

**Operations Assessment of Commuter Rail Service in
SFECC Corridor from Miami to Ft. Lauderdale**

1. Review of SFRTA Operations and Maintenance (O&M) Cost Data

- 12 peer commuter rail transit systems were selected for comparison based on system age and size.
- SFRTA’s costs for Vehicle Operations, Vehicle Maintenance and Non-Vehicle Maintenance are generally consistent with the experience of peer transit systems.
- SFRTA’s General Administration expenses are significantly higher (152%) than the peer average, indicating potential cost savings.
- Management audit recommended for more accurate determination of General Admin. Costs and potential savings.
- Confidence level is moderate considering each of the peer agencies has unique operating characteristics, costs of living, organizational structure, responsibilities, and variations in reporting.

Comparison of SFRTA Annual Commuter Rail O&M Costs - SFRTA and Peer Average Cost Basis ¹			
Cost Parameter	SFRTA Reported Costs ²	Peer-Based Projections ³	Best-Case Projections
Vehicle Operations Cost	\$21,430,426	\$29,690,299	\$21,430,426
Vehicle Maintenance Cost	\$10,161,750	\$9,433,674	\$9,433,674
Non-vehicle Maintenance Cost ⁴	\$2,374,193	\$4,298,529	\$2,374,193
General Administration Cost	\$18,905,293	\$7,509,711	\$7,509,711
Total	\$52,871,662	\$50,932,213	\$40,748,004

Notes:

(1) Source: 2009 National Transit Database reports.

(2) Cost and revenues not included in table: State payment for CSX maintenance (\$3,920,000), SFRTA-supported feeder bus service (\$4,350,792), SFRTA fare-box revenue (\$9,744,718)

(3) Projected costs based on SFRTA operations and Peer Systems unit costs.

(4) Generally includes maintenance of track, stations and other facilities

2. Conceptual O&M cost for SFECC service from Miami to Ft. Lauderdale

A conceptual commuter rail operating plan was developed for the SFECC between Miami Government Center and Ft. Lauderdale Government Center. The 24.8-mile line is assumed to be double-tracked in the future with eight at-grade stations. The SFECC O&M cost may be offset by several sources including fare-box recovery, federal funds and ancillary revenue such as leases and advertisements.

50-train Scenario (2009 dollars)

20-minute peak headways

- \$22.03M (Peer-Based Operator)
- \$24.35M (SFRTA-Based Operator)
- \$17.76M (Best Case-Based Operator)

32-train Scenario (2009 dollars)

30-minute peak headways

- \$14.22M (Peer-Based Operator)
- \$16.69M (SFRTA-Based Operator)
- \$11.47M (Best Case-Based Operator)

