

Menlo Park - Comprehensive Shuttle Study

FINAL REPORT – January 2025



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SUMMARY REPORT

Introduction

This report summarizes the evaluation process and its key findings for the Menlo Park Comprehensive Shuttle Evaluation. Detailed research is included in the Appendices.

The City of Menlo Park has provided free shuttles between Caltrain and the Marsh Road and Willow Road business parks since 1989. The Marsh and Willow Shuttles provide a "last-mile" connection to encourage commuters to take transit instead of driving and complement transit services in San Mateo County provided by SamTrans, Caltrain, and the Dumbarton Express. In the late 1990's, the City began offering free community shuttles including the Crosstown Shuttle, a scheduled service with a set timetable and route, and the Shoppers' Shuttle, a door-to-door service providing access around Menlo Park and selected parts of Palo Alto, and Redwood City. All shuttle vehicles have bicycle racks and are wheelchair-accessible to promote mobility for all.

Challenges to the shuttle system in recent years include more private companies providing shuttles for employees, greater use of transportation network companies (e.g. Uber, Lyft), changing travel patterns in general, the COVID-19 pandemic, and work-from-home policies.

The goal of this comprehensive shuttle study is to serve existing and future riders' needs, while identifying options to deliver transportation services more efficiently. The shuttle study proposes service improvements based on resident and commuter use of the shuttles, and future changes including new residential development in the Bayfront area (these new developments are subject to parking maximums and are required to reduce trips by single-occupancy vehicles by 20 percent). Recommendations for improving the shuttle system include modifying current routes and schedules, improving frequencies, and providing on-demand options to provide greater service coverage and flexibility.

Project Overview, Goals, and Objectives

The Menlo Park Shuttle Program provides access to community and commuter destinations, door-to-door services, and vital transit connections throughout the City. To align with changing travel needs and to respond to growth in the Bayfront and other areas, the City seeks to enhance this shuttle system as an alternative to driving, reduce operating costs, and support vulnerable populations, including older adults, low-income residents, and non-English speakers.

The key goals of the project were to:

- Efficiently connect the community to transit, jobs, shopping, and other destinations

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- Ensure shuttle service complements other San Mateo County transit services to help create a holistic regional transportation network
- Find cost savings while continuing to provide high-quality shuttle service
- Provide an attractive transit alternative to driving

In achieving these goals, the study also sought to:

- Analyze riders' travel patterns and needs that were impacted by COVID-19
- Identify innovative solutions, such as microtransit or ride-hailing partnerships, that may be feasible in the complex fiscal environment where reduced funding and increasing costs have impacted other shuttle programs in the region
- Provide recommendations that reflect the changes to the built environment and travel patterns that have occurred in Menlo Park, that can benefit large and small businesses, people with disabilities, older adults, low-income residents, and commuters

Study Process and Timeline

The comprehensive study, conducted from March 2023 to November 2024, considered five key components:

1. Existing Transportation Ecosystem
2. Community Engagement
3. Assessment of Shuttle Service Improvement
4. Shuttle Fee Assessment
5. Funding Opportunities and Partnerships

The project incorporated three distinct phases of community engagement to gather public and stakeholder input, which helped prepare and guide the shuttle system recommendation. Figure 1 illustrates how these components were executed alongside the parallel rounds of engagement.

Figure 1: Study Process and Timeline Overview

2023				2024			
Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter
1. Existing Transportation Ecosystem		2. Assessment of Shuttle Service Improvement		3. Shuttle Fee Assessment		4. Funding Opportunities & Partnership	5. Board Review
				Recommendation Updates			
Engagement Phase 1		Engagement Phase 2		Engagement Phase 3			

Existing Transportation Ecosystem

Transit Services

The City of Menlo Park is served by multiple public transportation providers, offering both local and regional options. The key transit services connecting residents and visitors to nearby cities and essential amenities include:

Caltrain – Caltrain offers vital rail connections from Menlo Park to San Francisco, the Peninsula, San Jose, and Gilroy. With hourly service at the Menlo Park station¹, it provides efficient links to regional destinations and city centers.

SamTrans – SamTrans operates a regional bus network across San Mateo County, extending into Santa Clara County and San Francisco. Menlo Park benefits from multiple routes, providing connections to nearby cities like Redwood City and Palo Alto.

Dumbarton Express – Operated by AC Transit, the Dumbarton Express links Menlo Park with Union City BART and Stanford University. This express route is crucial for commuters, bridging the gap to Newark, Fremont, and the BART system.

Marguerite Shuttle – Stanford University’s Marguerite Shuttle provides free transport around Palo Alto, connecting indirectly to Menlo Park via other transit options.

SamTrans Redi-Wheels – Redi-Wheels offers paratransit services for individuals with disabilities, covering San Mateo County and Pacifica from 5:30 am to midnight daily.

Peninsula Volunteers – Providing subsidized Lyft rides for medical appointments, this service operates Monday through Friday, with flexible scheduling options.

Commute.org and 511.org – These resources offer trip planning and commuter assistance. Commute.org runs free commuter shuttles to major transit hubs, while 511.org provides comprehensive Bay Area transportation information.

City Shuttles – Menlo Park offers free commuters and community shuttles including M1 – Crosstown Shuttle, Shoppers’ Shuttle, M3 – Marsh Road Shuttle, and M4 – Willow Road Shuttle.

Demographic and Employment Analysis

This analysis assessed transit needs and ridership potential in Menlo Park by examining demographic factors, employment/activity hubs, and other key factors to identify areas

¹ Since the start of the study, Caltrain electrification has increased service to the station.

where transit investment could be most impactful. Table 1 presents a demographic snapshot of Menlo Park, providing insights into population composition and commuting patterns.

Table 1: Demographic Snapshot of Menlo Park

Population	People of Color	Age Composition	People with Disabilities	Work – Mode Choice
Menlo Park has a total population of 33,677 residents , with a population density of 3,019 people per square mile	Individuals identifying as people of color make up 38% of the population	24% under 18, 37% aged 19–44 , 19% aged 45–60, 20% above 60	About 7% of residents have a disability	54% drive alone 23% work from home 10% walk/bike 5% use transit

Using data from the American Community Survey (ACS), Metropolitan Transportation Commission (MTC) Plan Bay Area 2040 projections, and local open data, this study mapped demographic indicators at the block group level to assess community needs across Menlo Park. This analysis identified neighborhoods with concentrated populations who are likely to depend on public transit.

Propensity analysis combines the weighted densities of various demographic indicators, including the proportion of older adults, households with limited or no vehicle access, people of color, those living below 200% of the poverty line, and individuals with disabilities. These factors are known to increase reliance on public transportation. The analysis assigns higher weights to indicators such as zero-vehicle households, poverty, and people of color, as these strongly correlate with increased transit needs.

- The finding highlights specific neighborhoods, such as Belle Haven, Vintage Oaks, Downtown Menlo Park, and the area east of The Willows, as high-need areas for public transportation.
- Notably, MTC and SamTrans have designated the Belle Haven neighborhood an "Equity Priority Community" and an "Equity Priority Area," underscoring the critical transportation needs.

Employment density, another key indicator of transit demand, is projected to increase significantly in Menlo Park, with jobs expected to grow by 50% from 17,417 in 2021 to 26,205 by 2040. Downtown Menlo Park currently has the highest employment density, a trend anticipated to continue due to its proximity to the Caltrain station. The eastern part of Menlo Park is expected to see increased employment density by 2040, while parts of West Menlo are projected to remain stable.

Composite density is a combination of population density and employment density, which can determine public transit demand. Figure 2 combines these factors into the composite density score, weighed to reflect both resident and commuter needs, identifying high-

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demand transit areas such as Downtown, Central Menlo Park, Linfield Oaks, Bayfront, and a part of Sharon Heights.

