

2005-2006 Transit Needs Assessment

SHASTA COUNTY
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TRANSPORTATION
PLANNING AGENCY



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SHASTA COUNTY

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I. INTRODUCTION

Within Shasta County, the Transportation Development Act (TDA) funds more than 810,000 transit trips per year with approximately \$4.2 million. These services, together with other non-TDA-funded transit services, are intended to meet the primary transit needs within the county. Because transit in Shasta County is funded primarily with TDA revenues, only transit services that are reasonable to fund can be provided. Therefore, the existing transit system cannot meet 100% of the transit demand in the county. The annual unmet transit needs review required by the TDA is intended to determine what new transit needs, if any, can be reasonably funded using TDA funds.

*810,000+
Transit Trips
provided by
TDA
providers*

The Shasta County Regional Transportation Planning Agency (RTPA) reviews “unmet transit needs” in accordance with Section 99401.5 of the Transportation Development Act (TDA). This review helps determine the amount of TDA funds to be allocated for transit services in each jurisdiction in the cities and county. The annual unmet transit needs review process involves these following three steps:

- 1) Perform a general assessment of transit needs within Shasta County jurisdictions;
- 2) Conduct a public hearing to consider specific unmet transit needs; and
- 3) Participation by the Social Services Transportation Advisory Council (SSTAC), including a recommendation to the RTPA.

Information gathered through this process is used by the RTPA to determine “unmet transit needs” which are “reasonable to meet.” Appendix D directs citizens on which agency they should contact regarding transit issues.

This report contains the information for the first part of this three-step process — the general assessment of transit needs. TDA guidelines for this analysis are included as Appendix A to this report. The general assessment of transit needs consists of the following:

- Unmet Transit Needs and Reasonable to Meet Definition: This provides the definition and evaluation criteria adopted by the RTPA pursuant to TDA §99401.5(c).
- Transit Demand Analysis: This identifies the size and location of groups likely to be transit dependent or transit disadvantaged, including the elderly and disabled (TDA §99401.5 (B)(1)).
- Description of Existing Transit Services: This is an inventory of existing public and private transit services in Shasta County, including paratransit. This inventory helps determine which transit needs are currently being served and sets the framework for the “existing transit performance” section discussed below.
- Existing Transit Performance: This is a review of trends in ridership and farebox ratios for TDA-funded transportation services. This section identifies transit demands currently met by existing services (TDA §99401.5 (B)(2)).
- Transit Evaluation: This assesses potential TDA-funded transit services that would meet all or part of the “transit needs” which are not currently met (TDA §99401.5 (B)(3)). Potential services are reviewed for consistency with established performance criteria such as “reasonable to meet” standards. Criteria to be used when considering expansion of these services is also provided in this section. Appendix E of this report represents a chronological history from 1999 to present detailing primary unmet need requests and RTPA responses and actions.

A. SUMMARY OF CONCLUSIONS

Generally, public and private transit operators serve the primary areas of high transit demand, as well as many other specialized transit needs throughout the county. Specific transit needs may be identified as a result of the unmet transit needs hearing process. These needs will be reviewed on a case-by-case basis.

TDA-funded transportation services are currently operating consistent with established performance standards, including those found in the “unmet needs” and “reasonable to meet” definition (see page 3).

New or expanded services can be required under the Transportation Development Act where an “unmet transit need” is found “reasonable to meet” by the RTPA. The expansion criteria discussed in this report (see Transit Evaluation) for each type of service should be utilized in determining if a new service can be funded. Limited funding is available to meet specialized transit needs through the CTSA. CTSA services are funded at the discretion of the RTPA Board.

Last year's 2004/2005 Transit Needs Assessment reflected RABA's 2002/2003 calculated farebox ratio at 16.97%, falling below the temporary farebox ratio of 17.5%. During RABA's 2003/2004 fiscal audit, \$30,774 in prior year revenue for punch cards was recognized that should have been applied to the 2002/2003 farebox. This results in RABA meeting the required farebox ratio of 17.5% with a corrected farebox recovery of 17.91%.

The RTPA adopted a temporary reduction of the farebox ratio for the 2001/2002, 2002/2003, 2003/2004, and 2004/2005 fiscal years of 16.5%, 17.5%, 18.5%, and 19% respectively. RABA's farebox ratio, calculated from their State Controller Report information for the 2003/04 fiscal year was 15.53%, which falls below the required farebox ratio of 18.5%. Failure to meet farebox ratio is further described in Section V1: Transit Evaluation.

B. METHODOLOGY

2002/2003 Farebox Ratio Corrected

- Punch Card Deferred Revenue found in 2003/2004 fiscal audit
- Farebox Recovery for 2002/2003 changed to 17.91%

In 1995, the RTPA retained the services of transit consultant Leigh, Scott, & Cleary to build a framework for providing a general assessment of unmet transit needs in Shasta County based on available demographic information. This framework is detailed in the Shasta County Transit Services Evaluation, Technical Memorandum Number One, dated March 1995. This framework was updated in the July 2001 RABA Short- and Long-Range Master Transit Plan Study, and is described in *Section 3, Transit Demand Analysis*. The method to determine transit demand is further presented in Appendix A-2 and A-3.

Transit demand information, together with current ridership trends and public hearing testimony on specific unmet needs, will be considered by the Social Services Transportation Advisory Council and the RTPA in making the final determination regarding unmet transit needs that are reasonable to meet.

II. UNMET TRANSIT NEEDS AND REASONABLE TO MEET DEFINITION

Section 99401.5 of TDA statutes require the RTPA to conduct an annual assessment of transit needs within each jurisdiction. This assessment consists of a two-part test: First, are there "unmet transit needs?" And second, are these unmet transit needs "reasonable to meet?" The Shasta County Regional Transportation Planning Agency has adopted the definitions shown below for "unmet transit needs" and "reasonable to meet" (Resolution 00-21, December 12, 2000).

Unmet Transit Needs: An "unmet transit need" under the Transportation Development Act shall be found to exist only under the following conditions:

1. A population group in the proposed transit service area has been defined and located which has no reliable, affordable, or accessible transportation for necessary trips. The size and location of the group must be such that a service to meet their needs is feasible within the definition of "reasonable to meet" as set forth below.
2. Necessary trips are defined as those trips which are required for the maintenance of life, education, access to social service programs, health, and physical and mental well-being, including trips which serve employment purposes.
3. Unmet transit needs specifically include:
 - (a) Transit or specialized transportation needs identified in the transit system's Americans with Disabilities Act Paratransit Plan or short-range Transit Plan which are not yet implemented or funded.
 - (b) Transit or specialized transportation needs identified by the Social Services Transportation Advisory Council and confirmed by the RTPA through testimony or reports which are not yet implemented or funded.
4. Unmet transit needs specifically exclude:
 - (a) Minor operational improvements or changes, involving issues such as bus stops, schedules and minor route changes.
 - (b) Improvements funded or scheduled for implementation in the following fiscal year.
 - (c) Trips for any purpose outside of Shasta County, in accordance with PUC Section 99220(b).
 - (d) Primary and secondary school transportation.

UNMET TRANSIT NEEDS ARE DEFINED AS :

- No reliable, affordable, or accessible transportation for trips
- Trips are those required for the maintenance of life, education, social programs, etc.

Reasonable to Meet:

An identified unmet transit need shall be found "reasonable to meet" only under the following conditions:

1. It has been demonstrated to the satisfaction of the Agency that transit service adequate to meet the unmet need can be operated with a subsidy not to exceed 80% of operating cost in urbanized areas and 90% in non-urbanized areas. It must also have been demonstrated that the unsubsidized portion of operating costs can be recovered by fare revenues as defined in the State Controller's Uniform System of Accounts and Records. The "Cost Allocation Method" is the method to be used for determining fare box ratio (Appendix A-1). Appendix A-1 should be used as a guide to determine costs to be allocated to any proposed new services.
 - (a) Transit service subsidy maximums may be determined on an individual route or service area, or an individual proposed route or service area, basis.
2. The proposed expenditure of Transportation Development Act funds required to support the transit service does not exceed the authorized allocation of the claimant, consistent with Public Utilities Code Sections 99230-99231.2 and TDA Regulations Sections 6649 and 6655.

The fact that an identified need cannot fully be met based on available resources, however, shall not be the sole reason for finding that a transit need is not Reasonable to Meet.
3. The proposed expenditure shall not be used to support or establish a service in direct competition with an existing private service, nor to provide 24-hour service.
4. Where transit service is to be jointly funded by two or more of the local claimant jurisdictions, it shall be demonstrated to the satisfaction of the Commission that the resulting inter-agency cost sharing is equitable. In determining if the required funding equity has been achieved the Commission may consider, but is not limited to considering whether or not the proposed cost sharing formula is acceptable to the affected claimants.
5. Transit services designed or intended to address an unmet transit need shall in all cases make coordinated efforts with transit services currently provided, either publicly or privately.

III. TRANSIT DEMAND ANALYSIS

**Shasta County's
Population increased
1.4% from 2003. The
total County population in
2004 is 175,700.**

This is an evaluation of transit demand, by census tract, in the county. U.S. census data provides the only countywide demographic information broken down into smaller county subareas. Important types of census information for evaluating transit needs includes population density, elderly and mobility impaired populations, and single-vehicle households. Shasta County is divided into 27 census tracts (see Map 1a, 1b on Page 6). Generally, census tracts are smaller in urban areas where population densities are higher. Census data is collected every ten years, with the last census conducted in 2000.

Since last year's unmet transit needs review, transit demand has increased slightly in proportion to the increase in population. Table 1 compares the 2003 and 2004 Shasta County population by jurisdiction. The 2004 countywide population increased 1.4% over 2003's. Transit demand is assumed to grow at the same rate as population growth.

TABLE 1: POPULATION TRENDS				
	2003 Population	2004 Population	Percent Change	Estimated 2005 Population (based on 1.4% population growth)
ANDERSON	9,625	10,050	4.4%	10,191
REDDING	86,300	87,300	1.2%	88,522
SHASTA LAKE	9,875	10,050	1.8%	10,191
UNINCORPORATED	67,500	68,300	1.2%	69,256
TOTAL COUNTY	173,300	175,700	1.4%	178,160

**Source: Department of Finance E-1 Report*

Figure 1 on Page 7 charts the Projected Transit Demand by Census Tract. These densities range dramatically between the high-demand, small census tracts in Central Redding to the larger, low-population tracts in the outlying areas of the county. The highest demand density is Census Tract 107; the area of Caldwell Park to the transfer facility on Lake Blvd. The second highest demand density is Census Tract 108. This route serves Shasta College, Simpson University, Shasta View, Old Alturas/Dana Drive, and Churn Creek Road. All areas with substantial transit demand density currently have fixed route service as identified with an asterisk (*) on the following figure. Map 5 details the census tract locations within Shasta County. Figure 2 on Page 9 represents the density by census tract within the county. Areas with an asterisk (*) represent areas served by transit.

