

PLANNING COMMISSION

Paul Player, Chair Kirk Anders Bob Dallas Bill Grossman Heyward Wescott, Vice-Chair Richard Grove Renate Herod

AGENDA	CITY OF DUNWOODY 41 PERIMETER CENTER EAST, SUITE 103 DUNWOODY, GA 30346	April 12, 2016 6:00 PM
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A. CALL TO ORDER

B. ROLL CALL

C. MINUTES

1. Approval of Meeting Minutes from March 8, 2016 Planning Commission Meeting

D. ORGANIZATIONAL AND PROCEDURAL ITEMS

E. UNFINISHED BUSINESS

- 1. RZ 16-041: Dunwoody Crown Towers, LLC, owner of 244 Perimeter Center Parkway, Dunwoody, GA 30346, by G. Douglas Dillard, attorney for the property owner, seeks to rezone property currently zoned Office-Institution (O-I) to Commercial-Residential Mixed-Use (CR-1). The tax parcel number is 18 329 04 005.
- 2. SLUP 16-041: Dunwoody Crown Towers, LLC, owner of 244 Perimeter Center Parkway, Dunwoody, GA 30346, by G. Douglas Dillard, attorney for the property owner, seeks the following the following: (a) For approval of a special land use permit to increase the height of the multi-unit residential building. (b): For approval of a special land use permit to increase the height of the mixed use vertical building. (c): For approval of a special land use permit to allow multi-unit residential use in the CR-1 Zoning District. The tax parcel number is 18 329 04 005.

F. NEW BUSINESS

1. TA 16-051 - Consideration of re-adoption and/or modification of the LED prohibition of the Sign Ordinance, Chapter 20 of the City of Dunwoody Code of Ordinances.

G. OTHER BUSINESS

1. Presentation by Michael Starling

H. PUBLIC COMMENT

I. COMMISSION COMMENT

J. ADJOURN

CITY OF DUNWOODY MARCH 8, 2016 PLANNING COMMISSION MINUTES

The Planning Commission of the City of Dunwoody held a Meeting on March 8, 2016 at 6:00 PM. The meeting was held in the City of Dunwoody City Hall, 41 Perimeter Center East, Dunwoody, Georgia 30346. Present for the meeting were the following:

- Voting Members: Paul Player, Chair Heyward Wescott, Vice-Chair Bill Grossman, Commission Member Richard Grove, Commission Member
- Also Present: Steve Foote, Community Development Director Rebecca Keefer, City Planner Andrew Russell, Planning Coordinator

A. <u>CALL TO ORDER</u>

B. <u>ROLL CALL</u>

Kirk Anders, Bob Dallas, and Renate Herod were absent.

- C. <u>MINUTES</u>
 - 1. <u>Approval of Meeting Minutes from January 12, 2016 Planning</u> <u>Commission Meeting</u>

Bill Grossman motioned to approve. Richard Grove seconded.

The motion was voted on and passed (4 - 0).

- D. ORGANIZATIONAL AND PROCEDURAL ITEMS
- E. <u>UNFINISHED BUSINESS</u>
- F. <u>NEW BUSINESS</u>
 - 1. <u>RZ 16-041</u>: Dunwoody Crown Towers, LLC, owner of 244 Perimeter Center Parkway, Dunwoody, GA 30346, by G. Douglas Dillard, attorney for the property owner, seeks to rezone property currently zoned Office-Institution (O-I) to Commercial-Residential Mixed-Use (CR-1). The tax parcel number is 18 329 04 005.

Paul Player introduced the item.

Rebecca Keefer presented the item and recommended deferral to the April 12, 2016 Planning Commission meeting.

Doug Dillard, attorney for the applicant, presented on behalf of the application and asked for deferral to the April 12, 2016 Planning Commission meeting.

Heyward Wescott motioned to defer to the April 12, 2016 meeting. Bill Grossman seconded.

The motion was voted on and passed (4 - 0).

 <u>SLUP 16-041</u>: Dunwoody Crown Towers, LLC, owner of 244 Perimeter Center Parkway, Dunwoody, GA 30346, by G. Douglas Dillard, attorney for the property owner, seeks the following the following: (a) For approval of a special land use permit to increase the height of the multi-unit residential building. (b): For approval of a special land use permit to increase the height of the mixed use vertical building. (c): For approval of a special land use permit to allow multi-unit residential use in the CR-1 Zoning District. The tax parcel number is 18 329 04 005.

Heyward Wescott motioned to defer to the April 12, 2016 meeting. Richard Grove seconded.

The motion was voted on and passed (4 - 0).

- G. OTHER BUSINESS
- H. PUBLIC COMMENT
- I. <u>COMMISSION COMMENT</u>

Heyward Wescott recognized City Council Member Terry Nall and thanked him for attending the meeting.

J. <u>ADJOURN</u>

Heyward Wescott motioned to adjourn. Bill Grossman seconded.

The motion was voted on and passed (4 - 0).



41 Perimeter Center East, Suite 250 Dunwoody, Georgia 30346 P (678) 382-6700 dunwoodyga.gov

MEMORANDUM

To: Planning Commission

From: Rebecca Keefer, AICP

Date: April 12, 2016

Subject: RZ 16-041: Dunwoody Crown Towers, LLC, owner of 244 Perimeter Center Parkway, Dunwoody, GA 30346, by G. Douglas Dillard, attorney for the property owner, seeks to rezone property currently zoned Office-Institution (O-I) to Commercial-Residential Mixed-Use (CR-1) to allow for construction of Dunwoody Crown Towers, a mixed use development with residential and nonresidential uses. The tax parcel number is 18 329 04 005.



ITEM DESCRIPTION

The subject property, Site B in the image above, consists of a 4.75 acre portion of the 14.95 acre property located at 244 Perimeter Center Parkway. The 14.95 acre property, commonly referred to as the "Goldkist site," is located just north of I-285, east of Perimeter Center Parkway, west of Ashford Dunwoody Road, and south of a strip shopping center on Hammond Road. The entire 14.95 acre property at 244 Perimeter Center Parkway is currently zoned Office-Institution District (O-I), and has entitlements from a 1999 DeKalb County variance case for a 28-story hotel, a conference center with a 6-level parking structure, two 24-story office buildings, and two 10-level parking decks. The entitlements are not conditioned to a site plan.

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The applicant proposes to subdivide the 14.95 acre lot into two properties, Site A and Site B, and rezone Site B from O-I to Commercial-residential mixed-use (CR-1) to construct a mixed-use development with commercial, retail, lodging, and owner-occupied residential uses. The applicant would retain all existing entitlements (height variances) on Site A, which is not a part of the rezoning and would therefore remain zoned O-I. Because dual-zoned parcels are prohibited, the rezoning of Site B would not take effect until the lot has been legally subdivided and a final plat has been recorded.

The application has been through the DRI process with the Atlanta Regional Commission (ARC) and Georgia Regional Transportation Authority (GRTA). As of this writing, GRTA has issued recommendations that may be modified before GRTA's final decision on April 8, 2016. The final decision will be forwarded to the Commission in advance of the April 12 meeting.

The applicant has met all regulations for applicant initiated neighborhood meetings as required by ordinance, holding a meeting with the public on Monday, February 1, 2016, and providing the applicable reports to the City.

Direction	Zoning	Use	Current Land Use
Ν	C-1 R-150	Commercial Residential	Retail Cemetery
S	Interstate	Interstate	Interstate
E	OCR	Entitlements for retail	Undeveloped
W	0-1	Office-Institution	Lodging

ANALYSIS

Site Plan Analysis

A large surface parking lot exists in the center of the subject property, and mature trees grow around the parking lot on all sides, with tree cover being particularly dense in the east and south areas of the lot. A building that was formerly the Goldkist Company headquarters, a parking structure, and a large surface parking lot exists on the adjacent lot, designated Site A, but no buildings currently exist on Site B. Vehicular access to Site B is currently through a private drive that extends from Gold Kist Road off of Perimeter Center Parkway. The land that site B is composed of does not currently have the required street frontage to be created at this time; therefore, the proposed street off of Perimeter Center Parkway will have to be constructed before the 14.95 acre property can be subdivided, as subdivisions cannot occur except off an existing or proposed street meeting City standards.

According to the site plan dated March 30, 2016, the applicant plans to construct one multiunit owner-occupied condo tower with parking deck; one mixed-use condo tower with a hotel, owner-occupied residential units, accessory uses, and parking; and a retail building. To construct the towers and build residential units, the applicant is seeking SLUPs to increase the height of the Multi-Unit Residential Building ("Crown Tower 1") to 35 stories and the height of the Mixed-Use, Vertical Building ("Crown Tower 2") to 29 stories, and to



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allow a Multi-dwelling Residential Use in the CR-1 district for Crown Tower 1, as required by the use table in the Zoning Code. The applicant proposes to provide private drives meeting City standards throughout the subject property. On the east side of the property, the applicant proposes to connect to a driveway that comes off of Ashford Dunwoody Road onto the adjacent property to the north. The proposed lots, Site A and Site B, that would be created once the property is subdivided would have to be compliant with the Zoning Ordinance in terms of setbacks, lot coverage, building height, parking, pedestrian circulation, landscaping, and all other regulations and associated provisions that apply. During staff reviews and meetings with the applicant, it was determined that a variance would be required for the existing building on Site A to remain in compliance with zoning codes when land is dedicated to the City for a public street and right-of-way extending from Perimeter Center Parkway.

The applicant is in the process of drafting a development agreement to address site development work. Staff anticipates receiving the draft on April 6. Staff will perform a review of the agreement and will attempt to transmit the agreement for Planning Commission review prior to the meeting. Staff will incorporate the final approved version of the development agreement as an Exhibit in the conditions of approval.

This application has three companion SLUP applications (SLUP 16-041a,b,c) being heard concurrently with this rezoning request, all of which are for Site B only:

- a. Increase the height of the multi-unit residential building ("Crown Tower 1" on enclosed conceptual drawings);
- b. Increase the height of the mixed used vertical building ("Crown Tower 2" on conceptual drawings); and
- c. Allow multi-unit residential use in the CR-1 Zoning District.

This application has one companion variance application (ZBA 16-045), which is for Site A only. The variance request was approved with the following conditions at the March 31, 2016 Zoning Board of Appeals meeting:

Exhibit A: Lot Division Plat, Sheet 5 of 5, submitted by applicant (undated)

- 1. The variance to reduce the setback from 50' to 0' shall apply to the existing building, accessory structures, and equipment, only.
- 2. The variance shall apply to the right-of-way depicted on Exhibit A and to future rightof-way for the Westside Connector, only.
- 3. If adequate clear zone cannot be met for any future road improvements, the existing building, accessory structures, and equipment shall be adjusted to comply.

Comprehensive Plan

The Dunwoody Comprehensive Plan is organized primarily by regions, delineated as 'character areas'. The subject parcel is located in the Perimeter Center Character Area, as well as the Transit Village sub-area of the Perimeter CID/LCI study area. Perimeter Center is envisioned as a visitor friendly "livable regional center with first-class office, retail, entertainment, hotels, and high-end restaurants in a pedestrian and bicycle-friendly environment. Future development will emphasize high quality design standards and building materials and incorporate national best practices on efficiency, where possible.

The City is in the code review phase of the Perimeter Center Zoning Project. The subject site is located in the proposed PC-1 District subarea, intended to apply to the central core area

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of Perimeter Center, including the area around the Dunwoody MARTA station. The PC-1 District allows "the highest intensity of buildings, a high level of employment uses, and active ground story uses and design that support pedestrian mobility."

Review and Approval Criteria

In accordance with Georgia and local law, the following review and approval criteria shall be used in reviewing the respective amendment applications:

Section 27-335. Review and approval criteria.

parking decks.

- b. *Zoning Map Amendments.* The following review and approval criteria must be used in reviewing and taking action on all zoning map amendments:
 - Whether the zoning proposal is in conformity with the policy and intent of the comprehensive plan;
 The rezoning proposal is in substantial conformity with the policy and intent of the comprehensive plan.
 - 2. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties; The zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties. Office, lodging, retail, and owner-occupied residential uses are suitable uses in view of the use and development of adjacent and nearby properties.
 - Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned;
 The property to be affected does have a reasonable economic use as currently zoned. The current designation is Office-Institution (O-I), with existing entitlements. Existing entitlements allow the applicant to construct a 28-story hotel, a conference center with a 6-level parking structure, two 24-story office buildings, and two 10-level
 - 4. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property;

A portion of the paved internal private drive is shown encroaching on the commercial/retail property adjacent to the north, on the site plan dated March 30, 2016.

The driveway that the applicant plans to extend to the curb cut off of Ashford Dunwoody Road does not connect directly to the applicant's property without first going through the adjacent property.

The historic Stephen Martin Cemetery borders the property to the north, sandwiched between it and the adjacent shopping center. The dirt and gravel path that leads to the cemetery, and its sign, are located on the subject property. The path and the sign are located in an area to be dedicated on the site plan. The actual cemetery is not located on the subject property. The applicant has spoken with



representatives from the Dunwoody Preservation Trust, the entity that maintains the cemetery, to work on an acceptable strategy for the cemetery's continued maintenance and accessibility.

5. Whether there are other existing or changing conditions affecting the use and development of the property that provide supporting grounds for either approval or disapproval of the zoning proposal;

There are several factors that lend uncertainty to the project. The GDOT I-285/400 Interchange Project impacts this property directly through the acquisition of additional right-of-way needed for the freeway. The amount of right-of-way that will be taken from Site A and B has not been determined, and therefore, the impact on the site cannot be fully determined. Similarly, the ability to complete the Westside Connector from I-285 at Ashford Dunwoody Road to Perimeter Parkway depends on the complete dedication of right-of-way from this site and adequate funding. The development of this site without the Westside Connector would further burden Hammond Drive, Ashford Dunwoody Road, and other local streets.

- 6. Whether the zoning proposal will adversely affect historic buildings, sites, districts, or archaeological resources; and *The site is currently nearly built-out. A large commercial building and structured and surface parking sits on the west side of the property, and most of the east side of the property is paved parking surface. The adjacent cemetery to the north is the only historic site identified.*
- 7. Whether the zoning proposal will result in a use that will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.

The traffic study submitted by the applicant does not fully reflect the actual congestion that currently exists at the Ashford Dunwoody Road and Hammond Drive intersection. Staff has requested revisions to the traffic impact study to reduce the percentage of trips assigned to transit, adjust the trip routing to be more consistent with previous studies and update the traffic signal timing model to reflect actual conditions. The site is in close proximity to the Dunwoody MARTA station, making public transit a realistic alternative for those commuting to and from the property. GRTA has conditioned the proposal to provide sidewalks along all property frontage and both side of all internal roadways. That said, the Zoning Code allows for a 25% reduction in the number of required parking spaces, provided that the property is located 1,500 feet from a MARTA station (Sec. 27-204). As the development is not located within 1,500 feet of the Dunwoody MARTA station (per sheet CP-004), the proposed parking reduction is not allowable. The applicant will either have to provide the additional parking in accordance with the required ratios or utilize a different reduction method enabled in the Code (e.g.: shared and bicycle parking).

With the requested revisions to the traffic study, staff expects that the study will show that the Ashford Dunwoody Road and Hammond Drive corridors will experience increasing congestion. Substituting residential and other uses for some of the office space would help distribute the trips to and from the site more evenly since residential

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trips would be outbound at times when the majority of the area traffic is inbound and vice versa. Additional turn lanes at congested intersections as recommended in this and other traffic impact studies can help reduce delays. However, at intersections like Ashford Dunwoody Road and Hammond Drive where multiple turn lanes already exist on all the approaches, adding additional lanes is not realistic or desirable. Additional connectivity to the interstate and other arterials, such as proposed with the Westside Connector, is needed to address congestion in a significant way.

Regarding the impact on public schools, DeKalb County School District was asked to provide comment on the impact the development will have on schools. That report is attached for review. DeKalb County projects the development will add 37 students to the County system.

RECOMMENDATION

Staff Recommendation

Based on the above analysis and findings, staff has determined that the requested amendments to the official zoning map meet the requirements of Chapter 27, §27-335. Therefore, staff recommends the application be **approved** with the following exhibit(s) and condition(s):

EXHIBIT A: Development agreement, approved May 9, 2016.EXHIBIT B: GRTA notice of decision, dated April 8, 2016.EXHIBIT C: Site plan, dated March 30, 2016.

