



**To:** Operations and Scheduling Committee

**Date:** 5/31/2012

**From:** Anne Muzzini, Director of Planning & Marketing

**Reviewed by:**

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**SUBJECT: Operations Analysis**

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**Summary:** Chapters of the Short Range Transit Plan are being reviewed by the MP&L committee. Information in the most recently completed Operations Analysis chapter is relevant to the work of the O&S Committee and pertinent sections have been selected for discussion.

**Action Required:** Information and Discussion Only

### **Bishop Ranch Service:**

The Express Routes serving Bishop Ranch (routes #96, #97, #92, and #95) have experienced significant growth in ridership over the past two years, due to the influx of service workers from businesses that moved there, including a new Bank of the West corporate office. Bishop Ranch (Sunset Develop Corporation and Chevron) purchases bus passes from CCCTA and distributes them to employees located at the Ranch as a benefit so these commuters ride free. CCCTA expects the number of Bishop Ranch riders to grow when PG&E moves there in the near future.

	FY08-09	FY09-10	FY10-11	FY 2011-12 (Projected)
Bishop Ranch Pass Passengers	105,720	114,998	171,777	190,452

### **TDA Cost per Passenger**

The TDA cost per passenger is a valuable measure of performance as it takes into consideration the subsidy for each passenger carried and it is one of the primary tools used for service adjustments. CCCTA determines the TDA Cost per Passenger by reducing the marginal operating cost for the route by the fares and special revenues for it. Routes that have dedicated private and public fund sources, such as the revenues from Bishop Ranch and the City Walnut Creek, have lower TDA and general fund subsidy. Other special revenues include the bridge toll funds (RM2) for Route #98 and Measure J funds identified for Express routes in each subregion, San Joaquin Regional Rail (ACE) support of Route #92, and Contra Costa County developer fees for Route #35.

Routes that are heavily funded with TDA and other general fund revenues (STA, Measure J Bus, and 5307 Preventative Maintenance) and have low productivity have the highest TDA cost per passenger. For the comparisons shown actual FY 2010-11 ridership was used and the marginal cost was developed based on FY11-12 budgeted operator wages and fringes, supervisor labor and fringe, maintenance labor, parts fuel and insurance.

## TDA Cost per Passenger

<b>Route</b>	<b>Ridership</b> (FY10-11 Passengers)	<b>Cost</b> (\$49.56/Total Hr + \$2.01/Total Mi)	<b>Fares</b> (\$1.35/Pass)	<b>Special Revenue</b>	<b>TDA &amp; General Funds</b>	<b>TDA Cost/ Pass</b>
649	275	\$22,180	\$371	\$21,809	\$21,809	\$0.00
98X	90,058	\$692,508	\$121,579	\$565,906	\$5,023	\$0.06
316	26,205	\$144,098	\$35,377	\$107,045	\$1,676	\$0.06
4 (Weekend)	51,158	\$121,578	\$69,064	\$35,756	\$16,758	\$0.33
91X	10,651	\$81,248	\$14,379	\$61,481	\$5,388	\$0.51
16	185,458	\$993,431	\$250,368	\$626,137	\$116,925	\$0.63
96X	116,572	\$930,138	\$157,372	\$676,233	\$96,533	\$0.83
97X	22,755	\$396,590	\$30,720	\$345,752	\$20,118	\$0.88
92X	44,302	\$378,076	\$59,808	\$277,120	\$41,148	\$0.93
14	171,622	\$665,552	\$231,690	\$271,454	\$162,408	\$0.95
4	237,638	\$747,046	\$320,811	\$175,014	\$251,221	\$1.06
20	295,674	\$775,283	\$399,159		\$376,124	\$1.27
611	9,029	\$23,849	\$12,189		\$11,659	\$1.29
614	10,131	\$28,276	\$13,677		\$14,599	\$1.44
18	112,487	\$589,696	\$151,857	\$271,454	\$166,385	\$1.48
9	156,059	\$775,194	\$210,680	\$330,218	\$234,296	\$1.50
10	256,078	\$755,100	\$345,705		\$409,395	\$1.60
627	10,033	\$30,166	\$13,544		\$16,622	\$1.66
605	15,894	\$49,342	\$21,457		\$27,885	\$1.75
615	4,803	\$15,855	\$6,485		\$9,370	\$1.95
314	92,377	\$310,602	\$124,709		\$185,893	\$2.01
613	4,019	\$13,694	\$5,426		\$8,268	\$2.06
619	4,526	\$15,446	\$6,110		\$9,336	\$2.06
623	7,428	\$26,503	\$10,028		\$16,475	\$2.22
1	99,471	\$361,339	\$134,286		\$227,053	\$2.28
602	23,950	\$90,644	\$32,333		\$58,311	\$2.43
601	22,677	\$86,312	\$30,614		\$55,698	\$2.46
11	79,098	\$336,471	\$106,783		\$229,689	\$2.90
95X	39,463	\$362,755	\$53,275	\$193,297	\$116,184	\$2.94
15	134,195	\$583,037	\$181,163		\$401,874	\$2.99
612	5,879	\$27,278	\$7,937		\$19,341	\$3.29
17	73,293	\$344,285	\$98,945		\$245,340	\$3.35
606	56,360	\$266,792	\$76,086		\$190,707	\$3.38
320	16,977	\$84,437	\$22,919		\$61,518	\$3.62
35	93,867	\$879,818	\$126,720	\$400,163	\$352,934	\$3.76
636	14,365	\$81,092	\$19,392		\$61,700	\$4.30
625	7,800	\$44,168	\$10,530		\$33,637	\$4.31
21	161,495	\$1,006,693	\$218,018		\$788,676	\$4.88

