



**TRANSIT & RIDESHARE COMMITTEE
MEETING AGENDA**

Thursday, May 12, 2016

1:30 to 3:00 p.m.

Solano Transportation Authority

Conference Room 1

One Harbor Center, Ste. #130

Suisun City, CA 94585

ITEM

BOARD/STAFF PERSON

1. CALL TO ORDER – SELF INTRODUCTIONS

Jack Batchelor, Chair

2. APPROVAL OF AGENDA

Jack Batchelor, Chair

(1:30 – 1:35 p.m.)

3. OPPORTUNITY FOR PUBLIC COMMENT

(1:35 – 1:40 p.m.)

4. CONSENT CALENDAR

A. Minutes of the Transit & Rideshare Committee Meeting of March 28, 2016

Sheila Ernst, STA

Recommendation:

Approve the Transit & Rideshare Committee meeting minutes of March 28, 2016.

(1:40 – 1:45 p.m.)

Pg. 5

5. ACTION ITEMS

A. Adoption of CTP Transit and Rideshare Element Policies

Robert Macaulay, STA

Recommendation:

Review and provide comments on the draft Policies, Performance Standards and Milestones provided as Attachment A.

(1:45 – 2:00 p.m.)

Pg. 7

Transit Committee Members

Osby Davis
City of Vallejo

Elizabeth Patterson
City of Benicia

Jack Batchelor, Jr.
(Chair)
City of Dixon

Harry Price
City of Fairfield

Ron Rowlett (pending)
City of Vacaville

Mona Babauta
Consortium Member
Solano County Transit

Erin Hannigan
(Vice-Chair)
County of Solano

Jim Allison
CCJPA

Kevin Connelly
WETA

Robert Macaulay
STA

6. INFORMATION ITEMS (Discussion)

A. Transit Corridor Study Update, Phase 2

Philip Kamhi, STA
Jim McElroy, Consultant

1. Capital Equipment

2. Bus Replacement

(2:00 – 2:20 p.m.)

Pg. 39

B. Senior Summit Update

Liz Niedziela, STA

(2:20 – 2:30 p.m.)

C. CTP Transit and Rideshare Element Performance Measures and Milestones

Robert Macaulay, STA

(2:30 – 2:40 p.m.)

Pg. 73

7. COMMITTEE MEMBER COMMENTS

Jack Batchelor, Chair

(2:35 – 2:40 p.m.)

8. FUTURE AGENDA ITEMS

Meeting 7

1. California High Speed Rail Presentation - TBD
2. Draft CTP Transit and Rideshare Element Projects and Programs – Robert Macaulay
 - a. Express Bus
 - b. Rail
 - c. Ferry
3. Draft Element – Robert Macaulay/Elizabeth Richards

9. ADJOURNMENT

The next Transit & Rideshare Committee meeting is tentatively scheduled for **June 2, 2016 at 1:30 p.m.** at the STA.



TRANSIT & RIDESHARE COMMITTEE
Draft Minutes for the meeting of
March 28, 2016

1. CALL TO ORDER

Jack Batchelor, Jr. called the meeting to order at 1:30 p.m. in the Solano Transportation Authority (STA) Conference Room.

Committee Members Present:

Jack Batchelor, Chair	City of Dixon
Osby Davis	City of Vallejo (arrived to the meeting at 1:42 p.m.)
Erin Hannigan	County of Solano
Elizabeth Patterson	City of Benicia

Committee Members Absent:

Mona Babauta	SolTrans Representative
Harry Price	City of Fairfield
Vacant	City of Vacaville

Others Present:

Philip Kamhi	STA
Judy Leaks	STA
Robert Macaulay	STA
Debbie McQuilkin	STA
Liz Niedziela	STA
Elizabeth Richards	Elizabeth Richards Consulting

2. APPROVAL OF AGENDA

On a motion by Board Member Patterson, and a second by Board Alternate Member Hannigan, the Transit and Rideshare committee approved the March 28, 2016 agenda.
(4 Ayes, 2 Absent)

3. OPPORTUNITY FOR PUBLIC COMMENT

None presented.

4. CONSENT CALENDAR

A. Minutes of the Transit & Rideshare Committee Meeting of January 25, 2016

Recommendation:

Approve the Transit & Rideshare Committee meeting minutes of January 25, 2016.

On a motion by Board Member Patterson, and a second by Board Member Davis, the Transit and Rideshare Committee approved the recommendation. (4 Ayes, 2 Absent)

5. INFORMATIONAL ITEMS (Discussion)

A. Comprehensive Transportation Plan (CTP) Update – Draft Policies Chapter

Robert Macaulay provided an update on the Comprehensive Transportation Plan (CTP) for the Draft Policies Chapter. He explained that policies are specific action statements that implement Goals, and which contained clear action words such as shall, will, assign or invest. Mr. Macaulay outlined the draft Transit and Rideshare Element policies. He added that the policies are in draft form, and will be discussed by this committee and the SolanoExpress Intercity Transit Consortium over the next 4 to 6 weeks. He stated that milestones are intermediate steps to help STA and its member and partner agencies determine if they are making progress towards achievement of the element goals. Mr. Macaulay concluded that once comments are received, STA staff will bring the modified policies back for further review and at that time, milestones will also be presented.

Board Member Patterson asked for clarification on “Milestones” versus “Performance Measures”.

The group discussed bus capacity for bicycles, bike sharing and e-lockers.

The group discussed transit performance reports.

Board Member Davis expressed concerns on outreach pertaining to low income.

The committee proposed adding the following language under #7: *(1) No less than once a year or annually, the STA will query the transit operators to discuss the options and benefits of consolidation. (2) Will support the expansion of bike share programs in Solano County and throughout the Bay Area.*

By consensus the Transit and Rideshare Committee approved the recommendation as amended above in *bold and italics*. (4 Ayes, 2 Absent)

6. COMMITTEE MEMBER COMMENTS

7. FUTURE AGENDA ITEMS

A summary of the future agenda items for 2016 was presented.

8. ADJOURNMENT

The meeting adjourned at 2:20 p.m. The next Transit & Rideshare committee meeting is scheduled to meet on **Thursday, May 12, 2016 at 1:30 p.m.** at the Solano Transportation Authority.



DATE: May 2, 2016
TO: STA Transit and Rideshare Committee
FROM: Robert Macaulay, Director of Planning
RE: Adoption of CTP Transit and Rideshare Element Policies

Background:

The Solano Comprehensive Transportation Plan (CTP) is one of the STA's primary long-range Planning documents along with the Congestion Management Program (CMP) and the Metropolitan Transportation Commission's Regional Transportation Plan, known as Plan Bay Area. The CTP consists of three main elements: Active Transportation; Arterials, Highways and Freeways; and, Transit and Rideshare. The development of the Solano CTP is driven by the activities to implement its purpose statement, which is:

The Solano Comprehensive Transportation Plan will help fulfill the STA's mission by identifying a long-term and sustainable transportation system to provide mobility, reduce congestion, and ensure travel safety and economic vitality to Solano County.

Within the Solano CTP the Transit and Rideshare Element Purpose Statement is:

Identify and develop mass transit and rideshare facilities, services and policies that maximize the ability of Solano residents, workers and visitors to reach destinations within Solano County, and to access regional transportation systems.

The overall purpose of the CTP is to identify opportunities and resources to move the countywide transportation system from its current condition to a desired future condition, and to then prioritize steps to bring this change to fruition. The first step in preparing the Transit and Rideshare Element was identification of those services and facilities that the Element's policies are designed to influence; namely, intercity transit services. These intercity transit services provide connectivity between Solano County's communities, and connect Solano County with the wider Northern California mega-region, especially the Bay Area. The primary components of the Transit and Rideshare system are:

- Intercity bus service, primarily provided by FAST and SolTrans
- Intercity rail provided by the Capitol Corridor
- Ferry service from San Francisco Bay Ferry Service (formerly WETA)
- Vanpools and carpools
- Paratransit and Mobility Management services

The State of the System, Goals and Goal Gap Analysis have been approved by the STA Board.

Discussion:

Policies are specific action statements that implement Goals. The Policies contain clear action words such as shall, will, assign or invest. When STA staff make recommendations to committees or the Board, those recommendations will be guided by the policies in this Element. The Transit and Rideshare Element Policies are provided as Attachment A.

The Draft Transit and Rideshare Element Policies were presented to the Committee at their meeting of March 28th, and to the SolanoExpress Intercity Transit Consortium at its meetings of March 29th and April 26th. Comments received from the Committee were provided to the Consortium. At its meeting of April 26, 2016, the Consortium unanimously recommended that the Committee approve the Transit and Rideshare Element Policies.

Finally, STA staff has attempted to identify those policies in the Transit and Rideshare element that also help implement the goals of the other elements. Those policies are identified by a black box with white text to help them stand out.

Fiscal Impact:

None.

Recommendation:

Recommend the STA Transit and Rideshare Committee approve the Transit and Rideshare Element Policies provided as Attachment A.

Attachment:

- A. Transit and Rideshare Element Policies

T&R Policy 1 – STA will continue to focus its investments in maintaining and, where appropriate expanding, the existing SolanoExpress and rideshare/vanpool system as its primary means of providing mass transit. When fund sources with multiple uses are available, the SolanoExpress and rideshare/vanpool system will be given priority in receiving those funds.

Discussion – These two aspects of the transit and rideshare system carry by far the largest proportion of Solano’s transit users. In fiscal year 2013 – 2014, SolanoExpress had more than 1.1 million passenger trips. In FY 2014 – 2015, that number had increased 1.3% to 1.2 million riders. During the same comparable time period, carpools and vanpools carried a ridership equivalent to 8 million.

Most SolanoExpress riders board or disembark from a bus at one of the major transit centers: namely, Curtola Park and Ride and Vallejo waterfront centers, the Fairfield Transportation Center or the Vacaville Transportation Center. All four of these facilities are located in or immediately adjacent to Priority Development Areas (PDAs). This co-location directly supports the continued and expanded use of these transit centers for long distance commutes within or out of Solano County, making it easy for riders to access the transit centers with minimal use of an automobile. This is particularly important because of the reluctance of people to switch modes of travel.

Park and ride lots are located both within and away from PDAs. This takes advantage of the greater schedule and social flexibility provided by carpools and vanpools.

This Policy helps implement Goals 1 and 1.a, 6, 9, 9.b, 9.c, 13.a, 14, 15, 16 and 10.

T&R Policy 2 – STA will make appropriate investments in facilities that support regional transit providers; specifically, Capitol Corridor intercity rail and San Francisco Bay Ferry (formerly the Water Emergency Transportation Agency) ferry service.

Discussion – The other primary alternatives for commuters to driving alone within and out of Solano County are the ferry and rail service. These two systems combined carried more than 960,000 passengers during the last reported year, with approximately 20% of the trips on the Capitol Corridor and 80% on the ferry system. The greatest advantage that these systems have is that they do not rely upon the regional roadway network, which is subject to frequent impacts from traffic congestion.

An additional benefit of these regional transit providers is the significant reduction in per-capita emissions of air pollutants, especially greenhouse gases (GHGs), which occurs when these vehicles operate at or near capacity. If passengers can walk, bicycle or take transit to the stops for these services, the congestion and air emission benefits are multiplied even further.

There are currently two Solano stops for regional transit: the Suisun City / Fairfield Capitol Corridor station and the Vallejo ferry terminal. A second Capitol Corridor train station is under construction and will open in 2017, serving Eastern Fairfield and Vacaville. All three of the stations are located in existing PDAs.

This Policy helps implement Goals 1 and 1.a, 2, 5, 6, 10, 13, 16 and 18.

T&R policy 3 – STA will expand the availability of services to seniors and persons with disabilities through the Solano Mobility Management program as a co-equal priority with conventional transit services.

Discussion – Seniors and people with disabilities have some of the most significant transportation challenges in Solano County. At the same time, they also have some of the most limited resources to meet those challenges. Solano mobility management is a series of programs designed to help these individuals participate in the economic and social life. The best outcome of mobility management programs is to provide seniors and people with disability freedom and independence of movement within and outside of Solano County. Programs such as transit ambassador and trip information can do exactly this.

Other mobility management programs may be ongoing for their recipients. Taxi scrip programs are one example of this sort of ongoing support. While mobility management may not provide as many trips as express bus or carpooling, and therefore has less of an impact on traffic congestion and air pollution, it does fill a critical gap in the Solano county transit system.

This Policy helps implement Goals 4, 4.a, 4.b, 5, 7, 8, 9.d, 12 and 17.

T&R Policy 4 – Use the SolanoExpress Intercity Transit Consortium as the primary means for coordinating SolanoExpress and local transit services at a staff level. Use the CTSA, Solano Seniors and People with Disabilities Committee and the Paratransit Coordinating Council as the primary means of discussion and coordination at a policy-maker level. Participate in CCJPA, San Francisco Bay Ferry and other working groups to identify and address coordination of local transit services with regional providers at a staff level.

Discussion – There are four main steps identified in this policy. First and foremost, STA will to continue to host the SolanoExpress Intercity Transit Consortium. This monthly forum provides the best opportunity to identify and deal with financing equipment and other major operational issues regarding intercity transit buses. As also served as a forum for dealing with any issues related to the interface between intercity and local transit.

The second item is to maintain staff liaison with all of the regional transit providers with whom STA or other local agencies interact. An example of this is STA staffs continue to participation in the Capitol Corridor staff working group meetings. This allows STA staff to be aware early on of issues being dealt with by Capitol Corridor staff, and to inform Capitol Corridor of issues that exist in Solano County. A similar level of direct and frequent staff to staff contact exists between STA and Soltrans, and a regular attendance at monthly San Francisco Bay Ferry meetings by STA staff is now occurring. Because the service locations for Capitol Corridor trains and San Francisco Bay Ferry ferry boats are also hubs for local transit, the local transit providers - Soltrans and FAST – are able to see and immediately respond to any change in service times made by the regional transit providers.

The third item is for STA to continue to implement the intercity transit funding agreement, whereby the transit providers in Solano County pool and then share out resources needed to provide intercity transit. This is combined with STA’s funding of marketing for the Solano express routes.

