

# Sustainability Task Force Agenda 

A Committee of the Chico City Council
Mayor Ann Schwab, Chair
Meeting of May 3, 2010 - 3:00 p.m. to 5:00 p.m.
Council Chamber Building, 421 Main Street, Conference Room No. 1

## 1. UPDATE ON BUTTE REGIONAL TRANSIT SYSTEM MARKET-BASED STUDY.

In February 2009, the Butte County Association of Governments (BCAG) retained a consultant to conduct a Market-based Study of the Butte Regional Transit System (B-Line). The purpose of this study is to comprehensively evaluate the current fixed route system to determine whether it is effectively meeting consumer needs within the Butte County area. Senior Planner Robin Van Valkenburgh from BCAG will provide an update on the study and information on proposed service changes to the B-Line system. A copy of Working Paper \#4 with background information regarding the Market Based Transit Study is attached to this agenda.

## 2. REPORTS AND COMMUNICATIONS

## a. Report from the Ad-Hoc Education/Outreach Committee

The Task Force's Ad-Hoc Education/Outreach Committee will provide a report on Ecofest and other Earth Day related outreach events.

## b. Report on the City Council Action Regarding the Residential Energy Conservation Ordinance (RECO)

Staff and the Chair Schwab will provide a report on the City Council's consideration of the proposed revisions to the Chico Municipal Code regarding energy and water conservation measures required upon the resale or transfer of residential housing.

## 3. BUSINESS FROM THE FLOOR

Members of the public may address the Committee at this time on any matter not already listed on the agenda, with comments being limited to three minutes. The Committee cannot take any action at this meeting on requests made under this section of the agenda.
4. ADJOURNMENT - The meeting will adjourn no later than 5:00 p.m. to a regular meeting scheduled for 3:00 to 5:00 p.m. on Monday, June 7, 2010.

## ATTACHMENTS:

Market Based Transit Study Working Paper \#4

| Distribution available in the office of the City Clerk: |  |
| :--- | :--- |
| Prepared: | $4 / 28 / 10$ |
| Posted: | $4 / 28 / 10$ | | Chico City Clerk's Office |
| :--- |
| Prior to: |
| $3: 00$ p.m. |

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## B Line

## Market Based Transit Study

Working Paper \#4: B-Line Preferred Alternative

4/19/2010<br>Butte County Association of<br>Governments

## Introduction

## Background

This is the fourth working paper for the BCAG Market-Based Transit Study. It provides the routing, scheduling framework, vehicle service hours, and hours of operation for the preferred alternative. Since ten months have elapsed from the first working paper to this working paper, the key findings of the first three working papers are presented to provide the context for the preferred alternative.

The first working paper, finalized in June 2009, reported on the results of the Community Telephone and E-Survey Reports. The market research report was based on the data collected from three surveys: a random community telephone survey of Butte County residents, a non-random e-survey of Butte County commuters (college students and employees) and a comprehensive survey of B-Line riders. The later survey of B-Line riders was completed in 2008 and was conducted under a separate contract. A few of the key findings are repeated below.

Butte County's population appears to be surprisingly open to the concept of using public transportation. Both the general population reflected in the phone survey, and the commuter population reflected in the e-survey, include large segments of potential riders.

## 2 Phone Survey

- Twelve percent of residents already use the bus, at least occasionally, and fully half of the population says they would be willing to consider riding if service were convenient.
- Among the potential riders, $63 \%$ say they believe using transit would be "convenient" and $87 \%$ say they can realistically see themselves using B-Line if service improvements were made.

E-Survey

Market Segments


- Of commuters who responded to the e-survey, $24 \%$ currently use B-Line at least once a month, while half ( $49 \%$ ) are potential riders open to the idea of using B-Line regularly.
- Commuters captured in the e-survey were somewhat less optimistic about B-Line's convenience than potential riders in the general population. Thirty-nine percent (39\%) of the potential riders thought B-Line would be convenient, and $66 \%$ thought they would realistically consider using B-Line if major improvements were made.

Even among residents who don't use B-Line regularly, many indicated a true willingness to give it a try.

The majority (about 80\%) of both the Butte County population included in the phone survey and the respondents to the e-survey enjoys full modal choice. This means that if passengers are to be attracted to transit use it will be because of factors other than lack of a vehicle.

Despite the high level of modal choice, there is currently a significant minority of the population which uses alternative modes of transportation to commute to work or school.

