INTRODUCTION

This chapter presents the recommended comprehensive Routing Plan for the B-Line transit system. This discussion builds upon the detailed evaluation of alternatives presented in previous chapters; the reader is encouraged to refer to these previous chapters for additional detail on the service elements.

An important basis of this plan is the public input provided in the course of this study. Key public input opportunities to date consist of the following:

- A virtual community workshop on July 14th with 16 participants. A summary of the workshops is provided in Appendix G.
- A second virtual community workshop on October 22, 2022, also with 16 participants.
- An onboard survey, which provided input from 280 participants.
- Development of a project webpage throughout the study process.

In addition, a third Public Workshop will be held along with community pop-up events to gain input on this Draft Plan.

NEAR-TERM PLAN

The Near-Term Routing Plan is designed to improve the near-term effectiveness of the overall transit program within financial constraints and shift services to better meet current demands and needs.

Chico Service Modifications

The existing route network in general is serving the transit needs of Chico well. The system provides good coverage of the urban area and the route structure provides good service to downtown Chico and the college campus, with transfers in downtown Chico as well at secondary transfer points at the North Valley Plaza and Forest Avenue in the south. There are some areas (notably in the eastern and northern portions of the service area) with low ridership that merit revisions. In addition, there is the need to revise routes to improve on-time performance. This plan has been developed to address those issues and improve the system overall. The guiding principles to redesign the services in Chico include:

- Retain key services in downtown Chico
- Reflect community unmet needs
- Address on-time performance issues on existing Chico routes
- Replace low performing routes with microtransit service
- Add direct service in the southeast of the City and to new destinations such as the Jesus Center
- Emphasize North Valley Plaza as the secondary transit center

Figure 34 presents the recommended Routing Plan for the Chico service area. As shown, two microtransit service areas are planned. These will consist of an app-based service (similar to Uber or Lyft) by which passengers can request immediate rides either through the app or by phone, and are provided with a curb-to-curb ride anywhere within the individual zones or to nearby fixed route hubs. Additional detail on microtransit can be found in Chapter 7, above.

The following describes the recommended changes for each route.

Route 2 Mangrove

Route 2 will continue to operate from downtown Chico to northeast Chico primarily by the Mangrove Avenue and Cohasset Road corridors. There are two changes to Route 2 under this plan. First, the route will no longer serve the DMV loop on Rio Lindo Avenue and Parmac Road. The change will allow for faster travel times and more reliable service. In addition, the north end of the route is revised to better serve the Social Security office and shorten the travel time. The route will no longer operate on Ceres Avenue and Eaton Road south of Lassen Avenue. The new routing will travel north on Ridgewood Drive, south on Ceres Avenue and west on Lassen Avenue. The overall revised route is 9.0 miles in length compared with the current 11.1 miles in length. This reduction in length will significantly improve the ability for this route to stay on schedule.

Route 3 Nord/East

There are no service changes proposed for Route 3. It is recommended to implement a transit signal priority (TSP) program to improve the travel time and reliability of the service. Potential locations for TSP could include Nord Avenue and West Sacramento Avenue, Nord Avenue and West 8th Avenue, East Avenue and Esplanade, and East Avenue at the SR 99 interchange.

Route 4 First/East

No changes are proposed for Route 4.

Route 5 East 8th Street

Under this plan there are two proposed changes to the route. First, the Springfield Drive loop will be operated in both the inbound and outbound directions, rather than the current route which only travels on the loop in the inbound direction. This will provide more convenient service to the Chico Marketplace Mall and Kohl's, as well as the residential neighborhoods. The second change is to shorten the southern terminus loop to operate south on Forest Avenue, east on Parkway Village Drive and north on Huntington Drive. This new routing shortens the travel time while still making the connection to Walmart and to other routes at the Forest Avenue Transit Center. The Notre Dame Boulevard loop will be discontinued on Route 5 but will be served by a new microtransit zone, as discussed below. The revised route will be 11.2 miles in length, 0.3 miles less than at present. This will reduce running time by several minutes, improving on-time performance.

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Route 8 Nord

No routing changes are proposed for Route 8. However, it is recommended that service times be expanded to include Friday evening service until 9:34 PM as well as providing service on Saturdays from 8:20 AM to 9:34 PM, when CSUC is in session. This will enhance service to the busy neighborhood northwest of the CSUC campus, which generates strong ridership.

