

TECHNICAL MEMORANDUM

Date: May 7, 2020

To: File

From: Tom Gaul, Fehr & Peers

Subject: *IBEC Contribution to Caltrans' I-405 ATM/CM Project*

LA2018-3002

I-405 IMPACTS AND MITIGATION

The Draft EIR for the IBEC Project found that the IBEC Project would have direct or cumulative impacts on nine freeway analysis segments along the I-405.

The mitigation measure that has been identified in consultation with Caltrans District 7 staff is to contribute a fair share towards Caltrans' I-405 Active Traffic Management (ATM)/Corridor Management (CM) project. This memorandum describes the methodology used to calculate the IBEC Project's fair share towards the ATM/CM project.

METHODOLOGY FOR DETERMINING FAIR SHARE

Portion of ATM/CM Project Length Impacted by IBEC Project

The segments impacted by the IBEC Project total to 2.77 directional miles of the freeway. The Caltrans ATM/CM project is 6.75 miles in length (PM 19.2 to PM 25.95), or 13.5 directional miles. The impacted segments therefore constitute 20.5% of the ATM/CM Project length.

IBEC Project Share of Traffic Growth at Impacted Segments

Traffic volume projections from the IBEC DEIR were used to determine the IBEC Project's fair share. The data was pulled for each impacted segment for the Daytime Event AM Peak, the Daytime Event PM Peak, and the Weekday Pre-Event periods. This data and the resultant IBEC Project share of traffic volume growth is summarized in Table 1. Detailed traffic volume projections by location are included in the attachment.

Proposed Annualization of Project Impacts

The IBEC Project will only generate its impacts on days when there are larger events occurring at the Project, not continuously throughout the year. Therefore, the Project contribution is proposed to be annualized as shown in Table 2.

Table 1 – IBEC Project Share of Traffic Volume Growth on a Single Event Day Basis

Analysis Hour	# of Impacted Segments	Existing Volume	Cumulative (2030) Volume	Cumulative (2030) Plus Project Volume	IBEC Project Only Volume	IBEC Project % of Growth
Daytime Event AM (summed across all impacted segments)	4	57,247	62,010	63,346	1,336	21.9%
Daytime Event PM (summed across all impacted segments)	4	57,044	64,575	65,389	814	9.8%
Weekday Pre-Event (summed across all impacted segments)	5	87,488	95,144	99,620	4,476	36.9%
Total		201,780	221,730	228,356	6,626	24.9%

Table 2 –Annualization of IBEC Project Share

Analysis Hour	IBEC Project % of Growth	# of Events per Year	% of Annual Days	Project % of Growth Multiplied by % of Annual Days
Daytime Event AM (summed across all impacted segments)	21.9%	100 [a]	27.4%	6.0%
Daytime Event PM (summed across all impacted segments)	9.8%	55 [b]	15.1%	1.5%
Weekday Pre-Event (summed across all impacted segments)	36.9%	72 [c]	19.7%	7.3%
Weighted Average	24.9%			5.4%
<p>Notes:</p> <p>a. 100 corporate/community events (2,000 maximum attendance) per year, conservatively assuming they all begin during the AM peak period.</p> <p>b. 20 family shows (8,500 maximum attendance) and 35 other events (7,500 maximum attendance) per year, conservatively assuming they all end during the PM peak period.</p> <p>c. 41 regular season NBA basketball games (18,000 maximum attendance), 5 pre-season NBA basketball games (18,000 maximum attendance), 3 post-season basketball games (18,000 maximum attendance), 5 large concerts (18,500 maximum attendance), 8 medium concerts (14,500 maximum attendance), and 10 small concerts (9,500 maximum attendance) per year.</p>				

Fair Share Contribution

Fair Share Contribution Without Proposed Annualization of Project Impacts

Since the IBEC Project is impacting 20.5% of the directional project length for the ATM/CM Project, the IBEC fair share responsibility without consideration of annualization of the Project's impacts would be 5.1% ($20.5\% \times 24.9\%$ from Table 1). The capital outlay cost for the I-405 ATM/CM Project is \$29,900,000. The IBEC Project fair share contribution to the ATM/CM Project cost would therefore be \$1,524,900 (5.1% of \$29,900,000) without consideration of annualization of the Project's impacts.