Map 1a: 2000 Census Tract Boundary—County of Shasta



Map 1b: 2000 Census Tract Boundary—City of Redding Corporate Boundary

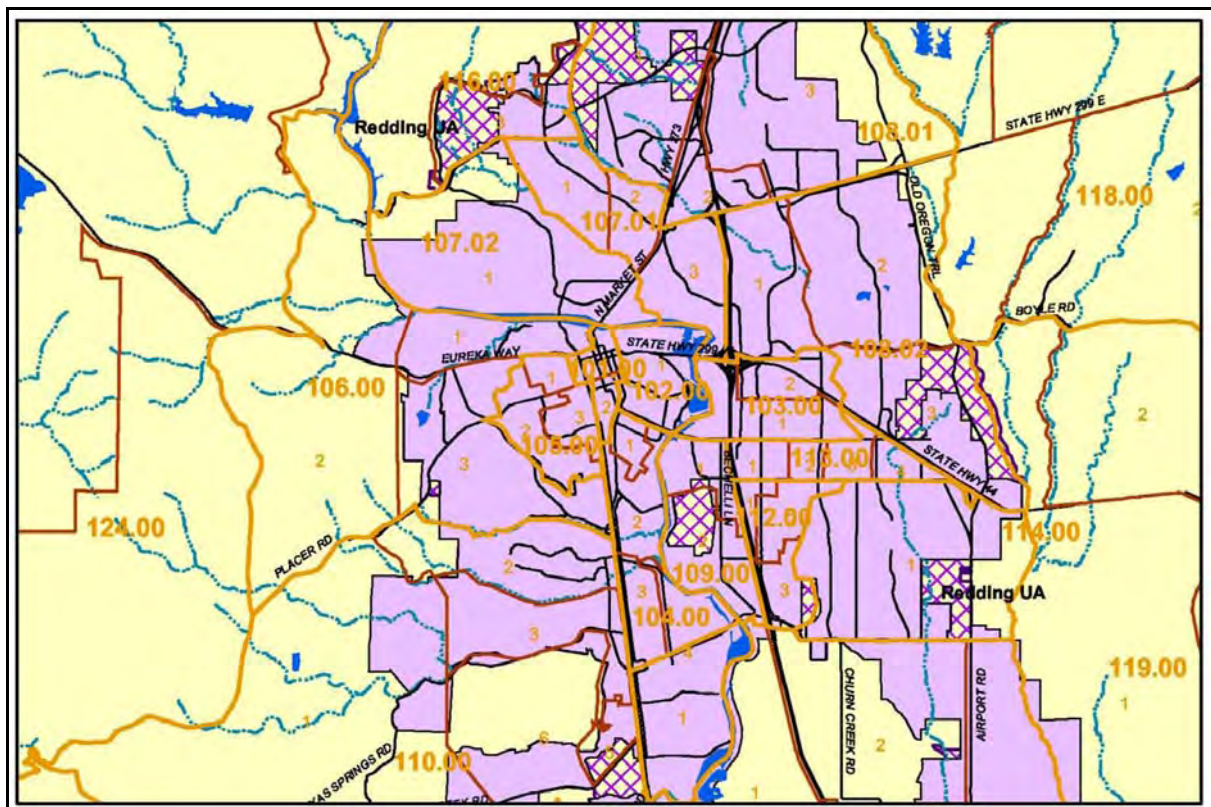
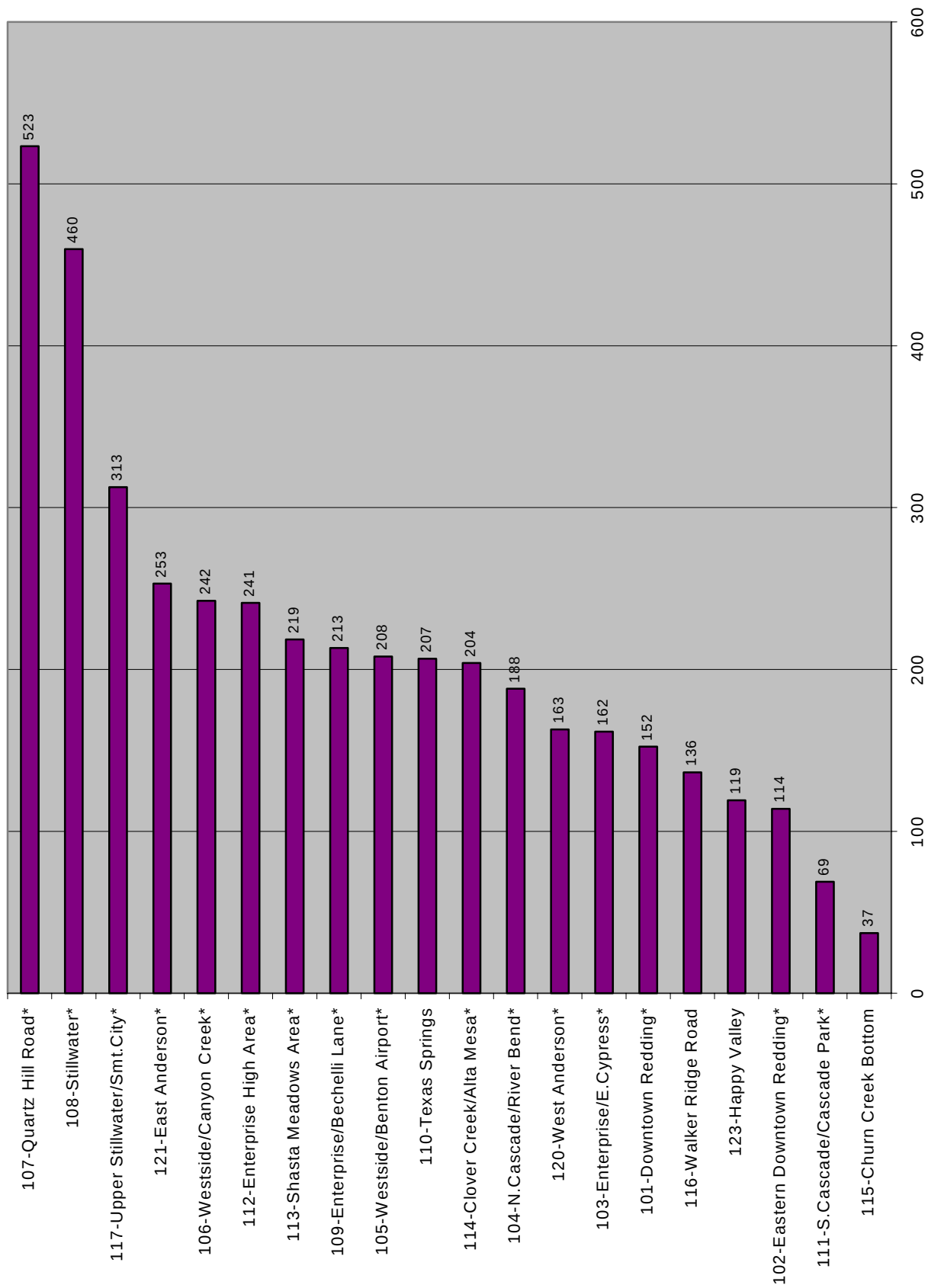


Figure 1: Projected 2004 Transit Demand by Census Tract One-Way Passenger Trips per Day
 *Area Served by Fixed Route



Map 5:
Transit Demand by Census Tract

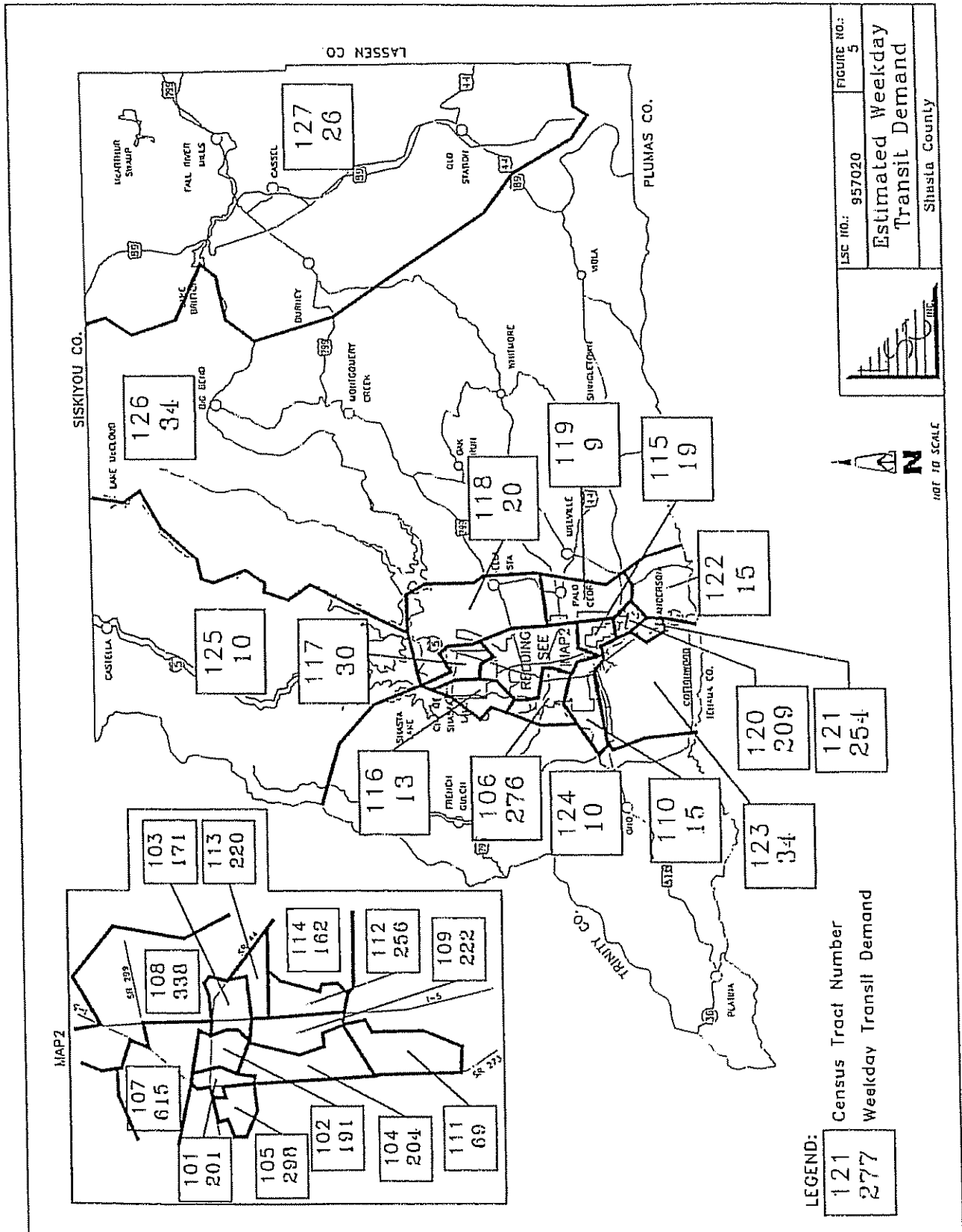
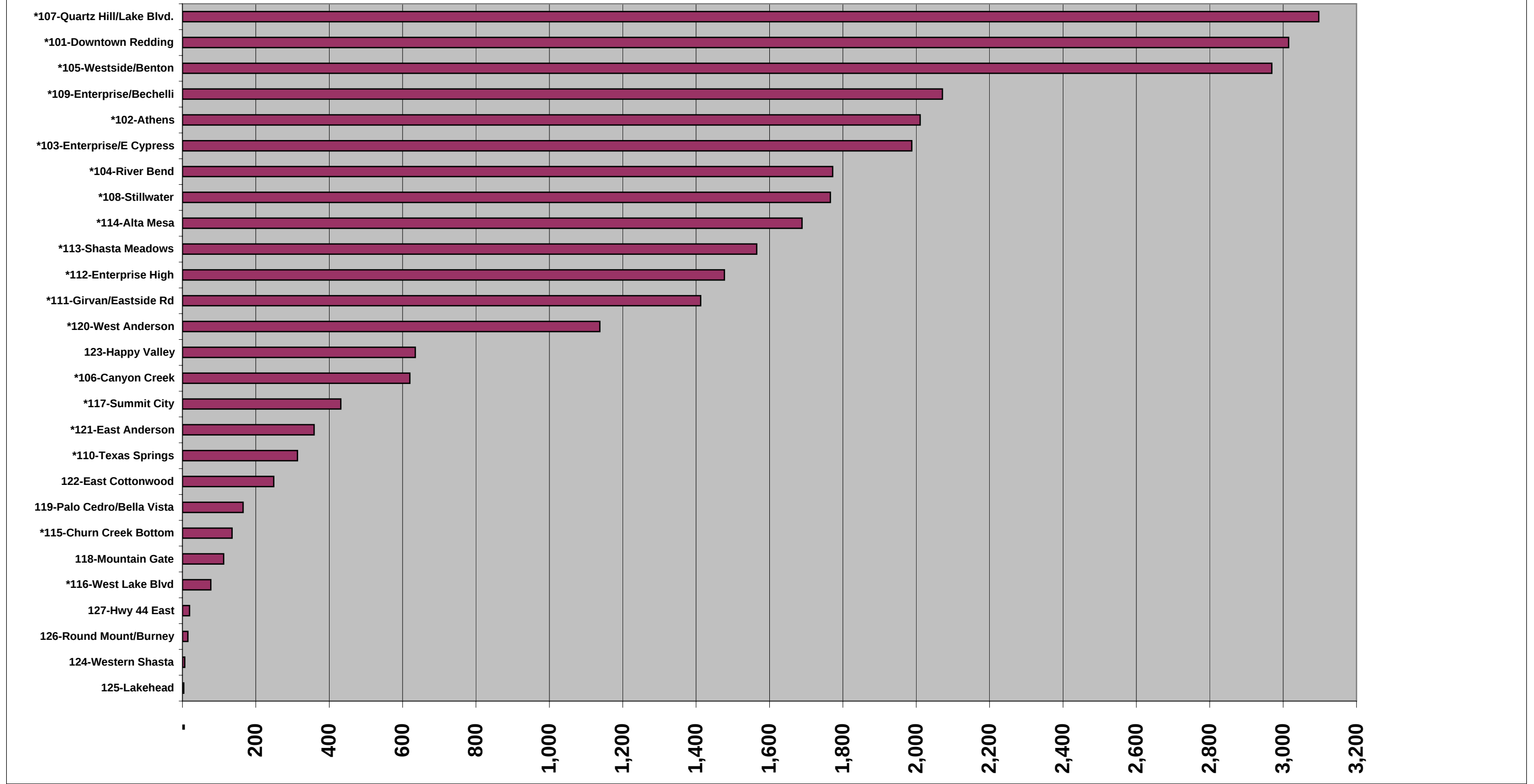