## 2 Phone Survey

- Among the general population, only two-thirds (66\%) drive alone to work or school. Twenty percent carpool, $5 \%$ bike, $4 \%$ ride the bus, and $4 \%$ walk.
- Among potential riders in the general population, $65 \%$ currently drive alone, while $25 \%$ carpool.


## E-Survey

- Among the e-survey respondents, $70 \%$ drive alone, while $11 \%$ bicycle, $8 \%$ carpool, $7 \%$ ride the bus and $4 \%$ walk.
- Student commuters are much more likely to ride the bus (23\%), bike (19\%) or walk (13\%). Only $33 \%$ drive alone.
- Among the potential commute riders, $79 \%$ drive alone, while $9 \%$ bike and $9 \%$ carpool.

The second working paper, completed in July 2009, was the Existing Conditions Report. The purpose of this report is to provide an accurate baseline for the development of four alternatives for the Market Based Transit Study. The main feature of this report is individual route profiles of the Chico Urban Routes and Regional Routes 20, 40, and 41. A summary of existing performance is provided below.

## Chico Urban Routes

The table at the right provides a summary of the average monthly performance from September 2007 to June 2008 when CSUC and other schools are in session. Route 6 has the highest average monthly ridership at 17,384 monthly passengers. Route 8 , one of the CSUC student routes, has the highest productivity at 39.0 passengers per hour. Route 7 has the lowest ridership with just 1,696 monthly passengers and just 5.8 passengers per hour. The cost per passenger is just $\$ 2.02$ for Route 8 , but is $\$ 12.14$ for Route 7.

| Chico <br> Routes | Monthly <br> Rev. Hrs. | Monthly <br> Costs | Monthly <br> Passenger | Pass/ <br> Rev. Hour | Cost/ <br> Passenger |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 465 | 32,550 | 9,201 | 19.8 | $\$ 3.54$ |
|  | 456 | 31,920 | 7,629 | 16.7 | $\$ 4.18$ |
| $\mathbf{3}$ | 388 | 27,160 | 9,230 | 23.8 | $\$ 2.94$ |
| $\mathbf{4}$ | 388 | 27,160 | 7,676 | 19.8 | $\$ 3.54$ |
| $\mathbf{5}$ | 611 | 42,770 | 8,395 | 13.7 | $\$ 5.10$ |
| $\mathbf{6}$ | 627 | 43,890 | 17,384 | 27.7 | $\$ 2.52$ |
| $\mathbf{7}$ | 294 | 20,580 | 1,696 | 5.8 | $\$ 12.14$ |
| $\mathbf{8}$ | 259 | 18,130 | 10,102 | 39.0 | $\$ 2.02$ |
| $\mathbf{9}$ | 259 | 18,130 | 6,861 | 26.5 | $\$ 2.97$ |
| $\mathbf{1 0}$ | 338 | 23,660 | 4,692 | 13.9 | $\$ 5.04$ |

## Oroville Routes

The table at the right shows the performance of the four local Oroville routes. There are significantly fewer monthly revenue hours in Oroville than in Chico, which reflect the lower demand levels. Average monthly passengers for this weekday-only service range from 351 to 790 monthly passengers. Productivity, as measured in passengers per vehicle revenue hour, is particularly low, ranging from 4.8 to 11.0 passengers per hour. Route 27 is higher than average because it does serve a number of students at Las Plumas High School before and after school.

| Oroville | 10- month Average FY 2007/08: 9/2007-6/2008 |  |  |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: |
|  | Monthly | Monthly | Monthly | Pass/ | Cost/ |
|  | Rev. Hours | Costs | Passengers | Rev. Hour | Passenger |
| $\mathbf{2 4}$ | 74 | $\$ 5,145$ | 351 | 4.8 | $\$ 5.85$ |
| $\mathbf{2 5}$ | 114 | $\$ 7,980$ | 790 | 6.9 | $\$ 6.37$ |
| $\mathbf{2 6}$ | 49 | $\$ 3,430$ | 396 | 8.1 | $\$ 6.79$ |
| $\mathbf{2 7}$ | 57 | $\$ 3,990$ | 628 | 11.0 | $\$ 7.20$ |

## Regional Routes

There are five regional routes that connect the towns and cities of Chico, Oroville, Paradise, Magalia, Gridley and Biggs. Service levels vary greatly. Route 20 offers hourly service on weekdays and service every two hours on weekends. Route 20 has high productivity for a longer intercity route, at 19.3 passengers per hour, with a cost per passenger of just $\$ 3.63$.