Route 9 Orange/Warner/Cedar

Route 9 will continue to operate the existing route in the CSUC area, with two modifications. First, the southern loop will be shifted to Orange Street instead of Oak Street to provide additional coverage in the neighborhood and to serve the Amtrak station. Only one existing stop (on Oak Street just north of West Seventh Street) will need to be moved. Secondly, service will be extended during the CSUC sessions to provide Friday evening service until 10:01 PM, as well as Saturday service from 8:14 AM to 10:01 PM. This will replace the existing 9C service on Friday evenings and Saturdays during the CSUC sessions.

Route 14 Park/Forest/MLK

No changes are proposed for Route 14.

Route 15 Esplanade/Lassen

Route 15 will continue to provide service from downtown Chico to north Chico via the Esplanade corridor. Under this plan, Route 15 will take over the Rio Lindo Avenue / Cohasset Road loop to serve the DMV. In addition, the northern terminus routing will shift north to Ridgewood Drive to better serve the Social Security office and to offset some of the additional running time needed to serve the Rio Linda / Cohasset Road loop.

Route 16 Esplanade/ Hwy 99

Route 16 will be eliminated under this plan. This addresses the inefficient overlap between Routes 15 and 16 on Esplanade south of Lassen Boulevard (with Route 15 continuing to provide service). North of Lassen Avenue, service will be provided by the North Microtransit service, as discussed below.

Route 17 Park/Fair/Forest

Route 17 provides service from the Downtown Transit Center to the Walmart and Butte College Chico Campus on Forest Avenue. The route will be revised to shift the service from MLK Jr. Parkway to Fair Street in the outbound direction to provide direct service to the Jesus Center and Fairgrounds. Stops along MLK Jr. Parkway will continue to be served by Route 14.

Route 52 Chico Airport Express

Route 52 operates limited express service to the airport (five runs per weekday). This service will be discontinued and replaced by the North Microtransit.

North Microtransit Zone

The zone is designed to replace the low-performing Routes 16 and 52 that are currently serving the community in northwest Chico. It consists of the area north of Lassen Avenue as far west as Alamo Avenue and as far east as Cohasset Road, extending as far north as the airport terminal on the northeast and the SR 99 / Wilson Landing Road intersection on the northwest. The microtransit van will also serve the key stops at North Valley Plaza and at the Social Security office on Lassen Avenue to connect the on-demand service with the fixed route system.

The Northwest Zone will utilize the revenue hours from the existing Route 16 to operate weekdays and Saturdays. One vehicle will be sufficient to provide service in the zone. Fares will be identical with the fixed route fares (for all microtransit zones).

East Microtransit Zone

The East Zone is designed to replace the existing poorly performing Route 7. It will serve the areas on the east side of Chico between Forest Avenue and Bruce Road/Manzanita Avenue, as well as the area north of East Avenue and east of Cohasset Road. Route 7 currently has the lowest ridership in the system. The area is made up of lower density land uses that can be better served by microtransit than fixed route. The vehicle will also serve transfer points at North Valley Plaza, Social Security office and Forest Avenue Transfer Point to provide connections with fixed routes and will also serve the existing bus stops at Pleasant Valley High School.

The zone will utilize the revenue hours from the existing Routes 7 and 52 to operate weekday service. One vehicle will be sufficient to provide service in the zone.

Plan Benefits

Overall, this plan has the following benefits in the Chico Area:

- Travel times are reduced on Routes 2 and 5, improving the on-time performance.
- Lower performing routes have been replaced with microtransit to better align the service with the market it serves and to expand the effective transit service area.
- Transit coverage is extended with microtransit in the east and north areas, with continued connection points at Downtown Chico, North Valley Plaza and Forest Avenue.
- Direct fixed route local service is provided on Fair Street to the Jesus Center.
- Friday evening service and Saturday service is provided on Routes 8 and 9 when CSUC is in session.

Oroville Service

The existing service in Oroville operates four routes at 60-minute headways using two buses. This plan reallocates the service hours to improve on-time performance and coverage in the area. The service plan introduces three microtransit zones and three fixed routes to expand the service to more areas. The key components of the services in Oroville include:

- Retain high ridership route segment
- Replace low ridership segments with microtransit

- Commingle paratransit and general public demand response extend coverage

Figure 35 presents the near-term routing plan for the Oroville service area. The following provides an overview of the recommended changes for each route.