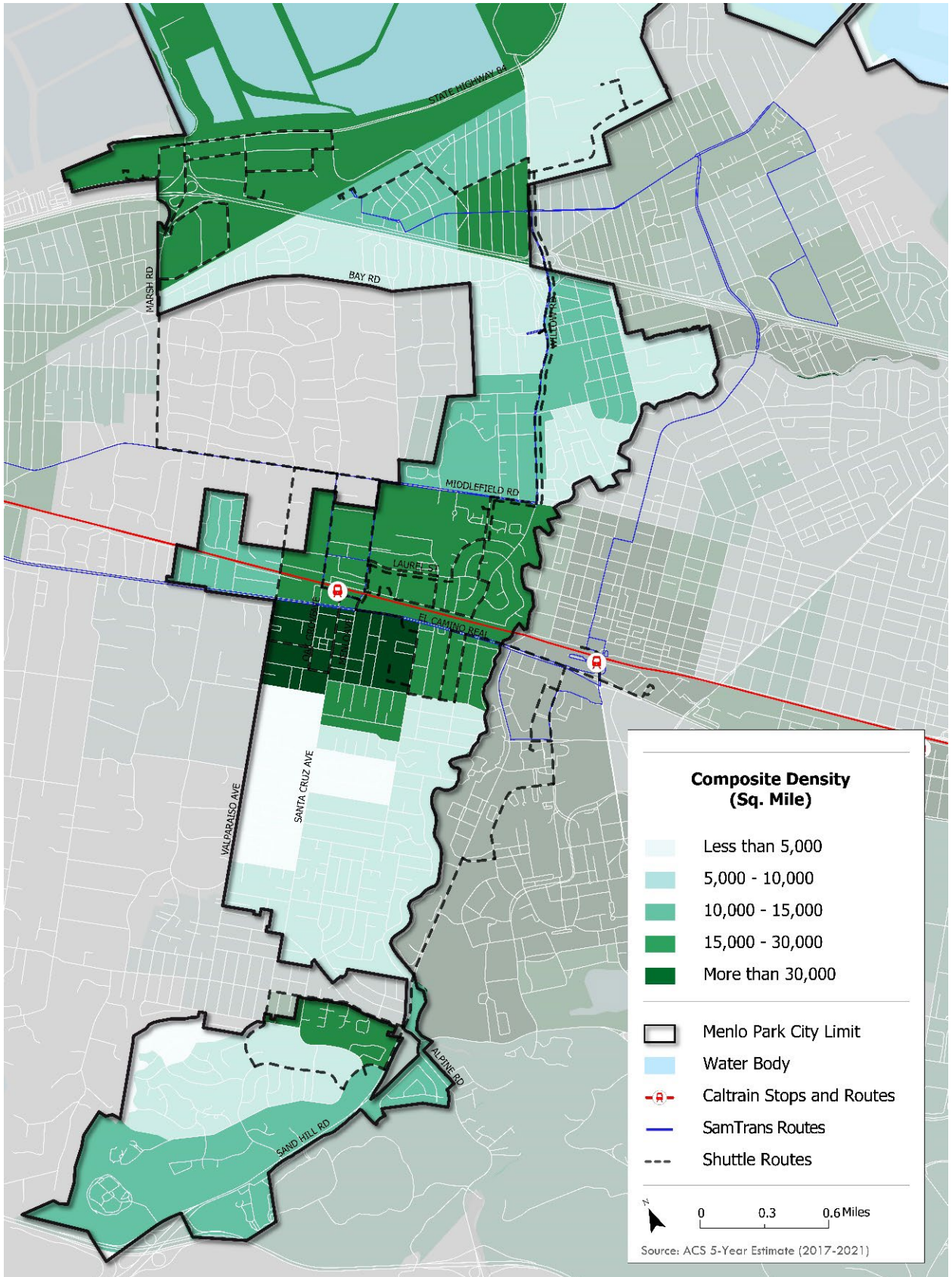
This score is calculated by adding the adjusted population density to twice the employment density. This weighting reflects the needs of both workers at job sites and potential customers visiting those locations. While the Menlo Park Shuttle serves all these areas, determining the quality of service and operational efficiency provides further insights into actual ridership patterns and how well the existing service meets the high demand.

Activity centers are key locations in Menlo Park that are likely to generate high demand for public transportation. Figure 3 highlights these, including educational institutions, senior services, community centers, the medical campus, shopping areas, and major employers. By mapping these points of interest (POIs), the map helps us understand where these destinations are situated in relation to each other and residential areas, and how people might travel to and from these destinations, including potential public transit routes.

The distribution of activity centers varies across Menlo Park, with a lower concentration in Central Menlo Park than in other areas. This diversity in activity center types and locations suggest they cater to a wide range of people across different age groups and demographics.

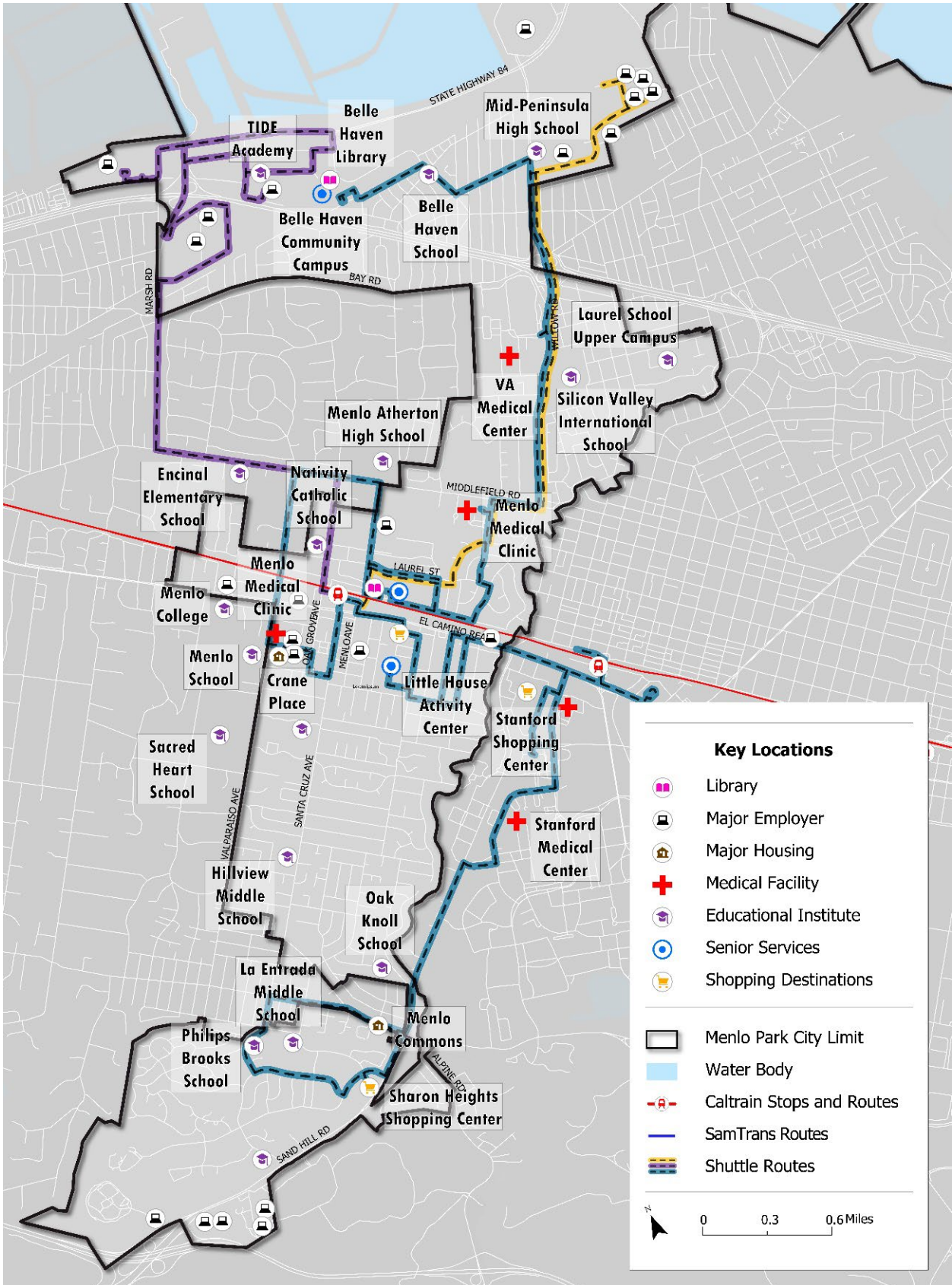
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Figure 2: Composite Density Map of Menlo Park



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Travel Demand Analysis

Travel flow and origin-destination analysis in urban settings provide valuable insights into commuter behavior, highlighting the direction and volume of trips, especially during peak hours. The travel demand analysis was conducted within Menlo Park and a 500-meter buffer from City limits. The 2019 travel flow map (Figure 4) shows:

- High concentration of trips in the northern and northeastern sections, especially around the Bayfront area and Belle Haven, where there is significant travel during peak hours due to nearby business districts.
- Central Menlo Park, notably near Middlefield Road and Laurel Street, also experiences moderate travel activity, reflecting strong intra-city travel.
- Southern parts of the City, including Sand Hill Road and Santa Cruz Avenue, see fewer trips, aligning with residential and less transient travel patterns.

By 2031, projected travel density indicates growth in the Bayfront and Belle Haven with increased flows in central areas, while southern Menlo Park remains steady with lower trip volumes as shown in Figure 5. These trends suggest that development in northern and central Menlo Park and the presence of key employees may continue to shape travel demand in these areas.

Analyzing travel flow within a 500-meter buffer around Menlo Park provides insights into movement patterns with adjacent cities. In 2019, the highest trip counts were observed in East Palo Alto, followed by flows near Stanford Hospital and to downtown Menlo Park as presented in Figure 6.

