

## 9 FINANCIAL MODEL

The financial element for the BCAG Transit & Non-Motorized Plan is the subject of this chapter. The first section presents operating cost projections and the capital improvement program to support the short and mid-term service plan and the funding sources to pay for them. The short-term plan covers the three year period from FY 2014/15 through FY 2016/17. The mid-term plan extends from FY 2017/18 through FY 2026/27. The long-range projection makes assumptions for 2040. This chapter concludes with a series of potential new funding sources that could be pursued by BCAG to help fund service enhancements and capital investments.

### SHORT-TERM AND MID-TERM SERVICE LEVELS AND OPERATING COST PROJECTIONS

The short-term and mid-term transit service plans are described in detail in Chapter 7. The short-term service plan describes how B-Line will transform over the next two years and begins to introduce elements that are seen in the mid-term service plan. Most of the short-term service changes are focused on route simplification, improved circulation, creating route terminal points at key destinations, and improving on-time performance of existing routes. In the mid-term, the focus turns to creating transit-priority corridors and developing a rapid bus service along the primary B-Line trunk route connecting North Chico with downtown and the Chico Mall area in southeast Chico.

Figure 9-1 presents operating cost projections from FY 2014/15 to FY 2026/27 for the short-term and mid-term planning horizons. It provides a breakdown of service levels and operating costs for fixed route and paratransit service. Detailed assumptions are defined below.

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**Figure 9-1 Operating Cost Projections**

	Actual	Short-Term Projections										Mid-Range Projections				
		FY 2013-14	FY 2014-15	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	
<b>Service Levels (service hours)</b>																
<b>Fixed Route Service</b>																
Urban Service	45,873	45,829	45,829	45,829	44,554	44,554	44,554	44,554	44,554	44,554	44,554	44,554	44,554	44,554		
Rural Service	25,144	24,957	24,957	24,957	24,957	24,957	24,957	24,957	24,957	24,957	24,957	24,957	24,957	24,957		
Total Fixed Route Revenue Hours	71,017	70,785	70,785	70,785	69,510	69,510	69,510	69,510	69,510	69,510	69,510	69,510	69,510	69,510		
<b>Paratransit Service</b>																
Urban Service	25,369	26,114	25,591	25,335	25,589	25,845	26,103	26,364	26,628	26,654	26,681	26,708	26,734	26,761		
Rural Service	24,565	25,089	24,588	24,342	24,585	24,831	25,079	25,330	25,583	25,609	25,635	25,660	25,686	25,712		
Total Paratransit Revenue Hours	49,934	51,203	51,203	49,677	50,174	50,676	51,182	51,694	52,211	52,263	52,316	52,368	52,420	52,473		
<b>Estimated Ridership</b>																
<b>Fixed Route Service</b>																
Urban Service	955,237	962,403	972,027	981,747	954,434	963,978	973,618	973,618	983,354	993,188	993,188	1,003,120	1,013,151	1,013,151		
Rural Service	409,428	411,784	415,902	420,061	420,061	424,261	428,504	428,504	432,789	437,117	437,117	441,488	445,903	445,903		
Total Fixed Route Ridership	1,364,665	1,374,187	1,387,928	1,401,808	1,374,495	1,388,240	1,402,122	1,402,122	1,416,143	1,430,305	1,430,305	1,444,608	1,459,054	1,459,054		
<b>Paratransit Service</b>																
Urban Service	70,312	75,729	74,289	73,620	74,430	75,250	76,078	76,916	77,763	77,918	78,074	78,230	78,387	78,544		
Rural Service	83,195	85,304	83,682	82,928	83,841	84,764	85,697	86,641	87,595	87,770	87,945	88,121	88,298	88,474		
Total Paratransit Ridership	153,507	161,033	157,971	156,547	158,271	160,013	161,775	163,556	165,357	165,688	166,019	166,352	166,685	167,018		
<b>Estimated Farebox Revenue</b>																
<b>Fixed Route Service</b>																
Urban Service	\$749,731	\$785,611	793,467	801,402	\$833,643	\$841,980	\$850,400	\$909,928	\$919,027	\$928,217	\$993,192	\$1,003,124	\$1,013,156	\$1,084,076		

