2477 Arnold Industrial Way

Concord, CA 94520-5326

(925) 676-7500

countyconnection.com

ADMINISTRATION & FINANCE COMMITTEE MEETING AGENDA

Wednesday, August 16, 2017 9:00 a.m.

Candace Andersen's Office, 3338 Mt. Diablo Blvd. Lafayette, CA 94549

The committee may take action on each item on the agenda. The action may consist of the recommended action, a related action or no action. Staff recommendations are subject to action and/or change by the committee.

- 1. Approval of Agenda
- 2. Public Communication
- 3. Approval of Minutes of July 10, 2017*
- 4. CCCTA Investment Policy-Quarterly Reporting Requirement*
- 5. Income Statements for the Nine Months Ended March 31, 2017*
- 6. Report on the Performance of the Battery Electric Trolleys (BET)*
- 7. Review of Vendor Bills, July 2017**
- 8. Legal Services Statement, May 2017-General, May 2017-Labor**
- 9. Next Scheduled Meeting October 4, 2017
- 10. Adjournment

*Enclosure

FY2016/2017 A&F Committee

Don Tatzin - Lafayette, Al Dessayer - Moraga, Sue Noack - Pleasant Hill, Candace Andersen - Contra Costa County

Clayton • Concord • Contra Costa County • Danville • Lafayette • Martinez

Moraga • Orinda • Pleasant Hill • San Ramon • Walnut Creek

^{**}Enclosure for Committee Members

^{***}To be mailed under separate cover

^{****}To be available at the meeting.

General Information

<u>Public Comment</u>: Each person wishing to address the committee is requested to complete a Speakers Card for submittal to the Committee Chair before the meeting convenes or the applicable agenda item is discussed. Persons who address the Committee are also asked to furnish a copy of any written statement to the Committee Chair. Persons who wish to speak on matters set for Public Hearings will be heard when the Chair calls for comments from the public. After individuals have spoken, the Public Hearing is closed and the matter is subject to discussion and action by the Committee.

A period of thirty (30) minutes has been allocated for public comments concerning items of interest within the subject matter jurisdiction of the Committee. Each individual will be allotted three minutes, which may be extended at the discretion of the Committee Chair.

<u>Consent Items</u>: All matters listed under the Consent Calendar are considered by the committee to be routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a committee member or a member of the public prior to when the committee votes on the motion to adopt.

<u>Availability of Public Records:</u> All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body, will be available for public inspection at 2477 Arnold Industrial Way, Concord, California, at the same time that the public records are distributed or made available to the legislative body. The agenda and enclosures for this meeting are posted also on our website at www.countyconnection.com.

Accessible Public Meetings: Upon request, County Connection will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request, including your name, mailing address, phone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service so that it is received by County Connection at least 48 hours before the meeting convenes. Requests should be sent to the Assistant to the General Manager, Lathina Hill, at 2477 Arnold Industrial Way, Concord, CA 94520 or hill@countyconnection.com.

<u>Shuttle Service</u>: With 24-hour notice, a County Connection LINK shuttle can be available at the BART station nearest the meeting location for individuals who want to attend the meeting. To arrange for the shuttle service, please call Katrina Lewis – 925/680 2072, no later than 24 hours prior to the start of the meeting.

Currently Scheduled Board and Committee Meetings

Board of Directors: Thursday, August 17, 9:00 a.m., County Connection Board Room

Administration & Finance: Wednesday, October 4, 9:00 a.m., Supervisor Andersen's Office, 3338 Mt. Diablo

Blvd. Lafayette, CA 9454

Advisory Committee: TBA. County Connection Board Room

Marketing, Planning & Legislative: Thursday, September 7, 10:00 a.m., 1676 N. California Blvd., S620, Walnut Creek Operations & Scheduling: Friday, September 1, 8:00 a.m. Supervisor Andersen's Office 309 Diablo Road,

Danville, CA

The above meeting schedules are subject to change. Please check the County Connection Website (www.countyconnection.com) or contact County Connection staff at 925/676-1976 to verify date, time and location prior to attending a meeting.

