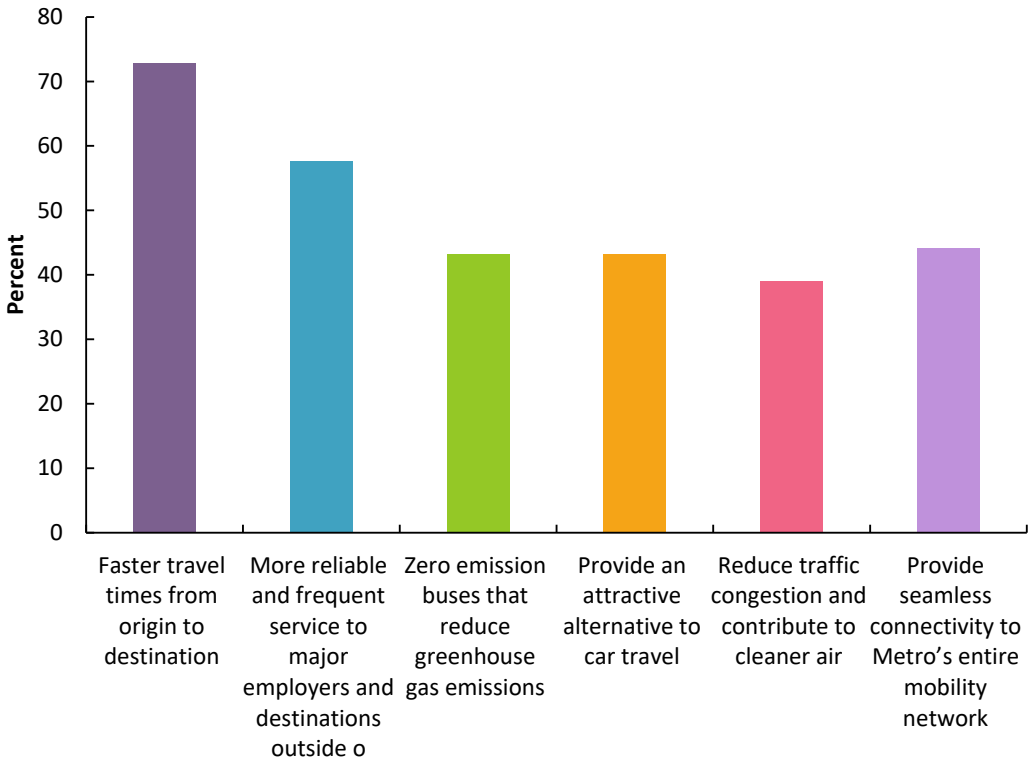
Value	Percent	Count
Add signalized crossings/crosswalks	63.6%	75
Repair sidewalks connecting to BRT stations and replace missing sidewalk segments	78.8%	93
Enhance facilities for people with disabilities and/or people travelling with strollers	64.4%	76
Secure bike parking at BRT stations	29.7%	35
Improved bike facilities connecting to and/or parallel to BRT corridors	35.6%	42
Connections to bike-share stations or other mobility devices such as scooters	28.0%	33

9.Enhanced BRT Vehicle Features (*Required)



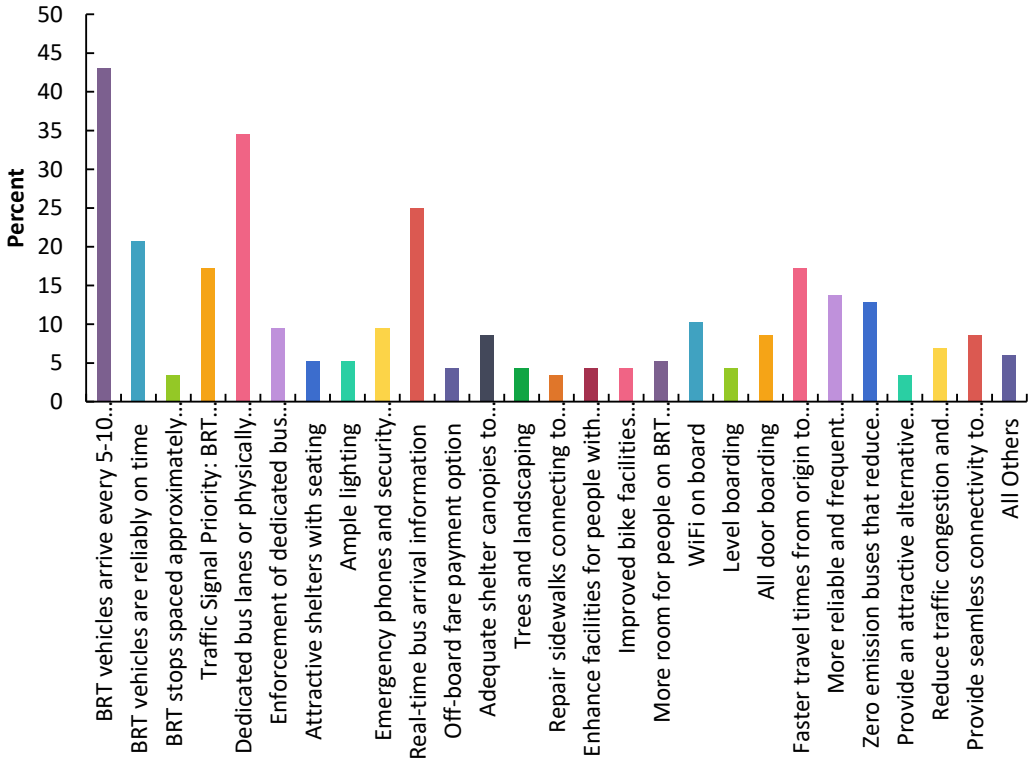
Value	Percent	Count
More room for people on BRT Vehicles	86.4%	102
WiFi on board	55.9%	66
Level boarding	69.5%	82
All door boarding	88.1%	104

10.Regional Benefits (*Required)



Value	Percent	Count
Faster travel times from origin to destination	72.9%	86
More reliable and frequent service to major employers and destinations outside of central Los Angeles	57.6%	68
Zero emission buses that reduce greenhouse gas emissions	43.2%	51
Provide an attractive alternative to car travel	43.2%	51
Reduce traffic congestion and contribute to cleaner air	39.0%	46
Provide seamless connectivity to Metro's entire mobility network	44.1%	52

11.Based on your previous responses, please select your top 3 features and amenities. (*Required)



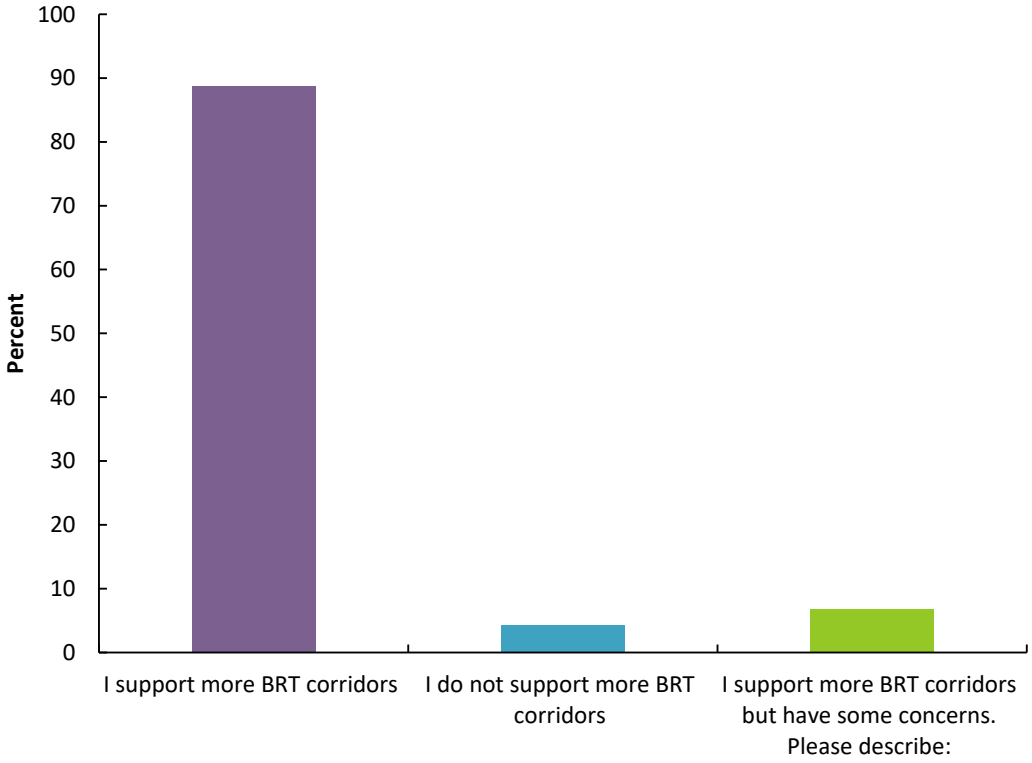
Value	Percent	Count
BRT vehicles arrive every 5-10 minutes or more frequently	43.1%	50
BRT vehicles are reliably on time	20.7%	24
BRT stops spaced approximately every mile so that buses spend less time stopping and starting	3.4%	4
Traffic Signal Priority: BRT vehicles get an extended green	17.2%	20

light at intersections thus reducing stop time at red lights		
Dedicated bus lanes or physically separated busways in which buses can operate free from congestion: Median running lane or Curbside bus lane or Off-set bus lane	34.5%	40
Enforcement of dedicated bus lanes to ensure other vehicles do not block BRT vehicles	9.5%	11
Attractive shelters with seating	5.2%	6
Ample lighting	5.2%	6
Emergency phones and security cameras	9.5%	11
Real-time bus arrival information	25.0%	29
Off-board fare payment option	4.3%	5
Adequate shelter canopies to provide shade and shelter from rain	8.6%	10
Trees and landscaping	4.3%	5
Add signalized crossings/crosswalks	1.7%	2

Repair sidewalks connecting to BRT stations and replace missing sidewalk segments	3.4%	4
Enhance facilities for people with disabilities and/or people travelling with strollers	4.3%	5
Secure bike parking at BRT stations	2.6%	3
Improved bike facilities connecting to and/or parallel to BRT corridors	4.3%	5
Connections to bike-share stations or other mobility devices such as scooters	1.7%	2
More room for people on BRT Vehicles	5.2%	6
WiFi on board	10.3%	12
Level boarding	4.3%	5
All door boarding	8.6%	10
Faster travel times from origin to destination	17.2%	20
More reliable and frequent service to major employers and destinations outside of central Los Angeles	13.8%	16

Zero emission buses that reduce greenhouse gas emissions	12.9%	15
Provide an attractive alternative to car travel	3.4%	4
Reduce traffic congestion and contribute to cleaner air	6.9%	8
Provide seamless connectivity to Metro's entire mobility network	8.6%	10

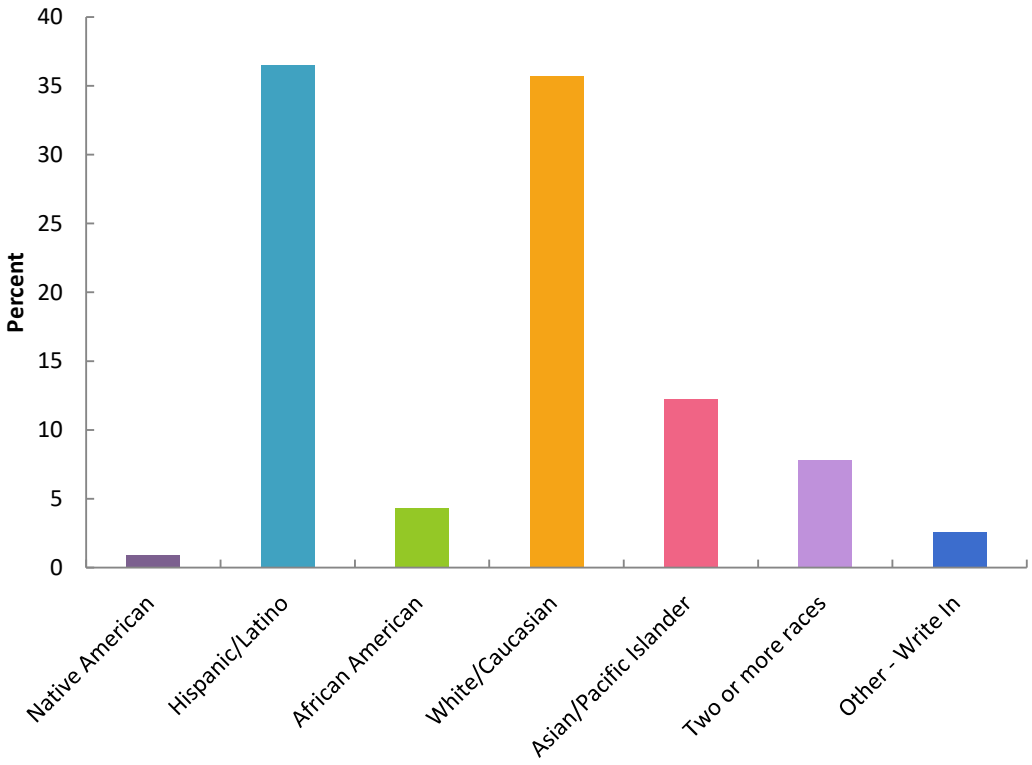
12.How do you feel about BRT as a part of the solution to mobility needs in Los Angeles County? (*Required)



Value	Percent	Count
I support more BRT corridors	88.8%	103
I do not support more BRT corridors	4.3%	5
I support more BRT corridors but have some concerns. Please describe:	6.9%	8

I support more BRT corridors but have some concerns. Please describe:	Count
Congestion during construction	1
Do it right and not on the cheap!!!!!!!!!!	1
Doesnt take away lanes	1
I understand street space is limited and I would not want BRT to be installed at the expense of existing or proposed bike lanes.	1
Indecisive because I haven't used the system yet.	1
Pasadena	1
more bus only lanes...	1
Totals	7

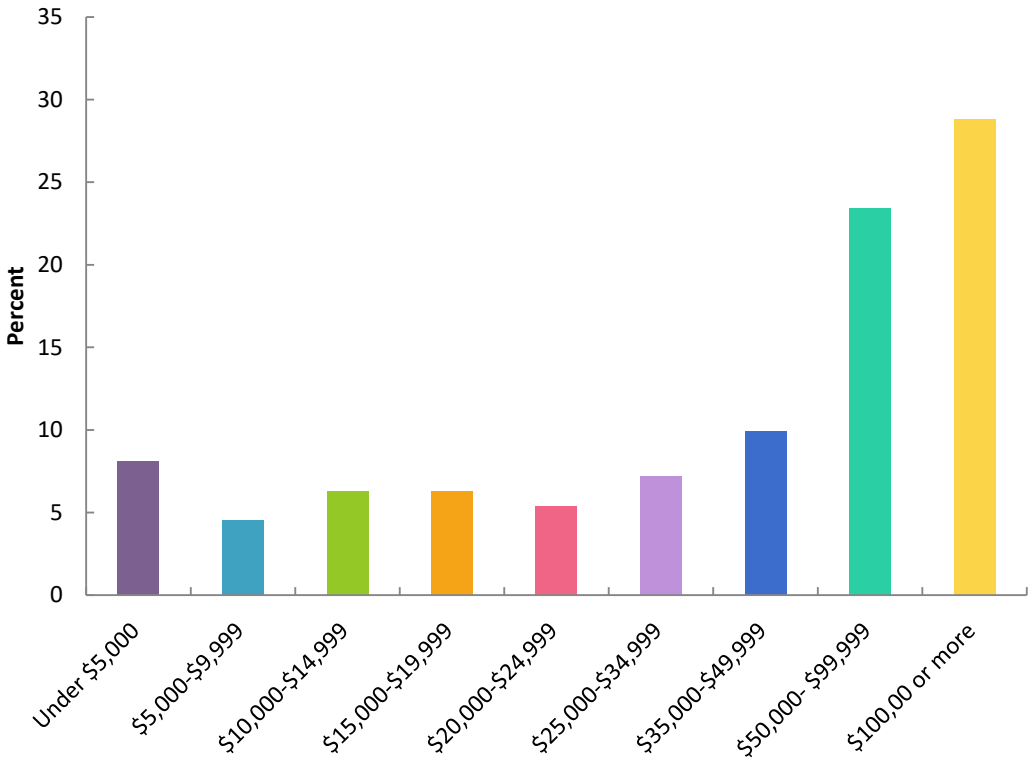
13.What is your ethnicity? Select one.



Value	Percent	Count
Native American	0.9%	1
Hispanic/Latino	36.5%	42
African American	4.3%	5
White/Caucasian	35.7%	41
Asian/Pacific Islander	12.2%	14
Two or more races	7.8%	9
Other - Write In	2.6%	3

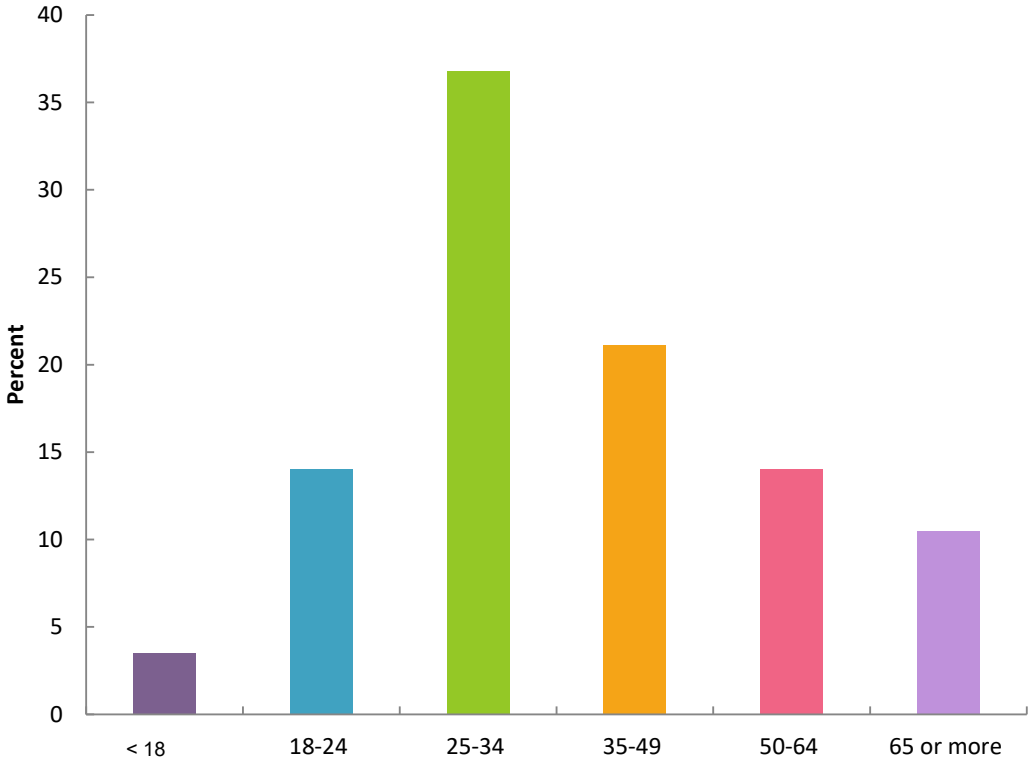
Other - Write In	Count
African	1
Mexican, chinese, white	1
Totals	2

14.What is your annual household income? Select one.



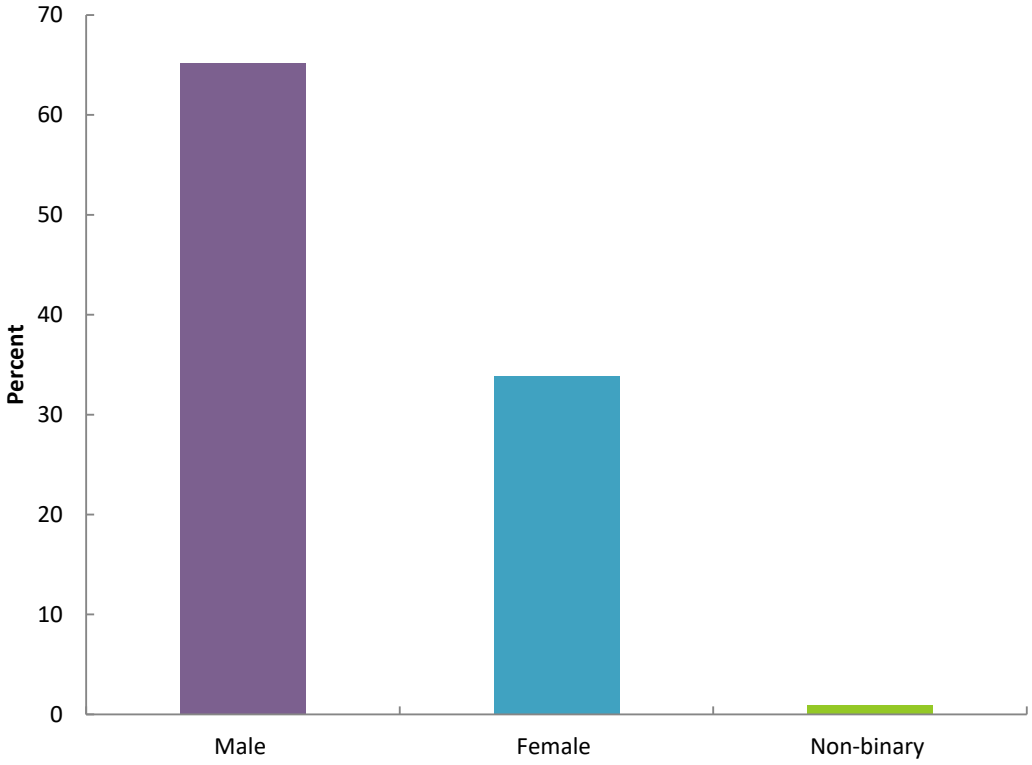
Value	Percent	Count
Under $5,000	8.1%	9
$5,000-$9,999	4.5%	5
$10,000-$14,999	6.3%	7
$15,000-$19,999	6.3%	7
$20,000-$24,999	5.4%	6
$25,000-$34,999	7.2%	8
$35,000-$49,999	9.9%	11
$50,000- $99,999	23.4%	26
$100,00 or more	28.8%	32

15.What is your age?



