

Appendix L

Thermal Ranch Specific Plan Vehicle Miles Traveled Analysis,

prepared by

Urban Crossroads, Inc., June 7, 2023

AND

Thermal Ranch Specific Plan Alternatives - Trip Generation Comparison

prepared by

Urban Crossroads, Inc., August 30, 2024

June 7, 2023

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THERMAL RANCH SPECIFIC PLAN VEHICLE MILES TRAVELED (VMT) ANALYSIS

Mr. John Criste,

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Analysis for the Thermal Ranch Specific Plan development (**Project**), which is located south of Avenue 62, east of Harrison Street, and west of Tyler Street in Thermal.

PROJECT OVERVIEW

It is our understanding that the project is to consist of a mix of uses including and centered around a 231-acre equestrian center and related show facilities, including barns, stabling and related equestrian services. Other components of the Thermal Ranch Specific plan would include a mix of residential neighborhoods including seasonal and year-round workforce housing and RV park facilities, single-family and multi-family lots, and extended stay condominiums. Proposed commercial areas would include a commercial village adjacent to Harrison Street, resort commercial uses near a proposed hotel (150± keys), and supporting commercial uses within the equestrian center. Exhibit 1 shows the preliminary site plan.

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which requires all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a [Technical Advisory on Evaluating Transportation Impacts in CEQA](#) (December of 2018) (**Technical Advisory**) (1). Based on OPR's Technical Advisory, the County of Riverside has recently adopted their [Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled](#) (December of 2020) (**County Guidelines**) (2). The adopted County Guidelines have been utilized to prepare this VMT analysis.

VMT SCREENING ASSESSMENT

Consistent with County Guidelines, projects should evaluate available screening criteria based on their location and project type to determine if a presumption of a less than significant transportation impact can be made. The following project screening thresholds were selected for review based on their applicability to the proposed Project:

- Small Projects Screening
- High Quality Transit Areas (HQTA) Screening
- Map-Based Screening
- Local Essential Service

SMALL PROJECTS SCREENING

The County Guidelines identify projects that generate fewer than 110 daily vehicle trips are presumed to have a less than significant impact absent substantial evidence to the contrary. Housing developments of less than or equal to 110 single family dwelling units or 147 multi-family dwelling units are considered small projects.

County Guidelines also identify those projects forecasted to generate greenhouse gas (GHG) emissions below 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO_{2e}) per year are also assumed to cause a less than significant VMT impact.¹ The County Guidelines provides a list of land use types based on quantity (i.e., dwelling units or square footage) and provides a typical development potential to be below the 3,000 MTCO_{2e} per year.

For retail land uses, buildings with area less than or equal to 60,000 square feet are presumed to cause a less-than-significant impact. The Project includes over 60,000 square feet of retail land use with unknown building sizes, so the retail portion of the Project does not satisfy the Small Projects screening criteria.

Small Projects screening criteria is not met.

HIGH QUALITY TRANSIT AREAS (HQTA) SCREENING

Projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing “major transit stop”² or an existing stop along a “high-quality transit corridor”³) may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75;

¹ County Guidelines; Page 19.

² Pub. Resources Code, § 21064.3 (“‘Major transit stop’ means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.”).

³ Pub. Resources Code, § 21155 (“For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.”).

- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The Project is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor.

HQTA screening criteria is not met.

MAP-BASED SCREENING

The County Guidelines note that “residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT.”⁴ County Guidelines also state that the use of map-based screening for low VMT generating areas is also applicable for other employment uses such as the Project’s industrial development. Urban Crossroads has obtained a VMT data table from County Staff for all TAZs within Riverside County that identifies VMT per capita and VMT per employee for the purposes of identifying of low VMT areas. The data utilizes the sub-regional Riverside Transportation Analysis Model (RIVTAM) to measure baseline VMT performance for individual TAZ’s and a comparison was made to the applicable impact threshold (e.g., VMT per employee for office or industrial land uses and VMT per capita for residential land uses). The Project’s TAZ was identified in the Riverside County Transportation Analysis Model (RIVTAM) as TAZ 4824. The County’s data table identifies the Project’s TAZ 4824 to generate 14.67 VMT per capita. Whereas the County regional threshold is 15.2 VMT per capita⁵. The Project is located in a low VMT area for residential uses.

Map-Based screening criteria is met for the residential land uses.

LOCAL ESSENTIAL SERVICE

The introduction of new local essential services shortens non-discretionary trips by putting those goods and services closer to complimentary land uses, resulting in conditions which do not increase overall VMT. Similar to a medical office, local park, or daycare use being located close to residences, a hotel can provide a local service to adjacent land uses that otherwise attract travelers from more distant lodging locations. In this case, the proposed the hotel would not be provided if the adjacent Horse Park were not located at the site, so it is reasonable to assume that visitors which select this location are considering the proximity to the Horse Park use. Therefore the hotel is presumed to not increase overall VMT.

Local Essential Service screening criteria is met for the hotel land uses.

⁴ Technical Advisory; Page 12

⁵ County Guidelines; Page 22

VMT ANALYSIS

VMT MODELING

The County Guidelines identify RIVTAM and RIVCOM as the appropriate tool for conducting VMT analysis for land development projects in Thermal. However, RIVTAM is currently preferred until RIVCOM is accepted by Riverside County. RIVTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. RIVTAM is a travel forecasting model that represents a sub-area (Riverside County) of the Southern California Association of Governments (SCAG) regional traffic model. RIVTAM was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model.

PROJECT LAND USE CONVERSION

In order to evaluate Project VMT, standard land use information must first be converted into a RIVTAM compatible dataset. The RIVTAM model utilizes socio-economic data (SED) (e.g., population, households, employment, etc.) instead of land use information for the purposes of vehicle trip estimation. Project land use information such as dwelling units, hotel rooms, and recreation land uses must first be converted to SED for input into RIVTAM. Table 1 presents the estimated number of population and employees used to represent the Project in the RIVTAM model. The RIVTAM model was then run inclusive of the Project's SED inputs.

TABLE 1: POPULATION AND EMPLOYMENT ESTIMATES

Land Use	Quantity	Estimated Population or Employees
Residential	1,682 Dwelling Units / RVs	4,541 population
Commercial Village	200,000 square feet	800 employees
Hotel	150 Rooms	225 employees
Equestrian Center Event	223.1 Acres	300 employees

¹ Estate lots and detached residential units are anticipated to have occupancies greater than 3.0 persons per dwelling unit, attached residential units and resort condominiums have occupancies of 2.5 to 3.0 persons per dwelling unit, workforce housing cottages and RVs have occupancies less than 2.5 persons per dwelling unit resulting in an overall average of 2.7 persons per dwelling unit.

PROJECT IMPACT ON VMT

The VMT analysis methodology for retail uses focuses on the net change or net increase in the total VMT for the region. This is an appropriate metric for the Horse Park event, as it is used for land uses that have customers / visitors, rather than being employment-based. The county guidelines indicate that example land uses include retail, medical office, and sports venue.

Travel activity associated with total link-level VMT was extracted from the "without Project" and "with Project" RIVTAM model run for 2012 and 2040 conditions, then interpolated for baseline (2022) conditions. This methodology is commonly referred to as "boundary method" and includes the total VMT for all vehicle trips with one or both trip ends within a specific geographic area. The "boundary method" VMT for Riverside County is shown on Table 2.

TABLE 2: BASE YEAR RIVERSIDE COUNTY LINK-LEVEL VMT

Scenario	Vehicle Miles Traveled (VMT)		
	2012	2040	2022
Without Project	53,554,552	92,382,853	67,421,802
With Project	53,592,507	92,402,422	67,453,191
With Project Change	37,955	19,569	31,389

To determine whether there is a significant impact using the boundary method, the Riverside County area VMT with the project employment is compared to without project conditions. The Riverside County VMT without Project is estimated at 67,421,802 in 2022, whereas with the Project, the Riverside County VMT is estimated at 67,453,191. The project’s effect on VMT (with retail uses and Horse Park event) is considered significant because it results in a cumulative link-level boundary Riverside County VMT increase (i.e. a net increase in total VMT) under the plus project condition compared to the no project condition.

PROJECT DESIGN FEATURES FOR VMT REDUCTION

Transportation demand management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant. Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA, 2021) provides information on individual measures for potential reduction in VMT. In addition, Appendix F of the County Guidelines sets forth TDM measures in Riverside County.

The equestrian center is designed with an extensive internal network of horse trails and golf cart/walking paths to limit and control vehicular/horse interactions. Other than golf carts, motor vehicles are prohibited inside the equestrian center except those needed for deliveries, maintenance and emergency purposes. Parking fields are provided at the periphery of the horse park so visitors can park and walk into the equestrian center to attend show events.

Surrounding the equestrian center are a mix of residential neighborhoods, including single-family homes (attached and detached), large rural estate lots, seasonal and year-round workforce housing, and Recreational Vehicle (RV) park facilities, providing a variety of housing options and neighborhoods within the Thermal Ranch community. Each of these neighborhoods is planned with direct connections to the golf cart and walking paths within the equestrian center, allowing residents to fully access the center’s amenities, services, and events using golf carts instead of conventional automobiles.

The golf cart accommodations, together with internal pedestrian and bicycle infrastructure for travelers between the residential areas, retail, horse park, and hotel uses are anticipated to potentially reduce VMT by approximately 2.0%.

The project includes improved design elements to enhance walkability and connectivity, as described above. Improved street network characteristics within the Project include pedestrian trails, pedestrian crossings, and a host of other physical variables that differentiate pedestrian-oriented environments from auto-oriented environments. The Project provides a pedestrian

access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site. The Project minimizes barriers to pedestrian access and interconnectivity. However, because the nature of the project VMT impact largely relates to external activity, a significant unavoidable impact would remain.

CONCLUSION

In summary, the Project was evaluated consistent with available screening criteria as presented in the County Guidelines. The Project residential and hotel were found to meet available screening thresholds, but the horse park and retail were not found to meet available screening thresholds and a comprehensive VMT analysis was performed. The results of the VMT analysis found the Project to exceed the County's adopted threshold of a net increase in VMT. The Project has a significant unavoidable impact on VMT.

If you have any questions, please contact us at jkain@urbanxroads.com for John or mwhiteman@urbanxroads.com for Marlie.

Respectfully submitted,

URBAN CROSSROADS, INC.



John Kain, AICP
Principal



Marlie Whiteman, P.E.
Senior Associate

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **County of Riverside.** *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled.* County of Riverside : s.n., December 2020.
3. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.