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	Short-Term Projections					Mid-Range Projections										
	Actual	FY 2013-14	FY 2014-15	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	
Rural Service	\$543,063	\$551,769	\$557,287	\$562,860	\$602,260	\$608,282	\$614,365	\$657,371	\$663,944	\$670,584	\$717,525	\$724,700	\$731,947	\$783,183		
Total Fixed Route Revenue	\$1,292,794	\$1,337,380	\$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		
<b>Paratransit Service</b>																
Urban Service	\$174,760	\$181,094	\$177,650	\$176,049	\$190,446	\$192,543	\$194,663	\$210,583	\$212,901	\$213,327	\$228,717	\$229,175	\$229,633	\$246,199		
Rural Service	\$173,481	\$179,183	\$175,775	\$174,191	\$188,437	\$190,511	\$192,609	\$208,361	\$210,655	\$211,076	\$226,303	\$226,756	\$227,210	\$243,601		
Total Paratransit Revenue	\$348,241	\$360,277	\$353,425	\$350,240	\$378,883	\$383,055	\$387,272	\$418,943	\$423,556	\$424,403	\$455,020	\$455,931	\$456,843	\$489,800		
<b>Estimated Operating Costs</b>																
<b>Fixed Route Service</b>																
Urban Service	\$3,512,787	\$3,614,689	\$3,723,130	\$3,834,824	\$3,839,979	\$3,955,179	\$4,073,834	\$4,196,049	\$4,321,930	\$4,451,588	\$4,585,136	\$4,722,690	\$4,864,371	\$5,010,302		
Rural Service	\$2,326,266	\$2,378,166	\$2,449,511	\$2,522,996	\$2,598,686	\$2,676,647	\$2,756,946	\$2,839,654	\$2,924,844	\$3,012,589	\$3,102,967	\$3,196,056	\$3,291,938	\$3,390,696		
Total Fixed Route Op Costs	\$5,839,053	\$5,992,855	\$6,172,641	\$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		
<b>Paratransit Service</b>																
Urban Service	\$1,626,467	\$1,724,427	\$1,740,636	\$1,774,927	\$1,846,456	\$1,920,868	\$1,998,279	\$2,078,810	\$2,162,586	\$2,229,691	\$2,298,879	\$2,370,213	\$2,443,760	\$2,519,590		
Rural Service	\$1,562,863	\$1,644,151	\$1,659,606	\$1,692,300	\$1,760,500	\$1,831,448	\$1,905,255	\$1,982,037	\$2,061,913	\$2,125,894	\$2,191,861	\$2,259,874	\$2,329,998	\$2,402,298		
Total Paratransit Op Costs	\$3,189,330	\$3,368,578	\$3,400,242	\$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		
<b>Total System Operating Costs</b>	<b>\$9,028,383</b>	<b>\$9,361,432</b>	<b>\$9,572,883</b>	<b>\$9,825,047</b>	<b>\$10,045,621</b>	<b>\$10,384,142</b>	<b>\$10,734,315</b>	<b>\$11,096,551</b>	<b>\$11,471,274</b>	<b>\$11,819,763</b>	<b>\$12,178,842</b>	<b>\$12,548,833</b>	<b>\$12,930,067</b>	<b>\$13,322,886</b>		

## **Short-Term Service Levels and Cost Assumptions**

Key assumptions for short-term service levels for fixed-route and paratransit services are summarized below:

- Beginning in FY 2014/15, fixed-route service levels are slightly adjusted downward and then remain constant for the next two years. Annual revenue service hours are as follows:
  - Urban fixed-route service hours: 45,829
  - Rural fixed-route service hours: 24,957Paratransit service hours are expected to drop slightly due to refinements in the ADA-eligibility process. In FY 2014/15, a total of 51,203 hours are proposed, with a drop to 49,677 paratransit service hours in FY 2016/17. Consistent with the recent trend, urban paratransit service hours are slightly higher than rural paratransit service hours.
- Fixed-route and paratransit service levels are based on the FY 2013/14 actual hourly costs for urban and rural service with an annual 3% inflation rate.

Based on these assumptions, operating costs in FY 2014/15 are projected at just under \$9.4 million. Two years later, in FY 2016/17 with stable fixed-route service levels and slightly lower paratransit service levels, operating costs are estimated at \$9.8 million.

## **Mid-Term Service Levels and Cost Assumptions**

In the mid-term timeframe, starting in FY 2017/18, urban fixed-route service levels are projected to drop slightly, from 45,829 annual service hours to 44,544 due to efficiencies related to a reconfigured Route 1 that replaces Routes 15N and 15S and includes some operational enhancements that reduce travel time. Urban fixed route service hours are expected to remain stable throughout the mid-term planning period. Rural fixed route service is projected to remain steady at 24,957 annual service hours.

Fixed-route annual operating costs are estimated at \$6.4 million in FY 2017/18 and gradually increase each year to \$8.4 million in FY 2026/27. In FY 2017/18 paratransit service costs are projected at just below \$3.5 million and after ten years climb to \$4.9 million.

Total system operating costs inclusive of fixed-route and paratransit services are estimated at \$9.8 million in FY 2017/18 and increase to \$13.3 million in FY 2026/27, the final year of the mid-term planning horizon.

## **Key Performance Indicators**

Figure 9-2 shows key transit system performance measures based on the hourly cost of service and projected ridership assuming implementation of the short-term and mid-term service plans. Minimal fixed route ridership gains in the short-term when service levels remain constant. Consequently, productivity shows minimal gains with urban fixed-route service productivity hovering at about 21 hourly passengers. In the mid-term, passenger productivity is projected to increase from 21 to 23 hourly passengers. As expected, rural fixed route service has lower productivity; in FY 2014/15 rural service is expected to carry about 16 passengers per hour with expected increases to nearly 18 hourly passengers at the end of the mid-term planning horizon.

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After an initial slight drop in FY 2016/17 due to a drop in service hours, paratransit service ridership is projected to increase at a modest annual rate of 1% between FY 2017/18 and FY 2026/27. Urban paratransit service is estimated to carry just under three hourly passengers whereas productivity in rural areas is slightly higher because of shorter travel distances in contained small cities.

The bottom rows of Figure 9-2 displays the projected farebox recovery for fixed-route and paratransit services. It reveals that the farebox recovery ratio for each services meet or exceeds the standards established in this plan, with the exception of paratransit service in the mid-term. Details on fare revenue are presented on page 9-8.