This agenda is posted on County Connection's Website (www.countyconnection.com) and at the County Connection Administrative Offices, 2477 Arnold Industrial Way, Concord, California



Administration and Finance Committee Summary Minutes July 10, 2017

The meeting was called to order at 9:00 a.m. at Supervisor Andersen's Office in Lafayette at 3338 Mt. Diablo Boulevard. Those in attendance were:

Committee Members: Director Al Dessayer

Director Don Tatzin Director Sue Noack

Director Candace Andersen

Staff: General Manager Rick Ramacier

Guests: None

- 1. <u>Approval of Agenda-</u> Approved.
- 2. Public Communication- None.
- 3. Approval of Minutes of May 31, 2017- Approved.
- 4. <u>Proposed Reorganization of Administrative Staff The General Manager presented the need and the rational for a reorganization of the administrative staff. The reorganization will provide for a more productive and effective staff. This will serve to ensure that the Authority can continue to deliver efficient and effective transit services, and meet its mission now and throughout a constantly changing future. After a somewhat brief discussion, the A&F Committee moved the staff recommendation to forward the proposed administrative staff reorganization to the full board for approval.</u>
- 5. Review of Vendor Bills, May 2018- Reviewed.
- 6. <u>Legal Services Statement, March 2017, General & Labor-</u> Approved.
- 7. <u>Adjournment-</u> The meeting was adjourned. The next meeting is set for scheduled Wednesday, August 16, 2017 at 9:00am at 3338 Mt. Diablo Blvd, Lafayette, CA 94549.

Rick Ramacier, General Manager



TO: Administration & Finance Committee DATE: August 7, 2017

FROM: Rick Ramacier

General Manager

SUBJECT: CCCTA Investment Policy – Quarterly Reporting Requirement

Attached please find CCCTA's Quarterly Investment Policy Reporting Statement for the quarter ending March 31, 2017.

This certifies that the portfolio complies with the CCCTA Investment Policy and that CCCTA has the ability to meet the pool's expenditure requirements (cash flow) for the next six (6) months.

CCCTA

BANK CASH AND INVESTMENT ACCOUNTS (ROUNDED OFF TO NEAREST \$)

FINANCIAL INST	ACCT#	TYPE	PURPOSE F		PER BANK		PER BANK	PER BANK	PER GL*
FIXED ROUTE					SEP 2016		DEC 2016	MAR 2017	MAR 2017
UNION BANK	274-00-26650	CHECKING	AP GENERAL	\$	2,415,179	\$	646,035	\$ 2,797,930	\$ 2,790,652
UNION BANK	274-00-26693	CHECKING	PAYROLL	\$	42,319	\$	48,037	\$ 54,403	\$ 42,779
UNION BANK	274-00-26723	CHECKING	CAPITAL PURCHASES	\$	285,394	\$	257,266	\$ 250,000	\$ 250,000
UNION BANK	274-00-26715	CHECKING	WORKERS' COMP - CORVEL	\$	63,162	\$	278,781	\$ 54,860	\$ 9,176
UNION BANK	274-00-26685	CHECKING	PASS SALES	\$	10,944	\$	18,820	\$ 79,699	\$ 79,699
UNION BANK	274-00-26707	Money Market	INFO TRANSIT SYS MAINT-CLEVER DEVICES	\$	32,646	\$	32,699	\$ -	\$ -
PAYPAL	27SAXUUFL9732	CHECKING	PAYPAL-PASS SALES	\$	1,001	\$	608	\$ 1,854	\$ 1,854
			TOTAL	\$	2,850,645	\$	1,282,246	\$ 3,238,746	\$ 3,174,160
PARATRANSIT									
UNION BANK	274-00-26669	CHECKING	AP GENERAL	\$	254,322	\$	254,259	\$ 250,071	\$ 254,345
			TOTAL	\$	254,322	\$	254,259	\$ 250,071	\$ 254,345
LAIF FUND									
LAIF ACCOUNT	4007001	INT-INVEST	OPERATING FUNDS	\$	7,569,804	\$	6,751,075	\$ 7,359,702	\$ 7,359,702
LAIF ACCOUNT		INT-INVEST	2014-15 Rolling Stock	\$	3,098,756	\$	2,471,259	\$ 2,476,287	\$ 2,476,287
LAIF ACCOUNT		INT-INVEST	Lifeline Bus Stop Access	\$	133,223	\$	125,261	\$ 124,955	\$ 124,955
LAIF ACCOUNT		INT-INVEST	Facility Rehab	\$	3,281,940	\$	3,286,932	\$ 3,200,598	\$ 3,200,598
LAIF ACCOUNT		INT-INVEST	LCTOP - Martinez Shuttle	\$	254,940	\$	179,298	\$ 102,384	\$ 102,384
LAIF ACCOUNT		INT-INVEST	LCTOP - Electric Trolley	\$	273,456	\$	213,373	\$ 177,188	\$ 177,188
LAIF ACCOUNT		INT-INVEST	Safe Harbor Lease Reserve	\$	1,450,959	\$	1,453,166	\$ 1,455,643	\$ 1,455,643
LAIF ACCOUNT		FMV ADJ.	Fair Market Value Adjustment for Year-End	\$	=	\$	-	\$ -	\$ -
			TOTAL	\$	16,063,078	\$	14,480,364	\$ 14,896,757	\$ 14,896,757
CCCTA EMPLOYEE									20 2.4 (1990)
UNION BANK	274-00-26677	CHECKING	EMPLOYEE FITNESS FUND	\$	8,696	\$	9,276	\$ 9,676	\$ 9,876
UNION BANK	274-00-26502	CHECKING	EMPLOYEE FUNCTION	\$	508	\$	508	\$ 78	\$ 268
			TOTAL	\$	9,204	\$	9,784	\$ 9,754	\$ 10,144
					T	1 22			
7/18/2017 KLM			GRAND TOTAL	\$	19,177,249	\$	16,026,653	\$ 18,395,328	\$ 18,335,406