The fourth and final item is to assist local jurisdictions in preparing and updating SRTPs. Federal statutes require that the MTC, in partnership with the state and with local agencies, develop and periodically update a long-range Regional Transportation Plan (RTP), and a Transportation Improvement Program (TIP) which implements the RTP by programming federal funds to transportation projects contained in the RTP. In order to effectively execute these planning and fund programming responsibilities, MTC, in cooperation with Region IX of the Federal Transit Administration (FTA), requires each transit operator

receiving federal funding through the TIP (federal grantees within the MTC region) to prepare, adopt, and submit an SRTP to MTC. The SRTP develops a coordinated investment plan for the five major fixed-route and paratransit providers in Solano County – specifically SolTrans, FAST, Vacaville City Coach, Dixon Read-Ride, and Rio Vista Delta Breeze. The SRTP develops a set of consistent operator objectives, goals, measures, and standards, as well as service and capital investment plans for each operator.

This Policy helps implement Goals 2, 3, 4, 4.a, 4.b, 4.c, 7, 8 and 12.

T&R Policy 5 – STA will assign staff to actively monitor MTC activities to implement electronic toll collection, and will seek early implementation of electronic toll collection for all intercity transit providers.

Discussion – Electronic fare collection increases the convenience of transit use to riders, eases the collection of some ridership data, and can result in better fare collection. A common form of fare collection across the region makes it easier for transit users to shift modes or system providers.

Solano County is not likely to be the leader in adopting some form of electronic fare collection. The technical support staff and capital expenditure for leading such a program is beyond Solano County transit providers’ resources. By actively monitor and partnering with regional providers such as MTC, Solano County can be prepared to be an early adopter of such systems.

This Policy helps implement Goal 3.

T&R Policy 6 – STA will be prepared to offer assistance to any local transit providers who wish to pursue consolidation and/or improve coordination and efficiency. On an annual or more frequent basis, STA will query Solano County and other partner transit agencies regarding the options and benefits regarding transit operator consolidation and/or improved coordination and efficiency.

Discussion - STA helped provide legal, consultant, management and financial assistance to the Vallejo Transit and Benicia Breeze transit services when they merged in 2010. This merger has led to improved service delivery, greater efficiency and financial stability for both communities’ transit service, and for Solano Express buses operated by Soltrans. The past two years, STA has provided transit finance and service planning assistance to Rio Vista’s Delta Breeze. The STA does not have a policy to require or encourage further consolidation of local or Express transit providers in Solano County, but is ready and available to support any local jurisdictions that request such help.

This Policy helps implement Goals 3.a and 3.b.

T&R Policy 7 – STA’s Countywide Bicycle and Pedestrian Plans, and PDA Plans financially supported by STA, will identify access improvements around Transit Centers of Regional Significance and local transit centers in order to help fill the “first mile/last mile” gap. STA will support the purchase of Solano Express buses with adequate bicycle storage features. STA will support expansion of bike sharing projects throughout the Bay Area, including in Solano County

Discussion - One of the obstacles to the use of bus, rail and ferry transit is the gap at the start of the trip between home and the transit center, and the corresponding gap at the end of the trip between the

transit center and the final destination. If the 'gap' is too substantial of an obstacle, transit users will drive to the transit center (increasing congestion and air pollution, and requiring parking at the station), or will drive solo to their destination.

For Solano commute trips, the rail and ferry stops at the destination are fixed and unchangeable. Bus destinations may have some flexibility, but most (such as BART stations) are also fixed. STA policies and investments cannot change this 'last mile' gap. The 'first mile,' however, is much more within Solano jurisdictions' control.

One way to help fill the first mile gap is to reduce its size, i.e. to help people who want to use transit have an opportunity to live near a transit stop. The PDA program and several state Cap and Trade grant programs help support local land use decisions that encourage the placement of residences near major transit stops.

The other way to fill the gap is to make movement for bicyclists and pedestrians within it more convenient. STA's Safe Routes to Transit (SR2T) plan addresses access issues in close proximity to transit stops (and finds that the most dangerous spot is where pedestrians cross a public street). Because the Countywide Bicycle and Countywide Pedestrian plans are developed with input from the bicycling and walking communities, they are the best place to address ease and safety of use for these modes near transit centers.

In addition, STA works with regional transit providers and local jurisdictions to provide additional secure bike storage facilities at their local terminals. This also helps improve the convenience of using bicycles to access the transit system.

The access and safety improvements that implement this Policy also help implement the Complete Streets policy in the Arterials, Highways and Freeways element. That makes this Policy supportive of multiple Solano CTP elements.

This Policy helps implement Goals 1, 1.a, 2, 5 and 10.

T&R Policy 8 – Require transit providers receiving funds administered by STA to submit performance reports. At a minimum, these reports will include farebox recovery, total ridership, on-time performance and surveyed passenger satisfaction.

Discussion – The minimum data needed by SolanoExpress decision makers on the effectiveness of the system consists of farebox recovery, total ridership, on-time performance and passenger satisfaction. There are additional data that are traditionally gathered, and those efforts should also continue.

An annual report of this data will not only provide a snapshot in time as to system performance, but also allow changes over time to be seen and used to measure system performance and the effectiveness of the investment decisions made by the STA Board and the operators of SolanoExpress bus systems.

An example of the effectiveness of this approach is seen in the Capitol Corridor's decade-long systematic improvement. Ridership surveys of Capitol Corridor and other train passengers showed that passengers most valued a system that was convenient to their origin and destination, and had frequent and reliable service. While station locations were relatively fixed (few opportunities exist for new or relocated stations) and passenger train frequency is largely dictated by freight rail schedules, the Capitol Corridor could make investments that improved on-time performance and reduced operating cost. As a result of

this focus on measuring and reporting on performance, and making investments that impact performance, the Capitol Corridor is, as of early 2016, number one in on time performance, number three in ridership and number three in overall customer satisfaction in the entire Amtrak System.

Some of the data, such as on-time performance and farebox recovery, can be reported on to the Consortium on a quarterly basis, and to the STA Board on an annual basis. Other data that takes time and expense to gather, such as passenger satisfaction, only needs to be gathered and reported on a two- to three-year cycle.

This Policy helps implement Goals 6, 7, 17, 17.a and 17.b.

T&R Policy 9 – STA shall not adopt policies that exclude private providers from offering or providing transit services as long as they do not interfere with the provision of public transit, and shall seek to ensure that policies requiring private providers to pay for use of public facilities are reasonable related to the burden borne by those public facilities.

Discussion – Private transit providers can come in a variety of forms, as outlined in the Transit and Rideshare State of the System report. These providers can deliver important supplements to the public mass transit system; supplements that are usually focused on as narrow portion of the transit-using public. By accommodating these private providers, and seeking only to cover costs reasonably associated with their use of public facilities, the publically-available mass transit system can more effectively focus on the general transit-using population.

This Policy helps implement Goals 6 and 8.

T&R Policy 10 – Provide funding for and conduct transit studies for all major intercity transit corridors. Each study will be updated no less frequently than every 6 years.

Discussion – Bus and ridesharing trips in Solano County usually move along a major highway corridor. I-80 is the lynchpin of Solano freeway and highway transit routes. Other major routes include I-680 into Contra Costa, Alameda and Santa Clara counties, SR 12 through Solano County, SR 29 into Napa and SR 37 into Marin and Sonoma counties, although most transit trips on these corridors at some point connect with I-80. The best way to identify specific capital and operational issues is to conduct a detailed look at the operation of a specific corridor.

Corridor studies typically explore two major areas: capitol facilities, and operations and maintenance of vehicles and facilities. Corridor plans often use financial and operational models to examine the best location and timing of investments. These corridor plans provide the sort of detailed, prioritized recommendations that allow Solano Express operators, cities and STA to then make timely funding decisions.

This Policy helps implement Goals 7, 9, 9.b, 9.c, 10, 16, 17, 17.a and 17.b.

T&R Policy 11 – STA will develop a standard methodology of collecting and reporting on auto, bicycle and pedestrian crashes within ¼ mile of TFORS, and will report those statistics on an annual basis.

Discussion – When STA updated the Solano travel safety plan in 2015, one of the challenges discovered was the variety of methods used to collect and report safety and crash data. This makes it difficult to identify, on a countywide basis, those areas most deserving of additional investment to improve safety. This policy calls on STA to act as a central clearinghouse for crash data, and to use that data to help prioritize funding decisions.

The data gathered to implement this Policy will also help identify issues related to the Active Transportation and Arterials, Highways and Freeways Elements. That makes this Policy supportive of multiple Solano CTP elements.

This Policy helps implement Goals 11, 11.a and 11.b.

T&R Policy 12: To meet the mobility needs of the ambulatory and non-ambulatory ADA certified individuals and to ensure long-term viability of existing and new programs, evaluate ADA services (paratransit and intercity taxi programs) on at least an annual basis.

Discussion – Over the past several years, the provision of ADA intercity services has changed and new services have been implemented. The popularity of some services has strained their long-term viability. Other services still need to be developed to better serve the non-ambulatory ADA certified individuals. Implemented services should be monitored, evaluated and modified as needed. Outreach to ambulatory and non-ambulatory ADA certified individuals to understand and address their most urgent transportation needs will be important as part of the evaluation of existing services and the development on new services.

This Policy helps implement Goals 4, 4.a, 4.b, 12 and 17.

T&R Policy 13: Evaluate and modify currently implemented ADA in-person assessment model to improve convenience for new and recertifying applicants and to improve efficiencies on at least an annual basis.

Discussion: STA coordinates the ADA certification process countywide. A contractor schedules and assessments, coordinates with transit operators for those in need of ADA paratransit service, conducts the assessments and tracks activity. Assessments are scheduled in all seven Solano cities on a rotating basis at least monthly. In some cities multiple assessment days are held to meet demand. Re-certifications have been conducted in the same manner as original certifications.

There has been interest expressed in holding assessments in locations with a concentration of ADA certification applicants such as skilled nursing facilities. If carefully selected, these on-site assessment sessions would be more convenient for applicants by reducing the need to travel and more efficient for the contractor and transit operator as there would be a reduction in “no shows” and arrangement of ADA paratransit rides would be reduced.

Recertification every three years is a requirement. The specifics of the recertification process should be reviewed to identify opportunities to streamline it for both applicants’ convenience and the service delivery efficiency. Some applicants’ original certification may be based on disabilities that prevent their

use of fixed-route transit indefinitely. A simplified recertification process would be warranted in these situations.

This Policy helps implement Goals 4, 12 and 17.

T&R Policy 14: Conduct a study, or studies, to identify the transportation needs of Solano seniors, people with disabilities, and the low-income population. Update the study or studies no less frequently than every 6 years.

Discussion - With a rapidly growing senior population, the countywide Transportation Study for Seniors and People with Disabilities from 2011 should be updated. This study involved significant public outreach which should continue with future updates. Five Community Based Transportation Plans were conducted in the past fifteen years; these focused on outreaching to local communities to identify the transportation needs of the low-income population followed by identifying and prioritizing solutions. Many, but not all, priority projects from these studies have been implemented. More current outreach and study of these groups should be done to address the changes in these groups, the community, and the differing strategies available now and in the future.

This Policy helps implement Goals 4, 6, 7 and 17.

T&R Policy 15: Partner, and outreach to, a diversity of community stakeholders such as public, private and non-profit organizations serving seniors, people with disabilities, and the low-income population.

Discussion – The mobility needs of seniors, people with disabilities and the low-income population are specialized and diverse. Meeting the mobility needs of these groups is important to address their quality of life that is inherently challenged. Understanding those needs will depend upon partnering with organizations that already work with these groups and understand their challenges with mobility. The recently formed CTSA and other committees include these partnerships. These and additional partnerships will also facilitate outreach to these consumers. Outreach and other direct contact with these populations will be a valuable tool in planning, promoting, and assessing services.

This Policy helps implement Goals 4, 4.b and 6.

T&R Policy 16: Use technological advances to improve communication with consumers of mobility management services.

Discussion – The solanomobility.org website created a centralized information resource with a wide range of mobility and program information for seniors, people with disabilities and the low-income. With search functions and layering of information, a substantial amount of information is relayed to the user in a simpler format than if printed. While printed materials are still made available, the website's Find Your Ride, Travel Training, and Older Driver Safety Information functions are examples of a technology advancement that has facilitated the dissemination of information to consumers. The website needs to be kept updated with current information, features and functionality to meet the

changing needs of its users and capabilities of electronic communication. The website is a resource to other organizations and links between websites reconfirmed. Other forms of technological communications should be reviewed, evaluated and considered as additional ways to reach consumers for both disseminating information as well as for collecting information and input.

This Policy helps implement Goals 4 and 6.

T&R Policy 17: Regularly monitor a wide variety of information sources regarding innovations in private and public ‘shared mobility’ resources, including mobile applications, vehicle sharing transportation network companies and on-call vehicles. Incorporate new and developing mobility options and technology into STA plans.

Discussion – Transit and rideshare services between hubs is designed to efficiently move large numbers of riders long distances. Riders arriving from, or traveling to, the many locations in the areas surrounding a transit hub often find this portion of the trip inconvenient or impossible. These locations may be employment, residential, community services, medical facilities, shopping and more. This is the “first mile/last mile” gap. Local transit, walking, bicycling, driving alone and other options are available to varying degrees at Solano transit hubs. A countywide study could identify and prioritize transit/rideshare hub “first mile/last mile” gaps, identify existing and potential strategies, explore newer and advancing alternatives such as bikeshare programs, carsharing, shuttles, taxis, transportation network companies (TNCs), self-driving vehicles and other options, work with the community to evaluate strategies for potential implementation.

This Policy helps implement Goals 5, 6, 8 and 9.d.

T&R Policy 18 – STA will provide notice to SolanoExpress vehicle operators when it is aware of the availability of funds that can be used for clean transit vehicles and infrastructure, and will use support for clean transit vehicles and infrastructure as a ranking criteria when allocating such funds.

Discussion – While full of transit vehicles are very efficient in regards to air pollutant emissions per passenger mile when compared to single occupant cars, they do still produce important amounts of air pollution, including greenhouse gas emissions. In addition, as transit vehicle occupancy decreases, the amount of pollution per passenger mile goes up, sometimes to the point where transit vehicles are emitting more air pollutants than single occupancy vehicles. The California Air Resources Board (CARB) has requirements for transition of public transit vehicle fleets to zero emission vehicles. STA has adopted an alternative fuels plan which supports conversion of all types of public vehicle fleets to low or zero emission vehicles. This includes both vehicle replacement and modification of support infrastructure such as fueling and maintenance facilities.

