



DATE: October 20, 2015

CATEGORY: New Business

DEPT.: Public Works

TITLE: **Mountain View Community Shuttle Pilot Program**

RECOMMENDATION

Receive an update regarding Mountain View Community Shuttle Pilot Program operations and provide direction regarding any potential modifications to the service.

BACKGROUND

The Mountain View Community Shuttle (MVCS) Pilot Program was launched in January 2015 to provide enhanced transportation connections between residential neighborhoods; senior residences and services; City offices, Library, park, and recreational facilities; medical offices; shopping centers; and entertainment venues throughout Mountain View to residents. There is no charge to ride on an MVCS.

MVCS' four shuttle vehicles travel along the approximately 13.5-mile shuttle route (attached)—two in a clockwise direction and two in a counterclockwise direction—stopping at 27 locations throughout the City approximately every 30 minutes on weekdays from 10:00 a.m. to 6:00 p.m. and once an hour between 12:00 noon and 8:00 p.m. on weekends and holidays. Each of the shuttles is equipped with a wheelchair lift, space for two wheelchairs, WiFi connectivity, and bicycle racks on the outside. The shuttle's route and stop locations were designed based on input received from the community as well as operational requirements for effective and efficient shuttle operations.

MVCS is a two-year pilot program fully funded by Google. The program will automatically be renewed at the end of the initial program period for an additional year unless either the City or Google decide to terminate the program. Google has retained ALTRANS to manage the daily operations and customer service needs for the MVCS Pilot Program.

ANALYSIS

Ridership

MVCS ridership levels continue to trend upward. Provided below are ridership statistics for three different points in time for the new shuttle service—February 2015 (the first full month of shuttle operations), May 2015 (the midpoint for shuttle services so far), and August 2015 (the last reporting period completed prior to the development of this report).

Data/Information	February 2015	May 2015	August 2015
Average Daily Ridership	233	249	305
Weekday	269	295	380
Weekend/Holiday	105	137	148
Total Passengers (Month)	6,595	7,629	9,456
Total Ridership to Date (Since Start of Service)	10,588	35,702	62,605

Performance indicators for shuttle and transit services are often based on cost and/or revenue measures (e.g., cost per rider, operating cost per mile, farebox recovery, etc.). Because Google is fully funding the cost of the MVCS Pilot Program, City staff has no data to use in calculating cost-related performance indicators. Also, because the MVCS service is provided free of charge, no farebox recovery or other revenue-related measures can be developed.

However, a Passengers Per Service Hour metric can be used to compare the MVCS service to other community shuttle programs in nearby communities. Although not identical in terms of the target ridership, destinations served, service frequency, and/or the design of the service, the Midday Shuttle in Menlo Park and Crosstown Shuttle in Palo Alto can be considered the most analogous to the MVCS’ weekday services.

The Menlo Park Midday Shuttle is also a no-fare service serving all SamTrans bus stops along its route, Menlo Park and Palo Alto Caltrain stations, senior housing and activity facilities, Menlo Park’s Belle Haven Library, Stanford Shopping Center, and medical offices. Passengers can also flag down a shuttle anywhere along the route to board. The service operates on an hourly schedule Monday through Friday, from 9:30 a.m. to 3:30 p.m.

Palo Alto's Crosstown Shuttle connects several residential neighborhoods, schools, senior residences, libraries, City recreation facilities, commercial districts, and Caltrain. A special school run operates during the morning and afternoons to transport students to and from school. In April 2015, Crosstown Shuttle service frequency was increased from approximately once an hour to every 30 minutes during the midday hours of 10:00 a.m. to 2:30 p.m.

Provided below is Passengers Per Service Hour data for the MVCS service during the month of August 2015 compared to the most current data available for the Menlo Park and Palo Alto services.