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**Figure 9-2 Key Performance Indicators**

Performance Indicators	Actual FY 2013-14	Short-Term Projections					Mid-Range Projections							
		FY 2014-15	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
<b>Cost/Hour</b>														
<b>Fixed Route Service</b>														
Urban Service	\$76.58	\$78.87	\$81.24	\$83.68	\$86.19	\$88.77	\$91.44	\$94.18	\$97.00	\$99.92	\$102.91	\$106.00	\$109.18	\$112.46
Rural Service	\$92.52	\$95.29	\$98.15	\$101.10	\$104.13	\$107.25	\$110.47	\$113.78	\$117.20	\$120.71	\$124.33	\$128.06	\$131.91	\$135.86
<b>Paratransit Service</b>														
Urban Service	\$64.11	\$66.04	\$68.02	\$70.06	\$72.16	\$74.32	\$76.55	\$78.85	\$81.22	\$83.65	\$86.16	\$88.75	\$91.41	\$94.15
Rural Service	\$63.62	\$65.53	\$67.50	\$69.52	\$71.61	\$73.76	\$75.97	\$78.25	\$80.60	\$83.01	\$85.50	\$88.07	\$90.71	\$93.43
<b>Cost/Passenger</b>														
<b>Fixed Route Service</b>														
Urban Service	\$3.68	\$3.76	\$3.83	\$3.91	\$4.02	\$4.10	\$4.18	\$4.31	\$4.40	\$4.48	\$4.62	\$4.71	\$4.80	\$4.95
Rural Service	\$5.68	\$5.78	\$5.89	\$6.01	\$6.19	\$6.31	\$6.43	\$6.63	\$6.76	\$6.89	\$7.10	\$7.24	\$7.38	\$7.60
<b>Paratransit Service</b>														
Urban Service	\$23.13	\$22.77	\$23.43	\$24.11	\$24.81	\$25.53	\$26.27	\$27.03	\$27.81	\$28.62	\$29.44	\$30.30	\$31.18	\$32.08
Rural Service	\$18.79	\$19.27	\$19.83	\$20.41	\$21.00	\$21.61	\$22.23	\$22.88	\$23.54	\$24.22	\$24.92	\$25.65	\$26.39	\$27.15
<b>Passengers/Hour</b>														
<b>Fixed Route Service</b>														
Urban Service	20.8	21.0	21.2	21.4	21.4	21.6	21.9	21.9	22.1	22.3	22.3	22.5	22.7	22.7
Rural Service	16.3	16.5	16.7	16.8	16.8	17.0	17.2	17.2	17.3	17.5	17.5	17.7	17.9	17.9
<b>Paratransit Service</b>														
Urban Service	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Rural Service	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
<b>Farebox Recovery Ratio</b>														
<b>Fixed Route Service</b>														
Urban Service	21.3%	21.7%	21.3%	20.9%	21.7%	21.3%	20.9%	21.7%	21.3%	20.9%	21.7%	21.2%	20.8%	21.6%
Rural Service	23.3%	23.2%	22.8%	22.3%	23.2%	22.7%	22.3%	23.1%	22.7%	22.3%	23.1%	22.7%	22.2%	23.1%
<b>Paratransit Service</b>														
Urban Service	10.7%	10.5%	10.2%	9.9%	10.3%	10.0%	9.7%	10.1%	9.8%	9.6%	9.9%	9.7%	9.4%	9.8%
Rural Service	11.1%	10.9%	10.6%	10.3%	10.7%	10.4%	10.1%	10.5%	10.2%	9.9%	10.3%	10.0%	9.8%	10.1%

## **SHORT AND MID-TERM REVENUE PROJECTIONS**

The projected operating costs through FY 2026/27 can be implemented and sustained with existing financial resources. Discretionary federal and state grant funds will be needed for vehicle replacements and other desirable capital improvements as discussed later in this chapter.

### **Existing Funding Sources**

Funds for this plan come from the following primary sources:

- Federal Transit Administration (FTA)
  - Section 5307 and 5311 funds
- State Transportation Development Act (TDA) Funds
  - Local Transportation Funds
  - State Transportation Assistance Funds
- Fare revenues

BCAG has received funding from each source described in this section, and it is anticipated that these revenue sources will continue to be available in the short-term and mid-term timeframes. These sources and the assumptions in projecting funding levels through FY 2016/27 are discussed below. Figure 9-3 summarizes short-and mid-term transit system operating costs and operating revenues extending from FY 2014/15 through 2026/27.

