Level of Service	Expected Delay	(Seconds/Vehicle)
A	Little or no delay.	0-10.0
B	Short traffic delay.	>10.1 – 15.0
C	Average traffic delays.	>15.1 – 25.0
D	Long traffic delays.	>25.1 – 35.0
E	Very long traffic delays.	>35.1 – 50.0
F	Extreme delays potentially affecting other traffic movements in the intersection.	>50

Source: *2000 Highway Capacity Manual*, Transportation Research Board, Washington, D.C.

Study Scenarios

Weekday peak-hour traffic operations were evaluated at the study intersections for each of the following traffic scenarios:

- Existing (Year 2008) Conditions
- Future (Year 2010) with Ambient Growth and Related Projects
- Future (Year 2010) with Ambient Growth and Related Projects and the Proposed Project

The TRAFFIX software and CALCADB software (developed by LADOT) packages were used by KOA to perform the analysis of Level of Service at the study intersections.

Existing Period Conditions

In order to define existing traffic conditions at the study intersections, peak hour turning movement counts were collected at the study intersections on a weekday during the hours of 7:00 AM to 9:00 AM, 4:00 PM to 6:00 PM. The traffic counts were collected on Wednesday, May 14, 2008, and Thursday, May 15, 2008. All traffic count data is included in Appendix B of this report.

Fieldwork within the Project study area was undertaken to identify the condition of major roadways, to identify traffic control and approach lane configuration at each study intersection, and to identify the locations of on-street parking and transit stops.

Existing Level of Service at each of the study intersections is discussed in Section 2 of this report.

Future Period Conditions

In order to define regional traffic growth that would affect operations at the study intersections during the Project year (Year 2010), an ambient/background traffic growth rate was defined. This annual growth rate was defined based on the Los Angeles County Congestion Management Program document, and verified with City Staff. The chosen annual rate of 1% was utilized to increase existing (Year 2008) traffic volumes to future (Year 2010) base traffic volumes.

Future Area Development Projects

In addition to future ambient growth, traffic from area related projects (approved and pending) was considered before examining significant traffic impacts from the proposed Project. KOA researched information from City of Culver City and Los Angeles Department of Transportation (LADOT)

pertaining to area projects that would add measurable volumes to the study area intersections. Daily and peak hour trips that would be generated from each of the related projects were computed based on the Institute of Transportation Engineers book *Trip Generation, 7th Edition*, published in 2003.

Level of Service for future conditions at the study intersections with traffic from related projects is discussed in Section 3 of this report.

Project Trip Generation and Distribution

Forecast Project trip generation was mainly derived from the Institute of Transportation Engineers *Trip Generation, 7th Edition*. In order to calculate trip generation totals, trip rates per unit established within the *Trip Generation* book were applied.

The methodology utilized for Project trip distribution calculations is discussed in Section 4 of this report.

Level-of-Service Analysis and Impacts

KOA quantitatively assessed weekday morning and afternoon peak hour traffic impacts at 19 study intersections. As defined by City Staff, significant impacts of a proposed project at study intersections must be mitigated to a level of insignificance.

The Level of Service for future conditions with related project traffic and Project traffic at the study intersections is discussed in Section 5 of this report

Level-of-Service Methodology

The Intersection Capacity Utilization (ICU) method of intersection analysis, per the City of Culver City, was used to determine the intersection volume-to-capacity ratio (V/C) and corresponding Level of Service (LOS) based on the turning movements and intersection characteristics at the signalized intersections. The ICU method is a procedure that incorporates the effects of geometry and traffic signal operation and develops a v/c ratio for each separate movement, identifies those that are critical, and then adds them. The analytical base for this method is the understanding that each signalized intersection has a combination of conflicting movements which must be accommodated. The output from this method is a volume/capacity (v/c) ratio and a Level of Service for the intersection as a whole.

The V/C for the intersection corresponds to a LOS value, which describes the intersection operations. The Levels of Service vary from A through F, with A representing the best possible conditions, free flow, and F representing forced flow or failing/jammed conditions. Generally, LOS D or better is considered acceptable in urban areas.

All other signalized intersections within the City of Los Angeles were analyzed using Circular 212 Planning or Critical Movement Analysis (CMA) method per City of Los Angeles Department of Transportation (LADOT) guidelines. The CMA analysis method for evaluating signalized intersections involves the computation of volume-to-capacity (V/C) ratios for each critical movement. Capacity, or saturation flow rate, is defined as the maximum rate of flow that can pass through a given intersection approach under prevailing traffic and roadway conditions. The sum of all critical movements on a critical lane basis is used to determine the total intersection volume to capacity ratio (V/C) and corresponding Level of Service. This volume/capacity ratio value is based upon volumes by lane, signal phases, and approach lane configuration.

Under existing conditions, all of the signalized study intersections within the City of Los Angeles are controlled by the City of Los Angeles' Automated Traffic Surveillance and Control (ATSAC) system and are part of the Smart Corridor ATSAC system. In accordance with LADOT procedures, a capacity increase of 7% (0.070 v/c adjustment) was applied to reflect the benefits of ATSAC control at these intersections.

Under future conditions, these intersections would be equipped with Adaptive Traffic Control System (ATCS). ATCS is the latest enhancement to ATSAC and uses a personal computer-based traffic signal control software program which provides fully traffic adaptive signal control based on real-time traffic conditions. The ATCS system will automatically adjust traffic signal timing in response to current traffic demands by allowing ATCS to simultaneously control all three critical components of traffic signal timing, namely cycle length, phase split and offset. In accordance with LADOT procedures, a capacity increase of 3% (0.030 v/c adjustment) will be applied to reflect the benefits of ATCS control at these intersections.

It should be noted that the City of Culver City has not officially adopted guidelines in determining significant impact criterion for stop-controlled intersections. For this study, significant impacts for stop-controlled intersections were determined by analyzing these intersections as signalized locations and obtaining a v/c ratio for both with and without project conditions. The difference in the v/c ratio is the increase due to the project. Using this project v/c increase and Level of Service based on the Highway Capacity Manual definitions for stop-controlled intersections, significant impacts for the stop-controlled intersections were identified. Thus, all stop-controlled intersections were analyzed as signalized intersections for the purpose of determine potential project significant impact.

2. Existing Conditions (Year 2008)

This section documents the existing conditions in the study area. The discussion presented here is limited to specific roadways in the project's vicinity. Figure 4 depicts the lane configurations and traffic control at the study intersections.

A. Existing Roadway System

Significant freeways and roadways within the study area are described below. The discussion on roadways discussed here are roadways that form the study intersections.

I-10 (Santa Monica Freeway) is an east-west freeway that provides regional access within the study area. It is about three quarters of a mile from the site. The freeway can be accessed via several interchanges at Robertson Boulevard, National Boulevard, La Cienega Boulevard, and Fairfax Avenue.

Robertson Boulevard is classified as a Primary Arterial that runs in a north-south direction within the northern end of the Project study area. The roadway primarily provides four travel lanes. Ramps leading to and from the I-10 Freeway are linked to Robertson Boulevard in the northern center of the study area. On-street parking is generally prohibited along the roadway. The posted speed limit is 35 miles per hour (mph).

Higuera Street is a Neighborhood Feeder street that runs in an east-west direction. Traffic calming measures have been implemented along this roadway to discourage cut through traffic between Jefferson Boulevard and the Santa Monica Freeway and Venice Boulevard and Washington Boulevard corridors. Limited on-street parking is provided along some segments of the roadway. From Hayden Avenue to Jefferson Boulevard, Higuera Street is classified as a Secondary Arterial roadway; the roadway cross-section widens to provide four travel lanes, a striped two-way left turn median, and on-street parking on the north side of the street. The land uses along this segment are primarily industrial. The posted speed limit is 25 mph.

Hayden Avenue is a local north-south Secondary Arterial that leads directly to the project site which provides one travel lane per direction. On-street parking is provided on both sides of the street. On-street parking spaces are provided in both parallel and angled configurations between National Boulevard and Higuera Street. The posted speed limit is 25 mph.

Hayden Place is a local street that is approximately 1,200 feet long which begins at the southern end of Hayden Avenue at Higuera Street and ends at the cul-de-sac. The roadway provides one lane in each direction. It is a direct access to the project site which is located at the end of the cul-de-sac. On-street parking is provided on both sides of the street.

Eastham Drive is a local north-south roadway east of the proposed site. The roadway provides two travel lanes with no medians. On-street parking is provided throughout the stretch of the roadway from National Boulevard to Higuera Street.

Jefferson Boulevard is a Primary Arterial that runs in a north-south direction south of National Boulevard, and in an east-west direction from the intersection of Jefferson Boulevard and National Boulevard. The land uses along the street are primarily offices and light industrial uses, excluding Baldwin Hills Regional Park near Higuera Street/Rodeo Road. The roadway provides four travel lanes and has a striped two-way left-turn median. On-street parking is generally permitted on both sides of the street. The posted speed limit ranges from 35 mph to 40 mph.

La Cienega Boulevard is a Primary Arterial that runs in a north-south direction across the eastern edge of the study area. The roadway provides six travel lanes and has a striped two-way left-turn median. On-street parking is generally prohibited on both sides of the roadway. The posted speed limit is 35 mph.

Fairfax Avenue is a Primary Arterial that runs in a north-south direction across the eastern portion of the study area. The southern end of Fairfax Avenue terminates at La Cienega Boulevard north of Jefferson Boulevard. The roadway provides four travel lanes and has a striped two-way left-turn median. On-street parking is generally available on both sides of the roadway. The posted speed limit is 35 mph.

Venice Boulevard is a six-lane divided Primary Arterial that runs in an east-west direction across the northern portion of the study area. On-street parking and bicycle lanes are provided on both sides of the street along the segments within the study area. The posted speed limit is 35 mph.

Washington Boulevard is a four-lane Primary Arterial that runs in an east-west direction across the northern portion of the study area. The roadway has a striped two-way left-turn median on the western portion of the study area and a raised landscaped median on the eastern portion of the study area. On-street parking is generally provided along most segments within the study area. The posted speed limit is 35 mph.

National Boulevard is a four-lane Secondary Arterial that runs in an east-west direction north of the project site. The roadway has a striped two-way left-turn median on certain segments. On-street parking is provided along most segments within the Project site. The posted speed limit is 35 mph.

Warner Drive is a local street within the Hayden Tract area that runs in an east-west direction along the north side of the Project site. The roadway provides one travel lane in each direction. On-street parking (both parallel and angled) is provided along the street.

Rodeo Road is a six-lane Primary Arterial that runs in an east-west direction within the study area. The roadway begins where Higuera Street ends at Jefferson Boulevard. The roadway provides a two-way left-turn median. On-street parking is prohibited along most segments within the study area. The posted speed limit is 35 mph.

Lucerne Avenue is a two-lane Neighborhood Feeder that runs in a north-south direction south of the project site. On-street parking is generally permitted within the study area. The fronting land uses are primarily residential. The posted speed limit is 25 mph.

Duquesne Avenue is a two-lane Secondary Arterial that runs in a northwest-southeast direction and is located to the south of Higuera Street. On-street parking is provided within the study area. The land uses along the street are primarily residential, excluding the City civic center uses near Braddock Drive and industrial uses at the eastern end of the roadway near Jefferson Boulevard. The posted speed limit is 35 mph.

Hayden Place a two-lane roadway that serves as the southern approach to the Higuera Street/Hayden Avenue/Hayden Place intersection. On-street parallel parking is provided curbside in marked parking spaces. Hayden Place terminates in a cul-de-sac approximately 1,200 feet south of Higuera Street.

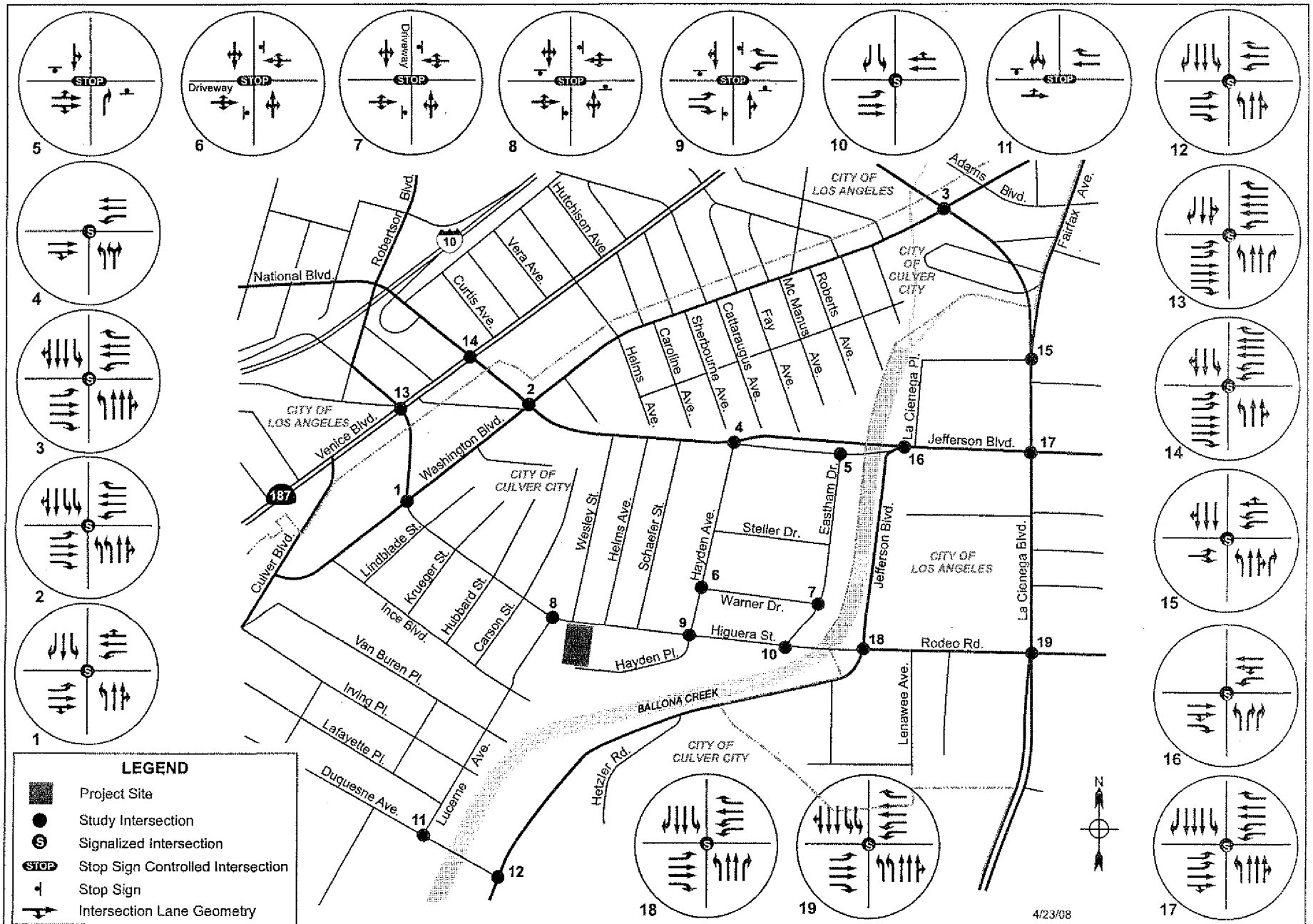

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Figure 4

Intersection Geometry

B. Existing Transit Service

The Project study area is served by bus transit lines operated by Culver City Bus Lines and the Los Angeles County Metropolitan Transportation Authority (MTA). Figure 5 illustrates the routes of the following transit services that serve the Project study area.

Culver CityBus Lines

Culver CityBus Line 1 is a local east-west bus route that mainly travels along Washington Boulevard through the study area. This line provides service between the West Los Angeles Transit Center and Venice Beach. The line runs Monday through Friday at a peak frequency of 12 to 15 minutes. This line also operates on weekends at a frequency of 15 to 40 minutes.

Culver CityBus Line 4 is a local east-west bus route that mainly travels through the study area. This line mainly travels along Fairfax Avenue, La Cienega Boulevard, and Jefferson Boulevard. This line runs Monday through Friday at a peak frequency of 60 minutes. This line does not operate on weekends or holidays. The northern terminus is the West Los Angeles Transit Center. The southern terminus is Fox Hills Mall and travels through the West Los Angeles College campus.

