



**Beverly Hills City Council Liaison /
Traffic and Parking Commission Committee**
will conduct a Special Meeting, at the following time and place, and will address the
agenda listed below:

**CITY OF BEVERLY HILLS
455 N. Rexford Drive
Room 280A
Beverly Hills, CA 90210**

IN-PERSON / TELEPHONIC / VIDEO CONFERENCE MEETING

Beverly Hills Liaison Meeting
<https://beverlyhills-org.zoom.us/my/committee>
Meeting ID: 516 191 2424
Passcode: 90210

You can also dial in by phone:
+1 669 900 9128 US
+1 833 548 0282 (Toll-Free)

One tap mobile
+16699009128,,5161912424# US
+18335480282,,5161912424# US (Toll-Free)

Tuesday, August 22, 2023
10:00 AM

Please be advised that pre-entry metal detector screening requirements are now in place in City Hall. Members of the public are requested to plan visits accordingly.

In the interest of maintaining appropriate social distancing, members of the public can view this meeting through live webcast at www.beverlyhills.org/live and on BH Channel 10 or Channel 35 on Spectrum Cable, and can participate in the teleconference/video conference by using the link above. Written comments may be emailed to mayorandcitycouncil@beverlyhills.org and will also be taken during the meeting when the topic is being reviewed by the Beverly Hills City Council Liaison / Traffic and Parking Commission Committee. Beverly Hills Liaison meetings will be in-person at City Hall.

AGENDA

- 1) Public Comment
 - a. Members of the public will be given the opportunity to directly address the Committee on any item listed on the agenda.

- 2) Beverly Hills Transit Feasibility Study and Proposed Pilot Project

Receive direction on next steps for development of a pilot transit program consisting of a combination of fixed route and microtransit as recommended in the draft 2022 Transit

3) Adjournment



Huma Ahmed
City Clerk

Posted: August 17, 2023

**A DETAILED LIAISON AGENDA PACKET IS AVAILABLE FOR REVIEW AT
WWW.BEVERLYHILLS.ORG**



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CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT
MEMORANDUM

TO: City Council and Traffic and Parking Commission Liaison Committee

FROM: Daren Grilley, Assistant Director/City Engineer
Martha Eros, Transportation Planner

DATE: August 22, 2023

SUBJECT: Beverly Hills Transit Feasibility Study

ATTACHMENT:

1. November 14, 2022 City Council Traffic and Parking Commission Liaison Committee Memorandum (Excerpt)
2. Proposed Transit Fixed-Route Circulator

RECOMMENDATION

Staff recommends that the City Council and Traffic and Parking Commission Liaison Committee (Liaison Committee) receive progress updates on the Transit Feasibility Study and provide feedback and direction to staff on next steps for a potential pilot transit program consisting of a combination of a fixed-route circulator and citywide on-demand microtransit system.

INTRODUCTION

The adopted 2021 Complete Streets Plan includes goals and policies for exploring a fast, reliable local transit shuttle with connections to the upcoming Metro D (Purple) Line subway stations. With the absence of convenient parking at both Metro subway stations, interest in local transit connections is anticipated when the subway stations open in the future. The draft Climate Action & Adaptation Plan also recommends developing a locally operated transit system to help shift away from single-occupancy vehicles and reduce the length of vehicle trips.

A transit needs assessment, including public surveys and outreach, was conducted between July and September 2022. The findings were presented at the October 6, 2022, TPC meeting and the Commission supported the recommendation to develop a pilot project for City Council to consider that would consist of one fixed circulator route operating with high frequency (e.g., 15-minute headways) south of North Santa Monica Boulevard, along with demand-based microtransit that would serve residential areas.

This information was reported to the Liaison Committee on November 14, 2022 (Attachment 1). Vice Mayor Gold, TPC Chair Ignarro and Vice-Chair Shalowitz were in attendance; Councilmember Mirisch recused himself. At that meeting, staff received direction to proceed with additional community outreach to receive feedback on a draft transit route and shuttle stops on commercial and/or residential public right-of-way.

DISCUSSION

Second Public Survey

Staff released a second Transit Circulator Pilot Program Survey the week of December 5, 2022, to gather feedback on the proposed route and stops. Following the same outreach plan for the

feasibility planning phase, the City's Communications team engaged in multiple layers of outreach to solicit participation in the transit survey and attendance at virtual and in-person community meetings. The outreach included newspaper ads, citywide mailings, email blasts, posted signs at transit stops, promotion at City meetings and special events, social media posts, and informational flyers at public counters and on the City's Senior Dial-A-Ride vehicles.

Staff provided a summary of the 113 responses at the January and February 2023 TPC meetings. Highlights include:

- 60% indicated interest in using a local public transit system in the future,
- 41% focus on on-time and reliable service,
- 38% importance of short distances between stops, and
- 48% will use service for recreation, 48% work/commuter, 22% travel.

Write-in comments included the omission of Roxbury Park, the high school, and residential areas in the southwest and north of North Santa Monica Boulevard; attractive bus stop amenities; and duplicating existing Metro bus operations.

Demonstration and Test Runs

Multiple test runs by staff were conducted to test AM and PM peak-hour and non-peak travel times on random days and times, as well as identify stop locations. Based on public input and test run experiences, a fixed-route circulator was developed (Attachment 2).

On March 2, 2023, a transit circulator demonstration was performed from 9 AM to 4 PM to allow community members to get a feel for how a local transit system could operate and to provide additional feedback on the future pilot project.

The demonstration consisted of two City shuttles traveling, each traveling in opposite directions with 21 stops. Each full loop took approximately 35-40 minutes to complete depending on traffic conditions; occasional blockage of a bus stop zone by private passenger vehicles was encountered during operations. Additionally, one run was conducted in the Flats neighborhood, north of North Santa Monica Boulevard via North Rexford and Beverly Drives, to evaluate road grade, potential bus stops on residential street blocks, and distance and timing for a potential northern loop; the loop without stops took approximately 25 minutes.

Phased Implementation Options

The pilot shuttle system could be implemented in phases by adding the southwest area of the city connecting to Beverly Hills High School and Roxbury Park at some point during the pilot period. The proposed demand-based pilot microtransit system is intended to serve all areas of the city based on availability. Although the proposed pilot route runs alongside existing Metro bus lines, frequency and connections between Metro bus stops can take 30-50 minutes in certain areas and may require multiple transfers to reach a local destination, thus the goal of a local shuttle system is to increase frequency for shorter bi-directional trips.

Direction Requested

Staff seeks direction on implementing a pilot transit system, including:

1. Continue planning the implementation of a two-year pilot transit system.
 - Combination of circulator and microtransit (recommended by TPC and staff)
 - Circulator only
 - Microtransit only

2. Postpone implementation to coordinate with opening of the Metro subway system.
3. Cease further evaluation of a local transit system.

FISCAL IMPACT

Preliminary Cost Estimate

The initial estimated costs described in Kittelson’s *Draft Transit Needs Assessment Study Technical Memorandum* was approximately \$3.5 million. That figure was based on transit industry standards and a desired 15-minute headway for fixed-route shuttle and on-demand microtransit services for a one-year pilot program.

Revised Preliminary Cost Estimate

The data gathered from the demonstration was used to determine service frequency, number of vehicles needed to meet demand and refine the preliminary cost estimates. The following revised cost estimate range for the elements of the proposed pilot program was prepared by staff in consultation with other agencies and the executive management team of the City’s current transit contractor:

- Circulator Fixed-Route and On-demand Microtransit: \$ 3.5-4.5 million
- Circulator Fixed-Route Only: \$ 3.0-3.7 million
- Microtransit On-demand Only: \$ 500,000-800,000

DRAFT	Fixed Route	Microtransit	Both
Vehicles	14*	2	16
Operation	3	0	3
Maintenance	3	0	3
Administration	2	1.5	2
Drivers*^	TBD	TBD	TBD
Fuel	TBD	TBD	TBD
Technology	TBD	TBD	TBD

* 15-minute headway each direction

*^ Full- and Part-time shifts

Factors affecting the actual costs include the general operation and administrative costs by a professional transit provider, type and number of vehicles to operate an effective system with the desired 15-minute frequencies, transit stop improvements. The cost estimate does not include potential future infrastructure improvements to support alternative (i.e., electric) fuel vehicles. Purchasing and contracts associated with the pilot program will follow City solicitation and procurement policies.

Funding for a pilot program is available for one-year only using a combination of local return transportation funds, including Proposition A and Measure M funds. All local, state and federal transportation funding requires that services be open to the general public without discrimination and cannot be exclusive to one subset of the population.

Depending on the option selected and the duration of the pilot program, additional funding appropriation will be necessary for fiscal year 2024/25 and beyond. Additional study will be required to understand the capital and operations financial needs and revenue options to sustain a long-term, ongoing transit system.

ATTACHMENT 1



CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT
MEMORANDUM

TO: City Council and Traffic and Parking Commission Liaison Committee

FROM: Daren Grilley, Assistant Director/City Engineer

DATE: November 14, 2022

SUBJECT: Beverly Hills Transit Feasibility Study and Neighborhood Traffic Calming Program Update

ATTACHMENT:

1. October 6, 2022 Transit Feasibility Study Report
2. November 3, 2022 Neighborhood Traffic Calming Program Report

RECOMMENDATION

Staff recommends that the City Council and Traffic and Parking Commission Liaison Committee receive progress updates on the Transit Feasibility Study and Draft Neighborhood Traffic Calming Program (NTCP), and provide feedback and direction to staff on next steps for each of these initiatives.

INTRODUCTION

On April 20, 2021, the City Council adopted the Complete Streets Plan that includes goals and policies that will guide the City in building a safe, convenient and environmentally responsible transportation system serving multiple modes of travel, including driving, walking, cycling and transit (www.beverlyhills.org/completestreets). Goals of the Complete Streets Plan include:

- Providing First/Last Mile Connections
- Improving Transit Rider Experiences
- Increasing Transit Ridership
- Supporting Safe, Complete, Livable, Sustainable and Quality Neighborhoods

Specific policies in support of these goals include exploring a fast, reliable **transit shuttle** with connections to the upcoming Purple (D) Line subway stations and developing a comprehensive **neighborhood traffic calming** toolbox for residential neighborhoods.

This report summarizes the progress towards implementing these policies.

DISCUSSION

Transit Feasibility Study

At their March 15, 2022 study session, the City Council directed staff to begin developing a transit service plan with the Traffic and Parking Commission (TPC) as the advisory body. With the assistance of the transportation consulting firm, Kittelson & Associates, Inc., a transit needs assessment, including public surveys and outreach, was conducted between July and September 2022.

The findings of the Transit Study were presented at the October 6, 2022 TPC meeting (Attachment 1). The Commission supported the recommendation by staff and Kittelson & Associates to

develop a pilot project for City Council to consider that would consist of one fixed circulator route operating with high frequency (e.g. 15-minute headways) south of North Santa Monica Boulevard, along with demand-based Microtransit that would serve residential areas.

Staff is refining the proposed circulator route, including potential stops, which will be presented to the public for input in November-December. A detailed outline of the proposed transit pilot project will be presented to the TPC in January, followed by the City Council. If supported, an RFP would be issued with the goal of beginning operation of a 12-24 month long pilot project by June 2023.

Neighborhood Traffic Calming Program

At the October 7, 2021 TPC meeting staff presented 16 potential traffic calming measures to consider including in the City's Traffic Calming Toolbox, which serves as a resource to identify traffic calming options that are applicable to address the traffic-related concerns in a specific location. The TPC supported inclusion of all measures as potential options for neighborhoods to request on their streets.

At the May 5, 2022 TPC meeting, staff presented industry best practices in NTCPs, as well as policies, procedures, and considerations from the peer cities of Hayward, Glendale, and Encinitas to inform development of a NTCP for Beverly Hills. The Commissioners provided feedback on project initiation, screening, thresholds of community support, approval, and evaluation, which staff incorporated into the Beverly Hills Draft NTCP.

The Draft NTCP, which combines the traffic calming toolbox with the recommended policies and implementation procedures, was made available for public comment from mid-September through mid-October, and presented to the TPC at their November 3, 2022 meeting (Attachment 2). Commission comments will be incorporated and the Draft NTCP will be brought to the City Council for consideration in early 2023.