Route 25 Feather River Boulevard

Route 25 provides service from the Oroville Transit Center to Walmart and the retail area along Feather River Boulevard in the southwest part of the city. Under this plan, the route will operate in a bi-directional manner along the existing service on Feather River, Mitchell Avenue to the DMV, north on 5th Avenue to Robinson Street and Lincoln Street to the Transit Center. The route will follow the same routing in the outbound direction back to Feather River and Walmart. The route will no longer serve the Oro Dam corridor (which will be served by Route 27). Table 40 provides an example schedule for Routes 25, 26 and 27, indicating how one bus operates the three routes over the course of each hour.

Route 26 Orange Avenue

The revised Route 26 extends the existing loop along Orange Avenue, Canyon Highlands Drive, and Bridge Street to service the Oroville High School, as well as the retail and residential in that area. The route connects to other routes at the transit center. It is interlined with the Route 25 and 27.

Route 27 Oro Dam/Veatch

Route 27 will serve the segment of Oro Dam Boulevard between the Transit Center and Veatch Street, including FoodMaxx and Las Plumas Plaza. The route will travel in a small loop to provide service along Oro Dam and connect back to the Transit Center for connections to other routes. The route will be interlined with Routes 25 and 26.

West Microtransit Zone

The existing Route 24 which serves the Thermalito area has very low ridership and productivity. Under this plan a West Zone encompassing the Thermalito area will be operated as a combined paratransit and general public demand response service. The service in the zone will connect riders from Thermalito to areas in central Oroville for transfer opportunities to other routes and zones. Fares for all microtransit zones will be consistent with the fixed route fares.

Southeast Microtransit Zone

The Southeast Zone provides service to the areas along Olive Highway (as far east as Gold Country Casino) and along Lincoln Street and Lower Wyandotte Road as far south as Monte Vista Avenue, serving the areas currently served by Route 27 and Route 26 (that will no longer operate on Olive Highway). The zone will also cover Las Plumas High School, Gold Country Casino and connect to the Transit Center for transfer opportunities. Passengers will also be able to travel to/from the Oroville Transit center to connect with fixed routes or other microtransit zones. Route 30 will also continue to serve the southern portion of this zone.

