

Appendix F

Traffic Analysis

MEMO

LOS ANGELES OFFICE

Date: February 23, 2007

Project Number: 100756

To: John Cook, AICP, Circlepoint

From: Sam Morrissey, P.E.

Subject: Arizona Eastern Rail – Traffic Analysis

Wilbur Smith Associates is pleased to present this memorandum; a traffic and transportation analysis of a proposed Arizona Eastern Rail (AZE) line in Safford, Arizona. The analysis documents the existing and future conditions along two study roadway segments where the proposed rail line will cross; Highway U.S. 70 and Airport Road. The primary focus of this analysis was the transportation related effects of the proposed project at these two crossing locations.

1.0 EXISTING CONDITIONS

As a basis for comparison with proposed future conditions, existing conditions were analyzed for both study roadway segments along U.S. 70 and Airport Road. Available 2005 traffic volume data was collected for both Airport Road and U.S. 70.

U.S. 70

The study area along U.S. 70 spanned from milepost 343 to milepost 344. A definitive rail crossing location had yet to be determined at the time of this analysis; however, the selected study area was assumed to cover all probable crossing locations based on preliminary information provided by AZE. Within the bounds of the study area, U.S. 70 is a two-lane highway with a posted speed limit of 55 mph. No signalized intersections exist within the study area. Both residential and commercial driveways directly access the highway. U.S. 70 crosses the San Simone River within the study area. An upgrade in roadway elevation leading to the crossing was observed for a length of approximately 650 feet on either side of the bridge.

Airport Road

The study area along Airport Road extended westward approximately one half mile from the intersection with Solomon Pass Road. Within the study segment, Airport Road consists of two lanes with no intersections. Airport Road is predominantly surrounded by vacant land, with the exception of Safford Regional Airport to the east of the study area. No speed limit was posted within this roadway segment, however based on the closest available posting the speed limit was assumed to be 55 mph.

1.1 EXISTING TRAFFIC VOLUMES

Year 2005 average annual daily traffic (AADT) volume for U.S. 70 from milepost 341.85 to milepost 344.37 was supplied by the Arizona Department of Transportation (ADOT), while AADT volumes for Airport Road were calculated based on raw traffic count data provided by the Graham County Office of Engineering. Seasonal and daily adjustment factors, as well as

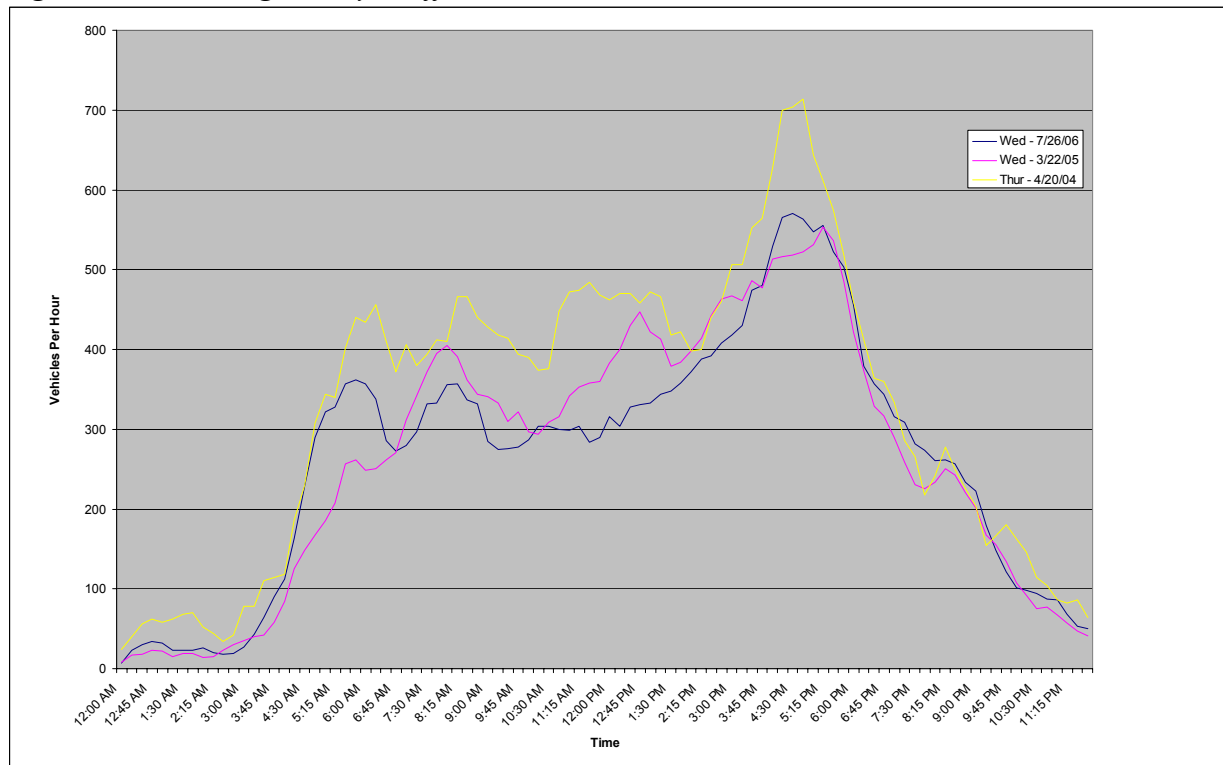
peak hour (K) and peak directional (D) factors were provided by ADOT to arrive at a one-way PM peak hour volume used in analysis. Table 1.1 summarizes the AADT calculations for each study segment. Figures 1.1 and 1.2 graphically summarize the existing available traffic volumes along each of the study roadway segments. The tabulated data from which the information in Table 1.1, Figures 1.1, and Figure 1.2 was derived can be found in Appendix A.

