

DRAFT



**ALBUQUERQUE  
STREETCAR EVALUATION**

# Appendices

Prepared for:



The City of Albuquerque

Prepared by:

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## A. Relevant HDR Documents

The following is a list of documents produced by HDR Engineering, Inc. and its partner firms during the 2006 phase of streetcar analysis and engineering. These documents were reviewed by Leland Consulting Group and Fehr & Peers and informed the Albuquerque Streetcar Evaluation process. Relevant documents are listed below in order of completion date. Except where otherwise noted, the author is HDR, Inc.

- Albuquerque Modern Streetcar Conceptual Downtown Alternatives Assessment  
June 9, 2006, Downtown Alternatives Assessment.pdf
- Preferred Streetcar Alignment Map.pdf  
August 29, 2006
- Evaluation of Operations Options, September 7, 2006, pdf document.
- Re: Evaluation of Operations Options  
September 13, 2006, Evaluation of Operations Option-091206-FINAL.pdf
- Re: Albuquerque Streetcar Ridership Forecasting – Alternatives Analysis  
September 24, 2006
- RE: Traction Power Sizing, Spacing and Siting Study  
October 11, 2006, Traction Power Study.pdf
- Conceptual Traffic Design Report  
URS Corporation with HDR, Final Draft for Client Review, October 25, 2006
- Best Lane Analysis – Airport Segment  
URS Corporation with HDR, Final Draft for Client Review, October 31, 2006
- Best Lane Analysis – Central Avenue Segment  
URS Corporation with HDR, Revised Final Draft for Client Review, November 2, 2006,  
CentralAveBestLane110606.pdf
- CONCEPTUAL COST ESTIMATE  
REVISION 2 NOVEMBER 3, 2006, Albuquerque Unit Price Estimate\_Rev 1A.xls
- Albuquerque Streetcar Maintenance Facility  
LTK ENGINEERING SERVICES, 03, November 2006, MSF Site Location Study.pdf
- Albuquerque Modern Streetcar [presentation]  
HDR Streetcar Presentation.pdf, date unknown

## B. Streetcar Peer Systems

Table 1. Streetcar System Comparison – Segments (A)

	VINTAGE				MODERN			Albuquerque Segment A Atrisco to 4th^^	Albuquerque Segment B 4th to Girard^^	Albuquerque Segment C Girard to San Mateo^^
	Kenosha	Tampa	Little Rock	Memphis	Tacoma	Seattle^	Portland			
<b>SYSTEM DETAILS</b>										
Year Completed	2000	2002	2004	1993	2003	2007	2001	2011	2011	2011
Vehicle Type	vintage	vintage	vintage	vintage	modern	modern	modern	modern	modern	modern
Track Length (miles)	1.7	2.4	3.5	7	1.6	2.6	4	2.5	2.2	1.6
Stations	17	10	14	24	5	11	42	8	8	3
Streetcars	5	9	5	19	3	3	10	3	2	2
ROW	mixed flow	mixed flow	mixed flow	mixed flow	dedicated ROW	mixed flow	mixed flow	mixed flow	mixed flow	mixed flow
Routes	1	1	2	3	1	1	1	1	1	1
<b>OPERATION DETAILS</b>										
Fares	\$0.25	\$2.00	\$0.50	\$0.60	FREE	\$1.50	FREE to \$1.70	\$1.00	\$1.00	\$1.00
Service Hours	Summer M-F 10a-7p Sa-Su 10a-5:30p Winter M-F 10a-2p	M-W 11a-10p Th 11a-11p F 11a-2a Sat 9a-2a Sun noon-8p	M-W 11a-10p Th-Sa 11-midnight Sun 11:00a-5p	M-Th 6a-11p F 6a-1a Sa 9:30a-1a Sun 10a-6p	M-F 5a-8p Sa 8a-10p Su 10a-8p	M-Th 6a-9p F-Sat 6a-11p Sun 10a-7p	M-Th 5:30a-11:30p F 5:30a-12:00am Sat 7:15a-11:45p Sun 7:15a-10:30p	M-F 5:30a-12:00a Sat 7a-12:00a Sun 7a-12:00a	M-F 5:30a-12:00a Sat 7a-12:00a Sun 7a-12:00a	M-F 5:30a-12:00a Sat 7a-12:00a Sun 7a-12:00a
Total Weekly Service Hours	60	85	78	110.5	99	103	122.5	126.5	126.5	126.5
Peak Headway (minutes)	30	15	20	10	10	15	13	10	10	10
<b>RIDERSHIP DETAILS</b>										
Annual Ridership	58,000	435,000	200,020	1,000,000	740,000	330,000	3,476,764	366,759	916,161	545,354
Average Weekday Ridership***	199	1,490	685	3,425	2,925	1,300	10,001	1,277	3,189	1,898
<b>CAPITAL COST DETAILS</b>										
Capital Cost (millions)	\$5	\$53	\$27	\$101	\$81	\$52	\$100	\$70	\$62	\$45
Capital Cost per Mile (millions)	\$3	\$22	\$8	\$14	\$51	\$20	\$25	\$28	\$28	\$28
Capital Cost per Annual Rider	\$86	\$122	\$135	\$101	\$109	\$158	\$29	\$191	\$67	\$82
<b>OPERATION COST DETAILS</b>										
Annual Operating Cost **	\$300,000	\$2,400,000	\$850,000	\$4,300,000	\$3,940,000	\$2,000,000	\$4,800,000	\$2,201,983	\$1,293,661	\$1,293,661
Cost Per Passenger	\$5	\$6	\$4	\$4	\$5	\$6	\$1	\$6	\$1	\$2
Cost per Passenger per Mile	\$3	\$2	\$1	\$0.6	\$3	\$2	\$0.3	\$2.4	\$0.6	\$1.5

Source: Fehr & Peers

Table 2. Streetcar System Comparison – Segments (B)

<b>RIDERSHIP GENERATORS*</b>										
Stadium (seats)	0	20,500	18,000	20,000	23,000	0	0	72,000	72,000	72,000
International Airport (mill annual pass.)	0	0	2.1	0	0	0	0	6.4	6.4	6.4
University (enrolment)	0	0	0	0	2,292	0	24,000	26,000	26,000	26,000
Convention Center (sq ft)	10,000	600,000	33,000	350,000	120,000	0	0	600,000	600,000	600,000
Medical Center/Hospital (employees)	0	0	0	3,000	0	2,800	4,500	3,400	3,400	3,400
Other Destinations	Harbor Park	Cruise Port	Clinton Library	Beal St	State Museum	Seattle Center	Theater District	Historic Plaza	Historic Plaza	Historic Plaza
<b>RAIL TRANSIT CONNECTIONS*</b>										
Commuter Rail	✓				✓			✓	✓	✓
Light Rail							✓			
Monorail						✓				
<b>PARK AND RIDE FACILITIES*</b>										
Surface Parking	✓			✓				TBD	TBD	TBD
Parking Structure		✓	✓		✓		✓	TBD	TBD	TBD
<b>CBD PARKING</b>										
Off Street - Publicly Operated	1,000	16,000	0	3,700	2,500		4,000	1,500	1,500	1,500
Maximum Daily Parking Rate (public facilities)	\$1.50	\$9.50	\$0.00	\$12.00	\$12.00		\$13.00	\$8.00	\$8.00	\$8.00
<b>FINANCING TOOLS</b>										
Capital	FTA 5309 Tax Increment Financing	CMAQ FTA 5309 State DOT City of Tampa Port Authority Development Impact Fees	Federal Small Starts City of North Little Rock City of Little Rock Pulaski County	FTA 5307 City of Memphis TDOT MATA	Regional Transit Tax	Local Improvement District State and Federal Grants City Property Sale Proceeds Private Contribution	Parking Revenue Local Improvement Districts Development Agreements Federal (Non Transportation) City of Portland	TBD	TBD	TBD
Operating	Fare Box Federal State	Fare Box Special Assessment District Endowment from Naming Rights Advertising State Block Operating Assistance FTA CMAQ Tampa Port Authority	Fare Box Federal Cities/COUNTIES	Fare Box	Regional Transit Tax	Fare Box FTA 5307/5309 Streetcar and Station Sponsorship Bulk Pass	TriMet Parking Revenue Fare Box	TBD	TBD	TBD

Source: Fehr & Peers

**Table 3. Streetcar System Comparison – Cumulative**

	VINTAGE				MODERN			Albuquerque 4th to Girard^^	Albuquerque 4th to San Mateo^^	Albuquerque Atrisco to San Mateo^^
	Kenosha	Tampa	Little Rock	Memphis	Tacoma	Seattle^	Portland			
<b>SYSTEM DETAILS</b>										
Year Completed	2000	2002	2004	1993	2003	2007	2001	2011	2011	2011
Vehicle Type	vintage	vintage	vintage	vintage	modern	modern	modern	modern	modern	modern
Track Length (miles)	1.7	2.4	3.5	7	1.6	2.6	4	2.2	3.8	6.3
Stations	17	10	14	24	5	11	42	9	16	19
Streetcars	5	9	5	19	3	3	10	2	4	6
ROW	mixed flow	mixed flow	mixed flow	mixed flow	dedicated ROW	mixed flow	mixed flow	mixed flow	mixed flow	mixed flow
Routes	1	1	2	3	1	1	1	1	1	1
<b>OPERATION DETAILS</b>										
Fares	\$0.25	\$2.00	\$0.50	\$0.60	FREE	\$1.50	FREE to \$1.70	\$1.00	\$1.00	\$1.00
Service Hours	Summer M-F 10a-7p Sa-Su 10a-5:30p Winter M-F 10a-2p	M-W 11a-10p Th 11a-11p F 11a-2a Sat 9a-2a Sun noon-8p	M-W 11a-10p Th-Sa 11-midnight Sun 11:00a-5p	M-Th 6a-11p F 6a-1a Sa 9:30a-1a Sun 10a-6p	M-F 5a-8p Sa 8a-10p Su 10a-8p	M-Th 6a-9p F-Sat 6a-11p Sun 10a-7p	M-Th 5:30a-11:30p F 5:30a-12:00am Sat 7:15a-11:45p Sun 7:15a-10:30p	M-F 5:30a-12:00a Sat 7a-12:00a Sun 7a-12:00a	M-F 5:30a-12:00a Sat 7a-12:00a Sun 7a-12:00a	M-F 5:30a-12:00a Sat 7a-12:00a Sun 7a-12:00a
Total Weekly Service Hours	60	85	78	110.5	99	103	122.5	126.5	126.5	126.5
Peak Headway (minutes)	30	15	20	10	10	15	13	10	10	10
<b>RIDERSHIP DETAILS</b>										
Annual Ridership	58,000	435,000	200,020	1,000,000	740,000	330,000	2,365,200	916,161	1,461,515	1,828,275
Average Weekday Ridership	199	1,490	685	3,425	2,534	1,130	8,100	3,189	5,087	6,364
<b>CAPITAL COST DETAILS</b>										
Capital Cost (millions)	\$5	\$53	\$27	\$101	\$81	\$52	\$100	\$62	\$47	\$76
Capital Cost per Mile (millions)	\$3	\$22	\$8	\$14	\$51	\$20	\$25	\$28	\$29	\$30
Capital Cost per Annual Rider	\$86	\$122	\$135	\$101	\$109	\$158	\$42	\$67	\$32	\$41
<b>OPERATION COST DETAILS</b>										
Annual Operating Cost**	\$300,000	\$2,400,000	\$850,000	\$4,300,000	\$3,940,000	\$2,000,000	\$4,800,000	\$1,293,661	\$3,110,304	\$4,403,966
Cost Per Passenger	\$5	\$6	\$4	\$4	\$5	\$6	\$2	\$1	\$2	\$2
Cost per Passenger per Mile	\$3	\$2	\$1	\$0.6	\$3	\$2	\$0.5	\$0.6	\$0.6	\$0.4

Source: Fehr & Peers

## C. Operations Cost

### Review of Operating Scenarios and Costs June 20, 2008

In September of 2006, HDR prepared a memo called Evaluation of Operations Options. The document described nine operating options and associated costs for the proposed Albuquerque Streetcar. The scenarios considered two lines: a Central Route running from Tingley Drive to Carlisle Boulevard and an Airport Route with service from Albuquerque International Sunport with three route variations. These route options were analyzed for 15, 20, and 30 minute headways. Operating costs for the different scenarios ranged from \$3,029,000 to \$5,128,000.

Since the HDR memo significant changes have been made to the streetcar routes, route lengths, and phase segments. Fehr & Peers conducted a review of HDR's analysis and prepared a new set of operating scenarios. The current scenarios do not include an airport route. Rather, operations are considered for the central route that runs along Historic Highway 66/Central Avenue from Atrisco Drive to San Mateo Boulevard. The route has been divided into three sections: section A runs 2.5 miles from Atrisco Drive to 4<sup>th</sup> Street, section B runs 2.2 miles from 4<sup>th</sup> Street to Girard Boulevard, and section C runs 1.6 miles from Girard Boulevard to San Mateo Boulevard.

Three operating scenarios were considered: an aggressive scenario, a moderate scenario, and a conservative scenario. In the aggressive scenario the streetcar will operate with 10 minute headways during the weekday peak and weekday base periods and 15-20 minute headways all other times. In the moderate scenario the streetcar operates with 10 minute headways during the weekday peak only and 15-20 minute headways all other times. In the conservative scenario the streetcar operates with 20 minute headways at all times. Additionally, the aggressive scenario used a phasing plan that built segment B in 2009, segment C in 2010, and segment A in 2011. The moderate scenario built segment B in 2009, segment C in 2015, and segment A in 2020. The conservative scenario built segment B in 2009, segment C in 2020, and segment A in 2030.

The three operating scenarios are based on several assumptions. The system was assumed to operate 254 weekdays, 52 Saturdays, and 59 Sundays and holidays. The presumed hours of operation used are shown below:

Weekday	Early Morning	5:30 – 7:00 a.m.
	AM Peak	7:00 – 9:00 a.m.
	Base	9:00 a.m. – 4:00 p.m.
	PM Peak	4:00 – 6:00 p.m.
	Evening	6:00 p.m. – 12:00 a.m.
Saturday	Base	7:00 a.m. – 6:00 p.m.
	Evening	6:00 p.m. – 12:00 a.m.
Sunday	Base	7:00 a.m. – 6:00 p.m.
	Evening	6:00 p.m. – 12:00 a.m.

Additionally, during these hours the street car was assumed to operate at an average speed of 14 miles per hour, which included delays for stops as well as layover time. Finally, operating cost calculations for these scenarios used \$130 per vehicle revenue hour in 2008. This number was grown 3% a year to account for inflation and other cost increases from 2009 to 2030.

Using this information, the operating details of each segment as well as the whole line were calculated for each of the three scenarios. Results for the aggressive scenario can be found in the Summary Matrix.

**Table 4. Operations Costs - By Segment, 2011**

Operation cost for each alignment section; assumes each segment is operating independently in 2011.

**Aggressive Streetcar Construction & Redevelopment (2011) - Segments**

		Distance	Average Speed	Run Time	Headway	# Vehicles	Revenue Hours	Daily Cost	Annual Cost
<b>Segment A - Atrisco to 4th - 2011</b>									
Weekday	Early Morning	2.5	14	11	15	2	3	\$ 414	\$ 105,093
	Peak	2.5	14	11	10	3	6	\$ 828	\$ 210,186
	Base	2.5	14	11	10	3	21	\$ 2,896	\$ 735,649
	Peak	2.5	14	11	10	3	6	\$ 828	\$ 210,186
	Evening	2.5	14	11	15	2	12	\$ 1,655	\$ 420,371
<b>Weekday Total</b>								<b>\$ 6,620</b>	<b>\$ 1,681,484</b>
Saturday	Base	2.5	14	11	15	2	22	\$ 3,034	\$ 157,777
	Evening	2.5	14	11	15	2	12	\$ 1,655	\$ 86,060
<b>Saturday Total</b>								<b>\$ 4,689</b>	<b>\$ 243,837</b>
Sunday	Base	2.5	14	11	15	2	22	\$ 3,034	\$ 179,016
	Evening	2.5	14	11	15	2	12	\$ 1,655	\$ 97,645
<b>Sunday Total</b>								<b>\$ 4,689</b>	<b>\$ 276,662</b>
<b>Annual Total</b>								<b>\$ 2,201,983</b>	

**Segment B - 4th to Girard - 2011**

Weekday	Early Morning	2.2	14	9	20	1	1.5	\$ 207	\$ 52,546
	Peak	2.2	14	9	10	2	4	\$ 552	\$ 140,124
	Base	2.2	14	9	10	2	14	\$ 1,931	\$ 490,433
	Peak	2.2	14	9	10	2	4	\$ 552	\$ 140,124
	Evening	2.2	14	9	20	1	6	\$ 828	\$ 210,186
<b>Weekday Total</b>								<b>\$ 4,069</b>	<b>\$ 1,033,412</b>
Saturday	Base	2.2	14	9	20	1	11	\$ 1,517	\$ 78,889
	Evening	2.2	14	9	20	1	6	\$ 828	\$ 43,030
<b>Saturday Total</b>								<b>\$ 2,345</b>	<b>\$ 121,919</b>
Sunday	Base	2.2	14	9	20	1	11	\$ 1,517	\$ 89,508
	Evening	2.2	14	9	20	1	6	\$ 828	\$ 48,823
<b>Sunday Total</b>								<b>\$ 2,345</b>	<b>\$ 138,331</b>
<b>Annual Total</b>								<b>\$ 1,293,661</b>	

**Segment C - Girard to San Mateo - 2011**

Weekday	Early Morning	1.6	14	7	15	1	1.5	\$ 207	\$ 52,546
	Peak	1.6	14	7	10	2	4	\$ 552	\$ 140,124
	Base	1.6	14	7	10	2	14	\$ 1,931	\$ 490,433
	Peak	1.6	14	7	10	2	4	\$ 552	\$ 140,124
	Evening	1.6	14	7	15	1	6	\$ 828	\$ 210,186
<b>Weekday Total</b>								<b>\$ 4,069</b>	<b>\$ 1,033,412</b>
Saturday	Base	1.6	14	7	15	1	11	\$ 1,517	\$ 78,889
	Evening	1.6	14	7	15	1	6	\$ 828	\$ 43,030
<b>Saturday Total</b>								<b>\$ 2,345</b>	<b>\$ 121,919</b>
Sunday	Base	1.6	14	7	15	1	11	\$ 1,517	\$ 89,508
	Evening	1.6	14	7	15	1	6	\$ 828	\$ 48,823
<b>Sunday Total</b>								<b>\$ 2,345</b>	<b>\$ 138,331</b>
<b>Annual Total</b>								<b>\$ 1,293,661</b>	

		Hours of Operation		
Weekday	Early Morning	5:30:00 AM	7:00:00 AM	1.5
	Peak	7:00:00 AM	9:00:00 AM	2
	Base	9:00:00 AM	4:00:00 PM	7
	Peak	4:00:00 PM	6:00:00 PM	2
	Evening	6:00:00 PM	12:00:00 AM	6
Saturday	Base	7:00:00 AM	6:00:00 PM	11
	Evening	6:00:00 PM	12:00:00 AM	6
Sunday	Base	7:00:00 AM	6:00:00 PM	11
	Evening	6:00:00 PM	12:00:00 AM	6

254 weekdays  
52 Saturdays  
59 Sundays and holidays

**Table 5. Operations Costs – Cumulative Costs, 2011**

Cumulative Operations costs assuming operations roll out of Alignment Sections in B – C – A order.