Community Outreach

The City's Communications team engaged in multiple layers of outreach to solicit participation in the transit survey and attendance at virtual and in-person community meetings. The outreach—described in detail starting on page 5 of Attachment 1—included newspaper ads, citywide mailings, email blasts, posted signs at transit stops, promotion at City meetings and special events, social media posts, and informational flyers at public counters and on City Dial-A-Ride shuttles.

The City released the Draft NTCP for community review September 16-October 14, 2022 via the project website www.beverlyhills.org/trafficcalming. To get the word out, staff mailed a citywide postcard, distributed a press release, published ads in the newspapers, posted on social media, and emailed community groups. Community members were asked to provide comments via email, phone, or through a form on the website.

FISCAL IMPACT

The fiscal impacts for the Transit Pilot Project and the NTCP are discussed in the attached reports.

Attachment 1



CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT
TRAFFIC AND PARKING COMMISSION

TO: Traffic and Parking Commission

FROM: Daren Grilley, Assistant Director/City Engineer
Martha Eros, Transportation Planner

DATE: October 6, 2022

SUBJECT: Beverly Hills Transit Feasibility Study

ATTACHMENT:

1. Draft Transit Feasibility Study and Unmet Needs Assessment and Suitability Analysis Technical Memorandum
2. Community Outreach Mailer

RECOMMENDATION

Staff recommends that the Traffic and Parking Commission review the attached draft *Transit Feasibility Study and Unmet Needs Assessment and Suitability Analysis Technical Memorandum* and consider the recommendation to develop a pilot program consisting of a combination of fixed route and microtransit.

INTRODUCTION

At their March 15, 2022 study session, the City Council directed staff to begin developing a transit service plan with the Traffic and Parking Commission (Commission) as the advisory body. At the April 7, 2022 Commission meeting, staff outlined a scope of work for a transit needs assessment analysis to identify opportunities for future transit system connections.

The adopted 2021 Complete Streets Plan identifies first-last mile opportunities for the Metro Purple Line (Line D) subway stations in Beverly Hills, including micro transit systems. Continued support by the Commission and advocacy from the CAC spearheaded the commission of a transit feasibility study to identify appropriate transit systems/services based on current and future transit growth.

DISCUSSION

In June 2022, the transportation planning firm of *Kittelson & Associates Inc.* (Kittelson) was engaged to prepare the transit needs assessment, which will serve as the foundation for the implementation and operation of a citywide transit system.

Fundamental first steps of the transit feasibility study include:

- Gather stakeholder and public input
- Understand transit needs in the community
- Analyze existing transit services to identify gaps/unmet needs
- Identify the goals, objectives and options of new transit service

Community Outreach/Needs Assessment

Two community outreach meetings were conducted in late August/early September with approximately 12 participants attending either the virtual or in-person sessions, and approximately 430 surveys were received in response to a transit survey released on June 20. A summary of the responses include:

- Approximately 28% (118 of 430) of respondents indicated that they are current or past riders of transit within the City; 43% (184) indicated no experience as transit riders and expressed an interest in using public transit in the future; 29% (124) indicated no interest in using public transportation.
- Approximately 35% (41 of 118) of those identifying as transit users rated current transit services within the City as “very good” or “good.”
- Conditions or “barriers” cited against using public transit include the following, from most significant to least significant:
 - Existing transit services take too long or do not run on time
 - Transfers are confusing, time consuming, or costly
 - Public transportation does not operate near (my) home
 - Transit stops are too far from (my) trip origin or destination
- Several travel corridors highlighted by users in the interactive mapping survey:
 - North-South Corridors: Rodeo, Beverly, Canon, Rexford Drives; Robertson Boulevard
 - East-West Corridors: Santa Monica, Olympic, Beverly Boulevards
- Frequent location types cited by users included medical facilities such as urgent cares and Cedars-Sinai Medical Center, parks, public schools, commercial/retail areas (e.g. coffee shops and restaurants), civic centers (e.g. post office, library), and religious institutions.

Westside Transit Operators

In addition to conducting community outreach meetings, the Kittelson team conducted individual interviews with Westside transit stakeholders, including the Cities of West Hollywood and Culver City to gather insight on local transit services serving each community, and with the Metro Westside planning group for NextGen operations and next steps. Each organization indicated transit ridership is trending toward shorter, faster trips with higher frequency.

West Hollywood

The City of West Hollywood operates a combination of fixed route service to supplement the Metro transit network and specialized on-demand service for individuals over 62 years and disabled persons of all ages. In June 2022, the City Council approved a staff proposal to explore a microtransit pilot project to transition away from dial-a-ride system to provide a general-public microtransit service with priority given to seniors and residents with disabilities served by the current dial-a-ride program. While trips will still be offered to qualifying populations for free, West Hollywood plans to charge non-qualifying riders a fare. Since West Hollywood shares a border and a transit contract with Beverly Hills, there is great opportunity to improve connections between the two cities.

Culver City

In 2017, the City of Culver City completed its *Transit Oriented Development (TOD) Visioning Study and Recommendations* report, with a vision of refocusing its mobility planning approach to include all modes of travel, including walking/pedestrians, transit, bicycles, and automobile traffic. As a result of the study, the *MOVE Culver City* project came to fruition with the goal of improving transit connections throughout the City's urban core and Expo Station area, and to improve the bus transit experience to encourage more transit use.

In November 2021, Culver City introduced an electric, low-floor minibus circulator scheduled to run every 10 minutes at peak times and every 15 minutes off-peak. The intent behind the addition of the circulator to the *Move Culver City* pilot project, as well as the use of converted electric passenger vans instead of conventional transit buses, was to help make service more accessible and convenient for residents and reduce the stigma of riding transit. During the school year, additional circulator routes that serve Culver City Middle School and High School are now offered following advocacy and support by the Culver City Unified School District and parents.

Los Angeles County Metro

Following 400+ community outreach events over a two year period, Metro launched its countywide NextGen Plan with the goal of providing 10-minute or less headways and restructuring the bus line network to focus on local service. The four regional Metro lines operating within the Beverly Hills city limits are confined to major arterial streets. To address transit gaps, Metro launched a three-year micro-transit pilot program (similar to a shared on-demand service such as Lyft) to transport riders within 2-3 miles from major transit centers to key destinations. Currently, Metro microtransit service is operating in Westwood to address high student ridership demands.

Service Options for Consideration

Beverly Hills is well-suited for a variety of transit options, with a compact footprint, a grid pattern street network (south of Sunset Boulevard), and a mix of land uses that provides consistent all-day sources of travel demand. In all instances, it is recommended that any service be offered in the form of a limited pilot period under the administration of the City of Beverly Hills. This will offer the City the ability to explore alternatives more quickly and respond more quickly to needs that may not have been able to be considered by this study or in existence at the time of this study. Two complementary options are best suited for consideration of a City-managed transit service pilot project:

- Fixed-route transit
- Microtransit

Fixed Route

Fixed route transit operates like conventional public transportation as seen within Beverly Hills today provided by Metro, operating defined routes on defined schedules, serving defined stops. Public input received over the course of the study indicates that public interest is for fast connection into the upcoming Metro D (Purple) Line stations scheduled to open in calendar year 2024 on Wilshire Boulevard at La Cienega Boulevard and Rodeo Drive. The greatest transit circulation need within the community is for north-south connectivity, as identified through community input and LA Metro peer discussions (Attachment-1, Figure 7).

Fixed-route transit propensity is greatest from Santa Monica Boulevard to the south of the city, as the intensity of commercial activity and greater relative density provides the concentration of residents and commercial points of interest that offers the greatest potential ridership base.

The residential land use patterns north of Santa Monica Boulevard are traditionally associated with lower all-day transit propensity and utilization, and it is not evident through public outreach

that there is an unmet demand in this portion of the city. To ensure citywide transit opportunities, this area may be better served by alternative service, such as microtransit (discussed below).

From the community survey and public workshop feedback in addition to lessons learned from Culver City, there is also evidence to suggest time-limited fixed route service could be effective during morning and afternoon peak-hour activity to connect parts of the city with the greatest concentrations of enrolled students to Beverly Hills High School. Additionally, exploring extended fixed-route, commute-oriented service to connect the Flats region to the upcoming Metro D Line stations as part of a pilot program may be considered for future testing.

Microtransit

Microtransit is an emerging technology option that offers promise for geographies/terrain more challenging for fixed-route transit or defined zones with lower densities adjacent to areas otherwise favorable for a more conventional transit service, utilizing new technologies to offer on-demand routing between more widely spaced origins and destinations using smaller transit vehicles.

Within Beverly Hills, a microtransit pilot is likely to be the most successful service strategy for portions of the city north of Santa Monica Boulevard. Depending on the limitations of any prospective partner (app) platform, it may be possible for the full portion of the city north of Santa Monica Boulevard to be served by a single microtransit zone.

As with fixed-route transit, network connectivity is critical to the success of any transit service, and limited specific connections into the regional network outside of the microtransit zone would be strongly advised, such as incorporating the future Metro D Line stations along Wilshire Boulevard as exclaves of the microtransit zone. If evidence of peak commute-oriented demand exists within the microtransit zone, it may be more efficient to instead operate peak service along a fixed route to more efficiently capture demand and reduce overall trip times.

Next Steps

Based on the study recommendations, staff recommends developing a pilot program consisting of a combination of fixed route and microtransit service. If the Commission supports this recommendation, or similar variation of services, staff will move forward with developing details for the following considerations:

- Route(s) and stop locations
- Operating hours
- Performance standards (service frequency, safety issues, stop amenities, etc.)
- Safety standards (in consultation with the Police Department)
- Vehicle types, passenger capacity, and power options

Staff would conduct additional outreach to get feedback on these details before returning to the Commission, tentatively in December 2022, for review and recommendation to the City Council.

Public Outreach

The City's Communications team engaged in multiple layers of outreach to solicit participation in the transit survey and attendance at the virtual and in-person community meetings, including:

Ads in BH Courier, BH Weekly, and BH Press (transit survey participation and community outreach meetings)	Beverly Hills Unified School District and PTA social media posts and partnership
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City social media posts, including a personal re-post by Councilmember Nazarian	E-blast notices to approximately 1,200 Complete Streets email subscribers
Citywide mailer announcing community meeting dates and survey information to all households and businesses	Promote on landing page of City website, calendar of events and project page (www.bevelryhills.org/transitstudy)
Post information flyers at 20 high-use Metro bus stops along Wilshire Blvd and Beverly Drive	Promoting project at City events, including the Climate Action Committee Movie Night, Concerts on Canon series, Sunday Farmers' Market
TPC monthly updates and public comment forum	Public Works Commission presentation
CAAC Advisory Committee updates	Beverly Hills Active Adult Club (BHAAC) board presentation
Metro Purple Line monthly community outreach meeting	Posted flyers on senior Dial-A-Ride shuttles
Information flyers distributed at all city public counters	Internal City employee newsletter and emails

A total of 430 surveys were submitted as a result of the extensive public outreach. The cost of outreach efforts totaled approximately \$20,000 for newspaper advertisements, citywide mailers, newspaper advertisements and social media posts.

FISCAL IMPACT

The preliminary estimated cost is approximately \$3.5 million for a one-year pilot program with one microtransit vehicle and one circulator route as described in the study. Factors affecting the actual costs include the general operation and administrative costs by a professional transit provider, type and number of vehicles to operate an effective system with the desired number of routes and frequencies, transit stop improvements, infrastructure to support alternative fuel vehicles. Purchasing and contracts associated with the pilot program will follow City solicitation and procurement policies.

Funding is currently available to start a pilot program using local return transportation funds. Depending on the option selected and the duration of the pilot program, additional funding appropriation will be necessary for fiscal year 2023/24. Additional study will be required to understand the capital and operations funding needs and revenue options to sustain a long-term, ongoing transit system.

Technical Memorandum

September 30, 2022

Project# 27708

To: Martha Eros, Transportation Planner
City of Beverly Hills
455 N Rexford Dr
Beverly Hills, CA 90210

From: Peter Casellini, AICP; Fernando Sotelo, TE; Allison Woodworth; Sam Liu, EIT

RE: Beverly Hills Transit Needs Assessment Study
Unmet Needs Assessment and Suitability Analysis

INTRODUCTION

Kittelson & Associates, Inc. (Kittelson) is working with the City of Beverly Hills (City) to determine whether the current and future planned transit services are sufficient to support the needs of Beverly Hills residents, workers, and visitors. This memorandum summarizes the community needs expressed by the public and peer agencies during community outreach efforts including the online survey, interactive mapping exercise, and public meetings, and provides initial recommendations to direct future transit planning efforts by the City based on the results of the community needs analysis and current industry best practices.