- This Ordinance shall take effect upon the property being subdivided in accordance with all of the ordinances, rules, and regulations of the City of Dunwoody in effect at the time of the subdivision application, but in any case, not later than May 9, 2018. If the Subdivision is not accomplished by May 9, 2018, this Ordinance shall be null and void. (this verbiage to be included in the body of the ordinance, rather than a condition).
- 2. Development of the site shall be in substantial compliance with the above Exhibits.
- 3. The recordation of the final plat shall take place within 120 days of the completion of site development improvements, unless an extension for unforeseen circumstances is approved by the Community Development Director.
- 4. Site is limited to a maximum of 380 'for sale' residential units and 150 rooms for a hotel. Other uses and structures permitted as of right in the CR-1 district are also permitted.
- 5. Any buildings on Site B shall be setback a minimum of 10 feet from any existing or future right-of-way on the north of the site. All other setbacks shall be in accordance with the CR-1, the future PC-1, and/or the Perimeter Center Overlay Districts.
- 6. Site shall be prohibited from having vehicular access to the existing curb cut at Ashford Dunwoody Road or the attached driveway on the adjacent property. This curb cut and access shall only be for the maintenance of and access to the Spruill cemetery.

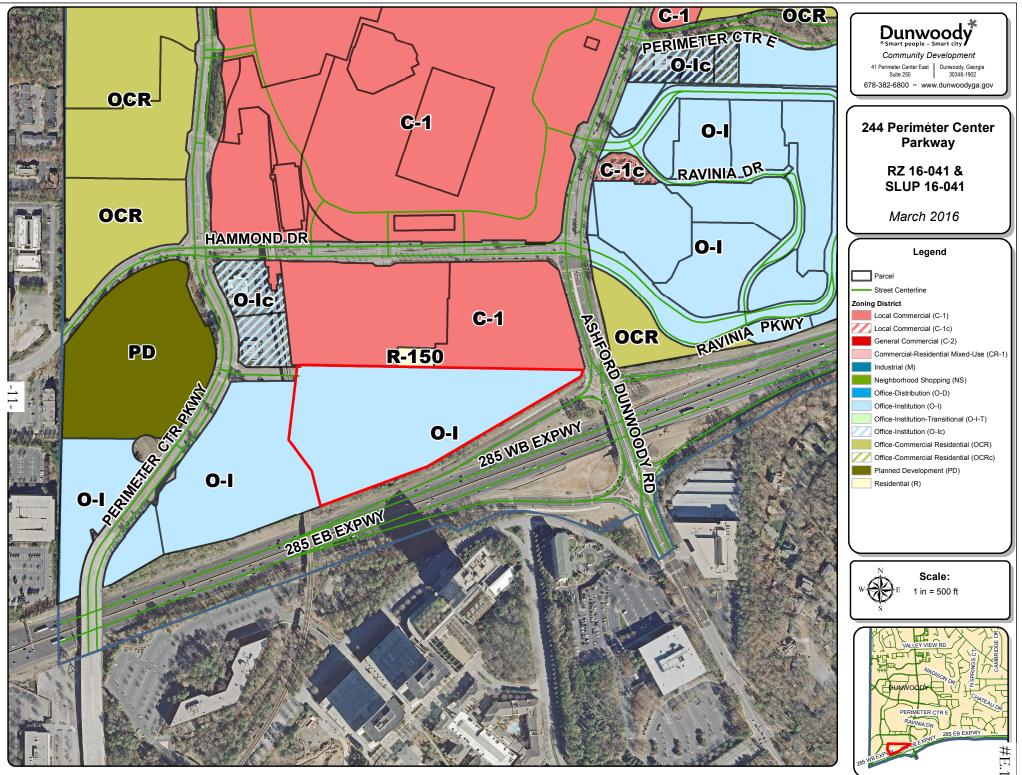


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- 7. Entitlements for the site under the February 9, 1999 variance decision shall be maintained on Site A as depicted on the Site Plan.
- 8. Covenants shall restrict non-owner occupied units to a maximum of 10 percent. A unit shall not be considered "owner occupied" if it includes any partial owner who pays another party (except the mortgagor) for the right to live there.
- 9. The site is considered one development, and as such, plaza areas and open spaces shown on the plans for Site A will be provided.
- 10. Show and label extension of proposed right-of-way on Site B as "future right-of-way" across Site B.
- 11. Provide plan for open space improvements and amenities for residential and commercial areas.
- 12. Provide documents for easements on this site granting access to the adjacent cemetery.
- 13. Provide pedestrian access up to the edge of the property to accommodate MARTA connection.
- 14. Provide improvements recommended in GRTA notice of decision.
- 15. Construct public streets in accordance with standards in Perimeter Center Overlay.

Attachments

- Location Map, Zoning Districts Map, Future Land Use Map
- Division 2. Nonresidential and Mixed-use zoning districts excerpt
- Comprehensive Plan excerpt
- GRTA Revised Letter of Understanding and Staff Recommendations
- Traffic Study
- DeKalb County School District Zoning Review Comments
- Application packet



Disclaimer: All data is provided as is, with all faults, without warranty of any kind, either expressed or implied. This map is the property of the City of Dunwoody, Georgia and its assigns. All rights reserved.

244 Perimeter Ctr Pkwy Lot Division









CHAPTER 27 - ZONING ORDINANCE^[1]

Footnotes:

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Editor's note—Ord. No. 2013-10-15, § 1, adopted Oct. 14, 2013, repealed former Ch. 27, §§ 27-1—27-1654, and enacted a new Ch. 27 as set out herein. Former Ch. 27 pertained to similar subject matter. See the Code Comparative Table for a complete derivation. For stylistic purposes, a uniform system of headings, catchlines, capitalization, citation to state statutes, and expression of numbers in text have been used to conform to the Code of Ordinances. Additions made for clarity are indicated by brackets and obvious misspellings and punctuation errors have been corrected without notation.

ARTICLE II. - ZONING DISTRICTS

DIVISION 2. - NONRESIDENTIAL AND MIXED-USE ZONING DISTRICTS

Sec. 27-71. - General.

(a) The districts. The city's nonresidential and mixed-use zoning districts are listed below.

	Zoning District	Map Symbol
	Office-Institution	O-I
Office	Office-Institution-Transitional	O-I-T
Office	Office-Distribution	O-D
	Office-Commercial-Residential	OCR
	Neighborhood Shopping	NS
Commercial	Local Commercial	C-1
Commercial	Commercial-Residential Mixed-Use	CR-1
	General Commercial	C-2
Industrial	Industrial	M

(b) Purposes.

- (1) General. The nonresidential and mixed-use districts are generally intended to promote consistency with the comprehensive plan and provide opportunities for shopping, employment, entertainment and living.
- (2) Office-institution and office-institution-transitional. The primary purposes of the O-I and O-I-T districts are as follows:
 - a. To provide convenient locations for office and institutional uses;
 - b. To provide locations for the development of cultural, recreational, educational and health service facilities; and
 - c. To limit building heights to two stories in O-I-T zoned areas adjacent to single-dwelling residential districts.
- (3) Office-distribution. The primary purpose of the O-D district is to provide convenient locations for office and distribution establishments.
- (4) Office-commercial-residential. The primary purposes of the OCR district are as follows:
 - a. To provide for economic development within the city through redevelopment of parcels of land that have been used in the past for commercial and light industrial uses but that have become obsolete and now offer an opportunity for establishing new moderate-intensity mixed-use developments consisting of a combination of office, commercial and residential uses;
 - b. To promote redevelopment and new development in an environment that is pedestrianoriented and that provides employment, shopping, entertainment and living opportunities in close proximity thereby reduces auto dependency; and
 - c. To encourage the conversion of vacant commercial and industrial buildings into mixed-use projects.
- (5) Neighborhood shopping. The primary purposes of the NS district are as follows:
 - a. To provide convenient neighborhood retail shopping and service areas within the city;
 - b. To provide for the development of new neighborhood shopping districts;
 - c. To help ensure that the size and scale of neighborhood shopping centers and individual uses within shopping centers are compatible with the scale and character of surrounding neighborhoods; and
 - d. To accommodate uses designed to serve the convenience shopping and service needs of the immediate neighborhood.
- (6) Local commercial. The primary purposes of the C-1 district are as follows:
 - a. To provide convenient local retail shopping and service areas within the city;
 - b. To provide for the development of new local commercial districts; and
 - c. To accommodate uses designed to serve the convenience shopping and service needs of groups of neighborhoods.
- (7) Commercial-residential mixed-use. The primary purposes of the CR-1 district are as follows:
 - a. To provide convenient local retail shopping and service areas within a mixed-use (commercial-residential) setting;

- b. To provide for the development of new commercial-residential mixed-use districts; and
- c. To promote development patterns that accommodate residential, employment and entertainment within a walkable, mixed-use environment.
- (8) General commercial. The primary purposes of the C-2 district are as follows:
 - a. To provide convenient general business and commercial service areas within the city;
 - b. To provide for the development of new general commercial districts; and
 - c. To accommodate uses designed to serve the general business and commercial service needs of the city.
- (9) Industrial. The primary purposes of the M district are as follows:
 - a. To provide areas for the establishment of businesses engaged in the manufacturing, processing, creating, repairing, renovating, painting, cleaning, or assembling of goods, merchandise, or equipment;
 - b. To help ensure that establishments operate so as to not create adverse noise and other impacts on nearby residential, office, commercial and mixed-use districts; and
 - c. To help ensure that M districts are located in areas with access to major arterials and freeways.

(Ord. No. 2013-10-15, § 1(Exh. A § 27-5.10), 10-14-2013)

Sec. 27-72. - Uses allowed.

The following table identifies uses allowed in nonresidential and mixed-use zoning districts. See [subsection] 27-111(4) for information about how to interpret the use table.

				DIST	RIC	ΓS				Supplemental	
USES		0- I-T	0- D	OCR	NS	C- 1	CR- 1	C- 2	м	Regulations	
P = use permitted as of right / A = administrative permit req'd / E = special exception req'd / S = special land use permit req'd											
RES	IDE	NTIA	L								
House	ehol	d Liv	ving								
Detached house	-	Р	-	-	-	-	-	-	-	27-147	
Multi-unit building	-	-	-	S	-	-	S	-	-		
Mixed-use building, vertical	-	-	-	Р	-	-	Р	-	-		

Gro	oup	Livin	g							
Convent and monastery	Р	Р	-	Р	-	-	-	-	-	27-146
Fraternity house, sorority house or residence hall	Р	-	-	_	-	-	-	-	-	
Nursing home	Р	Р	-	-	-	-	-	-	Р	
Personal care home, family $(1-4 \text{ persons})$	-	-	Р	-	Р	Р	Р	Р	-	
Personal care home, group (5–7 persons)	-	-	Р	-	Р	Р	Р	Р	-	
Personal care home, community (8+ persons)	Р	Р	Р	-	P	Р	Р	Р	-	27-145
Child caring institution (1–6 persons)	Р	Р	Р	_	Р	Р	Р	Ρ	-	
Child caring institution (7–15 persons)	Р	Р	Р	-	Р	Р	Р	P	-	
Child caring institution (16 or more)	Р	S	Р	-	Р	Ρ	Р	Р	-	
Community living arrangement (1-4 persons)				Р		Р	Р			
Shelter, homeless	S	S	-	-	-	Р	Р	P	-	27-140
Transitional housing facility	S	S	-	-	-	Р	Р	Р	-	27-140
QUASI-PUBLIC	AN	D INS	STITU	JTIOI	IAL	1	<u> </u>	<u> </u>	<u> </u>	
Ambulance Service	-	-	-	-	-	Р	Р	Р	Р	
Club or Lodge, Private	Р	Р	Р	-	-	Р	Р	Р	Ρ	
Cultural Exhibit	Р	Р	Р	-	-	Ρ	Р	Р	-	
Day care facility, adult (6 or fewer persons)	-	-	Р	-	-	-	-	-	-	27-137
Day care center, adult (7 or more)	Р	Р	Р	Р	Р	Р	Р	P	-	
Day care facility, child (6 or fewer persons)	-	-	Р	-	-	-	-	-	-	

Day care center, child (7 or more)	Р	Р	Р	Р	Р	Р	Р	Р		
Educat	iona	l Ser	vice	S			<u> </u>	<u> </u>		
College or university	Р	Р	Р	-	-	-	-	-	-	
Kindergarten	-	-	Р	Р	Р	Р	Р	Р	-	27-141
Research and training facility, college or university affiliated	Р	Р	Р	_	-	-	-	-	Р	
School, private elementary, middle or senior high	Р	Р	Р	Р	-	Р	Р	P	Р	27-148
School, specialized non-degree	Р	Р	Р	Р	-	Ρ	Р	Р	Ρ	
School, vocational or trade	Р	Р	Р	-	-	Р	Р	Р	Р	
Hospital	Р	-	-	-	-	-	-	-	-	
Place of Worship	Р	Р	Р	Р	Р	Р	Р	Р	Р	27-146
Utility Facility, Essential	E	E	Р	E	E	Р	Р	Р	Р	27-151
100	MME	ERCI	۹L		1	1	<u> </u>	1	1	
A	dult	Use								
Body art service								Р	Ρ	
Sexually oriented business	Р	-	-	Р	-	-	-	Р	Р	27-149
Anin	nal S	ervi	ces	1	1	1	1	1	1	1
Animal care/boarding	-	-	-	S	S	Р	Р	Р	Р	27-131
Animal grooming	-	-	-	Р	Р	Р	Р	P	Р	27-131
Animal hospital/veterinary clinic	-	-	-	Р	Р	Ρ	Р	P	Ρ	27-131

Commun	icati	ion S	ervi	ces						
Radio and television broadcasting stations	Р	Р	Р	-	-	Р	Р	Р	Р	
Recording studios	Р	Р	Р	-	-	Р	Р	Р	Р	
Telecommunication tower	A	-	A	-	S	A	A	A	A	27-150
Telecommunication antenna, co-located	Р	Р	Р	Р	Р	Р	Р	Р	Р	27-150
Construction and B	uildi	ing S	ales	and S	Servi	ces	<u> </u>		<u> </u>	
Building or construction contractor	-	-	-	-	-	-	-	Р	Р	
Commercial greenhouse or plant nursery	-	-	-	-	-	-	-	Р	Р	
Electrical, plumbing and heating supplies and services	-	-	-	-	-	Р	Р	-	Р	
Lumber, hardware or other building materials establishment	-	-	-	-	-	P	Р	Р	Р	
Eating and Dri	nkin	g Est	tabli	shme	nts	1		<u> </u>	<u> </u>	
Restaurant, accessory to allowed office or lodging use	Р	-	-	Р	-	Р	Р	Р	Р	
Restaurant, drive-in or drive-through	-	-	-	-	-	Р	S	Р	Р	
Food truck	Р	Р	Р	Р	Р	Р	Р	Р	Р	27-138
Other eating or drinking establishment	-	-	-	Р	Р	Р	Р	Р	-	
Entertainment	and	Spe	ctat	or Spo	orts					
Auditorium or stadium	-	-	-	-	-	-	-	Р	Р	
Drive-in theater	-	-	-	-	-	-	-	Р		
Movie theater	-	-	-	Р	-	-	-	Р	-	

Special events facility	-	Р	-	-	-	Р	Р	Р	-				
Finan	cial	Serv	ices	1	<u> </u>	1	1	<u> </u>		1			
Banks, credit unions, brokerage and investment services	Р	Р	Р	Р	Р	Р	Р	Р	Р				
Convenient cash business	-	-	-	-	-	-	-	Р	-	27-136			
Pawn shop	-	-	-	-	-	-	-	Р	-	27-144			
Food and Beverage Retail Sales													
Liquor store (as principal use)	-	-	-	-	-	Р	Р	Р	Р				
Liquor store (accessory to lodging or 3+ story office)	-	-	Р	Р	-	-	-	-	-				
Other food and beverage retail sales	-	-	Р	Р	Р	Р	Р	Р	Р				
Funeral and	Inte	rme	nt Se	ervice	S	1	<u> </u>	<u> </u>		<u> </u>			
Cemetery, columbarium, or mausoleum	Р	Р	Р	-	-	-	-	-	-				
Crematory	-	-	-	-	-	-	-	-	S				
Funeral home or mortuary	Р	-	-	-	-	Р	Р	Р	Р				
Lodging	Р	-	Р	Р	-	Р	Р	Р	Р				
Medical Service													
Home health care service	Р	Р	-	-	-	-	-	-	-				
Hospice	Р	Р	-	-	-	-	-	-	-				
Kidney dialysis center	Р	Р	-	-	-	-	-	-	-				
Medical and dental laboratory	Р	Р	-	Р	-	Р	Р	-	Р				