**A. Aggressive Streetcar Construction & Redevelopment (2011) - Cumulative**

	Distance	Average Speed	Run Time	Headway	# Vehicles	Revenue Hours	Daily Cost	Annual Cost	
<b>4th to Girard - 2011</b>									
Weekday	Early Morning	2.2	14	9	20	1	1.5 \$	207 \$	52,546
	Peak	2.2	14	9	10	2	4 \$	552 \$	140,124
	Base	2.2	14	9	10	2	14 \$	1,931 \$	490,433
	Peak	2.2	14	9	10	2	4 \$	552 \$	140,124
	Evening	2.2	14	9	20	1	6 \$	828 \$	210,186
<b>Weekday Total</b>							<b>\$</b>	<b>4,069 \$</b>	<b>1,033,412</b>
Saturday	Base	2.2	14	9	20	1	11 \$	1,517 \$	78,889
	Evening	2.2	14	9	20	1	6 \$	828 \$	43,030
<b>Saturday Total</b>							<b>\$</b>	<b>2,345 \$</b>	<b>121,919</b>
Sunday	Base	2.2	14	9	20	1	11 \$	1,517 \$	89,508
	Evening	2.2	14	9	20	1	6 \$	828 \$	48,823
<b>Sunday Total</b>							<b>\$</b>	<b>2,345 \$</b>	<b>138,331</b>
<b>Annual Total</b>									<b>\$ 1,293,661</b>
<b>4th to San Mateo - 2011</b>									
Weekday	Early Morning	3.8	14	16	15	3	4.5 \$	621 \$	157,639
	Peak	3.8	14	16	10	4	8 \$	1,103 \$	280,247
	Base	3.8	14	16	10	4	28 \$	3,862 \$	980,866
	Peak	3.8	14	16	10	4	8 \$	1,103 \$	280,247
	Evening	3.8	14	16	15	3	18 \$	2,483 \$	630,557
<b>Weekday Total</b>							<b>\$</b>	<b>9,171 \$</b>	<b>2,329,556</b>
Saturday	Base	3.8	14	16	15	3	33 \$	4,551 \$	236,666
	Evening	3.8	14	16	15	3	18 \$	2,483 \$	129,090
<b>Saturday Total</b>							<b>\$</b>	<b>7,034 \$</b>	<b>365,756</b>
Sunday	Base	3.8	14	16	15	3	33 \$	4,551 \$	268,524
	Evening	3.8	14	16	15	3	18 \$	2,483 \$	146,468
<b>Sunday Total</b>							<b>\$</b>	<b>7,034 \$</b>	<b>414,992</b>
<b>Annual Total</b>									<b>\$ 3,110,304</b>
<b>Atrisco to San Mateo - 2011</b>									
Weekday	Early Morning	6.3	14	27	15	4	6 \$	828 \$	210,186
	Peak	6.3	14	27	10	6	12 \$	1,655 \$	420,371
	Base	6.3	14	27	10	6	42 \$	5,793 \$	1,471,299
	Peak	6.3	14	27	10	6	12 \$	1,655 \$	420,371
	Evening	6.3	14	27	15	4	24 \$	3,310 \$	840,742
<b>Weekday Total</b>							<b>\$</b>	<b>13,240 \$</b>	<b>3,362,968</b>
Saturday	Base	6.3	14	27	15	4	44 \$	6,068 \$	315,554
	Evening	6.3	14	27	15	4	24 \$	3,310 \$	172,120
<b>Saturday Total</b>							<b>\$</b>	<b>9,378 \$</b>	<b>487,675</b>
Sunday	Base	6.3	14	27	15	4	44 \$	6,068 \$	358,033
	Evening	6.3	14	27	15	4	24 \$	3,310 \$	195,290
<b>Sunday Total</b>							<b>\$</b>	<b>9,378 \$</b>	<b>553,323</b>
<b>Annual Total</b>									<b>\$ 4,403,966</b>
<b>Hours of Operation</b>									
Weekday	Early Morning	5:30:00 AM	7:00:00 AM	1.5					
	Peak	7:00:00 AM	9:00:00 AM	2					
	Base	9:00:00 AM	4:00:00 PM	7					
	Peak	4:00:00 PM	6:00:00 PM	2					
	Evening	6:00:00 PM	12:00:00 AM	6					
Saturday	Base	7:00:00 AM	6:00:00 PM	11					
	Evening	6:00:00 PM	12:00:00 AM	6					
Sunday	Base	7:00:00 AM	6:00:00 PM	11					
	Evening	6:00:00 PM	12:00:00 AM	6					
254 weekdays 52 Saturdays 59 Sundays and holidays									

Source: Fehr & Peers

**Table 6. Operations Costs – Moderate Construction Timeline, Cumulative Costs**

Cumulative Operations costs assuming operations roll out of Alignment Sections in B – C – A order.

**B. Moderate Streetcar Construction & Redevelopment (2011 -2020) - Cumulative**

	Distance	Average Speed	Run Time	Headway	# Vehicles	Revenue Hours	Daily Cost	Annual Cost
<b>Atrisco to San Mateo - 2020</b>								
Weekday	6.3	14	27	15	4	6	\$ 1,080	\$ 274,244
Early Morning								
Peak	6.3	14	27	10	6	12	\$ 2,159	\$ 548,489
Base	6.3	14	27	15	4	28	\$ 5,039	\$ 1,279,807
Peak	6.3	14	27	10	6	12	\$ 2,159	\$ 548,489
Evening	6.3	14	27	15	4	24	\$ 4,319	\$ 1,096,978
<b>Weekday Total</b>							<b>\$ 14,756</b>	<b>\$ 3,748,007</b>
Saturday	6.3	14	27	15	4	44	\$ 7,918	\$ 411,727
Base								
Evening	6.3	14	27	15	4	24	\$ 4,319	\$ 224,578
<b>Saturday Total</b>							<b>\$ 12,237</b>	<b>\$ 636,305</b>
Sunday	6.3	14	27	15	4	44	\$ 7,918	\$ 467,151
Base								
Evening	6.3	14	27	15	4	24	\$ 4,319	\$ 254,810
<b>Sunday Total</b>							<b>\$ 12,237</b>	<b>\$ 721,961</b>
<b>Annual Total</b>								<b>\$ 5,106,273</b>
<b>4th to Girard - 2011</b>								
Weekday	2.2	14	9	20	1	1.5	\$ 207	\$ 52,546
Early Morning								
Peak	2.2	14	9	10	2	4	\$ 552	\$ 140,124
Base	2.2	14	9	20	1	7	\$ 965	\$ 245,216
Peak	2.2	14	9	10	2	4	\$ 552	\$ 140,124
Evening	2.2	14	9	20	1	6	\$ 828	\$ 210,186
<b>Weekday Total</b>							<b>\$ 3,103</b>	<b>\$ 788,196</b>
Saturday	2.2	14	9	20	1	11	\$ 1,517	\$ 78,889
Base								
Evening	2.2	14	9	20	1	6	\$ 828	\$ 43,030
<b>Saturday Total</b>							<b>\$ 2,345</b>	<b>\$ 121,919</b>
Sunday	2.2	14	9	20	1	11	\$ 1,517	\$ 89,508
Base								
Evening	2.2	14	9	20	1	6	\$ 828	\$ 48,823
<b>Sunday Total</b>							<b>\$ 2,345</b>	<b>\$ 138,331</b>
<b>Annual Total</b>								<b>\$ 1,048,445</b>
<b>4th to San Mateo - 2015</b>								
Weekday	3.8	14	16	20	2	3	\$ 466	\$ 118,283
Early Morning								
Peak	3.8	14	16	10	4	8	\$ 1,242	\$ 315,421
Base	3.8	14	16	20	2	14	\$ 2,173	\$ 551,986
Peak	3.8	14	16	10	4	8	\$ 1,242	\$ 315,421
Evening	3.8	14	16	20	2	12	\$ 1,863	\$ 473,131
<b>Weekday Total</b>							<b>\$ 6,985</b>	<b>\$ 1,774,242</b>
Saturday	3.8	14	16	20	2	22	\$ 3,415	\$ 177,579
Base								
Evening	3.8	14	16	20	2	12	\$ 1,863	\$ 96,862
<b>Saturday Total</b>							<b>\$ 5,278</b>	<b>\$ 274,441</b>
Sunday	3.8	14	16	20	2	22	\$ 3,415	\$ 201,484
Base								
Evening	3.8	14	16	20	2	12	\$ 1,863	\$ 109,901
<b>Sunday Total</b>							<b>\$ 5,278</b>	<b>\$ 311,385</b>
<b>Annual Total</b>								<b>\$ 2,360,068</b>
<b>Hours of Operation</b>								
Weekday	Early Morning	5:30:00 AM	7:00:00 AM	1.5				
	Peak	7:00:00 AM	9:00:00 AM	2				
	Base	9:00:00 AM	4:00:00 PM	7				
	Peak	4:00:00 PM	6:00:00 PM	2				
	Evening	6:00:00 PM	12:00:00 AM	6				
Saturday	Base	7:00:00 AM	6:00:00 PM	11				
	Evening	6:00:00 PM	12:00:00 AM	6				
Sunday	Base	7:00:00 AM	6:00:00 PM	11				
	Evening	6:00:00 PM	12:00:00 AM	6				

254 weekdays  
52 Saturdays  
59 Sundays and holidays

Source: Fehr & Peers

**Table 7. Operations Costs – Conservative Construction Timeline, Cumulative Costs**

Cumulative Operations costs assuming operations roll out of Alignment Sections in B – C – A order.

**C. Conservative Streetcar Construction & Redevelopment (2011 -2030) - Cumulative**

	Distance	Average Speed	Run Time	Headway	# Vehicles	Revenue Hours	Daily Cost	Annual Cost	
<b>Atrisco to San Mateo - 2030</b>									
Weekday	Early Morning	6.3	14	27	20	3	4.5 \$	1,088 \$	276,421 \$
	Peak	6.3	14	27	20	3	6 \$	1,451 \$	368,562 \$
	Base	6.3	14	27	20	3	21 \$	5,079 \$	1,289,965 \$
	Peak	6.3	14	27	20	3	6 \$	1,451 \$	368,562 \$
	Evening	6.3	14	27	20	3	18 \$	4,353 \$	1,105,685 \$
<b>Weekday Total</b>							<b>\$</b>	<b>13,422 \$</b>	<b>\$ 3,409,194</b>
Saturday	Base	6.3	14	27	20	3	33 \$	7,981 \$	414,995 \$
	Evening	6.3	14	27	20	3	18 \$	4,353 \$	226,361 \$
<b>Saturday Total</b>							<b>\$</b>	<b>12,334 \$</b>	<b>\$ 641,355</b>
Sunday	Base	6.3	14	27	20	3	33 \$	7,981 \$	470,859 \$
	Evening	6.3	14	27	20	3	18 \$	4,353 \$	256,832 \$
<b>Sunday Total</b>							<b>\$</b>	<b>12,334 \$</b>	<b>\$ 727,691</b>
<b>Annual Total</b>									<b>\$ 4,778,241</b>
<b>4th to Girard - 2011</b>									
Weekday	Early Morning	2.2	14	9	20	1	1.5 \$	207 \$	52,546 \$
	Peak	2.2	14	9	20	1	2 \$	276 \$	70,062 \$
	Base	2.2	14	9	20	1	7 \$	965 \$	245,216 \$
	Peak	2.2	14	9	20	1	2 \$	276 \$	70,062 \$
	Evening	2.2	14	9	20	1	6 \$	828 \$	210,186 \$
<b>Weekday Total</b>							<b>\$</b>	<b>2,551 \$</b>	<b>\$ 648,072</b>
Saturday	Base	2.2	14	9	20	1	11 \$	1,517 \$	78,889 \$
	Evening	2.2	14	9	20	1	6 \$	828 \$	43,030 \$
<b>Saturday Total</b>							<b>\$</b>	<b>2,345 \$</b>	<b>\$ 121,919</b>
Sunday	Base	2.2	14	9	20	1	11 \$	1,517 \$	89,508 \$
	Evening	2.2	14	9	20	1	6 \$	780 \$	46,020 \$
<b>Sunday Total</b>							<b>\$</b>	<b>2,297 \$</b>	<b>\$ 135,528</b>
<b>Annual Total</b>									<b>\$ 905,519</b>
<b>4th to San Mateo - 2020</b>									
Weekday	Early Morning	3.8	14	16	20	2	3 \$	540 \$	137,122 \$
	Peak	3.8	14	16	20	2	4 \$	720 \$	182,830 \$
	Base	3.8	14	16	20	2	14 \$	2,519 \$	639,904 \$
	Peak	3.8	14	16	20	2	4 \$	720 \$	182,830 \$
	Evening	3.8	14	16	20	2	12 \$	2,159 \$	548,489 \$
<b>Weekday Total</b>							<b>\$</b>	<b>6,658 \$</b>	<b>\$ 1,691,174</b>
Saturday	Base	3.8	14	16	20	2	22 \$	3,959 \$	205,863 \$
	Evening	3.8	14	16	20	2	12 \$	2,159 \$	112,289 \$
<b>Saturday Total</b>							<b>\$</b>	<b>6,118 \$</b>	<b>\$ 318,152</b>
Sunday	Base	3.8	14	16	20	2	22 \$	3,959 \$	233,576 \$
	Evening	3.8	14	16	20	2	12 \$	2,159 \$	127,405 \$
<b>Sunday Total</b>							<b>\$</b>	<b>6,118 \$</b>	<b>\$ 360,981</b>
<b>Annual Total</b>									<b>\$ 2,370,307</b>
<b>Hours of Operation</b>									
Weekday	Early Morning	5:30:00 AM	7:00:00 AM	1.5					
	Peak	7:00:00 AM	9:00:00 AM	2					
	Base	9:00:00 AM	4:00:00 PM	7					
	Peak	4:00:00 PM	6:00:00 PM	2					
	Evening	6:00:00 PM	12:00:00 AM	6					
Saturday	Base	7:00:00 AM	6:00:00 PM	11					
	Evening	6:00:00 PM	12:00:00 AM	6					
Sunday	Base	7:00:00 AM	6:00:00 PM	11					
	Evening	6:00:00 PM	12:00:00 AM	6					

254 weekdays  
52 Saturdays  
59 Sundays and holidays

Source: Fehr & Peers

## D. Ridership

**Table 8. 2011 Boarding Projection Based on Current Boardings**

Anticipated Route 66 Ridership in 2011 (2007 ridership was 6,500)	8,000
RT 66 riders not served by streetcar corridors*****	25%
RT 66 riders served by streetcar corridors*****	75%
RT 66 riders not served by streetcar corridors*****	2,000
RT 66 riders served by streetcar corridors*****	6,000
4th & Girard Ridership Potential	50%
Girard to San Mateo Potential	30%
Atrisco to 4th Street Potential	20%
4th & Girard Ridership Potential	3,000
Girard to San Mateo Potential	1,800
Atrisco to 4th Street Potential	1,200

\*\*\*\*\*Based on anticipated ABQ Ride boarding and alighting from RT66 for 2011

Source: Fehr & Peers

**Table 9. Ridership - Alignment Section A, Atrisco to 4th**

**AGGRESSIVE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	36	71	107	142	178	212	245	279	313	347	379	411	443	475	507	538	568	598	629	659
Future Commercial	0	0	26,739	53,478	80,217	106,956	133,694	151,724	169,755	187,785	205,815	223,845	244,647	265,449	286,250	307,052	327,854	349,336	370,817	392,299	413,780	435,262