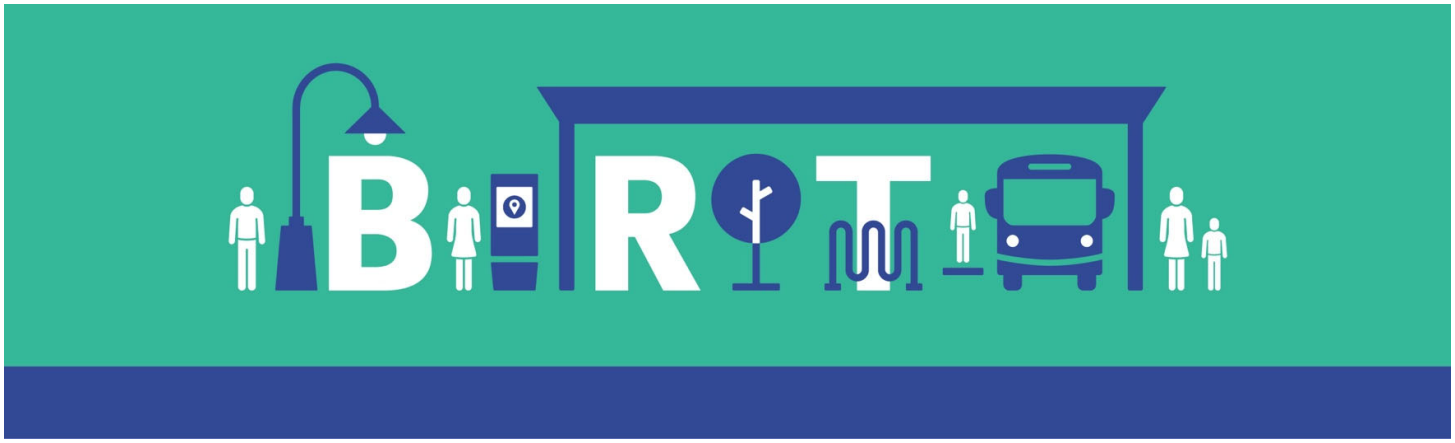
Value	Percent	Count
< 18	3.5%	4
18-24	14.0%	16
25-34	36.8%	42
35-49	21.1%	24
50-64	14.0%	16
65 or more	10.5%	12

16.What is your gender identity?



Value	Percent	Count
Male	65.2%	75
Female	33.9%	39
Non-binary	0.9%	1

Note: There are 8 English paper surveys.



Appendix C

Stakeholder Workshops:

Stakeholder List

Workshop Presentations

Workshop Summaries

Organization	Category	First Name	Last Name
Arroyo Verdugo Communities JPA	Government Agencies	Ann	Wilson
Central City of Los Angeles	Government Agencies	Stacy	Weisfeld
Central City of Los Angeles	Government Agencies	Michelle	Boehm
Gateway Cities Council of Governments	Government Agencies	Nancy	Pfeffer
Gateway Cities Council of Governments	Government Agencies	Stephanie	Cadena
Las Virgenes/Malibu Council of Governments	Government Agencies	Terry	Dipple
Las Virgenes/Malibu Council of Governments	Government Agencies	Elizabeth	Shavelson
North County Transportation Coalition	Government Agencies	Arthur	Sohikian
San Fernando Valley Council of Governments	Government Agencies	John	Bwarie
San Gabriel Valley Council of Governments	Government Agencies	Marisa	Creter
South Bay Cities Council of Governments	Government Agencies	Jacki	Bacharach
South Bay Cities Council of Governments	Government Agencies	David	Leger
Westside Cities Council of Governments	Government Agencies	Cecilia	Estolano
Westside Cities Council of Governments	Government Agencies	Winnie	Fong
AARP	Community Based Organization	Stephanie	Ramirez
Access Services	Transportation Services and Groups	Erick	Haack
Aging & Disability Transportation Network	Community Based Organization	Dina	Garcia
Angelinos Against Gridlock	Community Based Organization	David	Murphy
BizFed	Business Organizations	Jerard	Wright
Citizen's Advisory Council	Advisory Council	Darrell	Clarke
Climate Resolve	Community Based Organization	Bryn	Lindblad
Communities for a Better Environment	Community Based Organization	Darryl	Molina-Sarmiento
Communities for a Better Environment	Community Based Organization	Byron	Ramos-Gudiel
FAST	Transportation Services and Groups	Hilary	Norton
Investing in Place	Community Based Organization	Jessica	Meaney
LA County Bicycle Coalition	Community Based Organization	Eli	Akira Kaufman
LA Walks	Community Based Organization	John	Yi
Move LA	Transportation Services and Groups	Denny	Zane
Multicultural Communities for Mobility	Community Based Organization	Jill	Contreras
Sustainable Streets (Active Trans)	Community Based Organization	Ron	Durgin
Alliance for Community Empowerment (ACE) SFV focused	Community Based Organization	Michelle	Miranda
Alliance for Community Transit-LA	Transportation Services and Groups	Laura	Raymond
Best Start Metro LA	Community Based Organization	Brenda	Aguilera
Best Start Watts	Community Based Organization	Guadalupe	Zapata
Best Start Watts	Community Based Organization	Maria	Manzano
Best Start Wilmington	Community Based Organization	Irais	Colin
Cal State University System	Educational Institution	Carmen	Gapuchin
DayOne (SGV focused)	Community Based Organization	Catalina	Gonzalez
LA Chamber of Commerce	Business Organizations	Kendal	Asuncion
LA Chamber of Commerce	Business Organizations	Diana	Yedoyan
LA Community College District	Educational Institution	Maria	Iacobo
LAUSD	Educational Institution	Renee	Bell-Harbor
Pacoima Beautiful	Community Based Organization	Veronica	Padilla-Campos

SELA Collaborative	Community Based Organization	Wilma	Franco
SGV Economic Partnership	Business Organizations	Bill	Manis
SlateZ	Community Based Organization	Effie	Turnbull
Temple City Youth Committee	Community Based Organization	Peggy	Kuo
LA Forward	Community Based Organization	Alfonso	Directo
Valley Industry Commerce Association (VICA)	Business Organizations	Armando	Flores
Valley Industry Commerce Association (VICA)	Business Organizations	Stuart	Waldman
Watts Rising Collaborative	Community Based Organization	Wajeha	Bilal
LA County Supervisorial District 1	Elected Official Staff	Martin	Reyes
LA County Supervisorial District 1	Elected Officials	Hilda	Solis
LA County Supervisorial District 2	Elected Official Staff	David	Riccitiello
LA County Supervisorial District 2	Elected Officials	Mark	Ridley-Thomas
LA County Supervisorial District 3	Elected Official Staff	Nicole	Englund
LA County Supervisorial District 3	Elected Officials	Sheila	Kuhl
LA County Supervisorial District 4	Elected Official Staff	Young-Gi	Kim Harabedian
LA County Supervisorial District 4	Elected Officials	Janiche	Hahn
LA County Supervisorial District 5	Elected Official Staff	Dave	Perry
LA County Supervisorial District 5	Elected Officials	Kathryn	Barger

BRT Vision & Principles Study

Purpose of the Study

The Bus Rapid Transit (BRT) Vision & Principles Study is a comprehensive study that will establish the standard of a future Metro BRT network and serve as a pillar towards Metro's goal of creating a world class transportation system. This study will develop the overall vision, goals and objectives for BRT in LA County. It will define local BRT operational standards and design guidelines and identify new corridors that align with current and future needs and opportunities so that when funding is available, the County can strategically invest in the construction of innovative mobility options that will benefit the entire region.

The BRT survey will be open for responses through May 31, 2020.

Survey (English) Survey (Spanish)

Relationship to existing BRT service and active projects

This work will directly inform and outline service features for all BRT projects moving forward and will be integrated into existing efforts, to the extent possible. The Study will also tie into other transit improvements studies that are currently underway. The project team will coordinate to share data with programs and initiatives that have a direct impact on the study, including the NextGen Bus Plan, Long Range Transportation Plan and Mobility Matrices project. Metro currently has three projects in the early stages of development that are considering BRT as a transit option; Vermont, North Hollywood to Pasadena and North San Fernando Valley Transit Corridors.

BRT Technical Advisory Committee

A Technical Advisory Committee (TAC), comprised of Metro departments and staff from other transit providers and local cities, was formed at the outset of the project and has convened regularly since that time. The TAC has been an integral part of the technical process and provides a broad level of expertise, experience and input on all elements of the project.

Relationship to existing BRT service and active projects

This work will directly inform and outline service features for all BRT projects moving forward and will be integrated into existing efforts, to the extent possible. The Study will also tie into other transit improvements studies that are currently underway. The project team will coordinate to share data with programs and initiatives that have a direct impact on the study, including the NextGen Bus Plan, Long Range Transportation Plan and Mobility Matrices project. Metro currently has three projects in the early stages of development that are considering BRT as a transit option; Vermont, North Hollywood to Pasadena and North San Fernando Valley Transit Corridors.

BRT Technical Advisory Committee

A Technical Advisory Committee (TAC), comprised of Metro departments and staff from other transit providers and local cities, was formed at the outset of the project and has convened regularly since that time. The TAC has been an integral part of the technical process and provides a broad level of expertise, experience and input on all elements of the project.

Stakeholder Engagement

Metro is working to conduct targeted engagement with stakeholders across the county. Ongoing activities include:

- Stakeholder briefings/presentations
- Stakeholder workshop
- BRT Technical Advisory Committee input
- Participation in NextGen Bus Plan public workshops
- Countywide survey engagement and education (click to take the survey)

Goals and Objectives

- Develop local BRT standards and guidelines
- Identify and prioritize candidate BRT corridors
- Identify a network of future potential BRT corridors

Development of local BRT design guidelines and standards

In order to develop standards and guidelines, Metro reviewed key information from internal sources as well as international, national and peer agencies (ITDP, FTA, APTA, TRB, NBRTI) and organized BRT standards into a

BRT Technical Advisory Committee

A Technical Advisory Committee (TAC), comprised of Metro departments and staff from other transit providers and local cities, was formed at the outset of the project and has convened regularly since that time. The TAC has been an integral part of the technical process and provides a broad level of expertise, experience and input on all elements of the project.

Stakeholder Engagement

Metro is working to conduct targeted engagement with stakeholders across the county. Ongoing activities include:

- Stakeholder briefings/presentations
- Stakeholder workshop
- BRT Technical Advisory Committee input
- Participation in NextGen Bus Plan public workshops
- Countywide survey engagement and education (click to take the survey)

Goals and Objectives

- Develop local BRT standards and guidelines
- Identify and prioritize candidate BRT corridors
- Identify a network of future potential BRT corridors

Development of local BRT design guidelines and standards

In order to develop standards and guidelines, Metro reviewed key information from internal sources as well as international, national and peer agencies (ITDP, FTA, APTA, TRB, NBRTI) and organized BRT standards into a series of elements, such as dedicated running ways, stations, on-board amenities, branding, etc. Organization into these elements allowed for:

- cross comparison of national and international BRT standards
- consideration of what standards are most applicable to LA County
- refinement of standards specific to Los Angeles for each element

Metro opted for a combination of performance and prescriptive-based standards that together will outline the necessary elements to achieve a world-class mobility experience. Metro defines two levels of BRT: Full-BRT and BRT-Lite, which include minimum standards.

Approach to candidate corridor identification and selection

Stakeholder Engagement

Metro is working to conduct targeted engagement with stakeholders across the county. Ongoing activities include:

- Stakeholder briefings/presentations
- Stakeholder workshop
- BRT Technical Advisory Committee input
- Participation in NextGen Bus Plan public workshops
- Countywide survey engagement and education (click to take the survey)

Goals and Objectives

- Develop local BRT standards and guidelines
- Identify and prioritize candidate BRT corridors
- Identify a network of future potential BRT corridors

Development of local BRT design guidelines and standards

In order to develop standards and guidelines, Metro reviewed key information from internal sources as well as international, national and peer agencies (ITDP, FTA, APTA, TRB, NBRTI) and organized BRT standards into a series of elements, such as dedicated running ways, stations, on-board amenities, branding, etc. Organization into these elements allowed for:

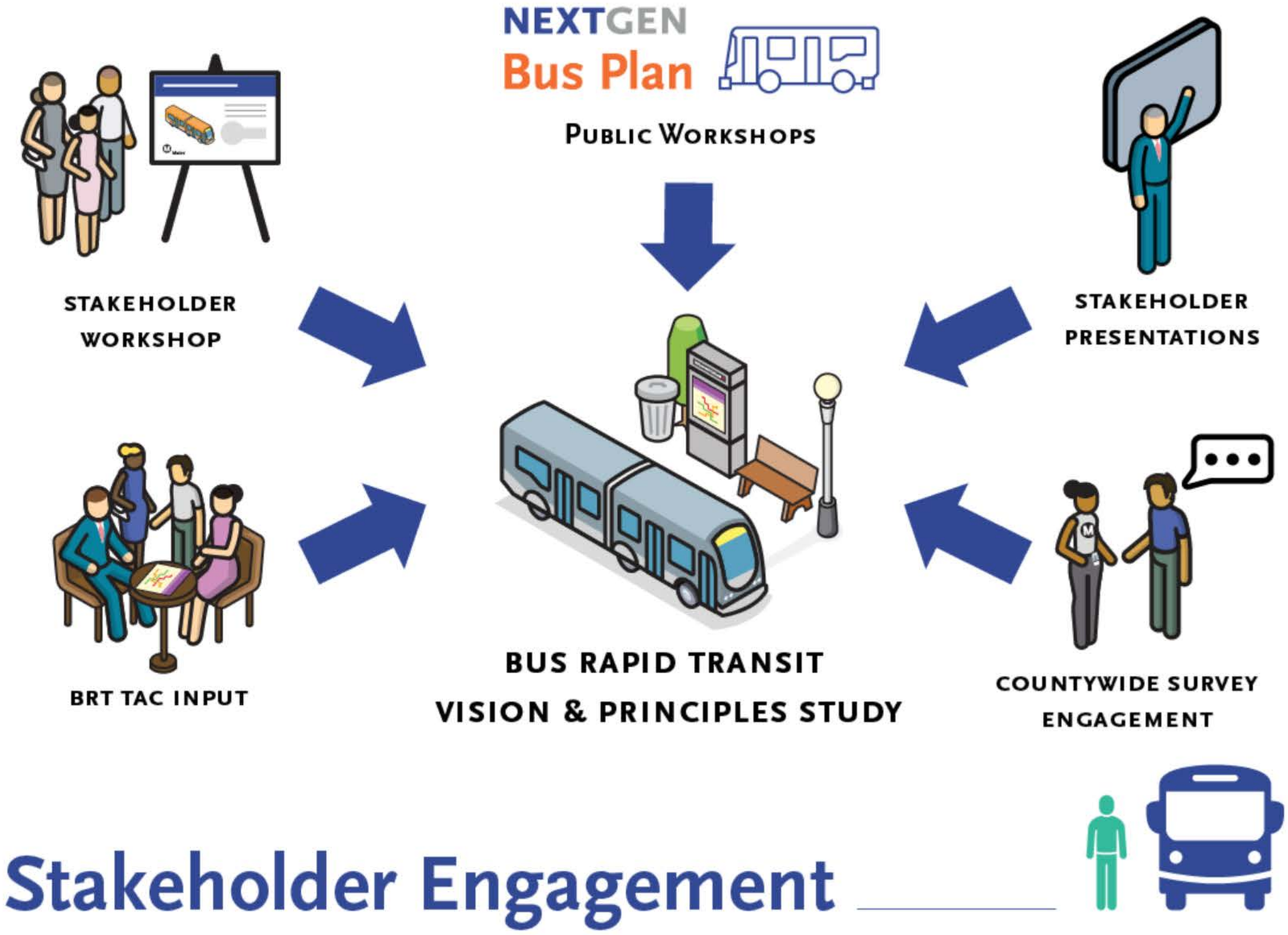
- cross comparison of national and international BRT standards
- consideration of what standards are most applicable to LA County
- refinement of standards specific to Los Angeles for each element

Metro opted for a combination of performance and prescriptive-based standards that together will outline the necessary elements to achieve a world-class mobility experience. Metro defines two levels of BRT: Full-BRT and BRT-Lite, which include minimum standards.

Approach to candidate corridor identification and selection

The corridor selection process incorporated industry-standard best practices for transportation planning best suited to the LA context. The intent behind the methodology is to integrate corridors previously studied by Metro with potential new corridors for consideration, evaluate them through a clear process and provide recommendations of new corridors for BRT service. Four methods were utilized to gather a broad list of potential corridors for BRT implementation. These included:

- corridors identified in recent planning studies and efforts



Goals and Objectives

- Develop local BRT standards and guidelines
- Identify and prioritize candidate BRT corridors
- Identify a network of future potential BRT corridors

Development of local BRT design guidelines and standards

In order to develop standards and guidelines, Metro reviewed key information from internal sources as well as international, national and peer agencies (ITDP, FTA, APTA, TRB, NBRTI) and organized BRT standards into a series of elements, such as dedicated running ways, stations, on-board amenities, branding, etc. Organization into these elements allowed for:

- cross comparison of national and international BRT standards
- consideration of what standards are most applicable to LA County
- refinement of standards specific to Los Angeles for each element

Metro opted for a combination of performance and prescriptive-based standards that together will outline the necessary elements to achieve a world-class mobility experience. Metro defines two levels of BRT: Full-BRT and BRT-Lite, which include minimum standards.

Approach to candidate corridor identification and selection

The corridor selection process incorporated industry-standard best practices for transportation planning best suited to the LA context. The intent behind the methodology is to integrate corridors previously studied by Metro with potential new corridors for consideration, evaluate them through a clear process and provide recommendations of new corridors for BRT service. Four methods were utilized to gather a broad list of potential corridors for BRT implementation. These included:

- corridors identified in recent planning studies and efforts
- subregional and stakeholder priorities identified through Measure M
- direct input from the project TAC
- use of a parametric design tool to identify corridors not previously discovered

Development of local BRT design guidelines and standards

In order to develop standards and guidelines, Metro reviewed key information from internal sources as well as international, national and peer agencies (ITDP, FTA, APTA, TRB, NBRTI) and organized BRT standards into a series of elements, such as dedicated running ways, stations, on-board amenities, branding, etc. Organization into these elements allowed for:

- cross comparison of national and international BRT standards
- consideration of what standards are most applicable to LA County
- refinement of standards specific to Los Angeles for each element

Metro opted for a combination of performance and prescriptive-based standards that together will outline the necessary elements to achieve a world-class mobility experience. Metro defines two levels of BRT: Full-BRT and BRT-Lite, which include minimum standards.

Approach to candidate corridor identification and selection

The corridor selection process incorporated industry-standard best practices for transportation planning best suited to the LA context. The intent behind the methodology is to integrate corridors previously studied by Metro with potential new corridors for consideration, evaluate them through a clear process and provide recommendations of new corridors for BRT service. Four methods were utilized to gather a broad list of potential corridors for BRT implementation. These included:

- corridors identified in recent planning studies and efforts
- subregional and stakeholder priorities identified through Measure M
- direct input from the project TAC
- use of a parametric design tool to identify corridors not previously discovered

Analyzed BRT Corridors

After compiling all identified potential corridors, the technical team conducted several levels of screening and analysis and coordinated with Metro's NextGen Bus Study in order to rank and evaluate each corridor for feasibility. The top 30 highest performing corridors were carried forward for additional screening. During the second round of evaluation, the team will gather additional input from the public and key stakeholders and add in

PERFORMANCE STANDARDS

Dwell Time


Speed


On-Time Performance/Reliability


Headway/Frequency

PRESCRIPTIVE STANDARDS

All-Door Boarding

Signal Priority (TSP)


Dedicated Lanes

Branding


Station Amenities

BRT Standards

Approach to candidate corridor identification and selection

The corridor selection process incorporated industry-standard best practices for transportation planning best suited to the LA context. The intent behind the methodology is to integrate corridors previously studied by Metro with potential new corridors for consideration, evaluate them through a clear process and provide recommendations of new corridors for BRT service. Four methods were utilized to gather a broad list of potential corridors for BRT implementation. These included:

- corridors identified in recent planning studies and efforts
- subregional and stakeholder priorities identified through Measure M
- direct input from the project TAC
- use of a parametric design tool to identify corridors not previously discovered

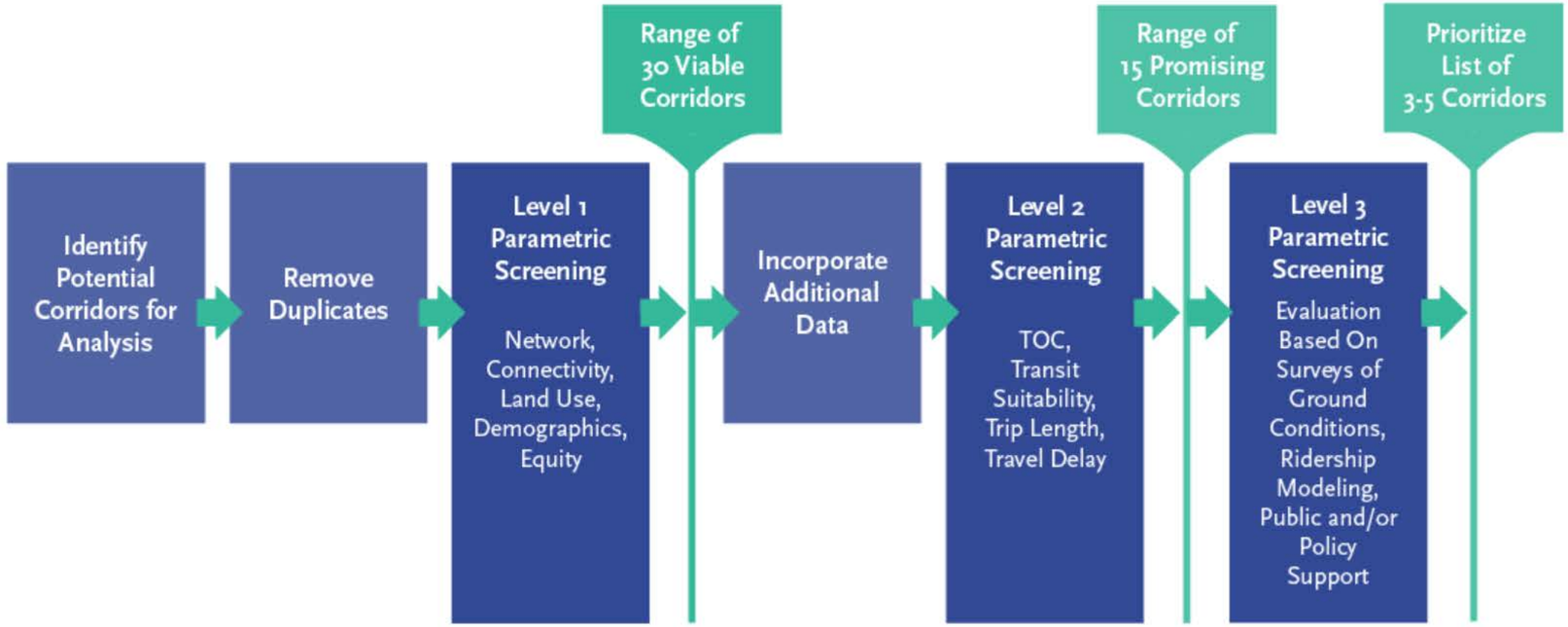
Analyzed BRT Corridors

After compiling all identified potential corridors, the technical team conducted several levels of screening and analysis and coordinated with Metro's NextGen Bus Study in order to rank and evaluate each corridor for feasibility. The top 30 highest performing corridors were carried forward for additional screening. During the second round of evaluation, the team will gather additional input from the public and key stakeholders and add in additional parameters for assessment in order to arrive at the 15 top performing corridors. Following this, a final assessment will shorten the list further, identifying the 3-5 priority corridors that will be recommended for BRT implementation.

