

# Memorandum

Date: June 12, 2023  
To: Lionel Uhry, Mar Ventures, Inc.  
From: Cadell Chand and Anjum Bawa  
Subject: **Revised Trip Generation Assessment –Nash Street Exchange**

*PT21-0064*

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## Introduction

This memorandum summarizes a trip generation assessment of the proposed Nash Street Exchange commercial center as part of the Phase 1 of El Segundo South Campus Specific Plan (ESSCSP) Development in the City of El Segundo, California. The purpose of the trip generation assessment is to evaluate the proposed uses under Phase 1 development and confirm if the trips generated by the uses will remain under the maximum allowable trips for Phase 1 development.

## Project Background

The proposed El Segundo South Campus Specific Plan (SP No. 11-01) Project proposes to establish a maximum allowable development within the Specific Plan area of 4,231,547 gross square feet (sf), or a net additional 2,142,457 gross sf over existing conditions. The specific plan buildout is planned to be completed in two phases.

The ESSCSP including trip ceiling to manage the forecast of vehicular trips generated by the land use mix identified in the specific plan. Per the Raytheon South Campus Specific Plan Traffic Impact Analysis (November 2013) Phase 1 was approved with a trip ceiling of 3,775 daily trips, including 89 AM and 225 PM peak hour trips. Thus, Phase 1 is currently entitled to develop land uses that would be at or below the trip allowance.



## Previous Approved Site Plan

The project site plan was previously approved in February 2019 with a total of 68,125 sf of mixed-use medical office and retail commercial development. Provided below is a summary of the approved development:

- 43,000 sf GLA of medical office
- 25,125 sf GFA retail commercial including 12,100 sf of uses, which will open after 10:00 AM in the morning.

Table 1 shows a trip generation summary of previously approved site plan. As shown in Table 1, the Phase 1 development previously estimated to generate 1,829 weekday daily trips, out of which 88 trips will be generated in the morning peak hour and 155 trips in the afternoon peak hour.

## Proposed Changes to Site Plan

As part of the proposed changes to Phase 1 site plan, a drive-through-only (no indoor seating) Starbucks Coffee store will be added to the northwest corner of the Phase site. The coffee store will only operate one drive-through lane. In addition, there are minor changes to the medical office and other commercial uses. Provided below is a brief land-use summary of proposed new site plan.

- 42,119 sf GLA of medical office (*881 sf less than previously proposed*)
- 22,584 sf GFA retail commercial including 14,921 sf of uses, which will open after 10:00 AM in the morning (*2,541 sf less than previously proposed*)
- 1,275 sf Fast Food with Drive-Through but no indoor dining

Exhibit 1 includes proposed new site plan and a summary of uses within various buildings proposed in Phase 1.

## Trip generation Assessment

To estimate the trips generated by the Raytheon retail development, specific assumptions were made regarding the proposed land uses. These assumptions include weekday daily, morning, and evening peak hour trip generation rates. A summary of these assumptions is provided below.

### Assumptions

- Shopping Center – ITE's *Trip Generation, 10<sup>th</sup> Edition* (2017) provides trip generation equations for the "Shopping Center" land use category (ITE 820). The trip rates and pass-by trip reductions used for this land use are consistent with the Shopping Center trip generation rates used in the certified EIR and in the subsequent traffic analyses. The following rates and assumptions were used:
  - Weekday daily: 37.75 per 1,000 sf GFA
  - Weekday AM peak hour: 0.94 per 1,000 sf GFA (62% entering, 38% exiting)



- Weekday PM peak hour: 3.81 per 1,000 sf GFA (48% entering, 52% exiting)
- An internal capture trip credit of 5% was applied to the trip generation estimates to represent the percentage of trips between land uses, such as with the existing Raytheon office building and proposed medical office.
- A 34% pass-by trip credit was applied to the land use for PM, which was considered reasonable for a land use like this located along a regional thoroughfare and verified by the ITE manual. The pass-by trip credit accounts for patrons who may already be on the regional streets interacting with the site in numerous ways, such as stopping by to make a purchase on their way home from work. The pass-by trip credit is consistent with the credit applied in the certified EIR.
- 14,921sf of retail uses in Buildings 4 and 5 will not open for business until after the morning peak commute period.
  