Table 1.1 – Existing AADT and Calculations

	2005	
	US 70	Airport Rd
Raw Count Data ¹	N/A	464
Annual Growth Factor ²	0	0
Seasonal Adjustment ²	N/A	0.917
AADT ²	5,900	425
K Factor ²	10.10%	10.10%
PM Peak hour	596	43
D Factor ¹	51.50%	51.50%
One Way PM Peak	307	22

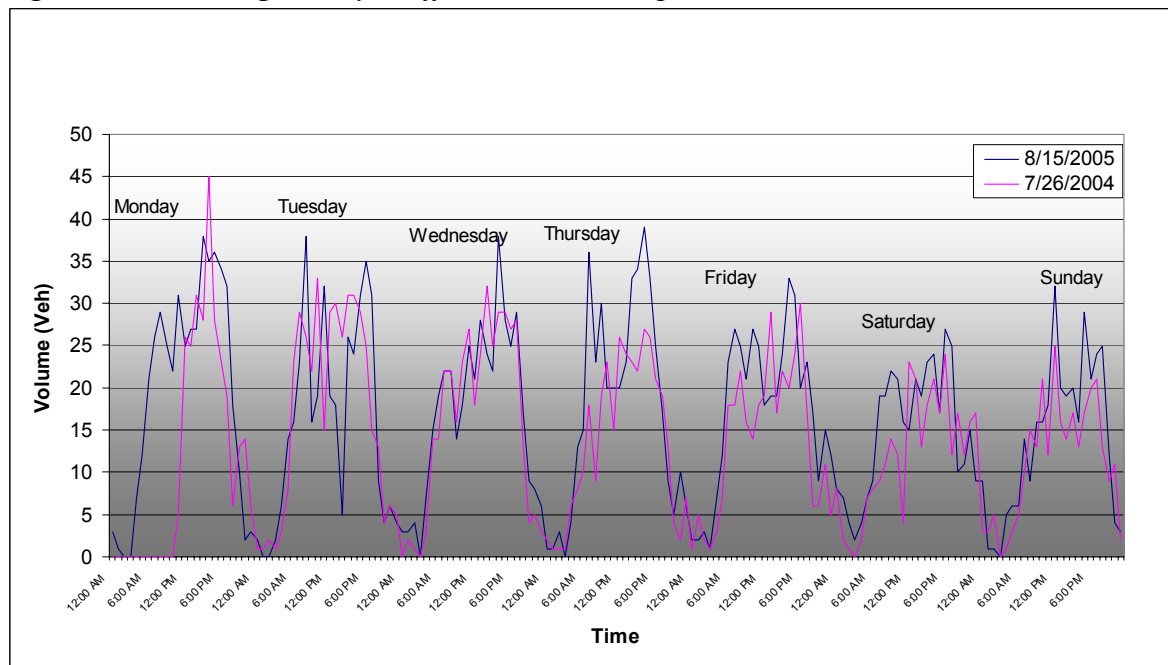
Source: 1) Graham County Engineering Department
2) Arizona Department of Transportation (ADOT)

Figure 1.1 – Existing Hourly Traffic Volumes – U.S. 70 MP 341.85 to MP 344.37



Data Source: Arizona Department of Transportation, September 2006.

Figure 1.2 – Existing Weekly Traffic Volumes – Airport Road 500' E/O Mesa De La Paz



Data Source: Graham County Engineering Department, September 2006.

1.2 EXISTING LEVEL OF SERVICE (LOS)

Currently, along both study roadway segments there are no at-grade rail crossings to restrict traffic flow. From the standpoint of delay based LOS analysis, both study roadway segments along Airport Road and U.S. 70 are operating at free-flow and vehicles traveling on these roadway segments do not experience any delay.

