



AGENDA

TRANSIT ADMINISTRATIVE OVERSIGHT COMMITTEE of the BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

**Friday
March 28, 2014
10:00 a.m.**

**BCAG Conference Room
2580 Sierra Sunrise Terrace, Suite 100, Chico CA
(530) 879-2468**

-
1. Introductions
 2. Minutes from TAOC Meeting- March 26, 2013

ITEMS FOR INFORMATION

3. Butte Regional Transit Bus Replacement Schedule - **Jon / Mike**
4. Proposed 2014/15 Policy Changes for Butte Regional Transit Fixed Route & ADA/Dial-A-Ride Services - **Mike / Cheryl**
5. Draft 2014/15 Butte Regional Transit Service Plan and Budget - **Mike / Julie**
6. FY 12/13 TDA Audit Comments - **Julie**

7. Chico to Sacramento Express Transit Service Study (Attachment) - **Andy / Mike**

8. Other Items

PERSONS WISHING TO ADDRESS AGENDA ITEMS OR COMMENT ON ANY ITEM NOT ON THE AGENDA MAY DO SO AT THIS TIME. COMMENTS ARE LIMITED TO THREE MINUTES PER PERSON. PLEASE STATE YOUR NAME AND ADDRESS FOR THE RECORD.

FOR ITEMS NOT ON THE AGENDA, NO ACTION WILL BE TAKEN AT THIS TIME. IF IT REQUIRES ACTION, IT WILL BE REFERRED TO STAFF AND OR PLACED ON THE NEXT AGENDA.

COPIES OF STAFF REPORTS OR OTHER WRITTEN DOCUMENTATION RELATING TO ITEMS OF BUSINESS REFERRED TO ON THE AGENDA ARE ON FILE IN THE OFFICE OF BUTTE COUNTY ASSOCIATION OF GOVERNMENTS (BCAG). PERSONS WITH QUESTIONS CONCERNING AGENDA ITEMS MAY CALL BCAG TO MAKE INQUIRIES REGARDING THE NATURE OF THE ITEM DESCRIBED ON THE AGENDA.



ITEM # 2

**Butte County Association of Governments
Transit Administrative Oversight Committee (TAOC)
Draft Summary Meeting Minutes
For March 26, 2013**

MEMBERS PRESENT

Mike Crump	Butte County Public Works
Linda Herman	City of Chico
Frank Fields	City of Chico
Mark Sorensen	City of Biggs
Mikah Salsi	City of Oroville

STAFF PRESENT

Jon Clark	Executive Director
Andy Newsum	Deputy Director
Jim Peplow	Senior Planner
Julie Quinn	Chief Fiscal Officer
Ibrahima Toure	Veolia Chico GM

The following minutes are a summary of the TAOC.

The Transit Administrative Oversight Committee (TAOC) meeting of the Butte County Association of Governments (BCAG) was held at the BCAG Conference Room on March 26, 2013, located at 2580 Sierra Sunrise Terrace in Chico.

Item #1 – Introductions

Self introductions were made.

Item #2 – Oral Communication

None.

Item #3 – April 2012 Minutes

No comments were received. The minutes were accepted by the committee.

Item #4 – Proposed 2013/14 Butte Regional Transit Service Plan and Budget

Staff presented the Proposed 2013/14 Butte Regional Transit Annual Service Plan and Budget for the committee's review and comments. The Draft B-Line Service Plan & Budget identifies a total operating budget of \$9,329,782, including contingency and capital reserves, for both fixed route service and paratransit service in the urban and rural areas of Butte County. B-Line operates seven days a week, approximately 118,000 combined annual service hours.

Major changes from the 2012/13 budget were outlined and discussed. It was indicated that the largest increases in this year's budget were purchased transportation services, capital reserves, fleet insurance and increased maintenance costs.

Staff informed the committee that the Veolia contract had been signed for the next five years. They also discussed the need for capital replacement; mentioned that because of the aging fleet and increasing maintenance costs, the trolley service was being eliminated; and that the CNG vehicles were being phased out.

Staff mentioned they are looking at an option to advertise on the sides of the buses. Committee Member Herman asked about the shelter contract with Stott and how it was going.

Committee Member Crump inquired about MAP 21, and what affects that might have.

Staff indicated we will need to continue to look at capital replacement, and asked committee members to consider the possibility of BCAG taking transit costs off the top before allocating/distributing TDA funds

Committee Member Herman inquired about the possibility of on-line ticket sales. Staff indicated it could be open for future consideration, but the main issue right now is that BCAG is not set up to accept credit cards.

Item #5 – Other Items

Staff explained the Next Bus system (B-Line Tracker) that is currently in the process of being implemented.

Committee Member Herman expressed an interest to see a smoking ordinance enforced at bus shelters.

Staff shared plans for the new transit facility.



TRANSIT ADMINISTRATIVE OVERSIGHT COMMITTEE

Item #3 Information

March 27, 2014

BUTTE REGIONAL TRANSIT BUS REPLACEMENT SCHEDULE

PREPARED BY: Jon Clark, Executive Director

ISSUE: BCAG staff has a bus replacement schedule for Butte Regional Transit to guide in the acquisition of bus replacements for the fixed route and paratransit systems. The bus replacement schedule identifies the number of buses to be replaced by fiscal year, and the costs for acquisition. Adding new buses to the fleet is necessary in order to: 1) maintain a stable working bus fleet; 2) maintain existing operating service levels; 3) to reduce the high cost of maintenance, and; 4) to maintain the FTA recommended 20% spare bus ratio for backup purposes.

DISCUSSION: Attached for the Committees review and comment is Butte Regional Transits fixed route and paratransit bus replacement schedule.

Fixed Route Bus Replacement

The fixed route bus replacement schedule for BRT identifies the future bus replacement needs by fiscal year, with the estimated replacement cost for acquisition. The bus replacement schedule is used to determine the number of new buses that need to be added to the fleet to maintain the current operating level of fixed route service (69,927 hours annually), while also providing sufficient back-up buses, or spare ratio. The Federal Transit Administration (FTA) recommends that transit agencies maintain a spare bus ratio not to exceed 20%.

During the 2014/15 FY, BCAG will need to purchase three (3) fixed route buses at an estimated cost of \$480,000 each, or a total of \$1,440,000. The buses to be purchased will be forty-foot (40') Clean Diesel Gillig buses. As part of the bus replacement schedule, BCAG staff is working to convert the B-Line fixed route bus fleet to Gillig clean diesel buses. The Gillig brand has been the best performing and most reliable buses used to date, and by converting the fleet to the same manufacturer, we hope to reduce maintenance costs over time.

Staff is proposing to fund the purchase of the three buses using \$480,000 from Butte Regional Transit Capital Reserves, \$160,000 from the 2014/15 TDA/LTF apportionment

and \$800,000 from an unobligated TDA/LTF fund balance. This unobligated TDA/LTF balance is the result of prior year fund balances that have accrued.

Staff is proposing to use the TDA/LTF fund balance with an “off the top” allocation for the bus purchase, versus identifying the purchase as a line item in the 2014/15 budget, which use the current funding formula. The reason being – since the jurisdictions of Oroville and Paradise are using all of their TDA/LTF allocations for operating, the remaining jurisdictions with TDA/LTF balances would have to make up the difference, which is not equitable. By funding the buses “off the top” all the jurisdiction should receive an allocation of TDA/LTF funds at a similar level to their 2013/14 allocation.

As reflected in the fixed route bus replacement schedule, funding for capital bus replacement is going to be an ongoing budget issue over the next couple of fiscal year’s as BCAG will need to purchase upward of eighteen (18) fixed route buses between the 2015/16 through 2017/18 fiscal years. BCAG staff will reassess our replacement needs annually, so the number of buses that need to be replaced could go down depending upon the condition of buses in the fleet.

BCAG is currently stretching the useful life of our buses beyond the FTA recommended twelve year time period, with most buses staying in service up to 14-16 years. For example, the three buses to be replaced will have been in service for over 15 years before they are retired, or used as backups. The tradeoff of running buses in service longer is that we face higher annual maintenance costs to keep these buses running.

Historically, BCAG has been able to purchase fixed route buses using other funding sources such as CMAQ or other state/federal grant funds. At present, these funds are not available, and in accordance of TDA statute, transit operating and capital needs must be met before TDA/LTF funds can be allocated to other uses.

BCAG staff will continue to pursue other funding sources for capital bus replacement, and should funds be obtained, we would revisit the funding contribution of TDA/LTF for bus replacement.

Paratransit Bus Replacement

Attached for the Committees review and comment is the paratransit bus replacement schedule for Butte Regional Transit.

The B-Line paratransit fleet is obviously smaller than the fixed route bus fleet, and the cost for vehicle replacement for the paratransit vans is much less. Paratransit vans cost approximately \$65,000 each.

During the 2014/15 FY, BCAG staff will submit a \$455,000 grant request to the FTA 5311 Program to fund for replacement of seven (7) paratransit vans. Fortunately, BCAG has been able to fund paratransit van replacement under the FTA 5311 program for several years, and has not had to utilize TDA/TF funding.

**FIXED ROUTE PARATRANSIT
BUS REPLACEMENT SCHEDULE**

**BUTTE REGIONAL TRANSIT B-LINE
2013/14 Vehicle Replacement Schedule**

	B-LINE FIXED ROUTE BUSES	BUS LENGTH	BUS #	MFG YR	MAKE	FUEL	FTA Useful Life (years)	Scheduled Replacement Year	Anticipated Replacement Year	Replacement Cost (Approx)	FUNDED - Replacement Cost	UNFUNDED - Replacement Cost				
1	BCAG	40'	2K1	2000	ORION/ORION V	CNG	12	2012	2014	\$ 450,000.00						
2	BCAG	40'	2K2	2000	ORION/ORION V	CNG	12	2012	2014	\$ 450,000.00						
3	BCAG	40'	2K3	2000	ORION/ORION V	CNG	12	2012	2014	\$ 450,000.00						
5	BCAG	40'	2K4	2000	ORION/ORION V	CNG	12	2012	2014	\$ 450,000.00						
6	BCAG	40'	2K5	2000	ORION/ORION V	CNG	12	2012	2014	\$ 450,000.00						
7	BCAG	40'	2K6	2000	ORION/ORION V	CNG	12	2012	2014	\$ 450,000.00						
8	BCAG	40'	2K7	2000	ORION/ORION V	CNG	12	2012	2014	\$ 450,000.00	\$ 3,150,000.00					
9	BCAG	35'	101	2001	GILLIG/PHANTOM	DIESEL	12	2013	2016	\$ 480,000.00						
10	BCAG	35'	201	2001	GILLIG/PHANTOM	DIESEL	12	2013	2016	\$ 480,000.00						
11	BCAG	35'	301	2001	GILLIG/PHANTOM	DIESEL	12	2013	2016	\$ 480,000.00		\$1,440,000				
12	BCAG	35'	031	2003	GILLIG	DIESEL	12	2015	2018	\$ 480,000.00						
13	BCAG	35'	032	2003	GILLIG	DIESEL	12	2015	2018	\$ 480,000.00						
14	BCAG	35'	033	2003	GILLIG	DIESEL	12	2015	2018	\$ 480,000.00						
15	BCAG	35'	034	2003	GILLIG	DIESEL	12	2015	2018	\$ 480,000.00						
16	BCAG	35'	035	2003	GILLIG	DIESEL	12	2015	2018	\$ 480,000.00						
17	BCAG	35'	036	2003	GILLIG	DIESEL	12	2015	2018	\$ 480,000.00		\$2,880,000				
18	BCAG	30'	O61	2006	FREIGHTLINER	CNG	12	2018		\$ 480,000.00						
19	BCAG	30'	O62	2006	FREIGHTLINER	CNG	12	2018		\$ 480,000.00						
20	BCAG	30'	O63	2006	FREIGHTLINER	CNG	12	2018		\$ 480,000.00						
21	BCAG	30'	O64	2006	FREIGHTLINER	CNG	12	2018		\$ 480,000.00		\$1,920,000				
22	BCAG	40'	O81	2008	ORION/ORION VIIMG	CNG	12	2020		\$ 480,000.00						
23	BCAG	40'	O82	2008	ORION/ORION VIIMG	CNG	12	2020		\$ 480,000.00						
24	BCAG	40'	O83	2008	ORION/ORION VIIMG	CNG	12	2020		\$ 480,000.00						
25	BCAG	40'	O84	2008	ORION/ORION VIIMG	CNG	12	2020		\$ 480,000.00						
26	BCAG	40'	O85	2008	ORION/ORION VIIMG	CNG	12	2020		\$ 480,000.00						
27	BCAG	40'	O86	2008	ORION/ORION VIIMG	CNG	12	2020		\$ 480,000.00						
28	BCAG	40'	O87	2008	ORION/ORION VIIMG	CNG	12	2020		\$ 480,000.00						
29	BCAG	40'	O88	2008	ORION/ORION VIIMG	CNG	12	2020		\$ 480,000.00		\$3,840,000				
30	BCAG	35'	1101	2011	Gillig Lowfloor	DIESEL	12	2023		\$ 480,000.00						
31	BCAG	35'	1102	2011	Gillig Lowfloor	DIESEL	12	2023		\$ 480,000.00						
32	BCAG	35'	1103	2011	Gillig Lowfloor	DIESEL	12	2023		\$ 480,000.00						
33	BCAG	35'	1104	2011	Gillig Lowfloor	DIESEL	12	2023		\$ 480,000.00						
34	BCAG	35'	1105	2011	Gillig Lowfloor	DIESEL	12	2023		\$ 480,000.00						
35	BCAG	35'	1106	2011	Gillig Lowfloor	DIESEL	12	2023		\$ 480,000.00		\$2,880,000				
											TOTAL UNFUNDED VEHICLE REPLACEMENT NEED	\$12,960,000				

NOTES

* TDA Funds will need to be used for bus replacemnt unless other state or federal funds can be obtained

* BCAG will be working to convert the fixed route fleet to Gillig Clean Diesel buses to standardise the fleet to make it more cost effective for maintenance and service.