- Medical Office – *Trip Generation, 10th Edition* provides trip generation rates for the “Medical Office Building” land use category (ITE 720). The following rates and assumptions were used:
  - Weekday daily: 34.80 per 1,000 sf GFA
  - Weekday AM peak hour: 2.78 per 1,000 sf GFA (78% entering, 22% exiting)
  - Weekday PM peak hour: 3.46 per 1,000 sf GFA (28% entering, 72% exiting)
  - An internal capture trip credit of 15% was applied to the trip generation estimates to represent the percentage of trips between land uses, such as with the existing Raytheon office building and proposed retail space.
  - A 15% transit credit was applied due to the proximity to transit service.
  - A 10% pass-by trip credit was applied to the land use for both AM and PM periods, verified by the ITE manual.
  
- Drive-through Only Starbucks Coffee Store - *Trip Generation, 11th Edition* provides trip generation rates for a “Coffee/Donut Shop with Drive-Through Window and No Indoor Seating” land use category (ITE 938). The following rates and assumptions were used:
  - Weekday daily: 179.00 trips per drive-through lane
  - Weekday AM peak hour: 39.81 trips per drive-through lane (50% entering, 50% exiting)
  - Weekday PM peak hour: 15.08 trips per drive-through lane (50% entering, 50% exiting)
  - An internal capture trip credit of 40% was applied to the trip generation estimates to represent the percentage of trips between land uses, such as with the existing Raytheon office building and proposed retail space.
  - A 5% transit credit was applied to account for customers and employees travel to/from the use via transit or other non-automobile modes.
  - A 70% pass-by trip credit was applied to the land use for both AM and PM periods, verified by the ITE manual



### *Trip Generation Results*

Using the assumptions and methodology described above, the proposed development would result in a total of 1,753 weekday daily trips, of which 89 trips would occur during the AM peak hour and 149 trips would occur during the PM peak hour. Table 2 shows the trip generation estimates for the Raytheon retail site.

## **Conclusion**

As can be seen in Table 2, the proposed land uses for the development would not exceed the EIR established trip cap for Phase 1 development for any of the daily or peak hour scenarios.

**TABLE 1  
NASH STREET EXCHANGE  
TRIP GENERATION**

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]								Estimated Trip Generation									
			Daily Rate	AM Peak Hour			PM Peak Hour			Trip Rate Unit	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips					
				Rate	% In	% Out	Rate	% In	% Out			In	Out	Total	In	Out	Total			
<b>PROPOSED PROJECT</b>																				
Medical Office	720	43.000 ksf	34.80	2.78	78%	22%	3.46	28%	72%	per ksf	1,496	94	26	120	42	107	149			
<i>Internal capture [b]</i>			15%	15%			15%				(224)	(14)	(4)	(18)	(6)	(16)	(22)			
<i>Transit credit [c]</i>			15%	15%			15%				(191)	(12)	(3)	(15)	(5)	(14)	(19)			
<i>Pass-by [d]</i>			10%	10%			10%				(108)	(7)	(2)	(9)	(3)	(8)	(11)			
Net External Medical Office											973	61	17	78	28	69	97			
Retail (open after 10 am)	820	12.100 ksf	37.75	0.00	62%	38%	3.81	48%	52%	per ksf	457	0	0	0	22	24	46			
<i>Internal capture [b]</i>			5%	0%			5%				(23)	0	0	0	(1)	(1)	(2)			
<i>Transit credit [c]</i>			5%	5%			5%				(22)	0	0	0	(1)	(1)	(2)			
<i>Pass-by [e]</i>			0%	0%			34%				0	0	0	0	(7)	(7)	(14)			
Net External Retail											412	0	0	0	13	15	28			
Retail	820	13.025 ksf	37.75	0.94	62%	38%	3.81	48%	52%	per ksf	492	7	5	12	24	26	50			
<i>Internal capture [b]</i>			5%	5%			5%				(25)	(1)	0	(1)	(1)	(2)	(3)			
<i>Transit credit [c]</i>			5%	5%			5%				(23)	(1)	0	(1)	(1)	(1)	(2)			
<i>Pass-by [e]</i>			0%	0%			34%				0	0	0	0	(7)	(8)	(15)			
Net External Retail											444	5	5	10	15	15	30			
<b>A. Total Project Trips</b>											<b>1,829</b>	<b>66</b>	<b>22</b>	<b>88</b>	<b>56</b>	<b>99</b>	<b>155</b>			
<b>B. Total trips approved for Phase I Development per Raytheon South Campus Specific Plan EIR (October, 2015)</b>											<b>3775</b>			<b>89</b>			<b>225</b>			
<i>Net trips available after proposed Phase I development (B-A)</i>											<b>1,946</b>			<b>1</b>			<b>70</b>			