Culver CityBus Line 5 is a local east-west bus route that mainly travels along Higuera Street through the project site vicinity. This line primarily serves Venice High School, Culver City High and Middle School, Civic Center, and Hayden Tract area. The line runs once in morning in the westbound direction and twice in the afternoon in the eastbound direction when Culver City Schools are in session. This line does not operate on weekends or holidays. The eastern terminus is Blair Hills. The western terminus is Venice High School.

Culver CityBus Line 7 is a local east-west bus route that mainly travels along Higuera Street. This line provides service between Venice and Culver Boulevard and Marina Del Rey. The line runs Monday through Saturday at a peak frequency of 40 minutes. This line also operates on Saturday.

MTA Bus Lines

MTA Line 33/333 is a local east-west bus route that provides service between downtown Los Angeles and Santa Monica/Venice area. The line travels along Venice Boulevard within the study area. The service on Venice Boulevard provides an approximate frequency of 10 to 12 minutes in the weekday and weekend peak periods. The eastern terminus includes a turnaround at Union Station. The western terminus is nearby the Santa Monica Pier.

MTA Line 105/705 is a local east-west bus route provides service between the City of Vernon and West Hollywood. This line travels primarily along Rodeo Road and La Cienega Boulevard within the study area. The line runs every day, including holidays, and provides a frequency of 15 to 20 minutes during peak periods. The eastern terminus is the Vernon Metro Blue Line Station. The western terminus is the West Hollywood Civic Center.

MTA Line 220 is a local north-south bus route that provides service between the City of West Hollywood and City of Culver City via City of Beverly Hills. This line travels primarily along Robertson Boulevard, National Boulevard and Washington Boulevard within the study area. The line runs Monday through Saturday; the service doesn't operate on Sundays and holidays. The service provides a frequency of 40 minutes during peak periods. The northern terminus is the Pacific Design Center. The southern terminus is the Venice Boulevard and Culver Boulevard.

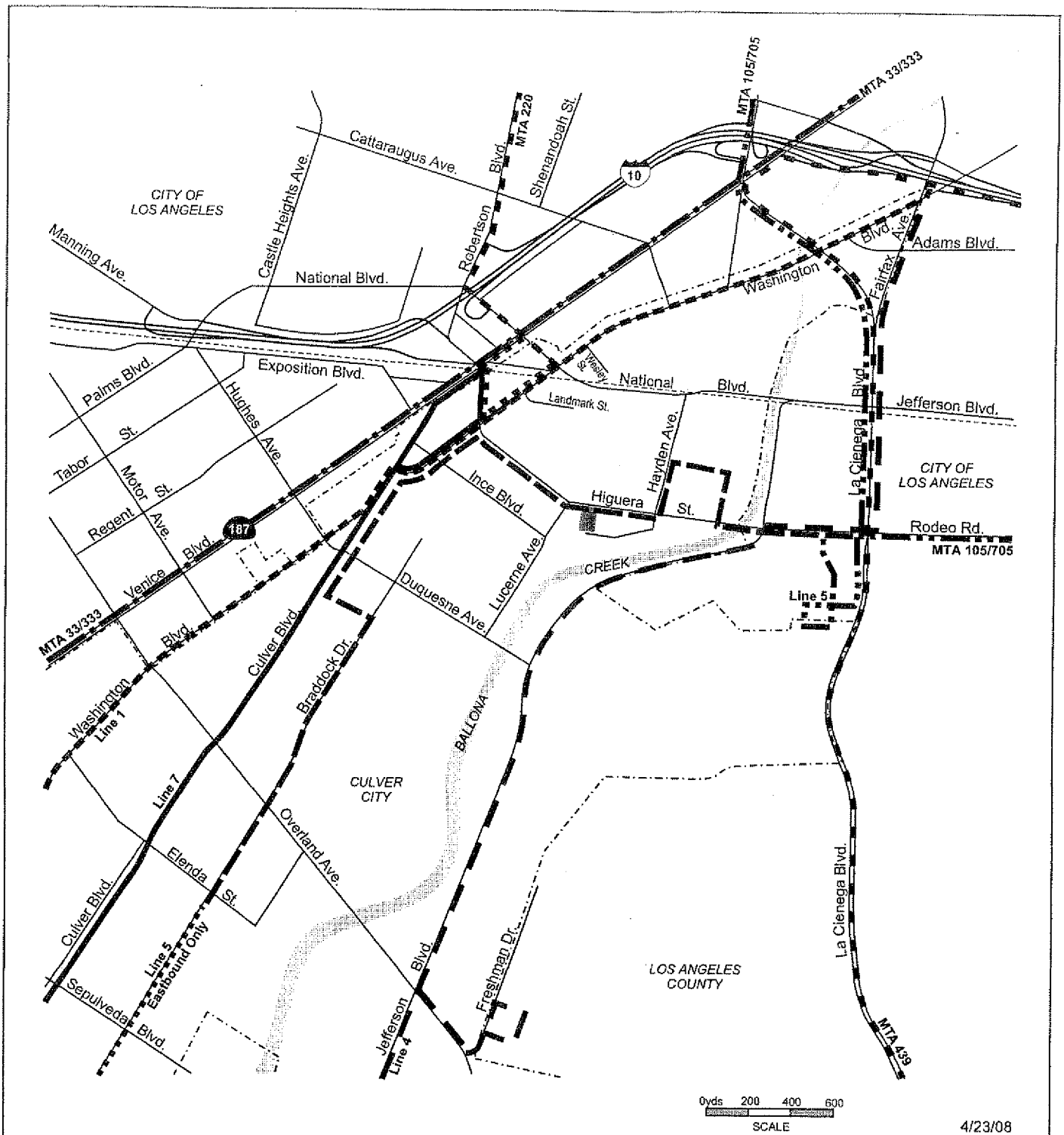

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Figure 5
Area Transit Lines

MTA Line 439 is a north-south bus route provides service between Metro Green Line Station (Aviation / I-105 Station) and West Los Angeles Transit Center. This line travels primarily along La Cienega Boulevard within the study area. The line runs every day, including holidays, and provides a frequency of 40 minutes during weekday peak periods and 60 minutes during weekends and holidays.

C. Existing Intersection Levels of Service

From the traffic counts at the study area intersections, a volume-to-capacity ratio and corresponding level of service (LOS) was determined for the weekday peak periods. Table I provides the volume/capacity ratios or delay (seconds) and LOS values for each study intersection for existing (Year 2008) conditions during the weekday morning and afternoon peak periods.

Table I – Summary of Intersection Performance
Existing (Year 2008) Conditions

Intersection	Weekday Morning Peak		Weekday Afternoon Peak	
	V/C or *Delay*	LOS	V/C or *Delay*	LOS
City of Culver City				
1. Robertson Boulevard & Washington Boulevard	0.586	A	0.545	A
2. National Boulevard & Washington Boulevard	0.631	B	0.671	B
3. La Cienega Boulevard & Washington Boulevard	0.894	D	0.811	D
4. Hayden Avenue & National Boulevard	0.533	A	0.598	A
5. Eastham Drive & National Boulevard [a]	*10.0*	A	*12.5*	B
6. Hayden Avenue & Warner Drive [a]	*36.1*	**E**	*14.0*	B
7. Eastham Drive & Higuera Street [a]	*9.6*	A	*9.9*	A
8. Lucerne Avenue & Higuera Street [a]	*13.9*	B	*9.7*	A
9. Hayden Avenue & Higuera Street [a]	*17.6*	C	*10.5*	B
10. Eastham Drive & Warner Drive	0.433	A	0.384	A
11. Lucerne Avenue & Duquesne Avenue [a]	*30.9*	D	*23.0*	C
12. Jefferson Boulevard & Duquesne Avenue	0.882	D	0.798	C
City of Los Angeles				
13. Robertson Boulevard & Venice Boulevard	0.906	**E**	0.829	D
14. National Boulevard & Venice Boulevard	0.917	**E**	0.998	**E**
15. La Cienega Boulevard & Fairfax Avenue	0.981	**E**	0.926	**E**
16. Jefferson Boulevard & National Boulevard	0.491	A	0.635	B
17. La Cienega Boulevard & Jefferson Boulevard	0.997	**E**	0.915	**E**
18. Jefferson Boulevard & Higuera Street/Rodeo Rd	0.717	C	0.630	B
19. La Cienega Boulevard & Rodeo Road	1.089	**F**	1.054	**F**

Note:

[a] Unsignalized intersection controlled by stop signs. Indicates average vehicle delay in seconds rather than V/C ratio.

Table I indicates that thirteen of the nineteen study intersections operate at LOS D or better under existing (Year 2008) conditions during the morning peak hour. During the afternoon peak hour, fifteen of the nineteen study intersections operate at LOS D or better. Those intersections that operated at LOS E or worse during either the AM or PM peak hour are identified below:

6. Hayden Avenue and Warner Drive (AM Peak Hour) (City of Culver City)
13. Robertson Boulevard and Venice Boulevard (AM Peak Hour) (City of Los Angeles)
14. National Boulevard and Venice Boulevard (AM and PM Peak Hours) (City of Los Angeles)
15. La Cienega Boulevard and Fairfax Avenue (AM and PM Peak Hours) (City of Los Angeles)
17. La Cienega Boulevard and Jefferson Boulevard (AM and PM Peak Hours) (City of Los Angeles)
19. La Cienega Boulevard and Rodeo Road (AM and PM Peak Hours) (City of Los Angeles)

The traffic analysis worksheets for existing conditions are provided in Appendix C of this report. The existing (Year 2008) morning and afternoon peak-hour turn movement volumes at the study intersections are provided in Figures 6 and 7, respectively.

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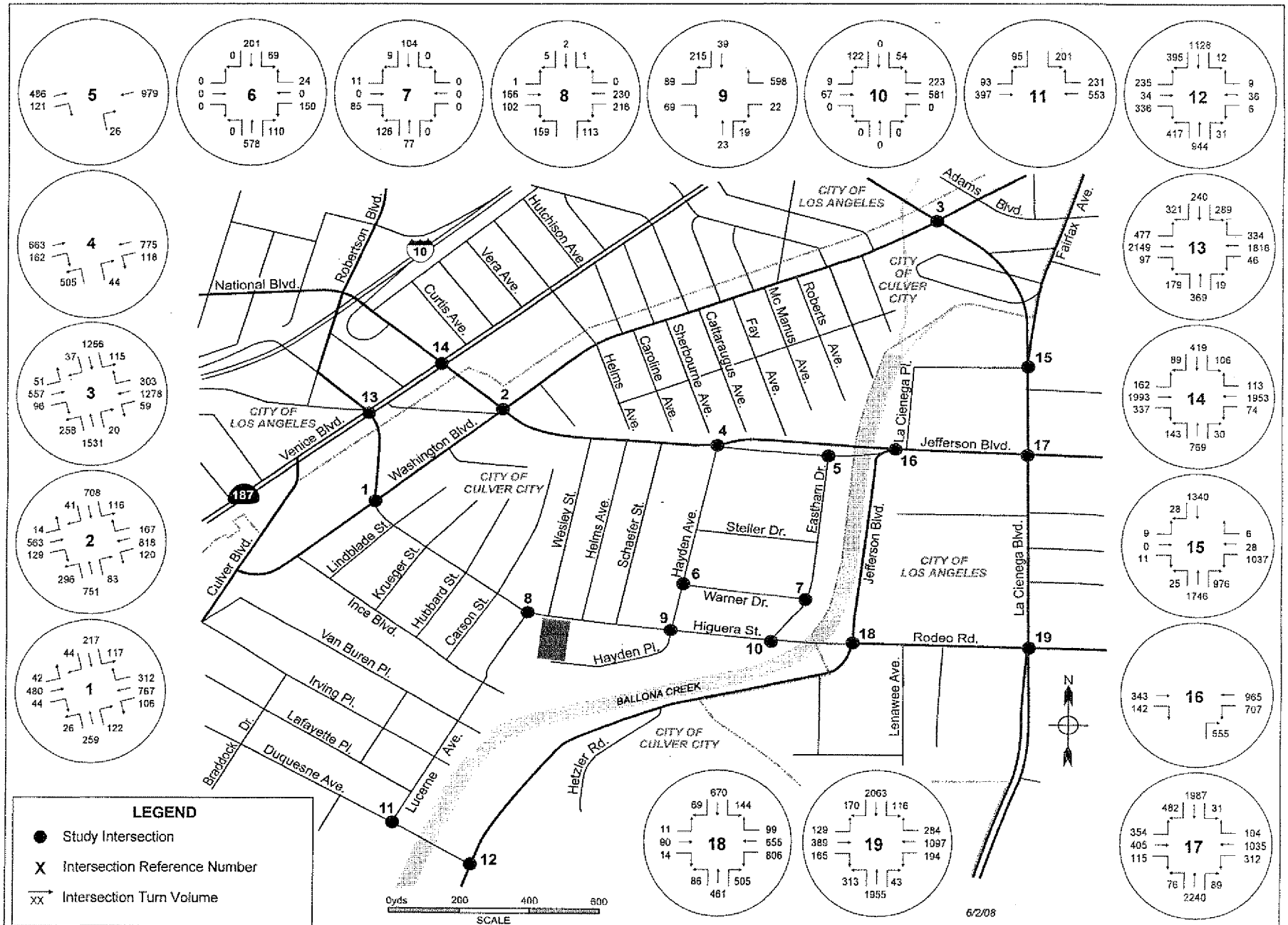

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Figure 6

Existing (Year 2008) Morning Peak-Hour Turn Volumes

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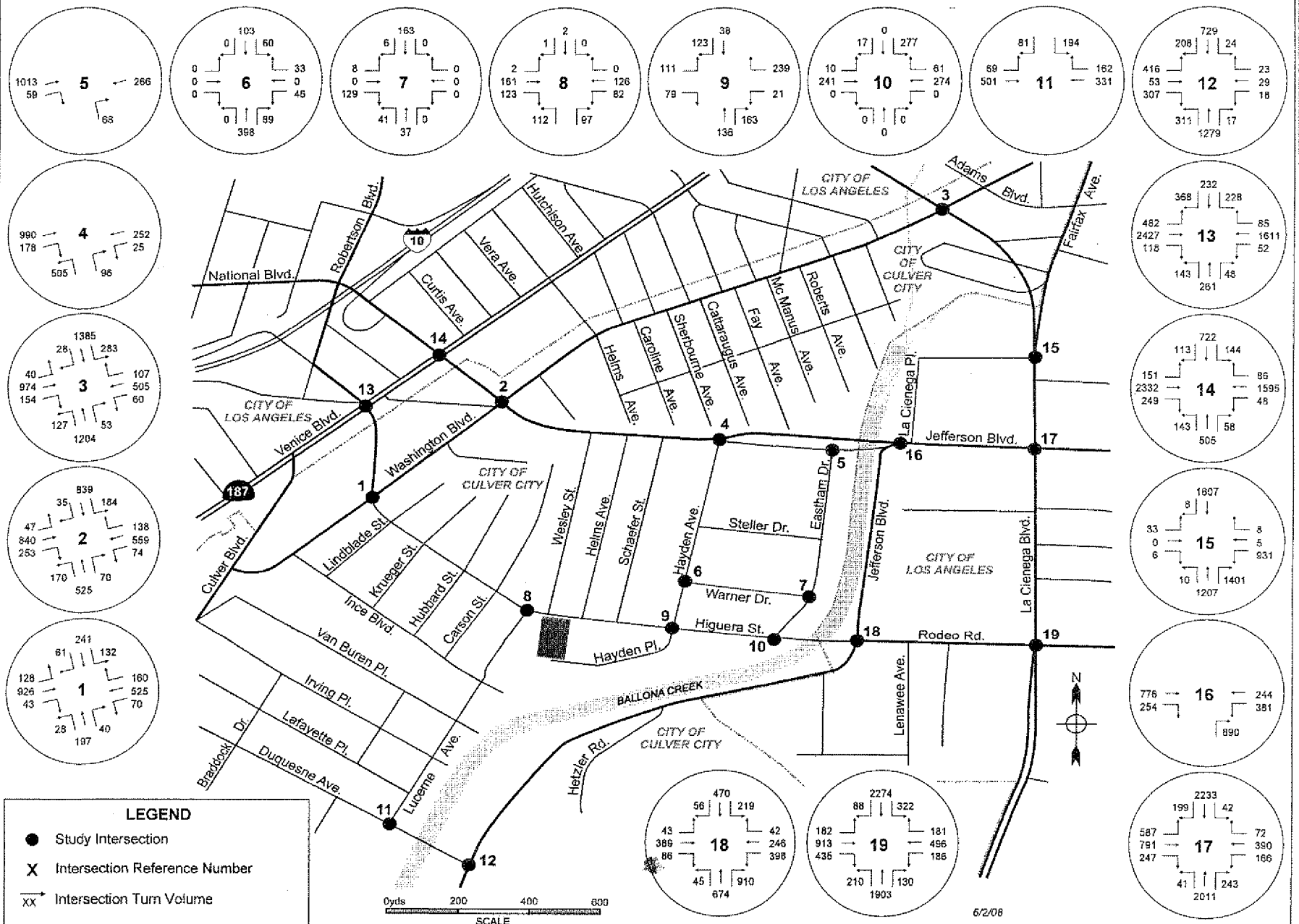

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Figure 7

Existing (Year 2008) Afternoon Peak-Hour Turn Volumes

3. Future (Year 2010) with Ambient Growth and Related Projects Conditions

This section provides an analysis of future traffic conditions in the study area with ambient growth and area related projects added but without the proposed Project. The Year 2010 was selected for analysis based on the anticipated completion date of the Project.