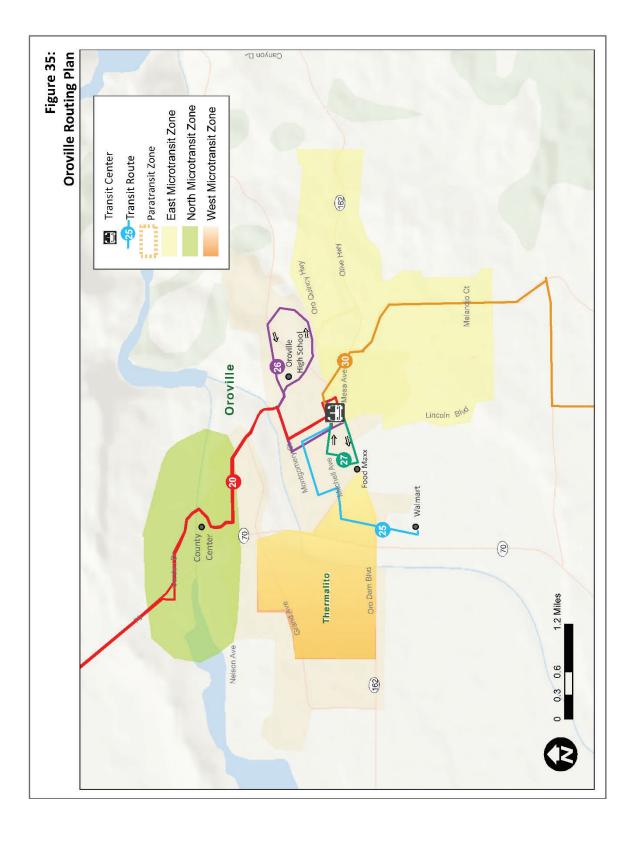


Table 40: Example Schedule - Oroville Fixed Routes							
			Route 2	Route 27			
Transit Center	Feather River Cinema	Transit Center	Bridge & Acacia	Orange & Acacia	Transit Center	Food Maxx	Transit Center
6:10 AM	6:21 AM	6:31 AM	6:39 AM	6:42 AM	6:50 AM	6:54 AM	7:00 AM
7:10 AM	7:21 AM	7:31 AM	7:39 AM	7:42 AM	7:50 AM	7:54 AM	8:00 AM
8:10 AM	8:21 AM	8:31 AM	8:39 AM	8:42 AM	8:50 AM	8:54 AM	9:00 AM
9:10 AM	9:21 AM	9:31 AM	9:39 AM	9:42 AM	9:50 AM	9:54 AM	10:00 AM
10:10 AM	10:21 AM	10:31 AM	10:39 AM	10:42 AM	10:50 AM	10:54 AM	11:00 AM
11:10 AM	11:21 AM	11:31 AM	11:39 AM	11:42 AM	11:50 AM	11:54 AM	12:00 PM
12:10 PM	12:21 PM	12:31 PM	12:39 PM	12:42 PM	12:50 PM	12:54 PM	1:00 PM
1:10 PM	1:21 PM	1:31 PM	1:39 PM	1:42 PM	1:50 PM	1:54 PM	2:00 PM
2:10 PM	2:21 PM	2:31 PM	2:39 PM	2:42 PM	2:50 PM	2:54 PM	3:00 PM
3:10 PM	3:21 PM	3:31 PM	3:39 PM	3:42 PM	3:50 PM	3:54 PM	4:00 PM
4:10 PM	4:21 PM	4:31 PM	4:39 PM	4:42 PM	4:50 PM	4:54 PM	5:00 PM
5:10 PM	5:21 PM	5:31 PM	5:39 PM	5:42 PM	5:50 PM	5:54 PM	6:00 PM

North Microtransit Zone

The North Microtransit Zone will share a vehicle with the Southeast Microtransit Zone. The zone will provide microtransit service to County Center Road and Grand Avenue area. This will take over for the discontinued portion of the existing Route 24. Trips to and from the Oroville Transit Center will also be accommodated to allow transfers to the fixed routes. Note that Route 20 will continue to serve this area on a more direct route (as discussed below).

Benefits of Plan in Oroville

This plan will have the following benefits in Oroville:

- Improved on-time performance for fixed routes
- Lower performing routes have been replaced with microtransit to better align the service with the market it serves. This has the potential to expand ridership in the future.
- Extended transit coverage with microtransit in the southeast and north areas
- No additional revenue hours

Paradise/Magalia Service

Route 40

The plan will combine Routes 40 and 41 and provide a consistent and more direct service connecting Magalia, Paradise and Chico. As shown in Figure 36, the route operates along most of the segment of the existing Route 40 to Wagstaff Road / Clark Road and continues north on Clark Road to the Lakeridge loop in Magalia. The Paradise Transit Center will be served in both directions. Note that the existing Route 41 service along Fair Street in Chico will be eliminated (all service will be along the

existing Route 40 in Chico), but the revisions to Route 17 will replace and expand service along Fair Street. Reflecting current ridership levels, the number of runs on weekdays will be five in the westbound direction and four in the eastbound direction, with three runs in each direction on Saturdays. As shown in Table 41, these runs are scheduled to allow commuting in both directions on weekdays, as well as mid-day services to allow a variety of trip lengths for other purposes. Note that if demand increases in the future, additional runs (particularly on weekdays) could be added.

Paradise/Magalia Microtransit

Outlying areas of Paradise and Magalia will be served by a microtransit zone. This will replace the various low-ridership loops operated currently by Route 41 and also substantially expand the transit service area to encompass new developments in Paradise that are part of rebuilding the community. (These new development sites are also shown in Figure 36.) To provide connections with the fixed route, service will operate from $6:30 \, \text{AM} - 6:00 \, \text{PM}$ on weekdays and $9:30 \, \text{AM} - 5:30 \, \text{PM}$ on Saturdays. This service should initially be operated using a single van. If ridership grows to the point where average wait times consistently exceed 30 minutes, a second van could be added during peak times. Fares will be consistent with the local fixed route fares.

Benefits of Plan in Paradise/Magalia

This plan will have the following benefits in Paradise and Magalia:

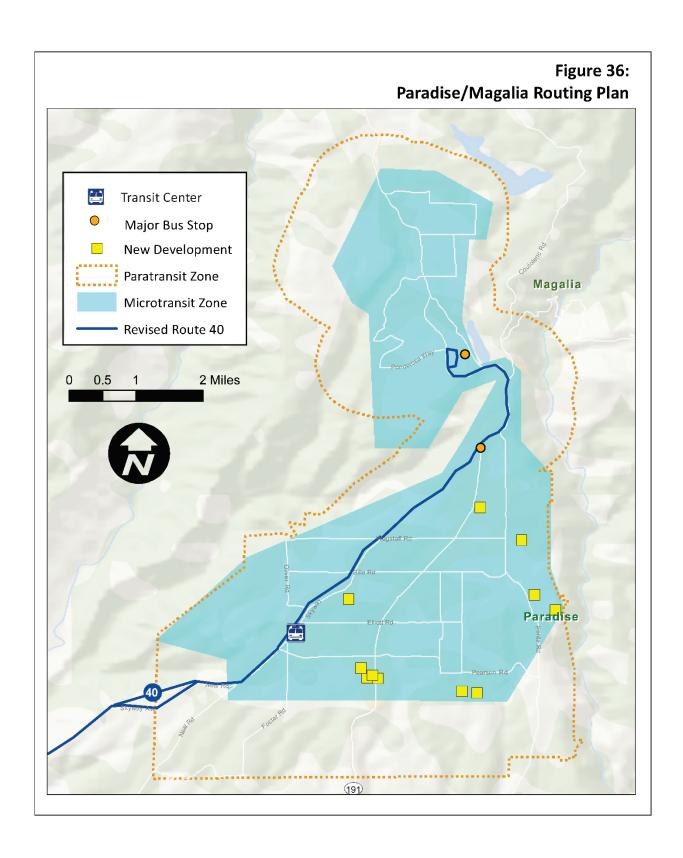
- Improved on-time performance for fixed route.
- Lower performing route segments have been replaced with microtransit to better align the service with the market it serves.
- Microtransit significantly expands the portions of the Ridge communities that have transit service. Importantly, this includes scattered multifamily residential developments that cannot be efficiently served by fixed routes. Overall, it provides service that better fits the development pattern as the area continues to recover from the Camp Fire. It also provides service for trips within the local area at the lower local fare rate rather than the current regional fare rate.

Other Intercity Services

Beyond the Paradise/Magalia service, the intercity routes will be revised as discussed below and shown in Figure 37.

Route 20

Route 20 is currently providing critical connections between the most populous areas within Butte County — Chico and Oroville. In this plan most of the routing of Route 20 will remain the same. The proposed rerouting will be focused on the County public service complex in Oroville as illustrated in Figure 24. The proposed new Route 20 will be bidirectional along SR 70, Garden Dr, Table Mountain Blvd, County Center Dr, Nelson Ave, and back to Table Mountain Blvd. This will reduce running time by 1 to 2 minutes and improve on-time performance.



		ute 40 Sched	ule			
Eastbound Weekday						
Chico		Paradise		Magalia		
Chico Transit	Forest Xfer	Paradise	Skyway &	Lakeridge	Continues	
Center	(Walmart)	Transit Center	Wagstaff	(Sav Mor Mkt)	On To	
7:20 AM	7:32 AM	7:54 AM	8:01 AM	8:13 AM	40 West	
10:50 AM	11:02 AM	11:24 AM	11:31 AM	11:43 AM	40 West	
12:50 PM	1:02 PM	1:24 PM	1:31 PM	1:43 PM	40 West	
4:50 PM	5:02 PM	5:24 PM	5:31 PM	5:43 PM	40 West	
Westbound We	eekday					
Magalia	Par	adise	Cl	nico		
Lakeridge	Skyway &	Paradise	Forest Xfer	Chico Transit	Continues	
(Sav Mor Mkt)	Wagstaff	Transit Center	(Walmart)	Center	On To	
6:45 AM	6:58 AM	7:05 AM	7:27 AM	7:40 AM		
8:15 AM	8:28 AM	8:35 AM	8:57 AM	9:10 AM		
11:45 AM	11:58 AM	12:05 PM	12:27 PM	12:40 PM	40 East	
1:45 PM	1:58 PM	2:05 PM	2:27 PM	2:40 PM		
5:45 PM	5:58 PM	6:05 PM	6:27 PM	6:40 PM		
Eastbound Satu	urday					
Chi	со	Paradise		Magalia		
Chico Transit	Forest Xfer	Paradise	Skyway &	Lakeridge	Continues	
Center	(Walmart)	Transit Center	Wagstaff	(Sav Mor Mkt)	On To	
9:50 AM	10:02 AM	10:24 AM	10:31 AM	10:43 AM	40 West	
12:50 PM	1:02 PM	1:24 PM	1:31 PM	1:43 PM	40 West	
4:10 PM	4:22 PM	4:44 PM	4:51 PM	5:03 PM	40 West	
Westbound Saturday						
Magalia Paradise		adise	lise Chi			
Lakeridge	Skyway &	Paradise	Forest Xfer	Chico Transit	Continues	
(Sav Mor Mkt)	Wagstaff	Transit Center	(Walmart)	Center	On To	
10:45 AM	10:58 AM	11:05 AM	11:27 AM	11:40 AM		
1:45 PM	1:58 PM	2:05 PM	2:27 PM	2:40 PM		
5:05 PM	5:18 PM	5:25 PM	5:47 PM	6:00 PM		

