APPENDIX L:
Transportation System Report

Rail Yard Re-Use Study
(Santa Fe Ave. / 2nd St.)

Contents

Rail Yard Re-Use Study
(Santa Fe Ave. / 2nd St.)

Introduction

The purpose of this study is to provide a rough approximation of the level of re-development that can occur on the existing City-owned Rail Yard in Albuquerque, NM located on the east side of 2nd St. approximately between Hazeldine Ave. SW south to just beyond Cromwell Ave. SW (see Vicinity Map on Page A-1 in the Appendix). This report is not designed to constitute the Traffic Impact Study required for development approval.

Study Procedures

The study was prepared by considering the 2008 Average Daily Traffic (ADT) volumes on 2nd St. and on 3rd St. to estimate how much residual capacity is available. Once the residual capacity was estimated, an approximation of the number of commercial, office, and residential trips that can be generated by the Rail Yard Re-Use Project that would not overtax the adjacent transportation system was calculated. In order to make that estimation, the trip distribution characteristics of the three different general land uses (commercial, office, and residential) were calculated consistent with the accepted method of determining trip distribution characteristics by the City of Albuquerque's Transportation Development Section of the Development Services Division of the Planning Department.

Based on the calculated trip distribution characteristics for each of the three major land use types, the new traffic generated by the proposed Rail Yard Re-Use project was calculated so as not to overtax the adjacent transportation system – primarily 2nd St. and 3rd St. Additional consideration is given to the additional traffic generated on the minor east-west streets (Pacific Ave., Santa Fe Ave., and Cromwell Ave.) where residential units are more directly impacted.

Study Area Characteristics

The primary access route associated with the Rail Yard Re-Use Project will be 2nd St. The secondary access route will be 3rd St. The project should be designed so impact is minimized to Pacific Ave., Santa Fe Ave., and Cromwell Ave. Those three streets are minor residential streets with single family residential driveways. Generally speaking, the City of Albuquerque policy is to minimize traffic on minor residential streets so that the volume typically does not exceed 1,000 vehicles per day.

2nd St. south of Coal Ave. is currently configured as a one-way street northbound. However, 2nd St. will need to be reconfigured to a two-way street as recently mandated by the City of

Albuquerque.   Failure to reconfigure 2nd St. as a two-way facility will create operational difficulties since it would result in substantial additional volumes of traffic generated by this project being routed on minor residential streets.   2nd St. was recently classified as a Collector Roadway on the Long Range Roadway Map for the Albuquerque Metropolitan Area.   Parallel parking is permitted along the west side of the street. The posted speed limit is 30 M.P.H.

3rd St. is currently configured as a two-way street with delineated parking on both sides of the street to the south of Coal Ave. The posted speed limit is 30 M.P.H.

Santa Fe Ave., Pacific Ave., and Cromwell Ave. are not classified on the Long Range Roadway Map for the Albuquerque Metropolitan Area.   They are considered to be minor residential streets.

Description of Proposed Development

A general description of the project is the re-development of an approximately 27-acre site on which there is approximately 360,000 S.F. of building – the remains of the old locomotive repair shop. Plans to redevelop the site include various general land uses including retail commercial, office, institutional, and residential uses. Specific location of access at this time is undefined. However, it seems likely that there will be three to five driveways along 2nd St. and perhaps one or two additional driveways accessing 1st St.

Trip Generation Rates

Trip generation rates for this project should be determined based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual (8th Edition) for land uses where data is available. However, there are some land uses for which there is no ITE Trip Generation data in the Manual – such as a museum which is known to be a future land use component. In those cases, trip generation rates should be based on traffic count data collected for similar facilities of the same general land use. Trip generation rates will not be utilized in this report, but should be utilized in formulating a proposed land use plan that would have traffic generation rate characteristics that did not exceed the recommendations of this study.

Trip Distribution / Trip Assignments

Trip distribution characteristics for three major land use categories were calculated for this study. The method of calculation of the trip distribution characteristics is the approved method utilized in Traffic Impact Studies reviewed by the City of Albuquerque Transportation

Development Section of the Development Services Division of the Planning Department. The City of Albuquerque approved methods are outlined as follows:

Residential Uses – Use inverse relationship based upon distance and employment. Use employment data from 2030 Socioeconomic Forecasts, MRCOG (S-07-01).

Office/Industrial Uses - Use inverse relationship based upon distance and population. Use population data from 2030 Socioeconomic Forecasts, MRCOG (S-07-01).

Commercial Uses - Use relationship based upon population. Use population data from 2030 Socioeconomic Forecasts, MRCOG (S-07-01).

Residential -

$$T_s = (T_t)(S_e / D) / (S_e / D)$$

T_s = Development to Individual Subarea Trips

T_t = Total Trips

S_e = Subarea Employment

D = Distance from Development to Subarea

Office/Industrial -

$$T_s = (T_t)(S_p / D) / (S_p / D)$$

T_s = Development to Individual Subarea Trips

T_t = Total Trips

S_p = Subarea Population

D = Distance from Development to Subarea

Commercial -

$$T_s = (T_t)(S_p) / (S_p)$$

T_s = Development to Individual Subarea Trips

T_t = Total Trips

S_p = Subarea Population

Commercial Land Use

Trip distribution characteristics for newly generated trips for the commercial land use are proportionally based on the 2012 projected population of Data Analysis Subzones within a two-mile radius of the proposed development. Population data for the years 2004 and 2030 were taken from the 2030 Socioeconomic Forecasts by Data Analysis Subzones for the MRCOG

Region, S-07-01, 2007, Appendix B and Appendix C, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2004 and 2030 was interpolated linearly to obtain 2010 population data to utilize for this analysis. Population Subzones were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of subareas and data analysis subzones are shown on Appendix Pages A-4 thru A-8.

Office / Industrial Land Uses

Trip distribution characteristics for newly generated trips for the office / industrial land use are proportionally based on the 2012 projected population of Data Subareas citywide inversely proportional to the distance of the subarea from the project location. Population data for the years 2004 and 2030 were taken from the 2030 Socioeconomic Forecasts by Data Analysis Subzones for the MRCOG Region, S-07-01 (July, 2007), Appendix E and Appendix F, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2004 and 2030 was interpolated linearly to obtain 2012 population data to utilize for this analysis. Population Subareas were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of data analysis subzones are shown in the Appendix. The office Trip Distribution map can be found in the Appendix on Page A-9 thru A-13.

Residential Land Use

Trip distribution characteristics for new generated trips for the residential land use are proportionally based on the 2012 projected employment of Data Subareas citywide. Employment data for 2004 and 2030 were taken from the 2030 Socioeconomic Forecasts for Data Analysis Subzones for the Mid-Region, S-07-01 (April, 2007), Appendix B, supplied by the Mid-Region Council of Governments (MRCOG). Employment Data was interpolated linearly to obtain 2012 values and adjusted for distance from the proposed new facility. Employment Subareas were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of subareas are shown in the Appendix Pages A-14 thru A-17.

Discussion of Existing Conditions

The most recent volume data for 2nd St. and for 3rd St. south of Coal Ave. available from the Mid-Region Council of Governments is 2008 volume data. It is anticipated that the background traffic growth rate in this area will be zero percent since it is essentially a fully developed urban

area with the exception of the proposed Rail Yard Re-Use Project and a few select adjacent uses that will likely develop as a result of the redeveloped Rail Yard project. The 2008 volume data demonstrates that 2nd St. between Coal Ave. and Bridge Blvd. is 4,900 vehicles per day. The 2008 volume data for 3rd St. between Coal Ave. and Bridge Blvd. is 3,100 vehicles per day. It is assumed in this analysis that the traffic on 2nd St. and 3rd St. will redistribute itself proportionately so that the daily volumes will remain unchanged on 2nd St. and 3rd St. after 2nd St. is converted to a two-way street. This assumption will need to be verified after the conversion takes place.

Background Traffic Growth

Background traffic growth is expected to be zero for this project. The only growth considered is that generated by the project in consideration. Additionally, there are a few nearby land parcels that are vacant or contain vacant buildings which may be redeveloped if this project is successful. Traffic generated by those few sites is not considered in this study since it is not known how they might develop. Also, it is likely that they will be low generators of traffic and not a consequential consideration.

Traffic Analysis

The basic assumption in this study is that the capacity of 2nd St. as a two-way roadway is approximately 11,000 vehicles per day and that all of the traffic generated by the proposed Rail Yard Re-Use Project will use 2nd St. for access except the trips whose origin and destination are in the residential uses which are immediately west of the proposed development. Those residential trips will travel to and from the project on Santa Fe Ave., Pacific Ave., and / or Cromwell Ave. It is also acknowledged that 3rd St. will serve as a secondary access for the project, but for the sake of being somewhat conservative at this point in time, it will be assumed that 2nd St. will bear the burden of essentially all of the traffic generated by the project.

The fact that the capacity of 2nd St. is 11,000 vehicles per day and the existing volume (2008) is 4,900 vehicles per day results in a reserve capacity of approximately 6,100 vehicles per day, the permitted increase in traffic on 2nd St. as a result of implementation of this project. Depending on the mix of uses proposed for the project, the trips generated by each use can be distributed onto the adjacent transportation system to determine at what point the capacity of the adjacent streets will be threatened. Additionally, the projected volumes of traffic on the three affected minor residential streets (Santa Fe Ave., Pacific Ave., and Cromwell Ave.) should not realize a significant increase in volume of traffic due to the nature of those streets.

