FEHR PEERS

Memorandum

Date:	July 7, 2023
From:	Carrie Tai, Director of Community Development, City of Hermosa Beach
From:	Michael Kennedy, AICP & Netai Basu, AICP
Subject:	**Transportation Impact Analysis Consistency Finding for the Hermosa Beach 2021-2029 Housing Element-Related Rezoning**

LB21-0029.03

Introduction

This memorandum summarizes the evaluation of the potential transportation impacts associated with rezoning related to the City of Hermosa Beach 2021-2029 Housing Element.

The California Department of Housing and Community Development (HCD) has established that the 6th Cycle of the Housing Element for jurisdictions in the Southern California (SCAG) region will plan for the period of October 15, 2021 – October 15, 2029. SCAG completed a Regional Housing Needs Assessment (RHNA) which allocates 558 units to Hermosa Beach, comprised of 232 very low-income units, 127 low-income units, 106 moderate-income units, and 93 above moderate-income units. With the projected development of 64 accessory dwelling units (ADUs) over eight years, the City has a remaining RHNA obligation of 494 units (221 very low-income, 99 low-income, 102 moderate-income, and 72 above moderate-income units).

In 2017, the City of Hermosa Beach approved PLAN Hermosa, a major update to the City's General Plan and Coastal Land Use Plan that provides a future vision, policies and proposed actions to guide residents, decision-makers, City staff, project developers and businesses in the city. The City prepared the EIR that was approved by the City Council on August 22, 2017.

Following the preparation of the Housing Element, the City has determined that rezoning is necessary in order to fully accommodate the RHNA. The City is proposing changes in zoning on 89 parcels to promote the production of additional housing. As this constitutes a change to the growth projections for population, households, and jobs in the City of Hermosa Beach that were environmentally cleared in the PLAN Hermosa EIR, an addendum to that EIR is being prepared for these proposed rezoning changes associated with the implementation of the Housing Element. This memorandum evaluates the potential for this Addendum Project to generate new or

substantially more severe transportation impacts due to the rezoning based on the methodologies and thresholds of significance from the PLAN Hermosa EIR.

VMT Analysis Methodology

The PLAN Hermosa EIR included an analysis of VMT for informational purposes but did not determine the significance of transportation impacts on that basis because it was not required at the time. As a result of Senate Bill (SB) 743, the State Resources Agency added Section 15064.3 to the CEQA Guidelines on December 28, 2018. It states that vehicles miles traveled (VMT) is the appropriate measure of transportation impacts for projects subject to CEQA effective July 1, 2020.

In this study, VMT estimates for the Addendum Project were prepared to identify the change in VMT compared with the information in the PLAN Hermosa EIR. Because the project includes a mix of residential and non-residential land uses, rather than a single land use, the following analysis metrics were analyzed:

- **Total Vehicle Trips per Capita (per Service Population)** – Total daily vehicle trips divided by the sum of residents and employees in the city.
- **Total VMT per Capita (per Service Population)** – Total origin/destination VMT divided by the sum of residents and employees in the city.

Calculating Project VMT

Consistent with the PLAN Hermosa EIR, Fehr & Peers used the 2012 SCAG RTP/SCS model for the Addendum Project, with a 2040 forecast year. This model, prepared by SCAG in 2012, covers a six-county region across southern California. It is a trip-based, four-step model which calculates trip generation, trip distribution, mode split and trip assignment to estimate traffic volumes and VMT across the transportation network. The City of Hermosa Beach is represented by four Tier I transportation analysis zones (TAZs), which are coterminous with the city's boundaries.

To properly represent the Addendum Project in the model, Fehr & Peers modified the socio-economic data (SED) in the model to reflect the growth in socioeconomic data (SED) with the proposed rezoning. The City of Hermosa Beach provided Fehr & Peers with estimated increases in households and reductions in commercial square feet associated with the Addendum Project. The future mix of land uses was converted to SED using factors on persons per household and employment intensity in the model using the same factors as were used in the PLAN Hermosa EIR. Following these modifications, the future year model was run with the proposed land use changes.