**FIXED ROUTE PARATRANSIT
BUS REPLACEMENT SCHEDULE**

**BUTTE REGIONAL TRANSIT B-LINE
2013/14 Vehicle Replacement Schedule**

	B-LINE PARATRANSIT VEHICLES	BUS LENGTH	BUS #	MFG YR	MAKE	FUEL	FTA Useful Life (years)	Scheduled Replacement Year	Anticipated Replacement Year	Replacement Cost (Approx)	FUNDED - Replacement Cost	UNFUNDED - Replacement Cost				
1	BCAG		217	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
2	BCAG		218	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
3	BCAG		219	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
4	BCAG		220	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
5	BCAG		221	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
6	BCAG		222	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
7	BCAG		223	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
8	BCAG		224	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
9	BCAG		225	2002	FORD E-450	GASOLINE	7	2009		\$ 65,000.00						
10	BCAG		416	2003	FORD AEROTECH	CNG	7	2010		\$ 65,000.00						
11	BCAG		417	2003	FORD AEROTECH	CNG	7	2010		\$ 65,000.00						
12	BCAG		418	2003	FORD AEROTECH	CNG	7	2010		\$ 65,000.00						
13	BCAG		419	2003	FORD AEROTECH	CNG	7	2010		\$ 65,000.00	\$ 845,000.00					
14	BCAG		810	2008	Ford StarCraft	GASOLINE	7	2015		\$ 65,000.00						
15	BCAG		811	2008	Ford StarCraft	GASOLINE	7	2015		\$ 65,000.00						
16	BCAG		812	2008	Ford StarCraft	GASOLINE	7	2015		\$ 65,000.00						
17	BCAG		814	2008	2	GASOLINE	7	2015		\$ 65,000.00						
18	BCAG		815	2008	Ford StarCraft	GASOLINE	7	2015		\$ 65,000.00						
19	BCAG		816	2008	Ford StarCraft	GASOLINE	7	2015		\$ 65,000.00						
20	BCAG		817	2008	Ford StarCraft	GASOLINE	7	2015		\$ 65,000.00		\$455,000				
21	BCAG		104	2010	Ford StarCraft	GASOLINE	7	2017		\$ 65,000.00						
22	BCAG		105	2010	Ford StarCraft	GASOLINE	7	2017		\$ 65,000.00						
23	BCAG		106	2010	Ford StarCraft	GASOLINE	7	2017		\$ 65,000.00						
24	BCAG		107	2010	Ford StarCraft	GASOLINE	7	2017		\$ 65,000.00						
25	BCAG		108	2010	Ford StarCraft	GASOLINE	7	2017		\$ 65,000.00						
26	BCAG		109	2010	Ford StarCraft	GASOLINE	7	2017		\$ 65,000.00		\$390,000				
											TOTAL UNFUNDED VEHICLE REPLACEMENT NEED	\$845,000				

NOTES

* Start 5310 application for the buses to be replaced in 2015?

* We need to increase the spare ratio, can we seek grants for additional bus funding



BCAG Transit Administrative Oversight Committee

Item #4 Information

March 28, 2014

BUTTE REGIONAL TRANSIT PROPOSED 2014/15 POLICY CHANGES & FOLLOW-UP ITEM

PREPARED BY: Michael Rosson, Transit Manager

ISSUE: Staff is reviewing proposed changes to some of B-Line's policies that would take effect in the 2014/15 FY. Staff is asking the TAOC to review & comment on the following:

- a) Dial-A-Ride Paratransit service is for adults 65 years and older or riders who have a disability that do not qualify under Americans with Disabilities Act (ADA).
- b) Currently, B-Line does not have a detailed policy regarding Disruptive Passengers/Service Animals. (See Attached)
- c) Riders may have their riding privileges suspended for the Dial-A-Ride/ADA Service within a calendar-month period if they have (3) No-Shows or (3) Late Cancellations or a combination of (3) Same Day Cancellations with the No-Shows or Excessive Advance Cancellations (50% of rides cancelled). (See Attached)
- d) ADA Compliance of the Butte Regional Transit Bus Shelters

DISCUSSION:

- a) The B-Line Paratransit system is beginning to be impacted by the amount of riders that use this service. BCAG is required to provide complementary Paratransit service to riders who have a disability that qualifies them under the ADA.

Currently, there are two types of eligibility that an applicant can qualify under for Paratransit services.

ADA Eligibility

The first is ADA eligibility; the application asks extensive questions about the applicant's ability to physically and mentally use fixed route service. A physician fills out a portion of the application to help determine if the applicant can indeed ride fixed route and if the disability is temporary or permanent. If the applicant can use fixed route service, then the application would be denied. If the applicant can, use fixed route service on some days and some days not, they will be approved for conditional eligibility, which is limited to service only on days not able to ride fixed route.

B-Line is required to provide complementary Paratransit service to its fixed route service to riders who qualify under the ADA. B-Line is also required to not have any "denials" of service to ADA riders as well.

Staff is not requesting any changes to the policy for ADA eligibility.

Dial-A-Ride Eligibility (DAR)

The Dial-A-Ride (DAR) service is not a required service; in fact, most agencies do not provide a DAR service and only provide the required ADA service. Currently, to qualify under DAR eligibility, an applicant needs to be 65 years or older OR has a disability that does not qualify under the ADA. The disability portion is not defined so essentially, anyone who fills out the application can state that they have a disability. There is no physician portion to be filled out on this application.

B-Line receives between 20-25 new Paratransit applications each week. The system is beginning to get impacted as most applicants are approved for service. The more riders and the more impacted the system gets, the more chances that DAR riders could be denied a ride. If there are denials, this could result in DAR not being efficient for the riders and a potential increase in complaints.

In order to continue providing DAR service, staff is recommending two changes to the DAR eligibility; ***increase the age from 65 years old to 70 years old and eliminate service for non-ADA disabled riders.***

These changes will take effect during the 2014/15 FY.

Current DAR riders will not be affected by this decision now. All riders are re-certified every 3 years.

The policy change will come when a DAR rider who was approved because of a non-ADA disability comes up for renewal. At renewal time, the rider will be issued an ADA application to determine if there is a qualifying disability. If their disability qualifies, they will be added to the ADA service. If their disability does not and it is determined, they can ride the fixed route and are under the age of 70, they will not qualify. These changes are necessary to avoid abuse of an impacted system and to continue to provide service to those it is intended for.

At some point in the future, the Paratransit system may be strictly providing ADA service only, however, at this time, with the approval of the above changes, DAR service may still be offered to Paratransit clients.

DISCUSSION:

- b) The goal of BCAG is to maintain and provide a safe Transit System for our riders who utilize B-Line. From time to time, there are situations when a passenger's conduct is so disruptive or offensive that it threatens the welfare, comfort and safety of the passengers and B-Line bus operators and/or the safe operation of the Transit System. In such circumstances, B-Line reserves the right to suspend and/or terminate a passenger's riding privileges. Staff is considering implementing a detailed Disruptive Passenger Conduct Policy. This policy has been established to protect the welfare of,

BCAG Transit Administrative Oversight Committee Item #4

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and to assure the safety and comfort for, the general public riding B-Line vehicles or on B-Line property and to protect the continuing safe operations of the Transit System.

Occasionally, there are times when a passenger's conduct and/or a Service Animal's conduct on a bus is, or becomes, extremely offensive and/or disruptive to the other passengers or to the bus operator, so that this passenger's and/or service animal's conduct threatens the safety & comfort of the passengers and the safe operation of the Transit System.

Each situation involving a disruptive passenger involves a unique set of facts and circumstances and follow-up if any, will be based on a review of these factors. Every effort will be made to mitigate the circumstances when possible. It must be noted that under serious circumstances, a suspension or termination of services may be issued after the first or second incident.

DISCUSSION:

- c) During the Triennial Review, the Reviewers documented a finding with BCAG's suspension policy. BCAG had established a policy of a 15-day suspension of service to Paratransit riders who accumulated three (3) no-shows within a 30-day period. The Reviewers stated that the numerical threshold over a 1-month period would not ensure that suspensions are imposed only on riders who engage in a pattern or practice of missing scheduled trips. BCAG revised the No-Show Suspension Policy to respond to the Triennial Review Finding and to ensure we are applying our suspension policy based on a scale of trips & percentage as addressed by the Reviewers.

The revised Suspension Policy will continue to address the violations during a 1-month period. However, the No-Shows and Late Cancellations will be considered the same infractions. In addition, within each 1-month period, penalties shall be assessed for No-Shows or Late Cancellations by the average # of trips per month & the # of allowable No-Shows/Late Cancellations per month (this is equal to a percentage of the average # of trips per month). Excessive No-Shows/Late Cancellations has a negative impact on the overall performance of the Paratransit service.

DISCUSSION:

- d) BCAG Staff is coming back to the Board to present the findings regarding the ADA compliance of the Butte Regional Transit bus shelters. STOTT & BCAG have researched the FTA DOT/ADA Regulations, DOL Regulations, CAL Building Codes Regulations, and ADA consultants and have found that the bus shelters are meeting ADA compliance. The bus shelters allow a 30"x48" space within the structure of the bus shelters for mobility devices.

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STAFF RECOMMENDATION: Staff is requesting the committee members to review and provide comments on these proposed policy changes. Based on the comments, Staff requests the TAOC support staff's recommendation to the BCAG Board that they adopt the policy changes at their May 2014 Board meeting.

Key Staff: Jon Clark, Executive Director
Cheryl Massae, Human Resources Manager
Jim Peplow, Senior Planner



BCAG Transit Administrative Oversight Committee

Item #5 Information

March 28, 2014

PROPOSED 2014/15 BUTTE REGIONAL TRANSIT (B-LINE) ANNUAL SERVICE PLAN AND BUDGET

PREPARED BY: Julie Quinn, Chief Fiscal Officer

ISSUE: BCAG is responsible for the preparation of the Annual Service Plan and Budget for Butte Regional Transit (B-Line) which is scheduled for adoption at the May BCAG Board of Directors meeting.

DISCUSSION: Staff has prepared the attached Proposed 2014/15 Butte Regional Transit Annual Service Plan and Budget for the Transit Administrative Oversight Committee's review and comments. The final Annual Service Plan and Budget will be presented to the BCAG Board of Directors for adoption at the May 2014 meeting.

In summary, the Proposed 2014/15 B-Line Service Plan & Budget identifies a total operating budget of **\$9,988,327**, including contingency and capital reserve, for both fixed route service and paratransit service in the urban and rural areas of Butte County. This equates to approximately \$658,546 greater than prior year, an increase of 7.0%. This increase is directly tied to the transit services contract, which includes an increase of approximately 4% in the hourly rate. This increase was expected and is consistent with the contracted hourly rate. The following items are major changes from the 2013/14 Budget:

1. An increase of \$459,498 in Purchased Transportation Services.
2. Increase of \$25,000 for ADA Certification. This has been subsidized by BCAG since brought in house. Costs for prior ADA-Ride were as high as \$68,000.
3. Increase of \$72,000 for administrative services. BCAG continues to subsidize the admin services, however, budgeted costs to transit have not increased significantly since FY 08/09.
4. Increase in Printing of \$50,000. As transit fares will change, new brochures will be needed in upcoming year. This increase is offset by the \$12,800 decrease in Bus Stop Signage due to change of brochure category.
5. An increase of \$31,064 in Capital Reserve allocation; remains at 5% of the total budget.
6. An increase of \$18,000 for Maintenance (vehicle/non-vehicle).
7. An increase of \$11,000 for the maintenance of the transit centers.

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STAFF RECOMMENDATION: Staff requests that committee members review and provide comments on the proposed budget at the committee meeting. If no significant issues are raised, staff requests the TAOC support staff's recommendation to the BCAG Board that they adopt the 2014/15 Annual Service Plan and Budget at their May 2014 Board meeting.

Key Staff: Mike Rosson, Transit Manager
 Julie Quinn, Chief Fiscal Officer
 Jon Clark, Executive Director

Introduction & Overview

The Butte County Association of Governments (BCAG) is formed by a Joint Powers Agreement (JPA) between the County of Butte and the incorporated cities of Chico, Gridley, Biggs, Oroville and the Town of Paradise. BCAG is the state designated Regional Transportation Planning Agency (RTPA) and the federally designated Metropolitan Planning Organization for Butte County.

In addition, BCAG's JPA gives responsibility to BCAG for the administration and operation of the region's consolidated public transit service. The BCAG Board of Directors is the policy making authority for transit decisions. The consolidation of the region's transit systems was the result of a multi-year planning effort by the cities, town, county and BCAG staff. Butte Regional Transit or *B-Line* provides fixed route and Paratransit services to the cities, town and the county. B-Line service began in July 2005.

The BCAG Board of Directors is responsible for all policy decisions under the authority of BCAG, as the Policy Board for Butte Regional Transit. Transit policy decisions require a super majority vote of the Board, seven (7) of the ten (10) Board members. The Policy Board reviews and makes decisions based upon the recommendations presented by the Transit Administrative Oversight Committee and BCAG staff.

Purpose of Annual Transit Service Plan and Budget

BCAG is required to annually prepare a transit service plan and budget for Butte Regional Transit as per the JPA. The purpose of this Plan and Budget is to describe the transit services to be provided for the upcoming 2014/15 fiscal year. In addition, operating and capital expenses are identified with available funding sources. The transit service plan and budget also describes the committees involved and established to provide valuable input and oversight on transit related matters.

Transit Administrative Oversight Committee

The Transit Administrative Oversight Committee was established as a result of the transit consolidation. This committee includes administrative and other staff representatives from the county, cities, town and BCAG. This Committee meets as necessary to review and provide guidance concerning the B-Line transit service. The Committee also provides recommendations to the BCAG Board of Directors on the Annual Transit Service Plan and Budget and other transit issues that may arise during the year that are not included in the Plan. All transit policy issues, transit service and operating matters are reviewed with this Committee prior to a recommendation being made to the BCAG Board of Directors.

Social Services Transportation Advisory Council

The BCAG Social Services Transportation Advisory Council (SSTAC) was established under the requirements of the Transportation Development Act (TDA) with representatives established by

statute. The SSTAC serves as an advisory committee to BCAG staff and the Policy Board on all transit issues. In particular, the SSTAC meets on an as needed basis during the year to provide input during the Unmet Transit Needs process.

Highlights and Accomplishments for 2013/14

Fiscal Year 2013/14 was another eventful year for Butte Regional Transit. Following are some of the accomplishments for the year:

- The documents were completed and submitted to FTA for the \$18 million State of Good Repair Program grant. The grant is to help construct the new Maintenance and Operations Facility.
- The environmental documents to acquire the land for the future Maintenance & Operations Facility were completed and submitted to FTA. *Land acquisition is expected to be completed by the end of the fiscal year.*
- BCAG received 14 new Paratransit vans for the Paratransit service.
- Production documents completed for six (6) new Gillig fixed route buses. Expected delivery to be completed by the end of the year.
- BCAG initiated an ADA Bus Stop Compliance plan to review all current bus stops and shelters to evaluate ADA compliance, and to develop a priority list for future improvements.
- BCAG initiated a Transit Service & Bike Path plan to review B-Line's service and to evaluate the Bike paths with Transit.
- Implementation of the HelpCentral.org/211 mobility management website (5316 JARC funded).
- BCAG surplus the three Trolleys during the 2013/14 FY through an auction.
- On pace to have the highest fixed route ridership in history of service.

Goals for 2014/15

- Begin construction of the Maintenance & Operations Facility by October.
- Complete the bus stop ADA compliance plan and start implementation of bus stop improvements.
- Apply for three (3) new fixed routes buses.
- Upgrade the current radio communication system for the Dispatch office, Revenue vehicles, & Support vehicles by the end of the FY.
- Evaluate future funding options for funding Butte Regional Transit, such as off the top of TDA or other equitable funding formulas.
- Change and implement policy changes for the B-Line service and to continue to evaluate current policies.
- Evaluate future funding needs for bus replacement and present a plan to the TAOC and BCAG Board of Directors.
- Evaluate a 'pilot' program for an Express Route from Chico to Sacramento
- Look at viability of combining fixed route and Paratransit farebox recovery ratios.

