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22 December 2022

TO: Phil Kercher, PE, PTOE, City of Scottsdale

FROM: Paul E. Basha, PE, PTOE, Summit Land Management

RE: Trip Generation Comparison for 3202 Scottsdale as Modified by Scottsdale City Council

INTRODUCTION

Summit Land Management prepared a complete Traffic Impact Study for the 3202 Scottsdale development dated September 2022. At the time of the traffic study, this proposed development consisted of 150 multi-family dwelling units and 4,000 square feet of commercial area.

Figure 1 provides an aerial photograph of the general project vicinity.
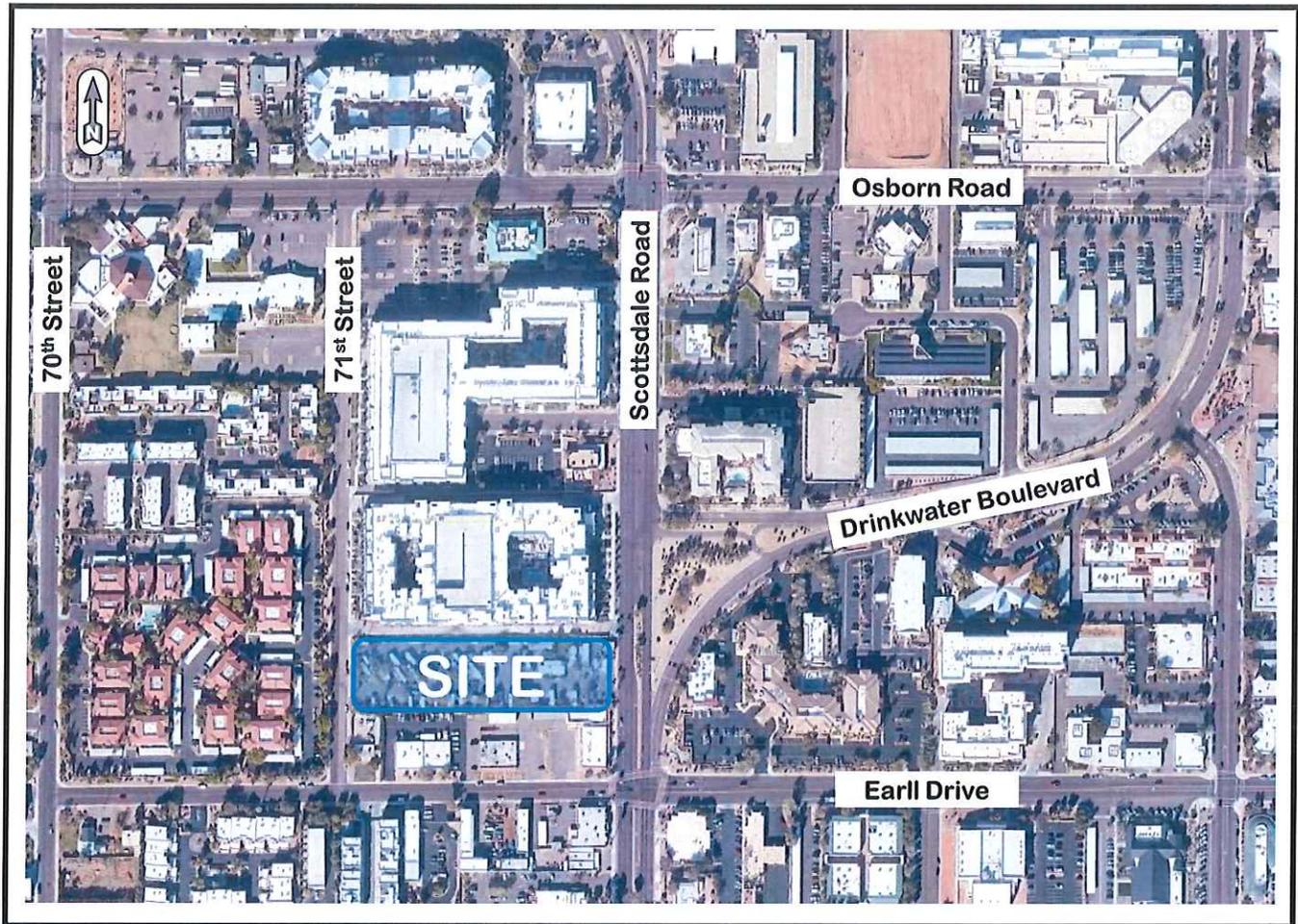
Figure 1: General Vicinity Aerial Photograph

The development submittal that was considered by the Scottsdale City Council on 7 December consisted of 135 multi-family dwelling units and 4,000 square feet of commercial area. During the Scottsdale City Council meeting, the City Council requested an increase of the commercial retail area to 8,000 square feet. The City Council then approved the rezoning request.

Subsequent to the City Council meeting, the City of Scottsdale requested a memorandum comparing the revised development of 135 dwelling units and 8,000 square feet of commercial retail.

