

## Appendix C: Unfunded Service Needs Assessment

Appendix C captures a number of local transit expansion service needs that the planning and operations department has identified through a variety of sources. These include:

- Input from riders (Bus Passenger Advisory Committee, comment cards, driver feedback, etc.)
- Input from Stakeholders (Partner agencies, local cities and towns, etc.)
- Current and previous planning studies
- Changes in transportation market conditions
- Changes in demographics

The expansion services described in this appendix are illustrative of the expansion opportunities the District would pursue if financial resources were available. These services are additive to the improvements and modest expansion assumed in the District's Service Plan (see Chapter 5). Together, these improvements can further the objective outlined in Strategy #1 of the Measure A Expenditure Plan:

*Develop a seamless local bus transit system that improves mobility and serves community needs, including special transit for seniors and the disabled*

Table C-12 attached at end of this Appendix provides a summary of these Measure A sub-strategies and their current status, and notes if they are included in either the funded or unfunded SRTP plan. If they are included in the SRTP as unfunded, the specific expansion project number is listed. This number corresponds to the expansion list shown in Table C-11.

The expansion projects are evaluated based on an estimate of their ability to score well in an assessment using the performance criteria outlined in the Measure A Expenditure Plan for transit investment. These criteria include:

- Fills a gap in the bus transit network
- Meets productivity standards (passengers per hour)
- Meets cost effectiveness standards (subsidy per passenger)
- Relieves congestion (total ridership)
- Provides seamless connections (to regional service)
- Eliminates "pass ups" (overcrowding on routes)
- Promotes environmental justice (demographic analysis)
- Attracts outside funding (federal, state, toll, other local)

To estimate performance under these criteria, District staff did a qualitative assessment. Scores were given based on three tiers: **High** (⊕⊕⊕) - likely supports goal, **Medium** (⊕⊕) - potentially supports goal, and **Low** (⊕) – questionable whether the service would support goal. These ratings are estimates of the project's ability to achieve the goal.

**Table C-1: Measure A Bus Transit Investments Evaluation Criteria Ratings Summary**

Measure A Goal	High Rating 	Medium Rating 	Low Rating 
Fill gap in the bus transit network	Provides service to an area currently not served by any public transit service	Provides service to an area with limited public transit service	Provides additional service to an area already served well by public transit
Meets productivity standards (passengers per hour)	Productivity expected to greatly exceed standard	Productivity expected to regularly meet standard	Ability to meet productivity standard is questioned
Meets cost effectiveness standards (subsidy per passenger)	Cost effectiveness expected to greatly exceed standard	Cost effectiveness expected to regularly meet standard	Ability to meet cost effectiveness standard is questioned
Relieves congestion (total ridership)	Ridership potential is great and has potential to significantly reduce vehicle trips	Ridership potential is strong and may reduce select vehicle trips	Ridership potential is questionable and may not impact congestion relief
Provides seamless connections (to regional service)	Service is available and timed to meet regional services including bus, rail, and ferry	Service is available but not timed specifically to meet regional services including bus, rail, and ferry	Service is not available nor timed to meet regional services including bus, rail and ferry
Eliminates "pass ups" (overcrowding on routes)	Service is offered on the same route/corridor, during the same times when current overcrowding conditions regularly occurs	Service is offered on similar routes/corridors and during the same times when potential overcrowding conditions could occurs	Service does not address any potential overcrowding conditions on services
Promotes environmental justice (demographic analysis)	The service is offered to serve populations that demonstrate the greatest need for the service	The service is offered equitably based on who it serves and its cost	The service is offered to a specific population that does not demonstrate strong need based on their demographics
Attracts outside funding (federal, state, toll, other local)	Service relies on less than 25% of Measure A to implement and operate	Service relies on 25-50% of Measure A to implement and operate	Service requires at least 50% of Measure A to implement and operate

Prioritizing and implementing expansion projects will not occur in a sequential order simply based on these qualitative ratings. Rather, this assessment shows the trade-offs between projects, highlighting strengths and weaknesses of each. Implementation of these services will require consideration of cost and other factors.

Staff identified a total of 22 expansion services in the unfunded needs assessment and assigned them to seven categories. These include (in no particular order):

- Expand and Enhance Shuttle Services
- Expand and Enhance Service to the College of Marin
- Expand and Enhance K-12 School Bus Services
- Provide Limited Stop or Express Services
- Restore Ferry Feeder Services (WAVE)
- Expand Rural and Recreational Services
- Provide and Support Flexible First and Last Mile Services

Table C-10 and Table C-11 the end of this appendix provide a summary of each expansion service rating, cost, ability to implement, and relative priority within the unfunded list. Since many of these expansion projects require additional study and analysis, some of these ratings are speculative.

The following is a brief narrative of each expansion category that outlines the expansion need, summarizes how the service is expected to perform under the evaluation criteria, estimates costs, and identifies opportunities for funding or partnerships.

## Expand and Enhance Shuttle Services

### Overview

Marin Transit has continued to expand shuttle services since the passage of Measure A. Shuttles provide a cost-effective fixed route transit option for the areas of the County with lower ridership demands. The initial three shuttle routes launched in 2006 operated just under 5,000 annual revenue hours. Currently, the District operates over 35,000 annual hours of shuttle service on six routes. Ridership during this time has grown from approximately 25,000 annual passenger trips to nearly 400,000 annual passenger trips.

Communities identified in the Measure A Expenditure Plan for shuttle service that currently do not have shuttle service include Mill Valley and Sausalito. The Expenditure Plan envisioned locally designed shuttle services termed the “Millie” and the “Sally” for these communities. Although shuttle services have not developed in these communities, local and regional services provide some of the County’s highest transit service levels in these areas. Implementation of shuttle services in these communities would likely be coupled with a decrease in local big bus or regional transit services.

The Peacock Gap area of East San Rafael is one of the few residential areas of the urbanized County without any fixed route service. The last fixed route service to this area was operated by Golden Gate Transit and

discontinued in 2007 due to low ridership and productivity. Resident requests for service and the lack of any other transit options result in the need for a future service to serve these residents.

Night service was also a goal of the shuttle program under the Expenditure Plan, and there are opportunities for further expansion. This need continues to arise in the communities of Novato and Tiburon where regular fixed route services concludes by 8:00pm.

The outreach conducted during the Novato Transit Needs Assessment Study and the Novato Community Based Transportation Study identified a lack of service to the Bolling Circle area of Novato (Hamilton). Further discussion with this community is required to determine the specific need. Potential deviation of the Routes 251 or 257 shuttle services may be the best option, based on anticipated ridership demand.

Table C-2 provides a summary of the Shuttle Expansion services, how the need was identified, and next steps for implementation.

**Table C-2: Shuttle Expansion Services**

Route / Service Area	Description	Need Identified	Next Steps	Priority Level
Mill Valley	New circulator shuttle in Mill Valley	Measure A Expenditure Plan, Public/Customer Requests	<b>Planning:</b> Review ridership on current local and regional services. Evaluate feasibility of extending Route 219	<b>Low</b>
East San Rafael (Peacock Gap)	New shuttle to support residents in East San Rafael	Public/Customer Requests	<b>Outreach:</b> Community feedback on specific transit needs	<b>Low</b>
Sausalito	New circulator shuttle in Sausalito	Measure A Expenditure Plan	<b>Planning:</b> Review ridership on current local and regional services. Monitor Volunteer Driver Gap Grant project issued to Sausalito	<b>Low</b>
219 (Tiburon)	Expanded evening service for employees and patrons	Tiburon Transit Needs Assessment Study, Job Access Mobility Institute Study	<b>Implement:</b> Identify funding	<b>Medium</b>
251 (Novato)	Expanded evening service for residents	Novato Needs Assessment, Novato CBTP, Public/Customer Requests, Job Access Mobility Institute Study	<b>Implement:</b> Identify funding	<b>Medium</b>
251 or 257 (Novato)	Deviate Route 251 or 257 to serve Bolling Circle areas of Hamilton	Novato Needs Assessment, Novato CBTP, Public/Customer Requests	<b>Outreach:</b> Community feedback on specific transit needs. <b>Planning:</b> Assess trade-offs for added revenue service. Coordinate with City of Novato on bus stop siting and costs	<b>Medium</b>

## Performance Criteria Ratings

Shuttle expansion projects tend to rate highest in filling a gap in the transit network that occurs due to low ridership demands. They also tend to score favorably in meeting productivity and cost effectiveness standards due to the low operating costs. Shuttle projects in Mill Valley and Sausalito would overlap or duplicate current local and regional fixed route services. It is assumed some reduction in service levels on these routes will be necessary to achieve productivity and cost effectiveness targets. Based on the current riders of evening trips on local fixed route services, added service would most benefit low-income riders who rely heavily on the transit service for mobility.