Identification of a future network of potential BRT corridors

How and where should Metro build LA's future BRT network?

Use our online interactive mapping tool to view analyzed corridors and provide your input on the future BRT network.



Corridor Analysis Methodology

Analyzed BRT Corridors

After compiling all identified potential corridors, the technical team conducted several levels of screening and analysis and coordinated with Metro's NextGen Bus Study in order to rank and evaluate each corridor for feasibility. The top 30 highest performing corridors were carried forward for additional screening. During the second round of evaluation, the team will gather additional input from the public and key stakeholders and add in additional parameters for assessment in order to arrive at the 15 top performing corridors. Following this, a final assessment will shorten the list further, identifying the 3-5 priority corridors that will be recommended for BRT implementation.

Identification of a future network of potential BRT corridors

How and where should Metro build LA's future BRT network?

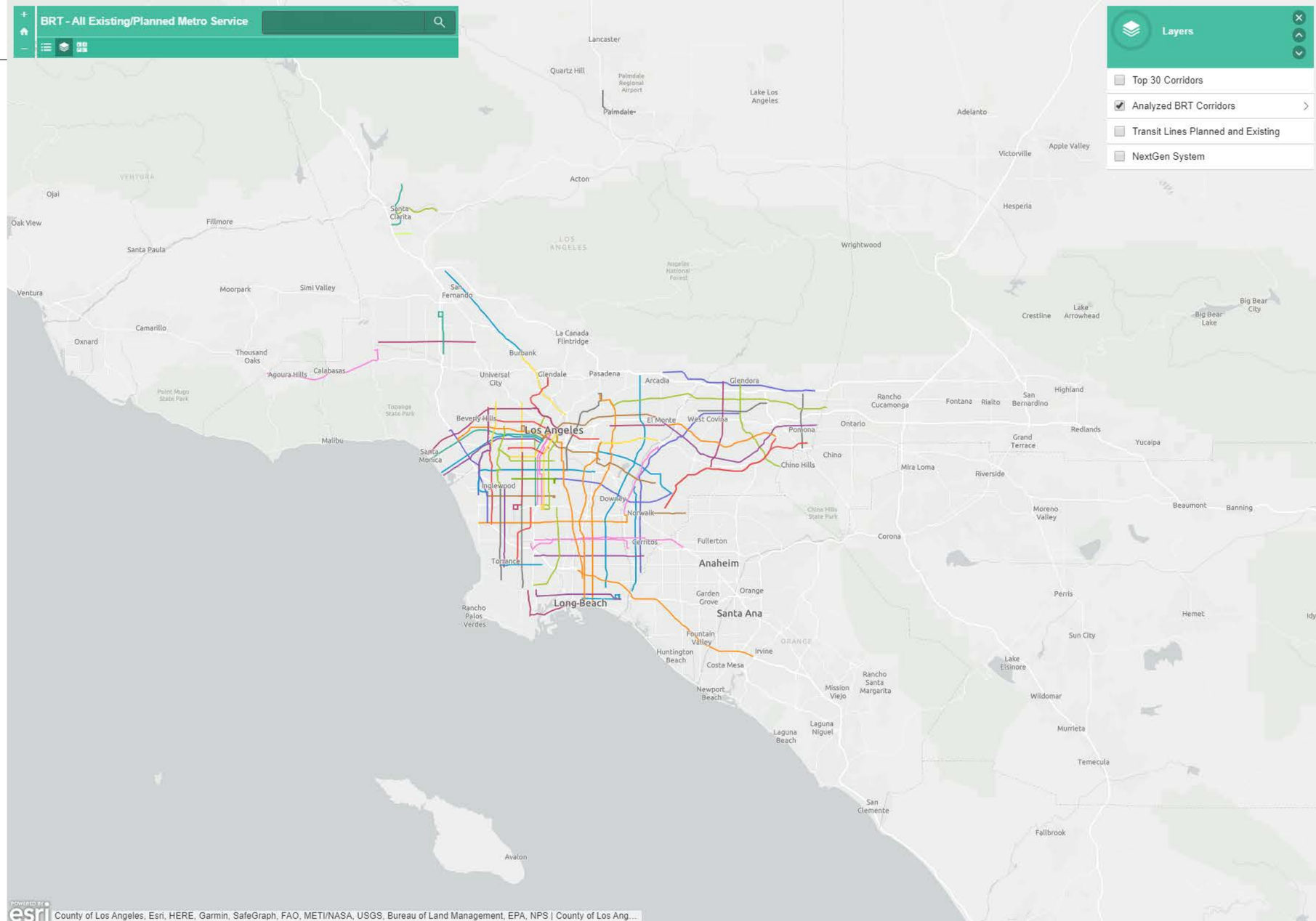
Use our online interactive mapping tool to view analyzed corridors and provide your input on the future BRT network.

Next Steps

- Finalize standards & guidelines
- Refine priority corridor selections
- Identify a network of future potential BRT corridors
- Recommendations of the study are targeted to be presented to the Metro Board in Fall 2020

More Information

- Survey (English)
- Survey (Spanish)
- Vermont Transit Corridor
- North Hollywood to Pasadena Transit Corridor
- North San Fernando Valley Transit Corridor
- NextGen Website



Identification of a future network of potential BRT corridors

How and where should Metro build LA's future BRT network?

Use our online interactive mapping tool to view analyzed corridors and provide your input on the future BRT network.

Next Steps

- Finalize standards & guidelines
- Refine priority corridor selections
- Identify a network of future potential BRT corridors
- Recommendations of the study are targeted to be presented to the Metro Board in Fall 2020

More Information

- Survey (English)
- Survey (Spanish)
- Vermont Transit Corridor
- North Hollywood to Pasadena Transit Corridor
- North San Fernando Valley Transit Corridor
- NextGen Website

Identification of a future network of potential BRT corridors

How and where should Metro build LA's future BRT network?

Use our online interactive mapping tool to view analyzed corridors and provide your input on the future BRT network.

Next Steps

- Finalize standards & guidelines
- Refine priority corridor selections
- Identify a network of future potential BRT corridors
- Recommendations of the study are targeted to be presented to the Metro Board in Fall 2020

More Information

- Survey (English)
- Survey (Spanish)
- Vermont Transit Corridor
- North Hollywood to Pasadena Transit Corridor
- North San Fernando Valley Transit Corridor
- NextGen Website

Identification of a future network of potential BRT corridors

How and where should Metro build LA's future BRT network?

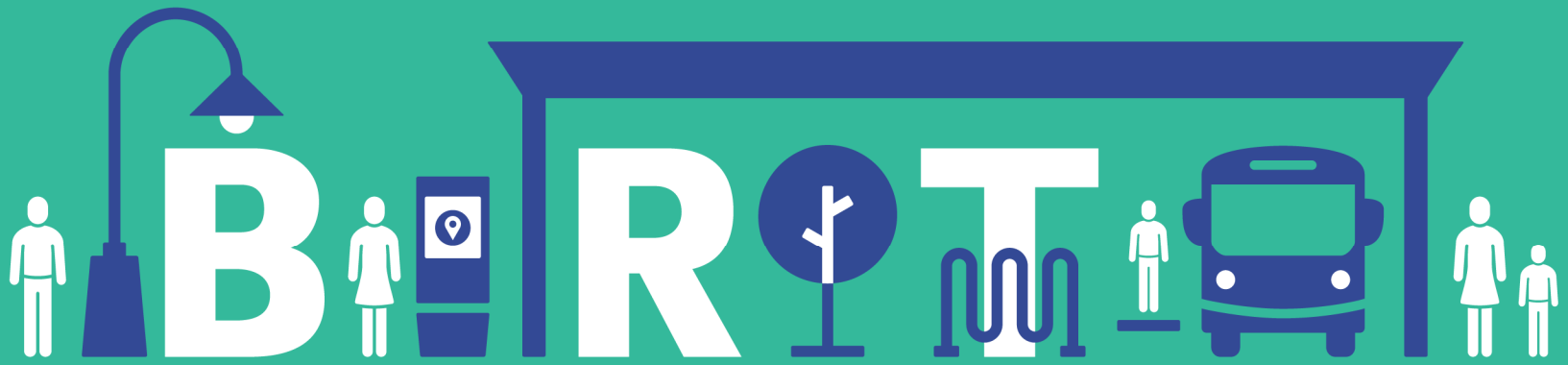
Use our online interactive mapping tool to view analyzed corridors and provide your input on the future BRT network.

Next Steps

- Finalize standards & guidelines
- Refine priority corridor selections
- Identify a network of future potential BRT corridors
- Recommendations of the study are targeted to be presented to the Metro Board in Fall 2020

More Information

- Survey (English)
- Survey (Spanish)
- Vermont Transit Corridor
- North Hollywood to Pasadena Transit Corridor
- North San Fernando Valley Transit Corridor
- NextGen Website



visioning BRT

BUS RAPID TRANSIT STUDY

Key Stakeholder Workshop

Wednesday May 20, 2020

Metro

Agenda

visioning BRT
BUS RAPID TRANSIT STUDY

BRT - The Convenient Choice Connecting Customers and Communities

- Study Overview
- Recap of Comments
- Corridor Analysis Methodology
- Top 15 Corridors
- Future BRT Network Overview
- Stakeholder and Public Engagement
- Next Steps

Metro

BRT Vision & Principles Study Overview

- **Study Purpose**
  - Define BRT
  - Provide the foundation for the assignment of Measure M BRT program funds
  - Support Measure M BRT projects
- **Study Outcomes**
  - BRT standards
  - Design criteria
  - Identify and prioritize BRT corridors
  - Future BRT network

Metro

Stakeholder Workshop – What We Heard

Connectivity is Fundamental

- BRT routes should connect to major transit hubs and bus/rail lines

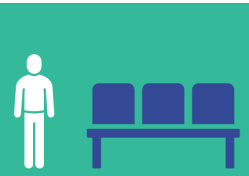
Coordinate with Municipal Operators and Cities

- Collaborate with municipal operators to avoid service inefficiencies
- Facilitate community development opportunities, including affordable housing

Operational and Design Details Matter

- Opportunity to update standards for support systems onboard buses and at stations—provides for future network efficiency
- BRT stops and stations should increase the efficiency of boarding/alighting

Stakeholder Workshop – What We Heard



Public Acceptance Continues to be a Challenge

- BRT currently has a negative connotation that should be corrected

Leverage Metro Policies

- BRT criteria should be tied to Metro Transit Oriented Communities (TOC) outcomes

Future BRT Network

- Eighteen new corridors or supplements to existing corridors

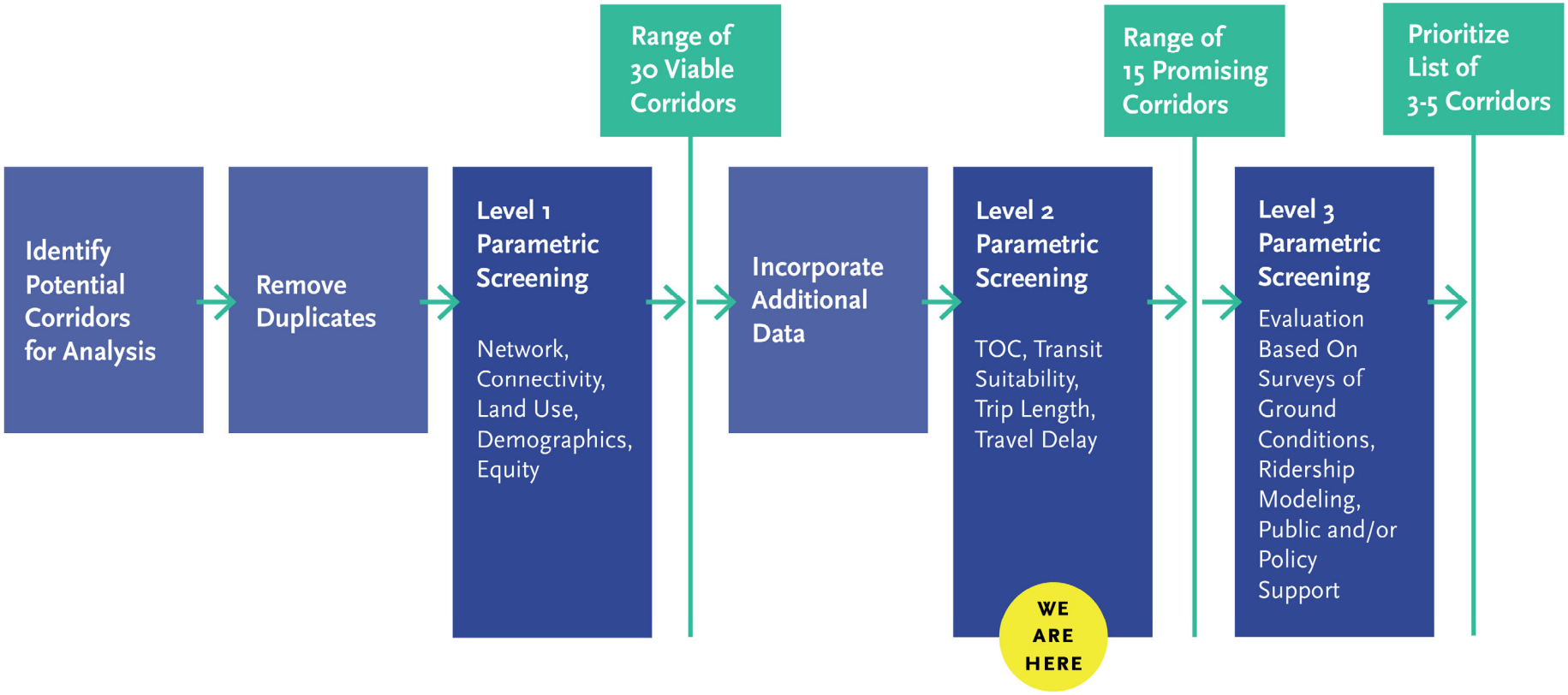
Metro

Open Discussion

Questions or Comments?

Metro

Corridor Analysis Methodology

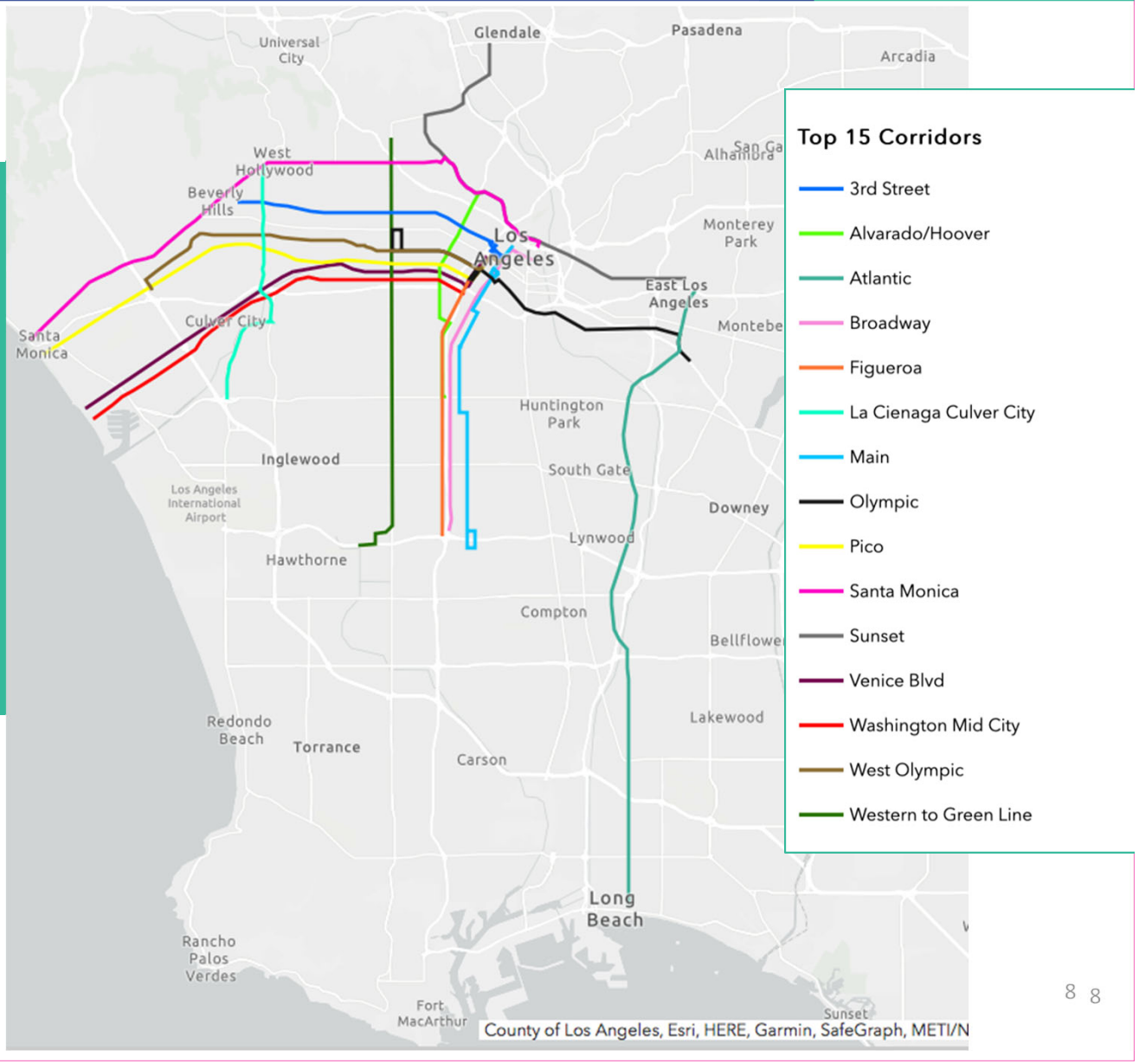


Metro

Top 15 Corridors

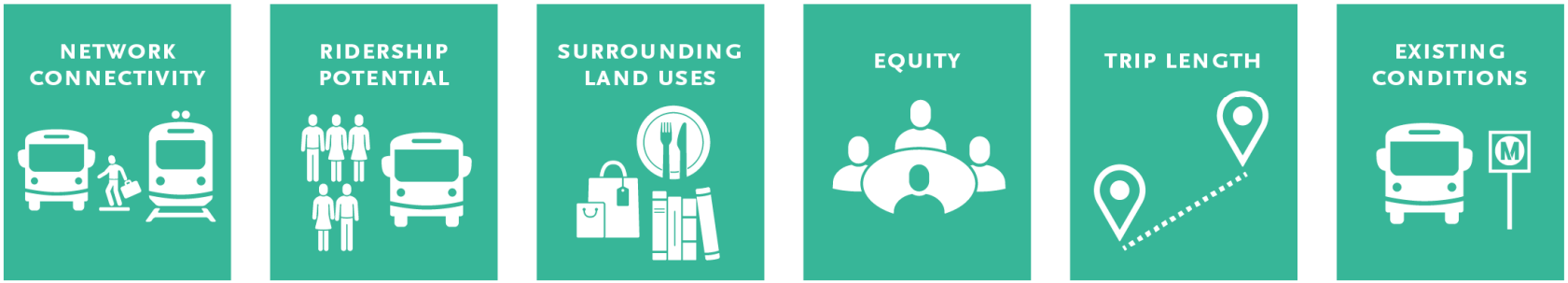
15 Potential Corridors

[Top 15 Potential BRT Corridors]



Future BRT Network

Build upon strong candidate corridors identified in a multi-step screening process that used the following criteria:



Utilize a gap analysis that:

> Considers existing and planned rail/BRT network

> Identifies gaps in coverage

> Connects future BRT corridors to one another and the Metro rail network

> Leverages corridors identified and screened through the project study

Metro

Open Discussion

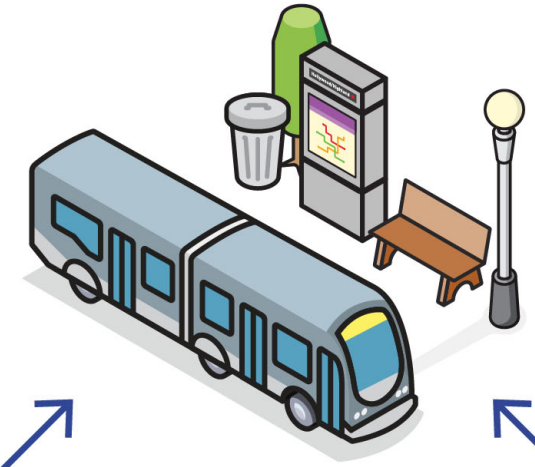
Questions or Comments?

Metro

Public and Stakeholder Input

BUS RAPID TRANSIT VISION & PRINCIPLES STUDY

STAKEHOLDER WORKSHOPS

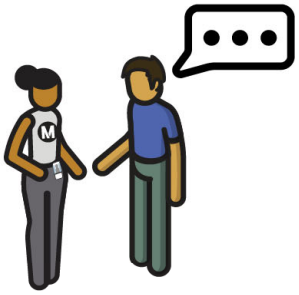


STAKEHOLDER PRESENTATIONS

BRT TAC INPUT

NEXTGEN Bus Plan

PUBLIC WORKSHOPS



COUNTYWIDE SURVEY ENGAGEMENT

Survey Results

GENERAL OVERVIEW

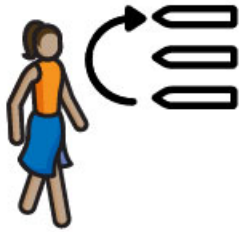
Over 60% of respondants are already familiar with BRT service, and more than 54% currently use Metro's BRT Service

More than 65% of those surveyed use public transit 3 or more days a week, with over 79% using Metro Bus and Rail services for that travel.

More than 91% of respondents would support more BRT corridors as part of the solution to mobility needs in LA County

TOP 5 PRIORITIES FOR BRT FEATURES & AMENITIES

- Frequency
- Dedicated bus lanes
- Reliability
- Real-time information
- Emergency phones & security cameras



Metro

Stakeholder Input – Next Steps

BRT Survey

- Push to your membership
- Survey closes May 30, 2020

Map Comment Tool

- Record your comments on Top 15 Potential BRT Corridors
- Comment Tool closes May 30, 2020

Stakeholder Workshop

- Summer 2020
- Final 3 to 5 Select BRT Corridors
- Future BRT Network

Metro

Demonstration of Map Comment Tool

Interactive Tool Demonstration for Review & Comment on 15 Corridors

Top 15 Potential BRT Corridors

Metro

Open Discussion

Questions or Comments?

