



MEMORANDUM

DATE: February 27, 2020

To: Annie Baek, InSite Property Group

FROM: Dean Arizabal, LSA

SUBJECT: Trip Generation Analysis for the Proposed Self-Storage and RV Storage Facility at 3701 Pacific Place, Long Beach, California

LSA has prepared this trip generation analysis for the proposed self-storage and recreational vehicle (RV) storage facility (project) in Long Beach, California. The proposed project is at 3701 Pacific Place, the former site of the Long Beach Golf Learning Center. The proposed project will construct a 150,000-gross-square-foot building with 1,100 self-storage units and 580 RV storage spaces on the currently vacant property.

The project site is north of the Interstate 405 (I-405) freeway, east of the Interstate 710 (I-710) freeway and the Los Angeles River, and west of the Los Angeles Metropolitan Transportation Authority (Metro) A Line light rail tracks and Los Cerritos Park. Access to the site is currently provided at the signalized intersection of Pacific Place/Wardlow Road and the unsignalized intersection of Pacific Place/I-405 and I-710 northbound on-ramps.

The purpose of this analysis is to identify the proposed project trip generation and determine whether the project would require a more-detailed traffic analysis according to the City of Long Beach's (City) *Traffic Impact Analysis (TIA) Guidelines*. The *TIA Guidelines* state that a TIA should be prepared for every project that would generate more than 100 vehicle trips per day. The TIA requirement can be waived by the City Traffic Engineer where impacts are deemed negligible. In addition, the *TIA Guidelines* state that intersections at which the project contributes a total of 50 or more peak-hour trips should be analyzed. As such, this trip generation analysis evaluates the proposed project against the City's two trip thresholds.

Trip Generation

The potential trip generation of the proposed project was calculated using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017) for self-storage use (Land Use Code 151: Mini-Warehouse). Although ITE does not have trip rates for RV storage use, the trip-generating characteristics of an RV storage use closely resemble those of a self-storage (mini-warehouse) use. Table A presents the trip generation estimate using the ITE (Land Use Code 151) trip rates for the proposed project of 1,100 self-storage units and 580 RV storage spaces (considered "units" for purposes of the trip generation).

Table A: Project Trip Generation (ITE Trip Rates)

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Mini-Warehouse (Self-Storage and RV Storage) ¹		100 storage units (100 RV spaces)	17.960	0.710	0.680	1.390	0.980	0.970	1.950
Project Trip Generation									
Self-Storage and RV Storage ²	16.80	100 storage units (100 RV spaces)	302	12	11	23	17	16	33

¹ Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017).

Land Use Code (151) - Mini Warehouse

² Proposed project includes 1,100 self-storage units and 580 RV storage spaces (1,680 total units and spaces).

ADT = average daily traffic

RV = recreational vehicle

As Table A shows, the proposed project is estimated to generate 302 daily trips, 23 of which would occur in the a.m. peak hour and 33 of which would occur in the p.m. peak hour, using ITE trip rates.

As an alternative method to calculating trips for the self-storage and RV storage uses, LSA also applied trip rates developed from gate data (vehicle entries and exits) recorded between November 2019 and January 2020 for a self-storage facility in Moreno Valley (14150 Grant Street) and a self-storage and RV storage facility in Desert Hot Springs (15305 Little Morongo Road). The gate data is provided as an attachment. Table B presents the trip generation estimate for the proposed project using the gate trip rates for the 1,100 self-storage units and the 580 RV storage spaces.

Table B: Project Trip Generation (Gate Trip Rates)

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates¹									
Self-Storage		100 storage units	12.90	0.53	0.40	0.93	0.93	0.79	1.72
RV Storage		100 RV spaces	17.23	0.50	0.47	0.97	0.93	1.12	2.05
Project Trip Generation									
Self-Storage	11.00	100 storage units	142	6	4	10	10	9	19
RV Storage	5.80	100 RV spaces	100	3	3	6	5	7	12
Total			242	9	7	16	15	16	31

¹ Trip rates developed from gate data for the Moreno Valley Self Storage and Desert Hot Springs Self Storage and RV Storage facilities (November 2019 to January 2020).