August 30, 2024

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THERMAL RANCH SPECIFIC PLAN ALTERNATIVES - TRIP GENERATION COMPARISON

Dear Mr. John Criste:

Urban Crossroads, Inc. is pleased to submit this summary of trip generation associated with potential Thermal Ranch Specific Plan Project Alternatives. The four alternatives to the Thermal Ranch Specific Plan include the following:

1. Alternative A: Increased Intensity Mixed-Use Alternative

Under the Increased Intensity Mixed-Use Alternative ("Alternative A"), the project would assume the same basic goal of a mixed-use resort residential community focused around a world-class equestrian center but with a greater intensification of urban land uses.

For trip generation purposes, the following land uses have been utilized:

- 223± acres Equestrian Center / Horse Park, which includes 75,000 square feet of event-related commercial space, and 10,000 square feet of office space
- 388 DU – Equestrian Estates
- 605 DU – Single Family Attached Residential
- Equestrian Center Housing – 500 Modular Units and 320 RV Spaces
- 505 Resort Condominiums
- 300 Rooms - Hotel
- 60,000 SF – Specialty Retail in PA-5
- 200,000 SF – Commercial Retail in PA-6

2. Alternative B: Low Density Residential Alternative

Alternative B is more consistent with the site's existing use and rural uses in the area, while still facilitating the equestrian center development and associated resort residential character. The equestrian center (PA-1) acreage would remain at 223± acres. However, residential lots would be reduced. Commercial development would include a total of 100,000 square feet of retail space in PA-5 and 6 (resort/specialty retail in PA-5 and commercial retail in PA-6). The 150 key hotel in PA-5 would remain the same under this alternative. In comparison with the proposed Project.

For trip generation purposes, the following land uses have been utilized:

- 223± acres Equestrian Center / Horse Park, which includes 75,000 square feet of event-related commercial space, and 10,000 square feet of office space
- 39 DU – Equestrian Estates
- 139 DU – Single Family Attached Residential
- Equestrian Center Housing – 500 Modular Units and 320 RV Spaces
- 210 Resort Condominiums
- 150 Rooms - Hotel
- 40,000 SF – Specialty Retail in PA-5
- 60,000 SF – Commercial Retail in PA-6

3. Alternative C: No Project Alternative

Under the No Project Alternative (“Alternative C”), the project would be remain in its existing agricultural condition.

4. Alternative D: No PA-5/PA-6 Commercial Alternative

Alternative D is generally consistent with the Proposed Project, but eliminates the commercial and resort development proposed in Planning Areas 5 and 6. In its place, this alternative would result in 32 estate lots in Planning Areas 5 and 6 which would also reduce the number of estate lots in Planning Area 2 to 100. This alternative redistributes 32 of the estate lots to the southwest quadrant of the Project area, but does not increase the total number of residential units within the Project area. Under this alternative, Planning Areas 1, 3 and 4 remain identical to the proposed Project land uses.

PROJECT TRIP GENERATION COMPARISON

In order to compare the traffic characteristics of the proposed Project provided in the Thermal Ranch Specific Plan Traffic Analysis (TA), May 31, 2023 and the proposed Project Alternatives, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation (11th Edition, 2021) manual are utilized.

ITE trip generation rates for Single Family Detached Residential (Code 210), Condominiums (Code 220), Single Family Attached (Code 215), Modular Homes (Workforce Housing, Code 223), Hotel (Code 310), RV Park (Code 416), General Office Building (Code 710) and Commercial Retail (40-150 TSF, Code 821) are used. Specialty Retail from San Diego Association of Governments (SANDAG) and equestrian – horse park rates derived from data collected at the existing Desert International Horse Show have also been used.

Table 1 presents the weekday trip generation rates and resulting trip generation summary for the proposed Project (consistent with the TA). As shown on Table 1, the proposed Project is anticipated to generate a net total of 18,939 external trip-ends per day on a typical weekday with 1,000 external vehicles per hour (VPH) during the weekday AM peak hour and 1,393 external VPH during the weekday PM peak hour.

Table 2 presents the weekend trip generation rates and resulting trip generation summary for the proposed Project (consistent with the TA). As shown on Table 2, the proposed Project is anticipated to generate a net total of 21,523 external trip-ends per day on a typical Saturday with 13,995 external trip-ends per day on a typical Sunday with 1,530 external vehicles per hour (VPH) during the Saturday AM peak hour and 1,407 external VPH during the Sunday PM peak hour.

Alternative A: Increased Intensity Mixed-Use Alternative

Table 3 presents the weekday trip generation rates and resulting trip generation summary for Project Alternative A (Increased Intensity Mixed-Use). As shown on Table 3, Alternative A is anticipated to generate a net total of 25,916 external trip-ends per day on a typical weekday with 1,328 external vehicles per hour (VPH) during the weekday AM peak hour and 1,801 external VPH during the weekday PM peak hour.

Table 4 presents the weekend trip generation rates and resulting trip generation summary for Project Alternative A (Increased Intensity Mixed-Use). As shown on Table 4, Project Alternative A (Increased Intensity Mixed-Use) is anticipated to generate a net total of 29,031 external trip-ends per day on a typical Saturday with 18,647 external trip-ends per day on a typical Sunday with 1,948 external vehicles per hour (VPH) during the Saturday AM peak hour and 1,927 external VPH during the Sunday PM peak hour.

Alternative B: Low Density Residential Alternative

Project Alternative B (Low Density Residential) is shown on Table 5 for typical weekday conditions. The Project alternative is anticipated to generate a net total of 12,212 external trip-ends per day on a typical weekday with 666 external vehicles per hour (VPH) during the weekday AM peak hour and 924 external VPH during the weekday PM peak hour.

Table 6 presents the weekend trip generation rates and resulting trip generation summary for Project Alternative B (Low Density Residential). As shown on Table 6, Project Alternative B (Low Density Residential) is anticipated to generate a net total of 14,277 external trip-ends per day on a typical Saturday with 10,498 external trip-ends per day on a typical Sunday with 983 external vehicles per hour (VPH) during the Saturday AM peak hour and 1,048 external VPH during the Sunday PM peak hour.

Alternative C: No Project Alternative

Project Alternative C (No Project Alternative) is shown on Table 7. The Project alternative is anticipated to generate a net total of 1,183 external trip-ends per day on a typical weekday with 108 external vehicles per hour (VPH) during the weekday AM peak hour and 125 external VPH during the weekday PM peak hour. Alternative C is not analyzed for weekend conditions because agriculture traffic on weekends is estimated to be nominal.

Alternative D: No PA-5/PA-6 Commercial Alternative

Table 8 presents the weekday trip generation rates and resulting trip generation summary for Project D (No PA-5/PA-6 Commercial). As shown on Table 8, Alternative D is anticipated to generate a net total of 10,159 external trip-ends per day on a typical weekday with 766 external vehicles per hour (VPH) during the weekday AM peak hour and 975 external VPH during the weekday PM peak hour.

Table 9 presents the weekend trip generation rates and resulting trip generation summary for Project Alternative D (No PA-5/PA-6 Commercial). As shown on Table 9, Project Alternative D (No PA-5/PA-6 Commercial) is anticipated to generate a net total of 12,367 external trip-ends per day on a typical Saturday with 11,013 external trip-ends per day on a typical Sunday with 1,032 external vehicles per hour (VPH) during the Saturday AM peak hour and 1,054 external VPH during the Sunday PM peak hour.

With the elimination of commercial land uses in Planning Areas 5 and 6, Project Access 1 at Harrison Street (the Left-In/Right-In/Right-Out driveway) could be restricted to Right-In/Right-Out only for Alternative D.

VEHICLE MILES TRAVELED (VMT)

A VMT impact was found for the proposed Project Planning Area 1 horse park and commercial uses in Planning Areas 5, and 6 in the Thermal Ranch Specific Plan Vehicle Miles Traveled (VMT) Analysis. Residential and hotel land uses were presumed to not have a significant VMT impact because they met the screening criteria.

Alternative A: Increased Intensity Mixed-Use Alternative

The VMT impact that was found for the Planning Area 1 horse park and Planning Areas 5 and 6 commercial uses in the Thermal Ranch Specific Plan Vehicle Miles Traveled (VMT) Analysis is likely to remain with Alternative A because the commercial and horse park land uses are included in this scenario.

Alternative B: Low Density Residential Alternative

The VMT impact that was found for the horse park (Planning Area 1) in the Thermal Ranch Specific Plan Vehicle Miles Traveled (VMT) Analysis is anticipated to remain with Alternative B. However, a retail impact is not anticipated because the retail would be screened out from analysis due to its size as a small project.

Alternative C: No Project Alternative

A VMT impact is not projected to occur for Alternative C because existing land uses remain.

Alternative D: No PA-5/PA-6 Commercial Alternative

The VMT impact that was found for the horse park in Planning Area 1 in the Thermal Ranch Specific Plan Vehicle Miles Traveled (VMT) Analysis is likely to remain with Alternative D because the PA-1 land uses do not change in this scenario. The previously identified VMT impact related to commercial uses in Planning Areas 5 and 6 would not occur for Alternative D (No PA-5/PA-6 Commercial Alternative). The redistribution of residential land uses in PAs 5 and 6 are not anticipated to have a VMT impact because residential land uses in this area meet the Map-Based screening criteria.

CONCLUSIONS

Based on the comparison results presented on Table 10 for typical weekday conditions and Table 11 for weekend conditions, the potential Project land use alternatives are estimated to generate the following differences when compared to the proposed Project provided in TA:

- Alternative A: Increased Intensity Mixed-Use Alternative
 - 6,977 more external **weekday** trip-ends per day, 328 more AM peak hour external trips, and 408 more PM peak hour external trips.
 - 7,508 more external **Saturday** trip-ends per day, 4,652 more external **Sunday** trip-ends per day, 418 more Saturday AM peak hour external trips, and 520 more Sunday PM peak hour external trips.
- Alternative B: Low Density Residential Alternative
 - 6,727 fewer external **weekday** trip-ends per day, 334 more AM peak hour external trips, and 469 more PM peak hour external trips.
 - 7,246 fewer external **Saturday** trip-ends per day, 3,497 fewer external **Sunday** trip-ends per day, 547 fewer Saturday AM peak hour external trips, and 359 fewer Sunday PM peak hour external trips.
- Alternative C: No Project Alternative
 - 17,756 fewer external **weekday** trip-ends per day, 892 fewer AM peak hour external trips, and 1,268 fewer PM peak hour external trips.
 - **Weekend** agriculture trip rates are not available, but weekend trip generation for agriculture is anticipated to be nominal. Therefore, Alternative C is estimated to essentially eliminate weekend trip generation for the site.
- Alternative D: No PA-5/PA-6 Commercial Alternative
 - 8,780 fewer external **weekday** trip-ends per day, 234 fewer AM peak hour external trips, and 418 fewer PM peak hour external trips.

