Traffic Impact Study for Oakley Distribution Center Access Points (DRI 2452)

Oakley Industrial Blvd &
Fayetteville Rd
City of Fairburn
Fulton County, Georgia

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Executive Summary

The proposed Oakley Distribution Center will be located in the southeast quadrant of the intersection of Oakley Industrial Boulevard and Fayetteville Road in the City of Fairburn, Fulton County, Georgia. The Oakley Distribution Center will consist of 1,300,000 square feet of high-cube warehouse/distribution center buildings with access driveways on both adjacent roadways and internal roadways connecting all buildings and parking areas, as well as interconnection with the adjacent development to the west of the site. The site is serviced by the adjacent CSX rail. The development is expected to be completed and occupied in 2016.

The development is expected to generate approximately 1,093 entering and 1,093 exiting vehicles daily when completed. Approximately 417 of these vehicles are expected to be combination trucks and the remainder personal vehicles.

Approximately 85% of the truck trips are expected to approach and exit the site from the west using Oakley Industrial Boulevard to access SR 74 and I-85, and SR 92 to the north and south, as well as intermediate local locations. Approximately 10% of the truck trips are expected to originate and terminate to the east, also using Oakley Industrial Boulevard to access SR 138 and I-85. Approximately 5% of the trucks are expected to use Graham Drive and Fayetteville Road north of Oakley Industrial Boulevard to access local locations. Approximately 55% of the personal vehicles are expected to use Oakley Industrial Boulevard to the west of the site and 30% to the east, with 10% originating and terminating to the south using Fayetteville Road and 5% to the north using Graham Drive.

It is expected that the trucks will primarily enter the site from Oakley Industrial Boulevard and exit the site onto Fayetteville Road northbound. The personal vehicles are expected to enter and exit the site primarily at the Fayetteville Road driveway.

The Oakley Distribution Center is expected to generate 156 morning peak hour trips (108 entering, 48 exiting) and 217 evening peak hour trips (67 entering, 150 exiting) on the external roadway network. Approximately 25% of these trips are expected to be trucks during the weekday peak hours.

Based on 24-hour bidirectional vehicular counts collected on May 30, 2013 (while Fulton County schools were in session) on the adjacent roadways, increased by a compounded one (1) percent average annual rate for three (3) years to estimate background growth and the assignment of new trips generated by the Oakley Distribution Center as discussed above, the capacities of the proposed site driveways were analyzed using the Transportation Research Board (TRB) 2010 Highway Capacity Manual methodology utilizing 2010 HCS+ software for the expected typical weekday peak volume morning and evening hours of the adjacent streets with the new trips.

Both of the site access intersections are expected to operate at adequate Levels of Service (LOS).

1.0 Introduction

The proposed Oakley Distribution Center will be located in the southeast quadrant of the intersection of Oakley Industrial Boulevard and Fayetteville Road in the City of Fairburn, Fulton County, Georgia.

The Oakley Distribution Center will consist of 1,300,000 square feet of high-cube warehouse/distribution center buildings with access driveways on both adjacent roadways and internal roadways connecting all buildings and parking areas, as well as interconnection with the adjacent development to the west of the site. The site is serviced by the adjacent CSX rail.

The development is expected to be completed and occupied in 2015.

This study analyzed the proposed site access intersections expected operations:

- Collection of existing traffic data;
- Determination of the number of trips expected to be generated by the new developments;
- Directional distribution and assignment of the new trips;
- Capacity analyses of the study intersections with the new trips; and
- Report of analyses results.

In the following sections, the analysis of traffic operations is described for existing conditions, and future conditions with the additional traffic. Finally, conclusions are presented.

2.0 Existing Traffic Conditions

Oakley Industrial Boulevard is a three-lane local roadway with an assumed 45 mph speed limit between SR 138 to the east and SR 74 (and beyond) to the west. The intersections of Oakley Industrial Boulevard at Fayetteville Road, SR 92, SR 74, and SR 138 are signalized.

Fayetteville Road is a two-lane local roadway with a 45 mph speed limit adjacent to the site, but changing to 35 mph south of the site. At the signalized intersection with Oakley Industrial Boulevard, Graham Drive aligns with Fayetteville Road to the north. Fayetteville Road continues to the north from Oakley Industrial Boulevard west of the signalized intersection.

The land uses along the roadways in the study area are primarily warehousing, distribution centers, with some industrial and residential, and agricultural/undeveloped.

2.1 EXISTING VOLUMES

Weekday 24-hour directional vehicular counts were collected on Thursday, May 30, 2013, when the Fulton County public schools were in session on Oakley Industrial Boulevard and on Fayetteville Road near the site. During the 24 hours, 6,939 vehicles were counted in both directions on Oakley Industrial Boulevard and 2,549 vehicles were counted in both directions Fayetteville Road adjacent to the site.

To provide existing 2016 peak morning and evening turning movement volumes at the site access driveways, the 2013 counts were increased by 3% to account for other developments that are not in the immediate vicinity, but that will contribute traffic to the road network (background growth). Growth of this nature is generally be determined by examining historic trends in the vicinity of the subject site, and by applying those trends to the appropriate roadways.