At the other end of the service level continuum is Route 31, with just one trip in the morning and one trip in the afternoon between Oroville and Paradise on weekdays only. The service averages 9

| Regional <br> Routes | 10- month Average FY 2007/08: 9/2007-6/2008 |  |  |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: |
|  | Menthly | Monthly <br> Revs | Monthly <br> Passengers | Passl <br> Rev. Hour | Cost/ <br> Passenger |
|  | 518 | $\$ 36,260$ | 9,999 | 19.3 | $\$ 3.63$ |
| $\mathbf{3 0}$ | 131 | $\$ 9,170$ | 1,311 | 10.0 | $\$ 7.00$ |
| $\mathbf{3 1}$ | 39 | $\$ 2,730$ | 353 | 9.0 | $\$ 7.74$ |
| $\mathbf{4 0}$ | 427 | $\$ 29,890$ | 5,930 | 13.9 | $\$ 5.04$ |
| $\mathbf{4 1}$ | 289 | $\$ 20,230$ | 2,954 | 10.2 | $\$ 6.85$ | passengers per hour, which is lowest among the B-Line intercity routes, but still quite respectable compared to other peer intercity services. Routes 40 and 41 between Magalia, Paradise and Chico provide over 700 monthly revenue hours of service. Route 40 is slightly more productive with 13.9 passengers and a cost per trip of $\$ 5.04$, second to Route 20.

A series of workshops was held between March 30 and April 202009 to receive public input on the B-Line system and opportunities for improvement in the future. Many of the public comments received were considered in the development of the alternatives presented in this working paper.

The final input to the development of the four alternatives was a Design Summit held with BCAG staff, Veolia staff, two elected officials representing the Project Development Team, and project consultant staff, from July $28^{\text {th }}$ to July $30^{\text {th }}$. General sessions were held on each day:
$>$ July $28^{\text {th }}$ : Chico Routes
> July 29 $9^{\text {th }}$ : Regional Routes and Oroville Routes
> July $30^{\text {th }}$ : Preliminary Proposals.
The primary purpose of the Design Summit was to utilize the results of the market research, public input, and evaluation of existing B-Line services to craft four alternatives to the B-Line route network and schedule. It was a collaborative process among the design summit team participants. The consulting team also conducted field investigations during the three-day Design Summit. This working paper builds on the Design Summit results.

The third working paper provided four specific alternatives to consider. B-Line provided 67,024 annual vehicle revenue hours as of November 2008, the baseline date used for the Market-Based Transit Study. The four alternatives include:

1. A $10 \%$ decrease in vehicle revenue hours.
2. Reallocation of existing vehicle revenue hours to better meet market needs.
3. $10 \%$ increase in vehicle revenue hours.
4. Market Based scenario that reasonably matches market needs with B-Line service levels without a financial constraint.

The four alternatives include individual specific actions that can be implemented separately if, for example, there is a need for a $5 \%$ reduction in service instead of a $10 \%$ reduction.

At a meeting of the Project Development Team it was determined that Alternative 2, with modifications should be the preferred alternative. This alternative reallocates how the existing 67,000 vehicle revenue hours are allocated. This working paper provides the specifics of the preferred alternative. However, before describing the preferred alternative, a description is provided of the current allocation of the 67,000 vehicle revenue hours and the existing service levels.

## Breakdown of Existing Annual Vehicle Revenue Hours and Service Levels

Exhibit 1 is a breakdown of existing vehicle revenue hours by route and service type for both weekday and weekend service. There are a total of 67,024 vehicle revenue hours for the existing B-Line Service.

Exhibit 2 provides a summary of the existing service levels for B-Line by route and the days of the week. The span of service and frequencies by time of day are provided for each route in the B-Line system.
*Table 1 Note: A reduced service span on Fridays results in only 8.50 hours on Routes 8 and 9.

| Chico Routes | Daily Weekday | Daily <br> Saturday | Daily Sunday | Annual Total |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 19.83 | 10.00 |  | 5,578 |
| 2 | 19.43 | 10.00 |  | 5,476 |
| 3 | 16.23 | 9.83 |  | 4,651 |
| 4 | 16.23 | 9.95 |  | 4,657 |
| 5 | 26.70 | 10.00 |  | 7,329 |
| 6 | 27.48 | 10.00 |  | 7,528 |
| 7 | 11.83 | 9.83 |  | 3,529 |
| 8 | 11.50* |  |  | 1,744 |
| 9 | 11.50* |  |  | 1,744 |
| 10 | 13.90 | 9.90 |  | 4,059 |
| Subtotal | 174.7 | 96.5 |  | 46,294 |


