

# San Clemente

ARTERIAL AND MOBILITY STUDY

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CITY OF SAN CLEMENTE

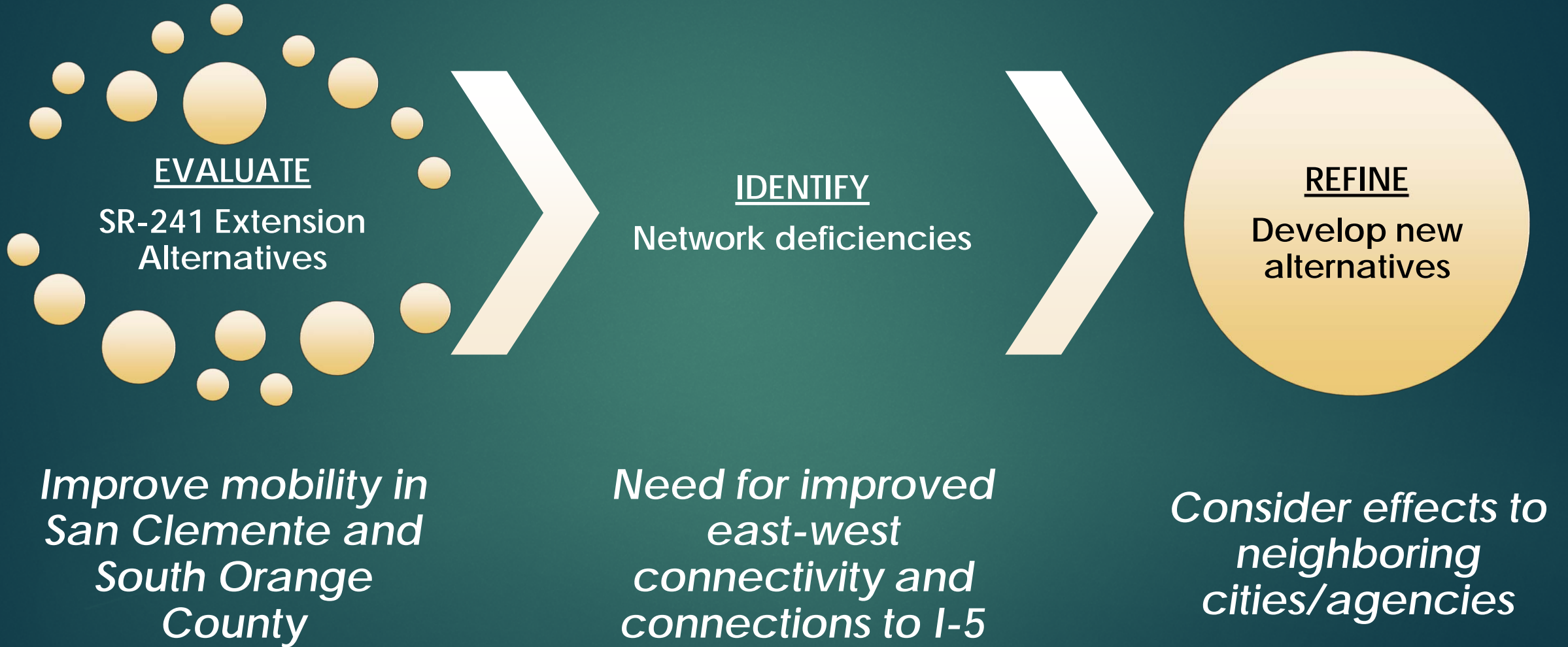
IBI GROUP

NOVEMBER 13, 2019

# Overview

- Background
- Study Area
- Scenarios
- Results
- Evaluation
- Recommendation
- Next Steps