Metro

Contact Us

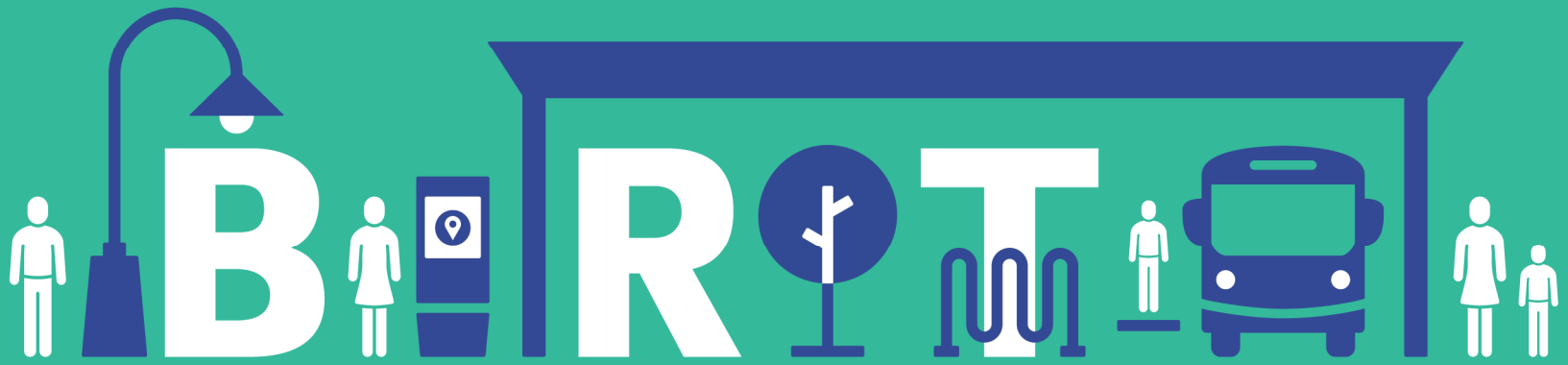
visioning BRT
BUS RAPID TRANSIT STUDY

Thank you!

Lauren Cencic
Project Manager
CencicL@Metro.Net

Paul Backstrom
Deputy Project Manager
BackstromP@Metro.Net

Metro



visioning BRT

BUS RAPID TRANSIT STUDY

Key Stakeholder Workshop

Tuesday September 1, 2020

Metro

Agenda

visioning BRT
BUS RAPID TRANSIT STUDY

BRT - The Convenient Choice Connecting Customers and Communities

- Study Overview and Purpose
- Recap of Key Stakeholder Comments and Input to Date
- Stakeholder and Public Engagement
- Development of BRT Standards & Design Guidelines
- Corridor Analysis Methodology
- Corridor Prioritization Process
- Future Unfunded Network
- Next Steps

Metro

BRT Vision & Principles Study Overview

- **Study Purpose**
  - Define BRT
  - Provide the foundation for the assignment of Measure M BRT program funds
  - Support Measure M BRT projects
- **Study Outcomes**
  - BRT standards
  - Design criteria
  - Identify and prioritize BRT corridors
  - Future BRT network

Metro

Stakeholder Workshops– What We Heard

Connectivity is Fundamental

- BRT routes should connect to major transit hubs and bus/rail lines

Coordinate with Municipal Operators and Cities

- Collaborate with municipal operators to avoid service inefficiencies
- Facilitate community development opportunities, including affordable housing
- Consider ‘complete streets’ studies and other initiatives or plans currently underway that could compliment or provide opportunities for this Study

Metro

Stakeholder Workshops– What We Heard

Public Acceptance Continues to be a Challenge

- BRT currently has a negative connotation that should be corrected

Leverage Metro Policies

- BRT criteria should be tied to Metro Transit Oriented Communities (TOC) outcomes

Operational and Design Details Matter

- Opportunity to update standards for support systems onboard buses and at stations—provides for future network efficiency
- BRT stops and stations should increase the efficiency of boarding/alighting

Metro

Summary of Outreach

Survey Engagement

- Distributed in-person and online through digital and extended outreach methods
  - 526 total surveys completed
  - 27 comment cards submitted

Public Meetings

- Tabling at 33 NextGen public meetings

Stakeholder Workshops and Presentations

- 40+ presentations and workshops with key organizations and stakeholders have been held
- 11 TAC meetings

Story Map Site Traffic

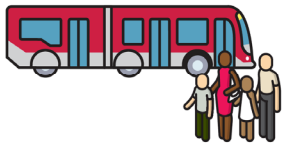
- 5,100+ views since launch

Metro

Survey Highlights

GENERAL OVERVIEW

Over **88%** of respondants are already **familiar with BRT service**, and more than **56%** currently use Metro's BRT Service



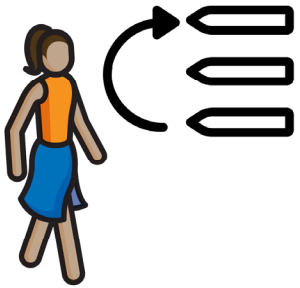
More than **58%** of those surveyed use public transit **3 or more days a week**, with over **80%** using Metro Bus and Rail services for that travel.

More than **97%** of respondents would **support more BRT corridors** as part of the solution to mobility needs in LA County

Segment 1 included a specific reach for **low-income**, **age group 50+**, **Asian and African American populations**; Segment 2 included an additional target of **women** across the county

TOP 5 PRIORITIES FOR BRT FEATURES & AMENITIES

- Frequency
- Dedicated bus lanes
- Reliability
- Real-time information
- Faster travel times (origin to destination)



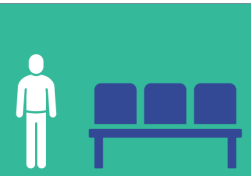
Metro

Open Discussion

Questions or Comments?

Metro

BRT Standards



Full BRT and BRT lite

- Accommodate the complex geographical and political constraints of LA County

BRT standards

- Use both performance and prescriptive standards
- TAC discussion on thresholds for each standard

Metro

BRT Standards

- Dwell Time
- Speed
- On-Time Performance / Reliability
- Headway
- All-Door Boarding
- Intersection Priority (TSP)
- Dedicated Lanes
- Branding
- Station Amenities

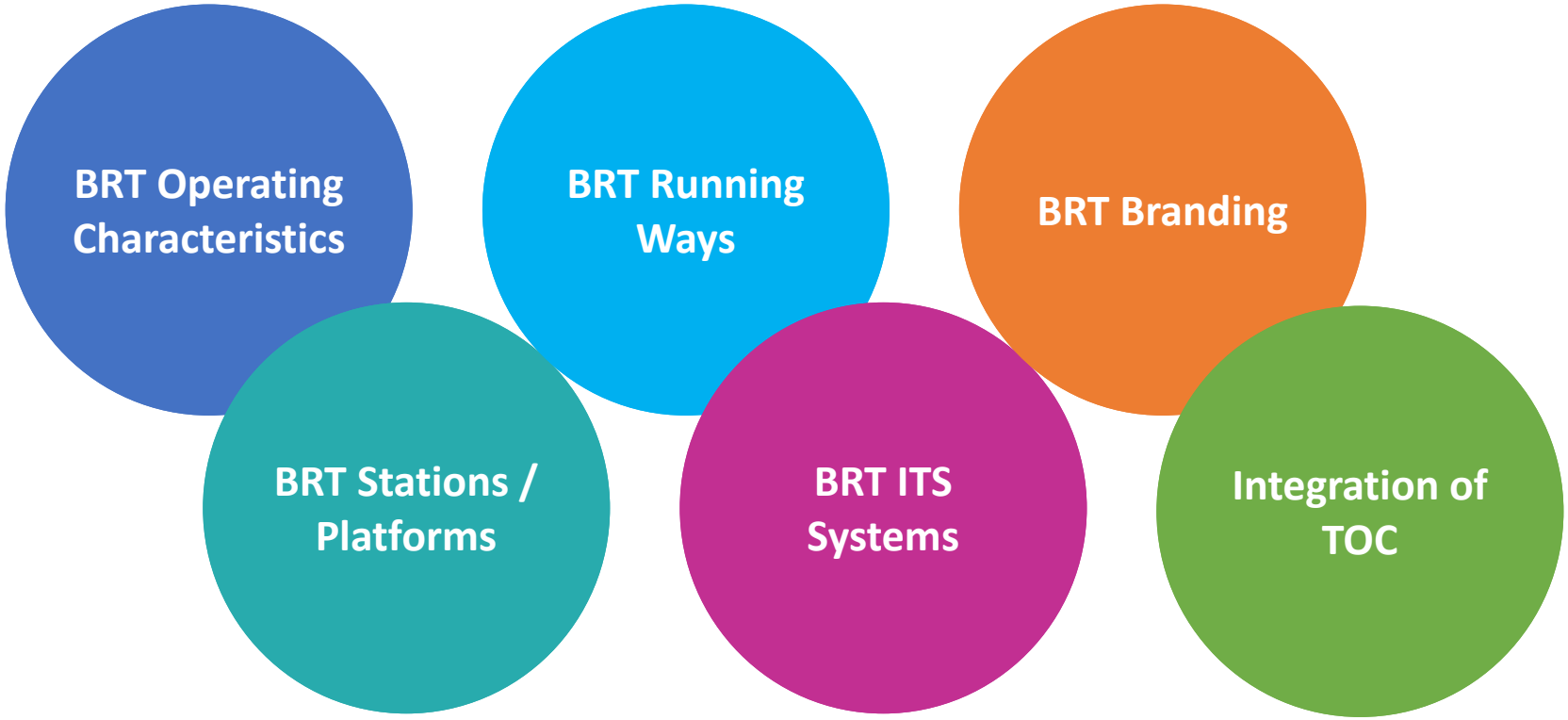
Metro

BRT Elements of Design

visioning BRT
BUS RAPID TRANSIT STUDY

Purpose:

Design guidelines are recommendations intended to provide clear instructions to designers and developers on how to adopt specific principles, such as intuitiveness, learnability, efficiency, and consistency.



Metro

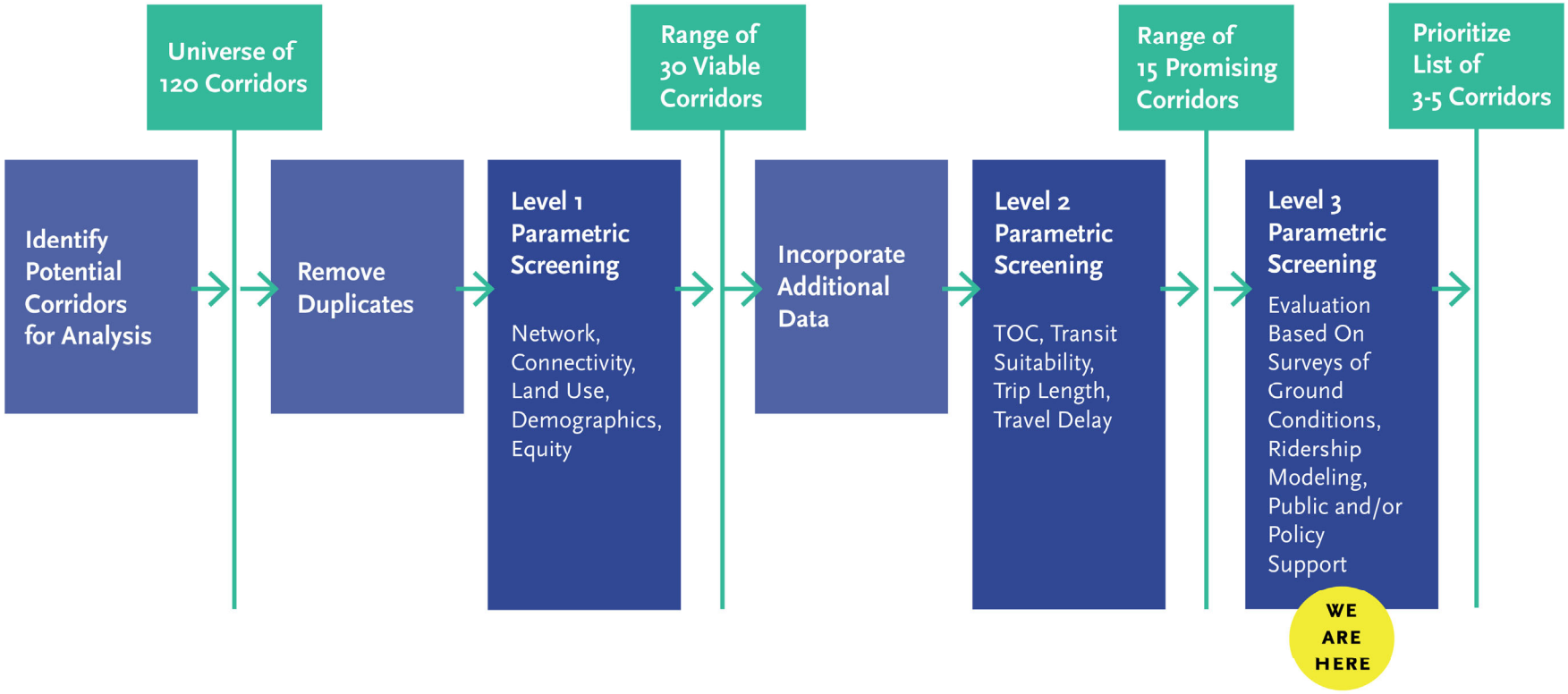
BRT Stations

Open Discussion

Questions or Comments?

Metro

Corridor Prioritization Methodology



Metro

Analysis From 15 to 7 Corridors

Highest Ranked 7 Corridors

- West Olympic
- Venice
- La Cienega
- Western
- Sunset
- Broadway
- Atlantic

Corridors Not in the Highest Ranked 7

- Santa Monica
- 3rd Street
- Olympic
- Pico
- Washington
- Alvarado/Hoover
- Figueroa
- Main

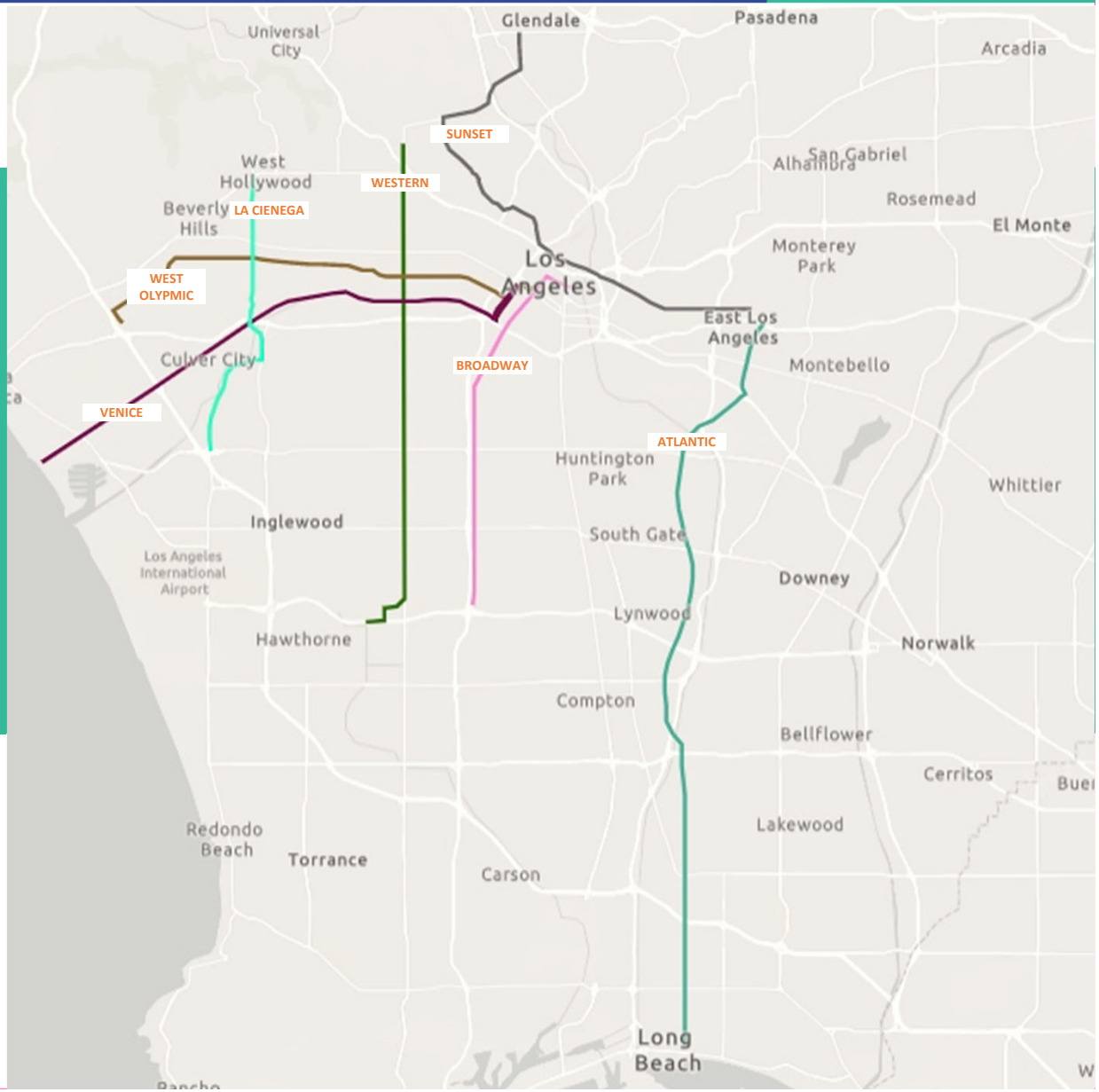
Metro

Highest Ranked 7 Corridors

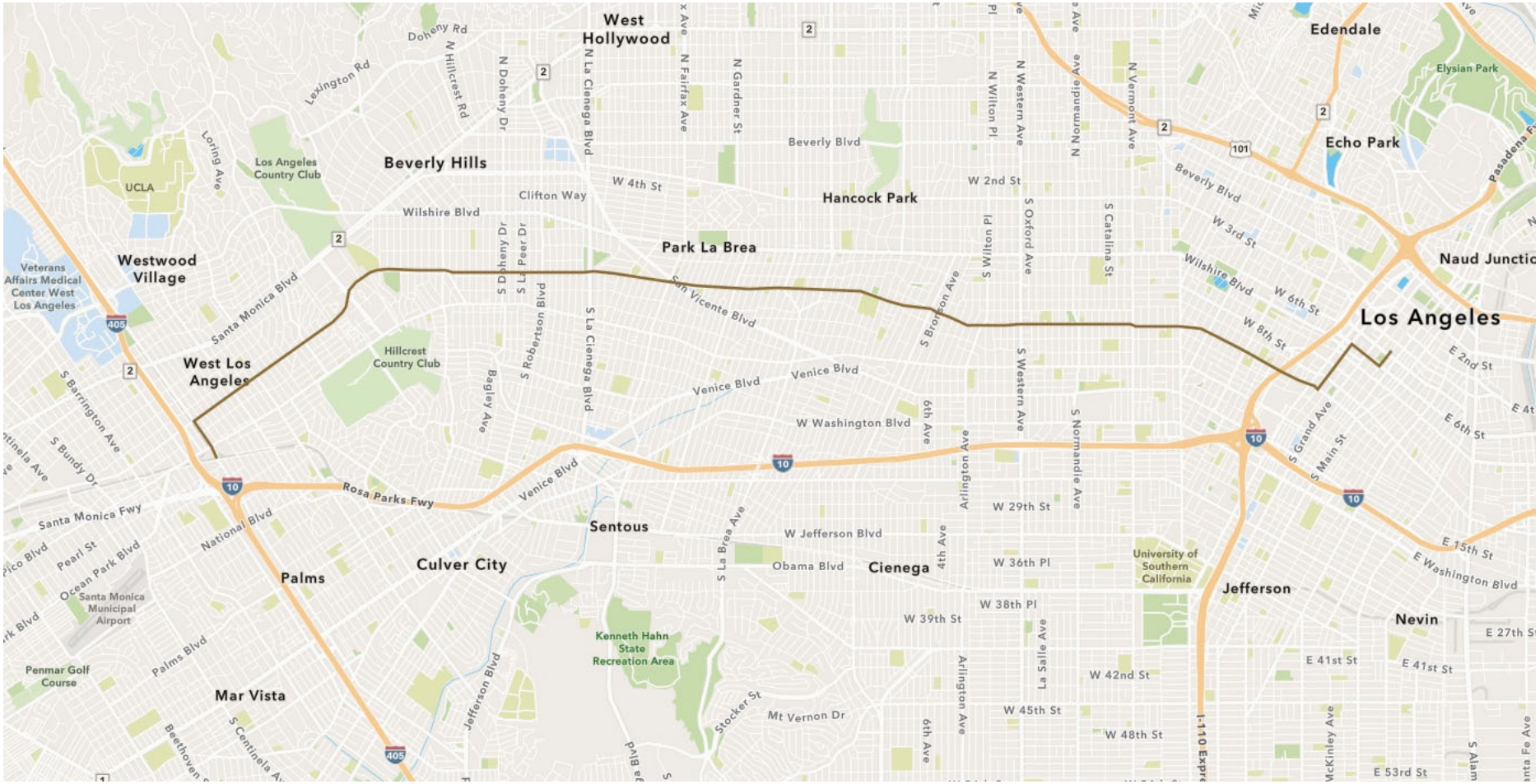
7 Potential Corridors

[7 Potential BRT Corridors Interactive Map]