A. Ambient Growth

For the analysis of background traffic during the study year, an annual traffic growth rate factor of 1% was utilized to provide for increases in traffic from the existing traffic counts. This annual rate was discussed and verified with City of Culver City staff and included in the proposed methodologies and assumptions submitted during the scoping of the project.

To apply this ambient growth rate to existing (Year 2008) volumes, a factor of 1.02 was utilized. This factor simulates a 1% annual increase over the two-year period between existing conditions and future (Year 2010) conditions.

The future (Year 2010) with ambient growth peak-hour turn movement volumes analyzed in this scenario are provided in Figures 8 and 9 for the morning and afternoon peak hours, respectively.

B. Related Projects

An area of influence, defined by an approximate 1.5-mile radius from the Project site, was utilized in order to capture specific locations of other approved and pending projects. Based on list of area related projects was compiled. These projects were considered to potentially contribute measurable traffic volumes to the study area during the future analysis period. Figure 10 illustrates the locations of the related projects. The project location/description and trip generation of each are described in Table 2.

Information provided by the City of Culver City and LADOT related projects database provides total peak-hour trips, compiled from environmental documentation and/or other traffic studies. The peak-hour trips in/out trip generation ratios applied to the related projects were based on ITE's *Trip Generation*. Trip generation estimates for the related projects not included in the database were developed using trip generation rates in ITE's *Trip Generation* (7th Edition). Table 2 indicates that the related projects are expected to generate approximately 67,679 daily trips of which 6,197 and 6,706 trips would be during the morning and afternoon peak hours, respectively.

For the purposes of analysis, the related area projects were separated into zones that could be included in the TRAFFIX model used in the preparation of this analysis. The related project traffic was added to the surrounding street system using similar distribution and assignment methodology applied for project trips, with some adjustments for related projects near the edges of the study area.

Figures 11 and 12 illustrate the related projects trip assignment by turning movement during the morning and afternoon peak hours, respectively.

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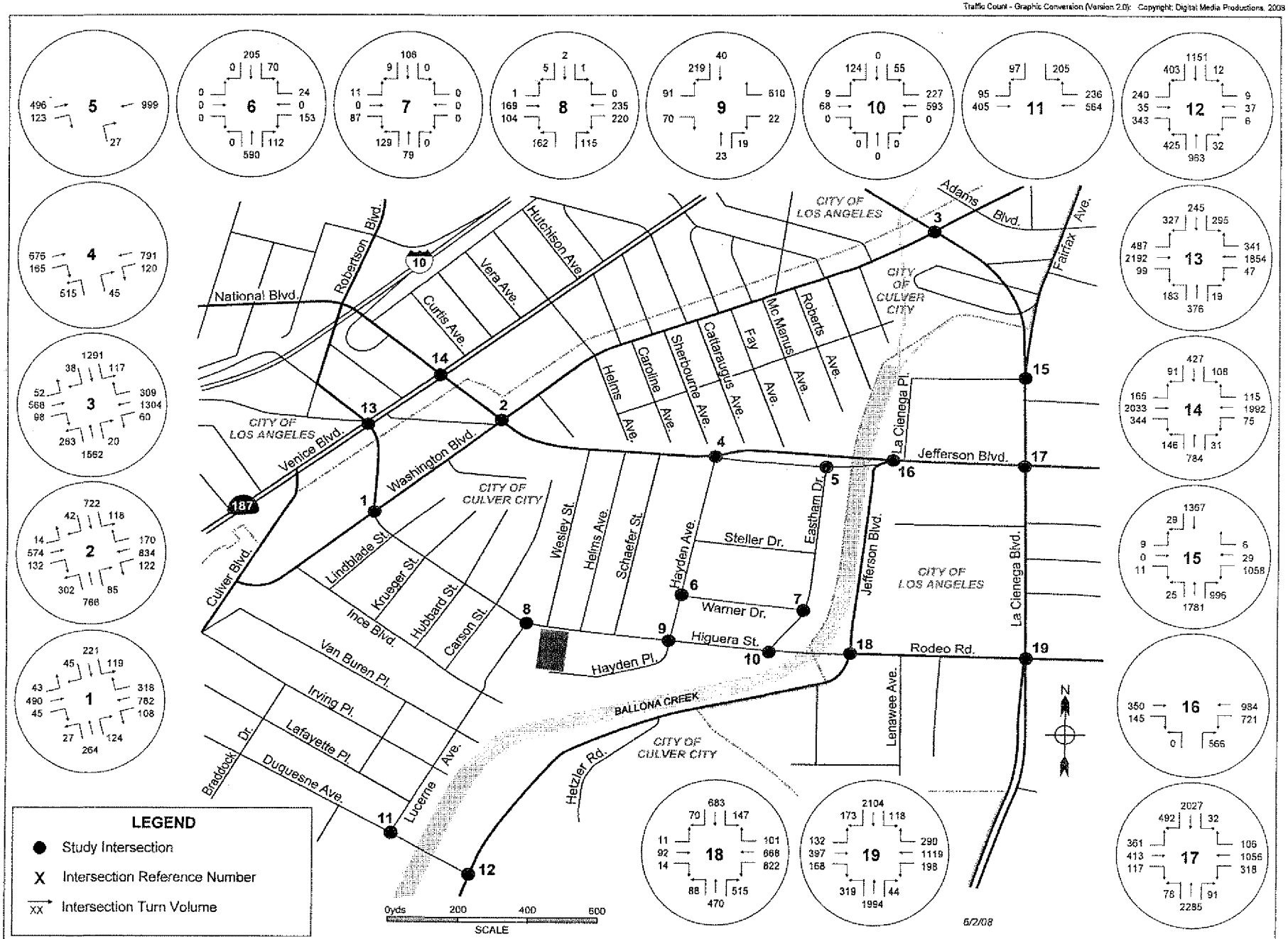

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Figure 8

Future (Year 2010) With Ambient Growth Morning Peak-Hour Turn Volumes

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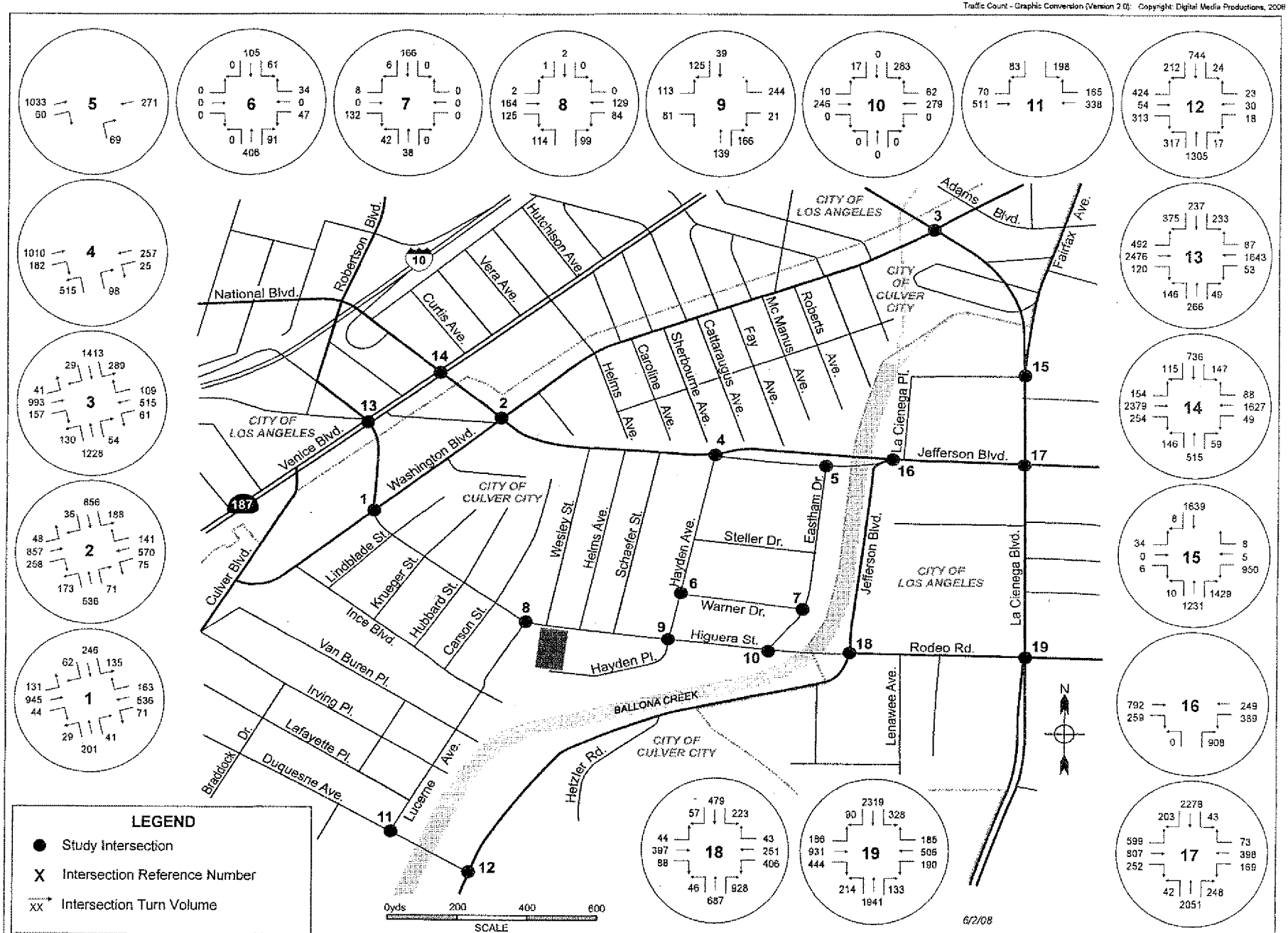

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Figure 9

Future (Year 2010) With Ambient Growth Afternoon Peak-Hour Turn Volumes

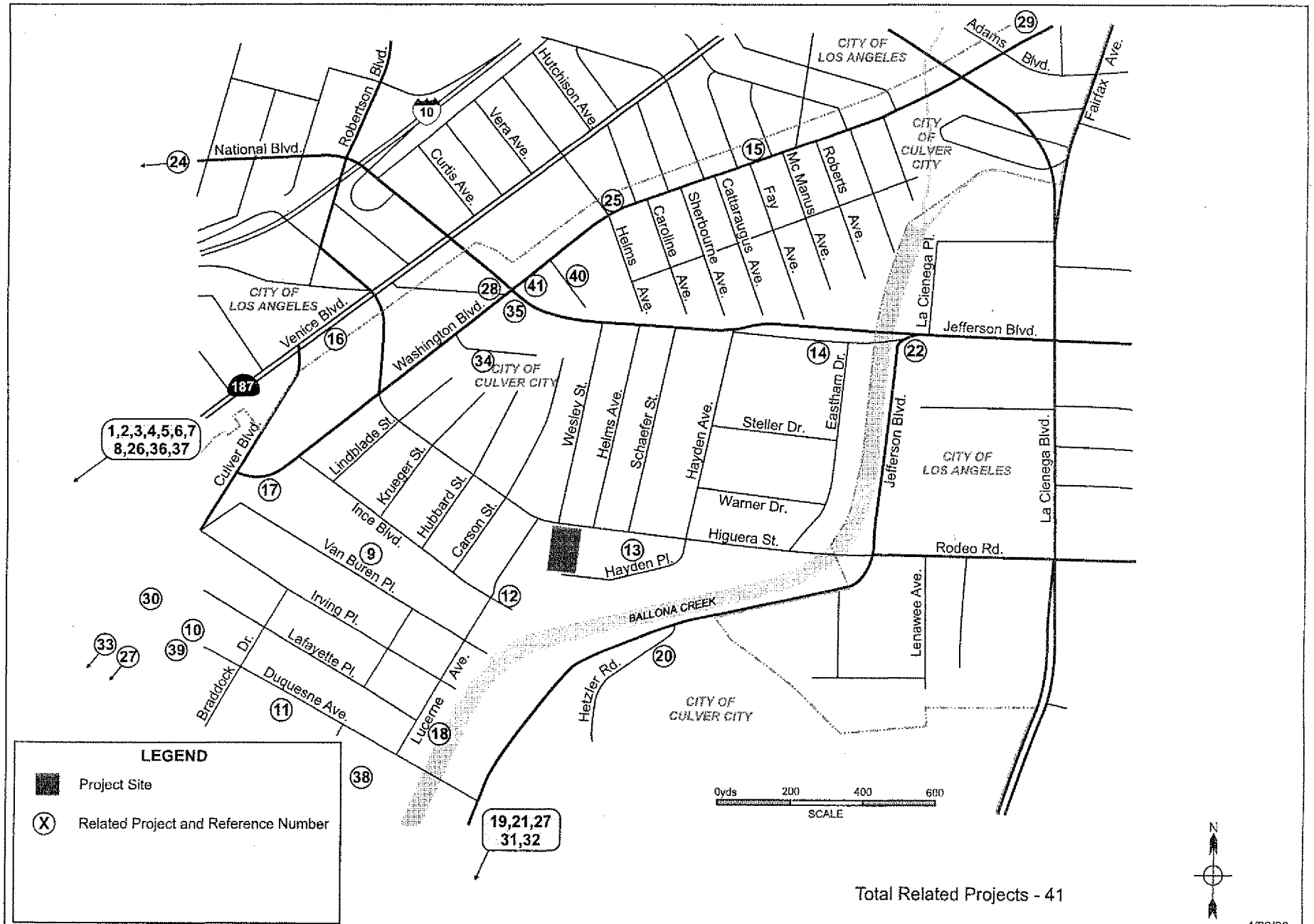

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Figure 10

Locations of Related Projects

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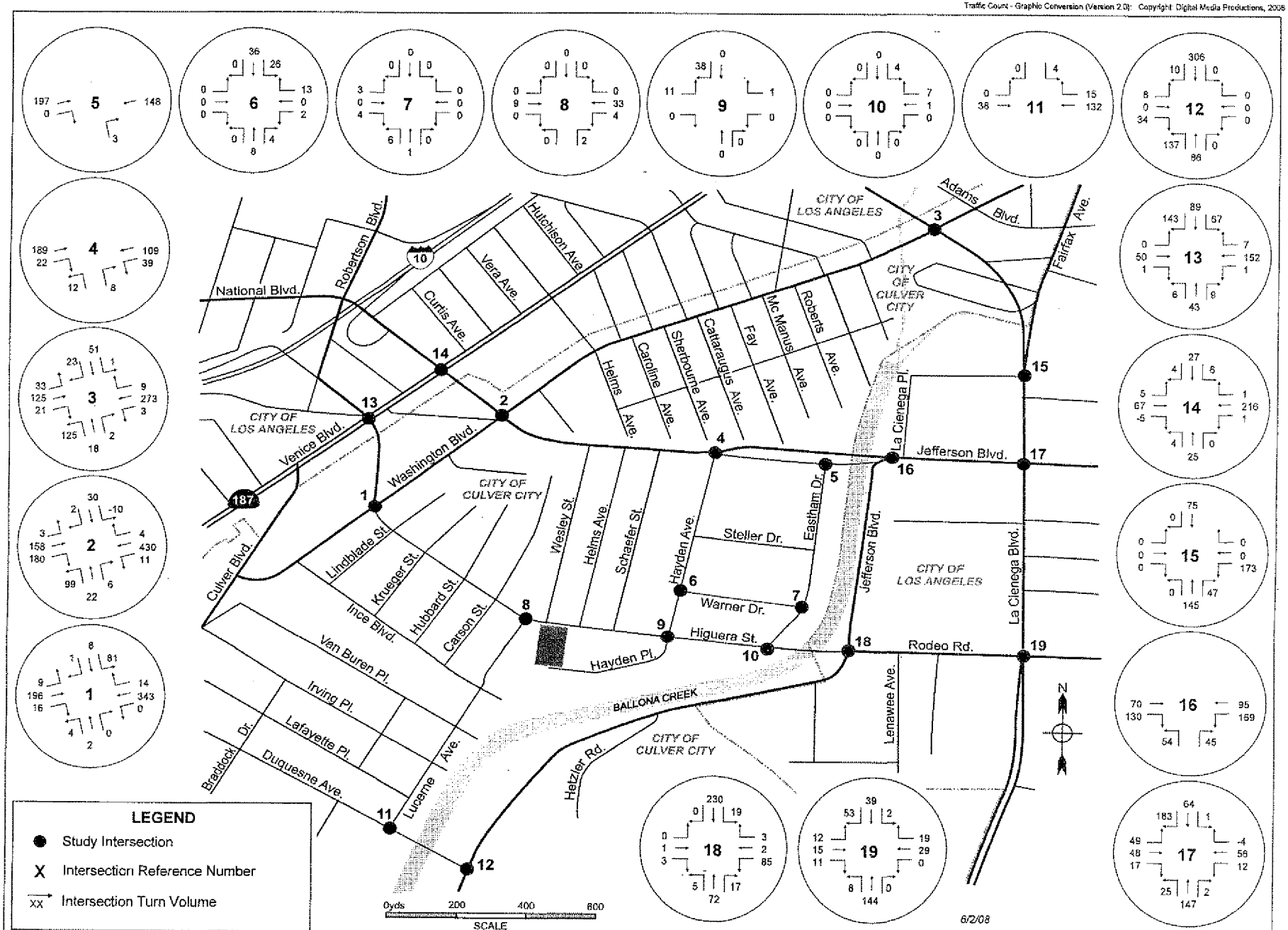