Funding

B-Line services are funded through a variety of sources. Farebox revenue accounts for approximately 10% of operating costs in rural areas and 20% in urban areas, as required by law. Federal Transit Administration (FTA) Section 5307 contributes up to 50% funding of fixed route operating costs in the Chico urbanized area. FTA Section 5311 funds are available for funding a smaller portion of the rural fixed route service. The remainder of B-Line services is funded by the cities, town and county from their apportioned TDA and STA funds based on a funding formula outlined in BCAG's JPA.

Fixed Assets

EQUIPMENT

The useful life of a large transit bus is 12 years. B-Line received four (4) 40-foot Low Floor Clean Diesel Transit buses through the American Recovery and Reinvestment Act funds in 2011, placed an order for six (6) new 40-Foot Low Floor Clean Diesel buses, will be ordering three (3) new 40-Foot Low Floor Clean Diesel buses during the 2014/15 FY.

One major issue that BCAG will need to address during the 2014/15 fiscal year is the future funding of capital replacement of buses, specifically fixed route buses.

Paratransit vans have historically been purchased using the FTA 5310 program, and funding under this program appears to be sufficient for the time being. During the FY 2013/14, B-Line received fourteen (14) new Paratransit vans.

Since the consolidation of the B-Line in 2005, fixed route buses have been purchased using CMAQ funding. CMAQ funds were used as opposed to LTF to minimize the contribution to the Capital Reserve Account using LTF funds by the Cities, Town and County. However, CMAQ funds are not a stable funding source in that they are competitive and the Cities, Town and County compete for these funds as well.

The need to put a stable funding source in place is necessary to maintain the needed number of buses serving the current B-Line fixed route system, and future system needs.

During the 2014/15 FY BCAG will work with City, Town and County staff to evaluate funding source for future capital replacement of B-Line buses.

SHELTERS

The 2014/15 budget continues to benefit from the current contract with Stott Outdoor Advertising. Since the introduction of this agreement, Stott has installed 50 new bus stop shelters (which include trash and recycling receptacles) countywide, as well as updating and maintaining current assets.

During the 2013/14 fiscal year, BCAG also initiated a comprehensive review of all current stops, both sheltered and non-sheltered, for ADA compliance. The firm of Disabilities

Access Consultants (DAC) was retained to evaluate the five-hundred plus bus stop locations throughout the county to evaluate ADA compliance. During the 2012/13 FY & 2013/14 FY, five-hundred and fifty locations were evaluated.

DAC will develop a computer based program of the bus stop inventory which will identify need compliance improvement, and recommended priorities.

FY 2014/15 Proposed B-Line Budget

The total funding requirements for transit operations is \$9,988,327. This figure represents a \$658,546 (7.0%) increase in Total Operating requirements over the 2013/14 Final budget. The major differences from the 2014/15 Budget are:

1. An increase of \$459,498 in purchased transportation services per the contract with Veolia; (contract rate increase of 4.24%)
2. An increase of \$18,000 for vehicle and non-vehicle maintenance
3. An increase of \$11,000 for Oroville transit center maintenance
4. An increase of printing of \$50,000. Transit fares will change in the next fiscal year, thus new brochures will be needed. This increase is offset by the \$12,800 decrease in Bus Stop Signage due to change of brochure category.
5. An increase of \$25,000 for ADA Certification. This has been subsidized by BCAG since brought in house. Costs for prior ADA-Ride were as high as \$68,000.
6. An increase of \$72,000 for Support Services; BCAG continues to subsidize administrative services, however, budgeted costs to transit have not increased significantly since FY 08/09.
7. An increase of \$31,064 in Capital Reserve allocation; remains at 5% of the total budget.

The following tables outline the proposed 2014/15 B-Line budget in relation to the final 2013/14 B-Line budget.

FISCAL YEAR 2014/15 BUDGET

	FY 2013/14 APPROVED BUDGET	FY 2014/15 DRAFT BUDGET	<i>Difference</i>
OPERATING BUDGET			
OPERATING EXPENSES			
ADMINISTRATION			
Communications	\$ 4,000	\$ -	\$ (4,000)
Printing	10,000	60,000	50,000
Transportation and Travel (training)	4,000	4,000	-
Public Relations	74,000	74,000	-
Paratransit Software License	17,000	15,000	(2,000)
Paratransit ADA Certification	-	25,000	25,000
Support Services	310,000	382,000	72,000
TOTAL ADMINISTRATION	\$ 419,000	\$ 560,000	\$ 141,000
OPERATIONS AND MAINTENANCE			
Fleet Insurance	\$ 346,756	\$ 360,626	\$ 13,870
Maintenance - Vehicle	232,000	225,000	(7,000)
Maintenance - Non-vehicle	-	25,000	25,000
Transit Center Maintenance	12,000	23,000	11,000
Bus Stop Signage	25,000	12,200	(12,800)
Transit Center Staffing	11,100	15,100	4,000
Chico Transit Center Lease	18,000	18,000	-
Purchased Transportation-Fixed Route Services	3,785,185	3,959,467	174,282
Purchased Transportation-Paratransit Services	2,548,842	2,834,058	285,216
Fuel	1,403,797	1,390,500	(13,297)
TOTAL OPERATIONS AND MAINTENANCE	\$ 8,382,680	\$ 8,862,950	\$ 480,270
SUB-TOTAL OPERATING EXPENSES	\$ 8,801,680	\$ 9,422,950	\$ 621,270
APPROPRIATION FOR CONTINGENCIES	\$ 88,017	\$ 94,230	\$ 6,213
CAPITAL RESERVE CONTRIBUTIONS	\$ 440,084	\$ 471,148	\$ 31,064
TOTAL OPERATING REQUIREMENTS	\$ 9,329,781	\$ 9,988,327	\$ 658,546

	FY 2013/14 APPROVED BUDGET	FY 2014/15 PROPOSED BUDGET	Difference
OPERATING BUDGET CONTINUED			
OPERATING REVENUES			
Fixed Route Passenger Fares	\$ 1,429,458	\$ 1,337,380	\$ (92,078)
Paratransit Fares	328,954	360,276	31,322
TOTAL OPERATING REVENUE	\$ 1,758,412	\$ 1,697,656	\$ (60,756)
NON-OPERATING REVENUE			
LOCAL SUPPORT:			
County	\$ 1,536,338	\$ 1,572,019	\$ 35,681
Biggs	6,920	6,967	47
Chico	2,296,865	2,322,311	25,446
Gridley	20,880	21,020	140
Oroville	563,162	594,418	31,256
Paradise	910,582	973,936	63,354
TOTAL LOCAL SUPPORT	\$ 5,334,747	\$ 5,490,671	\$ 155,924
FTA GRANTS-OPERATING EXPENSES	\$ 2,236,622	\$ 2,800,000	\$ 563,378
TOTAL REVENUES	\$ 9,329,781	\$ 9,988,327	\$ 658,546

	FY 2013/14 APPROVED BUDGET	FY 2014/15 PROPOSED BUDGET	Difference
CAPITAL OUTLAY BUDGET			
CAPITAL OUTLAY			
Vehicles	600,000	1,440,000	840,000
TOTAL CAPITAL OUTLAY	\$ 600,000	\$ 1,440,000	\$ 840,000
CAPITAL OUTLAY FUNDING SOURCES			
ARRA (American Recovery & Reinvestment Act)			\$ -
FTA GRANT 5310		-	-
PROP 1B FUNDS	-	-	-
LTF	-	960,000	960,000
CMAQ GRANTS - CAPITAL ACQUISITIONS	-	-	-
TDA CAPITAL RESERVES	600,000	480,000	(120,000)
TOTAL CAPITAL OUTLAY FUNDING SOURCES	\$ 600,000	\$ 1,440,000	\$ 840,000

FY 2014/15 B-Line Proposed Service Plan

Fixed Route Services

Based on the Unmet Transit Needs Assessment, currently; there are no route changes during the 2014/15 FY.

Six intercity fixed-routes are provided on the B-Line. They are summarized below.

Route 20 Chico – Oroville. This intercity route operates between Chico and Oroville seven days a week. Weekday service begins at 5:50 AM and ends at 7:59 PM. Weekend service begins at 7:50 AM and ends at 6:00 PM. Weekday headways on Route 20 are 60 minutes peak, and 120 minutes midday; and weekend headways are 120 minutes. Total round-trip between Chico and Oroville is approximately one hour and 50 minutes with a layover in Oroville.

The major stops and timepoints on Route 20 are: Chico Transit Center, Fir Street Park and Ride, Forest Ave Xfer (WalMart & Bank), Butte County Administration and Oroville Transit Center (Mitchell & Spencer).

Route 30 Oroville – Gridley – Biggs. Route 30 operates between Oroville and Biggs with stops in Palermo and Gridley, Monday through Saturday. Weekday service begins in Oroville at 7:45 AM and ends in Oroville at 5:02 PM. Saturday service begins at 8:47 AM and ends at 4:53 PM. Weekday headways are approximately four hours and Saturday headways are 120 minutes. During the weekday, there is a five-minute layover in Biggs and vehicles go out of service in Oroville between each return trip. On Saturday, there is a

five-minute layover in Biggs and a 15-minute layover in Oroville. Total round-trip travel time between Oroville and Biggs is approximately one hour and 40 minutes.

The major stops and timepoints on Route 30 are: Oroville Transit Center (Mitchell & Spencer), Lincoln & Palermo (Palermo), Heritage Oaks Mall (Gridley) and 6th and B Streets in Biggs.

Route 31 Paradise – Oroville. Route 31 provides one morning trip and one evening trip between Paradise and Oroville on weekdays only. The morning trip begins at the Paradise Transit Center at 6:45 AM and arrives at the Oroville Transit Center (Mitchell & Spencer) at 7:33 AM. The evening trip leaves the Oroville Transit Center at 5:05 PM and ends in Paradise at 5:56 PM. The total travel time between Paradise and Oroville is approximately 50 minutes. Vehicles will go out of service at the end of each trip.

Major stops and timepoints on Route 31 are: Almond & Birch (Paradise), Clark & Wagstaff (Paradise), Clark & Pearson (Paradise), County Public Works (Oroville) and the Oroville Transit Center (Mitchell & Spencer).

Route 32 Gridley – Chico. Route 32 provides one morning trip and one evening trip between Gridley and Chico on weekdays only. The morning trip begins in Biggs at 6:40 AM, serves Gridley at 6:51 AM and arrives at the Chico Transit Center at 7:40 AM. The evening trip leaves the Chico Transit Center at 5:20 PM and ends in Biggs at 6:20 PM. The total travel time between Gridley and Chico is approximately 60 minutes. Vehicles will go out of service at the end of each trip.

Major stops and timepoints on Route 32 are: City Hall - 6th & C St (Biggs), Spruce & SR 99 (Gridley), Midway & Durham Dayton Hwy (Durham), and the Chico Transit Center.

Route 40 Paradise – Chico. Route 40 provides service between Paradise and Chico, seven days a week. Weekday service begins in Paradise at 6:00 AM and ends in Chico at 7:26 PM. Weekday headways are approximately 120 minutes, with more frequent service during the evening peak hours. Saturday service begins at 7:50 AM in Chico and ends at 7:03 PM in Paradise. Sunday service begins at 9:50 AM in Chico and ends at 6:00 PM in Chico. Round trip travel times between Paradise and Chico are approximately an hour and 52 minutes with a 10-minute layover scheduled in Paradise. For most runs, Route 40 alternates with Route 41.

Major stops and timepoints on Route 40 are: Chico Transit Center, Forest Ave Xfer @ WalMart (Chico), Almond & Birch (Paradise) and Skyway & Wagstaff (Paradise).

Route 41 Magalia – Chico. Route 41 provides service between Magalia and Chico, weekdays. Service begins in Magalia at 5:37 AM and ends in Paradise at 6:45 PM. Headways are approximately 130 minutes, with some variation during the peak hours. Round trip travel times between Magalia and Chico are approximately two hours and 10 minutes. For most runs, Route 41 alternates with Route 40. Saturday service is available between Magalia and Paradise on three round trip loops, one in the morning, one midday and one in late afternoon.

Major stops and timepoints on Route 41 are: Skyway & Colter (Paradise Pines), Lakeridge @ Holiday Market (Magalia), Skyway & Wagstaff (Paradise), Almond & Birch (Paradise), Forest Ave Xfer (WalMart & Bank) (Chico) and the Chico Transit Center.

In Chico, there are nine local fixed routes. It is important to note that most routes in Chico are timed to depart the Chico Transit Center at approximately 0:50 minutes past the hour in the mornings and 0:10 minutes past the hour in the afternoons. Also, many of the routes in the system are through-routed (interlined) with each other to improve connectivity and reduce the number of vehicles that are required to operate service. Each of the Chico routes is summarized below.

Route 2 – Mangrove. Route 2 provides service between the Chico Transit Center and Ceres & Lassen via Mangrove and Cohasset. Service is provided every 30-minutes during the peak morning hours and every 60-minutes at all other times of the day. Monday through Friday service begins at 6:15 AM at Ceres & Lassen and ends at Ceres & Lassen at 8:34 PM. Saturday service begins at 8:15 AM at Ceres & Lassen and ends at 6:56 PM at the Chico Transit Center. Round trip running time on Route 2 is approximately 45 minutes with layover time at the Chico Transit Center. During peak times Route 2 is through-routed with Route 7 at Ceres & Lassen.

Major stops and timepoints along Route 2 are: The Chico Transit Center, 5th & Mangrove, Parmac & Rio Lindo, North Valley Plaza and Ceres & Lassen.

Route 3 – Nord/East. Route 3 provides service between the Chico Transit Center and North Valley Plaza via Nord and East. Service is provided every 60-minutes at most times of the day with the exception of several AM peak-hour times where service increases to 30-minutes. Monday through Friday service on Route 3 begins at 6:18 AM at North Valley Plaza and ends at 9:00 PM at the Chico Transit Center. Saturday service begins at 8:50 AM at North Valley Plaza and ends at 7:00 PM at the Chico Transit Center. Round trip running time on Route 3 is 49 minutes with layover time at the Chico Transit Center. Route 3 is through-routed with Route 4 at North Valley Plaza.

Major stops and timepoints on Route 3 are: Chico Transit Center, West 8th Avenue & Nord, East & Nord, East & Esplanade and North Valley Plaza.

Route 4 – First/East. Route 4 provides service between the Chico Transit Center and North Valley Plaza via E. First, Manzanita and East. Service is provided every 60-minutes at most times of the day with limited 30-minute service during peak hours. Monday through Friday service begins at 6:15 AM at North Valley Plaza and ends at 8:59 PM at the Chico Transit Center. Saturday service begins at the Chico Transit Center at 8:50 AM and ends at the Chico Transit Center at 6:59 PM. Round trip running time on Route 4 is 49 minutes with layovers at the Chico Transit Center and North Valley Plaza. Route 4 is through-routed with Route 3 at North Valley Plaza.

Major stops and timepoints on Route 4 are: Chico Transit Center, Chico Junior HS, First & Longfellow, Pleasant Valley HS and North Valley Plaza.