2.0 FUTURE CONDITIONS

Future conditions were projected into Year 2030, including both two-lane and four-lane configurations possible along the study segment of U.S. 70, as well as an unchanged two-lane scenario for Airport Road.

2.1 FUTURE PLANNED DEVELOPMENT AND 2030 AADT

In order to predict 2030 volumes, an annual growth rate of 1.85% was applied to Year 2005 AADT traffic volumes. This rate was provided by ADOT for traffic volumes along the study roadway segment and was derived from the linear interpolation of previous growth in traffic volumes along U.S. 70. Therefore, any previous development trends along U.S. 70 are expected to be captured by this growth rate. By using this growth rate to project volumes, a similar pattern of development previously to the west of the study area is assumed to continue east along U.S. 70 through the Year 2030.

Table 2.1 summarizes how the AADT data for each location was incorporated into each analyzed scenario. The resulting one-way PM peak hour volume was then incorporated into the subsequent intersection operational analyses to be outlined in Section 3.2.

Table 2.1 – 2030 AADT Calculations

	2005		2030	
	U.S. 70	Airport Rd	U.S. 70	Airport Rd
Raw Count Data ¹	N/A	464	N/A	464
Annual Growth Factor ²	0	0	1.85%	1.85%
Seasonal Adjustment ²	N/A	0.917	N/A	0.917
AADT ²	5,900	425	9,330	673
K Factor ²	10.10%	10.10%	10.10%	10.10%
PM Peak hour	596	43	942	68
D Factor ¹	51.50%	52.00%	51.50%	52.00%
One Way PM Peak	307	22	485	35

Source: 1) Graham County Engineering Department
2) Arizona Department of Transportation (ADOT)

3.0 TRAFFIC IMPACT ASSESSMENT

As a direct result of the construction of an at-grade crossing, vehicles along each study segment which were previously freely flowing will be subject to delay based on the proposed at-grade rail crossings. In order to calculate the average vehicle delay at each segment it was necessary to predict the potential maximum direct delay imposed by each train crossing. In addition to average vehicle delay, it was also of interest to compute maximum vehicle queues possible, for safety and sight distance considerations.

3.1 CROSSING DELAY CALCULATION

In order to estimate the crossing time of the train, assumptions were made regarding train length and speed. The maximum train length as well as the minimum speed provided by Arizona Eastern Rail was incorporated in the calculations, in order to be conservative.

Assumptions:

- Train speed: 10 MPH minimum
- Train Length: 30 cars + 3 locomotives = 1,920 ft maximum
- One crossing per PM peak hour

In addition to the train crossing, it was necessary to incorporate any standards in preemptive signal timing to accurately reflect the total delay imposed by the train as it crosses the roadway. The guidelines used in these calculations are in accordance with the Arizona Corporation Commission (ACC) Rail Road Safety department's guidelines.

Railroad Crossing Phases:

- 20 seconds signal preemption (as per Federal Rail Administration requirements)
- 131 seconds for train to cross the roadway (as calculated, based on above assumptions)

- 12 seconds maximum before gates are fully raised (guideline provided by the Manual for Uniform Traffic Control Devices)
- The train will impose a maximum of 163 seconds delay per crossing.

3.2 QUEUE LENGTH AND VEHICLE DELAY ANALYSIS

The data calculated above was combined with the available Average AADT volumes for the two following roadway segments:

- U.S. 70 MP 341.85 to MP 344.37
- Airport Road east of Mesa De La Paz

Synchro 6 software (consistent with Highway Capacity Manual methodologies) was utilized for PM peak hour operational analysis of an at-grade crossing at each study roadway segment. In compliance with ADOT traffic engineering policies, the analysis conformed to the following guidelines:

Peak Hour Factor (PHF):

- PHF = 0.8 for < 75 vph per lane
- PHF = 0.85 for 75 – 300 vph per lane
- PHF = 0.9 for >300 vph per lane

Source: ADOT Traffic Engineering Policies, Guidelines, and Procedures; Section 200 – Traffic Studies

The results of the PM peak hour intersection operational analysis for potential at-grade crossings at U.S. 70 and Airport Road is summarized on Table 3.1. Note that Table 3.1 shows two possible configurations for U.S. 70; the existing two-lane configuration as well as the proposed four-lane configuration.