## TDA Cost per Passenger

<b>Route</b>	<b>Ridership</b> (FY10-11 Passengers)	<b>Cost</b> (\$49.56/Total Hr + \$2.01/Total Mi)	<b>Fares</b> (\$1.35/Pass)	<b>Special Revenue</b>	<b>TDA &amp; General Funds</b>	<b>TDA Cost/ Pass</b>
93X	49,440	\$524,539	\$66,743	\$212,552	\$245,243	\$4.96
311	18,865	\$119,140	\$25,468		\$93,672	\$4.97
608	3,745	\$23,940	\$5,056		\$18,884	\$5.04
622	3,880	\$26,154	\$5,238		\$20,917	\$5.39
6	98,142	\$684,919	\$132,492		\$552,427	\$5.63
321	22,778	\$159,660	\$30,750		\$128,910	\$5.66
19	36,685	\$260,151	\$49,525		\$210,627	\$5.74
603	6,348	\$46,844	\$8,570		\$38,274	\$6.03
315	6,640	\$50,951	\$8,965		\$41,987	\$6.32
28	77,995	\$601,147	\$105,294		\$495,853	\$6.36
301	7,812	\$62,259	\$10,546		\$51,713	\$6.62
6 (Weekend)	10,081	\$82,718	\$13,609		\$69,108	\$6.86
626	5,844	\$56,371	\$7,889		\$48,482	\$8.30
36	65,225	\$636,884	\$88,054		\$548,830	\$8.41
5	19,043	\$196,881	\$25,708		\$171,174	\$8.99
635	2,352	\$25,771	\$3,175		\$22,596	\$9.61
616	2,143	\$23,982	\$2,893		\$21,089	\$9.84
7	57,054	\$654,365	\$77,022		\$577,342	\$10.12
609	3,920	\$46,381	\$5,292		\$41,090	\$10.48
610	2,603	\$34,015	\$3,514		\$30,501	\$11.72
607	2,492	\$39,534	\$3,364		\$36,170	\$14.51
25	12,187	\$221,512	\$16,453		\$205,060	\$16.83
2	16,054	\$328,898	\$21,673		\$307,224	\$19.14
6L	742	\$29,401	\$1,001		\$28,399	\$38.28
<b>TOTAL</b>	<b>3,296,192</b>	<b>\$18,072,988</b>	<b>\$4,449,859</b>	<b>\$4,549,582</b>	<b>\$9,073,546</b>	<b>\$2.75</b>