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Figure 11

Related Project Only Trip Assignment - Morning Peak-Hour Turn Volumes

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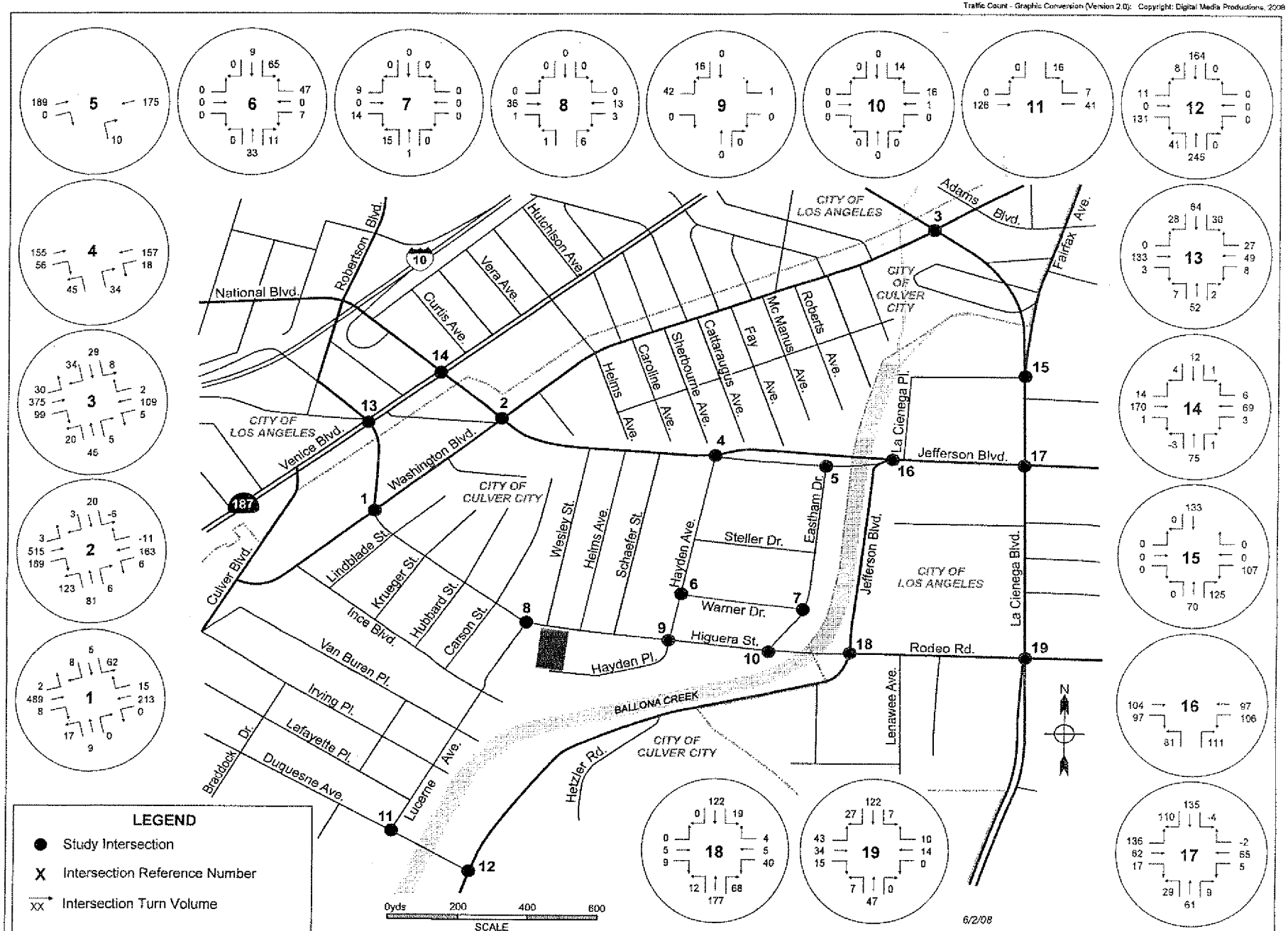

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Figure 12

Related Project Only Trip Assignment - Afternoon Peak-Hour Turn Volumes

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Table 2 – Related Project Trip Generation Estimates

Map #	Project Name	Location	Land Use	Intensity	Units	Daily Trips	AM PEAK			PM PEAK		
							Total	In	Out	Total	In	Out
1	Sony	10202 Washington Blvd.	Office	1035.516	k.s.f.	11,401	1,605	1,412	193	1,543	262	1,281
2	Live/ work lofts	10839 Washington Blvd.	Live/Work	3	d.u.	18	1	0	1	2	1	1
3	Huron Townhouses	3823-3833 Huron Ave.	Condominium	15	d.u.	88	7	1	6	8	5	3
4	Four Unit Condo	3838 Tilden Avenue	Condominium	4	d.u.	23	2	0	2	2	1	1
5	Condos	3846 Bentley Avenue	Condominium	4	d.u.	23	2	0	2	2	1	1
6	Condos	3873 Bentley Avenue	Condominium	2	d.u.	12	1	0	1	1	1	0
7	Condominium Conversion	3910 Girard Ave.	Condominium	7	d.u.	41	3	1	2	4	3	1
8	Four unit condominium	3972 Tilden Ave.	Condominium	4	d.u.	23	2	0	2	2	1	1
9	Four unit condominium	4014 Van Buren Pl.	Condominium	4	d.u.	23	2	0	2	2	1	1
10	TTM, Eight Unit Condo	4067/4073 Lincoln Ave.	Apartments	8	d.u.	54	4	1	3	5	3	2
11	TPM, Condominiums	4122/26 Lincoln Ave.	Condominium	2	d.u.	12	1	0	1	1	1	0
12	4227 Ince Blvd.	4227 Ince Blvd.	Condominium	6	d.u.	35	3	1	2	3	2	1
13	Parking Structure	8511 Warner Dr.	Retail [a]	101.553	k.s.f.	2,006	43	28	15	140	78	62
			Restaurant	31.110	k.s.f.							
14	Public storage expansion	8512 National Blvd.	Public Storage	71.570	k.s.f.	179	11	6	5	19	10	9
15	Max Leather AUP	8533 Washington Blvd.	Manufacturing	3.763	k.s.f.	70	10	7	3	9	4	5
16	Parcel B	9300 Culver Blvd.	Office/Restaurant/ Retail	115.108	k.s.f.	1,267	178	157	21	172	29	143
17	Culver Studios Expansion	9336 Washington Blvd.	Office	50	k.s.f.	551	78	69	9	75	13	62
18	Weinstock Condominiums	9650 Lucerne Ave.	Condominium	6	d.u.	35	3	1	2	3	2	1
19	Skateboard Park	9910 Jefferson Blvd.	Multipurpose Recreational Facility	12	k.s.f.	100	0	0	0	40	25	15
20	Baldwin Hills Scenic Overlook Park	Hetzler Rd.	Visitor Center	10.300	k.s.f.	265	3	2	1	12	5	7
21	West Los Angeles Community College Master Plan and EIR	9000 Overland Ave.	Community College	4,812	students	6,785	481	436	45	433	300	133
22	METRO Division 6 Transportation Facility	Jefferson Blvd./National Blvd.	Transit Center	175	buses	1,666	107	67	40	103	77	26
23	Baldwin Hills Regional Park Master Plan	LA Cienega/La Brea/Stocker St.	County Park	1,400	acres	2,226	14	11	3	84	34	50

Table 2 – Related Project Trip Generation Estimates (Continued)

Map #	Project Name	Location	Land Use	Intensity	Units	Daily Trips	AM PEAK			PM PEAK		
							Total	In	Out	Total	In	Out
24	Le Lycee Francais High School	10309 W National Blvd.	Private School K-12	340	students	946	280	207	73	108	46	62
25	Office Building	8787 Venice Blvd.	Office	45.712	ksf	503	71	62	9	68	12	56
26	Hampton Inn	3954 Sepulveda Blvd	Hotel	77	rooms	629	43	26	17	45	24	21
27	Village at Playa Vista (Assumes all phases of development)		Office	175	k.s.f.	2,271	326	287	39	305	52	253
			Dwelling Units	2600	d.u.	15,236	1,144	194	950	1,404	941	463
			Retail (Neighborhood)	150	k.s.f.	6,193	143	87	56	575	276	299
			Community Serving Uses	40	k.s.f.	520	13	9	4	18	6	12
28	Expo Light Rail Transit	National Blvd/Washington Blvd.	Transit Center	600 [d]	spaces	2,100	270	243	27	210	21	189
29	Mixed Use Development	5813 E. Washington Blvd	Residential Units	33	d.u.	193	15	3	12	17	11	6
			Retail [a]	13.801	k.s.f.	612	18	11	7	37	16	21
30	Uptown Lofts	9900 Culver Blvd	Office	4	k.s.f.	44	6	5	1	6	1	5
			Condominium	23	d.u.	135	10	2	8	12	8	4
31	Spartan Supplies	9919 Jefferson Blvd	Roofing Materials	18.420	k.s.f.	128	17	15	2	18	2	16
32	Symantec Office	800-900 Corporate Pointe	Office	550	k.s.f.	6,056	853	751	102	820	139	681
33	Union 76	10638 Culver Blvd	Gas station and convenience store with new car wash	2.500	k.s.f.	382	27	14	13	33	17	16
34	Park Century School	3939 Landmark St	Elementary School	6.950	k.s.f.	101	33	18	15	22	9	13
35	Turning Point-School	8794 National Blvd	Elementary School	9.000	k.s.f.	130	42	23	19	28	12	16
36	Condominium	3862 Huron Ave	Condominium	5	d.u.	29	2	0	2	3	2	1
37	Condominium	3968 Tilden Ave	Condominium	4	d.u.	23	2	0	2	2	1	1
38	Condominium	4228 Madison Ave	Condominium	2	d.u.	12	1	0	1	1	1	0
39	Condominium	4058 Madison Ave	Condominium	4	d.u.	23	2	0	2	2	1	1
40	Distribution & Warehouse	3434 Wesley St	Office	10.500	k.s.f.	116	16	14	2	16	3	13
41	Washington / National Specific Plan (Catalytic Projects)	Zone 1A & 1B	Residential/Retail/ Hotel	-	-	3,860	275	143	132	277	135	142
		Zone 3A	Residential/Retail/Business	-	-	-752	-42	-53	11	-83	-27	-56
		Zone 4A	Residential/Retail	-	-	1,286	69	20	49	97	56	41
TOTAL						67,679	6,197	4,281	1,916	6,706	2,624	4,082

C. Planned Roadway Improvements

The traffic analysis of future conditions takes into account planned roadway improvement anticipated to be completed within the timeframe of the proposed Project. KOA Corporation conducted research in both the City of Culver City and the City of Los Angeles. Significant planned roadway capacity enhancements in the immediate study area include roadway improvements that will be implemented as part of the Exposition Light Rail and Station parking structure.

Roadway improvements associated with the Expo Light Rail were obtained from Metro's "*Los Angeles Mid-City Westside Transit Corridor Mid-City Exposition Light Rail Transit Project - Final Environmental Impact State/Environmental Impact Report - Volume 1*", October 2005. The following summarizes these improvements:

- National Boulevard and Venice Boulevard (City of Los Angeles): Add an eastbound and westbound exclusive left-turn lane and a right-turn lane. Both approaches would then provide two left-turn lanes, three through lanes and one right-turn lane.

- National Boulevard and Jefferson Boulevard (City of Los Angeles): Add a northbound left-turn lane, the approach would then provide a left-turn lane and dual right-turn lanes; add an eastbound right-turn lane. The eastbound approach would then provide one through lane, one shared through/right-turn lane and one right-turn lane.

- La Cienega Boulevard and Rodeo Road (City of Los Angeles): Add a westbound exclusive left-turn lane. The westbound approach would then provide two left-turn lanes, two through lanes and one right-turn lane.

Figure 13 summarizes the improvements graphically.

D. Peak-Hour Intersection Level of Service

To analyze future conditions with related projects, intersection turn volumes with ambient growth and related projects traffic included were input into the TRAFFIX and LADOT analysis programs and processed with the Intersection Capacity Utilization (ICU), Critical Movement Analysis (CMA) and Highway Capacity Manual (HCM) methodologies, as appropriate.

Table 3 summarizes the LOS of the study area intersections during the morning and afternoon peak hours under this scenario.