*Table 3.1 – Results of PM Peak Hour Intersection Operational Analysis
(One Crossing Per PM Peak Hour)*

	2005			2030		
	U.S. 70 2 Lanes	U.S. 70 4 Lanes	Airport Rd	U.S. 70 2 Lanes	U.S. 70 4 Lanes	Airport Rd
Volume (vph)	596	596	43	942	942	68
PHF	0.9	0.85	0.8	0.9	0.85	0.8
Adj. Flow (vph)	662	701	54	1047	1109	85
Average Delay Per Vehicle (sec)	19	20.8	32.1	17.5	18.3	30.5
Intersection LOS	B	C	C	B	B	C
Max Queue (ft)	848	333	61	1371	608	87
Max Queue (Veh)^a	48	19	3	78	34	5

Source: Wilbur Smith Associates, 2006.

Notes: a) Based on AASHTO standard length of 17 feet 8 inches for cars and light trucks.

Based on the analysis, an at-grade crossing of a four-lane U.S. 70 in 2030 would yield the following:

- Maximum Queue Length: *608 ft (for each direction)*
- Maximum Queue: *34 vehicles (for each direction)*
- Average Delay per Vehicle: *18.3 seconds (Intersection LOS B)*
- Vehicles Affected per PM Peak Hour Crossing: *68 vehicles*

Additionally, an at-grade crossing at Airport Road in 2030 would yield the following:

- Maximum Queue Length: *87 ft (for each direction)*
- Maximum Queue: *5 (for each direction)*
- Average Delay per Vehicle: *30.5 seconds (Intersection LOS C)*
- Vehicles Affected per PM Peak Hour Crossing: *10 vehicles*

3.3 POTENTIAL CONSTRUCTION TRAFFIC IMPACTS

Construction activities were assumed to consist of clearing and grubbing, laying down the roadbed, laying track, and constructing a bridge over the Gila River. The assumption for construction time is 8 hours a day, 5 days a week, for approximately 9 to 12 months.

A typical track construction vehicle list was assumed to be the following:

- Trucks (5 pickups and 1 flat bed truck)
- Skid Steer Loaders (4)
- Front-end Loaders (4)
- Air Compressors (2)
- Spiker (1)
- Ballast Regulator (1)
- Tamper (2)

Based on the number of vehicles required for this construction operation a negligible amount of construction related traffic would be imposed on local roadways. Additionally any possible delays due to the specific at-grade crossing construction can be minimized by ensuring that any lane closures correspond with the minimum off-peak traffic volumes previously shown in Figures 1.1 and 1.2.

4.0 SAFETY CONSIDERATIONS

As a direct result of the proposed at-grade crossing vehicles traveling along each of the study roadway segments will be required to come to a complete stop during each train crossing. As a result, it was necessary to evaluate where any stopping sight distance (SSD) limitations exist along the study roadway segments.

4.1 SSD EVALUATION

Horizontal Sight Distance:

Field observations along U.S. 70 as well as Airport Road, revealed no horizontal sight distance concerns. Both roads are essentially straight between intersections, as shown in the images below.

U.S. 70 Looking West – Horizontal Sight Distance



Airport Road Looking East – Horizontal Sight Distance



Vertical Sight Distance:

Field observations along U.S. 70 within the vicinity of the San Simone River crossing showed up-grades in roadway slope leading to the bridge at a length of approximately 650 feet on either side. An at-grade rail crossing west of the San Simone River would thus be at a lower elevation than the bridge itself, creating a potential obstruction to the visibility of the crossing as well as the cars queued at the crossing. Conversely, if the rail crossing were placed within 650 feet of the San Simone River and raised to an equal elevation, it would be at a relative high-point in elevation, and visibility would not be a concern. A view of the San Simone River bridge looking west along Highway 70 is shown below.

U.S. 70 Looking West – Vertical Sight Distance



Along Airport road, there are no substantial vertical sight distance issues. The photo below shows airport road looking east. As shown in the photo, Airport Road does go through an elevation change; however, this elevation change would not impact vertical sight distance due to the installation of an at-grade crossing.

Airport Road Looking East – Vertical Sight Distance



SSD Calculation:

Given that the railroad is proposed to cross U.S. 70 to the west of the San Simone River, only vehicles traveling westbound over the river crossing could possibly be affected by limited sight distance of an at-grade crossing. Under this scenario, the most current AASHTO highway design standards were utilized in order to determine SSD. The assumptions leading to the calculated SSD are highlighted in Table 4.1.

Table 4.1 – SSD Variables

Symbol	Description	Value
V	Design Speed (mph) ^a	60
b	Brake Reaction Distance (ft) ^b	220.5
a	Deceleration Rate (ft/sec ²)	11.2
G	Grade	-2%

Source: 1) Wilbur Smith Associates, 2006

2) A Policy on Geometric Design of Highways and Streets 2001, American Association of State Highway and Transportation Officials (AASHTO)

Notes: a) Speed based on 85th percentile speed, approximated to be 5 mph over 55 mph speed limit, according to ADOT Traffic Engineering Policies, Guidelines, and Procedures; Section 200 – Traffic Studies.

b) Brake-reaction distance predicated on a reaction time of 2.5 sec.