Historical Annual Average Daily Traffic (AADT) provided by the Georgia Department of Transportation (GDOT) at counting stations in the vicinity of the site were consulted and a 1% per year growth rate was calculated and applied to the existing turning movement volumes for one year to account for background growth.

The traffic count printouts are included in the Appendix.

3.0 Project Traffic

The number of vehicle trips expected to be generated by the proposed development was estimated by applying the methodology, rates, and equations developed by the Institute of Transportation Engineers (ITE) as published in the *Trip Generation Manual*, 9th Edition, 2012 for Distribution Centers.

3.1 TRIP GENERATION

The numbers of new trips expected to be generated has been determined for the full build-out of the project in 2016. The results of the trip generation are shown in Table 3-1.

Table 3-1 Trip Generation

Land Use	Code	Intensity	Units	Daily	AM IN	AM OUT	PM IN	PM OUT
Distribution Center	152	1,300	ksf	2,184	108	48	67	150

Approximately 417 of the vehicles entering and exiting the site daily are expected to be combination trucks and the remaining 676 are expected to be personal vehicles. Approximately 25% of the morning and evening peak hour trips are expected to be trucks.

3.2 DIRECTIONAL DISTRIBUTION AND TRIP ASSIGNMENT

The geographic distribution of the remaining trips generated by the development was the existing and proposed roadway network and existing traffic patterns in the area, engineering judgment and the land uses and densities of use in the area.

Approximately 85% of the truck trips are expected to approach and exit the site from the west using Oakley Industrial Boulevard to access SR 74 and I-85, and SR 92 to the north and south, as well as intermediate local locations. Approximately 10% of the truck trips are expected to originate and terminate to the east, also using Oakley Industrial Boulevard to access SR 138 and I-85. Approximately 5% of the trucks are expected to use Graham Drive and Fayetteville Road north of Oakley Industrial Boulevard to access local locations. Approximately 55% of the personal vehicles are expected to use Oakley Industrial Boulevard to the west of the site and 30% to the east, with 10% originating and terminating to the south using Fayetteville Road and 5% to the north using Graham Drive, primarily to local origins/destinations.

It is expected that the trucks will primarily enter the site from Oakley Industrial Boulevard and exit the site onto Fayetteville Road northbound. The personal vehicles are expected to enter and exit the site primarily at the Fayetteville Road driveway.

4.0 Future Traffic Conditions

The estimated vehicular trips for the project were added to the future background traffic volumes to represent the traffic expected in the area in the future when the project built-out.

4.1 CAPACITY ANALYSIS: FUTURE WITH PROJECT CONDITIONS

Using the methodologies described in the EXPLANATION OF LEVEL OF SERVICE Section, the results of the capacity analysis for existing conditions are presented in the following table.

Table 4-1 Access Intersections Analyses

Intersection		Control	Approach/ Movement	Peak Period LOS	
#	Name			AM	PM
1	Site Driveway #1 at Oakley Industrial Blvd	Side Street STOP Sign	NB	C	C
			EB	A	A
			WB	A	A
2	Site Driveway #2 at Fayetteville Road	Side Street STOP Sign	NB	A	A
			SB	A	A
			EB	B	B

As can be seen in table above, both of the study intersections are expected to operate at adequate Levels of Service (LOS) during both peak periods.

Explanation of Level of Service

Capacity analyses of the study intersections were completed using procedures in the Transportation Research Board's *Highway Capacity Manual (HCM)*. This is the usual methodology for the analysis of traffic conditions. The software program *Synchro 8* (a nationally recognized computer software package for analyzing capacities and Levels of Service) was used to perform the actual capacity analyses for the key intersections.

Operating conditions at intersections are evaluated in terms of Levels of Service (LOS). LOS A through D are generally considered adequate peak hour operations. LOS E and F are generally considered inadequate conditions.

Levels of Service for signalized intersections are reported in composite fashion, i.e., one LOS for the entire intersection, and are based on average control delay. Individual turning movements at a signalized intersection may experience inadequate LOS, particularly where those volumes are relatively low, while the intersection as a whole has an adequate LOS. This is because the major movements on the major roadway are given priority in assigning signal green time.

Traffic conditions at un-signalized intersections, with STOP sign control on the minor street only, are evaluated for the minor street approaches and for the left turns from the major street. This is because the major street traffic is assumed to have no delay since there is no control (no STOP sign). Inadequate Levels of Service for minor street approaches to un-signalized intersections are not uncommon, as the continuous flow traffic will always get the priority.

Levels of Service for all-way STOP controlled intersections are reported both for key intersection movements, and in composite fashion, i.e., one LOS for the entire intersection, and are based on average control delay.

The *Highway Capacity Manual* Level of Service criteria for signalized and un-signalized intersections are shown in the following table:

Highway Capacity Manual Intersection Level of Service Criteria

LOS	Control Delay (seconds per vehicle)	
	Signalized Intersection	**Unsignalized Intersection**
A	≤ 10	≤ 10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	> 80	> 50

Source: Highway Capacity Manual.