Route 5 – East 8th Street. Route 5 provides service between the Chico Transit Center and the Chico Mall via E. 8th/E. 9th and Forest. Service is provided every 60-minutes most of the time on weekdays with limited 30 minute AM and PM peak hour service and every 60-minutes on Saturdays. Monday through Friday service begins at 6:15 AM at the Forest Ave Xfer (Bank) and ends at 8:34 PM at the Forest Ave Xfer (Bank). Saturday service begins at 8:15 AM at the Forest Ave Xfer (Bank) and ends at 6:59 PM at the Chico Transit Center. Round trip running time on Route 5 is 49 minutes with a layover at the Chico Transit Center.

Major stops and timepoints on Route 5 are: Chico Transit Center, 9th Street & Pine, 8th Street and Highway 32, 8th Street and Olive and the Forest Ave Xfer (Bank).

Route 7 – Bruce/Manzanita. Route 7 provides service between the Forest Ave Xfer (Bank)/Chico Mall and Pleasant Valley High School via Huntington, Forest Ave, Bruce and Manzanita to Ceres/Lassen. Route 7 is the only route in Chico that does not provide service to the Chico Transit Center. Monday through Friday service on Route 7 provides three runs, peak AM and PM hours and one mid-day run. *The mid-day run was determined to be an unmet transit need that was reasonable to meet as part of the 2013/14 Unmet Transits Assessment and Finding.* Service on Monday through Friday begins at 6:45 AM at the Forest Ave Xfer (Bank) and ends at 5:26 PM at Ceres and Lassen. Route 7 is through-routed with Route 2 at Ceres and Lassen. Round trip running time on Route 7 is 51 minutes.

Major stops and timepoints on Route 7 are: Forest Ave Xfer (Bank), Marsh Junior HS, Sierra Sunrise Village, Pleasant Valley HS and Ceres and Lassen.

Route 8 – Nord. Route 8 is a student shuttle that directly connects CSU-Chico with student neighborhoods northwest of the campus. Route 8 also provides a connection to other routes at the Chico Transit Center at 2nd and Salem. Route 8 provides 30-minute service Monday through Friday only while CSU-Chico is in session. Monday through Friday service begins at 7:34 AM at W. 8th Avenue & Nord and ends at 9:34 PM at the Chico Transit Center. Friday service ends at 4:04 PM at the Chico Transit Center. Round trip running time on Route 8 is 24 minutes and there is no scheduled layover time between runs. Route 8 is through-routed with Route 9 at the Chico Transit Center.

Route 9 – Warner/Oak. Route 9 is also a student shuttle that directly connects CSU-Chico with student neighborhoods north and south of the campus. Route 9 also provides a connection to other routes at the Chico Transit Center at 2nd & Salem. Like Route 8, Route 9 provides 30-minute service Monday through Friday only while CSU-Chico is in session. Monday through Friday service begins at 7:33 AM at 4th Avenue & Cedar and ends at 10:01 PM at the Chico Transit Center. Friday service ends at 4:01 PM at the Chico Transit Center. Round trip running time on Route 9 is 27 minutes and there is no scheduled layover time between runs. Route 9 is through-routed with Route 8 at the Chico Transit Center.

Route 9C- Cedar Loop. Route 9C is a limited service loop that only operates when the regular Route 9 (Student Shuttle) is not running, including: Fridays after 4 PM (year round), Saturdays year round and CSUC breaks. Friday afternoon service begins at 5:10 PM at the Chico Transit Center and ends at 8:24 PM at the Chico Transit Center. Saturday service begins at 8:30 AM at the Chico Transit Center and ends at 6:24 PM at the Chico Transit Center. Monday through Friday service, when the regular Route 9 is not running, begins at 7:50 AM at the Chico Transit Center and ends at 8:24 PM at the Chico Transit Center.

Route 15 – Forest/MLK/Park – Lassen/Esplanade. Route 15 provides service along the Esplanade and Park Ave corridor; from Ceres/Lassen at the north end to the Forest Ave Xfer point in the south. Monday through Friday Route 15 provides 20-minute service during AM and PM peak hours and 30 minute service throughout the rest of the day and 60 minutes in the evenings. Saturday Route 15 provides 60 minute service. Route 15 is split into the 15N serving Esplanade/Lassen to the Chico Transit Center and the 15S serving the Chico Transit Center to Park Ave/MLK/ Forest Ave. Round trip running time on Route 15 is approximately 46 minutes for each loop.

Route 15N Monday through Friday service begins at 6:15 AM at Ceres & Lassen and ends at 9:34 PM at Ceres & Lassen. Saturday service begins at 7:50 AM at the Chico Transit Center and ends at 6:34 PM at Ceres & Lassen.

Major stops and timepoints on Route 15N are: Chico Transit Center, Esplanade & 5th, Esplanade & East, Lassen & Cohasset and Ceres & Lassen.

Route 15S Monday through Friday service begins at 6:18 AM at the Forest Ave Xfer (WalMart) and ends at 9:38 PM at the Forest Ave Xfer (WalMart). Saturday service begins at 7:50 AM at the Chico Transit Center and ends at 6:57 PM at the Chico Transit Center.

Major stops and timepoints on Route 15S are: Chico Transit Center, 20th St & E. Park, E. Park & MLK, Forest Ave Xfer (Bank) and Forest Ave Xfer (WalMart).

Route 16 – Esplanade/SR 99. Route 16 provides service from the Chico Transit Center to Esplanade and SR 99. Route 16 provides 60 minute service Monday through Saturday. Monday through Friday service begins at 6:55 AM at Esplanade & SR 99 and ends at 6:55 PM at Esplanade & SR 99. Saturday service begins at 7:55 AM at Esplanade & SR 99 and ends at 5:55 PM at Esplanade & SR 99. Route 16 is through routed with Route 15 at the Chico Transit Center.

Major stops and timepoints on Route 16 are: Chico Transit Center, Esplanade & 5th, Rio Lindo & Parmac, East & Esplanade and Esplanade and SR 99.

Both Oroville and Paradise also have local fixed route service. These services are summarized below.

Route 24 – Thermalito. Route 24 provides service from the Oroville Transit Center (Mitchell & Spencer) along Mitchell and Feather River Blvd to Thermalito and Butte County Public Works/Administration. Route 24 provides 60 minute service Monday through Friday with a 1 hour layover midday. Service begins at 6:34 AM at the Oroville Transit Center (Mitchell & Spencer) and ends at 7:30 PM at the Oroville Transit Center (Mitchell & Spencer). Route 24 is timed to connect with the Route 20 at Butte County Public Works for transfers to Chico. Total round trip running time on Route 24 is 36 minutes. Route 24 is through routed with Route 27.

Major stops and timepoints on Route 24 are: Oroville Transit Center (Mitchell & Spencer), 14th & Grand and Public Works/Administration.

Route 25 – Oro Dam. Route 25 provides service from the Oroville Transit Center (Mitchell & Spencer) to the Feather River Cinemas and Downtown. Route 25 provides 60 minute service Monday through Friday with a 1 hour layover midday. Service begins at 6:12 AM at the Oroville Transit Center (Mitchell & Spencer) and ends at 6:50 PM at the Oroville Transit Center (Mitchell & Spencer). Total round trip running time on Route 25 is 18 minutes. Route 25 is through routed with Route 26.

Major stops and timepoints on Route 25 are: Oroville Transit Center (Mitchell & Spencer) and Feather River Cinemas.

Route 26 – Olive Highway/Kelly Ridge. Route 26 provides service from the Oroville Transit Center (Mitchell & Spencer) along Olive Highway to Gold Country Casino and Kelly Ridge as well as serving the Orange and Acacia area. Monday through Friday Route 26

provides 60 minute service to South Oroville and Gold Country Casino and alternating 120 minute service to Kelly Ridge (5 trips per day) and the Orange & Acacia area (6 trips per day). Service begins at 6:33 AM at the Oroville Transit Center (Mitchell & Spencer) and ends at 6:21 PM at the Oroville Transit Center (Mitchell & Spencer). Total running time for Route 26 is between 28 and 34 minutes depending on which alternate loop it is running. Route 26 is through routed with Route 25.

Major stops and timepoints on Route 26 are: Oroville Transit Center (Mitchell & Spencer), D St & Meyers, Gold Country Casino, Kelly Ridge & Royal Oaks, Oroville Hospital and Orange & Acacia.

Route 27 – South Oroville. Route 27 provides service from the Oroville Transit Center through South Oroville to Las Plumas High School. Route 27 provides 60 minute service Monday through Friday, with a 1 hour layover at 10 AM. Monday through Friday service begins at 7:10 AM at the Oroville Transit Center (Mitchell & Spencer) and ends at 6:50 PM at the Oroville Transit Center (Mitchell & Spencer). Total running time for Route 27 is 20 minutes. Route 27 is through routed with route 24.

Major stops and timepoints on Route 27 are: Oroville Transit Center (Mitchell & Spencer), Las Plumas High School and Meyers & D St.

Route 46 – Feather River Hospital. Route 46 will operate along a fixed route between the Paradise Transit Center and Feather River Hospital. Three trips are made daily between the Paradise Transit Center (Almond & Birch), and Feather River Hospital. The three trips leaving Almond & Birch leave at 9:41 AM, 1:41 PM and 5:01 PM and return to Almond & Birch at 10:08 AM, 2:08 PM and 5:28 PM. Total round trip running time on Route 46 is 30 minutes and is timed to connect with Route 40 at the Paradise Transit Center on both the Eastbound and Westbound runs. Operation of Route 46 will be coordinated through B-Line Paratransit rather than the fixed-route and intercity services (see “B-Line Paratransit” section below).

Major stops and timepoints on Route 46 are: Paradise Transit Center (Almond & Birch) and Feather River Hospital.

Days and Hours of Operation and Fleet Requirement

The following table summarizes the services that will be provided on B-Line and shows the days and hours of operation of all fixed route services. The table also shows how many buses are required for each route (fleet requirement) and peak-hour headways.

Figure 1: Hours of Operation and Fleet Requirements

Route	Hours of Operation	Fleet Requirement	Peak Hour Headway
Intercity Routes			
Route 20 Chico – Oroville	Monday – Friday 5:50 AM – 7:59 PM Saturday/Sunday 7:50 AM – 6:00 PM	3	M-F: 60 min. Sat/Sun: 120 min.
Route 30 Oroville – Gridley – Biggs	Monday – Friday 7:45 AM – 5:02 PM Saturday 8:47 AM – 4:53 PM	1	M-F: 240 min. Sat: 120 min.
Route 31 Paradise – Oroville	Monday – Friday One round-trip: 6:45 AM – 7:33 AM and 5:05 PM – 5:56 PM	0*	M-F: One round-trip
Route 32 Gridley – Chico	Monday – Friday One round-trip: 6:40 AM – 7:40 AM and 5:20 PM – 6:20 PM	1	M-F: One round-trip
Route 40 Paradise – Chico	Monday – Friday 6:00 AM – 7:26 PM Saturday 7:50 AM – 7:03 PM Sunday 9:50 AM – 6:00 PM	3	M-F: 120 min. Sat/Sun: 120 min.
Route 41 Paradise Pines – Chico	Monday – Friday 5:50 AM – 6:45 PM Saturday 9:45 AM – 6:03 PM	1	M-F: 120 min. Sat: three trips in Magalia loop only

Route	Hours of Operation	Fleet Requirement	Peak Hour Headway
Local Chico Routes			
Route 2 Mangrove**	Monday – Friday 6:15 AM – 8:34 PM Saturday 8:15 AM – 6:56 PM	2	M-F: 60 min. Sat: 60 min.
Route 3 Nord/East**	Monday – Friday 6:18 AM – 9:00 PM Saturday 8:50 AM – 7:00 PM	2	M-F: 30 min. Sat: 60 min.
Route 4 First/East**	Monday – Friday 6:15 AM – 8:59 PM Saturday 8:50 AM – 6:59 PM	2	M-F: 30 min. Sat: 60 min.
Route 5 E. 8 th Street	Monday – Friday 6:15 AM – 8:34 PM Saturday 8:15 AM – 6:59 PM	2	M-F: 30 min. Sat: 60 min.
Route 7 Bruce/Manzanita**	Monday – Friday 6:46 AM – 6:36 PM Saturday 8:46 AM – 6:36 PM	1	M-F: 60 min.
Route 8 Nord**	Monday – Thursday 7:00 AM – 7:30 PM Friday 7:00 AM – 3:00 PM	1	M-F: 30 min.
Route 9 Warner/Oak**	Monday – Thursday 7:38 AM – 7:08 PM Friday 7:38 AM – 4:08 PM	1	M-F: 30 min.
Route 15 Park/MLK/Forest- Esplanade/Lassen	Monday – Friday 6:15 AM – 9:38 PM Saturday 7:50 AM – 6:57 PM	5	M-F: 20 min. Sat: 30 min.
Route 16 Esplanade/SR99	Monday – Friday 6:55 AM – 6:55 PM Saturday 7:55 AM – 5:55 PM	1	M-F: 60 min. Sat: 60 min.
Local Oroville/Paradise Routes			
24 Thermalito *Interlined with 27	Monday – Friday 6:34 AM – 7:30 PM	0.5	M-F: 60 min.
25 Oro Dam *Interlined with 26	Monday – Friday 6:12 AM – 6:50 PM	0.5	M-F: 60 min.
26 Olive Highway *Interlined with 25	Monday – Friday 6:33 AM – 6:21 PM	0.5	M-F: 60 min.
27 South Oroville *Interlined with 24	Monday – Friday 7:10 AM – 6:50 PM	0.5	M-F: 60 min.

46 Feather River Hospital-Paradise	Monday – Friday 9:41 AM – 5:28 PM	1 Paratransit vehicle	M-F: three trips daily
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* Route 31 is through-routed with Route 30 and therefore does not require an extra vehicle.

** Routes 2, 3, 4 and 7 are all through-routed with each other at various times. Routes 8 and 9 are through-routed with each other.

Estimated Annual Fixed Route Vehicle Service Hours

Figure 2 provides an estimate of annual vehicle service hours for all B-Line fixed routes. Vehicle service hours are defined as all the time buses are in service during established hours and over established routes, or as specifically authorized by BCAG. All time during which buses are not in service for the purpose of transporting passengers, including but not limited to platform time, driving buses to or from Contractor facilities for any reason (maintenance, fueling, driver relief, etc.) and all other vehicle operations for purposes other than passenger transportation, do not constitute vehicle service hours.