Route 30

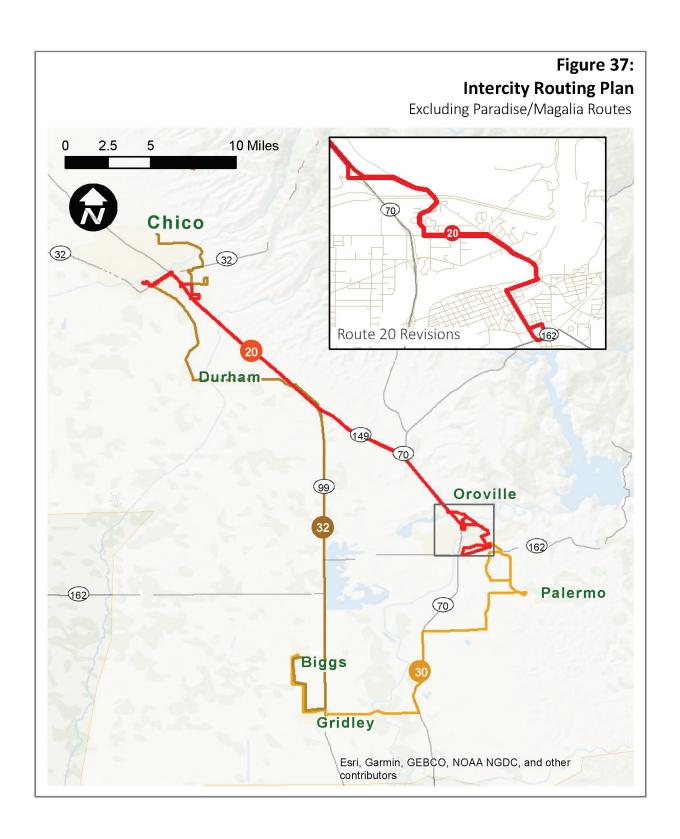
No changes are planned for Route 30.

Route 32

No changes are considered for Route 32. While ridership is low, it is an important lifeline service, and serves disadvantaged communities.

Route 31

Prior to the Camp Fire, Route 31 provided service between Paradise and Oroville. Even before the pandemic and fire, ridership on this route was very low. Given that the bulk of the need for a transit connection to Paradise/Magalia is to/from Chico, available transit resources are better used in expanding that service (as discussed above) and reinstatement of Route 31 is not part of this plan.



Benefits to Intercity Services

- Improved on-time performance for intercity routes
- Maintain key service areas of the intercity routes
- Improve regional service efficiency

Paratransit Services

Under this plan, fixed routes will be reduced. As the minimum paratransit service area required under the Americans with Disabilities Act is a ¾ mile distance from a fixed route, this provides the potential to reduce paratransit service areas. However, no reductions in existing paratransit services are proposed.

Also, as detailed in Chapter 8, expansion of paratransit services is not warranted under current ridership demands. Instead, B-Line should focus on continuing to provide a high quality of paratransit service.

Total Systemwide Operations Impacts

This plan will require 76,572 annual vehicle-hours of revenue service to operate the B-Line System, as shown in Table 42. This is 408 or 1 percent more than the total services under the existing service plan for FY 2021-22 As shown in this table, this reflects a slight increase in services for Paradise/Magalia, a slight increase in Chico service, and no change in other services. This plan will result in a 13 percent decrease in vehicle-hours of revenue service compared to FY 2022-23.