Medical office/clinic	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Office or Consumer Service	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Parking, Non-accessory	S	-	Р	-	-	Р	Р	Р	Р	27-143
Personal Im	prov	veme	ent S	ervice	2					
Barber shop, beauty shop, nail salon, massage and/or spa establishments, estheticians, and other "typical" uses per [subsection] 27-114(14)	Р	-	-	Р	Р	Р	Р	Р	Р	27-114(14)
Other personal improvement service	-	-	-	-	-	Р	Р	Р	Р	
Repair or Launo	lry S	i iervi	ce, C	Consu	mer					
Laundromat, self-service	-	-	-	Р	Р	Р	Р	Р	-	
Laundry or dry cleaning drop-off/pick-up	Р	-	-	Р	Р	Р	Р	Р	Р	
Other consumer repair or laundry service	-	-	-	Р	Р	Р	Р	Ρ	Р	
Research and Testing Services	Р	-	Р	Р	-	-	-	Р	Р	
Re	tail	Sale	5	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	
Retail sales of goods produced on the premises	-	-	-	-	-	-	-	-	Р	
Shopping Center	-	-	-	Р	Р	Р	Р	Р	-	
Other retail sales	-	-	Р	Р	Р	Р	Р	Р	-	
Sports and Re	l crea	tion	 , Par	l ticipa	Int					
Golf course and clubhouse, private	Р	Р	Р	-	-	-	-	Р	Р	
Health club	-	-	P	Р	P	Р	Р	Р	Р	
Private park	Р	Р	P	-	-	-	-	-	-	

Recreation center or swimming pool, neighborhood	Р	Р	Р	-	-	-	-	-	Р				
Recreation grounds and facilities	-	-	Р	-	-	-	-	Р	-				
Tennis center, club and facilities	Р	Р	Р	Р	-	Р	Р	Р	-				
Other participant sports and recreation (Indoor)	Р	-	-	Р	-	Р	Р	Р	-				
Other participant sports and recreation (Outdoor)	-	-	-	-	-	-	-	Р					
Vehicle and Equipment, Sales and Service													
Car wash	-	-	-	-	-	Р	-	Р	Р	27-134			
Gasoline sales	-	-	-	-	-	Р	-	Р	Р	27-139			
Vehicle repair, minor	-	-	-	-	-	Р	-	Р	Р	27-153			
Vehicle repair, major	-	-	-	-	-	-	-	Ρ	Ρ	27-152			
Vehicle sales and rental	-	-	-	-	-	S	S	Р	Р	27-154			
Vehicle storage and towing	-	-	-	-	-	-	-	Ρ	Р	27-155			
INI	SUS.	TRIA	L	1	1	1	1	1	1				
Manufacturing and Production, Light	-	-	-	-	-	-	-	Р	Р				
Wholesaling, Wareho	usin	g and	d Fre	eight I	Nov	eme	ent	1		<u> </u>			
Warehousing and storage	-	-	Р	-	-	-	-	-	-				
Self-storage warehouse	-	-	Р	-	-	-	-	-	Р				
Storage yard and truck terminal	-	-	-	-	-	-	-	-	S				
AGRICULTURE A	ND	TRAI	NSPO	ORTAT	ΓΙΟΝ		1						

Agriculture												
Agricultural produce stand P												
Community garden	Р	Р	Р	Р	Р	Р	Р	Р	Ρ	27-135		
Crops, production of	-	-	-	-	-	-	-	-	Р			
Tra	anspo	rtati	on									
Heliport	S	-	S	-	-	S	S	-	Ρ			
Stations and terminals for bus and rail passenger service	S	-	-	-	-	-	-	-	-			
Taxi stand and taxi dispatching office	-	-	-	-	-	Р	Р	-	Р			

(Ord. No. 2013-10-15, § 1(Exh. A § 27-5.20), 10-14-2013; Ord. No. 2015-01-05, § 1, 1-26-2015; Ord. No. 2015-06-13, § 1, 6-22-2015)

Sec. 27-73. - Lot and building regulations.

- (a) This section establishes basic lot and building regulations that apply in nonresidential and mixed-use zoning districts. These regulations offer certainty for property owners, developers and neighbors about the limits of what is allowed; they are not to be construed as a guarantee that stated minimums and maximums can be achieved on every lot. Other factors, such as topography, the presence of protected resources, off-street parking and other factors may work to further limit actual building and development potential.
- (b) The lot and building standards of the following table apply to all principal and accessory uses allowed in nonresidential and mixed-use districts, unless otherwise expressly stated in this zoning ordinance. Article VII, division 1, identifies exceptions to these regulations and rules for measuring compliance (see also Figure 5-1).

	Regulation	0-1	O-I-T	O-D	OCR	NS	C-1	CR-1	C-2	М
L1	Minimum Lot Area (sq. ft.)	20,000	20,000[1]	43,560	87,120	20,000	20,000	20,000	30,000	30,000
L2	Minimum Lot Frontage (ft.)	100	100	150	100	100	100	100	100	100

	Maximum Density (dwelling units per acre)	NA	NA	NA	30	NA	NA	80	NA	NA
	Minimum Building/Structur e Setbacks (ft.)									
S 1	Street, front and side	50	40	75	0	50	50	0	50	75
S 2	Side, interior	20	20	20	20	20	20	20[2]	20	20
S 3	Rear	30	30	30	40	30	30	30	30	30
с	Maximum Lot Coverage (%)	80	80	80	80	80	80	80	80	80
	Maximum Building Height (stories/ft.)	5/70[3]	2/35	2/35[4]	2/35[4]	2/25	2/35[4]	3/45[4]	2/35[4]	5/70[3]
	Maximum Building Floor Area (sq. ft.)	NA	NA	NA	NA	50,000[5]	NA	NA	NA	NA

[1] Attached house developments are subject to a minimum lot area requirement of 4,000 square feet per dwelling unit.

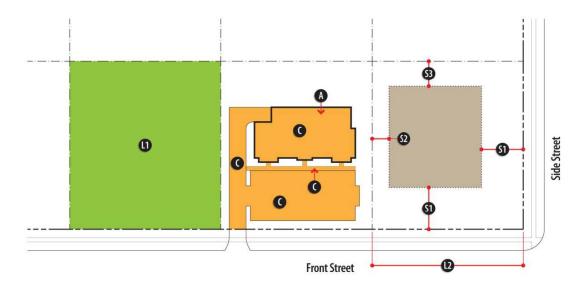
[2] No interior side setback required abutting C-1, CR-1 or C-2-zoned lots.

[3] Buildings may exceed three stories in height only if approved by fire and rescue services. Buildings in excess of five stories or 70 feet in height may be approved only through the special land use permit procedures of article V, division 3. Multi-unit residential and vertical mixed-use buildings that abut any attached single-dwelling residential district may not exceed 40 feet in height. Multi-unit residential buildings and vertical mixed-use buildings that abut any detached single-dwelling residential district may not exceed 35 feet in height.

[4] Buildings in excess stated height limits may be approved through the special land use permit procedures of article V, division 3. Buildings may exceed three stories in height only if approved by fire and rescue services.

[5] No individual building may exceed 50,000 sq. ft. (GSF). No multi-tenant center may exceed 100,000 sq. ft.

Figure 5-1: Lot and Building Regulations Diagram, Nonresidential and Mixed-use Districts



(Ord. No. 2013-10-15, § 1(Exh. A § 27-5.30), 10-14-2013; Ord. No. 2015-01-05, § 1, 1-26-2015)

Sec. 27-74. - Other regulations.

Uses and development in nonresidential and mixed-use zoning districts may be subject to other regulations and standards, including the following.

- (1) Nonconformities. See article VI, division 4.
- (2) Accessory uses and structures. See article III, division 3.
- (3) Parking. See article IV, division 1.
- (4) Landscaping and screening. See article IV, division 2.
- (5) Signs. See chapter 20 of the Municipal Code.
- (6) Outdoor storage. See section 27-286.
- (7) Temporary uses. See article III, division 4.
- (8) Outdoor lighting. See article IV, division 3.

(Ord. No. 2013-10-15, § 1(Exh. A § 27-5.40), 10-14-2013)

Secs. 27-75—27-85. - Reserved.

PERIMETER CENTER

Vision/Intent

Perimeter Center will be a visitor friendly "livable" regional center with first-class office, retail, entertainment, hotels, and high-end restaurants in a pedestrian and bicycle-oriented environment. The area will serve as a regional example of high quality design standards. The City of Dunwoody works in partnership with the Perimeter Community Improvement Districts (PCIDs) and adjacent communities to implement and compliment the framework plan and projects identified in the Perimeter Center Livable Centers Initiative study (LCI) and its current and future updates.

In the future, the area should add public gathering space and pocket parks, venues for live music and entertainment and continue to create transportation alternatives, mitigate congestion, and reduce remaining excessive surface parking. The area creates the conditions of possible true "live-work" environment. All future development continues to emphasize high quality design standards and building materials and incorporates the current national best practices on energy efficiency, where possible.

The City of Dunwoody recognizes the value of creating mixed-use, transit-oriented development within walking distance of public transit stations. However, the City has concerns about the impact of such development on the City's infrastructure and schools.

Future Development

The Perimeter Center Character Area will be divided into four subareas (PC-1, PC-2, PC-3, and PC-4) which match the draft proposed overlay district outline that the City is reviewing as part of the Perimeter Center Zoning Code. This area was the subject of a previous LCI Study. The cities of Dunwoody, Sandy Springs, and Brookhaven work in partnership with the Perimeter Community Improvement Districts (PCIDs) to implement and complement the framework plan and projects identified in the Perimeter Center Livable Centers Initiative study (LCI) and its current and future updates.

For specific recommendations on height, density and use refer to the provisions of the Perimeter Center Overlay District and Zoning, available from the Dunwoody Community Development Department.

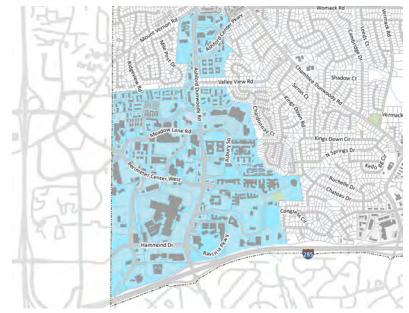


FIGURE 13: Perimeter Center Character Area Map

PC-1: Intended to apply to the central core area of Perimeter Center, including the area directly surrounding the Dunwoody MARTA train station. This district allows for the highest intensity of buildings, a high level of employment uses, and active ground story uses and design that support pedestrian mobility.

PC-2: Made up primarily of employment uses and limited shop front retail, residential, and services.

PC-3: A smaller scale, less intensive commercial district, permitting both shop front and office buildings.

PC-4: Made up primarily of residential uses at a scale that provides a transition between the intensity of Perimeter Center and the surrounding single-family residential neighborhoods.

Action Items







▲ Housing in Perimeter Center

- New development will include amenities and provide public functional green space.
- New development will be mindful of school capacity issues and applicants will work with Board of Education and City for better resolution of school issues.
- Reduce surface parking and promote livable centers in the immediate areas surrounding MARTA station.
- Encourage hotel and convention development near MARTA in order to foster commerce along the mass transportation route.
- Achieve a lifelong-community for residents who can age in place with safe access to medical, recreational and other necessary services.
- Create bicycle, pedestrian and non-auto related transportation options to connect with the rest of the City of Dunwoody.
- The 2012 PCID Commuter Trail System Master
 Plan proposed a network of commuter trails connecting to the MARTA station.

The 2012 PCID Perimeter Circulator Implementation report recommended circulator transit to provide first/ last mile connectivity for commuters and reduction in CID area congestion.

- The PCIDs have proposed Perimeter Park at the Dunwoody MARTA Station.
- Work with the Perimeter Transportation Management Association (TMA) to actively reduce automobile dependency and emerge as a leader in alternative transportation for the region.
- Work to strengthen Board of Education relationship for creative solutions to school capacity.
- Work with the PCIDs' boards to implement vision.
- Coordinate with the City of Sandy Springs for LCI Updates and implementation.
- Coordinate with the Atlanta Regional Commission (ARC) for implementation of future LCI study updates.
- Coordinate with MARTA regarding Bus Rapid Transit (BRT) (or other regional service) and urban design surrounding all transit stations.
- Look for ways to encourage live entertainment for the benefit of visitors and residents.



COMMUNITY IMPROVEMENT DISTRICT (CID)

A Community Improvement District (CID) is an authorized self-taxing district dedicated to Infrastructure improvements within its boundaries. The PCIDs are governed by two boards – one each for Fulton and DeKalb. The PCIDs spent or leveraged public funds to invest \$55 million in Dunwoody alone; over \$7 million from ARC's LCI program was directed to the PCIDs. This makes it one of the most, if not the most, successful CIDs in the region. The PCIDs' mission focuses exclusively on transportation improvements:

To work continuously to develop efficient transportation services, with an emphasis on access, mobility, diversification and modernization.



LETTER OF UNDERSTANDING

March 14, 2016

Dunwoody Crown Towers, LLC c/o G. Doug Dillard, Esq. Pursley, Friese, Torgrimson 1230 Peachtree Street, Suite 1200 Atlanta, Georgia 30309

RE: DRI 2567 244 Perimeter Center Parkway

Dear Mr. Brown:

The purpose of this letter is to inform you of the GRTA staff recommendation regarding your request for expedited review of the **DRI 2567 244 Perimeter Center Parkway** Development of Regional Impact (DRI). Based on the information presented during the Pre-Review/Methodology meeting on March 7, 2016, the DRI qualifies for the criteria for expedited review under the DRI *Procedures and Principles for GRTA Development of Regional Impact Review* Section 3-102.F., Livable Centers Initiative (LCI), which requires the proposed DRI project to be located within an LCI, consistent with the LCI plan, and that the LCI implementation is in good standing with the Atlanta Regional Commission (ARC). A Trip Generation and an Access Analysis are required as part of the review under this criteria. Some of the following items were discussed in the meeting above and should assist you and your consultant team in preparing the DRI Review Package.

Project Overview

The proposed development is located in the City of Dunwoody on 13.26 acres located in the northwest quadrant of the I-285/Ashford-Dunwoody Road Interchange, south of Hammond Drive and east of Perimeter Center Parkway. The trigger for this development is a rezoning. The project will be a mixed-use development consisting of approximately 1.1 million square feet of new office space, 500-room and 150-room hotels, 32,452 restaurant space, 43,700 square feet of retail space, 63,442 conference center and 380 units of high-rise condominiums.