STA can help member and partner agencies accelerate this transition to clean vehicles and fuels by ensuring that they are aware of funding opportunities. STA can also write letters of support for those agencies seeking funding and furthering the goal of STA plans and policies.

When STA programs funds, such as BAAQMD TFCA program manager funds, it can use support for low and zero emission vehicles as a criteria to help identify which projects will be funded. While there may be other considerations, prioritizing clean fuel vehicles and facilities makes it more likely that they will be fully funded and delivered.

This Policy helps implement Goals 13, 13.a, 14, 15 and 16.

T&R Policy 19 – STA will continue to fund a ridesharing program such as Solano Napa Commuter Information (SNCI).

Ridesharing support is critical to maintaining and advancing carpool and vanpool formation and use. STA, in partnership with the Napa Valley Transportation Agency, has used SNCI to provide these and other ride matching and trip planning activities.

With MTC's 2015 decision to stop providing direct funding for county ridesharing programs, this function becomes more difficult to support. Due to its value and the large number of carpool and vanpool users in Solano and Napa counties, however, STA will continue to provide this service in some form. At the same time, STA will monitor developments in private ridematching services, especially mobile applications that make both formal and casual carpool formation fast and convenient for users.

This Policy helps implement Goal 9.a.

Page intentionally left blank



DATE: May 3, 2016
TO: STA Transit and Rideshare Committee
FROM: Jim McElroy, STA Consultant
RE: Transit Corridor Study Update, Phase 2

Background:

The STA Board, staff, partners, and consultants are working with a process to improve the SolanoExpress regional transit service. The current effort is called the Transit Corridor Study, Phase 2. The two main elements are operations planning and capital planning. This agenda item is to provide an update and a status report on the current phase of the planning.

Discussion:

Over the past 3 years, the STA has undergone an extensive process to evaluate and revise Solano County's regional transit network. This is the first comprehensive analysis and proposed modification to the current intercity transit service, collectively marketed as SolanoExpress, since 2004.

The initial Transit Corridor Study was completed in December 2014. At that time, the STA Board reviewed the draft study document and directed the implementation of the second phase of planning, based on a preferred service option. Attachment A is a map of the preferred service option. The preferred option best fit the criteria established during the study. If fully implemented, the selected option streamlines the number of routes from seven to three, improves connectivity within the County, improves the frequency of service, and extends the hours of service.

During 2015, STA carried out various tasks including a procurement process to hire the Phase 2 consultant; and, completion of an extensive public outreach process. More recently, the following has been completed:

1. Refined the list of implementation issues, based on Board, public, and partner input.
2. Received a draft implementation plan from our project consultant (Attachment B).
3. Reviewed the draft plan and proposed that we follow a somewhat different implementation or phased approach (Attachment C) that retains peak period Route 90 service in the first phase.
4. Prepared plans to bring on a specialist in scheduling and operations planning to develop a set of draft schedules tied to realistic operations timing and to identify allocation of equipment and operating costs; and, to further validate operational viability.

5. Set Board Workshops on service planning and capital planning for July 2016.
6. Set a new proposed implementation date of approximately July 2017. The delay is to assure that we are thorough in planning, working with the operators, and accounting for user concerns.
7. Identified a draft list of key facilities needed to implement the initial service or attain longer term performance objectives: (1) Highway 37 at Fairgrounds Way; (2) bus stops serving Solano Community College at Suisun Valley; and, (3) improvements at the Fairfield Transportation Center. All three locations have routing and route timing issues.

Today, we would like to provide an overview of the above items and update on the project with focus on two key areas:

- Operations Planning: This includes a high level overview of the preferred option as well as the proposed phased approach to mitigate certain implementation issues.
- Facilities Planning: Certain investments are important to attaining ridership and bus timing objectives.

Feedback from the Committee members is requested.

Fiscal Impact:

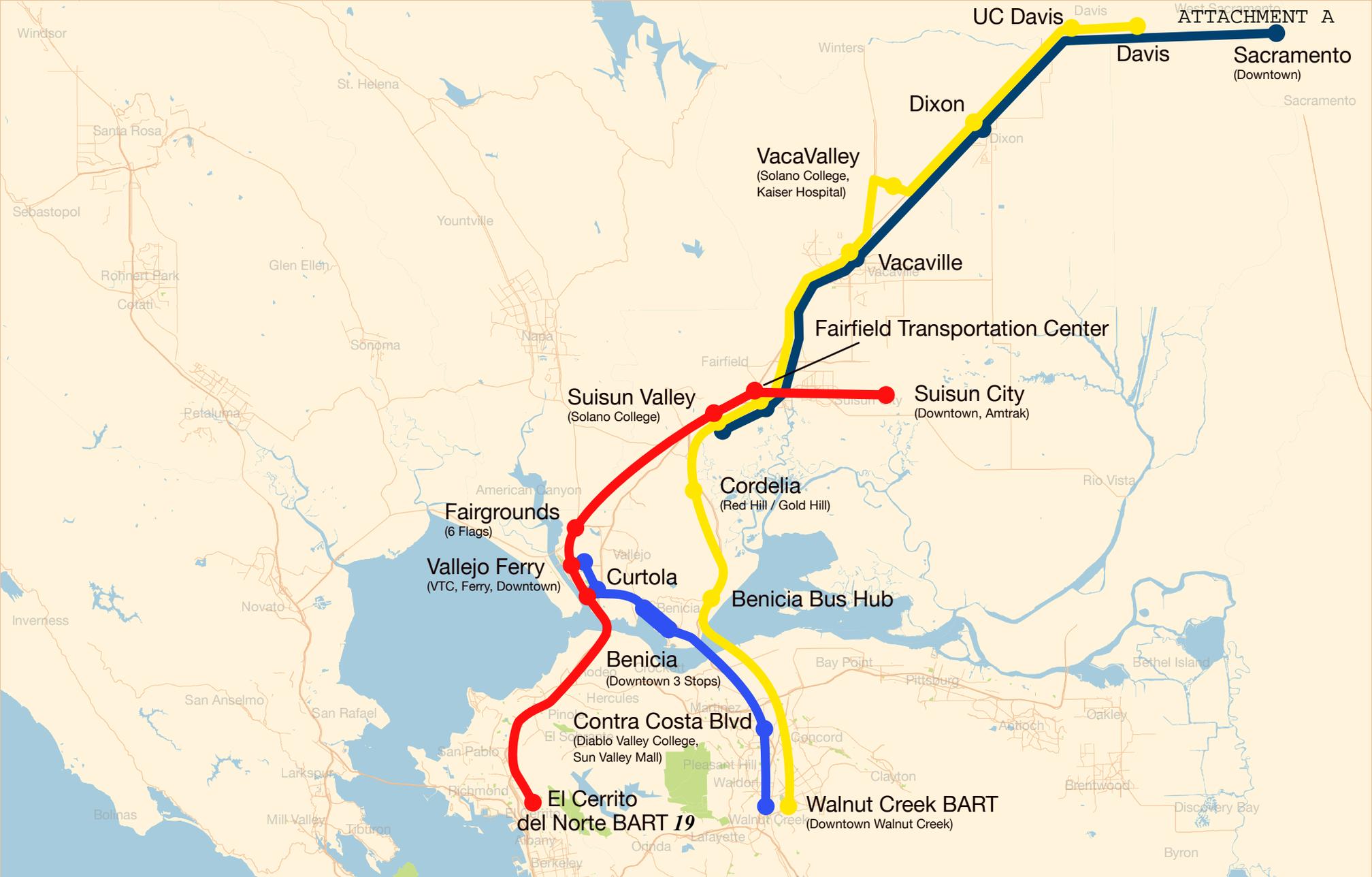
Proposed service changes are intended to be constrained within existing and planned resources for SolanoExpress service.

Recommendation:

Informational.

Attachments:

- A. Map of Preferred Service Option
- B. Draft Consultant Corridor Study Implementation Plan
- C. Draft Corridor Study Phasing Approach with Key Implementation Issues



Interim Report: Solano Express - Transit Corridor Study

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Introduction

In late 2014, and after extensive study and discussion, Arup and the Solano Transportation Authority completed the I-80/I-680 Transit Corridor Study. This study reviewed the existing operation of the Solano Express Routes 20, 30, 40 78, 80 and 90. The basic recommendation was to reduce the number of individual routes and, in turn, increase the frequency of service on the remaining routes.

This Interim Report documents the most recent steps leading to implementation of the recommendations.

Solano Express Transit Corridor Study

1. Review of Prior Work and Status

STA engaged Arup to evaluate the performance of the existing Solano Express services and provide recommendations for further evaluation. Arup, working closely with the STA staff, as well as the transit operators (SolTrans and FAST), and the Intercity Consortium, in late 2014 recommended a basic all-day three route system, with an additional peak hour service linking Fairfield and Vacaville to Sacramento.

The proposed routing consisted of three all-day, frequent routes, designated by color:

- Davis via Interstate 80 and Interstate 680 to the Walnut Creek BART Station (Yellow).
- Suisun City via Highway 12, Interstate 80, Highway 37 and then Mare Island Way and Curtola Parkway to Interstate 80 and the El Cerrito del Norte BART Station (Red)
- Vallejo Ferry Terminal via Curtola Parkway, Interstate 780, Military Way (Benicia) and then via Interstate 680 to the Walnut Creek BART Station (Blue)

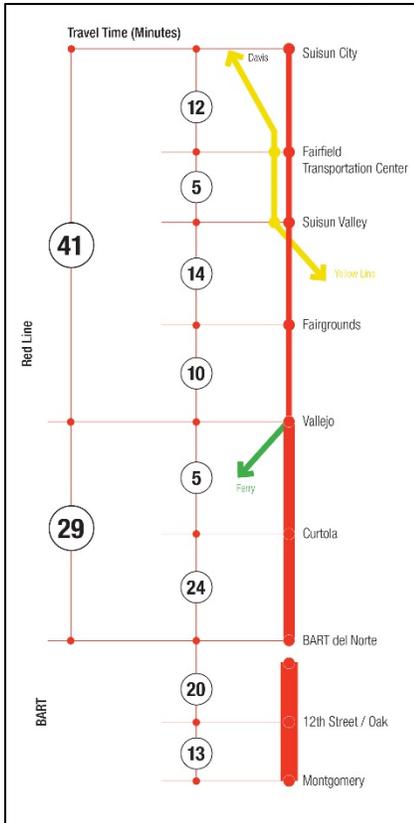


Figure 2- Proposed Red Line – Suisun-Vallejo-delNorte BART

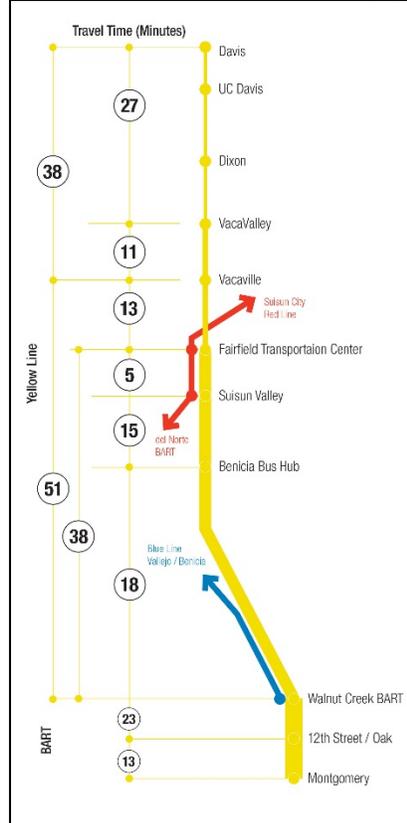


Figure 1 - Proposed Yellow Line – Davis-Vacaville-Fairfield- Walnut Creek BART

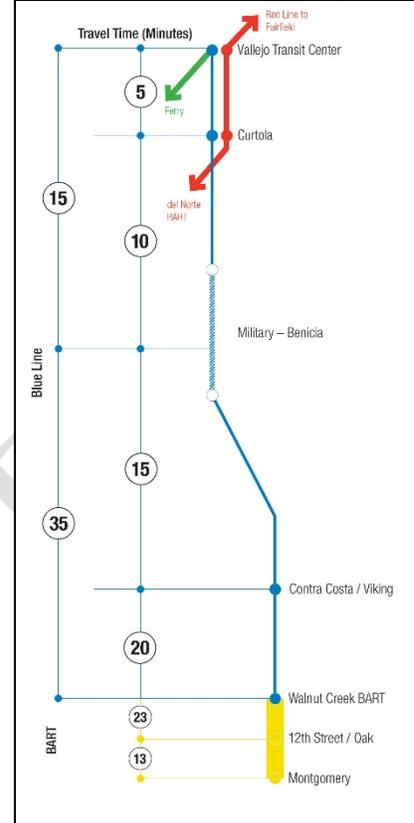


Figure 3- Proposed Blue Line – Vallejo-Benicia-Walnut Creek BART

The overall objective was to create a simple, easily understood, useful regional service that met financial performance standards, using the following service design guidance:

- BART-like service design
- Ability to travel from Solano County city to Solano County city quickly, primarily on the freeway.
- Good connections to Vallejo Ferry and BART.
- Access to UC Davis and local colleges.
- Frequent service throughout the day and into the evening.
- Minimum 35 mph operation.

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Service to Davis became all-day – an increase from the current limited peak service – while Sacramento service continued to focus on the peak commute hours.

In addition to the service elements, the proposal also identified key station access points to provide opportunities for passengers to enter the system:

- A new freeway station between adjacent to Interstate 80, near Solano College Fairfield, and between Fairfield Transportation Center and Suisun Valley Road. The proposed location – Suisun Parkway at Kaiser Drive – provides access to Solano College and business park from the Suisun to BART and Davis to Walnut Creek BART lines.
- Upgrades to Fairfield Transportation Center and Curtola Park and Ride, as well as new freeway-adjacent stops in Benicia, and on I-680.