- 9,156 fewer external **Saturday** trip-ends per day, 2,982 fewer external **Sunday** trip-ends per day, 498 fewer Saturday AM peak hour external trips, and 353 fewer Sunday PM peak hour external trips.
- With the elimination of commercial land uses in Planning Areas 5 and 6, Project Access 1 at Harrison Street (the Left-In/Right-In/Right-Out driveway) could be restricted to Right-In/Right-Out only for Alternative D.

Based on the Vehicle Miles Traveled (VMT) comparison above, the potential Project land use alternatives are anticipated to experience the following differences when compared to the proposed Project provided in TA:

- Alternative A: Increased Intensity Mixed-Use Alternative
 - The VMT impacts found for Planning Areas 1, 5, and 6 of the proposed Project are likely to remain with Alternative A.
- Alternative B: Low Density Residential Alternative
 - The horse park VMT impact is anticipated to remain with Alternative B. However, a VMT impact is not anticipated for Planning Areas 5 and 6 due to reductions in commercial project size.
- Alternative C: No Project Alternative
 - No VMT impact is anticipated for Alternative C because existing land uses remain.
- Alternative D: No PA-5/PA-6 Commercial Alternative
 - The redistribution of residential land uses in PAs 5 and 6 are not anticipated to have a VMT impact because residential land uses in this area meet the Map-Based screening criteria.

If you have any questions, please contact John Kain at (949) 375-2435 or Marlie Whiteman (714) 585-0574.

Respectfully submitted,

URBAN CROSSROADS, INC.



John Kain, AICP
Principal



Marlie Whiteman, PE
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TABLE 1: PROPOSED PROJECT TRIP GENERATION WEEKDAY SUMMARY

Trip Generation Rates¹

Land Use	ITE LU Code	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached	210	DU	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Condominiums	220	DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Modular Homes (Workforce Housing)	223	DU	0.10	0.26	0.36	0.27	0.19	0.46	4.81
Hotel	310	RM	0.35	0.27	0.62	0.36	0.37	0.73	12.23
RV Park ³	416	Spaces	0.08	0.13	0.21	0.18	0.09	0.27	2.70
General Office Building	710	TSF	1.34	0.18	1.52	0.24	1.20	1.44	10.84
Commercial Retail (40-150 TSF)	821	TSF	1.07	0.66	1.73	2.54	2.65	5.19	67.52
Specialty Retail ⁴	--	TSF	0.72	0.48	1.20	1.80	1.80	3.60	40.00
Equestrian - Horse Park ⁵	--	Guests	0.041	0.032	0.073	0.016	0.063	0.079	0.696

Trip Generation Results

Planning Area (PA)	Land Use	ITE LU Code	Quantity ²	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
1	Specialty Retail	975	75 TSF	54	36	90	135	135	270	3,000
	General Office Building	710	10 TSF	13	2	15	2	12	14	108
	Equestrian - Horse Park	--	5,000 Guests	205	160	365	80	315	395	3,480
	PA1 Subtotal			272	198	470	217	462	679	6,588
	<i>Internal PA 1 interaction (Retail with Guests)</i>			(18)	(18)	(36)	(68)	(68)	(136)	(1,500)
	<i>PA 1 Interaction with Residential - PA's 2, 3, & 5</i>			(7)	(4)	(11)	(14)	(15)	(29)	(311)
	<i>PA 1 Interaction with Workforce Housing - PA 4</i>			(103)	(27)	(130)	(43)	(116)	(159)	(1,250)
	<i>PA 1 Interaction with Commercial - PA 6</i>			(15)	(23)	(38)	(60)	(57)	(117)	(265)
	<i>Interaction between Project PA's</i>			(143)	(72)	(215)	(185)	(256)	(441)	(3,326)
	Planning Area 1 Subtotal External Trips			129	126	255	32	206	238	3,262
2	Single Family Detached	210	132 DU	24	69	93	78	46	124	1,245
	<i>PA 2 Interaction with Horse Park - PA 1</i>			(1)	(1)	(2)	(3)	(3)	(6)	(53)
	<i>PA 2 Interaction with Hotel/Retail - PA 5</i>			(1)	(1)	(2)	(2)	(2)	(4)	(48)
	<i>PA 2 Interaction with Commercial - PA 6</i>			(2)	(4)	(6)	(8)	(6)	(14)	(141)
	<i>Interaction between Project PA's</i>			(4)	(6)	(10)	(13)	(11)	(24)	(242)
Planning Area 2 Subtotal External Trips			20	63	83	65	35	100	1,003	
3	Single Family Detached	210	390 DU	70	203	273	230	137	367	3,678
	<i>PA 3 Interaction with Horse Park - PA 1</i>			(2)	(4)	(6)	(7)	(7)	(14)	(158)
	<i>PA 3 Interaction with Hotel/Retail - PA 5</i>			(2)	(3)	(5)	(5)	(5)	(10)	(144)
	<i>PA 3 Interaction with Commercial - PA 6</i>			(8)	(11)	(19)	(27)	(27)	(54)	(478)
	<i>Interaction between Project PA's</i>			(12)	(18)	(30)	(39)	(39)	(78)	(780)
Planning Area 3 Subtotal External Trips			58	185	243	191	98	289	2,898	
4	Modular Homes (Work Force Housing)	223	500 DU	50	130	180	135	95	230	2,405
	RV Park	416	320 Spaces	26	42	68	58	29	87	864
	PA4 Subtotal			76	172	248	193	124	317	3,269
	<i>PA 4 Interaction with Horse Park - PA 1</i>			(27)	(103)	(130)	(116)	(43)	(159)	(1,250)
	<i>PA 4 Interaction with Commercial - PA 6</i>			(6)	(10)	(16)	(21)	(20)	(41)	(425)
<i>Interaction between Project PA's</i>			(33)	(113)	(146)	(137)	(63)	(200)	(1,675)	
Planning Area 4 Subtotal External Trips			43	59	102	56	61	117	1,594	
5	Condominiums	220	340 DU	34	102	136	109	65	174	2,292
	Hotel	310	150 RM	53	41	94	54	56	110	1,835
	Specialty Retail	--	50 TSF	36	24	60	90	90	180	2,000
	PA5 Subtotal			123	167	290	253	211	464	6,127
	<i>Internal PA 5 interaction</i>			(19)	(19)	(38)	(26)	(26)	(52)	(520)
	<i>PA 5 Interaction with Horse Park - PA1</i>			(1)	(2)	(3)	(5)	(4)	(9)	(100)
	<i>PA 5 Interaction with Residential - PA's 2 & 3</i>			(4)	(3)	(7)	(7)	(7)	(14)	(192)
<i>PA 5 Interaction with Commercial - PA6</i>			(14)	(23)	(37)	(54)	(51)	(105)	(1,313)	
<i>Interaction between Project PA's</i>			(38)	(47)	(85)	(92)	(88)	(180)	(2,125)	
<i>Commercial Pass-By (5%)</i>			(5)	(4)	(9)	(8)	(7)	(15)	(200)	
Planning Area 5 Subtotal External Trips			80	116	196	153	116	269	3,802	
6	Commercial Retail (40-150 TSF)	821	150 TSF	161	99	260	381	398	779	10,128
	<i>PA 6 Interaction with Horse Park - PA 1</i>			(23)	(15)	(38)	(57)	(60)	(117)	(265)
	<i>PA 6 Interaction with Hotel/Retail - PA 5</i>			(16)	(10)	(26)	(38)	(40)	(78)	(1,013)
	<i>PA 6 Interaction with Residential - PA's 2 to 5</i>			(32)	(20)	(52)	(66)	(70)	(136)	(1,344)
	<i>Interaction between Project PA's</i>			(71)	(45)	(116)	(161)	(170)	(331)	(2,622)
<i>Commercial Pass-By (15%)</i>			(12)	(11)	(23)	(34)	(34)	(68)	(1,126)	
Planning Area 6 Subtotal External Trips			78	43	121	186	194	380	6,380	
Total Project Trip Ends				726	908	1,634	1,352	1,378	2,730	31,035
Total Internal Interaction				(301)	(301)	(602)	(627)	(627)	(1,254)	(10,770)
Commercial Pass-By				(17)	(15)	(32)	(42)	(41)	(83)	(1,326)
PROPOSED PROJECT TOTAL WEEKDAY EXTERNAL TRIPS				408	592	1,000	683	710	1,393	18,939

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

² DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet; EMP = Employees

³ Since the ITE daily rate for Land Use Code 416 (RV Park) is not available, daily rates have been estimated (PM x 10).

⁴ Since ITE does not have trip rates for a specialty retail, SANDAG's specialty retail rates has been utilized.

⁵ Trip generation rates have been derived based on count data collected at the existing Desert International Horse Show facility during February, 2023.

TABLE 2: PROPOSED PROJECT TRIP GENERATION WEEKEND SUMMARY

Trip Generation Rates ¹										
Land Use	ITE LU Code	Units ²	Saturday			Sunday			Daily	
			Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
			In	Out	Total	In	Out	Total		
Single Family Detached	210	DU	0.50	0.42	0.92	0.44	0.39	0.83	9.48	8.48
Condominiums, Modular Homes, RV Parks	220	DU/RV Space	0.22	0.19	0.41	0.19	0.17	0.36	4.55	3.86
Hotel	310	RM	0.36	0.43	0.79	0.37	0.33	0.70	10.05	7.83
General Office Building	710	TSF	0.29	0.24	0.53	0.12	0.09	0.21	2.21	0.70
Commercial Retail (40-150 TSF)	821	TSF	2.59	2.39	4.98	2.31	2.40	4.71	81.07	42.68
Specialty Retail ³	--	TSF	2.06	1.38	3.44	1.62	1.63	3.25	47.83	25.18
Equestrian - Horse Park ⁴	--	Guests	0.046	0.006	0.052	0.009	0.057	0.066	0.708	0.705