ADT = average daily traffic

RV = recreational vehicle

As Table B shows, the proposed project is estimated to generate 242 daily trips, 16 of which would occur in the a.m. peak hour and 31 of which would occur in the p.m. peak hour, using trip rates developed from gate data of one existing self-storage facility and one existing self-storage and RV storage facility.

Conclusion

LSA analyzed the trip generation for the proposed project to determine whether it would require a more-detailed traffic analysis according to the City's *TIA Guidelines*. Using ITE trip rates or trip rates developed from similar facilities currently in operation, the proposed project is anticipated to generate a maximum of 302 daily trips, including a maximum of 33 trips during the peak hours.

Although the proposed project would generate more than 100 trips per day, it would generate fewer than 50 trips per peak hour. Because the proposed project would not contribute 50 or more trips per peak hour to any intersection, an intersection analysis is not required per the *TIA Guidelines*. A maximum project contribution of 33 peak-hour trips to the adjacent intersections is nominal, and the potential for an intersection impact is unlikely. As such, LSA recommends that the City Traffic Engineer waive the TIA requirement for this project.

If you have any questions, please contact me at (949) 553-0666.

Attachment: Self Storage and RV Storage Gate Data (November 2019 to January 2020)



Self Storage Trip Generation and Trip Rates (Moreno Valley and Desert Hot Springs)

Trip Generation

Day and Date	Size ¹	Daily	AM Peak Hour ²			PM Peak Hour ³		
			In	Out	Total	In	Out	Total
Tuesday 11/5/19		170	9	4	13	20	30	50
Wednesday 11/6/19		164	4	5	9	5	8	13
Thursday 11/7/19		194	8	6	14	10	10	20
Tuesday 11/12/19		167	9	14	23	17	10	27
Wednesday 11/13/19		209	11	9	20	17	15	32
Thursday 11/14/19		188	9	6	15	8	8	16
Tuesday 11/19/19		219	14	6	20	10	10	20
Wednesday 11/20/19		173	6	8	14	7	9	16
Thursday 11/21/19		183	15	9	24	11	12	23
Tuesday 12/3/19		182	8	7	15	21	11	32
Wednesday 12/4/19		162	9	10	19	9	8	17
Thursday 12/5/19		213	3	3	6	19	13	32
Tuesday 12/10/19		209	5	3	8	16	10	26
Wednesday 12/11/19		225	6	9	15	22	9	31
Thursday 12/12/19		206	8	4	12	19	18	37
Tuesday 12/17/19		174	13	6	19	8	7	15
Wednesday 12/18/19		242	9	7	16	16	13	29
Thursday 12/19/19		188	5	2	7	17	14	31
Tuesday 1/7/20		213	13	8	21	16	16	32
Wednesday 1/8/20		195	3	2	5	24	10	34
Thursday 1/9/20		210	5	4	9	22	7	29
Tuesday 1/14/20		202	10	11	21	13	14	27
Wednesday 1/15/20		218	13	8	21	10	13	23
Thursday 1/16/20		195	5	6	11	18	14	32
Tuesday 1/28/20		162	7	5	12	6	7	13
Wednesday 1/29/20		204	4	5	9	14	14	28
Thursday 1/30/20	15.12	203	6	4	10	6	11	17
Average	15.12	195	8	6	14	14	12	26

Trip Rates

Land Use Type	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Self Storage	1.00	12.90	0.53	0.40	0.93	0.93	0.79	1.72

¹ Size is the total number of self storage units of the Moreno Valley and Desert Hot Springs self storage facilities (in hundreds).

² AM Peak Hour is the one-hour period between 7:00 and 9:00 a.m. with the highest trip generation (7:00-8:00, 7:15-8:15, 7:30-8:30, 7:45-8:45, or 8:00-9:00 a.m.).

³ PM Peak Hour is the one-hour period between 4:00 and 6:00 a.m. with the highest trip generation (4:00-5:00, 4:15-5:15, 4:30-5:30, 4:45-5:45, or 5:00-6:00 p.m.).



