

**Appendix D**

**Cost Effectiveness Tables**



APPENDIX ITEMS

Table 5.9-5 – Cost Effectiveness Summary- Key Indicators

CRITERIA	CORRIDOR ALTERNATIVES						
	2025 TSM	2025 RB	Canoga Ave. RR ROW	Reseda Blvd.	Sepulveda Blvd.	Van Nuys Blvd. - Foothill Terminus	Lankershim Blvd. - SF Rd.
Weekday Boardings per Mile*(Minimal Base)	n/a	n/a	653	751	890	939	1,625
Weekday Boardings per Mile* (Full Enhanced)	n/a	n/a	816	939	1,113	1,173	2,031
Farebox Recovery Ratio (Minimal Base)	40.62%	40.70%	39.78%	38.86%	37.78%	38.53%	39.41%
Farebox Recovery Ratio (Full Enhanced)	40.62%	40.70%	40.02%	39.17%	38.14%	38.92%	39.76%
Capital Cost (Minimal Base)	n/a	\$4,510,000	\$41,950,000	\$8,280,000	\$27,810,000	\$7,390,000	\$6,080,000
Capital Cost (Full Enhanced)	n/a	\$4,510,000	\$68,351,000	\$16,180,000	\$33,290,000	\$20,840,000	\$23,690,000
Operating Cost per Mile (Minimal and Full)	n/a	n/a	\$36,621,709	\$14,090,113	\$10,012,665	\$9,703,829	\$16,167,521
Capital Cost per Mile (Minimal Base)	n/a	n/a	\$7,768,519	\$571,034	\$1,318,009	\$345,327	\$486,400
Capital Cost per Mile (Full Enhanced)	n/a	n/a	\$12,657,593	\$1,115,862	\$1,577,725	\$973,832	\$1,895,200
Capital Cost per Passgr (Minimal Base)	n/a	\$0.0044	\$0.0296	\$0.0066	\$0.0179	\$0.0052	\$0.0044
Capital Cost per Passgr (Full Enhanced)	n/a	\$0.0044	\$0.0499	\$0.0140	\$0.0229	\$0.0161	\$0.0178
Incremental Cost Per New Trip (Minimal Base)	\$3.93	\$11.52	\$7.25	\$6.31	\$7.32	\$5.78	\$5.16
Incremental Cost Per New Trip (Full Enhanced)	\$3.93	\$11.52	\$6.50	\$5.24	\$5.96	\$4.84	\$4.43