KLM

* GL balances reduced by oustanding checks and increased by deposits in transit, if any.

This is to certify that the portfolio above complies with the CCCTA Investment Policy and that CCCTA has the ability to meet its expeditures (cash flow) for the next six months.

Rick Ramacier General Manager



To: Administration & Finance Committee Date: August 16, 2017

From: Erick Cheung, Director of Finance

SUBJECT: Income Statements for the Nine Months Ended March 31, 2017

The attached unaudited County Connection Income Statements for nine months of FY 2017 are presented for your review. The combined expenses of \$25,163,625 for Fixed Route and Paratransit, (Schedule 1), are 8.5% under the budget or -\$2,331,785. The expense categories with the most significant variances are:

Wages	\$(326,937)	(3.2)%	Operators' wages are lower by -\$87K and Other wages are lower by -\$240K due to vacancies.
Fringe Benefits	\$(46,691)	(0.6)%	Fringe Benefits for pension and medical are under by -\$178K and -\$127K, respectively, but offset by workers compensation settlements for \$288K.
Services	\$(292,691)	(18.0)%	Services are under budget due to lower promotions expense of -\$100K, legal services of -\$62K, service repairs of -\$99K, and IT contracts of -\$22K. Clever Device annual maintenance fee was over \$14K.
Materials & Suppl	ies \$(500,199)	(24.1)%	Materials and supplies are lower due to lower diesel fuel costs of -\$232K and fewer repair parts expenses of -\$159K.
Special Trip Servi	ses \$(328,905)	(16.0)%	Lower paratransit ridership results in fewer trips.
Contingency	\$(600,000)	(100.0)%	Not needed based on expenses being under budget.

Fixed route and Paratransit revenues and expenses are presented on Schedules 2 and 3. Actual expenses are compared to the year-to-date approved budget. Fixed route expenses are -9.5% under budget and Paratransit expenses are -5.5% under budget.

The combined revenues are also under budget. The most significant variances:

Passenger fares/special fares	\$(348,836)	(9.0)%	Fixed route passenger fares/special fares are -\$300K lower than budget and Paratransit fares are -\$49K lower than budget. Compared to the same period in the prior year, Fixed route and Paratransit are lower by -\$223K or -6.6% and -\$27K or -6.6%, respectively.
TDA revenue earned	\$(1,905,638)	(13.3)%	TDA revenue is lower due to lower than expected expenses.
Other operating assistance	\$(167,812)	(9.8)%	LCTOP funds received award of \$615K with \$308K for Martinez Shuttle and \$307K for Electric Trolley Capital. Budget originally assumed \$573K for operations.

Fixed Route Operator Wages (Schedule 4)

Schedule 4 compares various components of operator wages with the budget.

- Platform (work time) is -0.3% under budget.
- Overtime is 4.8% over budget.
- Training is -2.3% under budget.
- Overall wages for operators are -1.5% under budget.