RV Storage Trip Generation and Trip Rates (Desert Hot Springs)

Trip Generation

Day and Date	Size ¹	Daily	AM Peak Hour ²			PM Peak Hour ³		
			In	Out	Total	In	Out	Total
Tuesday 11/5/19		50	0	0	0	0	3	3
Wednesday 11/6/19		57	1	2	3	4	2	6
Thursday 11/7/19		49	1	1	2	5	5	10
Tuesday 11/12/19		37	0	0	0	3	5	8
Wednesday 11/13/19		38	1	0	1	0	0	0
Thursday 11/14/19		52	2	1	3	2	2	4
Tuesday 11/19/19		41	3	2	5	1	2	3
Wednesday 11/20/19		49	3	3	6	3	7	10
Thursday 11/21/19		55	3	3	6	4	3	7
Tuesday 12/3/19		43	1	1	2	3	3	6
Wednesday 12/4/19		24	0	0	0	0	1	1
Thursday 12/5/19		65	3	4	7	1	2	3
Tuesday 12/10/19		52	0	0	0	4	4	8
Wednesday 12/11/19		44	1	0	1	1	2	3
Thursday 12/12/19		44	2	2	4	3	5	8
Tuesday 12/17/19		38	1	1	2	2	3	5
Wednesday 12/18/19		54	1	1	2	2	3	5
Thursday 12/19/19		49	3	3	6	3	2	5
Tuesday 1/7/20		70	1	1	2	6	4	10
Wednesday 1/8/20		32	1	1	2	0	1	1
Thursday 1/9/20		35	0	0	0	2	2	4
Tuesday 1/14/20		39	2	2	4	4	3	7
Wednesday 1/15/20		58	2	2	4	5	7	12
Thursday 1/16/20		57	3	2	5	7	5	12
Tuesday 1/28/20		48	1	2	3	2	3	5
Wednesday 1/29/20		50	1	0	1	1	2	3
Thursday 1/30/20	2.78	63	1	1	2	2	3	5
Average	2.78	48	1	1	3	3	3	6

Trip Rates

Land Use Type	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
RV Storage	1.00	17.23	0.50	0.47	0.97	0.93	1.12	2.05

¹ Size is the total number of RV storage spaces of the Desert Hot Springs RV storage facility (in hundreds).

² AM Peak Hour is the one-hour period between 7:00 and 9:00 a.m. with the highest trip generation (7:00-8:00, 7:15-8:15, 7:30-8:30, 7:45-8:45, or 8:00-9:00 a.m.).

³ PM Peak Hour is the one-hour period between 4:00 and 6:00 a.m. with the highest trip generation (4:00-5:00, 4:15-5:15, 4:30-5:30, 4:45-5:45, or 5:00-6:00 p.m.).

Summary

Moreno Valley Self Storage Trip Generation

Daily	AM Peak In	AM Peak Out	PM Peak In	PM Peak Out	
Tuesday 11/5/19	116	8	3	10	4
Wednesday 11/6/19	93	2	3	3	5
Thursday 11/7/19	111	6	2	3	6
Tuesday 11/12/19	106	4	4	6	4
Wednesday 11/13/19	125	6	5	8	8
Thursday 11/14/19	108	4	4	6	6
Tuesday 11/19/19	130	13	5	5	7
Wednesday 11/20/19	110	3	5	5	7
Thursday 11/21/19	100	10	4	5	6
Tuesday 12/3/19	101	3	4	13	6
Wednesday 12/4/19	97	3	6	5	2
Thursday 12/5/19	118	2	2	5	6
Tuesday 12/10/19	109	1	1	9	4
Wednesday 12/11/19	112	2	3	14	4
Thursday 12/12/19	121	5	1	11	9
Tuesday 12/17/19	106	8	4	3	5
Wednesday 12/18/19	123	3	3	8	7
Thursday 12/19/19	101	2	1	11	9
Tuesday 1/7/20	94	8	3	9	7
Wednesday 1/8/20	107	3	2	12	5
Thursday 1/9/20	114	0	1	8	4
Tuesday 1/14/20	109	6	7	8	6
Wednesday 1/15/20	111	8	2	4	4
Thursday 1/16/20	85	1	3	5	4
Tuesday 1/28/20	97	3	2	4	4
Wednesday 1/29/20	122	2	2	4	7
Thursday 1/30/20	113	4	3	3	5