Finally, the study also recommended upgrading buses themselves to high-capacity double deck vehicles now in service in metropolitan Toronto and metropolitan Seattle, and being considered in suburban New York.

These recommendations affect passengers in the following ways:

- Fairfield passengers accessing BART must use Walnut Creek BART instead of El Cerrito del Norte BART.
- More service would be provided between Fairfield and Vacaville to BART than the current service.
- The fare from Walnut Creek to Oakland and San Francisco is higher than from El Cerrito del Norte.
- Current over-the-road high-step highway coaches would be phased out in favor of low-floor double deck buses.

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

2. Outreach Comments and Results

During late 2015, STA staff and consultants conducted several public meetings, and also solicited comments from riders, FAST and SolTrans staff, and the Intercity Consortium. In general, these comments can be summarized as follows:

Public Meetings:

Reliability – Existing Service: On time reliability issues identified on current Route 30 (to Sacramento)
On time performance issues related to congestion on current Route 90

Impacts – Proposed Service: Additional commute time for Fairfield to Berkeley passengers, as these passengers will now be connecting to BART in Walnut Creek and then transfer at MacArthur Station.

Higher BART fare at Walnut Creek versus El Cerrito del Norte for passengers destined for Oakland and San Francisco.

Transfer required by current Route 85 users to access the Solano Mall; lack of evening local connecting service to allow Solano Mall workers to return to Vallejo at Mall closing time

Walnut Creek BART lacks AC Transit bus redundancy that is present at El Cerrito del Norte (i.e., BART strike).

Reliability – Proposed Service: Concern that proposed Fairfield Transportation Center to Walnut Creek travel cannot be made in the planned 38 minutes.

Stakeholders and Operators

Proposed Service: Concern that recommendation overstates demand to Davis and doesn't address either the Sacramento market or Davis to Sacramento traffic congestion.

Level of service deficiencies to Vacaville and Solano Community College campus in Vacaville.

3. Market Assessment and Travel Market Forecasts

The Transit Corridor Study responded to forecast changes in demographics and travel demand, as identified in regional studies. These forecasts, and the region’s responses, were documented in Plan Bay Area, adopted by MTC and the Association of Bay Area Governments (ABAG).

Plan Bay Area Regional demographics and travel demand (originally adopted in 2013) continue to be the regional travel forecasts, as new forecasts are still being researched. The current forecasts accommodate another 2.1 Bay Area million residents and 1.1 million jobs by 2040. Solano County is designated to accommodate 27,000 residential units over 30 years (about 4% of the Bay Area total) and about 47,500 new jobs (a bit more than 4% of the Bay Area total).

As identified in the Transit Corridor Study, the vast majority of Solano County travel is local – the Solano-Napa travel model identifies about one million intra-Solano trips, of which about two-thirds are purely local – starting and ending in the same city. However, there are still about 224,000 Solano city-to-city trips, plus more than 150,000 daily trips out of the county.

Table 1- Current Daily Trips

Solano to:	Total Daily Trips 2012	Percent Share
Internal, within Solano cities	670,000	63%
Intra-Solano, non-local	224,000	21%
Sacramento	39,200	4%
Contra Costa	57,500	5%
Alameda	24,600	2%
Napa	25,600	2%
San Francisco	17,900	2%

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Based on the Plan Bay Area forecasts, future year Solano County AM peak period “intercity” trips are projected to as follows:

Table 2 - Forecast Daily Peak Period Trips

Market	2030 AM Peak Period Trips	Growth 2010-2030
Solano to San Francisco	6,400	13%
Solano to I-80 Corridor (including Oakland)	17,000	19%
Solano to I-680 Corridor (including Central Contra Costa)	20,000	20%
Solano to Davis/Sacramento	11,000	-1%
Intra-county (Non-Local)	89,000	40%

Source: Solano-Napa Travel Model, 2012.

Past trends – including current intercity bus ridership – suggest good regional bus service can attract riders. Forecasts indicate travel growth into a strong central Contra Costa County corridor (Concord, Pleasant Hill and Walnut Creek) as well as continued transit competitive markets into Oakland and San Francisco. While the Sacramento market has little forecast growth from Solano County, there is an opportunity to serve a dense job area downtown (total Sacramento city job market exceeds 200,000). There also is forecast significant increases in travel between Solano County cities, just as there is significant travel between East Bay cities, some of which is served by BART.

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

4. Service Design – Adopted Goals and Objectives

The service design principles, which favor a simple, understandable route system with higher service levels on fewer routes, derive from the adopted Goals and Objectives for the study and approved by the STA Board on September 11, 2013, and are unchanged from the Study:

Table 3 - Adopted Service Design Standards

Benchmark	Standard
<i>Service Design Requirements</i>	
Connects Solano County cities	Yes
Connects to regional transit	Yes
Meets unmet transit needs	Yes
User friendly	15 minutes frequency peak/ 94% on time/reliability
Speed (mph average)	35
<i>Service Productivity Benchmarks</i>	
Passengers per vehicle revenue hour	25.0
Passengers per trip	15.0
Passengers per vehicle revenue mile	1.0
Peak corridor demand (Load factor) (hourly demand/capacity)	85.0%
Capacity utilization (passenger miles/seat miles)	35.0%
<i>Cost Efficiency Benchmarks</i>	
Cost per vehicle revenue hour	\$125.00
Cost per vehicle revenue mile	\$5.00
Cost per revenue seat mile	\$0.10
<i>Cost Effectiveness Benchmarks</i>	
Subsidy per passenger trip	\$3.50
Revenue per revenue seat mile	\$0.04
Farebox recovery ratio	50%

5. Recommended Service Design – Changes from 2014 Study

The Transit Corridor Study (2014) suggested a three-route all-day system, with a peak hour only service to Sacramento, as follows:



Figure 4- Recommended (2014) Route Structure

Based on comments from stakeholders, passengers and the public, the following changes to the Transit Corridor Study routings are proposed:

- Prioritize all-day Sacramento service, downgrade Davis access: Stakeholders identified Sacramento as a stronger all-day market; ridership counts verify that the current ridership to Sacramento is much stronger than to Davis (150 boardings in Sacramento versus less than 20 in Davis).
- Protect travel time from Fairfield to BART: Concern was expressed that I-680 near Walnut Creek has severe congestion in the morning, resulting in longer travel times overall for trips to Oakland and San Francisco than via I-80 and BART delNorte.

As a result, the proposed Yellow Line will be extended to operate as a basic service from Sacramento to Walnut Creek BART via Vaca Valley and Vacaville and Fairfield. This routing provides the continuous link to the Solano College Fairfield and Vacaville campuses developed in the Transit Corridor Study. A peak period branch service to Davis will operate separately, and not be combined with the all-day Sacramento service.

In addition, in the morning peak period, to ensure that passenger travel to Oakland and San Francisco is fast and reliable, between 630am and 830am Yellow Line service will divert to North Concord BART southbound (westbound) only and then continue to the all-day Walnut Creek BART terminal. This will allow passengers destined for Oakland and San Francisco to board BART earlier, and have a faster overall trip by avoiding the worst traffic conditions on I-680 in Pleasant Hill and Walnut Creek; all trips would still terminate at Walnut Creek allowing both direct access to Central Contra Costa jobs and access to other transit services at the Walnut Creek BART hub.

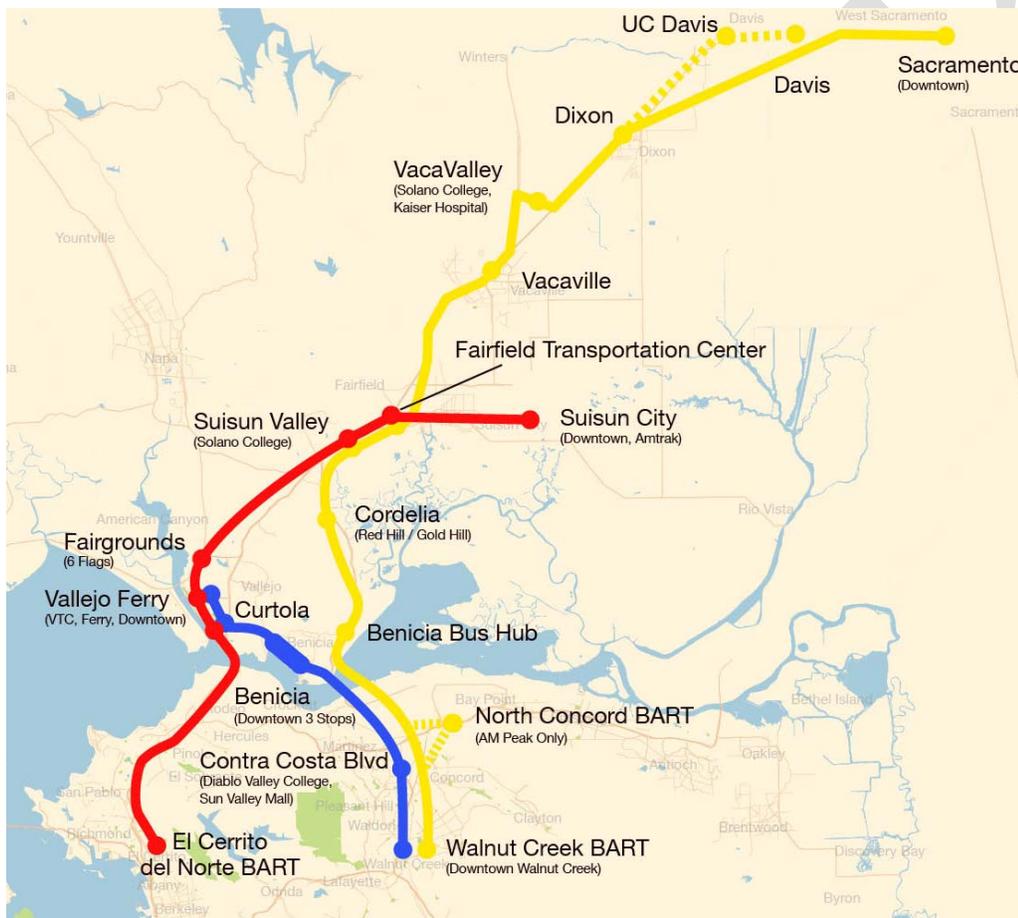


Figure 5 – Recommended Revised Solano Express Route Structure

Analysis of Route Changes and Impacts on Passengers and Finances

During the course of the study, several concerns were identified in addition to those discussed in the public meetings. These concerns include:

- Impact on passengers of accessing BART at Walnut Creek versus El Cerrito del Norte
- Benefit of proposed freeway and transit center improvements to passengers and communities
- Cost versus benefit of proposed Solano College in-line station.
- Cost and benefit of using low floor double deck buses versus high floor highway coaches.

These issues are considered, as follows:

Fairfield to Walnut Creek BART vs del Norte BART

The relative advantages and disadvantages of operating Solano Express services from Fairfield entirely to Walnut Creek (proposed Yellow Line service) are identified in Table 4.

Table 4 - Fairfield to Walnut Creek BART vs del Norte BART

Connecting BART Station	Bus Trip Time from Fairfield (minutes, peak)	Time to SF from BART Station	Peak Hour Trains to SF	Peak Hour Trains to Oakland	Station Environment
El Cerrito del Norte	40	33	4	8	Marginal
Walnut Creek BART	38	37	11	11	Good

As noted, the overall travel time increases slightly by providing access at Walnut Creek, however the overall peak period travel time decreases as more train service results in less waiting time. All trains go to San Francisco from Walnut Creek compared to El Cerrito del Norte where only four trains per hour provide direct service to San Francisco. Finally, the station environment – including atmosphere and location attractions – is more comfortable and inviting in Walnut Creek.

It has been noted that trains are more crowded at Walnut Creek, even with the high level of service. However, BART has begun operating four trains per hour from Pleasant Hill, providing less crowded trains at Walnut Creek. A more significant concern is AM traffic conditions on I-680 between 630am and 930am from the Highway 242 junction to downtown Walnut Creek. Conversely, afternoon traffic returning to Solano County has only minor delay. The response to the morning condition is to route

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

buses via the North Concord BART station and ensure reliable overall travel time (30 minutes to North Concord BART and then 48 minutes from BART to Montgomery Station –78 minutes total, about the same as from either Walnut Creek or El Cerrito del Norte).

In the afternoon, there is no substantial difference in crowding as passengers on all lines are competing for seat space equally, by line and by destination.

Benefit of proposed freeway and transit center improvements to passengers and communities

The Transit Corridor Study identified a series of incremental projects that provided better access and faster service to transit passengers. These projects include a series of freeway ramp stops, some in-line freeway stations, and transit priority on local streets.

These improvements bring many (but not all) the qualities of a rail service to bus systems. These qualities include faster trip times in route, faster times at stations, and good reliability. The benefits of these can be identified in Table 5.

Consultant Draft

Table 5- Capital Improvement Benefits

Feature	Description	Benefit
In-Line Bus Station	Locates bus stop within the freeway right-of-way. Can be either on ramp, or separate median station.	Significant travel time savings for bus passengers, operating cost savings for agencies, and increased revenue due to more bus passengers. Most in-line stations will save 3 to 5 minutes in trip time. If 3 in-line stations are provided and replace surface routing, and the overall running time is one hour, then costs will decrease by about 25%, or about \$30 per hour based on STA’s assumed hourly cost.
Transit Priority on Arterials	At selected intersections, provide signal timing for bus operations, provide signal priority (holding green, limiting red), and geometric improvements such as queue jumps, etc.	Travel time savings on the order of 5% to 10%. The range of hourly savings is about \$5 to \$10 per hour.
Park and Ride Lots	Provides access to the regional transit system by bringing passengers closer to the transit service.	Increases the marketability of transit services and their potential use.
Dwell Time Reductions	Faster boarding and alighting, usually through improved fare collection and low floor buses (see bus discussion)	Fare collection usually adds about 10% to running time. Changing to prepaid fares results in about a \$10 per hour cost savings.

Benefit of Solano College (Fairfield) In-Line Station

The Transit Corridor Study recommended an in-line station that could serve Solano College’s Fairfield campus. The Study’s goals included better access to the college and between college campuses. As a result, the Yellow Line was designed to serve both the Solano College Fairfield campus and the newer Vacaville campus.