Notes:

- a. Source: Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition*, 2017, unless otherwise noted.
- b. Internal capture represents the percentage of trips occurring between land uses proposed or already operating within the site (Raytheon South Campus).
- c. Trip generation adjustment discount associated with proximity to transit service for similar sites based on recommendations published by Los Angeles County Metropolitan Transportation Authority (LAMTA) and ITE.
- d. Informed by City of Los Angeles Department of Transportation pass-by trip rate, derived from surveys published in the "Trip Generation Handbook: An ITE Recommended Practice," 2003.
- e. Source: Appendix A - Table 2: Summary of Trip Generation Rates and Trip Credits within the Raytheon report for retail land use.

**TABLE 2  
NASH STREET EXCHANGE  
REVISED TRIP GENERATION**

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Estimated Trip Generation							
			Daily Rate	AM Peak Hour			PM Peak Hour			Trip Rate Unit	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				Rate	% In	% Out	Rate	% In	% Out			In	Out	Total	In	Out	Total
<b>PROPOSED PROJECT</b>																	
Medical Office	720	42,119 ksf	34.80	2.78	78%	22%	3.46	28%	72%	per ksf	1,466	91	26	117	41	105	146
Internal capture [b]			15%	15%			15%				(220)	(14)	(4)	(18)	(6)	(16)	(22)
Transit credit [c]			15%	15%			15%				(187)	(12)	(3)	(15)	(5)	(14)	(19)
Pass-by [d]			10%	10%			10%				(106)	(7)	(2)	(8)	(3)	(8)	(11)
Net External Medical Office											953	58	17	75	27	67	94
Retail (open after 10 am)	820	14,921 ksf	37.75	0.00	0%	0%	3.81	48%	52%	per ksf	563	0	0	0	27	30	57
Internal capture [b]			5%	0%			5%				(28)	0	0	0	(1)	(2)	(3)
Transit credit [c]			5%	0%			5%				(27)	0	0	0	(1)	(2)	(3)
Pass-by [e]			0%	0%			34%				0	0	0	0	(8)	(9)	(17)
Net External Retail											508	0	0	0	17	17	34
Retail	820	7,663 ksf	37.75	0.94	62%	38%	3.81	48%	52%	per ksf	289	4	3	7	14	15	29
Internal capture [b]			5%	5%			5%				(14)	0	0	0	0	(1)	(1)
Transit credit [c]			5%	5%			5%				(14)	0	0	0	0	(1)	(1)
Pass-by [e]			0%	0%			34%				0	0	0	0	(4)	(5)	(9)
Net External Retail											261	4	3	7	10	8	18
Coffee/Donut w/Drive-Through, No Indoor Seating [f]	938	1 Lane	179.00	39.81	50%	50%	15.08	50%	50%	per lane	179	20	20	40	8	7	15
Internal capture [c]			40%	40%			40%				(72)	(8)	(8)	(16)	(3)	(3)	(6)
Transit credit, Walk, and Bike [c]			5%	5%			5%				(5)	(1)	0	(1)	0	0	0
Pass-by [e]			70%	70%			70%				(71)	(8)	(8)	(16)	(3)	(3)	(6)
Net External Coffee Shop											31	3	4	7	2	1	3
<b>A. Total Project Trips</b>											<b>1,753</b>	<b>65</b>	<b>24</b>	<b>89</b>	<b>56</b>	<b>93</b>	<b>149</b>
<b>B. Total trips approved for Phase I Development per Raytheon South Campus Specific Plan EIR (October, 2015)</b>											<b>3,775</b>			<b>89</b>			<b>225</b>
Net trips available after proposed Phase I development (B-A)											<b>2,022</b>			<b>0</b>			<b>76</b>