A worksheet has been designed (Page A-18) to demonstrate a typical development scenario assuming that 8,000 commercial trips were generated, 1,650 office / industrial trips were

generated, and 1,500 residential trips were generated by the proposed Rail Yard Re-Use project. That being the case, the 11,000 trip capacity on 2nd St. near the north end of the project would not be exceeded. That would be the critical segment of street since most of the traffic generated is distributed to the north on 2nd St. based on the trip distribution calculations previously described. All other segments of streets in the surrounding area would still be significantly less than capacity. The trip generation scenario described above would be generated by approximately 150,000 S.F. of retail commercial use, 150,000 S.F. of general office use, and 250 residential apartment dwelling units (See Page A-19). There are virtually an infinite number of permutations and combinations of land uses for the Rail Yard Re-Use Plan that would meet this recommended transportation condition, but a guideline can be utilized such that the project can generate approximately 11,000 trips per day distributed onto the adjacent transportation system and not exceed the 11,000 vehicle per day capacity of 2nd St. Various proposed land use plans can be applied to the worksheet template in this report to test to confirm if the plan will or will not exceed the capacity of the adjacent transportation system. (See Appendix Page A-18)

VICINITY MAP

Zone Atlas Page:

K-14-Z

PROJECT

SOUTH BROADWAY

BARELAS

ATGSF RAILWAY COMPANY MACHINE SHOP

DOWNTOWN 2010
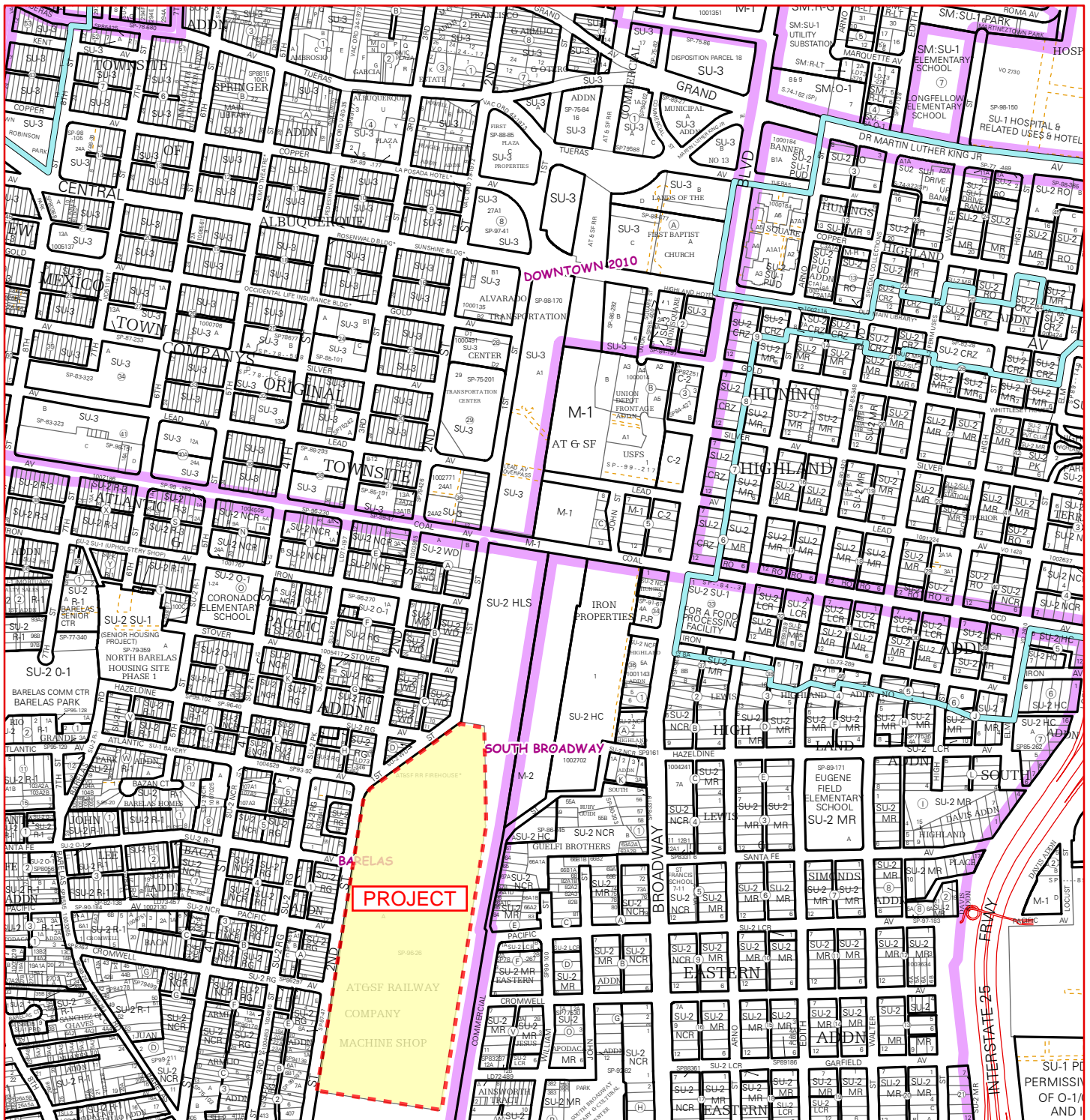
For more current information and more details visit: http://www.cabq.gov/gis

AGIS
Albuquerque Geographic Information System

Map amended through: 6/13/2008

Note: Grey Shading Represents Area Outside of the City Limits
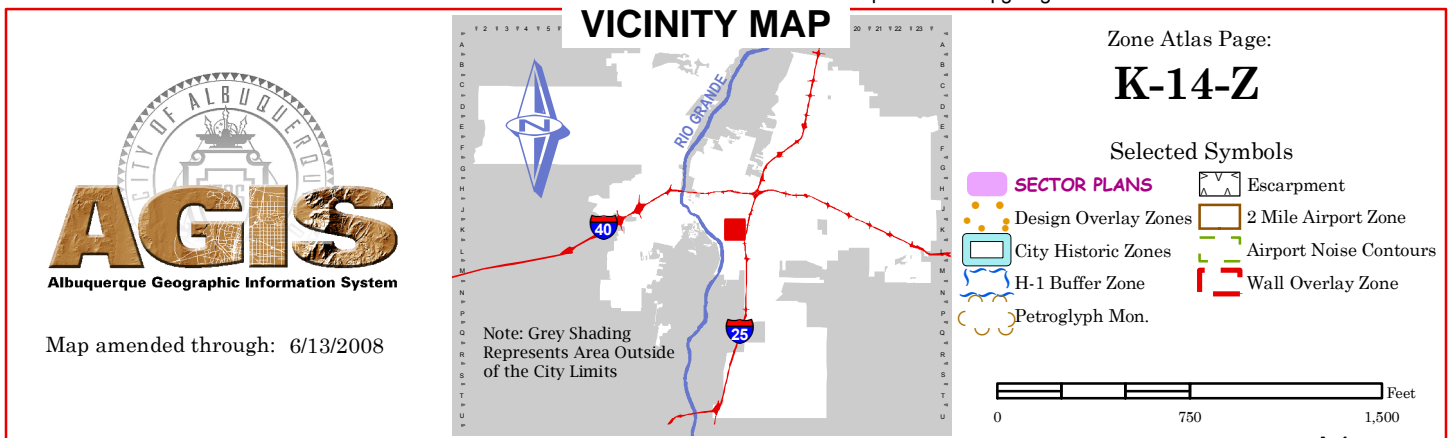
Selected Symbols

SECTOR PLANS
Design Overlay Zones
City Historic Zones
H-1 Buffer Zone
Petroglyph Mon.

Escarpment
2 Mile Airport Zone
Airport Noise Contours
Wall Overlay Zone

| 0 | 750 | 1,500 | Feet |

A-1

Inset for Downtown

12th St. **6th St.** **4th St.** **2nd St.** **Broadway Blvd.**

I-40

												Odelia Rd./

11000 *6100* 5400 10400 *4700* 12300 *10200* **7000** — Odelia Rd./ Indian Sch. Rd.

7600

5500 **6800** **3500** **3700** **6400** **5400** **17800** **3700** — Mountain Rd.

10900 6500 5700 11800 4500 5800 16100

6300

17900 **19200** *23400* **25500** **25700** **26000** **26300** — Lomas Blvd.

3800 6400 *3400* *4900* *7500* *6100* 5900 15400

1200 **3400** **4700** **4400** **4500** **2500** **17600** — Marquette Ave.

8500 8200 6700 6400 Martin Luther

4300 **1500** *2500* **3300** **3900** **4100** **3700** **19100** — King Jr. Ave.

Tijeras Ave. 6800 5600

12600 *2600* *1900* **3300** **3400** **4200** **3600** I-25 — Copper Ave.

10900 5500 4600 5700

7600 **4200** **9600** **4800** *1300* *10600* **12700** **17400** **25100** — Central Ave.

4400 2500 4100 3400 3400

3700 *3800* *1500* *3800* *3400* **19100** — Gold Ave.

2700 2200 3400 3300 3900

2200 *5800* **6100** *7700* *6500* *10600* **8400** **11800** — Lead Ave.

3900 4300 4300 15800

3900 **3300** *5400* *6300* *7700* *8100* **8300** **11000** — Coal Ave.

6400 6500 3100 4900 13700

8th St. 8700 *33100*

40400 **36500** *33100* *27500* — Bridge Blvd.

2008 Traffic Flow Map (Downtown Inset)
Published by the Mid-Region Council of Governments

DATA ANALYSIS SUBZONE (DASZ) MAP

Rail Yard Re-Use Project (Santa Fe Ave. / 2nd St.)

Trip Distribution Table
Rail Yard Re-Use Project (Santa Fe Av. / 2nd St.)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercial Trips**

2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 Socioeconomic
2030 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

