To: Town of Paradise Valley 6401 E Lincoln Drive

Paradise Valley, Arizona 85253

From: Eric Maceyko

EPS Group, Inc.

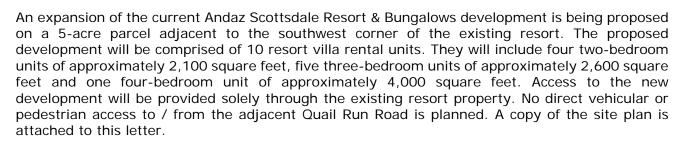
1130 N. Alma School Rd., Ste. 120

Mesa, AZ 85201

Date: July 15, 2022

Re: Andaz Scottsdale Resort and Bungalows

Trip Generation Comparison – FIRST REVISION



A previous traffic analysis was conducted for a potential redevelopment of the entire property (inclusive of the 5-acre parcel) that included different uses for this site. The *Cottonwoods Resort Traffic and Parking Impact Analysis* was completed in September 2013 by Kimley-Horn and Associates, Inc. The previously planned development for the 5-acre site included single-family resort residential dwelling units. A copy of the pertinent excerpts from this study are attached to this letter.

The estimated trip generation for the previously approved and currently proposed development was determined through the procedures and data contained within the Institute of Transportation Engineers (ITE) *Trip Generation*, 11th Edition, published in September 2021. This document provides traffic volume data from existing developments throughout North America that can be utilized to estimate vehicle trips that might be generated from developments. The traffic data are provided for 179 different categories, or Land Use Codes (LUC). The estimated traffic volume is dependent upon independent variables defined by the characteristics and size of each LUC. It should be noted that all data plots and statistics presented in the manual are based on data collected prior to the COVID-19 pandemic. Trip generation was conducted as detailed below.

The most appropriate data to estimate trips for the previous development are provided by ITE Land Use Code 210 – Single-Family Detached Housing. Since the previous report considered the entire site as a whole, the proportion of the total trip generation for the single-family resort residential uses was utilized as a function of the individual 5-acre site (approximately 19 single-family dwelling units). The complete calculation results for the previously planned land use are summarized in the following table:

Table 1: Total Trip Generation – Previous Development

				VEHICLE GENERATED TRIPS						
DESCRIPTION OF LAND USE			Daily	AM Peak Hour			PM Peak Hour			
Land Use	ITE LUC	SI	ZE	Total	Enter	Exit	Total	Enter	Exit	Total
Resort Residential	210	19	DU	219	4	12	16	13	8	21



The most appropriate data to estimate trips for the proposed development are provided by ITE Land Use Code 330 – Resort Hotel. The complete calculation results for the new proposed land use are summarized in the following table:

Table 2: Total Trip Generation – Proposed Development

					VEHICLE GENERATED TRIPS						
	DESCRIPTION OF LAND USE			Daily	AM Peak Hour			PM Peak Hour			
	Land Use	ITE LUC	S	IZE	Total	Enter	Exit	Total	Enter	Exit	Total
ſ	Resort Hotel	330	10	Units	80*	2	1	3	2	2	4

^{*}no daily trip data availlable for LUC 330, so data from LUC 310 (Hotel) was utilized as a substitute

Copies of the trip generation output sheets are attached to this letter. The following table summarizes the two (2) trip generation calculations and compares the differences between the previously planned land use and the new proposed land use.

Table 3: Trip Generation Comparison

TIME PERIOD	PREVIOUS	PROPOSED	COMPARISON
WEEKDAY			
Total	219	80	-139
AM PEAK HOUR			
Total	16	3	-13
Enter	4	2	-2
Exit	12	1	-11
PM PEAK HOUR			
Total	21	4	-17
Enter	13	2	-11
Exit	8	2	-6

Based on the trip generation calculations, the new proposed land uses are anticipated to generate 139 less daily trips, 13 less morning peak hour trips and 17 less evening peak hour trips than the previously planned land use. It is also important to note that the proposed 10 additional hotel guestroom structures will bring the total guestroom inventory to 195 guestrooms. This is less than the 201 total units approved by the Town of Paradise Valley in 2015.