PREVIOUS TRIP GENERATION

Table 1 provides trip generation results from the submitted and approved Traffic Impact Analysis dated 12 September 2022. **Attachment 1** provides the complete calculations. The Institute of Transportation Engineers publication, *Trip Generation Manual 11th Edition*, was utilized for the calculations. The land use category and code for the apartments was Multifamily Housing, 221. The land use categories and codes for the commercial land use were Shopping Plaza (40,000 to 150,000 square feet), 821, and Strip Retail Plaza (less than 40,000 square feet), 822. As indicated within **Table 1**, Code 822 was utilized when data were available, and Code 821 was utilized when Code 822 did not have data.

Table 1: Trip Generation of 3202 Scottsdale in September Traffic Impact Analysis

	ENTERING	EXITING	TOTAL
WEEKDAY DAILY	593	593	1,186
AM PEAK HOUR STREET	20	50	70
AM PEAK HOUR GENERATOR	28	58	86
PM PEAK HOUR STREET	57	40	97
PM PEAK HOUR GENERATOR	138	108	246
SATURDAY DAILY	622*	622*	1,244*
PEAK HOUR GENERATOR	49	55	104
SUNDAY DAILY	439*	438*	877*
PEAK HOUR GENERATOR	52*	36*	88*

(* Trip generation for code 821: between 150,000 and 40,000 square feet; as trip generation rates for these time periods are unavailable for code 822: less than 40,000 square feet. All other trip generation is for code 822: gross floor area less than 40,000 square feet.)

COUNCIL-APPROVED LAND USE TRIP GENERATION

Table 2 provides the trip generation summary estimate for 135 apartment dwelling units. **Attachment 2** provides the trip generation calculations. The *Trip Generation Manual 11th Edition* was utilized for the calculations as described previously.

Phil Kercher, City of Scottsdale
Trip Generation 3202 Scottsdale
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Table 2: Trip Generation 135 Apartments

	ENTERING	EXITING	TOTAL
WEEKDAY DAILY	372	372	744
AM PEAK HOUR STREET	13	38	51
AM PEAK HOUR GENERATOR	14	39	53
PM PEAK HOUR STREET	38	24	62
PM PEAK HOUR GENERATOR	40	26	66
SATURDAY DAILY	419	419	838
PEAK HOUR GENERATOR	31	37	68
SUNDAY DAILY	289	289	578
PEAK HOUR GENERATOR	35	22	57

Table 3 provides the trip generation summary estimate for 8,000 square feet of retail. **Attachment 2** provides the trip generation calculations. The *Trip Generation Manual 11th Edition* was utilized for the calculations as described previously.

Table 3: Trip Generation 8,000 Square Feet of Retail

	ENTERING	EXITING	TOTAL
WEEKDAY DAILY	270	270	540
AM PEAK HOUR STREET	9	5	14
AM PEAK HOUR GENERATOR	22	23	45
PM PEAK HOUR STREET	21	21	42
PM PEAK HOUR GENERATOR	97	82	179
SATURDAY DAILY	325*	324*	649*
PEAK HOUR GENERATOR	26	26	52
SUNDAY DAILY	171*	170*	341*
PEAK HOUR GENERATOR	19*	19*	38*

(* Trip generation for code 821: between 150,000 and 40,000 square feet; as trip generation rates for these time periods are unavailable for code 822: less than 40,000 square feet. All other trip generation is for code 822: gross floor area less than 40,000 square feet.)

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Table 4 provides the trip generation summary estimate for the sum of 135 apartment dwelling units and 8,000 square feet of retail.

Table 4: Trip Generation 135 Apartments and 8,000 Square Feet of Retail

|	ENTERING	EXITING	TOTAL
WEEKDAY DAILY	642	642	1,284
AM PEAK HOUR STREET	22	43	65
AM PEAK HOUR GENERATOR	36	62	98
PM PEAK HOUR STREET	59	45	104
PM PEAK HOUR GENERATOR	137	108	245
SATURDAY DAILY	744*	743*	1,487*
PEAK HOUR GENERATOR	57	63	120
SUNDAY DAILY	460*	459*	919*
PEAK HOUR GENERATOR	54*	41*	95*

(* Trip generation for code 821: between 150,000 and 40,000 square feet; as trip generation rates for these time periods are unavailable for code 822: less than 40,000 square feet. All other trip generation is for code 822: gross floor area less than 40,000 square feet.)

Table 5 compares the trip generation from the requested land use sizes to the City Council approved land use sizes.

Table 5: Trip Generation Comparison of Requested versus Council-Approved Land Use

DAY AND PERIOD	PREVIOUS	APPROVED	DIFFERENCE
WEEKDAY DAY	1,186	1,284	**8%**
WEEKDAY MORNING PEAK HOUR OF STREET	70	65	**-7%**
WEEKDAY MORNING PEAK HOUR OF GENERATOR	86	98	**14%**
WEEKDAY EVENING PEAK HOUR OF STREET	97	104	**7%**
WEEKDAY EVENING PEAK HOUR OF GENERATOR	246	245	**0%**
SATURDAY DAY	1,244	1,487	**20%**
SATURDAY PEAK HOUR OF GENERATOR	104	120	**15%**
SUNDAY DAY	877	919	**5%**
SUNDAY PEAK HOUR OF GENERATOR	88	95	**8%**

Please contact me at (480) 505-3931 or pbasha@summitlandmgmt.com, if you have any questions or would like to discuss this traffic statement.