Statistics (Schedule 6)

Schedule 6 provides selected statistical information for the current year compared to the last two years:

Fixed route:

- Passenger fares/special fares are -6.6% less than FY 2016 and -7.4% less than FY 2015.
- The farebox recovery ratio is less than FY 2016 and FY 2015. The ratio is 14.9% in FY 2017; 16.2% in FY 2016 and 16.6% in FY 2015.
- Operating expenses are 1.9% more than in FY 2016 and 3.5% more than in FY 2015.
- Fixed route revenue hours are -0.3% less than FY 2016 and 1.7% more than FY 2015.
- The cost per revenue hour has increased 4.5% compared to FY 2016 and 2.9% compared to FY 2015.
- Passengers have decreased -5.5% compared to FY 2016 and -2.8% compared to FY 2015.
- The cost per passenger has increased 7.8% compared to FY 2016 and 6.5% compared to FY 2015.
- Passengers per revenue hour has decreased -3.1% compared to FY 2016 and -3.3% compared to FY 2015.

Paratransit:

- Passenger fares have decreased -6.6% compared to FY 2016 and -8.0% compared to FY 2015.
- The farebox ratio is less than FY 2016 and FY 2015. The ratio is 9.7% in FY 2017; 10.1% in FY 2016; and 12.1% in FY 2015.
- Expenses have decreased -2.9% compared to FY 2016 and increased 6.0% compared to FY 2015.
- Revenue hours are -8.0% less than FY 2016 and -4.4% in FY 2015.
- Passengers have decreased -5.0% compared to FY 2016 and -6.4% compared to FY 2015.
- The cost per passenger has increased 2.2% since FY 2016 and 13.2% compared to FY 2015.
- Paratransit passengers per revenue hour have increased 3.3% compared to FY 2016 and decreased -2.1% compared to FY 2015.

FY 2017 Year to Date Comparison of Actual vs Budget Combined Fixed Route and Paratransit Income Statement For the Nine Months Ended March 31, 2017

		Actual		Budget		Variance	% Variance
Revenues							
Passenger fares	\$	2,510,610	\$	2,816,193	\$	(305,583)	-10.9%
Special fares		1,023,372		1,066,625		(43,253)	-4.1%
		3,533,982		3,882,818		(348,836)	-9.0%
Advertising		462,170		456,842		5,328	1.2%
Safe Harbor lease		7,467		3,060		4,407	144.0%
Other revenue		126,789		75,465		51,324	68.0%
Federal operating		1,026,951		1,012,500		14,451	1.4%
TDA earned revenue		12,370,601		14,276,239		(1,905,638)	-13.3%
STA revenue		1,578,666		1,589,270		(10,604)	-0.7%
Measure J		4,510,172		4,484,578		25,594	0.6%
Other operating assistance		1,546,827		1,714,639		(167,812)	-9.8%
		21,629,643		23,612,592		(1,982,949)	-8.4%
Total Revenue	\$	25,163,625	\$	27,495,410	\$	(2,331,785)	-8.5%
Expenses							
Wages- Operators	\$	5,803,296	\$	5,889,850	\$	(86,554)	-1.5%
Wages-Other		4,205,328		4,445,711		(240,383)	-5.4%
· ·		10,008,624		10,335,561		(326,937)	-3.2%
Fringe Benefits		7,239,391		7,286,082		(46,691)	-0.6%
Services		1,334,322		1,627,013		(292,691)	-18.0%
Materials & Supplies		1,575,897		2,076,096		(500,199)	-24.1%
Utilities		225,832		334,800		(108,968)	-32.5%
Insurance		516,684		533,509		(16,825)	-3.2%
Taxes		124,216		214,425		(90,209)	-42.1%
Leases and Rentals		38,159		34,500		3,659	10.6%
Miscellaneous		126,325		150,345		(24,020)	-16.0%
Special Trip Services		3,974,175		4,303,080		(328,905)	-7.6%
Operations		25,163,625		26,895,410		(1,731,785)	-6.4%
Contingency Reserve		-		600,000		(600,000)	-100.0%
Total Expenses	\$	25,163,625	\$	27,495,410	\$	(2,331,785)	-8.5%
Net Income (Loss)	\$	-	\$	-	\$	-	
Revenue Hours		219,113		228,075		(8,962)	-3.9%
Cost per Rev Hr	\$	114.67	\$	120.40	\$	(5.73)	-4.8%
Passengers Passengers		2,721,034		2,880,123		(159,089)	-5.5%
Cost per Passenger	\$	9.25	\$	9.55	\$	(0.30)	-3.1%
Farebox ratio	•	14.1%	-	14.1%	-	-0.1%	-0.5%

(fares, spec fares/Oper exp-w/o contingency-leases)

Schedule 1-Combined Fixed Route & Paratransit

FY 2017 Year to Date Comparison of Actual vs Budget Fixed Route Income Statement For the Nine Months Ended March 31, 2017