Figure 2: DENSITY BY CENSUS TRACT
* = RABA Service Provided



Existing Ridership Demand: The first step in analyzing transit demand was to develop existing ridership figures. In the 2001 LSC report, ridership figures were collected and allocated to the various census tracts (see Map 5) that comprise the RABA service area. The 2000 US Census Data regarding population figures and the California State Department of Finance's population estimated were used to allocate population to census tract. Only those portions of each census tract within the RABA service area were analyzed.

Allocating the total existing transit demand figures to individual census tracts based upon demographic data, yields the estimated future demand presented in Figure 1. As shown, demand is particularly high in census tracts 107 and 108, comprising the northern and northeastern portions of Redding. These areas generate approximately 23.3 percent of existing transit demand. This figure is updated annually from the 2000 Census Data and 2001 LSC report using the countywide percent change from the Department of Finances E-1 population estimate for the current year.

Forecast of Ridership Demand: The demand for public transit services in the RABA service area is expected to increase over the next 20 years. The following forecasts are some of the expected trends:

- ◆ Overall demand for transit service will increase 48.4 percent over current levels by 2020.
- ◆ A strong concentration of future growth in demand will occur in the northern portion of the service area, with the areas in Census tract 114 and 106 experiencing a relatively high level of growth, as well as the eastern portion of Anderson.
- ◆ Areas generating a low level of growth in ridership are the older established areas around downtown Redding, western Anderson, and Happy Valley.



Downtown Redding near Intermodal

IV. DESCRIPTION OF EXISTING TRANSIT SERVICES

This section reviews the transit services available in Shasta County. Types of services available have been divided into two categories: TDA-funded services and non-TDA-funded services. This distinction is made since the purpose of this report is to assist in allocating TDA funds. Appendix B details the prior year schedule of TDA allocations.

A. TDA-FUNDED TRANSPORTATION SERVICES

1. Redding Area Bus Authority (RABA) Services

The Redding Area Bus Authority (RABA) provides fixed route and demand response service to the Greater Redding Area. Fixed route and demand response service is provided six days a week. Hours of operation are generally Monday through Friday from 6:30 a.m. to 7:30 p.m., and Saturday from 9:30 a.m. to 7:30 p.m. Each RABA service is briefly described below. RABA provides express service to the Burney area on behalf of Shasta County.

Fixed Route: RABA operates twelve fixed routes within the cities of Redding, Shasta Lake, and Anderson. Some unincorporated fringe areas are also served. The service area covers approximately 100 square miles from Shasta Lake City as the northern boundary to Anderson in the South. The eastern most boundary is Shasta College while the western boundary is Wisconsin Avenue off of Placer Street. Ten of the routes operate on one-hour headways using one vehicle apiece. Route 9 to Anderson operates on a 90 minute headway using two vehicles. In total, twelve vehicles need to be operating.

The following table represents routes and hours of operation:

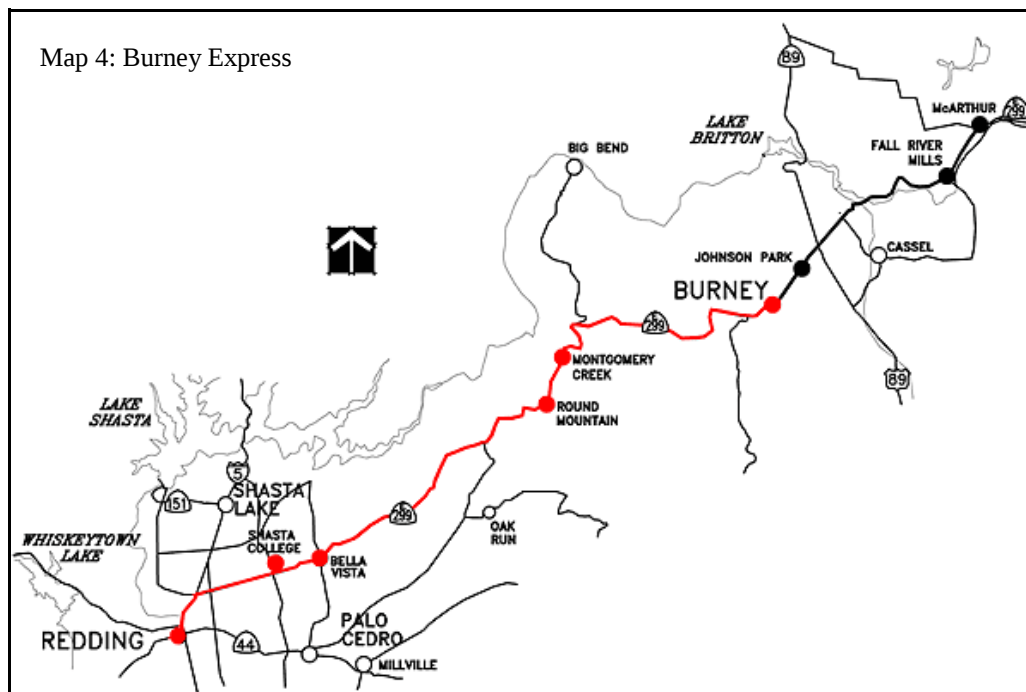
Table 2: RABA FIXED ROUTE

City	Route	Area	Hours
Anderson	Route 9		6:15am—7:15pm
Redding	Route 2	Eureka/Placer	6:30am—7:30 pm
	Route 3	Park Marina/Bonneyview	6:30am—7:30 pm
	Route 4	Bechelli/Churn Creek	6:15am—7:15pm
	Route 5	Hartnell	6:30am—7:30 pm
	Route 6	Mt Shasta Mall/Victor	6:30am—7:30 pm
	Route 7	Churn Creek/Shasta College	6:30am—7:30 pm
	Route 11	Hilltop/Cypress	6:30am—7:30 pm
	Route 12	Breslauer	7:00am— 6:30pm
	Route 14	Benton/No Market	7:00am—7:30pm
Shasta Lake	Route 1	Redwood/Lake	6:00 am—8:00 pm
	Route 8	Shasta Lake City	6:00 am—8:00 pm

Demand Response: RABA demand response service provides curb-to-curb transportation to individuals who, because of a disability, are not able to use a regular fixed route service. The service area is generally within three-quarter miles of the fixed routes, complying with the mandates of the Americans With Disabilities Act. To be eligible for this service, passengers must apply and be accepted into the system.



Burney Express: This service is designed to offer express service into Redding from the outlying community of Burney. The service, aimed at commuters who typically live in Burney and work in the Redding area, operates Monday through Friday with two round-trips each day. Express route services are provided by RABA on a contract basis on behalf of Shasta County.



RABA SERVICE CHANGES SINCE THE 2004 UNMET TRANSIT NEED REVIEW:

⇒ Transportation Enhancements:

RABA has an agreement with a contractor to provide a bus shelter program. The contractor furnishes the shelters, performs any maintenance to keep the shelters in good repair and working order, and performs a weekly cleanup of each shelter location at their expense. RABA receives 10 percent of the gross advertising revenues from any advertising placed by the contractor. Nine shelters were placed in 2004. To date, 38 shelters have been placed throughout the area .

⇒ Acquisition of Transit Vehicles:

RABA acquired three transit coaches to replace existing 1987 fleet vehicles programmed for retirement. These vehicles comply with California Air Resource Board emission requirements.

⇒ **Intermodal Passenger Transfer Facility-Phase II:**

Through the Shasta County Regional Transportation Planning Agency's Overall Work Program, RABA received Federal Transit Administration planning dollars to fund a feasibility study for the second phase of the Intermodal Passenger Transfer Facility. This phase calls for a multi-use complex to be utilized by private transportation carriers (e.g. Greyhound and Amtrak rail). The study concluded that the project would be compatible with the overall RABA operation; but it is not feasible with the Greyhound component at this time.