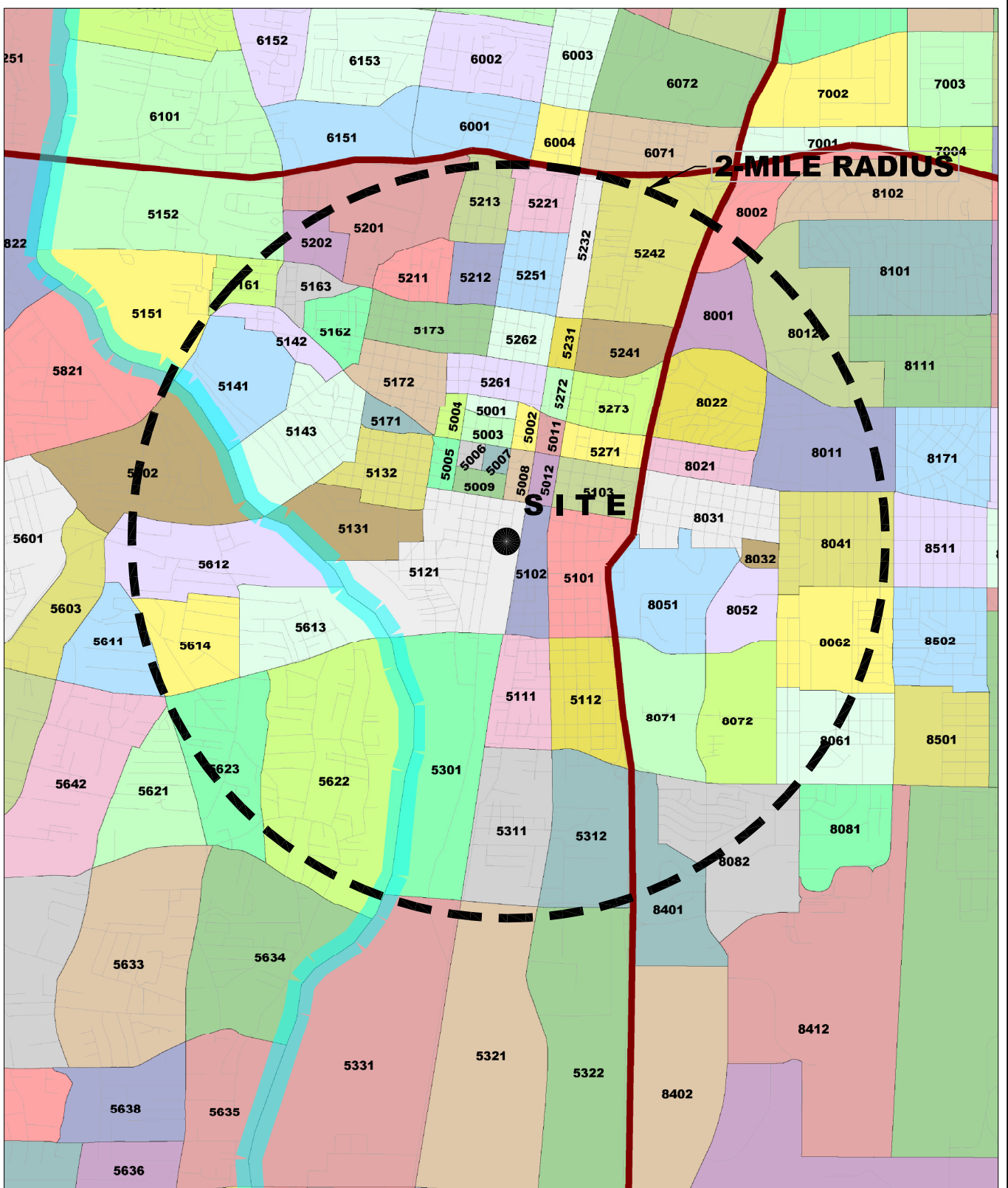| DASZ #	% Sub Area in Study	2004 Population	2030 Population	Interpolated Population for the Year	Population in Study	Percent Population	(SN) Second St North % Utilizing	% Population Utilizing	Population	(SS) Second St South % Utilizing	% Population Utilizing	Population
		2004	2030	2012								
Boundary Specified on DASZ Map												
5001	100%	0	0	0	0	0.00%	100%	0.00%	0	0%	0.00%	0
5002	100%	0	0	0	0	0.00%	100%	0.00%	0	0%	0.00%	0
5003	100%	13	128	48	48	0.11%	100%	0.11%	48	0%	0.00%	0
5004	100%	133	188	150	150	0.34%	100%	0.34%	150	0%	0.00%	0
5005	100%	543	575	553	553	1.24%	100%	1.24%	553	0%	0.00%	0
5006	100%	24	98	47	47	0.11%	100%	0.11%	47	0%	0.00%	0
5007	100%	4	93	31	31	0.07%	100%	0.07%	31	0%	0.00%	0
5008	100%	16	152	58	58	0.13%	100%	0.13%	58	0%	0.00%	0
5009	100%	55	216	105	105	0.23%	100%	0.23%	105	0%	0.00%	0
5011	100%	110	654	277	277	0.62%	100%	0.62%	277	0%	0.00%	0
5012	100%	22	187	73	73	0.16%	100%	0.16%	73	0%	0.00%	0
5101	100%	1878	1867	1,875	1,875	4.19%	50%	2.10%	938	50%	2.10%	938
5102	100%	534	519	529	529	1.18%	50%	0.59%	265	50%	0.59%	265
5103	100%	794	1144	902	902	2.02%	100%	2.02%	902	0%	0.00%	0
5111	100%	1326	1244	1,301	1,301	2.91%	0%	0.00%	0	100%	2.91%	1,301
5112	100%	1812	1876	1,832	1,832	4.10%	0%	0.00%	0	100%	4.10%	1,832
5121	100%	2804	2712	2,776	2,776	6.21%	30%	1.86%	833	50%	3.10%	1,388
5131	100%	170	160	167	167	0.37%	50%	0.19%	84	50%	0.19%	84
5132	100%	1779	1765	1,775	1,775	3.97%	100%	3.97%	1,775	0%	0.00%	0
5141	100%	182	171	179	179	0.40%	100%	0.40%	179	0%	0.00%	0
5142	100%	296	415	333	333	0.74%	100%	0.74%	333	0%	0.00%	0
5143	100%	937	976	949	949	2.12%	100%	2.12%	949	0%	0.00%	0
5161	55%	668	625	655	360	0.80%	100%	0.80%	360	0%	0.00%	0
5162	100%	536	494	523	523	1.17%	100%	1.17%	523	0%	0.00%	0
5163	100%	45	44	45	45	0.10%	100%	0.10%	45	0%	0.00%	0
5171	100%	253	269	258	258	0.58%	100%	0.58%	258	0%	0.00%	0
5172	100%	958	933	950	950	2.12%	100%	2.12%	950	0%	0.00%	0
5173	100%	991	919	969	969	2.17%	100%	2.17%	969	0%	0.00%	0
5201	60%	478	1248	715	429	0.96%	100%	0.96%	429	0%	0.00%	0
5202	80%	0	81	25	20	0.04%	100%	0.04%	20	0%	0.00%	0
5211	100%	790	794	791	791	1.77%	100%	1.77%	791	0%	0.00%	0
5212	100%	611	638	619	619	1.38%	100%	1.38%	619	0%	0.00%	0
5213	95%	279	279	279	265	0.59%	100%	0.59%	265	0%	0.00%	0
5221	100%	4	3	4	4	0.01%	100%	0.01%	4	0%	0.00%	0
5231	100%	1	0	1	1	0.00%	100%	0.00%	1	0%	0.00%	0
5232	100%	33	32	33	33	0.07%	100%	0.07%	33	0%	0.00%	0
5241	100%	502	507	504	504	1.13%	100%	1.13%	504	0%	0.00%	0
5242	75%	1274	1192	1,249	937	2.09%	100%	2.09%	937	0%	0.00%	0
5251	100%	265	271	267	267	0.60%	100%	0.60%	267	0%	0.00%	0
5261	100%	132	454	231	231	0.52%	100%	0.52%	231	0%	0.00%	0
5262	100%	99	93	97	97	0.22%	100%	0.22%	97	0%	0.00%	0
5271	100%	410	830	539	539	1.20%	100%	1.20%	539	0%	0.00%	0
5272	100%	0	83	26	26	0.06%	100%	0.06%	26	0%	0.00%	0
5273	100%	418	434	423	423	0.95%	100%	0.95%	423	0%	0.00%	0
5301	100%	26	22	25	25	0.06%	0%	0.00%	0	100%	0.06%	25
5311	100%	1442	1369	1,420	1,420	3.17%	0%	0.00%	0	100%	3.17%	1,420
5312	100%	225	228	226	226	0.51%	0%	0.00%	0	100%	0.51%	226
5602	55%	2253	2201	2,237	1,230	2.75%	40%	1.10%	492	60%	1.65%	738
5612	95%	1024	1140	1,060	1,007	2.25%	0%	0.00%	0	100%	2.25%	1,007
5613	100%	1125	1073	1,109	1,109	2.48%	0%	0.00%	0	100%	2.48%	1,109
5614	100%	683	642	670	670	1.50%	0%	0.00%	0	100%	1.50%	670
5622	95%	2876	2668	2,812	2,671	5.97%	0%	0.00%	0	100%	5.97%	2,671
5623	65%	1397	1295	1,366	888	1.99%	0%	0.00%	0	100%	1.99%	888
8001	100%	19	273	97	97	0.22%	100%	0.22%	97	0%	0.00%	0
8002	30%	422	524	453	136	0.30%	100%	0.30%	136	0%	0.00%	0
8011	90%	2027	1998	2,018	1,816	4.06%	100%	4.06%	1,816	0%	0.00%	0
8012	50%	466	471	468	234	0.52%	100%	0.52%	234	0%	0.00%	0
8021	100%	724	829	756	756	1.69%	100%	1.69%	756	0%	0.00%	0
8022	100%	1083	1423	1,188	1,188	2.66%	100%	2.66%	1,188	0%	0.00%	0
8031	100%	1753	1721	1,743	1,743	3.90%	100%	3.90%	1,743	0%	0.00%	0
8032	100%	24	15	21	21	0.05%	100%	0.05%	21	0%	0.00%	0
8041	95%	2730	2659	2,708	2,573	5.75%	100%	5.75%	2,573	0%	0.00%	0
8051	100%	13	5	11	11	0.02%	0%	0.00%	0	100%	0.02%	11
8052	100%	477	440	466	466	1.04%	0%	0.00%	0	100%	1.04%	466
8061	50%	1167	1219	1,183	592	1.32%	0%	0.00%	0	100%	1.32%	592
8062	80%	2732	2539	2,673	2,138	4.78%	0%	0.00%	0	100%	4.78%	2,138
8071	100%	5	28	12	12	0.03%	0%	0.00%	0	100%	0.03%	12
8072	100%	765	1268	920	920	2.06%	0%	0.00%	0	100%	2.06%	920
8082	50%	1081	1034	1,067	534	1.19%	0%	0.00%	0	100%	1.19%	534
8401	40%	0	0	0	0	0.00%	0%	0.00%	0	100%	0.00%	0
				49,872	44,734	100.00%			24,945			19,234
									55.76%			43.00%

Trip Distribution Table
Rail Yard Re-Use Project (Santa Fe Av. / 2nd St.)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercial Tr**