Methodology for Analysis

- The development site is currently served by one full-movement driveway of Goldkist Road onto Perimeter Center Parkway south of Hammond Drive. When the Westside Connection is completed, the development will have access directly onto that new road. Approximately 65 feet of right-of-way is preserved on the site plan.
- This proposed development is located within Perimeter Livable Centers Initiative (LCI) study area.
- The estimated vehicular trip generation is 18,006 gross new daily trips, based on ITE 9th editions of the ITE *Trip Generation Manual*.
- A 25% alternative mode reduction is allowed, in addition to the allowable mixed use and pass-by reductions.
- All intersections identified as within the study network shall be analyzed during the AM and PM peak hours for

 (1) existing conditions, (2) future "no-build" conditions and (3) future "build" conditions. This DRI shall be
 reviewed in one phase to be completed by 2026. The LOS standard is "E" due to the DRI location adjacent to
 a fixed transit guideway facility and located in a major activity center as defined by regional policies per GRTA
 Technical Guidelines Section 3-102.E. Transportation Analysis.
- The Access Analysis study network is:
 - Perimeter Center Parkway at Lake Hearn Drive
 - Perimeter Center Parkway at Gold Kist Drive (also site driveway)
 - Perimeter Center Parkway at Hammond Drive
 - Hammond Drive at Shopping Center Driveway
 - Hammond Drive at Ashford-Dunwoody Road

- A 1% background traffic growth rate* shall be used for all roadways, AM and PM peak hour project trips on the overlapping study network roadway segments, and the addition of the following DRIs project trips:
 - o DRI #1582 236 Perimeter Mixed Use (aka State Farm Phase I, under construction; approved in 2013)
 - o DRI #2501 Park Center (aka State Farm Phase II, under construction; approved in 2015)
 - Per the City of Dunwoody, Hines Ravinia IV and 1201 Hammond Drive
 *Glenridge, Palisades and High Street are accounted for in the background traffic growth rate.
- Due to the current land uses and proposed demolition, the existing vehicle movements from the current land uses will be counted and reported in the existing conditions and future "no-build" conditions, but are to be deducted from the future "build" conditions prior to adding the DRI project trips.
- Capacity analysis shall be based on turning movement counts collected not more than 12-months prior to the
 date of the actual DRI submittal to GRTA. As appropriate, pedestrian counts and heavy vehicle counts shall
 be collected with vehicle counts and considered within the capacity analysis. Turning movement counts shall
 be collected while local schools are in session and ordinarily not between the week of Thanksgiving and the
 second week of January or any week of a major holiday. [NOTE: Adjustments are allowed to previous counts
 to account for a difference in older counts and those from 12-months ago.]
- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account.
- The applicant shall research TIP, STIP, RTP, and GDOT's construction work program, as well as any local government plans (SPLOST, CIP, etc.), to determine the open-to-traffic date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. This information shall be included within the traffic analysis.

ADDITIONAL INFORMATION

Every roadway segment and intersection listed above will be analyzed for "required improvements." If the existing LOS for the segment or intersection is below the applicable level of service for a particular time period (e.g., A.M. peak period, P.M. peak period, etc.), then the measured LOS service for that segment and time periods is the standard by which the "base" and "future" traffic conditions will be designed. For example, if the County's LOS standard is LOS D, but an intersection or segment currently operates at LOS E for a certain peak period, then the LOS standard for that intersection or segment for "base" and "future" conditions becomes LOS E (only for that intersection and only for that peak period). The "base" is the phase year traffic without the development traffic (also called future "no-build" conditions) and the "future" is the phase year with the development traffic (also called future "build" conditions). As required in the technical guidelines, specific "required improvements" will be identified to bring the "base" LOS and "future" LOS for every roadway segment and intersection up to the applicable LOS standard. If the existing LOS for the segment or intersection is LOS F, then the future "no-build" and future "build" LOS standard will be LOS E. The improvements required to achieve the desired LOS standard will be provided in a table and graphic within the study. The traffic study should indicate the existing roadway laneage at each studied intersection as well as the laneage required (to meet the LOS standard) for future "nobuild" and future "build" conditions. The improvements may include both programmed improvements and improvements identified in the study.

The planned and programmed improvement should indicate the project sponsor, the anticipated funding by source (federal, state, city/county, developer, CID, etc.), the year open-to-traffic, and estimate of the total project cost. All other required improvements identified in the study should, to the extent known, identify the cost, sponsor, funding, and timing. If any of these elements are not known, please state as "unknown."

The future "no-build" and the future "build" analyses should NOT automatically include/assume the additional lanes/capacity associated with planned and programmed improvement projects unless those roadway projects are currently under construction. Instead, the traffic consultant should recommend the additional laneage required to satisfy the level of service standard.

DRI REVIEW PACKAGE CHECKLIST

Please use the DRI Review Package Checklist to help you prepare your GRTA DRI Review Package for expedited review of your application. The Checklist reflects the understandings set forth in this letter, and is incorporated into this letter by reference.

The site plan shall be prepared in accordance with Section 4-104 of the DRI Review Package Technical Guidelines and it shall be dated, and shall be at a scale of 1"= 200' or larger (showing more detail). The site plan shall be consistent with GRTA's Site Plan Information Guidelines, which represents the minimum required information on site plans.

The applicant shall indicate on the site plans all adjacent land uses, current zoning, and future land use as indicated on the future land use map. Additionally, all existing and proposed sidewalks, existing and proposed pedestrian trails, and existing and proposed roadway laneage should be indicated on the site plan.

DRI REVIEW PACKAGE SUBMITTAL

At the time you are ready to submit your DRI Review Package to GRTA, please note the following:

- Provide one (1) paper copy of all materials of the Transportation analysis and of the Site Plan
- Provide one (1) CD-ROM with electronic versions of all submittal documents:
 - Provide a .pdf of each document (Adobe Acrobat)
 - Provide the native format for each document
 - .dwg is the preferred CAD format (AutoCAD)
 - .docx is the preferred word processing format (Word)
 - xlsx is the preferred spreadsheet format (Excel)
 - .sy7, .sy8 or .sy9 is the preferred capacity analysis format (Synchro)

As part of the completeness certification process, please have your consultant forward one copy of the completed GRTA DRI Review Package (traffic analysis, site plan, CD) to the GDOT District Office, Regional Commission and local government Planning & Development and Transportation group (contact information provided below). GRTA shall be copied on each of the transmittal letters.

GDOT DISTRICT 7	CITY OF DUNWOODY PUBLIC WORKS	ATLANTA REGIONAL COMMISSION
Patrick Allen	Michael Smith	Andrew Smith
5025 New Peachtree Rd, NE	41 Perimeter Center East	40 Courtland Street, NE
Chamblee, GA 30341	Suite 250	Atlanta, Georgia 30303
	Dunwoody, GA 30346	_

Expedited Review Recommendation

Once the DRI Review Package (including the DCA Additional Information Form) has been submitted and determined complete, and ARC with City of Dunwoody have confirmed the LCI consistency qualification, GRTA staff will make a recommendation regarding your request for expedited review under Section 2-202.B of the *Procedures and Principles for GRTA Development of Regional Impact Review*. If the City of Dunwoody and/or ARC do not confirm consistency with the LCI as required, then the study network and other methodology assumptions may need to be revised for a Non-Expedited Review.

If you have any questions, please feel free to contact me (404) 463-3068 or by email at lbeall@grta.org.

Sincerely,

auntBeall

Laura F. Beall, AICP Program Manager cc: Jon West, DCA Jon Tuley, ARC Patrick Allen, GDOT District 7 Greg Floyd, MARTA Catherine Mercier-Baggett, City of Sandy Springs Patrice Ruffin, City of Brookhaven

Steve Foote, City of Dunwoody Michael Smith, City of Dunwoody Charles Brown, Crown Holdings Group Karla Poshedly, Moreland Altobelli Sal Lalani, TVS Design

Traffic Impact Study

For the Rezoning of the Dunwoody Crown Towers Development

City of Dunwoody, Georgia

Prepared by Moreland Altobelli Associates, Inc.

February 2016

INTRODUCTION

A portion of the Dunwoody Crown Towers development, located in the northwest quadrant of the I-285/Ashford-Dunwoody Road Interchange, is proposed to be rezoned. The Dunwoody Crown Towers Development is currently located on Gold Kist Drive. The current O-I zoning on the west end allows for approximately 1,600,000 square feet (SF) of high-rise office space. The master site plan includes two office towers with 24 stories (567,000 SF each), a restaurant and conference center of approximately 96,000 SF and a high-rise hotel (28 stories with up to 500 rooms or 356,200 SF). The proposed zoning requested on the east end would include 380 units of high-rise condominiums in mixed-use buildings, a retail center (3 stories with a total of 43,700 SF) and a small luxury hotel with approximately 150 rooms or 115,200 SF.

The purpose of this study is to analyze future traffic conditions with and without the proposed zoning and to recommend improvements to maintain acceptable traffic operating conditions, if any, upon the completion of the development. The proposed Dunwoody Crown Towers development is expected to be completed in 2026. The project location map is shown in Figure 1.



Figure 1: Project Location Map

STUDY AREA ROADWAY NETWORK

The study area roadway network is comprised of five key intersections that are expected to be impacted by the Project:

- 1. Perimeter Center Parkway at Hammond Drive
- 2. Perimeter Center Parkway at Gold Kist Drive
- 3. Perimeter Center Parkway at Lake Hearn Drive
- 4. Hammond Drive at Ashford-Dunwoody Road
- 5. Hammond Drive at Shopping Center Driveway

The following is a brief inventory of each major roadway within the study area.

Perimeter Center Parkway

Perimeter Center Parkway is a four-lane divided north-south oriented roadway that extends from Lake Hearn Drive to Perimeter Center West. Perimeter Center Parkway serves as a collector roadway for office and commercial developments and it parallels Peachtree-Dunwoody Road and Ashford-Dunwoody Road. The roadway has an approximate average daily traffic volume of 8,060 vehicles per day.

Hammond Drive

Hammond Drive is a four-lane divided east-west oriented roadway that connects from Mount Vernon Highway to Ashford-Dunwoody Road. The northwest quadrant of the intersection of Hammond Drive at Ashford-Dunwoody Road is the site of Perimeter Mall. Hammond Drive crosses over GA 400 freeway and has a north-facing half-diamond interchange with the GA 400 freeway. The roadway has an approximate average daily traffic volume of 22,720 vehicles per day.

Ashford-Dunwoody Road

Ashford-Dunwoody Road is a six-lane divided north-south oriented roadway. Ashford-Dunwoody Road has an interchange with I-285. The roadway has an approximate average daily traffic volume of 28,650 vehicles per day.

Gold Kist Drive

Gold Kist Drive is a two-lane local road that ends at the driveway to the Gold Kist Office building. There is currently two other office driveways on Gold Kist Drive.

EXISTING CONDITIONS

Peak hour turning movements were obtained from VHB Engineers (formerly GT Hill Planners) for both the morning peak period (7:00 - 9:00 a.m.) and the evening peak hour (4:00 - 6:00 p.m.) at five major signalized intersections along Perimeter Center Parkway and Hammond Drive. These counts were collected in 2014.

Additionally, 24-hour bi-directional traffic counts were conducted on Peachtree Center Parkway, Hammond Drive and Ashford-Dunwoody Road in 2015. All of the existing daily traffic volumes are contained within the Appendix.

ANALYSIS OF EXISTING TRAFFIC CONDTIONS

The existing traffic conditions were evaluated at five of the intersections in the study area to determine the operational performance of the area roadway network. Figure 2 shows the existing peak hour traffic volumes that were used in this analysis.

Intersection Capacity Analysis

The goal of this analysis is to investigate the existing traffic operational performance of the individual intersections of the study area. This analysis was conducted using the methodology outlined in the *2010 Highway Capacity Manual* (HCM). This methodology is the industry standard for the evaluation of intersection capacity and delay. In order to facilitate the analysis, a computerized procedure referred to as SYNCHRO was used. This software conforms to the methodology of the HCM. SYNCHRO determines operational characteristics of the intersection. Two of these characteristics that help define the conditions at an intersection are the Level of Service (LOS) and the vehicular delay.

The vehicular delay value that results from the SYNCHRO analysis is used to determine the level of service of an intersection. Level of service (LOS) is a letter designation used to describe traffic operating conditions, on a declining scale from A to F. LOS "A" represents free-flow traffic conditions and LOS "F" represents extreme delays with stopped traffic conditions. Table 1 below indicates the relationship between intersection delay and level of service for signalized intersections.

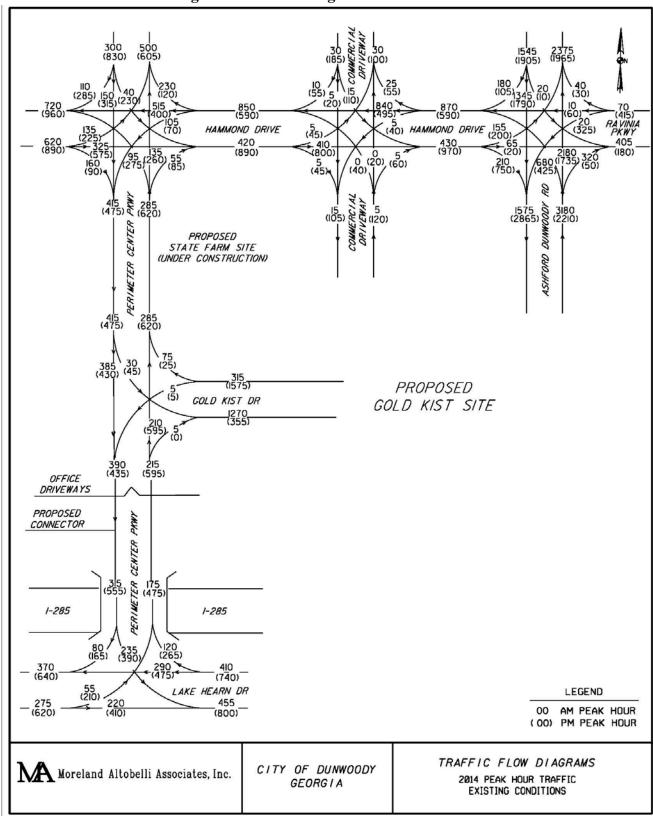


Figure 2: 2014 Existing Traffic Volumes

Level of Service	Control Delay (seconds/vehicle)
А	0-10
В	>10-20
С	>20-35
D	>35-55
Е	>55-80
F	>80

Table 1: Level of Service Criteria For Signalized Intersections

The results of the existing traffic conditions capacity analysis are summarized in Table 2 below:

Name of Intersection	AM Pea	k Hour	PM Peak Hour			
Name of Intersection	LOS	Delay	LOS	Delay		
Perimeter Center Parkway at Hammond Drive	В	13.4	В	19.9		
Perimeter Center Parkway at Gold Kist Drive	А	4.9	А	1.7		
Perimeter Center Parkway at Lake Hearn Drive	А	7.3	В	11.2		
Hammond Drive at Ashford-Dunwoody Road	В	19.2	С	29.6		
Hammond Drive at Shopping Center Driveway	А	3.3	А	8.5		

Table 2: Summary of Intersection Capacity AnalysisExisting Traffic Conditions

Under existing conditions, all the intersections shown above are operating at acceptable levels of service during AM and PM peak hours. The intersection capacity analysis worksheets are contained within the Appendix.

FUTURE TRAFFIC CONDITIONS

Future year 2026 traffic volumes without the Dunwoody Crown Towers development (2026 No-Build Conditions) were determined from the trip generation of planned development in the area. Table 3 is a list of planned development and the source of information obtained for each development site. Many of the sources were from Developments of Regional Impact (DRI) reports.

Name of Development/Location	DRI #	Prepared By
236 Perimeter Mixed-Use (a.k.a State Farm, Phase I)	1582	Kimley-Horn and Associates, Inc.
Park Center (a.k.a. State Farm, Phase II), Included High Street (DRI#1432), State Farm, Phase I and Palisades Apartments (DRI#1152, updated in 2015)	2501	Kimley-Horn and Associates, Inc.
Hines Ravinia IV, Trip Generation		Square footage and land use provided by the City of Dunwoody
1201 Hammond Drive, Trip Generation		Square footage and land use provided by the City of Dunwoody.

The percent distribution of development traffic along the roadways of the study was obtained from the respective studies listed above. The trip generated traffic was manually distributed and assigned to the study area roadway network. The resulting future 2026 traffic volumes are shown in Figure 3.

Project Trip Generation

Vehicle trip generation was estimated for the Dunwoody Crown Towers development using trip generation equations developed by the Institute of Transportation Engineers (ITE) and published in a report titled, *Trip Generation, 9th Edition*. Full build-out and occupancy of the development were assumed when applying the trip generation equations. The summary of the trips generated by Dunwoody Crown Towers development can be found in Tables 4 and 5.