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ONLINE SURVEY FINDINGS

The City developed a Mobility Needs Survey to understand how people who work, live, and recreate in Beverly Hills travel around the community and how they imagine doing so in the future. The survey recorded the demographics of respondents; explored their past and current experiences using public transit to travel to, from, and within Beverly hills; and solicited opinions on how to improve transit within the community – from serving new destinations to addressing commonly identified barriers to using the existing system.

The survey (**Appendix A**) was published online via Survey Monkey and publicized through the City's website, two project public meetings, traditional and social media, City hosted events (such as the Farmers' Market), flyers at high activity Metro bus stops within the city, and e-blasts. A full list of outreach distribution strategies will be summarized in the **Outreach Memo**.

In order to capture broader perspectives on mobility and retain the ability to solicit feedback on existing services from current riders, some survey questions were asked only of existing or interested transit riders and others only of people who responded that they did not expect to ever use public transit in the city.

The following sections explore the **who, where, how, why, and why not** of the public transit landscape in Beverly Hills, the answers to which provide a framework for analyzing the City's unmet transit needs.

Existing Regional and Local Transit Use

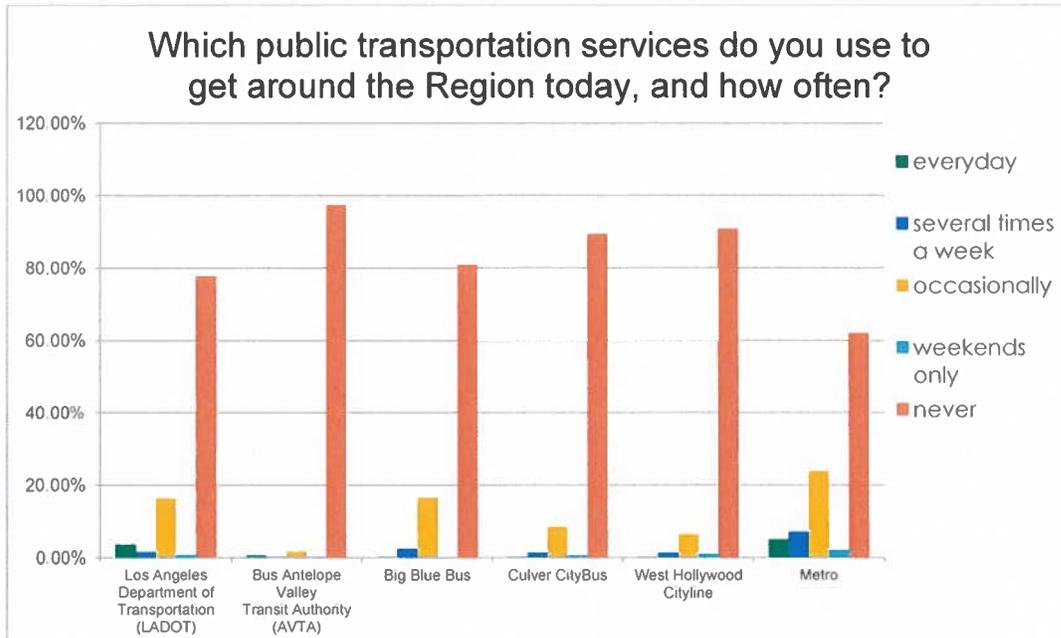
REGIONAL TRIPS

Several transit services operate near or within Beverly Hills and provide **inter-community** and larger regional connectivity. These travel patterns may indicate connection opportunities for potential future local services.

Metro, LADOT, and Big Blue Bus accounted for the highest percentage of daily, several times a week, or occasional trips on the regional options listed (**Figure 1**). The most common frequency cited for riding any of the regional transit services was "occasionally".¹ "Never" accounted for over 80 percent of the frequency responses across all regional services.

¹ This question received a nearly 100 percent response rate from the over 400 survey users. "Other" write in answers included Metrolink, WeHo PickUp, and Metro bikeshare. This question was open to all respondents.

Figure 1 Regional Transit Use

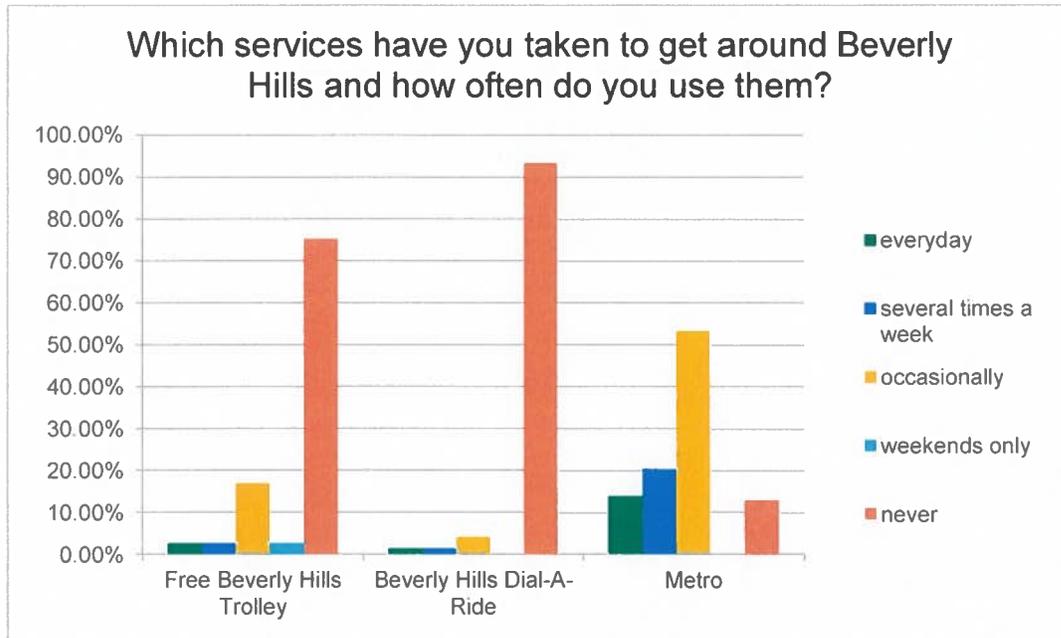


LOCAL TRIPS

Three core public transit services exist within the City and serve local trips currently. Survey users that indicated they had previously taken transit within Beverly Hills were asked which of these services they ride and how often.² Respondents indicated that they use Metro overwhelmingly for most local trips (Figure 2).

² Roughly 1/4 of respondents (99) answered or were eligible to answer this question.

Figure 2 Local Transit Use and Frequency

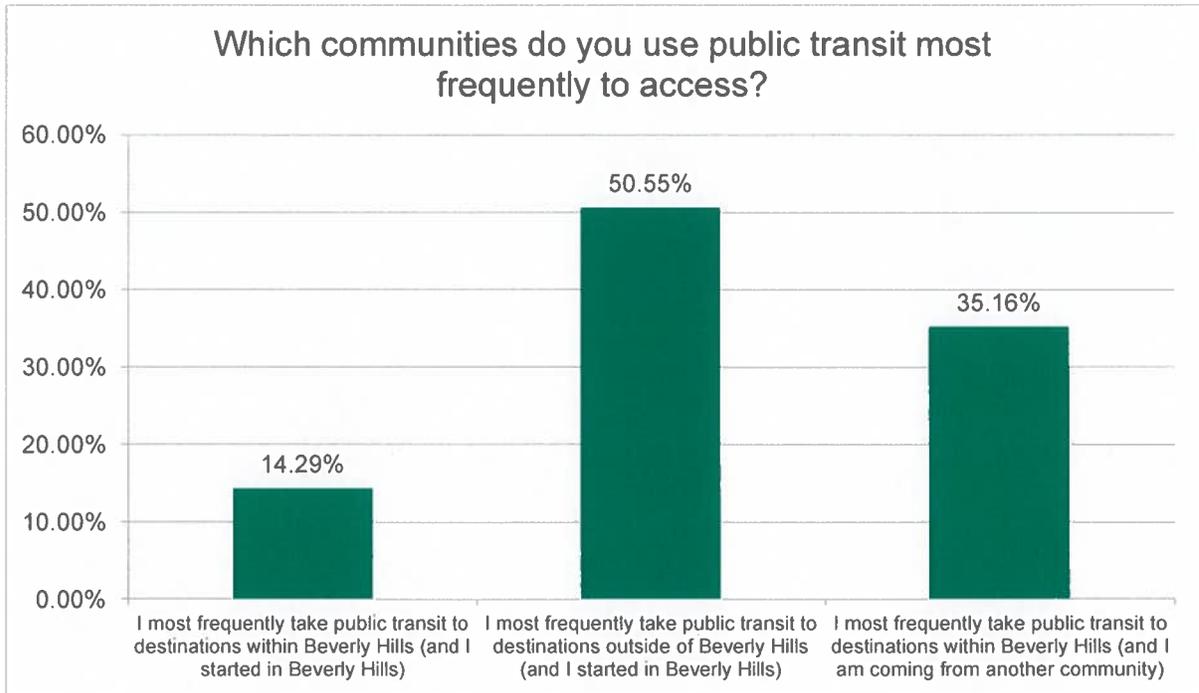


INTRA- AND INTER-COMMUNITY TRANSIT TRAVEL

Beverly Hills is part of a larger region that offers significant entertainment, recreation, and employment opportunities. Half of current transit riders indicated that they use transit for inter-community travel (outside of Beverly Hills).³ While the remaining half of users indicated they take transit to access local destinations, only 14 percent of those riders started their trip within Beverly Hills (**Figure 3**). This does not necessarily indicate that there is an insufficient market for new Beverly Hills transit services. It is possible that the riders coming from outside the community may benefit from additional local connection options to expand their greater access to Beverly Hills businesses and entertainment districts.

³ This question was asked of only current transit riders

Figure 3 Intra- and Inter-Community Trip Demand



Interest

Just over a quarter of respondents indicated that they are current or past riders of transit within the City. A combined 43 percent of respondents indicated no experience as local riders, but expressed an interest in starting in the future. The nearly three quarters of responses from existing or interested riders is a positive indication toward a market for existing or new and improved services. The strong interest in taking transit when the Purple Line opens emphasizes the importance of ensuring that safe, convenient, and comfortable connections to and from the stations (often referred to as the “first mile / last mile”) are available to translate that demand into ridership.

Table 1 Have you used public transportation services in Beverly Hills?

Answer Choices	Responses
Yes, I have used public transportation in Beverly Hills	27.7%
I rarely use public transportation	0.0%
I have never taken public transportation in Beverly Hills and I have no interest in starting ¹	29.1%
I have never taken public transportation in Beverly Hills, but I am interested in starting ¹	22.8%
I have never taken public transportation in Beverly Hills, but I plan to start when the Metro Purple Line stations open in the City. ¹	20.4%

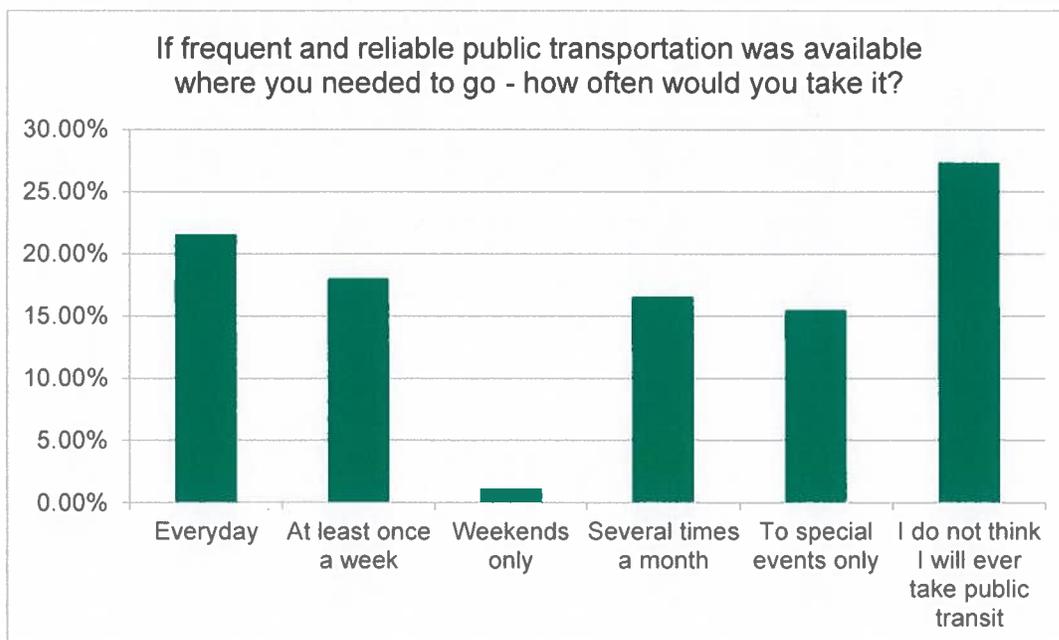
This question was open to all respondents.