2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 Socioeconomic
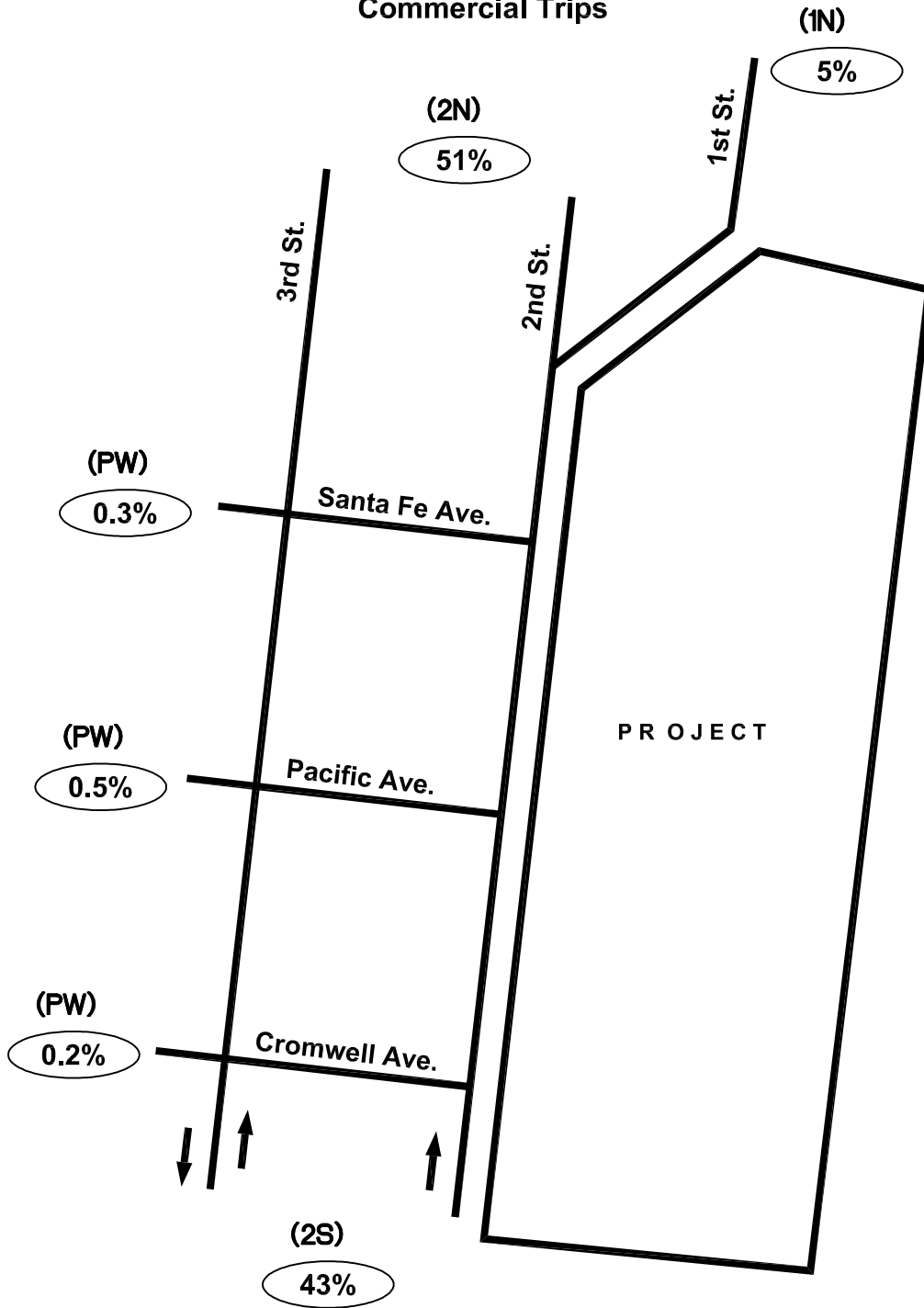*2030 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico*

DASZ #	% Sub Area in Study	2004 Population	2030 Population	Interpolated Population for the Year	Population in Study	Percent Population	(PW) Pacific Ave. West % Utilizing	% Population Utilizing	Population
		2004	**2030**	**2012**					
Boundary Specified on DASZ Map									
5001	100%	0	0	0	0	0.00%	0%	0.00%	0
5002	100%	0	0	0	0	0.00%	0%	0.00%	0
5003	100%	13	128	48	48	0.11%	0%	0.00%	0
5004	100%	133	188	150	150	0.34%	0%	0.00%	0
5005	100%	543	575	553	553	1.24%	0%	0.00%	0
5006	100%	24	98	47	47	0.11%	0%	0.00%	0
5007	100%	4	93	31	31	0.07%	0%	0.00%	0
5008	100%	16	152	58	58	0.13%	0%	0.00%	0
5009	100%	55	216	105	105	0.23%	0%	0.00%	0
5011	100%	110	654	277	277	0.62%	0%	0.00%	0
5012	100%	22	187	73	73	0.16%	0%	0.00%	0
5101	100%	1878	1867	1,875	1,875	4.19%	0%	0.00%	0
5102	100%	534	519	529	529	1.18%	0%	0.00%	0
5103	100%	794	1144	902	902	2.02%	0%	0.00%	0
5111	100%	1326	1244	1,301	1,301	2.91%	0%	0.00%	0
5112	100%	1812	1876	1,832	1,832	4.10%	0%	0.00%	0
5121	100%	2804	2712	2,776	2,776	6.21%	20%	1.24%	555
5131	100%	170	160	167	167	0.37%	0%	0.00%	0
5132	100%	1779	1765	1,775	1,775	3.97%	0%	0.00%	0
5141	100%	182	171	179	179	0.40%	0%	0.00%	0
5142	100%	296	415	333	333	0.74%	0%	0.00%	0
5143	100%	937	976	949	949	2.12%	0%	0.00%	0
5161	55%	668	625	655	360	0.80%	0%	0.00%	0
5162	100%	536	494	523	523	1.17%	0%	0.00%	0
5163	100%	45	44	45	45	0.10%	0%	0.00%	0
5171	100%	253	269	258	258	0.58%	0%	0.00%	0
5172	100%	958	933	950	950	2.12%	0%	0.00%	0
5173	100%	991	919	969	969	2.17%	0%	0.00%	0
5201	60%	478	1248	715	429	0.96%	0%	0.00%	0
5202	80%	0	81	25	20	0.04%	0%	0.00%	0
5211	100%	790	794	791	791	1.77%	0%	0.00%	0
5212	100%	611	638	619	619	1.38%	0%	0.00%	0
5213	95%	279	279	279	265	0.59%	0%	0.00%	0
5221	100%	4	3	4	4	0.01%	0%	0.00%	0
5231	100%	1	0	1	1	0.00%	0%	0.00%	0
5232	100%	33	32	33	33	0.07%	0%	0.00%	0
5241	100%	502	507	504	504	1.13%	0%	0.00%	0
5242	75%	1274	1192	1,249	937	2.09%	0%	0.00%	0
5251	100%	265	271	267	267	0.60%	0%	0.00%	0
5261	100%	132	454	231	231	0.52%	0%	0.00%	0
5262	100%	99	93	97	97	0.22%	0%	0.00%	0
5271	100%	410	830	539	539	1.20%	0%	0.00%	0
5272	100%	0	83	26	26	0.06%	0%	0.00%	0
5273	100%	418	434	423	423	0.95%	0%	0.00%	0
5301	100%	26	22	25	25	0.06%	0%	0.00%	0
5311	100%	1442	1369	1,420	1,420	3.17%	0%	0.00%	0
5312	100%	225	228	226	226	0.51%	0%	0.00%	0
5602	55%	2253	2201	2,237	1,230	2.75%	0%	0.00%	0
5612	95%	1024	1140	1,060	1,007	2.25%	0%	0.00%	0
5613	100%	1125	1073	1,109	1,109	2.48%	0%	0.00%	0
5614	100%	683	642	670	670	1.50%	0%	0.00%	0
5622	95%	2876	2668	2,812	2,671	5.97%	0%	0.00%	0
5623	65%	1397	1295	1,366	888	1.99%	0%	0.00%	0
8001	100%	19	273	97	97	0.22%	0%	0.00%	0
8002	30%	422	524	453	136	0.30%	0%	0.00%	0
8011	90%	2027	1998	2,018	1,816	4.06%	0%	0.00%	0
8012	50%	466	471	468	234	0.52%	0%	0.00%	0
8021	100%	724	829	756	756	1.69%	0%	0.00%	0
8022	100%	1083	1423	1,188	1,188	2.66%	0%	0.00%	0
8031	100%	1753	1721	1,743	1,743	3.90%	0%	0.00%	0
8032	100%	24	15	21	21	0.05%	0%	0.00%	0
8041	95%	2730	2659	2,708	2,573	5.75%	0%	0.00%	0
8051	100%	13	5	11	11	0.02%	0%	0.00%	0
8052	100%	477	440	466	466	1.04%	0%	0.00%	0
8061	50%	1167	1219	1,183	592	1.32%	0%	0.00%	0
8062	80%	2732	2539	2,673	2,138	4.78%	0%	0.00%	0
8071	100%	5	28	12	12	0.03%	0%	0.00%	0
8072	100%	765	1268	920	920	2.06%	0%	0.00%	0
8082	50%	1081	1034	1,067	534	1.19%	0%	0.00%	0
8401	40%	0	0	0	0	0.00%	0%	0.00%	0
				49,872	44,734	100.00%			**555**
									1.24%

Rail Yard Reuse Project

(Santa Fe Ave. / 2nd St.)
Trip Distribution Map (%)
Commercial Trips

NTS

(1N)
5%

(2N)
51%

1st St.

3rd St.

2nd St.

(PW)
0.3%

Santa Fe Ave.

P R O J E C T

(PW)
0.5%

Pacific Ave.

(PW)
0.2%

Cromwell Ave.