Stopping Distance Equation:

$$d = \frac{V^2}{30\left(\left(\frac{a}{32.2}\right) \pm \frac{G}{100}\right)} = 365 \text{ feet}$$

$$\text{SSD} = d + b = 365 + 220.5 = 585.5 \approx \mathbf{590 \text{ feet}}$$

Source: A Policy on Geometric Design of Highways and Streets 2001, American Association of State Highway and Transportation Officials (AASHTO)

SSD Calculation Results:

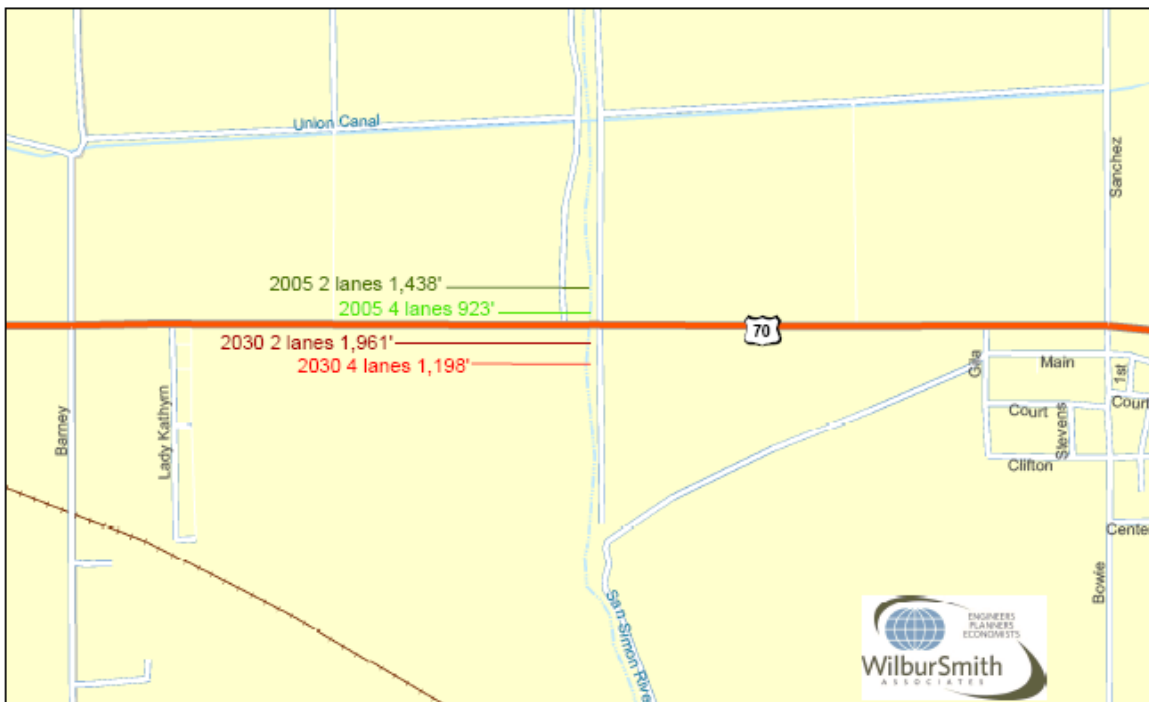
Table 4.2 shows the zone to the west of the San Simone River in which the placement of an at-grade crossing would necessitate either additional warning signals, or the elevation of the crossing to be level with the San Simone River Bridge. At the distances shown in Table 4.2, vehicle queues related to a train crossing during the PM peak hour would remain outside the allotted SSD, thus allowing an approaching vehicle the necessary distance to stop before reaching the queue. Figure 4.1 depicts these zones for each of the scenarios.

Table 4.2 – SSD Hazard Zone

	2005		2030	
	U.S. 70 - 2 Lanes	U.S. 70 - 4 Lanes	U.S. 70 - 2 Lanes	U.S. 70 - 4 Lanes
Max Queue (ft)	848	333	1,371	608
SSD (ft)	590	590	590	590
Hazard Zone (feet West of San Simone River Bridge)	1,438	923	1,961	1,198

Source: Wilbur Smith Associates, 2006.

Figure 4.1 – SSD Hazard Zone



Source: Wilbur Smith Associates, 2006.

5.0 Possible Mitigation Measures

5.1 VEHICLE DELAY

Although an at-grade crossing will inevitably impose a previously non-existent vehicular delay, when averaged over the PM peak hour the resulting delay ranges from LOS B to LOS C. In addition the analyzed PM peak hour represents the worst-case scenario when the train crossing coincides with the PM peak hour, which is also the absolute daily peak hour. Under these considerations, and given the acceptable LOS C during even a worst-case scenario, no mitigation measures are required for vehicle delay.

