

ENVIRONMENT | PLANNING | DEVELOPMENT SOLUTIONS, INC.

To: Andrea Arcilla
From: Meghan Macias, TE
CC: Tim Howard
Date: 1/10/2019
Re: Trip Generation Analysis for Proposed Holly Street Parking Lot

This technical memorandum presents an analysis of the trip generation for the proposed Holly Street Parking Lot, located on the east side of Holly Street, north of Wilson Street, within the Rialto Sphere of Influence. The project site is currently occupied by the Milestone MX motorcycle park. The approximately 65-acre site will serve as a parking lot for FedEx Ground drivers and for tractor and trailer storage.

The proposed project would remove the existing structures on-site and pave approximately 31 acres (approximately 48%) of the site for use as a parking lot for FedEx Ground drivers and for trailer storage. Approximately 1005 parking stalls will be provided for automobiles and long-haul tractors. An additional 556 trailer spaces will be provided. The parking lot will be used for FedEx Ground drivers (Contracted Service Providers – CSPs). The CSPs would arrive in their personal vehicles and park, then drive a tractor to the FedEx Rialto Hub located 330 Resource Drive, Bloomington, CA or the West Rialto Station located at 11600 Cactus Ave., Bloomington, CA. CSPs would then pick up a trailer and dispatch from the hub. Drivers would return to drop their trailers at the Rialto Hub or West Rialto station then drive the tractor back to the proposed Holly Street lot. When the FedEx facilities are congested, some trailers would be returned to the Holly Street lot along with the tractor. Access to the site would be provided via a transponder-operated gate. Security from the FedEx facility would roam between the FedEx site and the proposed Holly Street parking lot and would patrol the site on a regular basis, approximately every 2 hours or 12 times per day.

It is anticipated that approximately 9 CSPs will arrive at the site every hour and will shuttle 9 tractors/trailers to the Rialto Hub or West Rialto Station. This number could be as low as 5 per hour during off-peak times. The potential trip generation of the project has been evaluated based on the proposed operation of the site and is shown in Table 1. Table 1 shows the total trips as well as the passenger car equivalent (PCE) trips. PCE accounts for the fact that a truck has a slower start-up time, takes up more roadway space and has reduced maneuverability when compared to a passenger car.

Table 1: Site Trip Generation

Total Vehicles										
		Daily			AM Peak			PM Peak		
		In	Out	Total	In	Out	Total	In	Out	Total
Drivers Entering ¹		216	0	216	9	0	9	9	0	9
Tractors Departing to Rialto Hub ¹		0	216	216	0	9	9	0	9	9
Tractors Arriving at Holly St. Lot		216	0	216	9	0	9	9	0	9
Drivers Exiting		0	216	216	0	9	9	0	9	9
Total		432	432	864	18	18	36	18	18	36
Passenger Car Equivalent (PCE)										
	PCE Factor	Daily			AM Peak			PM Peak		
		In	Out	Total	In	Out	Total	In	Out	Total
Drivers Entering ¹	1.0	216	0	216	9	0	9	9	0	9
Tractors Departing to Rialto Hub (PCE) ²	1.5	0	324	324	0	14	14	0	14	14
Tractors Arriving at Holly St. Lot (PCE) ³	1.5	162	0	162	7	0	7	7	0	7
Tractor-Trailers Arriving at Holly St. Lot (PCE) ³	3.0	324	0	324	14	0	14	14	0	14
Drivers Exiting	1.0	0	216	216	0	9	9	0	9	9
Total Project Trip Generation		702	540	1242	29	23	52	29	23	52
Existing Trip Generation (Milestone MX Park)		128	128	256	12	5	17	4	3	7
Net New Trips		574	412	986	17	18	35	25	20	45

¹ Trip generation based on 9 drivers/hour arriving at the Holly Street lot in their personal vehicle, picking up a tractor and driving to the FedEx Rialto hub to pick up a loaded trailer.

² PCE = Passenger Car Equivalent. A factor of 1.5 is used for tractors without trailer and 3.0 is used for tractors with trailers.

³ Drivers would drop trailers at the FedEx Rialto hub and return to the Holly Street lot with a tractor only. Some may return with a trailer if the Rialto yard is congested. The calculation assumes that half of all tractors returning to Holly Street would have trailers and are calculated with a PCE of 3.0.

Table 1 also accounts for the existing trip generation of the Milestone MX Park. The existing trip generation at the Holly Street Driveway to Milestone MX park was counted on Tuesday, November 27, 2018. The existing daily and peak hour trips at Milestone MX park are documented in the table and reduced from the project's trip generation, as these trips are already generated by the site.

The County of San Bernardino Traffic Impact Study Guidelines require a Traffic Impact Study (TIS) to be prepared for projects that generate 100 or more trips during any peak hour. Based on evaluation of the proposed operation of the lot as shown in Table 1, the project would generate approximately 35 net new AM and 45 net new PM peak hour PCE trips, and therefore should not require preparation of a TIS.

If you have any questions about this analysis, please contact me at (949) 794-1186 or at meghan@epdsolutions.com.