Figure 2: Estimated Annual Fixed Route Vehicle Service Hours

Route	Estimated Annual Vehicle Service Hours
Intercity Routes	
20 Chico – Oroville	7,360
30 Oroville – Gridley – Biggs	1,642
31 Paradise – Oroville	472
32 Gridley – Chico	510
40 Paradise – Chico	5,233
41 Paradise Pines – Chico	4,012
Intercity Subtotal	19,229
Local Chico Routes	
2 Mangrove	4,400
3 & 4 Nord/East-First/East	9,513
5 E. 8 th Street	5,224
7 Bruce/Manzanita	1,849
8 & 9 Nord – Warner/Oak	3,411
9C Warner/Oak (Non-Student Shuttle)	408
15 & 16 Park/MLK/Forest-Esplanade/SR 99	19,722
Local Chico Routes Subtotal	44,527
Local Paradise Route	
46 Feather River Hospital	344
Local Paradise Route Subtotal	344
Local Oroville Routes	
24 & 27 Thermalito & Las Plumas	2,958
25 & 26 Central Oroville & Kelly Ridge	2,869
Local Oroville Routes Subtotal	5,827
TOTAL Estimated Fixed Route Annual Vehicle Service Hours	69,927

B-Line Paratransit

The B-Line Paratransit service has combined the previous Paratransit services provided in Chico, Paradise and Oroville into one service. B-Line Paratransit provides complementary Paratransit service in accordance with the Americans with Disabilities Act. B-Line Paratransit also offers Dial-a-Ride service for seniors and persons with disabilities. To be eligible for the service, riders must be 65 years of age or older or have an impairment that prevents using the fixed route system.

The service area of B-Line Paratransit includes the Chico Urban Area, the entire Town of Paradise and portions of Paradise Pines, Wilderness Way off of Pentz Road, and the greater Oroville area, including the City of Oroville and portions of unincorporated Butte County. Services on B-Line Paratransit are operated during the same time as the fixed route services. Services are operated during the following hours:

- Monday through Friday: 5:50 AM to 10:00 PM
- Saturday: 7:00 AM to 10:00 PM
- Sunday: 7:50 AM to 6:00 PM

BCAG developed Paratransit policies and procedures that took effect on July 1, 2007. The primary purpose is to comply with Federal Transit Administration (FTA) regulations and the Americans with Disabilities Act (ADA). As part of this process, BCAG defined new Paratransit boundaries to ensure ADA compliance and implemented a new eligibility certification process. The complete B-Line Paratransit Policies and Procedures are posted on BCAG's website at www.bcag.org.

Estimated Annual Vehicle Service Hours for Paratransit: 48,000

(Actual hours vary by service area according to the fixed route schedule in that city).

Legal Holidays

Both fixed route and Paratransit service shall not be provided on the following six (6) legal holidays:

1. New Year's Day
2. Memorial Day
3. Independence Day
4. Labor Day
5. Thanksgiving Day
6. Christmas Day



BCAG Transit Administrative Oversight Committee

Item #6 Information

March 28, 2014

FY 12/13 TDA AUDIT COMMENTS

PREPARED BY: Julie Quinn, Chief Fiscal Officer

ISSUE: The fiscal year 12/13 TDA auditors, Richardson & Company, made some comments to the board regarding the administration of the TDA. These comments were not findings on internal controls, but items for consideration. BCAG staff concurs with the comments and will be adjusting TDA policies accordingly.

DISCUSSION: The two areas of concern are the jurisdiction TDA fund tracking and subsequent accumulation of TDA funds.

When TDA funds are claimed on the expenditure plans they are designated for a specific use, such as transit/ bikes/ streets & roads. Our auditors found that, overall, there was not sufficient tracking of the revenues and expenditures by designated category. For example, if the transit revenues were greater than the transit expenditures, there was no tracking of funds reserved for transit versus funds reserved for streets & roads. BCAG staff is discussing various options for mitigating this issue, however, it is important that the jurisdictions accounting of these revenues and expenditures follow more closely the claims on the expenditure plans.

This leads into the second audit issue. As these TDA funds have accumulated over the years some jurisdictions have accumulated significant TDA fund balance on their books. The concern of the auditors is that those funds that have accumulated be spent as originally designated. If the purpose was originally for transit, then they cannot be used for streets and roads unless the reallocation is approved by the Transportation Planning Agency (TPA), which is BCAG.

Staff initial review of fund balance held by jurisdictions indicates that all fund balance held by jurisdictions can be considered available for streets & roads. Staff will be working with jurisdictions individually to clarify policy as it relates to your specific situation.

STAFF RECOMMENDATION: Staff requests that each jurisdiction review their TDA tracking procedures as it compares to the TDA expenditure plans and review with BCAG their intentions for any accumulated TDA fund balance.

Key Staff: Julie Quinn, Chief Fiscal Officer
Ivan Garcia, Programming Manager
Jon Clark, Executive Director

Butte County Inter-City Commuter Bus Feasibility Study

Technical Memorandum Two: Alternatives Analysis



Prepared for the
Butte County Association of Governments

Prepared by



LSC Transportation Consultants, Inc.

Inter-City Commuter Bus Feasibility Study

Technical Memorandum 2: Alternatives Analysis

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August 30, 2013

LSC# 137100

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A key step in the development of a transit plan is the analysis and evaluation of alternatives for the operation of public transit in the study area. Such an analysis requires consideration of a number of factors, including service, capital (vehicles, facilities, and other equipment), institutional and management, and financial alternatives. This document presents a discussion of each of these factors.

The discussion presented in Chapters 2 through 5 is not intended to identify a recommended course of action. Rather, this *Technical Memorandum* outlines the options available to the Butte County Association of Government and B-Line, and explains the advantages and disadvantages of each option. This discussion will provide the basis for recommending a course of action to be presented in the Draft Plan to follow.

The service, capital and financial alternative presented are a means to address the potential needs of the new service. This includes, in particular, new vehicles required, additional staff and possible funding sources.

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The basis for any transit plan is the development of an effective and appropriate service strategy. The types of service provided, their schedules and routes, and the quality of service can effectively determine the success or failure of a transit organization.

Following an examination of the existing conditions of transit service and potential needs / demand for commuter service, a number of service alternatives have been evaluated and are presented in this chapter. The service alternatives are specifically intended to present multiple options for commuter service to Sacramento, with varying levels of financial impacts to BCAG. Each service alternative is described, including operating characteristics, financial characteristics, and capital requirements.

COMMUTER SERVICE ALTERNATIVES

Based on the evaluation of ridership demand and standard transit planning principals, a series of service alternatives were developed and evaluated. Individual service elements are first assessed, and then combined into a series of overall service package alternatives.

Chico – Oroville – Marysville – Sacramento Service: 2 AM and 2 PM runs

If commuter service were to be implemented, a reasonable minimum level of service would be to operate two southbound runs for the morning commute period and two northbound runs in the evening commute period. (Operating only a single run in each commute period has been found to generate poor ridership, as passengers have no options for travel times.) In order to avoid paying drivers for their time throughout the day in Sacramento, both drivers would return to Chico at the end of the second morning run. One bus would be left in downtown Sacramento during the mid-day, in order to minimize mileage on the fleet. The driver of the first run would park the bus and return to Chico on the second bus. In the afternoon, one driver would ride southbound as a passenger, and then wait until the second northbound departure time. Drivers would be paid for this deadhead time, but the costs of this additional deadhead time is less than the avoided costs of the additional fuel and maintenance costs on the second vehicle. As the incremental cost of running the "off-direction" run while carrying passengers over that of operating out-of-service is minimal (a few additional minutes to serve stops), these morning northbound and afternoon southbound runs would be open to riders.

Table 1 presents a reasonable example service schedule for this alternative. Commute period schedule times are selected based upon the AM arrival times and PM departure times in Sacramento that generate the greatest ridership on existing commuter services. These times provide for an 8-hour to 9-hour work day in Sacramento.

Starting at the Chico Transit Center, this route would serve the Park-and-Ride at Fir Street, stop in Oroville (at the Transit Center and possibly at another park-and-ride lot), at Robinson's Corner (intersection of SR 70 and East Gridley Road, to serve Gridley/Biggs and Palermo

residents), the Caltrans District 3 building in Marysville, and a series of eight stops in downtown Sacramento, along J Street, 15th Street, and P Street).¹ This is shown graphically in Figure 1.

TABLE 1: Example Schedule of Chico - Oroville - Marysville - Sacramento Service, 2 AM and 2 PM Runs			
Southbound			
Chico (Transit Center)	5:19 AM	5:49 AM	1:49 PM
Chico (Fir St. PnR)	5:25 AM	5:55 AM	1:55 PM
Oroville (Transit Center)	5:53 AM	6:23 AM	2:23 PM
Robinsons Corner (70/E. Gridley Rd)	6:06 AM	6:36 AM	2:36 PM
Marysville (Caltrans)	6:25 AM	6:55 AM	2:55 PM
Sacramento (15th&K)	7:20 AM	7:50 AM	3:50 PM
Northbound			
Sacramento (15th&K)	8:05 AM	4:05 PM	4:35 PM
Marysville (Caltrans)	9:00 AM	5:00 PM	5:30 PM
Robinsons Corner (70/E. Gridley Rd)	9:13 AM	5:13 PM	5:43 PM
Oroville (Transit Center)	9:32 AM	5:32 PM	6:02 PM
Chico (Fir St. PnR)	10:00 AM	6:00 PM	6:30 PM
Chico (Transit Center)	10:06 AM	6:06 PM	6:36 PM
Total Daily Service Quantities			
In-Service Vehicle-Hours	12.10		
Driver Deadhead Hours	5.53		
In-Service Vehicle-Miles	564		
Source: LSC Transportation Consultants, Inc.			

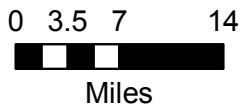
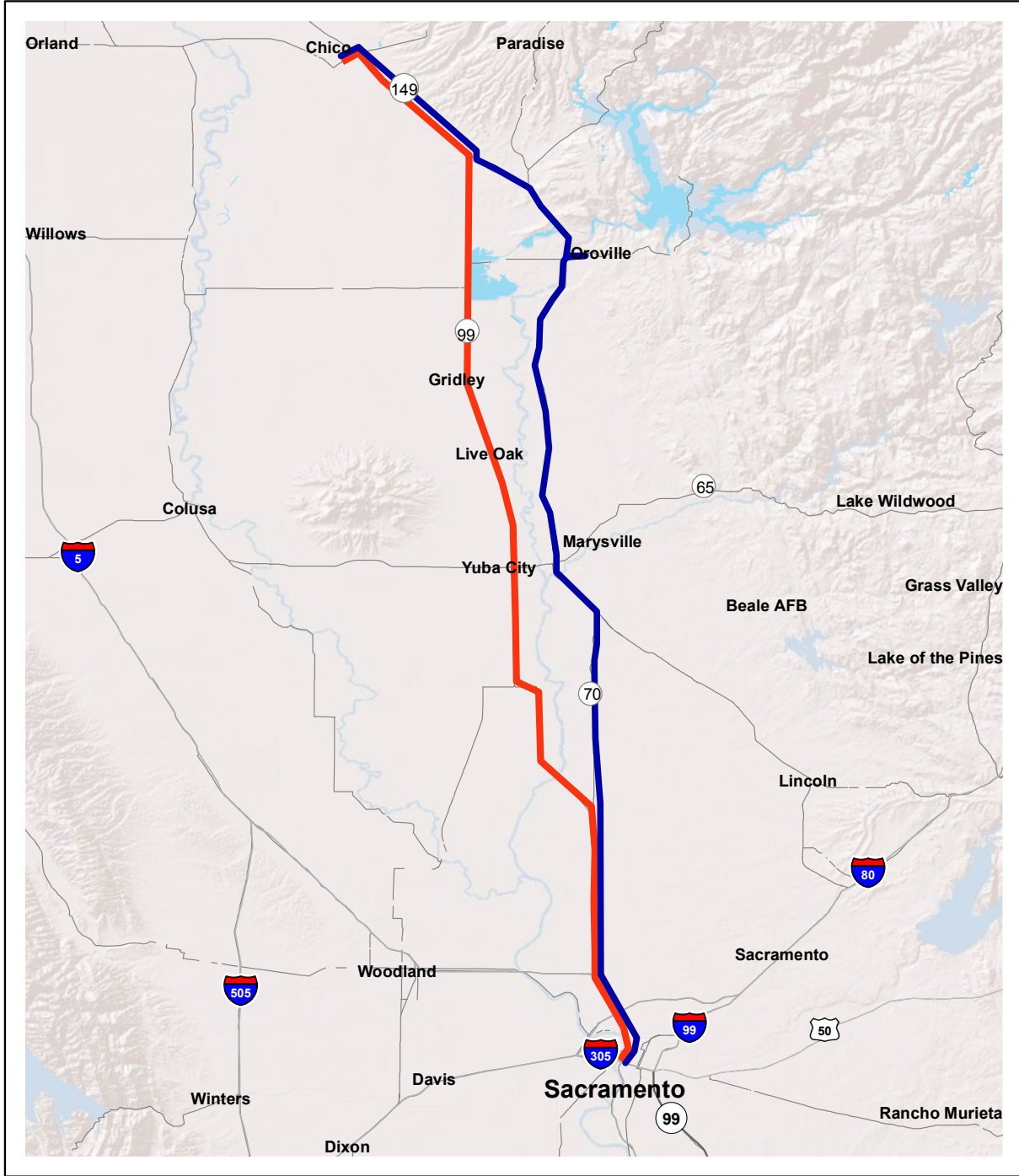
As also shown in Table 1, in total this service would require 12.10 in-service vehicle-hours per day, and travel 564 vehicle-miles per day. The second driver (not driving the off-direction run) would be paid for their travel time as well as the added wait time (over standard break time) in Sacramento. This totals 5.53 additional driver pay hours per day.

The 2012-13 B-Line operating cost equation presented in Technical Memorandum One was factored by an estimated 3 percent inflation rate to yield the cost factors for 2013-14. In addition, a factor for driver deadhead hours was identified based on driver wage rates and overhead costs. The resulting equation for 2013-14 operating costs is as follows:

$$\begin{aligned} \text{Marginal Operating Cost} = & \$51.83 \times \# \text{ of In-Service Vehicle-Hours} + \\ & \$17.55 \times \# \text{ Driver Deadhead Hours} + \\ & \$1.36 \times \text{In-Service Vehicle Miles} \end{aligned}$$

¹ This loop through downtown Sacramento is used by several of the existing commuter bus programs, as it has convenient access to/from I-5, and provides stops within convenient walk distance of all major downtown employment sites.

**FIGURE 1:
Potential Chico - Sacramento Commuter Transit Routes**



- Chico - Oroville - Marysville - Sacramento
- Chico - Gridley - Yuba City - Sacramento

Applying this equation to the daily service quantities, and assuming operation on 244 days per year (reflecting 10 holidays per year observed on work days), this alternative is estimated to incur an operating cost of \$379,000 annually, as shown in Table 2.

Ridership Estimate

Ridership that would be generated by this alternative is estimated by considering the total potential ridership presented in Technical Memorandum 1 (which reflects the quality of service provided at existing peer commuter transit systems serving downtown Sacramento, as well as Butte – Sacramento travel patterns) and applying a series of factors to reflect the quality of service that would be provided under this alternative compared to that of the peer systems. As shown in Table 3, these factors are on a scale from 0.00 to 1.00, where a value of 1.00 reflects no reduction in ridership². A series of three service quality factors were applied for this alternative:

- The most significant factor is the limited service schedule. While the peer systems provide a wide range of service time options, Butte commuters would be limited to the two AM and PM service times. A review of ridership by run for both the YST and the EDCTA systems indicates that the conceptual service times shown in the Butte service currently serve an average of approximately 39 percent of the total daily ridership (38 percent on YST and 39 percent on EDCTA). A corresponding factor is applied.
- Due to the early departure times from Chico and Oroville to meet the start of the work day in Sacramento, the morning commute runs would operate before the availability of local transit services. As few commuter passengers at peer systems access by public transit (the large majority drive to their transit stop), a 2 percent reduction is applied for this factor.
- The lack of a mid-day service also reduces the potential for ridership on the commute service. Based on the relative ridership on mid-day services on the peer systems, a factor of 0.88 is applied.