APPENDIX

Traffic Counts

Trip Generation

Capacity Analyses

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Classification Data

Site Code: 33900103
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Eastbound

Start Time	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Total
5/30/13	0	17	0	0	0	0	0	0	1	0	0	0	0	0	18
00:15	0	4	0	0	0	0	0	0	1	0	0	0	0	0	5
00:30	0	8	1	0	0	0	0	0	1	0	0	0	0	0	10
00:45	0	4	0	0	2	0	0	0	0	0	0	0	0	0	6
	0	33	1	0	2	0	0	0	3	0	0	0	0	0	39
01:00	0	7	0	0	0	0	0	1	0	0	0	0	0	0	8
01:15	0	3	1	0	1	0	0	0	0	0	0	0	0	0	5
01:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
01:45	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
	0	20	1	0	1	0	0	1	0	0	0	0	0	0	23
02:00	0	9	0	0	0	0	0	0	1	0	0	0	0	0	10
02:15	0	3	0	0	0	0	0	2	1	0	0	0	0	0	6
02:30	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
02:45	0	8	2	0	0	0	0	0	1	0	0	0	0	0	11
	0	23	4	0	1	0	0	2	3	0	0	0	0	0	33
03:00	0	7	0	0	0	0	0	0	2	0	0	0	0	0	9
03:15	0	9	1	0	1	0	0	0	1	0	0	0	0	0	12
03:30	0	9	1	0	1	0	0	0	0	0	0	0	0	0	11
03:45	0	8	0	0	0	0	1	2	0	0	0	0	0	0	11
	0	33	2	0	2	0	1	2	3	0	0	0	0	0	43
04:00	0	4	1	0	2	0	0	1	0	0	0	0	0	0	8
04:15	0	1	0	0	2	1	0	1	1	0	0	0	0	0	6
04:30	0	6	0	0	0	0	0	1	0	0	0	0	0	0	7
04:45	0	7	1	0	1	0	0	0	0	0	0	0	0	0	9
	0	18	2	0	5	1	0	3	1	0	0	0	0	0	30
05:00	0	4	0	0	0	0	0	2	0	0	0	0	0	0	6
05:15	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
05:30	0	7	0	0	2	0	0	0	0	0	0	0	0	0	9
05:45	0	22	7	0	3	1	0	1	0	0	0	0	0	0	34
	0	45	7	0	5	1	0	3	0	0	0	0	0	0	61
06:00	0	19	4	0	2	0	0	1	0	0	0	0	0	0	26
06:15	0	29	9	0	3	0	0	1	0	0	0	0	0	0	42
06:30	0	45	8	0	4	0	0	1	0	0	0	0	0	0	58
06:45	1	57	11	0	10	0	0	2	0	0	0	0	0	0	81
	1	150	32	0	19	0	0	5	0	0	0	0	0	0	207
07:00	0	42	8	1	2	0	0	0	1	0	0	0	0	0	54
07:15	1	52	11	0	7	0	0	2	0	0	0	0	0	0	73
07:30	0	55	7	0	3	0	0	0	0	0	0	0	0	0	65
07:45	0	66	9	0	7	2	1	0	2	1	0	0	0	0	88
	1	215	35	1	19	2	1	2	3	1	0	0	0	0	280
08:00	0	46	12	1	7	0	0	1	0	0	0	0	0	0	67
08:15	0	47	3	0	4	0	0	0	0	0	0	0	0	0	54
08:30	1	46	3	0	4	1	0	1	0	0	0	0	0	0	56
08:45	0	43	6	1	9	0	0	0	0	0	0	0	0	0	59
	1	182	24	2	24	1	0	2	0	0	0	0	0	0	236
09:00	0	23	6	0	6	0	0	0	0	0	0	0	0	0	35
09:15	0	25	6	0	15	0	0	1	1	0	0	0	0	0	48
09:30	0	23	6	1	3	0	0	1	1	0	0	0	0	0	35
09:45	1	24	1	0	14	0	0	1	0	0	0	0	0	0	41
	1	95	19	1	38	0	0	3	2	0	0	0	0	0	159
10:00	0	30	4	0	3	0	0	0	1	0	0	0	0	0	38
10:15	0	19	2	2	3	0	0	6	0	0	0	0	0	0	32
10:30	1	23	3	2	2	0	0	1	0	0	0	0	0	0	32
10:45	0	29	8	0	8	0	0	0	0	0	0	0	0	0	45
	1	101	17	4	16	0	0	7	1	0	0	0	0	0	147
11:00	0	29	4	2	6	0	0	1	0	0	0	0	0	0	42
11:15	0	31	3	0	10	0	0	2	0	0	0	0	0	0	46
11:30	0	26	8	0	7	0	0	3	0	0	0	0	0	0	44
11:45	0	35	4	0	2	0	0	1	0	0	0	0	0	0	42
	0	121	19	2	25	0	0	7	0	0	0	0	0	0	174
Total	5	1036	163	10	157	5	2	37	16	1	0	0	0	0	1432
Percent	0.3%	72.3%	11.4%	0.7%	11.0%	0.3%	0.1%	2.6%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

