

EXECUTIVE SUMMARY

The purpose of this transportation plan is to outline transit service and non-motorized transportation enhancements that can be made in Butte County to expand mobility, improve intermodality, and result in a set of recommended local and intercity public transit services, improved bikeways and bicycle paths, and improved pedestrian access to transit. These recommendations are to be integrated into the region's new 2016-2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

Public transportation has the potential to reduce greenhouse gas (GHG) emissions in the transportation sector, which makes about 28% of all GHG emissions in the US overall and about 37% in California. The major GHG benefits that are derived from public transportation are from reductions in overall vehicle-miles traveled (VMT) in urbanized areas. These savings are often called displaced VMT. They are mostly indirect impacts that come from changes in mode split, congestion relief, and the "land-use multiplier" effect. Even still, it is difficult for transit service enhancements alone to be able to claim carbon dioxide (CO₂) benefits. Recognizing this challenge, transit projects have had the greatest success in reducing GHG emissions when they are combined with land-use and congestion management strategies that include non-motorized investments.

CHARACTERISTICS OF BUTTE COUNTY

Certain population groups are more likely to use transit than others based on their socio-economic status, age, and physical ability. These groups are known as captive riders—as opposed to choice riders—in that public transit, walking, or biking are their only affordable or practical options for transportation. Since walking and biking have their own limitations in terms of range and physical requirements, public transit can often be the sole option for captive riders. Transit efficiency and performance therefore become imperative, and inadequate service can generate significant impacts on these groups for their work, shopping, medical, and other trips.

While seniors and young people live throughout Butte County, households without vehicles tend to be clustered in central Chico and in residential areas populated by California State University, Chico (CSU) students. Much of central Oroville also has a moderate to high proportion of households that do not own vehicles.

With the exception of CSU in Chico, many of the largest employers in Butte County are located in peripheral areas and near freeways, like the WalMart stores in Chico and Oroville, and the Feather Falls and Gold Country Casinos outside of Oroville. Modest population and employment growth is expected in these peripheral areas, some of which are outside of B-Line's current fixed route service area. Modeled data shows that most population and employment growth is anticipated on the periphery of Chico, with significant population growth on the north side of the city adjacent to Highway 99 and north of East Avenue. Additional growth is anticipated in the southeastern quadrant of the city, between SR 32 and Highway 99, with some employment growth on the south side of the city along Park Avenue. Paradise is expected to have higher levels of residential growth than most of the county's other cities, but pockets of growth are expected south and east of Oroville and around Biggs.

Based on an array of demographic factors, current B-Line routes cover transit-dependent areas relatively well, with the exception of more rural areas off of main corridors in Oroville and Paradise that do not readily support traditional fixed-route operations.

EXISTING TRANSIT SERVICES

B-Line operates primarily two types of services: urban (Chico area) and rural (within other Butte County cities or intercity, between other major cities and population centers of Butte County). Some routes operate Monday through Friday only, and others operate all seven days. Routes 8, 9, and 40X operate on different schedules depending on whether CSU is in session.

B-Line operates and serves transit centers that offer timed transfer points. The Chico Transit Center is located on West 2nd Street between Salem Street and Normal Avenue in downtown Chico. An additional timed transfer point in Chico, referred to as the Forest Avenue Transfer Point, is located on both sides of Forest Avenue at Baney and Parkway Village. The Oroville Transit Center is on Spencer Avenue just north of Oro Dam Boulevard in downtown Oroville. A small stop in Paradise serves as the Transit Center in that community, and is located at Almond and Cedar Streets.

B-Line's fixed-route fleet consists of 35 standard buses. B-Line has special fare agreements with CSU, Butte College, and the City of Chico (for City employees).

B-Line Paratransit is a door-to-door service for qualified individuals traveling within the greater Butte County B-Line service area in Chico, Oroville, and Paradise. It provides Americans with Disabilities Act (ADA) service for individuals who cannot use the fixed-route system as well as for others with disabilities and seniors 65 years of age or older.

TRANSIT PERFORMANCE

For a transit agency of its size, B-Line is performing very well in most respects. Most of its local Chico routes are popular, and ridership is solid in some other cities, although weak on some routes, primarily in Magalia and Oroville.

Maintaining consistent on-time performance continues to be a challenge for several B-Line routes. In an analysis from September 2013, over 50% of B-Line fixed routes were found to be running more than five minutes late at some point during the route. This issue is particularly problematic for through-routed buses, because delays cascade through more than one route.

