

Appendix A

Traffic Analysis Memorandum



Memorandum

To: Kevin Ferrier, Terry A Hayes Assoc. **From:** Janet Harvey, Iteris
Date: February 2, 2011 **Job Number:** 16J09-2105
Re: Jordan Downs – Response to Comments

Iteris has completed a review of the traffic-related comments received on the Jordan Downs Draft EIR and has performed the necessary analyses to respond to the comments. This memorandum addresses the following comments:

- Additional cumulative (related) projects in the unincorporated Los Angeles County area.
- Additional analysis using County of Los Angeles methodology
- Analysis of the Alameda Street (E) at Tweedy Boulevard as signalized intersection
- Transit trip generation.

EIR comment 3-3 – Additional Related Projects

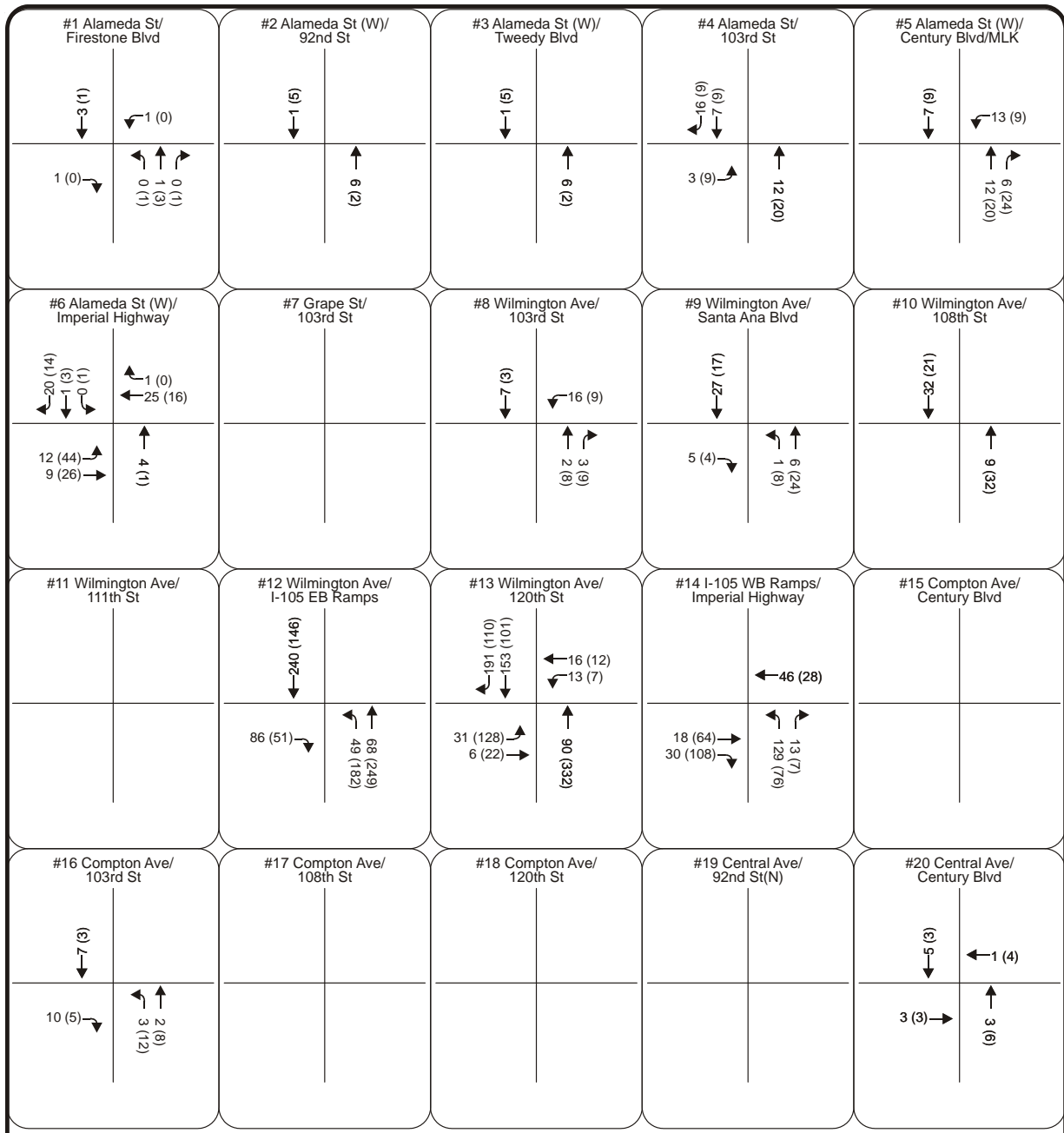
In February 2010, Iteris obtained, from the Los Angeles Department of Regional Planning, a Cumulative Project Report for all projects within the unincorporated County. Iteris inadvertently missed two (2) scrap metal recycling projects located within the Study Area. In December 2010, Los Angeles County Department of Public Works (DPW) staff also identified another County project not contained within the Cumulative Project Report, the Martin Luther King, Jr. Medical Center Campus Redevelopment EIR (MLK Hospital EIR).

Trip generation for the three (3) related projects is shown below in **Table 1**. Trip distribution for the two scrap metal recycling sites was determined in coordination with DPW staff, and the MLK Hospital EIR was used for the trip distribution of this project. The resulting related project trip assignment of these three projects are shown in **Figure 1**.