## Cost Estimates or Considerations

The District's current shuttle operating cost for revenue service is approximately \$80 per revenue hour (including fuel). This equates to approximately \$350,000 per year for a short 30 minute runtime for a route that operates every 60 minutes weekdays only and to \$850,000 for a 60 minute runtime for a route that operates every 60 minutes daily. Although operating costs of the shuttle program are lower than most other fixed route services, average farebox recovery on shuttle routes is only 12% and average passenger subsidy is \$7.50 per trip. Assuming Measure A accounts for 40% of all operating costs, each shuttle passenger trip is supported by \$3.00 of Measure A sales tax funding.

## Opportunities for Funding / Partnerships

Shuttle routes tend to serve a localized population. There are opportunities to partner with local cities/towns, major employers, or Downtown Business Districts to subsidize the costs of shuttle services. Night service in Tiburon would directly support the employees and patrons of local business. Shuttles in Sausalito and Mill Valley could play similar roles. Novato service expansion projects could be eligible for MTC Lifeline or similar funding.

Marin Transit's original 2006 SRTP included a fixed route shuttle service type titled "Local Initiative Service." The service was envisioned as relying on partnerships between local jurisdictions, agencies, or private employers and Marin Transit, with each providing half the cost of operation. It was recognized that these services would serve a localized need and not be able to meet the District's performance targets. Under the program, the District would set subsidy levels based on the actual performance of the service. To date, there are no examples where these services were developed. However, implementation of the identified unfunded shuttle needs may look to this model.

## Expand and Enhance Service to College of Marin

### Overview

Students and employees at the College of Marin rely on local Marin Transit services to access the two campuses at Kentfield and Novato (Indian Valley Campus). Two routes (Route 22 and 29) currently serve Kentfield weekdays and two routes (Route 251 and 257) serve the Indian Valley Campus. The District has

made incremental improvements in recent years to expand services and increase night service to these locations to better serve student needs. However, transit travel times are not competitive with other options. Annual student surveys administered by the College continue to identify transportation and access as one of the top challenges.

Recently, Marin Transit has worked closely with the College of Marin to identify opportunities to improve transit access and affordability for its students and faculty. These discussions included surveying and data analysis of students’ home origins to determine specific transportation needs. The initial findings suggest that an improved connection between the San Rafael Transit Center in Downtown San Rafael and the Kentfield campus would be the most beneficial improvement. The transit center provides direct connections to nearly all other local and regional services, and will eventually provide a connection to the SMART commuter rail service. Based on student home origins and the current fixed route network, additional connections between Novato (serving other areas of northern Marin County) and Mill Valley (serving other areas of southern Marin County) are the next desirable areas for expansion services.

Table C-3 provides a summary of the Shuttle Expansion services, how the need was identified, and next steps for implementation.

**Table C-3: College of Marin Expansion Services**

Route / Service Area	Description	Need Identified	Next Steps	Priority Level
SRTC - Kentfield COM Campus	New direct shuttle between College of Marin’s Kentfield Campus and the San Rafael Transit Center	Countywide Transit Market Assessment Study, Stakeholder Discussions, COM Student Surveys	<b>Planning:</b> Identify routing and service plan <b>Implement:</b> Identify funding	<b>High</b>
Novato – Indian Valley COM Campus - Kentfield COM Campus	New shuttle between Downtown Novato and College of Marin’s Indian Valley and Kentfield Campuses	Novato Transit Needs Assessment Study, Novato CBTP, Stakeholder Discussions, COM Student Surveys	<b>Planning:</b> Identify routing and service plan <b>Implement:</b> Identify funding	<b>Medium</b>
Mill Valley – Kentfield COM Campus	New shuttle between Mill Valley, Strawberry and College of Marin’s Kentfield Campus	Stakeholder Discussions, COM Student Surveys	<b>Planning:</b> Identify routing and service plan <b>Implement:</b> Identify funding	<b>Medium</b>

**Performance Criteria Ratings**

Expansion services for the College of Marin rate well in many categories based on the identified ridership demand and relatively modest costs for added services. It is estimated that only 10% of all College of Marin students currently use transit, and this creates a big opportunity for market expansion if services are more attractive. Nearly 50% of students responding to a recent College of Marin survey indicated that a shuttle between the San Rafael Transit Center and the Kentfield Campus would improve the transit network and access to campus. Although Mill Valley and Novato currently have some form of transit connection to

College of Marin Kentfield, the trip does require at least one transfer. These new services would score well in filling gaps in the current bus network.

Demographics of transit riders using the current routes to College of Marin suggest that improvements to this service will positively impact those without other mobility options. As discussed below, a potential partnership with the College could also create an opportunity to attract outside funding and reduce Measure A subsidy.

### Cost Estimates or Considerations

Based on current Marin Transit operations, expansion to the College of Marin will likely occur through the supplemental school portion of the seasonal contract that provides the K-12 supplemental services on school days only. Based on 30 minute service frequencies for each of these expansion routes, it is estimated the service could be provided with the current fleet and drivers and offer opportunities to convert non-revenue paid time to revenue time.

Current supplemental school operating costs are approximately \$110 per revenue hour (including fuel). The relatively high hourly cost is due to the significant amount of non-revenue time associated with running a service that only operates during the school peak hours. Costs to expand College of Marin services using only current supplemental drivers and vehicles are estimated to be marginal.

### Opportunities for Funding / Partnerships

Included in recent discussions with the College of Marin is the idea of a financial contribution to offset operating costs for the service. Revenues generated through such mechanisms as a student transportation fee (“Class Pass”) or parking fees could directly offset operating costs and/or lead to enhanced services or allow students and faculty to ride at no charge. Such a partnership offers opportunities for outside funding, thus reducing Measure A contributions, and allows the District to achieve high ratings in cost effectiveness.

## Expand and Enhance K-12 School Services

### Overview

The delivery of school transportation in Marin County, as in much of the rest of California, has evolved significantly since the adoption of Proposition 13 and ongoing demographic trends away from bus ridership. The substantial financial commitment required to operate and manage a full service school transportation program has resulted in many districts seeking a full range of alternatives to provide student access to school. These have included expanded use of the supplemental school service offered by Marin Transit, shared use of contractual mechanisms such as that used by Marin Pupil Transportation Authority, fee for service offerings, and active promotion of alternatives such as Safe Routes to School (SR2S).

Marin Transit operates 27 routes, including 11 supplemental school routes that are designed to add capacity to the transit network on school days. These supplemental services are generally stand-alone services aligned

with school bell times, and operate Monday to Friday during the school year. In FY 2013/14, Marin Transit provided over 300,000 individual school-based rides on the supplemental services at an average of 33 passengers per trip.

The Countywide Coordinated School Transportation Study is currently underway. Marin Transit is in a partnership with the Transportation Authority of Marin (TAM) and the Marin County Office of Education to better coordinate and improve the home to school transportation offerings in the county. The key output from the study for the District is a better understanding of future needs for bus transportation to serve student markets.

Results and recommendations are forthcoming, but early analysis indicates the future of school-related transportation in Marin County should consist of a mix of yellow bus service and supplemental public transit services. Yellow bus services appear to be the best match for younger students and also allow for a more cost effective expansion opportunities for current services. Supplemental services are more appropriate for older students and offer the District a certain level of operating efficiency when paired with the District’s seasonal services, such as the Muir Woods Shuttle.

To allow the District to introduce, or in some cases expand, yellow bus services, Marin Transit entered into a partnership to procure yellow bus services in early 2015. This partnership includes three school districts in Marin County, San Rafael City Schools, Reed Union School District, and Ross Valley School District. The arrangement would provide the District a mechanism for using Measure A funding to contract for yellow bus operations in Marin County.