Daily ridership estimates are calculated by multiplying the potential demand by each of these three factors. The total potential demand reflects residents of those areas of Butte County within a reasonable drive distance of a potential stop. As shown in Table 3, this alternative is estimated to generate 77 one-way passenger-trips per day (or roughly 38 passengers making round-trips) for persons commuting to Sacramento. A similar analysis was conducted for Butte County residents commuting to Marysville/Yuba City. As the schedule would require a long work day (arrival no later than 6:55 AM, with a first departure at 5:00 PM), the “impact of limited schedule times” factor would be even lower than for Sacramento commuters. As a result, only 2 daily-round trips are forecast to be generated by Marysville/Yuba City commuters.

² As an example, a factor of 0.80 indicates that 20 percent of potential ridership would be dissuaded from using the service due to the specific service quality factor.)

TABLE 2: Butte County -- Sacramento Commuter Transit Service Alternatives

	Daily Service Quantities				Annual Service Quantities				Daily Ridership (1-Way Passenger-Trips) (2)			Annual Ridership (1-Way Passenger-Trips) (2)			Annual Operating Subsidy		
	In-Service Vehicle-Hours	Driver Deadhead Hours	In-Service Vehicle-Miles	In-Service Vehicle-Hours	Driver Hours	Deadhead Hours	In-Service Vehicle-Miles	In-Service Vehicle-Hours	Sacramento	Marysville/Yuba City	Total	Sacramento	Marysville/Yuba City	Total		Facebook Revenue (2)	
																	Annual Operating Cost (1)
Individual Service Elements																	
Chico – Oroville – Marysville – Sacramento Service: 2 AM and 2 PM runs	12.10	5.53	564	3,073	1,405	143,256	3,073	1,405	143,256	77	2	79	19,600	500	20,100	\$149,000	\$230,000
Chico – Gridley – Yuba City – Sacramento Service: 2 AM and 2 PM runs	11.50	5.33	540	2,921	1,355	137,160	2,921	1,355	137,160	76	3	79	19,300	800	20,100	\$148,000	\$214,000
Add Mid-day round-trip Chico-Oroville – Marysville to connect with YST service	2.37	0.00	104	601	0	26,416	601	0	26,416	22	2	24	5,600	500	6,100	\$23,000	\$44,000
Add Mid-day round-trip Chico-Gridley-Marysville to connect with YST service	2.33	0.00	98	593	0	24,892	593	0	24,892	19	4	23	4,900	1,000	5,900	\$22,000	\$43,000
Extend One Mid-Day B-Line Route 20 Run from Oroville to Marysville to connect with YST service	1.23	0.00	64	313	0	16,256	313	0	16,256	22	2	24	5,600	500	6,100	\$23,000	\$15,000
Overall Service Scenarios																	
Chico – Oroville – Marysville – Sacramento Service: 2 AM and 2 PM runs With Mid-Day Route 20 Service to Marysville	13.33	5.53	628	3,386	1,405	159,512	3,386	1,405	159,512	99	4	103	25,200	1,000	26,200	\$172,000	\$245,000
Chico – Gridley – Yuba City – Sacramento Service: 2 AM and 2 PM runs With Mid-Day Route 20 Service to Marysville	12.73	5.33	604	3,234	1,355	153,416	3,234	1,355	153,416	98	5	103	24,900	1,300	26,200	\$171,000	\$229,000

Note 1: Applying forecasted FY 2013-14 cost factors. Note 2: Reflecting full potential ridership, not typically achieved until the third year of a new transit service.

While the schedule for this alternative would provide the opportunity for residents of Sacramento, Marysville and Yuba City to travel north to Oroville or Chico on a daily basis, the fact that the schedule does not allow arrival in Chico until 10:06 AM and requires departure at 1:49 PM means that it would not be useful for most potential trips (such as commuting). This potential ridership is assumed to be negligible.

TABLE 3: Ridership Demand for Commute Period Alternatives

	Total Potential Daily 1-Way Psgr Trips	Service Quality Factors			Estimated Actual Daily 1-Way Psgr-Trips
		Impact of Limited Schedule Times	Impact of Lack of Local Transit Connections	Impact of Lack of Midday Service	
To/From Sacramento					
Chico – Oroville – Marysville – Sacramento Service: 2 AM and 2 PM runs	228	0.39	0.98	0.88	77
Chico – Gridley – Yuba City – Sacramento Service: 2 AM and 2 PM runs	225	0.39	0.98	0.88	76
To/From Marysville/Yuba City					
Chico – Oroville – Marysville – Sacramento Service: 2 AM and 2 PM runs	13	0.15	0.98	0.88	2
Chico – Gridley – Yuba City – Sacramento Service: 2 AM and 2 PM runs	26	0.15	0.98	0.88	3

Multiplying by the days of service per year, this alternative would carry an estimated 20,100 one-way passenger-trips per year, consisting of 19,600 generated by commuting to Sacramento and 500 generated by commuting to Yuba City/Marysville. It should be noted that these figures include travel for all purposes, not just commuting. As they are based on total observed ridership on the peer systems (not just commuters), they reflect all travel, including access to intercity transportation services, to the degree that these trips occur on the peer systems.

These figures reflect full potential ridership, once the service is well-established. Typically, new transit services do not achieve full ridership until the third year of operation, as it takes several years for potential passengers to become fully aware of the service, and to make changes in their daily habits needed to use transit service. While the proportion of full ridership that would occur in the first few years of service depends on marketing efforts, ridership is typically 60 percent of ultimate ridership in the first year of service, and 90 percent in the second year.

Fare Revenue

Identifying the appropriate fare level for a potential commuter service should consider several factors:

- Fares charged by existing public transit Sacramento commuter services. As shown in Table 4, base fares range from \$4 to \$7 per one-way trip. As the large majority of riders on these systems use monthly passes, the more important fare is that charged for the monthly pass, which ranges from \$128 to 178.50. Considered on a per-mile basis, the base fare results in a cost per mile ranging from \$0.10 to \$0.17 with an average of \$0.13. A monthly passholder commuting 20 days per month pays a total cost (including any employer subsidy) ranging from \$0.07 to \$0.14, with an average of \$0.10.

TABLE 4: Peer Sacramento Commuter Fares

	Yuba Sutter Transit	El Dorado County Transit	Solano Express	Amador Transit	Placer County Transit	San Joaquin RTD	Average
Base Fare (1-way trip)	\$4.00	\$5.00	\$5.75	\$5.50	\$5.75	\$7.00	\$5.50
Monthly Pass	\$128.00	\$180.00	\$130.00	--	\$178.50	\$160.00	\$155.30
Typical 1-Way Trip Length (Miles)	42	30	43	46	49	46	
Base Fare per Mile	\$0.10	\$0.17	\$0.13	\$0.12	\$0.12	\$0.15	\$0.13
Cost per Mile for Monthly Passholder Commuting 20 Days/Month	\$0.08	\$0.15	\$0.08	--	\$0.09	\$0.09	\$0.10

- With a relatively high route length (and thus cost), a higher fare for service from Butte County would be appropriate. Applying the average peer fare per mile to the 94-mile route length from Chico to Sacramento would indicate a base fare of \$12.30 and a monthly pass cost of \$360.
- The large majority of Sacramento County transit commuters have the cost of their fare (typically monthly pass) subsidized by their employer. Both the State of California and Sacramento County reimburse employees up to \$65 for the cost of their monthly pass.³ This means that most passengers are effectively indifferent to fares up to this level. Evidence of ridership reductions that accompanied EDCTA's fare increase to \$180 indicates that riders are sensitive to fare increases over this point.
- The cost of driving a private vehicle is currently estimated by the Internal Revenue Service to be \$0.24 solely for variable costs (fuel, tires) or \$0.565 if all costs (including depreciation and maintenance) are considered. A commuter driving a solo one-way trip from Chico to Sacramento thus incurs a variable cost of \$22.56, and a total long-term cost of \$53.11. The variable cost of a one-way trip by each member of a two-person carpool is \$11.28, while the total long-term cost is \$26.55.

Overall, a reasonable fare level for a new service would be as follows:

- One-way trip between Butte County and Sacramento – \$10
- Monthly pass between Butte County and Sacramento – \$300
- One-way trip between Butte County and Yuba City/Marysville – \$5
- Monthly pass between Butte County and Yuba City/Marysville – \$150

³ A 2011 survey of El Dorado Transit passengers commuting to Sacramento indicated that employers subsidized transit costs for 89 percent of riders.

At these rates, an existing member of a two-person carpool traveling between Chico and Sacramento purchasing a monthly pass and using it for 20 round-trips per month would save approximately \$150 a month compared with the variable cost of driving, and \$760 compared with the total cost of driving. A commuter currently driving solo would save \$600 per month in variable costs, or an impressive \$2,150 per month in total costs.

Another factor in assessing fare revenue is that many passengers on existing Sacramento commuter services purchase monthly passes, but use them only infrequently (due no doubt to the fact that their employer subsidizes the cost of the pass). This results in relatively high fare revenues per passenger-trip served. As an example, the YST Sacramento Commuter service generates \$4.37 in passenger revenues (largely monthly pass sales) even though the average fare if all passes were used 22 days per year would equal \$3.20. However, given that employees would be shouldering a much higher proportion of total pass costs for a Butte – Sacramento service, no additional fare revenue reflecting low use of passes is assumed.

Applying the recommended fares identified above, and conservatively assuming 100 percent monthly pass ridership, the average fare per one-way passenger trip would be \$8.25 for passengers traveling to/from Sacramento, and \$4.12 for passengers traveling to/from Marysville/Yuba City. The resulting estimated annual fare revenue totals \$149,000 per year, as shown in Table 2.

Subtracting the fare revenues from the operating costs, this alternative would require an estimated operating subsidy of \$230,000 per year. Applying a factor reflecting that Year One ridership would be 60 percent of ultimate ridership, this figure is estimated to be \$289,600 for the first year of service.

Chico – Gridley – Yuba City – Sacramento Service: 2 AM and 2 PM runs

This alternative is identical to the previous alternative, except that the route operates along the SR 99 corridor through Durham, Gridley and Yuba City, rather than the SR 70 corridor. An example schedule is shown in Table 5. Reflecting the additional delays along SR 99 through Yuba City (compared to delays along SR 70 through Marysville), the travel time would be slightly longer though the route would be slightly shorter. In addition to the stops listed, it would be beneficial to establish a park-and-ride in the southern portion of Chico. Also, a park-and-ride stop at the intersection of SR 99 and SR 142 (Oroville Dam Boulevard) could also serve persons driving from Oroville and Paradise. This is show graphically in Figure 1.

The annual operating cost of this service is estimated to be \$362,000, as shown in Table 2. This is \$17,000 less than the previous alternative, as the reductions in mileage-related costs slightly exceeds the increase in hourly-related costs.

As shown in Table 3, the potential ridership of this alternative is essentially identical to that of the previous alternative, at 20,100 passenger-trips per year. Ridership to Sacramento would be slightly lower, but ridership to Yuba City/Marysville would be slightly higher. As the very large proportion of passengers will be park-and-riding, and the benefits of avoiding an auto trip all the way into Sacramento are much greater than the modest incremental drive time to a park-and-ride lot on SR 99, there would be little difference in the propensity of Oroville and Paradise area residents to use either route. Also, while there is greater commuting from Butte County to

Yuba City (in comparison with Marysville), the poor service times for commuters to either location and the fact that employment sites are dispersed over a large area (necessitating use of local transit) means that ridership potential is very low.

Farebox revenue would equal approximately \$148,000, yielding an annual operating subsidy of \$214,000 per year. This is \$16,000 less than the previous alternative.

TABLE 5: Example Schedule of Chico - Gridley - Yuba City - Sacramento Service, 2 AM and 2 PM Runs			
Southbound			
Chico (Transit Center)	5:25 AM	5:55 AM	1:55 PM
Chico (Fir St. PnR)	5:31 AM	6:01 AM	2:01 PM
Gridley (Spruce&99)	5:58 AM	6:28 AM	2:28 PM
Yuba City (Walton Terminal)	6:22 AM	6:52 AM	2:52 PM
Sacramento (15th&K)	7:20 AM	7:50 AM	3:50 PM
Northbound			
Sacramento (15th&K)	8:05 AM	4:05 PM	4:35 PM
Yuba City (Walton Terminal)	9:03 AM	5:03 PM	5:33 PM
Gridley (Spruce&99)	9:27 AM	5:27 PM	5:57 PM
Chico (Fir St. PnR)	9:54 AM	5:54 PM	6:24 PM
Chico (Transit Center)	10:00 AM	6:00 PM	6:30 PM
Total Daily Service Quantities			
In-Service Vehicle-Hours	11.50		
Driver Deadhead Hours	5.33		
In-Service Vehicle-Miles	540		
Source: LSC Transportation Consultants, Inc.			

Operate One Commute Period Bus on the SR 70 Corridor and One on the SR 99 Corridor

A third commute period alternative was considered, in which one AM run and one PM run are operated along the SR 70 corridor, while the other one AM and one PM run are operated along the SR 99 corridor. An example schedule is shown in Table 6. This option would have a cost similar to that of those discussed above (\$378,000 per year). It would have the advantage of providing equity between the two corridors. However, a substantial disadvantage of this option is that passengers parking at an intermediate stop (such as at Robinsons Corner) would have no flexibility on their PM departure time, as only one of the PM routes would return them to their car. As a result, the utility of the service to commuters living outside of Chico would be substantially reduced. There would also be operational problems associated with passengers mistakenly boarding a run that does not take them back to their car (which has long been a problem on the Yuba Sutter Transit services). For these reasons, this option is not considered further.

TABLE 6: Example Schedule With One Trip on Both Routes

Southbound			
Chico (Transit Center)	5:19 AM	5:45 AM	1:49 PM
Gridley (Spruce&99)	--	6:28 AM	--
Yuba City (Walton Terminal)	--	6:52 AM	--
Chico (Fir St. PnR)	5:25 AM	--	1:55 PM
Oroville (Transit Center)	5:53 AM	--	2:23 PM
Marysville (Caltrans)	6:25 AM	--	2:55 PM
Sacramento (15th&K)	7:20 AM	7:50 AM	3:50 PM
Northbound			
Sacramento (15th&K)	8:05 AM	4:05 PM	4:35 PM
Marysville (Caltrans)	9:00 AM	5:00 PM	--
Oroville (Transit Center)	9:32 AM	5:32 PM	--
Chico (Fir St. PnR)	10:00 AM	6:00 PM	--
Yuba City (Walton Terminal)	--	--	5:33 PM
Gridley (Spruce&99)	--	--	5:57 PM
Chico (Transit Center)	10:06 AM	6:06 PM	6:40 PM
Total Daily Service Quantities			
In-Service Vehicle-Hours	12.23		
Driver Deadhead Hours	5.53		
In-Service Vehicle-Miles	556		
Source: LSC Transportation Consultants, Inc.			