The MLK Hospital EIR study identified mitigation measures for their project-related impacts. However, since at this time, the MLK Hospital EIR is a draft EIR, and mitigation measures are not committed, the MLK Hospital EIR mitigation measures were not incorporated into the future conditions analysis. In addition, since the initial analysis was performed, the City of South Gate has installed a traffic signal at intersection #37, Alameda Street (E) and Tweedy Boulevard, so all future scenarios will consider this intersection to be signalized.

Table 1– Related Project Trip Generation

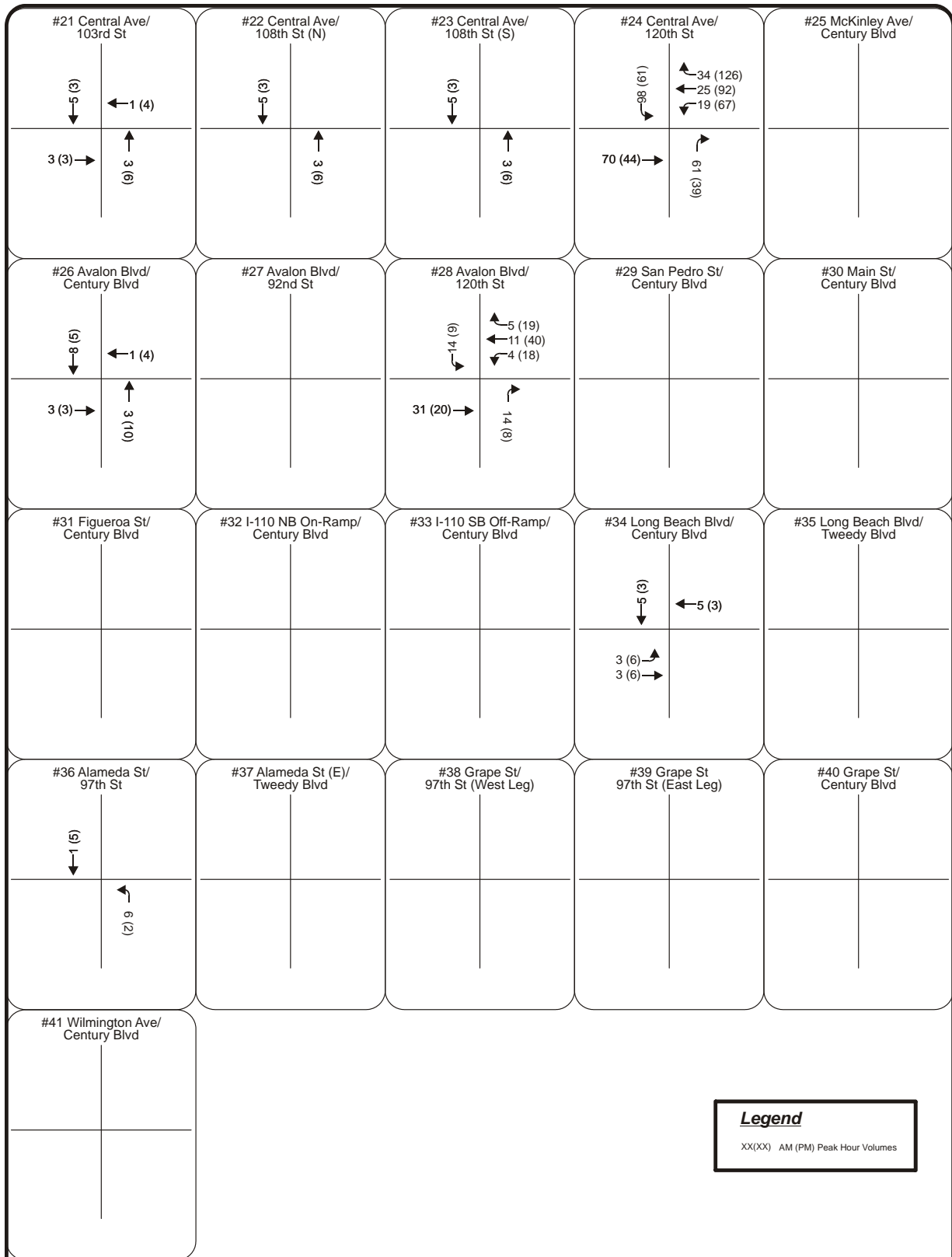
Project	Description / Location	Land Use Code	Land Use	Size		Jurisdiction	Daily Trips	WEEKDAY					
								AM peak Hour Trips			PM Peak Hour Trips		
								In	Out	Total	In	Out	Total
10	Expansion of existing 38-acre Martin Luther King Jr. Medical Center Campus at 12021 Wilmington Avenue in the unincorporated area of Willowbrook, County of Los Angeles, California	610	Hospital	1,291	KSF	County of Los Angeles	19,677	921	319	1,240	568	1,185	1,753
		720	Medical Office	300	KSF								
		210	Single Family	100	DU								
		820	Retail	80	KSF								
		710	General Office	150	KSF								
11	9113 South Alameda Street, Walnut Park, scrap metal recycling center	110	Light Industrial	33.395	KSF	County of Los Angeles	233	27	4	31	4	28	32
12	2241 East 89th Street, Walnut Park, scrap metal & CRC material recycling center	110	Light Industrial	41.857	KSF	County of Los Angeles	292	32	4	36	5	36	41
TOTAL							20,202	980	327	1,307	577	1,249	1,826
Note: DU – dwelling unit; KSF – 1,000 square feet. Sources: Institute of Transportation Engineers, <i>Trip Generation</i> , 8 th Edition; Martin Luther King, Jr. Medical Center Campus Redevelopment EIR; City of Los Angeles.													