The conceptual design “piggybacked” off the planned westbound truck stop facility to provide very close college campus access at low cost to a planned station on Suisun Parkway and Kaiser Drive. Figure 6 illustrates one possible design for the station:



Figure 6 - Solano College Station Access

The distance to the college campus is about 2,000 feet, about the same as the distance from the Berkeley BART station to the center of the UC Berkeley campus. Westbound access is at grade, while eastbound access requires some grade separation.

Since the submittal of the Transit Corridor Study, some questions have been raised on the feasibility of the Solano College in-line station. Should the station be deferred or eliminated, the following concerns are identified:

- If Solano College access continues, the additional running time will be about 5 minutes in each direction. This diversion increases running time and also inconveniences through passengers (those, for example, from Vacaville to Walnut Creek).

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref

244602-00

- If, on the other hand, the college stop is bypassed and the Yellow Line operates on the freeway to FTC, then the important direct connection between the Fairfield and Vacaville campus is not provided. Instead, passengers will be required to transfer at FTC or Vacaville Transit Center.

Passengers will be inconvenienced with either the bypass or the slower diversion, resulting in fewer riders and less fare revenue.

Benefit of Low Floor, Double Deck Buses

The Transit Corridor Study recommended, as the standard vehicle, a double deck, low floor vehicle.

The proposed route system evolves from the current select few stops with a significant freeway operation, to one of many stops linking community to community via the freeway right-of-way. As a result, dwell time can increase substantially, which in turns harms ridership and increases cost.

The current fleet of over-the-road coaches already are very slow boarding, as they require passengers to navigate four narrow and steep steps to enter the buses (it should also be noted that disabled access is inconvenient, requiring an external lift into the bus, causing even more significant delay). A study by UC Berkeley for AC Transit found that the average boarding time per passenger on an over-the-road coach was about 8 seconds. Alighting time is about the same. As a result, if at one stop, 10 passengers board and 10 alight, the total dwell time just for passenger activity will be at least 2.5 minutes. If, however, a low floor bus is used, the Transit Capacity Manual (TCRP Report 165) estimates only 2 seconds per passenger (25% of the over-the-road coach).

As an example of the impact on running time, the Yellow Line from Sacramento to Walnut Creek is proposed to make nine mid-point stops. If, at every stop (on average) 10 people alighted and 10 boarded, the difference in running time between the over-the-road coach and the low-floor double deck bus will be more than 15 minutes (about 16% of total running time).

Route Descriptions and Service Characteristics

Red Line: Suisun City to El Cerrito del Norte via Fairfield (Stops/Stations in **Bold**)

The Red Line operates from **the Suisun Amtrak** via Highway 12, Beck Avenue, Cadenasso (**Fairfield Transportation Center**), Auto Mall, Chadbourne, Suisun Parkway, Business Center Drive (**Solano College Station @ Kaiser Drive**), Green Valley Road, I-80, Hwy 37 (**Fairgrounds Drive**), Wilson Avenue, Mare Island Way, Georgia Street (**Valley Ferry Terminal**), Sacramento Street, **Vallejo Transit Center**, Santa Clara Street, Maine Street, Mare Island Way, Curtola Parkway, **Curtola Park and Ride**, I-80, Cutting Blvd, **El Cerrito del Norte BART**.

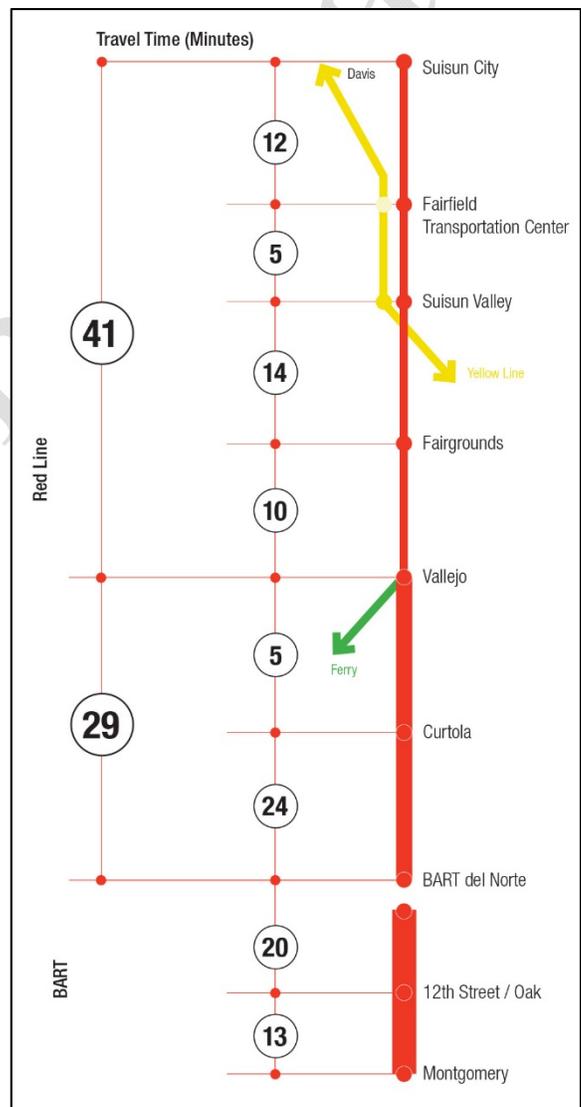


Figure 7- Recommended Red Line

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Red Line - Service

Segment	Service Frequency		
	<i>6am-9am/4pm-7pm</i>	<i>Midday</i>	<i>Nite</i>
Suisun/Fairfield to Vallejo	30	30	30 – Last trip 10 pm
Vallejo to El Cerrito del Norte BART	15	15	15 – Last trip 1130pm

Red Line – Recap

Characteristic	
Weekday Veh Hours	100
Weekday Gross Costs	\$6,000
Estimated Net Cost Weekdays	\$1.5 mil

Consultant Draft

Yellow Line: Sacramento to Walnut Creek via Vacaville and Fairfield (Stops/Stations in Bold)

The Yellow Line operates from downtown Sacramento via Capitol Mall, 5th Street, (**5th and P**), P Street, (**9th and P**), 10th Street, L Street (**L and 10th**), Capitol Mall (**Capitol Mall and Front**), Tower Bridge, I-80, Hwy 113 (**Dixon Station**), I-80, Vaca Valley Parkway (**Crescent Drive – Kaiser Hospital**), (**North Village – Solano College**), I-505, I-80, Allison Drive. Travis Way (**Vacaville Transit Center**), Allison Drive, I-80, West Texas Frontage Road, West Texas, (**Fairfield Transportation Center**), Auto Mall, Chadbourne, Suisun Parkway, Business Center Drive (**Solano College Station @ Kaiser Drive**), Green Valley Road, I-680, Industrial Way, Park Road (**Benicia Industrial Stop**), Bayshore Road, I-680, North Main, **Walnut Creek BART**.

Peak Period: Extend from Vaca Valley/I-80 via I-80, Hwy 113, Hutchison Drive, (UC Davis), Old Davis Road, 1st Street return via I-80.

Peak Period, AM Southbound only 630am to 830am): From **Benicia Industrial Stop**, Bayshore Road, I-680, Hwy 4, Port Chicago Highway (**North Concord BART**), Olivera Road, Hwy 242, I-680, North Main, **Walnut Creek BART**.

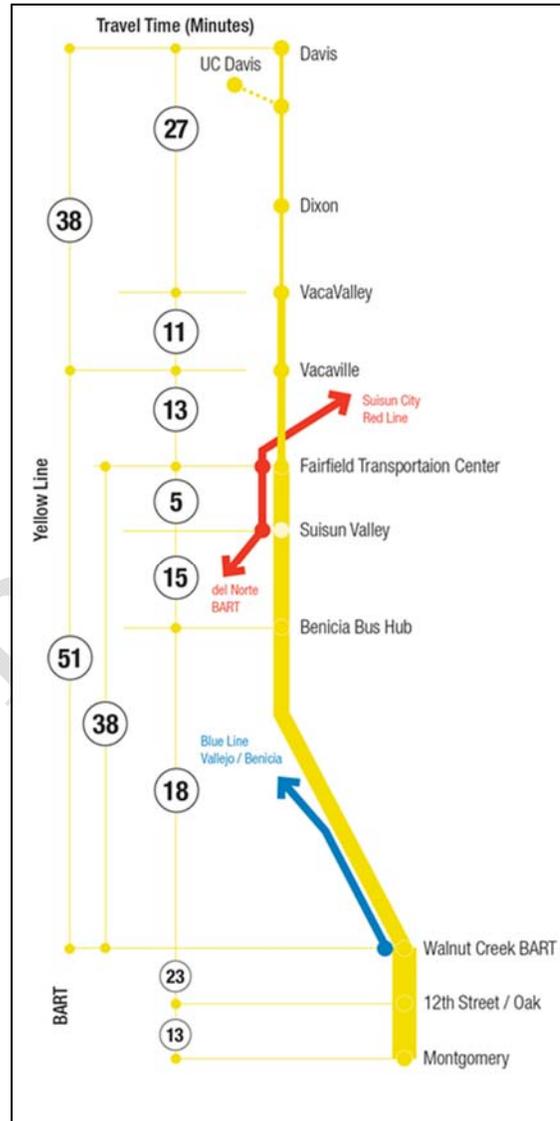


Figure 8 - Recommended Yellow Line

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Yellow Line - Service

Segment	Service Frequency		
	<i>6am-9am/4pm-7pm</i>	<i>Midday</i>	<i>Nite</i>
Sacramento to Vacaville	60	60	60 – Last trip 11 pm
Vacaville to Fairfield	30	30	60 – Last trip 11 pm
Fairfield to Walnut Creek BART	15	30	15 – Last trip 1100pm

Red Line – Recap

Characteristic	
Weekday Veh Hours	140
Weekday Gross Costs	\$17,600
Estimated Net Cost Weekdays	\$2.9 mil

Blue Line: Vallejo Transit Center to Walnut Creek BART via Benicia (Stops/Stations in **Bold**)

The Blue Line operates from the **Vallejo Transit Center**, then via Santa Clara Street, Maine Street, Mare Island Way, Curtola Parkway, **Curtola Park and Ride**, I-780, Military West (**11th / 7th / 1st / 5th & I-780**), I-780, I-680, Concord Avenue, (**SunValley Shopping Center**), Monument Blvd, I-680 to North Main, **Walnut Creek BART**.

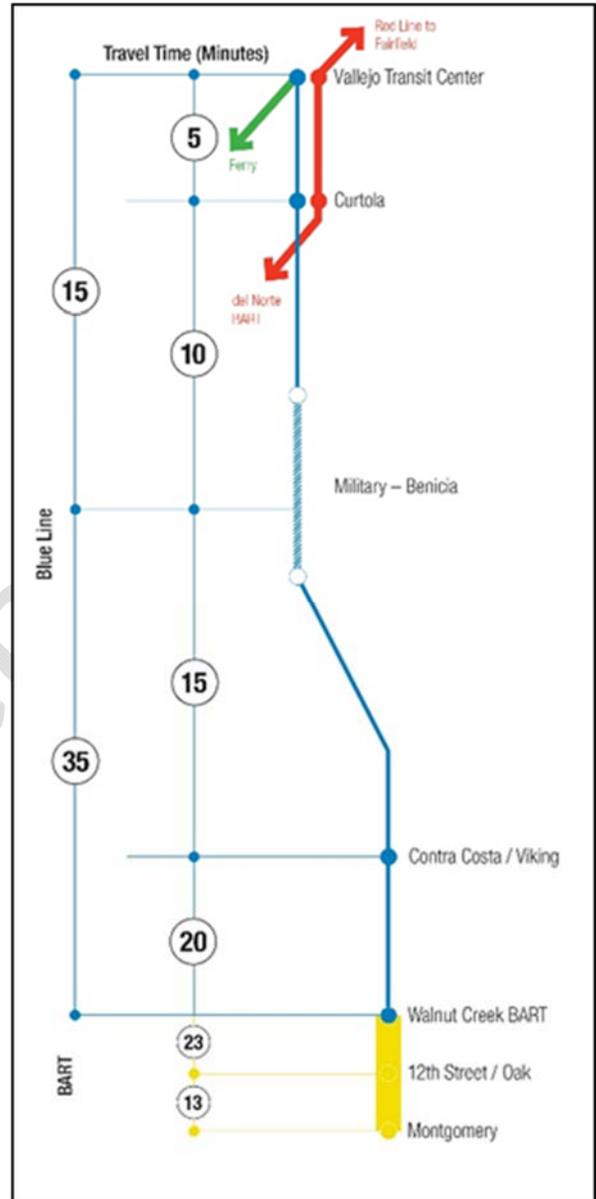


Figure 9 - Recommended Blue Line

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Blue Line - Service

Segment	Service Frequency		
	<i>6am-9am/4pm-7pm</i>	<i>Midday</i>	<i>Nite</i>
Vallejo to Walnut Creek BART	30	30	60 – Last trip 900pm

Blue Line – Recap

Characteristic	
Weekday Veh Hours	35
Weekday Gross Costs	\$3,250
Estimated Net Cost Weekdays	\$0.8 mil

Consultant Draft

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Cost and Funding

The initial cost to deliver the recommended service plan results in about 46 additional hours of service daily. STA policy caps the cost of these hours at \$125 per hour. Depending upon farebox recovery, the range of additional net cost is from \$750,000 to about \$1.5 million, as follows:

Table 6 - Farebox Recovery Range

Farebox Recovery	Net Annual Cost
Farebox Recovery = 0%	\$1.5 million
Farebox Recovery = 25%	\$1.1 million
Farebox Recovery = 50%	\$750,000

For purposes of planning, the assumption is a net cost of *\$1 million annually* in the first 18 months of operation. Current weekend service levels and vehicle hours (although not necessarily routings) would remain unchanged during this period.