Table C-4 provides a summary of the K-12 School Bus Expansion services, how the need was identified, and next steps for implementation.

**Table C-4: K-12 School Bus Expansion Services**

Route / Service Area	Description	Need Identified	Next Steps	Priority Level
Countywide	Introduce and expand yellow bus services to younger students in Marin County	Measure A Expenditure Plan, Tiburon/Novato Needs Assessments, 2015 Coordinated School Transportation Study	<b>Planning:</b> Complete Coordinated School Transportation Study. Quantify the yellow bus need <b>Implement:</b> Identify funding	<b>Medium</b>
Countywide	Expand and improve supplemental school services to older students in Marin County	Measure A Expenditure Plan, Tiburon/Novato Needs Assessments, 2015 Coordinated School Transportation Study	<b>Planning:</b> Complete Coordinated School Transportation Study. Quantify supplemental school need <b>Implement:</b> Identify funding	<b>Medium</b>

### Performance Criteria Ratings

K-12 school services score high in a number of Measure A evaluation criteria categories. These include filling a gap in the bus transit network, meeting productivity standards, meeting cost effectiveness standards, and relieving congestion. Yellow bus is relatively untested in Marin County by the District. Experience from other organizations operating similar services and experience on the supplemental routes suggest high ridership levels are achievable on a per trip basis and a high farebox recovery (low subsidy) could be achieved. It is also assumed a heavily discounted or free pass would be issued to students who qualify for the free or reduced lunch program, resulting in a high rating for promoting environmental justice. All other criteria get a medium rating except providing seamless connections to the regional services, which is rated low.

### Cost Estimates or Considerations

Current supplemental school operating costs are approximately \$110 per revenue hour (including fuel). The relatively high cost is due to the significant amount of non-revenue time associated with running a service that only operates during the school peak hours. Pricing for yellow bus is typically done by the day, and the rates account for the significant amount of midday down time for the drivers.

It is estimated that each yellow bus will cost around \$400 per day to operate. Assuming a 175 day school year, the annual cost per bus is approximately \$70,000. Since the operation of a yellow bus is purchased per day, the cost per student is a function of how efficiently the bus is used and how many different students can be served during the day. School district decisions on bell time and staggering of schedules play a large role in the cost efficiency of these services and the ability to expand them.

### Opportunities for Funding / Partnerships

As mentioned above, the current Coordinated School Transportation Study will offer insight on how partnerships could be leveraged to make transportation services, including bus, more efficient and to allow for expansion. The current supplemental school program gains operational efficiencies in equipment and drivers through merging with the District's seasonal programs. Future expansion services to College of Marin could offer additional efficiencies by using supplemental equipment and drivers for school day only services.

Yellow bus services are priced and operate differently than the supplemental services. As referenced above, coordination with the school districts on bell times and scheduling between schools will greatly impact the cost efficiency of providing these services. Since yellow bus could offer another tool for local communities to reduce roadway congestion, partnerships with local cities and towns will offset costs for expanded yellow bus services.

## Provide Limited Stop or Express Services

### Overview

Local transit services are focused on increasing mobility for Marin County residents. Trips are shorter in length than regional trips or ferry trips. Operating characteristics tend to balance speed of service with accessibility, creating significant travel times for some trips.

Goal E under the SRTP Route Level performance measures calls for providing competitive travel times to promote transit use. Perhaps the most sensitive market to travel times are commuters who rely on the service daily and oftentimes transfer to another local or regional service to complete their trip. This market may increase as SMART comes online in the coming years.

The analysis of auto-to-transit travel times on current services highlights Routes 23 and 71 as having the highest discrepancy in travel time between modes. An express alignment of Route 71 is included as part of the funded plan and includes an 18% travel time savings over the current alignment by simply removing the bus pad stops in San Rafael, Larkspur, and Corte Madera that have duplicative local and regional services. An express option to Route 23 is also included in the funded plan and has significant potential to decrease end-to-end travel times especially in the Fairfax to San Rafael segment. The Fairfax-San Rafael Transit Corridor Study is evaluating opportunities for transit service enhancements in this corridor, including areas of travel time savings. Marin Transit will use the results of this effort to finalize the service plan for the express service that would operate in the Ross Valley-San Rafael corridor and serve the future Downtown San Rafael SMART station.

One other expansion project to achieve travel time savings has been identified in the Mill Valley to San Rafael corridor. An express service along Route 17 can achieve travel time savings for current riders and attract new riders to this route. In addition, Route 17 could be designed to provide a convenient link to future SMART services for South County residents traveling north.

The current deviation of Route 17 to Strawberry Village increases travel times for many riders traveling to Mill Valley. The ongoing study of the East Blithedale / Tiburon Blvd interchange is assessing improvements to pedestrian and bicycle circulation, with a focus on how these users connect to transit services. Results of this study will be evaluated in concert with express bus options for Mill Valley and other areas of southern Marin County.

Table C-5 provides a summary of the Limited Stop or Express Expansion services, how the need was identified, and next steps for implementation.

**Table C-5: Limited Stop or Express Expansion Services**

Route / Service Area	Description	Need Identified	Next Steps	Priority Level
San Rafael – Mill Valley	New weekday peak only express service connecting Downtown San Rafael to Mill Valley	2012 Onboard Survey, On-Time performance Assessment	<b>Planning:</b> Identify exact alignment and stops. <b>Implement:</b> Identify funding	<b>Medium</b>

### Performance Criteria Ratings

Express services are anticipated to perform well in productivity and cost effectiveness standards since they focus on areas of high ridership and operate with higher speeds, making more efficient use of the revenue time. Since these services would operate in high ridership corridors where other routes currently operate, they would to some degree duplicate existing services. However, they will create a new service type that may attract a new market and, as a result, fill a gap in the network for these users. Highest ratings for express services are in the areas of seamless connections, as they would direct link to the San Rafael Transit Center and future SMART station.

### Cost Estimates or Considerations

Limited or express services would likely need the capacity offered through our big bus program and thus cost approximately \$135 per revenue hour. Initially, express services would be focused on peak travel hours and target commute needs. This would require relatively few revenue hours of service, however the peak nature would require additional fleet beyond the current baseline service. Annual operating cost estimates for an express route that operates peak hours only would range from approximately \$250,000 to \$500,000 per year, depending on service frequency and length of route.

### Opportunities for Funding / Partnerships

Funding for these services would likely directly compete with resources allocated for the fixed route program. Opportunities to reduce regular fixed route service levels as a result of expanded express services may be used to fund these service.

## Restore Ferry Feeder Service (Wave)

### Overview

Until 2003, Golden Gate Transit offered ferry feeder service for regional customers in a number of corridors Countywide. As ridership and revenues declined, Golden Gate cancelled all “ferry feeder” services. The Measure A Expenditure Plan includes the desire to restore these services if resources become available.

“Ferry feeder” service is defined as a transit route that is timed to meet ferry services connecting to San Francisco. In the AM, the route is timed to arrive slightly before boat departure, and in the PM, the route is

waiting for arriving passengers. Since the ridership and success of the service is so dependent on the ferry operation, the fleet and drivers are typically dedicated to the service. Since 2003, there has been limited funding to reintroduce this dedicated service. GGBHTD, in support of its Larkspur Ferry Strategic Plan, has reintroduced the service in select corridors in Marin County and dedicated a fleet and pool of drivers to operate it. Due to the integrated operational needs of this type of service, GGBHTD is uniquely positioned as the best provider and for ensuring high satisfaction from both its ferry and “feeder” passengers.

In 2013 Marin Transit was successful in re-instating a variation of “ferry feeder” service to the Tiburon Peninsula, a service previous provided by GGT Route 9. The service was provided as a deviation of the Shuttle Route 219 (219f) rather than as a stand-alone service with a dedicated fleet and driver. A total of three AM and three PM trips were original provided and timed to the Blue and Gold ferry schedules. Based on ridership and passenger requests, this was adjusted to meet two AM and four PM ferries in 2014. Although these trips are timed specifically to the meet the ferries, the trips serve multiple markets (not just ferry passengers) and provide revenue service in both directions during both AM and PM hours (rather than revenue in one direction and deadhead back to the start of the route). Marin Transit does not offer a free transfer, as in the case of GGT’s Route 25, and instead offers a discounted transfer credit coordinated with Blue and Gold for connecting ferry passengers.