¹This answer was used to determine the survey “skip logic” for follow up questions. These respondents were not asked questions specific to existing ridership behavior such as how they get to local transit stops.

To explore the scenarios in which the "I have never taken public transit in Beverly Hills" cohort would consider riding, these respondents were asked "If frequent and reliable public transportation was available where you needed to go, how often would you take it?". Under this scenario, nearly 40 percent of users indicated a likelihood of using public transit everyday or at least once a week (

Figure 4). Of the remaining 60 percent, roughly half (32 percent) indicated that they would consider transit for occasional use or to get to special events and 27 percent indicated they would still not consider transit a viable mobility option. Overall, this suggests that transit may transform a percentage of the "I have never taken public transit in Beverly Hills" cohort into riders by operating a frequent and reliable service that provides access to popular community destinations.

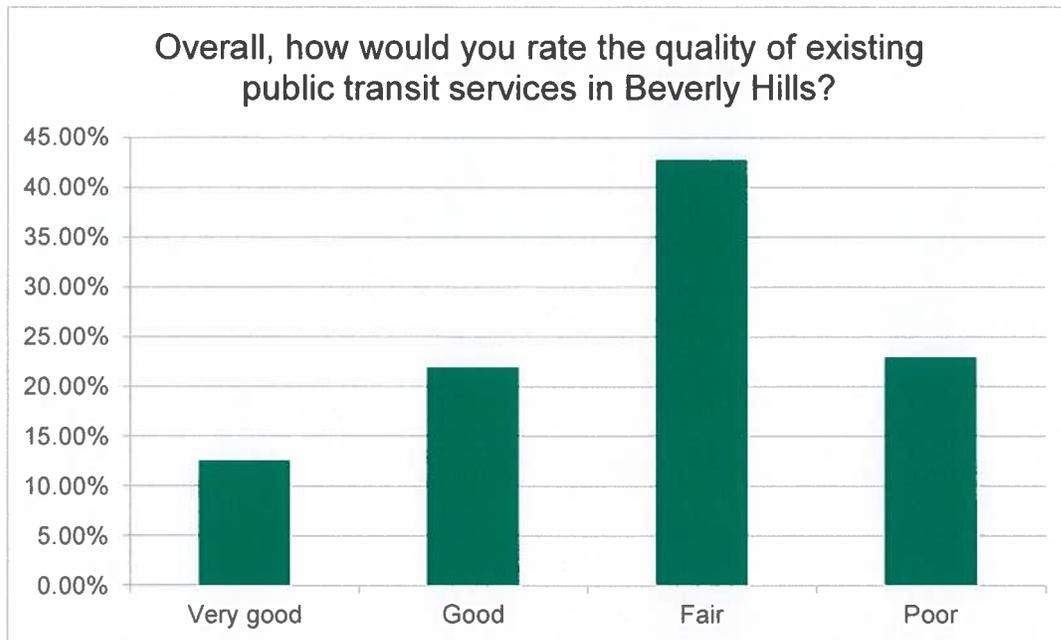
Figure 4 Willingness to Take Transit In Future



Satisfaction

35 percent of users rated current transit services within the city as "very good" or "good" (**Figure 5**). However, the modal response was a "fair" rating. The following section explores the barriers that riders experience which may contribute to the "fair" or "poor" ratings. This question was only asked of people who indicated they had taken public transit in Beverly Hills.

Figure 5 Satisfaction with Current Transit Services in Beverly Hills



Barriers to Transit

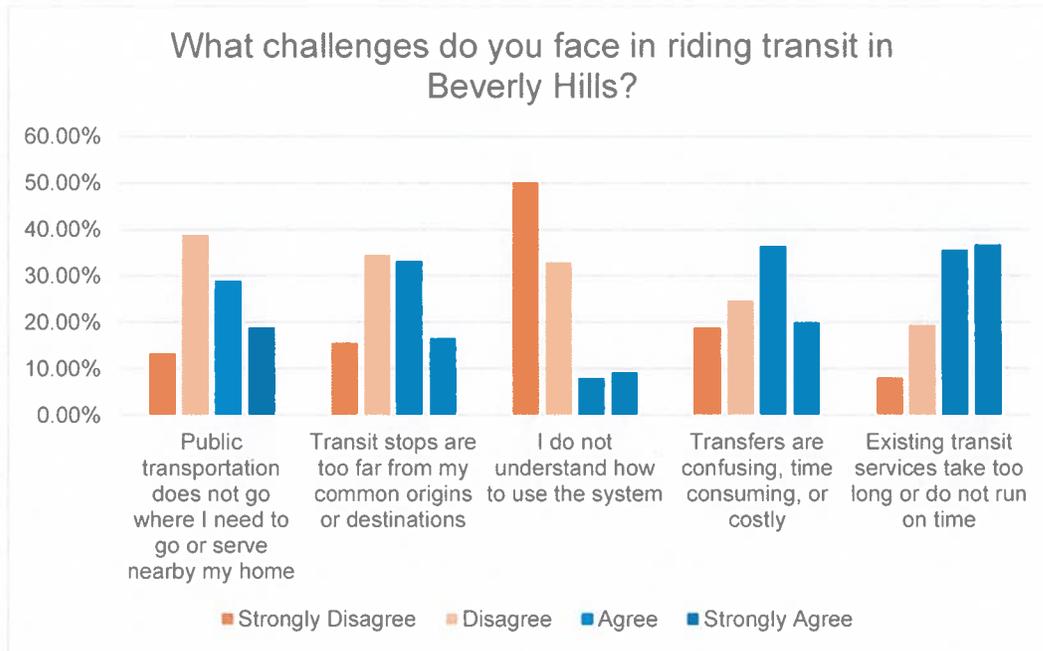
Barriers to accessing or comfortably navigating a transit network prevent people from perceiving or experiencing transit as a viable and quality way to get around. This depresses transit ridership and undermines its ability to be a competitive transportation alternative. The "I have used public transit in Beverly Hills" cohort was asked to evaluate a list of barriers for relevance to their ridership experience (on a scale of "strongly disagree" to "strongly agree") (

Figure 6). A weighted average was applied to these responses and resulted in the following barrier rankings from most significant to least:

1. Existing transit services take too long or do not run on time
2. Transfers are confusing, time consuming, or costly
3. Public transportation does not go where I need to go or serve nearby my home
4. Transit stops are too far from my common origins or destinations
5. I do not understand how to use the system

Additional barriers were provided via the write-in option. Comments highlighted difficulties accessing transit stations due to distances between the stops and the rider origin or destination; uncomfortable or unsafe connections to transit for people walking, using a wheelchair, and biking; and safety concerns while riding transit.

Figure 6 Challenges Riding Public Transit (Asked of Transit Riders)



Destinations

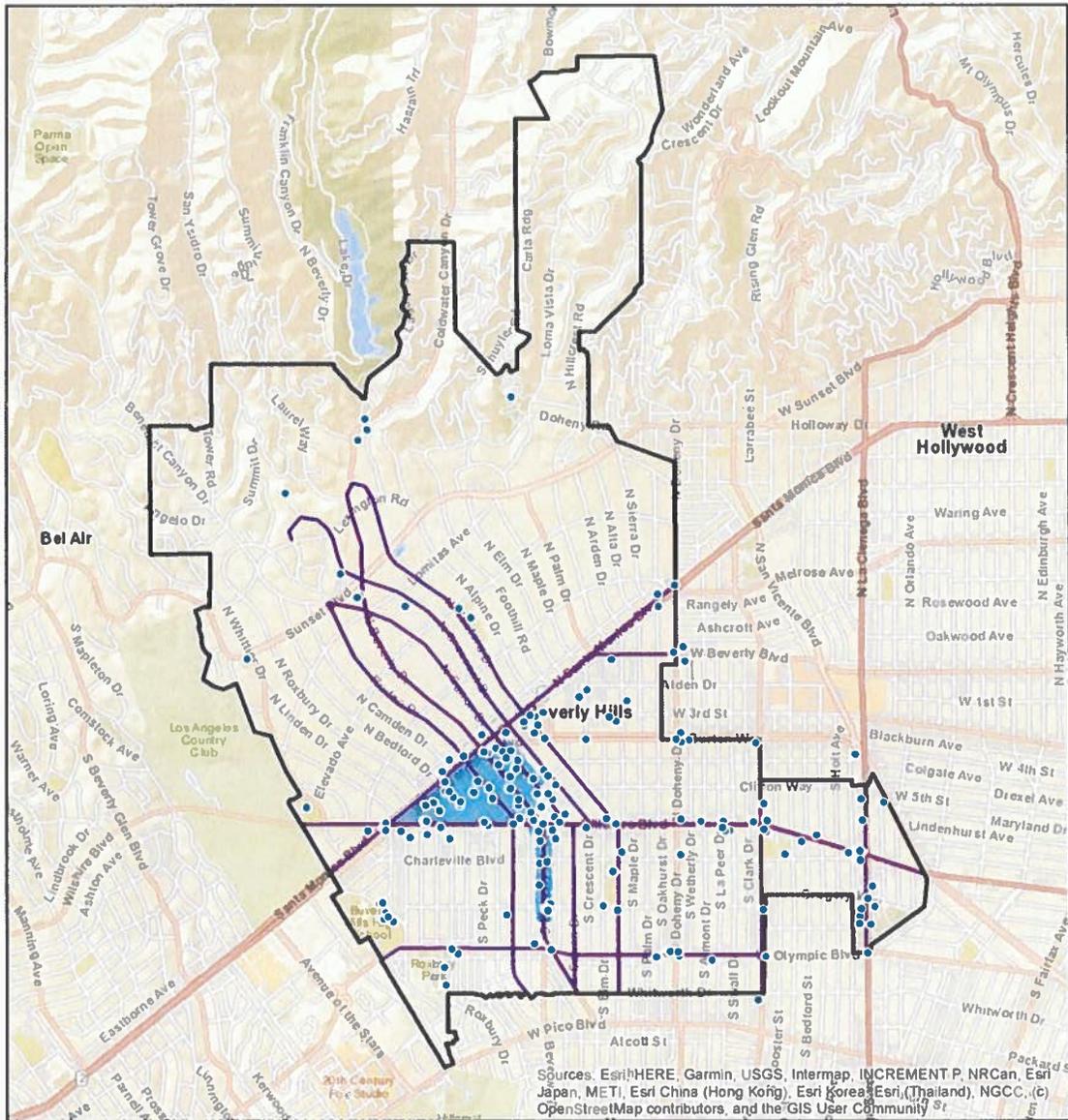
Determining where people want to go is an important aspect of understanding whether the current transit system is making those connections at all – agnostic of quality of service – or where future service may be most successful. The survey asked every user to list their “[up to] top three destinations when travelling within Beverly Hills”. This question received a 61 percent response rate and asked people to answer in comment form rather than selecting from a pre-determined list. All comments were compiled (regardless of which order the destinations were listed) and mapped. In addition, responses from the live exercise conducted during the public workshops were preserved and added to the map. Figure 7 shows a concentration of destinations within and near the Golden Triangle and along Wilshire Blvd. Several travel corridors were highlighted by users:

- North-South Corridors⁴
 - Rodeo Dr
 - Beverly Dr
 - Canon Dr
 - Rexford Dr
 - Robertson Blvd
- E-W Corridors
 - Santa Monica Blvd
 - Olympic Blvd
 - Beverly Blvd

⁴ In most instances, corridors stated in responses did not indicate corridor segments, such as north or south of a given cross street. Because of this, the full corridor was included for mapping purposes.

Frequent location types cited by users included medical facilities such as urgent cares and Cedars-Sinai Medical Center, parks, public schools, commercial/retail areas (e.g. coffee shops and restaurants), civic centers (e.g. Post office, library), and religious institutions.