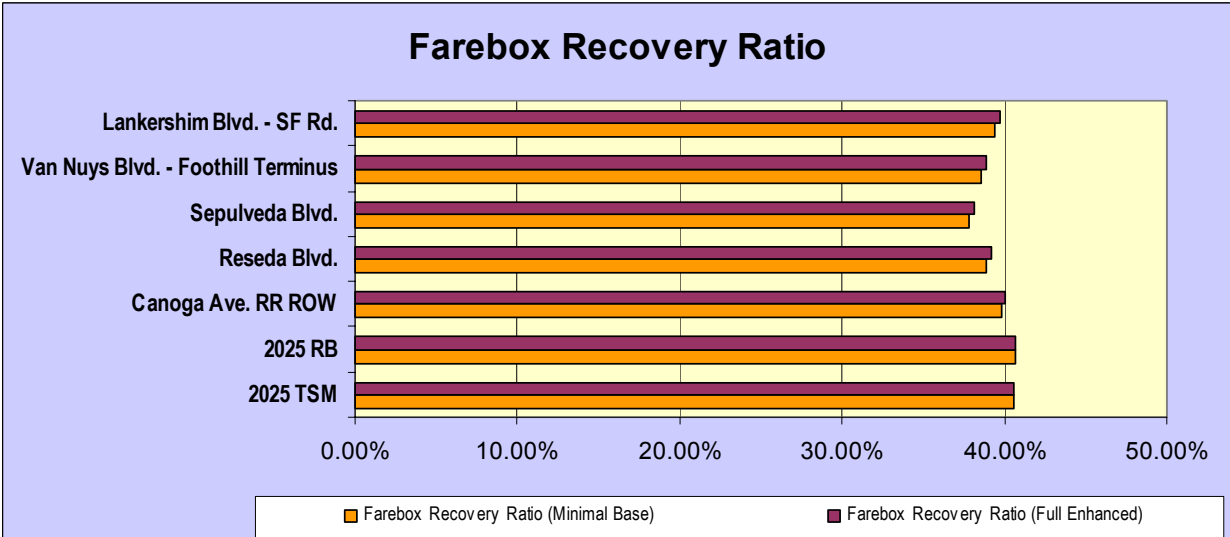


Table 5.7-6 – Capital Cost Estimates by Project Elements

San Fernando Valley North-South Transit Corridor Alternatives Analysis

Corridor Alternatives	Project Element									Total (\$million)
	Station Elements	Station Access Improvements	Urban Design Elements	Base Roadway Improvements	Additional Roadway Improvements	Grade Separations	Parking Facilities	Red Line Portal	Right of Way	
<b>Base 2025</b>										
Capital Cost (\$million)										\$ -
Annualized Capital Cost (\$million)										\$ -
Annual O&M Cost (\$million)										\$ 181.46
<b>Total Annualized Cost (\$million)</b>										<b>\$ 181.46</b>
<b>2025 TSM</b>										
Capital Cost (\$million)	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annualized Capital Cost (\$million)										\$ -
Annual O&M Cost (\$million)										\$ 194.87
<b>Total Annualized Cost (\$million)</b>										<b>\$ 194.87</b>
<b>2025 RB</b>										
Capital Cost (\$million)	\$ 4.51	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4.51
Annualized Capital Cost (\$million)										\$ 0.50
Annual O&M Cost (\$million)										\$ 190.03
<b>Total Annualized Cost (\$million)</b>										<b>\$ 190.53</b>
<b>Canoga RR ROW</b>										
Capital Cost (\$million)	\$ 10.74	\$ -		\$ 25.14	\$ -	\$ -	\$ -	\$ -	\$ 6.07	\$ 41.95
Annualized Capital Cost (\$million)										\$ 3.37
Annual O&M Cost (\$million)										\$ 197.76
<b>Total Annualized Cost (\$million)</b>										<b>\$ 201.12</b>



Table 5.7-7 – Capital Cost Estimates by Project Elements (Appendix [Cont'd])

San Fernando Valley North-South Transit Corridor Alternatives Analysis

Corridor Alternatives	Project Element									Total (\$million)
	Station Elements	Station Access Improvements	Urban Design Elements	Base Roadway Improvements	Additional Roadway Improvements	Grade Separations	Parking Facilities	Red Line Portal	Right of Way	
<b>Reseda Boulevard</b>										
Capital Cost (\$million)	\$ 4.30	\$ -		\$ 3.98	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8.28
Annualized Capital Cost (\$million)										\$ 0.75
Annual O&M Cost (\$million)										\$ 204.31
<b>Total Annualized Cost (\$million)</b>										<b>\$ 205.06</b>
<b>Sepulveda Boulevard</b>										
Capital Cost (\$million)	\$ 2.92	\$ -		\$ 6.92	\$ -	\$ -	\$ -	\$ -	\$ 17.97	\$ 27.81
Annualized Capital Cost (\$million)										\$ 2.06
Annual O&M Cost (\$million)										\$ 211.27
<b>Total Annualized Cost (\$million)</b>										<b>\$ 213.33</b>
<b>Van Nuys Boulevard - Sylmar Terminus</b>										
Capital Cost (\$million)	\$ 1.98	\$ -		\$ 5.41	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7.39
Annualized Capital Cost (\$million)										\$ 0.60
Annual O&M Cost (\$million)										\$ 207.66
<b>Total Annualized Cost (\$million)</b>										<b>\$ 208.26</b>
<b>Lankershim Boulevard – San Fernando Road</b>										
Capital Cost (\$million)	\$ 1.94	\$ -		\$ 4.14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6.08
Annualized Capital Cost (\$million)										\$ 0.50
Annual O&M Cost (\$million)										\$ 202.09
<b>Total Annualized Cost (\$million)</b>										<b>\$ 202.60</b>



Table 5.7-8 – Cost Effectiveness Summary (Minimal Base Scenario)