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 66	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Induced average daily boardings from all DU	0	0	23	46	69	92	115	138	160	182	204	226	247	267	288	309	330	350	369	389	409	428
Induced average daily boardings from all Commercial	0	0	53	107	160	214	267	303	340	376	412	448	489	531	573	614	656	699	742	785	828	871
Total average weekday boardings	1200	1200	1277	1353	1430	1506	1583	1641	1699	1757	1815	1873	1936	1998	2061	2123	2186	2248	2311	2374	2436	2499
Total average weekend day boardings	360	360	383	406	429	452	475	492	510	527	545	562	581	599	618	637	656	674	693	712	731	750
Estimated average annual boardings	344,760	344,760	366,759	388,759	410,758	432,757	454,757	471,451	488,145	504,839	521,532	538,226	556,164	574,103	592,041	609,979	627,917	645,922	663,928	681,934	699,940	717,945

**MODERATE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	18	36	53	71	89	106	123	140	157	174	190	206	222	238	254	269	284	299	314	330
Future Commercial	0	0	13,369	26,739	40,108	53,478	66,847	75,862	84,877	93,892	102,907	111,923	122,323	132,724	143,125	153,526	163,927	174,668	185,409	196,149	206,890	217,631

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 66	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Induced average daily boardings from all DU	0	0	12	23	35	46	58	69	80	91	102	113	123	134	144	155	165	175	185	194	204	214
Induced average daily boardings from all Commercial	0	0	27	53	80	107	134	152	170	188	206	224	245	265	286	307	328	349	371	392	414	435
Total average weekday boardings	1200	1200	1238	1277	1315	1353	1391	1420	1450	1479	1508	1537	1568	1599	1630	1662	1693	1724	1755	1787	1818	1849
Total average weekend day boardings	360	360	371	383	394	406	417	426	435	444	452	461	470	480	489	498	508	517	527	536	545	555
Estimated average annual boardings	344,760	344,760	355,760	366,759	377,759	388,759	399,758	408,105	416,452	424,799	433,146	441,493	450,462	459,431	468,400	477,369	486,338	495,341	504,344	513,347	522,350	531,353

**CONSERVATIVE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	12	24	36	47	59	71	82	93	104	116	126	137	148	158	169	179	189	199	210	220
Future Commercial	0	0	8,913	17,826	26,739	35,652	44,565	50,575	56,585	62,595	68,605	74,615	81,549	88,483	95,417	102,351	109,285	116,445	123,606	130,766	137,927	145,087

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 66	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Induced average daily boardings from all DU	0	0	8	15	23	31	38	46	53	61	68	75	82	89	96	103	110	117	123	130	136	143
Induced average daily boardings from all Commercial	0	0	18	36	53	71	89	101	113	125	137	149	163	177	191	205	219	233	247	262	276	290
Total average weekday boardings	1200	1200	1226	1251	1277	1302	1328	1347	1366	1386	1405	1424	1445	1466	1487	1508	1529	1549	1570	1591	1612	1633
Total average weekend day boardings	360	360	368	375	383	391	398	404	410	416	422	427	434	440	446	452	459	465	471	477	484	490
Estimated average annual boardings	344,760	344,760	352,093	359,426	366,759	374,092	381,426	386,990	392,555	398,120	403,684	409,249	415,228	421,208	427,187	433,166	439,146	445,147	451,149	457,151	463,153	469,155

Source: Fehr & Peers

**Table 10. Ridership - Alignment Section B, 4<sup>th</sup> to Girard**

**AGGRESSIVE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

segment capture

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	97	195	292	385	486	579	672	765	858	951	1039	1126	1214	1302	1390	1473	1556	1639	1722	1805
Future Commercial	0	0	62,810	125,620	188,430	251,240	314,050	376,860	439,670	502,480	565,290	628,100	690,910	753,720	816,530	879,340	942,150	1,004,960	1,067,770	1,130,580	1,193,390	1,256,200

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 65	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Induced average daily boardings from all DU	0	0	63	126	190	253	316	377	437	497	558	619	675	732	789	846	903	957	1011	1065	1119	1173
Induced average daily boardings from all Commercial	0	0	126	251	377	502	628	753	878	1,003	1,128	1,253	1,378	1,503	1,628	1,753	1,878	2,003	2,128	2,253	2,378	2,503
Total average weekday boardings	3,000	3,000	3,063	3,126	3,190	3,253	3,316	3,377	3,437	3,497	3,558	3,619	3,675	3,732	3,789	3,846	3,903	3,957	4,011	4,065	4,119	4,173
Total average weekend day boardings	900	900	957	1,013	1,070	1,127	1,183	1,227	1,270	1,314	1,357	1,401	1,447	1,494	1,540	1,587	1,633	1,680	1,726	1,772	1,819	1,865
Estimated average annual boardings	861,900	861,900	916,161	970,422	1,024,683	1,078,944	1,133,205	1,178,466	1,216,567	1,258,248	1,299,929	1,341,610	1,386,077	1,430,545	1,475,013	1,519,481	1,563,948	1,608,414	1,652,881	1,697,348	1,741,815	1,786,282

**MODERATE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	49	97	146	195	243	290	336	383	429	475	519	563	607	651	695	736	778	819	861	902
Future Commercial	0	0	31,405	62,810	94,215	125,620	157,025	178,202	199,378	220,555	241,731	262,908	287,340	311,772	336,204	360,636	385,068	410,298	435,528	460,758	485,989	511,219

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 65	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Induced average daily boardings from all DU	0	0	32	63	95	126	158	188	218	249	279	309	338	366	395	423	452	479	506	533	560	587
Induced average daily boardings from all Commercial	0	0	63	126	189	251	314	376	437	497	558	619	675	732	789	846	903	957	1,011	1,065	1,119	1,173
Total average weekday boardings	3,000	3,000	3,063	3,189	3,283	3,378	3,472	3,545	3,617	3,690	3,762	3,835	3,912	3,990	4,067	4,144	4,222	4,299	4,377	4,454	4,532	4,609
Total average weekend day boardings	900	900	928	957	985	1,013	1,042	1,063	1,085	1,107	1,129	1,150	1,174	1,197	1,220	1,243	1,267	1,290	1,313	1,336	1,359	1,383
Estimated average annual boardings	861,900	861,900	889,030	916,161	943,291	970,422	997,552	1,018,393	1,039,233	1,060,074	1,080,914	1,101,755	1,123,989	1,146,223	1,168,456	1,190,690	1,212,924	1,235,175	1,257,425	1,279,676	1,301,926	1,324,177

**CONSERVATIVE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	32	65	97	130	162	193	224	255	286	317	346	375	405	434	463	491	519	546	574	602
Future Commercial	0	0	20,937	41,873	62,810	83,747	104,683	118,801	132,919	147,037	161,154	175,272	191,560	207,848	224,136	240,424	256,712	273,532	290,352	307,172	323,992	340,812

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 65	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Induced average daily boardings from all DU	0	0	21	42	63	84	105	126	146	166	186	206	225	244	263	282	301	319	337	355	373	391
Induced average daily boardings from all Commercial	0	0	42	84	126	167	209	238	266	294	322	351	383	416	448	481	513	547	581	614	648	682
Total average weekday boardings	3,000	3,000	3,063	3,126	3,189	3,252	3,315	3,378	3,441	3,504	3,567	3,630	3,693	3,756	3,819	3,882	3,945	4,008	4,071	4,134	4,197	4,260
Total average weekend day boardings	900	900	919	938	957	976	994	1,009	1,023	1,038	1,052	1,067	1,082	1,098	1,113	1,129	1,144	1,160	1,175	1,191	1,206	1,222
Estimated average annual boardings	861,900	861,900	879,987	898,074	916,161	934,248	952,335	966,229	980,122	994,016	1,007,910	1,021,803	1,036,628	1,051,448	1,066,271	1,081,094	1,095,916	1,110,750	1,125,583	1,140,417	1,155,251	1,170,084

Source: Fehr & Peers

**Table 11. Ridership - Alignment Section B, Girard to San Mateo**

**AGGRESSIVE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	58	117	175	234	292	348	404	460	516	572	624	677	730	783	835	885	935	985	1035	1085
Future Commercial	0	0	30,093	60,187	90,280	120,374	150,467	170,759	191,051	211,344	231,636	251,928	275,339	298,751	322,162	345,574	368,985	393,162	417,338	441,515	465,692	489,868

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 66	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Induced average daily boardings from all DU	0	0	38	76	114	152	190	228	263	299	335	372	406	440	474	509	543	575	608	640	673	705
Induced average daily boardings from all Commercial	0	0	60	120	181	241	301	342	382	423	463	504	551	598	644	691	738	786	835	883	931	980
Total average weekday boardings	1,800	1,800	1,838	1,996	2,095	2,193	2,291	2,368	2,445	2,522	2,599	2,675	2,757	2,838	2,919	3,000	3,081	3,162	3,243	3,323	3,404	3,485
Total average weekend day boardings	540	540	569	599	628	658	687	710	733	756	780	803	827	851	876	900	924	949	973	997	1,021	1,045
Estimated average annual boardings	517,140	517,140	545,354	573,568	601,783	629,997	658,211	680,298	702,384	724,470	746,556	768,643	791,948	815,253	838,558	861,863	885,168	908,381	931,594	954,807	978,020	1,001,233

**MODERATE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	29	58	88	117	146	174	202	230	258	286	312	339	365	391	418	443	468	493	518	542
Future Commercial	0	0	15,047	30,093	45,140	60,187	75,233	85,380	95,526	105,672	115,818	125,964	137,670	149,375	161,081	172,787	184,493	196,581	208,669	220,758	232,846	244,934

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 66	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Induced average daily boardings from all DU	0	0	19	38	57	76	95	113	131	149	168	186	203	220	237	254	272	289	304	320	336	353
Induced average daily boardings from all Commercial	0	0	30	60	90	120	150	171	191	211	232	252	275	299	322	346	369	393	417	442	466	490
Total average weekday boardings	1,800	1,800	1,849	1,898	1,947	1,996	2,046	2,084	2,122	2,161	2,199	2,238	2,278	2,319	2,359	2,400	2,440	2,481	2,521	2,562	2,602	2,642
Total average weekend day boardings	540	540	555	569	584	599	614	625	637	648	660	671	683	696	708	720	732	744	756	769	781	793
Estimated average annual boardings	517,140	517,140	531,247	545,354	559,461	573,568	587,676	598,719	609,762	620,805	631,848	642,891	654,544	666,196	677,849	689,501	701,154	712,761	724,367	735,974	747,580	759,187

**CONSERVATIVE STREETCAR LINE CONSTRUCTION & REDEVELOPMENT**

**1. Induction calculations**

daily average boarding rate per DU*	0.65
daily average boarding rate per sf of commercial*	0.002

**2. Land Use Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Future DU	0	0	19	39	58	78	97	116	135	153	172	191	208	226	243	261	278	295	312	328	345	362
Future Commercial	0	0	10,031	20,062	30,093	40,125	50,156	56,920	63,684	70,448	77,212	83,976	91,780	99,584	107,387	115,191	122,995	131,054	139,113	147,172	155,231	163,289

**3. Induced Ridership Projections**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ridership from 66	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Induced average daily boardings from all DU	0	0	13	25	38	51	63	75	88	100	112	124	135	147	158	170	181	192	203	213	224	235
Induced average daily boardings from all Commercial	0	0	20	40	60	80	100	114	127	141	154	168	184	199	215	230	246	262	278	294	310	327
Total average weekday boardings	1,800	1,800	1,833	1,865	1,898	1,931	1,964	1,989	2,015	2,041	2,066	2,092	2,119	2,146	2,173	2,200	2,227	2,254	2,281	2,308	2,335	2,362
Total average weekend day boardings	540	540	550	560	569	579	589	597	604	612	620	628	636	644	652	660	668	676	684	692	700	708
Estimated average annual boardings	517,140	517,140	526,545	535,949	545,354	554,759	564,164	571,526	578,888	586,250	593,612	600,974	608,743	616,511	624,279	632,048	639,816	647,554	655,291	663,029	670,767	678,504

Source: Fehr & Peers

## E. Initial Cost and Ridership Analysis

[Insert memo here.]

## F. Land Use Benefits

**Table 12. Nationwide Demand for Urban Residential Types**

Unit Type	Preference
<b>Attached</b>	
Apartments	14%
Condos, Coops	9%
Townhouses	15%
<b>Total</b>	<b>38%</b>
<b>Detached</b>	
Small Lot ( < 7,000 sf )	37%
Large Lot ( > 7,000 sf )	25%
<b>Total</b>	<b>62%</b>
<b>Grand Total</b>	<b>100%</b>

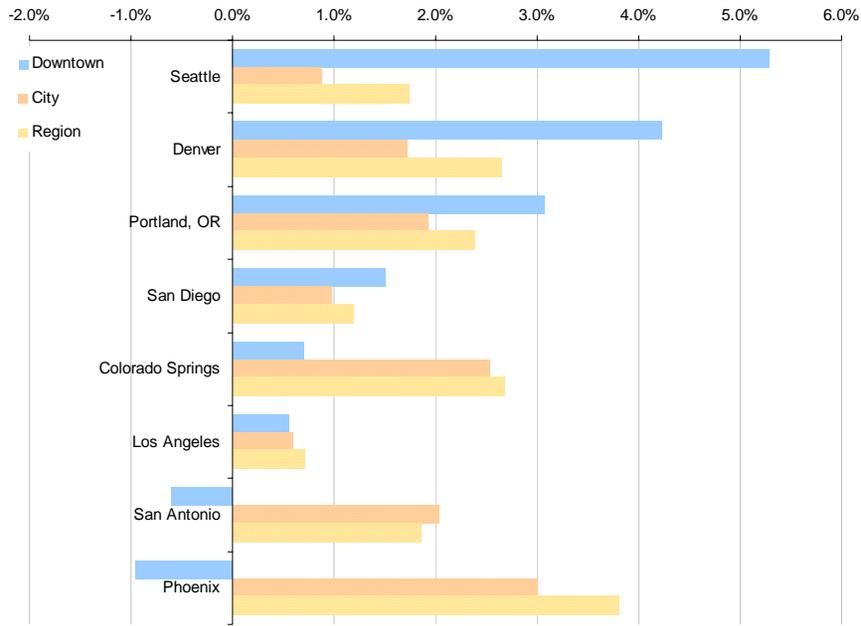
Source: The Metropolitan Institute at Virginia Tech

**Table 13. Albuquerque Demand for Urban Residential Types**

<b>Regional Population Growth, 2010 - 2030</b>	<b>251,730</b>
<b>Estimated Demand</b>	
Condo	5%
Townhome	10%
Walkable Neighborhood (between 33 and 45 percent)	38%
<b>Market Size</b>	
Condo	12,587
Townhome	25,173
Walkable Neighborhood	95,657

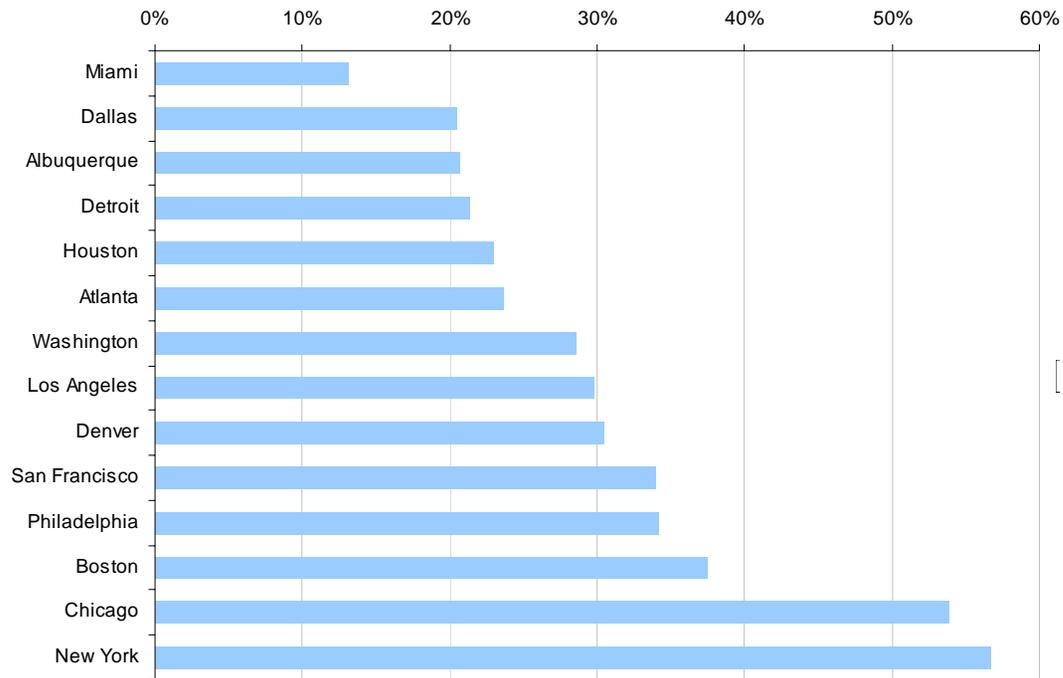
Source: Albuquerque Downtown Perception Study, The Metropolitan Institute at Virginia Tech

**Table 14. Population Growth in Downtowns, Cities, and Regions, 1990 – 2000**



Source: Brookings Institution, U.S. Census Bureau

**Table 15. Percent of Regional Office Space in Downtown**



Source: Metropolitan Institute at Virginia Tech

**Table 16. Residential Construction in Central Avenue Corridor, 2004 through 2009**

Includes projects under construction as of April 2008.