Legend
 XX(XX) AM (PM) Peak Hour Volumes



FIGURE 1-A
Additional Cumulative Projects Peak Hour Volumes
Jordan Downs Specific Plan



Legend
 XX(XX) AM (PM) Peak Hour Volumes



FIGURE 1-B
Additional Cumulative Projects Peak Hour Volumes
Jordan Downs Specific Plan

City of Los Angeles Methodology

Existing Plus Ambient Growth Plus Related Projects Level of Service

All study intersections were re-evaluated under this scenario using the CMA - Circular Planning 212 methodology. Level of service analyses under the Existing Plus Ambient Growth Plus Related Projects condition were performed for both AM and PM peak hours and are summarized below in **Table 2**.

As shown, a total of four signalized study intersections are projected to operate at LOS E in the AM or PM peak hours, and one intersection is projected to operate at LOS F. The following study intersections are projected to operate at LOS E during the AM and/or PM peak hours:

- #1 Alameda Street and Firestone Boulevard (PM Peak Hour)
- #3 Alameda Street (W) and Tweedy Boulevard (AM and PM Peak Hours)
- #6 Alameda Street and Imperial Highway (AM Peak Hour)
- #14 I-105 WB Ramps and Imperial Highway (AM Peak Hour).

The following study intersection is projected to operate at LOS F:

- #12 Wilmington Avenue and I-105 EB Ramps (AM Peak Hour).

The EIR traffic study identified three intersections projected to operate at LOS E, and no intersections projected to operate at LOS F.

Table 2 – Existing Plus Ambient Growth Plus Related Projects Peak Hour LOS – (City of Los Angeles Guidelines)

#	Intersection	Jurisdiction	AM Peak Hour		PM Peak Hour	
			LOS	V/C	LOS	V/C
1	Alameda St/Firestone Blvd	County of LA/South Gate	D	0.825	E	0.920
2	Alameda St (W)/92nd St	County of LA	C	0.762	C	0.742
3	Alameda St (W)/Tweedy Blvd **	(future) City of LA	E	0.932	E	0.957
4	Alameda St/103rd St ⁺	City of LA/Lynwood	B	0.695	D	0.810
5	Alameda St (W)/Century Blvd/MLK	Lynwood	C	0.729	B	0.696
6	Alameda St (W)/Imperial Highway	County of LA/Lynwood	E	0.995	D	0.843
7	Grape St/103rd St ⁺	City of LA	A	0.422	A	0.380
8	Wilmington Ave/103rd St ⁺	City of LA	A	0.323	A	0.338
9	Wilmington Ave/Santa Ana Blvd ⁺	City of LA	A	0.328	A	0.385
10	Wilmington Ave/108th St ⁺	City of LA	A	0.475	A	0.470
11	Wilmington Ave/111th St ⁺	City of LA	A	0.412	A	0.431
12	Wilmington Ave/I-105 EB Ramps ⁺	City of LA/County of LA	F	1.057	D	0.808
13	Wilmington Ave/120th St	County of LA	B	0.678	C	0.772
14	I-105 WB Ramps/Imperial Highway ⁺	City of LA/County of LA	E	0.926	D	0.861
15	Compton Ave/Century Blvd ⁺	City of LA	A	0.275	A	0.331
16	Compton Ave/103rd St ⁺	City of LA	A	0.350	A	0.431
17	Compton Ave/108th St ⁺	City of LA	B	0.664	A	0.493
18	Compton Ave/120th St	County of LA	A	0.484	A	0.372
19	Central Ave/92nd St ⁺	City of LA	A	0.466	A	0.500
20	Central Ave/Century Blvd ⁺	City of LA	B	0.672	B	0.668
21	Central Ave/103rd St ⁺	City of LA	A	0.558	A	0.598
22	Central Ave/108th St (N) ⁺	City of LA	A	0.443	A	0.498
23	Central Ave/108th St (S) ⁺	City of LA	A	0.453	A	0.504
24	Central Ave/120th St ⁺	City of LA	A	0.553	B	0.619
25	McKinley Ave/Century Blvd ⁺	City of LA	A	0.256	A	0.249
26	Avalon Blvd/Century Blvd ⁺	City of LA	A	0.452	A	0.545
27	Avalon Blvd/92nd St ⁺	City of LA	A	0.351	A	0.373
28	Avalon Blvd/120th St ⁺	City of LA	A	0.423	A	0.491
29	San Pedro St/Century Blvd ⁺	City of LA	A	0.487	A	0.531
30	Main St/Century Blvd ⁺	City of LA	A	0.516	A	0.525
31	Figueroa St/Century Blvd ⁺	City of LA	C	0.704	A	0.544
32	I-110 NB On-Ramp/Century Blvd ⁺	City of LA	A	0.372	A	0.300
33	I-110 SB Off-Ramp/Century Blvd ⁺	City of LA	A	0.312	A	0.395
34	Long Beach Blvd/Century Blvd	South Gate/Lynwood	C	0.775	C	0.758
35	Long Beach Blvd/Tweedy Blvd	South Gate/Lynwood	C	0.734	B	0.694
36	Alameda St/97th St* **	(future) City of LA/County of LA	-	-	-	-
37	Alameda St (E)/Tweedy Blvd**	(future) City of LA/South Gate	A	0.556	A	0.441
38	Grape St/97th St (W)*	City of LA	-	-	-	-
39	Grape St 97th St (E)*	City of LA	-	-	-	-
40	Grape St/Century Blvd*	City of LA	-	-	-	-
41	Wilmington Ave/Century Blvd*	City of LA	-	-	-	-

Note:
* Unsignalized intersections are analyzed separately under the Existing Plus Ambient Growth Plus Related Projects Plus Project scenario
** Intersection will become partially or fully under the City of Los Angeles jurisdiction with annexation, no ATSAC credit is taken
⁺ City of Los Angeles signalized intersections reflect an ATSAC credit which reduces the final V/C ratio by 0.100

Existing Plus Ambient Growth Plus Related Projects Plus Project Level of Service

All study intersections were re-evaluated using the CMA - Circular Planning 212 methodology per City of Los Angeles Traffic Study Policies and Procedures. Level of service analyses under the Existing Plus Ambient Growth Plus Project Plus Related Projects condition were performed for both AM and PM peak hours and are summarized below in **Table 3**.