Ridership Impacts

Table 43 presents the ridership forecast for the near-term Routing Plan. Overall, systemwide ridership is forecast to increase by 9 percent, or 43,900 boardings per year. (Note that this does not reflect any changes from external factors such as the continued rebound from the impacts of the pandemic.) By service area, this consists of the following:

Chico: 10 percent increase Oroville: 2 percent increase

Paradise/Magalia: 16 percent increase Other Intercity: 3 percent increase

Fixed route ridership estimates were calculated using an elasticity of demand model which measures the demand shift based on demographic and operational changes. Microtransit ridership was calculated based on the total population and jobs in each zone, as well as the microtransit ridership rates per person/job seen in other similar area providing microtransit service. As a new service to the region, however, the ridership estimates for the microtransit services have a relatively high level of uncertainty. These should be considered to have a possible error range of + or - 50 percent. Of note, under this Routing Plan overall ridership is forecast to increase by 9 percent while service levels will increase by 1 percent. This indicates that the Plan as a whole will improve the effectiveness of the B-Line services.

Table 42: Near Term Routing Plan Impact on Service Revenue Hours

	Vehicle Revenue-Hours of Service			
Route/Service	Weekday	Saturday	Sunday	Total Annual
2	15.5	11.0	0	4,556
3	15.8	10.0	0	4,581
4	17.8	10.0	0	5,082
5	14.3	11.0	0	4,252
East Chico Microtransit	11.8	10.0	0	3,540
8	14.4	0.0	0	3,711
9	15.1	13.8	0	4,594
14	23.0	11.0	0	6,483
15	22.5	11.0	0	6,355
North Chico Microtransit	11.5	10.0	0	3,476
17	10.5	9.5	0	3,193
25	6.3	0.0	0	1,606
26	6.0	0.0	0	1,542
27	6.0	0.0	0	1,542
Southeast Microtransit	3.0	0.0	0	868
North Microtransit	3.0	0.0	0	868
Thermalito Microtransit ¹	0.0	0.0	0	0
40	8.1	5.4	0	2,366
Paradise/Magalia Microtransit	11.5	8.0	0	3,367
20	24.9	9.8	9.84	7,405
30	5.4	5.6	0	1,671
32	2.0	0.0	0	516

Summary by Service Area	Annual Vehicle Revenue-Hours of Service					
	Existing	Plan	Change	% Change		
Chico	49,605	49,821	216	0%		
Oroville	6,426	6,426	0	0%		
Paradise/Magalia	5,541	5,733	192	3%		
Other Intercity	9,592	9,592	0	0%		
Total Systemwide	71,164	71,572	408	1%		

Note 1: Served by existing paratransit vans.

Table 43: Ridership Impacts of Near-Term Routing Plan

	Annual Ridership				
	Existing - Factored	Factored 2022 Estimated With	Charra	%	
Route	2022 Estimated	Plan	Change	Change	
Chico Area					
2 Mangrove	34,200	36,500	2,300	7%	
3 North/East	58,400	61,400	3,000	5%	
4 First/East	37,900	37,900	0	0%	
5 East 8th St	27,000	30,400	3,400	13%	
7 Bruce/Manzanita	6,700	0	-6,700	-100%	
8 Nord	30,400	35,300	4,900	0%	
9 Warner/Oak	47,800	55,500	7,700	0%	
14 Park/Forest/MLK CW	29,600	29,600	0	0%	
15 Esplanade/Lassen	44,000	64,900	20,900	48%	
16 Espanade/99	25,900	0	-25,900	-100%	
17 Park/Fair/Forest CCW	14,100	23,000	8,900	63%	
52 Chico Airport Express	1,800	0	-1,800	-100%	
Chico East Microtransit Zone	0	9,800	9,800		
Chico North Microtransit Zone	0	7,500	7,500		
Subtotal: Chico Area	357,800	391,800	34,000	10%	
<u>Oroville</u>					
24 Thermalito	5,300	0	-5,300	-100%	
25 Feather River	4,400	4,700	300	7%	
26 Orange/Bridge St	3,800	3,100	-700	-18%	
27 Oro Dam/Foodmaxx	4,300	1,700	-2,600	0%	
Oroville Microtransit Zones		8,600	8,580		
Subtotal: Oroville	17,800	18,100	280	2%	
Paradise/Magalia					
40 Paradise/Magalia-Chico	26,600	41,600	15,000	56%	
41 Magalia-Chico	19,300	0	-19,300	-100%	
Paradise/Magalia Microtransit Zone	0	11,700	11,700		
Subtotal: Paradise/Magalia	45,900	53,300	7,400	16%	
Intercity (Excluding Paradise/Magalia)					
20 Chico-Oroville	57,900	60,100	2,200	4%	
30 Oroville-Biggs	5,700	5,700	0	0%	
32 Gridley-Chico	1,500	1,500	0	0%	
Subtotal: Intercity	65,100	67,300	2,200	3%	
TOTAL SYSTEMWIDE	486,600	530,500	43,900	9%	