(2S)
43%

Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Rail Yard Reuse Project

(Santa Fe Ave. / 2nd St.)
Trip Assignments (%)
Commercial Trips
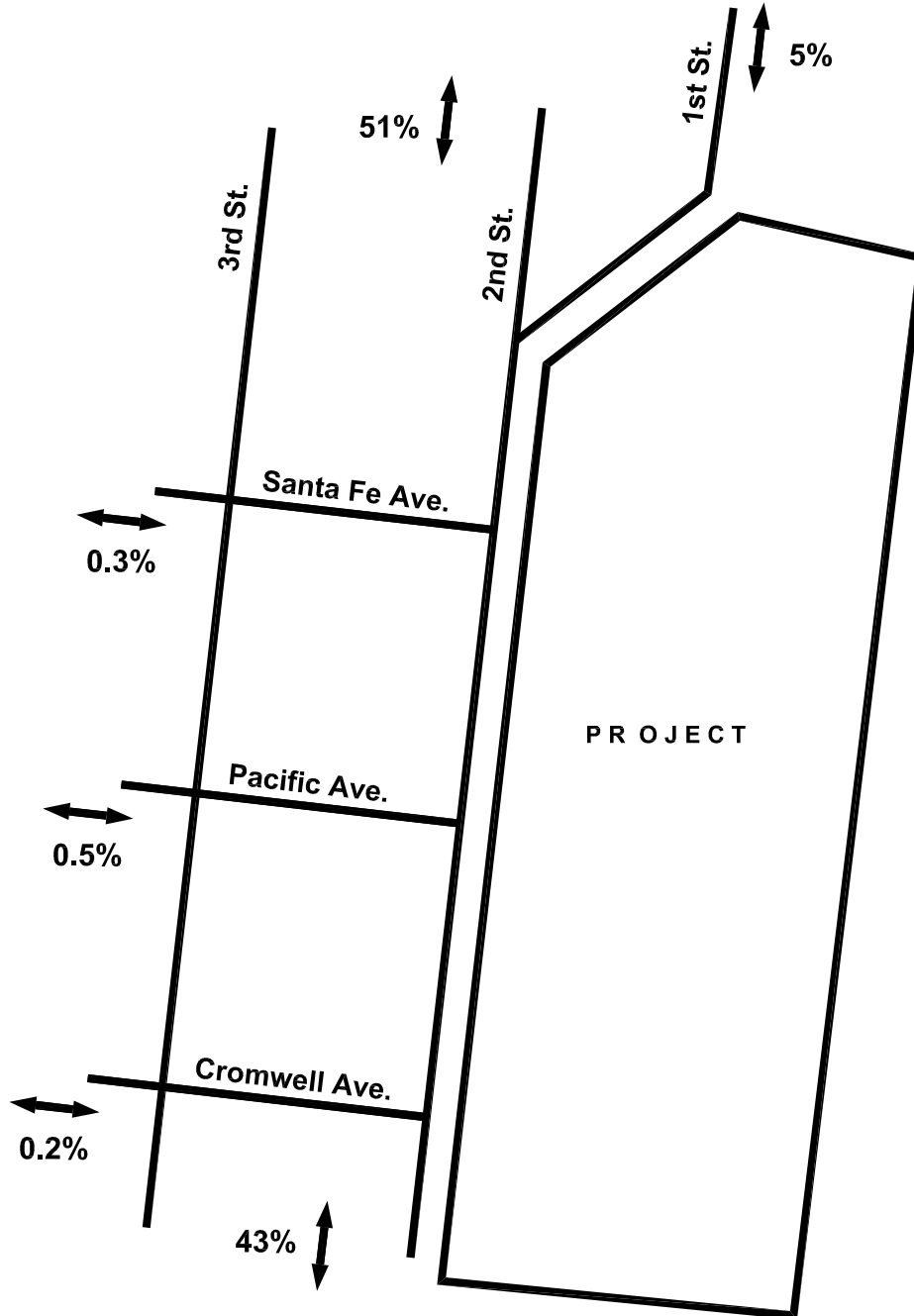
NORTH

NTS

1st St.

5%

51%

3rd St.

2nd St.

Santa Fe Ave.

0.3%

PROJECT

Pacific Ave.

0.5%

Cromwell Ave.

0.2%

43%

Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

SANDOVAL

27

U.S. 550

1

NORTHERN BLVD.

27

2

3

4

I-25

27

SANTA FE

5

13

14

12

PASEO DEL NORTE

N.M. 14

29

BERNALILLO

MONTGOMERY

7

15

16

6

17

18

8

19

I-40

23

N.M. 337

COORS

10

11

20

22

9

I-40

21

28

24

N.M. 47

25

25

I-25

28

TORRANCE

26

VALENCIA

1/27/03
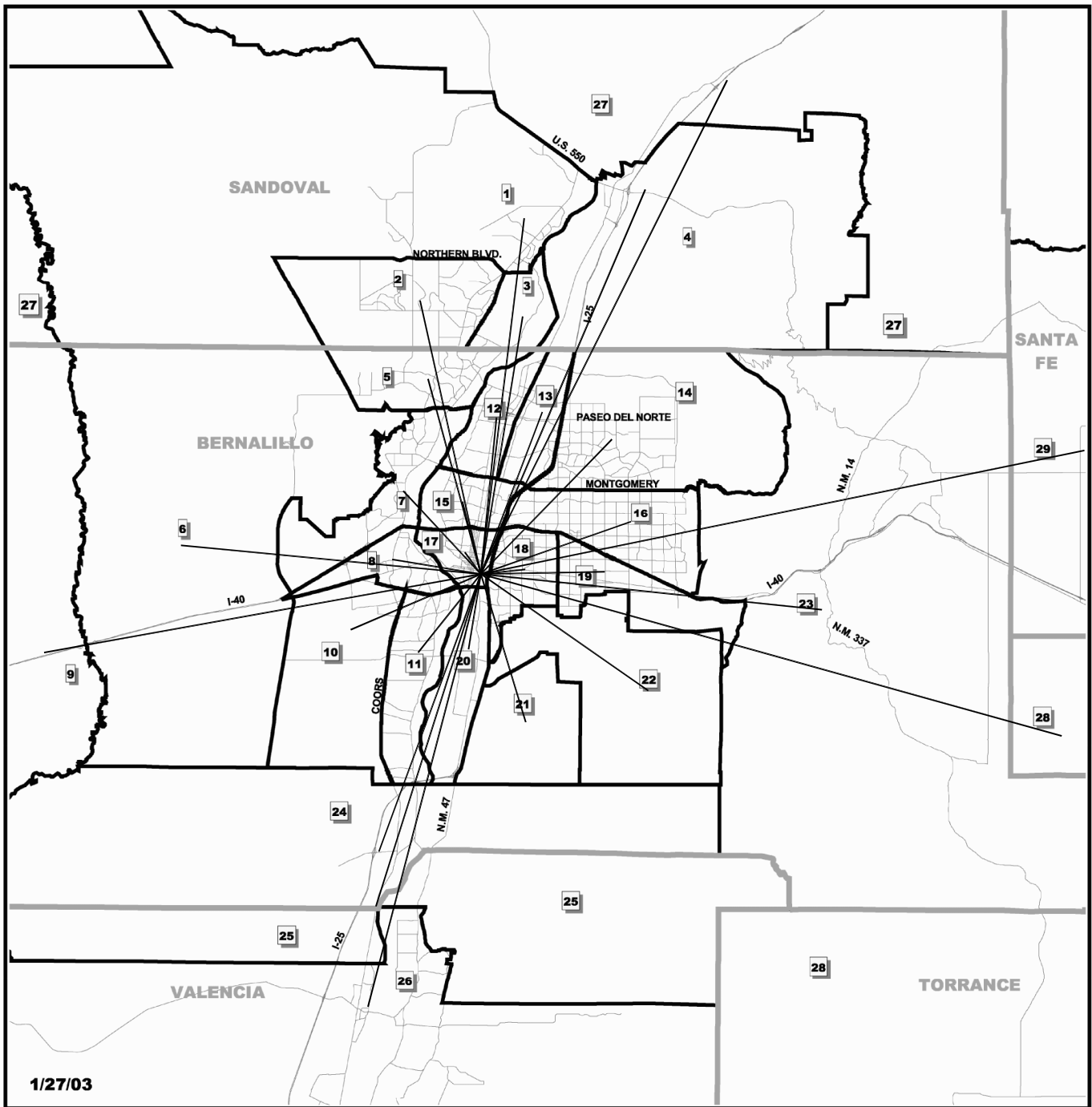
Figure 6

22 Subarea Identification Number

Subareas of the MRCOG Region

Subarea boundaries extend to county boundary
where full extent of subarea not shown except for Subarea 29
which only includes southern Santa Fe County.

**Rail Yard Re-Use Project
(Santa Fe Ave. / 2nd St.)
Trip Distribution Subarea Map**

A-9

Trip Distribution Table
Rail Yard Re-Use Project (Santa Fe Av. / 2nd St.)

Sub Area Population Data:
For determination of Trip Distribution for Proposed **Office Development Trips**

2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

Sub Area I.D.#	% Sub Area in Study	2004 Population	2030 Population	Interpolated Population for the Year 2012	Population in Study	Dist. (Mi.)	Population / Distance	% Population / Distance	(SN) Second St North % Utilizing	(SN) Population	(SN) % Population / Dist. Utilizing	(SS) Second St South % Utilizing	(SS) % Population / Dist. Utilizing	(SS) Population
1	100%	26,972	39,738	30,900	30,900	14.9	2,074	1.43%	100%	2,074	1.43%	0%	0.00%	0
2	100%	39,348	40,610	39,736	39,736	11.4	3,486	2.40%	100%	3,486	2.40%	0%	0.00%	0
3	100%	7,865	8,728	8,131	8,131	10.7	760	0.52%	100%	760	0.52%	0%	0.00%	0
4	100%	13,387	14,936	13,864	13,864	17.6	788	0.54%	100%	788	0.54%	0%	0.00%	0
5	100%	35,968	44,203	38,502	38,502	8.0	4,813	3.31%	100%	4,813	3.31%	0%	0.00%	0
6	100%	2,784	3,950	3,143	3,143	12.3	256	0.18%	100%	256	0.18%	0%	0.00%	0
7	100%	48,565	59,615	51,965	51,965	4.2	12,373	8.51%	100%	12,373	8.51%	0%	0.00%	0
8	100%	27,546	28,553	27,856	27,856	3.3	8,441	5.81%	50%	4,221	2.90%	50%	2.90%	4,221
9	100%	1,678	1,888	1,743	1,743	18.5	94	0.06%	100%	94	0.06%	0%	0.00%	0
10	100%	39,532	4,822	28,852	28,852	5.8	4,974	3.42%	0%	0	0.00%	100%	3.42%	4,974
11	100%	32,051	33,202	32,405	32,405	4.4	7,365	5.07%	0%	0	0.00%	100%	5.07%	7,365
12	100%	16,144	16,146	16,145	16,145	6.3	2,563	1.76%	100%	2,563	1.76%	0%	0.00%	0
13	100%	8,715	10,146	9,155	9,155	7.1	1,289	0.89%	100%	1,289	0.89%	0%	0.00%	0
14	100%	93,104	94,279	93,466	93,466	8.0	11,683	8.04%	100%	11,683	8.04%	0%	0.00%	0
15	100%	24,691	25,262	24,867	24,867	2.6	9,564	6.58%	100%	9,564	6.58%	0%	0.00%	0
16	100%	108,882	108,353	108,719	108,719	7.1	15,313	10.53%	100%	15,313	10.53%	0%	0.00%	0
17*	100%	20,920	21,196	21,005	21,005	1.0	21,005	14.45%	45%	9,452	6.50%	45%	6.50%	9,452
18	100%	42,078	41,670	41,952	41,952	2.4	17,480	12.02%	50%	8,740	6.01%	50%	6.01%	8,740
19	100%	59,027	58,888	58,984	58,984	5.7	10,348	7.12%	50%	5,174	3.56%	50%	3.56%	5,174
20	100%	9,482	9,699	9,549	9,549	3.7	2,581	1.78%	0%	0	0.00%	100%	1.78%	2,581
21	100%	6	6	6	6	7.2	1	0.00%	0%	0	0.00%	100%	0.00%	1
22	100%	4,231	3,629	4,046	4,046	9.3	435	0.30%	0%	0	0.00%	100%	0.30%	435
23	100%	18,140	20,390	18,832	18,832	15.1	1,247	0.86%	100%	1,247	0.86%	0%	0.00%	0
24	100%	2,393	2,554	2,443	2,443	12.9	189	0.13%	0%	0	0.00%	100%	0.13%	189
25	100%	1,009	1,062	1,025	1,025	15.1	68	0.05%	0%	0	0.00%	100%	0.05%	68
26	100%	75,506	85,654	78,628	78,628	19.4	4,053	2.79%	0%	0	0.00%	100%	2.79%	4,053
27	100%	20,955	22,276	21,361	21,361	23.3	917	0.63%	100%	917	0.63%	0%	0.00%	0
28	100%	19,524	21,690	20,190	20,190	26.2	771	0.53%	0%	0	0.00%	100%	0.53%	771
29	100%	11,360	13,771	12,102	12,102	26.6	455	0.31%	100%	455	0.31%	0%	0.00%	0
		811,863	836,916	819,572	819,572		145,384	100.00%		95,260	65.52%		33.03%	48,024
											65.52%			33.03%