| Oroville Routes |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | :---: |
| $24 / 25 / 26 / 27$ | 13.9 |  |  | 3,532 |  |
| Regional Routes |  |  |  |  |  |
| 20 | 20.4 | 9.9 | 9.9 | 6,215 |  |
| 30 | 4.75 | 7.0 |  | 1,575 |  |
| 31 | 1.82 |  |  | 463 |  |
| 40 | 16.30 | 10.9 | 7.9 | 5,130 |  |
| 41 | 13.33 | 1.4 |  | 3,471 |  |
| Subtotal | 56.6 | 29.1 |  | 16,855 |  |
| Paradise Routes |  |  |  |  |  |
| 46 | 1.4 |  |  | 344 |  |
| Total | 247.8 | 125.6 | 17.7 | 67,024 |  |

Exhibit 2, Existing Service Levels

|  | Weekdays |  |  |  |  | Saturday |  |  | Sunday |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Span of Service |  | Frequency (Minutes) |  |  | Span of Service |  | Freq. <br> Minutes | Span of Service |  | Freq. |
|  | Start am | End pm | Peak | Midday | Evening | Start am | $\begin{aligned} & \text { End } \\ & \mathrm{pm} \end{aligned}$ |  | Start | End |  |
| Chico Routes |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 8:15 | 9:15 | 30 | 60 | 30 | 8:50 | 5:15 | 60 | - | - | - |
| 2 | 6:15 | 7:50 | 30 | 60 | 30 | 8:50 | 5:43 | 60 | - | - | - |
| 3 | 6:20 | 10:02 | 30/60 | 60 | 60 | 8:20 | 6:10 | 60 | - | - | - |
| 4 | 6:18 | 7:42 | 30 | 60 | 60 | 8:18 | 6:15 | 60 | - | - | - |
| 5 | 6:23 | 7:42 | 30 | 30 | 60 | 8:23 | 6:10 | 60 | - | - | - |
| 6 | 6:16 | 9:45 | 30 | 30 | 60 | 8:16 | 6:16 | 60 | - | - | - |
| 7 | 6:46 | 6:36 | 60 | 60 | 60 | 8:46 | 6:36 | 60 | - | - | - |
| 8 | 7:30 | 7:00 | 30 | 30 | - | - | - | - | - | - | - |
| 9 | 7:38 | 7:08 | 30 | 30 | - | - | - | - | - | - | - |
| 10 | 7:20 | 8:12 | 60 | 60 | 60 | 8:50 | 6:44 | 60 | - | - | - |
| Oroville Routes |  |  |  |  |  |  |  |  |  |  |  |
| 24 | 6:46 | 5:28 | 120 | 160 | 180 | - | - | - | - | - | - |
| 25 | 7:05 | 5:28 | 60 | 60 | 60 | - | - | - | - | - | - |
| 26 | 8:36 | 4:57 | 120 | 120 | 120 | - | - | - | - | - | - |
| 27 | 7:36 | 5:57 | 120 | 120 | 120 | - | - | - | - | - | - |
| Regional Routes |  |  |  |  |  |  |  |  |  |  |  |
| 20 | 5:50 | 7:20 | 60 | 120 | 45 | 7:50 | 5:42 | 120 | 7:50 | 5:42 | 120 |
| 30 | 7:42 | 5:17 | 240 | 240 | 240 | 8:42 | 4:47 | 120 | - | - | - |
| 31 | 6:37 | 6:00 |  | 2 trips/day |  | - | - | - | - | - | - |
| 40 | 6:50 | 7:31 | 60 | 120 | 45 | 7:50 | 6:41 | 120 | 9:50 | 5:42 | 120 |
| 41 | 6:03 | 6:51 | 60 | 120 | 100 | 9:36 | 5:41 | 2/trips | - | - | - |
| Paradise Routes |  |  |  |  |  |  |  |  |  |  |  |
| 46 |  |  |  | 3 trips/day |  |  |  |  |  |  |  |

## Preferred Service Alternative

## Reallocation of Existing Vehicle Revenue Hours

The preferred service alternative, Alternative 2, reallocates the existing 67,000 vehicle revenue hours in response to the findings of the market research and public participation process.