Overall, B-Line's performance indicators are strong (Chapter 2 provides a detailed summary of B-Line's performance). Over the past five years, B-Line has exceeded Transit Development Act (TDA) farebox recovery ratio requirements for both urban and rural services, and despite difficulties surrounding two route restructuring efforts in 2010 and 2011, ridership increased 6% from fiscal year (FY) 2008/09 to FY 2012/13. Passenger productivity has remained relatively constant while hourly costs increased a modest 15% over the past five years. Paratransit services are also performing very well, with a farebox recovery ratio increase of 27.2% over the past five fiscal years. Changes to eligibility and an increase in the service area have resulted in Paratransit ridership increases, by nearly 40% in the past five years, which is of concern to BCAG. A July 2009 fare increase in addition to recent ridership gains also contributed to a 62.2% increase in Paratransit fare revenues from FY 2008/09 to FY 2012/13.

BICYCLING AND WALKING IN BUTTE COUNTY

According to the Non-Motorized Transportation Action Element of the 2012 MTP/SCS, bicycling has become an increasingly popular method of travel throughout the region due to energy savings, environmental benefits, and health advantages. The Element also notes that pedestrian travel in Butte County is common for very short trips and for students traveling to school. Approximately seven percent of Butte County residents bicycle or walk as their primary means of transportation to work. The walking or bicycling mode shares in Chico and Oroville are both above the county average while those in Gridley, Paradise, and Biggs are all below the average.

To assess the greatest opportunity areas for walking and bicycling, Butte County was analyzed using a regional demand screening process to determine a suitability screening score for bicycling and walking. While Chico, northwest Gridley and portions of Oroville score well for non-motorized modes, Paradise and Biggs have very limited areas that are conducive to walking or bicycling.

For regional trips, the bike infrastructure is fairly limited. Much of the county's street network is still very much planned around maximizing access for automobile trips, and many major streets outside of city and town centers lack sidewalks.

INPUT AND OPINIONS FROM MEMBERS OF THE PUBLIC

Bus Rider Survey

A survey was designed to understand how B-Line riders travel. The survey also collected information on riders' personal characteristics, such as age, income, employment status, and modes of access to the transit services. The survey found that a great proportion of B-Line passengers are students (54% of survey respondents), the majority of whom attend CSU and that most B-Line passengers represent below-average household incomes in Butte County. Most passengers are also regular riders and ride B-Line because they do not have other transportation options.

Overall, passengers are satisfied with B-line service, but seek more sheltered bus stops and better on-time performance. Other improvements sought by passengers include more frequent weekend and weekday service, as well as later evening weekday service. Although the on-time performance data illustrates some significant challenges for the agency, consumers were relatively neutral about on-time performance.

Community Survey

An in-person and online survey included stationing surveyors in downtown Chico, at the Oroville FoodMaxx shopping center, and at a special event in Paradise, as well as making the online version available. A link to this survey was sent by BCAG to a wide array of regional stakeholder groups in an effort to reach as wide an audience as possible.

Despite the fact that 85% of survey respondents said public transportation served their community, the majority of people said their primary mode of transportation for making the trip from home to school/work was driving alone. The intercept survey results offer several reasons for why "driving alone" is preferred over other modes of transportation.

Most people who took this intercept survey made their trip to school or work within 20 minutes, but people who took transit spent up to 40 minutes on their trip to school or work, illustrating that public transportation may result in a longer commute for many people. Nevertheless, many of the people who drive may not have considered the time it takes to find parking or walk from their parking space to their destination.

Greater usage of public transportation by survey respondents from lower-income households corresponds with the finding of the onboard survey: the majority of the people currently using public transportation do so because it is economical or because they have few other options.

The most frequently identified issue reported by pedestrians was a lack of sidewalks. Respondents also noted unsafe crossings or intersections and personal security concerns. Individuals frequently expressed concerns with driver behavior, weather conditions, or deteriorating or poorly maintained sidewalks.

Stakeholders

Approximately one dozen individual stakeholder interviews, generally lasting between a half-hour and an hour apiece, were conducted by phone in October and November of 2013. A common theme expressed by many stakeholders is that traveling by car is the dominant mode of travel given the county's low density and long distances many residents need to travel to reach their destinations. Many expressed that it is challenging to develop convenient alternative transportation options especially in the outlying communities. Some stakeholders commented that the image of the B-Line has improved over the years with the attractive new buses which have given the service greater visibility in the community. Stakeholders offered relatively few weaknesses about B-Line service.