Community Shuttle Program (City)	Passengers Per Service Hour	Data Collection Period
Midday Shuttle (Menlo Park)	8.5	Quarter 4, FY 2014-15
Crosstown Shuttle (Palo Alto)	23 ¹	FY 2014-15
Mountain View Community Shuttle	10.5	August 2015

As discussed briefly above, each community's unique decisions regarding the targeted audience for shuttle services, the destinations served, the frequency of service, and the design of the service and route all contribute to/influence shuttle ridership levels. After less than a year in operation, ridership on the MVCS service appears to compare favorably to the Menlo Park service which began in the early 1990s, but lags behind the Palo Alto Crosstown service that has been in operation since 1999 and has had more time to adjust/refine its services to meet the needs of the community it serves.

Impact on Valley Transportation Authority Transit Ridership

City and ALTRANS staff have been in communication with Valley Transportation Authority (VTA) staff throughout the initial pilot program period to determine if MVCS operations have had any negative impact on VTA transit ridership, particularly on VTA's 51 and Community Bus 32 and 34 routes, which share some stop locations and/or travel routes with the MVCS. Based on a review of ridership data, VTA staff has concluded that MVCS operations have had no noticeable impact on VTA transit ridership.

¹ Excludes school boardings. Passengers Per Service Hour in Fiscal Year 2013-14 calculation was 30.

Website and Customer Service Telephone Number

Shuttle service route and schedule information is available at mvcommunityshuttle.com and/or by calling (855) 730-RIDE (7433).

The website provides a general description of shuttle services, map and schedule information, notices to riders regarding service modifications, a list of all stop locations, and contact information for the customer service telephone number.

The MVCS website meets all Americans with Disabilities Act (ADA) requirements and its contents are designed/formatted to work with assisted reading programs and browser plugins for increasing size of text. The website is also mobile friendly for both cellular telephones and tablets.

Since January 2015, there have been approximately 26,800 unique visitors to the MVCS website. The map and complete schedule pages were the most-viewed pages. More than 50 percent of website visitors used a desktop computer to access the site, with another 42 percent accessing the site via a mobile device. English, Spanish, Chinese, Japanese, and Russian have been the most-used languages on the site. Approximately 44 percent of website visitors describe themselves as being between the ages of 25 and 44. Another 33 percent report that they are between the ages of 45 and 64.

The customer service telephone number (855) 730-RIDE (7433) has received almost 2,200 calls since January 2015. Calls have included requests for information/clarification regarding shuttle services and schedules, suggestions/requests for modifications to shuttle routes or stops, and/or complaints regarding services.

Additionally, approximately 13,000 bilingual (English/Spanish) pamphlets have been printed and distributed throughout the community providing route/stop, schedule, and other shuttle service-related information.

There have been significant technical challenges in implementing a Global Positioning System (GPS) to provide real-time shuttle location tracking and on-time performance information on the website. A new vendor was recently selected to complete work on implementing this feature. The system is anticipated to be operational on desktop computers and mobile devices in the next month.

MVCS Pilot Program Routes and Stops

The MVCS currently serves 50 shuttle stops at 27 locations throughout the City approximately every 30 minutes on weekdays from 10:00 a.m. to 6:00 p.m. and once an hour between 12:00 noon and 8:00 p.m. on weekends and holidays.

The Mountain View Transit Center and San Antonio Center stops are consistently among the stations generating the most demand during peak weekday service hours. Other high-demand stops include: Sylvan Park, El Camino Hospital, Middlefield/Easy, Rengstorff/Middlefield, and Civic Center. The least-utilized stops for both the Red and Gray Routes include the: Graham Middle School, Villa/Franklin, and Shoreline/Middlefield #2 stops. Peak service demand for shuttle services is between 10:00 a.m. and 11:40 a.m. on weekdays. There has been no consistent peak period for weekend service.

Operations-Related Updates/Issues

Operating range/battery endurance problems with the four electric shuttle vehicles purchased for the MVCS Pilot Program have required two additional electric vehicles to be ordered, increasing the size of the electric vehicle fleet to six shuttle vehicles. The two additional electric vehicles are expected to be delivered sometime this fall. In the interim, two gasoline-/diesel-powered shuttles are being used as back-up/supplemental vehicles and shuttle drivers have been trained to operate the electric vehicles to maximize their use/range so that there is less need to use the gasoline-/diesel-powered shuttles.