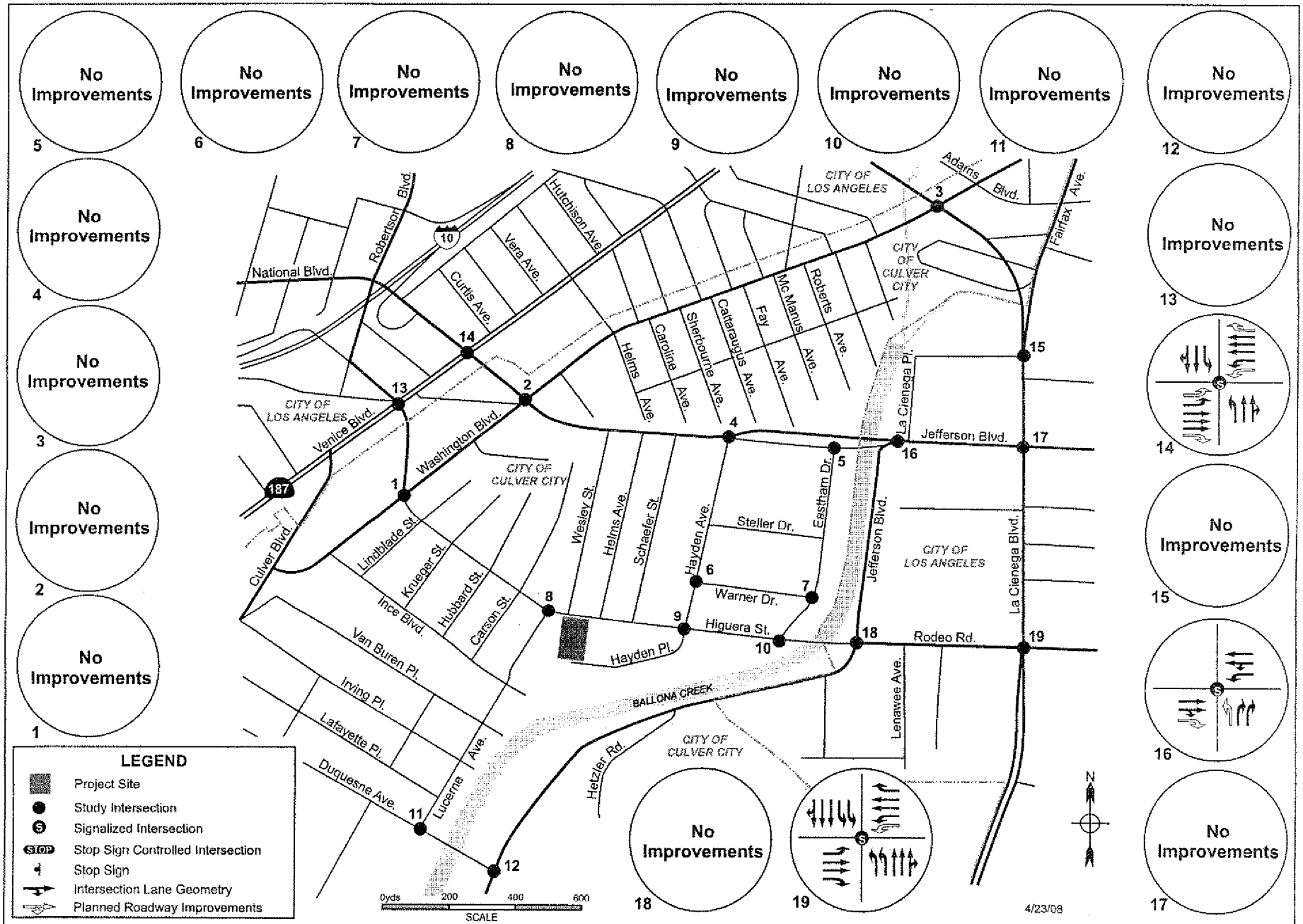

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Figure 13

Planned Roadway Improvements

Table 3 – Intersection Performance Ambient Growth and Related Projects Conditions (Year 2010)

Intersection	Weekday Morning Peak		Weekday Afternoon Peak	
	V/C or Delay[a]	LOS	V/C or *Delay*	LOS
City of Culver City				
1. Robertson Boulevard & Washington Boulevard	0.765	C	0.740	C
2. National Boulevard & Washington Boulevard	0.824	D	0.898	D
3. La Cienega Boulevard & Washington Boulevard	1.111	**F**	0.962	**E**
4. Hayden Avenue & National Boulevard	0.640	B	0.712	C
5. Eastham Drive & National Boulevard	*0.784*	C	*0.480*	A
6. Hayden Avenue & Warner Drive [a]	*58.3*	**F**	*17.5*	C
7. Eastham Drive & Higuera Street [a]	*9.8*	A	*10.2*	B
8. Lucerne Avenue & Higuera Street [a]	*15.8*	C	*10.3*	B
9. Hayden Avenue & Higuera Street [a]	*20.4*	C	*11.2*	B
10. Eastham Drive & Warner Drive	0.442	A	0.404	A
11. Lucerne Avenue & Duquesne Avenue [a]	*68.9*	**F**	*53.7*	**F**
12. Jefferson Boulevard & Duquesne Avenue	1.084	**F**	0.896	D
City of Los Angeles				
13. Robertson Boulevard & Venice Boulevard	0.997	**E**	0.912	**E**
14. National Boulevard & Venice Boulevard	0.892	D	0.959	**E**
15. La Cienega Boulevard & Fairfax Avenue	1.084	**F**	1.004	**F**
16. Jefferson Boulevard & National Boulevard	0.561	A	0.607	B
17. La Cienega Boulevard & Jefferson Boulevard	1.063	**F**	0.981	**E**
18. Jefferson Boulevard & Higuera Street/Rodeo Rd	0.789	C	0.694	B
19. La Cienega Boulevard & Rodeo Road	1.128	**F**	1.037	**F**

Note:

[a] Unsignalized intersection controlled by stop signs. Indicates average vehicle delay in seconds rather than V/C ratio.

Under future with ambient growth and related project conditions, the following is the list of intersections operating at poor levels of service (LOS E or worse) during either the AM or PM peak hours:

3. La Cienega Boulevard and Washington Boulevard (AM and PM Peak Hours) (City of Culver City)
6. Hayden Drive and Warner Drive (AM Peak Hour) (City of Culver City)
11. Lucerne Avenue and Duquesne Avenue (AM and PM Peak Hours) (City of Culver City)
12. Jefferson Boulevard and Duquesne Avenue (AM Peak Hour) (City of Culver City)
13. Robertson Boulevard and Venice Boulevard (AM and PM Peak Hours) (City of Los Angeles)
14. National Boulevard and Venice Boulevard (PM Peak Hour) (City of Los Angeles)
15. La Cienega Boulevard and Fairfax Avenue (AM and PM Peak Hours) (City of Los Angeles)
17. La Cienega Boulevard and Jefferson Boulevard (AM and PM Peak Hours) (City of Los Angeles)
19. La Cienega Boulevard and Rodeo Road (AM and PM Peak Hours) (City of Los Angeles)

The remaining ten study intersections would continue to operate at LOS D or better during both the morning and afternoon peak hours after the application of ambient growth rates and trips from related projects within the study area.

(Note: Improvements over existing levels of service are the result of planned intersection improvements, discussed earlier in this section of the report.)

The morning and afternoon peak hour traffic volumes for this scenario are provided in Figures 14 and 15, respectively. The traffic analysis worksheets for this scenario are provided in Appendix D of this report.

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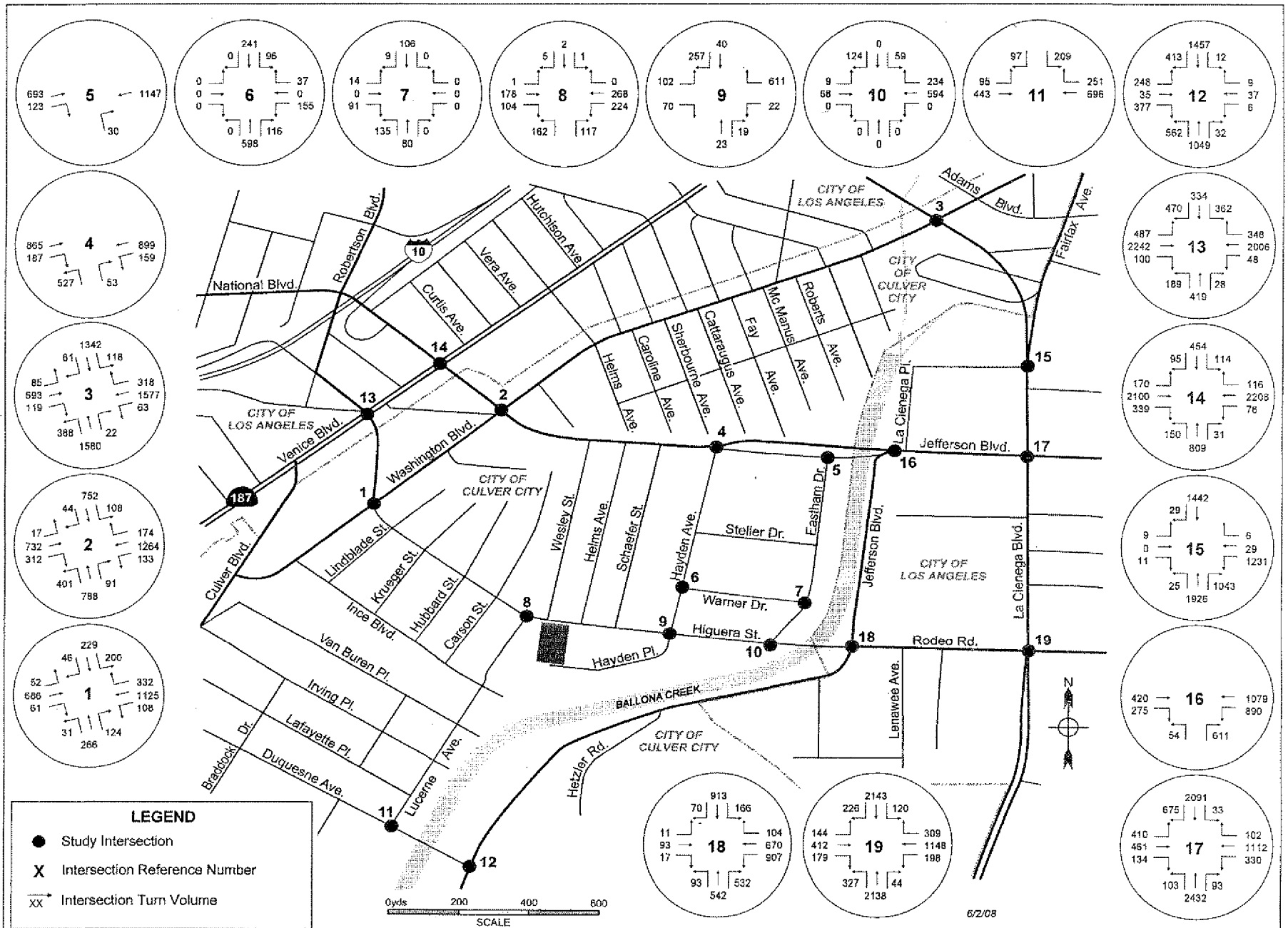

KOA CORPORATION PLANNING & ENGINEERING	8665 Hayden Place - Traffic Study	Figure 14
	Future (Year 2010) With Ambient Growth and Related Projects - Morning Peak-Hour Turn Volumes	

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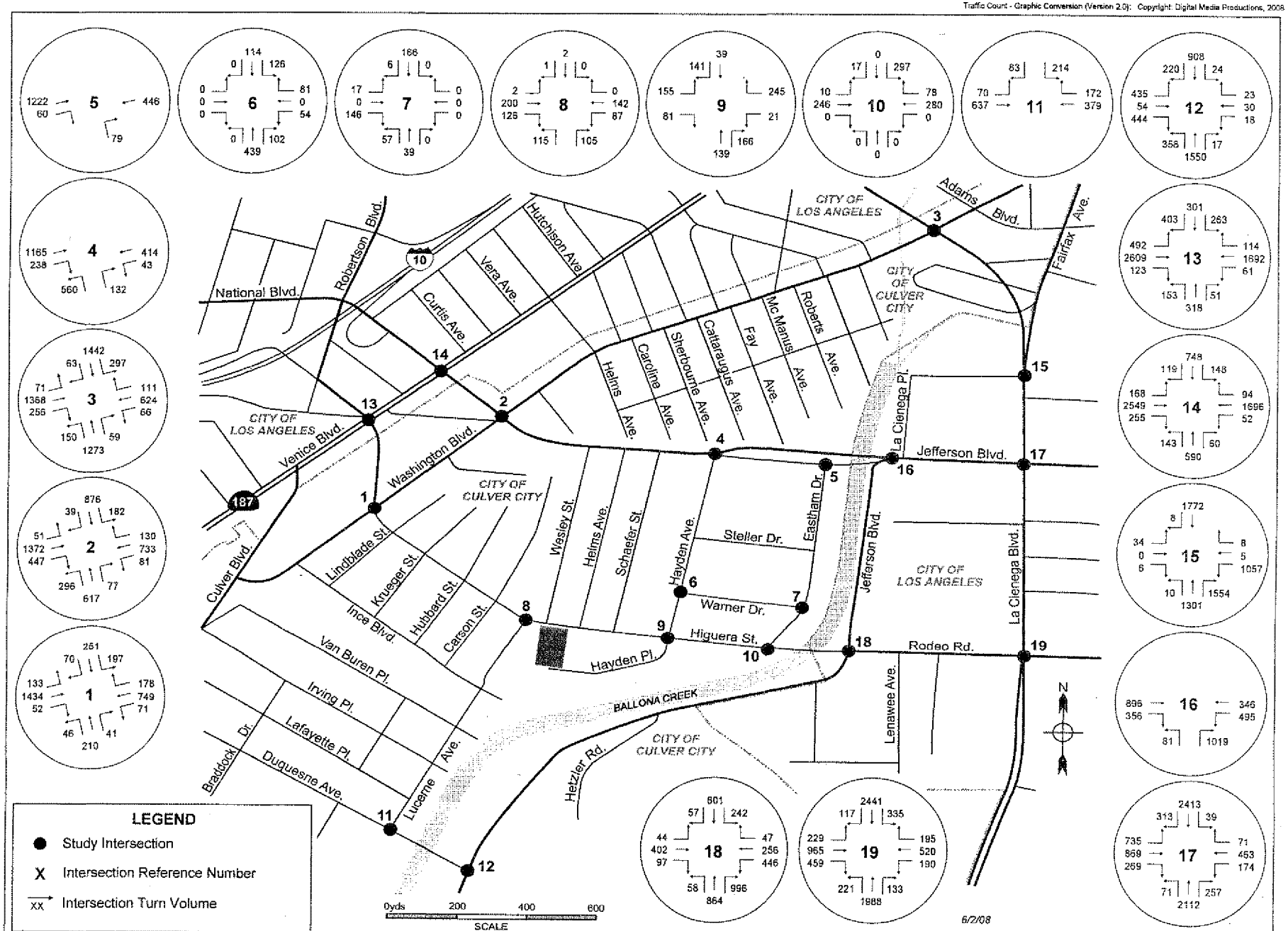

KOA CORPORATION PLANNING & ENGINEERING	8665 Hayden Place - Traffic Study	Figure 15
	Future (Year 2010) With Ambient Growth and Related Projects - Afternoon Peak-Hour Turn Volumes	

4. Project Traffic

This section defines the traffic that would be generated by the proposed Project in a three-step process including trip generation, trip distribution, and trip assignment.

A. Project Trip Generation

As indicated in Section 1, the project consists of constructing a 63,615 gross square-foot office building. This Project would replace the existing 18,000 gross square feet of light industrial use. Project access would be provided at the southern end of the cul-de-sac terminus of Hayden Place.

Table 4 summarizes the project trip generation rates that were utilized and the trip generation calculated from these rates. Trip generation for the proposed project land use was calculated by utilizing rates published in ITE's *Trip Generation, 7th Edition.*

While this project is likely eligible for a transit-oriented trip reduction based on the project's close proximity (approximately two street blocks) to the proposed main station of the Expo Light Rail system, in order to provide a conservative analysis, no transit-oriented development (TOD) trip reduction was taken in developing the project trip generation forecast for this analysis. Still, for purposes of discussion, Figure 16 and the text below is provided to describe the two most direct routes between the project site and the nearest future Exposition Line Station.

Route No. 1, which utilizes Wesley Street and National Boulevard, is approximately 2,400 feet (0.45 miles) in length. Sidewalks exist on both sides of Wesley Avenue and on the south side of National Boulevard. The sidewalks on Wesley Drive are relatively narrow but are offset from the curb in most cases by a planted parkway. Pedestrian crosswalks are provided at the signalized National Boulevard/Washington Boulevard intersection.

Route No. 2, which utilizes Higuera Street and Washington Boulevard, is approximately 3,170 feet (0.60 miles) in length. Both Higuera Street and Washington Boulevard have sidewalks on each side of the roadway. The Washington Boulevard/Higuera Street intersection is signalized and crosswalks are provided on all intersection approaches.

Assuming a walking speed of 4 feet per second and without accounting for signal delay, the walking time along Route No. 1 is 10 minutes and along Route No. 2 is 13 minutes.

Table 4 indicates the total trip generation of the proposed Project land uses and the trip generation credits taken for existing land uses.