MID-TERM SERVICE PLAN

An additional service plan was developed for possible implementation in the mid-term (5 to 10 years) planning horizon. This assumes that future ridership warrants expansion. A potentially viable means of enhancing transit quality and generating increased ridership is to provide high frequency (every 15 minutes) on high ridership potential corridors connecting key activity centers. As shown in Figure 38, this consists of 15-minute weekday service on Routes 3 and 14 from approximately 6:30 AM to 6:00 PM. By providing high-frequency service along the key corridors connecting the commercial and Butte College (Chico) campus area on the south with downtown/CSUC and the North Valley Plaza, this will improve connections and reduce overall travel times throughout the city. It will also increase the potential for development along the high-frequency corridors that take advantage of the improved accessibility.

In addition, Transit Signal Priority should be installed at approximately 10 key signals along Route 14 (in addition to the TSP installations along Route 3 under the near-term plan). While specific locations will require a detailed traffic engineering analysis, a preliminary list is as follows:

- Broadway/8th
- Park/20th
- 20th/Martin Luther King, Jr.
- 20th/ SR 99 Southbound
- 20th/ SR 99 Northbound

- 20th / Forest
- Skyway / Notre Dame
- Skyway / SR 89 NB Off Ramp
- Skyway / SR SB Off Ramp
- Park / Martin Luther King, J

Over the course of a year, this service improvement will increase revenue vehicle-hours by 13,244. At current rates, this will increase annual operating costs by \$1.18 Million. Ridership is estimated to increase by approximately 56,000 boardings per year, or a 62 percent increase over the near-term plan ridership on the two key routes. Note that this ridership estimate does not assume any "background" increase in ridership (due to rebound from pandemic ridership patterns, for example) nor does it reflect ridership generated by any new development along the high frequency corridor.

CAPITAL PLAN

As detailed in Chapter 9, the implementation of this Routing Plan will require some capital investments, as follows:

• The service modifications (and in particular the replacement of existing fixed routes with microtransit service) will allow a total of 112 existing stops to be removed (60 in Chico, 31 in Paradise/Magalia and 15 in Oroville). Of these, 23 currently have shelters. In addition, a total of 6 new stops will need to be installed, of which 4 will warrant shelters. Overall, bus stop modifications are forecast to cost a total of \$63,400.

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- The Near-Term service modifications would reduce the peak number of buses required in fixed route operation by two. Including one spare, a total of six vehicles would be required for microtransit service. The current B-Line van fleet consists of 22 vans that could be used for paratransit or microtransit service. As 16 vans are required for peak paratransit service (including 3 for spares), there are six vans currently available, sufficient to support the microtransit service. It is worth noting, however, that 12 of these vans are 2013 models and may well warrant replacement in the near future, and that any growth in paratransit demand may necessitate additional vehicle purchases.
- The Mid Term service would require four additional buses to provide 15-minute headway service.
- Microtransit services use specific software programs and apps, designed to receive ride requests, schedule drivers, track services and generate reports. There are a variety of software providers with varying prices, capabilities and levels of customer support, that are offered on a subscription basis. At typical current prices, the software needed to support the four microtransit zones would cost approximately \$47,500 per year.
- The Transit Signal Priority (TSP) systems recommended for Route 3 (in the near-term) and for Route 14 (in the mid-term) would cost on the order of \$540,000 to implement. This includes \$50,000 for detailed system design and implementation, \$450,000 for signal modifications, and approximately \$40,000 for on-bus equipment. \$240,000 would be needed for the near-term improvements, and an additional \$300,000 for the mid-term.

FARE PLAN

The following modifications to the existing fare policies are recommended, as discussed in Chapter 10:

- The 2-ride fare categories should be eliminated, in order to reduce the administrative costs and time required to handle fares on the buses and in recognition of the very low use of these fares. Instead, a new half-fare Day Pass should be implemented, and customers encouraged to make use of the Day Pass.
- Microtransit service should be provided at the Local Fare rates. This increases the equity of
 the general public transit services by making no difference in fares between areas close to
 fixed routes and those in other portions of the microtransit zones. Note that this will
 effectively reduce the fare rates in the Paradise/Magalia area.
- The types of passengers eligible for discounted fares should be expanded to include Veterans.