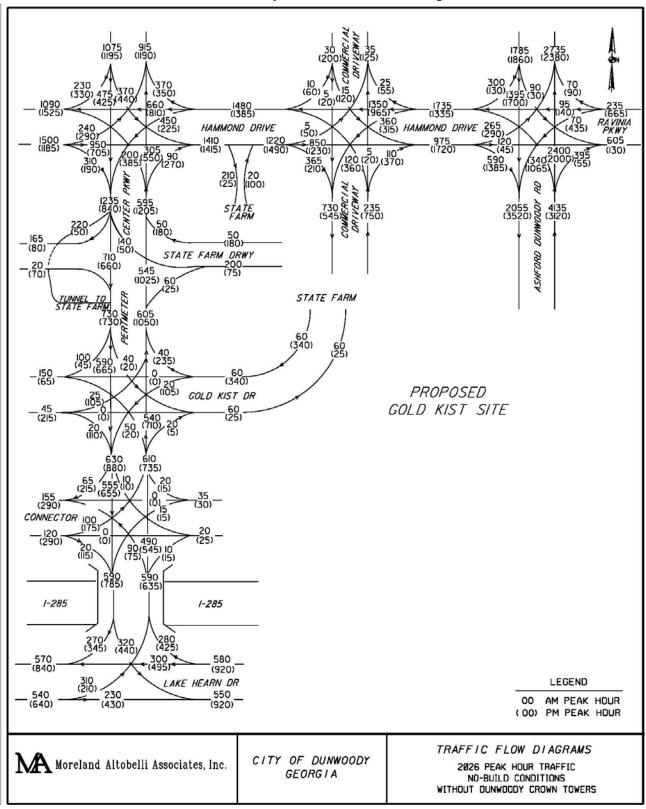


Figure 3: 2026 Traffic Volumes, No-Build Conditions Without Dunwoody Crown Towers Development

Table 4: Trip Generation Current Zoning

Land Use	ITE	Weekday	AM Pea	k Hour	PM Peak Hour		
Dunwoody Crown Towers Development	Code	Daily Trips	Enter	Exit	Enter	Exit	
1,134,000 SF, Office – Two Towers	710	8,312	1,175	160	230	1,120	
500-room Hotel – Tower 356,200 SF	310	4,102	155	110	155	145	
32,452 SF Restaurant	931	292	15	10	165	80	
63,442 SF Conference Center	715	739	100	15	15	100	
Gross Trips	-	13,445	1,445	295	565	1,445	
25% Reduction Transit*	-	-3,361	-361	-74	-141	-361	
Trip Generation of Existing Zoning	-	10,084	1,084	221	424	1,084	
Rounded Values Used in Traffic Study	-	10,100	1,085	220	425	1,085	

*Transit reduction based on Kimley Horn transit reductions from State Farm DRI (Park Center DRI #2501)

ITE Weekday Land Use **AM Peak Hour PM Peak Hour Dunwoody Crown Towers Development** Code **Daily Trips** Enter Exit Enter Exit 1,134,000 SF, Office - Two Towers 710 8,312 230 1,120 1,175 160 500-room Hotel - Tower 356,200 SF 310 4,102 155 110 155 145 32,452 SF Restaurant 931 292 15 10 165 80 63,442 SF Conference Center 715 739 100 15 15 100 380 units High-Rise Condominium 232 1,656 25 115 90 55 969 45 45 45 150-room Luxury Hotel 310 35 43,700 SF Retail Center 70 826 1,936 60 35 55 480 755 Gross Trips 18,006 1,575 1,615 _ -394 -120 -189 -404 25% Reduction Transit* -4,501 _ Mixed-Use Reduction** -828 -0 -0 -35 -74 _ Trip Generation of Proposed Zoning 360 531 12,677 1,181 1,137 -1,140 Rounded Values Used in Traffic Study 12.680 1.180 360 530

Table 5: Trip Generation Proposed Zoning

*Transit reduction based on Kimley Horn transit reductions from State Farm DRI (Park Center DRI #2501) **Mixed-Use Reduction due to Internal Capture (Source: Chapter 7, ITE Trip Generation Handbook, 9th Edition)

Traffic Distribution and Assignment

The estimated net new external trips were manually distributed and assigned to the study area road network based on the percent distribution obtained from VHB Engineers.

The resulting future year 2026 traffic volumes (2026 Future Build Conditions) with the current zoning and with the proposed zoning were determined and are shown in Figures 4 and 5, respectively.

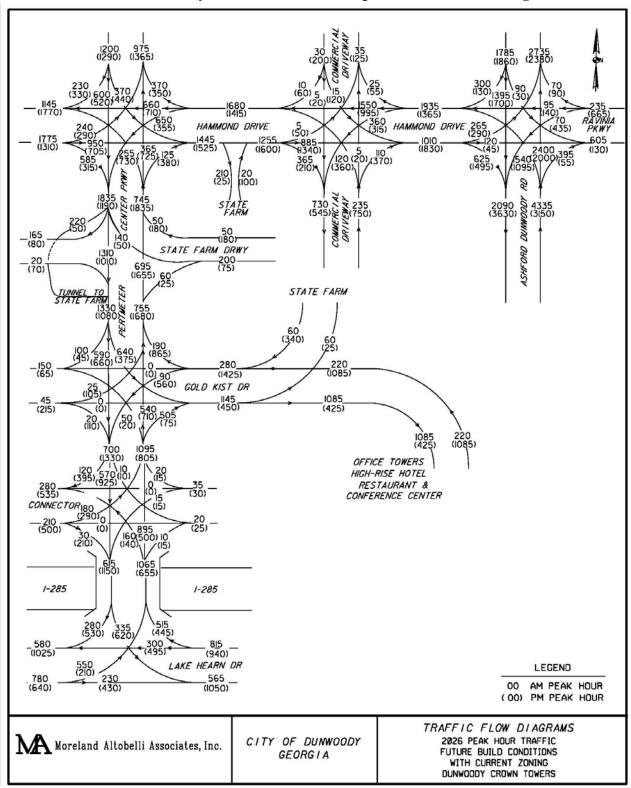


Figure 4: 2026 Build Traffic Volumes With Dunwoody Crown Towers Development's Current Zoning

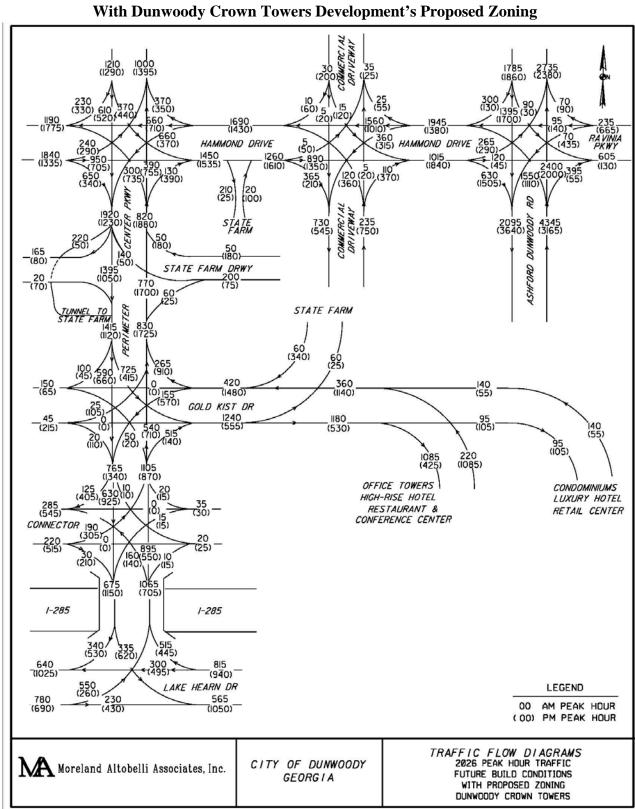


Figure 5: 2026 Build Traffic Volumes

ANALYSIS OF FUTURE TRAFFIC CONDITIONS

The future 2026 traffic conditions were evaluated under three different scenarios:

- Scenario 1: 2026 No-Build Conditions This scenario includes planned development in the area without the Dunwoody Crown Towers development
- Scenario 2: 2026 Build with Current Zoning Conditions This scenario includes planned development in the area and the current zoning that allows two office towers with 24 stories (567,000 SF each), a restaurant and conference center of approximately 96,000 SF and a high-rise hotel (28 stories with up to 500 rooms or 356,200 SF).
- Scenario 3: 2026 Build with Proposed Zoning Conditions This scenario includes planned development in the area and the proposed zoning that would allow 380 units of high-rise condominiums in mixed-use buildings, a retail center (3 stories with a total of 43,700 SF) and a small luxury hotel with approximately 150 rooms or 115,200 SF in addition to what is currently zoned.

SYNCHRO analysis was used to evaluate the major intersections of each scenario. Lane configuration and roadway assumptions were made for each scenario. Figure 6 illustrates the following assumptions that were made:

- The State Farm Phase I development would construct a right-turn lane on Hammond Drive that would allow motorists to turn into the right-in and right-out site driveway of the development.
- The Park Center development would construct a right-in, right-out driveway on Perimeter Center Parkway across from the planned State Farm Phase I development driveway. The State Farm Phase I development driveway would allow southbound left-turns and northbound right-turns into the driveway and right-out turns out of the driveway. There is also a proposed southbound entrance only tunnel into the State Farm Phase I development.
- The Park Center development would construct a driveway across from Gold Kist Drive.
- A new connector road is planned to be constructed from Perimeter Center Parkway to Peachtree-Dunwoody Road. On the City of Dunwoody side, Park Center development would construct the connector roadway from Perimeter Center Parkway to the Sandy Springs City Limits. It will intersect at the current median opening on Perimeter Center Parkway south of Gold Kist Drive. This connector roadway would be constructed as a three-lane roadway. On the Sandy Springs side, the proposed Palisades apartment development will construct the Connector Road as a matching three-lane roadway from Peachtree-Dunwoody Road to the City of Dunwoody City limits.
- Dunwoody Crown Towers development would construct additional turn-lanes on the Gold Kist Drive approach to Perimeter Center Parkway.
- The Park Center DRI recommended the construction of an additional left-turn lane on the westbound and northbound approaches of the intersection of Hammond Drive and Peachtree Center Parkway. An exclusive right-turn lane on eastbound Hammond Drive at Peachtree Center Parkway was also recommended in the Park Center DRI.

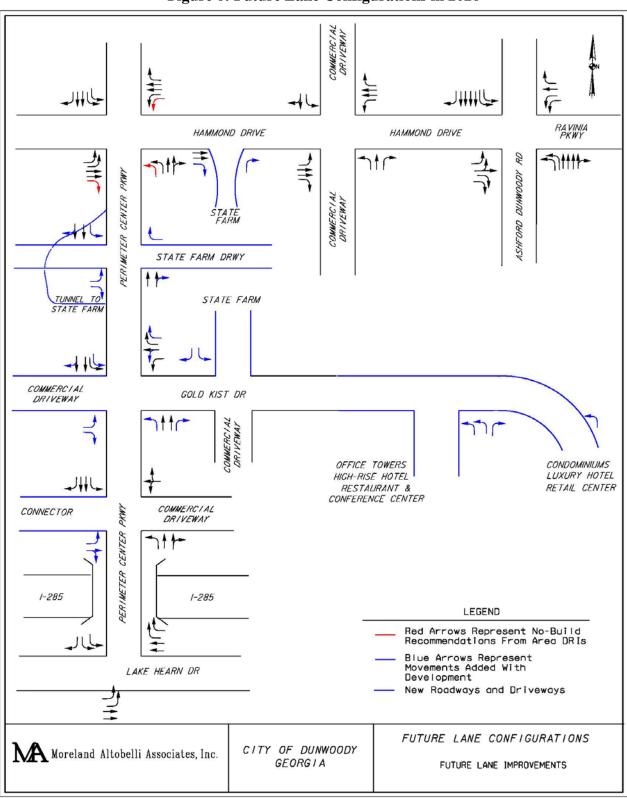


Figure 6: Future Lane Configurations in 2026

Table 6 summarizes the results of the intersection capacity analysis. The intersection capacity analysis worksheets are contained within the Appendix.

Intersections			ario 1 o-Build		20	Scena Scena Scena	ario 2 ent Zon	ing	Scenario 3 2026 Proposed Zoning			
	AM		PM		A	AM		PM		AM		PM
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Perimeter Center Parkway at Hammond Drive	С	26.6	В	10.6	D	36.9	D	43.6	D	42.4	D	45.1
Perimeter Center Parkway at Gold Kist Drive	А	5.9	А	7.2	В	16.7	С	31.0	В	18.0	С	28.5
Perimeter Center Parkway at Westside Connector	А	5.6	А	7.2	А	7.6	В	11.5	А	7.9	В	12.0
Perimeter Center Parkway at Lake Hearn Drive	В	10.9	D	37.3	В	12.3	В	13.1	В	12.2	В	13.3
Hammond Drive at Ashford-Dunwoody Road	D	43.9	Е	71.3	D	54.0	F	84.3	D	54.6	F	84.2
Hammond Drive at Shopping Center Driveway	А	7.4	С	27.1	В	10.6	С	26.5	А	9.8	С	26.5

Table 6: Summary of Intersection Capacity AnalysisFuture 2026 No-Build, Build with Current Zoning and Build with Proposed Zoning Traffic
Conditions

The results of the intersection capacity studies indicate that all intersections will operate at acceptable levels of service in the future no-build, build with current zoning of Dunwoody Crown Towers development, and build conditions with the proposed rezoning of Dunwoody Crown Towers development except for the intersection of Hammond Drive at Ashford-Dunwoody Road. There is an existing traffic problem that is being made worse with every new development in the Perimeter Center area. Traffic congestion at the intersection of Ashford-Dunwoody Road at Hammond Drive is the result of a traffic pattern caused by the poor interstate access to properties along Perimeter Center Parkway. Traffic from the I-285 westbound Ashford-Dunwoody Road ramp turns right onto Ashford-Dunwoody Road and then turns left onto Hammond Drive to reach destinations along Perimeter Center Parkway. This maneuver is a complex weave across three lanes and has the potential to have frequent crashes.

A project has been proposed and is under study to provide an access ramp from I-285 westbound that would underpass Ashford-Dunwoody Road and tie into Gold Kist Drive to be renamed the Westside Connector. This project would eliminate weaving traffic on Ashford-Dunwoody Road, reduce traffic congestion on Hammond Drive and Ashford-Dunwoody Road and provide improved access to Perimeter Center Parkway.

#E.1.

CONCLUSIONS

In conclusion, the rezoning of the Dunwoody Crown Towers development to add a residential/mixed-use component that includes 380 units of high-rise condominiums, a small luxury hotel and a small retail center will not impact the operations of the study intersections. There are no new improvements required to facilitate the addition of this residential development. Table 6 results indicate that there is less than one second of delay increase at the major intersections under the proposed zoning scenario.

Additionally, there would be a slight reduction in overall traffic because a small percentage of the residents of the condominiums would typically work at the office towers and office workers and residents would frequent the retail center. Also, the residential traffic peak hour movements are reverse from that of the office towers; therefore the residential traffic would not create the need for additional capacity on the roadway network.

APPENDIX

#E.1.