## Chico Routes

Based on input during the July 2009 Design Summit, as well as the findings from the market research and public participation process, the potential for providing 15 -minute service in the Chico downtown area was explored. A new core route would be established that combines Routes 1, 6 and 10, as shown In Exhibit 3. The route would provide 15-minute service during peak commute periods (starting at 2:30 pm to also serve school commutes). The route has preliminarily been nicknamed Route 15 to indicate the 15 -minute service frequency objective. Route 15 would serve the Chico Mall, Forest Avenue destinations including WKHButte College Chico campus, and then use E. Park to ' UMMartin Luther King Parkway, E. $20^{\text {th }}$ St., Dr. Martin Luther King Parkway, Park Ave to access downtown and the Transit Center. It would then continue along the Esplanade corridor to E. Lassen Ave, where the route and buses would alternate route ends to continue along the Route 1 alignment along E. Lassen Ave. (15A) and the Route 10 alignment continuing along Esplanade to its terminus (15B). Route 15 combines routes 1,66 , and 10. All portions of routes 1 and 10 will continue to be served, but portions of Route 6 are no longer served because of the proposed Route 15 alignment, shown in Exhibit 3.

The preferred alternative reallocates existing vehicle revenue hours. Route 15 service would only operate every 15 minutes during the peak commute periods, and every 30 minutes on 15A and 15B. During the midday, service would operate every 30 minutes along the core, and every 60 minutes at the 15A and 15B terminal ends.

The desire for improved frequency in Chico was expressed strongly in the results of the market research and public participation processes. Of the potential riders in the e-survey, for example, $64 \%$ preferred increased frequencies compared to longer hours (36\%). The City of Chico General Plan has an objective of 15 -minute transit service in the core area of Chico. These findings were discussed in the July Design Summit and the recommendation for 15 -minute service during peak commute periods is just a starting point. 30 -minute frequencies in the evenings are proposed in the $10 \%$ increase in vehicle revenue hour alternative and would receive first priority for service improvements if and when additional financial resources become available. The second goal is to have 15 -minute service from 7 am to 6 pm .

In response to CSUC student comments in the e-survey as well as the public participation process, Routes 8 and 9 would be extended to 10 pm on weekdays.

Exhibit 3, Proposed Chico B-Line Routes


Significant analysis and discussion has taken place on the future of Route 7. As discussed in detail in the existing conditions report, Route 7 had just 5.8 passengers per hour with a cost of $\$ 12.04$ per passenger, well below the system average. The original consulting team recommendation was to eliminate Route 7. However, based on comments from the Project Development Team, alternatives were explored for providing a limited peak period service to serve local residents, commuters and students. The recommended routing shown in Exhibit 3 is to connect with Route 2 on the north with service to Pleasant Valley High School, Sierra Sunrise Village and the interim Walmart TransIHU 3RLQbn Forest Ave. Three trips in each direction would be provided during morning and evening peak periods.

Providing 15-minute service on Route 15 during peak periods would require the reduction of frequencies on Route 5 from every 30 minutes to every 60 minutes in order to stay within the 67,000 vehicle revenue hour limit. Next to Route 7, Route 5 haV the lowest productivity of the Chico Routes with 13.7 passengers per hour. Route 6 also serves the Chico Mall and has a very high productivity of 27.7 passengers per hour with all-day 30 -minute frequencies. While the existing frequency of 30 minutes is desirable, it is felt that the vehicle revenue hours devoted to Route 15 will improve overall system productivity.

The preferred alternative has a few route adjustments recommended for the Chico Routes:
> Route 8 would have two-way routing on Warner St. to better connect CSUC origins and destinations.
$>$ Route 3 deviation via $4^{\text {th }}$ and Cedar would be eliminated. In the evenings Monday though Thursday when CSUC is in session, Routes 8 and 9 would have 60 -minute service to 10 pm .
> Route 2 would not be interlined with Route 1 as is currently the practice. A new terminal loop is recommended using Ceres Ave. Eaton Ave and E. Lassen Ave., serving Foothill Manor, Cobblecreek, Eastwood Court, and East of Eaton apartments. A timed transfer would be established with Route 7.
> Route 15 would have select peak period trips routed on Fair St. to serve the work training center.
$>$ Route 5 would be extended to Ivy St. along the $8^{\text {th }}$ and $9^{\text {th }}$ couplet, to serve the area formerly served by Route 6.

## Oroville Service

The existing Oroville routes are not working well. There are significantly fewer monthly revenue hours in Oroville than in Chico, which reflect the lower demand levels. On average, Routes 24,26 and 27 have frequencies every 120 minutes and route 25 has a frequency of every 60 minutes. Service is operated only from Monday to Friday. Average monthly passengers for this weekday-only service range from 351 to 790 monthly passengers. Productivity, as measured in passengers per revenue hour, is particularly low, ranging from 4.8 to 11.0 passengers per hour, below the BCAG minimum standard of 12 passengers per vehicle revenue hour for rural routes. Route 27 is higher than average because it does serve a number of students at Las Plumas High School before and after school.