# Background

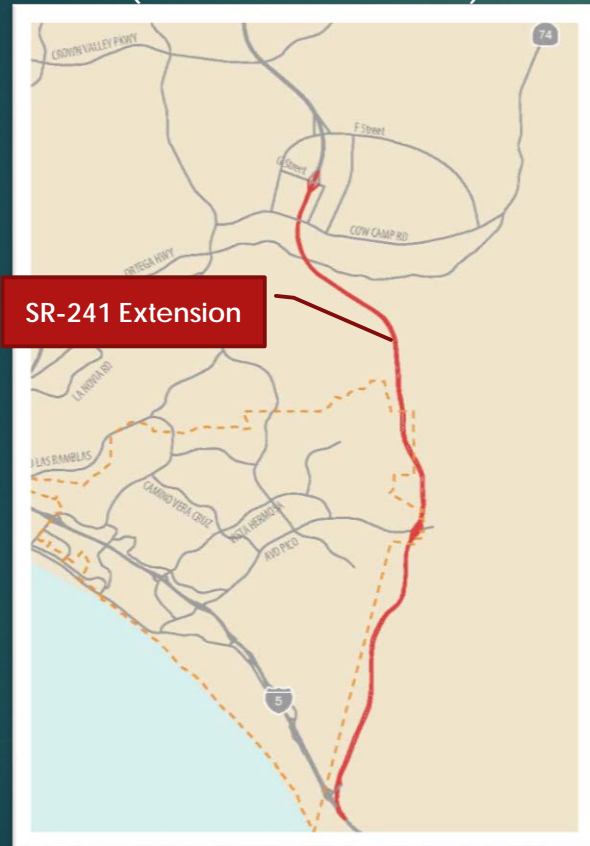


# Study Area Roadways



# Previous Analysis Scenarios

**2040 GREEN**  
(NO LONGER CONSIDERED)



**Package 2**

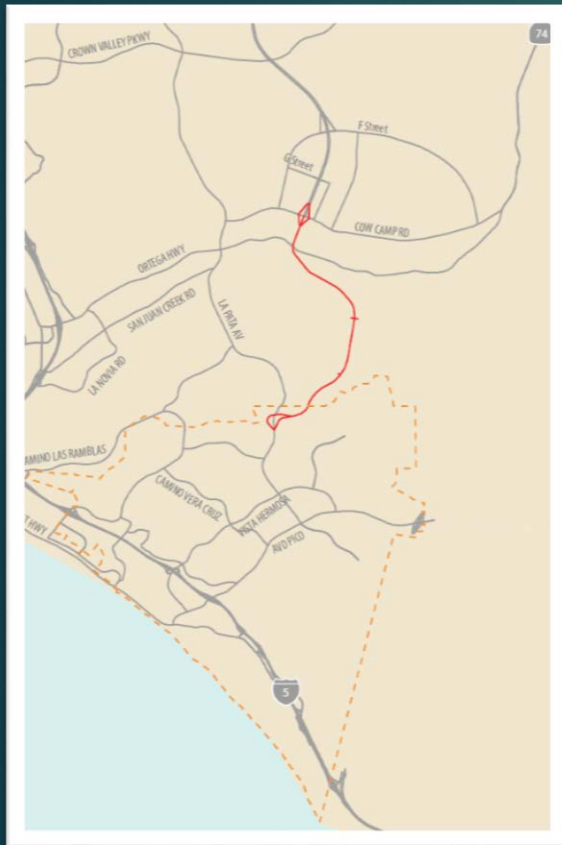


**Package 3**

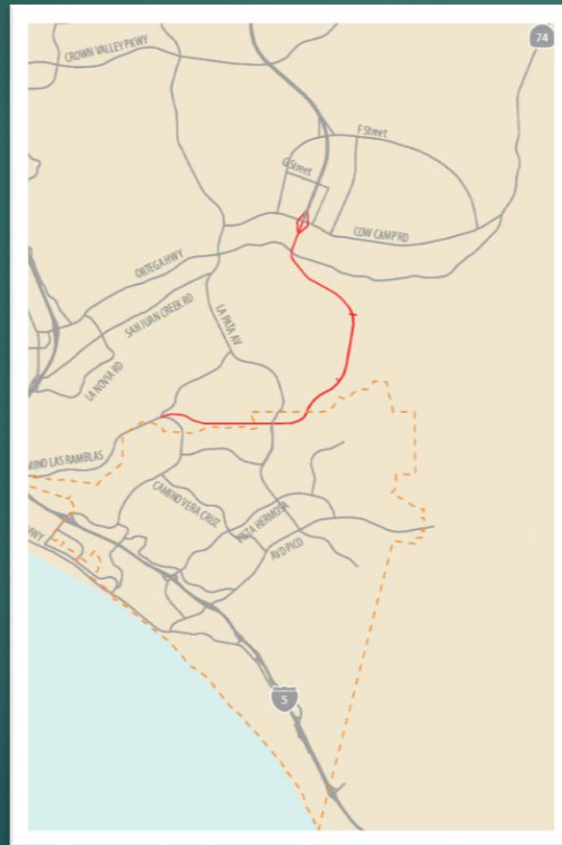


# ALT 22 Scenarios

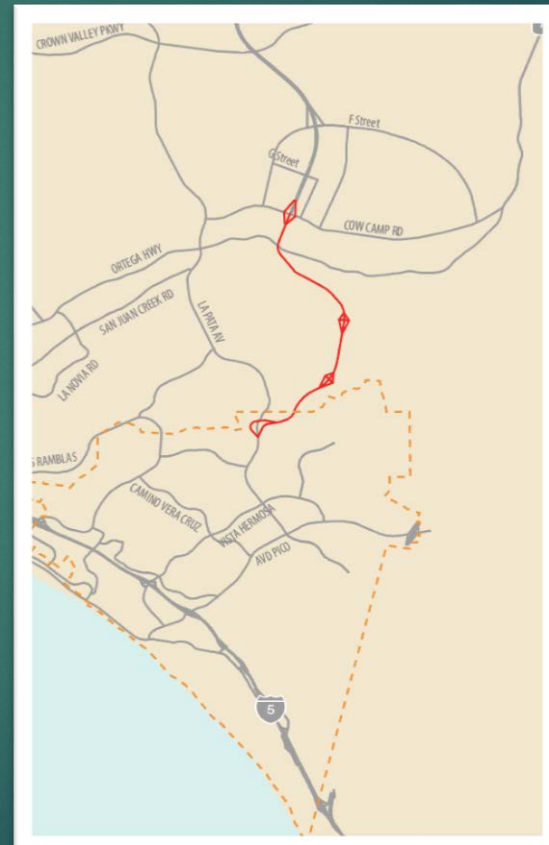
ALT 22-A



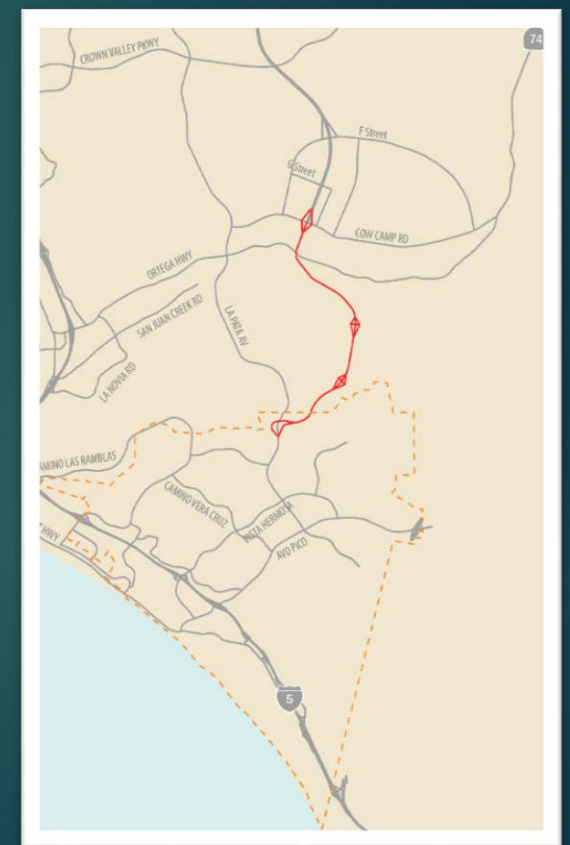
ALT 22-C



ALT 22-D



ALT 22-E



# Background Info - Scenario Development

## ▶ ALT 22-A

- ▶ OCTA LRTP Preferred Plan buildout without SR-241 Extension
- ▶ Los Patrones Parkway extended from Cow Camp Road to Avenida La Pata
- ▶ No connection to Ortega Highway

## ▶ ALT 22-C

- ▶ OCTA LRTP Preferred Plan buildout without SR-241 Extension
- ▶ Los Patrones Parkway extended from Cow Camp Road to Camino Las Ramblas
- ▶ No connection to Ortega Highway
- ▶ No connection to Avenida La Pata

## • ALT 22-D

- [Same as ALT 22-A]
- Two (2) on-/off-ramps within Rancho Mission Viejo PA5

## • ALT 22-E

- [Same as ALT 22-A]
- Two (2) on-/off-ramps within Rancho Mission Viejo PA5
- Does not include extension of San Juan Creek Rd to Avenida La Pata
- Does not include extension of Camino Las Ramblas to Avenida La Pata

### OCTA LRTP Preferred Plan Highlights\*

- Ortega Hwy Widening
- Rancho Mission Viejo (RMV) Roads
- Crown Valley Parkway Extension
- Las Ramblas and San Juan Creek extended per MPAH
- I-5 HOV extension between San Juan Creek to Pico
- I-5 HOV extension between Pico to county limit
- Ortega Interchange Project