LEHD Analysis: Employment Patterns and Commuting Distances

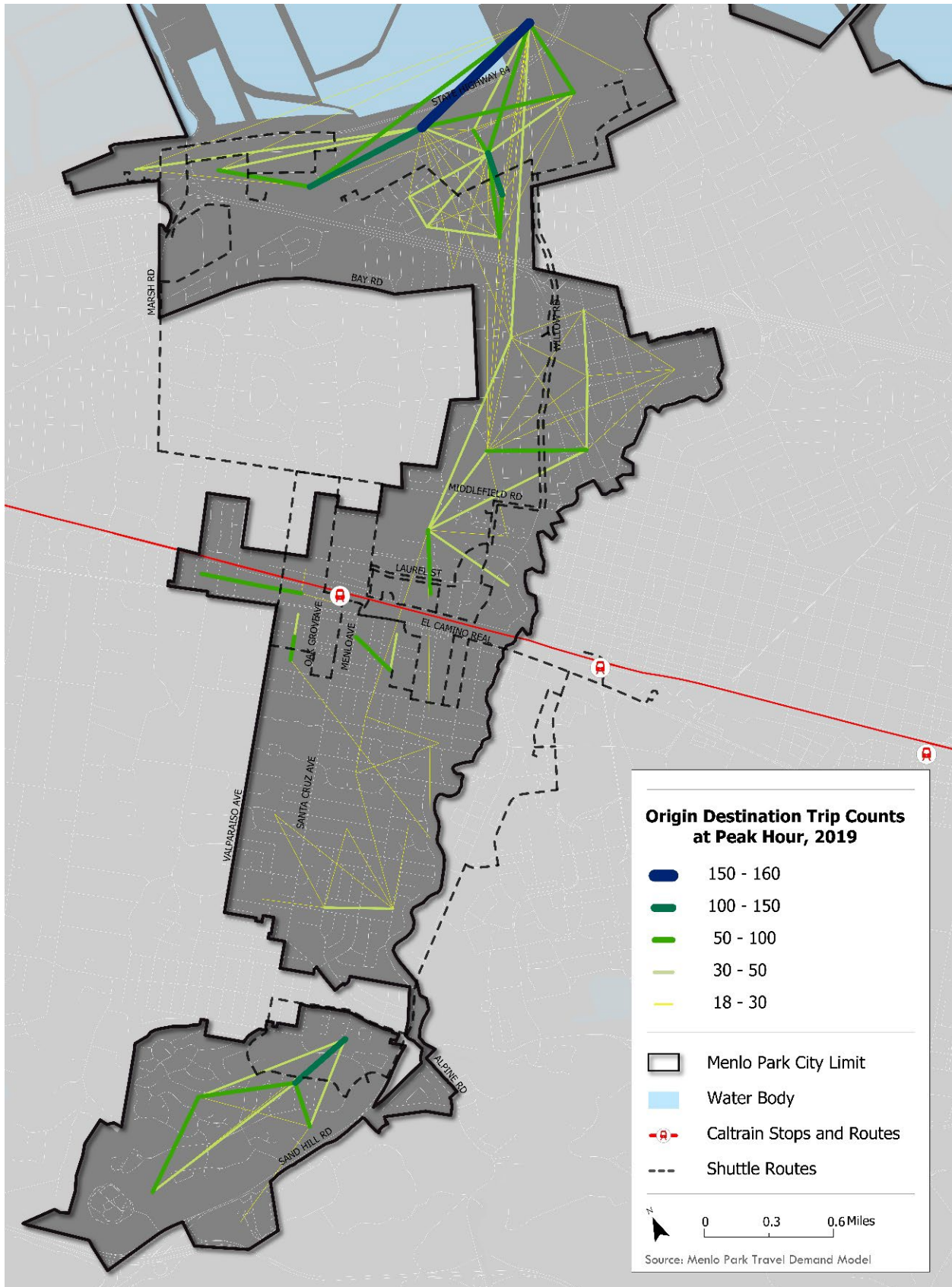
The Longitudinal Employer-Household Dynamics (LEHD) data from 2021 examines the interplay between employers and employees commuting to and from Menlo Park. Of the city's 14,980 residents, 13% work within Menlo Park, with notable numbers traveling to nearby tech hubs like Palo Alto and Stanford. San Francisco and San Jose, despite being over 30 miles away, attract a substantial share of Menlo Park's workforce. **Approximately 53% of Menlo Park residents commute less than 10 miles, while 26% commute between 10 and 24 miles, underscoring a preference for shorter commutes that may inform shuttle routes and transit planning.**

Worker Inflows and Outflows: Menlo Park's commuting patterns reveal that 97% of the city's workforce commutes from other cities, while 87% of residents travel outside of Menlo Park for work. This high proportion of both inbound and outbound commuters emphasizes the need for strategic transportation planning to manage peak-hour flows effectively.

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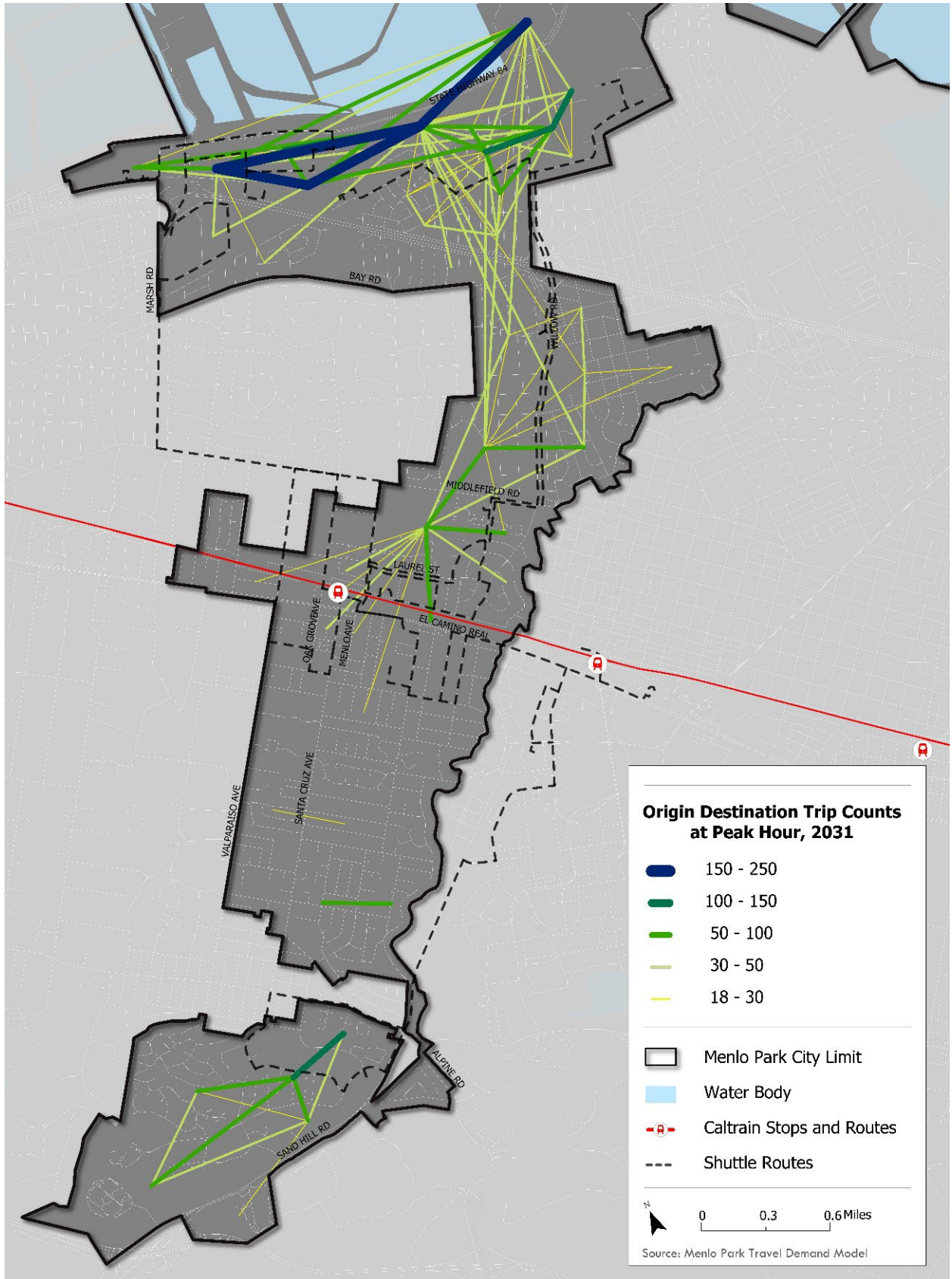
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Figure 4: 2019 Origin Destination Trip Counts at Peak Hour



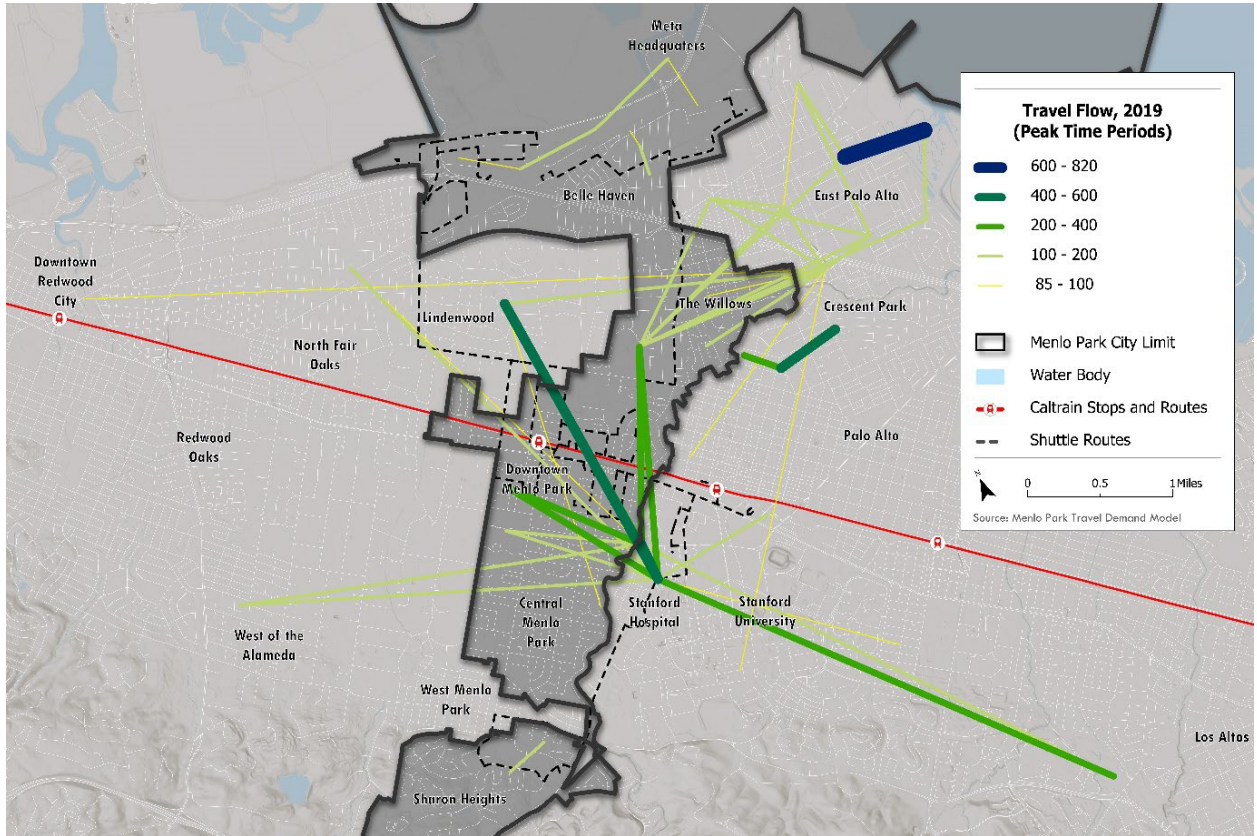
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Figure 5: 2031 Origin Destination Trip Counts at Peak Hour



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Figure 6: 2019 Travel Flow with 500-meter Buffer to City Limits



Analysis Summary

Since 1989, the City of Menlo Park has provided a free shuttle service, as a convenient mode of transportation for everyone. This service connects Menlo Park residents, visitors, and commuters to their respective destinations. The community shuttles cater to local destinations such as senior facilities, downtown retail, and the library, while the commuter shuttles efficiently transport commuters to the Marsh Road and Willow Road business parks from the Caltrain station during peak commute hours.