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**Figure 9-3 Projected Operating Costs and Revenues**

	Mid-Range Projections												
	Short-Term Projections					Mid-Range Projections							
	FY 2014-15	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
<b>Estimated Operating Costs</b>													
Fixed Route Service	\$5,992,855	\$6,172,641	\$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
Paratransit Service	\$3,368,578	\$3,400,242	\$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
<b>Total System Operating Costs</b>	<b>\$9,361,432</b>	<b>\$9,572,883</b>	<b>\$9,825,047</b>	<b>\$10,045,621</b>	<b>\$10,384,142</b>	<b>\$10,734,315</b>	<b>\$11,096,551</b>	<b>\$11,471,274</b>	<b>\$11,819,763</b>	<b>\$12,178,842</b>	<b>\$12,548,833</b>	<b>\$12,930,067</b>	<b>\$13,322,886</b>
<b>Estimated Operating Revenues</b>													
Total Farebox Revenues	\$1,697,657	\$1,704,178	\$1,714,502	\$1,814,786	\$1,833,317	\$1,852,037	\$1,986,242	\$2,006,527	\$2,023,204	\$2,165,737	\$2,183,755	\$2,201,946	\$2,357,060
Estimated Fixed Route Farebox Revenue	\$1,337,380	\$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
Estimated Paratransit Farebox Revenue	\$360,277	\$353,425	\$350,240	\$378,883	\$383,055	\$387,272	\$418,943	\$423,556	\$424,403	\$455,020	\$455,931	\$456,843	\$489,800
FTA 5307	\$2,000,000	\$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	\$800,000
Miscellaneous Revenues	\$25,000	\$25,000	\$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)	\$4,838,775	\$5,023,704	\$5,245,345	\$5,345,233	\$5,644,617	\$5,955,258	\$6,162,269	\$6,495,476	\$6,805,845	\$7,000,734	\$7,330,834	\$7,671,785	\$7,887,176
<b>Total System Revenues</b>	<b>\$9,361,432</b>	<b>\$9,572,883</b>	<b>\$9,825,047</b>	<b>\$10,045,621</b>	<b>\$10,384,142</b>	<b>\$10,734,315</b>	<b>\$11,096,551</b>	<b>\$11,471,274</b>	<b>\$11,819,763</b>	<b>\$12,178,842</b>	<b>\$12,548,833</b>	<b>\$12,930,067</b>	<b>\$13,322,886</b>

## **Federal Funds**

On July 6, 2012, President Obama signed into law new federal transportation legislation, Moving Ahead for Progress in the 21st Century (MAP-21). MAP-21 reauthorizes surface transportation funding in the United States. The legislation took effect on October 1, 2012 and will guide surface transportation funding for 27 months until January 1, 2015.

MAP-21 includes several strategic changes as compared with SAFETEA-LU, MAP-21's predecessor. One of MAP-21's central goals was to reverse the proliferation of smaller and more specialized programs and consolidate them into larger programs that give funders more flexibility. Some of the most salient examples of this change of policy direction are apparent in the way transit funds are funded and distributed.

### **FTA Section 5307, Urban Area Formula Funds**

For urbanized areas with populations over 200,000, funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive Federal funds. BCAG is the designated grantee in Butte County as the operator of the B-Line service and thus qualifies for capital and operating Section 5307 funding administered by the FTA. Section 5307 funding apportionments can be used for capital projects and cannot provide more than a 50% subsidy to support operations.

Annually, the B-Line receives just over \$2 million in Section 5307 funds and uses the vast majority for operating and maintenance costs. Based on projected population growth in the county and other factors, FTA 5307 funds are assumed to increase one percent per year.

### **FTA Section 5311, Rural Area Formula Funds**

This program provides funding assistance for public transportation projects in non-urbanized areas with population under 50,000. The program, first established in the late 1970s, remains a key FTA program. Activities eligible under the former Job Access and Reverse Commute (JARC) Program, which provided services to low-income individuals to access jobs, are now eligible under the Section 5311 program. In addition, the method by which FTA allocates funds to the states now includes the number of low-income individuals as a factor. There is no floor or ceiling on the amount of funds that a state has to program on job access and reverse commute activities.

FTA Section 5311 funds can be used to fund capital projects or support operations or combination thereof. This plan assumes that BCAG will continue to use its current annual allocation of \$800,000 in FTA Section 5311 to support fixed-route operations. These funds have been conservatively estimated at a constant level throughout the short and mid-term planning horizon.

## **State, Regional, and Local Funds**

The Transportation Development Act (TDA) provides two major sources of funding for public transportation: the Local Transportation Fund (LTF) and the State Transit Assistance fund (STA). Together, these funds are used to support B-Line service.

### **Local Transportation Funds**

For most California transit services, TDA funds are the largest single source of operating revenue; B-Line is no exception. The Local Transportation Fund revenues are derived from a one-quarter cent sales tax, which is collected by the Board of Equalization, and administered locally through

the Butte County Association of Governments (BCAG) which returns it to local jurisdictions. TDA funds can be used for capital expenditures or operations or a combination thereof, and, importantly, they provide an important source of local match for federal capital funding.

Member jurisdictions contribute all or a portion of their apportioned funds to help fund fixed route and paratransit operations and capital investments. In FY 2013/14, member jurisdictions contributed approximately \$4.4 million in LTF and STA funds to help fund the B-Line, representing nearly 50% of operating revenues. In future years, additional financial support from member jurisdictions will be required. Beginning in FY 2014/15, \$4.8 million is needed, accounting for 52% of operating revenues. This amount is projected to gradually increase to \$7.8 million by FY 2026/27.

### **State Transportation Assistance Funds (STAF)**

STAF are revenues derived from sales taxes on gasoline and diesel fuels. STAF is allocated annually by the BCAG. Unlike LTF which may be allocated to other purposes, STAF revenues may be used *only* for public transit or transportation services.