As planned, the back windows of the shuttle buses have served as rolling billboards to promote several community events in Mountain View during 2015, including Annual Spring Family Parade, Mountain View Apps Challenge, Mountain View Fire Department Pancake Breakfast, and Community Holiday Tree Lighting. Additional events will be advertised on shuttle vehicles throughout the 2016 calendar year.

Also, the name of the shuttle, along with website and telephone number information, was recently added to the back of each shuttle vehicle.

Requested Stop, Route, and Service Changes

Community Input/Requests

Approximately 20 requests for shuttle stop, route, and service changes, not including the input recently received from City advisory bodies (see below), have been received

since the MVCS Pilot Program began operations in January. None of the suggested changes have been implemented pending the results of the Council's current review of shuttle operations. The following chart provides information regarding the requested changes.

Modification Requests	Staff Analysis/Conclusion
Add Springer Elementary School Stop.	<ul style="list-style-type: none"> • Add 5 minutes to each loop. • School is a 12-minute walk from an MVCS stop.
Move Shoreline/Pear Stop to in front of the movie theaters.	<ul style="list-style-type: none"> • Efforts by City staff to secure approval from the owner of the movie theater property to allow another shuttle stop to be added directly in front of the movie theaters (in addition to the Shoreline/Pear Stop) have been unsuccessful to date and may be unlikely in the near future as the property begins to redevelop. See Shoreline/Pear Stop discussion below.
Relocate the Rengstorff/Montecito Stop to the intersection of Hackett Avenue/Montebello Avenue.	<ul style="list-style-type: none"> • Add 4 minutes to each loop. • Current stop is within a 5-minute (0.3-mile) walk from the proposed new location.
Add Palo Alto Medical Foundation (PAMF) Stop.	<ul style="list-style-type: none"> • The requested stop is in close proximity of the existing El Camino Real/Sylvan Stop. • The Highway 85 off-ramp, dedicated turn lane, and lack of shoulder on El Camino Real prevent a stop being located on El Camino Real. • Locating a stop within the PAMF property would add at least 5 minutes to each loop.
Add Shorebreeze Apartments Stop (460 North Shoreline Boulevard).	<ul style="list-style-type: none"> • The requested stop is 0.4 mile from the existing Villa/Shoreline and Shoreline/Middlefield Stops. • Add an estimated 8 to 10 minutes to each loop.
Add Miramonte/Barbara Stop.	<ul style="list-style-type: none"> • The requested stop is 0.3 mile from the existing Cuesta/Miramonte Stop and 0.4 mile from the existing Graham Middle School Stop.
Add weekend Shoreline Park Stop.	<ul style="list-style-type: none"> • Add an estimated 15 to 20 minutes to each loop.
Add Pear Avenue/Stevens Creek Trail access Stop.	<ul style="list-style-type: none"> • There is not sufficient room for a shuttle vehicle to turn around at the end of the street.
Add Mountain View Public Library Stop.	<ul style="list-style-type: none"> • The requested stop is less than 0.2 mile from the existing Civic Center Stops on Castro Street.