Trip Distribution Table
Rail Yard Re-Use Project (Santa Fe Av. / 2nd St.)

Sub Area Population Data:

For determination of Trip Distribution for Proposed **Office Development Trips**

2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico
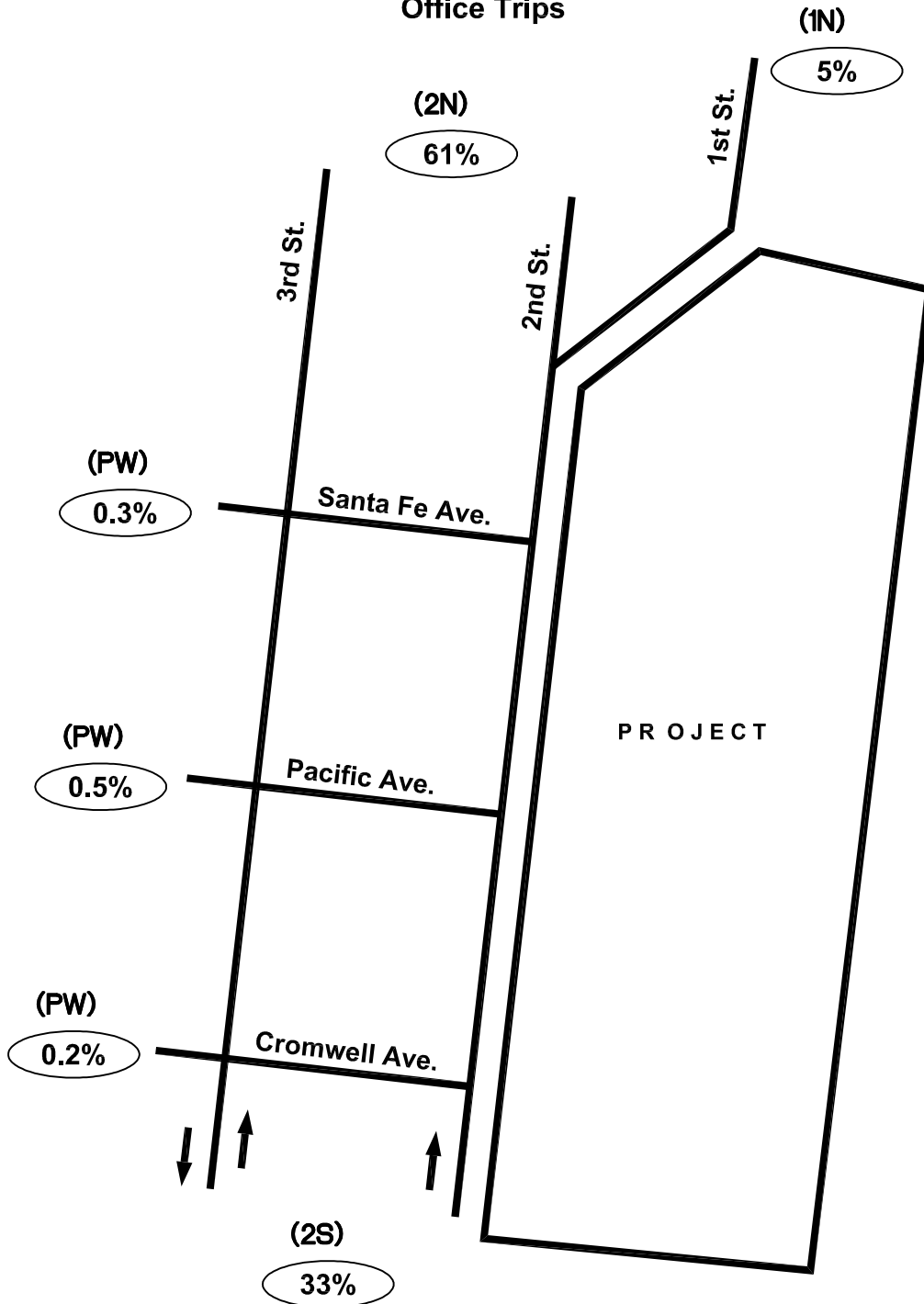
Sub Area I.D.#	% Sub Area in Study	2004 Population	2030 Population	Interpolated Population for the Year	Population in Study	Dist. (Mi.)	Population / Distance	(PW) Pacific Ave. West		
		2004	2030	2012				% Utilizing	% Population / Dist. Utilizing	Population
1	100%	26,972	39,738	30,900	30,900	14.9	2,074	0%	0.00%	0
2	100%	39,348	40,610	39,736	39,736	11.4	3,486	0%	0.00%	0
3	100%	7,865	8,728	8,131	8,131	10.7	760	0%	0.00%	0
4	100%	13,387	14,936	13,864	13,864	17.6	788	0%	0.00%	0
5	100%	35,968	44,203	38,502	38,502	8.0	4,813	0%	0.00%	0
6	100%	2,784	3,950	3,143	3,143	12.3	256	0%	0.00%	0
7	100%	48,565	59,615	51,965	51,965	4.2	12,373	0%	0.00%	0
8	100%	27,546	28,553	27,856	27,856	3.3	8,441	0%	0.00%	0
9	100%	1,678	1,888	1,743	1,743	18.5	94	0%	0.00%	0
10	100%	39,532	4,822	28,852	28,852	5.8	4,974	0%	0.00%	0
11	100%	32,051	33,202	32,405	32,405	4.4	7,365	0%	0.00%	0
12	100%	16,144	16,146	16,145	16,145	6.3	2,563	0%	0.00%	0
13	100%	8,715	10,146	9,155	9,155	7.1	1,289	0%	0.00%	0
14	100%	93,104	94,279	93,466	93,466	8.0	11,683	0%	0.00%	0
15	100%	24,691	25,262	24,867	24,867	2.6	9,564	0%	0.00%	0
16	100%	108,882	108,353	108,719	108,719	7.1	15,313	0%	0.00%	0
17*	100%	20,920	21,196	21,005	21,005	1.0	21,005	10%	1.44%	2,100
18	100%	42,078	41,670	41,952	41,952	2.4	17,480	0%	0.00%	0
19	100%	59,027	58,888	58,984	58,984	5.7	10,348	0%	0.00%	0
20	100%	9,482	9,699	9,549	9,549	3.7	2,581	0%	0.00%	0
21	100%	6	6	6	6	7.2	1	0%	0.00%	0
22	100%	4,231	3,629	4,046	4,046	9.3	435	0%	0.00%	0
23	100%	18,140	20,390	18,832	18,832	15.1	1,247	0%	0.00%	0
24	100%	2,393	2,554	2,443	2,443	12.9	189	0%	0.00%	0
25	100%	1,009	1,062	1,025	1,025	15.1	68	0%	0.00%	0
26	100%	75,506	85,654	78,628	78,628	19.4	4,053	0%	0.00%	0
27	100%	20,955	22,276	21,361	21,361	23.3	917	0%	0.00%	0
28	100%	19,524	21,690	20,190	20,190	26.2	771	0%	0.00%	0
29	100%	11,360	13,771	12,102	12,102	26.6	455	0%	0.00%	0
		811,863	836,916	819,572	819,572		145,384		1.44%	2,100
										1.44%

Rail Yard Reuse Project

(Santa Fe Ave. / 2nd St.)
Trip Distribution Map (%)
Office Trips

NTS

(1N)
5%

(2N)
61%

1st St.

3rd St.

2nd St.

(PW)
0.3%
Santa Fe Ave.

P R O J E C T

(PW)
0.5%
Pacific Ave.

(PW)
0.2%
Cromwell Ave.