At the July 2009 Design Summit and during consultant team field visits, a transition away from fixed-route service to zonal general public dial-a-ride service was discussed and this option was presented at the last Project Development Team meeting. Further discussion and analysis with BCAG staff led to the following conclusions: 1) fare revenues would be significantly reduced in the zonal dial-a-ride option 2) there DHFDYDIDEOISDIDNDQUWMHOKFHKRXXW. With the potential of reallocating WHwice hours from ADA Paratransit to fixed route service, the potential for keeping fixed route service in Oroville with improved service levels was explored.

Exhibit 2 provides the recommendations for a four-route, two-bus operation in Oroville. Service would be provided on hourly frequencies, a major improvement over existing service levels. Route $A$ is the old Route 25 , with some service enhancements suggested by Oroville's lead driver. Route A turns into Route C. Route C routing would be through the south Oroville neighborhood, Gold Country Casino, Kelly Ridge, Oroville Hospital, returning to the Oroville Transit Center. Extension to Kelly Ridge is based on input during the Human Services-Public Transit Coordination Plan process, the Market-Based Transit Demand workshop held in Oroville, and the unmet needs hearing process.

Route B would serve the Thermalito area and the County Center area on a one-way loop, with direct service between the County Center and the Oroville Transit Center in the clockwise direction. This route covers most of the existing Route 24. The difference is that Route B will operate on hourly frequencies, will operate on the one-way loop, and will provide a direct connection between the County Center and Oroville Transit Center. Connections to Route 20 would be Public Works in the County Center Area.

One bus would operate both Routes B and D. Route D would operate between the Oroville Transit Center and Las Plumas High School providing service on the Lincoln Blvd corridor on hourly frequencies.

Convenient connections on all 4 routes would be provided to Route 20 and this is further discussed later under the "Schedule Framework" of this working paper

## Paradise/Magalia Service

The primary service in Paradise and Magalia is provided by Routes 40 and 41. As described further below, the service levels on Routes 40 and 41 would remain the same in the preferred alternative. Route 41 would terminate at the Walmart Transfer Point, with transfers available on Route 15 to downtown Chico. Under this preferred alternative, it is recommended that Route 46 be eliminated in Paradise. Route 46 has the lowest productivity of all routes in the B-Line system with 2.7 passengers per vehicle revenue hour and cost of $\$ 25.18$ per passenger trip. It is recommended that a lifeline service be provided to the Feather River Hospital.

## Regional Routes

The feedback received during the public participation process and the on-board survey is that the regional routes are generally working well; the passenger productivity statistics presented earlier support this finding. In the preferred alternative, the service levels would remain the same. However, in order to coordinate better with Route 15 and to provide better access to the Chico Mall area, the routing in Chico for Routes 20, 40 and 41 would all change.

Route 20 would exit SR99 at Skyway in Chico, turn left on Notre Dame, turn left on Forest serving the Butte College-Chico Campus and the Walmart Transfer Point, turn left onto E. $20^{\text {th }}$ to serve the front side of the Chico Mall before reentering SR99 and continuing on the remainder of the original route. In Oroville, Route 20 would no longer run the one-way loop to Oro Dam Blvd., Feather River, Mitchell Ave to Spencer Ave.; it would terminate at the Oroville Transit Center (OTC). This loop had a low number of boardings, and required passengers to wait at the OTC for as much as 10 minutes before continuing to Chico.

Exhibit 4, Revised Oroville B-Line Routes


Route 40 would also exit SR99 at Skyway in Chico, turn left on Notre Dame, turn left on Forest serving the Butte College-Chico Campus and the Walmart Transfer Point, turn left on $20^{\text {th }}$ to Fair (as it currently does on weekends), then continue on its current route to the downtown Chico Transit Center. The routing is shown in Exhibit 3.

Route 41 would follow the same routing as route 40 to the Walmart Transfer Point, but would terminate at the Chico Mall on the Springfield loop. The routing is shown in Exhibit 3.

## Schedule Framework

The next four pages show a scheduling framework and transfer connections at the Chico Transit Center, Walmart Transfer Point, and Oroville Transit Center. Significant connectivity is provided in the recommended preferred alternative.

At the Chico Transit Center, during the morning, service would depart at :50 past the hour for Routes $2 / 7,3,4$, and 5 . In the afternoon at $3: 10$, to better serve CSUC and schools, the time would be shifted to :10 after the hour.