Apart from the Shoppers' Shuttle, all shuttles operate Monday through Friday. All shuttles are wheelchair-accessible and can accommodate up to two bicycles.

Of the four shuttles, two focus on commuters, and two focus on serving residents within the community. Commuter routes M3 Marsh Road and M4 Willow Road shuttles are focused on connecting regional connections like Caltrain to the job centers located in the Bayfront area east of Downtown Menlo Park, between U.S. Route 101 and San Francisco Bay. The community routes are the fixed-route M1 Crosstown shuttle and the dial-a-ride Shopper's shuttle. In 2022, the shuttles provided 16,447 trips, down 67% from 2019 and 80% from the system's peak in 2013.

All shuttles are operated under contract with SamTrans/Caltrain, Commute.org, and the City of Menlo Park by MV Transportation. The shuttles are housed in Burlingame, CA, approximately 17 miles north of Menlo Park.

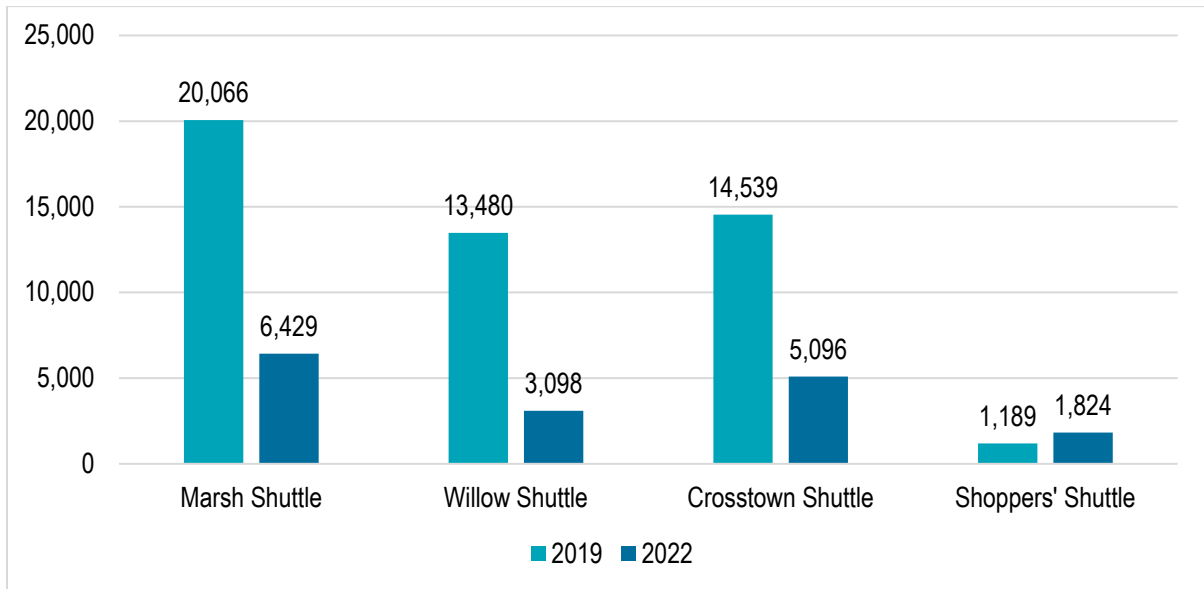
The decline in shuttle usage was caused by many factors, including:

- COVID-19 pandemic
- Increase in work from home
- Increased use of private company shuttles
- Changing travel patterns

Figure 7: 2024 Existing Shuttle System Map on Website



Figure 8: System Ridership in 2019 and 2022



Overall, in 2022, the service regained 33% of its pre-pandemic ridership and Figure 8 presents the change in ridership by shuttle between 2019 and 2022. Ridership decreased 72% on commute routes, possibly because the routes were impacted by changes in commute patterns. The Crosstown shuttle decreased by 65%, while the Shoppers shuttle increased 53%. It is worth noting that service changes (including service cuts, reductions in frequency, and elimination of service) to the Shuttles and regional transit providers like Caltrain and SamTrans have also impacted ridership.

In addition to changes in commuter behavior, the shuttle program has struggled to scale with the increase in office and residential development in the Bayfront area between 2015 and 2019. The shuttle is currently not well positioned to capture users from the future development planned in the Bayfront area.

Community Engagement

Throughout the project, a robust community engagement was conducted to gather input on existing conditions and needs, service scenarios, and final recommendations. Table 2 outlines the events and meetings held in each of the three phases, along with the engagement and marketing approaches undertaken.

Table 2: Event, Meeting, and Survey Schedule by Engagement Phase and Method

Phase 1: Existing Conditions	Phase 2: Service Scenarios	Phase 3: Recommendations
Technical Advisory Meeting #1 (Virtual) Monday, July 24, 2023	Pop-up Event #1 Downtown Farmers Market Sunday, January 28, 2024	Technical Advisory Meeting #3 (Virtual) Friday, September 20, 2024
Pop-up Event #1 Downtown Farmers Market Sunday, September 10, 2023	Pop-up Event #2 Mi Tierra Linda Market Monday, January 29, 2024	Co-Creation Session #2: Transit Funding Planning Game Monday, October 14, 2024
Pop-up Event #2 Belle Haven School Tuesday, September 12, 2023	Pop-up Event #3 Little House Activity Center Tuesday, January 30, 2024	Public Meeting (Virtual) Tuesday, October 15, 2024
Kick-Off Meeting (Virtual) Thursday, September 14, 2023	Pop-up Event #4 Arrillaga Recreation Center Wednesday, February 7, 2024	
Stakeholder Interviews #1 Between September 26 - October 13, 2023	Technical Advisory Meeting #2 (Virtual) Friday, February 16, 2024	
Co-Creation Session #1: Transit Planning Game Thursday, October 12, 2023		
Engagement Methods Utilized		
<ul style="list-style-type: none"> ▪ Community Surveys ▪ Onboard Surveys ▪ Marketing Collateral ▪ Social Media Campaigns ▪ Newsletter and Project Website 	<ul style="list-style-type: none"> ▪ Community Surveys ▪ Marketing Collateral and Social Media Toolkit ▪ Newsletter and Project Website 	<ul style="list-style-type: none"> ▪ Feedback Form ▪ Marketing Collateral ▪ Social Media Campaigns ▪ Newsletter and Project Website

Engagement Phase 1: Service Priorities

The primary interaction during pop-up events involved engagement boards where attendees used Post-it notes and dots to comment and indicate desired shuttle destinations. This not only facilitated direct feedback but also helped raise awareness of the study and existing services in the community. Overall, takeaways from all input gathered led to the following findings:

- **Frequency, Accessibility, and Visibility:** There was a strong emphasis on improving shuttle services by increasing their frequency, enhancing accessibility, and ensuring greater visibility to the public.
- **Education and Awareness:** The current shuttle program lacks awareness, which is necessary to ensure that potential users are informed about its benefits and availability.

- **Visibility:** The shuttle program should have increased visibility and prominence to increase public engagement and attract more riders.
- **Integration with Other Transportation Services:** Suggestions include integrating the shuttle service with the Transit Pass and Bay Pass programs, as well as partnering with SamTrans or exploring microtransit options for seamless travel.
- **Technological Solutions:** Users have expressed the need for a mobile app that allows them to enter their location and destination, providing clear directions on how to utilize the service effectively.
- **Inclusivity:** Concerns have been raised regarding the inclusion of unincorporated areas in the shuttle service. There is a strong desire to ensure that these regions are considered in future service expansions.

During the co-creation session, stakeholders were engaged in a simulated service planning exercise aimed at designing a public transportation network for Menlo Park. Participants were tasked with developing goals and creating a shuttle network while adhering to specific financial constraints, mirroring real-world limitations. Key takeaways from the session were:

- **Serving/Prioritizing Belle Haven:** All groups highlighted the importance of providing transportation options to the Belle Haven community. Secondly, there was a common focus on the Caltrain Station as a central element in service coverage.
- **Balanced Service Use:** Each group integrated fixed route services alongside on-demand services, emphasizing the importance of a balanced approach.
- **Frequency Matters:** There was a consensus on the need for increased service frequency to encourage the use of the shuttles.
- **Diverse User Base:** As a group, there was an acknowledgment that there is a range of users/riders, including commuters and residents (particularly older adults), as well as the trade-offs and challenges involved in meeting their unique needs.

Results from Phases 2 and 3 will be shared later in the report.