### **Passenger Fare Revenues**

Fares should be raised periodically to keep pace with the inflation rate. The B-Line fixed-route and paratransit services must meet their state-mandated farebox recovery ratios (20% urban and 10% rural for fixed routes) and 10% for paratransit, and thus must regularly increase fares to maintain this requirement. It is also good policy to raise fares incrementally on a regular basis rather than waiting long periods and then increasing fares by a significant amount.

This plan assumes a fare increase every three years with the first increase occurring in FY 2017/18. The last fare increase was on May 25, 2014 and raised cash fares on fixed route service approximately seven percent on local service and ten percent on regional service with slightly higher increases for pre-paid tickets and passes. Paratransit cash fares rose nine percent in May 2014 with larger increases for longer distance (zonal) travel. Proposed fare increases for the short-term and mid-term horizon are presented in Figure 9-4 on the next page.

Figure 9-4 Projected Fare Increases in the Short and Mid-Term

	Current Fare (1)	FY 2017/18	FY 2000/21	FY 2023/24	FY 2026/27
<b>Fixed Route Cash</b>					
Local <i>Regular</i>	\$1.50	\$1.60	\$1.75	\$2.00	\$2.20
Local <i>Discount</i>	\$0.75	\$0.75	\$0.85	\$1.00	\$1.10
Regional <i>Regular</i>	\$2.00	\$2.25	\$2.50	\$2.75	\$3.00
Regional <i>Discount</i>	\$1.00	\$1.10	\$1.20	\$1.25	\$1.35
<b>Paratransit Cash</b>					
Advance Request	\$2.75	\$3.00	\$3.25	\$3.50	\$3.75
Same Day Request	\$4.00	\$4.25	\$4.50	\$4.75	\$5.08
Zone 1	\$7.00	\$7.50	\$8.00	\$8.75	\$9.36
Zone 2	\$9.00	\$10.00	\$11.00	\$12.00	\$12.84
Zone 3	\$11.00	\$12.00	\$13.00	\$14.00	\$14.98

(1) Effective 5/25/14

## CAPITAL COSTS AND REVENUE PROJECTIONS

Short-term and mid-term capital projects consist of vehicle replacements and passenger amenities. Figure 9-5 lists the capital projects and their associated projected costs and proposed funding sources for FY 2014/15 through FY 2016/27. Please note that discretionary federal funds, (see page 9-14), will be pursued to pay for vehicle replacements.

### Vehicle Replacements

As shown in Figure 9-5, costs vary tremendously by year depending on whether vehicles are being replaced and the number and type of replacements. For fixed-route vehicles, it is assumed that 16 fixed route buses and seven paratransit vehicles are ready for replacement in the short-term having reached or exceed their useful lifecycle. During the ten year mid-term timeframe, 25 fixed-route buses are scheduled for replacement spread over seven years with between five and eight vehicles in four of the fiscal years. In FY 2015/16, seven paratransit vehicles are scheduled for replacement at a cost of nearly \$69,000 per vehicle or approximately \$469,000 for all seven vehicles. In the next ten years, between FY 2017/18 and FY 2026/27, a total of 21 paratransit vehicles will be ready to retire after reaching their useful life.

The size of the B-Line fleet remains unchanged in the short-and mid-term periods. It is assumed that all vehicles will be replaced at the end of their useful life, which is twelve years for fixed-route vehicles and seven years for paratransit vehicles.

### Passenger Amenities

In FYs 2020/21 and 2021/22, passenger amenities totaling \$75,000 each year consist of new bus stop signs and passenger shelters. A total of 50 new bus stop signs are recommended at \$1,000 per stop plus ten new passenger shelters at \$10,000 per shelter.

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**Figure 9-5 Capital Costs and Revenue Projections**

	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
<b>Capital Costs</b>												
<b>Fixed Route Vehicle Replacements</b>												
Replacement number	6	10				8			6		5	6
Estimated Cost	\$2,781,000	\$4,774,050				\$4,298,588			\$3,522,888		\$3,114,526	\$3,849,554
<b>Paratransit Vehicle Replacements</b>												
Replacement number	7		7					7				
Estimated Cost	\$468,650		\$497,191					\$559,593	\$593,672			
<b>Passenger Amenities</b>												
Bus Stop Signs (50 @ \$1000/stop)						\$25,000		\$25,000				
Shelters (10 \$10,000/shelter)						\$50,000		\$50,000				
<b>Total Capital Costs</b>	<b>\$3,249,650</b>	<b>\$4,774,050</b>	<b>\$497,191</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,373,588</b>	<b>\$0</b>	<b>\$634,593</b>	<b>\$0</b>	<b>\$4,116,559</b>	<b>\$0</b>	<b>\$3,849,554</b>
<b>Capital Revenues</b>												
<b>Federal</b>												
FTA 5309 Ladders of Opportunity Initiative Grant (1)	\$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 (2)	\$468,650	\$0	\$497,191	\$0	\$0	\$0	\$0	\$559,593	\$593,672	\$0	\$0	\$0
<b>State, Regional and Local Funds</b>												
TDALTF	\$417,150	\$716,108	\$0	\$0	\$0	\$719,788	\$75,000	\$0	\$528,433	\$0	\$467,179	\$577,433
<b>Total Capital Revenues</b>	<b>\$3,249,650</b>	<b>\$4,774,050</b>	<b>\$497,191</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,373,588</b>	<b>\$634,593</b>	<b>\$0</b>	<b>\$4,116,559</b>	<b>\$0</b>	<b>\$3,114,526</b>	<b>\$3,849,554</b>