Summary by Operator

Based on existing service assignments, it is assumed that SolTrans will operate the Red and Blue Lines, and FAST will operate the Yellow Line. The following table identifies the current service allocations and the proposed allocations:

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref

244602-00

Table 7 - Summary by Route and Operator

Operator	Weekday Veh Hours	Peak Vehicles
SolTrans – Route 78	29	4
SolTrans – Route 80	61	5
SolTrans – Route 85	34	2
<i>Soltrans Summary Existing</i>	<i>124</i>	<i>11</i>
Soltrans Red Line	100	6
SolTrans – Blue Line	35	4
<i>SolTrans - Proposed</i>	<i>135</i>	<i>10</i>
FAST Route 20	13	1
FAST Route 30	16	3
FAST Route 40	20	3
FAST Route 90	56	9
<i>FAST Summary Existing</i>	<i>105</i>	<i>16</i>
FAST Yellow Line	140	10
<i>FAST - Proposed</i>	<i>140</i>	<i>10</i>
Change - SolTrans	+11	-1
Change - FAST	+35	-6

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

6. Facilities and Freeway and Street Improvements

The recommended service plan creates a service that serves multiple markets, particularly between cities in Solano County, which should generate more ridership and revenue, and result in less subsidy per vehicle hour. This is in contrast to the current pattern of direct-one market trips between an outlying area (or park and ride lot) and a BART station.

To support this robust service plan, both vehicle and roadway infrastructure (freeways and arterial streets) need to be upgraded to accommodate this type of express, line-haul, multiple stop service. The Transit Corridor Study relied on *Transit Cooperative Research Program Report 145 – Reinventing the Urban Interstate: A New Paradigm for Multimodal Corridors* to identify a toolbox of roadway facilities that delivered the desired transit service. These “tools” include active freeway management (including metering and other management techniques), HOV lanes, in-line stations (on the ramps on in the medians), park and ride facilities, as well as land use changes adjacent to freeway transit nodes.

These projects should have close coordination with the MTC Managed Lanes Implementation Plan.

Major Capital Improvements, First Tier

The two most critical near-term transit improvements are the:

- Redesign and reconstruction of the I-80 ramps adjacent to the Fairfield Transportation Center to allow buses to remain in the freeway right-of-way and bypass signalized arterial intersections, and
- Establishment of a new station at Solano College along Suisun Parkway with fast and reliable access to I-80 and FTC.

First Tier Programming: *Fairfield Transportation Center I-80 ramps*

Eastbound: New stop on ramp at FTC, new bus only ramp from FTC into Beck on-ramp.

Cost: TBD

Benefit: 3 minute bus time savings

Westbound: TBD/Coordinate with MLIP project. Possible westbound median drop ramp.

Cost: TBD

Benefit: 4 minute bus time savings

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

First Tier Programming: *Solano College Station and Access*

Eastbound: TBD

Benefit: 5 minute bus time savings

Westbound: TBD

Benefit: 5 minute bus time savings

These stations act as the “hubs” of the system and provide both access and connection between different regional transit lines and the local transit network.

Minor Capital Improvements-Caltrans right-of-way, First Tier

In addition to the FTC and Solano College improvements, additional freeway stops on existing ramps, requiring minor improvements (for example, extensions of sidewalks), are recommended. These minor improvements include:

- Highway 37/Fairgrounds – Sidewalk Improvement/Bus Pad
- I-680/Gold Hill/Red Top – Sidewalk Improvement and Park & Ride Lot, and
- Benicia Industrial Park Transit Center Completion.

Minor First Tier Capital: *Caltrans Right-of-Way – 6 stops total; sidewalks.*

Cost: \$ 1 million

Benefit: Access for passengers – likely benefit to about 500 passengers daily.

Minor Capital Improvements-City rights-of-way, First Tier

In the first tier improvements, transit priority measures should be developed and delivered for the following arterial streets:

- Vaca Valley Parkway
- Curtola Parkway
- Military West, Benicia

These measures should include:

- Signal priority
- Queue jumps and bus bulbs

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

- Bus Lanes

Minor First Tier Capital: *City Rights-of-Way*

Scope Signal Upgrades: 25 intersections

Queue Jumps/Bulbs: TBD

Bus Lanes: TBD

Cost: Signals - \$3 million

Queue Jumps/Bulbs (allowance) - \$2 million

Benefit: About 2 bus hours of travel savings daily (annualized benefit = ~\$100,000)

Major Capital Improvements, Second Tier

As the system develops and additional access is desired, several other on-line stations can be considered. These site area adjacent to trip generators, fills gaps along route and access potential or planning park and ride locations. They include:

- I-80 Dixon (adjacent to Pitt School Road)
- I-80 Vacaville
- I-80 AirBase Parkway in Fairfield
- Hwy 37/Hwy 29 in Vallejo

Major Second Tier Capital: *Stations and Park and Rides*

Scope to be Determined.

Vehicles

Coupled with these initial right-of-way improvements and on-line stations, Solano Express also needs new equipment better suited for regional transit service, in contrast to point to point commuter express service. The three all-day services will include almost 20 intermediate stops with passengers boarding and alighting at each one. Boarding and dwell time should be a priority for reduction, and high capacity, low floor, fast boarding buses are necessary.

- The most progressive transit operators are now considering double deck buses for regional services because they have high capacity, reasonable operating costs, good ride quality and low floor access that benefits both cyclists and passengers with disabilities. In January, the Puget

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Sound area solicited for another 51 double deck buses (spread across three operators) in addition to the 50 double deck buses already in service.

- Some Solano operators have or are converting to compressed natural gas (CNG); depending upon procurement schedules, double deck CNG buses can be considered; however, it is also possible that fully electric battery powered buses will also be available in the near future.

Vehicles: *25 Total Double Deck Buses*

Cost: \$20 million

Benefit: About \$1.5 million annually due to faster boarding/alighting

Consultant Draft

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref

244602-00

7. Implementation Plan

A. Critical Milestones:

Implementation Date:	13 February 2017
Marketing Begins (Public):	9 January 2017
Driver Training:	7 November 2016
BART Fare Agreement:	16 September 2016
Marketing Begins (Internal):	16 September 2016
Schedules Developed:	16 September 2016
Project Financing:	14 June 2016
Project Approval (All Bodies):	14 June 2016

B. Critical Path Items:

BART Fare Equalization: Currently BART fares from Solano Express connection stations are as follows:

El Cerrito del Norte to:

San Francisco Downtown	\$4.45
Oakland Downtown	\$2.55

Walnut Creek to:

San Francisco Downtown	\$5.25
Oakland Downtown	\$3.50

As a result, the price difference is as follows:

San Francisco Downtown	\$0.80
Oakland Downtown	\$0.95

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

As part of the Transit Corridor Study, the recommendation was to work with BART and establish a new transfer agreement that retained the del Norte fare for Solano Express passengers. This represents no cost to BART, since those passengers are currently fed into the system at del Norte and are paying that fare. However, there are mechanical/implementation issues with this recommendation. This is a critical path item, as it is not realistic to route buses to a higher cost station for essentially the same level of service (the overall travel time – BART and bus – is about the same to either transfer station). There are four approaches to implementing this strategy, three of which require a transfer agreement with BART, noted in the table below:

Table 8 - BART Fare Coordination Options

Strategy	Description	Notes
Clipper Based Fare	Solano Express passengers using Clipper would be charged the full Solano Express fare but upon transfer to BART at Walnut Creek would be charged the del Norte BART fare to downtown Oakland and San Francisco.	Requires changes to Clipper business practices; will require contract Change Order and Fee. May not be able to occur within the implementation period.
Clipper Based Rebate	Solano Express passengers using Clipper would on BART be charged the full BART Walnut Creek fare, but would be issued a “transfer rebate” of 80 cents, reducing the Solano Express fare. BART would reimburse STA for this transfer.	Requires changes to Clipper business practices, however, this practice already is standard between Muni and BART and AC Transit and BART.
Rebates, Clipper Enumerated	STA would establish a lower fare to Walnut Creek, BART fares would remain the same, and BART would reimburse STA for the difference using Clipper-tag information.	Requires manual invoicing.
Reduced STA Fare	STA would establish an 80 cent lower fare to Walnut Creek BART, and BART would not provide reimbursement.	Based on 1,000 passengers daily transferring to BART, would result in an annual fare revenue loss of about \$200,000 to STA.

To ensure a seamless transition, the BART fare agreement should be completed no later than mid-September for a February 2017 implementation. However, even with that lead-time, the change will need to be placed into the Clipper business practice queue several months earlier.

Additional Funding: The likely annual budget increase for the additional Solano Express services is about \$1 million based on a midrange of farebox recovery. Since implementation is targeted for February 2017, this will require an increase of about \$500,000 for FY 2016-17. These funds must be identified prior to policy board approval of the new service and the selection of an implementation date.

Subject STA SRTP & Corridor Plan Implementation Project

Date February 16, 2016

Job No/Ref 244602-00

Public Approvals: This implementation plan include STA Board approval (likely requiring a formal public hearing), as well as approval from both SolTrans and FAST policy bodies. Consortium discussion is also required. These should be completed no later than mid-June, 2016.

Schedule Development: Once approval is granted, schedules – including vehicle assignments and work assignments (runcuts) need to be completed, within the overall service specifications. It is recommended that, due to the complexity of the schedules (many shortlines and peak services) a scheduling consultant develop the trips, connections and blocking for the three routes, based on the initial work developed in this study. The schedules should be developed no later than mid-September to allow the operators to make work assignments and develop operator bids. Driver training should then start in early November.

Marketing: Immediately after policy board approvals, an internal marketing effort should commence, with an overall strategy, development of printed and web-based materials, and associated outreach information. This information should then be ready for public distribution about six weeks prior to actual implementation.

C. Post Implementation:

Immediately after implementation, a high-profile effort should provide continuous review of the routes and impacts, and adjust as necessary for “teething” issues and other operational problems. A complete review of the changes should be developed for policy board consideration at six months and one year after implementation.

Transit Corridor Study, Draft Version 3

Board Recommended Alternative B

Background

Arup has prepared a draft Implementation Plan (DIP) based on the original Corridor Study. The DIP has not resolved concerns of STA staff and is not yet reviewed by operators, the STA Board, or others. STA staff is skeptical that the plan, in its purest form, will attain Board support when members are faced with certain likely objections:

1. The highest profile concern will likely come from objections to moving FAST's Route 90 in the Richmond BART corridor to the proposed Red Line in the Contra Costa County BART corridor. Public comment on this element was the most averse to the plan to route passengers in the new corridor.
2. One of the key arguments is that there is currently a fare premium for passengers moving through the Contra Costa County corridor. STA is working to resolve the issue but it will take time and a positive outcome is not certain.
3. STA staff is persuaded that the passenger experience will be less acceptable than the current experience through the Richmond Corridor. The main concern is that passengers will face more crowded trains than in the current routing.
4. There is a sense that capital investment in facilities is needed to attain good bus travel times and passenger acceptance; and, there is not enough time to gain the capital funds and implement the projects.
5. Staff has made the general observation that the few negatives are so persuasive that they will overcome the positive outcomes determined in the planning process. The "all or nothing" approach to the planning of the new system is likely not acceptable to the Board.

STA staff asked the contracted project manager to work with the consultant team to come up with an alternative approach that avoids the full shift of the Route 90 to the new Red Line. This is to avoid a confrontation with operators, current passengers, and ultimately the Board.

PHASED APPROACH

Phase 1:

Characteristics: Alternative B, as proposed, except Route 90 service maintained during peaks.

Target Date: July 1, 2017

Develop schedules that meet likely passenger expectations, through examination of current schedules and other appropriate feedback. These will not likely be the final implementation due to cost and operations considerations but they will be the baseline before modification. Once the base line schedules are agreed upon, turn the schedules over to the selected operations planning firm for

feedback and for recommended modifications. This is a negotiation before a full cycle of operations planning to determine a scheme for actual operations. Upon determination of the schedules, direct the operations planning firm to generate a draft plan to implement the service including:

1. Assignment of service to providers
2. Prepare all products necessary to full implement the service at the operations level, including preparation of schedules and blocking of service.
3. Develop draft cost and budget for implementation. Move the draft products through review and approval by appropriate operators and boards.

Additional service to be provided by consultant to implement Phase 1:

- Develop performance standards, particularly operator cost per revenue hour
- Prove scheduled timing
- Prove viability of single CC BART terminal
- Determine Stop Locations
- Implement Interim Stop locations
- Develop baseline standards for moving to Phase 2

Phase 2:

Steps necessary to get to Phase 2:

- Phase 1 meets milestones and performance goals
- Need to establish fare equity (BART or otherwise) for customers riding I-680 corridor
- Initiate low-cost capital enhancements (i.e. bus signal prioritization's)

Phase 2 Characteristics: Alternative B fully implemented.

Target Date: July 1, 2018-2020



DATE: May 2, 2016
TO: STA Transit and Rideshare Committee
FROM: Robert Macaulay, Director of Planning
RE: CTP Transit and Rideshare Element Performance Measures and Milestones

Background:

The Solano Comprehensive Transportation Plan (CTP) is one of the STA’s primary long-range Planning documents along with the Congestion Management Program (CMP) and the Metropolitan Transportation Commission’s Regional Transportation Plan, known as Plan Bay Area. The CTP consists of three main elements: Active Transportation; Arterials, Highways and Freeways; and, Transit and Ridesharing. The development of the Solano CTP is driven by the activities to implement its purpose statement, which is:

The Solano Comprehensive Transportation Plan will help fulfill the STA’s mission by identifying a long-term and sustainable transportation system to provide mobility, reduce congestion, and ensure travel safety and economic vitality to Solano County.

Within the Solano CTP the Transit and Rideshare element Purpose Statement is:

Identify and develop mass transit and rideshare facilities, services and policies that maximize the ability of Solano residents, workers and visitors to reach destinations within Solano County, and to access regional transportation systems.

The overall purpose of the CTP is to identify opportunities and resources to move the countywide transportation system from its current condition to a desired future condition, and to then prioritize steps to bring this change to fruition. The first step in preparing the Transit and Rideshare Element was identification of those services and facilities that the Element’s policies are designed to influence; namely, intercity transit services. These intercity transit services provide connectivity between Solano County’s communities, and connect Solano County with the wider Northern California mega-region, especially the Bay Area. The primary components of the Transit and Rideshare system are:

- Intercity bus service, primarily provided by FAST and SolTrans
- Intercity rail provided by the Capitol Corridor
- Ferry service from San Francisco Bay Ferry Service (formerly WETA)
- Vanpools and carpools
- Paratransit and Mobility Management services

The State of the System, Goals and Goal Gap Analysis have been approved by the STA Board.