Metro



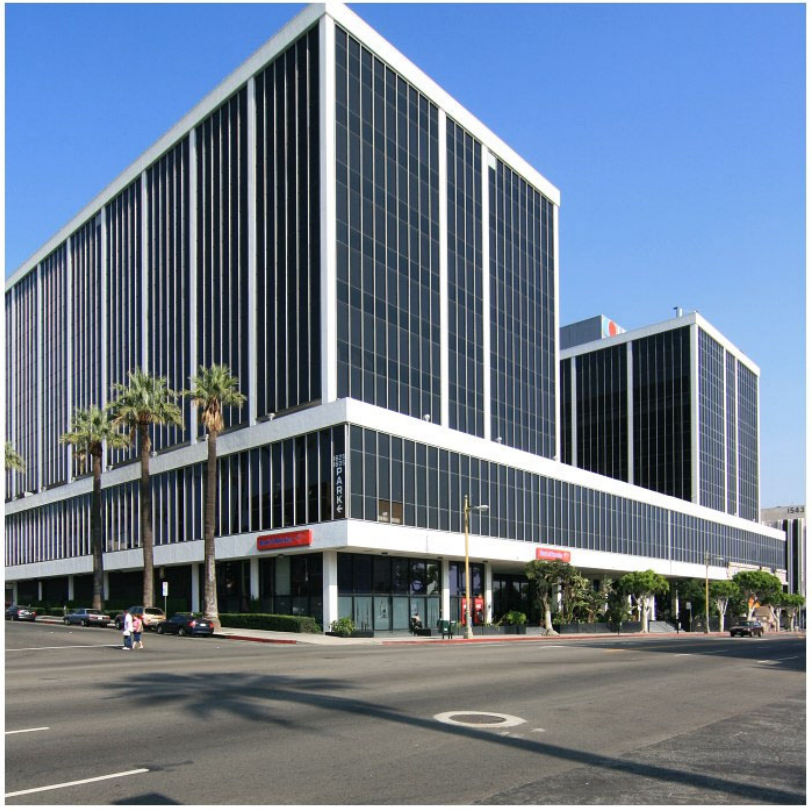
West Olympic



Metro

West Olympic

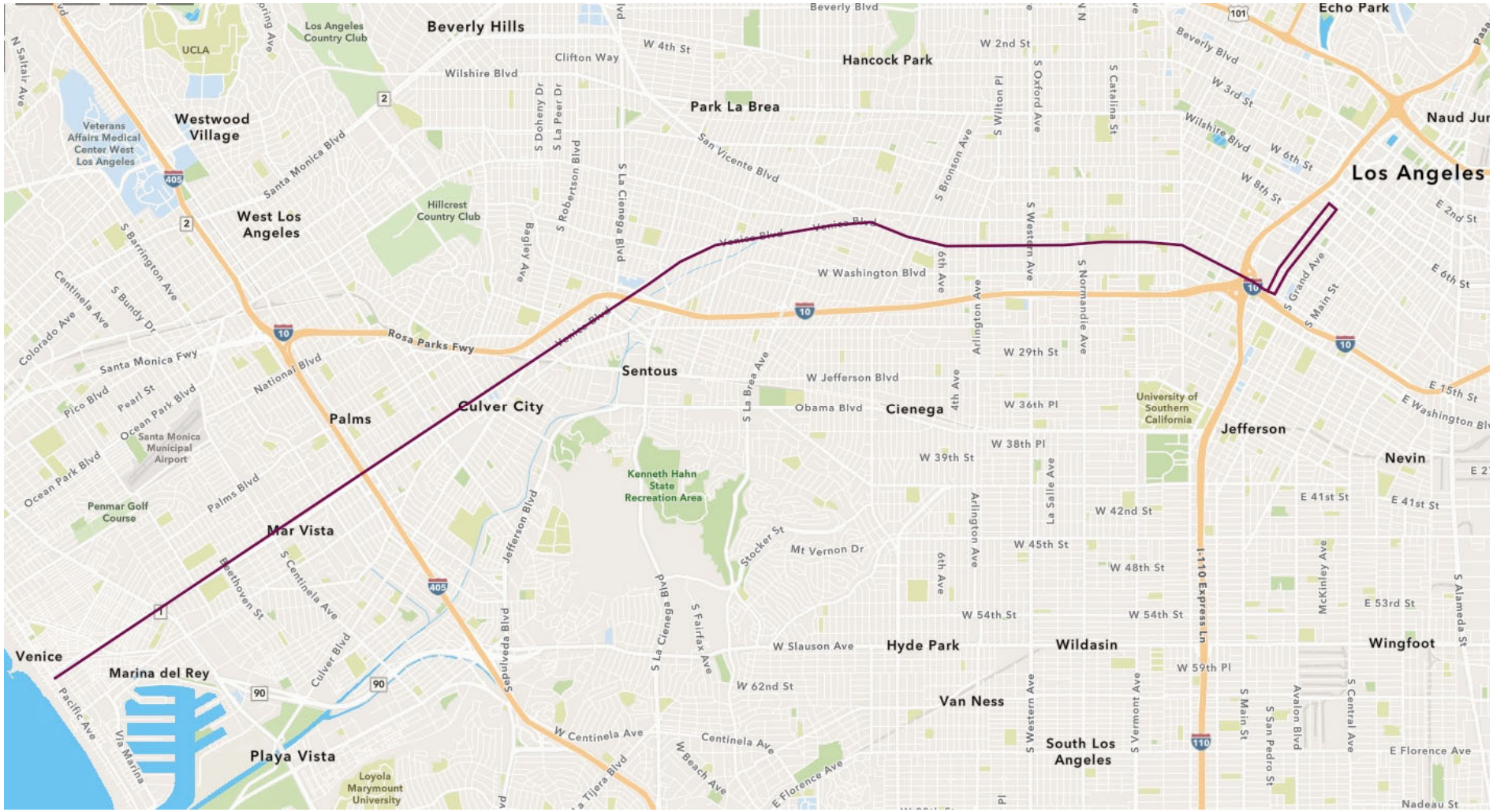
- Very high network connectivity
- Very high ridership
- High opportunity to build BRT-friendly infrastructure and realize travel time savings
- Parallel to and ½ mile from the Purple Line extension
- Potential to extend the corridor further west via Pico



Metro

Venice

visioning BRT
BUS RAPID TRANSIT STUDY



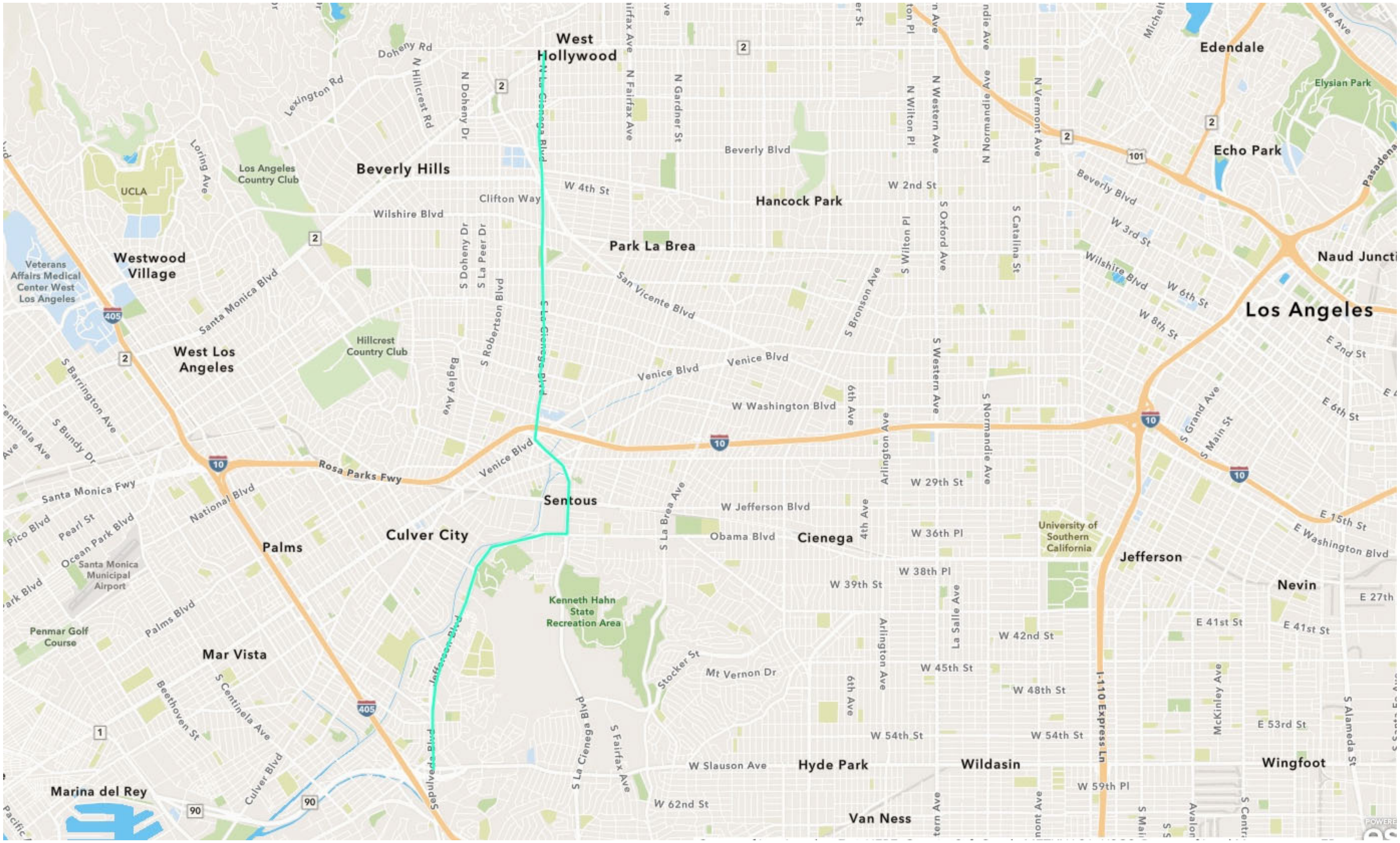
Metro

Venice

- Very high network connectivity
- Very high ridership
- High opportunity to build BRT-friendly infrastructure and realize travel time savings
- Pedestrian-friendly and street-oriented land uses
- Transit supportive policies including City of LA Community Plans and Culver City
- Strong transit-supportive policies along corridor
- Neighborhood sensitivity related to the Great Street Initiative

Metro

La Cienega

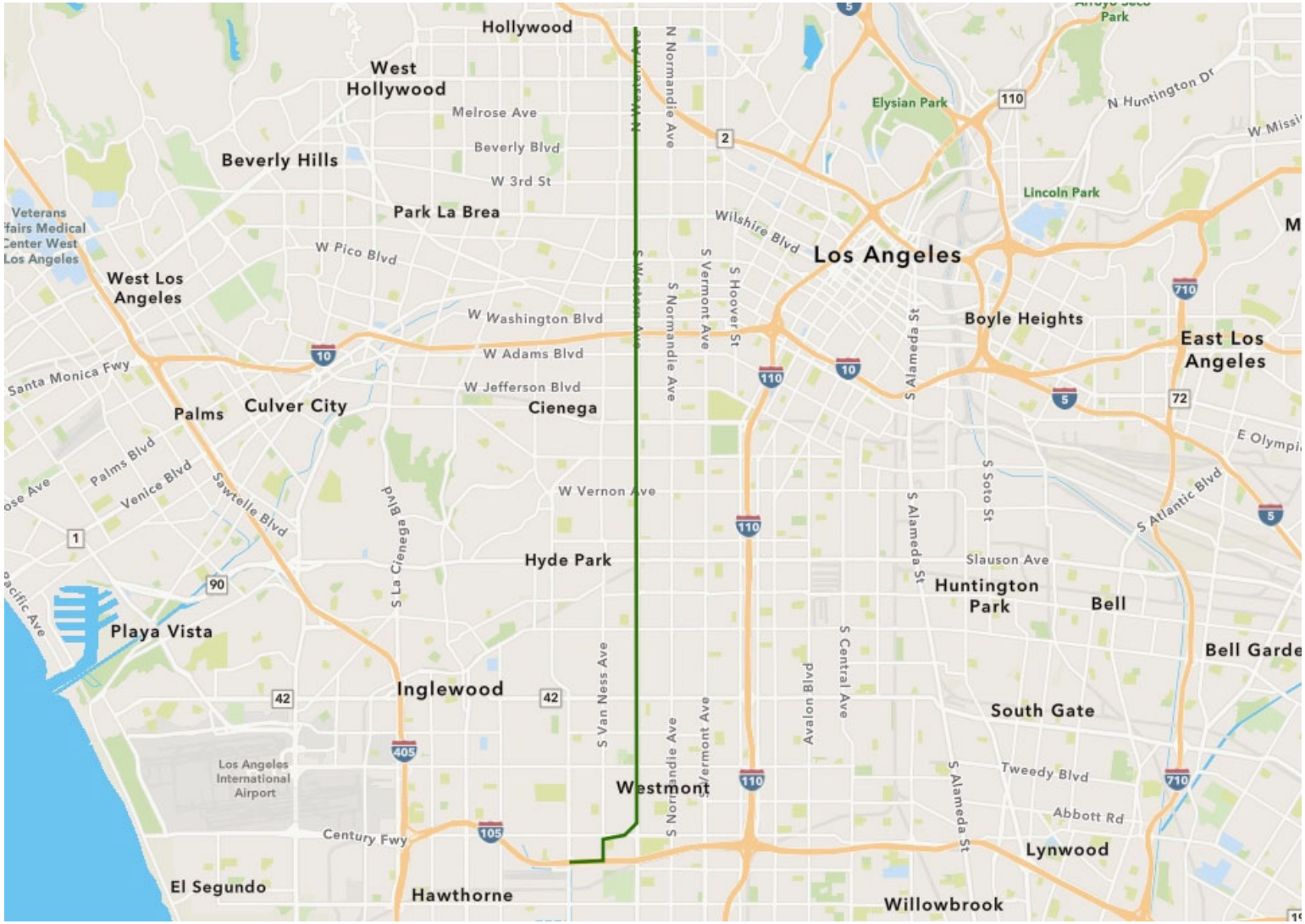

West Hollywood
Edendale
Elysian Park
Echo Park
Beverly Hills
Los Angeles Country Club
UCLA
Beverly Blvd
Hancock Park
W 4th St
Clifton Way
Wilshire Blvd
W 2nd St
Park La Brea
Westwood Village
Veterans Affairs Medical Center West Los Angeles
Naud Juncti
Los Angeles
San Vicente Blvd
Santa Monica Blvd
Hillcrest Country Club
West Los Angeles
Venice Blvd
W Washington Blvd
Rosa Parks Fwy
Santa Monica Fwy
Sentous
W 29th St
W Jefferson Blvd
National Blvd
Culver City
Palms
Obama Blvd
Cienega
W 36th Pl
University of Southern California
Jefferson
W 38th Pl
W 39th St
Santa Monica Municipal Airport
Nevin
Kenneth Hahn State Recreation Area
E 41st St
W 42nd St
Penmar Golf Course
Palms Blvd
Mar Vista
Mt Vernon Dr
W 45th St
W 48th St
W 54th St
E 53rd St
W Slauson Ave
Hyde Park
Wildasin
Wingfoot
Marina del Rey
W 62nd St
W 59th Pl
Van Ness
Lexington Rd
Doheny Rd
N Doheny Dr
N Fairfax Ave
N Gardner St
N Wilton Pl
N Western Ave
N Normandie Ave
N Vermont Ave
S Doheny Dr
S La Peer Dr
S Robertson Blvd
S Bronson Ave
S Oxford Ave
S Catalina St
S Western Ave
S Normandie Ave
S La Brea Ave
Arlington Ave
La Salle Ave
Jefferson Blvd
S La Cienega Blvd
S Fairfax Ave
Stocker St
I-110 Express Ln
McKinley Ave
S Alameda St

La Cienega

- Provides high-capacity north-south network coverage on the Westside
- Transit supportive policies including City of LA Community Plans and Culver City
- Interest from Culver City and Westside Cities COG
- Moderate opportunity to build BRT-friendly infrastructure and realize travel time savings
- May overlap with future Crenshaw North project
- Low network connectivity
- Low ridership
- Low potential equity benefit

Metro

Western



Metro

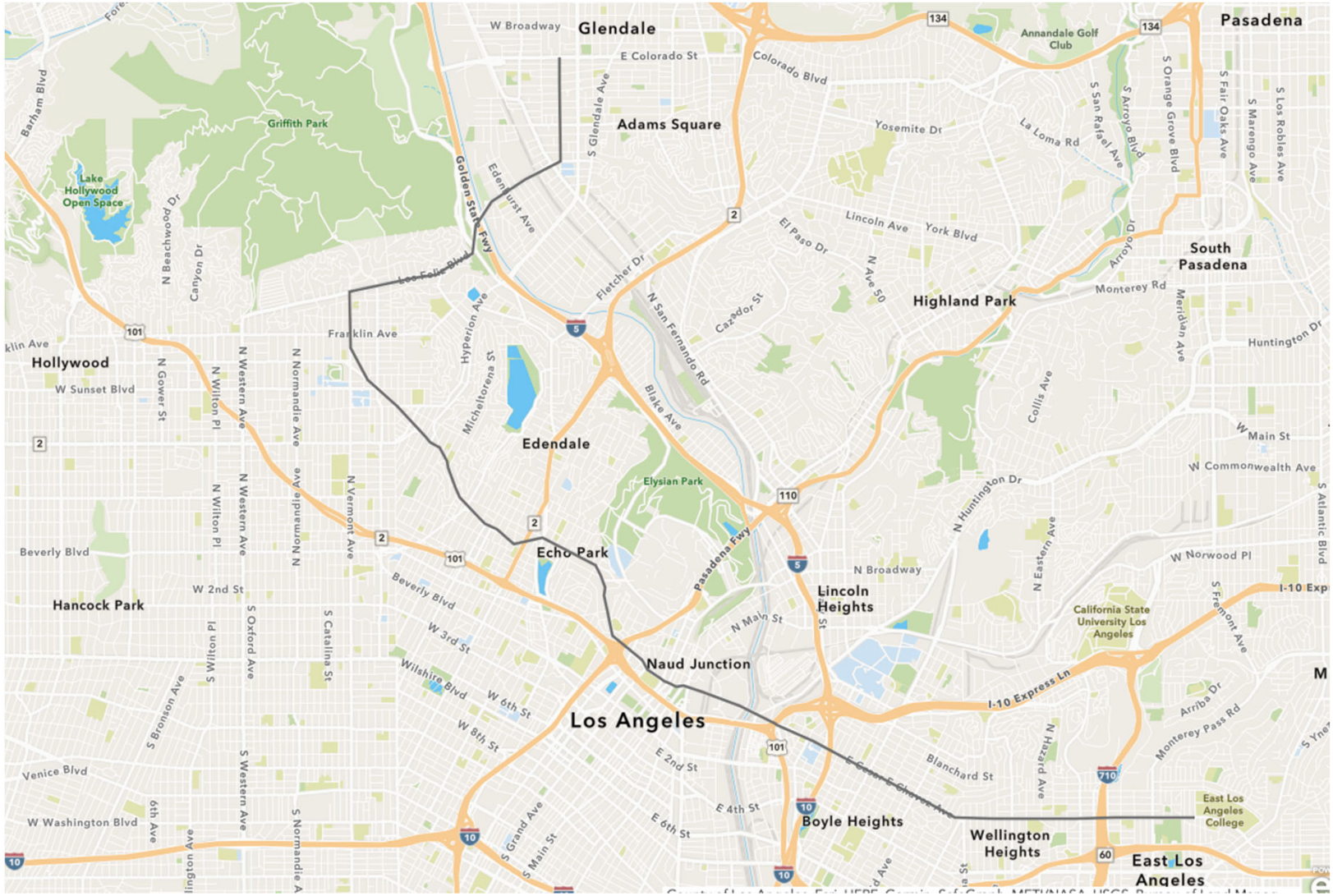
Western

visioning BRT
BUS RAPID TRANSIT STUDY

- Very high equity benefit
- Connects to 4 existing rail lines; moderate network connectivity for other services
- Currently Metro's 5th highest ridership corridor with 28,000 average weekday riders
- Good mix of land uses and several TOC-supportive areas along corridor
- Runs through 3 City of LA Community Plan areas which feature or are being updated to feature TOC and transit-supportive policies
- The City of Hawthorne and the unincorporated West Athens-Westmont community also has TOC-supportive policies in place
- High-priority corridor per LADOT
- Limited opportunity to build BRT-friendly infrastructure and realize travel time savings

Metro

Cesar Chavez/Sunset



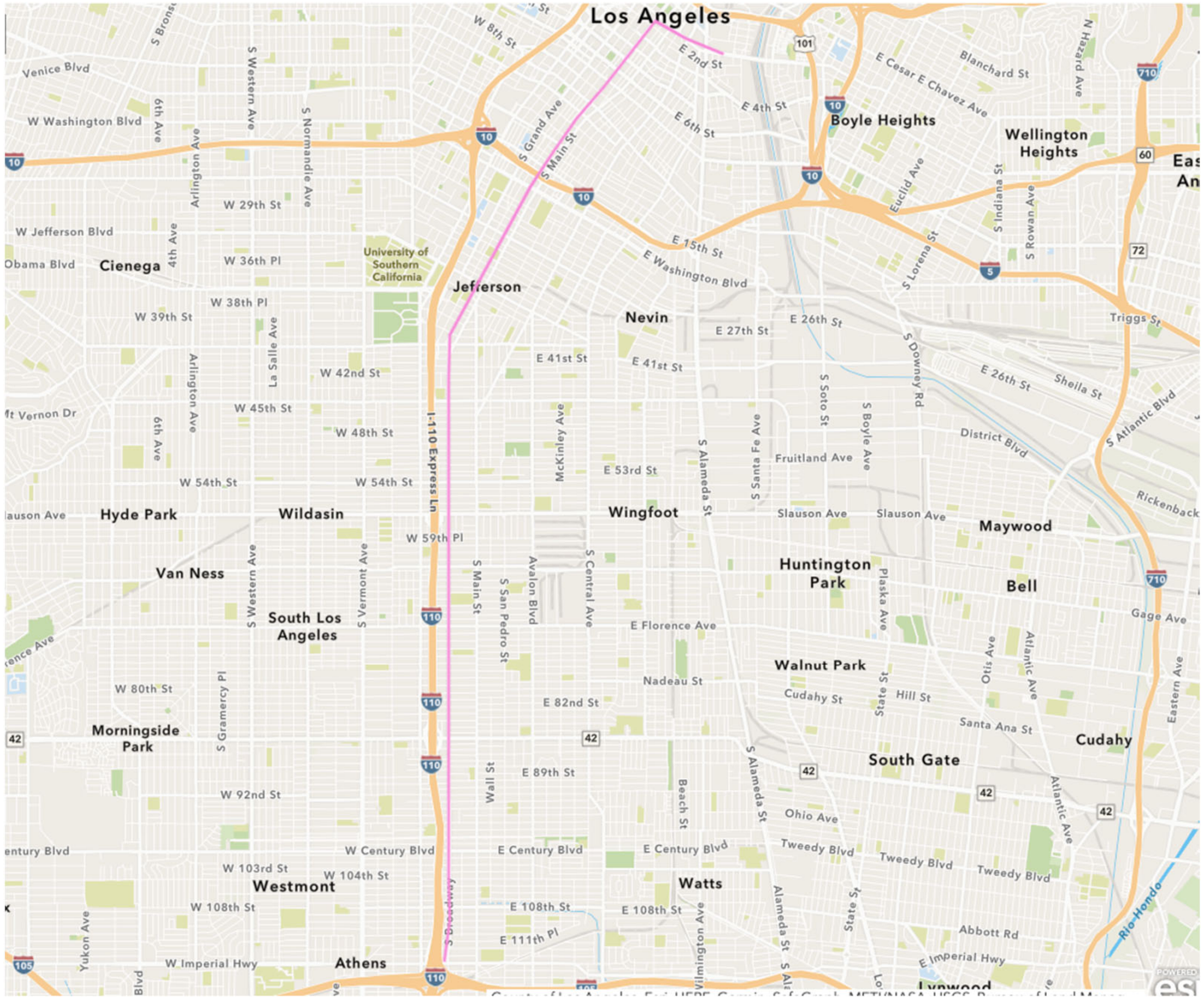
Metro

Cesar Chavez/Sunset

- Very high network connectivity
- Connects downtown Los Angeles with the San Fernando Valley
- Runs through 6 City of LA Community Plan areas which feature or are being updated to feature TOC and transit-supportive policies
- Moderate ridership
- Moderate opportunity to build BRT-friendly infrastructure and realize travel time savings