Stakeholders were asked to identify their top three priorities for improving transit services in Butte County in the next three years. Increasing headways on B-Line Service, providing service and connectivity to outlying and unincorporated communities, and improving facilities were the top priorities expressed by a majority of stakeholders. Safety was mentioned as a huge concern for bicyclists and the need to separate cycling from vehicular traffic.

GOALS AND OBJECTIVES

The overarching goal for this project is to identify solutions to reduce greenhouse gas emissions; this remains a key consideration in all of the transit service and bicycle and pedestrian planning effort.

B-Line's, goals, objectives and performance standards provide a basis for establishing transit system design and operations policies, offer a methodology for evaluating services, and provide a rationale for service expansions, reductions and eliminations. B-Line's primary goals are as follows:

- Maximize service efficiency and reliability.
- Maximize the effectiveness of service for B-Line's ridership markets.
- Improve the usability of B-Line.
- Expand B-Line's services into areas where transit has a likelihood of success.
- Tie the provision of transit to land use and the resulting demand levels.
- Advocate sustainable development practices that support transit.

Goals and objectives for bicycle and pedestrian planning include:

- Provide options so people will choose and be able to walk and bicycle as a way to travel, to be healthy and for recreation.
- Focus on urban infrastructure improvements that contribute to interconnectivity and safety for people who choose to walk or bike
- Facilitate regional links allowing for origin-to-destination access to bicycle and pedestrian facilities.

TRANSIT PLAN

Proposed changes to B-Line services in the short-term time horizon (by 2016) are focused on streamlining services and providing greater efficiencies. The recommendations for mid- (2017 through 2027), and long-term (to 2040) time horizons include investments to speed transit and to serve portions of Butte County, primarily in Chico, where transit investments will be appropriate given anticipated development.

Several of B-Line's existing routes perform well. Others can better meet performance standards and address demand. Even with modest changes to the system and essentially status quo operating levels, Butte County's jurisdictions will enjoy some reductions in VMT, along with related reductions in GHG emissions, although the impacts to GHG are small: reductions in emissions overall are estimated to range from about 0.25% to 0.27% of existing emissions.

In Chico, recommendations include changes to Route 15S, Route 15N, Route 2, Route 7, and Route 16, with the elimination of Routes 4 and 5 that would be served by the other routes. In Oroville, Route 24 has been expanded and Route 27 has been retained, essentially unchanged. Route 26 would be modified and Route 25 would be eliminated with service assigned to Route 24.

Most of the major regional routes, including Routes 20, 40, and 41, all perform strongly and as a result the short-term service plan recommends relatively few changes to these services (mostly minor routing changes in Chico). Some modifications or service reductions are recommended for Routes 30, 31, and 32.

Implementation of the transit service plan will benefit from investment in several new capital projects. These include improvements to the North Valley Plaza transfer center and the implementation of Route 1 "BRT lite" improvements. A recommended capital investment for Caltrans includes improvements to the Fir Street "Park & Bike or Ride" in Chico as well as the development of additional Park & Rides throughout Butte County in Oroville, Paradise, and Gridley. Finally, a new Downtown Chico Transit Center is recommended.

NON-MOTORIZED PLAN

Much of the foundation for non-motorized mode planning has already been established by jurisdictions through past bicycle plans. Through coordination by BCAG and movement toward compliance with the Active Transportation Program by jurisdictions, significant progress will be made towards enhancing opportunities for non-motorized modes.

Key bicycle recommendations include a potential bike station at the downtown Chico Transit Center and a small bike share program in Chico. Certain bicycle investments are prioritized by city and include the following:

- Chico: Add a bike path along State Route 99 and bike lanes on Mangrove Avenue, Chico River Road, 5th Street, and Holly Avenue. A pedestrian and bicycle facility is recommended on the north side of SR 32 between the Chico Park & Ride and Bruce Road.
- Oroville: Add a bike path along the Feather River and the railroad tracks, and bike lanes on Oroville Dam Boulevard, Montgomery Street, Mitchell Avenue and Feather River Boulevard.
- Paradise: Extend the Skyway bike path to the city limits, extend the bike lane on Pearson Road, and add bike lanes to Bille Road, Sawmille Road and Wagstaff Road.
- Gridley: Add a bike path along the railroad tracks and bike lanes on Sycamore Street, State Route 99 and on either side of Sycamore Middle School.
- Biggs: Add a bike path along the railroad tracks and a bike lane on B Street.