Segment	Date	Name	Units
<b>Downtown</b>			<b>185</b>
	<b>2005</b>		<b>71</b>
		Agave	11
		Gold Avenue Lofts	42
		Silver Street Lofts	18
		The Crossroads Building	0
	<b>2006</b>		<b>28</b>
		Sixth Street Lofts (Quicquel Project)	16
		Zona de Colores	12
	<b>2007</b>		<b>35</b>
		Banque Residences	35
	<b>2008</b>		<b>51</b>
		Anasazi	51
		Copper Square Office Condos	
		La Posada	0
		Plaza Maya Office Condos	
<b>EDO</b>			<b>247</b>
	<b>2005</b>		<b>13</b>
		12th and Mountain	4
		Huning Gardens	9
	<b>2006</b>		<b>180</b>
		Lofts at Albuquerque High	180
	<b>2008</b>		<b>54</b>
		Belvedere (aka Lofts at Albuquerque High)	54
<b>Nob Hill</b>			<b>28</b>
	<b>2008</b>		<b>28</b>
		The Place in Nob Hill	28
<b>Old Town</b>			<b>69</b>
	<b>2005</b>		<b>60</b>
		Sawmill Lofts	60
	<b>2008</b>		<b>9</b>
		Roma Condominiums	9
<b>West End</b>			<b>74</b>
	<b>2004</b>		<b>63</b>
		Huning Castle	63
	<b>2005</b>		<b>11</b>
		Silver Court	11
<b>Grand Total</b>			<b>603</b>

Source: Leland Consulting Group

**Table 17. 2004 MRCOG Regional Population and Employment Forecast**

(Basic Employment not shown)

<b>County</b>	<b>Population</b>	<b>Service Employment</b>	<b>Retail Employment</b>
BERNALILLO	602,413	182,186	66,571
SANDOVAL	102,462	14,215	4,629
SANTA FE	9,786	421	375
TORRANCE	17,695	2,381	648
VALENCIA	69,754	8,988	3,853
<b>Grand Total</b>	<b>802,110</b>	<b>208,191</b>	<b>76,076</b>

Source: MRCOG

**Table 18. 2030 MRCOG Regional Population and Employment Forecast**

<b>County</b>	<b>Population</b>	<b>Service Employment</b>	<b>Retail Employment</b>
BERNALILLO	759,000	264,564	80,162
SANDOVAL	197,182	33,672	9,779
SANTA FE	16,889	2,004	1,037
TORRANCE	27,479	4,028	831
VALENCIA	128,922	19,546	5,564
<b>Grand Total</b>	<b>1,129,472</b>	<b>323,814</b>	<b>97,373</b>

Source: MRCOG

**Table 19. 2004 to 2010 Adjustment**

	Population	Service Employment	Retail Employment
2004 (MRCOG)	32,489	39,245	7,015
Compound Annual Growth Rate	0.81%	0.25%	-0.53%
Growth Rate Based on	Streetcar Scenario	Base Case	Base Case
2010 (LCG Estimate)	34,097	39,831	6,794

Source: MRCOG, Leland Consulting Group

A 2010 estimate was used as a common starting point for both the Base Case and Streetcar Scenario, which then diverge between 2010 and 2030. The 2004 – 2010 population growth rate was based on the Streetcar Scenario because significantly greater population growth occurred in that period than projected in the Base Case. Conversely, actual 2004 – 2010 service and retail employment growth in the corridor appears to be relatively close to Base Case projections, thus the Base Case was used to establish the 2010 employment estimate.

**Table 20. 2010 – 2030 Growth Scenarios Overview**

**Streetcar Scenario**

	Population	Service Employment	Retail Employment
<b>Central Ave. Corridor</b>			
2004	32,489	39,245	7,015
2010	34,097	39,831	6,794
2030	40,591	45,860	8,764
Growth 2010 - 2030	6,495	6,029	1,970
<b>Region</b>			
2004	802,110	208,191	76,076
2010	877,742	248,452	83,492
2030	1,129,472	323,814	97,373
Growth 2010 - 2030	251,730	75,362	13,881
<b>Corridor Capture Rate</b>			
2004	4.1%	18.9%	9.2%
2010	3.9%	16.0%	8.1%
2030	3.6%	14.2%	9.2%
Growth 2010 - 2030	2.6%	8.0%	14.2%
<b>Annual Growth Rates</b>			
Central Ave. Corridor	0.9%	0.7%	0.9%

Source: Leland Consulting Group, MRCOG

**Base Case**

	Population	Service Employment	Retail Employment
<b>Central Ave. Corridor</b>			
2004	32,489	39,245	7,015
2010	34,097	39,831	6,794
2030	35,663	40,929	6,381
Growth 2010 - 2030	1,566	1,098	-413
<b>Region</b>			
2004	802,110	208,191	76,076
2010	877,742	248,452	83,492
2030	1,129,472	323,814	97,373
Growth 2010 - 2030	251,730	75,362	13,881
<b>Corridor Capture Rate</b>			
2004	4.1%	18.9%	9.2%
2010	3.9%	16.0%	8.1%
2030	3.2%	12.6%	6.6%
Growth 2010 - 2030	0.6%	1.5%	-3.0%
<b>Annual Growth Rates</b>			
Central Ave. Corridor	0.2%	0.1%	-0.3%

**Table 21. Population and Employment Growth in the Central Corridor by Five Year Increment**

	2004	2010	2015	2020	2025	2030
<b>Base Case</b>						
Population	32,489	34,097	34,519	34,922	35,302	35,663
Households	17,754	18,632	18,863	19,083	19,291	19,488
Total Employment	39,245	46,625	46,835	46,977	47,140	47,309
Service Employment	7,015	39,831	40,168	40,396	40,658	40,929
Retail Employment	46,260	6,794	6,667	6,581	6,483	6,381
<b>Streetcar Scenario</b>						
Population	32,489	34,097	35,847	37,518	39,097	40,591
Households	17,754	18,632	19,589	20,502	21,365	22,181
Total Employment	46,260	46,625	49,082	50,739	52,650	54,624
Service Employment	39,245	39,831	41,683	42,932	44,372	45,860
Retail Employment	7,015	6,794	7,399	7,807	8,278	8,764

Source: Leland Consulting Group

**Table 22. Built Units Conversion Rates**

	Population	Service Employment	Retail Employment
Household Size (persons/HH) <sup>1</sup>	1.83	-	-
Area (sf/employee)	1,000	225	300
Value (\$/sf)	\$175	\$225	\$225

Source: Leland Consulting Group

1. ESRI Business Analyst

**Table 23. Streetcar Scenario Built Area and Development Value**

	Population	Service Employment	Retail Employment
<b>Growth, 2010 - 2030</b>	6,495	6,029	1,970
<b>Dwelling Units (HHs)</b>	3,549	-	-
<b>Area (sf)</b>			
By Use	3,549,009	1,356,507	591,060
Total	5,496,576		
<b>Investment Value</b>			
By Use	\$621,076,570	\$305,214,168	\$132,988,502
Total	\$1,059,279,241		

Source: Leland Consulting Group

**Table 24. Cumulative Household Demand by Alignment Section**

Section	Market Area	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
A	West Side		16	33	49	66	82	98	113	129	145	160	175	190	205	219	234	248	262	276	290	304
A	Old Town		19	38	57	77	96	114	132	150	169	187	204	221	239	256	273	290	306	322	339	355
B	Downtown		33	66	98	131	164	195	227	258	289	321	350	380	409	439	468	496	524	552	580	608
B	EDO		32	65	97	129	161	192	223	254	284	315	344	373	402	432	461	488	516	543	571	598
B	UNM		32	65	97	129	161	192	223	254	284	315	344	373	402	432	461	488	516	543	571	598
C	Nob Hill		33	67	100	133	167	199	230	262	294	326	356	386	416	446	476	505	533	562	590	619
C	San Mateo		25	50	75	101	126	150	174	198	222	246	268	291	314	336	359	381	402	424	445	466
<b>Total</b>	<b>Total</b>		<b>191</b>	<b>383</b>	<b>574</b>	<b>765</b>	<b>957</b>	<b>1,139</b>	<b>1,322</b>	<b>1,504</b>	<b>1,687</b>	<b>1,870</b>	<b>2,042</b>	<b>2,215</b>	<b>2,387</b>	<b>2,560</b>	<b>2,733</b>	<b>2,896</b>	<b>3,059</b>	<b>3,222</b>	<b>3,386</b>	<b>3,549</b>
<b>Section</b>																						
A - West			36	71	107	142	178	212	245	279	313	347	379	411	443	475	507	538	568	598	629	659
B - Central			97	195	292	389	486	579	672	765	858	951	1,039	1,126	1,214	1,302	1,390	1,473	1,556	1,639	1,722	1,805
C - East			58	117	175	234	292	348	404	460	516	572	624	677	730	783	835	885	935	985	1,035	1,085
<b>Total</b>			<b>191</b>	<b>383</b>	<b>574</b>	<b>765</b>	<b>957</b>	<b>1,139</b>	<b>1,322</b>	<b>1,504</b>	<b>1,687</b>	<b>1,870</b>	<b>2,042</b>	<b>2,215</b>	<b>2,387</b>	<b>2,560</b>	<b>2,733</b>	<b>2,896</b>	<b>3,059</b>	<b>3,222</b>	<b>3,386</b>	<b>3,549</b>

Source: Leland Consulting Group

**Table 25. Cumulative Employment Area (square feet) by Alignment Section**

Section	Market Area	2,010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
A	West Side		14,821	29,643	44,464	59,285	74,107	84,101	94,095	104,089	114,083	124,077	135,608	147,138	158,669	170,199	181,729	193,637	205,544	217,451	229,358	241,266
A	Old Town		11,917	23,835	35,752	47,670	59,587	67,624	75,660	83,696	91,732	99,768	109,039	118,310	127,582	136,853	146,125	155,699	165,273	174,847	184,422	193,996
B	Downtown		23,584	47,168	70,752	94,336	117,920	133,823	149,726	165,629	181,532	197,435	215,782	234,130	252,477	270,825	289,172	308,119	327,066	346,013	364,960	383,907
B	EDO		16,161	32,321	48,482	64,643	80,803	91,700	102,598	113,495	124,392	135,289	147,862	160,434	173,006	185,579	198,151	211,134	224,118	237,101	250,084	263,067
B	UNM		23,065	46,131	69,196	92,261	115,327	130,880	146,433	161,986	177,539	193,092	211,036	228,980	246,924	264,868	282,812	301,342	319,873	338,403	356,933	375,463
C	Nob Hill		14,711	29,422	44,132	58,843	73,554	83,474	93,393	103,313	113,233	123,152	134,597	146,041	157,486	168,930	180,374	192,193	204,011	215,830	227,648	239,467
C	San Mateo		15,383	30,765	46,148	61,530	76,913	87,285	97,658	108,031	118,403	128,776	140,743	152,710	164,677	176,644	188,611	200,969	213,327	225,685	238,043	250,402
<b>Total</b>	<b>Total</b>		<b>119,642</b>	<b>239,284</b>	<b>358,927</b>	<b>478,569</b>	<b>598,211</b>	<b>678,887</b>	<b>759,562</b>	<b>840,238</b>	<b>920,913</b>	<b>1,001,589</b>	<b>1,094,666</b>	<b>1,187,743</b>	<b>1,280,820</b>	<b>1,373,897</b>	<b>1,466,975</b>	<b>1,563,093</b>	<b>1,659,212</b>	<b>1,755,330</b>	<b>1,851,449</b>	<b>1,947,567</b>
<b>Section</b>																						
A - West			26,739	53,478	80,217	106,955	133,694	151,724	169,755	187,785	205,815	223,845	244,647	265,449	286,250	307,052	327,854	349,336	370,817	392,299	413,780	435,262
B - Central			62,810	125,620	188,430	251,240	314,050	356,403	398,756	441,110	483,463	525,816	574,680	623,544	672,408	721,271	770,135	820,596	871,056	921,517	971,977	1,022,438
C - East			30,093	60,187	90,280	120,374	150,467	170,759	191,051	211,344	231,636	251,928	275,339	298,751	322,162	345,574	368,985	393,162	417,338	441,515	465,692	489,868
<b>Total</b>			<b>119,642</b>	<b>239,284</b>	<b>358,927</b>	<b>478,569</b>	<b>598,211</b>	<b>678,887</b>	<b>759,562</b>	<b>840,238</b>	<b>920,913</b>	<b>1,001,589</b>	<b>1,094,666</b>	<b>1,187,743</b>	<b>1,280,820</b>	<b>1,373,897</b>	<b>1,466,975</b>	<b>1,563,093</b>	<b>1,659,212</b>	<b>1,755,330</b>	<b>1,851,449</b>	<b>1,947,567</b>