Modification Requests	Staff Analysis/Conclusion
Add Costco/Charleston Plaza Stop.	<ul style="list-style-type: none"> • Council previously considered a loop configuration serving Charleston Plaza, but did not approve it. • Add approximately 10 minutes to each loop.
Longer operating hours.	<ul style="list-style-type: none"> • MVCS designed specifically as a midday service. • Commute hour services available through VTA, Caltrain, MVgo, and private employer shuttles. • Cost implications.
Bus shelter at Senior Center/Teen Center Stop.	<ul style="list-style-type: none"> • Teen Center awning may provide some protection. • The construction/installation of shelter structures should be studied on a systemwide basis, not for individual stops.
Add Del Medio Stop.	<ul style="list-style-type: none"> • Add 10 minutes to each loop.
Add more stops on Shoreline Boulevard.	<ul style="list-style-type: none"> • Requires significant redesign of existing routes. • Two-loop route with Shoreline Boulevard stops was previously considered but not approved by the City Council.
Add Mountain View High School Stop.	<ul style="list-style-type: none"> • Service to the school was previously discussed but not approved by the Council. • Duplicative of the morning and afternoon service already provided by the VTA's Route 51 bus.
Add Los Altos High School Stop.	<ul style="list-style-type: none"> • Requires significant redesign of existing routes. • Would add time required to complete a shuttle loop.
Add stop on Latham Street.	<ul style="list-style-type: none"> • Potential stop location(s) would need to be identified and evaluated. • Adding another stop along the existing route will add a few minutes to the amount of time required to complete a shuttle loop (but does not require the reconfiguration of the route).
Add stop at 111 Montebello Avenue (Petition request from approximately 175 residents of Paulson Park Apartments).	<ul style="list-style-type: none"> • Add approximately 8 minutes and 1 mile to each loop. • Current stop is within 0.3 mile from the proposed new location. • Potentially duplicative to existing VTA Route 34 service.

Advisory Body Input

When the City Council approved the MVCS Pilot Program in October 2014, staff was directed to meet with the Senior Advisory Committee, Bicycle/Pedestrian Advisory Committee, and Youth Advisory Committee after the shuttle program had been in

operation for a few months to seek input regarding how well the shuttle pilot program is serving the transportation needs of their constituents and if the advisory bodies have any suggested modifications to the service.

Provided below is a summary of the input received from the advisory bodies and members of the public during the advisory bodies' discussion regarding the MVCS Pilot Program, along with staff's analysis and responses to the suggestions/input.

Advisory Body	Topics/Comments/Questions	Staff Response
Senior Advisory Committee	<ul style="list-style-type: none"> • Ensure website and shuttle vehicle accommodate people with disabilities. • Ensure information sources for people without computers or smart phones are available. • Additional stops requested at PAMF, Costco/Charleston Plaza, and Shoreline Amphitheatre. • Prioritized service for seniors. 	<ul style="list-style-type: none"> • Website and vehicles meet ADA requirements. • Information available at (855) 730-RIDE (7433). Printed routes/schedules available. • New stops are either in close proximity to existing stops, would add time to completing a shuttle loop, and/or require additional financial resources. • Per Council direction, service designed to serve the mobility needs of multiple types of riders.
Bicycle/Pedestrian Advisory Committee	<ul style="list-style-type: none"> • A more robust data set should be collected and posted on the City's website to allow the public to analyze the data and offer suggested improvements to the service. • Alternate route configurations (e.g., figure 8, two-loop, or hub-and-spoke) should be evaluated. • Alternate service models (e.g., demand response) should be evaluated. • Loop route configuration makes trips too long/slow/not direct enough. • Survey riders to obtain ideas to improve the service. • Need to improve on-time performance. 	<ul style="list-style-type: none"> • Requested additional data collection and posting activities will require additional staff and financial resources. Input from Google and ALTRANS required regarding capacity and costs to take on the additional work. • Previously discussed, but not approved by the Council. • Previously discussed by the Council, but not incorporated into the current service model. • Two-loop route approved by the City Council after considering other options. • Staff concurs. • Improvements expected with proposed stop/route modifications (see below).