Improvements are also recommended to wayfinding signage and pedestrian crossings, with special development opportunities for sidewalks and crossings near B-Line stops.

FUNDING

The financial model assumes that the service plan is fully funded assuming the existing funding sources continue to be available and BCAG successfully secures capital grants for B-Line vehicle replacements. If capital grants are not forthcoming, then BCAG may need to postpone some of the scheduled fixed-route and paratransit vehicle replacements.

BCAG should consider other opportunities at the local level to generate local revenue sources. BCAG may want to evaluate the efforts pursued by other counties that are “self-help” in which local voters approve a sales tax for enhanced local services, including transportation.

The short- and mid-term funding plan is shown in Figure ES-1.

TRANSIT & NON-MOTORIZED PLAN | FINAL REPORT
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Figure ES-1 Short and Mid-Term System Funding Plan

	Short-Term Projections		Mid-Range Projections									
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Operating and Capital Costs												
Total Operating Costs	\$9,572,883	\$9,825,047	\$10,045,621	\$10,384,142	\$10,734,315	\$11,096,551	\$11,471,274	\$11,819,763	\$12,178,842	\$12,548,833	\$12,930,067	\$13,322,886
<i>Fixed Route Service</i>	\$6,357,820	\$6,438,665	\$6,631,825	\$6,830,780	\$7,035,703	\$7,246,774	\$7,464,177	\$7,688,103	\$7,918,746	\$8,156,308	\$8,400,998	\$8,400,998
<i>Paratransit Service</i>	\$3,467,227	\$3,606,956	\$3,752,317	\$3,903,535	\$4,060,847	\$4,224,500	\$4,355,586	\$4,490,740	\$4,630,087	\$4,773,759	\$4,921,889	\$4,921,889
Capital Costs	\$3,249,650	\$4,774,050	\$497,191	\$0	\$0	\$4,373,588	\$634,593	\$0	\$4,116,559	\$0	\$3,114,526	\$3,849,554
Total System Costs	\$12,822,533	\$14,599,097	\$10,542,812	\$10,384,142	\$10,734,315	\$15,470,139	\$12,105,866	\$11,819,763	\$16,295,402	\$12,548,833	\$16,044,593	\$17,172,440
Operating and Capital Revenues												
Federal Sources												
FTA 5307	\$2,020,000	\$2,040,200	\$2,060,602	\$2,081,208	\$2,102,020	\$2,123,040	\$2,144,271	\$2,165,713	\$2,187,371	\$2,209,244	\$2,231,337	\$2,253,650
FTA 5311	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000
FTA 5309 Ladders of Opportunity Initiative Grant	\$2,363,850	\$4,057,943	\$0	\$0	\$0	\$3,653,800	\$0	\$0	\$2,994,454	\$0	\$2,647,347	\$3,272,121
FTA 5310	\$468,650	\$0	\$497,191	\$0	\$0	\$0	\$559,593	\$0	\$593,672	\$0	\$0	\$0
State, Regional and Local Funds												
Miscellaneous Revenues	\$53,895	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
LTF/STA (Member Jurisdictions)	\$5,440,854	\$5,961,453	\$5,345,233	\$5,644,617	\$5,955,258	\$6,882,057	\$6,570,476	\$6,805,845	\$7,529,167	\$7,330,834	\$8,138,964	\$8,464,609
Farebox Revenues												
Fixed Route Service	\$1,350,754	\$1,364,261	\$1,435,903	\$1,450,262	\$1,464,765	\$1,567,298	\$1,582,971	\$1,598,801	\$1,710,717	\$1,727,824	\$1,745,103	\$1,867,260
Paratransit Service	\$353,425	\$350,240	\$378,883	\$383,055	\$387,272	\$418,943	\$423,556	\$424,403	\$455,020	\$455,931	\$456,843	\$489,800
Total System Revenues	\$12,851,428	\$14,599,097	\$10,542,812	\$10,384,142	\$10,734,315	\$15,470,139	\$12,105,866	\$11,819,763	\$16,295,402	\$12,548,833	\$16,044,593	\$17,172,440

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