Sincerely,
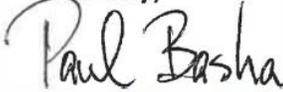
Summit Land Management
Paul E. Basha, PE, PTOE
Traffic Engineering Manager

Attachments:

1. Trip Generation Calculations 12 September 2022 Traffic Impact Analysis
2. Trip Generation Calculations for Council Approved Land Use Sizes

Appendix 1

Trip Generation Calculations from

12 September 2022 Traffic Impact Analysis

PROJECT	3202 NORTH SCOTTSDALE ROAD			
PARCEL	**PROPOSED WITH ONLY PROXY DATA BELOW 330 DWELLING UNITS**			
ITE LAND USE CATEGORY AND CODE	**MULTIFAMILY HOUSING (MID-RISE) - 221**			
INDEPENDENT VARIABLE	**DWELLING UNITS**			
SIZE	**165**			
		ENTERING	EXITING	TOTAL
***WEEKDAY* DAILY**		50%	50%	
NUMBER OF STUDIES and AVERAGE SIZE	21 || 21 | 148 | 282			
MINIMUM RATE	LOW RATES ACCEPTABLE	1.27	105	105	210
AVERAGE RATE		5.51	455	454	909
MAXIMUM RATE	HIGH RATES SUSPECT	12.50	1,032	1,031	2,063
STANDARD DEVIATION		2.63			
EQUATION: T = 5.92 * (X) - 60.62	R^2 = 0.54	458	458	916
LARGEST OF AVERAGE OR EQUATION		**458**	**458**	**916**
AM PEAK HOUR ADJACENT STREET		26%	74%	
NUMBER OF STUDIES and AVERAGE SIZE	44 || 26 | 153 | 300			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.06	3	7	10
AVERAGE RATE		0.38	16	47	63
MAXIMUM RATE	HIGH RATES SUSPECT	1.61	69	197	266
STANDARD DEVIATION		0.21			
EQUATION: NOT PROVIDED	NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION		**16**	**47**	**63**
AM PEAK HOUR GENERATOR		26%	74%	
NUMBER OF STUDIES and AVERAGE SIZE	38 || 21 | 132 | 300			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.11	5	13	18
AVERAGE RATE		0.39	17	47	64
MAXIMUM RATE	HIGH RATES SUSPECT	0.77	33	94	127
STANDARD DEVIATION		0.16			
EQUATION: LN(T) = 0.98 * LN(X) - 0.95	R^2 = 0.69	15	43	58
LARGEST OF AVERAGE OR EQUATION		**17**	**47**	**64**
PM PEAK HOUR ADJACENT STREET		62%	38%	
NUMBER OF STUDIES and AVERAGE SIZE	50 || 26 | 155 | 310			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.15	16	9	25
AVERAGE RATE		0.46	47	29	76
MAXIMUM RATE	HIGH RATES SUSPECT	1.11	113	70	183
STANDARD DEVIATION		0.19			
EQUATION: T = 0.41 * (X) + 7.91	R^2 = 0.58	47	29	76
LARGEST OF AVERAGE OR EQUATION		**47**	**29**	**76**
PM PEAK HOUR GENERATOR		61%	39%	
NUMBER OF STUDIES and AVERAGE SIZE	39 || 21 | 137 | 300			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.15	15	10	25
AVERAGE RATE		0.49	49	32	81
MAXIMUM RATE	HIGH RATES SUSPECT	1.26	127	81	208
STANDARD DEVIATION		0.22			
EQUATION: LN(T) = 0.95 * LN(X) - 0.57	R^2 = 0.64	44	28	72
LARGEST OF AVERAGE OR EQUATION		**49**	**32**	**81**

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PROJECT					**3202 NORTH SCOTTSDALE ROAD**		
PARCEL					**PROPOSED WITH ONLY PROXY DATA BELOW 330 DWELLING UNITS**		
ITE LAND USE CATEGORY AND CODE					**MULTIFAMILY HOUSING (MID-RISE) - 221**		
INDEPENDENT VARIABLE					**DWELLING UNITS**		
SIZE					**165**		
					ENTERING	EXITING	SUM
***SATURDAY* DAILY**					50%	50%	
NUMBER OF STUDIES and AVERAGE SIZE		5 || 111	201	282			
MINIMUM RATE	LOW RATES ACCEPTABLE	4.03			333	332	665
AVERAGE RATE		5.07			419	418	837
MAXIMUM RATE	HIGH RATES SUSPECT	8.51			702	702	1,404
STANDARD DEVIATION ||		1.44					
EQUATION: T = 2.74 * (X) + 468.18		$R^2 = 0.57$			460	460	920
LARGEST OF AVERAGE OR EQUATION					**460**	**460**	**920**
PEAK HOUR GENERATOR					46%	54%	
NUMBER OF STUDIES and AVERAGE SIZE		6 || 111	220	336			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.34			26	30	56
AVERAGE RATE		0.44			34	39	73
MAXIMUM RATE	HIGH RATES SUSPECT	0.73			55	65	120
STANDARD DEVIATION ||		0.11					
EQUATION: T = 0.34 * (X) + 22.00		$R^2 = 0.71$			36	42	78
LARGEST OF AVERAGE OR EQUATION					**36**	**42**	**78**
SUNDAY DAILY					50%	50%	
NUMBER OF STUDIES and AVERAGE SIZE		5 || 111	224	282			
MINIMUM RATE	LOW RATES ACCEPTABLE	3.06			253	252	505
AVERAGE RATE		4.28			353	353	706
MAXIMUM RATE	HIGH RATES SUSPECT	8.41			694	694	1,388
STANDARD DEVIATION ||		1.69					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**353**	**353**	**706**
PEAK HOUR GENERATOR					62%	38%	
NUMBER OF STUDIES and AVERAGE SIZE		5 || 111	201	282			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.26			27	16	43
AVERAGE RATE		0.42			43	26	69
MAXIMUM RATE	HIGH RATES SUSPECT	1.07			110	67	177
STANDARD DEVIATION ||		0.26					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**43**	**26**	**69**