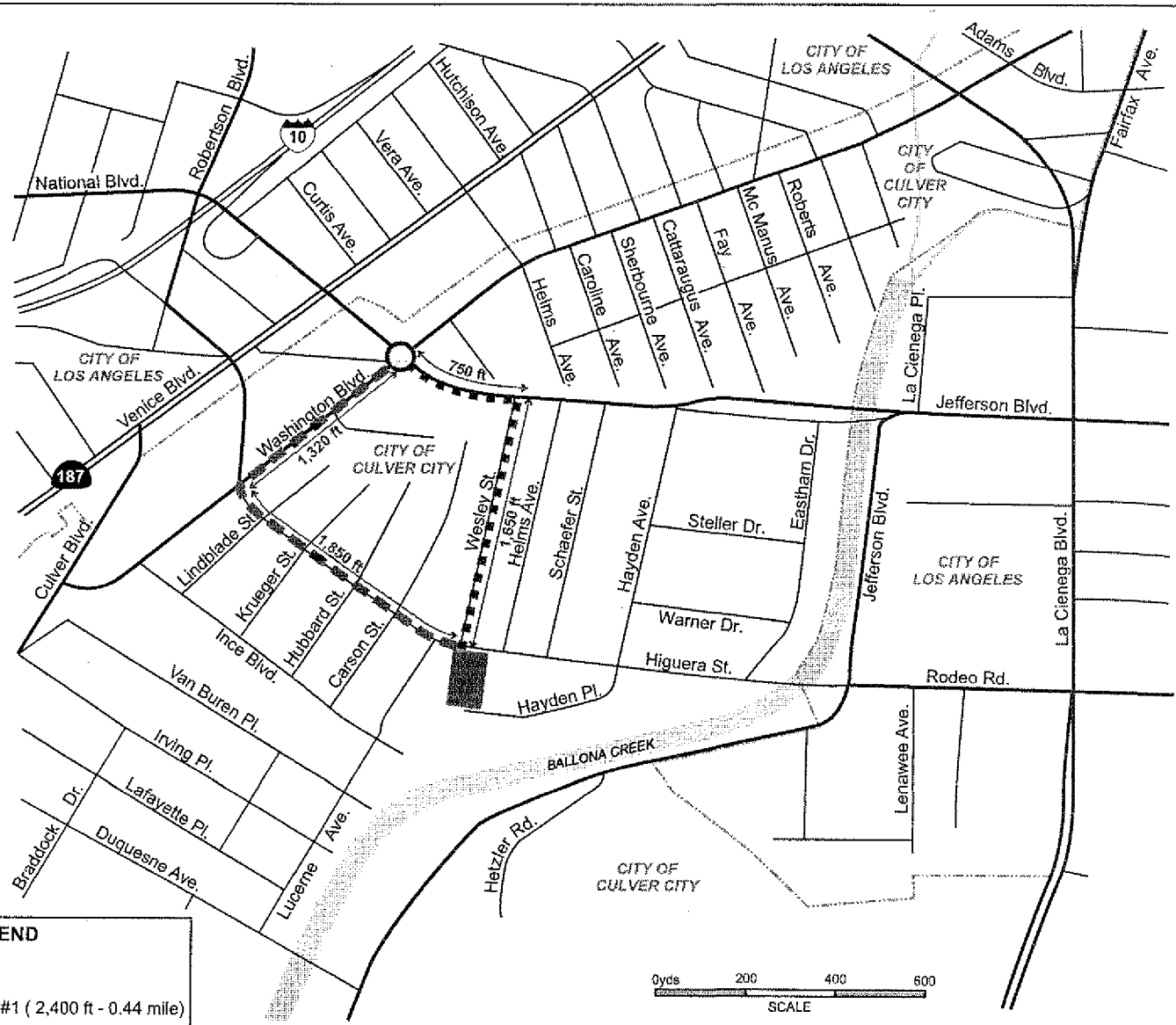

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Figure 16

Transit Access Pedestrian Route

Table 4 – Project Trip Generation Estimates

Land Use	Intensity	Units	Daily	AM Peak Hour			Afternoon Peak Hour		
				Total	In	Out	Total	In	Out
Trip Rates [1]									
Office (ITE Code 710)	-	KSF	11.01	1.55	1.36	0.19	1.49	0.25	1.24
Light Industrial (ITE Code 110)	-	KSF	6.97	0.92	0.81	0.11	0.98	0.12	0.86
Trips									
Existing Uses Credit									
Light Industrial (ITE Code 110)	18.000	KSF	(125)	(17)	(15)	(2)	(18)	(2)	(16)
Project									
Office (ITE Code 710)	63.615	KSF	700	99	87	12	95	16	79
TOTAL			**575**	**82**	**72**	**10**	**77**	**14**	**63**

[1] Trip generation rates were from ITE Trip Generation Manual, 7th Edition unless otherwise noted.

Based on the rates found in *Trip Generation*, the proposed project is forecast to generate 575 daily trips of which 82 and 77 trips would occur during morning and afternoon peak hour trips, respectively.

B. Project Trip Distribution

Trip distribution is the process of assigning the direction of travel to and from a project site. Trip distribution is dependent upon the land use characteristics of the project and the general locations of land uses to which project trips would originate or terminate. Project trip distribution was based on the geographic distribution of population from which the employees of the proposed development would originate or terminate as well as knowledge of development trends in the area, local and sub-regional traffic routes, and regional traffic flows.

Figure 17 illustrates the intersection trip distribution percentages that were utilized to assign project traffic volumes.

C. Project Trip Assignment

The final product of the trip assignment process is a full accounting of project trips, by direction and turning movement, at the study intersections. The project trips were assigned based on distribution inputs to the TRAFFIX program.

Figures 18 and 19 illustrate the project trip assignment to the study intersections for the morning and afternoon peak hours, respectively.

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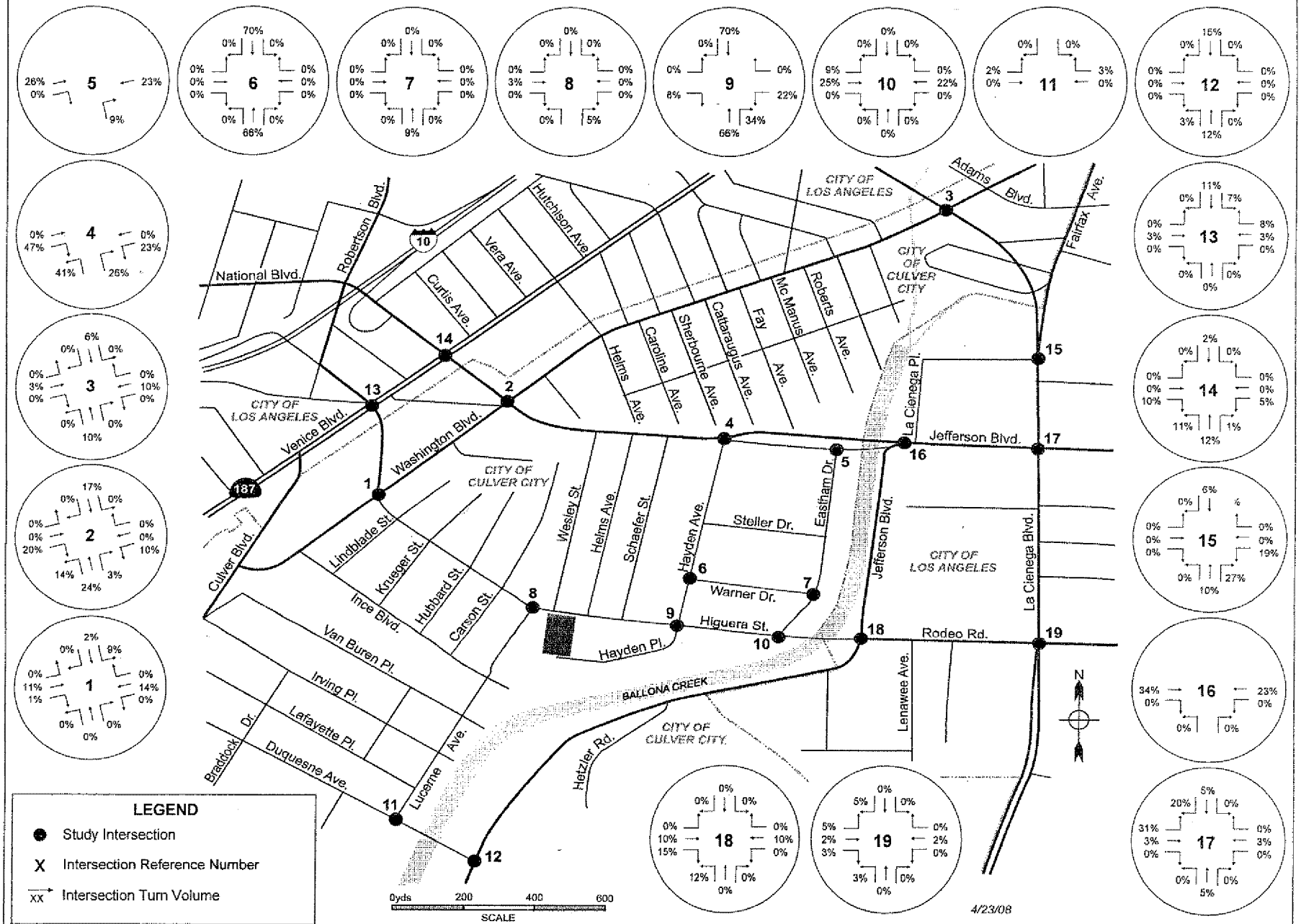

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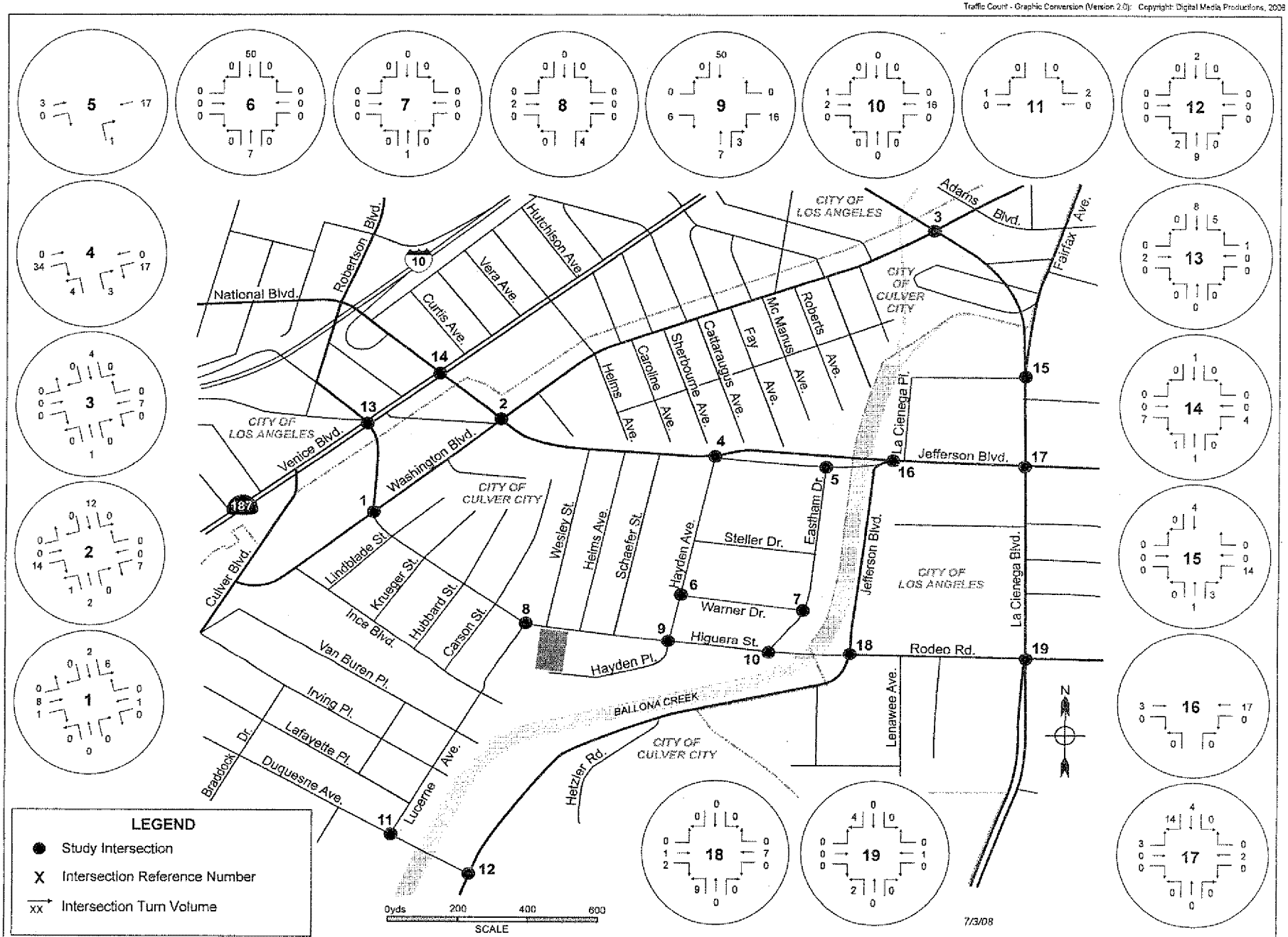

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Figure 18

Morning Peak Trip Assignment - Project Traffic

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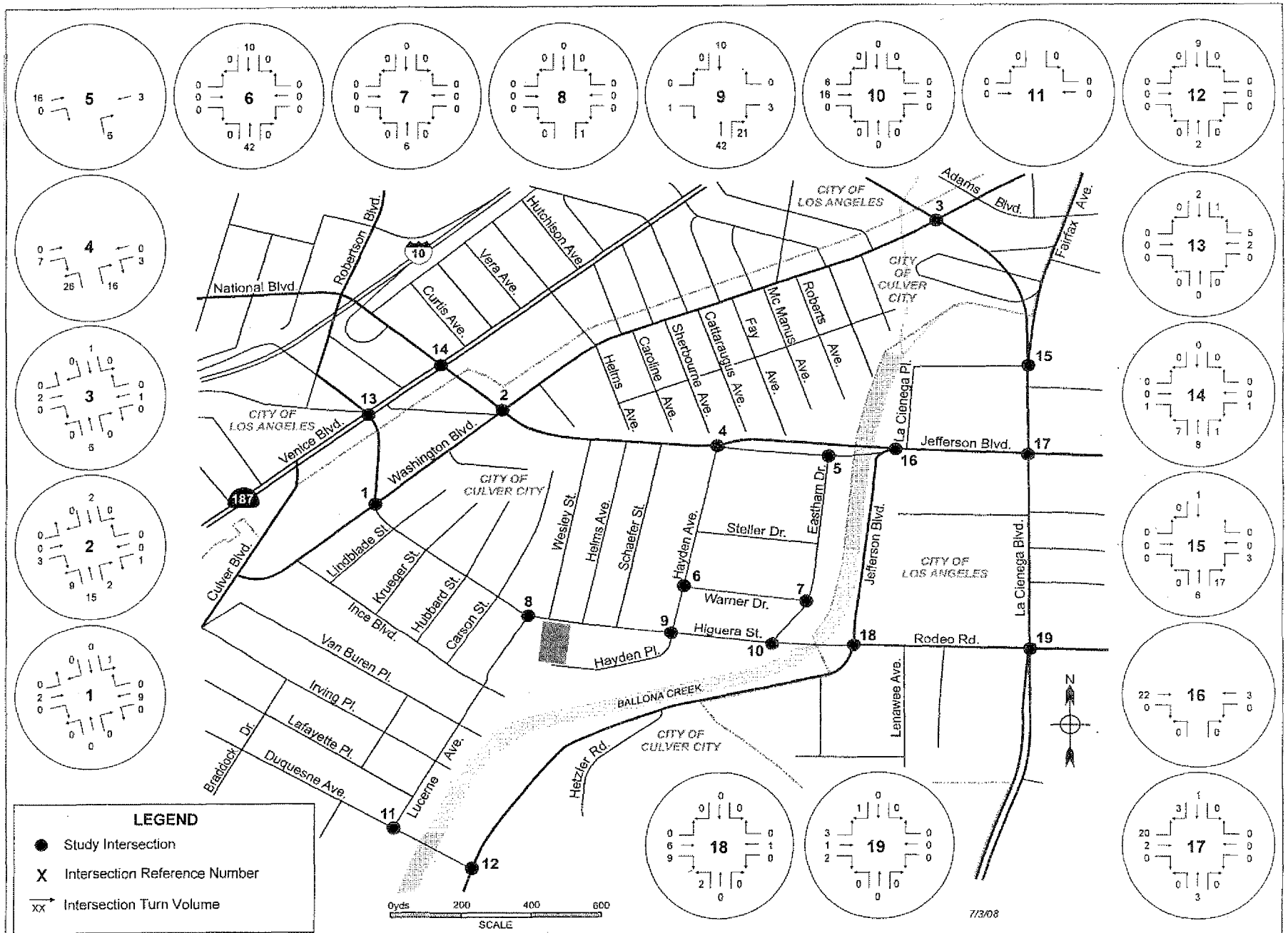

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Figure 19

Afternoon Peak Trip Assignment - Project Traffic

5. Future (Year 2010) with Ambient Growth and Related Projects and Project Conditions

This section documents future traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for these conditions were derived by adding Project trips to the future volumes (with ambient growth and related projects volumes).