\*Not an exhaustive list



# Analysis Summary – Study Area

SCENARIO	VMT	VHT	VHD
(Do Nothing) Package 4	3,412,847	88,090	17,959
2040 NP	3,759,082	86,764	7,867
<i>2040 GREEN</i> (No Longer Considered)	3,806,399	86,758	7,433
Package 2	3,738,331	86,248	7,628
Package 3	3,747,520	86,303	7,772
ALT 22-A	3,799,363	87,275	7,196
ALT 22-C	3,800,693	87,619	7,506
ALT 22-D	3,798,058	87,259	7,101
ALT 22-E	3,795,239	87,472	7,613



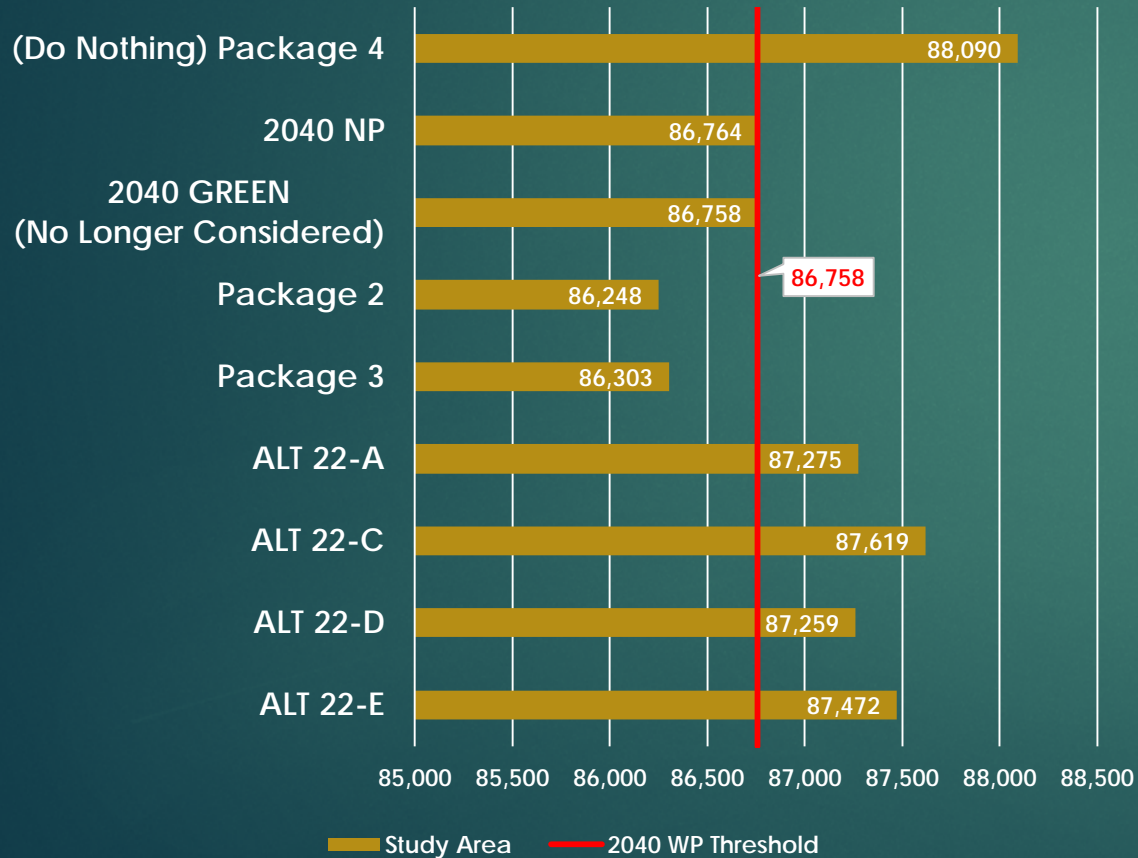
# Analysis Summary - VMT

## VMT (Daily)

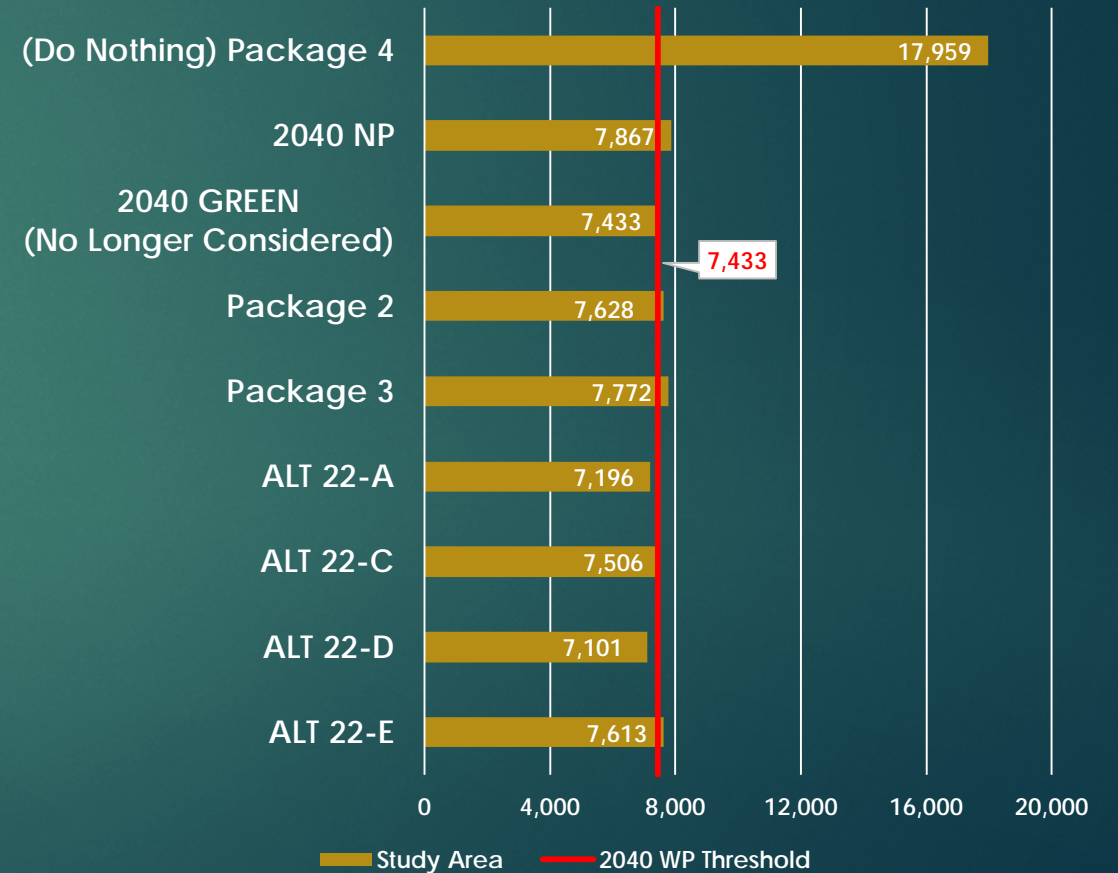


# Analysis Summary – VHT / VHD

## VHT (Daily)



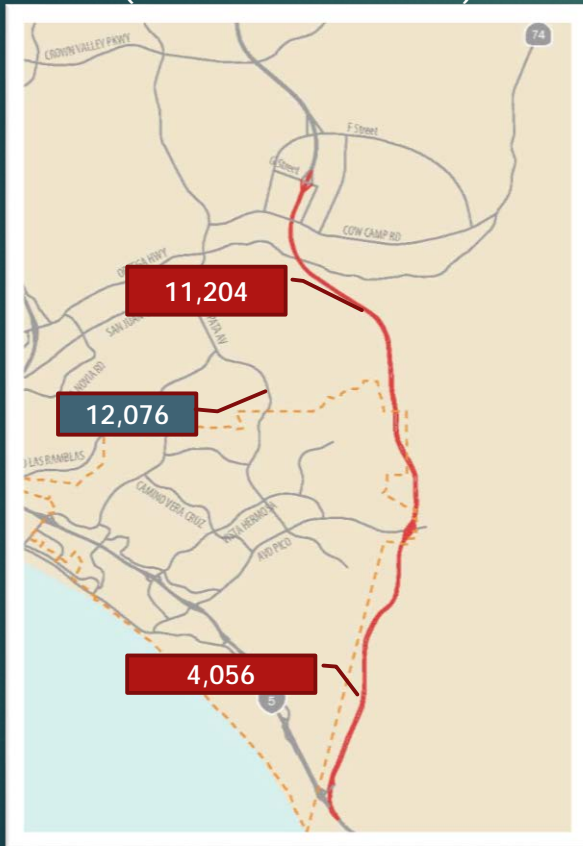
## VHD (Daily)



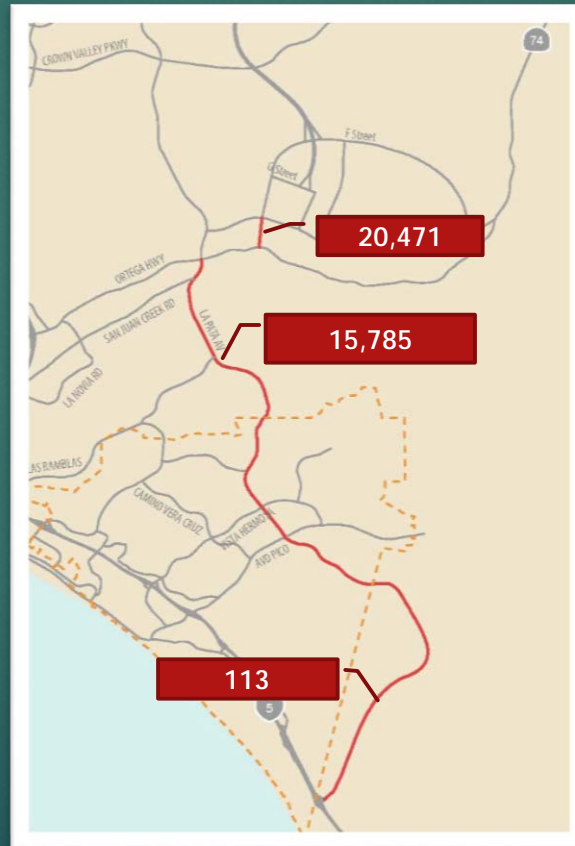
# Volume Comparison

(Forecasted Travel Demand on Extensions)

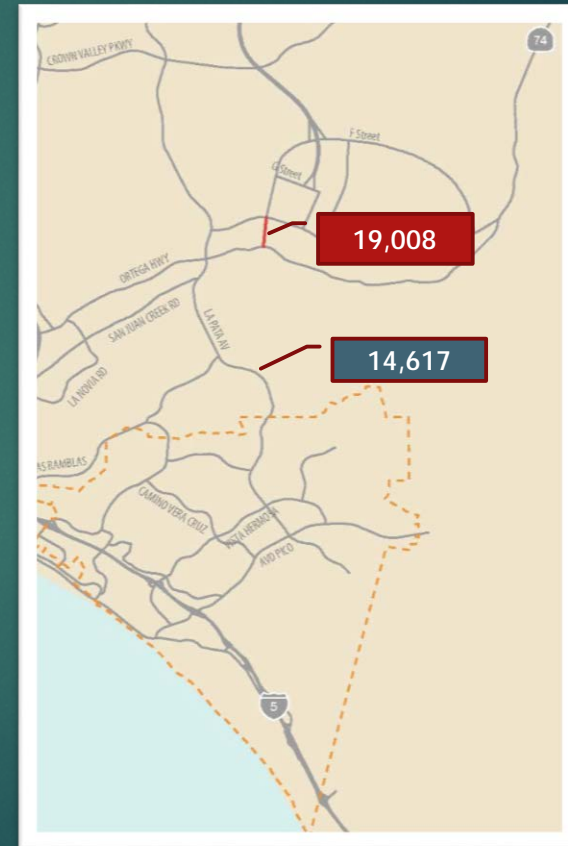
2040 GREEN  
(NO LONGER CONSIDERED)