		Actual		Budget		Variance	% Variance
Revenues							
Passenger fares	\$	2,130,717	\$	2,387,793	\$	(257,076)	-10.8%
Special fares		1,023,372		1,066,625		(43,253)	-4.1%
·		3,154,089		3,454,418		(300,329)	-8.7%
Advertising		462,170		456,842		5,328	1.2%
Safe Harbor lease		7,467		3,060		4,407	144.0%
Other revenue		126,789		75,390		51,399	68.2%
TDA earned revenue		11,569,620		13,221,330		(1,651,710)	-12.5%
STA revenue		1,092,660		1,092,660		-	0.0%
Measure J		3,380,386		3,354,791		25,595	0.8%
Other operating assistance		1,445,279		1,609,639		(164,360)	-10.2%
p		18,084,371		19,813,711		(1,729,340)	-8.7%
Total Revenue	\$	21,238,460	\$	23,268,129	\$	(2,029,669)	-8.7%
Expenses							
Wages- Operators	\$	5,803,296	\$	5,889,850	\$	(86,554)	-1.5%
Wages-Other	\$	4,146,886	Ψ	4,371,844	Ψ	(224,958)	-5.1%
rrages earle.	Ψ	9,950,182		10,261,694		(311,512)	-3.0%
Fringe Benefits	\$	7,196,881		7,244,318		(47,437)	-0.7%
Services	\$	1,313,067		1,614,938		(301,871)	-18.7%
Materials & Supplies	\$	1,573,787		2,073,546		(499,759)	-24.1%
Utilities		210,020		315,750		(105,730)	-33.5%
Insurance	\$	516,684		533,509		(16,825)	-3.2%
Taxes	\$	124,216		214,125		(89,909)	-42.0%
Leases and Rentals	\$ \$ \$ \$	38,159		34,500		3,659	10.6%
Miscellaneous	\$	125,943		149,670		(23,727)	-15.9%
Purchased Transportation	\$	189,521		226,080		(36,559)	-16.2%
Operations	Ψ	21,238,460		22,668,129		(1,429,669)	-6.3%
Contingency Reserve		-		600,000		(600,000)	-0.576
Total Expenses	\$	21,238,460	\$	23,268,129	\$	(2,029,669)	-8.7%
Net Income (Loss)	\$	-	\$	-	\$	(0.0)	
Revenue Hours		166,443		170,801		(4,358)	-2.6%
Cost per Rev Hr	\$	127.37	\$	136.03	\$	(8.65)	-6.4%
Passengers	Ψ	2,618,435	Ψ	2,772,111	4	(153,676)	-5.5%
Cost per Passenger	\$	8.11	\$	8.39	\$	(0.28)	-3.4%
Passengers per Rev Hr	Ψ	15.73	Ψ	16.23	Ψ	(0.50)	-3.1%
						, ,	
Farebox recovery ratio		14.9%		15.3%		-0.4%	-2.5%

(fares,spec fares/Oper exp-w/o contingency-leases)

Schedule 2-Fixed Route

Paratransit Income Statement

FY 2017 Year to Date Comparison of Actual vs Budget For the Nine Months Ended March 31, 2017

	Actual		Budget	Variance	% Variance	
Revenues						
Passenger fares	\$	379,893	\$ 428,400	\$ (48,507)	-11.3%	
		379,893	428,400	(48,507)	-11.3%	
Other revenue		-	75	(75)	-100.0%	
Federal operating	\$	1,026,951	1,012,500	14,451	1.4%	
TDA earned revenue	\$	800,981	1,054,909	(253,928)	-24.1%	
STA revenue	\$	486,006	496,610	(10,604)	-2.1%	
Measure J	\$	1,129,786	1,129,787	(1)	0.0%	
Other operating assistance	\$	101,548	105,000	(3,452)	-3.3%	
		3,545,272	3,798,881	(253,609)	-6.7%	
Total Revenue	\$	3,925,165	\$ 4,227,281	\$ (302,116)	-7.1%	
Expenses						
Wages-Other	\$	58,442	\$ 73,867	\$ (15,425)	-20.9%	
		58,442	73,867	(15,425)	-20.9%	
Fringe Benefits	\$	42,510	41,764	746	1.8%	
Services	\$	21,255	12,075	9,180	76.0%	
Materials & Supplies	\$	2,110	2,550	(440)	-17.3%	
Utilities	\$	15,812	19,050	(3,238)	-17.0%	
Taxes	\$	-	300	(300)	-100.0%	
Miscellaneous	\$	382	675	(293)	-43.4%	
Special Trip Services	\$	3,784,654	4,077,000	(292,346)	-7.2%	
Total Expenses	\$	3,925,165	\$ 4,227,281	\$ (302,116)	-7.1%	
Net Income (Loss)	\$	-	\$ -	\$ -		
Revenue Hours		52,670	57,274	(4,604)	-8.0%	
Cost per Rev Hr	\$	74.52	\$ 73.81	\$ 0.72	1.0%	
Passengers		102,599	108,012	(5,413)	-5.0%	
Cost per Passenger	\$	38.26	\$ 39.14	\$ (0.88)	-2.2%	
Passengers per Rev Hr		1.95	1.89	0.06	3.3%	
Farebox ratio		9.7%	10.1%	-0.5%	-4.5%	
(fares, spec fares/Oper exp-leases)						