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PROJECT					3202 NORTH SCOTTSDALE ROAD		
PARCEL					RETAIL		
ITE LAND USE CATEGORY AND CODE					SHOPPING PLAZA (40,000 to 150,000) - 821 WITHOUT SUPERMARKET		
INDEPENDENT VARIABLE					THOUSAND SQUARE FEET		
SIZE					4.00		
					ENTERING	EXITING	TOTAL
WEEKDAY DAILY					50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		7	45	59	78		
MINIMUM RATE	LOW RATES ACCEPTABLE	43.29			87	86	173
AVERAGE RATE		67.52			135	135	270
MAXIMUM RATE	HIGH RATES ACCEPTABLE	91.06			182	182	364
STANDARD DEVIATION		19.25					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**135**	**135**	**270**
AM PEAK HOUR ADJACENT STREET					62%	38%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		13	43	67	110		
MINIMUM RATE	LOW RATES ACCEPTABLE	0.29			1	0	1
AVERAGE RATE		1.73			4	3	7
MAXIMUM RATE	HIGH RATES ACCEPTABLE	3.77			9	6	15
STANDARD DEVIATION		1.06					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**4**	**3**	**7**
AM PEAK HOUR GENERATOR					49%	51%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		5	42	75	147		
MINIMUM RATE	LOW RATES ACCEPTABLE	3.18			6	7	13
AVERAGE RATE		5.58			11	11	22
MAXIMUM RATE	HIGH RATES ACCEPTABLE	8.85			17	18	35
STANDARD DEVIATION		1.85					
EQUATION: T = 5.67 * (X) - 6.87		$R^2 = 0.80$			8	8	16
LARGEST OF AVERAGE OR EQUATION					**11**	**11**	**22**
PM PEAK HOUR ADJACENT STREET					49%	51%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		42	43	79	142		
MINIMUM RATE	LOW RATES ACCEPTABLE	2.55			5	5	10
AVERAGE RATE		5.19			10	11	21
MAXIMUM RATE	HIGH RATES SUSPECT	15.31			30	31	61
STANDARD DEVIATION		2.28					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**10**	**11**	**21**
PM PEAK HOUR GENERATOR					54%	46%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		6	7	77	141		
MINIMUM RATE	LOW RATES ACCEPTABLE	4.44			10	8	18
AVERAGE RATE		5.40			12	10	22
MAXIMUM RATE	HIGH RATES SUSPECT	8.10			17	15	32
STANDARD DEVIATION		1.20					
EQUATION: T = 3.43 * (X) + 151.66		$R^2 = 0.89$			89	76	165
AVERAGE					**12**	**10**	**22**

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PROJECT	3202 NORTH SCOTTSDALE ROAD			
PARCEL	RETAIL			
ITE LAND USE CATEGORY AND CODE	SHOPPING PLAZA (40,000 to 150,000) - 821 WITHOUT SUPERMARKET			
INDEPENDENT VARIABLE	THOUSAND SQUARE FEET			
SIZE	4.00			
		ENTERING	EXITING	SUM
SATURDAY DAILY		50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	1 || 56 | 56 | 56			
MINIMUM RATE		81.07	162	162	324
AVERAGE RATE		81.07	162	162	324
MAXIMUM RATE		81.07	162	162	324
STANDARD DEVIATION		NA			
EQUATION: NOT PROVIDED		NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION			162	162	324
PEAK HOUR GENERATOR		51%	49%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	8 || 43 | 65 | 94			
MINIMUM RATE	LOW RATES ACCEPTABLE	2.38	5	5	10
AVERAGE RATE		6.22	13	12	25
MAXIMUM RATE	HIGH RATES ACCEPTABLE	9.91	20	20	40
STANDARD DEVIATION		2.11			
EQUATION: T = 7.75 * X - 98.93	$R^2 = 0.58$	-35	-33	-68
AVERAGE		13	12	25
SUNDAY DAILY		50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	1 || 56 | 56 | 56			
MINIMUM RATE	LOW RATES ACCEPTABLE	42.68	86	85	171
AVERAGE RATE		42.68	86	85	171
MAXIMUM RATE	HIGH RATES ACCEPTABLE	42.68	86	85	171
STANDARD DEVIATION		42.68			
EQUATION: NOT PROVIDED		NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION			86	85	171
PEAK HOUR GENERATOR		49%	51%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	1 || 56 | 56 | 56			
MINIMUM RATE		4.71	9	10	19
AVERAGE RATE		4.71	9	10	19
MAXIMUM RATE		4.71	9	10	19
STANDARD DEVIATION		NA			
EQUATION: NOT PROVIDED		NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION			9	10	19