**Notes:**

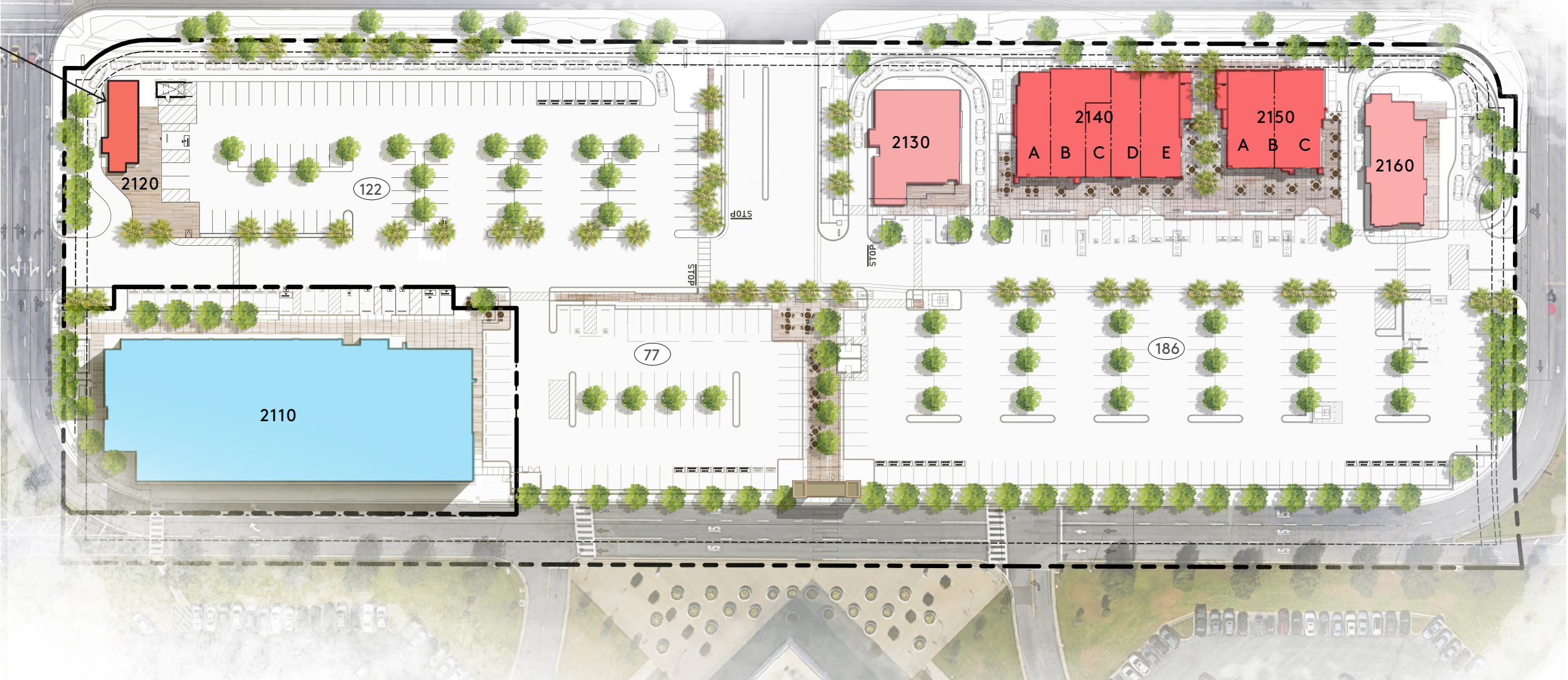
- a. Source: Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition*, 2017, unless otherwise noted.
- b. Internal capture represents the percentage of trips occurring between land uses proposed or already operating within the site (Raytheon South Campus).
- c. Trip generation adjustment discount associated with proximity to transit service for similar sites based on recommendations published by Los Angeles County Metropolitan Transportation Authority (LAMTA) and ITE.
- d. Informed by City of Los Angeles Department of Transportation pass-by trip rate, derived from surveys published in the "Trip Generation Handbook: An ITE Recommended Practice," 2003.
- e. Source: Appendix A - Table 2: Summary of Trip Generation Rates and Trip Credits within the Raytheon report for retail land use.
- f. Source: Institute of Transportation Engineers (ITE), *Trip Generation, 11th Edition*, 2021.