Trip Generation Results											
Planning Area (PA)	Land Use	ITE LU Code	Quantity ²	Saturday			Sunday			Daily	
				Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
				In	Out	Total	In	Out	Total		
1	Specialty Retail	975	75 TSF	155	103	258	122	122	244	3,587	1,889
	General Office Building	710	10 TSF	3	2	5	1	1	2	22	7
	Equestrian - Horse Park	--	8,100 Guests	373	49	422	73	462	535	5,735	5,711
	PA1 Subtotal			531	154	685	196	585	781	9,344	7,607
	<i>Internal PA 1 interaction (Retail with Guests)</i>			(52)	(52)	(104)	(61)	(61)	(122)	(1,794)	(945)
	<i>PA 1 Interaction with Residential - PA's 2, 3, & 5</i>			(16)	(11)	(27)	(12)	(12)	(24)	(361)	(190)
	<i>PA 1 Interaction with Workforce Housing - PA 4</i>			(94)	(63)	(157)	(49)	(94)	(143)	(1,570)	(1,430)
	<i>PA 1 Interaction with Commercial - PA 6</i>			(18)	(18)	(36)	(54)	(52)	(106)	(360)	(1,060)
	<i>Interaction between Project PA's</i>			(180)	(144)	(324)	(176)	(219)	(395)	(4,085)	(3,625)
	Planning Area 1 Subtotal External Trips			351	10	361	20	366	386	5,259	3,982
2	Single Family Detached	210	132 DU	66	55	121	58	51	109	1,251	1,119
	<i>PA 2 Interaction with Horse Park - PA 1</i>			(2)	(3)	(5)	(2)	(3)	(5)	(69)	(36)
	<i>PA 2 Interaction with Hotel/Retail - PA 5</i>			(2)	(2)	(4)	(2)	(2)	(4)	(49)	(31)
	<i>PA 2 Interaction with Commercial - PA 6</i>			(9)	(9)	(18)	(7)	(5)	(12)	(180)	(120)
	<i>Interaction between Project PA's</i>			(13)	(14)	(27)	(11)	(10)	(21)	(298)	(187)
	Planning Area 2 Subtotal External Trips			53	41	94	47	41	88	953	932
3	Single Family Detached	210	390 DU	195	164	359	172	152	324	3,697	3,307
	<i>PA 3 Interaction with Horse Park - PA 1</i>			(6)	(9)	(15)	(6)	(7)	(13)	(205)	(107)
	<i>PA 3 Interaction with Hotel/Retail - PA 5</i>			(5)	(6)	(11)	(5)	(5)	(10)	(146)	(92)
	<i>PA 3 Interaction with Commercial - PA 6</i>			(27)	(28)	(55)	(25)	(25)	(50)	(550)	(500)
	<i>Interaction between Project PA's</i>			(38)	(43)	(81)	(36)	(37)	(73)	(901)	(699)
	Planning Area 3 Subtotal External Trips			157	121	278	136	115	251	2,796	2,608
4	Modular Homes (Work Force Housing)	220	500 DU	110	95	205	95	85	180	2,275	1,930
	RV Park	220	320 Spaces	70	61	131	61	54	115	1,456	1,235
	PA4 Subtotal			180	156	336	156	139	295	3,731	3,165
	<i>PA 4 Interaction with Horse Park - PA 1</i>			(63)	(94)	(157)	(94)	(49)	(143)	(1,570)	(1,430)
	<i>PA 4 Interaction with Commercial - PA 6</i>			(26)	(28)	(54)	(22)	(21)	(43)	(540)	(430)
	<i>Interaction between Project PA's</i>			(89)	(122)	(211)	(116)	(70)	(186)	(2,110)	(1,860)
Planning Area 4 Subtotal External Trips			91	34	125	40	69	109	1,621	1,305	
5	Condominiums	220	340 DU	75	65	140	65	58	123	1,547	1,312
	Hotel	310	150 RM	54	65	119	56	50	106	1,508	1,175
	Specialty Retail	--	50 TSF	103	69	172	81	81	162	2,392	1,259
	PA5 Subtotal			232	199	431	202	189	391	5,447	3,746
	<i>Internal PA 5 interaction</i>			(19)	(19)	(38)	(26)	(26)	(52)	(380)	(520)
	<i>PA 5 Interaction with Horse Park - PA1</i>			(3)	(4)	(7)	(3)	(3)	(6)	(87)	(46)
	<i>PA 5 Interaction with Residential - PA's 2 & 3</i>			(8)	(7)	(15)	(7)	(7)	(14)	(195)	(122)
	<i>PA 5 Interaction with Commercial - PA6</i>			(47)	(51)	(98)	(43)	(41)	(84)	(1,446)	(770)
	<i>Interaction between Project PA's</i>			(77)	(81)	(158)	(79)	(77)	(156)	(2,108)	(1,458)
	<i>Commercial Pass-By (5%)</i>			(7)	(7)	(14)	(6)	(6)	(12)	(167)	(114)
Planning Area 5 Subtotal External Trips			148	111	259	117	106	223	3,172	2,174	
6	Commercial Retail (40-150 TSF)	821	150 TSF	389	359	748	347	360	707	12,161	6,402
	<i>PA 6 Interaction with Horse Park - PA 1</i>			(18)	(18)	(36)	(52)	(54)	(106)	(360)	(1,060)
	<i>PA 6 Interaction with Hotel/Retail - PA 5</i>			(39)	(36)	(75)	(35)	(36)	(71)	(1,216)	(640)
	<i>PA 6 Interaction with Residential - PA's 2 to 5</i>			(77)	(73)	(150)	(58)	(60)	(118)	(1,500)	(1,180)
	<i>Interaction between Project PA's</i>			(134)	(127)	(261)	(145)	(150)	(295)	(3,076)	(2,880)
	<i>Commercial Pass-By (15%)</i>			(37)	(37)	(74)	(31)	(31)	(62)	(1,363)	(528)
Planning Area 6 Subtotal External Trips			218	195	413	171	179	350	7,722	2,994	
Total Project Trip Ends				1,593	1,087	2,680	1,131	1,476	2,607	35,631	25,346
Total Internal Interaction				(531)	(531)	(1,062)	(563)	(563)	(1,126)	(12,578)	(10,709)
Commercial Pass-By				(44)	(44)	(88)	(37)	(37)	(74)	(1,530)	(642)
PROPOSED PROJECT TOTAL WEEKEND EXTERNAL TRIPS				1,018	512	1,530	531	876	1,407	21,523	13,995

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

² DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet; EMP = Employees

³ SANDAG's specialty retail weekday trip rates have been adjusted to estimate weekend trip rates based on the ITE 821 (Commercial) weekday to weekend relationship.

⁴ Trip generation rates have been derived based on count data collected at the existing Desert International Horse Show facility during February, 2023.

TABLE 3: ALTERNATIVE A, INCREASED INTENSITY MIXED-USE TRIP GENERATION WEEKDAY SUMMARY

Trip Generation Rates ¹									
Land Use	ITE LU Code	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached	210	DU	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Single Family Attached	215	DU	0.12	0.36	0.48	0.34	0.23	0.57	7.20
Condominiums	220	DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Modular Homes (Workforce Housing)	223	DU	0.10	0.26	0.36	0.27	0.19	0.46	4.81
Hotel	310	RM	0.35	0.27	0.62	0.36	0.37	0.73	12.23
RV Park ³	416	Spaces	0.08	0.13	0.21	0.18	0.09	0.27	2.70
General Office Building	710	TSF	1.34	0.18	1.52	0.24	1.20	1.44	10.84
Commercial Retail (40-150 TSF)	821	TSF	1.07	0.66	1.73	2.54	2.65	5.19	67.52
Specialty Retail ⁴	--	TSF	0.72	0.48	1.20	1.80	1.80	3.60	40.00
Equestrian - Horse Park ⁵	--	Guests	0.041	0.032	0.073	0.016	0.063	0.079	0.696

Trip Generation Results										
Planning Area (PA)	Land Use	ITE LU Code	Quantity ²	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
1	Specialty Retail	975	75 TSF	54	36	90	135	135	270	3,000
	General Office Building	710	10 TSF	13	2	15	2	12	14	108
	Equestrian - Horse Park	--	5,000 Guests	205	160	365	80	315	395	3,480
	PA1 Subtotal			272	198	470	217	462	679	6,588
				<i>Internal PA 1 interaction (Retail with Guests)</i>						
				<i>PA 1 Interaction with Residential - PA's 2, 3, & 5</i>						
				<i>PA 1 Interaction with Workforce Housing - PA 4</i>						
				<i>PA 1 Interaction with Commercial - PA 6</i>						
				<i>Interaction between Project PA's</i>						
				124	118	242	12	187	199	3,174
2	Single Family Detached	210	388 DU	70	202	272	229	136	365	3,659
				<i>PA 2 Interaction with Horse Park - PA 1</i>						
				<i>PA 2 Interaction with Hotel/Retail - PA 5</i>						
				<i>PA 2 Interaction with Commercial - PA 6</i>						
				<i>Interaction between Project PA's</i>						
				59	186	245	194	103	297	2,940
3	Single Family Attached	215	605 DU	73	218	291	206	139	345	4,356
				<i>PA 3 Interaction with Horse Park - PA 1</i>						
				<i>PA 3 Interaction with Hotel/Retail - PA 5</i>						
				<i>PA 3 Interaction with Commercial - PA 6</i>						
				<i>Interaction between Project PA's</i>						
			60	198	258	164	97	261	3,455	
4	Modular Homes (Work Force Housing)	223	500 DU	50	130	180	135	95	230	2,405
	RV Park	416	320 Spaces	26	42	68	58	29	87	864
	PA4 Subtotal			76	172	248	193	124	317	3,269
				<i>PA 4 Interaction with Horse Park - PA 1</i>						
				<i>PA 4 Interaction with Commercial - PA 6</i>						
			<i>Interaction between Project PA's</i>							
			43	60	103	58	63	121	1,649	
5	Condominiums	220	505 DU	51	152	203	162	96	258	3,404
	Hotel	310	300 RM	105	81	186	107	112	219	3,669
	Specialty Retail	--	60 TSF	43	29	72	108	108	216	2,400
	PA5 Subtotal			199	262	461	377	316	693	9,473
				<i>Internal PA 5 interaction</i>						
				<i>PA 5 Interaction with Horse Park - PA1</i>						
				<i>PA 5 Interaction with Residential - PA's 2 & 3</i>						
				<i>PA 5 Interaction with Commercial - PA6</i>						
			<i>Interaction between Project PA's</i>							
			<i>Commercial Pass-By (5%)</i>							
			134	184	318	239	182	421	6,248	
6	Commercial Retail (40-150 TSF)	821	200 TSF	214	132	346	508	530	1,038	13,504
				<i>PA 6 Interaction with Horse Park - PA 1</i>						
				<i>PA 6 Interaction with Hotel/Retail - PA 5</i>						
				<i>PA 6 Interaction with Residential - PA's 2 to 5</i>						
				<i>Interaction between Project PA's</i>						
				<i>Commercial Pass-By (15%)</i>						
			104	58	162	245	257	502	8,450	
Total Project Trip Ends				904	1,184	2,088	1,730	1,707	3,437	40,849
Total Internal Interaction				(357)	(357)	(714)	(762)	(762)	(1,524)	(13,113)
Commercial Pass-By				(23)	(23)	(46)	(56)	(56)	(112)	(1,820)
ALTERNATIVE A PROJECT TOTAL WEEKDAY EXTERNAL TRIPS				524	804	1,328	912	889	1,801	25,916

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).
² DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet; EMP = Employees
³ Since the ITE daily rate for Land Use Code 416 (RV Park) is not available, daily rates have been estimated (PM x 10).
⁴ Since ITE does not have trip rates for a specialty retail, SANDAG's specialty retail rates has been utilized.
⁵ Trip generation rates have been derived based on count data collected at the existing Desert International Horse Show facility during February, 2023.