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						ENTERING	EXITING	TOTAL
PROJECT					**3202 NORTH SCOTTSDALE ROAD**			
PARCEL					**RETAIL**			
ITE LAND USE CATEGORY AND CODE					**STRIP RETAIL PLAZA (LESS THAN 40,000) - 822**			
INDEPENDENT VARIABLE					**GENERAL URBAN / SUBURBAN**			
SIZE					**4.00**			
						ENTERING	EXITING	TOTAL
WEEKDAY DAILY						50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		4	9	19	35			
MINIMUM RATE	LOW RATES ACCEPTABLE		47.86			96	95	191
AVERAGE RATE			54.45			109	109	218
MAXIMUM RATE	HIGH RATES ACCEPTABLE		65.07			130	130	260
STANDARD DEVIATION			7.81					
EQUATION: T = 42.20 * X + 229.68			$R^2 = 0.96$			199	199	398
LARGEST OF AVERAGE OR EQUATION						**199**	**199**	**398**
AM PEAK HOUR ADJACENT STREET						60%	40%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		5	9	18	35			
MINIMUM RATE	LOW RATES ACCEPTABLE		1.60			4	2	6
AVERAGE RATE			2.36			5	4	9
MAXIMUM RATE	HIGH RATES ACCEPTABLE		3.73			9	6	15
STANDARD DEVIATION			0.94					
EQUATION: LN(T) = 0.66 * LN(X) + 1.84			$R^2 = 0.57$			10	6	16
LARGEST OF AVERAGE OR EQUATION						**10**	**6**	**16**
AM PEAK HOUR GENERATOR						50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		5	8	16	25			
MINIMUM RATE	LOW RATES ACCEPTABLE		2.40			5	5	10
AVERAGE RATE			7.60			15	15	30
MAXIMUM RATE	HIGH RATES SUSPECT		21.30			43	42	85
STANDARD DEVIATION			6.45					
EQUATION: NOT PROVIDED			NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION						**15**	**15**	**30**
PM PEAK HOUR ADJACENT STREET						50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		25	2	21	39			
MINIMUM RATE	LOW RATES ACCEPTABLE		2.81			6	5	11
AVERAGE RATE			6.59			13	13	26
MAXIMUM RATE	HIGH RATES SUSPECT		15.20			31	30	61
STANDARD DEVIATION			2.94					
EQUATION: LN(T) = 0.71 * LN(X) + 2.72			$R^2 = 0.56$			21	20	41
LARGEST OF AVERAGE OR EQUATION						**21**	**20**	**41**
PM PEAK HOUR GENERATOR						54%	46%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE		5	8	16	25			
MINIMUM RATE	LOW RATES ACCEPTABLE		6.27			14	11	25
AVERAGE RATE			13.24			29	24	53
MAXIMUM RATE	HIGH RATES ACCEPTABLE		24.11			52	44	96
STANDARD DEVIATION			7.40					
EQUATION: NOT PROVIDED			NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION						**29**	**24**	**53**

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PROJECT	3202 NORTH SCOTTSDALE ROAD						
PARCEL	RETAIL						
ITE LAND USE CATEGORY AND CODE	STRIP RETAIL PLAZA (LESS THAN 40,000) - 822						
INDEPENDENT VARIABLE	GENERAL URBAN / SUBURBAN						
SIZE	4.00						
					ENTERING	EXITING	SUM
SATURDAY DAILY					NA	NA	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	NA	NA	NA	NA			
MINIMUM RATE		NA			NA	NA	NA
AVERAGE RATE		NA			NA	NA	NA
MAXIMUM RATE		NA			NA	NA	NA
STANDARD DEVIATION		NA					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**NA**	**NA**	**NA**
PEAK HOUR GENERATOR					51%	49%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	12	8	27	39			
MINIMUM RATE	LOW RATES ACCEPTABLE	1.88			4	4	8
AVERAGE RATE		6.57			13	13	26
MAXIMUM RATE	HIGH RATES SUSPECT	14.23			29	28	57
STANDARD DEVIATION		3.45					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**13**	**13**	**26**
SUNDAY DAILY					NA	NA	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	NA	NA	NA	NA			
MINIMUM RATE		NA			NA	NA	NA
AVERAGE RATE		NA			NA	NA	NA
MAXIMUM RATE		NA			NA	NA	NA
STANDARD DEVIATION		NA					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**NA**	**NA**	**NA**
PEAK HOUR GENERATOR					NA	NA	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	NA	NA	NA	NA			
MINIMUM RATE		NA			NA	NA	NA
AVERAGE RATE		NA			NA	NA	NA
MAXIMUM RATE		NA			NA	NA	NA
STANDARD DEVIATION		NA					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**NA**	**NA**	**NA**