ATTACHMENTS

Site Plan Previous Report Excerpts Trip Generation Output Sheets



Expires:6/30/2023







September 4, 2013

Mr. James Shano, P.E. Public Works Director Town of Paradise Valley 6401 E. McDonald Drive Paradise Valley, AZ 85253



Suite 300 7740 N. 16th Street Phoenix, Arizona 85020

Re: Cottonwoods Resort - Paradise Valley, Arizona
Major Special Use Permit (SUP) Amendment
Traffic and Parking Impact Analysis – Revision No. 1

Dear Mr. Shano:

This letter discusses the anticipated traffic and parking impacts of redevelopment plans for the Cottonwoods Resort. The redevelopment plans discussed in this letter are the subject of an application currently under consideration by the Town of Paradise Valley for a major amendment to the Cottonwoods Resort Special Use Permit (SUP). The Cottonwoods Resort is operating under an existing SUP that covers 22 acres of privately owned contiguous parcels (the main resort site) located south of Lincoln Drive; west of Scottsdale Road; north of McDonald Drive; and east of Quail Run Road.

Overview

The Cottonwoods application requests an increase in the SUP coverage area, from 22.5 acres to 27.5 acres; and an increase in the maximum allowable number of resort guest/residential units, from 172 units to 282 units. A vicinity map and project site breakdown is presented in attached **Exhibit A**. A conceptual site plan for the property is presented in attached **Exhibit B**. Also attached to this letter are five additional exhibits **(Exhibits C through G)** displaying traffic impact information in a graphic format; and three pages of tables **(Tables 1 through 13)** that summarize the quantitative information and opinions discussed below.

Executive Summary

The information provided with this letter demonstrates the following:

Cottonwoods redevelopment will add fewer than 80 trips to Rose Lane during either peak hour. Rose Lane and the Scottsdale/Rose intersection have enough capacity remaining to accommodate all of this trip generation, as well as all of the traffic anticipated to



come from the recently approved "commercial to residential" land use conversion of the rear portion of the Borgata property, which is located adjacent to the Cottonwoods property.

- Daily traffic volumes on Rose Lane will be lower, after the Cottonwoods and Borgata sites have been redeveloped than it would have been if the Borgata site remained commercial.
- Peak hour level of service at the Scottsdale/Rose intersection is expected to remain in the acceptable level of service range after Cottonwoods is completely redeveloped, without any traffic impact mitigation on Rose Lane, and regardless of whether or not any access to the Cottonwoods is provided on Quail Run Road.
- Approval of the Cottonwoods application will add no traffic to Quail Run Road, except during emergencies, as required by the Town. In fact, the Cottonwoods redevelopment will actually reduce the potential future traffic volume on Quail Run Road, by relocating access for the 5-acre expansion parcel currently accessed from Quail Run Road, to Rose Lane.
- Even if Cottonwoods residential (and not resort) access was to be provided along Quail Run Road (a dual access scenario), the amount of Cottonwoods traffic that would use Quail Run would be minimal (approximately 104 vehicles per day, and fewer than 20 vehicles during either peak hour).
- The proposed redevelopment of the Cottonwoods property should not be the basis for determining when or how to close the existing "gap" in Quail Run Road because, regardless of which the above cited access scenarios is implemented, the amount of traffic this project would add to Quail Run Road would be minimal.
- The determination as to how and when to complete the rest of Quail Run Road between Lincoln and McDonald, should not occur without the following:
 - Specific consideration of the potential future use of the eight acres of undeveloped Sunchase property located to the west of the Cottonwoods site;
 - support of an alignment from existing owners of property along this segment of Quail Run Road; and
 - additional traffic impact analysis.
- The parking proposed for the Resort redevelopment is adequate.

Details of the Proposed Redevelopment

The Cottonwoods application currently under consideration by the Town of Paradise Valley proposes the following:

1. The Cottonwoods application proposes to redevelop the existing 22.5-acre SUP governed portion of the resort property, in a









	LEGEND
SUP	Existing Cottonwoods Resort/SUP Area – 22.5 Acres
SUPX	Proposed Cottonwoods SUP Expansion Parcel – 5.0 Acres
CC	Cottonwoods Commercial Parcel – 2.7 Acres (Not a part of this application)
10 S 10 10 S 10 10 S 10 S 10 S 10 S 10 S	Borgata Redevelopment Site - 5.2 Acres (Not a part of this application)
\$8	Sunchase Property - 8.0 Acres (Not a part of this application)
	Existing Signalized Intersection
8	Recognized Future Signalized Intersection
STOP	Stop Sign Controlled Intersection Approach

September 2013

Vicinity Map and Context Plan
Cottonwoods Resort Special Use Permit Amendment – Traffic Impact and Parking Analysis - Rev. 1