TABLE 4: ALTERNATIVE A, INCREASED INTENSITY MIXED-USE TRIP GENERATION WEEKEND SUMMARY

Trip Generation Rates ¹										
Land Use	ITE LU Code	Units ²	Saturday			Sunday			Daily	
			Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
			In	Out	Total	In	Out	Total		
Single Family Detached	210	DU	0.50	0.42	0.92	0.44	0.39	0.83	9.48	8.48
Single Family Attached	215	DU	0.27	0.30	0.57	0.42	0.37	0.79	8.76	7.17
Condominiums, Modular Homes, RV Parks	220	DU/RV Space	0.22	0.19	0.41	0.19	0.17	0.36	4.55	3.86
Hotel	310	RM	0.36	0.43	0.79	0.37	0.33	0.70	10.05	7.83
General Office Building	710	TSF	0.29	0.24	0.53	0.12	0.09	0.21	2.21	0.70
Commercial Retail (40-150 TSF)	821	TSF	2.59	2.39	4.98	2.31	2.40	4.71	81.07	42.68
Specialty Retail ³	--	TSF	2.06	1.38	3.44	1.62	1.63	3.25	47.83	25.18
Equestrian - Horse Park ⁴	--	Guests	0.046	0.006	0.052	0.009	0.057	0.066	0.708	0.705

Trip Generation Results											
Planning Area (PA)	Land Use	ITE LU Code	Quantity ²	Saturday			Sunday			Daily	
				Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
				In	Out	Total	In	Out	Total		
1	Specialty Retail	975	75 TSF	155	103	258	122	122	244	3,587	1,889
	General Office Building	710	10 TSF	3	2	5	1	1	2	22	7
	Equestrian - Horse Park	--	8,100 Guests	373	49	422	73	462	535	5,735	5,711
	PA1 Subtotal			531	154	685	196	585	781	9,344	7,607
	<i>Internal PA 1 interaction (Retail with Guests)</i>			(52)	(52)	(104)	(61)	(61)	(122)	(1,794)	(945)
	<i>PA 1 Interaction with Residential - PA's 2, 3, & 5</i>			(16)	(11)	(27)	(12)	(12)	(24)	(361)	(190)
	<i>PA 1 Interaction with Workforce Housing - PA 4</i>			(94)	(63)	(157)	(49)	(94)	(143)	(1,570)	(1,430)
	<i>PA 1 Interaction with Commercial - PA 6</i>			(24)	(25)	(49)	(72)	(69)	(141)	(490)	(1,410)
	<i>Interaction between Project PA's</i>			(186)	(151)	(337)	(194)	(236)	(430)	(4,215)	(3,975)
	Planning Area 1 Subtotal External Trips			345	3	348	2	349	351	5,129	3,632
2	Single Family Detached	210	388 DU	194	163	357	171	151	322	3,678	3,290
	<i>PA 2 Interaction with Horse Park - PA 1</i>			(4)	(5)	(9)	(4)	(5)	(9)	(119)	(63)
	<i>PA 2 Interaction with Hotel/Retail - PA 5</i>			(5)	(5)	(10)	(4)	(4)	(8)	(121)	(79)
	<i>PA 2 Interaction with Commercial - PA 6</i>			(24)	(26)	(50)	(22)	(20)	(42)	(500)	(420)
	<i>Interaction between Project PA's</i>			(33)	(36)	(69)	(30)	(29)	(59)	(740)	(562)
Planning Area 2 Subtotal External Trips			161	127	288	141	122	263	2,938	2,728	
3	Single Family Attached	215	605 DU	163	182	345	254	224	478	5,300	4,338
	<i>PA 3 Interaction with Horse Park - PA 1</i>			(5)	(8)	(13)	(5)	(6)	(11)	(169)	(88)
	<i>PA 3 Interaction with Hotel/Retail - PA 5</i>			(6)	(7)	(13)	(6)	(6)	(12)	(173)	(114)
	<i>PA 3 Interaction with Commercial - PA 6</i>			(35)	(36)	(71)	(33)	(32)	(65)	(710)	(650)
	<i>Interaction between Project PA's</i>			(46)	(51)	(97)	(44)	(44)	(88)	(1,052)	(852)
Planning Area 3 Subtotal External Trips			117	131	248	210	180	390	4,248	3,486	
4	Modular Homes (Work Force Housing)	220	500 DU	110	95	205	95	85	180	2,275	1,930
	RV Park	220	320 Spaces	70	61	131	61	54	115	1,456	1,235
	PA4 Subtotal			180	156	336	156	139	295	3,731	3,165
	<i>PA 4 Interaction with Horse Park - PA 1</i>			(63)	(94)	(157)	(94)	(49)	(143)	(1,570)	(1,430)
	<i>PA 4 Interaction with Commercial - PA 6</i>			(24)	(26)	(50)	(20)	(19)	(39)	(500)	(390)
<i>Interaction between Project PA's</i>			(87)	(120)	(207)	(114)	(68)	(182)	(2,070)	(1,820)	
Planning Area 4 Subtotal External Trips			93	36	129	42	71	113	1,661	1,345	
5	Condominiums	220	505 DU	111	96	207	96	86	182	2,298	1,949
	Hotel	310	300 RM	108	129	237	111	99	210	3,015	2,349
	Specialty Retail	--	60 TSF	124	83	207	97	98	195	2,870	1,511
	PA5 Subtotal			343	308	651	304	283	587	8,183	5,809
	<i>Internal PA 5 interaction</i>			(43)	(43)	(85)	(33)	(33)	(65)	(850)	(650)
	<i>PA 5 Interaction with Horse Park - PA1</i>			(2)	(3)	(5)	(2)	(2)	(4)	(72)	(38)
	<i>PA 5 Interaction with Residential - PA's 2 & 3</i>			(12)	(11)	(23)	(10)	(10)	(20)	(294)	(193)
<i>PA 5 Interaction with Commercial - PA6</i>			(63)	(68)	(131)	(62)	(60)	(122)	(1,931)	(1,134)	
<i>Interaction between Project PA's</i>			(120)	(125)	(245)	(107)	(105)	(212)	(3,147)	(2,015)	
<i>Commercial Pass-By (5%)</i>			(10)	(10)	(20)	(9)	(9)	(18)	(252)	(190)	
Planning Area 5 Subtotal External Trips			213	173	386	188	169	357	4,784	3,604	
6	Commercial Retail (40-150 TSF)	821	200 TSF	518	478	996	462	480	942	16,214	8,536
	<i>PA 6 Interaction with Horse Park - PA 1</i>			(25)	(24)	(49)	(69)	(72)	(141)	(490)	(1,410)
	<i>PA 6 Interaction with Hotel/Retail - PA 5</i>			(52)	(48)	(100)	(46)	(48)	(94)	(1,621)	(854)
	<i>PA 6 Interaction with Residential - PA's 2 to 5</i>			(103)	(97)	(200)	(86)	(88)	(174)	(2,020)	(1,740)
	<i>Interaction between Project PA's</i>			(180)	(169)	(349)	(201)	(208)	(409)	(4,131)	(4,004)
	<i>Commercial Pass-By (15%)</i>			(49)	(49)	(98)	(40)	(40)	(80)	(1,812)	(680)
Planning Area 6 Subtotal External Trips			289	260	549	221	232	453	10,271	3,852	
Total Project Trip Ends				1,929	1,441	3,370	1,543	1,862	3,405	46,450	32,745
Total Internal Interaction				(652)	(652)	(1,304)	(690)	(690)	(1,380)	(15,355)	(13,228)
Commercial Pass-By				(59)	(59)	(118)	(49)	(49)	(98)	(2,064)	(870)
ALTERNATIVE A TOTAL PROJECT WEEKEND EXTERNAL TRIPS				1,218	730	1,948	804	1,123	1,927	29,031	18,647

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

² DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet; EMP = Employees

³ SANDAG's specialty retail weekday trip rates have been adjusted to estimate weekend trip rates based on the ITE 821 (Commercial) weekday to weekend relationship.

⁴ Trip generation rates have been derived based on count data collected at the existing Desert International Horse Show facility during February, 2023.

TABLE 5: ALTERNATIVE B, LOW DENSITY RESIDENTIAL TRIP GENERATION WEEKDAY SUMMARY

Trip Generation Rates¹

Land Use	ITE LU Code	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached	210	DU	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Single Family Attached	215	DU	0.12	0.36	0.48	0.34	0.23	0.57	7.20
Condominiums	220	DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Modular Homes (Workforce Housing)	223	DU	0.10	0.26	0.36	0.27	0.19	0.46	4.81
Hotel	310	RM	0.35	0.27	0.62	0.36	0.37	0.73	12.23
RV Park ³	416	Spaces	0.08	0.13	0.21	0.18	0.09	0.27	2.70
General Office Building	710	TSF	1.34	0.18	1.52	0.24	1.20	1.44	10.84
Commercial Retail (40-150 TSF)	821	TSF	1.07	0.66	1.73	2.54	2.65	5.19	67.52
Specialty Retail ⁴	--	TSF	0.72	0.48	1.20	1.80	1.80	3.60	40.00
Equestrian - Horse Park ⁵	--	Guests	0.041	0.032	0.073	0.016	0.063	0.079	0.696