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Classification Data

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Eastbound

Start Time	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Total
12 PM	1	36	3	2	12	0	0	2	0	0	0	0	0	0	56
12:15	0	35	7	1	7	0	0	1	0	0	0	0	0	0	51
12:30	0	39	9	0	11	0	0	1	0	0	0	0	0	0	60
12:45	0	56	6	0	7	0	0	2	0	0	0	0	0	0	71
	1	166	25	3	37	0	0	6	0	0	0	0	0	0	238
13:00	0	35	9	1	6	0	0	1	0	0	0	0	0	0	52
13:15	0	37	6	0	2	0	0	0	0	0	0	0	0	0	45
13:30	0	39	6	0	2	0	0	4	0	0	0	0	0	0	51
13:45	0	31	8	0	8	0	0	0	0	0	0	0	0	0	47
	0	142	29	1	18	0	0	5	0	0	0	0	0	0	195
14:00	0	35	4	1	7	1	0	2	0	0	0	0	0	0	50
14:15	0	41	6	0	6	0	0	1	0	0	0	0	0	0	54
14:30	0	59	10	0	6	0	0	1	0	0	0	0	0	0	76
14:45	1	33	7	0	2	0	0	4	0	0	0	0	0	0	47
	1	168	27	1	21	1	0	8	0	0	0	0	0	0	227
15:00	0	44	10	2	14	1	0	3	0	0	0	0	0	0	74
15:15	0	31	4	0	8	0	0	1	0	0	0	0	0	0	44
15:30	0	62	8	0	9	0	0	2	0	0	0	0	0	0	81
15:45	0	37	8	1	10	0	0	2	1	0	0	0	0	0	59
	0	174	30	3	41	1	0	8	1	0	0	0	0	0	258
16:00	0	47	10	0	4	0	0	2	0	0	0	0	0	0	63
16:15	0	57	7	0	6	0	0	1	0	0	0	0	0	0	71
16:30	0	55	8	1	8	0	0	2	1	0	0	0	0	0	75
16:45	0	50	8	1	7	0	0	2	1	0	0	0	0	0	69
	0	209	33	2	25	0	0	7	2	0	0	0	0	0	278
17:00	0	44	10	1	1	0	0	3	0	0	0	0	0	0	59
17:15	0	34	3	0	4	0	0	1	0	0	0	0	0	0	42
17:30	0	30	2	0	2	0	0	0	0	0	1	0	0	0	35
17:45	0	41	4	2	2	0	0	1	0	0	0	0	0	0	50
	0	149	19	3	9	0	0	5	0	0	1	0	0	0	186
18:00	0	31	6	1	4	0	0	0	0	0	0	0	0	0	42
18:15	0	25	4	0	0	0	0	2	0	0	0	0	0	0	31
18:30	1	40	1	1	2	1	0	0	0	0	0	0	0	0	46
18:45	0	32	3	2	1	0	0	2	0	0	0	0	0	0	40
	1	128	14	4	7	1	0	4	0	0	0	0	0	0	159
19:00	0	29	2	1	0	0	0	0	0	0	1	0	0	0	33
19:15	0	30	0	0	3	0	0	0	0	0	0	0	0	0	33
19:30	0	30	2	0	1	0	0	0	1	0	0	0	0	0	34
19:45	0	20	1	0	2	0	0	3	0	0	0	0	0	0	26
	0	109	5	1	6	0	0	3	1	0	1	0	0	0	126
20:00	0	28	1	0	1	0	0	0	2	0	0	0	0	0	32
20:15	0	35	0	0	1	0	0	1	0	0	0	0	0	0	37
20:30	0	17	2	2	0	0	0	1	0	0	0	0	0	0	22
20:45	0	24	2	0	1	0	0	1	0	0	0	0	0	0	28
	0	104	5	2	3	0	0	3	2	0	0	0	0	0	119
21:00	0	22	0	0	0	0	0	0	0	0	0	0	0	0	22
21:15	0	24	4	0	0	0	0	0	0	0	0	0	0	0	28
21:30	0	14	3	0	0	0	0	1	1	0	0	0	0	0	19
21:45	0	19	1	0	0	0	0	1	1	0	0	0	0	0	22
	0	79	8	0	0	0	0	2	2	0	0	0	0	0	91
22:00	0	17	2	0	0	0	0	0	0	0	0	0	0	0	19
22:15	0	17	1	0	1	0	0	1	0	0	0	0	0	0	20
22:30	0	14	3	0	1	0	0	0	1	0	0	0	0	0	19
22:45	0	15	2	0	2	0	0	0	0	0	0	0	0	0	19
	0	63	8	0	4	0	0	1	1	0	0	0	0	0	77
23:00	0	10	1	0	1	0	0	0	0	0	0	0	0	0	12
23:15	0	18	3	0	0	0	0	1	0	0	0	0	0	0	22
23:30	0	12	1	0	1	0	0	0	0	0	0	0	0	0	14
23:45	0	6	1	0	1	0	0	0	2	0	0	0	0	0	10
	0	46	6	0	3	0	0	1	2	0	0	0	0	0	58
Total	3	1537	209	20	174	3	0	53	11	0	2	0	0	0	2012
Percent	0.1%	76.4%	10.4%	1.0%	8.6%	0.1%	0.0%	2.6%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	
Grand Total	8	2573	372	30	331	8	2	90	27	1	2	0	0	0	3444
Percent	0.2%	74.7%	10.8%	0.9%	9.6%	0.2%	0.1%	2.6%	0.8%	0.0%	0.1%	0.0%	0.0%	0.0%	