Fair Share Contribution With Proposed Annualization of Project Impacts

Since the IBEC Project is impacting 20.5% of the directional project length for the ATM/CM Project, the IBEC fair share responsibility considering annualization of the Project's impacts would be 1.1% ($20.5\% \times 5.4\%$ from Table 2). The capital outlay cost for the I-405 ATM/CM Project is \$29,900,000. The IBEC Project fair share contribution to the ATM/CM Project cost considering annualization of the Project's impacts would therefore be \$328,900 (1.1% of \$29,900,000).

ATTACHMENT

ATTACHMENT
IBEC PROJECT CONTRIBUTION TO CUMULATIVE TRAFFIC GROWTH AT I-405 IMPACTED SEGMENTS

I-405 Impacted Segment Volumes - Daytime Event AM Peak Hour					
Segment Name	Direction	Existing Volume	Cumulative (2030) Volume	Cumulative (2030) Plus Project Volume	Project Only Volumes
Off-Ramp to Imperial Hwy	NB	4,715	5,586	5,764	178
	SB	8,102	8,443	8,452	9
	Subtotal	12,817	14,029	14,216	187
La Tijera Blvd On-Ramp to Florence Ave Off-Ramp	SB	9,139	9,623	9,917	294
	NB	5,265	5,929	5,940	11
	Subtotal	14,404	15,552	15,857	305
Florence Ave Off-Ramp to La Cienega Blvd On-Ramp	SB	8,407	8,501	8,781	280
	NB	5,265	5,929	5,940	11
	Subtotal	13,672	14,430	14,721	291
La Cienega Blvd On-Ramp to C/D Off-Ramp	SB	12,016	13,160	13,704	544
	NB	4,339	4,839	4,848	9
	Subtotal	16,355	17,999	18,552	553
Total Volume across all impacted segments		57,247	62,010	63,346	1,336

I-405 Impacted Segment Volumes - Daytime Event PM Peak Hour					
Segment Name	Direction	Existing Volume	Cumulative (2030) Volume	Cumulative (2030) Plus Project Volume	Project Only Volumes
I-405 Mainline C/D On-Ramp	NB	8,858	9,546	9,876	330
	SB	12,000	13,287	13,305	18
	Subtotal	20,858	22,833	23,181	348
I-405 Mainline C/D On-Ramp	SB	5924	6820	6928	108
	NB	1766	2312	2325	13
	Subtotal	7690	9132	9253	121
La Cienega Blvd On-Ramp (n/o Imperial Hwy)	SB	6,006	6,905	7,044	139
	NB	8,610	10,026	10,061	35
	Subtotal	14,616	16,931	17,105	174
La Cienega Blvd s/o Imperial Hwy (On-Ramp)	SB	6,131	7,033	7,172	139
	NB	7,750	8,646	8,678	32
	Subtotal	13,881	15,679	15,850	171
Total Volume across all impacted segments		57,044	64,575	65,389	814

I-405 Impacted Segment Volumes - Weekday Pre-Event (Major Event)					
Segment Name	Direction	Existing Volume	Cumulative (2030) Volume	Cumulative (2030) Plus Project Volume	Project Only Volumes
La Tijera Blvd On-Ramp to Florence Ave Off-Ramp	SB	9,758	10,381	11,837	1,456
	NB	9,760	10,501	10,566	65
	Subtotal	19,518	20,882	22,403	1,521
Florence Ave Off-Ramp to La Cienega Blvd On-Ramp	SB	8,866	9,190	9,652	462
	NB	9,760	10,501	10,566	65
	Subtotal	18,626	19,691	20,218	527
La Cienega Blvd On-Ramp to C/D Off-Ramp	SB	12,323	13,508	14,340	832
	NB	8,631	9,215	9,274	59
	Subtotal	20,954	22,723	23,614	891
La Cienega Blvd On-Ramp (n/o Imperial Hwy)	SB	6,239	6,956	6,991	35
	NB	8,350	9,604	10,457	853
	Subtotal	14,589	16,560	17,448	888
La Cienega Blvd s/o Imperial Hwy (On-Ramp)	SB	6,327	7,046	7,081	35
	NB	7,475	8,243	8,857	614
	Subtotal	13,802	15,289	15,938	649
Total Volume across all impacted segments		87,488	95,144	99,620	4,476