Summary

Desert Hot Springs Self Storage Trip Generation

Daily	AM Peak In	AM Peak Out	PM Peak In	PM Peak Out
Tuesday 11/5/19	54	1	1	26
Wednesday 11/6/19	71	2	2	3
Thursday 11/7/19	83	2	4	4
Tuesday 11/12/19	61	5	10	6
Wednesday 11/13/19	84	5	4	7
Thursday 11/14/19	80	5	2	2
Tuesday 11/19/19	89	1	1	3
Wednesday 11/20/19	63	3	3	2
Thursday 11/21/19	83	5	5	6
Tuesday 12/3/19	81	5	3	5
Wednesday 12/4/19	65	6	4	6
Thursday 12/5/19	95	1	1	7
Tuesday 12/10/19	100	4	2	6
Wednesday 12/11/19	113	4	6	5
Thursday 12/12/19	85	3	3	9
Tuesday 12/17/19	68	5	2	2
Wednesday 12/18/19	119	6	4	6
Thursday 12/19/19	87	3	1	5
Tuesday 1/7/20	119	5	5	9
Wednesday 1/8/20	88	0	0	5
Thursday 1/9/20	96	5	3	3
Tuesday 1/14/20	93	4	4	8
Wednesday 1/15/20	107	5	6	9
Thursday 1/16/20	110	4	3	10
Tuesday 1/28/20	65	4	3	3
Wednesday 1/29/20	82	2	3	7
Thursday 1/30/20	90	2	1	6

Summary

Desert Hot Springs RV Storage Trip Generation

Daily	AM Peak In	AM Peak Out	PM Peak In	PM Peak Out
Tuesday 11/5/19	50	0	0	3
Wednesday 11/6/19	57	1	2	2
Thursday 11/7/19	49	1	1	5
Tuesday 11/12/19	37	0	0	5
Wednesday 11/13/19	38	1	0	0
Thursday 11/14/19	52	2	1	2
Tuesday 11/19/19	41	3	2	2
Wednesday 11/20/19	49	3	3	7
Thursday 11/21/19	55	3	3	3
Tuesday 12/3/19	43	1	1	3
Wednesday 12/4/19	24	0	0	1
Thursday 12/5/19	65	3	4	2
Tuesday 12/10/19	52	0	0	4
Wednesday 12/11/19	44	1	0	2
Thursday 12/12/19	44	2	2	5
Tuesday 12/17/19	38	1	1	3
Wednesday 12/18/19	54	1	1	3
Thursday 12/19/19	49	3	3	2
Tuesday 1/7/20	70	1	1	4
Wednesday 1/8/20	32	1	1	1
Thursday 1/9/20	35	0	0	2
Tuesday 1/14/20	39	2	2	3
Wednesday 1/15/20	58	2	2	7
Thursday 1/16/20	57	3	2	5
Tuesday 1/28/20	48	1	2	3
Wednesday 1/29/20	50	1	0	2
Thursday 1/30/20	63	1	1	3