Expanded “ferry feeder” service was identified in the GGBHTD’s Larkspur Ferry Strategic Vision as a landside access improvement strategy to support continued growth of the Larkspur Ferry service and improve rider satisfaction. In July 2013, the Golden Gate Bridge Highway & Transportation District (GGBHTD) Board of Directors elected to restore the Sir Francis Drake corridor ferry feeder service (WAVE Route 25), nearly ten years following cancellation. The route was approved as a pilot project alongside added morning ferry service and implementing paid parking at Larkspur. The “ferry feeder” pilot project operated for nearly a year before the GGBHTD Board took official action in June of 2014 to make the service permanent. In July 2014, the GGBHTD Board elected to pilot a second ferry feeder route from the Smith Ranch Road Park and Ride Lot in Terra Linda. That service started in December 2014.

Following GGBHTD Board adoption of the Route 25 pilot service, GGBHTD staff requested \$85,000 in Measure A interest funding from TAM to support it operations. The TAM Board authorized this amount in July 2013. In July 2014, GGBHTD requested two additional allocations of Measure A: 1) \$165,000 for continued service on Route 25, and 2) \$94,000 for a new “ferry feeder” pilot project from Smith Ranch Road (Route 37). The TAM Board approved a secondary allocation of \$85,000 in October 2014 and authorized additional spending pending the results of an analysis of lost opportunities for local transit when investing Measure A funds to support ferry feeder service.

GGBHTD provided the District with FY 2013/14 operating data for Route 25 to conduct a performance assessment using the criteria in the Measure A Expenditure Plan. During the first year of service, just over 25,000 passengers rode the service at a total cost of \$258,808. GGBHTD operated the route using a

dedicated fleet of ferry division-branded (WAVE) 30’ and 40’ vehicles. Six AM and six PM trips were offered between Fairfax Manor and the Larkspur Ferry Terminal via Sir Francis Drake.

Aside from the deviation to Marin General Hospital and not pulling into the ferry parking lot, Route 25 mimics the alignment of Marin Transit local Route 29. While these services share a common alignment, their function and markets differ. Route 29 is timed to the “pulse” in Downtown San Rafael and is focused on making bus connections while Route 25 is timed to the Larkspur Ferry and designed to make ferry connections.

Table C-6 provides a summary of the Ferry Feeder Expansion services, how the need was identified, and next steps for implementation.

**Table C-6: Ferry Feeder Expansion Services**

Route / Service Area	Description	Need Identified	Next Steps	Priority Level
Ross Valley Ferry Feeder	Ferry feeder service between Fairfax Manor and Larkspur Ferry Terminal	Measure A Expenditure Plan, Golden Gate Ferry Larkspur Service Strategic Plan	<b>Planning:</b> Complete <b>Implement:</b> Complete	<b>Medium</b>
Smith Ranch Road Ferry Feeder	Ferry feeder service between Smith Ranch Park and Ride Lot and Larkspur Ferry Terminal	Measure A Expenditure Plan, Golden Gate Ferry Larkspur Service Strategic Plan	<b>Planning:</b> Complete <b>Implement:</b> Complete	<b>Medium</b>

### Performance Criteria Ratings

As opposed to other expansion projects, the District has over one year’s worth of operating data available for use in evaluating performance and the service’s ability to achieve the Measure A criteria. Thus, this section provides additional detail on these ratings. The following assumes that GGBHTD continues to operate the “ferry feeder” service, and ongoing Measure A funding is requested and considered as a funding source.

*It should be noted that Marin Transit does not have a SRTP Board adopted route-level performance target for a stand-alone “ferry feeder” service. While it may appear logical to use the District’s community shuttle targets due to the name of the service, a more appropriate target may be the Supplemental School or Muir Woods program targets. As with the “ferry feeder”, these services are designed to serve one destination and to only operate during the times when peak demands warrant it. The capital investment, or type of vehicle (30’-40’ heavy duty), is also a closer match than the 24’ cutaway shuttle used for the District’s Community Shuttle program. GGBHTD has a target of 10 passengers per trip for ferry feeder services. This target does not directly correspond to any Marin Transit SRTP adopted target and creates challenges in comparing this service against other services receiving Measure A funds. The Marin Transit Board could decide to adopt a new target specific to this type of service to be incorporated into future SRTP updates.*

Ferry feeder services score highest in providing seamless connections to regional services. Since service levels are focused on peak hours, and the services operate in congested corridors, they also score well in relieving congestion. Although they provide a new “type” of service that was not currently offered (timed service to the Larkspur ferry), they duplicate service along corridors served by local and regional bus routes.

Analysis of actual performance and subsidy results for Route 25 is presented below, as service is already in place and data is available for the first full year of operation on the Sir Francis Drake. As stated, the District currently does not operate a dedicated “ferry feeder” type of service, and there are no route-level standards in the SRTP to use as a target in the evaluation. Ferry feeder service as operated by GGBHTD includes a significant amount of non-revenue time associated with operating in revenue service. This is due to the service carrying passengers only to the ferry in the AM and from the ferry in the PM, then “deadheading” back to the start of the route. The service also requires a dedicated fleet of vehicles branded for the Ferry Division and restricts opportunities to interline with other routes.

Due to the service characteristics, a per trip metric is the most appropriate way to assess the productivity of the service (as discussed above). Based on data received from GGBHTD covering the first full year of operation for Route 25, the service carried 25,279 passengers on 2,456 revenue trips or 10.3 passengers per trip. Absent any Marin Transit Board adopted targets for productivity for a “ferry feeder” service, staff deferred to a 20 passenger per trip target that is similar to the District’s per trip standard for supplemental school services. This target recognizes the added cost of the service associated with non-revenue time and strain on available equipment required from a peak only service. Based on its survey of ferry passenger and the pre-2003 ridership, GGBHTD estimates service in the Sir Francis Drake corridor to be the best performing route in the ferry feeder system. Using Marin Transit targets, the current passenger per trip averages and potential operation of other ferry feeder services are assigned a low score for their ability to meet productivity standards.

Information was also provided to quantify current performance of the ferry feeder relative to the service’s ability to meet the District’s cost effectiveness standards. During the first year of Route 25 operation, the service cost \$258,808 to operate with \$17,563 in associated revenues. While the feeder shuttles provide a free ride, these revenues appear to result from Clipper’s assignment of electronic passenger fares to both the feeder and the ferry. Using the 25,279 passenger trips reported, the service was subsidized at \$9.54 per passenger. Marin Transit does not receive any fare revenues associated with the investment of Measure A dollars in this service. If GGBHTD continues to operate the feeder service, their new estimate for the cost to operate the service increases the subsidy to \$10.24 per passenger. Although the District does not have a Board-adopted target for “ferry feeder” services, similar programs such as supplemental school and Muir Woods have subsidy targets at \$3.00-\$5.00 per passenger.

Based on the current capacity of local Route 29 (eastbound AM and westbound PM), there is no demonstrated need to eliminate “pass-ups” in this corridor, therefore scoring in this category is low. A low rating is also given to the “promotes environmental justice” as service is focused on the affluent areas of the

County. The rider profile mimics the ferry rider profile, where riders have high incomes and are not dependent on the service for mobility.

Based on historic funding requests by GGBHTD and the operating costs for Route 25, scoring in the “attracts outside funding” category is medium due to the fact that a third of the service (33%) during the first year was funded by Measure A. In addition, since Marin Transit does not operate the service, fare revenues and state/federal funding associated with the ridership on the route would not be recognized. Similar services operated by the District use a smaller share of Measure A.

### Cost Estimates or Considerations

Data received from GGBHTD on Route 25 operations for FY2013/14 reports that the service costs an estimated \$142.00 per revenue hour to operate with an annual total cost of \$258,808. This hourly rate is comparable to the rate GGBHTD charges to Marin Transit for local fixed route service. At the same time, the rate is 44% higher than Marin Transit’s shuttle rate and 23% higher than the hourly cost to operate Muir Woods or Supplemental School service.