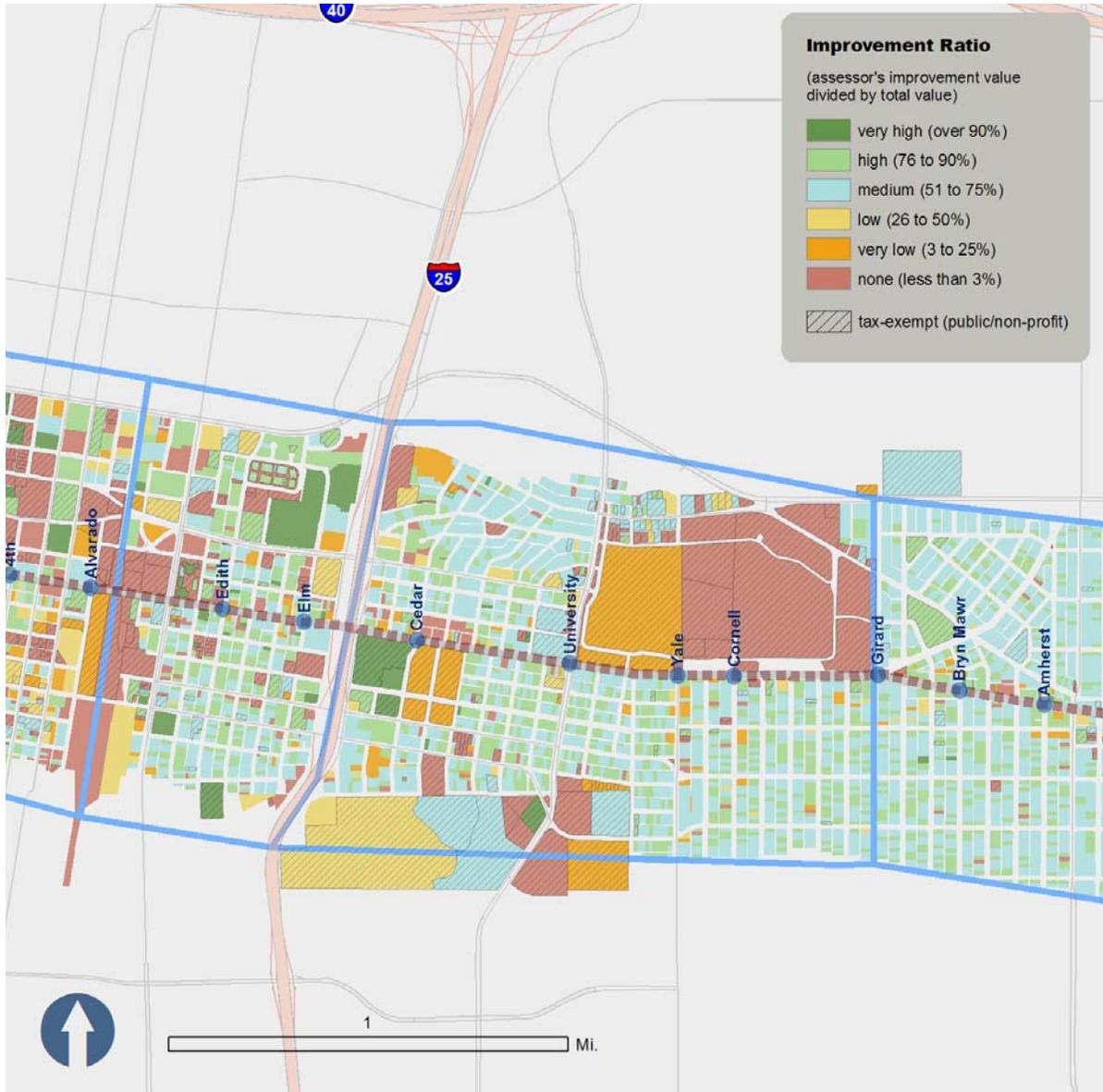
Source: Leland Consulting Group

Figure 1. Improvement Ratios, Alignment Section A



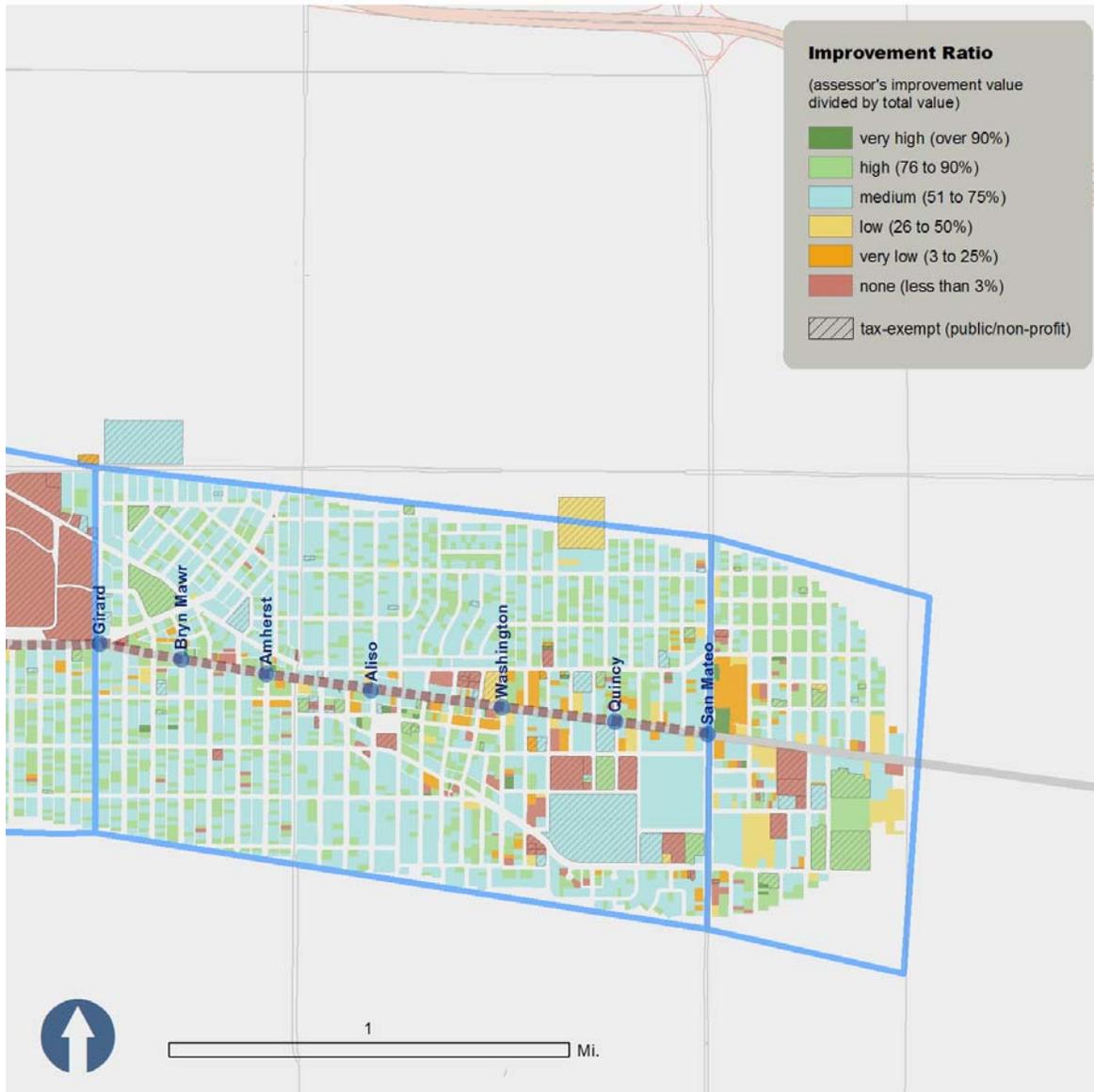
Source: Leland Consulting Group

Figure 2. Improvement Ratios, Alignment Section B



Source: Leland Consulting Group

Figure 3. Improvement Ratios, Alignment Section C



Source: Leland Consulting Group

## G. Funding Analysis

### Quarter Cent Cash Flows and Allocations

**Table 26. Quarter Cent Revenues**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total 1/4 Cent Receipts	\$0	\$0	\$39,675,608	\$41,064,254	\$42,501,503	\$43,989,056	\$45,528,672	\$47,122,176	\$48,771,452	\$50,478,453	\$52,245,199	\$54,073,781
Total 10 Year NPV	\$324,703,164											

Source: Leland Consulting Group, City of Albuquerque

**Table 27. Quarter Cent Revenue and Expenditure Assumptions**

Assumptions	
Inflation	3.0%
Debt Coverage Ratio	1.2
Farebox Recovery Ratio	15%

Source: Leland Consulting Group

**Table 28. Quarter Cent Revenues and Expenditures - B Alignment Only**

Quarter Cent with TIDD													
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Revenue Stream</b>													
Total	8.5%			\$3,372,427	\$3,490,462	\$3,612,628	\$3,739,070	\$3,869,937	\$4,005,385	\$4,145,573	\$4,290,669	\$4,440,842	\$4,596,271
To Capital	89.5%			\$3,018,322	\$3,123,963	\$3,233,302	\$3,346,467	\$3,463,594	\$3,584,820	\$3,710,288	\$3,840,148	\$3,974,554	\$4,113,663
To Operating (1)	10.5%			\$354,105	\$366,498	\$379,326	\$392,602	\$406,343	\$420,565	\$435,285	\$450,520	\$466,288	\$482,608
<b>Capital</b>													
Available for Debt Service				\$2,624,628	\$2,716,490	\$2,811,567	\$2,909,972	\$3,011,821	\$3,117,234	\$3,226,338	\$3,339,259	\$3,456,133	\$3,577,098
Bond Potential		\$23,618,393											
Debt Reserve to Operating (2)				\$393,694	\$407,473	\$421,735	\$436,496	\$451,773	\$467,585	\$483,951	\$500,889	\$518,420	\$536,565
<b>Operating</b>													
Expenses		\$1,219,400	\$1,255,982	\$1,293,661	\$1,332,471	\$1,372,445	\$1,413,619	\$1,456,027	\$1,499,708	\$1,544,699	\$1,591,040	\$1,638,772	\$1,687,935
Income													
(1) Revenue Stream				\$354,105	\$366,498	\$379,326	\$392,602	\$406,343	\$420,565	\$435,285	\$450,520	\$466,288	\$482,608
(2) Debt Reserve				\$747,799	\$773,972	\$801,061	\$829,098	\$858,116	\$888,151	\$919,236	\$951,409	\$984,708	\$1,019,173
(3) Farebox	15%			\$194,049	\$199,871	\$205,867	\$212,043	\$218,404	\$224,956	\$231,705	\$238,656	\$245,816	\$253,190
<b>Operating Fund Balance</b>				\$2,292	\$10,161	\$23,970	\$44,094	\$70,931	\$104,895	\$146,421	\$195,966	\$254,007	\$321,044
<b>2020 Balance</b>		\$321,044											
<b>Quarter Cent, No TIDD</b>													
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Revenue Stream</b>													
Total	17.5%			\$6,943,231	\$7,186,244	\$7,437,763	\$7,698,085	\$7,967,518	\$8,246,381	\$8,535,004	\$8,833,729	\$9,142,910	\$9,462,912
To Capital	98.5%			\$6,839,083	\$7,078,451	\$7,326,197	\$7,582,614	\$7,848,005	\$8,122,685	\$8,406,979	\$8,701,223	\$9,005,766	\$9,320,968
To Operating (1)	1.5%			\$104,148	\$107,794	\$111,566	\$115,471	\$119,513	\$123,696	\$128,025	\$132,506	\$137,144	\$141,944
<b>Capital</b>													
Available for Debt Service				\$5,947,029	\$6,155,175	\$6,370,606	\$6,593,577	\$6,824,352	\$7,063,204	\$7,310,417	\$7,566,281	\$7,831,101	\$8,105,190
Bond Potential		\$53,515,879											
Debt Reserve to Operating (2)				\$892,054	\$923,276	\$955,591	\$989,037	\$1,023,653	\$1,059,481	\$1,096,562	\$1,134,942	\$1,174,665	\$1,215,778
<b>Operating</b>													
Expenses		\$1,219,400	\$1,255,982	\$1,293,661	\$1,332,471	\$1,372,445	\$1,413,619	\$1,456,027	\$1,499,708	\$1,544,699	\$1,591,040	\$1,638,772	\$1,687,935
Income													
(1) Revenue Stream				\$104,148	\$107,794	\$111,566	\$115,471	\$119,513	\$123,696	\$128,025	\$132,506	\$137,144	\$141,944
(2) Debt Reserve				\$996,203	\$1,031,070	\$1,067,157	\$1,104,508	\$1,143,166	\$1,183,176	\$1,224,588	\$1,267,448	\$1,311,809	\$1,357,722
(3) Farebox	15%			\$194,049	\$199,871	\$205,867	\$212,043	\$218,404	\$224,956	\$231,705	\$238,656	\$245,816	\$253,190
<b>Operating Fund Balance</b>				\$739	\$7,002	\$19,147	\$37,550	\$62,605	\$94,725	\$134,343	\$181,913	\$237,910	\$302,831
<b>2020 Balance</b>		\$302,831											

Source: Leland Consulting Group

**Table 29. Quarter Cent Revenues and Expenditures – Recommended Alignment (B and C)**

Quarter Cent with TIDD													
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Revenue Stream</b>													
Total	12.0%			\$4,761,073	\$4,927,710	\$5,100,180	\$5,278,687	\$5,463,441	\$5,654,661	\$5,852,574	\$6,057,414	\$6,269,424	\$6,488,854
To Capital	82.0%			\$3,904,080	\$4,040,723	\$4,182,148	\$4,328,523	\$4,480,021	\$4,636,822	\$4,799,111	\$4,967,080	\$5,140,928	\$5,320,860
To Operating (1)	18.0%			\$856,993	\$886,988	\$918,032	\$950,164	\$983,419	\$1,017,839	\$1,053,463	\$1,090,335	\$1,128,496	\$1,167,994
<b>Capital</b>													
Available for Debt Service				\$3,394,852	\$3,513,672	\$3,636,650	\$3,763,933	\$3,895,671	\$4,032,019	\$4,173,140	\$4,319,200	\$4,470,372	\$4,626,835
Bond Potential		\$30,549,456											
Debt Reserve to Operating (2)				\$509,228	\$527,051	\$545,498	\$564,590	\$584,351	\$604,803	\$625,971	\$647,880	\$670,556	\$694,025
<b>Operating</b>													
Expenses		\$2,438,800	\$2,511,964	\$2,587,323	\$2,664,943	\$2,744,891	\$2,827,238	\$2,912,055	\$2,999,416	\$3,089,399	\$3,182,081	\$3,277,543	\$3,375,870
Income													
(1) Revenue Stream				\$856,993	\$886,988	\$918,032	\$950,164	\$983,419	\$1,017,839	\$1,053,463	\$1,090,335	\$1,128,496	\$1,167,994
(2) Debt Reserve				\$1,366,221	\$1,414,039	\$1,463,530	\$1,514,754	\$1,567,770	\$1,622,642	\$1,679,434	\$1,738,215	\$1,799,052	\$1,862,019
(3) Farebox	15%			\$388,098	\$399,741	\$411,734	\$424,086	\$436,808	\$449,912	\$463,410	\$477,312	\$491,631	\$506,380
<b>Operating Fund Balance</b>				\$23,990	\$59,815	\$108,220	\$169,985	\$245,928	\$336,905	\$443,814	\$567,594	\$709,231	\$869,754
<b>2020 Balance</b>		\$869,754											
Revenue for Other Projects				\$34,914,535	\$36,136,544	\$37,401,323	\$38,710,369	\$40,065,231	\$41,467,515	\$42,918,878	\$44,421,039	\$45,975,775	\$47,584,927
<b>Quarter Cent, No TIDD</b>													
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Revenue Stream</b>													
Total	28.0%			\$11,109,170	\$11,497,991	\$11,900,421	\$12,316,936	\$12,748,028	\$13,194,209	\$13,656,007	\$14,133,967	\$14,628,656	\$15,140,659
To Capital	100.0%			\$11,109,170	\$11,497,991	\$11,900,421	\$12,316,936	\$12,748,028	\$13,194,209	\$13,656,007	\$14,133,967	\$14,628,656	\$15,140,659
To Operating (1)	0.0%			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Capital</b>													
Available for Debt Service	24.3%			\$9,660,148	\$9,998,253	\$10,348,192	\$10,710,379	\$11,085,242	\$11,473,225	\$11,874,788	\$12,290,406	\$12,720,570	\$13,165,790
Bond Potential		\$86,929,347											
Debt Reserve to Operating (2)				\$1,449,022	\$1,499,738	\$1,552,229	\$1,606,557	\$1,662,786	\$1,720,984	\$1,781,218	\$1,843,561	\$1,908,086	\$1,974,869
<b>Operating</b>													
Expenses		\$1,219,400	\$1,255,982	\$1,293,661	\$1,332,471	\$1,372,445	\$1,413,619	\$1,456,027	\$1,499,708	\$1,544,699	\$1,591,040	\$1,638,772	\$1,687,935
Income													
(1) Revenue Stream				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(2) Debt Reserve				\$1,449,022	\$1,499,738	\$1,552,229	\$1,606,557	\$1,662,786	\$1,720,984	\$1,781,218	\$1,843,561	\$1,908,086	\$1,974,869
(3) Farebox	15%			\$194,049	\$199,871	\$205,867	\$212,043	\$218,404	\$224,956	\$231,705	\$238,656	\$245,816	\$253,190
<b>Operating Fund Balance</b>				\$349,410	\$716,547	\$1,102,198	\$1,507,178	\$1,932,341	\$2,378,573	\$2,846,797	\$3,337,973	\$3,853,103	\$4,393,227
<b>2020 Balance</b>		\$4,393,227											

Source: Leland Consulting Group

**Table 30. Quarter Cent Revenues and Expenditures – Full Alignment**

Quarter Cent with TIDD													
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Revenue Stream</b>													
Total	18.5%			\$7,339,987	\$7,596,887	\$7,862,778	\$8,137,975	\$8,422,804	\$8,717,603	\$9,022,719	\$9,338,514	\$9,665,362	\$10,003,649
To Capital	77.5%			\$5,688,490	\$5,887,587	\$6,093,653	\$6,306,931	\$6,527,673	\$6,756,142	\$6,992,607	\$7,237,348	\$7,490,655	\$7,752,828
To Operating (1)	22.5%			\$1,651,497	\$1,709,300	\$1,769,125	\$1,831,044	\$1,895,131	\$1,961,461	\$2,030,112	\$2,101,166	\$2,174,706	\$2,250,821
<b>Capital</b>													
Available for Debt Service				\$4,946,513	\$5,119,641	\$5,298,829	\$5,484,288	\$5,676,238	\$5,874,906	\$6,080,528	\$6,293,346	\$6,513,613	\$6,741,590
Bond Potential		\$44,512,483											
Debt Reserve to Operating (2)				\$741,977	\$767,946	\$794,824	\$822,643	\$851,436	\$881,236	\$912,079	\$944,002	\$977,042	\$1,011,238
<b>Operating</b>													
Expenses		\$4,514,380	\$4,649,811	\$4,789,306	\$4,932,985	\$5,080,974	\$5,233,404	\$5,390,406	\$5,552,118	\$5,718,682	\$5,890,242	\$6,066,949	\$6,248,958
Income													
(1) Revenue Stream				\$1,651,497	\$1,709,300	\$1,769,125	\$1,831,044	\$1,895,131	\$1,961,461	\$2,030,112	\$2,101,166	\$2,174,706	\$2,250,821
(2) Debt Reserve				\$2,393,474	\$2,477,246	\$2,563,949	\$2,653,688	\$2,746,567	\$2,842,696	\$2,942,191	\$3,045,168	\$3,151,748	\$3,262,060
(3) Farebox	15%			\$718,396	\$739,948	\$762,146	\$785,011	\$808,561	\$832,818	\$857,802	\$883,536	\$910,042	\$937,344
<b>Operating Fund Balance</b>				(\$25,939)	(\$32,430)	(\$18,184)	\$18,155	\$78,007	\$162,864	\$274,287	\$413,915	\$583,463	\$784,730
<b>2020 Balance</b>		\$784,730											
<b>Quarter Cent, No TIDD</b>													
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Revenue Stream</b>	47.0%			\$18,647,536	\$19,300,199	\$19,975,706	\$20,674,856	\$21,398,476	\$22,147,423	\$22,922,582	\$23,724,873	\$24,555,244	\$25,414,677
Total	100.0%			\$18,647,536	\$19,300,199	\$19,975,706	\$20,674,856	\$21,398,476	\$22,147,423	\$22,922,582	\$23,724,873	\$24,555,244	\$25,414,677
To Capital	0.0%			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
To Operating (1)													
<b>Capital</b>				\$16,215,248	\$16,782,782	\$17,370,179	\$17,978,136	\$18,607,370	\$19,258,628	\$19,932,680	\$20,630,324	\$21,352,386	\$22,099,719
Available for Debt Service		\$145,917,119											
Bond Potential				\$2,432,287	\$2,517,417	\$2,605,527	\$2,696,720	\$2,791,106	\$2,888,794	\$2,989,902	\$3,094,549	\$3,202,858	\$3,314,958
Debt Reserve to Operating (2)													
<b>Operating</b>													
Expenses		\$1,219,400	\$1,255,982	\$1,293,661	\$1,332,471	\$1,372,445	\$1,413,619	\$1,456,027	\$1,499,708	\$1,544,699	\$1,591,040	\$1,638,772	\$1,687,935
Income													
(1) Revenue Stream				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(2) Debt Reserve				\$2,432,287	\$2,517,417	\$2,605,527	\$2,696,720	\$2,791,106	\$2,888,794	\$2,989,902	\$3,094,549	\$3,202,858	\$3,314,958
(3) Farebox	15%			\$194,049	\$199,871	\$205,867	\$212,043	\$218,404	\$224,956	\$231,705	\$238,656	\$245,816	\$253,190
<b>Operating Fund Balance</b>				\$1,332,675	\$2,717,492	\$4,156,440	\$5,651,584	\$7,205,067	\$8,819,109	\$10,496,017	\$12,238,181	\$14,048,083	\$15,928,296
<b>2020 Balance</b>		\$15,928,296											