Discussion:

Policies are specific action statements that implement Goals. The Policies contained clear action words such as shall, will, assign or invest. When STA staff make recommendations to committees or the board, those recommendations will be guided by the policies in this element.

The draft transit and rideshare element policies are the subject of a separate staff report. The format is the same as used in the active transportation element. First, the specific policy is shown in bold text. Policies are usually 1 to 3 sentences. Following the policy, a discussion of the purpose and meaning of the policy is provided. This discussion may run for several paragraphs. Then the performance measurements and milestones are presented. Finally, a list of the goals that are advanced by the policy is provided.

In addition to action-based policies, there are proposed performance measures and milestones. These measures are indicated by highlighted text. Performance measures can be thought of as a unit of measure; for example, in the question “how many bike storage lockers are being added?”, new bike storage lockers are the performance standard. A milestone is a benchmark showing how much progress has been made; for example, if a policy states “add 200 park and ride lot spaces,” a milestone would be constructing a new park and ride lot with 100 new spaces.

Finally, STA staff has attempted to identify those policies in the Transit and Rideshare element that also help implement the goals of the other elements. Those policies are identified by a black box with white text to help them stand out.

Fiscal Impact:

None.

Recommendation:

Review and provide comments on the draft Policies, Performance Standards and Milestones provided as Attachment A.

Attachment:

- A. Draft Transit and Rideshare Element Policies, Performance Standards and Milestones
Chapter

T&R Policy 1 – STA will continue to focus its investments in maintaining and, where appropriate expanding, the existing SolanoExpress and rideshare/vanpool system as its primary means of providing mass transit. When fund sources with multiple uses are available, the SolanoExpress and rideshare/vanpool system will be given priority in receiving those funds.

Discussion – These two aspects of the transit and rideshare system carry by far the largest proportion of Solano’s transit users. In fiscal year 2013 – 2014, SolanoExpress had more than 1.1 million passenger trips. In FY 2014 – 2015, that number had increased 1.3% to 1.2 million riders. During the same comparable time period, carpools and vanpools carried a ridership equivalent to 8 million.

Most SolanoExpress riders board or disembark from a bus at one of the major transit centers: namely, Curtola Park and Ride and Vallejo waterfront centers, the Fairfield Transportation Center or the Vacaville Transportation Center. All four of these facilities are located in or immediately adjacent to Priority Development Areas (PDAs). This co-location directly supports the continued and expanded use of these transit centers for long distance commutes within or out of Solano County, making it easy for riders to access the transit centers with minimal use of an automobile. This is particularly important because of the reluctance of people to switch modes of travel.

Park and ride lots are located both within and away from PDAs. This takes advantage of the greater schedule and social flexibility provided by carpools.

Policy Performance Measures and Milestones – none. The Transit and Rideshare Goals 4 through 19 will have specific performance measures and milestones that implement Policies 1, 2 and 3.

This Policy helps implement Goals 1 and 1.a, 6, 9, 9.b, 9.c, 13.a, 14, 15, 16 and 10.

T&R Policy 2 – STA will make appropriate investments in facilities that support regional transit providers; specifically, Capitol Corridor intercity rail and WETA ferry service.

Discussion – The other primary alternatives for commuters to driving alone within and out of Solano County are the ferry and rail service. These two systems combined carried more than 960,000 passengers during the last reported year. The greatest advantage that these systems have is that they do not rely upon the regional roadway network, which is subject to frequent impacts from traffic congestion.

An additional benefit of these regional transit providers is the significant reduction in per-capita emissions of air pollutants, especially greenhouse gases (GHGs), which occurs when these vehicles operate at or near capacity. If passengers can walk, bicycle or take transit to the stops for these services, the congestion and air emission benefits are multiplied even further.

There are currently two Solano stops for regional transit: the Suisun City / Fairfield Capitol Corridor station and the Vallejo ferry terminal. A second Capitol Corridor train station is under construction and will open in 2017, serving Eastern Fairfield and Vacaville. All three of the stations are located in existing PDAs.

Policy Performance Measures and Milestones – none. The Transit and Rideshare Goals 4 through 19 will have specific performance measures and milestones that implement Policies 1, 2 and 3.

This Policy helps implement Goals 1 and 1.a, 2, 5, 6, 10, 13, 16 and 18.

T&R policy 3 – STA will expand the availability of services to seniors and persons with disabilities through the Solano Mobility Management program as a co-equal priority with conventional transit services.

Discussion – Seniors and people with disabilities have some of the most significant transportation challenges in Solano County. At the same time, they also have some of the most limited resources to meet those challenges. Solano mobility management is a series of programs designed to help these individuals participate in the economic and social life. The best outcome of mobility management programs is to provide seniors and people with disability freedom and independence of movement within and outside of Solano County. Programs such as transit ambassador and trip information can do exactly this.

Other mobility management programs may be ongoing for their recipients. Taxi scrip programs are one example of this sort of ongoing support. While mobility management may not provide as many trips as express bus or carpooling, and therefore has less of an impact on traffic congestion and air pollution, it does fill a critical gap in the Solano county transit system.

Policy Performance Measures and Milestones – none. The Transit and Rideshare Goals 4 through 19 will have specific performance measures and milestones that implement Policies 1, 2 and 3.

This Policy helps implement Goals 4, 4.a, 4.b, 5, 7, 8, 9.d, 12 and 17.

T&R Policy 4 – Use the SolanoExpress Intercity Transit Consortium as the primary means for coordinating SolanoExpress and local transit services at a staff level. Use the CTSA, Solano Seniors and People with Disabilities Committee and the Paratransit Coordinating Council as the primary means of discussion and coordination at a policy-maker level. Participate in CCJPA, WETA and other working groups to identify and address coordination of local transit services with regional providers at a staff level.

Discussion – There are four main steps identified in this policy. First and foremost, STA will to continue to host the SolanoExpress Intercity Transit Consortium. This monthly forum provides the best opportunity to identify and deal with financing equipment and other major operational issues regarding intercity transit buses. As also served as a forum for dealing with any issues related to the interface between intercity and local transit.

Policy Performance Measures and Milestones – There is no performance measure for this step. The milestones for this step are the regular meetings of the identified Committees.

Are the Committees meeting on a regular basis? If so, the milestones are being met and the policy implemented.

The second item is to maintain staff liaison with all of the regional transit providers with whom STA or other local agencies interact. An example of this is STA staffs continue to participation in the Capitol Corridor staff working group meetings. This allows STA staff to be aware early on of issues being dealt with by Capitol Corridor staff, and to inform Capitol Corridor of issues that exist in Solano County. A similar level of direct and frequent staff to staff contact exists between STA and Soltrans, and a regular

attendance at monthly WETA meetings by STA staff is now occurring. Because the service locations for Capitol Corridor trains and WETA ferry boats are also hubs for local transit, the local transit providers - SolTrans and FAST – are able to see and immediately respond to any change in service times made by the regional transit providers.

Policy Performance Measures and Milestones – Both the performance measure and milestone for this step is the attendance of STA staff at the regulars meetings of these agencies.

Is STA staff regularly attending these meetings? If so, the milestones are being met and the policy implemented.

The third item is for STA to continue to implement the intercity transit funding agreement, whereby the transit providers in Solano County pool and then share out resources needed to provide intercity transit. This is combined with STA’s funding of marketing for the SolanoExpress routes.

Policy Performance Measures and Milestones – The performance measure for this step is the implementation of the multi-agency funding agreement to fund the SolanoExpress system. The milestone is the annual distribution of TDA funds for SolanoExpress services according to the agreement.

Is the Intercity Funding Agreement being updated to ensure timely funding of SolanoExpress services? If so, the milestone are being met and the policy implemented.

The fourth and final item is to assist local jurisdictions in preparing and updating SRTPs. Federal statutes require that the MTC, in partnership with the state and with local agencies, develop and periodically update a long-range Regional Transportation Plan (RTP), and a Transportation Improvement Program (TIP) which implements the RTP by programming federal funds to transportation projects contained in the RTP. In order to effectively execute these planning and fund programming responsibilities, MTC, in cooperation with Region IX of the Federal Transit Administration (FTA), requires each transit operator receiving federal funding through the TIP (federal grantees within the MTC region) to prepare, adopt, and submit an SRTP to MTC. The SRTP develops a coordinated investment plan for the five major fixed-route and paratransit providers in Solano County – specifically SolTrans, FAST, Vacaville City Coach, Dixon Redit-Ride, and Rio Vista Delta Breeze. The SRTP develops a set of consistent operator objectives, goals, measures, and standards, as well as service and capital investment plans for each operator.

Policy Performance Measures and Milestones – The performance measure and milestone for this item is the adoption of a new or updated SRTP.

Are SRTPs adopted and updated on a schedule consistent with MTC and federal requirements? If so, the milestones are being met and the policy implemented.

This Policy helps implement Goals 2, 3, 4, 4.a, 4.b, 4.c, 7, 8 and 12.

T&R Policy 5 – STA will assign staff to actively monitor MTC activities to implement electronic fare collection, and will seek early implementation of electronic fare collection for all intercity transit providers.

Discussion – Electronic fare collection increases the convenience of transit use to riders, eases the collection of some ridership data, and can result in better fare collection. A common form of fare collection across the region makes it easier for transit users to shift modes or system providers.

Solano County is not likely to be the leader in adopting some form of electronic fare collection. The technical support staff and capital expenditure for leading such a program is beyond Solano County transit providers’ resources. By actively monitor and partnering with regional providers such as MTC, Solano County can be prepared to be an early adopter of such systems.

Policy Performance Measures and Milestones - STA staff monitors MTC electronic fare collection methods as well as partners with MTC and transit operators as needed. Milestones would be met by staying coordinated among these parties and an annual status report to Consortium about regional electronic fare collection developments.

Is STA staff monitoring the development and implementation of electronic fare collection methods? Are electronic fare collection methods being implemented in Solano transit fleet vehicles? If so, the milestones are being met and the policy implemented.

This Policy helps implement Goal 3.

T&R Policy 6 – STA will be prepared to offer assistance to any local transit providers who wish to pursue consolidation and/or improve coordination and efficiency. On an annual or more frequent basis, STA will query Solano County and other partner transit agencies regarding the options and benefits regarding transit operator consolidation and/or improved coordination and efficiency.

Discussion - STA helped provide legal, consultant, management and financial assistance to the Vallejo Transit and Benicia Breeze transit services when they merged in 2010. This merger has led to improved service delivery, greater efficiency and financial stability for both communities’ transit service, and for Solano Express buses operated by Soltrans. The past two years, STA has provided transit finance and service planning assistance to Rio Vista’s Delta Breeze. The STA does not have a policy to require or encourage further consolidation of local or Express transit providers in Solano County, but is ready and available to support any local jurisdictions that request such help.

Policy Performance Measures and Milestones – On an annual basis, reach out to Solano transit operators to share past transit consolidation progress and determine if there is interest in further consolidation or improvements in coordination and efficiency. The outreach should be to City Manager or Department head level personnel. If interest is expressed, STA is to provide assistance. Milestone will be met by sharing the results of this outreach to the STA Board and the Transit Committee at least every three years.

This Policy helps implement Goals 3.a and 3.b.

T&R Policy 7 – STA’s Countywide Bicycle and Pedestrian Plans, and PDA Plans financially supported by STA, will identify access improvements around Transit Centers of Regional Significance and local transit centers in order to help fill the “first mile/last mile” gap. STA will support the purchase of Solano Express buses with adequate bicycle storage features. STA will support expansion of bike sharing projects throughout the Bay Area, including in Solano County

Discussion - One of the obstacles to the use of bus, rail and ferry transit is the gap at the start of the trip between home and the transit center, and the corresponding gap at the end of the trip between the transit center and the final destination. If the ‘gap’ is too substantial of an obstacle, transit users will drive to the transit center (increasing congestion and air pollution, and requiring parking at the station), or will drive solo to their destination.

For Solano commute trips, the rail and ferry stops at the destination are fixed and unchangeable. Bus destinations may have some flexibility, but most (such as BART stations) are also fixed. STA policies and investments cannot change this ‘last mile’ gap. The ‘first mile,’ however, is much more within Solano jurisdictions’ control.

One way to help fill the first mile gap is to reduce its size, i.e. to help people who want to use transit have an opportunity to live near a transit stop. The PDA program and several State Cap and Trade grant programs help support local land use decisions that encourage the placement of residences near major transit stops.

The other way to fill the gap is to make movement for bicyclists and pedestrians within it more convenient. STA’s Safe Routes to Transit (SR2T) plan addresses access issues in close proximity to transit stops (and finds that the most dangerous spot is where pedestrians cross a public street). Because the Countywide Bicycle and Countywide Pedestrian plans are developed with input from the bicycling and walking communities, they are the best place to address ease and safety of use for these modes near transit centers.

In addition, STA works with regional transit providers and local jurisdictions to provide additional secure bike storage facilities at their local terminals. This also helps improve the convenience of using bicycles to access the transit system.

Finally, the access and safety improvements that implement this Policy also help implement the Complete Streets policy in the Arterials, Highways and Freeways element. That makes the Policy supportive of multiple Solano CTP elements.

Policy Performance Measurements and Milestones – Preparation of initial and updated STA Countywide Bicycle and Pedestrian Plans, and PDA Plans are the measurements for this policy. The milestones for this policy are completed Plans.

Are the applicable Plans kept current and used to implement projects, including first mile/last mile gap fill projects? If so, the policy is being implemented.

This Policy helps implement Goals 1, 1.a, 2, 5 and 10.

T&R Policy 8 – Require transit providers receiving funds administered by STA to submit performance reports. At a minimum, these reports will include farebox recovery, total ridership, on-time performance and surveyed passenger satisfaction.

Discussion – The minimum data needed by SolanoExpress decision makers on the effectiveness of the system consists of farebox recovery, total ridership, on-time performance and passenger satisfaction. There are additional data that are traditionally gathered, and those efforts should also continue.

An annual report of this data will not only provide a snapshot in time as to system performance, but also allow changes over time to be seen and used to measure system performance and the effectiveness of the investment decisions made by the STA Board and the operators of SolanoExpress bus systems.