Table 5 summarizes the resulting LOS values at the study intersections.

Table 5 – Intersection Performance - Ambient Growth and Related Projects and Project Conditions (Year 2010)

Intersection	Weekday Morning Peak		Weekday Afternoon Peak	
	V/C or Delay[a]	LOS	V/C or *Delay*	LOS
City of Culver City				
1. Robertson Boulevard & Washington Boulevard	0.770	C	0.741	C
2. National Boulevard & Washington Boulevard	0.828	D	0.903	**E**
3. La Cienega Boulevard & Washington Boulevard	1.114	**F**	0.964	**E**
4. Hayden Avenue & National Boulevard	0.733	C	0.799	C
5. Eastham Drive & National Boulevard [a]	*0.796*	C	*0.490*	A
6. Hayden Avenue & Warner Drive [a]	*68.7*	**F**	*18.4*	C
7. Eastham Drive & Higuera Street [a]	*9.8*	A	*10.2*	B
8. Lucerne Avenue & Higuera Street [a]	*15.9*	C	*10.4*	B
9. Hayden Avenue & Higuera Street [a]	*23.4*	C	*12.3*	B
10. Eastham Drive & Warner Drive	0.448	A	0.408	A
11. Lucerne Avenue & Duquesne Avenue [a]	*68.9*	**F**	*53.7*	**F**
12. Jefferson Boulevard & Duquesne Avenue	1.086	**F**	0.901	**E**
City of Los Angeles				
13. Robertson Boulevard & Venice Boulevard	1.002	**F**	0.912	E
14. National Boulevard & Venice Boulevard	0.893	D	0.964	**E**
15. La Cienega Boulevard & Fairfax Avenue	1.090	**F**	1.010	**F**
16. Jefferson Boulevard & National Boulevard	0.566	A	0.615	B
17. La Cienega Boulevard & Jefferson Boulevard	1.065	**F**	0.982	**E**
18. Jefferson Boulevard & Higuera Street/Rodeo Rd	0.800	C	0.697	B
19. La Cienega Boulevard & Rodeo Road	1.130	**F**	1.037	**F**

Note:
[a] Unsignalized intersection controlled by stop signs. Indicates average vehicle delay in seconds rather than V/C ratio.

Figures 20 and 21 illustrate the morning and afternoon peak hours turn movement volumes, respectively, at the study intersections under future with project conditions.

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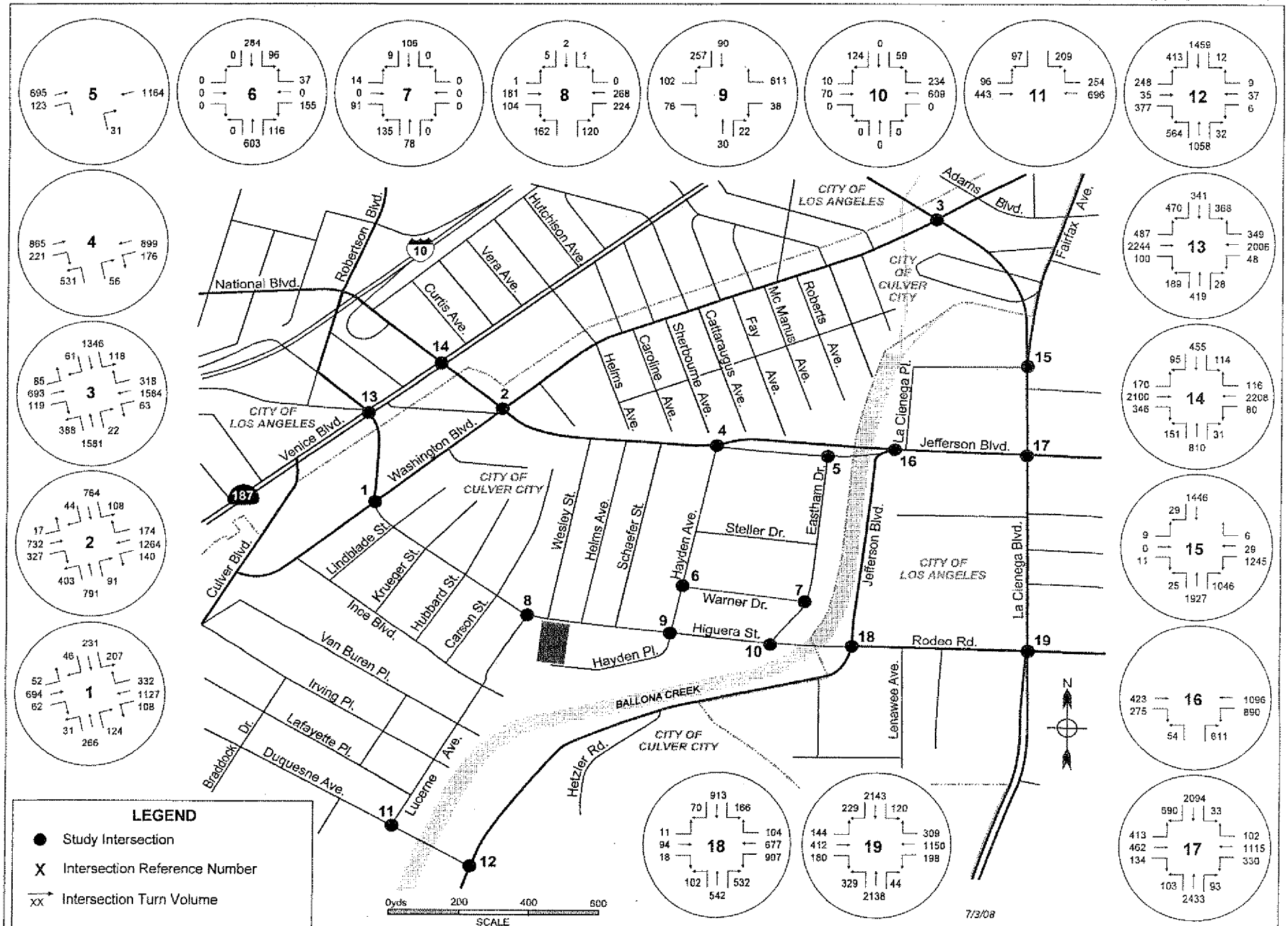

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Figure 20

Future (Year 2010) With Ambient Growth and Related Projects and Project Morning Peak-Hour Turn Volumes

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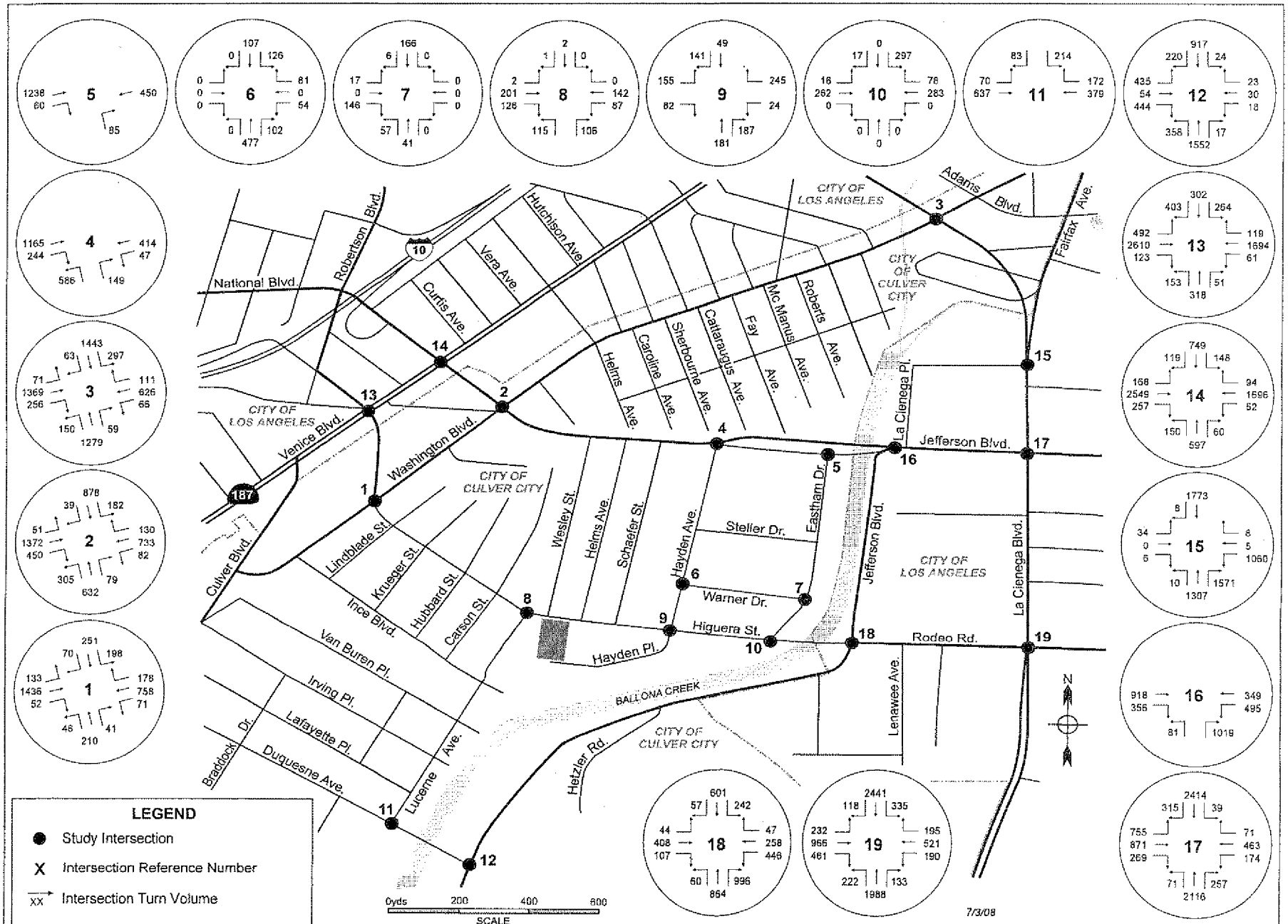

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Figure 21

Future (Year 2010) With Ambient Growth and Related Projects and Project Afternoon Peak-Hour Turn Volumes

Under future with ambient growth and related project and project conditions, the following is the list of intersections operating at poor levels of service (LOS E or worse) during either the AM or PM peak hours:

2. National Boulevard and Washington Boulevard (PM Peak Hour) (City of Culver City)
3. La Cienega Boulevard and Washington Boulevard (AM and PM Peak Hours) (City of Culver City)
6. Hayden Drive and Warner Drive (AM Peak Hour) (City of Culver City)
11. Lucerne Avenue and Duquesne Avenue (AM and PM Peak Hours) (City of Culver City)
12. Jefferson Boulevard and Duquesne Avenue (AM and PM Peak Hours) (City of Culver City)
13. Robertson Boulevard and Venice Boulevard (AM and PM Peak Hours) (City of Los Angeles)
14. National Boulevard and Venice Boulevard (PM Peak Hour) (City of Los Angeles)
15. La Cienega Boulevard and Fairfax Avenue (AM and PM Peak Hours) (City of Los Angeles)
17. La Cienega Boulevard and Jefferson Boulevard (AM and PM Peak Hours) (City of Los Angeles)
19. La Cienega Boulevard and Rodeo Road (AM and PM Peak Hours) (City of Los Angeles)

Nine of the study intersections would continue to operate at LOS D or better during both the morning and afternoon peak hours. The traffic analysis worksheets for this scenario are included in Appendix E of this report. Determination of significant traffic impacts created by Project traffic – per City of Culver City and LADOT guidelines - is discussed in the next report section.

6. Project Traffic Impacts and Traffic Demand Management (TDM) Requirements

A. Determination of Traffic Impacts

Traffic impacts are identified as significant if the proposed development traffic will result in a change in traffic conditions at a study intersection that will cause volume/capacity ratios to increase beyond a threshold limit specified by the overseeing agency.

The City of Culver City has established guidelines to determine if a project will have significant impact at a specific location in terms of project related increases in volume-to-capacity (V/C) ratio. The threshold criteria are as follows:

Level of Service	Final V/C*	Project Related V/C increase
D	0.801 – 0.900	Equal to or greater than 0.040
E and F	0.901 or more	Equal to or greater than 0.020

**Final V/C is the V/C ratio at an intersection, considering traffic from the project, ambient and related project growth, and without proposed traffic impact mitigations.*

As previously noted, the City of Culver City has not officially adopted guidelines in determining significant impact criteria for stop-controlled intersections. For this study, significant impacts for stop-controlled intersections were determined by analyzing these intersections as signalized locations and obtaining a v/c ratio for both with and without project conditions. The difference in the v/c ratio is the increase due to the project. Using this project v/c increase and level of service (based on Highway Capacity Manual methodology), significant impacts for the stop-controlled intersections were evaluated.

For study locations located within the City of Los Angeles, the City of Los Angeles Department of Transportation (LADOT) has also established specific thresholds for project related increases in the V/C ratio of study intersections. The following increases in peak hour V/C ratios are considered "significant" impacts:

Level of Service	Final V/C*	Project Related V/C increase
C	0.701 – 0.800	Equal to or greater than 0.040
D	0.801 – 0.900	Equal to or greater than 0.020
E and F	0.901 or more	Equal to or greater than 0.010

**Final V/C is the V/C ratio at an intersection, considering traffic from the project, ambient and related project growth, and without proposed traffic impact mitigations.*

Project Traffic Impacts

Tables 6 and 7 provide a comparison of morning and afternoon peak hour study scenarios, respectively, within the existing and future timeframe. In determining significant changes as discussed above, traffic impacts created by the project are calculated by comparing future ambient growth with related projects conditions to future ambient growth with related projects and Project conditions. The overall traffic impacts created by the proposed project, and determinations of significant impact, are provided in the right two columns of the tables.

Table 6 – Determination of Project Impacts - Morning (AM) Peak Hour

Intersection	Existing Conditions (Year 2007)		Future Growth + Related Projects (Year 2010)		Future Growth + Related Proj + Project (Year 2010)		Difference	Significant?
	V/C or Delay [a]	LOS	V/C or Delay [a]	LOS	V/C or Delay [a]	LOS		
City of Culver City								Per Culver City
1. Robertson Boulevard & Washington Boulevard	0.586	A	0.765	C	0.770	C	0.005	No
2. National Boulevard & Washington Boulevard	0.631	B	0.824	D	0.828	D	0.004	No
3. La Cienega Boulevard & Washington Boulevard	0.894	D	1.111	F	1.114	F	0.003	No
4. Hayden Avenue & National Boulevard	0.603	B	0.710	C	0.733	C	0.023	No
5. Eastham Drive & National Boulevard [a]	10.0 0.784	A	0.784	C	0.796	C	0.012	No
6. Hayden Avenue & Warner Drive [a]	36.1 0.726	E	56.8 0.726	F	68.7 0.730	F	0.004	No
7. Eastham Drive & Warner Drive [a]	9.6 0.322	A	9.8 0.322	A	9.8 0.322	A	0.000	No
8. Lucerne Avenue & Higuera Street [a]	13.9 0.593	B	15.8 0.593	C	15.9 0.596	C	0.003	No
9. Hayden Avenue & Higuera Street [a]	17.6 0.732	C	20.4 0.732	C	23.4 0.763	C	0.031	No
10. Eastham Drive & Higuera Street	0.433	A	0.442	A	0.448	A	0.006	No
11. Lucerne Avenue & Duquesne Avenue [a]	30.9 0.686	D	68.9 0.686	F	68.9 0.686	F	0.000	No
12. Jefferson Boulevard & Duquesne Avenue	0.882	D	1.084	F	1.086	F	0.002	No
City of Los Angeles								Significant? Per LADOT
13. Robertson Boulevard & Venice Boulevard	0.906	E	0.997	E	1.002	F	0.004	No
14. National Boulevard & Venice Boulevard	0.917	E	0.892	D	0.893	D	0.001	No
15. La Cienega Boulevard & Fairfax Avenue	0.981	E	1.084	F	1.090	F	0.006	No
16. Jefferson Boulevard & National Boulevard	0.491	A	0.561	A	0.566	A	0.005	No
17. La Cienega Boulevard & Jefferson Boulevard	0.997	E	1.063	F	1.065	F	0.002	No
18. Jefferson Boulevard & Higuera Street/Rodeo Rd	0.717	C	0.789	C	0.800	C	0.011	No
19. La Cienega Boulevard & Rodeo Road	1.089	F	1.128	F	1.130	F	0.002	No

Note:
[a] Unsignalized intersection controlled by stop signs. Indicates average vehicle delay in seconds on top row and estimated V/C ratio on lower row.