**Comparison of Commuter Rail Systems
Operating Characteristics and Costs (FY 2009)**

Service and Cost Parameter	Portland WES	Seattle Sound Transit	New York ConnDot	Baltimore MARC	Wash. D.C. VRE	SFRTA Tri-Rail	Dallas Trinity Exp.	Albuquerque Rail Runner	Utah FrontRunner	San Diego Coaster	SF Bay Caltrain	Los Angeles Metrolink	Oakland ACE	Peer Average
TRIS_ID:	0008	0040	1102	3034	3073	4077	6007/6056	6111	8001	9030	9134	9151	9182	
2009 Service Supplied														
Peak Trains in Operation	4	9	4	24	13	10	12	5	6	4	19	32	3	11.2
Peak Passenger Cars in Operation	4	44	16	109	67	27	34	19	18	20	95	141	21	47.3
Train Revenue Miles	48,096	245,790	262,282	995,171	309,925	1,067,526	418,637	318,168	749,997	257,404	1,414,274	2,472,149	126,252	668,129
Train Revenue Hours	1,484	6,419	5,899	25,938	9,769	31,060	18,700	8,518	36,270	6,366	40,653	61,015	4,284	19,721
Car Revenue Miles	66,319	1,399,687	1,012,527	5,088,471	1,866,876	2,953,182	1,292,607	1,080,290	2,249,991	1,349,238	6,895,746	10,655,753	780,192	2,822,375
Car Revenue Hours	2,057	36,010	22,769	128,890	59,257	87,315	56,156	28,289	108,810	33,348	198,204	263,307	22,680	80,546
Annual Passenger Trips	123,634	2,492,362	593,723	8,081,155	3,868,035	4,223,350	2,738,856	1,083,003	1,322,453	1,501,619	11,359,225	12,241,830	797,328	3,878,967
Directional Route Miles	29.2	146.9	101.2	400.4	161.5	142.2	72.3	193.1	87.7	82.2	153.7	777.8	172.0	193.9
# of Stations	5	10	9	42	18	18	10	10	8	8	32	55	10	18
# of Yards	1	1	1	4	2	2	1	1	1	1	1	1	1	1.4
2009 Costs														
Vehicle Operations	1,073,611	8,005,082	8,194,287	49,020,196	25,403,803	21,430,426	9,911,792	3,291,334	6,739,451	6,510,386	39,588,848	59,887,578	6,012,442	\$18,851,480
Vehicle Maintenance	878,625	12,878,475	6,188,368	18,920,076	12,888,516	10,161,750	6,261,976	3,701,718	3,377,511	3,526,665	15,189,017	22,303,375	929,638	\$9,015,824
Non-Vehicle Maintenance	214,364	3,487,428	2,198,304	14,903,680	2,517,070	2,374,193	2,663,045	6,927,383	6,884,022	2,747,626	6,941,580	24,303,594	-	\$5,858,638
General Administration	998,685	9,649,039	3,484,057	26,291,644	9,827,818	18,905,293	5,441,375	5,136,371	4,608,651	3,655,207	25,316,174	52,269,180	5,471,042	\$13,158,041
Total Costs in '09 dollars	\$3,165,285	\$34,020,024	\$20,065,016	\$109,135,596	\$50,637,207	\$52,871,662	\$24,278,188	\$19,056,806	\$21,609,635	\$16,439,884	\$87,035,619	\$158,763,727	\$12,413,122	\$46,883,982
Percent Vehicle Operations	33.9%	23.5%	40.8%	44.9%	50.2%	40.5%	40.8%	17.3%	31.2%	39.6%	45.5%	37.7%	48.4%	40.2%
Percent Vehicle Maintenance	27.8%	37.9%	30.8%	17.3%	25.5%	19.2%	25.8%	19.4%	15.6%	21.5%	17.5%	14.0%	7.5%	19.2%
Percent Non-Vehicle Maintenance	6.8%	10.3%	11.0%	13.7%	5.0%	4.5%	11.0%	36.4%	31.9%	16.7%	8.0%	15.3%	0.0%	12.5%
Percent General Administration	31.6%	28.4%	17.4%	24.1%	19.4%	35.8%	22.4%	27.0%	21.3%	22.2%	29.1%	32.9%	44.1%	28.1%
Productivity Calculations (2009 \$)														
Cost per Revenue Train-Hour	\$2,132.94	\$5,299.89	\$3,401.43	\$4,207.56	\$5,183.46	\$1,702.24	\$1,298.30	\$2,237.24	\$595.80	\$2,582.45	\$2,140.94	\$2,602.04	\$2,897.55	\$2,377.34
Cost per Revenue Car-Mile	\$47.73	\$24.31	\$19.82	\$21.45	\$27.12	\$17.90	\$18.78	\$17.64	\$9.60	\$12.18	\$12.62	\$14.90	\$15.91	\$16.61
Cost per Passenger Trip	\$25.60	\$13.65	\$33.80	\$13.50	\$13.09	\$12.52	\$8.86	\$17.60	\$16.34	\$10.95	\$7.66	\$12.97	\$15.57	\$12.09
Operating Parameters														
Average Train Consist	1.0	4.9	4.0	4.5	5.2	2.7	2.8	3.8	3.0	5.0	5.0	4.4	7.0	4.2
Average Speed (mph)	32.4	38.3	44.5	38.4	31.7	34.4	22.4	37.4	20.7	40.4	34.8	40.5	29.5	33.9

Notes:

- (1) Source: 2009 National Transit Database Reports
- (2) Excludes Minneapolis' Northstar which operated on part of FY 2009.