Schedule 3- Paratransit

Operator Wages

For the Nine Months Ended March 31, 2017

		Year to Date		
	Actual	Budget	Variance	% Variance
Platform/report/turn in	4,680,097	\$ 4,694,979	\$ (14,883)	-0.3%
Guarantees	201,253	\$ 254,115	(52,862)	-20.8%
Overtime	233,117	\$ 222,534	10,583	4.8%
Spread	121,519	\$ 125,238	(3,719)	-3.0%
Protection	239,779	\$ 231,741	8,038	3.5%
Travel	164,548	\$ 162,882	1,667	1.0%
Training	141,565	\$ 144,909	(3,344)	-2.3%
Other Misc	21,418	\$ 53,453	(32,035)	-59.9%
	\$ 5,803,296	\$ 5,889,850	\$ (86,554)	-1.5%

Schedule 4- Operator Wages

Other Revenue; Other Operating Assistance; Miscellaneous Expenses For the Nine Months Ended March 31, 2017

Other Revenue		
Investment income (interest)	\$	30,481
ADA Database Management revenue		75,000
Paypal Shipping revenue		873
RTC card revenue		1,608
Accounts payable discount		1
Various		18,826
	\$	126,789
Other Operating Assistance		
RM2	\$	109,004
BART feeder revenue	·	583,319
LCTOP		228,278
Lifeline grant		375,000
Homeland Security ITS		149,678
	\$	1,445,279
Miscellaneous Expenses		
Board Travel Expense	\$	5,981
Staff Travel Expense		38,959
CTA Conference		14,236
APTA Dues		26,272
Employee functions		21,579
Business Expense, GM		2,263
Employee Awards/Pins		2,858
Paypal fees		2,392
Training		7,824
Various other		3,579
	\$	125,943

Schedule 5- Other Revenues/Other Expenses

FY 2017 Year to Date Comparison of FY 2016 Actual & FY 2015 Actual Statistics

For the Nine Months Ended March 31, 2017

	Actual	Actual		Variance	Actual		Variance
	FY2017		FY2016	Actual 2017 to Actual 2016		FY2015	Actual 2017 to Actual 2015
Fixed Route							
Fares	\$ 2,130,717	\$	2,265,704	-6.0%	\$	2,377,363	-10.4%
Special Fares	1,023,372		1,110,837	-7.9%		1,028,768	-0.5%
Total Fares	\$ 3,154,089	\$	3,376,541	-6.6%	\$	3,406,131	-7.4%
Fares box recovery ratio	14.9%		16.2%	-8.3%		16.6%	-10.5%
Operating Exp (Less leases)	\$ 21,200,301	\$	20,814,483	1.9%	\$	20,488,519	3.5%
Revenue Hours	166,443		170,801	-2.6%		165,565	0.5%
Cost per Rev Hour	\$ 127.37	\$	121.86	4.5%	\$	123.75	2.9%
Passengers	2,618,435		2,772,111	-5.5%		2,694,588	-2.8%
Cost per Passenger	\$ 8.10	\$	7.51	7.8%	\$	7.60	6.5%
Passengers per Rev Hr	15.73		16.23	-3.1%		16.28	-3.3%