Trip Generation Results

Planning Area (PA)	Land Use	ITE LU Code	Quantity ²	AM Peak Hour			PM Peak Hour			Daily	
				In	Out	Total	In	Out	Total		
1	Specialty Retail	975	75 TSF	54	36	90	135	135	270	3,000	
	General Office Building	710	10 TSF	13	2	15	2	12	14	108	
	Equestrian - Horse Park	--	5,000 Guests	205	160	365	80	315	395	3,480	
	PA1 Subtotal			272	198	470	217	462	679	6,588	
				<i>Internal PA 1 interaction (Retail with Guests)</i>	(18)	(18)	(36)	(68)	(68)	(136)	(1,500)
				<i>PA 1 Interaction with Residential - PA's 2, 3, & 5</i>	(7)	(4)	(11)	(14)	(15)	(29)	(311)
				<i>PA 1 Interaction with Workforce Housing - PA 4</i>	(103)	(27)	(130)	(43)	(116)	(159)	(1,250)
				<i>PA 1 Interaction with Commercial - PA 6</i>	(6)	(9)	(15)	(24)	(23)	(47)	(106)
			<i>Interaction between Project PA's</i>	(134)	(58)	(192)	(149)	(222)	(371)	(3,167)	
			Planning Area 1 Subtotal External Trips	138	140	278	68	240	308	3,421	
2	Single Family Detached	210	39 DU	7	20	27	23	14	37	368	
				<i>PA 2 Interaction with Horse Park - PA 1</i>	(1)	(1)	(2)	(2)	(4)	(40)	
				<i>PA 2 Interaction with Hotel/Retail - PA 5</i>	(1)	(1)	(2)	(2)	(4)	(46)	
				<i>PA 2 Interaction with Commercial - PA 6</i>	(1)	(1)	(2)	(2)	(4)	(40)	
				<i>Interaction between Project PA's</i>	(3)	(3)	(6)	(6)	(12)	(126)	
			Planning Area 2 Subtotal External Trips	4	17	21	17	8	25	242	
3	Single Family Attached	215	139 DU	17	50	67	47	32	79	1,001	
				<i>PA 3 Interaction with Horse Park - PA 1</i>	(1)	(3)	(4)	(5)	(5)	(111)	
				<i>PA 3 Interaction with Hotel/Retail - PA 5</i>	(2)	(3)	(5)	(4)	(8)	(126)	
				<i>PA 3 Interaction with Commercial - PA 6</i>	(2)	(2)	(4)	(4)	(5)	(90)	
				<i>Interaction between Project PA's</i>	(5)	(8)	(13)	(13)	(14)	(327)	
			Planning Area 3 Subtotal External Trips	12	42	54	34	18	52	674	
4	Modular Homes (Work Force Housing)	223	500 DU	50	130	180	135	95	230	2,405	
	RV Park	416	320 Spaces	26	42	68	58	29	87	864	
	PA4 Subtotal			76	172	248	193	124	317	3,269	
				<i>PA 4 Interaction with Horse Park - PA 1</i>	(27)	(103)	(130)	(116)	(43)	(159)	(1,250)
				<i>PA 4 Interaction with Commercial - PA 6</i>	(5)	(7)	(12)	(13)	(12)	(25)	(250)
			<i>Interaction between Project PA's</i>	(32)	(110)	(142)	(129)	(55)	(184)	(1,500)	
			Planning Area 4 Subtotal External Trips	44	62	106	64	69	133	1,769	
5	Condominiums	220	210 DU	21	63	84	67	40	107	1,415	
	Hotel	310	150 RM	53	41	94	54	56	110	1,835	
	Specialty Retail	--	40 TSF	29	19	48	72	72	144	1,600	
	PA5 Subtotal			103	123	226	193	168	361	4,850	
				<i>Internal PA 5 interaction</i>	(15)	(15)	(29)	(20)	(20)	(40)	(400)
				<i>PA 5 Interaction with Horse Park - PA1</i>	(2)	(4)	(6)	(8)	(7)	(15)	(159)
				<i>PA 5 Interaction with Residential - PA's 2 & 3</i>	(4)	(3)	(7)	(6)	(6)	(12)	(172)
				<i>PA 5 Interaction with Commercial - PA6</i>	(6)	(9)	(15)	(19)	(18)	(37)	(465)
			<i>Interaction between Project PA's</i>	(27)	(31)	(58)	(53)	(51)	(104)	(1,196)	
			<i>Commercial Pass-By (5%)</i>	(4)	(4)	(8)	(6)	(6)	(12)	(183)	
			Planning Area 5 Subtotal External Trips	72	88	160	134	111	245	3,471	
6	Commercial Retail (40-150 TSF)	821	60 TSF	64	40	104	152	159	311	4,051	
				<i>PA 6 Interaction with Horse Park - PA 1</i>	(9)	(6)	(15)	(23)	(24)	(47)	(106)
				<i>PA 6 Interaction with Hotel/Retail - PA 5</i>	(6)	(4)	(10)	(15)	(16)	(31)	(405)
				<i>PA 6 Interaction with Residential - PA's 2 to 5</i>	(13)	(9)	(22)	(22)	(22)	(44)	(440)
				<i>Interaction between Project PA's</i>	(28)	(19)	(47)	(60)	(62)	(122)	(951)
				<i>Commercial Pass-By (15%)</i>	(5)	(5)	(10)	(14)	(14)	(28)	(465)
			Planning Area 6 Subtotal External Trips	31	16	47	78	83	161	2,635	
Total Project Trip Ends				539	603	1,142	825	959	1,784	20,127	
Total Internal Interaction				(229)	(229)	(458)	(410)	(410)	(820)	(7,267)	
Commercial Pass-By				(9)	(9)	(18)	(20)	(20)	(40)	(648)	
ALTERNATIVE B PROJECT TOTAL WEEKDAY EXTERNAL TRIPS				301	365	666	395	529	924	12,212	

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

² DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet; EMP = Employees

³ Since the ITE daily rate for Land Use Code 416 (RV Park) is not available, daily rates have been estimated (PM x 10).

⁴ Since ITE does not have trip rates for a specialty retail, SANDAG's specialty retail rates has been utilized.

⁵ Trip generation rates have been derived based on count data collected at the existing Desert International Horse Show facility during February, 2023.

TABLE 6: ALTERNATIVE B, LOW DENSITY RESIDENTIAL TRIP GENERATION WEEKEND SUMMARY

Trip Generation Rates ¹										
Land Use	ITE LU Code	Units ²	Saturday			Sunday			Daily	
			Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
			In	Out	Total	In	Out	Total		
Single Family Detached	210	DU	0.50	0.42	0.92	0.44	0.39	0.83	9.48	8.48
Single Family Attached	215	DU	0.27	0.30	0.57	0.42	0.37	0.79	8.76	7.17
Condominiums, Modular Homes, RV Parks	220	DU/RV Space	0.22	0.19	0.41	0.19	0.17	0.36	4.55	3.86
Hotel	310	RM	0.36	0.43	0.79	0.37	0.33	0.70	10.05	7.83
General Office Building	710	TSF	0.29	0.24	0.53	0.12	0.09	0.21	2.21	0.70
Commercial Retail (40-150 TSF)	821	TSF	2.59	2.39	4.98	2.31	2.40	4.71	81.07	42.68
Specialty Retail ³	--	TSF	2.06	1.38	3.44	1.62	1.63	3.25	47.83	25.18
Equestrian - Horse Park ⁴	--	Guests	0.046	0.006	0.052	0.009	0.057	0.066	0.708	0.705

Trip Generation Results											
Planning Area (PA)	Land Use	ITE LU Code	Quantity ²	Saturday			Sunday			Daily	
				Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
				In	Out	Total	In	Out	Total		
1	Specialty Retail	975	75 TSF	155	103	258	122	122	244	3,587	1,889
	General Office Building	710	10 TSF	3	2	5	1	1	2	22	7
	Equestrian - Horse Park	--	8,100 Guests	373	49	422	73	462	535	5,735	5,711
	PA1 Subtotal			531	154	685	196	585	781	9,344	7,607
	<i>Internal PA 1 interaction (Retail with Guests)</i>			(52)	(52)	(104)	(61)	(61)	(122)	(1,794)	(945)
	<i>PA 1 Interaction with Residential - PA's 2, 3, & 5</i>			(16)	(11)	(27)	(12)	(12)	(24)	(361)	(190)
	<i>PA 1 Interaction with Workforce Housing - PA 4</i>			(94)	(63)	(157)	(49)	(94)	(143)	(1,570)	(1,430)
	<i>PA 1 Interaction with Commercial - PA 6</i>			(7)	(7)	(14)	(22)	(21)	(43)	(140)	(430)
	<i>Interaction between Project PA's</i>			(169)	(133)	(302)	(144)	(188)	(332)	(3,865)	(2,995)
	Planning Area 1 Subtotal External Trips			362	21	383	52	397	449	5,479	4,612
2	Single Family Detached	210	39 DU	20	16	36	17	15	32	370	331
	<i>PA 2 Interaction with Horse Park - PA 1</i>			(2)	(2)	(4)	(2)	(3)	(5)	(54)	(29)
	<i>PA 2 Interaction with Hotel/Retail - PA 5</i>			(1)	(2)	(3)	(1)	(1)	(2)	(39)	(25)
	<i>PA 2 Interaction with Commercial - PA 6</i>			(2)	(2)	(4)	0	1	1	(40)	10
	<i>Interaction between Project PA's</i>			(5)	(6)	(11)	(3)	(3)	(6)	(133)	(44)
	Planning Area 2 Subtotal External Trips			15	10	25	14	12	26	237	287
3	Single Family Attached	215	139 DU	38	42	80	58	51	109	1,218	997
	<i>PA 3 Interaction with Horse Park - PA 1</i>			(5)	(8)	(13)	(5)	(6)	(11)	(172)	(90)
	<i>PA 3 Interaction with Hotel/Retail - PA 5</i>			(5)	(5)	(10)	(5)	(5)	(10)	(132)	(84)
	<i>PA 3 Interaction with Commercial - PA 6</i>			(6)	(6)	(12)	(5)	(5)	(10)	(120)	(100)
	<i>Interaction between Project PA's</i>			(16)	(19)	(35)	(15)	(16)	(31)	(424)	(274)
	Planning Area 3 Subtotal External Trips			22	23	45	43	35	78	794	723
4	Modular Homes (Work Force Housing)	220	500 DU	110	95	205	95	85	180	2,275	1,930
	RV Park	220	320 Spaces	70	61	131	61	54	115	1,456	1,235
	PA4 Subtotal			180	156	336	156	139	295	3,731	3,165
	<i>PA 4 Interaction with Horse Park - PA 1</i>			(63)	(94)	(157)	(94)	(49)	(143)	(1,570)	(1,430)
	<i>PA 4 Interaction with Commercial - PA 6</i>			(18)	(18)	(36)	(13)	(13)	(26)	(360)	(260)
	<i>Interaction between Project PA's</i>			(81)	(112)	(193)	(107)	(62)	(169)	(1,930)	(1,690)
Planning Area 4 Subtotal External Trips			99	44	143	49	77	126	1,801	1,475	
5	Condominiums	220	210 DU	46	40	86	40	36	76	956	811
	Hotel	310	150 RM	54	65	119	56	50	106	1,508	1,175
	Specialty Retail	--	40 TSF	82	55	137	65	65	130	1,913	1,007
	PA5 Subtotal			182	160	342	161	151	312	4,377	2,993
	<i>Internal PA 5 interaction</i>			(22)	(22)	(44)	(17)	(17)	(34)	(440)	(340)
	<i>PA 5 Interaction with Horse Park - PA 1</i>			(4)	(6)	(10)	(5)	(5)	(10)	(137)	(72)
	<i>PA 5 Interaction with Residential - PA's 2 & 3</i>			(7)	(6)	(13)	(6)	(6)	(12)	(171)	(109)
	<i>PA 5 Interaction with Commercial - PA6</i>			(19)	(21)	(40)	(14)	(14)	(28)	(586)	(256)
<i>Interaction between Project PA's</i>			(52)	(55)	(107)	(42)	(42)	(84)	(1,334)	(777)	
<i>Commercial Pass-By (5%)</i>			(6)	(6)	(12)	(5)	(5)	(10)	(152)	(111)	
Planning Area 5 Subtotal External Trips			124	99	223	114	104	218	2,891	2,105	
6	Commercial Retail (40-150 TSF)	821	60 TSF	155	143	298	139	144	283	4,864	2,561
	<i>PA 6 Interaction with Horse Park - PA 1</i>			(7)	(7)	(14)	(21)	(22)	(43)	(140)	(430)
	<i>PA 6 Interaction with Hotel/Retail - PA 5</i>			(16)	(14)	(30)	(14)	(14)	(28)	(486)	(256)
	<i>PA 6 Interaction with Residential - PA's 2 to 5</i>			(30)	(30)	(60)	(18)	(17)	(35)	(620)	(350)
	<i>Interaction between Project PA's</i>			(53)	(51)	(104)	(53)	(53)	(106)	(1,246)	(1,036)
	<i>Commercial Pass-By (15%)</i>			(15)	(15)	(30)	(13)	(13)	(26)	(543)	(229)
Planning Area 6 Subtotal External Trips			87	77	164	73	78	151	3,075	1,296	
Total Project Trip Ends				1,106	671	1,777	727	1,085	1,812	23,904	17,654
Total Internal Interaction				(376)	(376)	(752)	(364)	(364)	(728)	(8,932)	(6,816)
Commercial Pass-By				(21)	(21)	(42)	(18)	(18)	(36)	(695)	(340)
ALTERNATIVE B TOTAL PROJECT WEEKEND EXTERNAL TRIPS				709	274	983	345	703	1,048	14,277	10,498