(2S)
33%

Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

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Rail Yard Reuse Project

(Santa Fe Ave. / 2nd St.)
Trip Assignments (%)
Office Trips
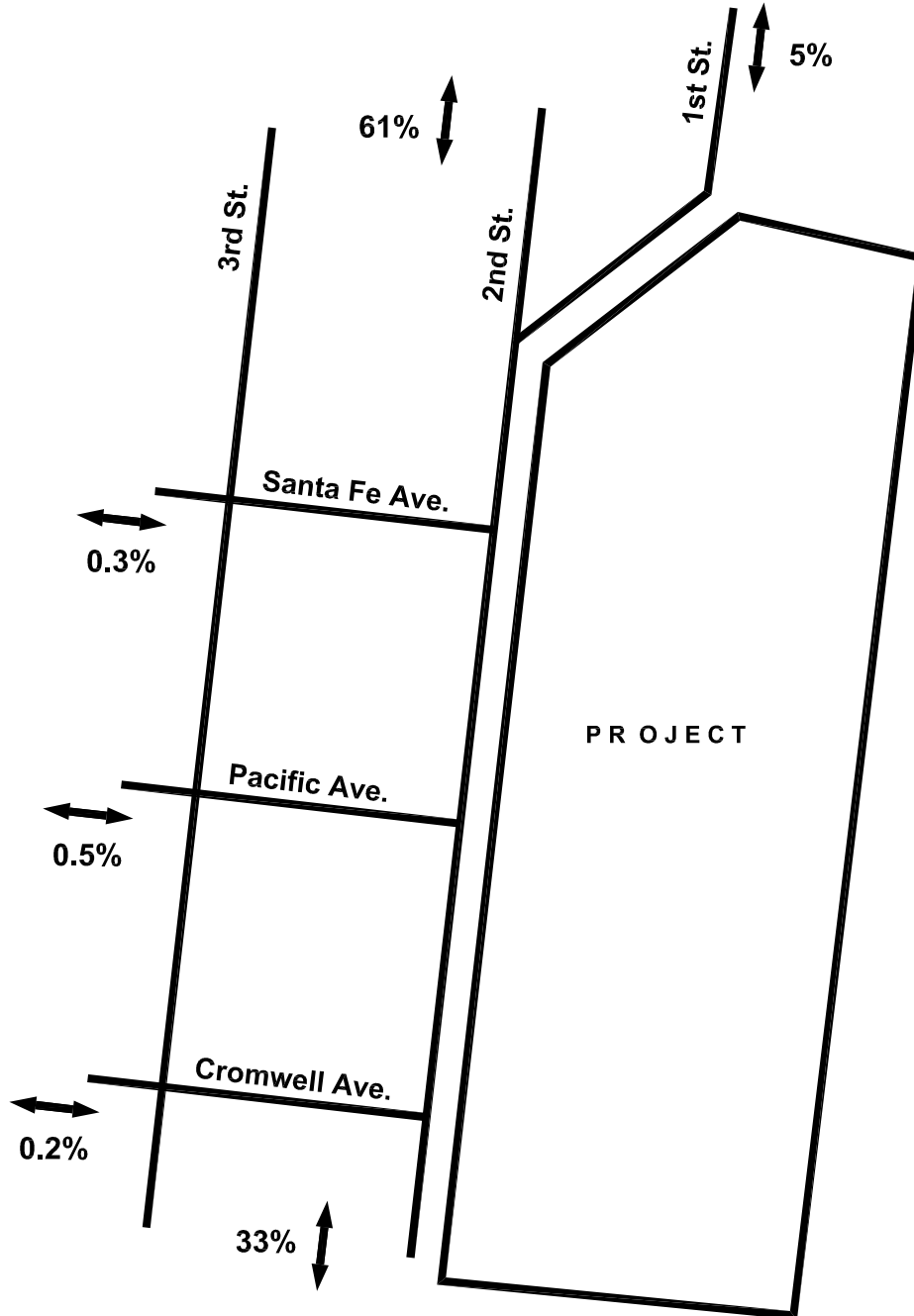
NTS

1st St.

5%

61%

3rd St.

2nd St.

Santa Fe Ave.

0.3%

P R O J E C T

Pacific Ave.

0.5%

Cromwell Ave.

0.2%

33%

Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

A-13

Trip Distribution Table
Rail Yard Re-Use Project (Santa Fe Av. / 2nd St.)

Sub Area Employment Data:
For determination of Trip Distribution for Proposed **Residential Development Trips**

2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

Sub Area I.D.#	% Sub Area in Study	2004 Employment	2030 Employment	Interpolated Employment for the Year	Employment in Study	Dist. (Mi.)	Employment / Distance	% Employment / Distance	(SN) Second St North % Utilizing	% Population / Dist. Utilizing	Population	(SS) Second St South % Utilizing	% Employment / Dist. Utilizing	Employment
		2004	2030	2012										
1	100%	4,903	21,902	10,133	10,133	14.9	680	0.62%	100%	0.62%	680	0%	0.00%	0
2	100%	16,736	23,706	18,881	18,881	11.4	1,656	1.52%	100%	1.52%	1,656	0%	0.00%	0
3	100%	1,267	1,648	1,384	1,384	10.7	129	0.12%	100%	0.12%	129	0%	0.00%	0
4	100%	2,935	4,943	3,553	3,553	17.6	202	0.19%	100%	0.19%	202	0%	0.00%	0
5	100%	13,877	28,079	18,247	18,247	8	2,281	2.10%	100%	2.10%	2,281	0%	0.00%	0
6	100%	712	11,759	4,111	4,111	12.3	334	0.31%	100%	0.31%	334	0%	0.00%	0
7	100%	8,372	19,146	11,687	11,687	4.2	2,783	2.56%	100%	2.56%	2,783	0%	0.00%	0
8	100%	8,058	15,002	10,195	10,195	3.3	3,089	2.84%	50%	1.42%	1,545	50%	1.42%	1,545
9	100%	781	1,498	1,002	1,002	18.5	54	0.05%	100%	0.05%	54	0%	0.00%	0
10	100%	3,342	8,902	5,053	5,053	5.8	871	0.80%	0%	0.00%	0	100%	0.80%	871
11	100%	5,555	7,264	6,081	6,081	4.4	1,382	1.27%	0%	0.00%	0	100%	1.27%	1,382
12	100%	6,929	7,741	7,179	7,179	6.3	1,139	1.05%	100%	1.05%	1,139	0%	0.00%	0
13	100%	38,326	49,804	41,858	41,858	7.1	5,895	5.42%	100%	5.42%	5,895	0%	0.00%	0
14	100%	35,837	44,920	38,632	38,632	8	4,829	4.44%	100%	4.44%	4,829	0%	0.00%	0
15	100%	18,228	22,077	19,412	19,412	2.6	7,466	6.86%	100%	6.86%	7,466	0%	0.00%	0
16	100%	60,444	63,459	61,372	61,372	7.1	8,644	7.94%	100%	7.94%	8,644	0%	0.00%	0
17	100%	33,936	37,420	35,008	35,008	1	35,008	32.16%	45%	14.47%	15,754	45%	14.47%	15,754
18	100%	44,662	51,256	46,691	46,691	2.4	19,455	17.87%	50%	8.93%	9,727	50%	8.93%	9,727
19	100%	27,971	31,533	29,067	29,067	5.7	5,099	4.68%	50%	2.34%	2,550	50%	2.34%	2,550
20	100%	7,090	11,147	8,338	8,338	3.7	2,254	2.07%	0%	0.00%	0	100%	2.07%	2,254
21	100%	49	10,028	3,119	3,119	7.2	433	0.40%	0%	0.00%	0	100%	0.40%	433
22	100%	29,284	30,169	29,556	29,556	9.3	3,178	2.92%	0%	0.00%	0	100%	2.92%	3,178
23	100%	2,651	5,057	3,391	3,391	15.1	225	0.21%	100%	0.21%	225	0%	0.00%	0
24	100%	1,727	2,244	1,886	1,886	12.9	146	0.13%	0%	0.00%	0	100%	0.13%	146
25	100%	161	215	178	178	15.1	12	0.01%	0%	0.00%	0	100%	0.01%	12
26	100%	17,290	32,326	21,916	21,916	19.4	1,130	1.04%	0%	0.00%	0	100%	1.04%	1,130
27	100%	4,520	6,134	5,017	5,017	23.3	215	0.20%	100%	0.20%	215	0%	0.00%	0
28	100%	4,545	6,685	5,203	5,203	26.2	199	0.18%	0%	0.00%	0	100%	0.18%	199
29	100%	1,451	3,796	2,173	2,173	26.6	82	0.08%	100%	0.08%	82	0%	0.00%	0
		401,639	559,860	450,322	450,322		108,871	100.00%		60.80%	66,190		35.99%	39,180
										60.80%			35.99%	

Trip Distribution Table
Rail Yard Re-Use Project (Santa Fe Av. / 2nd St.)

Sub Area Employment Data:
For determination of Trip Distribution for Proposed **Residential Development Trips**