Exhibit







	detring Type	Building Area	Overhang Area	Buildings / Room	Units Fer Building	TatalQvis	Fetal Building Area	Total Overhang Area	Total Coverage
wisting	93	2439	512	4	5	20	9,752	2012	13,800
	05	2687	688	5	5	25	13,435	3440	16,875
	87	2675	720	7	5	35	18,715	5040	23,763
	83	2024	420	6	5	10	17,546	4000	22,464
	69	2934	304	6	5	30	17,604	4824	23,423
	810	2354	576	1	5	5	2,354	574	2,930
	Bar	7.1	154	1				364	554
	Canopy		144					144	144
	Restrigen	585		1			215		525
	Total Entiting					545	79,939	21,355	101,195
re	Lobby/Mtg	a500		t			4,500		8,500
	Pool Ramada		324	3				972	977
	Pool Bidg	£43	Y	1			648		648
	Total Phace 1						89,067	22,524	111,415

	Sudising Type	Building	Overhang Area	Bullings	Units Per Building	Total Units	Total Building Area	Total Overhang Area	Total Coverage
ase 2	Çi	3000		15)	1	15	45,000	110211	(5.00)
	C3	2400		32	1	32	76,800		16,800

	Building Type	Duilding Alex	Overhang Area	Hoom	Units For Floor	fetallerts	Fetal Buffling Area	Total Overhang Aces	Total Coverage
Phase 3	OL	14,300		3	15	45	42,900		14,300
	02	14,300		1	15	45	43,500		14,300
	Total Phase 3					90	85,800		18 600

Total Coverage Total floor Arca 236,607 Total Units Remaining Allowable Floor Area 3,743

Phase 1 Lot Aires	768,149 Sq H
Phase 2 Lot Area	413,177 Sqft
TOTALLOT	1,201,721 Sq Ft
Total Allowable Coverage	
(0.25 v Lot Area)	300,430 Sq Ft
Estating Eurostage	101,795 5q ft
Additional Allowable Coverage	199,135 Sq Ft
Current Coverage of Parcel	3556
Current FAR of Farcel	12%
Phase 2 Total Coverage	233,215 Sq.Ft
Phase 2 Coverage Ratio	19%
Phase 2 Total Floor Area	210,887 Sq Ft
Phase 2 FAR	1854
Preso 3 Total Coverage	261,815
Phase 3 Coverage Ratio	22%
Phase 3 Total Floor Area	296,687
Phase 1 IAR	25%

NelsenPartners

SCS ADVISORS, INC

The Cottonwoods Resort Paradise Valley, AZ

17 April 2013

261,815

Conception Shallon

September 2013

Conceptual Site Plan

Cottonwoods Resort Special Use Permit Amendment - Traffic and Parking Impact Analysis - Rev. 1

Exhibit B

Trip Generation Comparison of Alternative SUP Amendment Scenarios

Table 1 - Cottonwoods Trip Generation as currently proposed (the "With SUP Amendment" Scenario)

	ITE					Trips	Generate	ed ⁽¹⁾			
	Land Use			Daily	Al	I Peak Ho	ur	PI	l Peak Ho	ur	
Land Use	Code	Quantity	Units	Total	ln	Out	Total	ln	Out	Total	
Cottonwoods Resort Residential (Inclusive of 5 Acre Expansion Parcel)	210	47	Dwelling Units	448	9	26	35	30	17	47	
Cottonwoods Resort Hotel/Casita	330	235	Guest Units	1,920 (2)	53	20	73	43	56	99	
	Totals	282	学的读 [1]	2,368	62	46	108	73	73	146	

Table 2 - Trip Generation as already allowed (the "Without SUP Amendment" Scenario)

	ITE					Trips	Generate	ed ⁽¹⁾			
	Land Use			Daily	All	Л Peak Ho	ur	PΛ	l Peak Ho	ur	
Land Use	Code	Quantity	Units	Total	ln .	Out	Total	// In	Out	Total	
Cottonwoods Resort Residential (Exclusive of 5-Acre Expansion Parcel)	210	1	Dwelling Units	10	0	1	1	1	0	1	
Cottonwoods Resort Casita	330	171	Guest Units	1,398 (2)	38	15	53	31	41	72	
	Totals	172		1,408	38	16	54	32	41	73	

Trip Generation Source - Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition

Table 3 - Cottonwoods SUP Amendment Trip Generation Impact Summary

Trip Generation Increase/(Reduction) Resulting from SUP Amendment Approval	Daily	AM Peak Hour	PM Peak Hour
The Constant moreass (reduction) resulting from Cor Americanient Approval	960 Trips	54 Trips	73 Trips

Notes:

⁽¹⁾ No daily estimate available for Resort Hotel. Daily Hotel rate (ITE land use code 310) used to estimate daily trips.