Table 5
Comparison of SFRTA and Peer Average General Administration Costs

City	CR Service	NTD ID	Operator Salary & Wage	Other Salary & Wage	Fringe Benefits	Services	Fuel & Lube	Tire & Tube	Other Materials & Supplies	Utilities	Casualty & Liability	Taxes	In Report	Misc. Expenses	Expense Transfer	Total G&A Cost	G&A Cost / Peak Car
Portland	WES	0008		\$20,570	\$29,535	\$14,520			\$14,800	\$50,372	\$859,125			\$9,632	\$131	\$998,685	\$249,671
Seattle	Sound Transi	0040		\$76,128	\$42,139	\$1,044,187			\$31,824	\$505,557	\$1,038,862	\$1,036,335	\$3,069,754	\$355,737	\$2,448,516	\$9,649,039	\$219,296
New York	ConnDot	1102				\$886,070							\$2,597,987			\$3,484,057	\$217,754
Baltimore	MARC	3034		\$601,093	\$37,255	\$4,460,101			\$1,047,093	\$991,975	\$6,281,400		\$12,040,048	\$1,131,315	(\$298,636)	\$26,291,644	\$241,208
Wash. D.C.	VRE	3073		\$2,991,470	\$997,157	\$3,319,170				\$893,712			\$792,667	\$833,642		\$9,827,818	\$146,684
SFRTA	Tri-Rail	4077		\$6,580,834	\$2,052,828	\$5,362,116				\$790,373	\$1,903,498			\$2,215,644		\$18,905,293	\$700,196
Dallas	Trinity Exp.	6007/6056		\$1,325,613	\$566,047	\$832,947			\$224,171	\$119,363	\$552,331		\$1,649,861	\$171,042		\$5,441,375	\$160,040
Albuquerque	Rail Runner	6111		\$1,353,132	\$582,163				\$118,773	\$240,213	\$1,302,944		\$517,378	\$1,021,768		\$5,136,371	\$270,335
Utah	FrontRunner	8001		\$1,922,333	\$707,437	\$846,245			\$234,244	\$786,563	\$320,873	\$0		\$354,211	(\$563,255)	\$4,608,651	\$256,036
San Diego	Coaster	9030		\$615,788	\$338,521	\$427,438			\$77,937	\$411,165	\$510,527	\$0	\$1,182,650	\$91,181		\$3,655,207	\$182,760
SF Bay	Caltrain	9134		\$3,054,755	\$2,260,518	\$5,372,790			\$217,409	\$1,407,993	\$4,536,943		\$8,465,766			\$25,316,174	\$266,486
Los Angeles	Metrolink	9151		\$9,385,663	\$7,276,131	\$10,974,358			\$2,209,619	\$2,952,556	\$14,344,658	\$105,807	\$3,820,845	\$1,199,543		\$52,269,180	\$370,703
Oakland	ACE	9182		\$1,415,193	\$657,028	\$632,173			\$806,085	\$141,592	\$1,497,973		\$187,759	\$133,239		\$5,471,042	\$260,526
Peer Average			\$0	\$2,445,214	\$1,295,563	\$2,847,676	\$0	\$0	\$498,196	\$774,286	\$3,013,558	\$285,536	\$3,432,472	\$683,359	\$396,689	\$13,158,041	\$278,137
Peer Average Cost per Peak Passenger C			\$0	\$51,687	\$27,386	\$60,195	\$0	\$0	\$10,531	\$16,367	\$63,701	\$6,036	\$72,556	\$14,445	\$8,385	\$278,137	
SFRTA Average Cost per Peak Passenger			\$0	\$243,735	\$76,031	\$198,597	\$0	\$0	\$0	\$29,273	\$70,500	\$0	\$0	\$82,061	\$0	\$700,196	