Pivot Moreno Entry

Date	COUNTA of Name	SUM of Peak AM 7-8	SUM of Peak AM 7:15-8:15	SUM of Peak AM 7:30-8:30	SUM of Peak AM 7:45-8:45	SUM of Peak AM 8-9	SUM of Peak PM 4-5	SUM of Peak PM 4:15-5:15	SUM of Peak PM 4:30-5:30	SUM of Peak PM 4:45-5:45	SUM of Peak PM 5-6
11/5/2019	65	7	8	2	2	0	4	4	3	5	10
11/6/2019	45	1	0	1	2	0	2	2	2	1	3
11/7/2019	49	3	4	2	6	0	3	3	3	3	2
11/12/2019	57	4	3	2	1	0	6	4	4	1	1
11/13/2019	69	2	6	6	6	0	3	5	5	8	6
11/14/2019	55	3	3	2	4	0	4	5	4	6	5
11/19/2019	66	2	9	13	13	0	3	4	5	5	5
11/20/2019	53	3	3	2	2	0	5	5	4	3	4
11/21/2019	52	10	10	8	3	0	5	2	2	2	1
12/3/2019	50	2	2	3	2	0	13	9	9	0	0
12/4/2019	47	3	2	2	2	0	1	2	3	5	4
12/5/2019	57	2	2	2	1	0	4	5	4	4	2
12/10/2019	57	1	1	0	0	0	6	5	9	7	6
12/11/2019	56	2	2	1	1	0	5	3	4	14	13
12/12/2019	61	0	0	4	5	0	3	5	9	11	11
12/17/2019	50	7	8	3	3	0	3	2	2	0	0
12/18/2019	53	1	2	3	3	0	8	5	4	4	3
12/19/2019	50	1	0	1	2	0	11	10	4	3	4
1/7/2020	49	7	7	8	3	0	7	9	7	7	6
1/8/2020	55	1	3	3	2	0	7	7	12	8	9
1/9/2020	63	0	0	0	0	0	8	5	3	6	5
1/14/2020	57	1	1	3	6	0	8	7	8	6	6
1/15/2020	57	1	3	2	8	0	4	4	4	3	4
1/16/2020	45	1	1	1	1	0	5	5	5	1	3
1/28/2020	52	1	3	3	3	0	3	3	3	4	3
1/29/2020	67	1	1	2	1	0	4	3	3	4	4
1/30/2020	56	4	4	3	3	0	3	1	1	1	1
Grand Total	1493	71	88	82	85	0	138	124	126	122	121

Pivot Moreno Exit

Date	COUNTA of Name	SUM of Peak AM 7-8	SUM of Peak AM 7:15-8:15	SUM of Peak AM 7:30-8:30	SUM of Peak AM 7:45-8:45	SUM of Peak AM 8-9	SUM of Peak PM 4-5	SUM of Peak PM 4:15-5:15	SUM of Peak PM 4:30-5:30	SUM of Peak PM 4:45-5:45	SUM of Peak PM 5-6
11/5/2019	51	2	3	2	2	0	3	2	2	3	4
11/6/2019	48	3	1	1	1	0	4	5	4	3	3
11/7/2019	62	1	2	2	2	0	2	4	6	5	6
11/12/2019	49	4	3	2	2	0	3	4	3	3	1
11/13/2019	56	2	4	5	4	0	2	4	7	7	8
11/14/2019	53	4	2	2	2	0	4	4	6	6	6
11/19/2019	64	3	4	5	4	0	4	6	6	7	6
11/20/2019	57	2	5	5	4	0	5	3	4	3	7
11/21/2019	48	2	4	3	4	0	6	6	3	2	3
12/3/2019	51	4	4	3	3	0	6	3	4	3	1
12/4/2019	50	3	4	5	6	0	1	2	2	1	2
12/5/2019	61	1	2	2	2	0	3	5	6	5	5
12/10/2019	52	0	1	1	1	0	3	4	4	3	4
12/11/2019	56	3	3	1	1	0	1	1	1	2	4
12/12/2019	60	0	0	1	1	0	8	8	9	9	4
12/17/2019	56	4	4	4	3	0	4	5	4	5	2
12/18/2019	70	1	1	2	3	0	4	5	7	7	6
12/19/2019	51	1	1	0	0	0	7	9	7	4	3
1/7/2020	45	3	3	2	3	0	7	6	4	4	4
1/8/2020	52	1	2	2	1	0	5	4	2	3	4
1/9/2020	51	1	0	0	0	0	2	4	2	2	3
1/14/2020	52	4	5	7	4	0	4	6	4	3	4
1/15/2020	54	1	1	2	2	0	2	2	3	4	4
1/16/2020	40	1	2	2	3	0	4	4	4	4	1
1/28/2020	45	1	1	2	2	0	4	4	4	3	4
1/29/2020	55	2	2	2	1	0	7	7	4	4	4
1/30/2020	57	1	3	3	3	0	5	4	2	1	3
Grand Total	1446	55	67	68	64	0	110	121	114	106	106