¹⁾ Trip Generation Source - Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition

²⁾ No daily estimate available for Resort Hotel. Daily Hotel rate (ITE land use code 310) used to estimate daily trips.

Hotel (310)

Vehicle Trip Ends vs: Rooms

On a: Weekday

Setting/Location: General Urban/Suburban

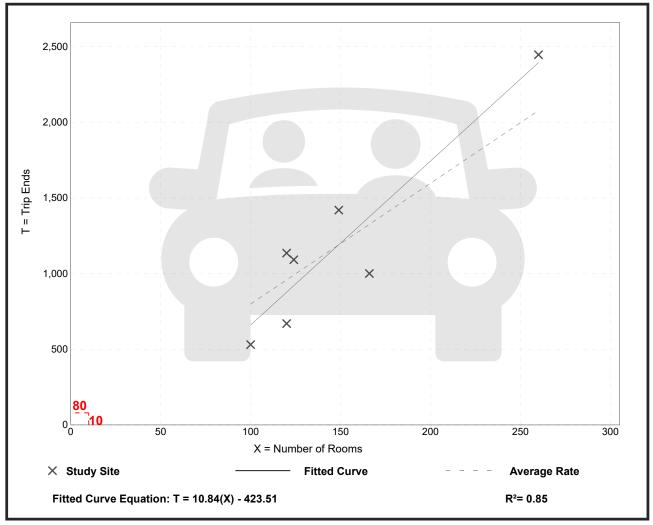
Number of Studies: 7 Avg. Num. of Rooms: 148

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
7.99	5.31 - 9.53	1.92

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

Resort Hotel

(330)

Vehicle Trip Ends vs: Rooms

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

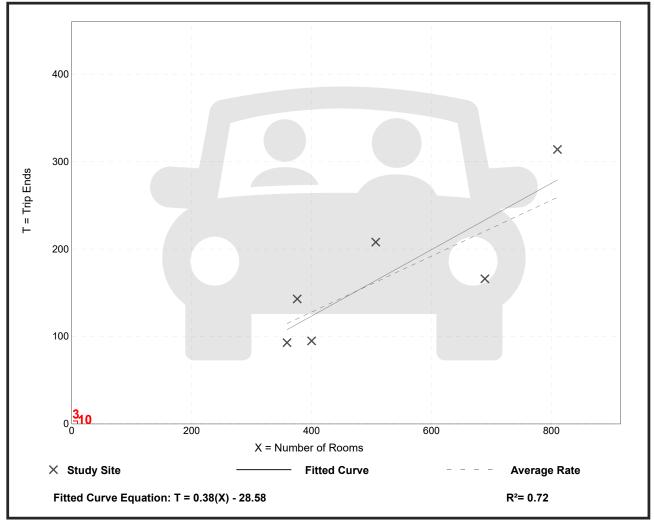
Number of Studies: 6 Avg. Num. of Rooms: 524

Directional Distribution: 72% entering, 28% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.32	0.24 - 0.41	0.08

Data Plot and Equation



Trip Gen Manual, 11th Edition

Institute of Transportation Engineers

Resort Hotel

(330)

Vehicle Trip Ends vs: Rooms

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

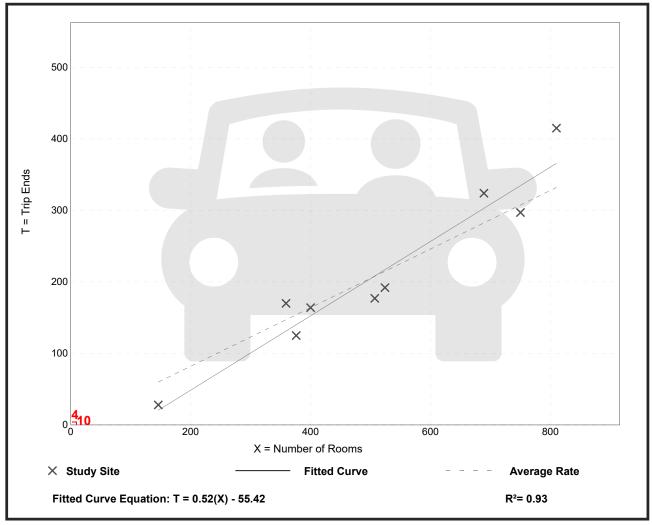
Number of Studies: 9 Avg. Num. of Rooms: 507