2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico
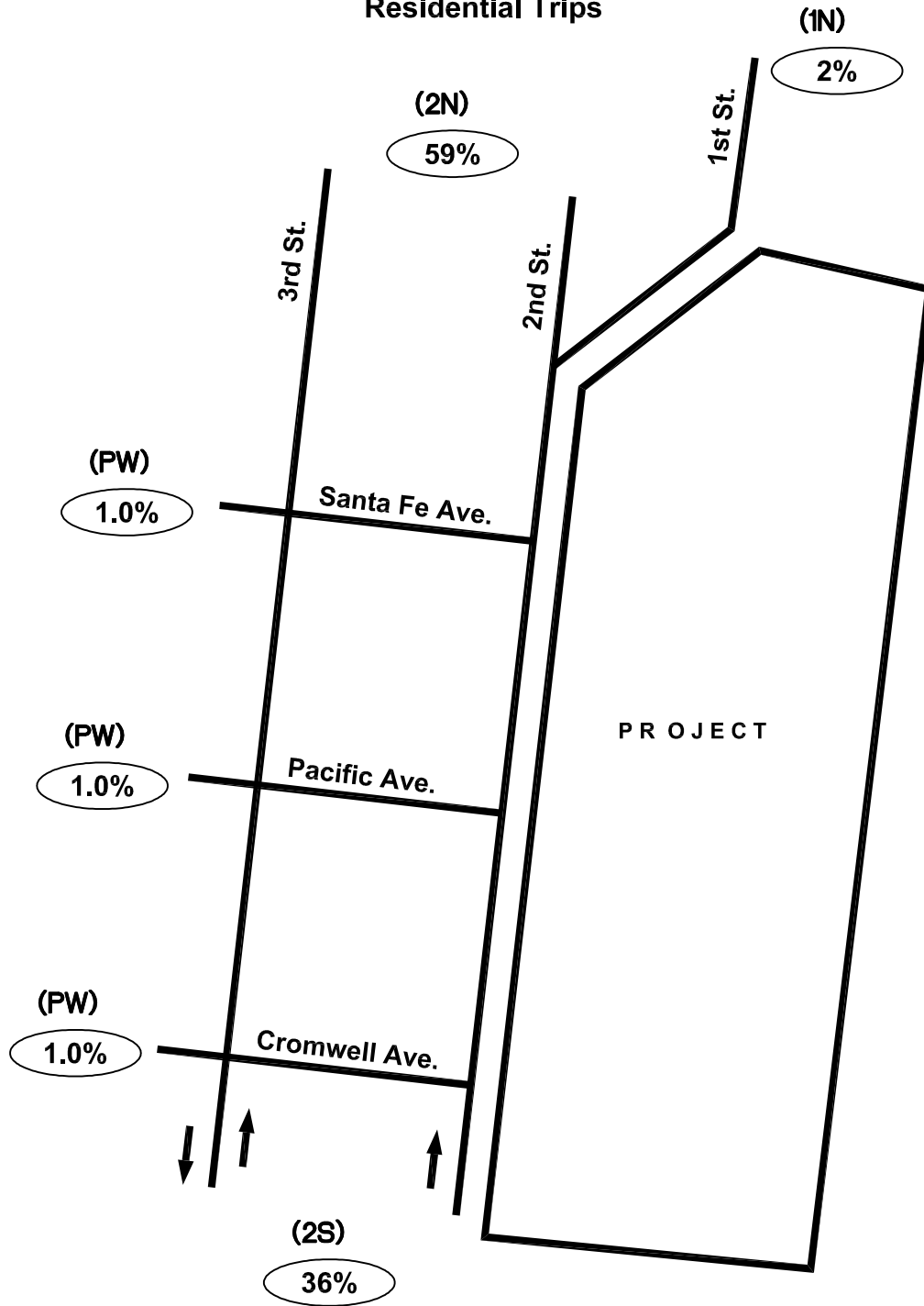
Sub Area I.D.#	% Sub Area in Study	2004 Employment	2030 Employment	Interpolated Employment for the Year 2012	Employment in Study	Dist. (Mi.)	Employment / Distance	% Utilizing	(PW) Pacific Ave. West % Employment / Dist. Utilizing	(PW) Pacific Ave. West Employment
1	100%	4,903	21,902	10,133	10,133	14.9	680	0%	0.00%	0
2	100%	16,736	23,706	18,881	18,881	11.4	1,656	0%	0.00%	0
3	100%	1,267	1,648	1,384	1,384	10.7	129	0%	0.00%	0
4	100%	2,935	4,943	3,553	3,553	17.6	202	0%	0.00%	0
5	100%	13,877	28,079	18,247	18,247	8	2,281	0%	0.00%	0
6	100%	712	11,759	4,111	4,111	12.3	334	0%	0.00%	0
7	100%	8,372	19,146	11,687	11,687	4.2	2,783	0%	0.00%	0
8	100%	8,058	15,002	10,195	10,195	3.3	3,089	0%	0.00%	0
9	100%	781	1,498	1,002	1,002	18.5	54	0%	0.00%	0
10	100%	3,342	8,902	5,053	5,053	5.8	871	0%	0.00%	0
11	100%	5,555	7,264	6,081	6,081	4.4	1,382	0%	0.00%	0
12	100%	6,929	7,741	7,179	7,179	6.3	1,139	0%	0.00%	0
13	100%	38,326	49,804	41,858	41,858	7.1	5,895	0%	0.00%	0
14	100%	35,837	44,920	38,632	38,632	8	4,829	0%	0.00%	0
15	100%	18,228	22,077	19,412	19,412	2.6	7,466	0%	0.00%	0
16	100%	60,444	63,459	61,372	61,372	7.1	8,644	0%	0.00%	0
17	100%	33,936	37,420	35,008	35,008	1	35,008	10%	3.22%	3,501
18	100%	44,662	51,256	46,691	46,691	2.4	19,455	0%	0.00%	0
19	100%	27,971	31,533	29,067	29,067	5.7	5,099	0%	0.00%	0
20	100%	7,090	11,147	8,338	8,338	3.7	2,254	0%	0.00%	0
21	100%	49	10,028	3,119	3,119	7.2	433	0%	0.00%	0
22	100%	29,284	30,169	29,556	29,556	9.3	3,178	0%	0.00%	0
23	100%	2,651	5,057	3,391	3,391	15.1	225	0%	0.00%	0
24	100%	1,727	2,244	1,886	1,886	12.9	146	0%	0.00%	0
25	100%	161	215	178	178	15.1	12	0%	0.00%	0
26	100%	17,290	32,326	21,916	21,916	19.4	1,130	0%	0.00%	0
27	100%	4,520	6,134	5,017	5,017	23.3	215	0%	0.00%	0
28	100%	4,545	6,685	5,203	5,203	26.2	199	0%	0.00%	0
29	100%	1,451	3,796	2,173	2,173	26.6	82	0%	0.00%	0
		401,639	559,860	450,322	450,322		108,871		3.22%	3,501
										3.22%

Rail Yard Reuse Project

(Santa Fe Ave. / 2nd St.)
Trip Distribution Map (%)
Residential Trips

NTS

(1N)
2%

(2N)
59%

1st St.

3rd St.

2nd St.

(PW)
1.0%

Santa Fe Ave.

PROJECT

(PW)
1.0%

Pacific Ave.

(PW)
1.0%

Cromwell Ave.

(2S)
36%

Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

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Rail Yard Reuse Project

(Santa Fe Ave. / 2nd St.)
Trip Assignments (%)
Residential Trips
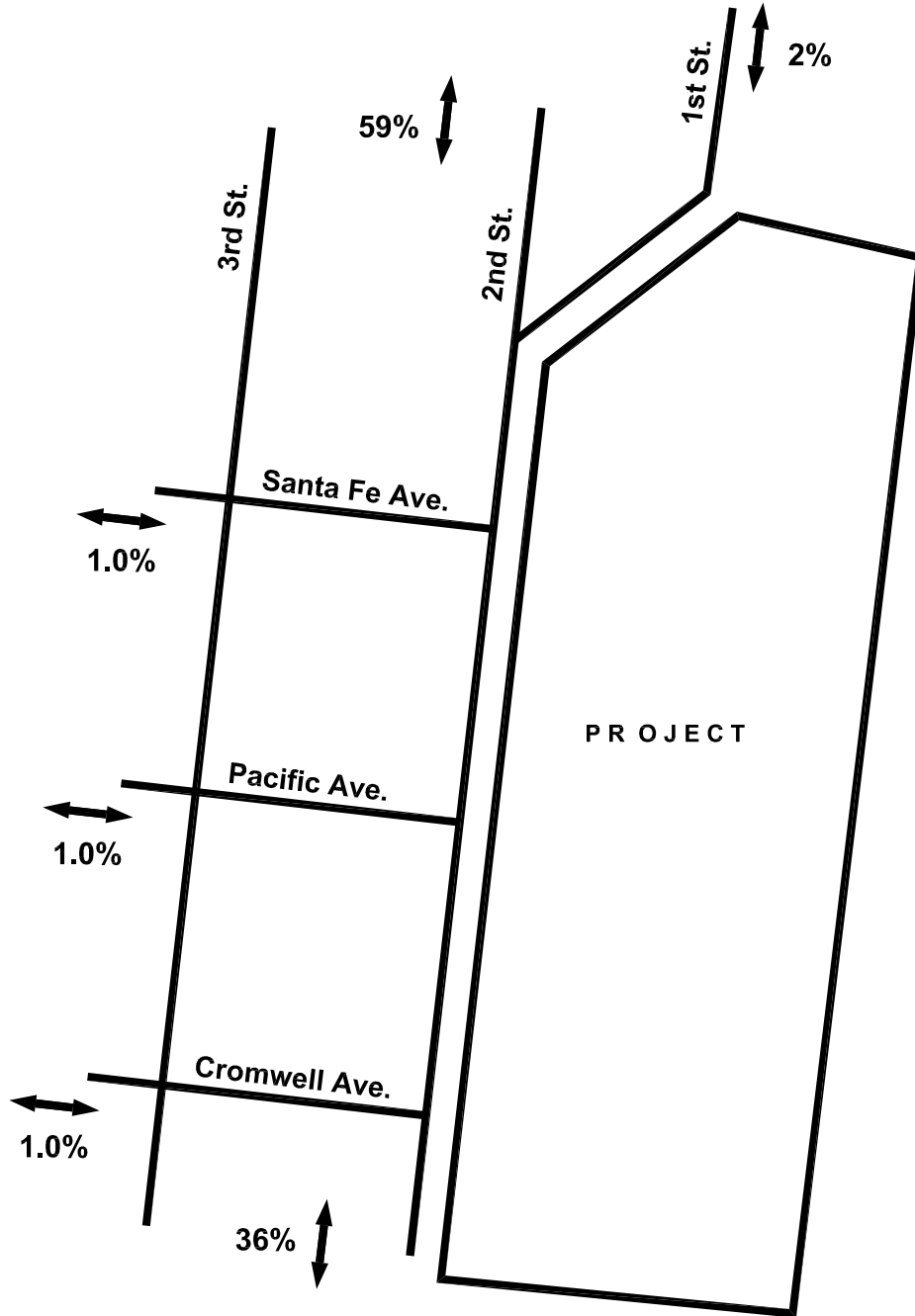
NTS

1st St.

2%

59%

3rd St.

2nd St.

Santa Fe Ave.

1.0%

P R O J E C T

Pacific Ave.

1.0%

Cromwell Ave.

1.0%

36%

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Railyard Re-Use Project (Santa Fe Ave. / 2nd St.)

Optimum Street Capacity   11,000 ADT

		Distribution			Trip Allocation			New Trips Generated	Projected ADT
Route	2008 ADT	Commercial	Office	Residential	Commercial	Office	Residential		
2nd St. / 3rd St. North	4,900	51.0%	61.0%	59.0%	4,080	1,007	885	5,972	10,872
2nd St. / 3rd St. South	4,900	43.0%	33.0%	36.0%	3,440	545	540	4,525	9,425
1st St North	<1,000	5.0%	5.0%	2.0%	400	83	30	513	N/A
Pacific Ave. West	<1,000	0.5%	0.5%	1.0%	40	8	15	63	N/A
Santa Fe Ave. West	<1,000	0.3%	0.3%	1.0%	24	5	15	44	N/A
Cromwell West	<1,000	0.2%	0.2%	1.0%	16	3	15	34	N/A

Commercial Trips Generated   8,000
Office Trips Generated   1,650
Residential Trips Generated   1,500
Total Trips Generated   11,150

NOTE: 2nd St. along the project frontage is a one-way northbound street (2 northbound lanes) - to be converted to two way street.
       3rd St. south of Coal Ave. is a two way street (one lane northbound, one lane southbound)

Railyard Re-Use Project (Santa Fe Ave. / 2nd St.)

Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

Summary Sheet

USE (ITE CODE) DESCRIPTION	Units	24 HR VOL GROSS	A. M. PEAK HR. ENTER	A. M. PEAK HR. EXIT	P. M. PEAK HR. ENTER	P. M. PEAK HR. EXIT
Shopping Center (820)	150.00	8,839	119	76	409	426
General Office Building (710)	150.00	1,823	228	31	42	205
Apartment, Post-1973 (220)	250.00	1,639	25	101	101	54
Subtotal		**12,301**	**372**	**208**	**552**	**685**
Mixed Use Reduction:	10%	(1,230)	(37)	(21)	(55)	(69)
Net New Trips to System		**11,071**	**335**	**187**	**497**	**616**