PIVOT DHS Storage Entry

Date	COUNTA of Name	SUM of Peak AM 7-8	SUM of Peak AM 7:15-8:15	SUM of Peak AM 7:30-8:30	SUM of Peak AM 7:45-8:45	SUM of Peak AM 8-9	SUM of Peak PM 4-5	SUM of Peak PM 4:15-5:15	SUM of Peak PM 4:30-5:30	SUM of Peak PM 4:45-5:45	SUM of Peak PM 5-6
11/5/2019	28	1	0	0	1	0	9	10	10	7	2
11/6/2019	37	2	2	1	0	0	1	2	2	2	2
11/7/2019	44	2	2	1	1	0	4	3	2	3	7
11/12/2019	34	2	4	5	5	0	11	7	7	3	2
11/13/2019	43	5	3	4	4	0	9	8	3	4	2
11/14/2019	40	2	3	4	5	0	2	1	1	1	1
11/19/2019	48	0	0	0	1	0	5	1	2	4	5
11/20/2019	32	3	3	3	3	0	0	2	2	2	2
11/21/2019	43	2	5	5	4	0	6	3	3	3	2
12/3/2019	42	3	5	4	3	0	8	8	7	2	3
12/4/2019	33	6	6	5	1	0	4	4	4	4	4
12/5/2019	48	1	1	0	1	0	14	10	2	2	3
12/10/2019	50	3	3	4	2	0	7	4	4	1	1
12/11/2019	58	2	3	4	3	0	4	8	8	8	7
12/12/2019	42	2	2	1	3	0	5	7	8	7	5
12/17/2019	35	0	3	5	5	0	2	1	2	4	5
12/18/2019	61	2	3	3	6	0	8	8	8	4	4
12/19/2019	42	1	1	2	3	0	6	4	5	3	1
1/7/2020	61	5	5	4	3	0	7	6	5	6	5
1/8/2020	44	0	0	0	0	0	12	12	4	4	4
1/9/2020	50	5	4	5	4	0	2	4	4	12	14
1/14/2020	46	2	3	3	4	0	5	3	4	5	4
1/15/2020	54	5	4	4	3	0	6	4	2	4	3
1/16/2020	57	3	3	3	4	0	10	13	11	11	7
1/28/2020	32	4	4	3	3	0	2	2	2	2	2
1/29/2020	42	2	1	1	1	0	8	9	10	9	3
1/30/2020	44	1	1	0	2	0	1	1	3	3	3
Grand Total	1190	66	74	74	75	0	158	145	125	120	103

PIVOT DHS Storage Exit

Date	COUNTA of Name	SUM of Peak AM 7-8	SUM of Peak AM 7:15-8:15	SUM of Peak AM 7:30-8:30	SUM of Peak AM 7:45-8:45	SUM of Peak AM 8-9	SUM of Peak PM 4-5	SUM of Peak PM 4:15-5:15	SUM of Peak PM 4:30-5:30	SUM of Peak PM 4:45-5:45	SUM of Peak PM 5-6
11/5/2019	26	1	1	0	0	0	1	16	26	26	26
11/6/2019	34	1	2	1	1	0	2	1	0	0	3
11/7/2019	39	4	4	4	1	0	4	4	3	3	1
11/12/2019	27	1	2	2	10	0	6	3	4	4	1
11/13/2019	41	4	3	3	2	0	7	6	4	4	2
11/14/2019	40	1	1	2	2	0	2	1	1	0	1
11/19/2019	41	1	0	0	1	0	3	2	2	1	1
11/20/2019	31	2	1	3	3	0	1	1	1	1	2
11/21/2019	40	1	3	5	5	0	5	6	3	2	3
12/3/2019	39	3	3	2	1	0	2	5	4	5	4
12/4/2019	32	2	4	4	2	0	6	2	1	2	2
12/5/2019	47	1	1	0	0	0	7	7	5	3	2
12/10/2019	50	0	2	2	2	0	5	6	5	4	4
12/11/2019	55	2	3	6	5	0	5	3	4	5	5
12/12/2019	43	2	2	2	3	0	6	7	8	7	9
12/17/2019	33	0	0	1	2	0	2	2	1	1	1
12/18/2019	58	2	2	2	4	0	6	5	3	4	4
12/19/2019	45	1	1	1	1	0	5	4	5	4	4
1/7/2020	58	5	5	5	2	0	9	8	5	5	5
1/8/2020	44	0	0	0	0	0	4	2	3	4	5
1/9/2020	46	3	3	2	2	0	2	1	3	3	2
1/14/2020	47	1	2	4	4	0	1	3	3	6	8
1/15/2020	53	3	6	6	5	0	9	7	6	4	1
1/16/2020	53	3	3	1	2	0	7	8	7	10	7
1/28/2020	33	2	3	3	3	0	1	0	1	2	3
1/29/2020	40	3	2	1	0	0	5	6	6	7	3
1/30/2020	46	1	1	1	1	0	1	1	5	6	5
Grand Total	1141	50	60	63	64	0	114	117	119	123	114