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Appendix 2

Trip Generation Calculations

for Council Approved Land Use Sizes

PROJECT	3202 NORTH SCOTTSDALE ROAD		
PARCEL	PROPOSED WITH ONLY PROXY DATA BELOW 330 DWELLING UNITS		
ITE LAND USE CATEGORY AND CODE	MULTIFAMILY HOUSING (MID-RISE) - 221		
INDEPENDENT VARIABLE	DWELLING UNITS		
SIZE	135		
		ENTERING	EXITING	TOTAL

						ENTERING	EXITING	TOTAL
WEEKDAY DAILY						50%	50%	
NUMBER OF STUDIES and AVERAGE SIZE		21	21	148	282			
MINIMUM RATE	LOW RATES ACCEPTABLE		1.27			86	85	171
AVERAGE RATE			5.51			372	372	744
MAXIMUM RATE	HIGH RATES SUSPECT		12.50			844	844	1,688
STANDARD DEVIATION			2.63					
EQUATION: T = 5.92 * (X) - 60.62		R^2 = 0.54				370	369	739
LARGEST OF AVERAGE OR EQUATION						**372**	**372**	**744**
AM PEAK HOUR ADJACENT STREET						26%	74%	
NUMBER OF STUDIES and AVERAGE SIZE		44	26	153	300			
MINIMUM RATE	LOW RATES ACCEPTABLE		0.06			2	6	8
AVERAGE RATE			0.38			13	38	51
MAXIMUM RATE	HIGH RATES SUSPECT		1.61			56	161	217
STANDARD DEVIATION			0.21					
EQUATION: NOT PROVIDED		NA				NA	NA	NA
LARGEST OF AVERAGE OR EQUATION						**13**	**38**	**51**
AM PEAK HOUR GENERATOR						26%	74%	
NUMBER OF STUDIES and AVERAGE SIZE		38	21	132	300			
MINIMUM RATE	LOW RATES ACCEPTABLE		0.11			4	11	15
AVERAGE RATE			0.39			14	39	53
MAXIMUM RATE	HIGH RATES SUSPECT		0.77			27	77	104
STANDARD DEVIATION			0.16					
EQUATION: LN(T) = 0.98 * LN(X) - 0.95		R^2 = 0.69				12	35	47
LARGEST OF AVERAGE OR EQUATION						**14**	**39**	**53**
PM PEAK HOUR ADJACENT STREET						62%	38%	
NUMBER OF STUDIES and AVERAGE SIZE		50	26	155	310			
MINIMUM RATE	LOW RATES ACCEPTABLE		0.15			12	8	20
AVERAGE RATE			0.46			38	24	62
MAXIMUM RATE	HIGH RATES SUSPECT		1.11			93	57	150
STANDARD DEVIATION			0.19					
EQUATION: T = 0.41 * (X) + 7.91		R^2 = 0.58				39	24	63
LARGEST OF AVERAGE OR EQUATION						**39**	**24**	**63**
PM PEAK HOUR GENERATOR						61%	39%	
NUMBER OF STUDIES and AVERAGE SIZE		39	21	137	300			
MINIMUM RATE	LOW RATES ACCEPTABLE		0.15			12	8	20
AVERAGE RATE			0.49			40	26	66
MAXIMUM RATE	HIGH RATES SUSPECT		1.26			104	66	170
STANDARD DEVIATION			0.22					
EQUATION: LN(T) = 0.95 * LN(X) - 0.57		R^2 = 0.64				37	23	60
LARGEST OF AVERAGE OR EQUATION						**40**	**26**	**66**

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SUMMIT
LAND MANAGEMENT

PROJECT		3202 NORTH SCOTTSDALE ROAD		
PARCEL		PROPOSED WITH ONLY PROXY DATA BELOW 330 DWELLING UNITS		
ITE LAND USE CATEGORY AND CODE		**MULTIFAMILY HOUSING (MID-RISE) - 221**		
INDEPENDENT VARIABLE		**DWELLING UNITS**		
SIZE		**135**		
		ENTERING	EXITING	SUM
***SATURDAY* DAILY**		50%	50%	
NUMBER OF STUDIES and AVERAGE SIZE	5 ‖ 111 201 282			
MINIMUM RATE	LOW RATES ACCEPTABLE	4.03	272	272	544
AVERAGE RATE		5.07	342	342	684
MAXIMUM RATE	HIGH RATES SUSPECT	8.51	575	574	1,149
STANDARD DEVIATION ‖		1.44			
EQUATION: T = 2.74 * (X) + 468.18		$R^2 = 0.57$	419	419	838
LARGEST OF AVERAGE OR EQUATION			**419**	**419**	**838**
PEAK HOUR GENERATOR		46%	54%	
NUMBER OF STUDIES and AVERAGE SIZE	6 ‖ 111 220 336			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.34	21	25	46
AVERAGE RATE		0.44	27	32	59
MAXIMUM RATE	HIGH RATES SUSPECT	0.73	46	53	99
STANDARD DEVIATION ‖		0.11			
EQUATION: T = 0.34 * (X) + 22.00		$R^2 = 0.71$	31	37	68
LARGEST OF AVERAGE OR EQUATION			**31**	**37**	**68**
SUNDAY DAILY		50%	50%	
NUMBER OF STUDIES and AVERAGE SIZE	5 ‖ 111 224 282			
MINIMUM RATE	LOW RATES ACCEPTABLE	3.06	207	206	413
AVERAGE RATE		4.28	289	289	578
MAXIMUM RATE	HIGH RATES SUSPECT	8.41	568	567	1,135
STANDARD DEVIATION ‖		1.69			
EQUATION: NOT PROVIDED		NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION			**289**	**289**	**578**
PEAK HOUR GENERATOR		62%	38%	
NUMBER OF STUDIES and AVERAGE SIZE	5 ‖ 111 201 282			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.26	22	13	35
AVERAGE RATE		0.42	35	22	57
MAXIMUM RATE	HIGH RATES SUSPECT	1.07	89	55	144
STANDARD DEVIATION ‖		0.26			
EQUATION: NOT PROVIDED		NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION			**35**	**22**	**57**