Traffic Data and Analysis Results

- 2015 Daily Traffic Volumes
- SYNCHRO Analysis results

APPENDIX

Traffic Data and Analysis Results

- 2015 Daily Traffic Volumes
- SYNCHRO Analysis results

Page 1

All Traffic Data Services, Inc 1336 Farmer Road Conyers, GA 30012

alltrafficdata.net

Site Code: 13 Station ID: 13 PERIMETER CENTER PKWY NORTH OF I-285

Latitude: 0' 0.0000 Undefined

NB											L	_atitude: 0	' 0.0000 U	ndefined
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 Axl	6 Axle	>6 Axl	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
12/15/15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	Ő	1	0	Ő	Ő	Ő	Ő	Ő	Ő	Ő	0 0	Ő	Õ	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	2	0	0	0	0	0	0	0	0	0	0	0	2
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01:45	2	1	0	0	0	2	0	0	0	0	0	0	0	5
	2	4	0	0	0	2	0	0	0	0	0	0	0	8
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02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	3	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:15	0	3	0	1	0	1	0	0	0	0	0	0	0	5
05:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
05:45	0	3	0	1	0	0	0	0	0	0	0	0	0	4
00.00	0	8	1	2	0	1	0	0	0	0	0	0	0	12
06:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
06:15 06:30	1 0	9 18	3 1	1 0	0 0	0 0	14 19							
06:45	0	21	2	0	1	1	0	0	0	0	0	0	0	25
00.45	1	53	8	1	1	1	0	0	0	0	0	0	0	65
07:00	0	19	3	0	0	0	0	0	0	0	0	0	0	22
07:00	0	28	4	0	0	1	0	0	0	0	0	0	0	33
07:30	0	38	9	0	0	0	0	0	0	0	0	0	0	47
07:45	0	51	4	0	1	0	0	0	0	0	0	0	0	56
07.40	0	136	20	0	1	1	0	0	0	0	0	0	0	158
08:00	0 0	57	8	0	1	1	0 0	1	0	0	0	0	0	68
08:15	Ő	50	6	0	0	2	Ő	1	0	õ	0	0 0	ŏ	59
08:30	0	45	6	0	0	0	0	0	0	0	0	0	0	51
08:45	Ő	57	8	1	1	Ő	Ő	Ő	0 0	Ő	0 0	Ő	Õ	67
	0	209	28	1	2	3	0	2	0	0	0	0	0	245
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09:15	0	22	6	0	0	0	0	0	0	0	0	0	0	28
09:30	0	36	5	0	0	0	0	0	0	0	0	0	0	41
09:45	0	46	1	0	0	1	0	0	0	0	0	0	0	48
	0	141	16	1	0	1	0	0	0	0	0	0	0	159
10:00	0	23	4	0	0	0	0	0	0	0	0	0	0	27
10:15	0	35	0	0	2	0	0	0	0	0	0	0	0	37
10:30	0	30	4	0	1	0	0	0	0	0	0	0	0	35
10:45	1	43	6	0	0	2	0	0	0	0	0	0	0	52
	1	131	14	0	3	2	0	0	0	0	0	0	0	151
11:00	0	48	7	0	2	1	0	0	0	0	0	0	0	58
11:15	0	72	10	0	2	0	0	0	0	0	0	0	0	84
11:30	0	74	6	0	3	0	0	0	0	0	0	0	0	83
11:45	0	109	4	1	0	0	0	0	0	0	0	0	0	114
	0	303	27	1	7	1	0	0	0	0	0	0	0	339
Total	4	990	115	6	14	12	0	2	0	0	0	0	0	1143
Percent	0.3%	86.6%	10.1%	0.5%	1.2%	1.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	

Site Code: 13 Station ID: 13 PERIMETER CENTER PKWY NORTH OF I-285

Latitude: 0' 0.0000 Undefined

NB														
Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	101	12	0	0	0	0	0	0	0	0	0	0	113
12:15	0	72	10	0	0	0	0	0	0	0	0	0	0	82
12:30	0	67	8	0	1	1	0	0	0	0	0	0	0	77
12:45	0	62	9	1	0	1	0	0	0	0	0	0	0	73
	0	302	39	1	1	2	0	0	0	0	0	0	0	345
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	0	191	38	3	2	1	0	0	0	0	0	0	0	235
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14:15	0	28	6	0	0	2	0	0	0	0	0	0	0	36
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15:30	0	55	19	4	0	0	0	2	0	0	0	0	0	80
15:45	0	68	16	0	2	0	0	0	0	0	0	0	0	86
	0	218	54	6	3	2	0	2	0	0	0	0	0	285
16:00	0	108	25	1	1	0	0	0	0	0	0	0	0	135
16:15	0	110	15	1	2	0	0	1	0	0	0	0	0	129
16:30	1	125	20	0	6	0	0	0	0	0	0	0	0	152
16:45	0	127	10	0	0	0	0	1	0	1	0	0	0	139
	1	470	70	2	9	0	0	2	0	1	0	0	0	555
17:00	1	135	11	0	4	0	0	0	0	0	0	0	0	151
17:15	6	80	10	1	8	0	0	1	0	0	0	0	0	106
17:30	4	65	8	1	1	0	0	0	0	0	0	0	0	79
17:45	1	76	12	1	13	1	0	0	0	0	0	0	0	104
	12	356	41	3	26	1	0	1	0	0	0	0	0	440
18:00	2	100	12	1	14	0	0	0	0	0	0	0	0	129
18:15	0	87	6	1	6	1	0	0	0	0	0	0	0	101
18:30	0	95	9	0	3	0	0	0	0	0	0	0	0	107
18:45	0	61	6	0	1	0	0	0	0	0	0	0	0	68
	2	343	33	2	24	1	0	0	0	0	0	0	0	405
19:00	0	57	4	0	2	0	0	0	0	0	0	0	0	63
19:15	0	57	2	0	2	0	0	0	0	0	0	0	0	61
19:30	0	39	3	0	1	0	0	0	0	0	0	0	0	43
19:45	0	25	1	0	0	0	0	0	0	0	0	0	0	26
	0	178	10	0	5	0	0	0	0	0	0	0	0	193
20:00	0	23	0	0	1	0	0	0	0	0	0	0	0	24
20:15	0	18	1	0	1	0	0	0	0	0	0	0	0	20
20:30	0	8	0	0	3	0	0	0	0	0	0	0	0	11
20:45	0	7	0	0	1	0	0	0	0	0	0	0	0	8
	0	56	1	0	6	0	0	0	0	0	0	0	0	63
21:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
21:15	0	8	2	0	0	0	0	0	0	0	0	0	0	10
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21:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
~~~~	0	28	3	0	0	0	0	0	0	0	0	0	0	31
22:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
22:15	0	7	2	0	0	0	0	0	0	0	0	0	0	9
22:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
22:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
00.00	0	16	2	0	0	0	0	0	0	0	0	0	0	18
23:00	0	6	0	0 0	0	0	0	0 0	0	0	0	0 0	0	6
23:15	0 0	3 1	0 0	0	0 0	0	0 0	0	0	0 0		0	0 0	3
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1 2
23:45	0										0			
Total	15	<u>11</u> 2330	<u>0</u> 322	<u> </u>	<u>1</u> 82	<u> </u>	0	0	0	0	0	0	0	<u>12</u> 2787
Percent	0.5%	2330 83.6%	322 11.6%	0.8%	82 2.9%	0.4%	0.0%	5 0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	2101
Felcent	0.5%	03.0%	11.0%	0.0%	2.9%	0.470	0.0%	0.270	0.0%	0.0%	0.0%	0.0%	0.0%	
Grand														
Total	19	3320	437	27	96	23	0	7	0	1	0	0	0	3930
Percent	0.5%	84.5%	11.1%	0.7%	2.4%	0.6%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
i elcent	0.070	04.070	11.170	0.7 /0	2.4/0	0.070	0.076	0.2 /0	0.070	0.070	0.070	0.076	0.070	

#### 

## All Traffic Data Services, Inc 1336 Farmer Road Conyers, GA 30012

alltrafficdata.net

Site Code: 13.5 Station ID: 13.5 PERIMETER SUMMIT PKWY NORTH OF I-285

Latitude: 0' 0.0000 Undefined

SB											l	_atitude: 0	)' 0.0000 U	ndefined
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 Axl	6 Axle	>6 Axl	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
12/15/15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	2	0	0	0	1	0	0	0	0	0	0	0	3
	0	4	0	0	0	1	0	0	0	0	0	0	0	5
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
~~~~	0	12	0	0	0	0	0	0	0	0	0	0	0	12
06:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12
06:15	0	9	0 1	0	1	0	0	0	0	0	0	0	0	10
06:30	0 0	20	2	0	0	0	0 0	0 1	0	0	0	0	0	21
06:45	0	<u>28</u> 67	2	0	<u>1</u> 2	0	0	1	0	0	0	0	0	<u>32</u> 75
07:00	0	36	1	0	2	0	0	0	0	0	0	0	0	39
07:00	1	43	0	0	2	0	0	0	0	0	0	0	0	44
07:15	0	43 51	3	0	1	0	0	0	0	0	0	0	0	55
07:30	0	85	1	0	1	0	0	0	0	0	0	0	0	87
07.43	1	215	5	0	4	0	0	0	0	0	0	0	0	225
08:00	0	53	1	0	1	0	0	1	0	0	0	0	0	56
08:15	0	54	1	0	0	0	0	0	0	0	0	0	Ő	55
08:30	0	63	3	0	1	0	0	0	0	0	0	0	0	67
08:45	0	49	0	0	0	0	0	0	0	0	0	0	Ő	49
	0	219	5	0	2	0	0	1	0	0	0	0	0	227
09:00	1	69	2	0	1	0	0	0	0	0	0	0	Ő	73
09:15	0	54	1	0	1	0 0	0	1	0	0	0	0	Ő	57
09:30	Ő	44	2	0	0	Ő	0	0	0	0	0	0	õ	46
09:45	0 0	46	3	0 0	0 0	Ő	0	0	0	0	0	0	0 0	49
	1	213	8	0	2	0	0	1	0	0	0	0	0	225
10:00	0	31	3	0	0	0	0	0	0	0	0	0	0	34
10:15	Ő	21	0	1	1	Ő	0	0	0	0	Ő	Ő	Ő	23
10:30	0	24	0	0	0	0	0	0	0	0	0	0	0	24
10:45	0	34	2	0	2	0	0	0	0	0	0	0	0	38
	0	110	5	1	3	0	0	0	0	0	0	0	0	119
11:00	0	30	4	0	1	0	0	0	0	0	0	0	0	35
11:15	0	41	0	0	0	0	0	0	0	0	0	0	0	41
11:30	0	33	2	0	0	0	0	0	0	0	0	0	0	35
11:45	0	42	0	0	1	0	0	0	0	0	0	0	0	43
	0	146	6	0	2	0	0	0	0	0	0	0	0	154
Total	2	987	34	1	15	1	0	3	0	0	0	0	0	1043
Percent	0.2%	94.6%	3.3%	0.1%	1.4%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