Table 7 – Determination of Project Impacts - Afternoon (PM) Peak Hour

Intersection	Existing Conditions (Year 2007)		Future Growth + Related Projects (Year 2010)		Future Growth + Related Proj + Project (Year 2010)		Difference	Significant?
	V/C or Delay [a]	LOS	V/C or Delay [a]	LOS	V/C or Delay [a]	LOS		
City of Culver City								Per Culver City
1. Robertson Boulevard & Washington Boulevard	0.545	A	0.740	C	0.741	C	0.001	No
2. National Boulevard & Washington Boulevard	0.671	B	0.898	D	0.903	E	0.005	No
3. La Cienega Boulevard & Washington Boulevard	0.811	D	0.962	E	0.964	E	0.002	No
4. Hayden Avenue & National Boulevard	0.668	B	0.782	C	0.799	C	0.017	No
5. Eastham Drive & National Boulevard [a]	12.5	B	0.480	A	0.490	A	0.010	No
6. Hayden Avenue & Warner Drive [a]	14.0	B	17.2	C	18.4	C		
			0.599		0.625		0.026	No
7. Eastham Drive & Warner Drive [a]	9.9	A	10.2	B	10.2	B		
			0.345		0.345		0.000	No
8. Lucerne Avenue & Higuera Street [a]	9.7	A	10.3	B	10.4	B		
			0.498		0.499		0.001	No
9. Hayden Avenue & Higuera Street [a]	10.5	B	11.2	B	12.3	B		
			0.541		0.580		0.039	No
10. Eastham Drive & Higuera Street	0.384	A	0.404	A	0.408	A	0.004	No
11. Lucerne Avenue & Duquesne Avenue [a]	23.0	C	53.7	F	53.7	F		
			0.627		0.627		0.000	No
12. Jefferson Boulevard & Duquesne Avenue	0.798	C	0.896	D	0.901	E	0.005	No
City of Los Angeles								Significant? Per LADOT
13. Robertson Boulevard & Venice Boulevard	0.829	D	0.912	E	0.912	E	0.001	No
14. National Boulevard & Venice Boulevard	0.998	E	0.959	E	0.964	E	0.005	No
15. La Cienega Boulevard & Fairfax Avenue	0.926	E	1.004	F	1.010	F	0.006	No
16. Jefferson Boulevard & National Boulevard	0.635	B	0.607	B	0.615	B	0.008	No
17. La Cienega Boulevard & Jefferson Boulevard	0.915	E	0.981	E	0.982	E	0.001	No
18. Jefferson Boulevard & Higuera Street/Rodeo Rd	0.630	B	0.694	B	0.697	B	0.004	No
19. La Cienega Boulevard & Rodeo Road	1.054	F	1.037	F	1.037	F	0.000	No

Note:
[a] Unsignalized intersection controlled by stop signs. Indicates average vehicle delay in seconds on top row and estimated V/C ratio on lower row.

The traffic analysis results summarized in Tables 6 and 7 show that the project is expected to have no significant impacts, based on City of Culver City and LADOT traffic study guidelines, at any of the study intersections.

B. Required Traffic Demand Management (TDM) Plan (City of Culver City)

The City of Culver City has the following Traffic Demand Management Plan requirements for all commercial projects over 50,000 square feet in size:

The owner shall provide a bulletin board, display case, or kiosk (displaying transportation information) where the greatest number of employees is likely to see it. The transportation information displayed should include, but is not limited to, the following:

(1) Current routes and schedules for public transit serving the site;

(2) Telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency and local transit operations;

(3) Ridesharing promotion material supplied by commuter-oriented organizations;

(4) Regional/local bicycle route and facility information;

(5) A listing of on-site services or facilities which are available for carpoolers, vanpoolers, bicyclists, and transit riders.

In addition, the owner shall comply with Paragraph (a) above and in addition shall provide:

(1) A designated parking area for employee carpools and vanpools as close as practical to the main pedestrian entrance(s) of the building(s). This area shall include at least ten percent of the parking spaces required for the site. The spaces shall be signed and striped sufficient to meet the employee demand for such spaces. The carpool/vanpool parking area shall be identified on the driveway and circulation plan upon application for a building permit;

(2) One permanent, clearly identified (signed and striped) carpool/vanpool parking space for the first 50,000 to 100,000 square feet of gross floor area and one additional permanent, clearly identified (signed and striped) carpool/vanpool parking space for any development over 100,000 square feet of gross floor area;

(3) Parking spaces clearly identified (signed and striped) shall be provided in the designated carpool/vanpool parking area at any time during the building's occupancy sufficient to meet employee demand for such spaces. Absent such demand, parking spaces within the designated carpool/vanpool parking area may be used by other vehicles;

(4) No signed and striped parking spaces for carpool/vanpool parking shall displace any handicapped parking;

(5) A statement that preferential carpool/vanpool spaces are available on-site and a description of the method for obtaining permission to use such spaces shall be included on the required transportation information board;

(6) A minimum vertical clearance of 7 feet 2 inches shall be provided for all parking spaces and access ways used by vanpool vehicles when located within a parking structure;

(7) Bicycle parking shall be provided in conformance with Section 12.21A16 of this Code.

7. Congestion Management Plan Conformance

The Congestion Management Program (CMP) was created statewide because of Proposition 111 and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (LACMTA). The CMP for Los Angeles County requires analysis of the traffic impact of individual development projects of potentially regional significance. A specific system of arterial roadways plus all freeways comprise the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is required when:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed project will add 50 or more vehicle trips during either the morning or afternoon weekday peak hours.

- At CMP mainline freeway-monitoring locations, where the project will add 150 or more trips, in either direction, during either the morning or afternoon weekday peak hours.

The nearest CMP arterial monitoring intersections to the project site are the intersections of La Cienega Boulevard/Jefferson Boulevard (City of Los Angeles) and Venice Boulevard/Overland Avenue (City of Los Angeles). Based on the incremental project trip generation estimates presented in Section 5, the proposed project is not expected to add 50 or more new trips per hour to these locations during the morning and afternoon peak hours. Therefore, no further analysis of these CMP monitoring intersections is required.

The nearest mainline freeway monitoring locations to the project site are on the Santa Monica Freeway (I-10) east of Overland Avenue and east of La Brea Avenue. Based on the incremental project trip generation estimates, the proposed project will not add 150 or more new trips per hour to these locations in either direction during the morning and afternoon peak hours. Therefore, no further analysis of CMP freeway monitoring stations is required.

8. Construction Impacts

It is likely that there will be short-term adverse traffic and parking impacts in the area during construction of the proposed project. It is City policy and procedure that developers submit a formal construction staging and traffic plan to the City for review and approval prior to the issuance of any construction permits. The applicant will be required to submit a plan, which includes information on staging and local haul routes, number of truck trips such as material evacuation, steel delivery, concrete pour and other deliveries, street/lane closures (if any), pedestrian circulation and traffic control, duration of construction activity and hours of operation. In addition, a construction parking plan will also be required that clearly delineates where construction workers will park. The plan shall clearly denote on-street parking in the project vicinity for construction workers shall be prohibited.

The Applicant and the construction contractor shall be required to submit a parking plan to the Culver City Planning Division for approval prior to issuance of any grading or building permits.

9. Parking Analysis

This section provides analysis of the parking requirements based on the Institute of Transportation Engineers *Parking Generation, 3rd Edition* compared to the City of Culver City guidelines.

A. Parking Supply

As proposed, a three-level subterranean parking garage and a surface parking area shall provide the on-site with 180 parking spaces and 1 loading space.

B. Parking Demand Based on ITE

In utilizing the ITE *Parking Generation* manual, average peak period parking demand was applied to the size of the proposed office to determine the number of parking spaces that project needs based on multiple sites surveyed. The following is the average peak parking demands for the proposed project:

- Office (Land Use 701) – 2.84 spaces per 1,000 gross square feet

The following peak parking demand of the project based on office use is estimated at:

- Office – 181 parking spaces based on a maximum of 63,615 gross square feet

Based on the parking supply of 181 parking spaces, the project has sufficient spaces to provide for peak parking demand based on ITE parking generation rates.

C. Parking Code Requirements

The City of Culver City parking requirement guidelines are provided below:

- Office use – 1 space per 350 gross square feet

Based on the maximum size of the proposed office and applying the appropriate parking code rate, the proposed Project would be required to provide a total of 182 parking spaces.

Based on the parking supply of 181 parking spaces, the proposed on-site parking would be deficient by one parking space based on the City's Code requirements.

10. Summary and Project Recommendations

The following are the conclusions made from the analysis within this report.

- During the existing (Year 2008) conditions scenario, eleven of the nineteen study intersections operate at LOS D or better during the weekday morning and afternoon peak hours.
- Under future (Year 2010) with ambient growth and related project conditions, seven of the nineteen study intersections operate at LOS D or better during both the weekday morning and afternoon peak hours. Twelve of the nineteen intersections would operate at LOS E or worse during one or both the peak periods.
- The project consists of the construction of a 63,615 gross square-foot office building. The proposed project is anticipated to be in operation by the Year 2010.
- It is estimated that the project would generate 575 daily trips, of which 82 and 77 trips would be during the morning and afternoon peak hours, respectively.
- Under future (Year 2010) with ambient growth and related project and conditions, ten of the nineteen study intersections operate at LOS D or better during the morning peak hour. Ten of the nineteen study intersections would operate at LOS D or better during the afternoon peak hour.
- The proposed Project would create no significant traffic impacts, based on the City of Culver City and LADOT traffic study guidelines, at any of the study intersections.
- The proposed project, which is greater than 50,000 square-feet in size, will be required to meet the City of Culver City traffic demand management (TDM) guidelines.
- The proposed project parking supply of 181 spaces is sufficient to meet the requirements based on the City parking Code.

APPENDIX A
Project Memorandum of Understanding

SCOPING FOR TRAFFIC STUDY

This Memorandum of Understanding (MOU) acknowledges City of Culver City requirements of traffic impact analysis for the following project:

Project Name: 8665 Hayden Place Office Project
Project Address: 8665 Hayden Place, Culver City, CA 90232
Project Description: Office Building at 62,899 square feet
Project Build-out Year: 2010 Ambient Growth Rate: 1% per year
Directional Distribution: N 25% S 20% E 30% W 25%
(Attachment A)

Trip Generation Rate(s): ITE Latest Edition / Other: 7th Edition
Office: Daily = 11.01, AM Peak = 1.55, PM Peak = 1.49

	Land Use: Office (ITE Code: 710)						
	In	Out	In	Out	Total	In	Out
AM Trips	86	11	—	—		86	11
PM Trips	16	78	—	—		16	78

Land Use	Intensity	Units	Daily	AM Peak Hour			Afternoon Peak Hour		
				Total	In	Out	Total	In	Out
Trip Rates [1]									
Office (ITE Code 710)	-	KSF	11.01	1.55	1.36	0.19	1.49	0.25	1.24
Light Industrial (ITE Code 110)	-	KSF	6.97	0.92	0.81	0.11	0.98	0.12	0.86
Trips									
Existing Uses Credit									
Light Industrial (ITE Code 110)	18.000	KSF	-125	-17	-15	-2	-18	-2	-16
Project									
Office (ITE Code 710)	62.899	KSF	693	97	86	11	94	16	78
Proposed TOD Credit									
5% TOD Credit [2]			-35	-5	-4	-1	-5	-1	-4
Total Trips After Existing and TOD Credit			**532**	**75**	**67**	**8**	**71**	**13**	**58**
Proposed TDM Credit as a Mitigation Measure									
10% TDM Trip Reduction (Requested Mitigation Measure)			-69	-10	-9	-1	-9	-2	-8
TOTAL "NET" TRIPS			**463**	**65**	**58**	**7**	**62**	**11**	**50**

[1] Trip generation rates were based on average rates from the ITE Trip Generation Manual, 7th Edition.

[2] Proposed TOD is based on City of Los Angeles guidelines in applying trip credits near a major transit station such as the proposed Expo Line.

Project Build out Year: 2010 Ambient or CMP Growth Rate: 1 % Per Year
Related Projects: List Obtained from City of Culver City and City of Los Angeles (Attachment B)

Study Intersections

(Subject to revision after CMP requirement, related projects, trip generation and distribution are determined)

1. Robertson Boulevard & Washington Boulevard (City of Culver City)
2. National Boulevard & Washington Boulevard (City of Culver City)
3. La Cienega Boulevard & Washington Boulevard (City of Culver City)
4. Hayden Avenue & National Boulevard (City of Culver City)
5. Eastham Drive & National Boulevard (City of Culver City)
6. Hayden Avenue & Warner Drive (City of Culver City)
7. Eastham Drive & Warner Drive (City of Culver City)
8. Lucerne Avenue & Higuera Street (City of Culver City)
9. Hayden Avenue & Higuera Street (City of Culver City)
10. Eastham Drive & Higuera Street (City of Culver City)
11. Lucerne Avenue & Duquesne Avenue (City of Culver City)
12. Jefferson Boulevard & Duquesne Avenue (City of Culver City)
13. Robertson Boulevard & Venice Boulevard (City of Los Angeles)
14. National Boulevard & Venice Boulevard (City of Los Angeles)
15. La Cienega Boulevard & Fairfax Avenue/Blackwelder Street (City of Los Angeles)
16. Jefferson Boulevard & National Boulevard (City of Los Angeles)
17. La Cienega Boulevard & Jefferson Boulevard (City of Los Angeles)
18. Jefferson Boulevard & Higuera Street/Rodeo Road (City of Los Angeles)
19. La Cienega Boulevard & Rodeo Road (City of Los Angeles)

Trip Credits: (Exact amount of credit subject to approval by CITY)	Yes	No
Transportation Demand Management (TDM)	☐	☑
Existing Active Land Use	☐	☑
Previous Land Use	☑	☐
Internal	☐	☑
Pass-by Trips	☐	☑
Transit Oriented District (TOD)	☑	☐

This analysis must follow latest Culver City Traffic Study guidelines.

	Consultants	Developer
Name	KOA Corporation	Rethink Tara Green, LLC
Address	1055 Corporate Center Dr, Suite 300 Monterey Park, CA 90706	4262 Lincoln Avenue Culver City, Ca 90232
Phone	323-260-4703	310-253-9131

Approved By:

Consultant's Representative Date	CITY Representative Date

From: Kurtz, Barry [mailto:barry.kurtz@culvercity.org]
Sent: Thursday, March 20, 2008 10:41 AM
To: Jasper Domingo
Cc: Greg Reitz; Montoya, Joseph
Subject: RE: 8665 Hayden Place MOU

Jasper,

In the trip chart, change 10% TOD Credit to 10%**TDM** Credit. In the list of study intersections, show the jurisdictions of each intersection. With these changes the MOU is acceptable.

Barry.

APPENDIX B
Traffic Count Data

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Robertson Blvd DATE: 5/14/2008 LOCATION: City of Culver City

E-W STREET: Washington Blvd DAY: WEDNESDAY PROJECT# 08-2232-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	1	1	1	2	0	1	2	1	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	50	11	14	28	20	8	41	2	12	176	52	415
7:15 AM	9	50	15	11	33	9	8	58	0	9	182	86	470
7:30 AM	9	58	17	25	25	14	29	101	7	20	225	63	593
7:45 AM	7	61	33	36	37	11	8	133	12	24	214	90	666
8:00 AM	7	67	24	23	65	6	8	107	13	30	188	66	604
8:15 AM	7	64	32	30	48	12	8	116	9	33	179	80	618
8:30 AM	5	67	33	28	67	15	18	124	10	19	186	76	648
8:45 AM	12	56	26	14	63	29	20	91	7	19	236	58	631
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 57	NT 473	NR 191	SL 181	ST 366	SR 116	EL 107	ET 771	ER 60	WL 166	WT 1586	WR 571	TOTAL 4645

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES =	26	259	122	117	217	44	42	480	44	106	767	312	2536
PEAK HR. FACTOR:		0.969			0.859			0.925			0.903		0.952

CONTROL: Signalized