### Opportunities for Funding / Partnerships

As discussed above, GGBHTD is currently operating and funding two “ferry feeder” services approved by their Board in July 2014. Following approval, GGBHTD staff requested \$85,000 in Measure A funds to cover a portion of the operating costs. GGBHTD identified these feeder routes as an opportunity to support sustaining current and future growth objectives for the Larkspur ferry services. Additional funds generated from the Ferry Division or new revenues generated from parking fees at Larkspur Landing offer potential funding opportunities for these services. The decision to use these funding sources, or increase the use of these funds, would need GGBHTD Board approval.

**Parking.** GGBHTD expected the new \$2 parking fee established in January 2014 to generate an estimated \$834,000 per year in revenues. As the “ferry feeder” service offers an alternative option for those who choose not to drive, revenues generated from parking have a strong nexus to the service and could be used to support operating costs. An additional \$1 per day added to the parking fee could fund Route 25 plus additional feeder routes with comparable service levels. With the removal of Marin Airporter from 300 Larkspur Landing Circle, GGBHTD will also be adding 330 parking spaces for its ferry patrons. GGBHTD estimates that the added revenue from parking alone, at the current \$2/day rate, will generate \$50,000 - \$60,000 per year.

**Ferry Fares.** Another funding source with a strong nexus to “ferry feeder” service is ferry passenger fares. Approximately 2.4 million passengers travel each year on GGT ferry services. The average fare per passenger trip is \$6.78, with a subsidy of \$7.34. A 5% increase in average fares (-\$0.34) would generate an estimated \$814,000 in additional revenue per year. This new revenue could fully support the operating costs of nearly three ferry feeder services with similar service levels to Route 25.

GGBHTD also estimates that the additional ferry revenues generated from new riders associated with the 330 new parking spaces at 300 Larkspur Landing Circle at \$300,000 to \$450,000 annually. This new revenue could support up to three new ferry feeder routes with similar service levels to Route 25.

Since nearly all “ferry feeder” passengers are ferry passengers, the total cost per trip and subsidy should also be considered. The current feeder service is free when connecting to the ferry. While the “free” fare is an incentive to use the service, the per passenger and per trip subsidies rise from the \$7.34 per ferry passenger to \$16.88 per ferry passenger for those that also uses this feeder shuttle. Charging a \$3.00 fare for this dedicated service would reduce the need for Measure A funding and provide a higher farebox recovery on these services.

**Discretionary Grants.** Outside discretionary grant opportunities are available for feeder shuttles, such as these “ferry feeders.” The Bay Area Air Quality Management District (BAAQMD) has up to \$4 million available annually from a regional surcharge on motor vehicles for shuttle/feeder bus services and regional ridesharing. Each service can request up to \$125,000 annually to support current service or up to \$200,000 per year for new or pilot services. Since the program only requires a 10% match, a significant share of operating costs for “ferry feeder” services would be covered.

It should be noted that the current ferry feeder service as provided by GGBHTD would likely not qualify for this funding since the vehicles used to provide this service are diesel-powered. An investment in alternative fuel buses, such as hybrid or electric vehicles, for purchase or lease will be required to meet the goals of this particular funding source. BAAQMD scores projects score higher if they provide service using the best available and cleanest technology vehicle(s) (e.g., 2010 or later engine, zero or partial zero emission).

## Expand Rural and Recreational Services

### Overview

The District provides fixed route services to rural West Marin on the West Marin Stagecoach and Muir Woods Shuttle. The rural services serve both residential mobility needs and provide access to the recreational areas in West Marin. The Muir Woods Shuttle provides a direct public transit connection to one of the Bay Area’s top tourist destinations. Together, these services offer congestion relief for many Marin County roadways and highways during weekend and holiday travel.

Supported by the National Park Service (NPS) and Marin Transit, the Muir Woods Shuttle provides peak season service on weekends and holidays to Muir Woods National Monument. Now in its eleventh season, the Shuttle carries nearly 25% of all Muir Woods visitors on the busiest visitation days and recorded over 100,000 passenger trips in 2014. The shuttle is a valuable resource to reduce roadway congestion in Sausalito, Tam Junction, and West Marin on peak weekends and holidays.

The District works in partnership with NPS to identify future expansion and improvements for the Muir Woods program. In addition, Marin Transit conducts customer surveys of shuttle passengers to educate the planning process and for annual evaluation reports. Due to the demand for the service and increasing

congestion on Highway 1, the District has expanded the program nearly every year since taking responsibility for it. Expansion and growth activities have focused on increasing service levels on peak weekends to reduce passenger wait times for boarding the shuttle. Now that the fleet has expanded to ten vehicles that each carry 37 passengers, service is provided as often as every ten minutes during the peak. Wait times have dropped significantly over the past three years.

Near-term growth and expansion of the program will focus on providing weekday service to Muir Woods during the summer when visitation to the park is at its highest (June/July/August). Due to the limited availability of the Pohono Park and Ride lot on weekdays, this expansion would focus on providing service to riders who travel to Marin by bus, ferry, or bike and rely on the Muir Woods Shuttle's Route 66F alignment that serves Sausalito, Marin City, and the curbside stop at Pohono / Manzanita Park and Ride. The timing of this expansion continues to complement provision of the District's supplemental school services, as school is out of session during busy visitation periods at Muir Woods.

Another area of near-term growth is in a new alignment that would capture passengers who do not have access to a car, or are visiting without a car, before they enter Marin County. This alignment would focus on serving the south side of the Golden Gate Bridge at the toll plaza and connect to a number of regional transit services. These include: San Francisco SFMTA Routes 28 and 76X, Golden Gate Transit Routes 10, 70, 101, and the PresidiGO shuttle. NPS is currently studying the circulation in and around the toll plaza parking lot and will consider the future needs of the Muir Woods Shuttle as part of this evaluation. Additional planning work and coordination with all operators and property owners will be required to identify stop and layover opportunities at the Bridge, service levels to the park, and the routing of the service within Marin County.

Longer term expansion of the Muir Woods Shuttle will rely on the Park Service's future reservation system. This reservation system will provide visitors with choices for park access, including the Muir Woods Shuttle, before they travel. The system will provide additional operating efficiencies by increasing certainties of ridership levels and reducing passenger wait times. Details of the reservation service are still to be worked out, and the District will continue to partner with NS to identify inputs needed for future operations. It is assumed that a future reservations system would require year-round operation of the weekend service and weekday service to support peak visitation levels.

The District conducted a significant expansion of rural Stagecoach service in June 2014 and will recommend adoption of these improvements in 2015. This expansion greatly enhanced service on the North Route 68 and on the South Route 61 during peak weekends. Recreational travel to the Golden Gate National Recreation area causes significant congestion in Marin County. Continued expansion of the South Route will expand travel alternatives for reaching these areas by car.

Table C-7 provides a summary of the Rural and Seasonal expansion services, how the need was identified, and next steps for implementation.

**Table C-7: Rural and Seasonal Expansion Services**

Route / Service Area	Description	Need Identified	Next Steps	Priority Level
Sausalito - Marin City – Tam Junction – Muir Woods	Peak summer weekday service on Route 66f	Muir Woods Shuttle Annual Evaluation Report, Stakeholder Meetings	<b>Planning:</b> Continue coordination with City of Sausalito; <b>Implement:</b> Identify funding	<b>High</b>
Golden Gate Bridge – Muir Woods – West Marin	New route connecting the Golden Gate Bridge to Muir Woods and West Marin	Muir Woods Shuttle Annual Evaluation Report, Stakeholder Meetings	<b>Planning:</b> Further study circulation at Toll Plaza parking lot, identify service levels and routing <b>Implement:</b> Identify funding	<b>High</b>
Sausalito – Marin City – Pohono – Muir Woods	Adjusted service on Route 66 and 66f (schedules and routing) based on NPS reservation system	Golden Gate National Recreation Area Management Plan, Stakeholder Meetings	<b>Planning:</b> Continue to work with NPS on details of reservation system and the shuttles role in park access	<b>Medium</b>
Sausalito-Marin City – Tam Junction – Stinson Beach – Bolinas	Increase service on Route 61 to support weekend and holiday demands	2014 Rural Fixed Route Expansion Plan	<b>Implement:</b> Identify funding and expand fleet	<b>Medium</b>

### Performance Criteria Ratings

Expansion of the Muir Woods Shuttle program scores well in nearly all categories including: fills a gap in the bus transit network, meeting productivity standards, meeting cost effectiveness standards, relieves congestion, and attracts outside funding. These ratings are based on anticipated performance of future services as projected from the current performance of Routes 66 and 66f. All other ratings except for “promotes environmental justice” are scored as medium.