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Westbound

Start Time	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Total
5/30/13	0	17	1	0	1	0	1	0	0	0	0	0	0	0	20
00:15	2	7	4	0	0	0	0	0	0	0	0	0	0	0	13
00:30	0	4	1	0	2	0	0	0	0	0	0	0	0	0	7
00:45	0	7	0	0	2	0	0	0	0	0	0	0	0	0	9
	2	35	6	0	5	0	1	0	0	0	0	0	0	0	49
01:00	0	7	2	0	1	0	0	0	0	0	0	0	0	0	10
01:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
01:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
	0	13	3	0	2	0	0	0	0	0	0	0	0	0	18
02:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
02:15	0	6	1	1	0	0	0	1	0	0	0	0	0	0	9
02:30	0	2	0	0	1	0	0	1	0	0	0	0	0	0	4
02:45	2	3	1	0	0	0	0	0	0	0	0	0	0	0	6
	2	11	2	1	1	0	0	2	2	0	0	0	0	0	21
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
03:15	0	2	0	1	1	0	0	0	0	0	0	0	0	0	4
03:30	0	3	0	0	0	0	0	1	0	0	0	0	0	0	4
03:45	0	5	3	0	0	0	0	0	1	0	0	0	0	0	9
	0	14	3	1	1	0	0	1	1	0	0	0	0	0	21
04:00	0	4	1	0	4	3	0	0	0	0	0	0	0	0	12
04:15	0	3	0	0	2	0	0	0	0	0	0	0	0	0	5
04:30	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
04:45	0	13	0	0	2	0	0	2	0	0	0	0	0	0	17
	0	22	1	1	8	3	0	2	0	0	0	0	0	0	37
05:00	0	14	2	0	0	0	0	0	0	0	0	0	0	0	16
05:15	0	14	2	0	0	0	0	0	0	0	0	0	0	0	16
05:30	0	21	2	0	3	0	0	0	1	0	0	0	0	0	27
05:45	0	20	4	0	1	0	0	0	0	0	0	0	0	0	25
	0	69	10	0	4	0	0	0	1	0	0	0	0	0	84
06:00	0	8	4	0	3	0	0	0	0	0	0	0	0	0	15
06:15	0	14	6	0	4	0	0	1	0	0	0	0	0	0	25
06:30	0	31	5	2	1	2	0	1	0	0	1	0	0	0	43
06:45	0	23	3	0	4	0	0	1	0	0	0	0	0	0	31
	0	76	18	2	12	2	0	3	0	0	1	0	0	0	114
07:00	0	13	9	1	3	2	0	0	0	0	1	0	0	0	29
07:15	0	26	6	1	10	1	0	2	1	0	0	0	0	0	47
07:30	0	25	8	0	6	0	0	0	1	0	0	0	0	0	40
07:45	0	23	3	0	2	0	0	1	0	0	0	0	0	0	29
	0	87	26	2	21	3	0	3	2	0	1	0	0	0	145
08:00	0	23	4	2	7	0	0	1	0	0	0	0	0	0	37
08:15	0	37	7	1	8	0	0	1	1	0	0	0	0	0	55
08:30	1	27	6	0	7	0	0	1	0	0	0	0	0	0	42
08:45	0	22	3	2	3	0	0	1	0	0	0	0	0	0	31
	1	109	20	5	25	0	0	4	1	0	0	0	0	0	165
09:00	1	23	6	0	5	1	0	4	0	0	0	0	0	0	40
09:15	0	26	3	1	4	0	0	2	0	0	0	0	0	0	36
09:30	0	16	3	1	4	0	0	2	0	0	0	0	0	0	26
09:45	0	15	4	1	9	0	0	0	0	0	0	0	0	0	29
	1	80	16	3	22	1	0	8	0	0	0	0	0	0	131
10:00	0	23	3	1	4	0	0	1	0	0	0	0	0	0	32
10:15	0	15	3	0	10	0	0	5	1	0	0	0	0	0	34
10:30	0	22	6	1	6	0	0	1	1	0	0	0	0	0	37
10:45	0	22	5	0	7	0	0	2	1	0	0	0	0	0	37
	0	82	17	2	27	0	0	9	3	0	0	0	0	0	140
11:00	0	41	8	0	8	0	0	1	0	0	0	0	0	0	58
11:15	1	25	4	1	6	0	0	2	1	0	0	0	0	0	40
11:30	1	28	8	3	9	0	0	1	0	0	0	0	0	0	50
11:45	0	40	6	0	8	0	0	1	0	0	0	0	0	0	55
	2	134	26	4	31	0	0	5	1	0	0	0	0	0	203
Total	8	732	148	21	159	9	1	37	11	0	2	0	0	0	1128
Percent	0.7%	64.9%	13.1%	1.9%	14.1%	0.8%	0.1%	3.3%	1.0%	0.0%	0.2%	0.0%	0.0%	0.0%	