Site Code: 13.5 Station ID: 13.5 PERIMETER SUMMIT PKWY NORTH OF I-285

Latitude: 0' 0.0000 Undefined

SB											L	_atitude: 0	' 0.0000 U	ndefined
Start	Dikaa	Cars &	2 Axle	Busse	2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 Axl	6 Axle	>6 Axl	Total
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
12 PM 12:15	0 1	34 50	3 0	0 0	0 1	1 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	38 52
12:15	0	50 82	1	0	0	0	0	1	0	0	0	0	0	52 84
12:30	0	92	1	0	1	0	0	1	0	0	0	0	0	95
12.10	1	258	5	0	2	1	0	2	0	0	0	0	0	269
13:00	1	84	1	0	0	1	0	1	0	0	0	0	0	88
13:15	0	91	3	0	0	0	0	0	0	0	0	0	0	94
13:30	1	73	2	1	0	0	0	0	0	0	0	0	0	77
13:45	0	71	3	0	1	0	0	0	0	0	0	0	0	75
	2	319	9	1	1	1	0	1	0	0	0	0	0	334
14:00	1	63	1	0	0	1	0	0	0	0	0	0	0	66
14:15	0	68	2	0	1	0	0	0	0	0	0	0	0	71
14:30	0	73	2	0	1	0	0	0	0	0	0	0	0	76
14:45	1	63 267	3	0	4	0	0	0	0	0	0	0	0	71 284
15:00	0	92	2	0	0	1	1	0	0	0	0	0	0	204 96
15:15	0	107	2	0	2	0	0	1	0	0	0	0	0	112
15:30	0	152	6	0	3	2	0	0	0	0	0	0	0	163
15:45	Ő	134	5	0	1	1	0	0	0 0	0 0	ů 0	Ő	0 0	141
	0	485	15	0	6	4	1	1	0	0	0	0	0	512
16:00	0	153	5	1	1	2	0	0	0	0	0	0	0	162
16:15	0	146	5	0	2	1	0	1	0	0	0	0	0	155
16:30	1	222	7	0	1	0	0	2	0	0	0	0	0	233
16:45	0	156	3	0	1	1	0	1	0	0	0	0	0	162
	1	677	20	1	5	4	0	4	0	0	0	0	0	712
17:00	1	197	2	0	0	2	0	1	0	0	0	0	0	203
17:15	1	177	3	0	3	0	0	1	0	0	0	0	0	185
17:30	0	170	3	0	1	1	0	0	0	0	0	0	0	175
17:45	1	161	2	0	0	1	0	0	0	0	0	0	0	165
18:00	3 1	705 178	10 6	0 0	4 2	4 1	0 0	2 2	0 2	0 0	0 0	0 0	0 0	728 192
18:15	1	159	4	0	2	1	0	0	0	0	0	0	1	168
18:30	1	158	1	0	2	0	0	0	0	0	0	0	0	162
18:45	0	152	5	0 0	3	0	0	0	0	0	0 0	0 0	Ő	160
	3	647	16	0	9	2	0	2	2	0	0	0	1	682
19:00	0	108	6	0	3	1	0	0	0	0	0	0	0	118
19:15	0	46	2	0	3	0	0	0	0	0	0	0	0	51
19:30	1	56	2	0	0	0	0	0	0	0	0	0	0	59
19:45	0	36	1	0	0	0	0	1	0	0	0	0	0	38
~~~~	1	246	11	0	6	1	0	1	0	0	0	0	0	266
20:00	0	36	3	0	0	0	0	0	0	0	0	0	0	39
20:15 20:30	0 0	23 18	0 0	0 0	1 0	0 0	0 0	24 18						
20:30	0	24	1	0	0	0	0	0	0	0	0	0	0	25
20.40	0	101	4	0	1	0	0	0	0	0	0	0	0	106
21:00	Õ	21	0	Ő	0	0 0	0	0 0	0 0	Ő	Ő	0 0	Ő	21
21:15	0	12	0	0	0	0	0	0	0	0	0	0	0	12
21:30	0	9	0	0	0	0	0	0	0	0	0	0	0	9
21:45	0	12	0	0	0	0	0	0	0	0	0	0	0	12
	0	54	0	0	0	0	0	0	0	0	0	0	0	54
22:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
22:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
22:30	0	9	0	0	0	0	0	0	0	0	0	0	0	9
22:45	0	4	1	0	0	0	0	0	0	0	0	0	0	5
22.00	0 0	27	2 1	0 0	0	0 0	0 0	29						
23:00 23:15	0	2 1	1	0	0	0	0	0	0	0	0 0	0	0	3 1
23:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
20.40	0	9	1	0	0	0	0	0	0	0	0	0	0	10
Total	13	3795	101	2	40	18	1	13	2	0	0	0	1	3986
Percent	0.3%	95.2%	2.5%	0.1%	1.0%	0.5%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	
Grand	15	4782	135	3	55	19	1	16	2	0	0	0	1	5029
Total														3029
Percent	0.3%	95.1%	2.7%	0.1%	1.1%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

Page 1

## All Traffic Data Services, Inc 1336 Farmer Road Conyers, GA 30012

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Site Code: 16 Station ID: 16 HAMMOND DRIVE WEST OF ASHFORD DUNWOODY

Latitude: 0' 0.0000 Undefined

Start	15-Dec-15	EE	3	Hour	Totals	W	Έ	Hour	Totals	Combined	d Totals
Time	Tue		Afternoon	Morning		Morning	Afternoon	Morning	Afternoon		Afternoon
12:00		18	202			8	261				
12:15		16	176			3	284				
12:30		8	198			10	264				
12:45		10	212	52	788	8	276	29	1085	81	1873
01:00		4	224			8	264			• •	
01:15		4	216			4	239				
01:30		2	262			2	224				
01:45		3	242	13	944	7	194	21	921	34	1865
02:00		4	274		0	7	207		011	0.	
02:15		5	252			3	206				
02:30		1	290			2	234				
02:45		1	252	11	1068	2 3	215	15	862	26	1930
03:00			187			3	176		002	20	
03:15		0 2	122			1	188				
03:30		1	170			1	186				
03:45		4	88	7	567	6	188	11	738	18	1305
04:00		4	124		007	5	193		100	10	1000
04:00		0	130			8	184				
04:10		4	119			10	181				
04:45		2	167	10	540	22	154	45	712	55	1252
05:00		10	128	10	540	26	190		112		1202
05:15		9	104			32	175				
05:30		10	84			38	168				
05:45		15	110	44	426	75	160	171	693	215	1119
06:00		16	147		420	96	148	171	033	215	1113
06:15		30	169			186	135				
06:30		39	216			186	178				
06:45		46	192	131	724	213	160	681	621	812	1345
07:00		63	211	131	124	185	153	001	021	012	1545
07:00		77	206			105	138				
07:30			200			218	136				
07:30		88 82	208	310	835	218	130	848	568	1158	1403
		96		310	030	248		040	500	1156	1403
08:00 08:15		108	225 180			240	106 101				
08.15		90	192			245	88				
08:30		90 80	146	374	743	209		904	383	1278	1100
08.45		108	146	374	743	209	88	904	303	12/0	1126
09.00		100	134			232	72				
09:15 09:30		97				234	62				
09:30		92 75	147 121	372	577	214	61 46	928	241	1300	818
10:00		75 104	121	312	577	248	46 54	928	241	1300	010
10:00		104	96			207					
10:15		118	96			227	40 27				
10.30		112		460	345	227		946	140	1206	107
10:45 11:00		126	46 77	400	343	246	21	846	142	1306	487
						272	39				
11:15		134	54				20				
11:30		136	32	500	170	237	21	1000	00	1000	260
<u>11:45</u>		164	16	599	179	292	10	1039	90	1638	269
Total		2383	7736			5538	7056			7921	14792
Percent		23.5%	76.5%			44.0%	56.0%			34.9%	65.1%
Grand		2383	7736			5538	7056			7921	14792
Total											
Percent		23.5%	76.5%			44.0%	56.0%			34.9%	65.1%
ADT	Al	DT 22,713	AA	DT 22,713							

## All Traffic Data Services, Inc 1336 Farmer Road Conyers, GA 30012

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Site Code: 1 Station ID: 1 ASHFORD DUNWOODY ROAD NORTH OF HAMMOND DRIVE Latitude: 0' 0.0000 Undefined

NB											L	_atitude: 0	' 0.0000 U	naerinea
Start		Cars &	2 Axle	······	2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 Axl	6 Axle	>6 Axl	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
12/15/15	0	41	10	0	2	0	0	0	0	0	0	0	0	53
00:15	0	32	6	0	4	0	0	0	0	0	0	0	0	42
00:30	0	18	8	0	0 1	0	0	0	0 0	0	1	0	0	27
00:45	0	<u>13</u> 104	<u>13</u> 37	0	7	0	0	0	0	0	0	0	0	<u>27</u> 149
01:00	0	104	2	0	1	0	0	0	0	0	0	0	0	149
01:15	0	15	3	0 0	2	0 0	0	1	0	0	0 0	0 0	0 0	21
01:30	0	11	2	0	1	0	0	1	0	0	0	0	0	15
01:45	1	15	2	1	0	1	0	1	0	0	0	0	0	21
	1	53	9	1	4	1	0	3	0	0	0	0	0	72
02:00	0	6	5	0	1	0	0	0	0	0	0	0	0	12
02:15	0	12	3	0	2	0	0	0	0	0	0	0	0	17
02:30 02:45	0 0	8 11	3 2	0 0	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	11 14
02.45	0	37	13	0	4	0	0	0	0	0	0	0	0	54
03:00	Ő	9	4	0 0	0	0	0	0	0 0	0	0 0	ů 0	0	13
03:15	0	3	3	1	1	0	0	0	0	0	0	0	0	8
03:30	0	9	1	1	1	0	0	0	0	0	0	0	0	12
03:45	2	22	2	1	0	2	0	0	0	0	0	0	0	29
	2	43	10	3	2	2	0	0	0	0	0	0	0	62
04:00	1	7	6	0	4	0	0	1	1	0	0	0	0	20
04:15 04:30	0 0	10 25	5 6	0 0	1	1 0	0 0	1	0 0	0	0 0	0 0	0 0	18 33
04:30	0	25 36	11	0	2	0	0	0	0	0	0	0	0	49
04.45	1	78	28	0	8	1	0	3	1	0	0	0	0	120
05:00	1	38	9	1	4	0	0	0	1	0	0 0	0 0	Ő	54
05:15	0	45	21	0	3	0	0	0	0	0	0	0	0	69
05:30	0	73	27	0	5	0	0	4	0	0	0	0	0	109
05:45	1	121	38	1	9	0	0	3	0	0	0	0	0	173
	2	277	95	2	21	0	0	7	1	0	0	0	0	405
06:00	2	138	30	0	6	1	0	1	0	0	0	0	0	178
06:15 06:30	10 9	152 232	45 62	3 4	12 6	3 2	1 0	6 11	0 1	0 1	0 1	0 0	0 1	232 330
06:45	8	194	54	4	5	2	0	4	0	0	0	0	1	271
	29	716	191	9	29	9	1	22	1	1	1	0	2	1011
07:00	6	189	45	2	12	4	0	4	0	0	0	0	0	262
07:15	5	179	47	2	9	1	0	5	0	0	0	1	0	249
07:30	7	190	47	1	7	4	0	8	0	1	0	0	0	265
07:45	4	225	68	1	8	1	0	5	0	0	0	0	1	313
00.00	22	783	207	6	36	10	0	22	0	1	0	1	1	1089
08:00 08:15	11 7	221 151	52 53	4 4	7 6	2 3	0 0	5 5	0 1	0 0	0 2	0 1	2 0	304 233
08:30	7	172	51	4	7	1	0	7	1	0	2	0	0	233
08:45	10	139	42	1	6	2	0	9	0	õ	Ő	Ő	0 0	209
	35	683	198	10	26	8	0	26	2	0	2	1	2	993
09:00	9	153	50	4	12	2	0	8	1	1	1	0	1	242
09:15	8	187	57	2	13	3	0	12	1	0	2	0	1	286
09:30	8	177	57	3	15	4	0	6	0	0	0	0	2	272
09:45	5	159	63	2	8	2	0	7	1	1	1	0	0	249
10.00	30 12	676 160	227	11	48	11	0	33 7	3	2	4 0	0	4	1049
10:00 10:15	12 9	169 151	69 79	3 1	10 13	3 5	0 0	10	0 0	1 0	0	0 0	0 0	274 268
10:30	10	177	91	2	13	1	1	10	1	0	1	0	0	312
10:45	7	164	60	2	13	4	0	5	0	0	0	0	2	257
	38	661	299	8	53	13	1	33	1	1	1	0	2	1111
11:00	7	192	83	2	11	2	0	5	1	0	1	0	0	304
11:15	10	148	65	2	11	3	1	5	1	2	1	0	0	249
11:30	8	137	63	1	8	3	0	3	0	1	0	0	0	224
11:45	5	113	46	1	10	2	1	5	1	0	2	0	0	186
Tatal	30	590	257	6	40	10	2	18	3	3	4	0	0	963
Total Percent	190 2.7%	4701 66.4%	1571 22.2%	56 0.8%	278 3.9%	65 0.9%	4 0.1%	167 2.4%	12 0.2%	8 0.1%	13 0.2%	2 0.0%	11 0.2%	7078
i eicent	2.1 /0	00.4 /0	22.2/0	0.070	0.970	0.970	0.170	2.4/0	0.2 /0	0.170	0.2 /0	0.070	0.2 /0	

#### Page 2

## All Traffic Data Services, Inc 1336 Farmer Road Conyers, GA 30012

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Site Code: 1 Station ID: 1 ASHFORD DUNWOODY ROAD NORTH OF HAMMOND DRIVE Latitude: 0' 0.0000 Undefined

NB											L	atitude: 0	0.0000 U	naeilhea
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 Axl	6 Axle	>6 Axl	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
12 PM	10	98	31	3	9	2	0	6	1	0	1	0	0	161
12:15	10	92	36	2	5	2	0	7	1	0	0	0	1	156
12:30	5	89	33	4	2	2	0	5	0	0	0	0	1	141
12:45	7	84	33	2	4	4	0	7	0	0	0	1	0	142
	32	363	133	11	20	10	0	25	2	0	1	1	2	600
13:00	12	89	47	1	6	3	0	7	0	1	0	0	0	166
13:15	4	116	72	1	12	1	0	7	1	0	0	0	0	214
13:30	10	125	67	3	14	3	0	5	1	0	0	0	0	228
13:45	8	120	58	2	9	5	0	4	0	0	0	0	1	207
	34	450	244	7	41	12	0	23	2	1	0	0	1	815
14:00	8	136	81	3	12	3	0	4	0	0	1	0	0	248
14:15	3	149	83	3	5	2	0	2	2	0	1	0	1	251
14:30	7	107	64	3	12	3	0	6	0	1	0	0	0	203
14:45	6	87	56	3	9	2	0	6	1	1	1	1	1	174
15.00	24	479	284	12	38	10	0	18	3	2	3	1	2	876
15:00	8	135	75	2	9	2	0	11	1	0	1	0	1	245
15:15	4	129	121	6	18	2	0	12	0	2 2	0	0	1	295
15:30 15:45	6 5	160 184	129 92	4 1	11 12	3 3	0 0	12 16	2	2	0 1	0 0	1 0	330 316
15.45	23	608	417		50	10	0	51	4	5	2	0	3	
16:00	23 8	152	417	13 2	50 16	3	0	10	4 0	5 1	2	0	3 0	1186 278
16:15	5	100	61	1	5	3	0	3	1	0	1	0	0	180
16:30	10	70	29	1	3	2	0	2	0	0	0	0	0	117
16:45	9	65	30	2	8	1	0	3	0	0	0	0	0	118
10.10	32	387	206	6	32	9	0	18	1	1	1	0	0	693
17:00	9	57	35	2	7	3	0	5	0	0	0	0	0	118
17:15	3	63	29	1	6	2	0	2	0	0	0	0	0	106
17:30	9	83	42	2	9	3	0	3	0	0	0	0	0	151
17:45	5	77	22	1	4	2	0	3	1	0	0	0	0	115
	26	280	128	6	26	10	0	13	1	0	0	0	0	490
18:00	10	92	33	1	3	4	0	2	0	0	1	0	0	146
18:15	6	70	34	2	3	3	0	3	0	0	0	0	0	121
18:30	9	74	24	2	3	3	0	3	0	0	0	0	0	118
18:45	6	86	32	2	4	1	0	5	0	0	0	0	0	136
	31	322	123	7	13	11	0	13	0	0	1	0	0	521
19:00	7	.94	43	1	7	2	0	8	0	0	0	0	0	162
19:15	5	147	108	2	8	2	0	16	0	0	2	0	0	290
19:30	5	143	108	3	8	2	0	13	2	1	1	0	0	286
19:45	9	130	80	1	10	2	0	8	0	0	0	0	0	240
20.00	26	514	339	7	33	8	0	45	2	-	3	0	0	978
20:00	3 1	102	74 79	0 3	3	0 1	0 0	7 6	0 0	0 0	0 0	0	0	189
20:15 20:30	2	125 99	79 68	3 1	8 2	1	0		0	0	0	2 0	0 0	225 183
20:30	2 4	99 88	66	0	2 4	1	0	10 10	0	0	0	0	0	173
20.45	10	414	287	4	17	3	0	33	0	0	0	2	0	770
21:00	4	86	83	0	4	1	0	6	0	0	0	0	0	184
21:15	2	82	71	1	2	1	0	4	0 0	0	ů 0	0 0	0	163
21:30	1	71	38	0	6	1	1	6	Ő	Ő	1	Ő	0	125
21:45	3	76	58	2	5	0	0	4	0	1	0	1	1	151
	10	315	250	3	17	3	1	20	0	1	1	1	1	623
22:00	1	82	36	1	5	0	0	3	1	0	0	0	0	129
22:15	3	81	35	1	7	0	0	7	0	0	0	0	0	134
22:30	0	60	39	1	6	1	0	3	0	0	0	0	0	110
22:45	1	73	31	1	1	0	0	2	0	0	0	0	0	109
	5	296	141	4	19	1	0	15	1	0	0	0	0	482
23:00	1	54	22	0	2	0	0	3	0	0	0	0	0	82
23:15	0	39	26	0	1	0	0	1	0	0	2	0	0	69
23:30	0	50	21	1	0	0	0	1	0	0	0	0	0	73
23:45	0	27	20	0	1	0	0	1	0	0	0	0	0	49
	1	170	89	1	4	0	0	6	0	0	2	0	0	273
Total	254	4598	2641	81	310	87	1	280	16	11	14	5	9	8307
Percent	3.1%	55.4%	31.8%	1.0%	3.7%	1.0%	0.0%	3.4%	0.2%	0.1%	0.2%	0.1%	0.1%	
Crand														
Grand Total	444	9299	4212	137	588	152	5	447	28	19	27	7	20	15385
Percent	2.9%	60.4%	27.4%	0.9%	3.8%	1.0%	0.0%	2.9%	0.2%	0.1%	0.2%	0.0%	0.1%	
i cicent	2.370	00.470	21.7/0	0.070	0.070	1.070	0.070	2.370	0.2/0	0.170	0.2/0	0.070	0.170	

## All Traffic Data Services, Inc 1336 Farmer Road Conyers, GA 30012

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Site Code: 1.5 Station ID: 1.5 ASHFORD DUNWOODY ROAD NORTH OF HAMMOND DRIVE Latitude: 0' 0.0000 Undefined

SB											L		0.0000 0	nuenneu
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 Axl	<6 Axl	6 Axle	>6 Axl	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
12/15/15	0	55	13	0	2	1	0	0	1	0	0	0	0	72
00:15	2	51	10	0	0	1	0	1	0	1	0	0	0	66
00:30 00:45	2 1	35 31	7 10	0 0	0 0	0 1	0 0	1 0	0 1	0 0	0 0	0 0	0 0	45 44
00.45	5	172	40	0	2	3	0	2	2	1	0	0	0	227
01:00	1	29	7	1	1	0	0	0	0	0	0	0	0	39
01:15	0	18	1	0	0	0	0	0	0	0	1	0	0	20
01:30	0	17	7	0	0	0	0	0	0	0	0	0	0	24
01:45	3	26	4	0	0	0	0	0	0	0	0	0	0	33
	4	90	19	1	1	0	0	0	0	0	1	0	0	116
02:00	2	18	2	0	0	0	0	0	0	0	0	0	0	22
02:15	0	14	3	1	1	1	0	1	0	0	0	0	0	21
02:30 02:45	1 2	8 6	3 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	12 9
02.45	5	46	9	1	1	1	0	1	0	0	0	0	0	64