Source: Leland Consulting Group

## Tax Increment Development District

**Table 31. TIDD Revenues, 2009 - 2020**

Revenue Source	Year											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		1	2	3	4	5	6	7	8	9	10	11
<b>Gross Receipts Tax</b>												
<b>From Employment</b>												
Service Employment	\$0	\$2,347,639	\$4,869,551	\$7,485,834	\$10,199,880	\$13,015,199	\$15,935,427	\$18,931,474	\$22,038,111	\$25,259,276	\$28,599,045	\$32,061,635
Retail Employment	\$0	\$1,154,329	\$2,395,956	\$3,684,322	\$5,021,115	\$6,408,081	\$7,847,026	\$9,323,162	\$10,854,084	\$12,441,752	\$14,088,192	\$15,795,502
Basic Employment	\$0	\$590,445	\$1,252,977	\$1,945,183	\$2,668,248	\$3,423,399	\$4,211,912	\$5,017,908	\$5,858,926	\$6,736,344	\$7,651,587	\$8,606,135
<b>Employment Subtotal</b>	<b>\$0</b>	<b>\$4,092,414</b>	<b>\$8,518,484</b>	<b>\$13,115,340</b>	<b>\$17,889,243</b>	<b>\$22,846,679</b>	<b>\$27,994,364</b>	<b>\$33,272,543</b>	<b>\$38,751,121</b>	<b>\$44,437,371</b>	<b>\$50,338,824</b>	<b>\$56,463,273</b>
<b>Construction</b>	<b>\$0</b>	<b>\$2,283,850</b>	<b>\$2,740,003</b>	<b>\$2,822,203</b>	<b>\$2,906,869</b>	<b>\$2,994,075</b>	<b>\$3,083,897</b>	<b>\$3,032,120</b>	<b>\$3,123,084</b>	<b>\$3,216,776</b>	<b>\$3,313,279</b>	<b>\$3,412,678</b>
<b>Utilities</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Gross Receipts Tax Subtotal</b>	<b>\$0</b>	<b>\$6,376,263</b>	<b>\$11,258,487</b>	<b>\$15,937,542</b>	<b>\$20,796,111</b>	<b>\$25,840,754</b>	<b>\$31,078,262</b>	<b>\$36,304,663</b>	<b>\$41,874,205</b>	<b>\$47,654,148</b>	<b>\$53,652,103</b>	<b>\$59,875,951</b>
<b>Property Tax</b>												
Existing Property	\$0	\$359,020	\$728,811	\$1,109,696	\$1,502,007	\$1,906,088	\$2,322,291	\$2,750,980	\$3,192,530	\$3,647,326	\$4,115,766	\$4,598,259
New Property	\$0	\$7,174	\$14,563	\$22,174	\$30,014	\$38,088	\$46,405	\$54,971	\$63,794	\$72,882	\$82,243	\$91,884
<b>Property Tax Subtotal</b>	<b>\$0</b>	<b>\$366,194</b>	<b>\$743,375</b>	<b>\$1,131,870</b>	<b>\$1,532,021</b>	<b>\$1,944,176</b>	<b>\$2,368,696</b>	<b>\$2,805,951</b>	<b>\$3,256,324</b>	<b>\$3,720,208</b>	<b>\$4,198,009</b>	<b>\$4,690,144</b>
<b>Annual Revenues</b>												
<b>Total</b>	<b>\$0</b>	<b>\$6,742,458</b>	<b>\$12,001,862</b>	<b>\$17,069,413</b>	<b>\$22,328,132</b>	<b>\$27,784,930</b>	<b>\$33,446,957</b>	<b>\$39,110,614</b>	<b>\$45,130,529</b>	<b>\$51,374,356</b>	<b>\$57,850,112</b>	<b>\$64,566,094</b>
Debt Coverage Ratio		1.30										
<b>Available for Debt Service</b>	<b>\$0</b>	<b>\$5,186,506</b>	<b>\$9,232,201</b>	<b>\$13,130,317</b>	<b>\$17,175,486</b>	<b>\$21,373,023</b>	<b>\$25,728,429</b>	<b>\$30,085,088</b>	<b>\$34,715,791</b>	<b>\$39,518,735</b>	<b>\$44,500,086</b>	<b>\$49,666,226</b>

Source: Leland Consulting Group

No revenues from utilities construction were estimated.

**Table 32. TIDD Revenues, 2021 - 2030**

Revenue Source	Year								
	2021	2022	2023	2024	2025	2026	2027	2028	2029
	12	13	14	15	16	17	18	19	20
<b>Gross Receipts Tax</b>									
<b>From Employment</b>									
Service Employment	\$35,607,387	\$39,282,196	\$43,090,616	\$47,037,356	\$51,127,287	\$55,318,156	\$59,659,630	\$64,156,976	\$68,815,637
Retail Employment	\$17,543,524	\$19,355,493	\$21,233,671	\$23,180,401	\$25,198,105	\$27,265,304	\$29,407,138	\$31,626,224	\$33,925,269
Basic Employment	\$9,578,473	\$10,591,859	\$11,647,881	\$12,748,185	\$13,894,478	\$15,063,767	\$16,281,161	\$17,548,494	\$18,867,669
<b>Employment Subtotal</b>	<b>\$62,729,384</b>	<b>\$69,229,548</b>	<b>\$75,972,168</b>	<b>\$82,965,942</b>	<b>\$90,219,871</b>	<b>\$97,647,226</b>	<b>\$105,347,929</b>	<b>\$113,331,694</b>	<b>\$121,608,575</b>
<b>Construction</b>	<b>\$3,321,675</b>	<b>\$3,421,325</b>	<b>\$3,523,965</b>	<b>\$3,629,684</b>	<b>\$3,738,575</b>	<b>\$3,642,988</b>	<b>\$3,752,278</b>	<b>\$3,864,846</b>	<b>\$3,980,791</b>
<b>Utilities</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Gross Receipts Tax Subtotal</b>	<b>\$66,051,059</b>	<b>\$72,650,873</b>	<b>\$79,496,133</b>	<b>\$86,595,626</b>	<b>\$93,958,445</b>	<b>\$101,290,215</b>	<b>\$109,100,206</b>	<b>\$117,196,540</b>	<b>\$125,589,366</b>
<b>Property Tax</b>									
Existing Property	\$5,095,228	\$5,607,105	\$6,134,338	\$6,677,389	\$7,236,731	\$7,812,853	\$8,406,259	\$9,017,467	\$9,647,012
New Property	\$101,815	\$112,043	\$122,579	\$133,430	\$144,607	\$156,119	\$167,977	\$180,190	\$192,770
<b>Property Tax Subtotal</b>	<b>\$5,197,042</b>	<b>\$5,719,148</b>	<b>\$6,256,917</b>	<b>\$6,810,819</b>	<b>\$7,381,338</b>	<b>\$7,968,973</b>	<b>\$8,574,236</b>	<b>\$9,197,658</b>	<b>\$9,839,782</b>
<b>Annual Revenues</b>									
<b>Total</b>	<b>\$71,248,101</b>	<b>\$78,370,021</b>	<b>\$85,753,050</b>	<b>\$93,406,445</b>	<b>\$101,339,783</b>	<b>\$109,259,187</b>	<b>\$117,674,443</b>	<b>\$126,394,198</b>	<b>\$135,429,148</b>
Debt Coverage Ratio									
<b>Available for Debt Service</b>	<b>\$54,806,232</b>	<b>\$60,284,632</b>	<b>\$65,963,885</b>	<b>\$71,851,112</b>	<b>\$77,953,679</b>	<b>\$84,045,528</b>	<b>\$90,518,802</b>	<b>\$97,226,306</b>	<b>\$104,176,268</b>

Source: Leland Consulting Group

**Table 33. GRT Rate for TIDD (A)**

<b>Taxing Jurisdiction</b>	<b>Included in TIDD receipts?</b>	<b>Maximum Allowed</b>	<b>Currently Imposed</b>
<b>City of Albuquerque</b>	<b>Yes.</b>		
<b>State Shared</b>			
<b>Total</b>		<b>1.225%</b>	<b>1.225%</b>
<b>Municipal GRT</b>			
Public Safety			0.25%
Basic Services			0.00%
General Purposes			0.50%
Transportation			0.25%
Unknown			0.00%
<b>Total</b>		<b>1.50%</b>	<b>1.0000%</b>
<b>Municipal Infrastructure GRT</b>			
General Purposes		0.125%	0.063%
Economic Development		0.125%	0%
<b>Total</b>		<b>0.250%</b>	<b>0.063%</b>
<b>Municipal Environmental GRT</b>			
<b>Total</b>		<b>0.063%</b>	<b>0%</b>
<b>State Admin. (Collection) Fee</b>			<b>-0.0188%</b>
<b>City Total</b>		<b>3.0375%</b>	<b>2.2688%</b>
<b>Bernalillo County</b>	<b>No.<sup>1</sup></b>		<b>0.5625%</b>
<b>State of New Mexico</b>	<b>Possible.</b> Must be approved by State Board of Finance.		<b>3.7750%</b>

Source: Leland Consulting Group

**Table 34. GRT Rate for TIDD (B)**

Taxing Jurisdiction	Base TIDD Rate	TIDD Factor	Final TIDD Rate
City of Albuquerque	2.2688%	75%	1.7016%
Bernalillo County	0%	0%	0%
State of New Mexico	3.775%	75%	2.8313%

Source: Leland Consulting Group

**Table 35. Potential TIDD GRT Rates**

<b>A - With State GRT</b>	4.5328%
<b>C - With 1/2 State GRT</b>	3.1172%
<b>B - Without State GRT</b>	1.7016%

Source: Leland Consulting Group

Three separate GRT rates were developed for the TIDD, as shown above, to reflect the unknown of State participation. The revenue generation results of State participation are shown in the Summary Report.

**Table 36. Estimated Gross Receipts per Employee, 2006**

Employment Type	Notes	Estimated Employees	Taxable GR per Emp., 2006
<b>Service</b>			
<b>Total</b>			
<b>Sector Specific Employment</b>			
Educational services	UNM	14,000	\$19,090
Health Care	Primarily Presbyterian and Lovelace Hospitals	5,679	\$23,862
Public Administration	Includes City, County, State, and Federal	6,000	\$0
<b>Sector Specific Subtotal</b>		<b>25,679</b>	<b>\$15,685</b>
<b>All Non Sector Specific</b>		<b>12,995</b>	<b>\$59,738</b>
<b>Service Subtotal / Weighted Av.</b>		<b>38,674</b>	<b>\$30,487</b>
<b>Retail</b>	Blended retail and food svc.	<b>6,904</b>	<b>\$83,074</b>
<b>Basic</b>		<b>3,138</b>	<b>\$59,738</b>

Source: Leland Consulting Group

**Table 37. TIDD GRT Receipts and Increment, 2009 - 2020**

	Base	> Increment										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		1	2	3	4	5	6	7	8	9	10	11
<b>Gross Receipts in Corridor</b>												
Service Employment (Standard)	\$1,344,062,551	\$1,395,854,653	\$1,451,491,463	\$1,509,210,214	\$1,569,085,747	\$1,631,195,522	\$1,695,619,707	\$1,761,716,577	\$1,830,253,201	\$1,901,316,477	\$1,974,996,323	\$2,051,385,774
Retail Employment	\$654,953,926	\$680,419,996	\$707,811,968	\$736,235,080	\$765,726,547	\$796,324,892	\$828,069,983	\$860,635,539	\$894,409,766	\$929,435,874	\$965,758,581	\$1,003,424,157
Basic Employment	\$234,006,462	\$247,032,490	\$261,648,844	\$276,919,850	\$292,871,632	\$309,531,294	\$326,926,950	\$344,708,318	\$363,262,334	\$382,619,354	\$402,810,858	\$423,869,496
<b>Total</b>	<b>\$2,233,022,939</b>	<b>\$2,323,307,139</b>	<b>\$2,420,952,275</b>	<b>\$2,522,365,143</b>	<b>\$2,627,683,926</b>	<b>\$2,737,051,707</b>	<b>\$2,850,616,640</b>	<b>\$2,967,060,434</b>	<b>\$3,087,925,301</b>	<b>\$3,213,371,705</b>	<b>\$3,343,565,761</b>	<b>\$3,478,679,426</b>
<b>GR Increment</b>												
Service Employment (Standard)	\$0	\$51,792,102	\$107,428,912	\$165,147,663	\$225,023,196	\$287,132,971	\$351,557,156	\$417,654,026	\$486,190,650	\$557,253,926	\$630,933,772	\$707,323,223
Retail Employment	\$0	\$25,466,071	\$52,858,042	\$81,281,154	\$110,772,622	\$141,370,966	\$173,116,057	\$205,681,613	\$239,455,840	\$274,481,949	\$310,804,655	\$348,470,231
Basic Employment	\$0	\$13,026,029	\$27,642,382	\$42,913,388	\$58,865,171	\$75,524,832	\$92,920,488	\$110,701,856	\$129,255,872	\$148,612,892	\$168,804,396	\$189,863,034
<b>GR Taxes Captured by TIDD</b>												
Service Employment (Standard)		\$2,347,639	\$4,869,551	\$7,485,834	\$10,199,880	\$13,015,199	\$15,935,427	\$18,931,474	\$22,038,111	\$25,259,276	\$28,599,045	\$32,061,635
Retail Employment		\$1,154,329	\$2,395,956	\$3,684,322	\$5,021,115	\$6,408,081	\$7,847,026	\$9,323,162	\$10,854,084	\$12,441,752	\$14,088,192	\$15,795,502
Basic Employment		\$590,445	\$1,252,977	\$1,945,183	\$2,668,248	\$3,423,399	\$4,211,912	\$5,017,908	\$5,858,926	\$6,736,344	\$7,651,587	\$8,606,135
<b>Total</b>		<b>\$4,092,414</b>	<b>\$8,518,484</b>	<b>\$13,115,340</b>	<b>\$17,889,243</b>	<b>\$22,846,679</b>	<b>\$27,994,364</b>	<b>\$33,272,543</b>	<b>\$38,751,121</b>	<b>\$44,437,371</b>	<b>\$50,338,824</b>	<b>\$56,463,273</b>

Source: Leland Consulting Group

**Table 38. TIDD GRT Receipts and Increment, 2020 - 2030**

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	12	13	14	15	16	17	18	19	20	21
<b>Gross Receipts in Corridor</b>										
Service Employment (Standard)	\$2,129,609,864	\$2,210,681,152	\$2,294,700,069	\$2,381,770,508	\$2,471,999,943	\$2,564,456,195	\$2,660,235,022	\$2,759,452,568	\$2,862,228,956	\$2,968,688,419
Retail Employment	\$1,041,987,897	\$1,081,962,380	\$1,123,397,543	\$1,166,345,050	\$1,210,858,349	\$1,256,463,568	\$1,303,715,327	\$1,352,671,375	\$1,403,391,442	\$1,455,937,309
Basic Employment	\$445,320,582	\$467,677,252	\$490,974,533	\$515,248,742	\$540,537,526	\$566,333,610	\$593,190,975	\$621,150,082	\$650,252,864	\$680,542,777
<b>Total</b>	<b>\$3,616,918,343</b>	<b>\$3,760,320,784</b>	<b>\$3,909,072,145</b>	<b>\$4,063,364,299</b>	<b>\$4,223,395,818</b>	<b>\$4,387,253,373</b>	<b>\$4,557,141,325</b>	<b>\$4,733,274,026</b>	<b>\$4,915,873,262</b>	<b>\$5,105,168,505</b>
<b>GR Increment</b>										
Service Employment (Standard)	\$785,547,313	\$866,618,601	\$950,637,518	\$1,037,707,957	\$1,127,937,392	\$1,220,393,644	\$1,316,172,471	\$1,415,390,017	\$1,518,166,405	\$1,624,625,868
Retail Employment	\$387,033,971	\$427,008,454	\$468,443,617	\$511,391,124	\$555,904,423	\$601,509,642	\$648,761,402	\$697,717,449	\$748,437,516	\$800,983,383
Basic Employment	\$211,314,121	\$233,670,790	\$256,968,072	\$281,242,280	\$306,531,064	\$332,327,148	\$359,184,514	\$387,143,621	\$416,246,402	\$446,536,315
<b>GR Taxes Captured by TIDD</b>										
Service Employment (Standard)	\$35,607,387	\$39,282,196	\$43,090,616	\$47,037,356	\$51,127,287	\$55,318,156	\$59,659,630	\$64,156,976	\$68,815,637	\$73,641,244
Retail Employment	\$17,543,524	\$19,355,493	\$21,233,671	\$23,180,401	\$25,198,105	\$27,265,304	\$29,407,138	\$31,626,224	\$33,925,269	\$36,307,075
Basic Employment	\$9,578,473	\$10,591,859	\$11,647,881	\$12,748,185	\$13,894,478	\$15,063,767	\$16,281,161	\$17,548,494	\$18,867,669	\$20,240,654
<b>Total</b>	<b>\$62,729,384</b>	<b>\$69,229,548</b>	<b>\$75,972,168</b>	<b>\$82,965,942</b>	<b>\$90,219,871</b>	<b>\$97,647,226</b>	<b>\$105,347,929</b>	<b>\$113,331,694</b>	<b>\$121,608,575</b>	<b>\$130,188,973</b>