San Fernando Valley North-South Transit Corridor Alternatives Analysis

Corridor Alternatives	2025 TSM	2025 RB	Canoga Avenue RR ROW	Reseda Boulevard	Sepulveda Boulevard	Van Nuys Boulevard - Sylmar Terminus	Lankershim Boulevard – San Fernando Road
	Total Capital Cost (\$million)	\$ -	\$ 4.51	\$ 41.95	\$ 8.28	\$ 27.81	\$ 7.39
Annualized Capital Cost (\$million)	\$ -	\$ 0.50	\$ 3.37	\$ 0.75	\$ 2.06	\$ 0.60	\$ 0.50
Annual O&M Cost (\$million)	\$ 194.87	\$ 190.03	\$ 197.76	\$ 204.31	\$ 211.27	\$ 207.66	\$ 202.09
Total Annualized Costs (\$million)	\$ 194.87	\$ 190.53	\$ 201.12	\$ 205.06	\$ 213.33	\$ 208.26	\$ 202.60
Total Annual Ridership (million)	113.71	111.61	113.69	114.72	115.34	115.62	115.08



Table 5.7-9 – Cost Effectiveness Summary (Fully Enhanced Base Scenario)

San Fernando Valley North-South Transit Corridor Alternatives Analysis

Corridor Alternatives	2025 TSM	2025 RB	Canoga Avenue RR ROW	Reseda Boulevard	Sepulveda Boulevard	Van Nuys Boulevard - Sylmar Terminus	Lankershim Boulevard – San Fernando Road
Total Capital Cost (\$million)	\$ -	\$ 4.51	\$ 68.35	\$ 16.18	\$ 33.29	\$ 20.84	\$ 23.69
Annualized Capital Cost (\$million)	\$ -	\$ 0.50	\$ 5.71	\$ 1.62	\$ 2.67	\$ 1.88	\$ 2.06
Annual O&M Cost (\$million)	\$ 194.87	\$ 190.03	\$ 197.76	\$ 204.31	\$ 211.27	\$ 207.66	\$ 202.09
Total Annualized Costs (\$million)	\$ 194.87	\$ 190.53	\$ 203.47	\$ 205.93	\$ 213.93	\$ 209.54	\$ 204.16
Total Annual Ridership (million)	114.39	111.77	114.37	115.65	116.43	116.78	116.10



**Table 5.7-10 – Capital Cost Estimates by Criteria (Minimal Base Scenario)**

Total Capital and Annualized Cost Estimates

**San Fernando Valley North-South Transit Corridor Alternatives Analysis**

CRITERIA/GOALS	CORRIDOR ALTERNATIVES							
	Base 2025	2025 TSM	2025 RB	Canoga Avenue RR ROW	Reseda Boulevard	Sepulveda Boulevard	Van Nuys Boulevard - Sylmar Terminus	Lankershim Boulevard – San Fernando Road
Route Length (Miles)	n/a	n/a	n/a	5.4	14.5	21.1	21.4	12.5
Annual Vehicle Hours	2,592,339	2,783,801	2,714,708	2,825,103	2,918,666	3,018,103	2,966,599	2,887,057
Weekday Boardings	435,228	445,923	437,695	445,855	449,882	452,311	453,422	451,296
Annual Boardings	110,983,140	113,710,416	111,612,276	113,693,076	114,720,012	115,339,356	115,622,712	115,080,480
Weekday Boardings per Mile*	n/a	n/a	n/a	653	751	890	939	1,625
Weekday Boardings per Vehicle Hour	43	41	41	40	39	38	39	40
Daily Farebox Revenue	\$ 301,177.78	\$ 308,578.85	\$ 302,885.08	\$ 308,531.80	\$ 311,318.62	\$ 312,999.35	\$ 313,768.30	\$ 312,296.83
Farebox Recovery Ratio	42.32%	40.38%	40.64%	39.78%	38.86%	37.78%	38.53%	39.41%
Capital Cost	n/a	n/a	\$ 4,510,000.00	\$ 41,950,000.00	\$ 8,280,000.00	\$ 27,810,000.00	\$ 7,390,000.00	\$ 6,080,000.00
Annualized Capital Cost	n/a	n/a	\$ 496,100.00	\$ 3,366,100.00	\$ 751,600.00	\$ 2,063,500.00	\$ 596,500.00	\$ 503,200.00
Annual O&M Cost	\$181,463,749.95	\$ 194,866,089.95	\$ 190,029,579.95	\$ 197,757,229.95	\$ 204,306,639.95	\$ 211,267,229.95	\$ 207,661,949.95	\$ 202,094,009.95
Total Annualized Cost	\$181,463,749.95	\$ 194,866,089.95	\$ 190,525,679.95	\$ 201,123,329.95	\$ 205,058,239.95	\$ 213,330,729.95	\$ 208,258,449.95	\$ 202,597,209.95
Operating Cost per Mile	n/a	n/a	n/a	\$ 36,621,709.25	\$ 14,090,113.10	\$ 10,012,664.93	\$ 9,703,829.44	\$ 16,167,520.80
Operating Cost per Passgr	\$ 1.64	\$ 1.71	\$ 1.70	\$ 1.74	\$ 1.78	\$ 1.83	\$ 1.80	\$ 1.76
Capital Cost per Mile	n/a	n/a	n/a	\$ 7,768,518.52	\$ 571,034.48	\$ 1,318,009.48	\$ 345,327.10	\$ 486,400.00
Capital Cost per Passgr	n/a	n/a	\$ 0.00	\$ 0.03	\$ 0.01	\$ 0.02	\$ 0.01	\$ 0.00