## FY10-11 Route Ridership and Productivity

		Ridership					Productivity
Route		Weekday	Saturday	Sunday	Total	Weekday Average	Pass/Rev Hr
600's	Select Service	230,496			230,496	904	30.1
4	Walnut Creek Downtown Shuttle	236,531	29,150	21,653	287,333	928	26.1
20	DVC / Concord	295,674			295,674	1,160	25.6
10	Concord / Clayton Rd	256,078			256,078	1,004	25.6
314	Clayton Rd / Monument Blvd / PH		53,659	38,717	92,377		22.2
92X	Ace Shuttle Express	44,302			44,302	174	20.8
15	Treat Boulevard	134,195			134,195	526	18.3
11	Treat Blvd / Oak Grove	79,098			79,098	310	17.3
14	Monument Blvd	171,622			171,622	673	16.9
93X	Kirker Pass Express	49,440			49,440	194	15.6
95X	San Ramon / Danville Express	39,463			39,463	155	15.3
17	Olivera/Solano / Salvio / North Concord	73,293			73,293	287	15.1
1	Rossmoor / Shadelands	99,471			99,471	390	15.1
96X	Bishop Ranch Express	116,572			116,572	457	14.7
316	Alhambra / Merello / Pleasant Hill		15,574	10,632	26,205		14.7
9	DVC / Walnut Creek	156,059			156,059	612	14.6
18	Amtrak / Merello / Pleasant Hill	112,487			112,487	441	14.4
21	Walnut Creek / San Ramon Transit Center	161,495			161,495	633	13.9
16	Alhambra Ave / Monument Blvd	185,458			185,458	727	13.5
320	DVC / Concord		10,393	6,585	16,977		13.4
6	Lafayette / Moraga / Orinda	98,142	6,157	3,924	108,223	385	12.9
321	San Ramon / Walnut Creek		13,617	9,161	22,778		12.7
311	Concord / Oak Grove / Treat Blvd / WC		10,727	8,138	18,865		12.2
98X	Martinez Express	90,058			90,058	353	12.0
91X	Concord Commuter Express	10,651			10,651	42	11.4
35	Dougherty Valley	93,867			93,867	368	11.3
19	Amtrak / Pacheco Blvd / Concord	36,685			36,685	144	10.4
28	North Concord / Martinez	77,995			77,995	306	10.1
36	San Ramon / Dublin	65,225			65,225	256	9.5
315	Concord / Willow Pass / Landana		3,899	2,742	6,640		9.5
97X	Bishop Ranch Express	22,755			22,755	89	9.1
301	Rossmoor / John Muir Medical Center		4,456	3,356	7,812		8.9
5	Creekside / Walnut Creek	19,043			19,043	75	8.0
2	Rudgear / Walnut Creek	16,054			16,054	63	7.1
7	Shadelands / Pleasant Hill / Walnut Creek	57,054			57,054	224	6.9
4H **	Walnut Creek Extended Holiday Service	1,107	356		1,463	4	6.4
25	Lafayette / Walnut Creek	12,187			12,187	48	4.1
6L	Orinda / Orinda Village	742			742	3	3.1
250 *	Gael Rail Service	571	810	518	1,899	2	1.9
<b>Totals</b>		<b>3,043,868</b>	<b>148,797</b>	<b>105,425</b>	<b>3,298,091</b>	<b>11,937</b>	<b>15.8</b>

## Planning Projects – Short Term Focus

In addition to moving forward on the specific plans mentioned described above, the planning and scheduling staff will be working in the short term to:

- review community development plans
- evaluate bus stop improvements
- address specific route ontime performance
- plan for demand increases at Bishop Ranch
- evaluate service to the Pacheco park and ride
- evaluate impact of fare increase and/or fare media changes

### Fare Changes

The Board has previously adopted a plan that increased fares every three years with the next increase due in FY12-13. The implementation of Clipper also suggests revisions to our fare media options. Within the next year CCCTA will evaluate the impact of various fare increase options. Fare media changes, such as the elimination of paper tickets, will be timed to coincide with Clipper installation. Regional fare coordination will be supported and ECCTA, WCCTA, and LAVTA will meet to determine how best to achieve this goal. The on-board survey will provide valuable input relating to the demographics of riders who use each type of fare media.