5.2 STOPPING SIGHT DISTANCE

Because the sight distance concerns surrounding the San Simone River Bridge are due to the difference in elevation between the bridge and the proposed at-grade crossing, one possibility would be to elevate the track to the same level as the bridge. This mitigation measure is particularly applicable to an at-grade crossing less than 650 feet west of the river; on the down-slope moving away from the bridge. If the track is not to be elevated, an advanced visual warning would be necessary to the east of the San Simone River. Remote flashing signals to the east of the river would effectively mitigate inadequate SSD. Alternatively, by simply ensuring that warning signals located at the crossing are visible to westbound vehicles east of the river, the same mitigation purpose would be fulfilled.

APPENDIX A: TRAFFIC COUNT DATA

Station Name:US-70 MP 343

Description:20th St to Bowie Ave/Sanchez Rd

City: Safford, AZ

County:Graham

Interval Begin	Wed - 7/26/06				Wed - 3/23/05				Thursday - 4/20/04			
	W	E	Hourly Total	AADT Adj	W	E	Hourly Total	AADT Adj	W	E	Hourly Total	AADT Adj
12:00 AM	2	5	7	7	4	4	8	8	12	12	24	21
12:15 AM	15	1	23	21	4	5	17	15	8	8	40	35
12:30 AM	3	4	30	28	1	0	18	16	8	8	56	49
12:45 AM	4	0	34	31	1	4	23	21	3	3	62	54
1:00 AM	2	3	32	30	5	2	22	20	10	10	58	51
1:15 AM	3	4	23	21	0	2	15	14	10	10	62	54
1:30 AM	3	4	23	21	5	0	19	17	11	11	68	59
1:45 AM	1	3	23	21	1	4	19	17	4	4	70	61
2:00 AM	4	4	26	24	1	1	14	13	1	1	52	46
2:15 AM	1	0	20	19	3	0	15	14	6	6	44	39
2:30 AM	2	3	18	17	6	7	23	21	6	6	34	30
2:45 AM	5	0	19	18	3	9	30	27	8	8	42	37
3:00 AM	9	7	27	25	5	2	35	31	19	19	78	68
3:15 AM	12	5	43	40	4	4	40	36	6	6	78	68
3:30 AM	24	2	64	59	14	1	42	37	22	22	110	96
3:45 AM	29	2	90	82	22	6	58	52	10	10	114	99
4:00 AM	35	3	112	102	29	4	84	74	21	21	118	103
4:15 AM	58	10	163	149	42	7	125	111	40	40	186	162
4:30 AM	79	13	229	208	36	2	148	131	44	44	230	200
4:45 AM	81	11	290	264	41	6	167	148	49	49	308	267
5:00 AM	58	12	322	293	39	12	185	163	39	39	344	299
5:15 AM	54	20	328	298	64	8	208	184	38	38	340	295
5:30 AM	95	26	357	325	67	20	257	227	75	75	402	349
5:45 AM	72	25	362	329	34	18	262	231	68	68	440	382
6:00 AM	36	29	357	325	29	9	249	220	36	36	434	377
6:15 AM	37	18	338	307	36	38	251	222	49	49	456	396
6:30 AM	41	28	286	260	50	48	262	231	52	52	410	356
6:45 AM	52	32	273	248	38	23	271	239	49	49	372	323
7:00 AM	41	31	280	255	41	38	312	275	53	53	406	352
7:15 AM	34	38	297	270	44	60	342	302	36	36	380	330
7:30 AM	44	60	332	302	46	82	372	328	59	59	394	342
7:45 AM	39	46	333	303	33	51	395	348	58	58	412	358
8:00 AM	40	55	356	324	31	58	405	357	52	52	410	356
8:15 AM	26	47	357	325	38	52	391	345	64	64	466	404
8:30 AM	30	54	337	307	33	66	362	319	59	59	466	404
8:45 AM	38	42	332	302	26	40	344	303	45	45	440	382
9:00 AM	22	26	285	259	47	39	341	301	46	46	428	371
9:15 AM	30	33	275	250	36	46	333	294	59	59	418	363
9:30 AM	40	45	276	251	31	45	310	274	57	57	414	359
9:45 AM	37	45	278	253	40	38	322	284	35	35	394	342
10:00 AM	28	29	287	261	33	28	297	262	44	44	390	338
10:15 AM	34	46	304	277	37	42	294	259	51	51	374	325
10:30 AM	33	52	304	277	40	51	309	273	58	58	376	326
10:45 AM	32	46	300	273	40	45	316	279	71	71	448	389
11:00 AM	23	33	299	272	33	54	342	302	56	56	472	410
11:15 AM	44	41	304	277	41	49	353	311	52	52	474	411
11:30 AM	33	32	284	258	54	42	358	316	63	63	484	420
11:45 AM	40	44	290	264	41	46	360	318	63	63	468	406
12:00 PM	45	37	316	287	59	51	383	338	53	53	462	401
12:15 PM	40	33	304	277	51	56	400	353	56	56	470	408
12:30 PM	45	44	328	298	63	63	430	379	63	63	470	408
12:45 PM	44	43	331	301	62	42	447	394	57	57	458	397
1:00 PM	44	40	333	303	43	42	422	372	60	60	472	410
1:15 PM	51	33	344	313	45	53	413	364	53	53	466	404
1:30 PM	43	50	348	317	52	40	379	334	39	39	418	363
1:45 PM	61	36	358	326	46	63	384	339	59	59	422	366
2:00 PM	52	46	372	338	45	54	398	351	48	48	398	345
2:15 PM	55	45	388	353	65	49	414	365	54	54	400	347
2:30 PM	38	59	392	357	61	59	442	390	59	59	440	382
2:45 PM	46	67	408	371	57	73	463	408	69	69	460	399
3:00 PM	46	62	418	380	50	53	467	412	71	71	506	439
3:15 PM	49	63	430	391	49	59	461	407	54	54	506	439
3:30 PM	47	94	474	431	67	78	486	429	82	82	552	479
3:45 PM	44	75	480	436	59	62	477	421	75	75	564	489
4:00 PM	51	106	529	481	59	80	513	452	103	103	628	545
4:15 PM	51	97	565	514	56	55	516	455	90	90	700	607