Source: Leland Consulting Group

**Table 39. TIDD Property Tax Rate**

Taxing Jurisdiction	Included in TIDD receipts?	Currently Imposed	
		Residential	Non-Residential
<b>City of Albuquerque</b>			
Operating	Yes	0.303%	0.327%
Debt Service	No	0.798%	0.798%
<b>Total City</b>		<b>1.100%</b>	<b>1.125%</b>
<b>State of New Mexico</b>	No. (Confirm)	<b>0.123%</b>	<b>0.123%</b>
<b>Bernalillo County</b>	Yes	<b>0.728%</b>	<b>1.093%</b>
<b>Other</b>			
Albuquerque Public Schools	No	0.828%	0.881%
Technical Vocational Education	No	0.304%	0.331%
Flood Control Authority	No	0.086%	0.107%
Hospital (UNMH/BCMC)	No	0.650%	0.589%
<b>Total Other</b>		<b>1.867%</b>	<b>1.908%</b>
<b>Total All Jurisdictions</b>		<b>3.819%</b>	<b>4.249%</b>
<b>TIDD Rate</b>			
Albuquerque Operating		0.303%	0.327%
Bernalillo County		0.728%	1.093%
<b>Total TIDD Rate</b>		<b>1.828%</b>	<b>2.218%</b>

Source: Leland Consulting Group

**Table 40. TIDD: Property Tax Receipts, 2009 - 2020**

	BASE YEAR 2009	> INCREMENT 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Net Taxable Value</b>												
<b>Existing Property</b>												
Residential	\$370,659,509	\$381,779,294	\$393,232,673	\$405,029,653	\$417,180,543	\$429,695,959	\$442,586,838	\$455,864,443	\$469,540,376	\$483,626,588	\$498,135,385	\$513,079,447
Non Residential	\$233,982,823	\$241,002,308	\$248,232,377	\$255,679,348	\$263,349,729	\$271,250,221	\$279,387,727	\$287,769,359	\$296,402,440	\$305,294,513	\$314,453,348	\$323,886,949
<b>Subtotal</b>												
<b>New Property from Construction</b>												
Residential	\$8,378,717	\$8,630,078	\$8,888,981	\$9,155,650	\$9,430,319	\$9,713,229	\$10,004,626	\$10,304,765	\$10,613,908	\$10,932,325	\$11,260,295	\$11,598,103
Non Residential	\$3,874,292	\$3,990,520	\$4,110,236	\$4,233,543	\$4,360,549	\$4,491,366	\$4,626,107	\$4,764,890	\$4,907,837	\$5,055,072	\$5,206,724	\$5,362,926
<b>Subtotal</b>												
<b>Property Tax Revenue</b>												
<b>Tax Rate</b>												
Residential	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%
Non Residential	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%
<b>Existing Property</b>												
Residential	\$6,777,138	\$6,980,453	\$7,189,866	\$7,405,562	\$7,627,729	\$7,856,561	\$8,092,258	\$8,335,025	\$8,585,076	\$8,842,629	\$9,107,907	\$9,381,145
Non Residential	\$5,190,207	\$5,345,913	\$5,506,291	\$5,671,479	\$5,841,624	\$6,016,872	\$6,197,379	\$6,383,300	\$6,574,799	\$6,772,043	\$6,975,204	\$7,184,460
<b>Subtotal</b>	<b>\$11,967,345</b>	<b>\$12,326,366</b>	<b>\$12,696,157</b>	<b>\$13,077,041</b>	<b>\$13,469,353</b>	<b>\$13,873,433</b>	<b>\$14,289,636</b>	<b>\$14,718,325</b>	<b>\$15,159,875</b>	<b>\$15,614,671</b>	<b>\$16,083,112</b>	<b>\$16,565,605</b>
<b>New Property from Construction</b>												
Residential	\$153,196	\$157,792	\$162,526	\$167,402	\$172,424	\$177,597	\$182,925	\$188,412	\$194,065	\$199,887	\$205,883	\$212,060
Non Residential	\$85,940	\$88,518	\$91,173	\$93,908	\$96,726	\$99,627	\$102,616	\$105,695	\$108,866	\$112,132	\$115,496	\$118,960
<b>Subtotal</b>	<b>\$239,136</b>	<b>\$246,310</b>	<b>\$253,699</b>	<b>\$261,310</b>	<b>\$269,150</b>	<b>\$277,224</b>	<b>\$285,541</b>	<b>\$294,107</b>	<b>\$302,930</b>	<b>\$312,018</b>	<b>\$321,379</b>	<b>\$331,020</b>
<b>Total</b>	<b>\$12,206,481</b>	<b>\$12,572,676</b>	<b>\$12,949,856</b>	<b>\$13,338,352</b>	<b>\$13,738,502</b>	<b>\$14,150,657</b>	<b>\$14,575,177</b>	<b>\$15,012,433</b>	<b>\$15,462,805</b>	<b>\$15,926,690</b>	<b>\$16,404,490</b>	<b>\$16,896,625</b>
<b>Property Tax Increment</b>												
<b>Existing Property</b>												
Residential	\$0	\$203,314	\$412,728	\$628,424	\$850,591	\$1,079,422	\$1,315,119	\$1,557,887	\$1,807,938	\$2,065,490	\$2,330,769	\$2,604,006
Non Residential	\$0	\$155,706	\$316,084	\$481,272	\$651,417	\$826,665	\$1,007,172	\$1,193,093	\$1,384,592	\$1,581,836	\$1,784,997	\$1,994,253
<b>Subtotal</b>	<b>\$0</b>	<b>\$359,020</b>	<b>\$728,811</b>	<b>\$1,109,696</b>	<b>\$1,502,007</b>	<b>\$1,906,088</b>	<b>\$2,322,291</b>	<b>\$2,750,980</b>	<b>\$3,192,530</b>	<b>\$3,647,326</b>	<b>\$4,115,766</b>	<b>\$4,598,259</b>
<b>New Property from Construction</b>												
Residential	\$0	\$4,596	\$9,330	\$14,205	\$19,228	\$24,400	\$29,728	\$35,216	\$40,868	\$46,690	\$52,687	\$58,863
Non Residential	\$0	\$2,578	\$5,234	\$7,969	\$10,786	\$13,688	\$16,677	\$19,755	\$22,926	\$26,192	\$29,556	\$33,021
<b>Subtotal</b>	<b>\$0</b>	<b>\$7,174</b>	<b>\$14,563</b>	<b>\$22,174</b>	<b>\$30,014</b>	<b>\$38,088</b>	<b>\$46,405</b>	<b>\$54,971</b>	<b>\$63,794</b>	<b>\$72,882</b>	<b>\$82,243</b>	<b>\$91,884</b>
<b>Total</b>	<b>\$0</b>	<b>\$366,194</b>	<b>\$743,375</b>	<b>\$1,131,870</b>	<b>\$1,532,021</b>	<b>\$1,944,176</b>	<b>\$2,368,696</b>	<b>\$2,805,951</b>	<b>\$3,256,324</b>	<b>\$3,720,208</b>	<b>\$4,198,009</b>	<b>\$4,690,144</b>
<b>TIDD Share</b>												
Existing Property		\$359,020	\$728,811	\$1,109,696	\$1,502,007	\$1,906,088	\$2,322,291	\$2,750,980	\$3,192,530	\$3,647,326	\$4,115,766	\$4,598,259
New Property from Construction		\$7,174	\$14,563	\$22,174	\$30,014	\$38,088	\$46,405	\$54,971	\$63,794	\$72,882	\$82,243	\$91,884
<b>Total</b>	<b>\$0</b>	<b>\$366,194</b>	<b>\$743,375</b>	<b>\$1,131,870</b>	<b>\$1,532,021</b>	<b>\$1,944,176</b>	<b>\$2,368,696</b>	<b>\$2,805,951</b>	<b>\$3,256,324</b>	<b>\$3,720,208</b>	<b>\$4,198,009</b>	<b>\$4,690,144</b>

Source: Leland Consulting Group

**Table 41. Table 42. TIDD: Property Tax Receipts, 2021 - 2030**

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>Net Taxable Value</b>										
<b>Existing Property</b>										
Residential	\$528,471,830	\$544,325,985	\$560,655,765	\$577,475,437	\$594,799,701	\$612,643,692	\$631,023,002	\$649,953,692	\$669,452,303	\$689,535,872
Non Residential	\$333,603,557	\$343,611,664	\$353,920,014	\$364,537,614	\$375,473,743	\$386,737,955	\$398,340,094	\$410,290,297	\$422,599,006	\$435,276,976
<b>Subtotal</b>										
<b>New Property from Construction</b>										
Residential	\$11,946,046	\$12,304,428	\$12,673,561	\$13,053,768	\$13,445,381	\$13,848,742	\$14,264,204	\$14,692,130	\$15,132,894	\$15,586,881
Non Residential	\$5,523,814	\$5,689,528	\$5,860,214	\$6,036,020	\$6,217,101	\$6,403,614	\$6,595,722	\$6,793,594	\$6,997,402	\$7,207,324
<b>Subtotal</b>										
<b>Property Tax Revenue</b>										
<b>Tax Rate</b>										
Residential	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%	1.828%
Non Residential	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%	2.218%
<b>Existing Property</b>										
Residential	\$9,662,579	\$9,952,456	\$10,251,030	\$10,558,561	\$10,875,318	\$11,201,577	\$11,537,625	\$11,883,753	\$12,240,266	\$12,607,474
Non Residential	\$7,399,994	\$7,621,994	\$7,850,654	\$8,086,173	\$8,328,759	\$8,578,621	\$8,835,980	\$9,101,059	\$9,374,091	\$9,655,314
<b>Subtotal</b>	<b>\$17,062,573</b>	<b>\$17,574,450</b>	<b>\$18,101,684</b>	<b>\$18,644,734</b>	<b>\$19,204,076</b>	<b>\$19,780,199</b>	<b>\$20,373,605</b>	<b>\$20,984,813</b>	<b>\$21,614,357</b>	<b>\$22,262,788</b>
<b>New Property from Construction</b>										
Residential	\$218,422	\$224,974	\$231,723	\$238,675	\$245,835	\$253,210	\$260,807	\$268,631	\$276,690	\$284,991
Non Residential	\$122,529	\$126,205	\$129,991	\$133,891	\$137,908	\$142,045	\$146,306	\$150,696	\$155,216	\$159,873
<b>Subtotal</b>	<b>\$340,951</b>	<b>\$351,179</b>	<b>\$361,715</b>	<b>\$372,566</b>	<b>\$383,743</b>	<b>\$395,255</b>	<b>\$407,113</b>	<b>\$419,326</b>	<b>\$431,906</b>	<b>\$444,863</b>
<b>Total</b>	<b>\$17,403,524</b>	<b>\$17,925,630</b>	<b>\$18,463,398</b>	<b>\$19,017,300</b>	<b>\$19,587,819</b>	<b>\$20,175,454</b>	<b>\$20,780,718</b>	<b>\$21,404,139</b>	<b>\$22,046,263</b>	<b>\$22,707,651</b>
<b>Property Tax Increment</b>										
<b>Existing Property</b>										
Residential	\$2,885,440	\$3,175,318	\$3,473,892	\$3,781,422	\$4,098,179	\$4,424,439	\$4,760,486	\$5,106,615	\$5,463,127	\$5,830,335
Non Residential	\$2,209,787	\$2,431,787	\$2,660,447	\$2,895,966	\$3,138,552	\$3,388,414	\$3,645,773	\$3,910,852	\$4,183,884	\$4,465,107
<b>Subtotal</b>	<b>\$5,095,228</b>	<b>\$5,607,105</b>	<b>\$6,134,338</b>	<b>\$6,677,389</b>	<b>\$7,236,731</b>	<b>\$7,812,853</b>	<b>\$8,406,259</b>	<b>\$9,017,467</b>	<b>\$9,647,012</b>	<b>\$10,295,442</b>
<b>New Property from Construction</b>										
Residential	\$65,225	\$71,778	\$78,527	\$85,479	\$92,639	\$100,014	\$107,610	\$115,434	\$123,493	\$131,794
Non Residential	\$36,590	\$40,266	\$44,052	\$47,951	\$51,968	\$56,105	\$60,367	\$64,756	\$69,277	\$73,933
<b>Subtotal</b>	<b>\$101,815</b>	<b>\$112,043</b>	<b>\$122,579</b>	<b>\$133,430</b>	<b>\$144,607</b>	<b>\$156,119</b>	<b>\$167,977</b>	<b>\$180,190</b>	<b>\$192,770</b>	<b>\$205,727</b>
<b>Total</b>	<b>\$5,197,042</b>	<b>\$5,719,148</b>	<b>\$6,256,917</b>	<b>\$6,810,819</b>	<b>\$7,381,338</b>	<b>\$7,968,973</b>	<b>\$8,574,236</b>	<b>\$9,197,658</b>	<b>\$9,839,782</b>	<b>\$10,501,170</b>
<b>TIDD Share</b>										
Existing Property	\$5,095,228	\$5,607,105	\$6,134,338	\$6,677,389	\$7,236,731	\$7,812,853	\$8,406,259	\$9,017,467	\$9,647,012	\$10,295,442
New Property from Constructi	\$101,815	\$112,043	\$122,579	\$133,430	\$144,607	\$156,119	\$167,977	\$180,190	\$192,770	\$205,727
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Source: Leland Consulting Group

## Public Improvement District (PID)

The statutory maximum tax rate increase for a PID is 1.639% (or 16.39 mils). 0.3% was used in this model; this is a rate similar to the improvement districts implemented for the Seattle and Portland streetcars. Residential property was not assumed to be assessed in the final PID model.

The PID area used here is all parcels within ¼ mile of the proposed streetcar alignment, not the ½ mile used for the TIDD. This distance reflects conventional perception that the most easily identifiable real estate impacts of transit improvements occur within a closer radius of the improvement. It is also reflected in lower property values than used in the TIDD.

	Alignment Section			
	A	B	C	Full
<b>District Net Taxable Property Value</b>				
Commercial Only	\$24,932,755	\$79,006,306	\$42,555,488	\$146,494,549
Com. and Res.	\$79,804,433	\$124,870,579	\$89,097,966	\$293,772,978
Model Value	\$24,932,755	\$79,006,306	\$42,555,488	\$146,494,549
<b>Annual Rate</b>				
Maximum	1.6%	1.6%	1.6%	1.6%
Model	0.3%	0.3%	0.3%	0.3%
<b>Annual Assessment</b>				
Total	\$74,798	\$237,019	\$127,666	\$439,484
Debt Coverage Ratio	1.25	1.25	1.25	1.25
Available for Debt Service	\$59,839	\$189,615	\$102,133	\$351,587
<b>Bond Potential</b>	\$778,377	\$2,466,502	\$1,328,542	\$4,573,420

Source: Leland Consulting Group

## H. February 2008 Introductory Presentation

Some information in this presentation pertaining to operating costs has been superseded by more recent data.



### Albuquerque Streetcar

February 20, 2008

Presented to:  
Twenty-First Century  
Transportation Task Force

Presented by:  
LELAND CONSULTING GROUP  
FEHR & PEERS  
TRANSPORTATION CONSULTANTS

### Presentation Outline

- Introduction
- Project Goals
- Streetcars, Transit, and Development
  - Case studies: The Streetcar in other US Cities
- Streetcar Cost-Benefit Analysis
- Discussion

Albuquerque Streetcar Evaluation

### About this Project

- Project Team
  - Leland Consulting Group
  - Fehr & Peers
- Scope of Work: Cost benefit Analysis of Albuquerque Streetcar
  - Review Cost and Ridership Estimates
  - Identify Development Potential
  - Market Strategy
  - Financing Strategy
  - Planning Context

Albuquerque Streetcar Evaluation

### Cost Benefit Analysis

<p><b>Costs</b></p> <ul style="list-style-type: none"> <li>• Capital</li> <li>• Operations</li> <li>• Opportunity Cost</li> </ul>	<p><b>Benefits</b></p> <ul style="list-style-type: none"> <li>• Economic Development                             <ul style="list-style-type: none"> <li>• Downtown Revitalization</li> <li>• Connect major destinations</li> <li>• Quality of life</li> </ul> </li> <li>• Transportation Benefits                             <ul style="list-style-type: none"> <li>• Ridership</li> <li>• Improved environment for walking, biking</li> <li>• Transportation options</li> <li>• Congestion mitigation</li> </ul> </li> <li>• Environmental Impacts                             <ul style="list-style-type: none"> <li>• Reduced pollution</li> <li>• Improved air quality</li> </ul> </li> </ul>
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Albuquerque Streetcar Evaluation

### The Transit Landscape



	Light Rail	Streetcar	Bus
<b>Markets Served</b>	Regional	Local "central city circulator"	Usually local, sometimes regional
<b>Ridership</b>	Commuters	Commuters, shoppers, tourists, students, conventioners,	Commuters, some shoppers
<b>System characteristics</b>	Emphasis: Speed, distance 1/2 mile+ between stations	Emphasis: Frequency, connectivity 1/4 mile between stations	Varies
<b>Vehicle characteristics</b>	150 feet long Wide turn radius Low floor	65 feet long Tight turn radius Low floor	65 feet long Tight turn radius Often high floor
<b>Right of Way</b>	Dedicated lanes	Mixed traffic lanes	Mixed traffic lanes
<b>Development Impacts</b>	Strong	Very strong	Weak
<b>Capital Cost</b>			
<b>Operations Cost</b>			

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### Portland

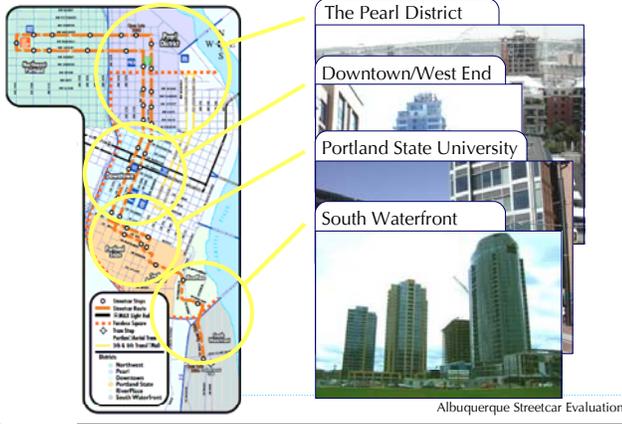
Why Portland?