### On-Time performance

CCCTA recently changed the methodology with which it measures on-time performance so that 100% of all trips at key stops are included. As new data comes in, CCCTA will gauge route level performance and make scheduling adjustments as needed. Based on initial data, the table below shows the routes that have the lowest on-time performance and may warrant service and or schedule adjustments.

Route	On Time		Late *		% On Time
Route 98	1693		934		64%
Route 93	1003		553		64%
Route 2	1245		560		69%
Route 96	2488		777		76%
Route 97	1189		327		78%
Route 91	372		99		79%

### PG&E to Bishop Ranch

In October 2012, PG&E is expected to consolidate various Bay Area offices and move nearly 800 workers to the Bishop Ranch Business Park. PG&E signed a 10-year lease for about 250,000 square feet which is likely to catalyze major service changes the Bishop Ranch. Many 96X trips are full in the peak direction so added ridership will

result in very crowded buses. This combined with already poor ontime performance due to the traffic variations on 680 is like to force a schedule change and or service addition.

### Pacheco Transit Hub

Last year CCCTA handed project management responsibilities for the Pacheco Transit hub to the Contra Costa Transportation Authority (CCTA). This facility will be a combination transit hub and park and ride facility on a Caltrans owned parcel on Blum Road in Pacheco at the I-680/SR 4 interchange. This facility will include 6 bus bays, 100+ P&R spaces, landscaping, lighting, and passenger amenities. Construction is expected to be completed within the next 24 months at which point CCCTA will have to identify the most effective service to provide this transit station. Currently the Routes 18, 19, and 28 have stops close to the proposed site but none offer the express service that will be expected out of this facility.

### **Planning Project - Long-Term**

CCCTA has identified the following developments that will likely have an impact on service in the after the next two years.

### Priority Development Areas

The One Bay Area Plan identifies priority development areas (PDA's) and employment centers, housing, and transportation will be focused here. Planning efforts will be undertaken to further define transit oriented development in in Central County. CCCTA will be faced with demand for more transit to serve the PDA's and private and local shuttles will be desired to enhance transportation options.

### Norris Canyon Ramps and San Ramon Service

The CCTA is pursuing funding to construct carpool lanes and high-occupancy vehicle (HOV) on and off ramps at the Norris Canyon Rd. intersection with I-680. This project, when completed, will dramatically change how CCCTA serves the area which includes the Bishop Ranch Business Park. Currently all service to Bishop Ranch and the San Ramon Transit Center uses the Bollinger Canyon Rd. exit, a mile south of Norris Canyon Rd. County Connection supports the project as buses currently do not have enough time to reach the I-680 HOV lanes, forcing them to remain in regular commute traffic. New on and off ramps at Norris would allow CCCTA's buses to utilize the HOV lanes without a difficult merge. A service plan for the area will need to be developed as routes that currently serve Chevron and the transit center will be affected by a new routing that utilizes Norris. The pace of development at the City of San Ramon's City Center and the North Camino Ramon Specific Plan area also will affect route plans and transit center development nearby. Planning staff will be working to stay involved to craft a service plan that reflects freeway changes and new development in San Ramon.

### Walnut Creek BART Village

The Walnut Creek BART station continues to be a regional hub for Central Contra Costa County. BART is working with the City of Walnut Creek and private developers to construct a mixed-use transit village consisting of apartments, commercial space, new bus access and parking. The project will change bus bay locations and alignment and could significantly impact demand. Service adjustments will be analyzed as necessary. The project will be phased in over time, with the bus access and parking part of the first phase. CCCTA will work with the City and BART to accommodate construction and evaluate any design changes.

CCCTA has pursued funding to create an Electric Trolley service to replace the diesel trolley service that exists now and runs between WC BART and downtown. If funding is approved, the next steps will be to purchase new vehicles and establish a charging station at the BART station.

### Walnut Creek Broadway Plaza

The City of Walnut Creek has released its Draft Environmental Impact Report (EIR) for the Broadway Plaza Long-Range Master Plan. This project proposes to increase the commercial square feet by up to 300,000 as well as demolish and reconstruct 200,000 square feet of commercial space. More importantly for CCCTA, the project purposes to close Broadway Plaza to vehicular traffic, included the Free Ride Trolley - Route #4. Planning staff will work with the City to ensure that trolley service remains a viable connection between the downtown and BART.