Route 15 would provide 15 -minute service and would depart the Chico Transit Center at :05,:20,:35 and :50 during peak periods and at :20 and $: 50$ during the midday. Service in the evenings would be at $: 10$ with a 60 -minute frequency.

The Walmart Transfer Point would also have Route 15 service at 15 -minute frequencies for trips downtown. This enables frequent service without a need to have timed transfers on all routes. That would be difficult given the various running times of routes meeting at the Walmart Transfer Point. There are limited transfer opportunities between other routes. For example, Route 5 arrives at :30 after the hour at the Walmart Transfer Point with a good connection to the :40 departure of Route 40.

At the Oroville Transit Center, good transfer opportunities to Route 20 will exist for Routes A, C, and D. On Route B serving Thermalito, a good transfer opportunity to Route 20 would be available at Public Works at the County Center.

## DOWNTOWN CHICO CHICO TRANSIT CENTER OUTBOUND

| Route | Times Departure | To |
| :---: | :---: | :---: |
| 2 | :50 |  |
|  | :10 3:10 PM on | Chico local |
| 3 | :50 |  |
|  | :10 3:10 PM on | Chico local |
| 4 | :50 |  |
|  | :10 3 PM on | Chico local |
| 5 | :50 |  |
|  | :10 3:10 PM on | Chico Mall |
| 8 | :18, :48 | Chico campus local |
| 9 | :18, :48 |  |
| 15 | :50, :05, :20, :35 AM peak <br> :20, :50 off-peak <br> :10, :25, :40, :55 PM peak | Chico campus local |
| 20 | :50 | North and South |
| 40 | :50 till 3:50 PM :20 from 4:20 PM on | Oroville |
|  |  | Paradise |


| Route | DOWNTOWN CHICO <br> Chico <br> Transit Center | AND CHICO MALL (WALM OUTBOUND <br> Arrive <br> Walmart <br> Transit Center | ART TRANSIT CENTER) To |
| :---: | :---: | :---: | :---: |
| 5 | :50 AM | :10 AM | Walmart |
|  | :10 PM | :30 PM | Transit Center |
| $2 / 7$ | :50 AM | :50 AM | PVHS / Chico Mall |
|  | :10 PM |  |  |
| 15 | :50, :05, :20, :35 AM Peak | :15, :30, :45, :00 AM Peak | Chico Mall |
|  | :20, :50 Off-Peak | :15, :45, Off-Peak | Chico Mall |
|  | :10, :25, :40, :55 PM Peak | :20, :35, :50, :05 PM Peak | Chico Mall |
| 20 | :50 all day | :05 all day | Oroville |
| 40 | :50 AM | :10 AM | Paradise |
|  | :20 PM | :40 PM |  |
| 41 | Originates Walmart Transfer | :25 AM | Paradise |
|  | Point | :30 PM |  |

# CHICO MALL (WALMART TRANSIT CENTER) AND DOWNTOWN CHICO INBOUND 

| Route | From: | Walmart <br> Transit Center | Chico <br> Transit Center |
| :---: | :--- | :--- | :--- |
| 5 | Chico Downtown | $: 20 \mathrm{AM}$ |  |
|  |  | $: 402: 40$ PM on | $: 45 \mathrm{AM}$ |
| 7 | Walmart | $: 50 \mathrm{AM}$ | $: 053: 05$ on |

## Oroville Transit Center <br> INBOUND <br> M - F

| ROUTE | AM | PM |
| :--- | :--- | :--- |
| A | $: 52$ | $: 05$ |
| B | $: 18$ | $: 12$ |
| C | $: 27$ | $: 38$ |
| D | $: 44$ | $: 40 /: 10$ |
| 20 | $: 40$ | $: 17$ |
| 30 | $: 17$ | $: 40$ |
|  | Oroville Transit Center |  |
| ROUTE | $: 29$ | $: 40$ |
| A | $: 44$ | $: 05$ |
| B | $: 52$ | $: 14$ |
| C | $: 20$ | $: 42$ |
| D | $: 42$ |  |

Exhibit 5 is a summary of the hours allocation for Chico local routes, Oroville local routes and the Regional routes. The allocation of hours is quite different than the status quo, but keep within the 67,000 annual vehicle revenue hours provided. In Oroville, there is an increase in vehicle revenue hours from 3,532 to 5,610 , the most dramatic change. Despite the recommended Route 15 service, there is a slight reduction in Chico vehicle revenue hours. The Regional Route remains fairly constant.

Exhibit 6 is a summary of the service levels proposed for the Chico Routes, Oroville Routes and Regional Routes.