- First modern model
- Connects the dots
  - Downtown: Employment and retail center
  - Urban neighborhoods: Historic and new
  - University
- High ridership
- Public-Private Partnership
- Development impacts



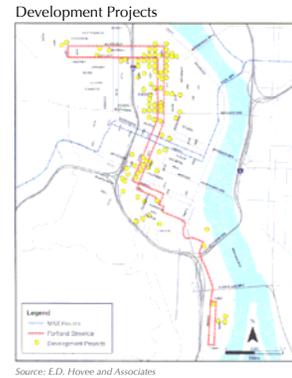
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### Portland: Visualizing the Impact



### Portland: Quantifying the Impact

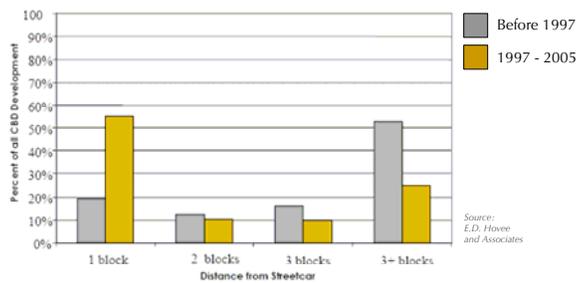
- \$2.3 billion investment within 3 blocks 1997 - 2005
- 7,200 residential units
- 4.6 million sf commercial
- Condos: Market now as high as \$600+ per s.f.



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### Portland: Quantifying the Impact

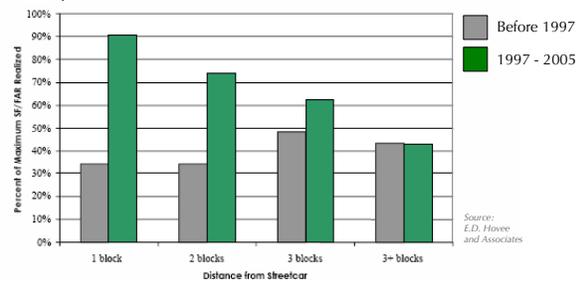
Location of Central Portland Development



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### Portland: Quantifying the Impact

Development Potential Achieved



Albuquerque Streetcar Evaluation

### Portland: Keys to Success

- Strong Anchors (Connecting the Dots)
  - Downtown, Pearl District, Portland State
- Political Leadership and Vision
  - "Central City Circulator" suggested as early as 1970s
  - Leaders take the case to land owners, public, and media
  - Public responsibilities include freeway demolition, parking strategies, three parks
  - Back up vision with public dollars
- Savvy Developers & Site Control
  - Urban developer Hoyt St. Properties owns 40+ acres directly surrounding alignment
  - Other major developers control other key parcels



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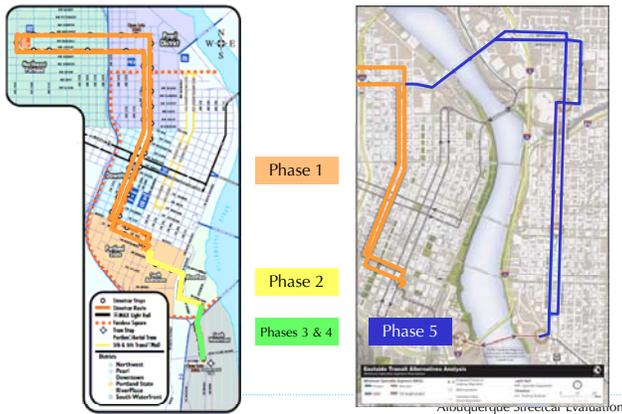
### Portland: Keys to Success

- Private sector leadership
  - Local merchants lead assessment district
- Healthy residential, office, and retail markets; good demographics
  - Real estate soars in 1990s and 2000s
  - High density urban housing fulfills unmet demand for young singles, couples, and downsizing boomers
  - Regional population and employment growth
- Appropriate regulation; quality urban design and architecture
  - Both public and private committed to quality
  - Several district-wide plans
  - Development agreements require: high density, active ground floors, high quality, parking location and quantity, affordable housing and more



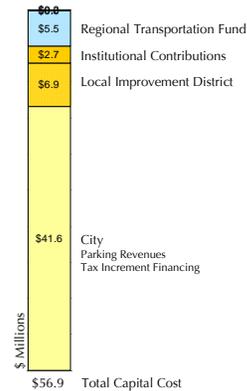
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### Portland: Phasing



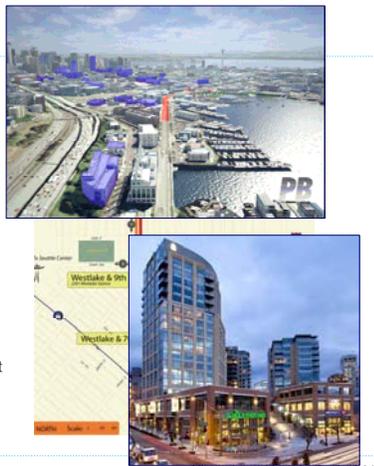
### Portland: Funding

- Local lead
- A new model for transit funding
- Independent, non-profit management



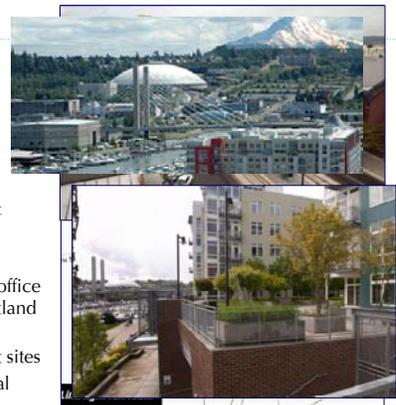
### Seattle

- Opened December 2007
- 1.3 mile starter line
- 1,000 daily ridership
- Connects
  - Biotech: UW campus and private labs
  - South Lake Union area including lakefront park
  - Downtown
- Development Partner
  - Vulcan Real Estate
- Roaring real estate market
- Funding
  - Local improvement district
  - Federal/MPO grants
  - Joint development



### Tacoma

- Opened 2003
- 1.6 miles
- 2,500 + daily ridership
- Connects
  - Cultural district
  - Convention center
  - Downtown employment
  - Regional transit links
- No master developer
- Middling residential and office markets compared to Portland and Seattle
- Constrained development sites
- Largely funded by regional transit agency



### Tampa

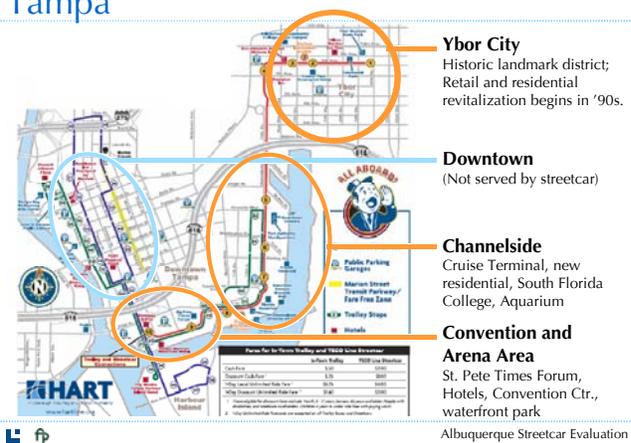
- Moving tourists first, locals later
- Connecting the dots

*"The streetcar was an exercise in place-making. Transportation is never just about moving people from A to B, it's a tool for creating communities."*  
—HART

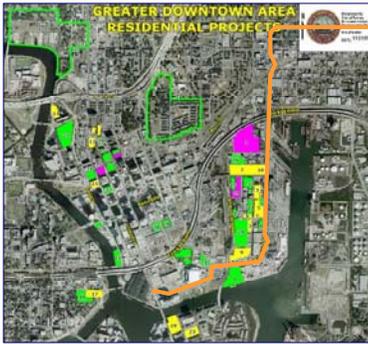
*"It's like Riverwalk in San Antonio. It gives convention organizers a reason to choose Tampa."*  
—Chamber of Commerce



### Tampa



## Tampa: Visualizing the Impact



"We wanted this part of town to be like LoDo in Denver. These kinds of higher density residential projects didn't exist outside of downtown until the streetcar was built"

—Michael English, former Planning Commissioner



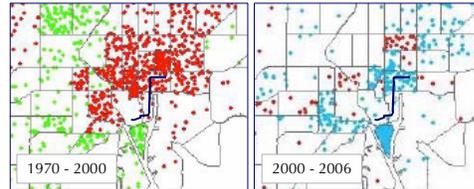
Complete	Units	2,229
Under Constr.	Units	1,317
Planned	Units	11,717



Albuquerque Streetcar Evaluation

## Tampa: Visualizing the Impact

### Net Housing Change



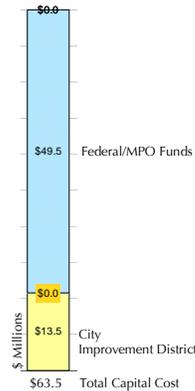
- Most of central city loses population with exception of Harbor Island
- Several central city areas gain residents, especially Ybor City
- Channelside expected to add residents next



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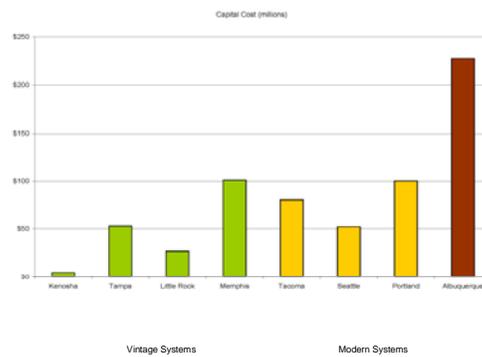
## Tampa: Funding

- Local leadership critical, despite large role of Federal funds,
- Improvement District
- Sponsorships
  - \$2.5 M total, including TECO sponsorship
- Endowment Fund for Operations
- City owned; non-profit managed; transit agency operated.



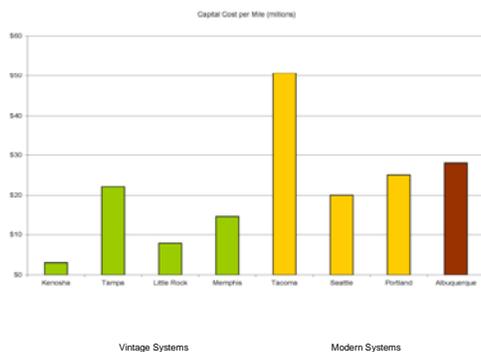
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## How do the overall capital costs compare?



Albuquerque Streetcar Evaluation

## How do the capital cost per mile compare?



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## What Do We Know About the Capital Costs?

- Albuquerque's system is consistent with modern streetcar capital costs per mile
  - Above average system length
  - Average costs for infrastructure
  - Average costs for system amenities



Albuquerque Streetcar Evaluation

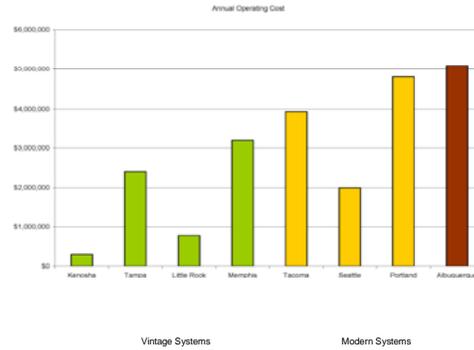
### Are there cost sharing opportunities?

- Share cost with other capital improvements
- Secure costs or purchase material for later phases of the project..NOW
- Reallocate capital funds earmarked for future ABQ ride routes replaced by streetcar
- Share stops with Rapid Ride
- Use a “toolbox” of funding options



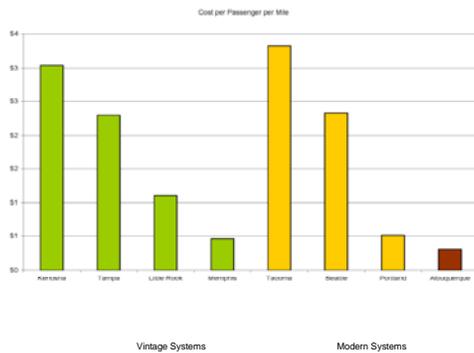
Albuquerque Streetcar Evaluation

### How do the overall operating costs compare?



Albuquerque Streetcar Evaluation

### How do the operating cost per passenger mile compare?



Albuquerque Streetcar Evaluation

### What Do We Know About the Operating Costs?

- Albuquerque’s system is lower than average to operate per passenger mile\*
  - Above average operations plan
  - Track length at build out is long
  - Anticipated ridership is high



Albuquerque Streetcar Evaluation

### Are there cost sharing opportunities?

- Peer systems used a variety of operation configurations to maximize budget
  - Public transit authority
  - Non-profit organizations
  - Private contractors
- Special services to offset operations costs
  - Charters for special events during off-peak hours
- Shift operating costs from ABQ Ride



Albuquerque Streetcar Evaluation

### Are there cost sharing opportunities?

	TCSP	FTA 5307/5309	Small Starts	CMAQ	STP	CDDBG	PIF	Sales Tax	Parking Garage Bonds	Parking Revenue	Advertising and Sponsorship	Gas Tax	Farebox	Special Farebox	Development Impact Fees	Local Improvement Districts	Transportation Authority	State DOT	Private Contribution	Special Assessment
Kenosha		X																		
Tampa		X		X							X	X			X	X	X	X		X
Little Rock		X		X	X						X						X	X		
Memphis		X											X				X	X		
Tacoma								X												
Seattle		X						X			X		X	X	X				X	X
Portland							X		X	X	X		X		X	X				



Albuquerque Streetcar Evaluation

### Peer System Ridership

- Ridership projections do not define success!!!
  - Particularly if not using FTA funds
  - Future ridership projections should use 4D's
- Phasing can serve specific travel needs
  - Planned and built as part of a larger systems
  - Built a ridership market and excitement



Albuquerque Streetcar Evaluation

### Ridership Generators

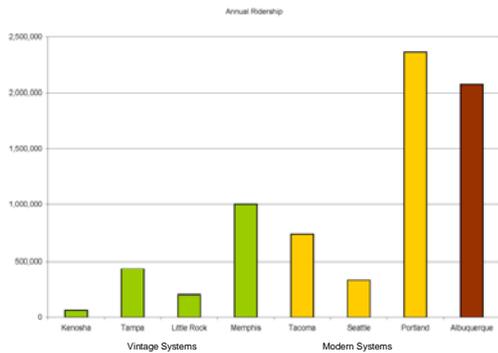
RIDERSHIP GENERATORS	Modern Systems			
	Tacoma	Seattle	Portland	Albuquerque
Stadium	X			X
International Airport	X			X
University	X		X	X
Convention Center	X			X
Medical Center/Hospital		X	X	X
Other Destinations	State museum	Seattle Center	Theater District	Historic Plaza

RIDERSHIP GENERATORS	Vintage Systems				
	Kenosha	Tampa	Little Rock	Memphis	Albuquerque
Stadium		X	X	X	X
International Airport			X		X
University					X
Convention Center	X	X	X	X	X
Medical Center/Hospital				X	X
Other Destinations	Harbor Park	Cruise Port	Clinton Library	Beal St	Historic Plaza



Albuquerque Streetcar Evaluation

### Peer System Ridership



Albuquerque Streetcar Evaluation

### Lessons Learned

Conventional wisdom versus complicated reality:

- Economic Development = Streetcar + time
- + Strong Anchors
- + Political leadership, vision
- + Private sector leadership
- + Healthy residential, office markets
- + Available sites
- + Appropriate regulation
- + Creative financing
- + Developer experience
- + Urban Design, architecture, and great plans



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### Lessons Learned

#### Lessons Learned

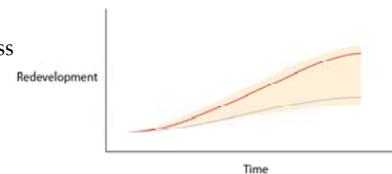
- Broad support base
  - Public Private partnerships
  - Connect the dots
  - “Think development when thinking transit.”
  - Phasing is key – bite sized pieces
- A streetcars is a tool to achieve other policy goals, not an end in itself



Albuquerque Streetcar Evaluation

### Measuring Economic Development

- New housing
- New jobs and business retention
- Tax revenue
  - Sales
  - Property
  - Business
- Place making
  - Downtown revitalization
  - Corridor revitalization
- Tourism
- Funding potential



Albuquerque Streetcar Evaluation



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