⇒ **Service Improvements:**

In 2003-2004 RABA implemented an express shuttle to Shasta College; realigned routes 4,7,11 and 14; combined Routes 2 and 10; and made minor adjustments to Routes 1, 8 and 9. The changes utilized existing routes with no impacts to the annual operating costs. Performance measures are utilized to monitor the new express service and the various route modifications.

⇒ **El Rancho Property:**

In June 2003, RABA acquired the El Rancho Motel property adjacent to the maintenance facility for expansion purposes. Demolition of the existing buildings, concrete, and asphalt is complete, and the site is now being used to park vehicles. Funds are budgeted in fiscal year 2004/2005 to begin design and construction of the maintenance bay expansion. Included in the project are funds for final paving and landscaping.



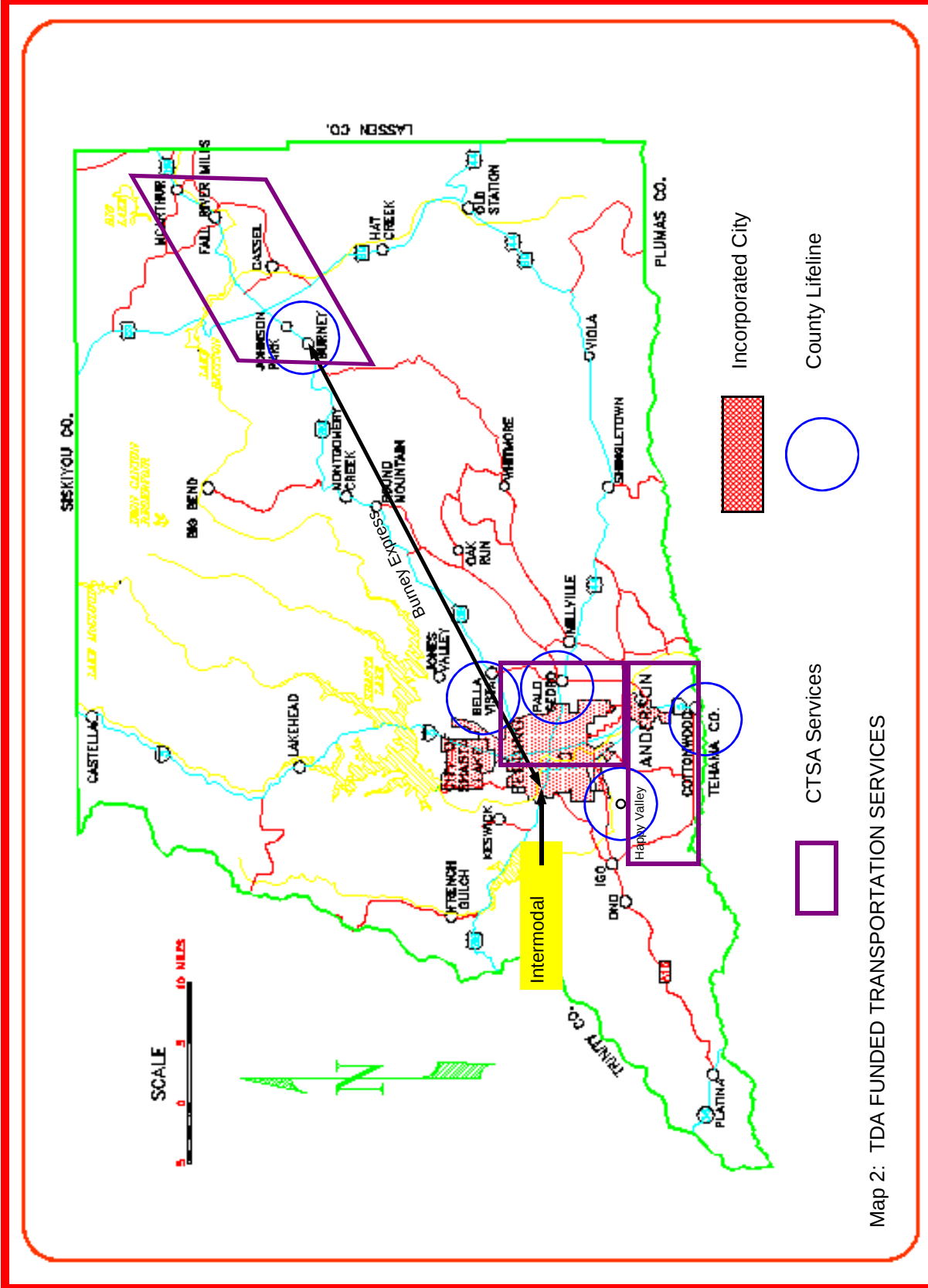
El Rancho Motel before demolition
Photos courtesy City of Redding



El Rancho Motel during demolition

⇒ **Bilingual Format Written Materials:**

In December 2003, members of the local Hispanic Coalition addressed the RABA Board regarding the printing of RABA materials in Spanish. The coalition had a California Endowment Grant that covered the printing costs of the Spanish route maps. Placards were also developed in Spanish and placed in the transit vehicles outlining important transit information. Decals in Spanish were also placed on the fareboxes with fare information.



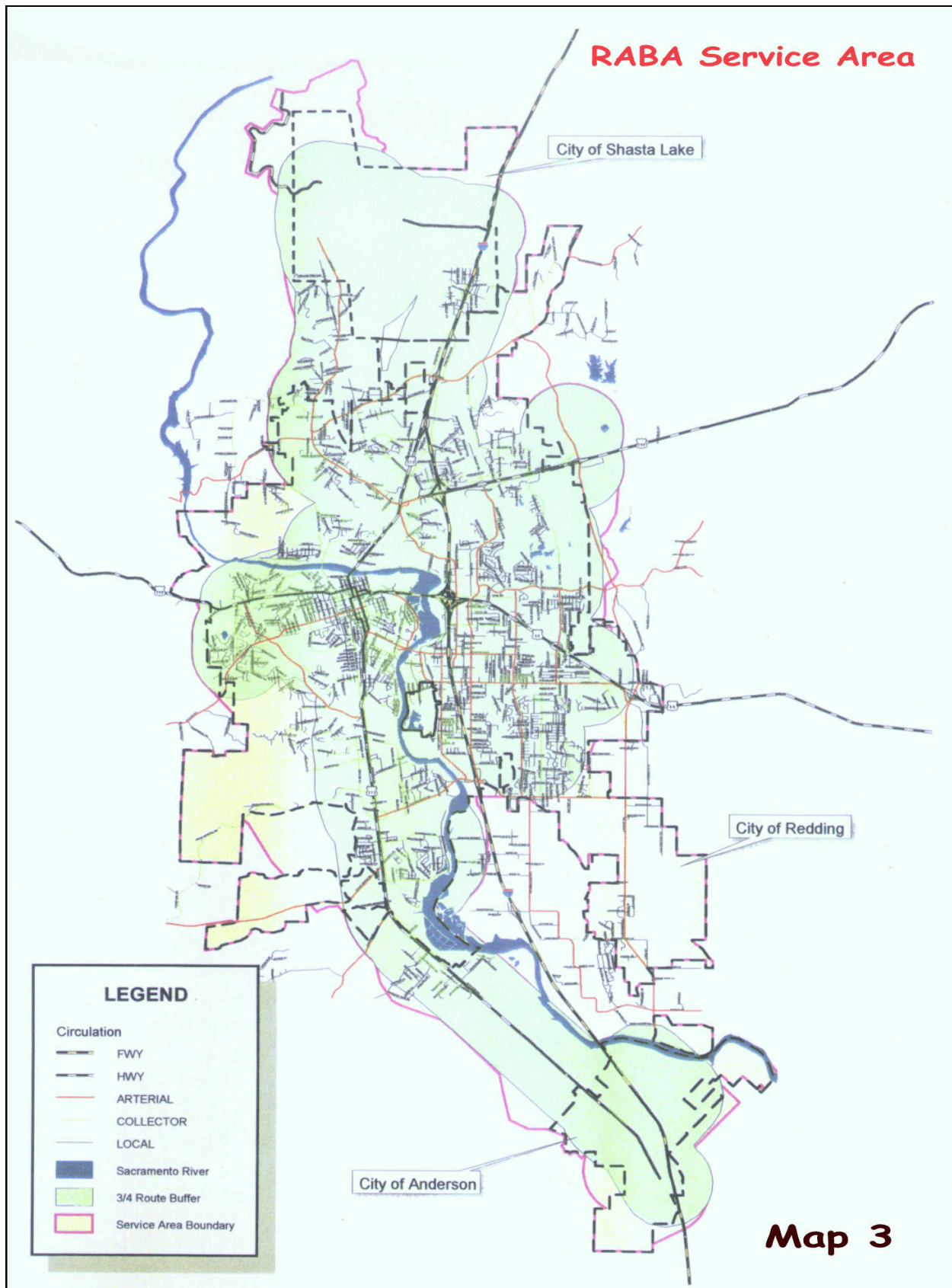


TABLE 3- RABA Service Summary

ROUTE	ROUTE LENGTH (MILES)	ROUTE SERVICE AREA	ROUND-TRIP TIME	FREQUENCY
FIXED ROUTE				
1	19.2	Masonic/Oasis/Ashby/Shasta Dam/Cascade	1 Hour	Hourly
2	19.3	Downtown/Pioneer/Airpark/Continental/Placer	1 Hour	Hourly
3	16.7	Downtown/Turtle Bay/Breslauer/Girvan/Ellis	1 Hour	Hourly
4	14.7	Canby/Churn Creek/Hartnell/Larkspur/College View	1 Hour	Hourly
5	12.0	Downtown/Hartnell/Bechelli	1 Hour	Hourly
6	15.0	Downtown/Victor/Canby	1 Hour	Hourly
7	18.0	Downtown/Canby/Shasta & Simpson College/College View	1 Hour	Hourly
8	16.9	Masonic/Cascade/Lake	1 Hour	Hourly
9	33.0	Anderson	1½ Hours	2 buses-one leaving every Hour
11	11.6	Downtown/Cypress/Canby/Masonic/N. Market	1 Hour	Hourly
12	11.0	Downtown/Breslauer /Market	½ Hour	Hourly
14	11.9	Downtown/Benton/Masonic/Hilltop/Cypress	1 Hour	Hourly
DEMAND RESPONSE				
	NA	Generally within 3/4 miles of all fixed routes		
BURNEY EXPRESS 110 (round trip)			2 round trips daily	

TABLE 4: TDA FUNDED TRANSPORTATION PROVIDERS IN SHASTA COUNTY

Service (Operator)	Vehicles	Miles/Month	Passenger Trips/ Month	Hours of Operation	Service Area	Fixed/Demand	Cost/Trip
Fixed Route (RABA)	18 Buses	61,699	59,492	Weekdays 6:30-7:30 Saturday 9:30-7:30 (times vary by route)	Redding, Anderson, Shasta Lake Areas	Fixed	\$3.56
Demand Response (RABA)	19-equipped vans are available	31,781	5,435	Weekdays 6:30-7:30 Saturday 9:30-7:30	Redding, Anderson, Shasta Lake Areas	Demand	\$16.53
Subtotal (DR & FR)	37 Vehicles	93,480	64,927	—	—	—	—
Burney Express (RABA)	2 lift-equipped vans	4,711	376	Weekdays 6:00-7:00	Burney-Redding	Fixed	\$13.52
Consolidated Trans. Service Agency (CTSA) Shasta Senior Nutrition	14-16 passenger buses, 4 lift-equipped vans	11,979	2,200	M-F 8-4:30	Shasta County (See Table 5)	Demand	\$11.16
Shasta County Lifeline	1 lift equipped vans	1,863	271	Twice Weekly Weekdays between 8-4:30	Service to: Burney, Johnson Park, Cottonwood, Bella Vista, Palo Cedro, Happy Valley	Demand	\$9.23

2. CONSOLIDATED TRANSPORTATION SERVICES AGENCY (CTSA) SERVICES



Shasta Senior Nutrition Programs (SSNP) has been the designated Consolidated Transportation Services Agency (CTSA) since 1995. This allows SSNP to act as both the administering agency and service operator. The CTSA provides specialized services to those who cannot use conventional transit services such as the elderly and disabled. By definition, CTSA services are designed to link intra-community origins and destinations (TDA §99275). Table 5 provides a description of CTSA service areas and hours of service.