An example of the effectiveness of this approach is seen in the Capitol Corridor’s decade-long systematic improvement. Ridership surveys of Capitol Corridor and other train passengers showed that passengers most valued a system that was convenient to their origin and destination, and had frequent and reliable service. While station locations were relatively fixed (few opportunities exist for new or relocated stations) and passenger train frequency is largely dictated by freight rail schedules, the Capitol Corridor could make investments that improved on-time performance and reduced operating cost. As a result of this focus on measuring and reporting on performance, and making investments that impact performance, the Capitol Corridor is, as of early 2016, number one in on time performance, number three in ridership and number three in overall customer satisfaction in the entire Amtrak System.

Policy Performance Measures and Milestones - Transit operators receiving funds administered by STA to submit on-time performance, farebox recovery data monthly for Consortium and to the STA Board annually. They may combine this with other reporting requirements. Customer satisfaction is to be measured less frequently, but no less than every three years and submitted to the STA. This may be as part of another study such as the multi-agency passenger survey with the submittal of these reports the milestones have been met.

Are performance measures being reported to the STA Board on a regular basis? If so, this policy is being implemented.

The access and safety improvements that implement this Policy also help implement the Complete Streets policy in the Arterials, Highways and Freeways element. That makes this Policy supportive of multiple Solano CTP elements.

This Policy helps implement Goals 6, 7, 17, 17.a and 17.b.

T&R Policy 9 – STA shall not adopt policies that exclude private providers from offering or providing transit services as long as they do not interfere with the provision of public transit, and shall seek to ensure that policies requiring private providers to pay for use of public facilities are

reasonable related to the burden borne by those public facilities.

Discussion – Private transit providers can come in a variety of forms, as outlined in the Transit and Rideshare State of the System report. These providers can deliver important supplements to the public mass transit system; supplements that are usually focused on a narrow portion of the transit-using public. By accommodating these private providers and seeking only to cover costs reasonably associated with their use of public facilities, the publically-available mass transit system can more effectively focus on the general transit-using population.

Policy Performance Measurements and Milestones – Inventory private transportation services at public transit facilities and update it no less than every three years. Evaluate if and how private operations complement or inhibit public transit operations and any physical impacts on the facility. Determine if any operational or policy changes should be considered to maintain public transit level of service at the performance standards established by the 2015 SolanoExpress Transit Corridor Plan. Completing initial and subsequent inventory reports will meet milestones and implement this policy.

This Policy helps implement Goals 6 and 8.

T&R Policy 10 – Provide funding for and conduct transit studies for all major intercity transit corridors. Each study will be updated no less frequently than every 6 years.

Discussion – Bus and ridesharing trips in Solano County usually move along a major highway corridor. I- 80 is the lynchpin of Solano freeway and highway transit routes. Other major routes include I-680 into Contra Costa, Alameda and Santa Clara counties, SR 12 through Solano County, SR 29 into Napa and SR 37 into Marin and Sonoma counties, although most transit trips on these corridors at some point connect with I-80. The best way to identify specific capital and operational issues is to conduct a detailed look at the operation of a specific corridor.

Corridor studies typically explore two major areas: capital facilities, and operations and maintenance of vehicles and facilities. Corridor plans often use financial and operational models to examine the best location and timing of investments. These corridor plans provide the sort of detailed, prioritized recommendations that allow SolanoExpress operators, cities and STA to then make timely funding decisions.

Policy Performance Measurements and Milestones- Conduct an intercity transit corridor study at least once every six years. Completion of the study(ies) will be the milestone.

Are all applicable studies less than 6 years old? If so, the policy is being implemented.

This Policy helps implement Goals 7, 9, 9.b, 9.c, 10, 16, 17, 17.a and 17.b.

T&R Policy 11 – STA will develop a standard methodology of collecting and reporting on auto, bicycle and pedestrian collisions within ¼ mile of TFORS, and will report those statistics on an annual basis.

Discussion – When STA updated the Solano Travel Safety Plan in 2015, one of the challenges discovered was the variety of methods used to collect and report safety and collision data. This makes it difficult to identify, on a countywide basis, those areas most deserving of additional investment to improve safety. This policy calls on STA to act as a central clearinghouse for collision data, and to use that data to help prioritize funding decisions.

Policy Performance Measurements and Milestones - The data gathered to implement this Policy will also help identify issues related to the Active Transportation and Arterials, Highways and Freeways Elements. That makes this Policy supportive of multiple Solano CTP elements. The milestone will be the development of a standard methodology and annual reporting of the collision statistics.

This Policy helps implement Goals 11, 11.a and 11.b.

The data gathered to implement this Policy will also help identify issues related to the Active Transportation and Arterials, Highways and Freeways Elements. That makes this Policy supportive of multiple Solano CTP elements.

T&R Policy 12: To meet the mobility needs of the ambulatory and non-ambulatory ADA certified individuals and to ensure long-term viability of existing and new programs, evaluate ADA services (paratransit and intercity taxi programs) on at least an annual basis.

Discussion – Over the past several years, the provision of ADA intercity services has changed and new services have been implemented. The popularity of some services has strained their long-term viability. Other services still need to be developed to better serve the non-ambulatory ADA certified individuals. Implemented services should be monitored, evaluated and modified as needed. Outreach to ambulatory and non-ambulatory ADA certified individuals to understand and address their most urgent transportation needs will be important as part of the evaluation of existing services and the development on new services.

Policy Performance Measurements and Milestones - Regularly evaluate ADA paratransit service and ADA intercity taxi programs. This evaluation should include ridership, productivity, operational and financial performance at minimum. Outreach to ambulatory and non-ambulatory ADA certified individuals and related stakeholders, to determine mobility gaps and to participate in prioritization of strategies to address gaps in these services at least every 3 years. A short and long-term action plan is to be developed. Milestones will be met by the regular review of ADA services and the less frequent outreach and completion of action plans.

This Policy helps implement Goals 4, 4.a, 4.b, 12 and 17.

T&R Policy 13: Evaluate and modify currently implemented ADA in-person assessment model to improve convenience for new and recertifying applicants and to improve efficiencies on at least an annual basis.

Discussion: STA coordinates the ADA certification process countywide. A contractor schedules and assessments, coordinates with transit operators for those in need of ADA paratransit service, conducts the assessments and tracks activity. Assessments are scheduled in all seven Solano cities on a rotating basis at least monthly. In some cities multiple assessment days are held to meet demand. Re- certifications have been conducted in the same manner as original certifications.

There has been interest expressed in holding assessments in locations with a concentration of ADA certification applicants such as skilled nursing facilities. If carefully selected, these on-site assessment sessions would be more convenient for applicants by reducing the need to travel and more efficient for the contractor and transit operator as there would be a reduction in “no shows” and arrangement of ADA paratransit rides would be reduced.

Recertification every three years is a requirement. The specifics of the recertification process should be reviewed to identify opportunities to streamline it for both applicants’ convenience and the service delivery efficiency. Some applicants’ original certification may be based on disabilities that prevent their use of fixed-route transit indefinitely. A simplified recertification process would be warranted in these situations.

Policy Performance Measurements and Milestones - At least annually evaluate the ADA assessment process to determine if modifications should be made to improve the process for applicants and/or transit operators. Milestones will be met with the completion of the annual evaluations.

This Policy helps implement Goals 4, 12 and 17.

T&R Policy 14: Conduct a study, or studies, to identify the transportation needs of Solano seniors, people with disabilities, and the low-income population. Update the study or studies no less frequently than every 6 years.

Discussion - With a rapidly growing senior population, the countywide Transportation Study for Seniors and People with Disabilities from 2011 should be updated. This study involved significant public outreach which should continue with future updates. Five Community Based Transportation Plans were conducted in the past fifteen years; these focused on outreaching to local communities to identify the transportation needs of the low-income population followed by identifying and prioritizing solutions. Many, but not all, priority projects from these studies have been implemented. More current outreach and study of these groups should be done to address the changes in these groups, the community, and the differing strategies available now and in the future.

Policy Performance Measurements and Milestones - Update of Transportation Study for seniors, people with disabilities and the low-income population at least every 6 years. Milestones will be the

completion of the study at least once every 6 years.

This Policy helps implement Goals 4, 6, 7 and 17.

T&R Policy 15: Partner, and outreach to, a diversity of community stakeholders such as public, private and non-profit organizations serving seniors, people with disabilities, and the low-income population.

Discussion – The mobility needs of seniors, people with disabilities and the low-income population are specialized and diverse. Meeting the mobility needs of these groups is important to address their quality of life that is inherently challenged. Understanding those needs will depend upon partnering with organizations that already work with these groups and understand their challenges with mobility. The recently formed CTSA and other committees include these partnerships. These and additional partnerships will also facilitate outreach to these consumers. Outreach and other direct contact with these populations will be a valuable tool in planning, promoting, and assessing services.

Policy Performance Measurements and Milestones – Identify current stakeholders and the degree of their diversity. Establish target to expand stakeholder diversity and outreach to achieve this. Establish a process to maintain diverse stakeholder group from the community as it changes over time. Milestones are creation of existing stakeholder diversity inventory, establishment of goal, outreach, expansion of diverse stakeholders, and process to maintain this.

This Policy helps implement Goals 4, 4.b and 6.

T&R Policy 16: Use technological advances to improve communication with consumers of mobility management services.

Discussion – The solanomobility.org website created a centralized information resource with a wide range of mobility and program information for seniors, people with disabilities and the low-income. With search functions and layering of information, a substantial amount of information is relayed to the user in a simpler format than if printed. While printed materials are still made available, the website's Find Your Ride, Travel Training, and Older Driver Safety Information functions are examples of a technology advancement that has facilitated the dissemination of information to consumers. The website needs to be kept updated with current information, features and functionality to meet the changing needs of its users and capabilities of electronic communication. The website is a resource to other organizations and links between websites reconfirmed. Other forms of technological communications should be reviewed, evaluated and considered as additional ways to reach consumers for both disseminating information as well as for collecting information and input.

Policy Performance Measurements and Milestones - The solanomobility.org is to be current. There should be regular review of technological advances that could improve communication with consumers of mobility management services. Milestones would be periodic review of technology

advances and an evaluation of what has been, or could be, incorporated as well as accuracy of solanomobility.org.

This Policy helps implement Goals 4 and 6.

T&R Policy 17: Regularly monitor a wide variety of information sources regarding innovations in private and public ‘shared mobility’ resources, including mobile applications, vehicle sharing transportation network companies and on-call vehicles. Incorporate new and developing mobility options and technology into STA plans.

Discussion – Transit and rideshare services between hubs is designed to efficiently move large numbers of riders long distances. Riders arriving from, or traveling to, the many locations in the areas surrounding a transit hub often find this portion of the trip inconvenient or impossible. These locations may be employment, residential, community services, medical facilities, shopping and more. This is the “first mile/last mile” gap. Local transit, walking, bicycling, driving alone and other options are available to varying degrees at Solano transit hubs. A countywide study could identify and prioritize transit/rideshare hub “first mile/last mile” gaps, identify existing and potential strategies, explore newer and advancing alternatives such as bikeshare programs, carsharing, shuttles, taxis, transportation network companies (TNCs), self-driving vehicles and other options, work with the community to evaluate strategies for potential implementation.

Policy Performance Measurements and Milestones – STA should develop an understanding, monitor and share the newly developing shared mobility and other new technology-based transportation alternatives. With the involvement of the community, prepare a study to identify and prioritize transit/rideshare hubs’ “first mile/last mile gaps”, identify existing and potential strategies to address the gaps including newer and advancing technologies and programs. Milestones will be met with the consideration of incorporating these new technology-based transportation alternatives for “first mile/last mile” gap closure or other purposes.

This Policy helps implement Goals 5, 6, 8 and 9.d.

T&R Policy 18 – STA will provide notice to SolanoExpress vehicle operators when it is aware of the availability of funds than can be used for clean transit vehicles and infrastructure, and will use support for clean transit vehicles and infrastructure as a ranking criteria when allocating such funds.

Discussion – While full of transit vehicles are very efficient in regards to air pollutant emissions per passenger mile when compared to single occupant cars, they do still produce important amounts of air pollution, including greenhouse gas emissions. The California Air Resources Board (CARB) has requirements for transition of public transit vehicle fleets to zero emission vehicles. STA has adopted an alternative fuels plan which supports conversion of all types of public vehicle fleets to low or zero emission vehicles. This includes both vehicle replacement and modification of support infrastructure such as fueling and maintenance facilities.

STA can help member and partner agencies accelerate this transition to clean vehicles and fuels by ensuring that they are aware of funding opportunities. STA can also write letters of support for those agencies seeking funding and furthering the goal of STA plans and policies.

When STA programs funds, such as BAAQMD TFCA program manager funds, it can use support for low and zero emission vehicles as a criteria to help identify which projects will be funded. While there may be other considerations, prioritizing clean fuel vehicles and facilities makes it more likely that they will be fully funded and delivered.

Policy Performance Measurements and Milestones –The collection and notification to transit operators of funds that may be used for clean transit vehicles and infrastructure will be a measurement as well as incorporating in STA ranking criteria for fund allocation the support for clean vehicles/infrastructure. Milestones will be met with the regular notification of clean vehicle/infrastructure funding opportunities and incorporation of clean vehicle/infrastructure in ranking criteria for fund allocations.

This Policy helps implement Goals 13, 13.a, 14, 15 and 16.

T&R Policy 19 – STA will continue to fund a ridesharing program such as Solano Napa Commuter Information (SNCI).

Ridesharing support is critical to maintaining and advancing carpool and vanpool formation and use. STA, in partnership with the Napa Valley Transportation Agency, has used SNCI to provide these and other ride matching and trip planning activities.

With MTC’s 2015 decision to stop providing direct funding for county ridesharing programs, this function becomes more difficult to support. Due to its value and the large number of carpool and vanpool users in Solano and Napa counties, however, STA will continue to provide this service in some form. At the same time, STA will monitor developments in private ridematching services, especially mobile applications that make both formal and casual carpool formation fast and convenient for users.

Policy Performance Measurements and Milestones – Funding a rideshare program such as SNCI at an operational level would be the milestone for meeting this goal.

This Policy helps implement Goal 9.a.