Operate Commute Service to Marysville/Yuba City Only, Relying on Yuba Sutter Transit For Connections to Sacramento

Rather than add new service to Sacramento, another potential strategy would be to initiate service only as far as Yuba City or Marysville, where Butte commuters would transfer to Yuba Sutter Transit services. This would have the benefit of significantly reducing the operating costs to B-Line (by roughly half that of the other commute period alternatives. However, there would be two significant disadvantages:

- It would require a transfer between the two transit services. Transit passengers find that the need to transfer significantly degrades the overall attractiveness of a transit trip, particularly in that it introduces uncertainty and the possibility of being stranded by a missed connection. This is particularly true of "discretionary" riders (such as commuters with ready access to a car). Ridership would be reduced on the order of 20 percent.
- More importantly, existing Yuba Sutter Transit runs do not have available excess seating capacity to accommodate additional riders generated by a Butte service. Based on the

ridership estimates, up to approximately 25 passengers would need to be accommodated. A review of the existing YST ridership and capacity per run (as shown in Technical Memorandum One) indicates that none of the existing AM runs have this capacity, and the only PM runs with adequate capacity are either early (such as the 3:30 PM departure) or late (departures after 5:10 PM). Moreover, the YST General Manager indicates that ridership tends to decline when the passengers per run exceeds roughly 75 percent of capacity (as passengers are less certain to get a seat, and less able to “spread out”). Given this, YST would need to operate additional buses to accommodate Butte County commuters.

As there is little opportunity for cost savings, as this strategy would require detailed agreements for cost and revenue sharing between YSTA and B-Line, and as ride quality (and thus ridership) would be degraded, this option is not considered further.

Add One Mid-day Round-Trip Between Chico-Oroville-Marysville to Connect with YST service

Ridership data from the peer Sacramento commuter systems indicates that providing mid-day service benefits overall service quality and ridership in several ways:

- It allows opportunities for commuters to work half-day.
- It provides “emergency ride home” opportunities to persons who otherwise would be concerned that a mid-day need to deal with an emergency (such as a sick child) leaves them stranded at work.
- It substantially improves the potential for non-commuters (such as intercity travelers) to use the transit service.

Under this alternative, B-Line would operate a single mid-day trip between Chico and Marysville via Oroville. A review of Yuba Sutter Transit schedules indicates that the most effective schedule would be to arrive in Marysville in time to transfer to the 1:00 PM southbound YST departure (from the Yuba County Public Works complex in Marysville) to Sacramento, and then wait for the 1:15 PM arrival at this same location from Sacramento. An example schedule is shown in Table 7. In combination with the commuter runs, this schedule would allow a morning stay in Sacramento from 7:20 AM to 12:07 PM, or an afternoon stay in Sacramento from 2:07 PM to 4:35 PM.

This service would increase ridership, both on the new runs as well as on the commute-period runs. An analysis of ridership by run on the peer systems, factored by the relative total demand and the various service quality factors, results in the ridership estimates shown in Table 8. As shown, a total of 24 additional daily one-way passenger trips would be added to the commute-only ridership by this alternative. This corresponds to approximately 6,100 passenger-trips per year.

Considering that some of this ridership represents incremental ridership on the commuter runs, that some of the ridership would be to/from Marysville, and that the remaining ridership would be distributed in both directions, the typical ridership added to the YST service would be

TABLE 7: Example Schedule of Midday Chico - Oroville - Marysville Connection to YST Sacramento Service

Southbound	
Chico (Transit Center)	11:49 AM
Chico (Fir St. PnR)	11:55 AM
Oroville (Transit Center)	12:23 PM
Robinson's Corner (SR 70/E. Gridley Road)	
Marysville (Yuba County Govt. Center)	12:55 PM
YST Departure to Sacramento	1:00 PM
Sacramento (15th&K)	2:07 PM
Northbound	
Sacramento (15th&K)	12:07 PM
YST Arrival in Marysville (Yuba County Govt. Center)	1:15 PM
B-Line Departure From Marysville	1:20 PM
Oroville (Transit Center)	1:52 PM
Chico (Fir St. PnR)	2:20 PM
Chico (Transit Center)	2:26 PM
Total Daily Service Quantities	
In-Service Vehicle-Hours	2.37
Driver Deadhead Hours	0.00
In-Service Vehicle-Miles	104
Source: LSC Transportation Consultants, Inc.	

TABLE 8: Ridership Demand for Midday Period Alternatives

	Total Potential 1-Way Psgr Trips	Impact of Limited Schedule Times	Impact of Lack of Local Transit Connections	Impact of Transfer	Estimated Actual 1-Way Psgr-Trips
To/From Sacramento					
Add Mid-day round-trip Chico-Oroville – Marysville to connect with YST service	55	0.60	0.90	0.75	22
Add Mid-day round-trip Chico-Gridley-Marysville to connect with YST service	54	0.60	0.80	0.75	19
To/From Marysville/Yuba City					
Add Mid-day round-trip Chico-Oroville – Marysville to connect with YST service	3	0.75	0.90	1.00	2
Add Mid-day round-trip Chico-Gridley-Marysville to connect with YST service	6	0.75	0.80	1.00	4

approximately 8 passengers. As shown in Technical Memorandum One, these YST runs are operated using 41 passenger buses, with average passenger boardings per run of 23 to 24. There would therefore be adequate capacity on existing YST runs to accommodate this additional ridership. Provision of this mid-day service would therefore increase farebox revenues on YST, without triggering the need for additional service and associated costs.

The additional ridership would generate an estimated \$23,000 per year in increased farebox revenues to B-Line (as well as additional fares on YST). Subtracting these revenues from the operating costs, providing mid-day service under this alternative would increase operating subsidy needs by \$44,000 per year.

Add Mid-Day Round-Trip Chico-Gridley-Marysville To Connect With YST Service

This option is identical to that previously discussed, except that service would be provided along the SR 99 corridor rather than the SR 70 corridor. As the YST mid-day runs do not serve a consistent location within Yuba City, the B-Line service would still terminate at the Yuba County Public Works complex in Marysville, along SR 20 just east of the Sacramento River. An example schedule is shown in Table 9.

TABLE 9: Example Schedule of Midday Chico - Gridley - Marysville Connection to YST Sacramento Service	
Southbound	
Chico (Transit Center)	11:50 AM
Chico (Fir St. PnR)	11:56 AM
Gridley (Spruce&99)	12:23 PM
Marysville (Yuba County Govt. Center)	12:55 PM
<i>YST Departure to Sacramento</i>	<i>1:00 PM</i>
<i>Sacramento (15th&K)</i>	<i>2:07 PM</i>
Northbound	
<i>Sacramento (15th&K)</i>	<i>12:07 PM</i>
<i>YST Arrival in Marysville</i>	<i>1:15 PM</i>
B-Line Departure From Marysville	1:20 PM
Gridley (Spruce&99)	1:52 PM
Chico (Fir St. PnR)	2:19 PM
Chico (Transit Center)	2:25 PM
Total Daily Service Quantities	
In-Service Vehicle-Hours	2.33
Driver Deadhead Hours	0.00
In-Service Vehicle-Miles	98
Source: LSC Transportation Consultants, Inc.	

This alternative would be approximately \$2,000 less per year to operate than the previous alternative (a total of \$65,000). Ridership would be slightly (200 passenger-trips per year) lower, reflecting the greater population along the SR 70 corridor as well as the greater local transit service in Oroville. Subtracting the \$22,000 in estimated farebox revenues, this option would require on the order of \$43,000 per year in operating subsidy (\$3,000 more than the previous alternative).

Extend One Mid-Day B-Line Route 20 Run from Oroville to Marysville

Rather than operating a new mid-day run from Chico to Marysville, another less-costly option would be to operate a single daily run between Oroville and Marysville, as an extension of Route 20. This would work well in the northbound direction, as the 1:20 PM departure from Marysville would roughly coincide with the existing 1:50 PM Route 20 departure from Oroville. In the southbound direction, the 12:23 PM departure from Oroville for a 12:55 arrival in Marysville does not correspond well with existing Route 20 southbound arrivals into Oroville (at 11:38 AM and 1:38 PM). To avoid a long wait and transfer in Oroville (which would significantly impact the convenience of this service, particularly in light of the need to also transfer in Marysville), either an existing Route 20 run would need to be modified, or an additional southbound run added. Assuming existing service is modified, only the costs of the incremental service between Oroville and Marysville would be incurred. As shown in Table 2, this is estimated to equal approximately \$38,000 per year. As this is significantly more cost-effective than duplicating service between Chico and Oroville, this option for mid-day service is assumed for the remainder of this analysis.

SERVICE ALTERNATIVE PERFORMANCE ANALYSIS

Table 10 presents an analysis of the various alternatives, for three key transit performance measures:

- **Passenger-trips per vehicle service-hour** is a key measure of service effectiveness. As indicated, the commute period alternative would carry 6.5 to 6.9 passenger-trips per vehicle service-hour. This figure is highest for the mid-day service extension of Route 20 to Marysville, at a net increase of 19.5 passenger-trips per additional hour operated.
- The **operating subsidy per passenger-trip** measures the cost efficiency of public transit funding. The commuter services would require \$10.65 to \$11.44 per passenger-trip. The mid-day services would be substantially more effective, as low as \$2.46 per passenger-trip for Route 20 extension to Marysville.
- The **farebox return ratio** is the ration of passenger fares (including monthly pass sales revenue) divided by the operating cost. It is the key measure required by the Transportation Development Act. This measure is calculated to be 39 to 41 percent for the commute-only alternatives, up to 61 percent for the incremental extension of Route 20 to Marysville. Note that these figures consider marginal operating costs only, and do not include any allocated fixed costs in the denominator.

TABLE 10: Service Alternatives Performance Measures

	Passenger-Trips per Vehicle Service Hour	Operating Subsidy per Passenger-Trip	Farebox Return Ratio
Individual Service Elements			
Chico – Oroville – Marysville – Sacramento Service: 2 AM and 2 PM runs	6.5	\$11.44	39%
Chico – Gridley – Yuba City – Sacramento Service: 2 AM and 2 PM runs	6.9	\$10.65	41%
Add Mid-day round-trip Chico-Oroville – Marysville to connect with YST service	10.1	\$7.21	34%
Add Mid-day round-trip Chico-Gridley-Marysville to connect with YST service	9.9	\$7.29	34%
Extend One Mid-Day B-Line Route 20 Run from Oroville to Marysville to Connect with YST Service	19.5	\$2.46	61%
Overall Service Packages			
Chico – Oroville – Marysville – Sacramento Service: 2 AM and 2 PM runs With Mid-Day Route 20 Service to Marysville	7.7	\$9.35	41%
Chico – Gridley – Yuba City – Sacramento Service: 2 AM and 2 PM runs With Mid-Day Route 20 Service to Marysville	8.1	\$8.74	43%

In sum, the commute service along the SR 70 corridor through Marysville has slightly better or equivalent performance under all three measures compared with the SR 99 corridor option. Of the three mid-day alternatives, the extension of Route 20 to Marysville has substantially better performance under all three measures.

SERVICE SCENARIOS

Based on the results of the performance analysis, the preferable individual alternatives were combined to generate the following two scenarios.

Chico – Oroville – Marysville – Sacramento Commute Service with Route 20 Mid-day Extension to Marysville

Under this scenario, two runs would be operated in the AM period and two runs in the PM period along the SR 70 corridor between Chico and Sacramento via Marysville, and one mid-day run of existing Route 20 service between Chico and Oroville would be extended to Marysville to provide direct connections with YST service to Sacramento. Key characteristics of this alternative, as shown in the bottom portions of Tables 2 and 10, are as follows:

- Annual Operating Cost -- \$417,000
- Daily One-Way Passenger-Trips – 103
- Annual One-Way Passenger-Trips – 26,200
- Annual Farebox Revenues -- \$172,000
- Annual Operating Subsidy -- \$245,000
- Passenger-Trips per Vehicle-Hour of Service – 7.7
- Operating Subsidy per Passenger-Trip -- \$9.35
- Marginal Farebox Return Ratio – 41 percent

Chico – Gridley – Yuba City – Sacramento Commute Service with Route 20 Mid-day Extension to Marysville

This scenario would consist of two runs operated in the AM commute period and two runs in the PM commute period along the SR 70 corridor between Chico and Sacramento via Marysville, and one mid-day run of existing Route 20 service between Chico and Oroville would be extended to Marysville to provide direct connections with YST service to Sacramento. Key characteristics of this alternative, as shown in the bottom portions of Tables 2 and 10, are as follows:

- Annual Operating Cost -- \$400,000
- Daily One-Way Passenger-Trips – 103
- Annual One-Way Passenger-Trips – 26,200
- Annual Farebox Revenues -- \$171,000
- Annual Operating Subsidy -- \$229,000
- Passenger-Trips per Vehicle-Hour of Service – 8.1
- Operating Subsidy per Passenger-Trip -- \$8.74
- Marginal Farebox Return Ratio – 43 percent

This chapter provides options and strategies to address the various capital needs associated with a commuter transit program, including the transit vehicle fleet and bus stop improvements.

CAPITAL ALTERNATIVES

Bus Fleet Expansion

The vehicle requirements for commuter services are very different than the standard vehicles used for local services. As the travel length is significantly longer with commuter routes, providing increased comfort and amenities is key in encouraging people to choose transit over personal vehicles. On commuter buses, or “over-the-road coaches”, these amenities typically include:

- Forward facing seats with higher seat backs and armrests
- Lighting at each seat
- Climate control at each seat
- Wi Fi
- Luggage racks

Depending on the make and model of vehicle purchased, other common amenities include reclining seats, footrests and audio/video components.

In order for BCAG to obtain 5311(f) funding for the fleet, each vehicle must qualify as an over-the-road coach and include luggage storage areas. Over-the-road coaches are typically classified as buses with elevated passenger decks over a luggage storage area, however some models have luggage storage inside the vehicle. These types of vehicles range from 35' to 60', and are available in a wide range of fuel options, including hybrid, CNG and diesel. These fuel types would allow the new vehicles to be consistent with the current BCAG fleet and air quality goals in place.

For the service plans discussed in Chapter 2, BCAG would need to purchase a minimum of 2 vehicles for operations and one additional vehicle for back up, for a total of 3 vehicles. Based on the ridership estimates presented in Chapter 2, 35-foot to 40-foot passenger vehicles would accommodate the number of passengers on each route, as well as allowing for additional space. Having extra seating capacity available is an important consideration, for several reasons:

- Most importantly, excess seating capacity provides passengers with surety that a seat will always be available, and that they will not be “stranded” due to lack of available seating.
- Additional seating provides capacity for any unusual peaks in demand (such as at the beginning or end of college semesters).