Package 2

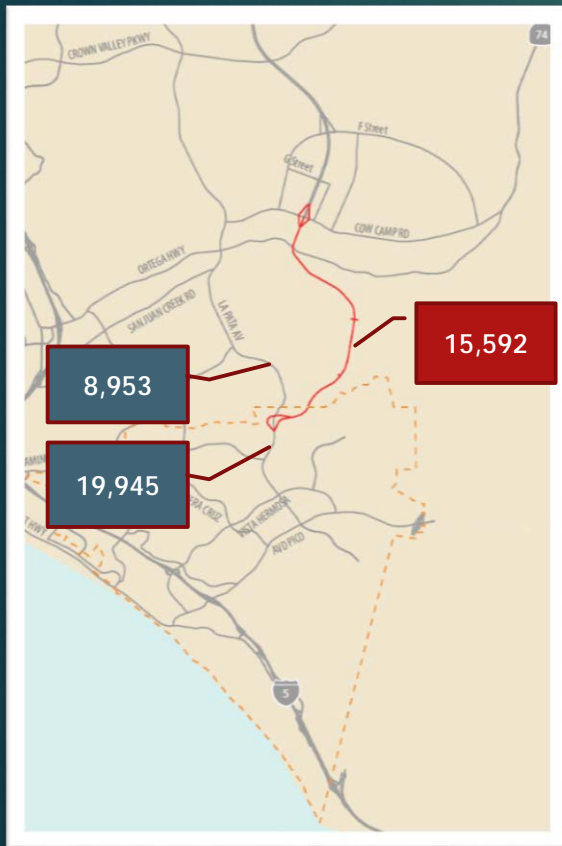


Package 3

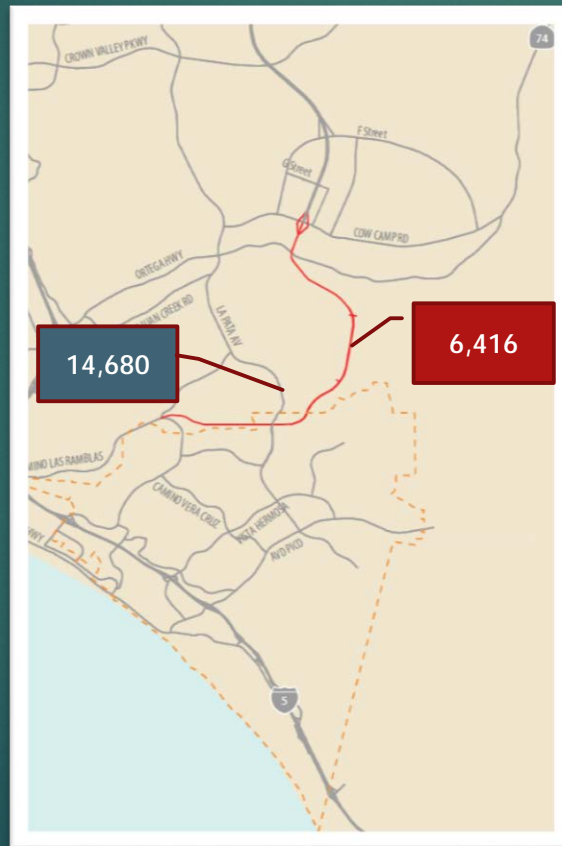


# ALT 22 Scenarios

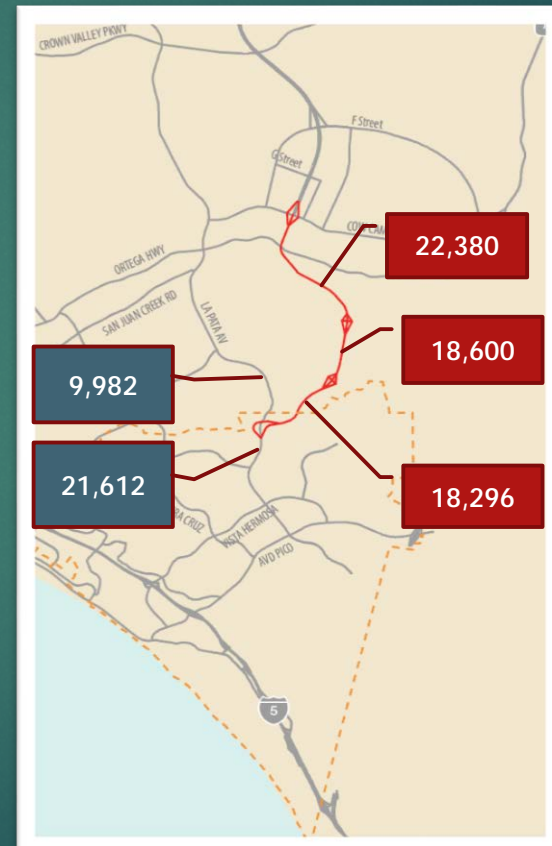
ALT 22-A



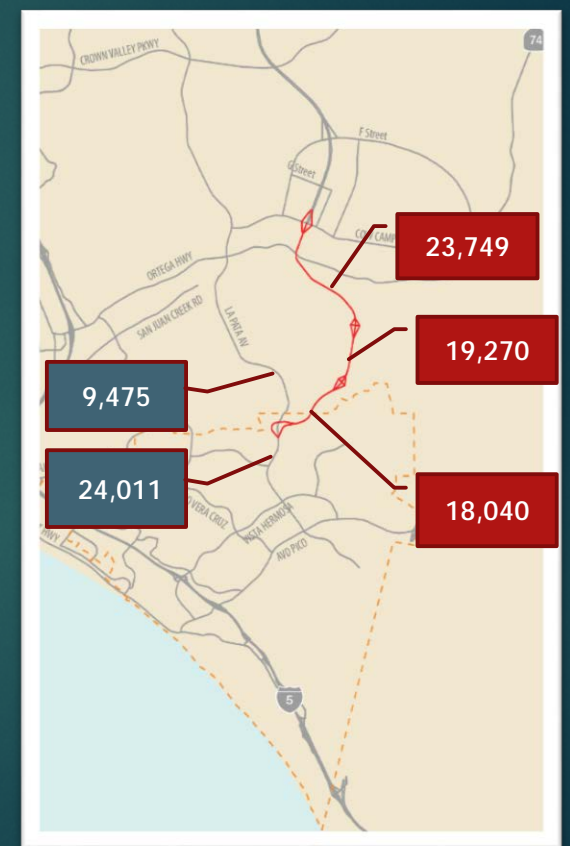
ALT 22-C



ALT 22-D

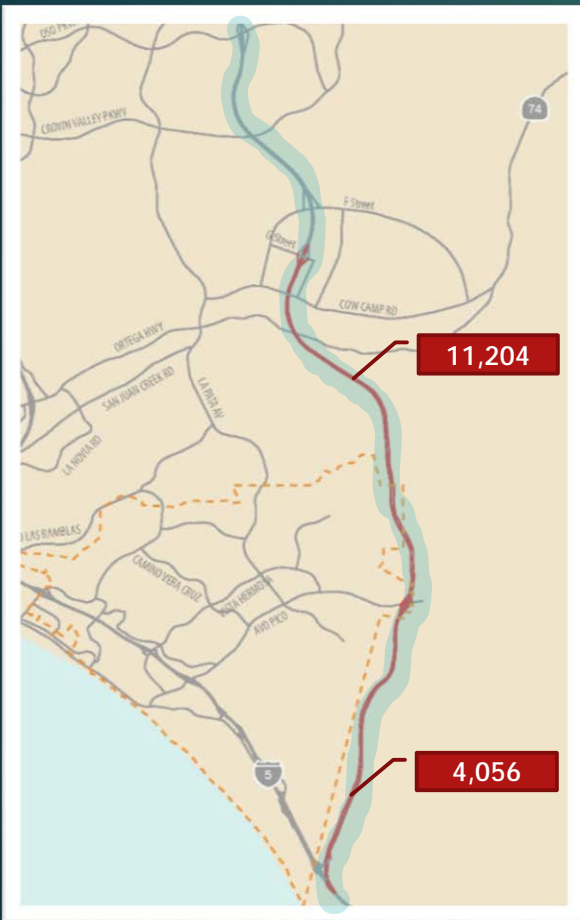


ALT 22-E

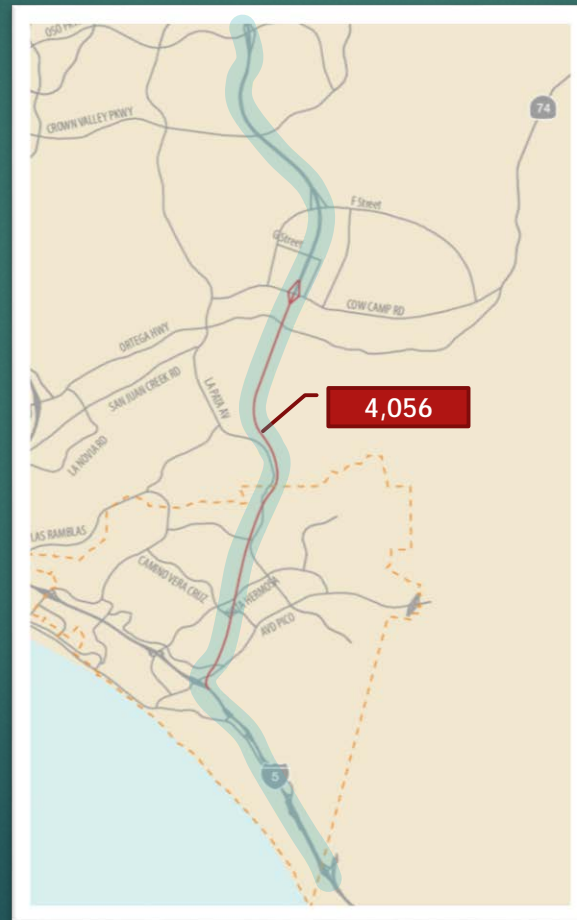


# Alternative 14 (I-5 Connection near Pico)

2040 GREEN



2040 ALT 14



## ▶ Assumptions:

- ▶ Cow Camp to I-5 (s/o Pico)
- ▶ No intermediate connections
- ▶ Volume = 4,056
- ▶ Length = 6.80 mi
- ▶ Speed = FFS = 65 mph
- ▶ Travel Time = Length / FFS