Engagement Phase 2: Service Scenarios

The focus of Phase 2 was to understand the community's input on the two-service scenarios through community survey. Findings indicated:

Main Themes

- **Scenario B was Preferred over Scenario A:** More than half of respondents preferred Scenario B over Scenario A, with a few concerns. There were concerns about the span of service and reduced service to Sharon Heights and Palo Alto Transit Center.

- **Respondents had Concerns about Both Scenarios:** Consistent feedback was provided on the limitations of both scenarios regarding service span and access to community amenities.
- **Respondents Desired an Increased Span of Service:** Members of the TAC and the public commented about expanding service in the evenings and weekends.
- **Fares for TNC service were Less Important than Fares for Microtransit:** Survey respondents were more concerned about the affordability of Microtransit fares than the cost of TNC service.
- **Major Concerns for Reduced Service to West Menlo Park:** The reduction of service to Sharon Heights and West Menlo Park was noted as a concern in both scenarios.
- **Community Members Supported Expansion for TNC Service:** Members of the TAC and the public supported expanded TNC service for the disabled and older adults. Comments supported expanding that service to all residents.

Sub Themes

- **Extended Hours:** It was noted that there was support for increased service hours compared to the number shown in both scenarios.
- **Increasing Frequency:** There was a strong emphasis on the need to increase the frequency of shuttle services with noting that that would increase a sense of reliability.
- **Improving Accessibility:** Several requests highlighted the need to improve road accessibility for pedestrians, especially around Central Menlo Park.
- **Lack of Awareness:** Many people were unaware of the program, or the services targeted at users.

Engagement Phase 3: Recommendations

For the final phase of engagement, the project team focused on presenting the Service Recommendations to the public and stakeholders, The project team developed a Preferred Service Plan for the Menlo Park Shuttle Program to make the shuttle service more convenient, reliable, and efficient for both current and future riders. This plan was presented for review to the public online at the study website and at a community-wide public meeting.

Main Themes

- **Community Members Supported the Recommendations:** Members of the TAC and the public supported the changes to the Midday Community shuttles. There were concerns about the changes to the Commuter Shuttle especially for users accessing the Marsh Road area.

- **Concerns About Service to the Marsh Road Area:** There were concerns about the changes to the Commuter Shuttle especially for users accessing the Marsh Road area, due to an increase in travel time for those users.
- **The Lack of Accessible On-Demand Options:** Participants in the public meeting had concerns about the lack of accessible on-demand options due to the lack of wheelchair accessible TNC vehicles in the area.
- **Support for Changes to Shuttle funding and Governance:** Participants in the Co-Creation session supported the concept of a Transportation Management Association (TMA) to manage the shuttle program and an expansion of Shuttle funding to enable additional mobility programs and investments.

Board Review Summary

One of the final steps of the study was a formal review of the study and the recommendations by the Menlo Park Complete Streets Commission and City Council. The final report was presented to the Complete Streets Commission on November 13th, 2024, and City Council on December 17th, 2024.

Complete Streets Commission

The Commission discussed benefits of local shuttle services, service costs per rider, major differences between the three plan options, service awareness and outreach process, bus stop amenities, wheelchair and disability accommodations, services from nearby public agencies and private companies, and next steps.

The Commission accepted the report and recommended that the following information in the report be highlighted when presented to City Council:

- Data about ridership by type of shuttle
- Data about cost per ride by type of shuttle
- Flag that the three comparison cities in the study operate their Commuter Shuttle through a TSA which is funded in part by an assessment on property owners and businesses
- Flag that an increase in ridership would likely require the City to invest in marketing and outreach, since the public survey found a lack of awareness of the shuttle
- State that the Commission did not support the termination of the free shuttle service to people with accessibility needs, unless information was provided to demonstrate that other existing services will fulfill these residents' needs

Menlo Park City Council

Like the Complete Streets Commission, the City Council discussed the benefits of local shuttle services, the sustainability of the shuttle program, and the need to improve service awareness and bus stop amenities. There were concerns about wheelchair and disability accommodations with the TNC proposal. Council members were concerned about the shuttle's financial position and were interested in evaluating new funding opportunities.

Shuttle Service Improvement Scenarios

Upon the analysis of the existing transportation ecosystem and listening to the priorities and goals of the community and stakeholders, the project team developed two service scenarios representing different approaches to determine the best way to improve individual routes and overall connectivity to addressing the needs and desires of the community. Scenarios included changes such as:

- Route realignments to provide more effective, efficient, and attractive service
- Changes to frequencies to match service with demand and facilitate connections
- Revised service spans to maximize access to employment, education, and basic needs
- Potential service to new areas identified as transit-supportive in the travel demand analysis
- Improved service coordination to facilitate transfers and reduce wait times
- Scenarios with different service models, including microtransit and Transportation Network Company (TNC)/Ridehail service

The service scenarios represented different combinations of approaches, rather than entire packages that would need to be selected as a whole. Instead, the purpose was to determine which individual projects or combinations of projects in each scenario would generate the highest levels of support, and then subsequently combine the best elements of each scenario into the recommended preferred service plan and final recommendations.

Scenario A: Coverage Focus

- Weekday service (Refer to Figure 9)
- Service focused on serving all City residents at the expense of maximizing ridership
- Replaces Crosstown and Shoppers Shuttles with microtransit service split between east and west zones
- Replaces Willow and Marsh Shuttles with a consolidated commuter shuttle
- More direct routing for the commuter shuttle to reduce travel times

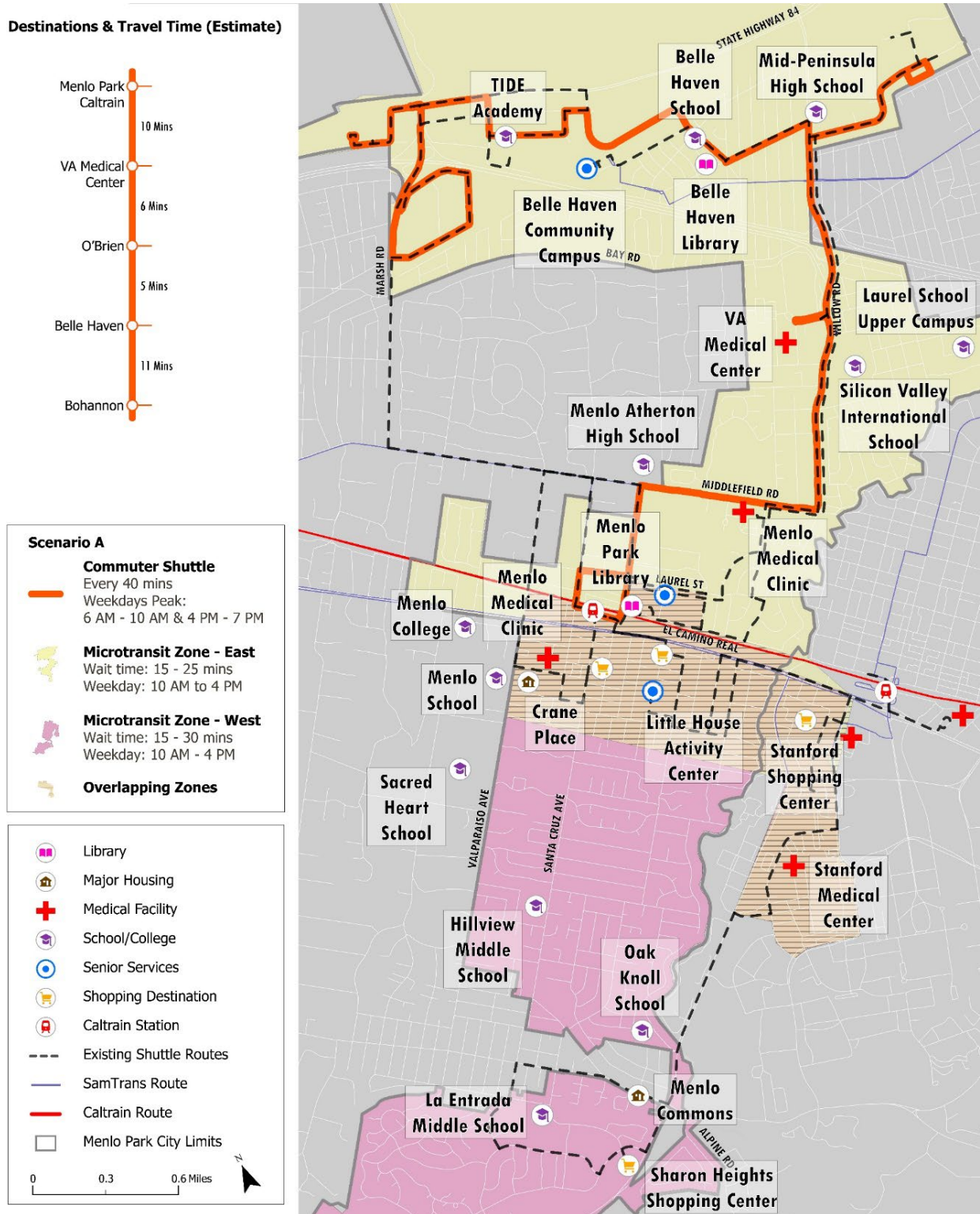
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- Increases the frequency of commuter service to the Bayfront area and Belle Haven during peak hours
- Microtransit fares estimated to be **\$3 per trip**, with reduced fares for youth and older adults

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Figure 9: Scenario A*



*This map was prepared in January 2024 and used in outreach engagement. Updates are incorporated in the service recommendations map.