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SUMMIT
LAND MANAGEMENT

PROJECT	3202 NORTH SCOTTSDALE ROAD						
PARCEL	RETAIL						
ITE LAND USE CATEGORY AND CODE	SHOPPING PLAZA (40,000 to 150,000) - 821 WITHOUT SUPERMARKET						
INDEPENDENT VARIABLE	THOUSAND SQUARE FEET						
SIZE	8.00						
					ENTERING	EXITING	TOTAL
WEEKDAY DAILY					50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	7	45	59	78			
MINIMUM RATE	LOW RATES ACCEPTABLE	43.29			173	173	346
AVERAGE RATE		67.52			270	270	540
MAXIMUM RATE	HIGH RATES ACCEPTABLE	91.06			364	364	728
STANDARD DEVIATION		19.25					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**270**	**270**	**540**
AM PEAK HOUR ADJACENT STREET					62%	38%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	13	43	67	110			
MINIMUM RATE	LOW RATES ACCEPTABLE	0.29			1	1	2
AVERAGE RATE		1.73			9	5	14
MAXIMUM RATE	HIGH RATES ACCEPTABLE	3.77			19	11	30
STANDARD DEVIATION		1.06					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**9**	**5**	**14**
AM PEAK HOUR GENERATOR					49%	51%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	5	42	75	147			
MINIMUM RATE	LOW RATES ACCEPTABLE	3.18			12	13	25
AVERAGE RATE		5.58			22	23	45
MAXIMUM RATE	HIGH RATES ACCEPTABLE	8.85			35	36	71
STANDARD DEVIATION		1.85					
EQUATION: T = 5.67 * (X) - 6.87		$R^2 = 0.80$			19	19	38
LARGEST OF AVERAGE OR EQUATION					**22**	**23**	**45**
PM PEAK HOUR ADJACENT STREET					49%	51%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	42	43	79	142			
MINIMUM RATE	LOW RATES ACCEPTABLE	2.55			10	10	20
AVERAGE RATE		5.19			21	21	42
MAXIMUM RATE	HIGH RATES SUSPECT	15.31			60	62	122
STANDARD DEVIATION		2.28					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**21**	**21**	**42**
PM PEAK HOUR GENERATOR					54%	46%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	6	7	77	141			
MINIMUM RATE	LOW RATES ACCEPTABLE	4.44			19	17	36
AVERAGE RATE		5.40			23	20	43
MAXIMUM RATE	HIGH RATES SUSPECT	8.10			35	30	65
STANDARD DEVIATION		1.20					
EQUATION: T = 3.43 * (X) + 151.66		$R^2 = 0.89$			97	82	179
AVERAGE					**23**	**20**	**43**

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SUMMIT

PROJECT	3202 NORTH SCOTTSDALE ROAD			
PARCEL	RETAIL			
ITE LAND USE CATEGORY AND CODE	SHOPPING PLAZA (40,000 to 150,000) - 821 WITHOUT SUPERMARKET			
INDEPENDENT VARIABLE	THOUSAND SQUARE FEET			
SIZE	8.00			
		ENTERING	EXITING	SUM
SATURDAY DAILY		50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	1 | 56 | 56 | 56			
MINIMUM RATE		81.07	325	324	649
AVERAGE RATE		81.07	325	324	649
MAXIMUM RATE		81.07	325	324	649
STANDARD DEVIATION		NA			
EQUATION: NOT PROVIDED		NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION			**325**	**324**	**649**
PEAK HOUR GENERATOR		51%	49%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	8 | 43 | 65 | 94			
MINIMUM RATE	LOW RATES ACCEPTABLE	2.38	10	9	19
AVERAGE RATE		6.22	26	24	50
MAXIMUM RATE	HIGH RATES ACCEPTABLE	9.91	40	39	79
STANDARD DEVIATION		2.11			
EQUATION: T = 7.75 * X - 98.93		$R^2 = 0.58$	-19	-18	-37
AVERAGE			**26**	**24**	**50**
SUNDAY DAILY		50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	1 | 56 | 56 | 56			
MINIMUM RATE	LOW RATES ACCEPTABLE	42.68	171	170	341
AVERAGE RATE		42.68	171	170	341
MAXIMUM RATE	HIGH RATES ACCEPTABLE	42.68	171	170	341
STANDARD DEVIATION		42.68			
EQUATION: NOT PROVIDED		NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION			**171**	**170**	**341**
PEAK HOUR GENERATOR		49%	51%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	1 | 56 | 56 | 56			
MINIMUM RATE		4.71	19	19	38
AVERAGE RATE		4.71	19	19	38
MAXIMUM RATE		4.71	19	19	38
STANDARD DEVIATION		NA			
EQUATION: NOT PROVIDED		NA	NA	NA	NA
LARGEST OF AVERAGE OR EQUATION			**19**	**19**	**38**