  - ▶ Oso to Cow Camp: 3.1 minutes
  - ▶ Cow Camp to I-5: 6.3 minutes
  - ▶ I-5 from Pico to County Line:
    - ▶ AM-NB: 2.7 minutes
    - ▶ AM-SB: 2.8 minutes
    - ▶ PM-NB: 2.7 minutes
    - ▶ PM-SB: 2.9 minutes

# Travel Time Comparison (Oso Parkway to County Line)

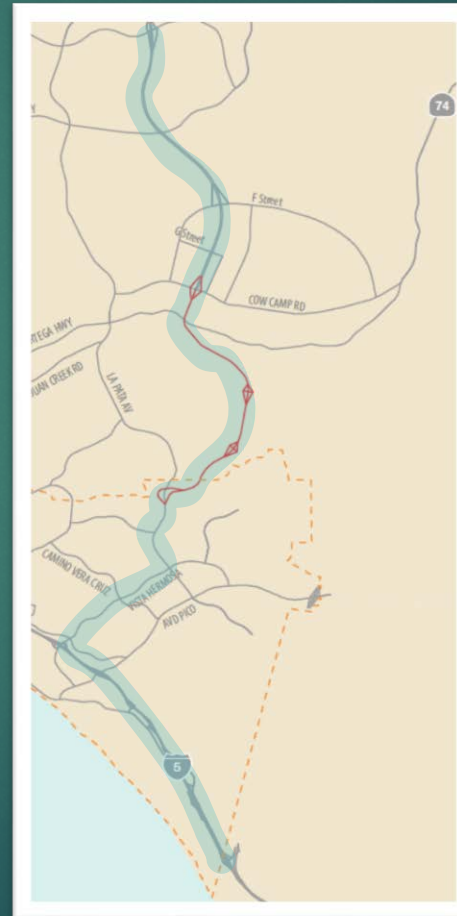
ALT 22-A



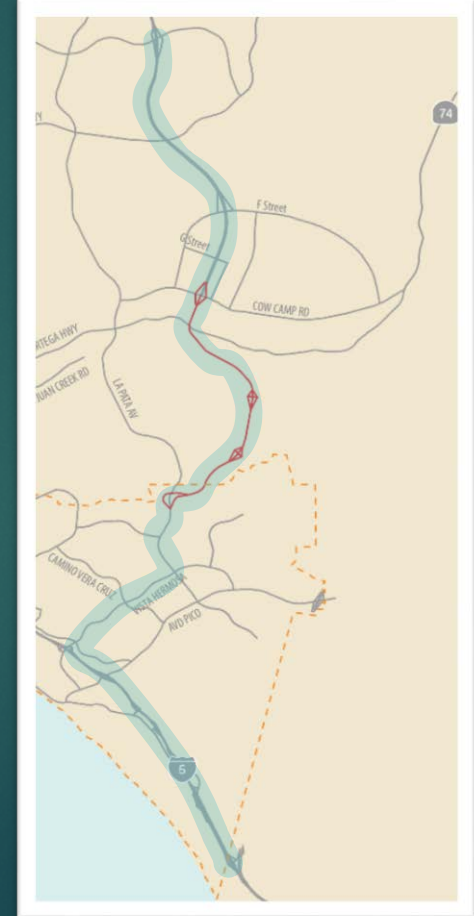
ALT 22-C



ALT 22-D



ALT 22-E



# Travel Time Comparison

## (Oso Parkway to County Line)

### ▶ AM

DIRECTION	ALT 22-A	ALT 22-C	ALT 22-D	ALT 22-E
County Line to Oso (NB)	22.00	25.30	21.83	22.60
Oso to County Line (SB)	22.13	25.25	21.84	22.14