Land Uses:

- Medical Office 42.119 ksf:** Includes Gross SF of 2110 El Segundo Blvd Building
- Retail 7.663 ksf:** Includes Gross SF + Patio SF of 2130, 2160 El Segundo Blvd Buildings
- Retail (open after 10 am) 14.921 ksf:** Includes Gross SF + Patio SF of 2140, 2150 El Segundo Blvd Buildings
- Coffee/Donut w/Drive-Through, No Indoor Seating:** 2120 El Segundo Blvd Building

# Exhibit A

NEW PROPOSED COFFEE SHOP



		GROSS BUILDING SF	NET BUILDING SF	NON-USABLE SF	PROVIDED PATIO SF	*EXCLUDED PATIO SF	PARKING PER SF	STALLS REQUIRED
<b>BLDG 2110</b>	MEDICAL OFFICE (2 levels)	42,119	40,450				200	202.3
<b>BLDG 2120</b>	STARBUCKS	1,130	998		145	145	130	7.7
<b>PAD 2130</b>	FAST FOOD	3,800	3,756		370	200	130	28.9
<b>BLDG 2140</b>	RESTAURANT	7,857						
	TENANT A		1,590	60	350	200		
	TENANT B		2,018	75	200	200		
	TENANT C		798	30	200	200		
	TENANT D		1,346	50	200	200		
	TENANT E		1,822	68	700	200		
<b>BLDG 2140 SUBTOTAL</b>			<b>7,574</b>	<b>283</b>			130	58.3
<b>BLDG 2150</b>	RESTAURANT	4,333						
	TENANT A		1,994	100	500	200		
	TENANT B		2,139	100	581	200		
<b>BLDG 2150 SUBTOTAL</b>			<b>4,133</b>	<b>200</b>			130	31.8
<b>PAD 2160</b>	FAST FOOD	2,798	2,798		695	200	130	21.5
<b>PATIO TOTAL</b>	DINING (>200sf/tenant)				3,941	1,945	75	26.6

TOTAL REQUIRED 377.0  
 TOTAL PROVIDED 385.0  
 SURPLUS/DEFICIT 8.0  
 Parking provided ratio- stalls / 1000 Gross SF 6.2

\*First 200 sf of patio space does not count towards area tabulation  
 Required restaurant parking based on 60% kitchen (at 250 sf) and 40% dining (at 1 per 75 sf), equals 1 per 130 sf blended rate