PIVOT DHS RV Entry

Date	COUNTA of Name	SUM of Peak AM 7-8	SUM of Peak AM 7:15-8:15	SUM of Peak AM 7:30-8:30	SUM of Peak AM 7:45-8:45	SUM of Peak AM 8-9	SUM of Peak PM 4-5	SUM of Peak PM 4:15-5:15	SUM of Peak PM 4:30-5:30	SUM of Peak PM 4:45-5:45	SUM of Peak PM 5-6
11/5/2019	25	0	0	0	0	0	0	0	0	0	0
11/6/2019	29	1	1	1	1	0	0	3	4	3	2
11/7/2019	24	1	1	1	1	0	3	3	5	3	2
11/12/2019	19	0	0	0	0	0	1	3	3	3	2
11/13/2019	18	0	0	0	0	1	0	0	0	0	0
11/14/2019	26	1	1	1	2	0	2	0	0	0	0
11/19/2019	19	1	3	3	3	0	1	0	0	0	0
11/20/2019	25	3	3	2	1	0	1	3	3	2	2
11/21/2019	28	3	2	2	3	0	0	1	1	1	4
12/3/2019	22	0	0	1	1	0	3	3	3	2	1
12/4/2019	12	0	0	0	0	0	0	0	0	0	0
12/5/2019	31	3	3	2	1	0	1	0	0	0	1
12/10/2019	25	0	0	0	0	0	4	2	1	1	1
12/11/2019	22	0	0	0	1	0	1	1	1	1	1
12/12/2019	20	1	1	1	2	0	2	2	3	2	2
12/17/2019	20	1	1	1	1	0	2	2	1	1	0
12/18/2019	27	1	1	1	1	0	2	2	2	1	1
12/19/2019	26	0	1	1	3	0	3	2	1	1	1
1/7/2020	35	0	0	1	1	0	0	3	4	6	6
1/8/2020	16	0	0	1	1	0	0	0	0	0	0
1/9/2020	18	0	0	0	0	0	1	1	2	2	1
1/14/2020	18	1	1	1	2	0	2	4	2	2	2
1/15/2020	29	1	1	2	1	0	5	4	4	1	2
1/16/2020	28	3	2	2	1	0	7	2	1	1	0
1/28/2020	23	1	0	1	1	0	2	1	1	1	0
1/29/2020	26	0	0	0	1	0	0	0	1	1	1
1/30/2020	31	0	1	1	1	0	2	2	2	2	1
Grand Total	642	22	23	26	30	0	48	45	44	36	34