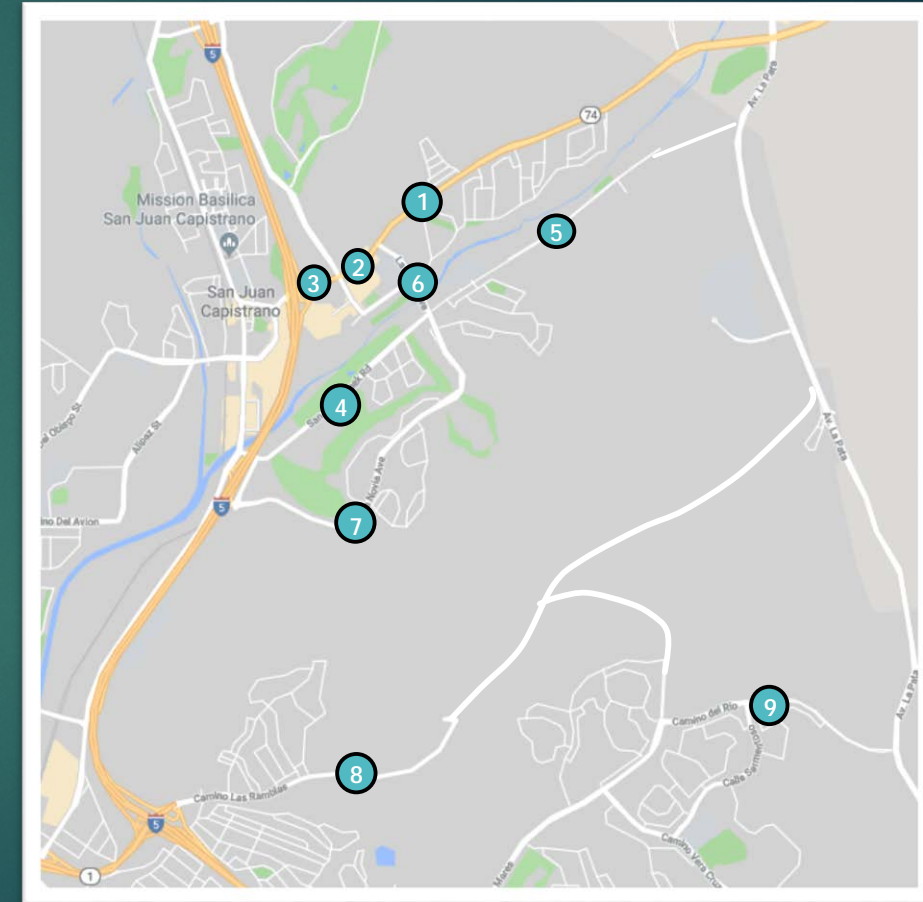
### ▶ PM

DIRECTION	ALT 22-A	ALT 22-C	ALT 22-D	ALT 22-E
County Line to Oso (NB)	21.30	24.83	21.60	21.78
Oso to County Line (SB)	22.05	26.27	21.80	22.07

# ADT – San Juan Capistrano

SEGMENT	FROM	TO	2040 GREEN	ALT 22-A	ALT 22-C	ALT 22-D	ALT 22-E
1. Ortega Hwy	La Pata	La Novia	↑	↓	↓	↓	↑
2. Ortega Hwy	La Novia	Rancho Viejo	↑	↓	↓	↓	↓
3. Ortega Hwy	Rancho Viejo	I-5 NB Ramps	↑	↓	↓	↓	↓
4. San Juan Creek	Camino Capistrano	La Novia	↑	↓	↓	↓	↓
5. San Juan Creek	La Novia	La Pata	↑	↑	↓	↑	↓
6. La Novia	Ortega	San Juan Creek	↓	↑	↑	↑	↑
7. La Novia	San Juan Creek	I-5 NB Ramps	↓	↑	↑	↑	↑
8. Las Ramblas	Via California	Los Mares	↓	↓	↑	↑	↑
9. Del Rio	Los Mares	La Pata	↓	↑	↑	↓	↑

VOLUME REDUCTION.
VOLUME INCREASE < 100.
VOLUME INCREASE 100 – 500.
VOLUME INCREASE > 500.





# ADT – San Juan Capistrano

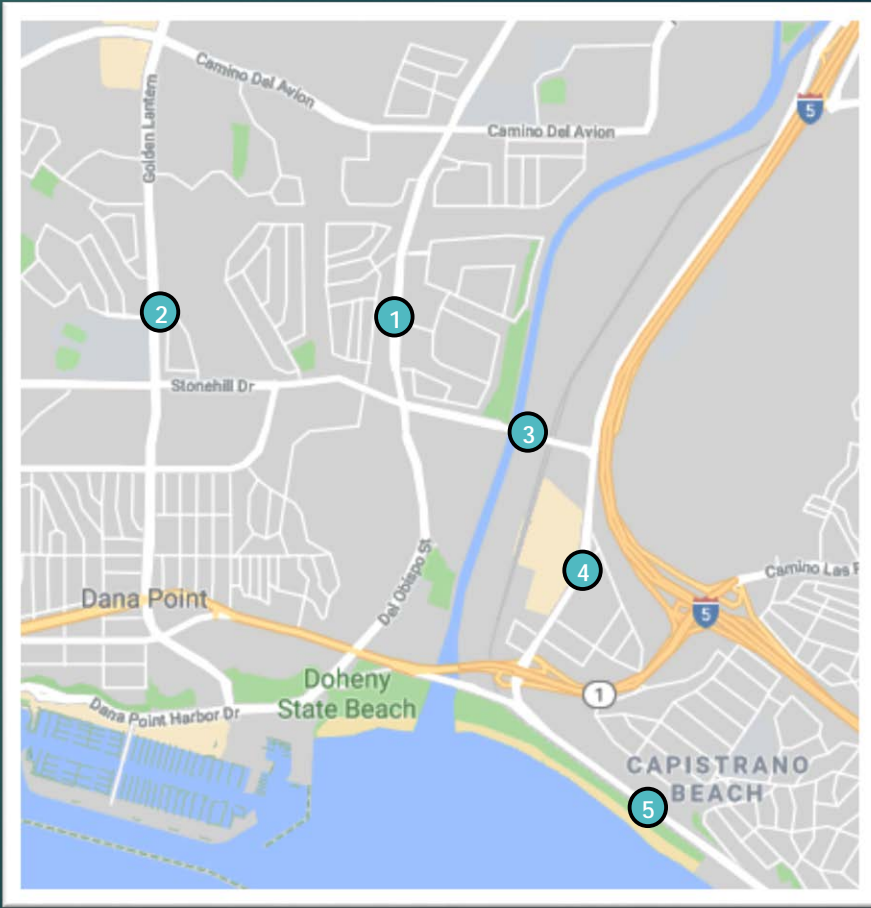
SEGMENT	FROM	TO	DIR	2040 NP	2040 GREEN	DELTA	ALT 22-A	DELTA	ALT 22-C	DELTA	ALT 22-D	DELTA	ALT 22-E	DELTA
1. Ortega Hwy	La Pata	La Novia	EB / WB	40,972	42,726	1,754	37,913	-3,059	39,314	-1,658	35,322	-5,650	41,235	263
2. Ortega Hwy	La Novia	Rancho Viejo	EB / WB	51,663	53,402	1,739	49,592	-2,071	50,236	-1,427	48,024	-3,639	48,863	-2,800
3. Ortega Hwy	Rancho Viejo	I-5 NB Ramps	EB / WB	51,511	53,349	1,838	49,744	-1,767	50,390	-1,121	48,325	-3,186	50,368	-1,143
4. San Juan Creek	Camino Capistrano	La Novia	EB / WB	15,897	16,162	265	15,772	-125	15,542	-355	15,259	-638	13,396	-2,501
5. San Juan Creek	La Novia	La Pata	EB / WB	15,337	15,492	155	16,204	867	15,022	-315	16,789	1,452	11,359	-3,978
6. La Novia	Ortega	San Juan Creek	NB / SB	14,493	14,444	-48	15,297	804	14,585	92	16,334	1,841	17,164	2,671
7. La Novia	San Juan Creek	I-5 NB Ramps	NB / SB	5,967	5,954	-13	6,025	58	6,067	100	5,991	24	6,283	316
8. Las Ramblas	Via California	Los Mares	EB / WB	16,032	15,735	-297	16,002	-30	16,435	403	16,463	431	16,705	673
9. Del Rio	Los Mares	La Pata	EB / WB	7,501	7,190	-311	7,511	10	7,550	49	7,473	-28	9,754	2,253