As shown, the results indicate that per CMA - Circular Planning 212 methodology, five signalized study intersections are projected to experience a significant project-related impact, as follows:

- #1 Alameda Street and Firestone Boulevard (PM Peak Hour)
- #5 Alameda Street (W) and Century Boulevard/Martin Luther King Jr. Boulevard (AM and PM Peak Hours)
- #12 Wilmington Avenue and I-105 EB Ramps (AM and PM Peak Hours)
- #20 Central Avenue and Century Boulevard (AM and PM Peak Hours)
- #35 Long Beach Boulevard and Tweedy Boulevard (AM and PM Peak Hours)

The EIR traffic study projected project-related impacts at the same locations, except for intersection #12, Wilmington Avenue and I-105 EB Ramps, which was not identified as a location projected to experience a project-related impact.

For intersections #1, #5, #20, and #35, no feasible mitigation measures were identified for these locations in the EIR traffic study

Table 3 – Existing Plus Ambient Growth Plus Related Projects Plus Project Peak Hour LOS - (City of Los Angeles Guidelines - CMA)

#	Intersection	Jurisdiction	AM Peak Hour						PM Peak Hour					
			Existing + AG + RP		Existing + AG + RP + Project		Δ in V/C	Sig Impact Yes/No	Existing + AG + RP		Existing + AG + RP + Project		Δ in V/C	Sig Impact Yes/No
			LOS	V/C	LOS	V/C			LOS	V/C	LOS	V/C		
1	Alameda St/Firestone Blvd	County of LA	D	0.825	D	0.836	0.011	No	E	0.920	E	0.934	0.014	Yes
2	Alameda St (W)/92nd St	County of LA	C	0.762	C	0.758	-0.004	No	C	0.742	C	0.742	0.000	No
3	Alameda St (W)/Tweedy Blvd **	(future) City of LA	E	0.932	C	0.763	-0.169	No	E	0.957	D	0.812	-0.145	No
4	Alameda St/103rd St ⁺	City of LA/Lynwood	B	0.695	B	0.614	-0.081	No	D	0.810	C	0.720	-0.090	No
5	Alameda St (W)/Century Blvd/MLK	Lynwood	C	0.729	C	0.794	0.065	Yes	B	0.696	C	0.771	0.075	Yes
6	Alameda St (W)/Imperial Highway	County of LA/Lynwood	E	0.995	E	0.997	0.002	No	D	0.843	D	0.850	0.007	No
7	Grape St/103rd St ⁺	City of LA	A	0.422	A	0.483	0.061	No	A	0.380	A	0.442	0.062	No
8	Wilmington Ave/103rd St ⁺	City of LA	A	0.323	A	0.343	0.020	No	A	0.338	A	0.342	0.004	No
9	Wilmington Ave/Santa Ana Blvd ⁺	City of LA	A	0.328	A	0.412	0.084	No	A	0.385	A	0.465	0.080	No
10	Wilmington Ave/108th St ⁺	City of LA	A	0.475	A	0.559	0.084	No	A	0.470	A	0.549	0.079	No
11	Wilmington Ave/111th St ⁺	City of LA	A	0.412	A	0.496	0.084	No	A	0.431	A	0.510	0.079	No
12	Wilmington Ave/I-105 EB Ramps ⁺	City of LA/County of LA	F	1.057	F	1.076	0.019	Yes	D	0.808	D	0.853	0.045	Yes
13	Wilmington Ave/120th St	County of LA	B	0.678	C	0.707	0.029	No	C	0.772	C	0.797	0.025	No
14	I-105 WB Ramps/Imperial Highway ⁺	City of LA/County of LA	E	0.926	E	0.929	0.003	No	D	0.861	D	0.865	0.004	No
15	Compton Ave/Century Blvd ⁺	City of LA	A	0.275	A	0.374	0.099	No	A	0.331	A	0.450	0.119	No
16	Compton Ave/103rd St ⁺	City of LA	A	0.350	A	0.319	-0.031	No	A	0.431	A	0.400	-0.031	No
17	Compton Ave/108th St ⁺	City of LA	B	0.664	B	0.684	0.020	No	A	0.493	A	0.513	0.020	No
18	Compton Ave/120th St	County of LA	A	0.484	A	0.498	0.014	No	A	0.372	A	0.383	0.011	No
19	Central Ave/92nd St ⁺	City of LA	A	0.466	A	0.471	0.005	No	A	0.500	A	0.506	0.006	No
20	Central Ave/Century Blvd ⁺	City of LA	B	0.672	C	0.787	0.115	Yes	B	0.668	C	0.784	0.116	Yes
21	Central Ave/103rd St ⁺	City of LA	A	0.558	A	0.519	-0.039	No	A	0.598	A	0.562	-0.036	No
22	Central Ave/108th St (N) ⁺	City of LA	A	0.443	A	0.459	0.016	No	A	0.498	A	0.512	0.014	No
23	Central Ave/108th St (S) ⁺	City of LA	A	0.453	A	0.466	0.013	No	A	0.504	A	0.521	0.017	No
24	Central Ave/120th St ⁺	City of LA	A	0.553	A	0.560	0.007	No	B	0.619	B	0.624	0.005	No