Metro

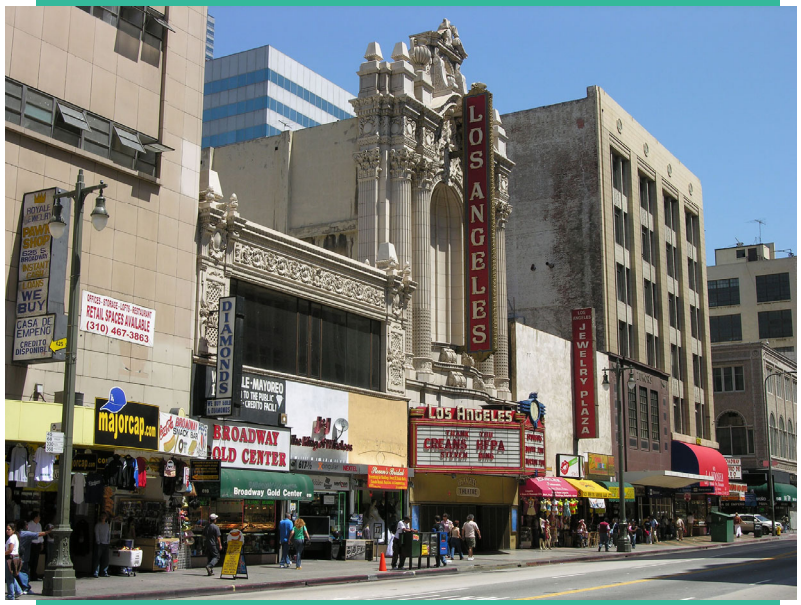
Broadway



Metro

Broadway

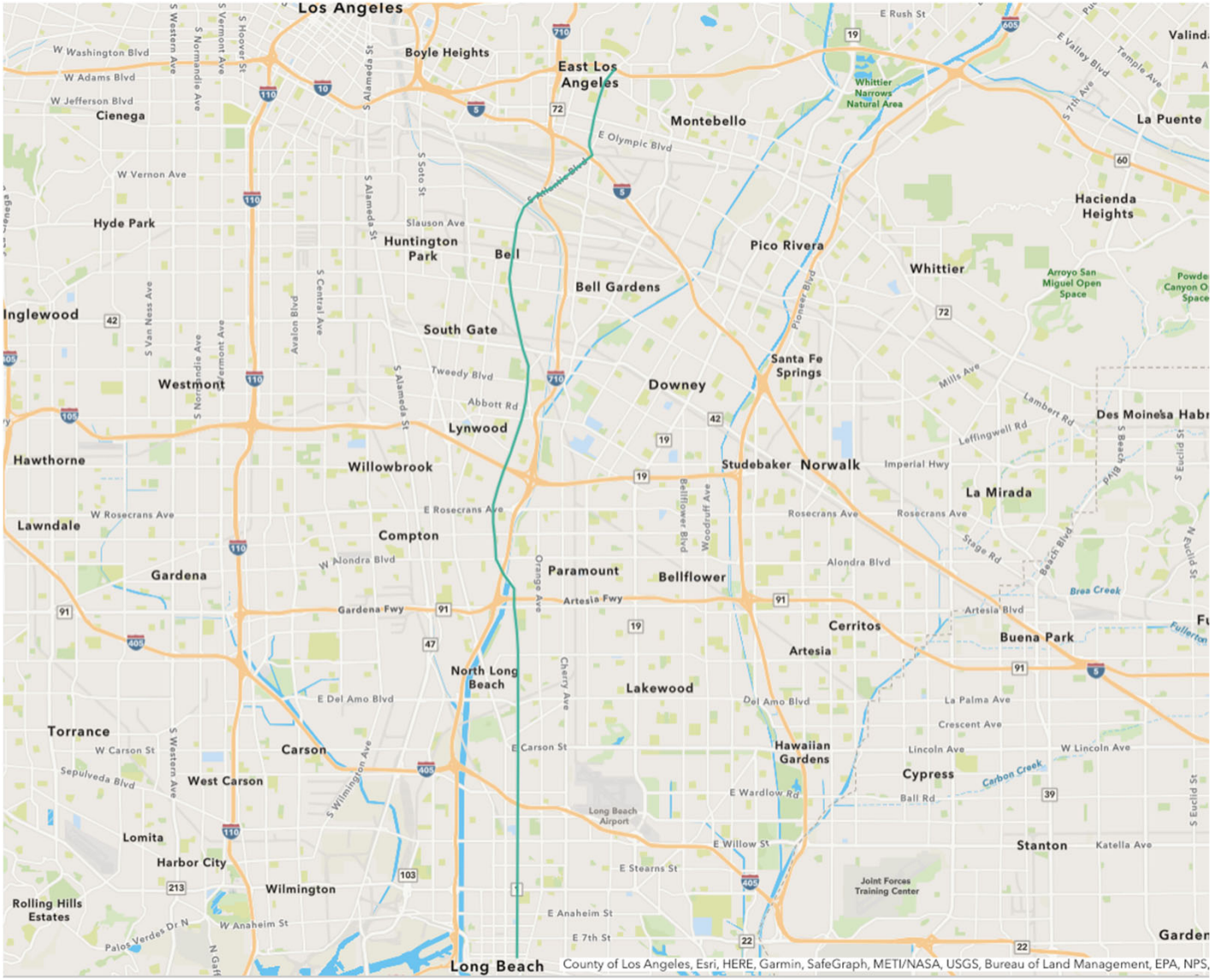
- Very high network connectivity
- Very high equity benefit
- High-priority corridor per LADOT
- Runs through 2 City of LA Community Plan areas which feature TOC and transit-supportive policies
- Moderate ridership
- Moderate opportunity to build BRT-friendly infrastructure and realize travel time savings
- A future Alternatives Analysis could consider both Broadway and Figueroa, which closely parallel each other and perform comparably



Metro

Atlantic

visioning BRT
BUS RAPID TRANSIT STUDY



Metro

Atlantic

- Connects East LA to Long Beach
- Interest from the Gateway Cities COG
- Moderate network connectivity
- Moderate activity for time savings
- Wide sidewalks provide good opportunity to build stations and passenger amenities
- Low ridership, but does provide access to industrial jobs for lower-income workers, addressing equity goals

Metro

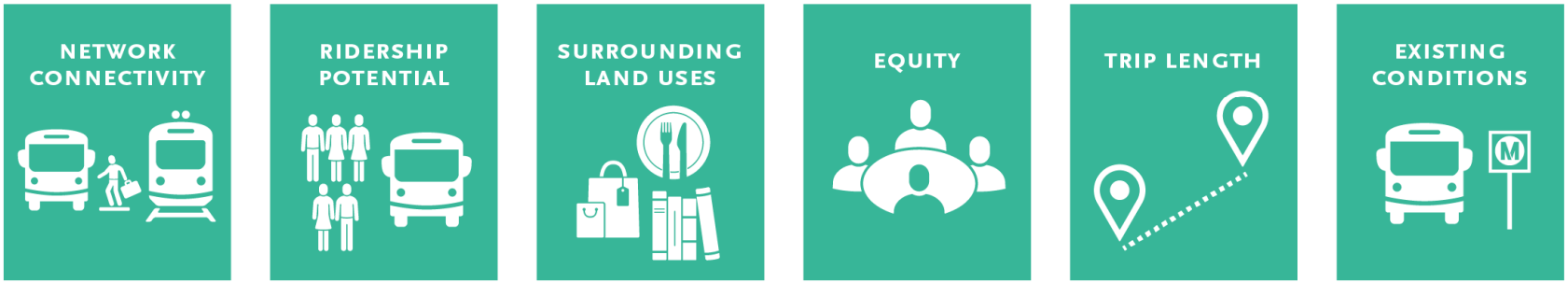
Open Discussion

Questions or Comments?

Metro

Future BRT Network

Build upon strong candidate corridors identified in a multi-step screening process that used the following criteria:



Utilize a gap analysis that:

> Considers existing and planned rail/BRT network

> Identifies gaps in coverage

> Connects future BRT corridors to one another and the Metro rail network

> Leverages corridors identified and screened through the project study

Future BRT Network Map

Metro

Next Steps

Stakeholder Input and Engagement

- TAC #12 on 9/3
- Ongoing stakeholder briefings(COG's, Electeds, Cities)

Fall 2020

- Finalize design manual and final report
- Narrow down to 3-5 priority corridors
- Future unfunded network
- Present recommendations to Board in October

Metro

Contact Us

visioning BRT
BUS RAPID TRANSIT STUDY

Thank you!

Paul Backstrom
Project Manager
BackstromP@Metro.Net

Fabian Gallardo
Transportation Planner
GallardoFa@Metro.Net

Metro

Metro BRT Vision & Principles Study Stakeholder Workshop February 7, 2020 LA Metro Headquarters 9:30 – 11am	
Attendance	16 Key Project Stakeholders were in attendance
Comments	• 3 written comment card submissions • 12 GIS mapping tool submissions • 2 online map comments • **17 Total Comments**
Key Stakeholders	• Armando Flores, Valley Industry Commerce Association (VICA) • Arthur Sohikian, North County Transportation Coalition • Dora Armenta, Pacoima Beautiful • Hilary Norton, California Transportation Commission (CTC) • Eli Lipmen, Move LA • Jerard Wright, BizFed • Laura Raymond, Alliance for Community Transit-LA • Nancy Pfeffer, Gateway Cities Council of Governments • Peggy Kuo, Temple City Youth Committee • Reed Alvarado, Fast Link DTLA • Bob Wolfe, Citizens Advisory Committee • Tom Chavez, Mayor Pro Tem, City of Temple City • Gloria Ohland, Move LA • Brian Bowens, Citizens Advisory Committee • Riley O'Brien, Westside Cities Council of Governments • Betina Cervantes, Cal State Los Angeles
Input Highlights	• BRT criteria should be tied to Metro Transit Oriented Communities (TOC) outcomes. BRT design criteria of stops and stations should align with implementation policies of TOC. • Design features of future BRT stops and stations should increase the efficiency and access of bus boarding and exiting. • BRT routes should intersect with and/or connect to existing major transit hubs like LAX, Union Station, Metro Transit Stations, etc. • BRT routes should connect with Metro Rail lines. • Very important for Metro to facilitate community development opportunities along BRT routes. These programs must include affordable housing programs.

	• BRT currently has a negative connotation within LA County due to North San Fernando Valley and North Hollywood to Pasadena projects. A project objective should be to improve this sentiment. • This project must consistently interact and collaborate with municipal operators to avoid service inefficiencies. • As BRT design criteria and operating standards are established and upgraded through this study, information technology support must be elevated as well. Support systems onboard buses and at stations will support future network efficiency.

Metro BRT Vision & Principles Study
Stakeholder Workshop
May 20, 2020
Meeting streamed online via Lifesize platform
10:00 – 11:15am

Attendance	28 Project Stakeholders were in attendance	
Comments	• 2 GIS online map comment submissions (post workshop) • 12 questions/comments related to the presentation or study were submitted in the live chat and all were addressed during the course of the workshop.	
Key Stakeholders	• Alexander Fung, SGVCOG, • Amy Wong • Angela Babcock, SFVCOG • Armando Flores, VICA • Arthur Sohikian, NCTC • Carmen Gapuchin, Cal State LA • Chase Engelhardt • Coby King, VICA • David Leger, SBCCOG • Denny Zane, Move LA • Dora Armenta, Pacoima Beautiful • Hilary Norton, FASTLinkDTLA, CTC • Eli Kaufman, LACBC • Eli Lipmen, Move LA	• Gloria Ohland, Move LA • Jamal White • John Yi, LA Walks • Josie, SLATE-Z • Jerard Wright, BizFed • Kendal Ascunsion, LA Chamber • Kevin Shin, LACBC • Marisa Creter, SGVCOG • Reed Alvarado, FASTLinkDTLA • Riley O'Brien, WCCOG • Veronica Padilla, Pacoima Beautiful • Wilma Franco, SELA • Winnie Fong, WCCOG • Yvette Kirrin, GCCOG
Questions & Comment Highlights	• The Atlantic Corridor and Florence-Whittier corridors are the subject of GCCOG Complete Street Studies that are on-going, and therefore we will specifically be seeking additional input regarding the viability of the BRT system on these Corridors, which we can report back via our study. • To what extent will TOC/community development and opportunities for affordable housing play a role in corridor selection? • Are you looking to other Metro areas (like Houston or even San Bernardino County) for examples of how other "car-centric" cities have approached BRT?	

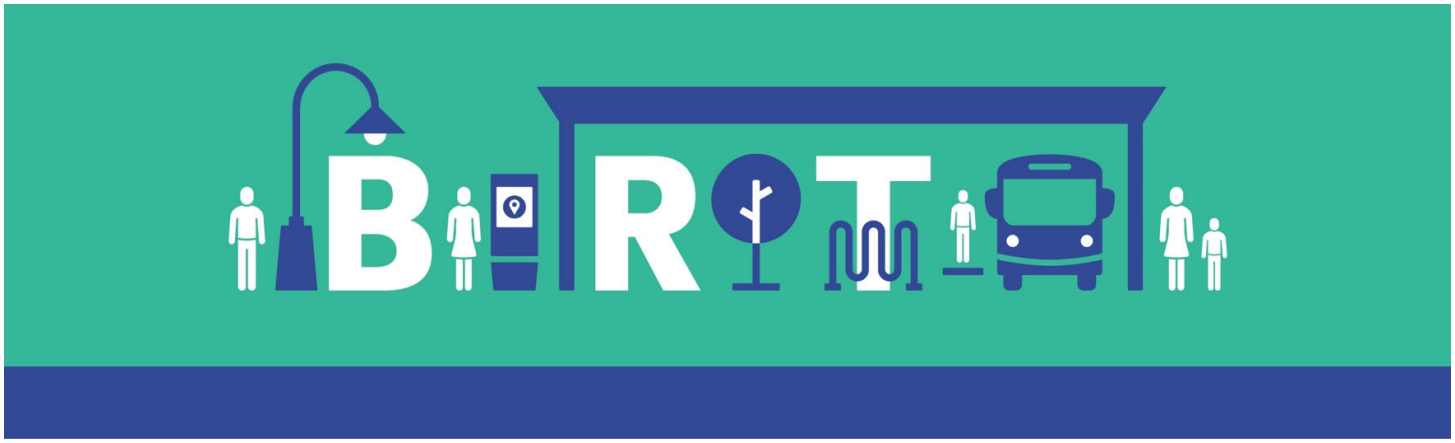
	• Do any of the 1st priority, 15 corridors include recent Metro Board actions such as the SR60 alternative replacement to the Eastside Gold Line LRT? • How much money was set aside in M for BRT? • How has COVID-19 impacted BRT analysis? For instance, certain lines have seen level boardings or even increases. This indicates lifeline and essential riders need these services. Is there an opportunity to use new data to assess these lines? • I like that Metro is making the connection between BRTs and TOCs. Since the state is supposed to be applying VMT standards starting July 1st, is Metro going to seek federal funding to support the nexus between affordable housing and BRT? • What has Metro done to dismiss the negative connotations of BRT in the community, especially in the San Gabriel Valley? • Are there any plans for future BRT projects in the San Gabriel Valley or the Gateway Cities subregions? • There are "complete streets" studies underway, e.g., Venice Blvd and Atlantic. To what extent do you see that as opportunity? • What type of existing room is needed for BRT infrastructure to be implemented? • While I understand that your top 15 is data-driven, it is striking that none of them are north or east of downtown. The eastside and San Fernando, Conejo, Santa Clarita, and San Gabriel Valleys are all shut out. Are the criteria too narrow? • Is there room in the funding to enable bus layover zones, transit centers and mobility hubs? Because with the region focused on increasing density, these zones will become increasingly scarce for operators to rest the bus and get their breaks.

Metro BRT Vision & Principles Study
Stakeholder Workshop
September 1, 2020
Meeting streamed online via Lifesize platform
10:00 – 11:15am

Attendance	28 Project Stakeholders were in attendance	
Comments	• 15 questions related to the presentation or study were submitted in the live chat and all were addressed during the course of the workshop. • 4 comments were submitted in the live chat (marked below in grey)	
Key Stakeholders	• Alexander Fung, SGVCOG • Yazdan Emrani, City of Glendale • Andrew Ross, LACDPW • Ann Wilson, AVJPA • Reed Alvarado, FASTLinkDTLA • Gloria Ohland, Move LA • John Yi, LA Walks • Armando Flores, VICA • Carmen Gachupin, Cal State LA • Edward Hitti, City of La Canada Flintridge • Eric Haack, Access Services • Laura Cornejo, City of Pasadena	• Dora Frietze-Armenta, Pacoima Beautiful • Angela Babcock, SFVCOG Jerard Wright, BizFed • Mark Yamarone, Metro • David Leger, SBCCOG • Eli Lipmen, Move LA • Daniel Tabor, LATTC • Riley O'Brien, WCCOG • Cynthia Cortez, SELA • Hilary Norton, FASTLinkDTLA • Arthur Sohikian, NCTC • David Kriske, City of Burbank • Elizabeth Hannon, Sutra • Jody Litvak, Metro • Maria Manzano, Best Start LA • Martha D'Andrea, LADOT
Questions & Comment Highlights	1. Was there any further clarification on the assignment of costs for BRT? a. This is more "the study before the study", but we are currently on our final report, where we will be studying a high-level range of costs 2. Is survey data available to be broken down by neighborhoods? a. Some data has the zip-codes available, but it was optional 3. What role do quality of experience standards play here? Cleanliness, safety, etc?	

	4. Can we get a copy of the list of the standard details mentioned? Particularly, can the breakdown include the difference in standard between light and full BRT? a. Yes, we can certainly make this available. 5. Given that most of the parametric screenings in levels 1 and 2 were conducted before COVID, are there any considerations to review the trip length, travel delays, and transit suitability for corridors that were not selected for prioritization? a. The analysis that was conducted was not affected by COVID, although ridership has plummeted. 6. Why did La Cienga not continue south to the LAX Crenshaw Line? 7. How is network connectivity measured? It seems like La Cienga would have higher network connectivity due to the lack of north/south Rail/BRT in Westside Cities. a. That is a good question; would imagine because there is probably some redundancies and overlap, but we have to look at this in detail. 8. If you connected to the Greenline Station at Imperial, you may incentivize the South Bay ridership from Lomita, Torrance, and other beach cities. 9. The irony and dilemma are that the highest-ranked corridors are poor candidates to actually build the needed BRT infrastructure like the dedicated lanes, queue jumpers, etc. Given the analysis that only 2 of the Top 7 corridors you can actually build the infrastructure on, how do corridors 8 through 14 measure in terms of actually building infrastructure to given the needed bus speed improvements? a. All of the top 7 have strong opportunities, but some are simply better than others. Some of the corridors have some restraints. 10. With the 7 corridors prioritized for further studies, how does Metro plan on moving forward with this study? a. To get down to the final 3-5, with the public engagement process we are going through. 11. Would love to get a copy of the survey by neighborhood and gender. 12. What is the average per mile cost for these BRT corridors? A range is helpful.

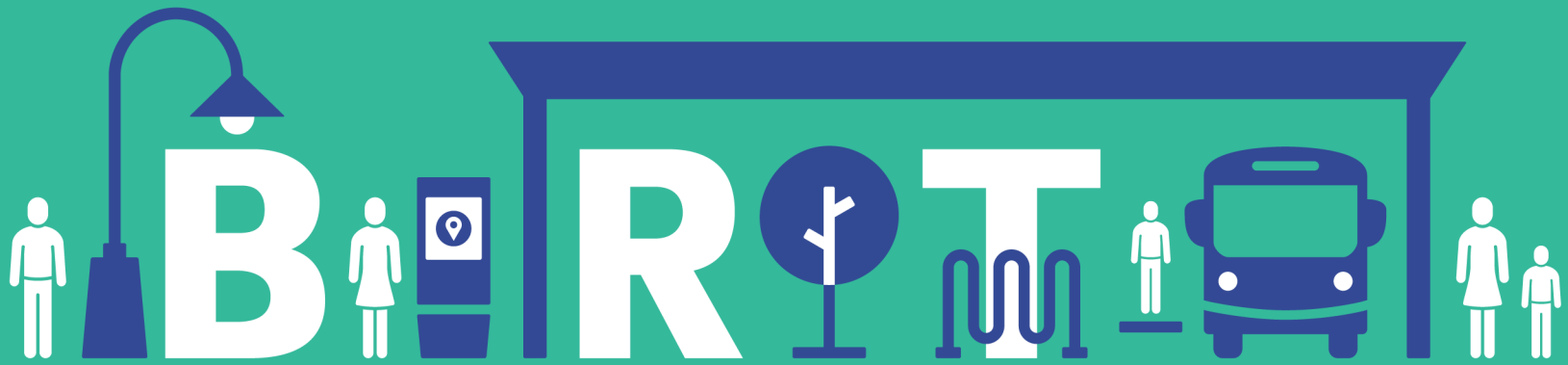
	a. These numbers will be available in the final report. Typically, $100M - $300M for any of the given corridors. 13. If you had all the money you needed, how much would that be and how many lines would that fund? 14. How is equity and job access prioritized in the weighting of prioritizing funding for these BRT corridors? Are all BRT corridors planned to be served by EV buses? 15. Does Metro plan on incorporating BRT as an alternative to future Rail projects (considering the relative cost savings vs. Rail)? a. Not something we are looking at in this study; that is more of a Board decision. 16. Are you considering additional BRT service as part of the expansion of the ExpressLane network to build on the success of the Silver Line and use tolling as a funding sources to increase BRT service? a. There may be opportunities to fund some of these projects to compliment a tolling process. It is in consideration but still need to be studied through 17. Will you be available to make this presentation to community groups, if asked? a. Yes, we can do some presentations, if needed.