Figure 7 Top Destinations Within Beverly Hills



Source: Kittelson and Associates, Inc. 2022

Legend

- Key Destinations
- Key Corridors
- Key Areas
- Beverly Hills City Limits

0 0.25 0.5 1 Miles



**Desired Destinations/Corridors
 Beverly Hills, CA**

These destinations are sourced from an online survey and public workshops (Summer 2022) in which users responded to the question "What are your top destinations when traveling within Beverly Hills?" Some destinations just outside the City boundary are included to acknowledge the "grey zone" for nearby inter-community connections.



Limitations

It is prudent to note the factors which may have shaped the survey response pool. While outreach occurred both online, in person, and through traditional media outlets, the survey itself was distributed exclusively online and in English. Access to the internet, language barriers, and lack of discretionary time to spend responding to a City survey or attend City events – such as the public workshop – may have resulted in under-representation of certain populations or on specific answers such as those that asked for “write-in” responses (e.g. the Destination question). To keep the survey focused on critical community feedback, demographic questions were limited. However, a comparison of age, which was collected, to 2020 American Community Survey (5 Year) data shows that the median age in Beverly Hills is 47 years old which falls within the largest responding cohort 35-49(46 percent). Only 1 percent of people responding indicated they were under 18 (this is less than the 5 percent of the population between the age of 15-17). The Survey was distributed to Beverly Hills Unified School district social media and Parent Teacher Association channels, potentially leading to overrepresentation of guardians who participate in these forums.

PEER AGENCY DISCUSSIONS

Discussions with Los Angeles Metro (Metro), West Hollywood, and Culver City were organized in order to explore the successes and experiences of different transit services, models, and networks. These peer agencies were chosen based on the following criteria:

- Presence of transit services that supplement Metro lines
- Similar rider demographics and experiences to those of Beverly Hills
- Locality to Beverly Hills

The **Plan Review, Existing Conditions Analysis, Peer Benchmarking memo** identified additional potential peers (Huntington Beach, Laguna Beach, and Santa Monica). However, while the service of these peer cities was analyzed, the selected benchmarking conversations focused on peers with experiences operating locally to gain additional input on local considerations and coordination with relevant Los Angeles County institutions.

Key takeaways from each peer agency discussion are discussed below.

Los Angeles County Metropolitan Transportation Authority (Metro)

The project team organized a virtual discussion with Metro on Monday, August 15, 2022. The following sections summarize key topics mentioned throughout the conversation.

EXISTING SERVICE

LOCAL BUS SERVICE

The northern part of Beverly Hills is served primarily by Line 2. The central and southern parts of Beverly Hills are served by Lines 4, 20, 28, 105, 617, and 720. Currently, Lines 4, 20, and 720 carry the majority of passengers within Beverly Hills, and are among Metro's most productive lines in the system. Most of the transit service provided is primarily along east-west corridors. Only Lines 105 and 617 partially travel along north-south corridors within the City.

Table 2 summarizes the existing Metro lines that currently serve the City of Beverly Hills.

Table 2: Existing Metro Service in Beverly Hills

Route Number	Service	Route Description	Peak Frequency (minutes)
2	Metro Local Line	East-West travel via Sunset Blvd	7.5
4	Metro Local Line	East-West travel via Santa Monica Blvd	9.5
20	Metro Local Line	East-West travel via Wilshire Blvd	15
28	Metro Local Line	East-West travel via Olympic Blvd	7.5
105	Metro Local Line	North-South travel via La Cienega Blvd	10

617	Metro Local Line	East-West travel via Burton Way North-South travel via Robertson Blvd and Beverly Dr	60
720	Metro Rapid Line	East-West travel via Wilshire	15

Source: Metro, 2022

NEXTGEN BUS PLAN

In 2018, Metro launched an effort to reimagine the bus system to better meet the needs of current and future riders through goals such as (1) doubling the number of frequent Metro bus lines and (2) providing more than 80 percent of current bus riders with 10 minute or better frequency. The NextGen Bus Plan was developed through consideration of technical data and public outreach that included over 400 meetings, events, and workshops over two years. It was approved by the Metro Board of Directors in October 2020.

Research supporting the plan showed a trend toward more people using Metro for shorter trips than longer trips. The restructuring plan sought to meet these needs with higher service frequency and a simplified network focused on local service with rebalanced bus stop spacing targeting ¼ mile between stops, and subsequently transitioning away from a comprehensive, longer-distance Rapid bus network. The NextGen Bus Plan service changes were developed to improve the speed, reliability, and accessibility of the transit system. These service changes are summarized in Table 3.

Challenges related to COVID-19, including an operator shortage, have currently disrupted Metro's ability to operate full service, and as a result, service frequencies in Beverly Hills and across the Metro network are lower than envisioned for full implementation of the NextGen plan.

Table 3: NextGen Service Changes Impacting Beverly Hills

Transit Agency	Route	Route Name	High level description of NextGen service changes	Weekday Frequency, Pre-NextGen (minutes)			NextGen Weekday Service Change Targets		
				Peak Hour	Midday	Evening	Peak Hour	Midday	Evening
Metro	2	Downtown LA – Westwood via Sunset Blvd	More Frequency, Simpler network Merges Lines 2, 302, and 200	11	15	27	7.5	10	15
Metro	4	Downtown LA – Santa Monica via Santa Monica Blvd	More Frequency, Simpler network Merges Lines 4 & 704 on Santa Monica Blvd	14	15	21	6	7.5	10
Metro	20	Downtown LA – Westwood/Santa Monica via Wilshire Blvd	More Frequency, Simpler network Merges Lines 20 & 720 between downtown Santa Monica and Downtown LA via Wilshire	15	12	28	5	5	7.5
Metro	28	Century City – Downtown LA via Olympic Blvd	More Frequency, Simpler network New high frequency line. Merges 28 & 728.	18	27	36	7.5	10	15
Metro	105	West Hollywood – Vernon via La Cienega Blvd/ Vernon Ave	More Frequency, Simpler network New high frequency line. Merges 105 & 705.	18	20	45	10	10	15-30
Metro	617	Beverly Dr – Burton Way – Robertson Blvd Shuttle	New Line Simplifies network with a higher frequency. E Line Culver City station to Cedars-Sinai Medical Center/Beverly Center via Robertson Blvd, west via Burton Wy and South on Beverly Dr. to Pico Blvd (replacing Lines 14 & 16 & 17 on those streets)	30	60	60	45	45	45
Metro	720	Santa Monica – Downtown LA via Wilshire Blvd	More Frequency, Simpler network New High Freq line 20 merging 20 & 720. Peak service only.	8	11	16	10	–	–

Source: Metro, 2022

METRO MICRO

In 2020, Metro launched a three year on-demand rideshare service pilot project called Metro Micro. They offer trips within their five service zones across Los Angeles County. The new service is designed to serve shorter local trips and uses small vehicles with seating for up to 10 passengers. Metro Micro as a concept was envisioned to form part of a family of Metro services, and service area pilot zones were designed to be incorporated into the Metro network in conjunction with the NextGen Bus Plan. The service is designed to be a fast, safe, and convenient option for quick trips around town.

Within the context of the Westside, the pilot has so far proven reasonably successful among college students in the Westwood area. Digital familiarity is viewed by Metro staff as key for microtransit and thus adoption has not been as successful among older residents. However, Metro has experienced that once passengers become familiar with how to request and use the service, they enjoy the service.

Metro Micro implementation also has not had a perceivable negative impact on fixed-route bus ridership. The following data provides a high-level summary of current pilot performance to date:

- Trip length of 2-3 miles on average
- 3 passengers per hour on average
- Operational cost of \$30 per ride, which is higher than the average fixed route operational costs
- 60 percent of the rides are shared with other community members
- High trip-reject rate
- Consistent growth that may be capped by service availability

RIDERSHIP IMPACTS FROM THE OPENING OF THE E (EXPO) LINE

Given the similarity of intent and geographic location of the D (Purple) Line, its opening may trigger similar ridership trend impacts as the opening of the fully-completed E (Expo) Line. With the full opening of the E Line, parallel east-west bus lines decreased in ridership by about 25 percent. There was some increase along the north-south lines connecting to the E Line, but the bulk of the increase in ridership was seen by the municipal agencies (Culver City and Santa Monica) responsible for the majority of connecting bus service in the new portion of the service area.

LIMITATIONS OF AND OPPORTUNITIES FOR SERVICE ENHANCEMENTS

There is a prime opportunity for both Metro and Beverly Hills to work together to improve local and regional transit network connectivity around future D Line stations. Metro staff interviewed feel there can be a beneficial role for additional municipal service in these areas to meet demand. As long as these services do not conflict, Metro is supportive of the City's effort to improve transit services. Metro staff also identified opportunities to connect the residents of Beverly Hills by providing better north-south transit service connections.

With the NextGen Bus Plan, Line 617 was planned to receive increased service frequency of up to 15 minutes; however, this target has not been met due to Metro's ongoing operator shortage. Metro staff also identified addition Line 617 improvement opportunities, namely a reroute onto Canon Drive to provide a more direct connection to the future Purple Line station at Wilshire and Rodeo.

Metro staff also shared a concern that some riders making longer trips may find the changes introduced with the NextGen bus plan to inconvenience with multiple bus transfers. The completion of the D Line extension to Westwood and the Veterans Administration hospital will hopefully reduce this burden.

West Hollywood

The project team organized a virtual discussion with West Hollywood's Social Services division on Thursday, August 11, 2022. The following sections summarize key topics discussed throughout the conversation.

EXISTING SERVICE

The City of West Hollywood is served by fixed route and on-demand services operated by LA Metro and the City. It also offers specialized and subsidized services to seniors (age 62+) and people with disabilities. Table 4 summarizes the existing services West Hollywood currently offers.

Table 4: Existing West Hollywood Transit Services

Service	Description
CityLine Local	Free daytime shuttle (M-Sat 9AM-5:30PM) that runs every 30 minutes and serves stops throughout the City of West Hollywood. The shuttle serves all purpose intra-community trips.
CityLine Commuter	Free rush hour and Saturday evening service connecting the City of West Hollywood and the Hollywood/Highland Metro B (Red) Line Station. The shuttle runs 15-minute frequency on weekdays 7AM-9AM and 5PM-8PM and Saturdays 5PM-8PM.
PickUp	Launched in August 2013 as a free entertainment shuttle that ran Fri-Sat (8PM-3AM) along Santa Monica Blvd between Fairfax Ave and Doheny Drive. It operates Friday through Saturday (8PM-3AM) and on Sunday (2PM-10PM) with a frequency of 15 minutes between Robertson Blvd and La Brea Avenue.
Dial-A-Ride	Free shared-ride transportation service. Trips are scheduled by appointment only and can be scheduled up to a week in advance. Regular shuttles provide trips for grocery shopping, to UCLA Medical Center, and VA West Los Angeles. Serves anywhere within West Hollywood, UCLA, VA, Kaiser (Cadillac and Sunset) and West Hollywood social service agencies. Only available for West Hollywood residents aged 62 or older and community members with disabilities at any age. All vehicles are ADA accessible. Curb-to-curb and Door-to-door options are available.
On-Call Transportation (Lyft/Uber)	Registration required service that is available on short notice, without advanced reservations. They are operating 24/7 and advertise to pick up riders within 15 minutes. Serves anywhere within the City of West Hollywood and up to a 10 mile radius from the border of the City of West Hollywood boundaries. Only available for West Hollywood residents aged 62 or older and community members with disabilities at any age. ADA accessible vehicles are available.

Source: West Hollywood, 2022

RIDERSHIP TRENDS ACROSS SERVICES

During the pandemic, ridership across all services decreased sharply. However, ridership is presently trending slightly upward. Prior to the pandemic, the CityLine Commuter route was highly popular, representing 60 percent of West Hollywood municipal transit ridership. CityLine Commuter route ridership is

still well below pre-pandemic ridership, which City staff attribute to the shift toward working from home. CityLine Local ridership volume is also still below pre-pandemic ridership; however, it is recovering faster than CityLine Commuter given changing worksite dynamics among the conventional daytime commuter population.

Anecdotal evidence from City staff in the absence of surveys conducted since the onset of the COVID-19 pandemic suggests that each service has unique demographics, which had in the past been supported by survey data. CityLine Local serves an older population, with many city seniors using the service to access community resources and grocery stores, while CityLine Commuter service users are demographically more similar to the city population as a whole.