#	Intersection	Jurisdiction	AM Peak Hour						PM Peak Hour					
			Existing + AG + RP		Existing + AG + RP + Project		Δ in V/C	Sig Impact Yes/No	Existing + AG + RP		Existing + AG + RP + Project		Δ in V/C	Sig Impact Yes/No
			LOS	V/C	LOS	V/C			LOS	V/C	LOS	V/C		
25	McKinley Ave/Century Blvd ⁺	City of LA	A	0.256	A	0.297	0.041	No	A	0.249	A	0.291	0.042	No
26	Avalon Blvd/Century Blvd ⁺	City of LA	A	0.452	A	0.485	0.033	No	A	0.545	A	0.586	0.041	No
27	Avalon Blvd/92nd St ⁺	City of LA	A	0.351	A	0.357	0.006	No	A	0.373	A	0.379	0.006	No
28	Avalon Blvd/120th St ⁺	City of LA	A	0.423	A	0.436	0.013	No	A	0.491	A	0.501	0.010	No
29	San Pedro St/Century Blvd ⁺	City of LA	A	0.487	A	0.510	0.023	No	A	0.531	A	0.557	0.026	No
30	Main St/Century Blvd ⁺	City of LA	A	0.516	A	0.537	0.021	No	A	0.525	A	0.546	0.021	No
31	Figueroa St/Century Blvd ⁺	City of LA	C	0.704	C	0.711	0.007	No	A	0.544	A	0.552	0.008	No
32	I-110 NB On-Ramp/Century Blvd ⁺	City of LA	A	0.372	A	0.385	0.013	No	A	0.300	A	0.312	0.012	No
33	I-110 SB Off-Ramp/Century Blvd ⁺	City of LA	A	0.312	A	0.319	0.007	No	A	0.395	A	0.400	0.005	No
34	Long Beach Blvd/Century Blvd	South Gate/Lynwood	C	0.775	C	0.784	0.009	No	C	0.758	C	0.768	0.010	No
35	Long Beach Blvd/Tweedy Blvd	South Gate/Lynwood	C	0.734	C	0.775	0.041	Yes	B	0.694	C	0.738	0.044	Yes
36	Alameda St/97th St* **	(future) City of LA/County of LA	-	-	-	-	-	-	-	-	-	-	-	-
37	Alameda St (E)/Tweedy Blvd**	(future) City of LA/South Gate	A	0.556	B	0.629	0.073	No	A	0.441	A	0.535	0.094	No
38	Grape St/97th St (W)*	City of LA	-	-	-	-	-	-	-	-	-	-	-	-
39	Grape St 97th St (E)*	City of LA	-	-	-	-	-	-	-	-	-	-	-	-
40	Grape St/Century Blvd*	City of LA	-	-	-	-	-	-	-	-	-	-	-	-
41	Wilmington Ave/Century Blvd*	City of LA	-	-	-	-	-	-	-	-	-	-	-	-

Note:

* Unsignalized intersections are analyzed separately

** Intersection will become partially or fully under the City of Los Angeles jurisdiction with annexation, no ATSAC credit is taken under Existing + AG + RP conditions

⁺ City of Los Angeles signalized intersections reflect an ATSAC credit which reduces the final V/C ratio by 0.100

Unsignalized Intersection Analysis

The unsignalized intersections operating conditions were re-evaluated using the Highway Capacity Methodology (HCM 2000) for unsignalized intersections. For the study intersections, the overall intersection delay is measured pursuant to procedures accepted by LADOT during the scoping process. If, based on the estimated delay, the resultant LOS “E” or “F” in the “Future With Project” scenario, then the intersection should be evaluated for the potential installation of a new traffic signal. Unsignalized intersections were evaluated to determine the need for the installation of a traffic signal or other specific control device, but are not included in the impact analysis.

As shown in **Table 4**, the results indicate that two of the five unsignalized study intersections are projected to operate at unacceptable LOS F during both the AM and PM peak hours under the Existing Plus Ambient Growth Plus Related Projects Plus Project scenario. The results from the signal warrant analyses show that the same two intersections identified in the Draft EIR are warranted for signal installation under the Existing Plus Ambient Growth Plus Related Projects Plus Project scenario.

Table 4 – Existing Plus Ambient Growth Plus Related Projects Plus Project Peak Hour LOS/Signal Warrant - (City of Los Angeles Guidelines)

#	Intersection	Jurisdiction	Existing + AG + RP + Project				Signal Warrants Met	
			AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour
			LOS	Del/Veh	LOS	Del/Veh	Yes/No	Yes/No
36	Alameda St/97th St	City of LA/County of LA	F	192.3	F	801.2	Yes	Yes
38	Grape St/97th St (W)	City of LA	B	11.9	B	11.0	-	-
39	Grape St 97th St (E)	City of LA	B	11.3	A	9.8	-	-
40	Grape St/Century Blvd	City of LA	D	32.1	D	30.6	-	-
41	Wilmington Ave/Century Blvd	City of LA	F	81.4	F	63.6	Yes	Yes

Mitigation Measures

The updated traffic impact analysis identified project-related impacts that are projected to occur at five (5) intersections. This is one more than the Draft EIR identified; the intersection of Wilmington Avenue at I-105 EB Ramps was not identified in the Draft EIR. Potential mitigation measures are discussed below.