Table 5: CSTA Hours of Service and Service Area		
ROUTE	HOURS OF SERVICE	AREA OF SERVICE
Route 2	8:00am to 3:30pm	Airport Road, Churn Creek Bottom, East of I-5 and Balls Ferry Road (as schedule requires)
Route 3	8:00am to 4:30pm	Burney Area—Doyles Corner, Johnson Park, Four Corners (as schedule requires)
Route 4	8:00am to 4:30pm	Fall River Mills, McArthur, Cassel, to Burney and return
Route 6	8:00am to 4:30pm	Happy Valley, Olinda, Cottonwood, to Anderson, Hwy 273 to Redding
Route 10	8:00am to 4:30pm	Redding—Enterprise, Hartnell, Bechelli
Route 11	8:00am to 4:30pm	Palo Cedro, Graystone Rd, Bella Vista, Deschutes Road
Frail/Elderly	8:00am to 4:30pm	Cities of Redding, Anderson , Shasta Lake, and the unincorporated County areas

3. COUNTY LIFELINE SERVICES

County Lifeline Services were established by Shasta County effective July 1, 1996. Like CTSA services, Lifeline services are operated by Shasta Senior Nutrition Programs. The service is intended to provide elderly and disabled transportation service from Burney/Johnson Park, Bella Vista, Palo Cedro, Happy Valley and Cottonwood to the Redding area for necessary services such as medical appointments. Table 4 on the previous page provides a summary of County Lifeline Services. It also compares the Lifeline Service to other TDA-funded services. The hours of service vary since the Lifeline Service is part of Shasta Senior Nutrition's coordinated transportation system which includes the CTSA services and other, non-TDA-funded programs.

B. NON-TDA-FUNDED TRANSPORTATION SERVICES

The public and private transportation services throughout the county are varied. The available services are operated on limited schedules. A summary of these services is presented in Table 6 on the following page. Shasta Senior Nutrition Program is listed on both Table 4 and Table 6 since some of their programs are not TDA-funded and serve different transit needs from those served through their TDA-funded programs (i.e., CTSA and Lifeline services).

Table 6: NON TDA FUNDED TRANSPORTATION PROVIDERS IN SHASTA COUNTY—Page 1 of 2									
Agency	Vehicles	Miles/ Month	Passen- ger Trips/ Month	Hours of Opera- tion	Service Area	# of Clients	Fixed/ Demand	Cost Per Trip	Coord. Partici- pant
County Schools	11 Wheelchair 8 Vans 2 sm conventional 6 lg. Conventional 27 Buses	54,900	N/A	M-F 5:00am- 5:30 pm	Shasta County	590	Demand and Fixed	N/A	N/A
Far Northern Regional Center	All Contract Service (ABC CAB, RABA, Laidlaw, Etc.)	N/A	25,000	M-F	Shasta, Siskiyou, Tehama, Lassen, Glenn, Butte, Modoc, Plumas & Trinity Coun- ties	5,400 Develop- mentally disabled	Demand And Fixed	N/A	Yes
Golden Umbrella	1 Mini Van 1 8 Passenger Van	2,044	N/A	M-F 8-4	Greater Redding Area/ rural and urban	4	Demand	N/A	Yes
Headstart	18 20 Psg. Bus 2 22 Psg. Bus	25,000	630	M-F 7-5	Shasta, Siskiyou, Trinity	780	Demand	\$13.00	Yes
Pit River Health Service	Not Provided								
Shasta Senior Nutrition	15- 16 Psgr. Buses 4—Lift equipped vans	19,589	3,430	M-F 8-4:30	Rural and Urban areas	2,022 Monthly	25% Fixed, 75% demand	\$11.16	Yes
Shascade Community Services	3 Mini Vans 5 9 Psgr. Vans 3 Mod. Van 3 5 psg. miniVans/ w lift 3 5 Psg. vehicles 1 Med. Bus	15,000	7,800	M-F 7-4:30 avail. For on call or eve.	Majority Shasta County. Available for medical purposes out of area.	250 Daily	Demand	N/A	Yes

Table Continued on Next Page

Table 6: NON TDA FUNDED TRANSPORTATION PROVIDERS IN SHASTA COUNTY—Page 2 of 2

Agency	Vehicles	Miles Per month	Passenger Trips Per Month	Hours of Operation	Service Area	# of Clients	Fixed/ Demand	Cost Per trip	Coord. Participant
Shasta College	9 Lg. Buses (2 w/lift) 2 Sm. Buses w/lift 3 Vans	15,000	5,000	6:00am— 8:00pm	Shasta, Tehama, and Trinity Counties	500/yr	Fixed and Demand	N/A	N/A
Redding Rancheria Indian Health	Not Provided								
Veterans Administration	3 10 Psg. Vans 1 12 Psg. Van, 1 wheelchair van 2 sedans, 1 mini van	4,000+	180+	5:30am- 5:00 pm	Shasta, Siskiyou, Trinity, Tehama, Butte Contra Costa, Sacramento, Yolo Counties	3000+ per year	Demand	N/A	N/A

V. EXISTING TRANSIT PERFORMANCE

This section examines trends in ridership and farebox ratios for TDA-funded transportation services. It also discusses funding limitations affecting current and future levels of transit service. Only TDA-funded services are reviewed, since the purpose of this report is to assist in allocating TDA funds.

Two terms are commonly used in this section: passenger trip and farebox ratio. They are important to understand when reviewing the information provided in this section and each term is discussed below.

Passenger Trip: A passenger trip is a one-way trip and is counted separately each time a passenger transfers. Passenger trips should not be confused with the number of riders. One rider typically accounts for two or more passenger trips each day.



Farebox Ratio: Farebox ratio is the fare revenue received divided by the cost of operating the service. Operating costs do not include fixed costs such as bus purchases. For example, if passengers pay 20¢ of every dollar spent to operate a service, the farebox ratio for that service is 20% (also expressed as 0.2). The farebox ratio is important for three reasons. First, funding penalties can apply where a minimum farebox ratio is not met. Second, minimum farebox standards are included in the RTPA definition of “reasonable to meet” transit services. Third, farebox ratio is the most commonly used measure of efficiency for a transit service.

A. REDDING AREA BUS AUTHORITY (RABA) SERVICES

Fixed Route and Demand Response: Performance of the RABA System has been evaluated in RABA’s Short- and Long-Range Master Transit Plan prepared by LSC Transportation Consultants, Inc. dated July 2001. The document presents a review of demographic characteristics, growth forecasts, existing transit services, and future transit demand. The following incorporates 2003/2004 operating statistics and future demand.

2003-2004 Findings: The population of the RABA service area, based on the Department of Finance E-1 Population Report for 2004, was 112,683. The population for Shasta County increased 1.4% during 2004. Table 7 on the following page represents RABA’s operating and financial statistics for 2003/2004.

Short- and Long-Range Master Transit Plan service improvements

implemented: In 2003-2004, RABA implemented an express shuttle to Shasta College; realigned routes 4, 7, 11 and 14; combined Routes 2 and 10; and made minor adjustments to Routes 1, 8 and 9. The changes utilized existing routes with no impacts to the annual operating costs. Performance measures are utilized to monitor the new express service and the various route modifications.

Table 7
RABA- 2003/2004 OPERATING AND FINANCIAL STATISTICS

Performance Indicator	Fixed Route	FR Change from Prior Year	Comments	Demand Response	Comments	DR Change from Prior Year	TOTAL
Passenger trips	718,417	Decrease 43,017 trips	Decrease From Previous Year: 5.65%	65,225	Increase From Previous Year: 1.09%	Increase 5,660 trips	783,642
Service Miles	796,926	Increase 70,467 miles	Passenger trips per service mile: .90	381,374	Passenger trips per service mile: .17	Increase 22,761 miles	1,178,300
Service Hours	48,280	Increase 1,797 hours	Passenger trips per service hour: 14.88	25,090	Passenger trips per service hour: 2.6	Increase 1,934 trips	73,370
Expenses	\$2,554,091	Increase \$275,471 Expenses	Per Passenger Trip Cost: \$3.56	\$1,077,998	Per Passenger Trip Cost: \$16.53	Increase \$67,359 Expenses	\$3,632,089
Fares	\$454,548	Decrease \$21,518 Fares	Farebox Recovery: 17.79%	\$109,695	Farebox Recovery: 10.1758%	Increase \$27,561 Fares	\$564,243

- Fares: Combined farebox recovery = 15.53%.
- Per Passenger Trip Subsidy = \$2.92 on the fixed route
- Per Passenger Trip Subsidy = \$14.85 on Demand Response.

Shasta College Express Service:

A two-year pilot program for an express shuttle from the Masonic Avenue Transfer Facility to Shasta College was added to RABA's service. The service was implemented in August 2003.

Shasta College Express was implemented by RABA, and is not mandated by the RTPA. If this service is to be funded through TDA funds, then it must follow the unmet needs process. This requires an analysis that tests if this service is "reasonable to meet" and the service must meet farebox requirements established by the RTPA. After 9-months of operation the farebox ratio was 5.33%, which does not meet the farebox requirements. The RABA Board terminated the Shasta College Express in December 2004 due to lack of ridership and not meeting farebox recovery.

Burney Express:

Burney Express operates two routes twice daily between the Burney area and Redding. This is an express service for commuters with fewer stops than a fixed route service.



Burney Express is funded through Shasta County's portion of TDA funds. This service continues to exceed the 10% minimum farebox requirement and has averaged a 16.23% farebox recovery over the past 12 months. Average ridership for 2003/2004 was 2.67 riders per hour. Operating costs have decreased from the 2002/2003 Transit Needs Assessment due to RABA's contract operator securing drivers that reside in the Burney Area. This eliminates non-revenue hours from this service when drivers leave from Redding to start in Burney.