Project VMT Results

Table 1 presents the VMT estimates for the Addendum Project compared with the PLAN Hermosa EIR for the following metrics:

- Resident Population, Employment and Households
- Total Vehicle Trips (VT)
- Total Vehicle Miles of Travel
- Total VMT per capita (the sum of residents and employees, also known as service population)
- Total Vehicle Trips per capita

As shown in **Table 1**, the Addendum Project is estimated to reduce overall daily vehicle trips by approximately 300 (1% reduction) and daily VMT by 6,000 (2% reduction) compared with the PLAN Hermosa EIR. Vehicle Trips per capita (service population) and VMT per capita (service population) would remain the same as the PLAN Hermosa EIR.

Based on this VMT analysis, the Addendum Project would not increase vehicle trips per capita, or vehicle miles traveled per capita above the level environmentally cleared by the PLAN Hermosa EIR. Therefore, it can be concluded that the transportation impacts associated with the Addendum Project would be consistent with those of the PLAN Hermosa EIR, and would not result in any new or more severe transportation impacts related to VMT.

Table 3. Future (2040) VMT Metrics with Proposed Housing Element

Scenario	2015 Existing	Year 2040 PLAN Hermosa EIR (Adopted)	Year 2040 Housing Element (Addendum Project)	Difference from Adopted Plan (#)	Diff from Adopted Plan (%t)
Population	19,800	20,400	21,000		
Employment	5,700	7,200	6,200		
Capita (Population + Employment)	*25,500*	*27,600*	27,200		
Vehicle Miles Travelled (VMT)	363,000	326,000	320,000	-6,000	-2%
Vehicle Trips Generated (VT)	38,700	34,200	33,900	-300	-1%
VMT / Capita	*14.2*	*11.8*	11.8	0	0%
VT / Capita	*1.52*	*1.25*	1.25	0	0%

Source: PLAN Hermosa Revised Draft Environmental Impact Report (August 2017) Table 4.14-15 on page 4.14-31 and Fehr & Peers, 2023.

Level of Service Impact Assessment

The PLAN Hermosa EIR applied the threshold of significance for transportation impacts that was based on project-related change in volume to capacity (v/c) or delay, and intersection level of service (LOS) which were the CEQA transportation impact metrics in effect at the time that EIR was prepared. As noted above, LOS is no longer a CEQA transportation impact metric as a result of SB 743.

Based on the detailed analysis of 13 intersections and 20 street segments, the PLAN Hermosa EIR concluded that the project (PLAN Hermosa) would result in significant transportation impacts at three intersections and one street segment:

- Intersections
    - Pacific Coast Highway & Artesia Boulevard
    - Pacific Coast Highway & Aviation Boulevard
    - Manhattan Avenue & 27th Street

- Street Segments
    - Prospect Avenue from Aviation Boulevard to 2nd Street

For each significantly impacted location, there were physical limitations and policy conflicts which made mitigation infeasible and so the transportation impact at these locations were determined to be significant and unavoidable.

In order to evaluate whether the Addendum Project would be consistent with the transportation impact findings of the PLAN Hermosa EIR, the SCAG model was used to forecast segment and intersection turning movement volumes for the Addendum Project model run used to evaluate VMT.

Table 2 presents daily segment volumes for the Addendum Project compared with the PLAN Hermosa EIR. As shown in the table, the Addendum Project would have the same or lower daily volumes at 15 of the 20 study segments. Five segments are forecast to have a negligible increase in 100 additional vehicle trips per day with the Addendum Project. However, collectively across all 20 segments, taking into account those with reduced, increased and no change in forecast daily volumes, the Addendum Project would have slightly lower segment volumes in total compared with the Addendum project. Therefore, it can be concluded that the Addendum Project would not result in any new or more severe significant transportation impacts on study segments than those of the PLAN Hermosa EIR.

Table 3 presents AM and PM peak hour intersection turning movement volumes for the Addendum Project compared with the PLAN Hermosa EIR. As shown in the table, the Addendum Project would have the same or lower volumes at 11 of 13 study intersections during the AM peak hour, and 9 of 13 during the PM peak hour. Total turning movements across all 13 study intersections would be 50 lower in the AM peak hour with the Addendum Project, and a negligible 10 higher in the PM peak hour across all 13 study intersections. During the PM peak hour, no turning movements would increase more than a negligible 10 hourly trips. Therefore, it can be concluded that the Addendum Project would not result in any new or more severe significant transportation impacts on study intersections than those of the PLAN Hermosa EIR.