The Pickup service is currently performing higher than pre-pandemic with approximately 2,000 trips per weekend compared to 1,700 trips. Based on 90 percent of participants of a 2019 survey, most riders are local residents, under the age of 40, and male⁵. On Sunday, there are more older participants.

UPCOMING OPPORTUNITIES

As ridership increases, the City of West Hollywood will continue to find ways to improve local and regional connectivity. With the opening of the D Line extension, the City of West Hollywood would like to accommodate future demand by providing a second commuter route.

Recently, the council approved the proposal for a microtransit pilot project. The intent of this project is to transition away from Dial-A-Ride and provide a citywide, general public microtransit service with a priority for city seniors and residents with disabilities served by the current Dial-A-Ride service. While trips will still be offered to qualifying populations for free, West Hollywood plans to charge non-qualifying riders a fare.

Since the West Hollywood shares a border with Beverly Hills, City staff agree there is a great opportunity for collaboration to improve connections between the two cities, such as along Doheny Drive.

Culver City

The project team organized a virtual discussion with Culver City's Transportation department on Wednesday, September 7, 2022. The following sections summarize key topics mentioned throughout the conversation.

EXISTING SERVICE

The City of Culver City provides several varieties of transit services to help residents, workers, and visitors travel around the city. Table 5 summarizes the existing Culver City transit service classifications.

Table 5: Existing Culver City Transit Services

Service	Description
CityBus	CityBus operated fixed-route service provides connections throughout Culver City and communities in Los Angeles including Century City, Marina del Rey,

⁵ <https://www.weho.org/services/social-services/community-study>

	and Westwood. The services interface with major destinations from UCLA to Metro C (Green) and E (Expo) Lines.
CityBus Local Circulator	<p>Pilot circulator routes to provide additional frequency to existing fixed-route alignments and support recent investments in dedicated transit infrastructure on key city arterial streets.</p> <p>Route 1C1 Culver City Downtown Circulator offers free rides between downtown and the Arts District via the Metro E Line. The circulator uses an electric, low-floor minibus and runs every 10 minutes at peak hour and 15 minutes in the off-peak. Routes 5C1 and 5C2 are weekday circulators that operate when school is in session, serving Culver City Middle School and High School as well as Downtown and La Cienega Blvd. 5C1 connects the Arts District and Clarksdale to Washington Blvd while 5C2 connects Overland Ave and Fox Hills to Washington Blvd.</p>
Circuit	Free electric shuttle service (microtransit) that connects destinations between downtown Culver City, the Art District, and Hayden Tract. It operates weekdays 8AM-5PM and on weekends 10AM-8PM.

Source: *Culver City, 2022*

LESSONS LEARNED FROM E (EXPO) LINE DEVELOPMENT

In 2005, Culver City was starting to prepare for the opening of Metro's E (Expo) Line. The Culver City station was proposed as an intermodal transit facility with an off-street transit center in Metro's right-of-way. During its design, the culture of Culver City was more car-oriented, thus concerns primarily involved traffic impacts of buses coming in and out of Metro's right-of-way. Negotiations with Metro resulted in an above-grade rail station and improved integration of the bus transit center to improve intermodal connections.

After the Culver City station opened, the city experienced significant development around the station area, with the City working with developers to incorporate transit-oriented principles into new developments and support improvements to streetscape planning. However, even with enhancements to bus transit connectivity, station access by car still experienced overwhelming demand, and the 300 parking spaces that were provided were insufficient to meet the demand for parking at the station. This experience led City staff to advance the Move Culver City project to improve transit connectivity throughout Culver City's urban core and station area and improve the bus transit experience to encourage more transit use.

MOVE CULVER CITY INITIATIVE

Move Culver City is implementing the vision set forth in the City's TOD Visioning Plan (adopted in 2017) & the Bicycle and Pedestrian Action Plan to implement holistic transportation options for pedestrians, bicyclists, and transit riders. To achieve this, the Culver City Transportation Department is looking to implement three Tactical Mobility Lane Pilot Projects through the quick-build process in three different phases:

- Phase 1: Tactical Mobility Lane on Washington Boulevard
- Phase 2: Tactical Mobility Lane on Sepulveda Boulevard
- Phase 3: Tactical Mobility Lane on Jefferson Boulevard

These pilot projects will serve as the opportunity for Culver City to learn how the permanent infrastructure improvement would work and demonstrate the benefits of such infrastructure to maximize the use of the roadway.

CIRCULATOR INTEGRATION

In November 2021, Culver City introduced an electric, low-floor minibus circulator scheduled to run every 10 minutes at peak times and every 15 minutes off-peak. Until January 2023, the circulator will remain free and open to the public. The intent behind the addition of the circulator to the Move Culver City pilot project, as well as the use of converted electric passenger vans instead of conventional transit buses, was to help make service more accessible and convenient for residents and reduce the stigma of riding transit. During the school year, additional circulator routes that serve Culver City Middle School and High School are now offered after organizing by the school district and parents. Unlike the initial 1C1 circulator route, the school routes are not free to the public, but in practice are free for students through a subsidized transit pass program developed in coordination with the school district.

Ridership is currently lower than anticipated due to a variety of challenges, including some technology challenges with the vehicles used for service, operator shortages, and overlapping services with Metro's Line 1. Since the 1C1 service area expanded in June 2022, ridership has grown slightly. Additional marketing and branding is planned to better publicize the circulator's availability and benefits to the community.

PROSPECTIVE SERVICE DESIGN AND MODE SUITABILITY ANALYSIS

Beverly Hills is well-suited for a variety of transit options, with a compact footprint, a strong grid pattern, and a mix of land uses that provides consistent all-day sources of travel demand. Two complementary options are most well-suited for consideration in the form of an early pilot. Advancement of either of these two options – or a combination of both – will help to better inform actual transit needs of the community through real-world practical experience, and can be further adjusted or serve as a basis for an informed transition to a different service configuration.

The two options proposed for further consideration under this study are City-controlled fixed-route transit and City-controlled microtransit. Fixed route transit operates like conventional public transportation as seen within Beverly Hills today provided by Metro, operating along defined routes on defined schedules, serving defined stops. Microtransit is an emerging technology option that offers on-demand routing between more widely spaced origins and destinations using smaller transit vehicles.

It is recommended that any service be first offered in the form of a limited pilot period under the administration of the City of Beverly Hills. This will allow the City to explore alternatives and respond more quickly to needs that may arise.

Prospective Service Design

Based on the existing service provided within Beverly Hills, the future regional connections provided by the upcoming D Line extension, current and future demographics and land use patterns, as well as community input from public outreach and community preference surveys, a combination of one or more fixed-route circulator routes and a microtransit service area would provide the desired service throughout Beverly Hills, appropriate connections to maximize the effectiveness of the regional transit network, and provide the most effective means of reducing vehicle miles traveled (VMT) throughout the city. Conceptual details of each component and their respective roles in a community transit network are explored below.

Fixed-Route Circulator

The fixed-route service model uses multi-passenger vehicles operating along defined routes on defined schedules to serve passengers at defined stops without reservations. While routes can be of any length, what is commonly referred to as a "circulator" model often operates shorter routes targeted to intra-community local circulation needs, and often uses smaller vehicles. The fixed-route circulator model is recommended to be the primary service incorporated into a Beverly Hills transit pilot due to the geography served, anticipated passenger volumes, existing complementary regional transit connections, and the highest relative cost efficiency.

Fixed-route service allows for trips to be aggregated into a more efficient footprint, offering potential for reductions in vehicle miles traveled (VMT), especially if paired with other priority measures that can improve travel times to match or fall below single-occupancy vehicle travel times such as dedicated transit lanes, shared bus/bike lanes, or emerging options such as municipal high-occupancy vehicle (HOV) lanes.

Public input received over the course of this study indicated that interest was strong throughout the community in a fast connection into the upcoming D Line stations being constructed along Wilshire

Boulevard at La Cienega Boulevard and Rodeo Drive, which can be best achieved with a dedicated linear bus route focusing on a limited number of arterial streets. The greatest transit circulation need within the community is for north-south connectivity, as identified through community input and LA Metro peer discussions, since the regional east-west connectivity continues to be strong with the upcoming D Line and surface transportation options along Sunset, Santa Monica, Wilshire, and Olympic Boulevards.

Fixed-route transit propensity is greatest from Santa Monica Boulevard to the south of the city, as the intensity of commercial activity and greater relative density provides the concentration of residents and commercial points of interest that offers the greatest potential ridership base. The residential land use patterns north of Santa Monica Boulevard are traditionally associated with lower all-day transit propensity and utilization, and it is not evident through public outreach that there is strong unmet demand in this portion of the city, but this area may be suitable for alternative service delivery mechanisms such as microtransit to ensure citywide transit coverage.

From the community survey and public workshop feedback in addition to lessons learned from peer city benchmarking, there is also evidence to suggest other time-limited service could be effective, particularly morning and afternoon service connecting the parts of the city with the greatest concentrations of enrolled students to local schools. It is not evident that there is strong unmet demand north of Santa Monica Boulevard for all-day fixed-route service, but exploring extending a fixed-route, commute-oriented service to connect the Flats region to the upcoming D Line stations as part of a pilot program if resources are available, or if other potential pilot resources like microtransit vehicles are made available for time-limited service.

Microtransit

Microtransit is an emerging transit mode that builds on the traditional Dial-A-Ride model by chaining individual trip requests together with on-demand routes generated through third-party software. Trips may be requested using an app similar to those used by ride-hailing services or by phone through a dispatch center. In areas where fixed-route service is less attractive due to longer distances to access service or longer trip times – generally areas of moderate to lower density – microtransit can offer a connection to the public transit network.

A key advantage of microtransit is that a broader area with lower demand can remain connected to the greater transit network using fewer resources than would be required to provide appropriate coverage with fixed-route service. Service can be deployed only as needed, and can remain available at key connection points such as the future D Line stations to capture outbound demand immediately during periods of lower utilization.

However, Microtransit can become capacity-constrained as ridership increases, and popular service at peak travel times can introduce longer wait times. Microtransit is also more resource-intensive on a per-passenger basis, as local experience through LA Metro's Metro Micro program indicates that service efficiency is limited to approximately four passengers per service hour, while peer region experience in San Diego County with fixed-route circulators in lower-density suburban areas saw its least efficient routes averaging ten passengers per revenue hour.

Microtransit is also challenged in areas with low all-day demand but higher concentrations of demand at specific times, such as office parks or school trips, as the lower-capacity vehicles are less suited to dealing with larger levels of demand. Regular customers with routine travel needs may also find daily trip reservations and changing daily wait time variability to be an impediment to perceived service reliability.

However, microtransit also offers a way of collecting travel demand data in real-time to determine where future fixed-route service can offer capacity to meet demand that may exceed the constraints of microtransit service more effectively. Examples from an early pilot in Eugene, Oregon that replaced underperforming fixed-route service saw demand exceed supply quickly, with many microtransit riders in the pilot region making consistent trips throughout the week, and data from that pilot was used to relaunch several fixed-route lines that better matched the changes in demand observed through the microtransit pilot. Similarly, in San Diego, previous Dial-A-Ride service assets connecting business parks in the Sorrento Valley region with the North County Transit District's Sorrento Valley COASTER commuter rail station were transitioned into fixed-route services, as MTS discovered that standing trip reservations for repeated weekday trips significantly outnumbered unreserved trips.

Within Beverly Hills, a microtransit pilot is likely to be the most successful service strategy for portions of the city north of Santa Monica Boulevard. Depending on the limitations of any prospective partner platform, which will have their own recommended criteria for service zones based on specific operating model configurations (such as whether to limit pickups to certain virtual stops), it may be possible for the full portion of the city north of Santa Monica Boulevard to be served by a single microtransit zone. As with fixed-route transit, network connectivity is critical to the success of any transit service, and limited specific connections into the regional network outside of the microtransit zone would be strongly advised, such as incorporating the future D Line stations along Wilshire Boulevard as exclaves of the microtransit zone.

If evidence of peak commute-oriented demand exists within the microtransit zone, it may be more efficient to instead operate peak service along a fixed route to more efficiently capture demand and reduce overall trip times, while transitioning back to a microtransit model outside peak commute hours. This would require the use of vehicles that would support both operating models, which will be discussed later in this memorandum.

Prospective Service Costs

Detailed costs will need to be developed based on an evaluation of exact route alignments using reasonable and realistic real-world travel speeds, but for purposes of high-level estimations of recommended service volumes, certain variables can be used.