B. CONSOLIDATED TRANSPORTATION SERVICES AGENCY (CTSA) SERVICES

The Consolidated Transportation Services Agency (CTSA) provides transportation to the elderly. These combined services provide approximately 135 passenger trips per day. CTSA services are funded using TDA revenue before it is apportioned to jurisdictions ("off the top"). TDA-funding is limited to 5% of the money available for apportionment (TDA \$99233.7). CTSA services are not subject to farebox ratio requirements, but must meet certain performance standards. Passengers pay for these services on a donation basis.

CTSA services provided 26,403 trips at a cost of \$11.16 per trip. RTPA staff is in the process of revising the CTSA performance criteria to a TDA subsidy of less than \$15.00 per passenger trip, and the cost per hour shall not exceed \$35.00 per service hour. These amounts shall be adjusted for changes in the consumer price index.

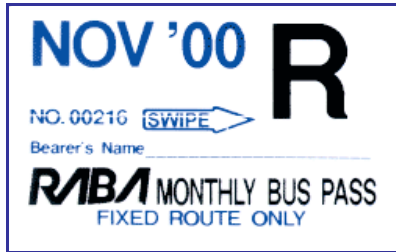
Table 8 SSNP- 2003/2004 OPERATING AND FINANCIAL STATISTICS				
Performance Indicator	2002/2003	2003/2004	Change from Prior Year	Percent Change
Passenger trips	24,449	26,403	Increase 1,954 trips	8.0% Increase
Service Miles	145,636	143,755	Decrease 1,881 Miles	1.3% Decrease
Cost Per Passenger	\$11.32	\$11.16	Decrease \$.16 Per Passenger	1.4% Decrease
Cost Per Mile	\$1.90	\$2.05	Increase \$.15 per mile	7.32% Increase
Total Expenses	\$276,809	\$294,645	Increase \$17,836 Expenses	6.45% Increase

C. COUNTY LIFELINE SERVICES

Lifeline Services provide approximately 13 passenger trips daily. This service is currently funded voluntarily by Shasta County using TDA funds. This service is not subject to farebox requirements; however, it must meet performance requirements established by the County. Like the CTSA services, the system operates on a donation basis.

Lifeline Services, as part of Shasta Senior Nutrition Programs' coordinated system, effectively serve specialized transportation needs in Burney, Johnson Park, Cottonwood, Bella Vista, Palo Cedro, Happy Valley, and Redding. It provides approximately 3,250 trips annually at a cost of \$9.23 per trip.

D. CALWORKS TRANSPORTATION COORDINATION



CalWORKS is a state-mandated program designed to assist welfare clients to enter the work force. Transportation is one of the barriers for clients attempting to access training and work sites. The program requires that CalWORKS identify transportation resources for their clients. CalWORKS provides the following transportation assistance to qualifying clients:

- ◆ RABA Monthly Bus Passes
- ◆ Individual \$5.00 punch cards
- ◆ Mileage reimbursement (must have a valid drivers license, legal vehicle registration, and an insured vehicle)
- ◆ Community service clients can be picked up if they have no car and there is no bus service.

E. FINANCIAL ISSUES

Minimum Farebox Ratio

Annually the RTPA is required to review the farebox ratio for RABA services to determine funding eligibility pursuant to TDA regulations. The ultimate significance of farebox ratios is that RABA's eligibility for TDA funds is determined in large part by the required ratios. If RABA's actual fare revenues are less than the required ratio, its TDA eligibility would not be increased to make up the difference.



The farebox ratio for RABA urban fixed route and demand response services in 2003/2004 was 15.53%, falling below the RTPA required farebox. While RABA did not meet the required established farebox ratio for 2003/2004, it does have a plan in place to meet the requirement following the grace year should it be necessary.

In February of 2002, the RTPA approved a request by RABA to reduce the farebox ratio to 16.5% for 2001/2002, 17.5% for 2002/2003, 18.5% for 2003/2004 and 19% for years thereafter.

The next section provides a detailed discussion of farebox ratio requirements.

VI. TRANSIT EVALUATION

This section reviews the feasibility of expanding TDA-funded services, by type of service, to meet identified transit needs. Expansion of service can include increasing the level of services (e.g., expanded hours, more vehicles, or shorter headways) or expanding service to a new area. This section focuses on existing services since they have established standards, current operational information is available, and since they can more readily accommodate newly identified transit needs. New types of services may meet transit needs, but would need to be considered on a case-by-case basis depending on the method of funding and any required performance standards. Appendix E represents a chronological history from 1999 to present detailing primary unmet need requests and RTPA responses and actions.

Where an “unmet transit need” is found “reasonable to meet” according to the RTPA adopted definition, transit funds are allocated. Existing transit services can also continue to receive TDA funds as long as they comply with the “reasonable to meet” standard (§99401.5 (e)). Transit needs which would not meet the RTPA adopted criteria are not required to be provided; however, jurisdictions may provide these services at their discretion using TDA funds or other revenue sources.

Table 9: PERFORMANCE CRITERIA

Redding Area Bus Authority (Fixed Route and Demand Response)	System wide 18.5% farebox requirement for 2003-2004
Burney Express	10% Farebox requirement
Consolidated Transportation Services Agency	A TDA subsidy of less than \$10.00 per passenger
Lifeline	Voluntary—set by County
Vanpool	Voluntary

A. FIXED ROUTE/DEMAND RESPONSE SERVICE

This service is currently an “unmet transit need” determined “reasonable to meet” by the RTPA (see RTPA adopted definitions and standards). Fixed route and demand response farebox ratios do not meet the 18.5% standard.

Based on information provided in the State Controller’s Report, submitted by RABA, the system-wide farebox ratio for fiscal year 2003/2004 was 15.53%. Appendix C provides detailed farebox ratio calculations. This places RABA in non-compliance with required revenue ratios under Section 99268.9 of TDA law. However, the first fiscal year for which an operator does not maintain the required ratio of fare revenues to operating cost is considered a grace year, and will not result in any penalty nor loss of eligibility for funds under this article (99268.9 (b)). If RABA’s farebox continues to fall below the required farebox ratio, this will result in a penalty or loss of eligible TDA funds. While RABA did not meet the RTPA established farebox ratio, RABA does have a plan in place to meet the requirement following the grace year should it be necessary.

Expansion Criteria: Expansion of fixed route service should only be considered by the RTPA where a positive effect on farebox ratios can be demonstrated. A new transit service would need to generate at least 15 passenger trips per each new service hour or about 200 passenger

trips a day to meet or exceed a 20% farebox ratio. Figure 1 on Page 7 shows census tracts in the county which can generate this level of passenger trips. All census tracts exceeding 200 passenger trips per day are served by RABA fixed routes.

One or more of the following criteria should be used when considering an approval of an expansion or modification to a fixed route service:

- ◆ Based on census group and block information and the methodology described in Section 3 and Appendix A-2 and A-3, the population density in the new service area would need to generate at least 200 passenger trips per day. This may need to be slightly adjusted periodically due to rising operating costs.
- ◆ The new transit service includes controls to reduce operating cost or increase fare revenues to maintain the current system average. Such services would be evaluated on a case-by-case basis to determine if minimum farebox ratios can be met or exceeded.

B. BURNEY EXPRESS SERVICE

This service is currently an “unmet transit need” determined “reasonable to meet” by the RTPA (see RTPA adopted definitions and standards). The current service from Burney exceeds the 10% minimum farebox requirement for rural areas. There are no demand response requirements for Express Service. This system meets all criteria associated with the “unmet transit need” and “reasonable to meet” standards.

The Burney Express provides service to a community of 3,500 people. Burney has community sewer and water service which support urban-type densities. Many residents utilize Redding for services and some residents commute to Redding for employment and education.

Expansion Criteria: Since this service is currently considered “reasonable to meet,” express service from other outlying communities to Redding should only be considered where similar demographic conditions occur (i.e., total population, population densities and demand for Redding services) to those found in the Burney area.



C. CONSOLIDATED TRANSPORTATION SERVICES AGENCY (CTSA) SERVICES

This is a community transit service funded “off the top” by the RTPA pursuant to TDA, Article 4.5. These services are not subject to “unmet transit need” and “reasonable to meet” standards. Funding is limited to 5% of the money available for apportionment countywide. Among other requirements, claims filed for community transit services must meet all of the following criteria:

- The service must link intracommunity origins and destinations (§99275(b)).
- The service is responding to a transportation need currently not being met in the community of the claimant (§99275.5(c)(1)).
- The service is integrated with existing transit services, where appropriate (§99275.5(c)(2)).
- The RTPA revised performance criteria for CTSA services in July 2003. The criteria is a subsidy of less than \$10.00 per passenger trip. This amount shall be adjusted for changes in the consumer price index.

Expansion Criteria: Expansion can be considered by the RTPA provided the service meets

the performance criteria for a community transit service as listed above. Expanded hours of operation or service to new areas are examples of expanded services that could be provided.

Finding: Community transit services must be provided at a TDA subsidy of less than \$10.00 per passenger trip. This service currently does not meet the performance criteria established by the RTPA in 2003. Increased costs in workers compensation, health insurance, mandatory drug testing, and fuel costs contributed to this service not meeting the established performance criteria. This is the second year the CTSA has not met their performance criteria. RTPA staff is in the process of revising the CTSA performance criteria.



D. COUNTY LIFELINE SERVICES

This service is currently funded voluntarily by Shasta County and is not subject to “unmet transit need” and “reasonable to meet” standards. The existing agreement established by the county for this service sets minimum service standards regarding service areas, hours of operation, operating costs, and a minimum number of trips to be provided annually.

Expansion Criteria: Expansion of these services are at the discretion of the cities or County and not the RTPA. Individual jurisdictions may provide the service with TDA funds, or other funding sources, and set their own performance standards. Potential expansions to services could include new service in specified areas; or expanding the frequency, days or hours of service.

E. VANPOOLS

Vanpool service can be funded voluntarily. Vanpools are not necessarily subject to “unmet transit need” and “reasonable to meet” standards. Vanpools have been provided in Shasta County in the past. Policies can be established with minimum standards. Past policies have included the following:

- Commitment of a volunteer driver/coordinator and a minimum of four paying riders.
- Trip origins and destinations should be within Shasta County.
- The distance from origin to destination should be at least 25 miles.

Expansion Criteria: Like any other service provided at a jurisdiction's discretion, a vanpool service could be provided to meet other transit needs. Individual jurisdictions would adopt their own performance standards.

F. SUMMARY

TDA-funded transportation services, with the exception of the Burney Express, currently do not meet established performance standards, including those found in the “unmet needs” and “reasonable to meet” definition. New or expanded services can be required under the Transportation Development Act where an “unmet transit need” is found “reasonable to meet” by the RTPA. The expansion criteria discussed in this report for each type of service should be utilized in determining if a new service can be funded. Limited funding is available to meet specialized transit needs through the CTSA. CTSA services are funded at the discretion of the RTPA Board.

Due to a low farebox ratio in urban areas and rising operating costs, the ability to expand the fixed route/demand response system is limited at this time. If, however, new transit services are identified through the unmet needs process and can demonstrate improved farebox performance, there may be opportunities to provide additional fixed route service.