4:30 PM	53	93	570	518	59	88	518	457	84	84	704	611
4:45 PM	45	67	563	512	56	69	522	460	80	80	714	619
5:00 PM	58	83	547	497	81	67	531	468	68	68	644	559
5:15 PM	61	95	555	505	65	68	553	488	74	74	612	531
5:30 PM	64	49	522	475	61	69	536	473	65	65	574	498
5:45 PM	35	58	503	457	34	40	485	428	52	52	518	449
6:00 PM	39	55	456	415	44	41	422	372	39	39	460	399
6:15 PM	35	44	379	345	50	34	373	329	50	50	412	358
6:30 PM	42	49	357	325	47	39	329	290	41	41	364	316
6:45 PM	35	45	344	313	33	29	317	280	50	50	360	312
7:00 PM	39	27	316	287	31	27	290	256	26	26	334	290
7:15 PM	28	44	309	281	31	22	259	229	26	26	286	248
7:30 PM	34	30	282	257	29	29	231	204	31	31	266	231
7:45 PM	36	36	274	249	34	23	226	200	26	26	218	189
8:00 PM	23	30	261	238	33	33	234	207	38	38	242	210
8:15 PM	32	41	262	238	33	37	251	222	44	44	278	241
8:30 PM	24	35	257	234	24	26	243	215	17	17	250	217
8:45 PM	24	25	234	213	17	18	221	195	14	14	226	196
9:00 PM	24	18	223	203	23	24	202	178	27	27	204	177
9:15 PM	15	14	179	163	14	21	167	148	19	19	154	134
9:30 PM	12	16	148	135	22	16	155	137	23	23	166	144
9:45 PM	14	8	121	110	10	4	134	119	21	21	180	156
10:00 PM	10	12	101	92	13	7	107	95	18	18	162	141
10:15 PM	14	12	98	90	12	8	92	82	11	11	146	127
10:30 PM	9	15	94	86	15	6	75	67	7	7	114	99
10:45 PM	8	7	87	80	7	9	77	68	16	16	104	91
11:00 PM	11	10	86	79	6	4	67	60	9	9	86	75
11:15 PM	6	2	68	62	6	4	57	51	9	9	82	72
11:30 PM	6	3	53	49	6	5	47	42	9	9	86	75
11:45 PM	6	6	50	46	5	5	41	37	5	5	64	56
Totals	3199	3178			3239	3122			3929	3929		
Combined	6377				6361				7858			
Split %	50.2%	49.8%			50.9%	49.1%			50.0%	50.0%		
	W	E			W	E			W	E		
AM Peak H	5:15 AM - 6:15 AM				7:15 AM - 8:15 AM				7:45 AM - 8:45 AM			
Volume	257	100			154	251			233	233		
Combined	357				405				466			
PM Peak H	3:45 PM - 4:45 PM				4:30 PM - 5:30 PM				4:00 PM - 5:00 PM			
Volume	199	371			261	292			357	357		
Combined	570				553				714			