Paratransit

Fares	\$ 379,893	\$ 406,738	-6.6%	\$ 412,832	-8.0%
Fares box recovery ratio	9.7%	10.1%	-3.8%	12.1%	-19.8%
Operating Exp (Less leases)	\$ 3,925,165	\$ 4,044,316	-2.9%	\$ 3,704,294	6.0%
Revenue Hours	52,670	57,274	-8.0%	55,084	-4.4%
Cost per Rev Hour	\$ 74.52	\$ 70.61	5.5%	\$ 67.25	10.8%
Passengers	102,599	108,012	-5.0%	109,638	-6.4%
Cost per Passenger	\$ 38.26	\$ 37.44	2.2%	\$ 33.79	13.2%
Passengers per Rev Hr	1.95	1.89	3.3%	1.99	-2.1%

Schedule 6- Statistics



To: Administrative & Finance Committee Date: August 7, 2017

From: Rashidi Barnes Reviewed by:

Director of Innovation & Mobility

SUBJECT: Battery Electric Trolley Bus Update

Background

The Route 4 requires three (3) vehicles to operate during peak hours through the Walnut Creek downtown area. In 2012 County Connection received an FTA Clean Fuels grant to purchase four (4) battery electric trolleys (BEBs). This included the related charging infrastructure as well. The trolleys were delivered to County Connection over last November and December. Between December and March, the four trolleys were slowly and methodically introduced into revenue service. We also used this time to train all staff on the finer points of operating and maintaining the battery electric buses (BEB). Furthermore, we have been and continue work diligently with our vendor partners including GILLIG, BAE, and WAVE to make adjustments and corrections as needed. As time goes by this need to make such adjustments are generally decreasing, but remain nonetheless.

Overall, we are pleased with the performance of both the trolleys and the associated charging system. Since the introduction of the first trolley in November, we have logged over 18,000 miles and over 4,000 service hours with this BEB fleet. This is a bit better than staff anticipated. As you may recall, this project is classified as a "Prototype". Thus, we have kept the three old diesel powered trolleys in reserve to "protect" the service. Since early March of this year, these reserve old diesel trolleys have been used less and less with each passing month as the BEBs become fully integrated into revenue service.

Data Collection and Performance Assessment

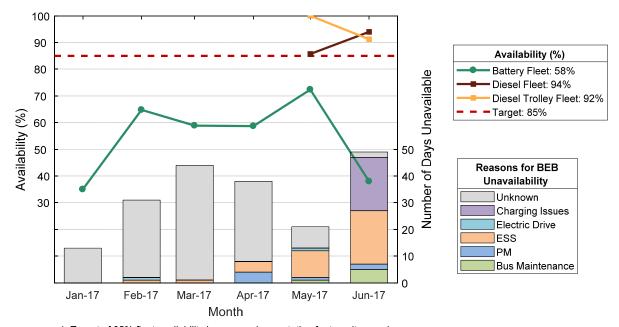
Data collection on the performance of the four trolleys has been underway for a few months now. At this point, we have better data regarding the questions of what are the trolleys costing to operate and maintain than regarding how do they perform as compared to a diesel bus.

Included in this report are some preliminary data generated in part by the National Renewable Energy Laboratory (NREL), who is conducting a third-party evaluation of our BETs. NREL is using January 2017 as data collection start point in this initial report.

Ultimately, using April 1, 2017 as a data collection start point for the purpose of analysis may be used as that matches the date when the implementation period ended. Nonetheless, the initial ENRL report provides a good deal of useful data and information on our experiences with the BEBs thus far.

Vehicle Availability

ENRL has looked at vehicle availability since January, 2017. Based on the data they are using the BEB's have been available 58 percent of the time between January and June. As noted above, November 2016 through March 2017 is considered to be our implementation period where we ramped up revenue service with the trolleys. Again, we and our vendors recognized going in that we would likely need at least six months for training, de-bugging, and adjusting to reach a point of eventual reliability expectations. Thus, between the months of March and May availability began to increase as we reached a level of regularity and predictability with the system as whole. Below is a chart from the ENRL report that is illustrative of the relative availability of the trolleys for the first six months of 2017.



1. Target of 85% fleet availability is a general expectation for transit agencies

Staff would note that our vendor partners have been excellent in responding to issues behind the reasons for unavailability of the BEBs. All three vendors have been with us every step of the way so far.

With a project of this type, unanticipated events cannot be avoided. These can be seen as opportunities to learn from and ultimately increase overall system performance. One such example that has occurred was a partial power outage at the Walnut Creek BART station. On that occasion, we were unable to use the WAVE charger at the BART station and we decided to pull the trolleys off the road. On another occasion, we pulled them off the road when a political protest put the trolleys at risk of being away from the WAVE charger for too long.