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

² DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet; EMP = Employees

³ SANDAG's specialty retail weekday trip rates have been adjusted to estimate weekend trip rates based on the ITE 821 (Commercial) weekday to weekend relationship.

⁴ Trip generation rates have been derived based on count data collected at the existing Desert International Horse Show facility during February, 2023.

TABLE 7: ALTERNATIVE C, NO PROJECT/EXISTING AGRICULTURE TRIP GENERATION WEEKDAY SUMMARY

Trip Generation Rates

Land Use	ITE LU Code	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Agriculture ¹	-	Acres	0.10	0.08	0.18	0.08	0.13	0.21	2.00

Trip Generation Results

Land Use	ITE LU Code	Quantity ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Agriculture	--	591.6 Acres	58	50	108	50	75	125	1,183

ALTERNATIVE C PROJECT TOTAL WEEKDAY EXTERNAL TRIPS			58	50	108	50	75	125	1,183
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¹ Since ITE does not have daily trip rates for agriculture use, SANDAG's daily trip rate has been utilized. SANDAG and ITE does not provide any peak hour trip rates, therefore trip rates provided in the Orange County Great Park - 688 Acre Park Development Traffic Study - July 2014, prepared by LSA Associates has been utilized.

TABLE 8: ALTERNATIVE D NO PA-5/PA-6 COMMERCIAL TRIP GENERATION WEEKDAY SUMMARY

Trip Generation Rates ¹									
Land Use	ITE LU Code	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached	210	DU	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Condominiums	220	DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Modular Homes (Workforce Housing)	223	DU	0.10	0.26	0.36	0.27	0.19	0.46	4.81
RV Park ³	416	Spaces	0.08	0.13	0.21	0.18	0.09	0.27	2.70
General Office Building	710	TSF	1.34	0.18	1.52	0.24	1.20	1.44	10.84
Specialty Retail ⁴	--	TSF	0.72	0.48	1.20	1.80	1.80	3.60	40.00
Equestrian - Horse Park ⁵	--	Guests	0.041	0.032	0.073	0.016	0.063	0.079	0.696

Trip Generation Results											
Planning Area (PA)	Land Use	ITE LU Code	Quantity ²	AM Peak Hour			PM Peak Hour			Daily	
				In	Out	Total	In	Out	Total		
1	Specialty Retail	975	75 TSF	54	36	90	135	135	270	3,000	
	General Office Building	710	10 TSF	13	2	15	2	12	14	108	
	Equestrian - Horse Park	--	5,000 Guests	205	160	365	80	315	395	3,480	
	PA1 Subtotal			272	198	470	217	462	679	6,588	
				<i>Internal PA 1 interaction (Retail with Guests)</i>	(18)	(18)	(36)	(68)	(68)	(136)	(1,500)
				<i>PA 1 Interaction with Residential - PA's 2, 3, 5 & 6</i>	(7)	(4)	(11)	(14)	(15)	(29)	(311)
				<i>PA 1 Interaction with Workforce Housing - PA 4</i>	(103)	(27)	(130)	(43)	(116)	(159)	(1,250)
			<i>Interaction between Project PA's</i>	(128)	(49)	(177)	(125)	(199)	(324)	(3,061)	
			Planning Area 1 Subtotal External Trips	144	149	293	92	263	355	3,527	
2	Single Family Detached	210	100 DU	18	52	70	59	35	94	943	
			<i>PA 2 Interaction with Horse Park - PA 1</i>	(1)	(1)	(2)	(3)	(4)	(7)	(62)	
			<i>Interaction between Project PA's</i>	(1)	(1)	(2)	(3)	(4)	(7)	(62)	
			Planning Area 2 Subtotal External Trips	17	51	68	56	31	87	881	
3	Single Family Detached	210	390 DU	70	203	273	230	137	367	3,678	
			<i>PA 3 Interaction with Horse Park - PA 1</i>	(3)	(6)	(9)	(11)	(11)	(22)	(248)	
			<i>Interaction between Project PA's</i>	(3)	(6)	(9)	(11)	(11)	(22)	(248)	
			Planning Area 3 Subtotal External Trips	67	197	264	219	126	345	3,430	
4	Modular Homes (Work Force Housing)	223	500 DU	50	130	180	135	95	230	2,405	
	RV Park	416	320 Spaces	26	42	68	58	29	87	864	
	PA4 Subtotal			76	172	248	193	124	317	3,269	
				<i>PA 4 Interaction with Horse Park - PA 1</i>	(27)	(103)	(130)	(116)	(43)	(159)	(1,250)
			<i>Interaction between Project PA's</i>	(27)	(103)	(130)	(116)	(43)	(159)	(1,250)	
			Planning Area 4 Subtotal External Trips	49	69	118	77	81	158	2,019	
5	Single Family Detached	210	23 DU	4	12	16	14	8	22	217	
	PA5 Subtotal			4	12	16	14	8	22	217	
				<i>PA 5 Interaction with Horse Park - PA1</i>	0	1	1	0	1	1	5
				<i>Interaction between Project PA's</i>	0	1	1	0	1	1	5
			Planning Area 5 Subtotal External Trips	4	13	17	14	9	23	222	
6	Single Family Detached	210	9 DU	2	5	7	5	3	8	85	
				<i>PA 6 Interaction with Horse Park - PA 1</i>	0	(1)	(1)	(1)	0	(1)	(5)
				<i>Interaction between Project PA's</i>	0	(1)	(1)	(1)	0	(1)	(5)
			Planning Area 6 Subtotal External Trips	2	4	6	4	3	7	80	
Total Project Trip Ends				442	642	1,084	718	769	1,487	14,780	
Total Internal Interaction				(159)	(159)	(318)	(256)	(256)	(512)	(4,621)	
ALTERNATIVE D TOTAL WEEKDAY EXTERNAL TRIPS				283	483	766	462	513	975	10,159	

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

² DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet; EMP = Employees

³ Since the ITE daily rate for Land Use Code 416 (RV Park) is not available, daily rates have been estimated (PM x 10).

⁴ Since ITE does not have trip rates for a specialty retail, SANDAG's specialty retail rates has been utilized.

⁵ Trip generation rates have been derived based on count data collected at the existing Desert International Horse Show facility during February, 2023.

TABLE 9: ALTERNATIVE D NO PA-5/PA-6 COMMERCIAL TRIP GENERATION WEEKEND SUMMARY

Trip Generation Rates¹

Land Use	ITE LU Code	Units ²	Saturday			Sunday			Daily	
			Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
			In	Out	Total	In	Out	Total		
Single Family Detached	210	DU	0.50	0.42	0.92	0.44	0.39	0.83	9.48	8.48
Condominiums, Modular Homes, RV Parks	220	DU/RV Space	0.22	0.19	0.41	0.19	0.17	0.36	4.55	3.86
General Office Building	710	TSF	0.29	0.24	0.53	0.12	0.09	0.21	2.21	0.70
Specialty Retail ³	--	TSF	2.06	1.38	3.44	1.62	1.63	3.25	47.83	25.18
Equestrian - Horse Park ⁴	--	Guests	0.046	0.006	0.052	0.009	0.057	0.066	0.708	0.705