Directional Distribution: 43% entering, 57% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.41	0.19 - 0.51	0.08

Data Plot and Equation



Trip Gen Manual, 11th Edition

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Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units On a: Weekday

Setting/Location: General Urban/Suburban

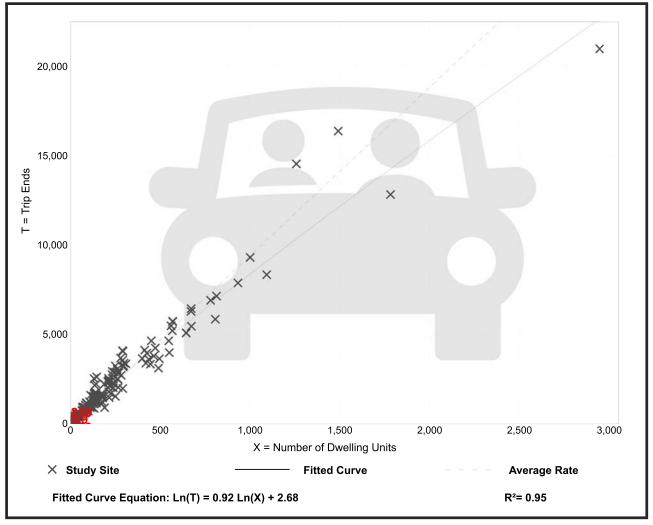
Number of Studies: 174 Avg. Num. of Dwelling Units: 246

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

https://itetripgen.org/printGraph 1/1

Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

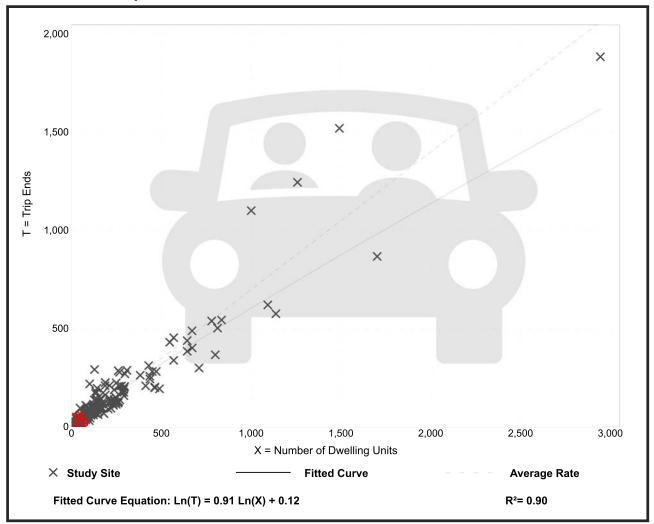
Number of Studies: 192 Avg. Num. of Dwelling Units: 226

Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



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https://itetripgen.org/printGraph 1/1

Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

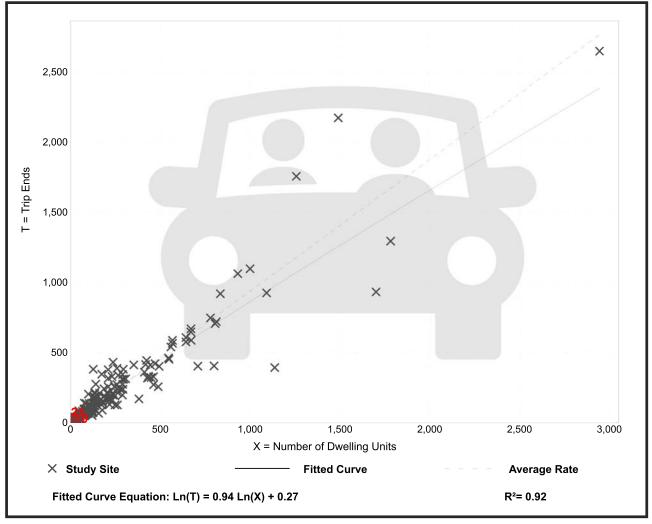
Number of Studies: 208 Avg. Num. of Dwelling Units: 248

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



Trip Gen Manual, 11th Edition

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https://itetripgen.org/printGraph 1/1