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SUMMIT

PROJECT	3202 NORTH SCOTTSDALE ROAD						
PARCEL	RETAIL						
ITE LAND USE CATEGORY AND CODE	STRIP RETAIL PLAZA (LESS THAN 40,000) - 822						
INDEPENDENT VARIABLE	GENERAL URBAN / SUBURBAN						
SIZE	8.00						
					ENTERING	EXITING	TOTAL
WEEKDAY DAILY					50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	4	9	19	35			
MINIMUM RATE	LOW RATES ACCEPTABLE	47.86			192	191	383
AVERAGE RATE		54.45			218	218	436
MAXIMUM RATE	HIGH RATES ACCEPTABLE	65.07			261	260	521
STANDARD DEVIATION		7.81					
EQUATION: T = 42.20 * X + 229.68		$R^2 = 0.96$			284	283	567
LARGEST OF AVERAGE OR EQUATION					**284**	**283**	**567**
AM PEAK HOUR ADJACENT STREET					60%	40%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	5	9	18	35			
MINIMUM RATE	LOW RATES ACCEPTABLE	1.60			8	5	13
AVERAGE RATE		2.36			11	8	19
MAXIMUM RATE	HIGH RATES ACCEPTABLE	3.73			18	12	30
STANDARD DEVIATION		0.94					
EQUATION: LN(T) = 0.66 * LN(X) + 1.84		$R^2 = 0.57$			15	10	25
LARGEST OF AVERAGE OR EQUATION					**15**	**10**	**25**
AM PEAK HOUR GENERATOR					50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	5	8	16	25			
MINIMUM RATE	LOW RATES ACCEPTABLE	2.40			10	9	19
AVERAGE RATE		7.60			31	30	61
MAXIMUM RATE	HIGH RATES SUSPECT	21.30			85	85	170
STANDARD DEVIATION		6.45					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**31**	**30**	**61**
PM PEAK HOUR ADJACENT STREET					50%	50%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	25	2	21	39			
MINIMUM RATE	LOW RATES ACCEPTABLE	2.81			11	11	22
AVERAGE RATE		6.59			27	26	53
MAXIMUM RATE	HIGH RATES SUSPECT	15.20			61	61	122
STANDARD DEVIATION		2.94					
EQUATION: LN(T) = 0.71 * LN(X) + 2.72		$R^2 = 0.56$			33	33	66
LARGEST OF AVERAGE OR EQUATION					**33**	**33**	**66**
PM PEAK HOUR GENERATOR					54%	46%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	5	8	16	25			
MINIMUM RATE	LOW RATES ACCEPTABLE	6.27			27	23	50
AVERAGE RATE		13.24			57	49	106
MAXIMUM RATE	HIGH RATES ACCEPTABLE	24.11			104	89	193
STANDARD DEVIATION		7.40					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**57**	**49**	**106**

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PROJECT	3202 NORTH SCOTTSDALE ROAD					
PARCEL	RETAIL					
ITE LAND USE CATEGORY AND CODE	STRIP RETAIL PLAZA (LESS THAN 40,000) - 822					
INDEPENDENT VARIABLE	GENERAL URBAN / SUBURBAN					
SIZE	8.00					
					ENTERING	EXITING	SUM

					ENTERING	EXITING	SUM
SATURDAY DAILY					NA	NA	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	NA	NA	NA	NA			
MINIMUM RATE		NA			NA	NA	NA
AVERAGE RATE		NA			NA	NA	NA
MAXIMUM RATE		NA			NA	NA	NA
STANDARD DEVIATION		NA					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**NA**	**NA**	**NA**
PEAK HOUR GENERATOR					51%	49%	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	12	8	27	39			
MINIMUM RATE	LOW RATES ACCEPTABLE	1.88			8	7	15
AVERAGE RATE		6.57			27	26	53
MAXIMUM RATE	HIGH RATES SUSPECT	14.23			58	56	114
STANDARD DEVIATION		3.45					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**27**	**26**	**53**
SUNDAY DAILY					NA	NA	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	NA	NA	NA	NA			
MINIMUM RATE		NA			NA	NA	NA
AVERAGE RATE		NA			NA	NA	NA
MAXIMUM RATE		NA			NA	NA	NA
STANDARD DEVIATION		NA					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**NA**	**NA**	**NA**
PEAK HOUR GENERATOR					NA	NA	
STUDIES and LOW, AVERAGE, AND HIGH SIZE	NA	NA	NA	NA			
MINIMUM RATE		NA			NA	NA	NA
AVERAGE RATE		NA			NA	NA	NA
MAXIMUM RATE		NA			NA	NA	NA
STANDARD DEVIATION		NA					
EQUATION: NOT PROVIDED		NA			NA	NA	NA
LARGEST OF AVERAGE OR EQUATION					**NA**	**NA**	**NA**

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