Service costs are more predictable with contracted service, with most contracts offering service on a per-hour basis. Additional detailed benchmarking into costs associated with contracting should be conducted to develop a more detailed independent cost estimate, as the range of costs can vary widely depending on the responsibilities of the contractor, including to what extent any vehicle costs are associated with the contract. For simplicity in adjusting further estimations, an estimated contract rate of \$100 per vehicle per hour is assumed, but additional vetting is required and is a recommended future task.

A draft circulator routing was developed, operating with a one-way distance of 5.2 miles on an alignment using Beverly Drive, Olympic Boulevard, La Cienega Boulevard, Robertson Boulevard, Burton Way, Doheny Drive, Beverly Boulevard, and Foothill Road to represent an approximate all-day circulator route. With an estimated in-service average travel speed of 12 miles per hour, including stops for passengers and traffic signals, one bus could complete one loop in under half an hour. To operate this loop bidirectionally with 15-minute frequency, four buses would be required per hour. Assuming an eighteen-hour service day and 365 days a year of service, one fixed circulator route would have a gross annual operating cost of \$2,628,000. Further adjustments could be made to increase service in peak hours or to decrease service frequency much later in the evenings on weekdays when demand may be lower if included in a contract and staffing levels are feasible.

Microtransit service costs are more difficult to calculate if being operated directly, but a similar hourly cost on the part of the contractor could be reasonably expected since labor will be the primary cost driver. Providing one additional staffed bus to operate within the city for eighteen hours a day with similar cost assumptions adds another annual marginal cost of \$657,000.

Similarly, a peak overlay service extending further into residential areas and connecting to Beverly Hills High School could require an additional two peak vehicles per hour for two hours a day, depending on resource availability, service design, and input from school officials and parents depending on need, and would add \$68,000 per year in gross costs based on a 170-day academic calendar with similar assumptions.



Figure 8: A sample circulator alignment used for rough service costing purposes. More detailed service planning is necessary to determine more accurate potential service costs.

It should be strongly cautioned that these are very rough, high-level cost estimates intended as a basis for order-of-magnitude level consideration for approximate budgeting purposes, and that more information with respect to service design and current real-world costs given recent inflation must be taken into consideration.

It is advised to start a new service with a "best foot forward" approach, ensuring that initial service levels upon launch are convenient and competitive to attract and retain passengers. Launching service with lower levels of investment short of the previously mentioned attractive frequent service levels and making plans to scale up service if demand increases will result in a first impression of service that is not useful enough to meet enough needs for enough people, and additional demand is less likely to materialize.

Options Not Currently Recommended for Further Consideration

While the urban form and demands of Beverly Hills could likely support one or more of several different transit operating models, at this time this study does not recommend immediate advancement of several concepts. Among several concepts considered but not advanced are:

- Partnerships with Los Angeles Metro to subsidize additional Metro service
- Partnerships with neighboring municipalities to share existing models of transit service
- Neighborhood Electric Vehicle (NEV) microtransit
- Transportation Network Company (TNC) subsidies
- Streetcar

PARTNERSHIP WITH LA METRO

A compelling option for many cities across the United States is to enter partnership arrangements with their regional transit operator, in this case LA Metro, to support additional transit service that otherwise is difficult

for Metro to feasibly support within the financial constraints under which they operate. This model would pose a low-risk alternative for Beverly Hills by supporting the operations of the regional provider already operating within City limits to increase service levels, and depending on the exact arrangements of a potential agreement, allow the City to exert stronger influence over service decisions. Challenges with this model are a lack of precedent within Los Angeles County as explored by this memorandum's authors as of the time of this writing, particularly given Los Angeles County's long history with standalone municipal operators supplementing regional service, as well as the considerable unknowns of acceptance of any arrangement by an outside Board of Directors and unknowns over any agency-wide regional equity considerations. **While this model could prove cost-effective to the City with lower administrative burden by leveraging existing public resources, the number of remaining variables are challenging to the success of a service given a goal of entering a demonstration pilot period on a short time horizon.**

PARTNERSHIP WITH NEIGHBORING MUNICIPALITIES

Similarly, entering into a contractual relationship with neighboring municipalities either directly operating (such as Culver City or Santa Monica) or contracting transit service of their own (such as West Hollywood) is also a practical and generally financially viable option. The City of Beverly Hills already offers an excellent example of this arrangement through their relationship with the City of West Hollywood for on-demand Dial-A-Ride service for qualifying residents. However, similar challenges to the above case of Metro exist in the unknowns that arise in any negotiations with outside parties. **A partnership of this nature leverages economies of scale for efficient use of resources; however, due to the greater demand on timeline and resources, this is an option that is recommended for further consideration at a later date if a standalone City-led pilot proves successful.**

NEV MICROTRANSIT

A service option benchmarked in other communities such as downtown Santa Monica and Huntington Beach is the prospect of a microtransit service operated by smaller neighborhood electric vehicles, or NEVs. These vehicles are lower-capacity, with up to six seats, and are speed-restricted to operate solely on lower-speed urban streets. This option has also been so far implemented within denser entertainment and retail districts where vehicular congestion is generally already high. While these vehicles are most commonly operated in partnership with third-party service providers and supported by advertising revenue to keep overall cost to municipalities or contracting business improvement districts low, their capacity limitations limit the upper range of their service efficiency on a passenger per hour basis, and often do not offer the congestion reduction goals within their service areas since they are less able to efficiently pool trips. **While effective service in the Triangle is critical to the success of a prospective Beverly Hills service, and while there is viability for a microtransit pilot in other portions of the city, the existing implementation model for this service is not seen as a good match for Beverly Hills' climate and circulation needs and goals at this time.**

TNC SUBSIDIES

An option explored by several less-dense municipalities in Southern California and across the United States is entering into partnership arrangements with Transportation Network Companies (TNCs), also referred to as ride-hailing services, with major examples being the Uber and Lyft platforms. This approach itself can take several different shapes, with discounted trips throughout a defined zone, discounted trips originating or terminating in a zone but with discounts available for trips leaving the zone, or discounted trips originating or terminating at defined transit centers. This option has found qualified success in more suburban areas such as San Clemente, California and Pinellas County, Florida, but in most instances structurally relies upon demand within a given region being low enough to warrant a subsidy for an outside

service proving more cost-effective – or freeing up enough resources that can be more successfully deployed elsewhere – than investment in standalone alternatives. In addition, the finances of TNCs over the course of the COVID-19 pandemic and the changing regulatory environment in California raises concerns over the long-term sustainability of a program dependent on third-party platforms. The lower-occupancy vehicle operating model has also demonstrated negative traffic congestion impacts that are contrary to the climate and traffic goals shared by the City.

STREETCAR

Finally, the idea of a streetcar was considered but dismissed primarily on the basis of significant upfront capital costs relative to unproven ridership demand. Streetcars are a popular mode in the United States in downtown regions for circulation, but pose significant challenges in operations – especially in mixed-traffic environments where streetcars share their operating space with other private vehicles and can become subject to delay. Maintenance space needs also pose a significant challenge given the limited land available within city limits. Streetcars are commonly viewed as offering a degree of transit permanence to downtown regions and have proven to be a popular economic development strategy, but when passenger surveys ask transit riders and the community (including the Beverly Hills community) about priorities in transit service, usability and timeliness are more important than the specific mode. **Streetcars may have a role in the future if other transit services prove to offer consistent passenger demand along a particular alignment, but demand should first be proven through other modes with lower upfront capital costs such as fixed-route bus before consideration of more permanent investment.**

UNMET TRANSIT NEEDS

A thorough review of the 2020 Westside Cities Council of Governments Mobility Study, 2021 Beverly Hills Complete Streets Plan, and recent community surveys and outreach was conducted to identify the unmet transit needs in Beverly Hills. Throughout these discussions and review, several recurring themes became apparent:

- A majority of survey respondents view the current transit network's service within Beverly Hills as "fair" or "poor"
- The existing transit network is viewed as unreliable and inconvenient
- Several destinations of interest are missing from the current network

This section will highlight the specific weaknesses referenced through this project's outreach with respect to missing connections, as well as key community points of interest that have been identified as integral to any municipal service network.

Gaps in Existing Transit Network

There are currently seven primary Metro lines that the City of Beverly Hills rely on to get to their destinations: Lines 2, 4, 20/720, 28, 105, and 617. These lines are not only limited in frequency, but also limited in destinations. These lines serve the following respective corridors: Sunset Boulevard, Santa Monica Boulevard, Wilshire Boulevard, Olympic Boulevard, La Cienega Boulevard, Burton Way, and Beverly Drive. Despite strong coverage along east-west corridors with frequent crosstown service, there are little to no lines that connect these corridors together.

Only one route is designed to provide some level of intra-community circulation within Beverly Hills – Line 617, a new service that combined segments of previous routes in place prior to the NextGen bus network rollout – but the frequency levels that Metro has been able to operate given current operator shortages have left this service categorized as more of a "lifeline" service, operating once per hour per direction to ensure that service is available for those without any other option, but remaining very difficult for most current and prospective riders to incorporate into routine travel.

Bridging the transit connection gap between the northern part of the City (above Sunset Boulevard) and the southern part of the City (south of Santa Monica Boulevard) is important since the northern part of Beverly Hills offers community members access to high-quality community public space and outdoor activity areas identified as key destinations during outreach. These areas include, but are not limited to, Greystone Mansion, Will Rogers Memorial Park, The Maltz Park, Virginia Robinson Gardens, Coldwater Canyon Park, and Franklin Canyon Park.

On a smaller scale, much interest has been shared with the project team on improving circulation within the Triangle, especially among visitors that may currently be compelled to travel between parking areas to visit multiple destinations within the city. A transit solution that can help visitors arriving to Beverly Hills by car that can connect existing City parking structures near other destinations to key community destinations is considered valuable.

There has also been a desire to integrate local schools such as Beverly Hills High School into the transit network. However, this desire is unable to be met with the transit network in the City today given its location away from the major crosstown travel corridors.

The opening of the D Line stations along Wilshire Boulevard will bring an influx of demand for transit connections along this corridor. Lines 20 and 720 alone are operationally unable to meet this incoming demand, and their structure will help to carry passengers incrementally further in the same direction of travel, but will not themselves serve to meaningfully expand the reach of this new rail service. Moreover, there currently aren't enough transit lines traveling north-south that are able to connect community members to these future stations.

It is also key to note that transit is only a part of the solution to completely bridge the gaps within the network. Non-motorized connections will be important to think through and tie into the transit network resolve first and last mile accessibility, especially with the opening of the D Line stations along Wilshire Boulevard. The Beverly Hills Complete Streets Plan has identified several nonmotorized links within the community that will be crucial in expanding the effective reach of the new rail service in addition to any added surface transit service.

Key Destinations Identified from Outreach

There are several key destinations that have been identified by the community through the online survey and the interactive mapping exercise from public meetings. The following destinations are points within the City of Beverly Hills where the community members currently go to or wishes to go to:

- Commercial and retail shops within the Business Triangle
- Community assets such as City Hall, City Public Library
- Schools including Beverly Hills High School, Beverly Vista Middle School, and Horace Mann Elementary School
- Outdoor activity areas including La Cienega Park, Roxbury Park, Greystone Mansion, Will Rogers Memorial Park, The Maltz Park, Virginia Robinson Gardens, Coldwater Canyon Park, and Franklin Canyon Park

- Grocery stores (e.g. Ralphs on Beverly Boulevard, Whole Foods Market on Crescent Drive, and Pavilions on Olympic Boulevard)

These destinations should be considered in any future route recommendation to continue to create an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes.

SERVICE DESIGN CONSIDERATIONS

Principles of Service Design

For any public transit system to be successful, there are several key service area and service design attributes that need to be met, namely the concentration of origins and destinations both in geographic and temporal proximity, a degree of linearity in trip patterns that can be captured by one or more routes, and for areas with multiple routes, support for use of the complete network in route design and policy.