Reliable Traffic Data Services, LLC

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Classification Data

Site Code: 33900103
Oakley Industrial Blvd West of
Fayetteville Rd (West)

Westbound

Start Time	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Total
12 PM	0	44	14	1	12	0	0	3	1	0	0	0	0	0	75
12:15	0	38	8	1	14	0	0	4	2	0	0	0	0	0	67
12:30	0	39	4	0	14	0	1	3	0	0	0	0	0	0	61
12:45	0	37	7	0	9	0	0	3	0	0	0	0	0	0	56
	0	158	33	2	49	0	1	13	3	0	0	0	0	0	259
13:00	0	38	6	1	9	0	0	5	0	0	0	0	0	0	59
13:15	0	23	4	1	5	0	0	3	1	0	0	0	0	0	37
13:30	0	29	5	0	6	1	0	3	0	0	0	0	0	0	44
13:45	0	23	1	0	10	0	0	2	0	0	0	0	0	0	36
	0	113	16	2	30	1	0	13	1	0	0	0	0	0	176
14:00	0	27	9	0	9	0	0	1	0	0	1	0	0	0	47
14:15	0	26	8	0	4	0	0	2	2	0	0	0	0	0	42
14:30	0	36	4	1	13	0	0	3	0	0	0	0	0	0	57
14:45	0	29	6	0	4	0	0	3	0	0	0	0	0	0	42
	0	118	27	1	30	0	0	9	2	0	1	0	0	0	188
15:00	0	42	20	1	9	1	0	3	1	0	0	0	0	0	77
15:15	0	46	14	0	7	0	0	0	2	0	0	0	0	0	69
15:30	0	59	13	1	8	1	0	3	0	0	0	0	0	0	85
15:45	1	46	6	2	16	0	0	6	0	0	0	0	0	0	77
	1	193	53	4	40	2	0	12	3	0	0	0	0	0	308
16:00	0	44	10	1	9	0	0	4	0	0	0	0	0	0	68
16:15	0	56	9	1	5	0	0	1	0	0	0	0	0	0	72
16:30	0	60	9	0	10	0	0	2	0	0	0	0	0	0	81
16:45	0	62	10	1	11	0	0	4	1	0	0	0	0	0	89
	0	222	38	3	35	0	0	11	1	0	0	0	0	0	310
17:00	0	64	12	1	9	0	0	4	0	0	0	0	0	0	90
17:15	1	59	11	0	8	0	0	2	0	0	0	0	0	0	81
17:30	0	54	9	1	5	0	0	2	0	0	0	0	0	0	71
17:45	0	56	5	3	6	0	0	1	0	0	0	0	0	0	71
	1	233	37	5	28	0	0	9	0	0	0	0	0	0	313
18:00	0	53	14	0	8	0	0	2	0	0	0	0	0	0	77
18:15	0	46	10	0	8	0	0	0	0	0	0	0	0	0	64
18:30	0	48	6	0	7	0	0	0	1	0	0	0	0	0	62
18:45	0	44	4	0	5	0	0	2	0	0	0	0	0	0	55
	0	191	34	0	28	0	0	4	1	0	0	0	0	0	258
19:00	0	34	5	0	2	0	0	2	0	0	0	0	0	0	43
19:15	0	36	1	0	2	0	0	0	0	0	0	0	0	0	39
19:30	0	19	3	0	0	0	0	0	0	0	0	0	0	0	22
19:45	0	33	1	1	2	0	0	0	0	0	0	0	0	0	37
	0	122	10	1	6	0	0	2	0	0	0	0	0	0	141
20:00	0	45	4	0	3	0	0	1	0	0	0	0	0	0	53
20:15	0	34	3	0	3	0	0	1	0	0	0	0	0	0	41
20:30	0	31	3	0	2	1	0	0	0	0	0	0	0	0	37
20:45	0	25	5	0	0	0	0	0	0	0	0	0	0	0	30
	0	135	15	0	8	1	0	2	0	0	0	0	0	0	161
21:00	1	26	2	0	2	1	0	0	0	0	0	0	0	0	32
21:15	0	21	3	0	0	0	0	0	0	0	0	0	0	0	24
21:30	0	28	3	0	1	0	0	1	0	0	0	0	0	0	33
21:45	0	13	2	0	0	0	0	0	0	0	0	0	0	0	15
	1	88	10	0	3	1	0	1	0	0	0	0	0	0	104
22:00	0	10	2	0	0	1	0	0	0	0	0	0	0	0	13
22:15	0	10	1	0	0	0	0	0	0	0	0	0	0	0	11
22:30	0	18	3	0	0	0	0	0	1	0	0	0	0	0	22
22:45	0	10	2	0	2	0	0	0	0	0	0	0	0	0	14
	0	48	8	0	2	1	0	0	1	0	0	0	0	0	60
23:00	0	18	2	0	2	0	0	0	0	0	0	0	0	0	22
23:15	1	15	0	0	1	1	0	1	0	0	0	0	0	0	19
23:30	0	26	1	0	1	2	0	0	0	0	0	0	0	0	30
23:45	0	13	0	0	2	0	2	1	0	0	0	0	0	0	18
	1	72	3	0	6	3	2	2	0	0	0	0	0	0	89
Total	4	1693	284	18	265	9	3	78	12	0	1	0	0	0	2367
Percent	0.2%	71.5%	12.0%	0.8%	11.2%	0.4%	0.1%	3.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
Grand Total	12	2425	432	39	424	18	4	115	23	0	3	0	0	0	3495
Percent	0.3%	69.4%	12.4%	1.1%	12.1%	0.5%	0.1%	3.3%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%	