To reduce the overall impacts under the Existing Plus Ambient Growth Plus Related Projects Plus Project scenario, as defined under the City of Los Angeles Traffic Study Policies, the proposed mitigation measures are suggested for the intersections with significant project-related impacts.

- #1 Alameda Street and Firestone Boulevard – This intersection is located outside the City of Los Angeles under the County of Los Angeles jurisdiction. This intersection is also projected to experience a significant impact using the County of Los Angeles criteria. This intersection is scheduled to be improved via the County’s Traffic Signal Synchronization Program (TSSP), which will facilitate the movement of vehicles through the intersection. No feasible physical mitigation measures were identified for this intersection that would reduce the project-related impact to a less than significant level. Therefore, a significant project impact would remain. This is the same finding as the Draft EIR.
- #5 Alameda Street at Century Boulevard/MLK Boulevard – This intersection is located outside the City of Los Angeles in the City of Lynwood. While it does show a significant impact under

City of Los Angeles criteria, it does not show an impact using the City of Lynwood criteria. No feasible mitigation measures have been identified that would mitigate the identified impact. This is the same finding as the Draft EIR.

- # 12 Wilmington Avenue at I-105 EB Ramps – Project impacts at this location could be mitigated with the following:
 - Provide an additional northbound left turn lane by restriping the existing painted roadway median to convert it into a second northbound left turn lane. Minor signal modifications may be required to align the northbound left turn signal head.This would reduce the project impact to less than significant. This is a new mitigation measure that was not previously identified in the Draft EIR.
- #20 Central Avenue at Century Boulevard – At the intersection of Central Avenue and E. Century Boulevard, because of existing physical constraints, no feasible physical mitigations measures have been identified for this location. Therefore, a significant project impact would remain. This is the same finding as the Draft EIR.
- #35 Long Beach Boulevard at Tweedy Boulevard - This intersection is located outside the City of Los Angeles in the Cities of South Gate and Lynwood. While it does show a significant impact under City of Los Angeles criteria, it does not show an impact using the City of South Gate or Lynwood criteria. No feasible mitigation measures have been identified that would mitigate the identified impact. This is the same finding as the Draft EIR.

Level of service analyses under the Existing Plus Ambient Growth Plus Related Projects Plus Project scenario with mitigations were performed for both AM and PM peak hours and are summarized below in **Tables 5 and 6**.

Table 5 – Existing Plus Ambient Growth Plus Related Projects Plus Project With Mitigation AM Peak Hour LOS - (City of Los Angeles Guidelines - CMA)

#	Intersection	Jurisdiction	AM Peak Hour									
			Existing + AG +RP		Existing + AG + RP + Project		Δ in V/C	Sig Impact Yes/No	Existing + AG + RP + Project With Mitigation		Δ in V/C	Residual Impact Yes/No
			LOS	V/C	LOS	V/C			LOS	V/C		
1	Alameda St/Firestone Blvd	County of LA/Southgate	D	0.825	D	0.836	0.011	No	D	0.836	0.000	No
5	Alameda St (W)/Century Blvd/MLK	Lynwood	C	0.729	C	0.794	0.065	Yes	C	0.794	0.000	Yes
12	Wilmington Ave/I-105 WB Ramps	City of LA/County of LA	F	1.057	F	1.076	0.019	Yes	E	0.931	-0.126	No
20	Central Ave/Century Blvd	City of LA	B	0.672	C	0.787	0.115	Yes	C	0.787	0.000	Yes
35	Long Beach Blvd/Tweedy Blvd	South Gate/Lynwood	C	0.734	C	0.775	0.041	Yes	C	0.775	0.000	Yes

Table 6 – Existing Plus Ambient Growth Plus Related Projects Plus Project With Mitigation PM Peak Hour LOS - (City of Los Angeles Guidelines - CMA)

#	Intersection	Jurisdiction	PM Peak Hour									
			Existing + AG + RP		Existing + AG + RP + Project		Δ in V/C	Sig Impact Yes/No	Existing + AG + RP + Project With Mitigation		Δ in V/C	Residual Impact Yes/No
			LOS	V/C	LOS	V/C			LOS	V/C		
1	Alameda St/Firestone Blvd	County of LA	E	0.920	E	0.934	0.014	Yes	E	0.934	0.000	Yes
5	Alameda St (W)/Century Blvd/MLK	Lynwood	B	0.696	C	0.771	0.075	Yes	C	0.771	0.000	Yes
12	Wilmington Ave/I-105 WB Ramps	City of LA/County of LA	D	0.808	D	0.853	0.045	Yes	B	0.689	-0.119	No
20	Central Ave/Century Blvd	City of LA	B	0.668	C	0.784	0.116	Yes	C	0.784	0.000	Yes
35	Long Beach Blvd/Tweedy Blvd	South Gate/Lynwood	B	0.694	C	0.738	0.044	Yes	C	0.738	0.000	Yes

Other Jurisdictions' Methodology

In order to facilitate review by other agencies, intersections located in unincorporated Los Angeles County, the City of Lynwood and the City of South Gate were also re-evaluated with the additional related projects in place. Los Angeles County has requested analysis using their methodology, and is shown in the next section.