APPENDIX A

UNMET TRANSIT NEEDS FINDING

Public Utilities Code Section 99401.5. Prior to making any allocation not directly related to public transportation services, specialized transportation services, or facilities provided for the exclusive use of pedestrians and bicycles, the transportation planning agency shall annually do-all of the following:

- (a) Consult with the social services transportation advisory council established pursuant to Section 99238.
- (b) Identify the transit needs of the jurisdiction which have been considered as part of the transportation planning process, including the following:
 - (1) An annual assessment of the size and location of identifiable groups likely to be transit dependent or transit disadvantaged, including, but not limited to, the elderly, the handicapped, including individuals eligible for paratransit and other special transportation services pursuant to Section 12143 of Title 42 of the United States Code (the federal Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12101, et seq.)), and persons of limited means.
 - (2) An analysis of the adequacy of existing public transportation services and specialized transportation services, including privately and publicly provided services necessary to implement the plan prepared pursuant to Section 12143 (c) (7) of Title 42 of the United States Code, in meeting the transit demand identified pursuant to paragraph (1).
 - (3) An analysis of the potential alternative public transportation and specialized transportation services and service improvements that would meet all or part of the transit demand.
- (c) Identify the unmet transit needs of the Jurisdiction and those needs that are reasonable to meet. The transportation planning agency shall hold at least one public hearing pursuant to Section 99238.5 for the purpose of soliciting comments on the unmet transit needs that may exist within the jurisdiction and that might be reasonable to meet by establishing or contracting for new public transportation or specialized transportation services or by expanding existing services. The definition adopted by the transportation planning agency for the terms "unmet transit needs" and "reasonable to meet" shall be documented by resolution or in the minutes of the agency. The fact that an identified transit need cannot be fully met based on available resources shall not be the sole reason for finding that a transit need is not reasonable to meet. An agency's determination of needs that are reasonable to meet shall not be made by comparing unmet transit needs with the need for streets and roads.
- (d) Adopt by resolution a finding for the jurisdiction, after consideration of all available information compiled pursuant to subdivisions (a), (b), and (c). The finding shall be that (1) there are no unmet transits needs, (2) there are no unmet needs that are reasonable to meet, or (3) there are unmet transit needs, including needs that are reasonable to meet. The resolution shall include development pursuant to subdivisions (a), (b), and (c) which provides the basis for the finding.
- (e) If the transportation planning agency adopts a finding that there are unmet transit needs, including needs that are reasonable to meet, then the unmet transit needs shall be funded before any allocation is made for streets and roads within the jurisdiction.

**Appendix A-1
Cost Allocation Method**

TABLE 31: Recommended Service Modifications -- FY 1995-96 Subsidy Impact Under Existing DAVE Contract

Modification	Annual Impact of Modification										Impact on Annual Farebox Revenue	Change in Annual Subsidy Required Under DAVE Contract	
	Daily Vehicle Hours(1) Miles(2)		Vehicle-Hours	Vehicle-Miles	DAVE Contract Costs(3)	RABA Maintenance Costs	Total		Ridership				
	Hours	Miles					Marginal Operating Cost	Allocated Operating Cost(4)	Annual	Avg Day			
Provide Mid-day Burney Trip	2.5	0	640	0	\$13,436	\$0	\$0	\$13,436	\$15,743	2,000	8	\$3,500	\$9,936
Reduce Dial-A-Ride Service Hours - Burney	-2.5	-8	(640)	(2,048)	(\$13,436)	(\$451)		(\$13,887)	(\$16,194)	(400)	(2)	(\$400)	(\$13,487)
- Palo Cedro/Bella Vista	-3.5	-24	(896)	(6,144)	(\$18,811)	(\$1,352)		(\$20,163)	(\$23,393)	(300)	(1)	(\$300)	(\$19,863)
- Happy Valley	-1.5	-12	(384)	(3,072)	(\$8,062)	(\$676)		(\$8,738)	(\$10,122)	(300)	(1)	(\$300)	(\$8,438)
Provide Service to Fall River Mills Using Burney DAR Vehicle	0.0	72	0	18,488	\$0	\$4,067		\$4,067	\$4,067	2,600	10	\$2,500	\$1,567
Provide Shasta College-Northpoint Svc. Using Bella Vista DAR Vehicle	0.0	18	0	4,710	\$0	\$1,036		\$1,036	\$1,036	2,600	10	\$2,500	(\$1,464)
Provide Cottonwood Service Using Happy Valley DAR Vehicle	0.5	30	128	7,578	\$2,687	\$1,667		\$4,354	\$4,815	3,100	12	\$1,100	\$3,254
SUBTOTAL: Rural Services	-4.5	76	(1,152)	19,512	(\$24,186)	\$4,291		(\$19,895)	(\$24,047)	9,300	37	\$8,600	(\$28,495)
Operate Route 8 on Lake Blvd.	0.0	-40	0	(11,574)	\$0	(\$5,324)		(\$5,324)	(\$5,324)	1,700	6	\$700	(\$6,024)
Eliminate Route 9 to Cottonwood	-6.5	-96	(1,866)	(27,648)	(\$39,175)	(\$12,718)		(\$51,893)	(\$58,619)	(5,500)	(19)	(\$2,300)	(\$49,593)
Implement Route 12 on S. Market St.	6.5	70	1,866	20,175	\$39,175	\$9,281		\$48,456	\$55,182	20,100	70	\$8,600	\$39,856
SUBTOTAL: Urban Fixed Route	0.0	-66	0	(19,046)	\$0	(\$8,761)		(\$8,761)	(\$8,761)	16,300	57	\$7,000	(\$15,761)
TOTAL	-4.5	10	(1,152)	465	(\$24,186)	(\$4,470)		(\$28,656)	(\$32,808)	25,600	94	\$15,600	(\$44,256)

NOTE 1: Excluding deadhead travel, per existing DAVE contract.

NOTE 2: Including deadhead travel, as RABA direct maintenance expenses are dependent upon actual miles travelled.

NOTE 3: At \$20.944, the average of the 1995 and 1996 DAVE rates per vehicle-hour of service.

NOTE 4: Allocated fixed costs by vehicle-hours of service.

APPENDIX A-2 METHOD TO DETERMINE TRANSIT DEMAND

The analysis presented below segments the potential ridership for RABA services into two categories:

- ⇒ General public trips; and
- ⇒ Mobility Impaired trips

The analysis (Appendix A-3) yields estimates of the demand that could be expected given a high level of transit service for each category of ridership, and for each portion of the study area.

The first step is to review the demographic data available for the study area from the current U.S. Census.

Determine the Mobility Impaired Ridership

Calculate the Mobility Impaired (MI) using the 16-64 years of age with a disability from the 2000 Census: Disability Status by Sex table by census tract.

The populations (P) are added together for each census tract to determine the total population for all census tracts (GPT). The current RABA State Controllers Report (SCO) for specialized transit Demand Response (DR) is the source for the total elderly or disabled ridership. The total annual passengers for demand response are used as the base to calculate Mobility Impaired (MI) calibrated transit trips (MIC).

The total calibrated transit trips for the Mobility Impaired (MI) is calculated using this formula:

Formula: MI for census tract: $MI / MIT * \text{current DR SCO data} = \text{total mobility impaired calibrated trips (MIC)}$.

Example Census Tract 107: $1,293 / 16,522 * 65,225 = 5,104$ Calibrated Mobility Impaired Trips (MIC).

Determine General Public Transit Trips

The General Public (GP) in each census tract is calculated by using the total population for the census tract minus the Mobility Impaired (MI) in the census tract.

Step 1: Calculate the general public by the total population for the census tract (P) minus the Mobility Impaired (MI) in the census tract for the sum of general public in the census tract.

Step 2: Subtract the total Mobility Impaired (MIT) population from the total Population (GPT)

Step 3: Divide Step 1 by Step 2 for to equal the factor for general public trips

Step 4: Multiply the factor by the RABA SCO FR trips for the calibrated general public trips per census tract (GPCT).

Formula: Calibrated General Public Trips $= (P - MI) / (GPT - MIT) * FR = \text{Total calibrated general public trips (GPCT)}$

Example Census Tract 107: $(10,879 - 1,293 = 9,586) / (122,433 - 16,522 = 105,911) 9,586 / 105,911 = .09050 \times 713,904 = 64,615$ General Public Calibrated Trips per Census Tract (GPCT)

The total calibrated transit trips (TT) per census tract are the sum of the mobility impaired calibrated trips (MIC) plus the general public calibrated trips (GPCT) ridership in the tract.

Determining Annual Transit Trips Per New Census Tract

When applying this methodology to a new census tract you must first determine the calibrated trips per census tract using the transit demand method above. Calculate the annual transit trip per mobility impaired (MI) persons per year by using the RABA Demand Response trips (DR) – divided by the total mobility impaired (MIT) from the current census. This yields the total estimated (MIY) mobility impaired trips per year. General public trips annual transit trips are calculated using the total calibrated general public trips from the RABA (SCO) Fixed Route trips (FR) divided by the total population for all census tracts (GPT).

The total mobility impaired (MI) for the census tract is multiplied by mobility-impaired trips (MIY) per year to determine the number of calibrated trips for mobility impaired within the census tract (MIC).

General Public transit trips follow the formula of the total population in census tract (P) minus the mobility impaired (MI) in the census tract times the Public trips per year (GPY) equals the calibrated public trips (GPCT). The total calibrated mobility impaired calibrated trips (MIC) plus the General Public trips (GPCT) equal the total transit trips per model (TT) for the census tract.

Formula to determine total transit trips per census tract:

1. Total estimated &MI: $(DR/\&MIT)= MIY$ transit trips per year
2. Total estimated GP: $(FR/GPT)= GPY$ total estimated general public trips per year
3. Calibrated MI Trips per Census Tract: $MI * MIY = MIC$ total trips
4. General Public Trips per Census Tract: $P - MI * GPY = GPCT$ total general public trips
5. Total Trips per Model: $EP\&MIC + GPCT = TT$

Example Census Tract 107:

1. $65,225/16,522 = 3.95$ MI Trips per year
2. $713,904/(122,433- 16,522) = 6.74$ Trips per year
3. $1,293 * 3.95 = 5,107$ Calibrated MI Trips
4. $10,879 - 1,293 = 9,586 * 6.74 = 64,609$ Calibrated GP Trips
5. $5,107 + 64,609 = 69,716$ Transit Trips per Model