- When not needed for other passengers, additional capacity allows passengers a more comfortable ride, thereby encouraging additional ridership.

The cost of these vehicles depends on the type of fuel, and generally range between \$350,000 for diesel to upwards of \$500,000 for hybrid electric. CNG models tend to fall in the middle, at roughly \$400,000 per unit.

Park and Ride Facilities

Another key component of the success of a commuter service is adequate areas for passengers board the bus. As departures for the Sacramento service would occur prior to the daily start of the current B-Line fixed route system, using transit to get to the commuter service is not possible. As a result, and consistent with ridership patterns at similar existing commuter transit services, the large majority of riders will arrive at the transit stop by auto. Park and Ride lots are common boarding areas that are used for commuter services, as they provide enough parking and are typically found on major roadway areas that are easily accessible by both passengers and the bus.

The service alternatives in Chapter 2 would utilize the existing lots in both potential service corridors, including the parking lot at the Chico Transit Center, the Chico Fir Street park and ride, the Oroville Transit Center and the Oroville park and ride. In addition to these facilities, at least one additional park and ride should be developed for either scenario. For the Chico – Oroville – Marysville – Sacramento service, a new lot in Gridley at Robinson’s Corner (SR 70 and East Gridley Road) would provide parking and access for passengers from Gridley, Biggs and Palermo. For the Chico – Gridley – Yuba City – Sacramento service, a park and ride facility at Oroville Dam Road and SR 99 would provide parking and access for Oroville, Paradise and Thermalito passengers. In both locations, the vehicle would not have to travel off the main highway corridor, making these stops easily accessible without needing a lot of time.

Signage

The final capital element would be new signage at stop locations, as well as revised signage at existing stops, for the commuter route. New signs would need to be placed at the new park and ride locations, as well as in the downtown Sacramento area. BCAG will need to coordinate with Sacramento RT to get B-Line information on the signage in the downtown transit core area, as well as to get general approval to use the stops to ensure coordination with other services.

Downtown Area Daytime Bus Storage

The service alternatives presented in Chapter 2 would result in storage of one bus over the mid-day period in downtown Sacramento. At present, other commuter services have an arrangement with Sacramento RT to store buses beneath the Capital Center Freeway (near P Street and 29th Street). A similar agreement could probably be developed between B-Line and Sacramento RT.

Operate Commuter Bus as Short-Term Pilot Program and Contractor

One alternative to B-Line implementing in-house operation of a permanent commuter transit service would be to implement a pilot program. Pilot projects are common when starting new transit services, as it allows for both the transit agency and the public to gauge the effectiveness of a service without fully committing to a long-term project and funding at the start.

As part of this, the service could be operated through a contractor (such as through an amendment to the existing service contract), with the service contractor providing the necessary three-bus fleet. This would eliminate the need for BCAG to purchase vehicles for the service. Should the service prove successful and be approved for long term operation, the agency could include the service into a single service contract and/or obtain vehicles. There are two benefits to initially operating the service in this manner, from the agency's perspective: 1) a large funding commitment is not required up front for capital items, staff, etc., and 2) if the project is not successful or does not meet minimum performance standards, it can just be eliminated and the agency is not left with buses they can no longer use.

Cost Examples

One method for operating the service, as discussed above, is to have a contractor provide drivers plus vehicles for the commuter routes. Doing so would allow BCAG to have limited capital investment in a pilot project until it is determined whether the service is successful or not. Amador Stage Lines was contracted by the North Lake Tahoe Resort Association to provide skier shuttle services in Lake Tahoe, utilizing Amador Stage Line vehicles and drivers, and included fuel, maintenance and reporting. The costs incurred to the Resort Association were on a per vehicle per day basis; for a commuter service, it is estimated that the cost would be roughly \$900 per bus per day. Based on the number of days the commuter service would operate, these costs could total on the order of \$457,000 per year. Note that this is a rough estimate of costs, and the only way to confirm actual costs is to hold negotiations with potential contractors. This option would also not include the costs to operate the mid-day Route 20 extension of service to Marysville, which would add approximately \$38,000 in operating costs per year.

Placer County Transit (PCT) operates a commuter bus service into Sacramento using a contract service with Amador Stage Lines. Unlike the first example, this contract is only for the drivers; PCT supplies management, dispatch, vehicles and other supplies. The contract agreement is currently set at \$104.81 per vehicle revenue hour, plus \$53.27 per day for driver transport costs. The driver shift hours are 16 hours in the morning and 17 hours in the afternoon, however the actual revenue hours are only 6 hours each for the morning and afternoon shifts. As such, there is a significant amount of deadhead time, which contributes to the higher per revenue hour costs. It is important to note that the contract cost does include the storage of buses at Amador Stage Line's bus yard during the middle of the day, but does not include

maintenance. Given the potential revenue hours for operating the service from Butte County, and applying the PCT costs, the service would cost on the order of \$330,000 per year, depending on which alternative is chosen. This would not include the Route 20 connection scenarios to Marysville, which would be operated by B-Line and would subsequently increase overall costs by \$38,000. Further, vehicles would need to be purchased.

Summary

The pilot program option offers a number of advantages to Butte County, as discussed above. Similarly, both of the cost examples shown also have advantages. While operating the service wholly with a contract, meaning vehicles plus drivers, may cost more than what it would cost for BCAG, it eliminates the need to purchase vehicles up front. This, in turn, would reduce the long term commitment for BCAG. Having a contractor provide only the drivers could reduce operating costs, based on the PCT contract costs, and may be a more long term solution should the program prove successful, at which time vehicles could be purchased by BCAG.

Marketing for Commuter Services

Any new service needs to be marketed appropriately to ensure that the widest audience possible is aware of the service. In addition to standard methods, such as advertising in local media and on the agency's website, advertising can be done through coordination and partnerships with other agencies and businesses. In general, social media is important to commuters. Email updates directly from B-Line / BCAG would keep riders aware of the service, in addition to other social media channels like Facebook and Twitter.

Advertising the commuter service through Sacramento employers, such as the State government, would likely reach a large majority of potential passengers. The marketing would include information regarding the subsidy currently provided by the State for transit passes. At the moment, this is roughly 75 percent of the cost for a monthly pass, up to a maximum of \$65 per month.

Information for the commuter route should be marketed through the CSU Chico offices, as it is assumed that not only employees would use the service, but also students who may want to get to Sacramento for other purposes, such as Amtrak service. Both printed media (newspapers, flyers, etc) and the website would be good places for advertisements.

Coordination with nearby Transportation Management Associations (TMAs) is critical. These associations manage transportation efforts in a regional context, and including information about multiple transit agencies and their services. Presently, Butte County does not have a TMA, however the nearby Yuba / Sutter TMA and the Sacramento TMA could be utilized as a means to disseminate information. These website could include initial advertisements regarding the start of the service, as well as ongoing email blasts and general links to the Butte County commuter service schedules / maps.

Coordination of Services with Yuba/Sutter Transit

All of the potential service alternatives, as well as the service scenarios with the Route 20 extension, would stop in either Marysville or Yuba City. As such, it would be beneficial for BCAG to coordinate and work together with Yuba / Sutter Transit to ensure both services work in concert with one another. Discussions between agencies would include agreements for use of bus stops, mutual assist (such as if vehicles break down in route and maintenance is required), maintenance emergencies and other similar scenarios.

Coordinate and Communicate with Sacramento RT

BCAG/B-Line would also need to coordinate with Sacramento RT, as the service would be entering their jurisdiction and using their system's stops. Coordination with Sacramento RT would include developing agreements that allow B-Line to operate services in the downtown area (similar agreements are in place with Yuba / Sutter Transit and El Dorado Transit), as well as an agreement for use of stops and coordination with the other services in the area, and optimally for mid-day storage.

Develop and Implement Performance Monitoring and Goals

As with any new service, it is important to have performance goals and measures in place so that the service can effectively be evaluated. The following goals, performance measures, and standards are designed to reflect the adopted policy statements of the region. Goals establish general direction for policies and operation and are value-driven providing long-range perspective. Standards are quantifiable observable measures that reflect achievement of the goals. The performance measures provide the mechanism for judging whether or not the standards have been met.

Three major goals are identified: a service efficiency goal (reflecting efficient use of financial resources), a service effectiveness goal (reflecting effectiveness in serving passengers), and a service quality goal. These measures can be used to determine whether the service is meeting minimum goals, something that is particularly important in the case of operating a pilot program.

Standards are provided as appropriate, based upon observed performance of similar commuter services in California.

Service Efficiency Goal

To maximize the level of services that can be provided within the financial resources associated with the provision of transit services. The standards should not be strictly applied to new routes for the first two years of service, so long as 60 percent of standard is achieved after one full year of service and a favorable trend is maintained.)

Farebox Recovery Ratio Standard – The ratio of farebox income to operating costs should meet or exceed 30 percent.

Subsidy Standard – The public operation/administrative subsidy per passenger-trip for service should not exceed \$15, and should be adjusted annually to account for inflation.

Service Effectiveness Goal

To maximize the ridership potential of B-Line's potential commuter service. (The standards should not be strictly applied to new routes for the first two years of service so long as 60 percent of standard is achieved after one year and a favorable trend is maintained.)

Service Effectiveness Standard – Serve a minimum of 6 passenger-trips per vehicle service hour.

Service Quality Goal

To provide safe, reliable, and convenient transit services.

Service Availability Standard – Provide transit service to employment centers that can support commuter service consistent with the service efficiency and effectiveness goals.

On-Time Performance Standard – 90 percent of all trips should be operated "on-time," defined as not early, and no more than 5 minutes late.

Missed Trips Standard – The proportion of runs not operated or more than 15 minutes late should be no more than 1 percent.

FINANCIAL SOURCES

Funding Source Overview

Transit funding is obtained from multiple sources, with the most prominent being from Federal and State grant and other programs. Transit funding (not including passenger revenues), particularly in California, can be complicated due to the many available sources. The following is a summary of the available funding sources, beyond the standard funding used for existing fixed route operations and capital needs, and includes discussion (where applicable) regarding the new changes resulting from Moving Ahead for Progress in the 21st Century (MAP-21). It should be emphasized that there is a high degree of uncertainty regarding many of the transit funding programs over the long-term, as these depend on future decisions regarding public funding priorities.

Federal Funding Sources

The Federal Transportation Administration has numerous grant programs available to transit agencies for both operating and capital assistance. Eligibility in many programs are dependent upon population, distinguishing between “urban” and “nonurbanized” areas for funding allocations. Those applicable to Butte County are FTA 5307, 5311(f), 5339 and Congestion Management / Air Quality (CMAQ), each of these is discussed in detail below.

FTA Section 5307 Urbanized Area Formula Grant

The largest of FTA's grant programs, this program provides grants to urbanized areas (50,000 population or more per the US Census) to support public transportation. Funding is distributed by formula based on the level of transit service provision, population, and other factors. The program remains largely unchanged with a few exceptions:

- *Job access and reverse commute activities now eligible:* Activities eligible under the former Job Access and Reverse Commute (JARC) program, which focused on providing services to low-income individuals to access jobs, are now eligible under the Urbanized Area Formula program. This includes operating assistance, with a 50 percent local match required for job access and reverse commute activities. In addition, the urbanized area formula for distributing funds now includes the number of low-income individuals as a factor. There is no floor or ceiling on the amount of funds that can be spent on job access and reverse commute activities.
- *Expanded eligibility for operating expenses for systems with 100 or fewer buses:* MAP-21 expands eligibility for using Urbanized Area Formula funds for operating expenses. Previously, only urbanized areas with populations below 200,000 were eligible to use Federal transit funding for operating expenses. Now, transit systems in urbanized areas over 200,000 can use their formula funding for operating expenses if they operate no more than 100 buses. Systems operating between 76 and 100 buses in fixed route service during peak

service hours may use up to 50 percent of their “attributable share” of funding for operating expenses. Systems operating 75 or fewer buses in fixed-route service during peak service hours may use up to 75 percent of their “attributable share” of funding for operating expenses. This expanded eligibility for operating assistance under the urbanized formula program excludes rail systems.

In Fiscal Year 2013, this program has a total of \$4.367 billion, while this increases to \$4.428 billion in Fiscal Year 2014.

FTA Section 5311(f) Intercity Bus Service Grant

FTA 5311 funds are typically allocated to rural areas (under 50,000 population) for operating expenses with fixed route service. However, 15 percent of these funds are allocated for Intercity Bus Programs under subsection (f). The program is specific to intercity bus transportation programs that link urbanized and non-urbanized area, contributing to greater regional and statewide connections. Criteria for intercity bus services includes:

- Regularly scheduled bus service, available to the general public, operating on fixed-routes to more distant points (greater than 50 miles from the point of origin);
- Making limited stops;
- Connecting two or more areas not in close proximity (greater than 15 miles apart);
- Capacity for transporting baggage (racks above seating or in exterior luggage areas); and
- Provide meaningful connections and reasonable layover times

Funding is available for operations and capital assistance, including bus purchase, bus-related equipment (AVL, ITS etc), transit infrastructure (bus shelters and benches, security features, etc) and planning / marketing studies. Per Caltrans, maximum award limits are as follows: \$300,000 for operations; \$300,000 for bus purchases; \$200,000 for bus related equipment; \$200,000 for transit infrastructure; and \$100,000 for planning / marketing studies. The maximum percent federal share for operations is 55.33 percent, while the remaining capital components have a maximum federal share of 88.53 percent.

In Fiscal Year 2013, the total funding available through Caltrans was \$3.6 million for the FTA 5311(f) program. The fact that Chico and Oroville are currently served by intercity bus service (Greyhound) as well as Amtrak Thruway service probably reduces the potential for this funding source to be available for a parallel commuter bus service.

FTA Section 5339 Bus and Bus Facilities Grant

Prior to MAP-21, this grant was part of the FTA 5309 program. The purpose of the bus and bus facilities grant is to provide capital funding (replacement, rehabilitation or purchase) of vehicles and vehicle-related facilities / equipment, and to construct new bus-related facilities.

Funding for Fiscal Year 2013 is estimated at \$422 million and at \$427 million in Fiscal Year 2014. As with other federal programs, the federal share is 80 percent and a local 20 percent match is required. The formula for which funding is allocated is based upon population, vehicle revenue miles and passenger miles. Upon apportionment, the funds are available for three years after the fiscal year.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

Another federal program under MAP-21 is the CMAQ program, which is designed to help areas meet the Clean Air Act requirements. The goal is to reduce congestion and improve air quality in nonattainment areas and maintenance areas. Eligible activities include:

- Traffic monitoring, management or control facilities if it contributes to attainment of an air quality standard;
- Projects that improve traffic flow, including HOV lanes, intersection improvements, and ITS;
- Purchase of emergency communications equipment;
- Projects that shift traffic demand to nonpeak hours or other transportation modes, increase vehicle occupancy rate or reduce demand;
- Purchase of diesel retrofits;
- Facilities serving electric or natural gas fueled vehicles; and
- Some expanded authority to use funds for transit operations

In Fiscal Year 2013, approximately \$2.21 billion for CMAQ funds, and \$2.23 billion in Fiscal Year 2014.