Intersection Capacity Utilization (ICU) Methodology (City of Lynwood, City of South Gate Guidelines)

In order to facilitate review by other agencies, intersections located in the City of Lynwood and the City of South Gate were also re-evaluated under the Existing Plus Ambient Growth Plus Related Projects Plus Project scenario using the ICU methodology per guidelines from the individual jurisdictions, as well as their respective impact criteria. The intersection of Alameda Street (E) and Tweedy Boulevard has been analyzed as a signalized intersection, to reflect that a signal has been installed at this location since the Draft EIR was prepared.

Level of service analyses under this scenario were performed for both AM and PM peak hours and are summarized below in **Table 7**. As shown, the results indicate that using the local jurisdiction's (other than the City of Los Angeles and Los Angeles County) ICU methodology, one study intersection is projected to experience a significant impact as a result of the addition of project-related traffic during the AM and/or PM peak hours under the Existing Plus Ambient Growth Plus Related Projects Plus Project conditions, as follows:

- #1 Alameda Street and Firestone Boulevard (PM Peak Hour)

Note that this intersection was previously identified in the Draft EIR as being projected to experience a project-related impact using ICU methodology.

As in the Draft EIR, no feasible mitigation measures were identified for this location.

Table 7 – Existing Plus Ambient Growth Plus Related Projects Plus Project LOS - (City of Lynwood, City of Southgate - ICU)

#	Intersection	Jurisdiction	AM Peak Hour						PM Peak Hour					
			Existing + AG + RP		Existing + AG + RP + Project		Δ in V/C	Sig Impact Yes/No	Existing + AG + RP		Existing + AG + RP + Project		Δ in V/C	Sig Impact Yes/No
			LOS	V/C	LOS	V/C			LOS	V/C	LOS	V/C		
1	Alameda St/Firestone Blvd	County of LA**	-	-	-	-	-	-	-	-	-	-	-	-
		South Gate	D	0.873	D	0.884	0.011	No	E	0.962	E	0.975	0.013	Yes
4	Alameda St/103rd St	City of LA*	-	-	-	-	-	-	-	-	-	-	-	-
		Lynwood	D	0.808	C	0.736	-0.072	No	E	0.910	D	0.830	-0.080	No
5	Alameda St (W)/Century Blvd/MLK	Lynwood	C	0.750	D	0.807	0.057	No	C	0.720	C	0.787	0.067	No
6	Alameda St (W)/Imperial Highway	County of LA**	-	-	-	-	-	-	-	-	-	-	-	-
		Lynwood	E	0.957	E	0.960	0.003	No	D	0.825	D	0.831	0.006	No
34	Long Beach Blvd/Century Blvd	South Gate	C	0.790	C	0.798	0.008	No	C	0.775	C	0.784	0.009	No
		Lynwood						No						No
35	Long Beach Blvd/Tweedy Blvd	South Gate	C	0.753	C	0.790	0.037	No	C	0.719	C	0.757	0.038	No
		Lynwood						No						No
37	Alameda St (E)/Tweedy Blvd	City of LA*	-	-	-	-	-	-	-	-	-	-	-	-
		Southgate	B	0.615	B	0.674	0.059	No	A	0.498	A	0.557	0.059	No

Note: * City of LA intersections previously analyzed with City of LA Guidelines using CMA methodology
 ** See separate analysis in following section

Summary of Analysis

Three additional related (cumulative) projects were added to the analysis. For the Existing Plus Ambient Growth Plus Related Project Plus Project Level of Service analysis using City of Los Angeles traffic impact analysis guidelines, one additional intersection was identified that would be projected to experience a project related impact. This intersection, Wilmington Avenue and I-105 EB Ramps, now exceeds the City of Los Angeles thresholds for project related impacts with the additional cumulative projects included in the analysis. A mitigation measure was identified for this location, and it reduces the project impact to less than significant.

For unsignalized intersections, two intersections meet signal warrants; these same two intersections met signal warrants in the original study. A third intersection, located in the City of South Gate, previously met signal warrants; however, the City of South Gate has recently installed a traffic signal at this location. Therefore, there is no change to the study results for unsignalized intersections.

EIR comment 3-4 – Analyze County and/or County/City intersections using the County’s Methodology

The Los Angeles County Department of Public works requested analysis of project impacts using Los Angeles County traffic impact analysis methodology. The County methodology consists of:

- (a) Existing traffic;
- (b) Existing traffic plus ambient growth to the year the project will be completed (preproject);
- (c) Traffic in (b) plus project traffic; this scenario is compared to (b) to determine project impacts;
- (d) Traffic in (c) with the proposed mitigation measures (if necessary);
- (e) Traffic in (c) plus the cumulative traffic of other known developments; this scenario is compared to (c) to determine cumulative impacts; and
- (f) Traffic in (e) with the proposed mitigation measures (if necessary).

This is slightly different than the City of Los Angeles methodology, which consists of:

- (a) Existing conditions;
- (b) Future without project with ambient growth and related projects (this is not calculated under Los Angeles County methodology);
- (c) Future with project with ambient growth and related projects; this is compared to (b) to determine project impacts, and is the same value as (e) under County methodology; and
- (d) Traffic in (c) with traffic mitigation (if necessary); this is the same as (f) under County methodology.

Therefore, we have added an analysis scenario to identify project impacts using County methodology. Project impacts are identified through the use of the following:

- Existing traffic plus ambient growth compared to existing traffic plus ambient growth plus project traffic.

Although the City of Los Angeles is the lead agency for the project, the analysis for County and/or County/City intersections has been conducted in order to facilitate review by Los Angeles County.