Notes:  
 Lifecycle for fixed route vehicles is 12 years and it is seven years for paratransit vehicles.  
 Annual inflation rate is assumed to be 3%.  
 1) BCAG will apply for FTA 5309 Ladders of Opportunity Initiative Grant funds to replace fixed route vehicles. If successful, then federal funds will cover 85% of the cost and TDA funds will be used for the required 15% match.  
 2) BCAG will apply for FTA 5310 Grant funds to replace paratransit vehicles. Assumes 100% federal funds when replacing ADA vehicles.  
 In 13/14 five CNG fixed route vehicles were programmed and funded for replacement at estimated cost of \$2.25 M.  
 In 08/09 three diesel fixed route vehicles were programmed and funded for replacement. Anticipated replacement year is 2015.  
 In 2012/13 six paratransit vehicles were programmed and funded.

## LONG-TERM SERVICE PLAN COST PROJECTIONS

The long-term planning projections assume further expansion of fixed-route service hours to 55,529 annual hours in 2040. Service changes would largely be dependent on urbanization and development throughout Chico and the region; in particular, service expansion, such as new coverage routes, would be reliant on new pockets of development on Chico and Oroville’s outskirts as well as new roadway connections. New transit-priority corridors could also be added within Chico (and potentially Oroville) pending increased development (or redevelopment) within existing built-up areas. To fund the long-term service plan would require either a significant increase in financial contributions from member jurisdictions (LTF/STA funds) and/or increased federal formula funds.

### Operating Costs

Operating costs projected for 2040 would increase significantly due an conceptual increase of approximately 13,000 fixed route service hours plus about 3,000 more hours of paratransit service. Figure 9-6 shows the projected operating costs as well as passenger productivity for the long-term service plan.

**Figure 9-6 Long-Term Service Plan Operating Cost Projection and Performance**

Long-Range Projection - 2040	
<b>Service and Operating Costs</b>	
<b>Service Levels (service hours)</b>	
<i>Fixed Route Revenue Hours</i>	82,981
<i>Paratransit Revenue Hours</i>	55,096
<b>Estimated Ridership</b>	
<i>Fixed Route Ridership</i>	1,917,011
<i>Paratransit Ridership</i>	173,278
<b>Estimated Farebox Revenue</b>	
<i>Total Fixed Route Revenue</i>	\$2,928,322
<i>Total Paratransit Revenue</i>	\$622,516
<b>Estimated Operating Costs</b>	
<i>Total Fixed Route Op Costs</i>	\$12,744,833
<i>Total Paratransit Op Costs</i>	\$6,370,036
<b>Total System Operating Costs</b>	<b>\$19,114,868</b>
<b>Performance Indicators</b>	
<b>Cost/Hour</b>	
<i>Fixed Route Service</i>	\$150.14
<i>Paratransit Service</i>	\$115.24

	Long-Range Projection - 2040
<b>Passengers/Hour</b>	
<i>Fixed Route Service</i>	21.8
<i>Paratransit Service</i>	3.2
<b>Farebox Recovery Ratio</b>	
<i>Fixed Route Service</i>	24%
<i>Paratransit Service</i>	10%

## Capital Costs

The projected capital costs for the long-term service plan are shown in Figure 9-7. The projects consist solely of vehicle replacements: 35 fixed-route vehicles and 14 paratransit vehicles at an estimated cost of nearly \$25 million.

**Figure 9-7 Long-Term Service Plan Capital Cost Projection**

Capital Costs	FY 2034-2035
Fixed Route Replacement Vehicles (35)	\$23,129,406
Paratransit Replacement Vehicles (14)	\$1,336,366
<b>Total Capital Costs</b>	<b>\$24,465,772</b>

## Funding Strategy

Since it is difficult to predict federal and state funding levels in 2040, no specific funding plan is identified. In the future, additional analysis will be needed to evaluate the cost-effectiveness and potential fundability of the services outlined in the long-term service plan.

The following section of this chapter discusses potential new local funding sources that could be used in the mid- and long-term.

## POTENTIAL NEW FUNDING SOURCES

The primary existing funding sources are Federal Transit Administration (FTA) Sections 5307 and 5311 and TDA Article 4. Federal formula funds are projected to remain constant or increase only one percent in the short and mid-term timeframe. Discretionary federal funds are competitive and are not guaranteed and tend to be used for capital improvement projects. In this current economic climate of fiscal austerity it will be challenging for BCAG to fund its current and projected operations and all of its scheduled vehicle replacement projects without some additional funding.

Potential funding sources that BCAG can pursue to supplement transit service and pay for capital investments are presented in Figure 9-8. The figure first presents new federal funding opportunities followed by potential new revenues derived from state, regional and local sources. It then reviews opportunities for generating private funds. For each funding source identified in the figure, its purpose is stated, how funds can be used and applicability for the B-Line's service needs and capital requirements. Some of the revenue sources are currently being explored by BCAG although there are no firm commitments at this time.