Route 61 expansion scores well in relieving the congestion and eliminating pass-ups experienced during peak late afternoon return trips from Stinson Beach. The recent changes implemented on March 1, 2015 should assist with overcrowding, but additional service will continue to support reductions in pass ups.

### Cost Estimates or Considerations

The total operating costs for the Muir Woods Shuttle are 50% funded by NPS, and the service has a farebox recovery ratio of nearly 50%. These two aspects of the service make it very cost effective for the District to operate, and consequently, it requires very low levels of local Measure A contributions. Near-term opportunities for weekday service expansion will be achievable with the existing fleet and workforce and increase the overall efficiency of the program.

Rural services currently cost the District approximately \$80 per revenue hour to operate. This figure places them alongside the community shuttle program as the lowest cost to operate of any fixed route service. Rural

expansion service would be targeted to only peak weekends and represent a relatively small number of annual hours and costs.

### Opportunities for Funding / Partnerships

The current partnership with NPS is key to the success of the Muir Woods Shuttle, and the partners will continue to identify new opportunities to expand and enhance the shuttle. The District will encourage NPS to examine the total cost of the visit to the National Monument in its decision making relative to setting park entry fees. Opportunities to reduce the cost for visitors taking the shuttle compared to driving should be explored when evaluating the total cost (access plus admission) of visitation. This could be done by reducing, or not increasing, park entry fees when coupled with a bus ticket. The District will also encourage NPS to consider use of parking revenues to further subsidize shuttle service to the Park or to reduce visitation costs for shuttle users.

The potential for future parking charges at Stinson Beach and other parking areas in West Marin could offer funds to support transit expansion. The District should continue to work with the State Parks system to provide their visitors with transit access to their parks, trailheads, and beaches.

## Provide and Support Flexible First/Last Mile Services

### Overview

Marin Transit's fixed route services offer scheduled public transit along the County's most heavily traveled corridors. Most of these services focus on efficiently moving as many people as possible to reduce congestion and improve mobility. The Local Connector fixed route services offer a more personalized shuttle service to other areas of the County that demonstrate regular demand for transit service and can support ridership to meet the District's productivity targets. The District's paratransit and mobility management services provide another personalized layer of services for senior and special needs riders. While these offerings serve a significant number of Marin County residents, there is still a gap in services for many residents that make transit service unattractive or infeasible to use.

First/last mile services are intended to fill that gap in the transportation network and make transit service more accessible and attractive for residents. The focus is on overcoming barriers typically associated with getting to or from fixed route transit stops. These barriers can be a function of the topography or geography, characteristics of the transportation network (narrow streets, lack of sidewalks, limited bike facilities, and unsafe crossings), or a physical limitation of the user that restricts accessibility.

Due to the personalized nature of these trips, mass transportation is not the best match for this service need. Marin Transit continues to work with the community and its partners to identify other cost-effective solutions to this transportation barrier. A key question in this discussion is the level of ownership and subsidy the District should provide versus relying on the private market or users to fund and provide these services. Table C-8 summarizes the key rider markets that would benefit from improved first/last mile services and

some potential delivery models for these markets. Additional study would be the next step toward identifying the most appropriate model for addressing this unmet need.

**Table C-8: Rider Markets Identified for First / Last Mile Services**

Rider Market	Peak Service Needs (Time/Day)	Service Area	Potential Service Delivery Model	Alternative Delivery Models (supported and coordinated - not directly operated)
Seniors	Midday, weekdays and all day weekends	Countywide	Point to point services (on-demand), subscription shopper shuttles	Subscription taxi, TNC, or similar service
All	All	Locations with especially hilly terrain where fixed route and paratransit services cannot operate	Flex route service timed to bus operations at town center but circulates in residential areas in between	Subscription taxi, TNC, or similar service; car share
All	Night and off-peak hours	Commercial and residential areas with lower ridership demands	Flex route service timed to bus operations at town center but circulates in residential areas in between	Subscription taxi, TNC, or similar service; vanpools; car share; bike share
Ferry / Rail Passenger	AM / PM Peaks, weekdays	Residential areas with lower ridership demands or smaller employment sites	Point to point shuttles (subscription service), timed to trains or ferries	Subscription taxi, TNC, or similar service; vanpools; car share; bike share

### Directly Operated Services

Direct operation of the services gives the District the ability to have greater control and oversight of the service including safety and training of drivers and vehicle type, capabilities, and cleanliness. Direct operation typically comes at a higher cost than supporting others to provide the services. Note, however, that there appear to be opportunities to make other existing services more efficient and effective with the provision of a new type of service.

Consistent with the future goals of the Marin Access programs, the first step in offering more personalized first/last services is to better coordinate and integrate current and new program offerings. This would allow riders to see all transportation options when booking a trip and allow schedulers to view availability across all programs when booking a trip. Current programs to include in this integration are: paratransit, Catch-A-Ride, Novato Dial-A-Ride, and volunteer driver programs. For example, this enhanced view for schedulers could allow a same-day Catch-A-Ride trip to be assigned to a paratransit driver if this increases service efficiency.

If there are limited opportunities for greater efficiency and economies of scale in integrating these programs, the District should evaluate a new service model that would operate more as a flex route service than a traditional fixed route service. These are a potential new offering for the family of transit services in Marin

County that can be adapted to the needs of the community and the areas served. While Marin Transit's diverse offerings of fixed route services provide riders with transit services on a set route, based on a timetable for regular service, flex routes offer flexible solutions to meet additional mobility needs. To potentially decrease costs and increase mobility of these services, a smaller vehicle type should be considered and evaluated based on ridership capacity needs of the service. Current experience on Route 65 (Tomales-Petaluma) will be used to assess effectiveness of flex route operations in rural areas in West Marin.

### **Supported and Coordinated Services**

In Marin County the taxi industry offers one solution for partnership on supporting and coordinating with an outside provider of transportation for first and last mile services. Recent advancements in technology and smart phone access have spurred a new market for transportation. Transportation Network Companies (TNCs) such as Uber and Lyft offer new models and opportunities for first and last mile transportation. Other shared-ride (Carma, Sidecar, Lyft Line, Uberpool, etc.) or car-share companies (ZipCar, City Carshare, Getaround, etc.) can also support these mobility challenges. Availability of these services is high in the urbanized areas but still low in suburban areas such as Marin County.

The District's recent partnership with the taxi industry through the Catch-A-Ride program offers one model or partnership where trips for seniors and ADA are brokered out. Since the program is still relatively young, staff is continuously monitoring to see if it would be scalable to serve a larger market of users and if the industry is willing to take on more vehicles that can accommodate wheelchairs.

Additional opportunities to support and coordinate with private or non-profit providers should be explored that would require a lower per passenger subsidy levels than the current Catch-A-Ride program. One option would be to offer free transfers to the fixed route services from taxi, a transportation network company (TNC), or other approved providers. This would reduce the need for the District to provide these services and offer an incentive for riders to use the fixed route network. Since it is assumed the first/last mile connections are relatively short in distance, the out-of-pocket costs associated with the taxi or similar service would be minimal. The total cost of the trip would be more attractive, with the transit portion provided as free. Encouraging this behavior will also create incentives for these outside providers and strengthen the market and availability of services for Marin residents.

Continued partnership with the Transportation Authority of Marin (TAM) and their countywide transportation demand management (TDM) strategies can also offer solutions for bridging the first and last mile barrier. The pilot dynamic rideshare program (Carma) offered a shared ride service that relies on smartphone technology to match passenger and drivers. Future co-location of car share and bike share stations at key transit facilities can offer alternative travel options in areas where fixed route services are not feasible financially or physically to operate. Partnerships that identify vanpooling solutions to and from transit stops can also be a useful tool.