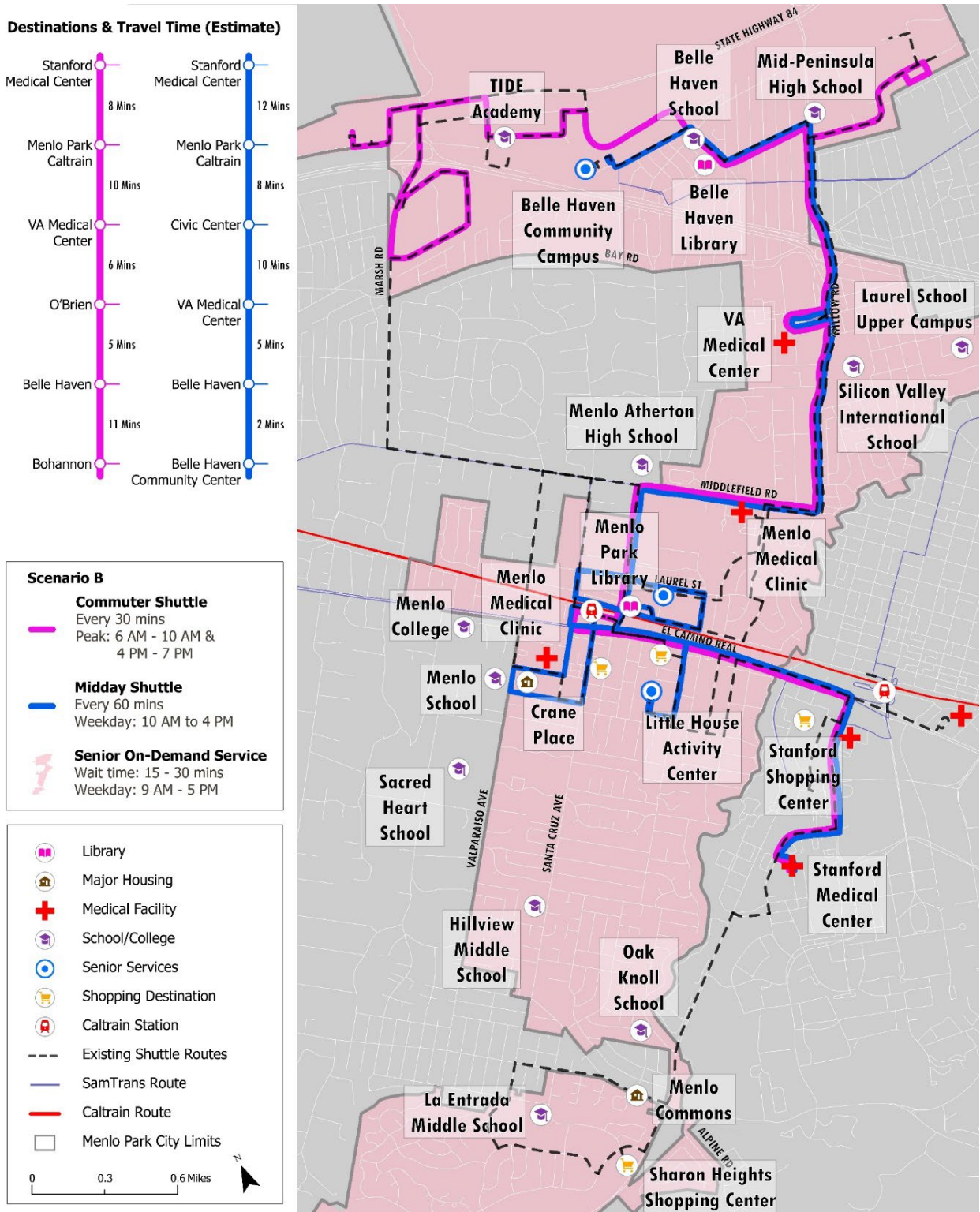
Scenario B: Ridership Focus

- Service focused on locations that generate ridership (Belle Haven, Downtown, Stanford Shopping Center, and Stanford Medical Center) at the expense of more coverage (Figure 10)
- Replaces Crosstown Shuttle with Midday Shuttle between Belle Haven and Stanford Medical Center
- 30-minute frequency commuter shuttle, with more direct routing to reduce travel times, replaces Willow and Marsh Shuttles
- Reduced shuttle service to Central Menlo Park and Sharon Heights
- TNC/rideshare replaces Shoppers Shuttle **for residents over 65 years old**
- TNC/rideshare wouldn't be wheelchair accessible, has an estimated **fare of \$4**

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Figure 10: Scenario B*



*This map was prepared in January 2024 and used in outreach engagement. Updates are incorporated in the service recommendations map.

Service Recommendations

Recommendations for shuttle system improvements were developed through public and stakeholder engagement inputs, survey results, data from travel demand projections, and analysis of market trends.

The recommendations were guided by six service considerations identified in the first phase of the engagement and study.

- Focus on bidirectional service.
- Minimize non-productive route segments.
- Streamline service and reduce duplication.
- Provide new transportation options.
- Modify service to serve Belle Haven more effectively.
- Improve frequency and span of service.

Based on these insights, two service plans were developed based on common route alignments and service concepts. The **Preferred Service Plan** (Figure 11) was developed to operate with existing financial resources but to better align existing service with demographic and travel changes in Menlo Park. A **Future Service Plan** (Figure 12) was developed for implementation if additional financial resources were identified. Communication from Menlo Park staff indicated that a **Reduced Service Plan** (Figure 13) was also necessary, in case of funding decreases or cost increases.

Secondary recommendations were also developed to leverage additional investments to improve the mobility eco-space within the City.

Preferred Service Plan

- Service is focused on locations that generate ridership (Belle Haven, Downtown, Stanford Shopping Center, and Stanford Medical Center)
- The 30-minute frequency commuter shuttle, with more direct routes to reduce travel times, replaces Willow and Marsh Shuttles
- Coordination with the electrified Caltrain schedule
- Midday hourly service with an East and West Shuttle between Caltrain and Belle Haven and Caltrain and Sharon Heights and Stanford Medical Center to replace the Crosstown Shuttle
- Timed connection at Caltrain for the Midday shuttle

Benefits

- More frequent peak service to Belle Haven, the Bayfront area, and Stanford Medical Center
- Faster service to Caltrain for Belle Haven and Sharon Heights
- Direct Service on Santa Cruz Ave corridor
- Subsidized TNC/rideshare service is available to more residents

Disadvantages

- Longer travel times for commuters
- Revised routes may require a longer walk to access stops

TNC/Rideshare Program

TNC/Rideshare fills the transportation gap for Menlo Park seniors and people with disabilities. Riders would request a ride through a smartphone app or by phone.

- TNC/rideshare replaces Shoppers Shuttle for residents over 65 years old
- Service fills the need for medical transportation
- Service would extend to surrounding communities for registered users
- Proposed fare of \$4, City subsidizes the remaining fare cost up to \$20. The rider is responsible for a cost above \$24.

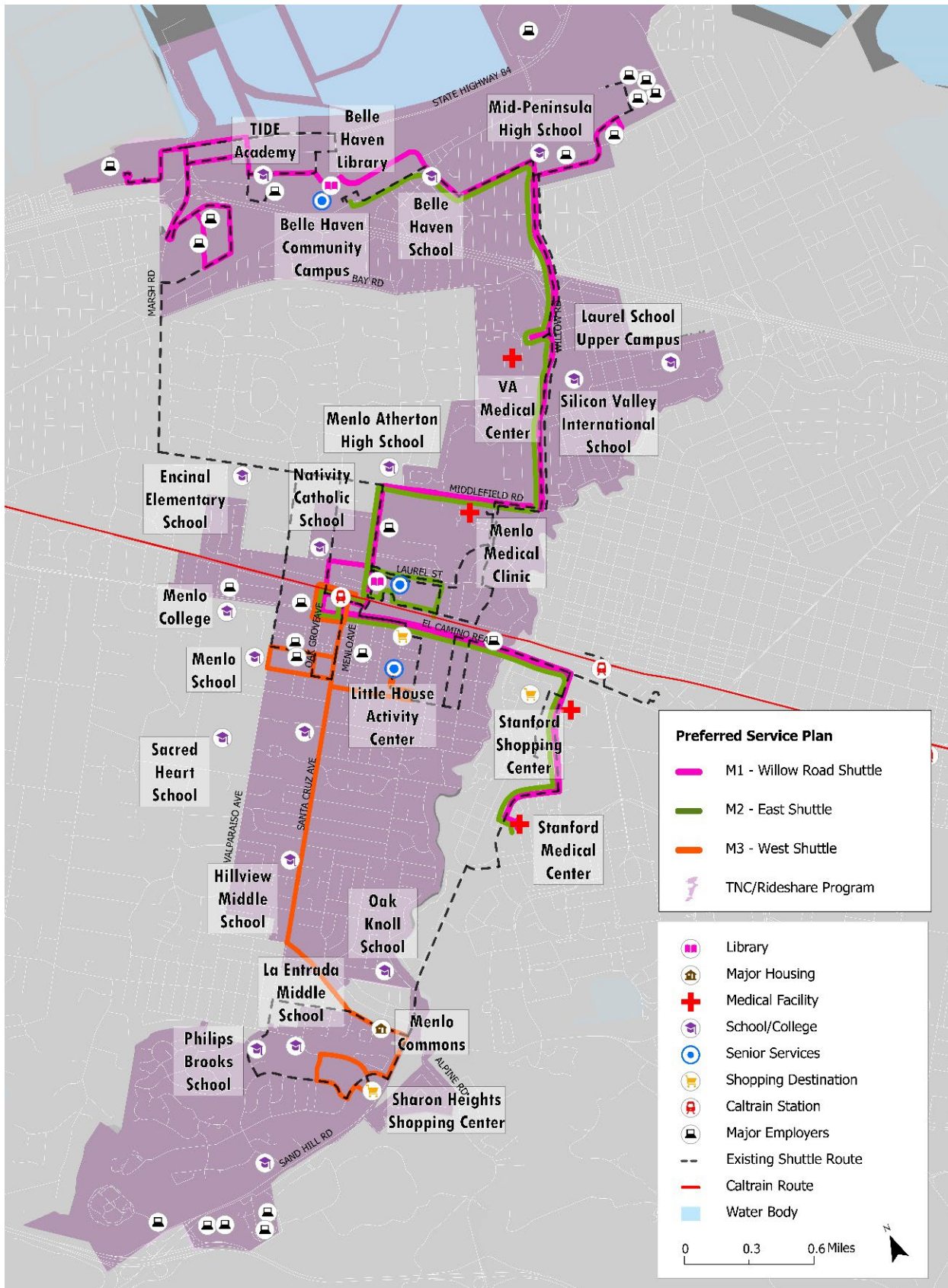
Program recommendations include:

- The ability to schedule trips via a concierge program
- Trip quantity limits based on available funding
- Open to all trip purposes for registered users
- Development of a fare subsidy program for low-income users
- Provide discounted Redi-wheels tickets to eligible users

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Figure 11: Preferred Service Plan



Future Service Plan

- Expanded service to new development in the Bayfront area including Willow Village, and developments on Independence and Constitution Drive
- Commuter and midday shuttles are rerouted to better serve Willow Village
- Midday Shuttle is extended to serve north Bayfront developments on Constitution/Independence Drive

Benefits

- More frequent peak service to Belle Haven, the Bayfront area, and Stanford Medical Center
- Expanded service to new developments in the Bayfront area including Willow Village
- Faster service to Caltrain for Belle Haven and Sharon Heights
- Subsidized TNC/rideshare service is available to more residents

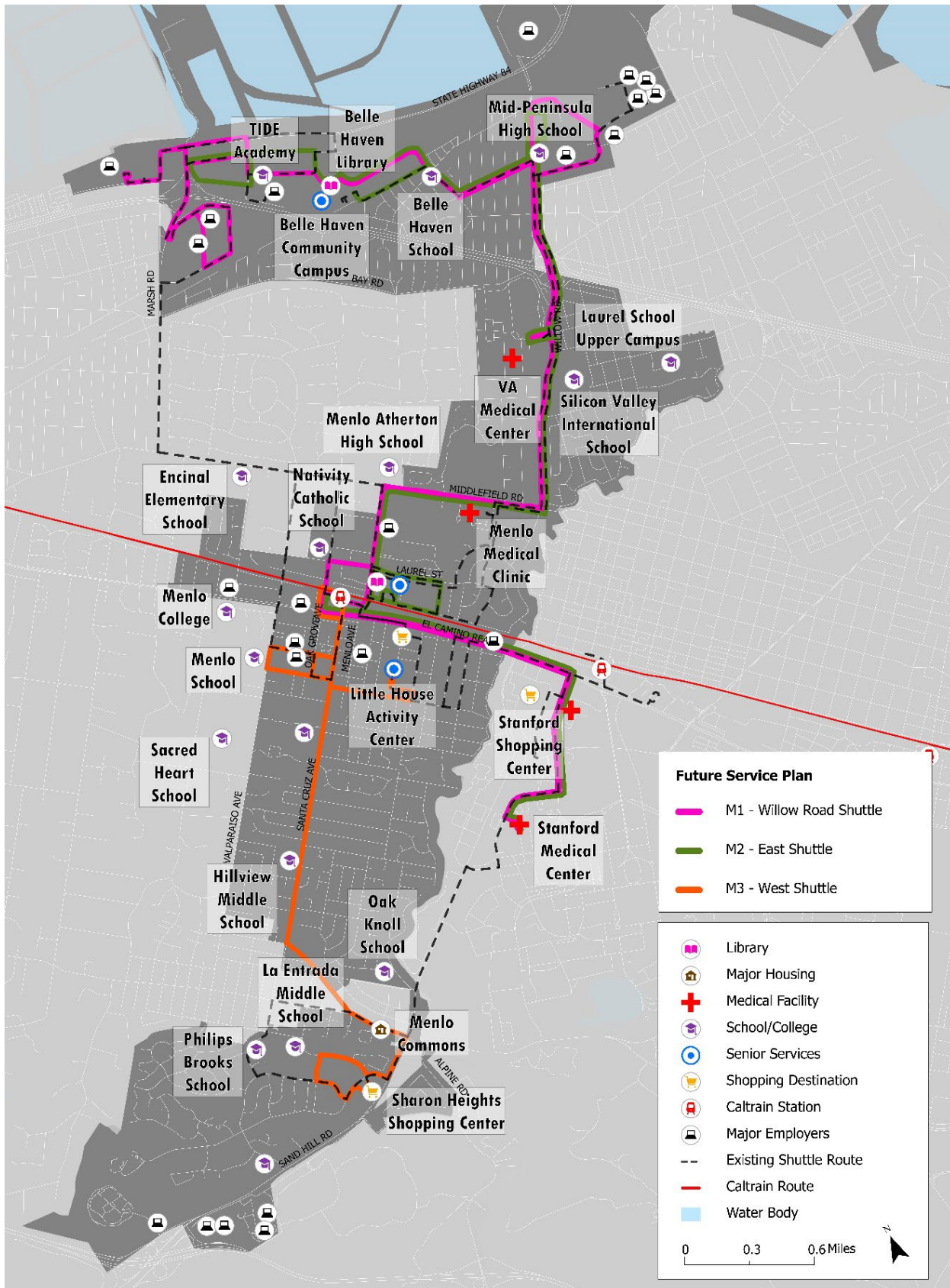
Disadvantages

- Longer travel times for commuters
- Revised routing may require a longer walk to access stops

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Figure 12: Future Service Plan



Reduced Service Plan

- Service is focused on locations that generate ridership (Belle Haven, Downtown, Stanford Shopping Center, and Stanford Medical Center) at the expense of more coverage
- Midday hourly service with an East and West Shuttle between Caltrain and Belle Haven and Caltrain and Sharon Heights to replace the Crosstown Shuttle
- 45-minute frequency commuter shuttle, with more direct routing to reduce travel times, replaces Willow and Marsh Shuttles
- TNC/rideshare replaces Shoppers Shuttle for residents over 65 years old, has an estimated fare of \$4

Benefits

- More frequent peak service to Belle Haven, the Bayfront area, and Stanford Medical Center
- Faster service to Caltrain for Belle Haven and Sharon Heights
- Subsidized TNC/rideshare service is available to more residents

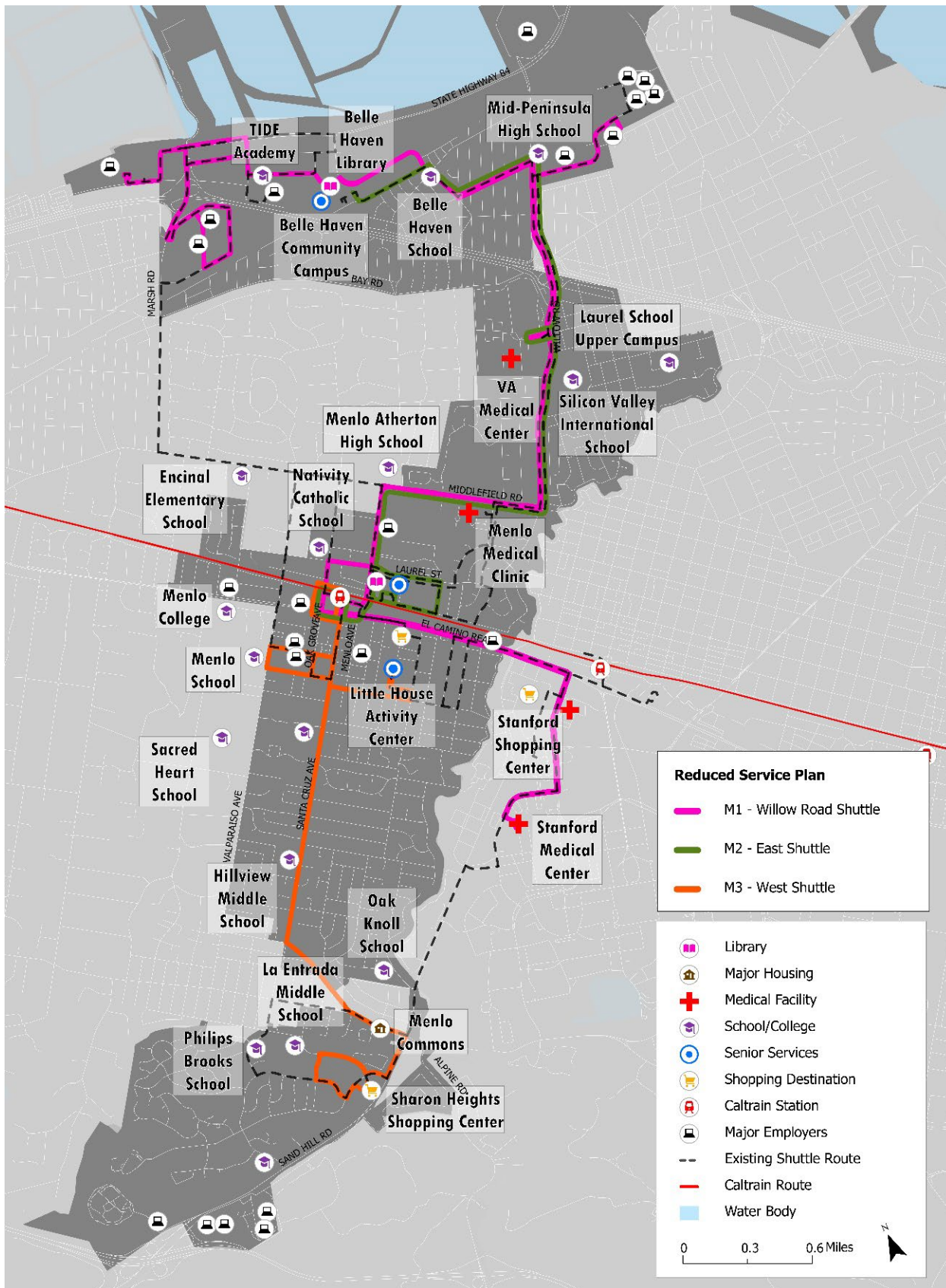
Disadvantages

- No Midday service to Stanford Medical Center
- Reduced frequency compared to the Preferred Service Option
- Longer travel times for commuters
- Revised routing may require a longer walk to access stops
- TNC/rideshare wouldn't be wheelchair accessible, riders would need to use Redi-Wheels etc

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Figure 13: Reduced Service Plan



Other Recommendations

Transit providers

SamTrans

Proposed enhancements to SamTrans service include extending existing service from Belle Haven into new development areas to the north. These changes would improve access to SamTrans service from the new developments north of Belle Haven.