Figure 9-8 Potential Funding Sources

Program Fund Source	Funding Purpose	Allowable Use of Funds	Applicability for B-Line Service and Capital Enhancements	Comments
<b>Federal Fund Sources</b>				
FTA Section 5309 Capital Program (Congressional Earmarks)	Provides Federal funds for bus and bus facilities and New Rail Starts	Transit capital projects	Potential for funding replacement vehicles, new transit centers and other capital projects	Work with Congressional delegation to secure federal funding for high priority large-scale capital projects in the transportation bill (2012). Projects may be positioned to receive "earmarks" in the next funding cycle if they are high profile and have local and regional support.
FTA Section 5309 Ladders of Opportunity Initiative Grant	As part of the FTA 5309 discretionary program, approximately \$100 million is available	Transit capital projects	Potential for funding replacement vehicles, new transit centers and other capital projects	BCAG is pursuing a Ladders of Opportunity Grant for replacement vehicles.
FTA Section 5309 State of Good Repair Initiative	To improve and maintain buses and bus facilities in good physical condition; as part of the FTA 5309 discretionary program, approximately \$650 million is available	Transit capital projects	Potential for funding replacement vehicles and rehabilitation of intermodal facilities	This funding is intended to support FTA's new requirement for a transportation asset management plans that requires systematic process of operating, maintaining, and improving the physical assets of a system to achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum possible cost
FTA Small Starts	To fund corridor-based bus projects that cost less than \$250M, and no greater than \$75M	Transit capital projects	Potential for funding BRT or LRT capital investments	Small Starts funding is very competitive, and has high administrative and reporting requirements. Projects with transit-supportive policies, economic development and strong local commitment are strong competitors.
<b>State, Regional and Local Fund Sources</b>				
Safe Routes to School Grant Funding Program	Projects to increase safety and accessibility for students to use sustainable forms of transportation to get to school	Capital projects only	Funds could be used to pay for infrastructure improvements	BCAG could partner with school districts and submit a SRTS grant application for infrastructure and other related improvements

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Program Fund Source	Funding Purpose	Allowable Use of Funds	Applicability for B-Line Service and Capital Enhancements	Comments
Vehicle Registration Fee (VRF)	SB 83 was signed into law in October 2009. This law authorizes a countywide transportation planning agency to propose an annual VRF of up to \$10 on motor vehicles registered within the County. The revenue generated would be used for specific transportation programs and projects identified in an Expenditure Plan	VRF may only be used to pay for programs/projects that bear a relationship or benefit to owners of motor vehicles paying the fee and must be consistent with a regional transportation plan.	Fees shall be used to fund projects and programs that improve existing transportation infrastructure or provide alternatives to driving	BCAG can elect to place a VRF before the voters. It would provide Butte County the opportunity to obtain a dedicated local funding source for transportation improvements that benefit or mitigate the automobile. The measure must be approved by a majority of voters.
Sales Tax Measure (countywide tax dedicated to transportation purposes known as "self-help" counties)	Self-help counties generate sales tax revenues to fund high priority transportation projects such as streets/roads improvements; transit enhancements or other projects of significance in Butte County	With the passage of a local sales tax measure, an Expenditure Plan lists all transportation related projects and programs that are to be funded with sales tax revenues.	An Expenditure Plan in Butte County could include transit improvements such as a new transit center or other projects or programs that resonate well with the voters	There are 19 self-help counties in the State. Since self-help counties have control over locally raised sales tax revenues, they can influence the types of transportation projects that benefit their residents.
Parcel Tax	A parcel tax is a tax on property owners for specific purposes, such as road maintenance or transit improvements. As with all specific purpose taxes, a parcel tax would require a 2/3 majority vote.	Revenues can be used for any allowable purpose under the enabling legislation	Tax revenues can be used to support operations or for capital investments	A number of transit agencies in California use parcel taxes to help fund their services. For example, AC Transit in the San Francisco Bay Area levies an annual per-parcel tax. Total annual revenue from the parcel tax is approximately \$65 million. The Bay Area Rapid Transit District (BART) assesses each parcel in the district an ad valorem tax as opposed to a fixed annual amount.