Airport Rd
500 Ft E/O Mesa De La Paz
7/26/2004

Interval Begin	Mon - 7/26			Tues 7-27			Wed - 7/28			Thur - 7/29			Fri - 7/30			Sat - 7/31			Sun - 8/1			Weekday Avg	
	W	E	Total	W	E	Total	W	E	Total	W	E	Total	W	E	Total	W	E	Total	W	E	Total	W	E
12:00 AM	-	-	0	0	1	1	0	0	0	1	1	2	1	0	1	4	4	8	0	3	3	0	0
1:00 AM	-	-	0	1	0	1	2	0	2	0	1	1	3	2	5	0	2	2	3	0	3	1	0
2:00 AM	-	-	0	2	0	2	0	1	1	0	1	1	1	1	2	1	0	1	4	1	5	0	0
3:00 AM	-	-	0	0	1	1	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0
4:00 AM	-	-	0	0	3	3	0	3	3	2	4	6	0	3	3	0	2	2	0	1	1	0	3
5:00 AM	-	-	0	3	5	8	5	9	14	3	5	8	3	4	7	3	4	7	0	3	3	3	5
6:00 AM	-	-	0	6	17	23	3	11	14	2	8	10	4	14	18	5	3	8	2	3	5	3	12
7:00 AM	-	-	0	6	23	29	6	16	22	4	14	18	5	13	18	3	6	9	6	4	10	5	16
8:00 AM	-	-	0	16	10	26	8	14	22	5	4	9	6	16	22	7	4	11	4	11	15	8	11
9:00 AM	-	-	0	12	10	22	8	8	16	8	11	19	8	8	16	7	7	14	4	9	13	9	9
10:00 AM	-	-	0	17	16	33	10	13	23	11	12	23	7	7	14	4	8	12	12	9	21	11	12
11:00 AM	4	1	5	6	9	15	14	13	27	7	8	15	8	10	18	2	2	4	9	3	12	7	8
12:00 PM	16	10	26	13	16	29	10	8	18	18	8	26	13	6	19	14	9	23	10	15	25	14	9
1:00 PM	14	11	25	18	12	30	10	14	24	10	14	24	15	14	29	10	11	21	14	2	16	13	13
2:00 PM	17	14	31	15	11	26	17	15	32	13	10	23	11	6	17	4	9	13	10	4	14	14	11
3:00 PM	17	11	28	18	13	31	15	10	25	12	10	22	12	10	22	9	9	18	12	5	17	14	10
4:00 PM	30	15	45	21	10	31	14	15	29	17	10	27	10	10	20	14	7	21	6	7	13	18	12
5:00 PM	18	10	28	15	14	29	20	9	29	16	10	26	15	9	24	9	8	17	7	10	17	16	10
6:00 PM	15	8	23	17	8	25	19	8	27	13	8	21	15	15	30	14	10	24	9	11	20	15	9
7:00 PM	7	12	19	8	7	15	13	15	28	9	10	19	11	6	17	5	7	12	10	11	21	9	10
8:00 PM	2	4	6	8	5	13	7	6	13	9	4	13	5	1	6	12	5	17	6	7	13	6	4
9:00 PM	6	7	13	3	1	4	0	4	4	2	2	4	2	4	6	8	4	12	5	4	9	2	3
10:00 PM	6	8	14	3	3	6	1	4	5	1	1	2	5	6	11	9	7	16	7	4	11	3	4
11:00 PM	2	4	6	1	4	5	1	2	3	6	1	7	2	3	5	9	8	17	1	1	2	2	2
Totals	154	115		209	199		183	198		169	158		163	168		153	136		141	128		173	173
Combined Split %	57.2%	42.8%		51.2%	48.8%		48.0%	52.0%		51.7%	48.3%		49.2%	50.8%		52.9%	47.1%		52.4%	47.6%		50.0%	50.0%
AM Peak Hi	-	-		10:00 AM	7:00 AM		11:00 AM	7:00 AM		10:00 AM	7:00 AM		9:00 AM	8:00 AM		8:00 AM	10:00 AM		10:00 AM	8:00 AM		10:00 AM	7:00 AM
Volume	-	-		17	23		14	16		11	14		8	16		7	8		12	11		11	16
Combined	N/A			40			30			25			24			15			23			27	
PM Peak H	4:00 PM	4:00 PM		4:00 PM	12:00 PM		5:00 PM	2:00 PM		12:00 PM	1:00 PM		1:00 PM	6:00 PM		12:00 PM	1:00 PM		1:00 PM	12:00 PM		4:00 PM	1:00 PM
Volume	30	15		21	16		20	15		18	14		15	15		14	11		14	15		18	13
Combined	45			37			35			32			30			25			29			31	