Reliable Traffic Data Services, LLC

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ADT Data

Site Code: 33900105
Fayetteville Rd South of
Oakley Industrial Blvd

Start Time	30-May-13 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	11			0	18				
12:15		0	14			0	16				
12:30		3	15			0	9				
12:45		1	11	4	51	1	17	1	60	5	111
01:00		0	15			0	16				
01:15		3	17			2	22				
01:30		0	16			3	17				
01:45		2	15	5	63	0	14	5	69	10	132
02:00		0	9			1	12				
02:15		0	14			0	16				
02:30		2	29			0	28				
02:45		1	10	3	62	1	20	2	76	5	138
03:00		1	8			1	23				
03:15		1	8			1	23				
03:30		2	13			0	41				
03:45		0	17	4	46	1	27	3	114	7	160
04:00		1	16			2	32				
04:15		3	14			1	33				
04:30		5	11			2	35				
04:45		6	13	15	54	2	36	7	136	22	190
05:00		3	13			3	57				
05:15		16	22			2	60				
05:30		12	23			3	52				
05:45		13	18	44	76	5	45	13	214	57	290
06:00		17	17			3	44				
06:15		24	15			7	25				
06:30		30	16			8	27				
06:45		49	13	120	61	3	20	21	116	141	177
07:00		35	3			10	34				
07:15		24	17			15	23				
07:30		44	12			7	15				
07:45		44	5	147	37	14	19	46	91	193	128
08:00		36	11			11	17				
08:15		32	13			8	18				
08:30		22	6			6	6				
08:45		21	13	111	43	15	11	40	52	151	95
09:00		20	8			8	13				
09:15		30	14			6	13				
09:30		23	4			12	21				
09:45		10	7	83	33	9	5	35	52	118	85
10:00		13	6			16	7				
10:15		14	9			6	9				
10:30		23	8			15	8				
10:45		20	6	70	29	8	6	45	30	115	59
11:00		18	4			20	8				
11:15		14	5			14	12				
11:30		15	2			13	11				
11:45		9	3	56	14	10	2	57	33	113	47
Total		662	569			275	1043			937	1612
Percent		53.8%	46.2%			20.9%	79.1%			36.8%	63.2%
Grand Total			662	569			275	1043			937	1612
Percent			53.8%	46.2%			20.9%	79.1%			36.8%	63.2%

ADT ADT 2,549 AADT 2,549

Trip Generation

ITE Trip Generation, 9th Edition (2012)

Project	Oakley Distribution Center	***Project Number***	
Client	Eberly & Associates		
Site	Oakley Industral Blvd & Fayetteville Rd, Fairburn, GA	***1000 Square Feet***	***1300***
Land Use	***High-Cube Warehouse***	***ITE Code***	***152***

Weekdays

	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=1.68(#units)-trucks	**1,351**	**50%**	**50%**	**676**	**676**
Trucks = 0.64 (#units)	**833**			**417**	**417**
Totals=	2,184			1,093	1,093

AM Peak Hour: Weekdays

(peak hour of adjacent street)

	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=0.14(#units)-25.62-trucks	**117**	**69%**	**31%**	**81**	**36**
Trucks = 0.03 (#units)	**39**			**27**	**12**
Totals=	156			108	48

PM Peak Hour: Weekdays

(peak hour of adjacent street)

	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=0.13(#units)-3.73-trucks	**165**	**31%**	**69%**	**51**	**114**
Trucks = 0.04 (#units)	**52**			**16**	**36**
Totals=	217			67	150