Appendix D

Stakeholder Briefings:

Full Presentation



visioning BRT

BUS RAPID TRANSIT STUDY

Metro

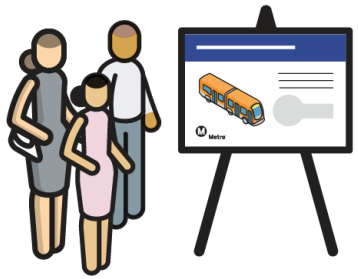
August 24, 2020

BRT Vision & Principles Study Overview

- **Study Purpose**
  - Define BRT
  - Provide the foundation for the assignment of Measure M BRT program funds
  - Support Measure M BRT projects
- **Study Outcomes**
  - BRT standards
  - Design criteria
  - Identify and prioritize BRT corridors
  - Future BRT network

Public and Stakeholder Input

BUS RAPID TRANSIT VISION & PRINCIPLES STUDY



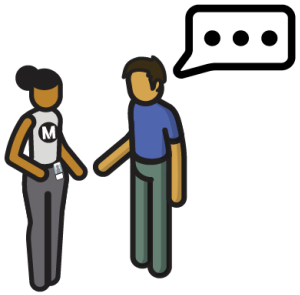
STAKEHOLDER WORKSHOPS

STAKEHOLDER PRESENTATIONS

BRT TAC INPUT

NEXTGEN Bus Plan

PUBLIC WORKSHOPS



COUNTYWIDE SURVEY ENGAGEMENT

BRT Standards

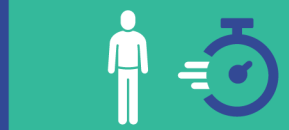
Full BRT and BRT lite

- Accommodate the complex geographical and political constraints of LA County

BRT standards

- Use both performance and prescriptive standards
- TAC discussion on thresholds for each standard

BRT Standards

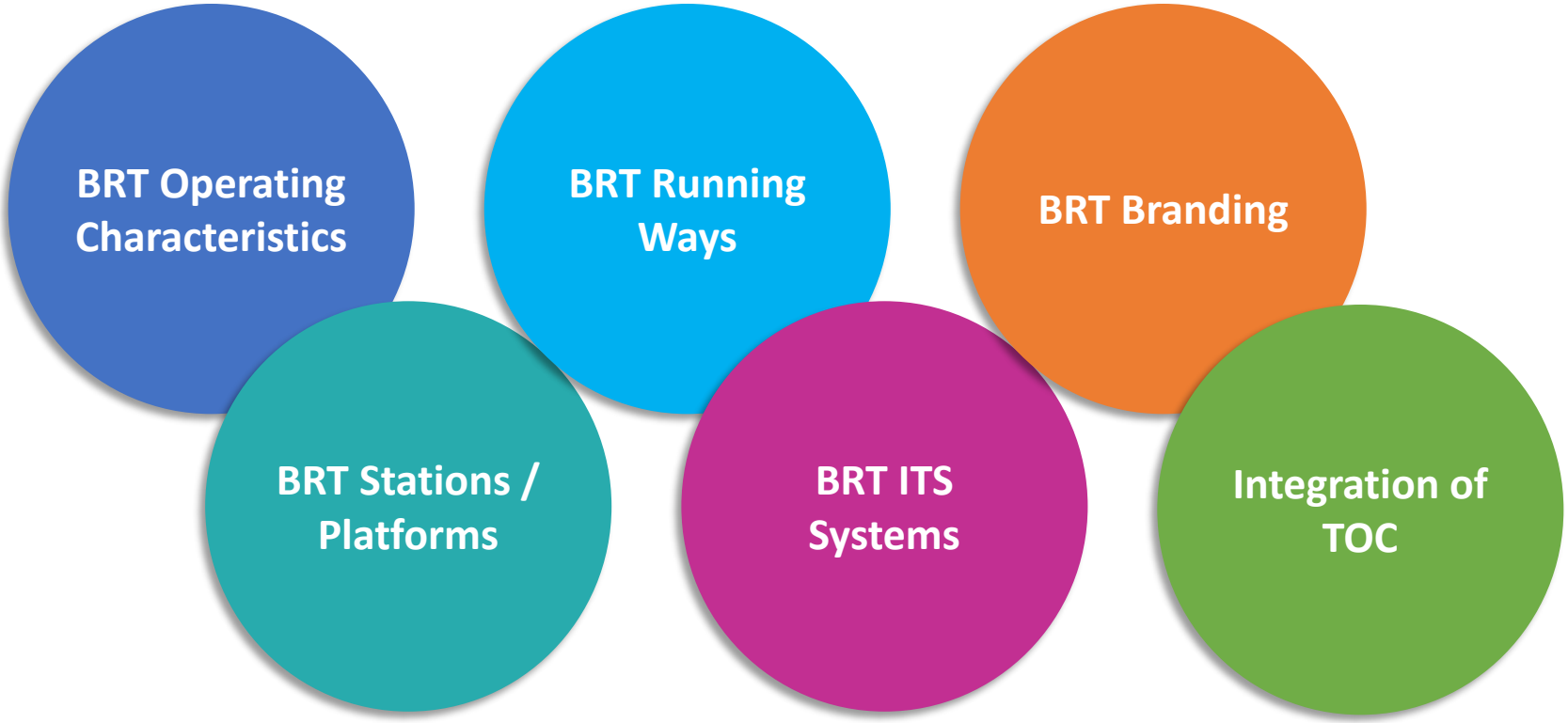


- Dwell Time
- Speed
- On-Time Performance / Reliability
- Headway
- All-Door Boarding
- Intersection Priority (TSP)
- Dedicated Lanes
- Branding
- Station Amenities

Metro

BRT Elements of Design

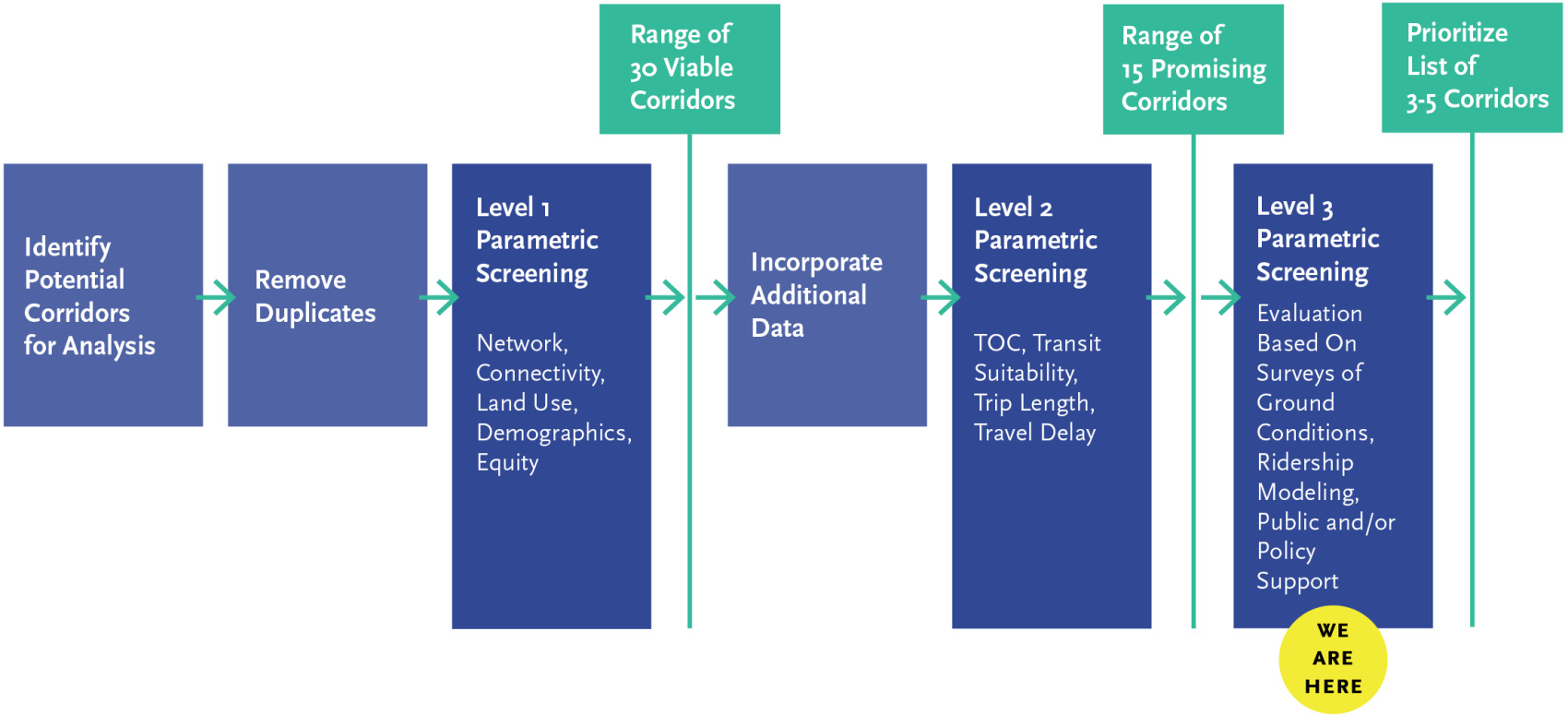
visioning BRT
BUS RAPID TRANSIT STUDY



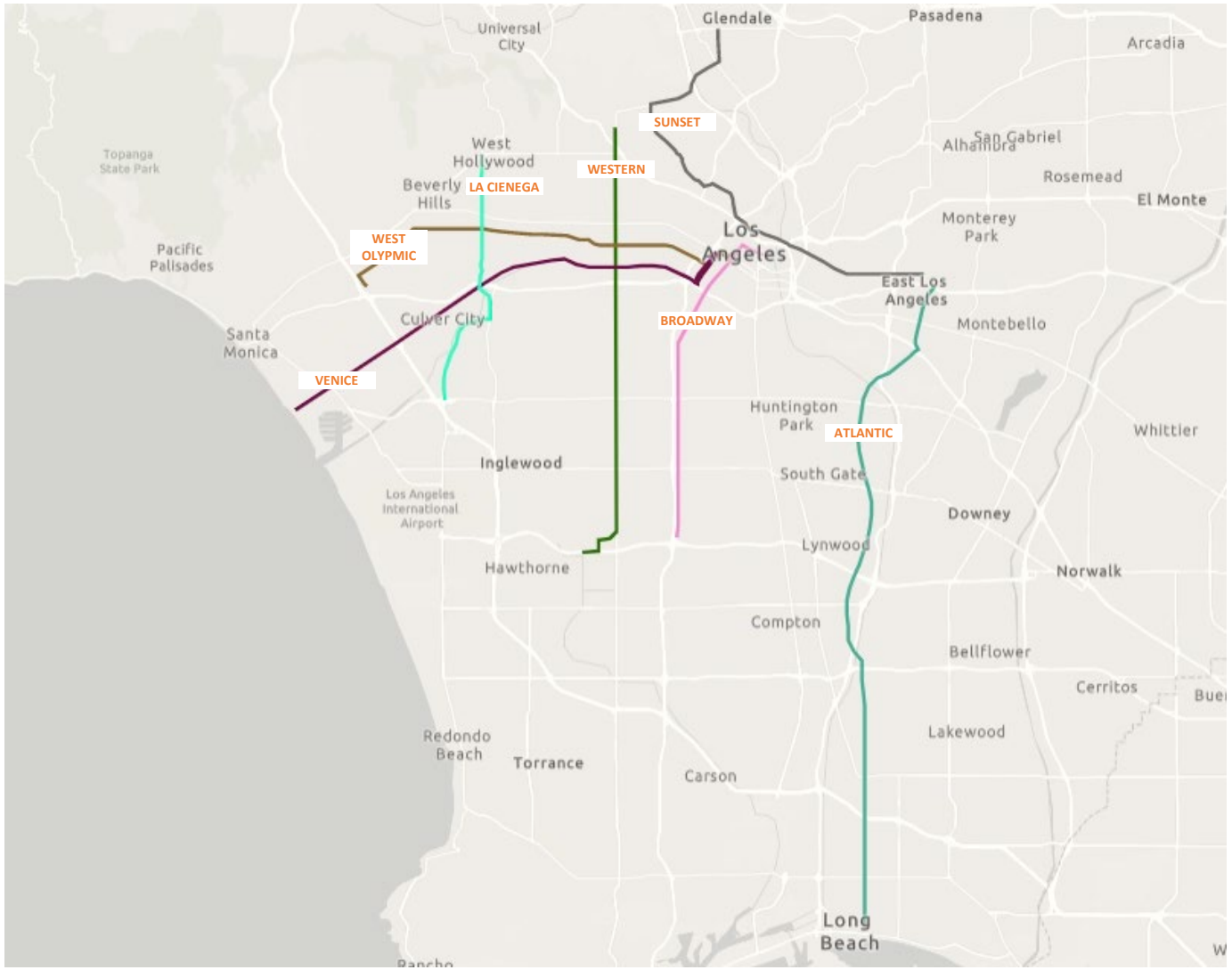
Metro

BRT Stations

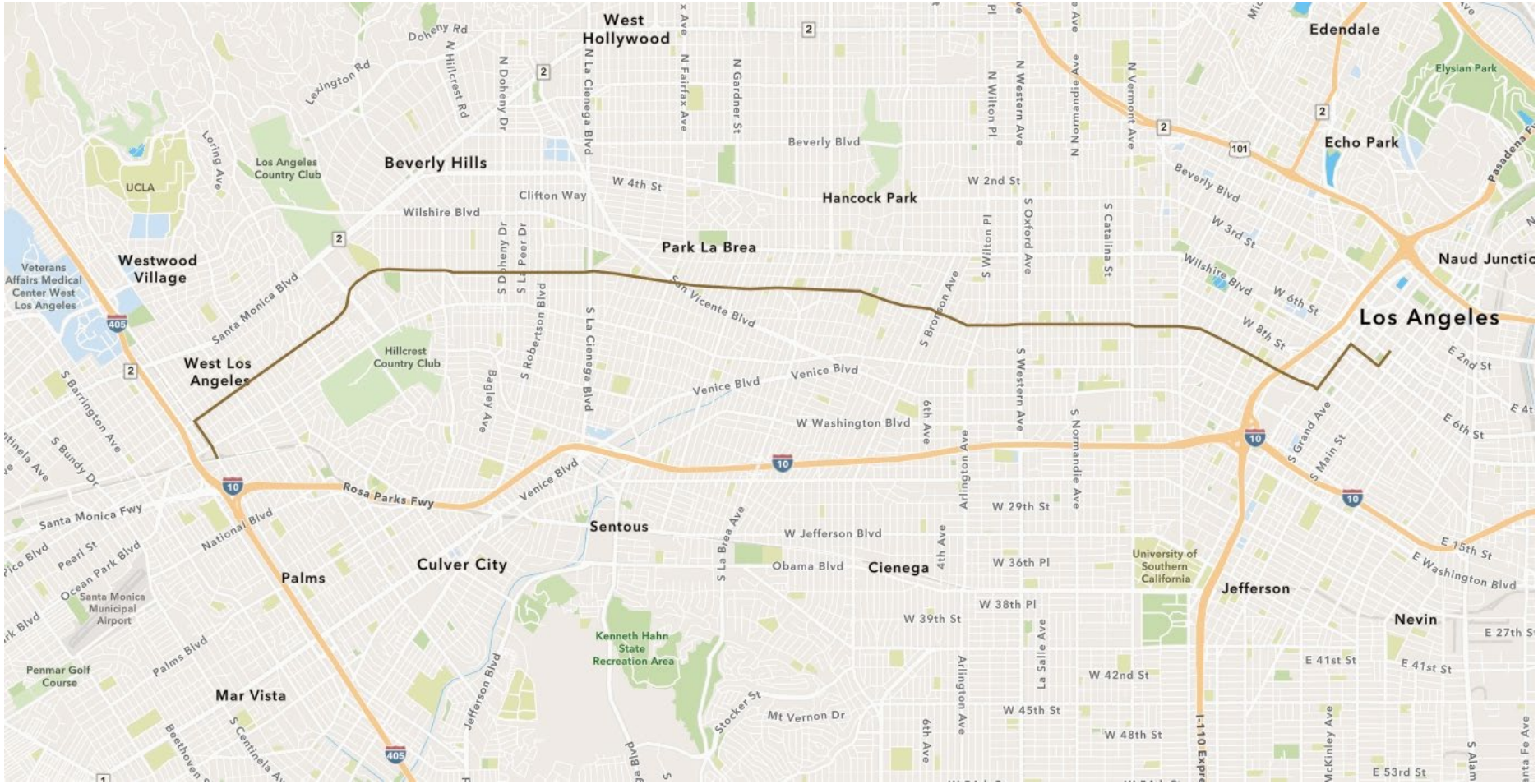
Corridor Prioritization Methodology



Top 7 Corridors – Map Overview



West Olympic



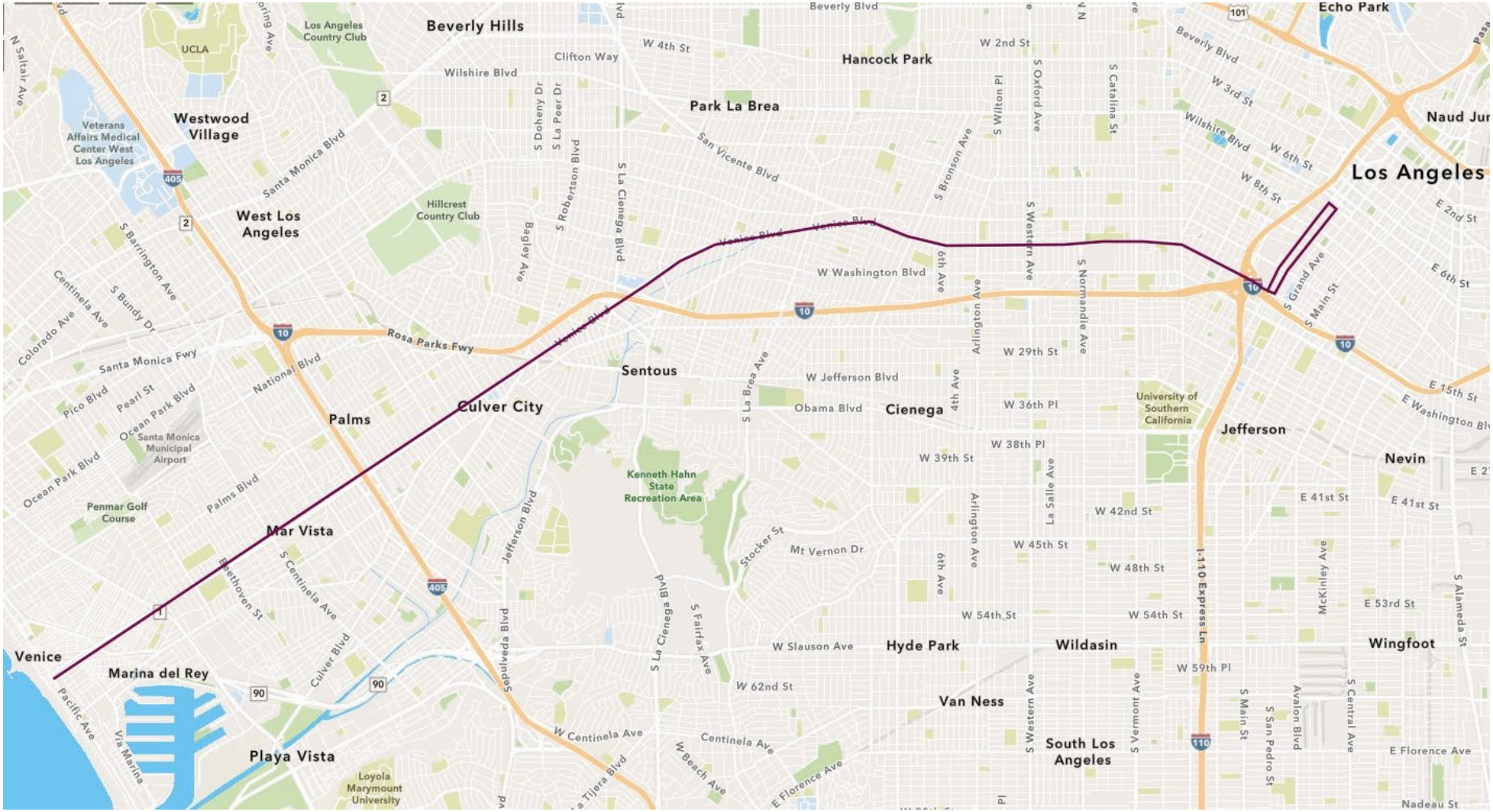
West Olympic

- Very high network connectivity
- Very high ridership
- High opportunity to build BRT-friendly infrastructure and realize travel time savings
- Parallel to and ½ mile from the Purple Line extension
- Potential to extend the corridor further west via Pico

Metro

Venice

visioning BRT
BUS RAPID TRANSIT STUDY



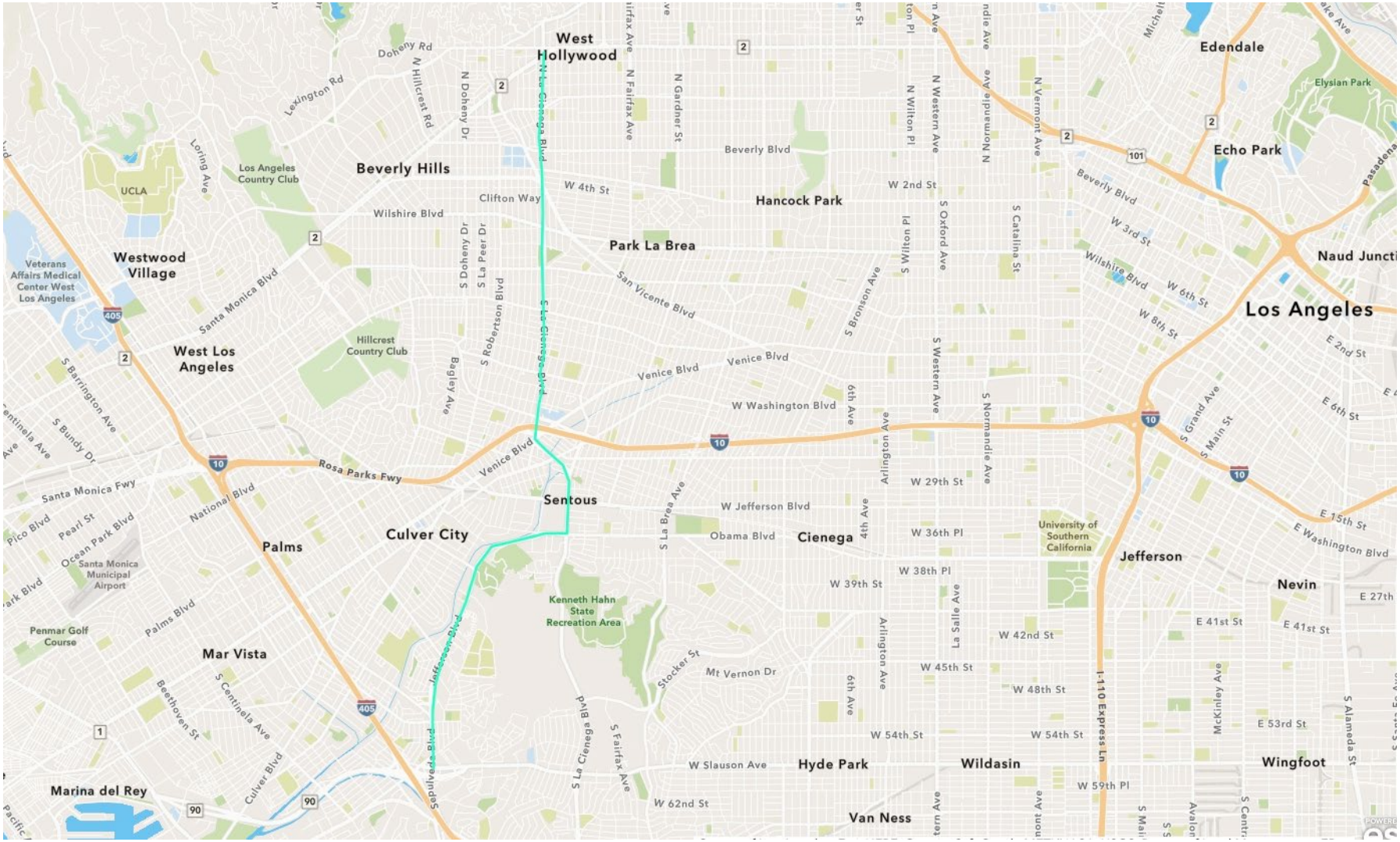
Metro

Venice

- Very high network connectivity
- Very high ridership
- High opportunity to build BRT-friendly infrastructure and realize travel time savings
- Pedestrian-friendly and street-oriented land uses
- Transit supportive policies including City of LA Community Plans and Culver City
- Strong transit-supportive policies along corridor
- Neighborhood sensitivity related to the Great Street Initiative