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Program Fund Source	Funding Purpose	Allowable Use of Funds	Applicability for B-Line Service and Capital Enhancements	Comments
Transportation Impact Fee	This is a one-time fee on new residential and non-residential development to mitigate impacts from increased congestion	<p>Primarily capital projects; also operations in some situations</p> <p>Like all developer fees, transportation fees must show a nexus between the development and specified improvement or service provided.</p>	<p>Butte County has a new development impact fee that went into effect in December 2013. The fees are not used for transportation improvements and would need to be revised to include transit as an acceptable mitigation.</p> <p>The City of Chico has a transportation impact fee although it can only be used for street or bicycle-related improvements.</p>	<p>Depending upon the rate of new development approvals, this could be a good source of funds for transit capital projects, especially those linked to infrastructure improvements along major corridors.</p> <p>With the passage of AB 147, transportation mitigation impact fees now include transit, bicycle and pedestrian facilities in addition to road improvements.</p>
<b>Private Sector Sources</b>				
Public/Private Partnerships	<p>Direct or in-kind contributions can provide important marginal support for transit services.</p> <p>Public/private partnerships can increase overall funding by leveraging "outside" dollars</p>	Flexible	<p>Support operations and/or pay for capital improvements</p>	<p>Examples of public/private partnerships are presented for universities colleges, retailers and employers. These include a U-Pass Program and Eco Pass. Other possibilities include hospitals, and other institutions.</p> <p>Public/partnerships can be effective to fund shelter installation and maintenance.</p>
Universal Transit Passes	To provide unlimited rides for low monthly fees, absorbed entirely or partially by employer, school, or developers.	Flexible –helps fund service improvements especially to employers, schools or entities contributing funds.	Can be an effective way to provide a stable source of income with large employers such as government offices in Downtown Chico, Enloe Medical Center or Wal-Mart.	The principle of employee or residential transit passes is similar to that of group insurance plans – transit agencies can offer deep bulk discounts when selling passes to a large group, with universal enrollment, on the basis that not all those offered the pass will actually use them regularly.
Retail and Merchant Contributions	Retailers may share in the cost of transportation improvements especially if one-time capital improvements or contributions.	Flexible	Primarily capital projects; also operations in some situations	May require agreement between BCAG and private interests – public/private partnerships.

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Program Fund Source	Funding Purpose	Allowable Use of Funds	Applicability for B-Line Service and Capital Enhancements	Comments
Employer Contributions	Employers may share in the cost of transportation improvements if beneficial to their employees.	Flexible	Primarily capital projects; also operations especially to subsidize transit passes	Employers sometimes are willing to underwrite transportation to support their workers getting to/from worksite. IKEA currently funds a significant portion of Route X92 operating costs.
Bus Stop Sponsorships	Although not necessarily a large revenue generator, BCAG could consider sponsorships at bus stops and even on buses.	Bus Advertising	Primarily capital	Portland Streetcar has a major private sector bus sponsorship program that generates approximately \$250,000 per year. For bus stop signs, businesses pay \$500 per month for each stop. In return, the business has their name posted at each end of the shelter, an audible announcement of the business over the Streetcar communication system at the sponsored stop location(s) as well as their name printed on brochures.
Partnerships with Advertising Agencies	To increase operating revenue and/or provide passenger amenities	Flexible	Could be an effective strategy for BCAG to partner with the private sector for a small but important element of its infrastructure	AC Transit and MUNI in the San Francisco Bay Area have contracts with ClearChannel to provide shelters and other passenger amenities. Another option is to sell advertising on buses – either panels or bus wraps.
Assessment Districts (Mello-Roos)  A property-based improvement district (PBD) collects money from property owners rather than business owners.	Local jurisdictions may form a district and levy a special tax after a 2/3 vote of the property owners. A Mello-Roos special tax provides more flexibility than an impact fee because it does not require that the levy be linked to benefits received.	The taxes may be used to fund a wide variety of infrastructure needs including transit. The revenues can be used for maintenance and operations.	There are no transit or transportation special assessments in Butte County. Once established, the District could advance public/private funding for any strategy provided it benefits residents within the District boundaries.	The hotel industry is considering a tourism tax in Butte County.  Business owners often initiate the process to establish an assessment district. However the County Board of Supervisors resolution must establish the intent and activities and its proposed boundaries.

## **CONCLUSION**

The funding plan for the short and mid-term horizon is presented in Figure 9-9. In the short-term and mid-term period, the service plan is fully funded assuming the existing fund sources continue to be available and BCAG successfully secures capital grants for vehicle replacements. If capital grants are not forthcoming, then BCAG may need to postpone some of the scheduled fixed-route and paratransit vehicle replacements.

To help pay for capital improvement projects, BCAG is planning to pursue an FTA Ladders of Opportunity grant and may want to consider seeking other discretionary capital grants to pay for the replacement of vehicles when they reach their useful life. However, given the challenge in successfully securing competitive capital grants and to fund further enhancements in the longer-term; BCAG should consider other opportunities at the local level to generate local revenue sources. The most promising potential is a countywide half-cent sales tax for transportation improvements with a percentage of the revenues dedicated for transit.

Figure 9-9 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
<b>Operating and Capital Costs</b>												
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
Fixed Route Service	\$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
Paratransit Service	\$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
<b>Total System Costs</b>	<b>\$12,822,533</b>	<b>\$14,599,097</b>	<b>\$10,542,812</b>	<b>\$10,384,142</b>	<b>\$10,734,315</b>	<b>\$15,470,139</b>	<b>\$12,105,866</b>	<b>\$11,819,763</b>	<b>\$16,295,402</b>	<b>\$12,548,833</b>	<b>\$16,044,593</b>	<b>\$17,172,440</b>
<b>Operating and Capital Revenues</b>												
<b>Federal Sources</b>												
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
<b>State, Regional and Local Funds</b>												
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
<b>Farebox Revenues</b>												
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
<b>Total System Revenues</b>	<b>\$12,851,428</b>	<b>\$14,599,097</b>	<b>\$10,542,812</b>	<b>\$10,384,142</b>	<b>\$10,734,315</b>	<b>\$15,470,139</b>	<b>\$12,105,866</b>	<b>\$11,819,763</b>	<b>\$16,295,402</b>	<b>\$12,548,833</b>	<b>\$16,044,593</b>	<b>\$17,172,440</b>