HCS+: Unsignalized Intersections Release 5.6

TWO-WAY STOP CONTROL SUMMARY

Analyst:	Randall Parker
Agency/Co.:	Parker & Seymour
Date Performed:	5/30/2016
Analysis Time Period:	AM Peak Hour
Intersection:	#1 @ Oakley Ind Blvd
Jurisdiction:	Fairburn
Units: U. S. Customary	
Analysis Year:	2016
Project ID:	Oakley Distribution Center
East/West Street:	Oakley Industrail Blvd
North/South Street:	Driveway #1
Intersection Orientation: EW	Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		286	22	1	332	
Peak-Hour Factor, PHF		0.92	0.92	0.92	0.92	
Hourly Flow Rate, HFR		310	23	1	360	
Percent Heavy Vehicles		--	--	100	--	--
Median Type/Storage	Undivided		/			
RT Channelized?						
Lanes		1	0	0	1	
Configuration			TR	LT		
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	1		1			
Peak Hour Factor, PHF	0.92		0.92			
Hourly Flow Rate, HFR	1		1			
Percent Heavy Vehicles	100		100			
Percent Grade (%)		8			0	
Flared Approach: Exists?/Storage			No /			/
Lanes	0		0			
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LR				
v (vph)		1		2				
C(m) (vph)		833		304				
v/c		0.00		0.01				
95% queue length		0.00		0.02				
Control Delay		9.3		16.9				
LOS		A		C				
Approach Delay				16.9				
Approach LOS				C				

HCS+: Unsignalized Intersections Release 5.6

TWO-WAY STOP CONTROL SUMMARY

Analyst:	Randall Parker
Agency/Co.:	Parker & Seymour
Date Performed:	5/30/2016
Analysis Time Period:	PM Peak Hour
Intersection:	#1 @ Oakley Ind Blvd
Jurisdiction:	Fairburn
Units: U. S. Customary	
Analysis Year:	2016
Project ID:	Oakley Distribution Center
East/West Street:	Oakley Industrail Blvd
North/South Street:	Driveway #1
Intersection Orientation: EW	Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		310	16	4	447	
Peak-Hour Factor, PHF		0.92	0.92	0.92	0.92	
Hourly Flow Rate, HFR		336	17	4	485	
Percent Heavy Vehicles		--	--	100	--	--
Median Type/Storage	Undivided		/			
RT Channelized?						
Lanes		1	0	0	1	
Configuration			TR		LT	
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	1		4			
Peak Hour Factor, PHF	0.92		0.92			
Hourly Flow Rate, HFR	1		4			
Percent Heavy Vehicles	100		100			
Percent Grade (%)		8			0	
Flared Approach: Exists?/Storage		No	/			/
Lanes	0		0			
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LR				
v (vph)		4		5				
C(m) (vph)		817		345				
v/c		0.00		0.01				
95% queue length		0.01		0.04				
Control Delay		9.4		15.6				
LOS		A		C				
Approach Delay				15.6				
Approach LOS				C				

HCS+: Unsignalized Intersections Release 5.6

TWO-WAY STOP CONTROL SUMMARY

Analyst:	Randall Parker
Agency/Co.:	Parker & Seymour
Date Performed:	5/30/2016
Analysis Time Period:	AM Peak Hour
Intersection:	#2 @ Fayetteville Rd
Jurisdiction:	Fairburn
Units: U. S. Customary	
Analysis Year:	2016
Project ID:	Oakley Distribution Center
East/West Street:	Driveway #2
North/South Street:	Fayetteville Rd
Intersection Orientation: NS	Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	8	163			41	77
Peak-Hour Factor, PHF	0.92	0.92			0.92	0.92
Hourly Flow Rate, HFR	8	177			44	83
Percent Heavy Vehicles	0	--	--		--	--
Median Type/Storage	Undivided		/			
RT Channelized?						
Lanes	0	1			1	0
Configuration		LT				TR
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume				42		4
Peak Hour Factor, PHF				0.92		0.92
Hourly Flow Rate, HFR				45		4
Percent Heavy Vehicles				30		0
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			No /
Lanes				0		0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	LT						LR	
v (vph)	8						49	
C(m) (vph)	1472						669	
v/c	0.01						0.07	
95% queue length	0.02						0.24	
Control Delay	7.5						10.8	
LOS	A						B	
Approach Delay							10.8	
Approach LOS							B	

HCS+: Unsignalized Intersections Release 5.6

TWO-WAY STOP CONTROL SUMMARY

Analyst: Randall Parker
Agency/Co.: Parker & Seymour
Date Performed: 5/30/2016
Analysis Time Period: PM Peak Hour
Intersection: #2 @ Fayetteville Rd
Jurisdiction: Fairburn
Units: U. S. Customary
Analysis Year: 2016
Project ID: Oakley Distribution Center
East/West Street: Driveway #2
North/South Street: Fayetteville Rd
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	5	62			192	0
Peak-Hour Factor, PHF	0.92	0.92			0.92	0.92
Hourly Flow Rate, HFR	5	67			208	0
Percent Heavy Vehicles	0	--	--		--	--
Median Type/Storage	Undivided		/			
RT Channelized?						
Lanes	0	1			1	0
Configuration	LT					TR
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume				134		11
Peak Hour Factor, PHF				0.92		0.92
Hourly Flow Rate, HFR				145		11
Percent Heavy Vehicles				30		0
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			No /
Lanes				0		0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	LT						LR	
v (vph)	5						156	
C(m) (vph)	1375						658	
v/c	0.00						0.24	
95% queue length	0.01						0.92	
Control Delay	7.6						12.2	
LOS	A						B	
Approach Delay							12.2	
Approach LOS							B	