VOLUME REDUCTION. VOLUME INCREASE < 100. VOLUME INCREASE 100 – 500. VOLUME INCREASE > 500.

# ADT – Dana Point

SEGMENT	FROM	TO	2040 GREEN	ALT 22-A	ALT 22-C	ALT 22-D	ALT 22-E
1. Del Obispo	Camino Del Avion	Stonehill	↓	↓	↓	↓	↓
2. Golden Lantern	Camino Del Avion	Stonehill	↓	↓	↓	↓	↑
3. Stonehill	Del Obispo	Camino Capistrano	↑	↑	↓	↓	↓
4. Camino Capistrano	Stonehill	Coast Hwy	↓	↓	↑	↓	↓
5. Coast Hwy	Camino Capistrano	Palisades	↓	↓	↓	↑	↑

VOLUME REDUCTION.
VOLUME INCREASE < 100.
VOLUME INCREASE 100 – 500.
VOLUME INCREASE > 500.



# ADT – Dana Point

SEGMENT	FROM	TO	DIR	2040 NP	2040 GREEN	DELTA	ALT 22-A	DELTA	ALT 22-C	DELTA	ALT 22-D	DELTA	ALT 22-E	DELTA
Del Obispo	Camino Del Avion	Stonehill	NB / SB	6,440	6,391	-49	6,394	-46	6,401	-39	6,398	-42	6,421	-19
Golden Lantern	Camino Del Avion	Stonehill	NB / SB	19,963	19,473	-490	19,774	-189	19,959	-4	19,928	-35	20,063	100
Stonehill	Del Obispo	Camino Capistrano	EB / WB	13,977	14,343	366	14,101	124	13,954	-23	13,701	-276	13,362	-615
Camino Capistrano	Stonehill	Coast Hwy	NB / SB	9,945	8,610	-1,335	9,738	-207	9,966	21	9,558	-387	9,584	-361
Coast Hwy	Camino Capistrano	Palisades	NB / SB	10,493	10,133	-360	10,282	-211	10,387	-106	11,304	811	11,412	919
<b>VOLUME REDUCTION.</b> <b>VOLUME INCREASE &lt; 100.</b> <b>VOLUME INCREASE 100 – 500.</b> <b>VOLUME INCREASE &gt; 500.</b>														

# Scenario Evaluation

METRIC	ALT 22-A	ALT 22-C	ALT 22-D	ALT 22-E
VMT	3,799,363	3,800,693	3,798,058	3,795,239
VHT	87,275	87,619	87,259	87,472
VHD	7,196	7,506	7,101	7,613
ADT	15,592	6,416	23,380	23,749

# Recommendation

## ▶ ALT 22-D

- ▶ **VMT reduced** from previous scenarios and comparable to ALT 22-E
- ▶ **VHT less** than that in ALT 22-E
- ▶ **Lowest VHD increase** from 2040 NP between SR-241 Alignments and ALT 22 scenarios
- ▶ **Lowest travel time** of ALT 22 scenarios from Oso Parkway to County Line
- ▶ **Larger volume serviced (ADT)** than any direct connection from Oso Parkway to I-5 and is comparable to ALT 22-E

# Next Steps – Public Comment Period

- ▶ November 8, 2019 – December 9, 2019 @ (5:00pm)
- ▶ **Submit Comments**
  - ▶ **In Person:**
    - ▶ Public meetings on November 20, 2019 and December 4, 2019
  - ▶ **Via e-mail:**
    - ▶ [scoping@SCTRE.org](mailto:scoping@SCTRE.org)
  - ▶ **By mail:**
    - Caltrans District 12
    - 1750 E 4<sup>th</sup> Street
    - Santa Ana, CA 92705
    - Attn: Env/SCTRE Scoping

# Next Steps – Public Comment Period

- ▶ **Wednesday, November 20, 2019 (5:00pm – 8:00pm)**

Norman P. Murray Community and Senior Center

24932 Veterans Way

Mission Viejo, CA 92692

\*Nearby transit: OCTA Routes 86 / 182

- ▶ **Wednesday, December 4, 2019 (5:00pm – 8:00pm)**

The Ocean Institute

24200 Dana Point Harbor Drive

Dana Point, CA 92629

\*Nearby transit: OCTA Routes 1 / 90

# Background Info – Previous Scenarios

## ▶ Package 1

- ▶ 2040 No Project
  - ▶ OCTA LRTP Preferred Plan buildout without SR-241 Extension
- ▶ 2040 With Project
  - ▶ OCTA LRTP Preferred Plan buildout with SR-241 Extension

## ▶ Package 2

- ▶ 2040 Projections
- ▶ OCTA LRTP Preferred Plan buildout
- ▶ No SR-241 extension
- ▶ Los Patrones (F Street) extended from Cow Camp to Ortega Hwy
- ▶ La Pata extended to Cristianitos Rd as primary roadway (4 lanes)
- ▶ La Pata widened to major roadway (6 lanes) b/w Ortega Hwy and Ave Pico

## • Package 3

- 2040 Projections
- OCTA LRTP Preferred Plan
- No SR-241
- Los Patrones (F Street) extended from Cow Camp to Ortega Hwy

## • Package 4

- 2040 Projections/Demographics
- No OCTA LRTP Preferred Plan
- “Do nothing” scenario
- 2012 Network Configuration (baseline)

### OCTA LRTP Preferred Plan Highlights\*

- Ortega Hwy Widening
- Rancho Mission Viejo (RMV) Roads
- Crown Valley Parkway Extension
- Las Ramblas and San Juan Creek extended per MPAH
- I-5 HOV extension between San Juan Creek to Pico
- I-5 HOV extension between Pico to county limit
- Ortega Interchange Project

\*Not an exhaustive list