Project related impacts were calculated using the methodology shown above. The results are shown in **Table 8** below, and show that under County methodology, project impacts are projected to occur as follows:

- #1 Alameda Street and Firestone Boulevard (PM Peak Hour)
- #12 Wilmington Avenue and I-105 EB Ramps (AM and PM Peak Hours)

The intersection of Wilmington Avenue and I-105 EB Ramps was not previously identified in the Draft EIR.

No feasible mitigation measures were identified for the Alameda Street and Firestone Boulevard intersection, and a significant project impact will remain. The mitigation measure identified earlier in this memorandum fully mitigates the project related impact at the intersection of Wilmington Avenue and I-105 EB Ramps.

Summary of Analysis

Los Angeles County traffic impact methodology guidelines were used to re-assess the project. This analysis identified two intersection projects projected to experience a project impact, one of which was not identified in the Draft EIR. However, a mitigation measure identified at this location will reduce the impact to less than significant.

Table 6 – County of Los Angeles Methodology – Project Impact Analysis LOS - (Los Angeles County Guidelines - ICU)

#	Intersection	Jurisdiction	AM Peak Hour						PM Peak Hour					
			Existing + AG		Existing + AG + Project		Δ in V/C	Sig Impact Yes/No	Existing + AG		Existing + AG + Project		Δ in V/C	Sig Impact Yes/No
			LOS	V/C	LOS	V/C			LOS	V/C	LOS	V/C		
1	Alameda St/Firestone Blvd	County of LA/Southgate	D	0.840	D	0.851	0.011	No	E	0.901	E	0.915	0.014	Yes
2	Alameda St (W)/92nd St	County of LA	D	0.810	D	0.808	-0.002	No	C	0.783	C	0.782	-0.001	No
6	Alameda St (W)/Imperial Highway	County of LA/Lynwood	E	0.925	E	0.927	0.002	No	D	0.805	D	0.813	0.008	No
12	Wilmington Ave/I-105 EB Ramps	City of LA/County of LA	E	0.971	E	0.988	0.017	Yes	C	0.738	C	0.778	0.040	Yes
13	Wilmington Ave/120th St	County of LA	B	0.649	B	0.667	0.018	No	B	0.636	B	0.660	0.024	No
14	I-105 WB Ramps/Imperial Highway	City of LA/County of LA	E	0.910	E	0.912	0.002	No	D	0.893	D	0.897	0.004	No
18	Compton Ave/120th St	County of LA	A	0.551	A	0.563	0.012	No	A	0.448	A	0.459	0.011	No

EIR comments 6-2 and 6-4 – Analysis of the Alameda Street (E) at Tweedy Boulevard as signalized intersection

The City of South Gate noted that at the intersection #37, Alameda Street (E) and Tweedy Boulevard, a traffic signal has recently been installed. The City requested that the analysis for 2020 conditions consider the signal to be in place.

The analysis conducted for EIR Comment 3-3 above, analyzes intersection #37, Alameda Street (E) and Tweedy Boulevard as a signalized intersection, and no project related impacts were identified at this location.

EIR comment 7-9 and 7-10 – Estimate project transit trip generation and document assumptions

The Metropolitan Transportation Authority (METRO) requested that transit trip generation be estimated for the project. The City of Los Angeles Department of Transportation (LADOT) Traffic Study Policies and Procedures provides guidelines on vehicle trip credits due to transit usage. The Draft 2010 Congestion Management Program for Los Angeles County also provides guidelines in the estimation of transit trips. Both methodologies and calculations are described below.

During the scoping process for the study, a Memorandum of Understanding with LADOT was developed, which provides approval on the assumptions and content of the traffic study. As part of this process, LADOT allowed a 15% transit trip credit for the project, based on proximity of the project to transit (bus and rail). In the draft EIR, Table IV.P-7 shows the transit trips, which are summarized in **Table 7** below. Table 7 shows that with the LADOT methodology, there are approximately 2,497 daily projected transit trips, with 210 in the AM peak hour, and 233 in the PM peak hour.

Table 7– Transit Trips – LADOT Methodology

	TRANSIT TRIPS								
	Daily			AM Peak			PM Peak		
	In	Out	Total	In	Out	Total	In	Out	Total
Vehicle Trips	8,324	8,324	16,647	623	753	1,376	790	698	1,488
15% Transit Trips	1,249	1,249	2,497	97	113	210	118	105	223

The CMP methodology of calculating transit trips is different than LADOT methodology. First, total project vehicle trips are converted to person trips by multiplying the total trips by a factor of 1.4. Then, for each time period, a factor is applied to obtain transit trips. The CMP recommends a factor of 10% for projects that are primarily residential within ¼ mile of a CMP transit center. The Blue Line station at 103rd Street is within ¼ mile from portions of the project area, therefore a 10% factor can be used. The resultant transit trips using CMP methodology are shown in **Table 8**. This methodology projects approximately 7% fewer transit trips than the number of transit trips estimated by the LADOT method contained in Table 7.

Table 9 – Transit Trips – CMP Methodology

	TRANSIT TRIPS								
	Daily			AM Peak			PM Peak		
	In	Out	Total	In	Out	Total	In	Out	Total
Vehicle Trips	8,324	8,324	16,647	623	753	1,376	790	698	1,488
Person Trips	11,653	11,653	23,306	872	1,054	1,926	1,106	978	2,083
10% Transit Trips	1,165	1,165	2,331	87	105	193	111	98	208

Therefore, for the most conservative analysis, and for transit planning purposes, the projected transit trips shall be those contained in Table 7.