TABLE 2. ADDENDUM PROJECT & PLAN HERMOSA EIR SEGMENT VOLUME COMPARISON

ID	Segment	Location	PLAN Hermosa EIR 2040 Forecast Daily Volumes	Addendum Project Housing Element 2040 Forecast Daily Volumes	Change in Forecast Daily Volumes Addendum Project
1	Hermosa Ave	27th St to 22nd St	9,600	9,600	0
2	Hermosa Ave	22nd St to 16th St	9,200	9,200	0
3	Hermosa Ave	16th St to 8th St	12,100	12,100	0
4	Hermosa Ave	8th St to Herondo St	10,300	10,200	-100
5	Valley Dr	Gould Ave to Pier Ave	4,700	4,700	0
6	Valley Dr	Pier Ave to 8th St	6,200	6,200	0
7	Ardmore Ave	16th St to 11th St	4,000	4,000	0
8	Ardmore Ave	8th St to 2nd St	2,900	2,900	0
9	Pacific Coast Hwy	Artesia Blvd to Aviation Blvd	37,600	37,700	100
10	Pacific Coast Hwy	Aviation Blvd to 2nd St	40,200	40,100	-100
11	Prospect Ave	Artesia Blvd to Aviation Blvd	7,100	7,100	0
12	Prospect Ave	Aviation Blvd to 2nd St	13,400	13,500	100
13	Artesia Blvd	Pacific Coast Hwy to Prospect Ave	26,600	26,700	100
14	Aviation Blvd	Pacific Coast Hwy to Prospect Ave	20,700	20,800	100
15	Pier Ave	Hermosa Ave to Valley Dr	12,400	12,400	0
16	Pier Ave	Ardmore Ave to Pacific Coast Hwy	13,500	13,400	-100
17	Gould Ave	Ardmore Ave to Pacific Coast Hwy	11,200	11,000	-200
18	8th St	Hermosa Ave to Valley Dr	2,500	2,400	-100
19	8th St	Pacific Coast Hwy to Prospect Ave	200	200	0
20	Herondo St	Hermosa Ave to Valley Dr	10,100	10,200	100
Total			**254,510**	**254,410**	**-100**

TABLE 3. ADDENDUM PROJECT & PLAN HERMOSA EIR INTERSECTION TURNING MOVEMENT VOLUME COMPARISON

Intersection	PLAN Hermosa EIR 2040 Forecast Total Intersection Turning Movement Volumes		Addendum Project Housing Element 2040 Forecast Total Intersection Turning Movement Volumes		Change in Forecast Intersection Turning Movement Volumes Addendum Project	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 - Hermosa Avenue & 13th Street	1,120	1,110	1,110	1,100	-10	-10
2 - Hermosa Avenue & Pier Avenue	1,310	1,350	1,300	1,360	-10	10
3 - Pacific Coast Highway & Artesia Boulevard	4,280	5,270	4,290	5,280	10	10
4 - Pacific Coast Highway & Aviation Boulevard	3,660	3,900	3,650	3,900	-10	0
5 - Pacific Coast Highway & Pier Avenue	2,960	3,470	2,970	3,480	10	10
6 - Pacific Coast Highway & 2nd Street	3,280	3,280	3,260	3,270	-20	-10
7 - Pacific Coast Highway & 16th Street	2,690	3,200	2,690	3,200	0	0
8 - Pacific Coast Highway & 21st Street	2,730	3,370	2,730	3,370	0	0
9 - Prospect Avenue & Artesia Boulevard	3,090	2,980	3,080	2,990	-10	10
10 - Prospect Avenue & Aviation Boulevard	2,990	3,120	2,990	3,120	0	0
11 - Prospect Avenue & Anita Street	2,980	2,900	2,970	2,890	-10	-10
12 - Manhattan Avenue & Greenwich Avenue/27th Stree	1,610	1,430	1,610	1,430	0	0
13 - Valley Drive & Gould Avenue	1,510	1,480	1,510	1,480	0	0
Total	**34,210**	**36,860**	**34,160**	**36,870**	**-50**	**10**