Appendix A-3								
Shasta County RTPA								
Analysis of Transit Demand								
	(DR) Demand Response Trips*	65,225	DR					
	(FR) Fixed Route Trips*	713,904	FR					
	Estimated Total Trips	779,129						
	<i>*Source: 2004 RABA SCO Report</i>							
Census Tract	Description	(P) Population	(MI) Mobility Impaired 16-64	(MI) Total Mobility Impaired	(MIC) Mobility Impaired Calibrated Trips	(GPCT) Calibrated General Pub. Trips	(TT) Total Trips Per Model	Density Per Square Mile
107	Quartz Hill	10,879	1,293	1,293	5,104	64,615	69,720	3,097.2
108	Lake Blvd	16,685	1,446	1,446	5,708	102,720	108,429	1,765.8
117	Summit City	7,802	1,359	1,359	5,365	43,430	48,795	431.5
121	East Anderson	5,429	834	834	3,292	30,973	34,266	358.8
106	Eureka Way/Canyon Crk	8,131	828	828	3,269	49,227	52,495	619.6
112	Enterprise High	5,377	613	613	2,420	32,112	34,532	1,477.3
113	Shasta Meadows	5,158	896	896	3,537	28,728	32,266	1,565.4
109	Enterprise/Bechelli	3,854	487	487	1,923	22,696	24,618	2,071.3
105	Placer/Benton Airpark	4,688	849	849	3,352	25,877	29,229	2,969.2
110	Texas Springs	6,851	947	947	3,739	39,797	43,535	313.6
114	Alta Mesa	8,709	1,032	1,032	4,074	51,748	55,822	1,688.7
104	River Bend	4,134	612	612	2,416	23,740	26,156	1,772.4
120	West Anderson	4,799	889	889	3,510	26,356	29,865	1,137.5
103	Enterprise/E Cypress	3,720	514	514	2,029	21,610	23,640	1,987.7
101	Downtown Redding	1,579	325	325	1,283	8,453	9,736	3,014.8
116	West Lake Blvd	3,528	525	525	2,073	20,242	22,315	77.4
123	Happy Valley	11,088	1,712	1,712	6,759	63,200	69,958	634.5
102	Eastern Downtown Rdg	2,126	313	313	1,236	12,221	13,456	2,010.9
111	Girvan/Eastside	2,742	229	229	904	16,939	17,843	1,412.6
115	Churn Creek Bottom	5,154	819	819	3,233	29,221	32,454	135.3
	TOTAL	122,433	16,522	16,522	65,225	713,904	779,129	
		(GPT)		(MIT)				
118	No Transit - Mount. Gate	7,374	936	936	3,695	43,396	47,091	112.2
119	No Transit - PC/BV	4,265	428	428	1,690	25,864	27,553	165.5
122	No Transit - E Cottonwood	4,988	676	676	2,669	29,065	31,734	248.7
124	No Transit - Igo/Ono/Platir	3,863	497	497	1,962	22,689	24,651	6.3
125	No Transit - Lakehead	1,609	193	193	762	9,545	10,307	3.4
126	No Transit - Burney	10,473	1,561	1,561	6,162	60,072	66,235	15.0
127	No Transit - Fall River	8,251	1,293	1,293	5,104	46,901	52,006	19.2
	Mobility Impaired Trips per year = MIY				3.95	= (MIY)		
	General Public trips per year = GPY				6.74	= (GPY)		
118	Sample Tract	7,374		1,971	7,781	36,419	44,201	112

APPENDIX B

SHASTA COUNTY RTPA SCHEDULE OF ANNUAL CLAIMS /TDA BUDGET FISCAL YEAR 2004/2005 CLAIMS

EXHIBIT B

CLAIMANT/PURPOSE		Funding Sources		
		LTF	STA	FTA
Off-The-Top Apportionments				
Administrative	PUC 99233.1	210,967		
(includes Core Function Match)				
CTSA Funding for Elderly Population	PUC 99275	302,762		
CTSA Funding for Administration by CTSA	PUC 99275	12,000		

Total Off The Top Apportionments		525,729		
		=====		
Redding Area Bus Authority				
TDA funds required per RABA budget	4,229,523			
PUC 99400(c)				
<u>Sources of Transit Funding:</u>				
LTF - Redding	1,689,205	1,689,205		
STA - Redding	121,921		121,921	
FTA Section 5307	1,628,280			1,628,280
LTF - Shasta Lake	58,190	58,190		
STA - Shasta Lake	13,835		13,835	
FTA Section 5307	184,773			184,773
LTF - Anderson	19,031	19,031		
STA - Anderson	13,515		13,515	
FTA Section 5311	180,498			180,498
LTF - Shasta County	200,637	200,637		
STA - Shasta County	95,460		95,460	
FTA Sec 5311	24,179			24,179

Total Funds Provided RABA for Transit	4,229,523	1,967,063	244,731	2,017,729
		=====		=====
Services Provided Under Contract to Shasta County				
Burney Express-Voluntary Program				60,000
City of Redding				
LTF - Streets and Roads		1,185,069		
City Of Anderson				
LTF Streets and Roads		299,588		
City Of Shasta Lake				
LTF Streets and Roads		267,975		
Shasta County				
LTF - Streets and Roads (PUC 99400(a))		2,029,541		
LTF - Purchased Transportation - Vanpool Subsidy (PUC 99400(c))		6,250		
LTF - Purchased Transportation - Lifeline Services (PUC 99400(c))		14,024		15,976
15,976				

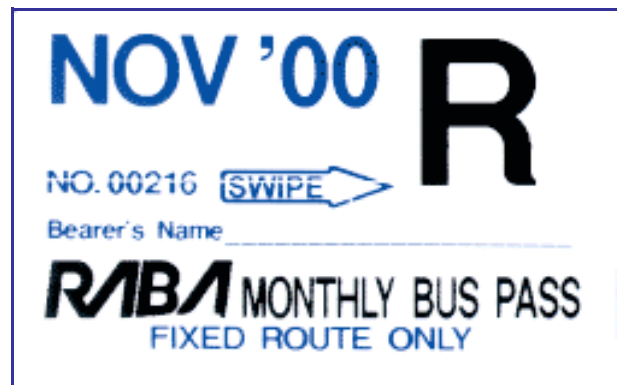
Total Revenues by Funding Source		5,769,510	244,731	2,093,705
		=====		=====

APPENDIX C

RABA FIXED AND DEMAND COMBINED 2003-2004 FAREBOX RATIO CALCULATIONS			
	Demand	Fixed Route	Total
Revenues: 6611.2 (excludes Charter 99247 (a))	\$1,117,469	\$2,756,093	\$3,873,562
Operating Expenses (Depreciation Not Included)			
Services	157,890	378,682	536,572
Fuel & Lubricants	105,435	321,366	426,801
Tires and Tubes	18,102	43,113	61,215
Other Materials & Supplies	21,797	165,973	187,770
Utilities	26,956	52,969	79,925
Casualty & Liability Costs	17,211	33,820	51,031
Purchased Transportation	719,632	1,590,482	2,310,114
Miscellaneous	50,446	172,850	223,296
Property	0	963,083	963,083
Total Expenses	1,117,469	3,722,338	4,839,807
Exclusions	(39,471)	(963,083)	(1,002,554)
TOTAL OPERATING EXPENSES	1,077,998	2,759,255	3,837,253
Farebox Recovery	10.17%	17.79%	15.53%

Redding Area Bus Authority Fare Structure		
	Redding / Shasta Lake	Anderson
Burney Express Routes	\$1-3.00	
Base Fare (6-61)	\$1.00	\$1.20
Zone Charge	\$.50	\$.60
Children Under 6	Free	Free
Transfers	Free	Free
Senior Base Fare	\$.50	\$.60
Handicapped Base Fare	\$.50	\$.60
Medicare Card Holder	\$.50	\$.60
Zone Charge	\$.25	\$.30
Demand Response	\$1.50	\$1.80
Zone Change	\$.75	\$.90

Monthly Pass Program	Senior / Regular	Disabled
Redding-Local	\$33	\$17
Redding-Shasta Lake	\$56	\$28
Redding-Anderson	\$67	\$33.50



APPENDIX D

TABLE OF RESPONSIBILITY

Citizens using transit in Shasta County often have comments or suggestions they would like to make about the system they use, but are unclear as to which comments are appropriate for the Unmet Transit Needs hearing. The examples in the table below are intended to offer citizens direction as to which agency to contact.

AREA OF CONCERN	EXAMPLES	RESPONSIBLE AGENCY
Expanded RABA/CTSA Service	• Adding a new bus route • Having buses operate for longer hours • Having buses operate on Sundays	RTPA during the Unmet Transit Needs written comment period and public hearing
Existing RABA service Issues	• Altering RABA's existing routes • Changing the location of bus stops • Comments about RABA's customer service	RABA
Existing CTSA service issues	• Altering existing SSNP routes • Comments about SSNP's customer service	CTSA
Other services	• Request for services not required by RTPA as part of Unmet Transit Needs process such as the Lifeline service or vanpools	Shasta County City of Redding City of Anderson City of Shasta Lake

**APPENDIX E— SHASTA COUNTY RTPA CHRONOLOGICAL UNMET NEEDS HISTORY
1999– Present**

Year	Primary Requests	RTPA Responses/Actions
1999/2000	1. Sunday Service 2. Longer Hours 3. Half Hour Headways 4. Rural area service	1998 Temporary farebox reduction to 15%. 1997/98 RABA generated 15.87% farebox ratio. Further expansion could result in system not meeting 17.5% farebox for 98/99. No evidence that service expansions would generate 20% farebox ratio required for expansion of service. Request for service in rural areas were in areas where service was attempted in the past and discontinued for low ridership. There is no increase in demographics in the areas requesting service. CTSA expanded service in 97/98 to the Burney/Fall River Mills area and added a special service for the frail and elderly. Both of these expansions have been a success. The CTSA service expansion to Lakehead twice weekly was terminated due to only one client being transported during the 11 month period.
2000/2001	1. Service Expansion 2. Longer Hours	RTPA implemented a temporary farebox reduction for RABA. The required farebox will be: 2001/2002—16.5%, 2002/2003—17.5%, 2004/2005—18.5%, and 19% thereafter.
2001/2002	1. Extend Anderson route to Cottonwood, Airport Road Route, 2. Add service to Fall River 3. Sunday Service 4. Longer Hours	1. Cottonwood Express may be reasonable to meet based on census tract data. Airport Road does not have enough density to recover 20% farebox requirement. 2. Burney Express service is operating at 19% farebox. 69 service hours would be required to run this extension to Fall River. Census Data does not support the needed trips. 3. The 1999/00 RABA farebox ratio was 19.1%, falling short of the required 20% for a new service to be determine reasonable to meet. 4. Same as #3 5. Shingletown Vanpool terminated due to lack of riders and driver.
		Note: RTPA adopted a weighted average farebox ratio for RABA of 19%. Implemented trial services to Cottonwood, Airport Road Corridor, and Fall River.
2002/2003	1. Service to Palo Cedro and Lakehead 2. Sunday Service 3. Longer Hours	1. These areas are low density and not reasonable to meet. 2. The 00/01 Farebox ratio was 18.8% falling below the required 20% farebox. 3. Same as #3
2003/2004	1. Service to Shasta College 2. Service to outlying areas 3. Longer Hours 4. Sunday Service	1. RABA implemented a pilot service to Shasta College thru regular operations. 2: Due to lack of ridership and farebox recovery Trial Services implemented in 2001/02 were terminated. Farebox ratios were Fall River—3.7%, Cottonwood—3%, and Airport Road Corridor—1.5%. RABA did meet the farebox requirement of 16.5% in 2001/02. 3,4: An extended hour analysis was performed by the RTPA using an elasticity of demand theory. The analysis yielded a 14.7% farebox ratio which does not meet the reasonable to meet definition. To obtain data for the analysis, RTPA staff performed an on-board survey of riders for both RABA Demand Response and CTSA.
2004/2005	1. Service to Happy Valley and Mountain Gate 2. Longer Hours 3. Sunday Service	1. Service can be provided to outlying areas where the CTSA operator has service, providing that persons are over 60 years of age or disabled. 2. See discussion in 2003/2004.