The District could also pursue a hybrid arrangement for service where Marin Transit provides the vehicle, vehicle maintenance, and driver training. The service is conducted with volunteers (through the Volunteer

Driver program), an organization that benefits from the service, or individuals who pool together for a shared ride. There may be additional opportunities to use that same vehicle outside service hours by offering it through a car share arrangement or program and supporting other countywide mobility goals.

### Driverless Technology

Transit also needs to consider a future with driverless cars and be responsive to how this change will impact the transit industry. Many automakers currently offer autopilot functionality and there is great speculation on when a fully autonomous vehicle will be ready for public sale. Although there are still many technology and regulatory hurdles that need to be overcome, preparing for the future of transportation should be considered in the 10-year plan.

While autonomous vehicles offer many opportunities for mobility, it is unclear if they will be able offer congestion relief. There are few opportunities in Marin County for additional infrastructure enhancements that would generate new physical roadway capacity. In a future with autonomous vehicles, transit’s role could perhaps focus on moving travelers along the capacity-constrained corridors within our community. This provides an opportunity for autonomous vehicles to assist with the first and last mile connectivity issue.

Table C-9 provides a summary of the First and Last Mile expansion services, how the need was identified, and next steps for implementation.

**Table C-9: First and Last Mile Expansion Services**

Route / Service Area	Description	Need Identified	Next Steps	Priority Level
Countywide	Same day, curb-to-curb services for seniors as available to make current program offerings more efficient	Measure A Expenditure Plan, Tiburon/Novato Needs Assessments, Senior Mobility Action & Implementation Plan	<b>Planning:</b> Study current trip request and denials and understand software need to consolidate scheduling	<b>Medium</b>
Countywide	New directly operated flex route services for general public	Measure A Expenditure Plan, Tiburon/Novato/West Marin Needs Assessments	<b>Planning:</b> Further study to identify potential markets and subsidy levels	<b>Medium</b>
Countywide	Hybrid program where District provides vehicle, maintenance, and training and rely on outside drivers and scheduling	Measure A Expenditure Plan, Tiburon/Novato Needs Assessments	<b>Planning:</b> Further study to identify potential markets and subsidy levels	<b>Medium</b>
Countywide	Support outside providers - free transfer agreements	Measure A Expenditure Plan, Tiburon/Novato Needs Assessments	<b>Planning:</b> Further study to identify opportunities. Talk with outside providers and explore how the process would function	<b>Medium</b>

### Performance Criteria Ratings

First and last mile services score highest in filling gaps in the bus transit network and providing seamless connections. Cost effective opportunities to achieve these goals are the focus of first and last mile services and will be explored as part of the upcoming planning process.

Since the exact program is still not well-defined, scoring the other criteria is a bit challenging. Since the programs will not target large populations and yet rely on heavy passenger loads, the ability to achieve high productivity or subsidy goals is questionable. These metrics may also be challenging to quantify if the service leads to more efficiency for other local services or significantly reduces reliance on outside providers.

### Cost Estimates or Considerations

Due to the personalized nature of these services, the cost per passenger to directly provide a service is likely going to be high. The decision to directly contract or operate service versus relying on outside providers will determine the District's level of required investment and the subsidy levels. However, even if the District contracts directly for the operation, there may be opportunities to leverage available resources by integrating and better coordinating Marin Transit's current program offerings. This type of implementation may not have a net increase in costs to the District while increasing the number of passengers served and reducing per passenger subsidies. Relying on and creating incentives for outside service providers such as taxis to support the District's goals could also be a cost effective way to implement this type of service without directly operating.

### Opportunities for Funding / Partnerships

Developing first and last mile services should focus on partnership opportunities and consider the ever changing environment of mobility. The District's current partnership on Volunteer Driving programs with the Marin Senior Coordinating Council (Whistlestop Transportation) offers a tremendous opportunity to leverage low cost resources to help fill the gaps in the transportation network. Current partnerships with the taxi industry can create future win-win opportunities that allow the District to expand mobility for seniors while strengthening the network of taxi services. Other potential partnership opportunities with TNCs could offers similar win-win arrangements.

The District will also continue to work with TAM to ensure future TDM programs are well integrated with transit and that users who choose a car-free lifestyle have a wide range of mobility options. This includes a safety net for transportation when one option fails or is infeasible for a specific trip. TDM offerings are viewed as support services to transit in Marin County and can address the first and last mile challenges consistently identified in planning work across the County.

### Expansion Scoring and Priorities

Table C-10 provides a summary of all unfunded service improvements and organizes them by priority level. Priorities were assigned based on the evaluation ratings and ease of implementation. Overall service ratings

were calculated based on an equal weighting of all Measure A criteria. Funding was not a factor in the prioritization as many of these projects could be achieved with outside funding, partnerships, or discretionary grant funds. The priority assignments are based on the District’s needs and assume the Service Plan improvements are fully implemented. Staff will revisit this list, and the priority assignments, annually and update them to reflect future needs for local transit service.

Table C-11 provides a summary of the project rating in each of the evaluation criteria plus an estimate of annual operating costs, estimate of Measure A contribution, and an assessment of the ease of implementation. The cost is based on an estimate for annual operating costs to Marin Transit. Each dollar sign (\$) represents approximately \$50,000 per year of added operating cost. The darker portions of the “\$” indicate the portion of the financial support that would likely come from Measure A.

**Table C-10: Expansion Services by Priority**

High Priority, Ready Projects (Ratings = <b>High, Ready</b> to Implement)
Expand and Enhance Service to College of Marin: <b>Downtown San Rafael Express Shuttle</b>
Expand Rural and Recreational Services: <b>Provide Summer Peak Weekday Service on Route 66F</b>
High Priority, Not Ready Project (Ratings = <b>High, Not Ready</b> to Implement)
Expand Rural and Recreational Services: Provide New Service Between Golden Gate Bridge and West Marin
Medium Priority Projects, Ready Projects (Rating = <b>Medium, Ready</b> to Implement)
Expand and Enhance Shuttle Services: <b>Tiburon Evenings (219)</b>
Expand and Enhance Shuttle Services: <b>Novato Evenings (251)</b>
Expand and Enhance Shuttle Services: <b>Novato Hamilton (251 or 257)</b>
Restore Ferry Feeder Service: <b>Ross Valley Wave (GGT Route 25)</b>
Restore Ferry Feeder Service: <b>Terra Linda Wave (GGT Route 37)</b>
Medium Priority Projects, Not Ready Projects (Rating = <b>Medium, Not Ready</b> to Implement)
Expand and Enhance Service to College of Marin: <b>IVC North / North County Express Shuttle</b>
Expand and Enhance Service to College of Marin: <b>Mill Valley/South County Express Shuttle</b>
Expand and Enhance K-12 School Bus Services: <b>Expand Yellow Bus Service Based on Results of School Study</b>
Expand and Enhance K-12 School Bus Services: <b>Expand Transit Service Based on Results of School Study</b>
Provide Limited Stop or Express Services: <b>Mill Valley Express (Route 17x)</b>
Expand Rural and Recreational Services: <b>Provide Year Round Service to Muir Woods to Support NPS Res. System</b>
Expand Rural and Recreational Services: <b>Increase service on Route 61 to Support Weekend and Holiday Demands</b>
Provide and Support Flexible First/Last Mile Services: <b>Expand same day curb-to-curb options for seniors</b>
Provide and Support Flexible First/Last Mile Services: <b>Provide flex route services for general public</b>
Provide and Support Flexible First/Last Mile Services: <b>Partner to provide new flexible first/last mile options</b>
Provide and Support Flexible First/Last Mile Services: <b>Support outside providers to strengthen first/last mile connections</b>
Low Priority Projects, Not Ready Projects (Rating = <b>Low, Not Ready</b> to Implement)
Expand and Enhance Shuttle Services: <b>Mill Valley (New Service)</b>
Expand and Enhance Shuttle Services: <b>Peacock Gap (New Service)</b>
Expand and Enhance Shuttle Services: <b>Sausalito (New Service)</b>