\* Based on ridership for the N/S corridors only.



**Table 5.7-11 – Capital Cost Estimates by Criteria (Fully Enhanced Base Scenario)**

Total Capital and Annualized Cost Estimates

**San Fernando Valley North-South Transit Corridor Alternatives Analysis**

CRITERIA/GOALS	CORRIDOR ALTERNATIVES							
	Base 2025	2025 TSM	2025 RB	Canoga Avenue RR ROW	Reseda Boulevard	Sepulveda Boulevard	Van Nuys Boulevard - Sylmar Terminus	Lankershim Boulevard – San Fernando Road
Route Length (Miles)	n/a	n/a	n/a	5.4	14.5	21.1	21.4	12.5
Annual Vehicle Hours	2,592,339	2,783,801	2,714,708	2,825,103	2,918,666	3,018,103	2,966,599	2,887,057
Weekday Boardings	435,228	448,597	438,312	448,512	453,546	456,582	457,971	455,313
Annual Boardings	110,983,140	114,392,235	111,769,560	114,370,560	115,654,230	116,428,410	116,782,605	116,104,815
Weekday Boardings per Mile*	n/a	n/a	n/a	816	939	1,113	1,173	2,031
Weekday Boardings per Vehicle Hour	43	41	41	40	40	39	39	40
Daily Farebox Revenue	\$ 301,177.78	\$ 310,429.12	\$ 303,311.90	\$ 310,370.30	\$ 313,853.83	\$ 315,954.74	\$ 316,915.93	\$ 315,076.60
Farebox Recovery Ratio	42.32%	40.62%	40.70%	40.02%	39.17%	38.14%	38.92%	39.76%
Capital Cost	n/a	n/a	\$ 4,510,000.00	\$ 68,351,000.00	\$ 16,180,000.00	\$ 33,290,000.00	\$ 20,840,000.00	\$ 23,690,000.00
Annualized Capital Cost	n/a	n/a	\$ 496,100.00	\$ 5,711,410.00	\$ 1,620,600.00	\$ 2,666,300.00	\$ 1,876,000.00	\$ 2,062,800.00
Annual O&M Cost	\$181,463,749.95	\$ 194,866,089.95	\$ 190,029,579.95	\$ 197,757,229.95	\$ 204,306,639.95	\$ 211,267,229.95	\$ 207,661,949.95	\$ 202,094,009.95
Total Annualized Cost	\$181,463,749.95	\$ 194,866,089.95	\$ 190,525,679.95	\$ 203,468,639.95	\$ 205,927,239.95	\$ 213,933,529.95	\$ 209,537,949.95	\$ 204,156,809.95
Operating Cost per Mile	n/a	n/a	n/a	\$ 36,621,709.25	\$ 14,090,113.10	\$ 10,012,664.93	\$ 9,703,829.44	\$ 16,167,520.80
Operating Cost per Passgr	\$ 1.64	\$ 1.70	\$ 1.70	\$ 1.73	\$ 1.77	\$ 1.81	\$ 1.78	\$ 1.74
Capital Cost per Mile	n/a	n/a	n/a	\$ 12,657,592.59	\$ 1,115,862.07	\$ 1,577,725.12	\$ 973,831.78	\$ 1,895,200.00
Capital Cost per Passgr	n/a	n/a	\$ 0.00	\$ 0.05	\$ 0.01	\$ 0.02	\$ 0.02	\$ 0.02

\* Based on ridership for the N/S corridors only.