PIVOT DHS RV Exit

Date	COUNTA of Name	SUM of Peak AM 7-8	SUM of Peak AM 7:15-8:15	SUM of Peak AM 7:30-8:30	SUM of Peak AM 7:45-8:45	SUM of Peak AM 8-9	SUM of Peak PM 4-5	SUM of Peak PM 4:15-5:15	SUM of Peak PM 4:30-5:30	SUM of Peak PM 4:45-5:45	SUM of Peak PM 5-6
11/5/2019	25	0	0	0	0	0	3	2	0	0	0
11/6/2019	28	2	2	2	2	0	1	1	2	2	2
11/7/2019	25	0	1	1	1	0	3	3	5	4	2
11/12/2019	18	0	0	0	0	0	0	2	5	5	5
11/13/2019	20	0	0	0	0	0	0	0	0	0	0
11/14/2019	26	0	1	1	1	0	2	2	0	0	0
11/19/2019	22	1	1	2	2	0	2	1	0	0	1
11/20/2019	24	3	3	2	2	0	3	6	7	6	5
11/21/2019	27	2	2	2	3	0	1	0	1	1	3
12/3/2019	21	0	0	1	1	0	3	3	2	3	1
12/4/2019	12	0	0	0	0	0	1	1	0	0	0
12/5/2019	34	3	4	4	3	0	1	0	1	1	2
12/10/2019	27	0	0	0	0	0	4	2	2	1	1
12/11/2019	22	0	0	0	0	0	2	2	1	1	1
12/12/2019	24	1	1	1	2	0	2	4	5	4	3
12/17/2019	18	1	1	1	1	0	2	2	3	2	1
12/18/2019	27	0	0	1	1	0	3	3	3	2	2
12/19/2019	23	1	1	1	3	0	2	2	2	2	1
1/7/2020	35	0	0	1	1	0	2	0	2	3	4
1/8/2020	16	0	0	0	1	0	0	1	1	1	1
1/9/2020	17	0	0	0	0	0	1	2	2	2	2
1/14/2020	21	0	1	1	2	0	2	3	3	3	2
1/15/2020	29	1	1	2	2	0	7	6	6	6	4
1/16/2020	29	2	2	2	2	0	3	4	5	3	2
1/28/2020	25	2	0	0	0	0	3	1	1	2	1
1/29/2020	24	0	0	0	0	0	0	0	1	1	2
1/30/2020	32	1	0	0	1	0	2	3	2	1	2
Grand Total	651	20	21	25	31	0	55	56	62	56	50



Table B: Project Trip Generation (Gate Data)

Land Use	Size	Unit	Weekday									Saturday						Sunday						
			ADT	AM Peak Hour			PM Peak Hour			ADT	AM Peak Hour			PM Peak Hour			ADT	AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total		In	Out	Total				
Trip Rates¹																								
Self-Storage		100 storage units	12.90	0.53	0.40	0.93	0.93	0.79	1.72	14.09	0.80	0.66	1.46	0.92	0.93	1.85	11.04	0.33	0.20	0.53	0.86	0.73	1.59	
RV Storage		100 RV spaces	17.23	0.50	0.47	0.97	0.93	1.12	2.05	16.95	0.85	0.72	1.57	0.99	1.21	2.20	14.25	0.63	0.45	1.08	0.81	1.35	2.16	
Project Trip Generation																								
Self-Storage	11.00	100 storage units	142	6	4	10	10	9	19	155	9	7	16	10	10	20	121	4	2	6	9	8	17	
RV Storage	5.80	100 RV spaces	100	3	3	6	5	7	12	98	5	4	9	6	7	13	83	4	3	7	5	8	13	
Total			242	9	7	16	15	16	31	253	14	11	25	16	17	33	204	8	5	13	14	16	30	

¹ Trip rates developed from gate data for the Moreno Valley Self Storage and Desert Hot Springs Self Storage and RV Storage facilities (November 2019 to January 2020).

ADT = average daily traffic

RV = recreational vehicle

From: Dean Arizabal <Dean.Arizabal@lsa.net>
Sent: Thursday, October 1, 2020 4:33 PM
To: paul@pbbrown.com; Annie Baek; FVilla@allenmatkins.com
Subject: 3701 Pacific PI - Surcharge Program Trips

Team:

Based on our discussion today, the surcharge program for the 3701 Pacific PI project would require approximately 10 trucks per day for the import of clean soil, with 4-6 cycles per truck (1 cycle = 2 trips), for a short-term duration of 7-8 days.

The trip generation for soil import would be 80-120 truck trips per day ($10 \times 4 \times 2 = 80$, or $10 \times 6 \times 2 = 120$). Assuming these trips could occur between 7:00 a.m. to 5:00 p.m. (10-hour day), this equates to approximately 8-12 trips per hour (including the a.m. and p.m. peak hours).

Given the low trip generation (up to 120 daily trips, including up to 12 peak-hour trips) for a temporary period of approximately 1 week, the surcharge program should not rise to the need for a traffic analysis as the trip generation for the surcharge program is a fraction of the anticipated trip generation of the proposed self-storage and RV storage project once it is operational (up to 302 daily trips, including up to 33 peak-hour trips).

Thank you,

Dean Arizabal | Associate
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