**Table C-11: Expansion Project Ratings**

Proj. #	Expansion Services	Fill gap in the bus transit network	Meets productivity standards	Meets cost effectiveness standards	Relieves congestion	Provides seamless connections	Eliminates "pass ups"	Promotes environmental justice	Attracts outside funding	Overall Rating (equal weighting of criteria)	Estimated Operating Cost <sup>4</sup>	Ease Of Implementation
1.0	Expand and Enhance Shuttle Services											
1.1	New Shuttle: Mill Valley	+	++	++	++	+	+	+	+	+	\$\$\$\$ \$\$\$\$	+
1.2	New Shuttle: Peacock Gap	+++	+	+	+	++	+	+	+	+	\$\$\$\$ \$\$\$\$	+
1.3	New Shuttle: Sausalito	+	++	++	+	+	+	+	+	+	\$\$\$\$ \$\$\$\$	+
1.4	Expand Shuttle: Tiburon Evenings (219)	+++	+	+	+	++	+	+++	+	++	\$\$\$	+++
1.5	Expand Shuttle: Novato Evenings (251)	+++	+	+	+	+	+	+++	+	++	\$\$\$	+++
1.6	Expand Shuttle: Novato Hamilton (251 or 257)	+++	+	+	+	+	+	+++	+	++	\$	+++
2.0	Expand and Enhance Service to College of Marin											
2.1	Downtown San Rafael Express Shuttle	++	+++	+++	++	+++	++	++	+++	+++	\$\$	+++
2.2	IVC Novato / North County Express Shuttle	++	++	+++	++	+	++	++	+++	++	\$\$\$\$	++
2.3	Mill Valley/South County Express Shuttle	+++	++	++	++	+	+	++	+++	++	\$\$\$\$	++
3.0	Expand and Enhance K-12 School Bus Services											
3.1	Expand Yellow Bus Service Based on Results of School Study	+++	+++	++	+++	+	++	+++	+	++	\$\$\$\$ \$\$\$\$ \$\$\$\$ \$\$\$\$	++

<sup>4</sup> "\$" represents approximately \$50,000 in annual operating costs. **Black "\$"** indicates estimates for portion of costs covered by Measure A

Proj. #	Expansion Services	Fill gap in the bus transit network	Meets productivity standards	Meets cost effectiveness standards	Relieves congestion	Provides seamless connections	Eliminates "pass ups"	Promotes environmental justice	Attracts outside funding	Overall Rating (equal weighting of criteria)	Estimated Operating Cost <sup>4</sup>	Ease Of Implementation
3.2	Expand Transit Service Based on Results of School Study	+	+++	++	+++	+	+++	+++	++	++	\$\$\$\$ \$\$\$\$	++
4.0	Provide Limited Stop or Express Services											
4.1	Mill Valley Express (Route 17x)	++	++	++	++	+++	+	++	+	++	\$\$\$\$ \$\$\$\$	++
5.0	Restore Ferry Feeder Service (Wave)											
5.1	Ross Valley Wave (GGT Route 25)	++	+	+	++	+++	+	+	++	++	\$\$\$\$ \$\$	+++
5.2	Terra Linda Wave (GGT Route 37)	++	+	+	++	+++	+	+	++	++	\$\$\$\$	+++
6.0	Expand Rural and Recreational Services											
6.1	Provide summer peak weekday service on Route 66F	+++	+++	+++	+++	++	++	+	+++	+++	\$	+++
6.2	Provide new service between Golden Gate Bridge and West Marin	+++	+++	+++	+++	+++	+	+	+++	+++	\$\$\$	+
6.3	Provide year-round service to Muir Woods support NPS reservation system	+++	++	+++	++	++	+	+	+++	++	\$\$\$\$	+
6.4	Increase service on Route 61 to support weekend and holiday demands	+	++	++	+++	++	+++	+	+++	++	\$	++
7.0	Provide and Support Flexible First/Last Mile Services											
7.1	Expand same day curb-to-curb options for seniors	+++	+	++	+	+++	+	++	+	++	\$	+
7.2	Provide flex route services for general public	+++	+	+	+	+++	+	++	+	++	\$\$\$\$	+
7.3	Partner to provide new flexible first/last mile options	+++	+	+	+	+++	+	++	++	++	\$\$	+
7.4	Support outside providers to strengthen first/last mile connections	+++	+	+	+	+++	+	+	++	++	\$	++

**Table C-12: Measure A Implementation Strategy 1: "Develop a seamless bus transit system that improves mobility and serves community needs, including special transit for seniors and the disabled"**

Measure A Strategies and Sub Strategies for Local Transit		Currently Implemented	In SRTP Service Plan As		Expansion Phase (Service)
			Funded	Unfunded	
1	Maintain and expand local bus transit service				
1.1	Provide transit service every 15 minutes in the following corridors:				
1.1.1	Highway 101 throughout Marin County connecting to San Francisco	N	P	P	<b>Funded</b>
1.1.2	San Rafael-College of Marin via Andersen/Sir Francis Drake	N	N	Y	<b>Unfunded (2.1)</b>
1.1.3	San Rafael-San Anselmo via Red Hill/4th Street	Y	Y	Y	
1.1.4	San Rafael Transit Center – Civic Center and Northgate Mall.	Y	Y	Y	
1.2	Provide transit service every 30 minutes in the following corridors:				
1.2.1	Sausalito to Marin City and the Toll Plaza via Bridgeway	N	N	Y	<b>Unfunded (1.3 &amp; 6.2)</b>
1.2.2	Mill Valley on Miller Avenue and East Blithedale	P	P	Y	<b>Unfunded (1.1, 2.3 &amp; 4.1)</b>
1.2.3	Corte Madera and Larkspur via Tamalpais/Magnolia and Sir Francis Drake	P	N	P	<b>Unfunded (2.3)</b>
1.2.4	San Anselmo to Fairfax via Sir Francis Drake and Red Hill Road	Y	Y	Y	
1.2.5	San Rafael via Lincoln to Civic Center, Merrydale, and on to Kaiser Hospital	Y	Y	Y	
1.2.6	Novato service in the Hamilton area, in the Ignacio area east of Palmer and S. Novato Boulevard	Y	Y	Y	
1.2.7	Corridor service from Novato to the San Rafael Transit Center with connection to College of Marin	Y	Y	Y	
1.3	Provide accessible neighborhood scaled shuttles using small buses in the following communities:				
1.3.1	Novato	Y	Y	Y	
1.3.2	Mill Valley	N	N	Y	<b>Unfunded (1.1)</b>
1.3.3	Sausalito	N	N	Y	<b>Unfunded (1.3)</b>
1.3.4	Belvedere and Tiburon	Y	Y	Y	
1.3.5	San Rafael	P	P	Y	<b>Unfunded (1.2)</b>
1.3.6	Ross Valley	P	Y	Y	
1.3.7	West Marin (maintain and expand Stagecoach service)	Y	Y	Y	
1.4	Restore night service and ferry connector shuttles as demand requires	P	P	Y	<b>Unfunded (1.4, 1.5, 5.1 &amp; 5.2)</b>
1.5	Provide flexible services for hillier or less populated areas with transit demand	N	N	Y	<b>Unfunded (7.2, 7.3 &amp; 7.4)</b>
1.6	Provide enhanced school bus service using creative transportation solutions	P	P	Y	<b>Unfunded (3.1 &amp; 3.2)</b>
2	Maintain and improve the rural bus transit system				
2.1	Develop a seven-day a week operation	Y	Y	Y	
2.2	Develop a north and south route service	Y	Y	Y	
3	Maintain and expand transit service and program for those with special needs				
3.1	Maintain and expand transportation services for seniors and the disabled	P	P	Y	<b>Unfunded (7.1 - 7.4)</b>
3.2	Continue and extend paratransit service to all of Marin County	P	P	P	
3.3	Develop new shared ride, wheelchair accessible taxi services that augments paratransit services	P	P	P	<b>Unfunded (7.1 - 7.4)</b>
3.4	Expand group transportation and shuttle services focused on seniors	P	P	Y	<b>Unfunded (1.1-1.6, 7.1-7.4)</b>
3.5	Provide discounted fares for very low-income seniors and person with disabilities, as well as the lowest income members of our community	Y	Y	Y	
3.6	Provide discounted transit passes to youth	Y	Y	Y	

Legend: **Y** = Yes; implemented or included in Plan, **N** = No; not implemented or included in plan, **P** = Partial; implemented or included in plan