Recommendations

- Extend Route 281 to Marsh Rd via Belle Haven
- Extend Ride Plus Service Area to Marsh Road
- Modify EPX Routing to include Constitution Drive

Business Community

Businesses adjacent to the shuttle service should work with the City to improve the waiting environment for shuttle users; these improvements could include shelters, benches, signage, and other investments that make the shuttle more attractive to users.

Recommendations

- Improved transit waiting environment
- Dedicated mobility/commute manager for the Bayfront Area

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Invest in transit infrastructure to improve service reliability in areas with high congestion. Investments could include bus lanes, transit signal priority, and queue jumps. Partnering with community organizations to establish a mobility management program for residents, to connect residents to transportation resources within the community and help fill mobility gaps in the City.

Recommendations

- Improved marketing to increase program awareness, engagement, and visibility
- Investments in transit-priority infrastructure
- Mobility management program
- Provide discounted Redi-wheels tickets to eligible users to improve mobility options for disabled residents

Funding Considerations

Menlo Park Shuttle Funding

Community transportation services and operations are generally funded with a combination of resources. Most fixed routes, complementary paratransit, and community-based services rely on public funding from federal, state, and local sources. As shown in Table 3, the four shuttles are funded from various sources, including regional grants, local funds, and other fees.

Table 3: City of Menlo Park Shuttle Fee Structure (FY 2023-2025)

Shuttle	Funding Sources	Current Budget FY2023-2025
Crosstown Shuttle	60% C/CAG Grant 40% MTC Lifeline Grant	\$874,000
Shoppers' Shuttle	100% City funds	\$150,400
Marsh Road Shuttle	75% C/CAG Grant 25% City funds (Measure A and Developer fees)	\$379,000
Willow Road Shuttle	75% C/CCAG Grant 25% City funds (Measure A and Developer fees)	\$341,900
Total		\$1,746,200

Shuttle Fee Assessment Peer Review

The project team evaluated the fee structure for the Menlo Park Shuttle Program and peers to identify options to advance the implementation of mobility solutions. Given the financial shifts due to the COVID-19 pandemic, this assessment explored how peer cities approach shuttle fees and funding sources to provide relevant recommendations.

Development Fees and Other Assessments

The concept of development fees in the Bay Area is part of a broader effort to fund infrastructure improvements, including transportation. These fees, often known as Transportation Impact Fees (TIFs) or Development Impact Fees (DIFs), are imposed by local governments on new developments to mitigate the additional demand they place on public services, especially transportation networks.

Peer Review Findings

In all the city-based shuttle programs studied, the management structures of their programs were based around a non-profit Transportation Management Association (TMA). This structure

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enables cities to bridge the gap between local government and business communities. Collaboration was crucial in all of the examples cited. Forming a TMA helped jurisdictions create improvement districts that fund transportation programs, such as in Mountain View. MVgo operates without directly assessing property owners. This reflects the concentration of large employers within the city. In contrast, Emeryville has the most expansive assessment program, in that it applies to all property owners within the city. The unique scoring system establishes the amount of that assessment. Table 4 represents the peer review comparison based on the service and funding information.

Table 4: Peer Comparison

City	Service	Ridership	Service Type(s)	Revenue	Expenses	Primary Funding Source
Emeryville	Emery Go-Round	409,887 (2022)	Fixed Route Shuttle	\$5,476,092	\$4,426,579	Citywide Property and Business Improvement District (PBID)
Mountain View	MVgo and Community Shuttle	175,000 (2022)	Fixed Route Shuttle, TNC/ Rideshare	\$5,366,335	\$4,816,746	Voluntary Membership Fees
San Leandro	San Leandro LINKS	200,000 (2018) Est	Fixed Route Shuttle	\$806,000	\$859,890	Business Improvement District (BID) assessment
*Financial data taken from the 2022 Tax Return of each organization						

Overall, with its concentration of large companies and new developments, Menlo Park is well-positioned to develop a TMA to create a comprehensive mobility program to support shuttle and other transportation services going forward.

Additional Funding Sources

Shuttles in San Mateo County are funded through a variety of sources listed below in Table 5.

Table 5: 2019 San Mateo County Shuttle Funding

Agency/Entity	Source	San Mateo County Community	San Mateo County Commuter
SMCTA - C/CAG	Shuttle Call for Projects	\$703,000	\$2,555,000
Private Sector	Matching Funds		\$1,788,000
Caltrain	Discretionary Funds		\$91,000
SamTrans	Discretionary Funds	\$29,000	\$32,000

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Agency/Entity	Source	San Mateo County Community	San Mateo County Commuter
Bay Area Air Quality Management District	Transportation for Clean Air (TFCA) Grants		\$341,000
MTC	Lifeline Grants	\$264,000	
City	Various Sources	\$283,000	\$154,000

A review of funding sources reveals a limited number of sources that can be utilized for the Menlo Park Shuttle. Other funding sources at the federal and state levels as presented in Table 6 are available but are more challenging to access due to increased regulatory burden, competition, and a preference for higher ridership services and services focused on older adults and disabled persons.

Table 6: Funding Source at State and Federal Level

Funding Source	Program	Funding	Details
State	Local Transportation Fund (LTF)	Discretionary Funding, Operations and Capital	Allocated to Local Transit Operators
	State Transit Assistance (STA) Program	Discretionary Funding, Operations and Capital	Allocated to Local Transit Operators
	TNC Access for All	Formula Funding: Operations and Capital	New program, No Fund Administrator for San Mateo County
Federal	5310: Enhanced Mobility of Seniors & Individuals with Disabilities	Competitive Funding-Capital	Program Administered by MTC and Caltrans
	Congestion Mitigation Air Quality (CMAQ)	Competitive Funding-Capital	Program Administered by MTC

Next Steps

During the evaluation process, the primary focus was on analyzing the existing shuttle system to determine what changes needed to be made to serve the needs of disadvantaged communities better and accommodate growth in the Bayfront area. After 18 months of community engagement and research on travel patterns/demand, peer system review, and analysis of new technologies, it became clear that beyond revised shuttle routes, there were several elements that require change to meet the goals outlined by the City of Menlo Park and ensure a successful implementation of the service plan.

- **Preferred Service Plan:** Implementing changes to the shuttle service will depend on funding availability and the cost of providing services. The Preferred Service plan represents a status quo environment where funding and cost are stable. Cost increases

- combined with a flat funding environment for shuttles, could reduce service levels, resulting in less frequent service, fewer hours of service, and fewer routes. The Reduced Service Plan represents an approach that preserves most of the benefits of the Preferred Service Plan at a lower cost. The region's experience with most shuttle services has shown that additional funding is often sought to preserve or expand services in the post-pandemic mobility landscape. Any change to the shuttle program must benefit the residents of Menlo Park, including those using wheelchairs and other mobility devices.
- **Holistic Approach to Community Mobility:** Common feedback from residents and riders was that many people are unaware of the shuttle program and how to use it. Older adults often found it challenging to use the mobility options available in their community. One recommendation is to partner with community organizations to establish a mobility management program for residents. The goal would be to connect residents to transportation resources within the community and help identify mobility gaps in the City. Another recommendation was to improve program marketing to increase program awareness, engagement, and visibility.
 - **Partnerships with Community Stakeholders and Business Community:** Success of modern shuttle programs is tied to how well the service is integrated within the community. Conversations with stakeholders have shown support for the service but an uncertainty about what role they have in improving the systems. One recommendation is that businesses adjacent to the shuttle service should work with the City to improve the waiting environment for shuttle users. These improvements could include shelters, benches, signage, and other investments that make the shuttle more attractive to users. Another recommendation is the creation of a dedicated mobility/commute manager position for the Bayfront area, to support TDM and trip reduction strategies for businesses and residents. Improved stakeholder and City collaboration has led to the expansion of shuttle service in other cities.
 - **New Funding and Management Model:** In all the city-based shuttle programs studied, the management structures of their programs were based around a non-profit TMA. This structure enables cities to bridge the gap between local government and business communities. This collaboration was crucial in all the successful examples cited. Forming a TMA helps facilitate the creation of improvement districts that fund transportation programs, as in Mountain View. Overall, with its concentration of large companies and new developments, Menlo Park is well-positioned to potentially access additional funding. This could be accomplished through leveraging additional private funding or developing a TMA to fund a comprehensive program to support the Shuttle and other transportation services.

The future growth of jobs and residents in Menlo Park creates an opportunity to reimagine the Shuttle program as an important and quality of life enhancing amenity for workers and residents.

The Preferred Service Plan creates a base for future growth in the service and expansion of mobility options in the City.

Appendices

The appendices provide detailed information on each component of this study and can be accessed as a separate document on the website.