The ENRL chart states that a "Target of 85% fleet availability is a general expectation for transit agencies". That does make a useful comparison note. However, at County Connection we look at this from a more basic place. That is, our daily goal and minimum standard is to meet "pull out". That means having a number of ready buses to put into revenue service to meet the schedule on that day.

The four BEBs are designated for Route 4. That route has three buses on it at peak. Thus, we have a goal and a standard that at least three BEBs are available for revenue at any one time.

Fuel Economy

The BEBs operate on the route 4 that has limited road inclines, daily medium to heavy passenger loads, low average speed and excessive congestion during peak hours of travel. These vehicles also experience high idle times due to the need to charge every time that they stop at the Walnut Creek BART station. All of these route characteristics have an affect the fuel economy of buses (both electric and diesel) on Route 4.

Between January and June of 2017, the BEBs average miles per gallon equivalent was 13.4. The monthly readings were very consistent from month-to-month.

To compare the fuel economy of all the bus fleets, NREL converted kilowatt hours (kWh) of electricity to diesel gallon equivalents using an energy conversion factor of 37.6 kWh/gallon.

ENRL's results show that fuel economy for the BEBs are is 3.5 times better than the old diesel trolleys. It's very important to note that these old diesel trolleys have not been in regular service since late last year and that they are well over 12 years old (buses are meant last 12 years). As a diesel bus ages, its fuel economy drops. Moreover, newer diesel buses are more fuel efficient than older diesel buses. So, we would expect to see the electric bus/diesel bus fuel economy gap shrink when comparing newer diesel buses to electric buses versus older diesel buses and electric buses.

ENRL has also done a comparison of the four trolleys to the entire diesel fleet. The entire diesel fleet have an average miles per gallon equivalent of 5.0. This comparison is somewhat limited. A more useful comparison that has yet to be done is one where the four BEBs are compared to the newest 29 foot diesels that recently went into service in somewhat similar operating conditions within our service area.

It is likely safe to say though that based on the data ENRL has generated that our BEBs are more "fuel efficient" than our diesel buses in terms of miles per gallon equivalent.

Broad Cost Comparisons

Costs comparisons ought to consider energy costs, maintenance costs, and operating costs. Maintenance costs and operating – particularly one-time costs such as training, etc. are one thing. However, on-going maintenance and operating costs are another thing.

With the current trolley project, on-going operating costs are primarily related to having to send out a replacement bus when an issue arises with an electric bus in service. This is due to the ability to charge in-route using the WAVE inductive charging system.

Maintenance costs related to maintaining an electric bus versus a diesel bus have been roughly equal in terms of routine maintenance. It is too early (vendor involvement, warranties, etc.) to provide you with a sense of on-going maintenance cost differences. These will of course emerge as we get further along in the project.

The main costs that we expect to have an effect on us are the costs related to price of fuel and how that interacts with fuel efficiencies.

Staff is working with NREL on determining the cost of operating and maintaining the trolleys. At this point, we have a pretty good sense of the fuel costs – electric versus diesel. Based off of the preliminary data, the trolleys average fuel cost per mile is \$.71 compared to an average of \$.43 for the diesel trolleys. On average County Connection is currently paying \$.25/kWh or \$9.40/dge (diesel gallon equivalent) for the trolleys while only \$1.54/gal for the diesel buses.

At these prices, the greater fuel economy of the electric buses is currently being fully negated and more by the cost of electricity form PG&E.

Conclusions

This is just a preliminary report. We hope to get you a more comprehensive report early in the fall. Then, we will provide you with regular and routine updates. However, with this report, we can state a few early conclusions.

With diesel costs relatively low and electricity costs in the Bay Area relatively high, efforts should be made to bring electricity costs more in line with current diesel cost. Furthermore, there are a multitude of variables with electricity rates (peak vs. demand charges) which all impact the operational cost when compared to a very stable fuel cost like diesel.

If the bus transit systems in the Bay Area are to find using electric buses to be economically viable in the long term, energy providers like PG&E are going to need to treat public transit systems in a different manner than the usual commercial customer. This will likely take further state action.

The reliability of the trolleys is progressing as anticipated and shows the promise of meeting our reliability goals. A long term item to watch will be how well the inductive charging process works over time. The ongoing success of that charging process may be the ultimate key to our project.

Finally, it is way too early to make any definitive determinations with our project so far. Moreover, with the related technology and political climate changing rapidly, the overall viability of battery electric buses will no doubt change rapidly as well.