Metro

La Cienega

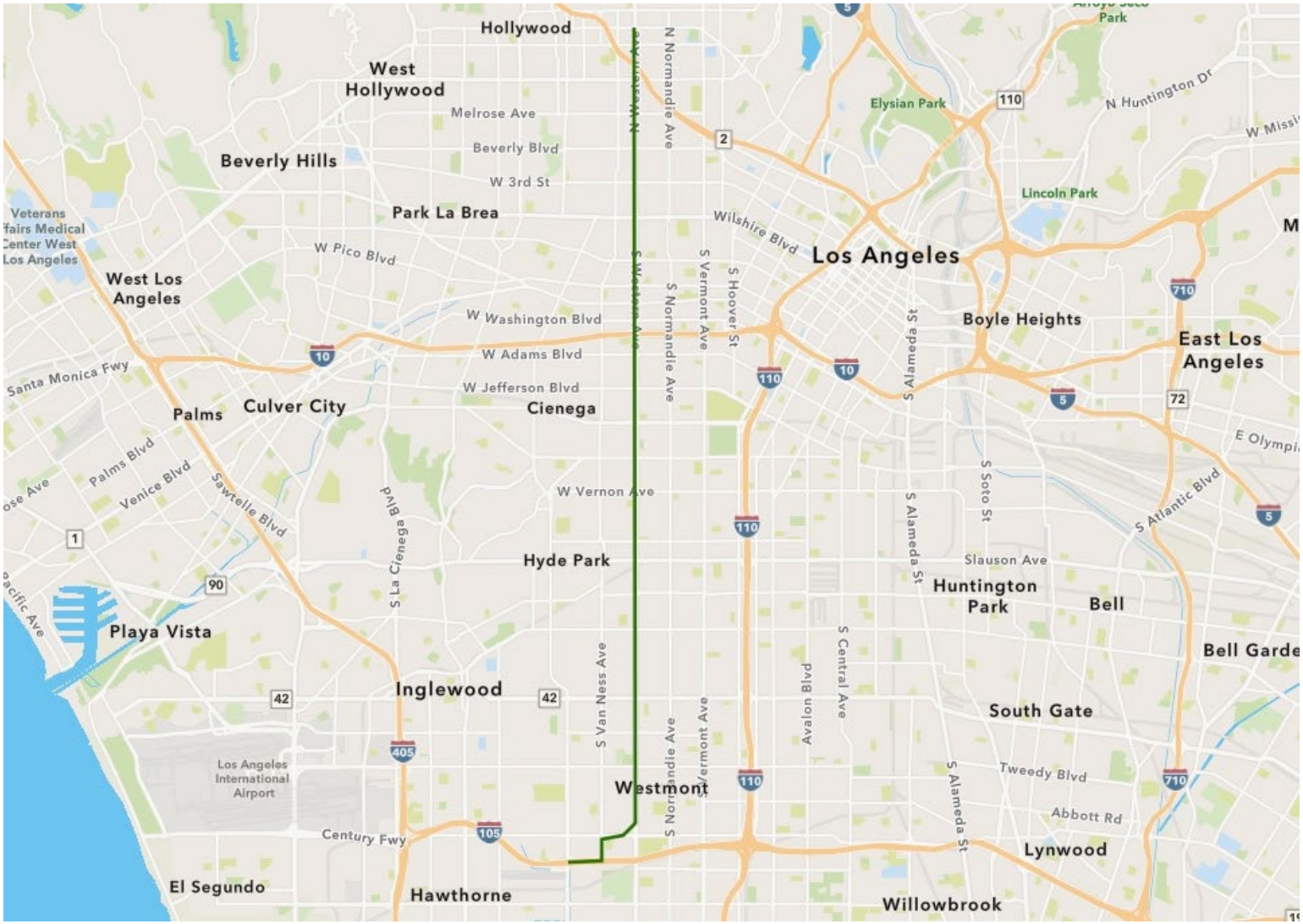

West Hollywood
Beverly Hills
Hancock Park
Park La Brea
Westwood Village
West Los Angeles
Sentous
Culver City
Palms
Mar Vista
Marina del Rey
Cienega
Jefferson
Hyde Park
Wildasin
Van Ness
Wingfoot
Nevin
Edendale
Echo Park
Elysian Park
Los Angeles
Naud Junct
Kenneth Hahn State Recreation Area
Hillcrest Country Club
Los Angeles Country Club
UCLA
Veterans Affairs Medical Center West Los Angeles
Santa Monica Municipal Airport
Penmar Golf Course
University of Southern California
Doheny Rd
Lexington Rd
N Hillcrest Rd
N Doheny Dr
N La Cienega Blvd
N Fairfax Ave
N Gardner St
Beverly Blvd
N Wilton Pl
N Western Ave
N Normandie Ave
N Vermont Ave
Loring Ave
Clifton Way
W 4th St
W 2nd St
Wilshire Blvd
S Doheny Dr
S La Peer Dr
S Robertson Blvd
S Wilton Pl
S Oxford Ave
S Catalina St
W 3rd St
W 6th St
W 8th St
San Vicente Blvd
S Bronson Ave
Santa Monica Blvd
Beagley Ave
Venice Blvd
W Washington Blvd
S Western Ave
S Normandie Ave
S Grand Ave
S Main St
E 2nd St
E 6th St
S Barrington Ave
S Bundy Dr
Rosa Parks Fwy
National Blvd
Santa Monica Fwy
Pico Blvd
Pearl St
Ocean Park Blvd
Palms Blvd
Arlington Ave
W 29th St
W Jefferson Blvd
Obama Blvd
W 36th Pl
W 38th Pl
W 39th St
W 42nd St
W 45th St
W 48th St
W 54th St
W Slauson Ave
W 62nd St
W 59th Pl
E 15th St
E Washington Blvd
E 27th
E 41st St
E 53rd St
McKinley Ave
S Alameda St
I-110 Express Ln
Jefferson Blvd
Stocker St
Mt Vernon Dr
S La Cienega Blvd
S Fairfax Ave
S La Brea Ave
S Centinela Ave
Beethoven St
Culver Blvd
Sepulveda Blvd
4th Ave
6th Ave
Pasadena

La Cienega

- Provides high-capacity north-south network coverage on the Westside
- Transit supportive policies including City of LA Community Plans and Culver City
- Interest from Culver City and WSCOG
- Moderate opportunity to build BRT-friendly infrastructure and realize travel time savings
- May overlap with future Crenshaw North project
- Low network connectivity
- Low ridership
- Low potential equity benefit

Metro

Western



Metro

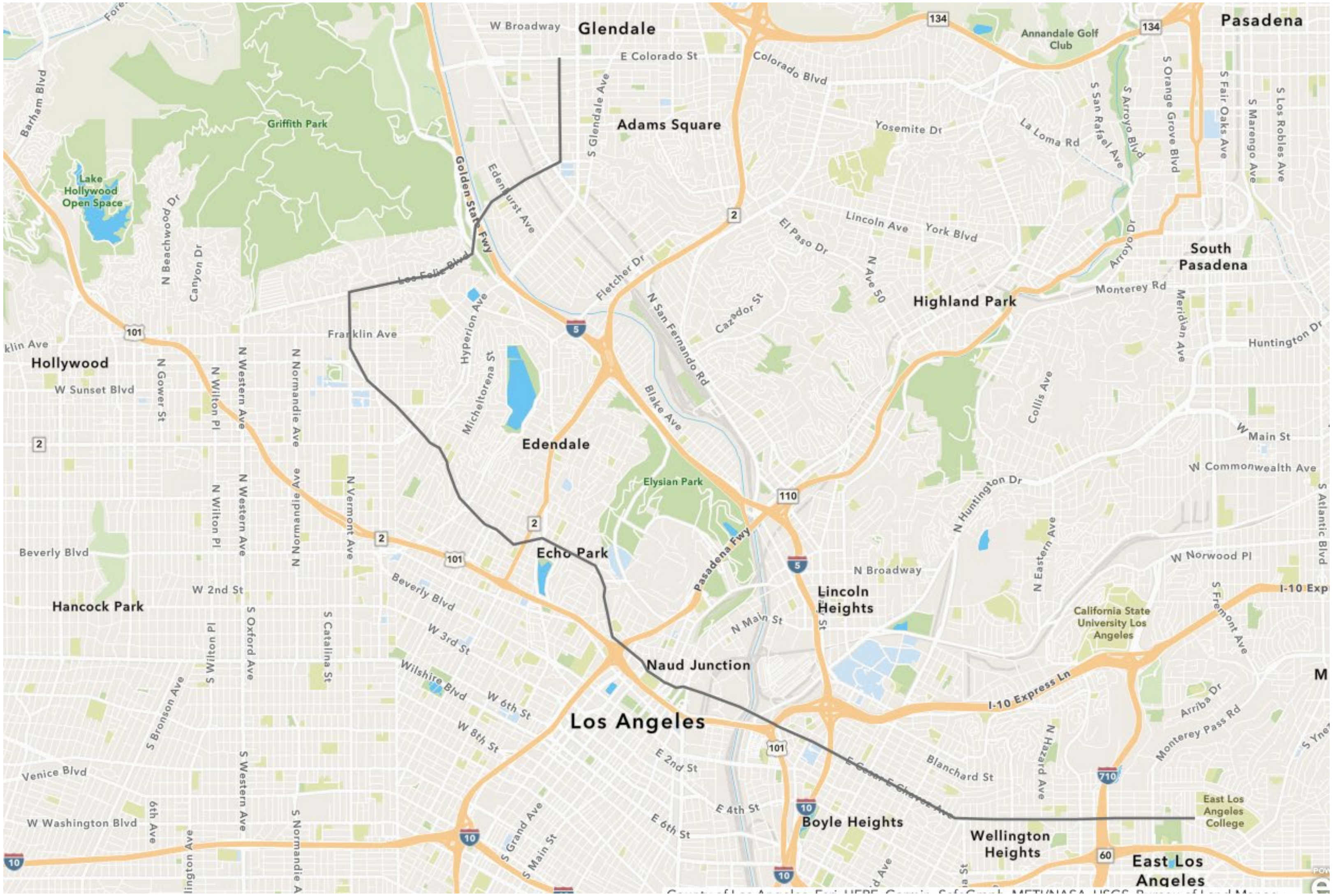
Western

visioning BRT
BUS RAPID TRANSIT STUDY

- Very high equity benefit
- Connects to 4 existing rail lines; moderate network connectivity for other services
- Currently Metro's 5th highest ridership corridor with 28,000 average weekday riders
- Good mix of land uses and several TOC-supportive areas along corridor
- Runs through 3 City of LA Community Plan areas which feature or are being updated to feature TOC and transit-supportive policies
- The City of Hawthorne and the unincorporated West Athens-Westmont community also has TOC-supportive policies in place
- High-priority corridor per LADOT
- Limited opportunity to build BRT-friendly infrastructure and realize travel time savings

Metro

Cesar Chavez/Sunset



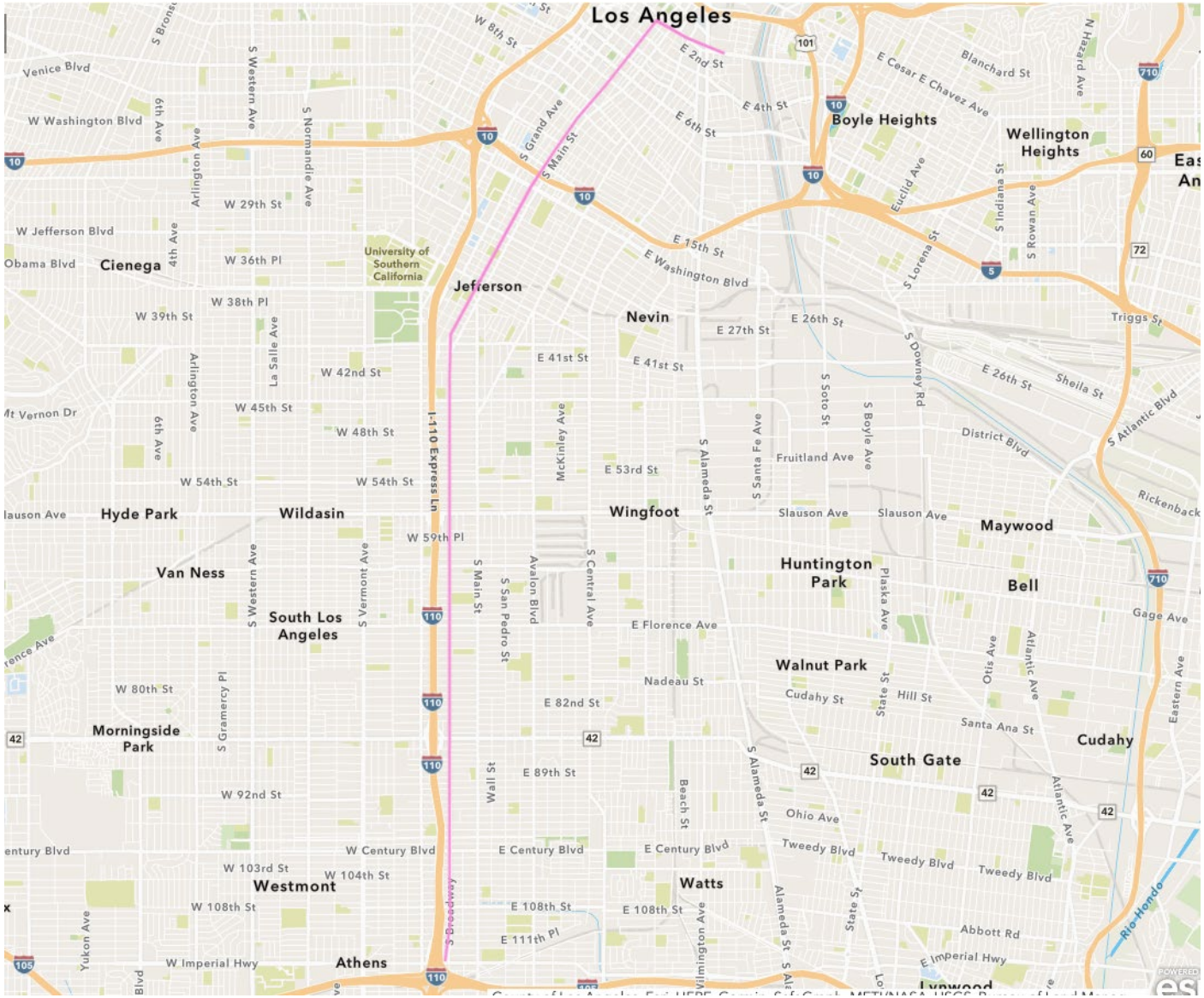
Metro

Cesar Chavez/Sunset

- Very high network connectivity
- Connects downtown Los Angeles with the San Fernando Valley
- Runs through 6 City of LA Community Plan areas which feature or are being updated to feature TOC and transit-supportive policies
- Moderate ridership
- Moderate opportunity to build BRT-friendly infrastructure and realize travel time savings

Metro

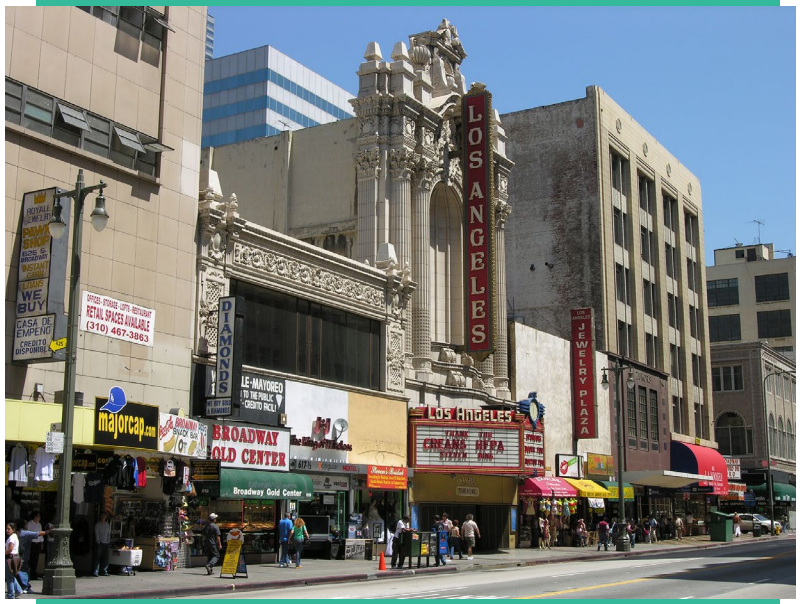
Broadway



Metro

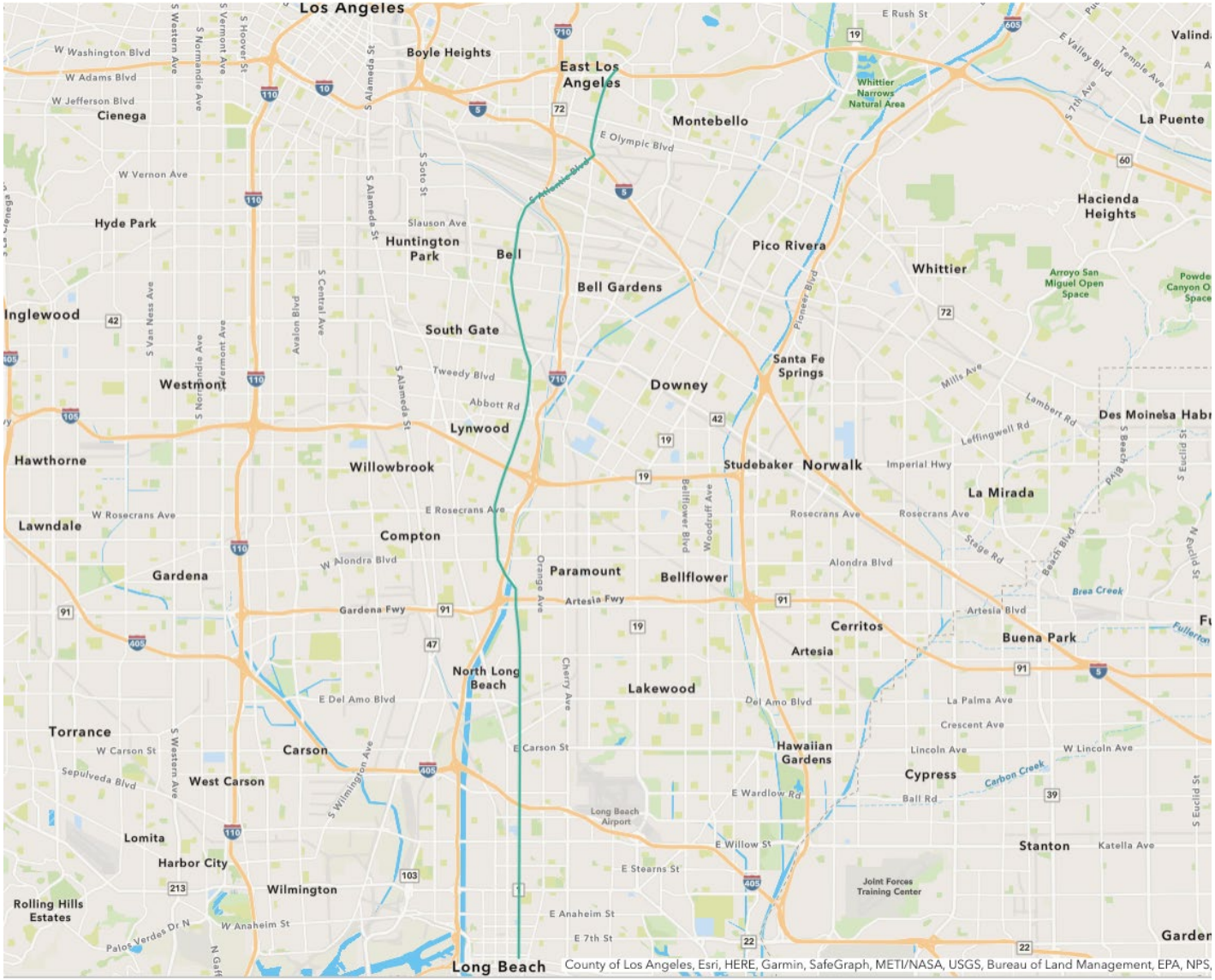
Broadway

- Very high network connectivity
- Very high equity benefit
- High-priority corridor per LADOT
- Runs through 2 City of LA Community Plan areas which feature TOC and transit-supportive policies
- Moderate ridership
- Moderate opportunity to build BRT-friendly infrastructure and realize travel time savings
- A future Alternatives Analysis could consider both Broadway and Figueroa, which closely parallel each other and perform comparably



Atlantic

visioning BRT
BUS RAPID TRANSIT STUDY



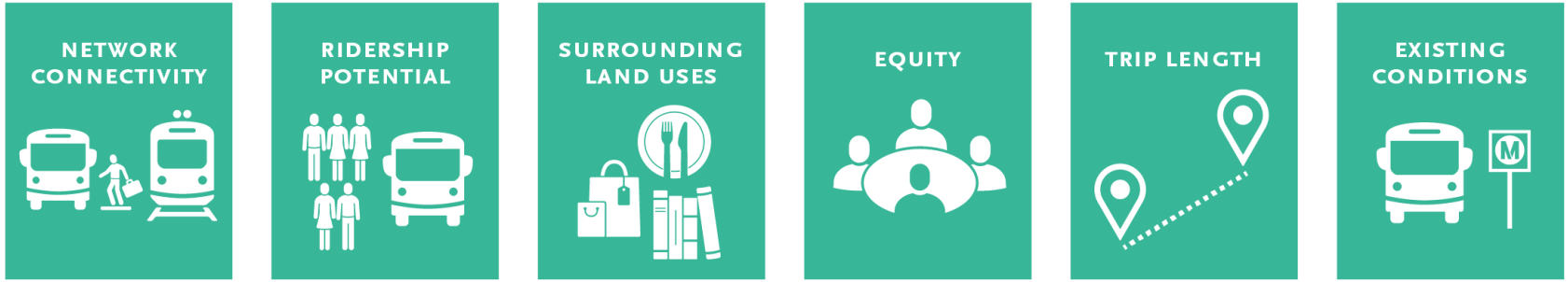
Metro

Atlantic

- Connects East LA to Long Beach
- Interest from the Gateway Cities COG
- Moderate network connectivity
- Moderate activity for time savings
- Wide sidewalks provide good opportunity to build stations and passenger amenities
- Low ridership, but does provide access to industrial jobs for lower-income workers, addressing equity goals

Future BRT Network

Build upon strong candidate corridors identified in a multi-step screening process that used the following criteria:



Utilize a gap analysis that:

> Considers existing and planned rail/BRT network

> Identifies gaps in coverage

> Connects future BRT corridors to one another and the Metro rail network

> Leverages corridors identified and screened through the project study

Metro

Contact Us

Thank you!

Lauren Cencic
Project Manager
CencicL@Metro.Net

Paul Backstrom
Deputy Project Manager
BackstromP@Metro.Net