Advisory Body	Topics/Comments/Questions	Staff Response
Bicycle/Pedestrian Advisory Committee (cont'd)	<ul style="list-style-type: none"> • More frequent service would make the shuttle a more appealing transportation option. • Extend service hours. • Improve information regarding routes/schedules (e.g., add schedule information to shuttle stop signs, advertise routes on side of shuttles). • Need to keep riders apprised of delays. • Implement a clock-face schedule (i.e., shuttles arrive at stops at consistent intervals making it easier for riders to memorize the schedule). 	<ul style="list-style-type: none"> • Potentially significant financial and operational issues—either will need to reduce the number of stops, reconfigure routes, and/or add more shuttle vehicles (and drivers). • Requires more evaluation of need/demand. Additional funding required to extend service hours not currently available. • Comments shared with Google and ALTRANS for possible implementation. • Should be resolved with launch of GPS vehicle tracking system. • Comment forwarded to Google and ALTRANS for evaluation, but may not be feasible given current number of stops and route configuration.
Youth Advisory Committee	<ul style="list-style-type: none"> • Need ability to track location of shuttles, closest stop location, and when next vehicle expected at a stop. • Add service to Mountain View and Los Altos High Schools. • Loop route configuration makes trips too long/slow/not direct enough. • More frequent service would make the shuttle a more appealing transportation option. • More outreach/advertising to students and schools needed. 	<ul style="list-style-type: none"> • Should be resolved with launch of GPS vehicle tracking system. • Service to the school was previously discussed, but not approved by the Council. Duplicative of the morning and afternoon service already provided by VTA's Route 51 bus. Service to Los Altos High School would require a significant reconfiguration of a shuttle route, require additional time to complete the loop, and additional funding (not currently available). • Two-loop route configuration approved by the City Council after considering other options. • Potentially significant operational and financial issues—either will need to reduce the number of stops, reconfigure routes, and/or add more shuttle vehicles (and drivers). • Comment shared with ALTRANS for further evaluation.

Recommended Stop/Service Modifications

Staff supports pursuing only a limited number of modifications to shuttle service/operations at this time (see below). Staff is not supportive of many of the other requested stop, route, and service changes because they:

- Would add stops in close proximity to existing shuttle stops.
- Require significant route configurations.
- Propose route or stop modifications previously discussed, but not approved by the City Council.
- Would extend the time required to complete a shuttle loop – something that would be inconsistent with the Council’s previously stated desire to have as close to 30-minute service frequency as possible.
- Require additional resources (e.g., financial, staffing, vehicles, etc.) that are currently not available.

Shoreline Boulevard Stop/Service Modification

Despite being identified as a highly desired destination when the MVCS was being designed, serving the Shoreline/Pear Stop accounts for only approximately 1 percent of total shuttle ridership, but accounts for 10 minutes of each shuttle loop.

Efforts by City staff to secure approval from the owner of the movie theater property to allow another shuttle stop to be added directly in front of the movie theaters (in addition to the stop on Shoreline Boulevard at Pear Avenue) have been unsuccessful to date and may be unlikely in the near future as the property begins to redevelop.

Traffic congestion on Shoreline Boulevard on Shoreline Amphitheatre concert event days has not only prevented timely service to the Shoreline/Pear Stop, but has also negatively impacted systemwide on-time performance (delays as much as 30 minutes have been reported on some event days).

Responding to this situation, ALTRANS implemented a trial program bypassing the Shoreline/Pear and Shoreline/Middlefield #2 Stops on concert event days starting at 3:30 p.m. on weekdays and all day on weekends. No complaints have been received to date regarding the bypass. City staff is working with ALTRANS to ensure shuttle users receive adequate prior notice of bypass events through notices displayed at the

Shoreline/Pear and Shoreline/Middlefield #2 Stops, posting on the community shuttle website, notices on the printed shuttle schedule, and announcements made by shuttle drivers.

Staff, working closely with ALTRANS, reviewed a number of service alternatives for the Shoreline/Pear and Shoreline/Middlefield #2 Stops to respond to the demand for the stops and improve overall systemwide on-time performance.

1. Make permanent the current trial program of bypassing the Shoreline/Pear and Shoreline/Middlefield #2 Stops on concert event days starting at 3:30 p.m. on weekdays and all day on weekends.

Implementation of this alternative would maintain at least some level of service at all of the originally planned shuttle stop locations, but would also provide the flexibility to bypass these two time-consuming stops on Amphitheatre concert events days and weekends to improve systemwide on-time performance.