Exhibit 5
Preferred Alternative: Reallocation of Existing Vehicle Revenue Ho

|  | Daily Weekday | Daily Saturday | Daily Sunday | Annual Total |
| :---: | :---: | :---: | :---: | :---: |
| Chico Routes |  |  |  |  |
| 15 ( 1/6/10) | 75.0 | 21.0 |  | 20,217 |
| 2 | 14.5 | 10.5 |  | 4,244 |
| 3 | 14.5 | 10.5 |  | 4,244 |
| 4 | 14.5 | 10.5 |  | 4,244 |
| 5 | 14.5 | 10.5 |  | 4,244 |
| 7 | 6.0 |  |  | 1,530 |
| 8 | 14.5 |  |  | 2,320 |
| 9 | 14.5 |  |  | 2,320 |
| Commuter Routes | 8.0 |  |  | 1,280 |
| Chico Subtotal | 176.0 | 63.0 | 0.0 | 44,641 |
| Oroville Routes |  |  |  |  |
| Route A and C | 11.0 |  |  | 2,805 |
| Routes B and D | 11.0 |  |  | 2,805 |
| Paratransit | -8.0 |  |  |  |
| Oroville Subtotal | 22.0 | 0.0 | 0.0 | 5,610 |
| Regional Routes |  |  |  |  |
| 20 | 20.4 | 9.9 | 9.9 | 6,215 |
| 30 | 4.8 | 7.0 | 0.0 | 1,575 |
| 31 | 1.8 | 0.0 | 0.0 | 463 |
| 40 | 16.3 | 10.9 | 7.9 | 5,130 |
| 41 | 13.3 | 1.4 | 0.0 | 3,471 |
| Total, regional | 56.6 | 29.1 | 17.7 | 16,854 |
| Grand Total | 254.6 | 92.1 | 25.6 | 67,105 |

Exhibit 6 Preferred Alternative Reallocation of Service Hours: Service Levels

|  | Weekdays |  |  |  |  | Saturday |  |  | Sunday |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Span of Service |  | Frequency (Minutes) |  |  | Span of Service |  | Freq. | Span of Service |  | Freq. |
|  | Start am | End pm | Peak | Midday | Evening | Start am | End pm |  | Start | End |  |
| Chico Routes |  |  |  |  |  |  |  |  |  |  |  |
| 15 (1/6/10) | 6:15 | 9:45 | 15 | 30 | 60 | 8:50 | 7:15 | 60 | - | - | - |
| 2 | 6:15 | 7:45 | 60 | 60 | 60 | 8:50 | 7:15 | 60 | - | - | - |
| 3 | 6:15 | 7:45 | 60 | 60 | 60 | 8:50 | 7:15 | 60 |  |  |  |
| 4 | 6:15 | 7:45 | 60 | 60 | 60 | 8:50 | 7:15 | 60 | - | - | - |
| 5 | 6:15 | 7:45 | 60 | 60 | 60 | 8:50 | 7:15 | 60 | - | - | - |
| 7 | 6:15 | 6:15 | 60 | Peak Period | only |  |  |  |  |  |  |
| 8 | 7:30 | 10:00 | 30 | 30 | 60 |  |  |  |  |  |  |
| 9 | 7:30 | 10:00 | 30 | 30 | 60 | - | - | - | - | - | - |
| Commuter Routes |  |  | Timed to school bell times |  |  |  |  |  |  |  |  |
| Oroville Zonal DAR |  |  |  |  |  |  |  |  |  |  |  |
| Route A and C | 6:30 | 6:30 | 60 | 60 |  |  |  |  |  |  |  |
| Route B and D | 6:30 | 6:30 | 60 | 60 |  |  |  |  |  |  |  |
|  | One hour schedule break during midday |  |  |  |  |  |  |  |  |  |  |
| Regional Routes |  |  |  |  |  |  |  |  |  |  |  |
| 20 | 5:50 | 7:20 | 60 | 120 | 30 | 7:50 | 5:42 | 120 | 7:50 | 5:42 | 120 |
| 30 | 7:42 | 5:17 | 240 | 240 | 240 | 8:42 | 4:47 | 120 | - | - | - |
| 31 | 6:37 | 6:00 |  | 2 trips/day |  | - | - | - | - | - | - |
| 40 | 6:50 | 7:31 | 60 | 120 | $\sim 90$ | 7:50 | 6:41 | 120 | 9:50 | 5:42 | 120 |
| 41 | 6:03 | 6:51 | 60 | 120 | 100 |  | 2 trips/day |  | - | - | - |