Trip Generation Results

Planning Area (PA)	Land Use	ITE LU Code	Quantity ²	Saturday			Sunday			Daily	
				Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
				In	Out	Total	In	Out	Total		
1	Specialty Retail	975	75 TSF	155	103	258	122	122	244	3,587	1,889
	General Office Building	710	10 TSF	3	2	5	1	1	2	22	7
	Equestrian - Horse Park	--	8,100 Guests	373	49	422	73	462	535	5,735	5,711
	PA1 Subtotal			531	154	685	196	585	781	9,344	7,607
	<i>Internal PA 1 interaction (Retail with Guests)</i>			(52)	(52)	(104)	(61)	(61)	(122)	(1,794)	(945)
	<i>PA 1 Interaction with Residential - PA's 2, 3, 5, & 6</i>			(16)	(11)	(27)	(12)	(12)	(24)	(361)	(190)
	<i>PA 1 Interaction with Workforce Housing - PA 4</i>			(94)	(63)	(157)	(49)	(94)	(143)	(1,570)	(1,430)
<i>Interaction between Project PA's</i>			(162)	(126)	(288)	(122)	(167)	(289)	(3,725)	(2,565)	
Planning Area 1 Subtotal External Trips				369	28	397	74	418	492	5,619	5,042
2	Single Family Detached	210	100 DU	50	42	92	44	39	83	948	848
	<i>PA 2 Interaction with Horse Park - PA 1</i>			(2)	(3)	(5)	(2)	(3)	(5)	(72)	(38)
	<i>Interaction between Project PA's</i>			(2)	(3)	(5)	(2)	(3)	(5)	(72)	(38)
	Planning Area 2 Subtotal External Trips				48	39	87	42	36	78	876
3	Single Family Detached	210	390 DU	195	164	359	172	152	324	3,697	3,307
	<i>PA 3 Interaction with Horse Park - PA 1</i>			(9)	(13)	(22)	(9)	(8)	(17)	(279)	(146)
	<i>Interaction between Project PA's</i>			(9)	(13)	(22)	(9)	(8)	(17)	(279)	(146)
	Planning Area 3 Subtotal External Trips				186	151	337	163	144	307	3,418
4	Modular Homes (Work Force Housing)	220	500 DU	110	95	205	95	85	180	2,275	1,930
	RV Park	220	320 Spaces	70	61	131	61	54	115	1,456	1,235
	PA4 Subtotal			180	156	336	156	139	295	3,731	3,165
	<i>PA 4 Interaction with Horse Park - PA 1</i>			(63)	(94)	(157)	(94)	(49)	(143)	(1,570)	(1,430)
	<i>Interaction between Project PA's</i>			(63)	(94)	(157)	(94)	(49)	(143)	(1,570)	(1,430)
Planning Area 4 Subtotal External Trips				117	62	179	62	90	152	2,161	1,735
5	Single Family Detached	210	23 DU	12	10	22	10	9	19	218	195
	PA5 Subtotal			12	10	22	10	9	19	218	195
	<i>PA 5 Interaction with Horse Park - PA1</i>			1	1	2	0	0	0	18	9
	<i>Interaction between Project PA's</i>			1	1	2	0	0	0	18	9
Planning Area 5 Subtotal External Trips				13	11	24	10	9	19	236	204
6	Single Family Detached	210	9 DU	5	4	9	4	4	8	85	76
	<i>PA 6 Interaction with Horse Park - PA 1</i>			0	(1)	(1)	(1)	(1)	(2)	(28)	(15)
	<i>Interaction between Project PA's</i>			0	(1)	(1)	(1)	(1)	(2)	(28)	(15)
	Planning Area 6 Subtotal External Trips				5	3	8	3	3	6	57
Total Project Trip Ends				973	530	1,503	582	928	1,510	18,023	15,198
Total Internal Interaction				(235)	(236)	(471)	(228)	(228)	(456)	(5,656)	(4,185)
ALTERNATIVE D TOTAL WEEKEND EXTERNAL TRIPS				738	294	1,032	354	700	1,054	12,367	11,013

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

² DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet; EMP = Employees

³ SANDAG's specialty retail weekday trip rates have been adjusted to estimate weekend trip rates based on the ITE 821 (Commercial) weekday to weekend relationship.

⁴ Trip generation rates have been derived based on count data collected at the existing Desert International Horse Show facility during February, 2023.

TABLE 10: PROJECT TRIP GENERATION WEEKDAY COMPARISON SUMMARY

Land Use ¹	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Alternative A Trip Generation Comparison							
Proposed Project ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 5,000 guests; PA2 - 132 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workfoce housing) and RV Park w/ 320 spaces; PA5 - 340 DU condominiums, 150 RM hotel, 50 TSF retail; PA6 - 150 TSF commercial	408	592	1,000	683	710	1,393	18,939
Alternative A, Increased Intensity Mixed Use ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 5,000 guests; PA2 - 388 DU SFDR; PA3 - 605 DU SFAR; PA4 - 500 DU modular homes (workfoce housing) and RV Park w/ 320 spaces; PA5 - 505 DU condominiums, 300 RM hotel, 60 TSF retail; PA6 - 200 TSF commercial	524	804	1,328	912	889	1,801	25,916
ALTERNATIVE A DELTA (Alternative A - Proposed Project)	116	212	328	229	179	408	6,977
Alternative B Trip Generation Comparison							
Proposed Project ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 5,000 guests; PA2 - 132 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workfoce housing) and RV Park w/ 320 spaces; PA5 - 340 DU condominiums, 150 RM hotel, 50 TSF retail; PA6 - 150 TSF commercial	408	592	1,000	683	710	1,393	18,939
Alternative B, Low Density Residential ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 5,000 guests; PA2 - 39 DU SFDR; PA3 - 139 DU SFAR; PA4 - 500 DU modular homes (workfoce housing) and RV Park w/ 320 spaces; PA5 - 210 DU condominiums, 150 RM hotel, 60 TSF retail; PA6 - 40 TSF commercial	301	365	666	395	529	924	12,212
ALTERNATIVE B DELTA (Alternative B - Proposed Project)	-107	-227	-334	-288	-181	-469	-6,727
Alternative C Trip Generation Comparison							
Proposed Project ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 5,000 guests; PA2 - 132 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workfoce housing) and RV Park w/ 320 spaces; PA5 - 340 DU condominiums, 150 RM hotel, 50 TSF retail; PA6 - 150 TSF commercial	408	592	1,000	683	710	1,393	18,939
Alternative C, No Project/Existing Agriculture ➤ 591.6 Acres of agriculture use	58	50	108	50	75	125	1,183
ALTERNATIVE C DELTA (Alternative C - Proposed Project)	-350	-542	-892	-633	-635	-1,268	-17,756
Alternative D Trip Generation Comparison							
Proposed Project ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 5,000 guests; PA2 - 132 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workfoce housing) and RV Park w/ 320 spaces; PA5 - 340 DU condominiums, 150 RM hotel, 50 TSF retail; PA6 - 150 TSF commercial	408	592	1,000	683	710	1,393	18,939
Alternative D, No PA-5/PA-6 Commercial ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 5,000 guests; PA2 - 100 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workfoce housing) and RV Park w/ 320 spaces; PA5 - 23 DU SFDR; PA6 - 9 DU SFDR	283	483	766	462	513	975	10,159
ALTERNATIVE D DELTA (Alternative D - Proposed Project)	-125	-109	-234	-221	-197	-418	-8,780

¹ DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet
SFDR = Single Family Detached Residential; SFAR = Single Family Attached Residential

TABLE 11: PROJECT TRIP GENERATION WEEKEND COMPARISON SUMMARY

Land Use ¹	Saturday			Sunday			Daily	
	Morning Peak Hour			Afternoon Peak Hour			Saturday	Sunday
	In	Out	Total	In	Out	Total		
Alternative A Trip Generation Comparison								
Proposed Project ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 8,100 guests; PA2 - 132 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workforce housing) and RV Park w/ 320 spaces; PA5 - 340 DU condominiums, 150 RM hotel, 50 TSF retail; PA6 - 150 TSF commercial	1,018	512	1,530	531	876	1,407	21,523	13,995
Alternative A, Increased Intensity Mixed Use ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 8,100 guests; PA2 - 388 DU SFDR; PA3 - 605 DU SFAR; PA4 - 500 DU modular homes (workforce housing) and RV Park w/ 320 spaces; PA5 - 505 DU condominiums, 300 RM hotel, 60 TSF retail; PA6 - 200 TSF commercial	1,218	730	1,948	804	1,123	1,927	29,031	18,647
ALTERNATIVE A DELTA (Alternative A - Proposed Project)	200	218	418	273	247	520	7,508	4,652
Alternative B Trip Generation Comparison								
Proposed Project ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 8,100 guests; PA2 - 132 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workforce housing) and RV Park w/ 320 spaces; PA5 - 340 DU condominiums, 150 RM hotel, 50 TSF retail; PA6 - 150 TSF commercial	1,018	512	1,530	531	876	1,407	21,523	13,995
Alternative B, Low Density Residential ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 8,100 guests; PA2 - 39 DU SFDR; PA3 - 139 DU SFAR; PA4 - 500 DU modular homes (workforce housing) and RV Park w/ 320 spaces; PA5 - 210 DU condominiums, 150 RM hotel, 60 TSF retail; PA6 - 40 TSF commercial	709	274	983	345	703	1,048	14,277	10,498
ALTERNATIVE B DELTA (Alternative B - Proposed Project)	-309	-238	-547	-186	-173	-359	-7,246	-3,497
Alternative C Trip Generation Comparison²								
Proposed Project ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 8,100 guests; PA2 - 132 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workforce housing) and RV Park w/ 320 spaces; PA5 - 340 DU condominiums, 150 RM hotel, 50 TSF retail; PA6 - 150 TSF commercial	1,018	512	1,530	531	876	1,407	21,523	13,995
Alternative C, No Project/Existing Agriculture ➤ 591.6 Acres of agriculture use	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ALTERNATIVE C DELTA (Alternative C - Proposed Project)	-	-	-	-	-	-	-	-
Alternative D Trip Generation Comparison								
Proposed Project ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 8,100 guests; PA2 - 132 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workforce housing) and RV Park w/ 320 spaces; PA5 - 340 DU condominiums, 150 RM hotel, 50 TSF retail; PA6 - 150 TSF commercial	1,018	512	1,530	531	876	1,407	21,523	13,995
Alternative D, No PA-5/PA-6 Commercial ➤ PA1 - 75 TSF retail, 10 TSF office, and Equestrian - Horse Park w/ 5,000 guests; PA2 - 100 DU SFDR; PA3 - 390 DU SFDR; PA4 - 500 DU modular homes (workforce housing) and RV Park w/ 320 spaces; PA5 - 23 DU SFDR; PA6 - 9 DU SFDR	738	294	1,032	354	700	1,054	12,367	11,013
ALTERNATIVE D DELTA (Alternative D - Proposed Project)	-280	-218	-498	-177	-176	-353	-9,156	-2,982

¹ DU = Dwelling Units; RM = Occupied Rooms; TSF = Thousand Square Feet
SFDR = Single Family Detached Residential; SFAR = Single Family Attached Residential

² N/A = Not Applicable. Weekend trip generation for agriculture use was not estimated since weekend trip rates for agriculture use is not available.