2. Eliminate weekday service at both the Shoreline/Pear and Shoreline/Middlefield #2 Stops, but maintain hourly service on weekends.

If implemented, the time required for a shuttle to complete one loop on weekdays could be reduced by approximately 5 to 8 minutes, providing some cushion to absorb traffic congestion delays encountered in other portions of the shuttle route (e.g., Grant Road), allowing for some improvement in the shuttle's overall on-time performance.

3. Eliminate afternoon commute time weekday service (3:00 p.m. to 6:00 p.m.) at both the Shoreline/Pear and Shoreline/Middlefield #2 Stops, but maintain non-peak weekday service (10:00 a.m. to 2:59 p.m.) and hourly service on weekends.

If implemented, the time required for a shuttle to complete one loop during weekday afternoon peak commute periods could be reduced by approximately 5 minutes, providing some cushion to absorb traffic congestion delays encountered in other portions of the shuttle route (e.g., Grant Road), allowing for some improvement in the shuttle's overall on-time performance.

Most MVCS riders using the Shoreline/Pear Stop do so before the afternoon peak commute period. However, reducing the service hours for this stop may make it more difficult for those using the shuttle service to see a movie.

4. Maintain the original shuttle schedule and continue serving both the Shoreline/Pear and Shoreline/Middlefield #2 Stops, acknowledging there will be delays/challenges on concert days and during congested commute periods.

Staff recommends implementing Option 2 above. Not only would it improve systemwide on-time performance on concert event days and weekdays in general, but it would also allow continuation of limited service to the movie theaters and/or other nearby destinations (e.g., Computer History Museum) on weekends.

Other Staff Recommendations

In addition to modifying service to the Shoreline/Pear and Shoreline/Middlefield #2 Stops as discussed above, staff recommends pursuing the following other proposed shuttle service modifications/improvements with Google and ALTRANS as the MVCS service begins its second year of operation in January 2016. These improvements will be implemented to the extent existing financial and staffing resources allow.

- Collect and report on additional data pertaining to community shuttle operations.
- Conduct a ridership survey.
- Explore opportunities to improve and expand on methods to disseminate shuttle-related information (e.g., advertise routes on the exterior of shuttle vehicles, post schedule information at shuttle stops, etc.).
- Explore modifying the schedule to provide more consistent service intervals at stops (to make it easier for riders to memorize the schedule).
- Conduct more outreach and advertising to students and schools.

Staff seeks Council input/direction regarding if any of the other requested changes proposed by the community and/or City advisory bodies should also be evaluated further by staff for possible implementation prior to the start of the MVCS' second year of operation.

FISCAL IMPACT

Google is fully funding the operations of the two-year MVCS Pilot Program at the current level of service.

City staff time and other implementation-related expenses have been incurred to coordinate the launch and provide ongoing oversight of shuttle program operations.

CONCLUSION

During its first several months in operation, the MVCS has provided a free, enhanced transportation service alternative to more than 62,000 riders.

Staff seeks Council direction regarding how well the MVCS Pilot Program has been serving the community since it began operations in January and if there are any potential modifications to the service the Council would like City and ALTRANS staff to pursue for implementation as the service begins its second year of operation in January 2016.

ALTERNATIVES

1. Identify and direct staff to research/evaluate other potential modifications to the MVCS Pilot Program.
2. Provide other direction to staff.

PUBLIC NOTICING

In addition to the City's standard public noticing requirements, notices regarding the MVCS Pilot Program being agendaized for Council discussion at this meeting were posted on social media, announced through other City contact lists, and posted on the Community Shuttle website.

Prepared by:

Linda Forsberg
Transportation and Business Manager

Michael A. Fuller
Public Works Director

Approved by:

Daniel H. Rich
City Manager

LF-MAF/7/CAM
901-10-20-15CR-E

Attachment: 1. [Mountain View Community Shuttle Pilot Program Route Map](#)