For a new transit service to be successful with respect to ridership and cost effectiveness, it needs to achieve most or all above goals. Listed below are strategies consistent with these goals that should be prioritized in any transit network development:

- **Routes should connect areas and people with the highest transit propensity in as direct of a path as possible.** These include areas with the greatest concentrations of residents and jobs, areas with the strongest retail and economic activity, and areas of greatest network interconnectivity. Linearity is also important to ensure that service can carry riders as far as possible as quickly as possible with as few operating resources as possible, such as buses, operator labor hours, and fuel.
- **Routes should be operated with the highest practical frequency, and with a span of service to match demand.** In most urban areas with consistent all-day activity, rider expectations are increasingly supporting high service frequencies, or the time between bus arrivals at a given stop, of no more than 15 minutes. At high service frequencies of 10 minutes or better, riders feel comfortable using transit without consulting a schedule, arriving to a stop knowing that service will be available soon. As service frequencies approach 15 minutes, more riders may seek out additional information such as schedules or real-time information to plan their trips, making using transit less intuitive and less convenient. As service frequencies exceed 15 minutes, more specific planning will be required by riders, leaving these trips only suitable for those with more predictable schedules and travel behavior, such as commutes to school or work, or riders with more travel flexibility such as retirees. Span of service, or the start and end times for the service day, should also be consistent with relative activity levels, and ensure that transit remains a viable option
 - *West Hollywood has found success emerging from the COVID-19 pandemic with its PickUp service, offering a frequent circulator during evenings and weekends targeted toward the community's peak entertainment hours.*
- **Routes should form (or contribute to) a comprehensive transit network.** Much as a city is made up of a comprehensive set of streets that connect and operate as a uniform, cohesive network, so too does a successful transit network. Ensuring that each route adds value in connecting riders between different parts of the community while also connecting to other services that can facilitate complementary connections outside the community will ensure that service investments yield the greatest possible benefit. In the case of Beverly Hills, it is imperative that any new service leverages the regional investments made by the new Purple Line stations by providing connecting service. Routes should be spaced to minimize effective overlapping and duplicative service coverage, bearing in mind that the customary walking distance to access a service corridor is generally one-quarter mile.

Funding Sources

State, federal, and local resources exist to support funding capital infrastructure like vehicles, bus stop amenities, and transit facilities, and to varying extents, ongoing operations. Communities throughout Los

Angeles County also benefit from local Measure M transportation funding, and municipalities have a history of trading Measure M funding allocations with other local dollars as needs arise. For example, West Hollywood purchases excess Measure M funding from other Los Angeles County communities for arranged prices in unassigned budget dollars to support its transit operations. As the federally designated Metropolitan Planning Organization (MPO) for Los Angeles County, LA Metro will be able to provide further guidance on resources to support a transit pilot and potential permanent transit operation.

An important note is that while many transit operators provide commute-specific services tailored to certain segments of the population like school students, public transit funding support from the federal and state government is conditional upon the basis that service is open to the public without discrimination and cannot be exclusive to school students or other subsets of the population.

Below are sources of potential funding to explore:

- City of Beverly Hills
 - Fare revenues
 - City General Fund support
- Los Angeles County
 - Measure M funding, including bolstering the set local allocation with additional funding swaps
- State of California
 - State Transit Assistance (STA)
 - Transit Development Act (TDA)
 - Transit and Intercity Rail Capital Program (TIRCP)
- United States Government
 - Formula Grants (to be coordinated with LA Metro)
 - 5311 Urbanized Area Grants
 - Surface Transportation Block Grant (STBG)
 - Congestion Mitigation and Air Quality (CMAQ) Grant Program
 - Discretionary Grants
 - 5339(c) Low- or No-Emission Vehicle Program
 - Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program

ADA Access and Bus Stops

Transit operations must operate with accessibility at the forefront. All public transit vehicles are required to support personal mobility devices such as wheelchairs and mobility scooters by providing wheelchair ramps or lifts, and all public transit infrastructure including bus stops and bus shelters must be fully accessible to passengers with mobility limitations. Capital funding may be required to establish new bus stops in portions of the city not currently served by transit to ensure accessibility.

In addition, fixed-route transit operation also requires the provision of complementary ADA paratransit service. It is possible that new service may be fully within the existing Access Services service area, but future analysis and detailed service planning will be required to fully determine any additional paratransit service needs.

OPERATIONAL CONSIDERATIONS

Fundamentals

The operation of transit service in any form requires several key non-negotiable attributes to be delivered. These attributes must be incorporated into any model from the beginning to ensure the greatest chance for system success.

- **Passenger safety and comfort:** Service should include on-board security cameras, security at major transfer points, adequate lighting on board vehicles and at waiting areas, and operator training to ensure that all riders feel comfortable and empowered to make use of the system without reservation or concern. Early system development discussions should include input on security, including obtaining a security contractor and developing an ambassador program to provide a face for the service, or developing a relationship with the Beverly Hills Police Department for select oversight in limited circumstances. Bus stop and station areas, as well as primary travel paths to access these areas, should also be identified in conjunction with Public Works staff to ensure that illumination at night is sufficient, blind spots are limited, and that any related concerns at key bus stop locations can be addressed. Finally, vehicles and bus stop areas should be regularly maintained to ensure a continued perception of cleanliness.
- **Marketing and branding:** While fast and frequent service can be enough to attract new passengers (as well as essential to retaining riders), ensuring a successful product launch will provide the greatest chance for system success. Innovative branding to produce a mobility product that feels consistent with the character of Beverly Hills will help increase public interest and awareness in the service and could encourage skeptics to try the service. West Hollywood provides an good local example with the distinctive artistic branding of their CityLine service, which draws attention to the vehicles in operation.
- **Regional interconnectivity:** The Los Angeles region has made great strides in producing a transit landscape that combines several different regional and municipal service providers into a coherent and consistent regional user experience. Shared attributes like the TAP fare payment system and integrated public information through Metro's transit maps help to empower riders to make use of the transit network more broadly instead of limiting trips to one familiar operator. A Beverly Hills transit service should seek to build on the model of other municipal operators like Culver City and Santa Monica in partnering with Metro to share fare payment systems (if fares are to be charged) and public information.

Contracting

Public transit service can either be contracted or operated directly by cities or transit districts. **A contracted approach would be recommended for a pilot project to reduce risk to the City by limiting assets on hand if the pilot is not continued, as contractors can also provide vehicles.**

Research has shown that there is not a clear advantage to either approach with respect to operating costs, and local governments can still take on some portions of the overall cost of building and operating a transit service while relying upon an outside contractor for administration of maintenance and operations. A hybrid setup is common in many large California transit agencies such as Foothill Transit and municipal fleets such as those operated by the City of Pasadena, with the agencies and cities taking on responsibility for real estate, facilities, and vehicle procurement to take advantage of capital funding opportunities available to government agencies, but outsourcing operations and maintenance to outside contractors.

If a Beverly Hills pilot were to continue into a permanent fixture a more detailed financial analysis would be recommended to determine the most cost-effective path forward, but given time constraints and the lack of adequate land to support an appropriately sized transit operating facility within city limits, beginning with a turn-key contract would offer the greatest flexibility and responsiveness, but may result in above-average operating costs compared to more mature operations.

Vehicles

A wide range of vehicles could be considered for fixed-route services, while microtransit operations would benefit from a narrower range of smaller vehicles. There are vehicle types that would be appropriate for both operating models and could add additional flexibility to change the nature of a pilot program or alternate between service models in a region over the course of a day.

In either circumstance, all vehicles must provide accommodation for riders using personal mobility devices such as wheelchairs and mobility scooters, such as through a wheelchair ramp or lift. Vehicles with wheelchair ramps are preferable on routes where high volumes of mobility devices can be expected, as wheelchair lift operation is a more time-consuming process that requires the operator to exit the vehicle, introducing additional delay to service.

As well, transit operators in California are now required to meet the California Air Resources Board's Innovative Clean Transit regulation, with non-zero-emission vehicles operated in revenue service to be fully phased out by 2035. **Given the stated community environmental goals for this project, the state of current operating technology, and the need for a future transition, a transit pilot project should seek to use battery electric vehicles.**

Fixed-route service along major corridors is most commonly provided using a standardized 40-foot transit bus and 60-foot articulated transit bus model, while circulator service like that operated by the Los Angeles Department of Transportation's DASH service may use 30- and 35-foot transit buses that are more maneuverable on streets with tighter turns and with the same heavy-duty build quality rated for FTA-required 12 year, 500,000 mile minimum vehicle lifespans, but at the expense of reduced passenger capacity compared to larger vehicles. Other circulator services like West Hollywood's CityLine make use of cutaway buses, using bus bodies placed on conventional passenger van frames. These vehicles are generally less expensive and can be somewhat more maneuverable, but are not tested to the same standards as transit buses and are rated for a shorter service lifespan. Most commercially available cutaway buses for transit use also include wheelchair lifts.

Operating costs can decrease with the use of smaller vehicles as energy efficiency will generally increase, but it should be noted that the energy cost associated with vehicle operation is a relatively small portion of overall operating costs, with most operating cost associated with labor, both in the form of drivers as well as maintenance overhead.

Microtransit service is generally operated using smaller vehicles, such as cutaway buses or large passenger vans modified to include wheelchair capabilities. A distinct advantage to the use of passenger vans, more specifically those rated to seat 10 or fewer people, is that a commercial driver's license is not required for operation in California. However, the reduced capacity of these vehicles limits their successful use in more conventional higher-capacity applications.

It is likely that securing a cutaway van fleet for a pilot program would offer the greatest flexibility for pilot program development while likely providing appropriate capacity for a fixed-route circulator.

SERVICE PERFORMANCE MEASUREMENT

Transit service performance can be measured in several ways, but common metrics for urban transit system planners and administrators to track closely are passengers per revenue hour, or how many passengers are carried for every hour a vehicle operated in revenue service, and passenger subsidy, which is the overall cost of providing service on a per-passenger basis. It is recommended that performance targets be defined in advance of a pilot program to help guide evaluation of whether the program is operating sustainably and whether resources are being used to the greatest benefit of the community. For comparison, the below are fiscal year 2019 systemwide passengers per revenue hour metrics for neighboring transit operators' fixed-route bus service as reported to the Federal Transit Administration:

- Los Angeles Metropolitan Transit Authority: 39.0 passengers/revenue hour
- Los Angeles DASH: 28.3 passengers/revenue hour
- Culver CityBus: 27.1 passengers/revenue hour
- Santa Monica Big Blue Bus: 22.5 passengers/revenue hour
- West Hollywood CityLine: 6.0 passengers/revenue hour

However, while performance metrics can inform planners of the relative efficiency of different services, it is important to note that metrics focusing only on performance of the service in isolation can only form part of an overall analysis of the role of service in the community. To this end, the State of California has been openly considering revisions to its Transit Development Act (TDA) funding guidelines for several years to reduce an emphasis on farebox recovery, or the share of revenue contributed toward transit operations from passenger fares, noting that meeting broader community goals may require the operation of service that places less of an emphasis on absolute cost efficiency. In addition, the remaining effects of changes in travel patterns resulting from the COVID-19 pandemic make it challenging to compare service performance today to service performance prior to March 2020. Most agencies have seen declines in overall ridership levels, and consequently declines in overall service efficiency indicators.

For example, many communities and agencies have set goals toward reducing community Vehicle Miles Traveled (VMT), which measures overall vehicle travel volumes, and can be a metric that rises and falls in parallel with carbon dioxide (CO₂) emissions and air pollutants like fine particulate matter depending on the community's vehicle fleet mix. A strategy toward achieving this goal would be to ensure that service alternatives exist and are attractive to capture trips, which may require operating more transit vehicles in service to provide more attractive service frequency than may be most cost-efficient.

NEXT STEPS

This project sought to provide a needs assessment for the feasibility of additional transit service within the City of Beverly Hills, and has found that there are gaps in existing transit service and potential new connections that can be made to better support regional transportation investments and improve local circulation. This project has also found that this need can be practically met by the City of Beverly Hills on its own, with viable options for exploring a pilot program using contracted service.

As establishment of a pilot program is explored further, there are several additional recommended considerations to explore:

- A second community survey focused on community preferences to determine what service attributes and which potential benefits or incentives would encourage use of public transportation within Beverly Hills

- More detailed route planning to provide specific fixed-route service alignments and operating cost units to inform prospective future Requests for Information (RFIs), including any capability of operating microtransit service using a third-party platform
- Release of an RFI to explore microtransit suitability in more detail with third-party technology providers
- Early partner discussions with LA Metro to explore available finances that could support development of a standalone City transit operation, including federal, state, and county funding opportunities and whether outside funds could be available for a pilot program
- Development of a strategy to transition existing City operating assets and programs, specifically for Dial-A-Ride and trolley service, to be guided by the results of a pilot program

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ATTACHMENT 2

**PROPOSED TRANSIT FIXED-ROUTE
November 2022**