03:00	0	6	2	0	0	0	0	0	ů 0	0 0	0	0	0	8
03:15	1	8	3	0	0	0	0	0	0	0	0	0	0	12
03:30	0	4	2	1	0	0	0	0	0	0	0	0	0	7
03:45	0	7	3	0	0	1	0	0	0	0	0	0	0	11
	1	25	10	1	0	1	0	0	0	0	0	0	0	38
04:00	0	4	2	0	0	0	0	1	0	0	0	0	0	7
04:15	1	3	7	0	0	1	0	0	0	0	0	0	0	12
04:30 04:45	0 0	5 18	6 3	0 0	1 0	1 0	0 0	13 21						
04.45	1	30	18	0	1	2	0	1	0	0	0	0	0	53
05:00	1	23	3	0	0	0	0	1	0	0	0	0	1	29
05:15	0	28	8	Ő	Ő	0	0	0	Ő	Ő	Ő	Ő	0	36
05:30	0	39	8	0	0	0	0	0	1	0	0	0	0	48
05:45	1	58	9	1	1	0	0	1	0	0	0	0	0	71
	2	148	28	1	1	0	0	2	1	0	0	0	1	184
06:00	4	54	8	0	1	0	0	1	0	0	0	0	0	68
06:15	3 5	56	14	1	3	2	0 0	1	0	0	0	0	0	80
06:30 06:45	2	121 137	10 13	3 0	0 2	0 0	0	1 2	0 0	0	0	0 0	0 0	140 156
00.45	14	368	45	4	6	2	0	5	0	0	0	0	0	444
07:00	9	189	12	0	0	1	0	2	0 0	0	0	0	0	213
07:15	3	201	16	1	7	0	0	3	0	1	2	0	1	235
07:30	3	223	28	2	4	4	0	2	0	0	1	0	1	268
07:45	6	204	17	3	7	6	0	3	2	0	0	0	2	250
	21	817	73	6	18	11	0	10	2	1	3	0	4	966
08:00	2	205	21	1	7	0	0	2	0	0	0	0	0	238
08:15 08:30	3 4	184 198	19 15	1	11 1	3 1	0 0	1 2	1 0	0 0	1 0	0 0	1 1	225 223
08:45	4 8	198	45	2	4	2	1	2	1	1	0	0	0	223
00.40	17	751	100	5	23	6	1	8	2	1	2	0	2	918
09:00	10	173	22	2	3	1	0	2	0	0	0	Ő	1	214
09:15	5	191	22	0	3	4	0	3	0	0	0	0	1	229
09:30	6	142	25	3	1	6	0	2	0	0	2	0	1	188
09:45	6	165	24	4	4	1	0	6	0	0	1	0	1	212
	27	671	93	9	11	12	0	13	0	0	3	0	4	843
10:00	6	168	29	2	1	2	0	2	0	0	1	0	1	212
10:15	6	161 164	30	3	0	1	0	2	2	0	0	0	1	206
10:30 10:45	3 8	164 154	34 32	2 1	1 3	1 0	0 0	3 5	1 1	0 0	0 0	0 0	1 0	210 204
10.40	23	647	125	8	5	4	0	12	4	0	1	0	3	832
11:00	23	169	33	0	1	4	0	3	0	0	1	0	0	213
11:15	3	164	33	1	7	1	0	8	ů 0	2	1	0	1	221
11:30	10	184	30	0	4	2	0	7	0	1	0	0	1	239
11:45	4	140	17	0	4	2	0	2	2	1	2	0	0	174
	19	657	113	1	16	9	0	20	2	4	4	0	2	847
Total	139	4422	673	37	85	51	1	74	13	7	14	0	16	5532
Percent	2.5%	79.9%	12.2%	0.7%	1.5%	0.9%	0.0%	1.3%	0.2%	0.1%	0.3%	0.0%	0.3%	

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# All Traffic Data Services, Inc 1336 Farmer Road Conyers, GA 30012 <u>alltrafficdata.net</u>

Site Code: 1.5 Station ID: 1.5 ASHFORD DUNWOODY ROAD NORTH OF HAMMOND DRIVE Latitude: 0' 0.0000 Undefined

B		Core º	2 1 10		2 140	2 1.10	1 100	-E ^!	E Avic	- E A-J	-6 A-4	6 Avia	- C A-1	
Start Time	Bikes	Cars & Trailers	2 Axle	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
			Long				Single							Total
12 PM 12:15	3	172	24	3	1 3	2 1	0	6 2	0	0 1	2	0	0	213
	5	151	20	1			1		1		1	0	0	187
12:30	2 2	192	25	2	2	2	0	3 2	1	0 1	1	0	0	230
12:45		108	14	4	2	3	0		2			0	0	139
12.00	12	623	83	10	8	8		13	4	2	5	0	0	769
13:00	3	88	20	2	6	3	0	3	0	0	0	0	0	125
13:15	3	91	19	1	8	2	0	2	0	0	0	0	1	127
13:30	2	89	15	3	7	2	0	2	0	0	1	0	0	121
13:45	2	117	20	2	4	3	0	6	0	0	0	0	0	154
	10	385	74	8	25	10	0	13	0	0	1	0	1	527
14:00	1	100	10	1	11	2	0	2	0	0	0	0	0	127
14:15	4	106	17	1	6	4	0	3	2	0	0	0	0	143
14:30	1	80	11	1	8	3	0	2	0	0	0	0	0	106
14:45	1	77	15	3	9	3	0	1	0	0	0	0	0	109
	7	363	53	6	34	12	0	8	2	0	0	0	0	485
15:00	3	110	12	1	5	4	0	4	0	0	0	0	0	139
15:15	3	98	20	2	9	2	0	4	0	0	0	0	0	138
15:30	4	130	21	3	2	3	0	1	0	0	0	0	1	165
15:45	7	113	32	2	3	2	0	1	0	1	0	0	0	161
	17	451	85	8	19	11	0	10	0	1	0	0	1	603
16:00	3	132	34	2	2	3	0	3	1	1	0	0	0	181
16:15	4	108	38	1	3	3	0	4	0	0	0	0	0	161
16:30	2	111	35	1	3	2	0	3	0	0	0	0	0	157
16:45	5	104	24	1	7	0	0	4	1	1	0	0	0	147
	14	455	131	5	15	8	0	14	2	2	0	0	0	646
17:00	5	106	33	1	6	3	0	2	0	1	0	0	0	157
17:15	3	126	24	3	4	0	0	6	0	0	1	0	0	167
17:30	6	128	46	2	4	3	0	3	1	0	1	0	0	194
17:45	3	104	42	0	7	0	0	2	0	0	0	0	0	158
	17	464	145	6	21	6	0	13	1	1	2	0	0	676
18:00	4	134	31	1	3	2	0	1	0	0	0	0	0	176
18:15	4	139	31	1	8	1	0	8	0	0	0	0	1	193
18:30	3	150	33	1	4	1	0	4	0	0	0	0	0	196
18:45	2	129	18	2	7	3	0	3	0	0	0	0	0	164
	13	552	113	5	22	7	0	16	0	0	0	0	1	729
19:00	1	106	14	2	3	2	0	1	0	0	0	0	0	129
19:15	1	106	9	2	5	1	0	3	Õ	Ő	Ő	Ő	0	127
19:30	2	116	12	3	6	1	0	1	0 0	0	0	0	0	141
19:45	5	128	15	4	4	2	0	2	Ő	Ő	Õ	Ő	Ő	160
	9	456	50	11	18	6	0	7	0	0	0	0	0	557
20:00	5	134	12	4	5	1	0	2	1	0	0	0	0	164
20:00	2	122	23	3	8	2	1	3	0	0 0	0 0	0	0	164
20:30	1	159	12	1	4	2	0	3	ů 0	0 0	1	0	0	183
20:30	2	153	20	3	10	2	0	2	2	0	0	0	0	193
20.45	10	567	67	11	27	7	1	10	3	0	1	0	0	704
21:00	3	157	20	2	9	2	0	2	0	0	1	0	0	196
21:00	3	142	15	3	6	5	0	3	3	0	2	0	0	182
21:13	1	215	16	1	5	2	0	2	0	0	0	0	2	244
	1			-						1				
21:45		209	24	2	3	2	0	4	0		0	0	0	246 868
00.00	8	723	75	8	23	11			3	1	3		2	
22:00	1	165	19	1	5	7	0	6	0	0	1	0	1	206
22:15	0	165	12	3	1	4	0	1		0	0	0	0	187
22:30	5	133	7	0	5	3	0	2	1	0	0	0	0	156
22:45	2	128	13	0	2	1	1	2	0	0	0	0	0	149
	8	591	51	4	13	15	1	11	2	0	1	0	1	698
23:00	0	129	15	0	1	0	0	1	1	0	1	0	2	150
23:15	1	109	9	0	2	1	1	1	0	0	1	0	0	125
23:30	0	87	7	0	0	1	0	2	0	0	0	0	0	97
23:45	1	88	4	1	0	0	0	1	0	0	0	0	0	95
	2	413	35	1	3	2	1	5	1	0	2	0	2	467
Total	127	6043	962	83	228	103	4	131	18	7	15	0	8	7729
Percent	1.6%	78.2%	12.4%	1.1%	2.9%	1.3%	0.1%	1.7%	0.2%	0.1%	0.2%	0.0%	0.1%	
Grand	266	10465	1605	100	040	1 = 1	F	205	24	1 /	20	0	24	12264
Total	200	10465	1635	120	313	154	5	205	31	14	29	0	24	13261
Percent	2.0%	78.9%	12.3%	0.9%	2.4%	1.2%	0.0%	1.5%	0.2%	0.1%	0.2%	0.0%	0.2%	

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		-	•	Ŧ	-	<u>`</u>	7	I	1	•	+	•
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBI
Lane Configurations	ካካ	<b>∱1</b> ≱		<u>۲</u>	- <b>††</b>	1	- ሽ	<b>≜</b> ⊅		ሻሻ	- <b>††</b>	i
Volume (vph)	135	325	160	105	515	230	95	135	55	40	150	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Storage Length (ft)	260		0	250		500	160		0	250		30
Storage Lanes	2		0	1		1	1		0	2		
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.0
Frt		0.950				0.850		0.957				0.85
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3362	0	1770	3539	1583	1770	3387	0	3433	3539	158
Flt Permitted	0.950			0.420			0.513			0.950		
Satd. Flow (perm)	3433	3362	0	782	3539	1583	956	3387	0	3433	3539	158
Right Turn on Red	2.00		Yes			Yes		2.30.	Yes	2.00	2307	Ye
Satd. Flow (RTOR)		141	105			250		60	105			15
Link Speed (mph)		45			45	200		45			45	
Link Distance (ft)		2029			963			670			786	
Travel Time (s)		30.7			14.6			10.2			11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.9
Adj. Flow (vph)	147	353	174	114	560	250	103	147	60	43	163	12
Shared Lane Traffic (%)	147	333	174	114	500	200	105	147	00	43	105	12
	147	527	0	114	560	250	103	207	0	43	163	12
Lane Group Flow (vph) Enter Blocked Intersection	No		No	No	No	No	No	No	No	43 No	No	
		No										N
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Rigl
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane	1 00	4 00	1.00	4.00	1.00	1.00	1.00	1.00	4.00	4.00	1.00	1.0
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
Turning Speed (mph)	15		9	15		9	15		9	15		
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Rig
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	2
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	2
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+E
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		Prot	NA	Per
Protected Phases	5	2		1	6	1 0111	3	8		7	4	1 01
Permitted Phases	5	2		6	U	6	8	0		1	т	
Detector Phase	5	2		1	6	6	3	8		7	4	

### Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

Existing

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	10.0	26.0		10.0	26.0	26.0	9.0	21.0		8.0	20.0	20.0
Total Split (%)	15.4%	40.0%		15.4%	40.0%	40.0%	13.8%	32.3%		12.3%	30.8%	30.8%
Maximum Green (s)	6.0	22.0		6.0	22.0	22.0	5.0	17.0		4.0	16.0	16.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)		5.0			5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)		11.0			11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0	0		0			0	0
Act Effct Green (s)	8.1	30.2		35.9	29.6	29.6	15.9	11.5		5.6	8.3	8.3
Actuated g/C Ratio	0.12	0.46		0.55	0.46	0.46	0.24	0.18		0.09	0.13	0.13
v/c Ratio	0.34	0.32		0.21	0.35	0.29	0.32	0.32		0.14	0.36	0.36
Control Delay	27.8	10.5		6.9	12.3	1.9	19.8	17.7		29.0	27.7	6.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	27.8	10.5		6.9	12.3	1.9	19.8	17.7		29.0	27.7	6.4
LOS	С	В		А	В	А	В	В		С	С	А
Approach Delay		14.3			8.8			18.4			20.1	
Approach LOS		В			А			В			С	
90th %ile Green (s)	10.2	24.2		9.3	23.3	23.3	5.0	11.5		4.0	10.5	10.5
90th %ile Term Code	Gap	Coord		Gap	Coord	Coord	Мах	Hold		Мах	Gap	Gap
70th %ile Green (s)	8.9	23.0		8.3	22.4	22.4	8.5	11.0		6.7	9.2	9.2
70th %ile Term Code	Gap	Coord		Gap	Coord	Coord	Max	Hold		Gap	Gap	Gap
50th %ile Green (s)	8.1	25.1		7.4	24.4	24.4	8.2	10.3		6.2	8.3	8.3
50th %ile Term Code	Gap	Coord		Gap	Coord	Coord	Gap	Hold		Gap	Gap	Gap
30th %ile Green (s)	7.3	27.8		6.6	27.1	27.1	7.2	18.6		0.0	7.4	7.4
30th %ile Term Code	Gap	Coord		Gap	Coord	Coord	Gap	Hold		Skip	Gap	Gap
10th %ile Green (s)	0.0	50.8		0.0	50.8	50.8	0.0	6.2		0.0	6.2	6.2
10th %ile Term Code	Skip	Coord		Skip	Coord	Coord	Skip	Hold		Skip	Gap	Gap
Queue Length 50th (ft)	27	54		19	84	0	29	27		8	31	0
Queue Length 95th (ft)	50	91		23	42	10	63	54		22	55	28
Internal Link Dist (ft)	00	1949		20	883	10	00	590			706	20
Turn Bay Length (ft)	260	.,.,		250	000	500	160	070		250	100	300
Base Capacity (vph)	427	1636		546	1611	856	319	946		297	871	503
Starvation Cap Reductn	0	0		0	0	0.00	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.34	0.32		0.21	0.35	0.29	0.32	0.22		0.14	0.19	0.24
Intersection Summary												
Area Type:	Other											
Cycle Length: 65												

Lanes, Volumes, Timings

Existing

Lanes, Volumes, Timings	or Contor Diving & Hommond Dr	Existing AM
1: Perimeter Center Pkwy/Perimet	er Center Pkwy. & Hammond Dr.	Alvi
Actuated Cycle Length: 65		
Offset: 50 (77%), Referenced to phase 2:EBT and	6:WBTL, Start of Green	
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.36		
Intersection Signal Delay: 13.4	Intersection LOS: B	
Intersection Canacity Litilization 12.7%	ICITI evel of Service A	

Intersection Capacity Utilization 42.7% Analysis Period (min) 15

ICU Level of Service A

Splits and Phases: 1: Perimeter Center Pkwv/Perimeter Center Pkwv, & Hammond Dr.

Splits and Thases.	T. T CHINELEI CENLEI T KWY/T CHINELEI CENLEI T KWY. & T		
<b>√</b> ø1	<b>→</b> ø2 (R)	<b>1</b> ø3	<b>∳</b> ø4
10 s	26 s	9 s	20 s
▶ ø5	● ● Ø6 (R)	<b>▶</b> ø7	<b>₩</b> 88
10 s	26 s	8 s 🛛	21 s

### Lanes, Volumes, Timings 2: Hammond Dr.& Shopping Center Dr

Existing	
AM	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	<u></u>	1	۲	<u></u>	*	۲	<b>†</b>	1	۲	¢Î	
Volume (vph)	5	410	5	5	840	25	0	0	5	15	5	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	200		200	100		0	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		Ű
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.71	0.850	1.00	0.70	0.850	1.00	1.00	0.850	1.00	0.897	1.00
Flt Protected	0.950		0.000	0.950		0.000			0.000	0.950	0.077	
Satd. Flow (prot)	1770	5085	1583	1770	3539	1583	1863	1863	1583	1770	1671	0
Flt Permitted	0.292	3003	1303	0.485	3337	1303	1005	1005	1505	0.784	1071	U
Satd. Flow (perm)	544	5085	1583	903	3539	1583	1863	1863	1583	1460	1671	0
Right Turn on Red	544	0000	Yes	703	3337	Yes	1005	1005	Yes	1400	1071	Yes
Satd. Flow (RTOR)			151			151			437		11	162
		45	101		45	101		45	437		45	
Link Speed (mph)		45 963			45 979			45 533				
Link Distance (ft)											748	
Travel Time (s)	0.00	14.6	0.00	0.00	14.8	0.00	0.00	8.1	0.00	0.00	11.3	0.00
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	446	5	5	913	27	0	0	5	16	5	11
Shared Lane Traffic (%)	_		_	_	010		<u>^</u>	<u>^</u>	_			
Lane Group Flow (vph)	5	446	5	5	913	27	0	0	5	16	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	0.0	Perm	pm+pt	NA	
Protected Phases	5	2		ppt 1	6		3	8		7	4	
Permitted Phases	2	£	2	6	0	6	8	0	8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
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Lanes, Volumes, Timings
2: Hammond Dr.& Shopping Center Dr

Existing AM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	8.0	29.0	29.0	8.0	29.0	29.0	8.0	20.0	20.0	8.0	20.0	
Total Split (%)	12.3%	44.6%	44.6%	12.3%	44.6%	44.6%	12.3%	30.8%	30.8%	12.3%	30.8%	
Maximum Green (s)	4.0	25.0	25.0	4.0	25.0	25.0	4.0	16.0	16.0	4.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)	None	5.0	5.0	None	5.0	5.0	None	5.0	5.0	None	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	56.7	58.7	58.7	56.7	58.7	58.7		0	5.5	7.4	7.3	
Actuated g/C Ratio	0.87	0.90	0.90	0.87	0.90	0.90			0.08	0.11	0.11	
v/c Ratio	0.07	0.90	0.90	0.07	0.90	0.90			0.00	0.08	0.08	
Control Delay	2.0	2.0	0.00	2.2	3.2	0.02			0.01	24.6	16.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	
Total Delay	2.0	2.0	0.0	2.2	3.2	0.0			0.0	24.6	16.5	
LOS	2.0 A	2.0 A	0.0 A	Z.Z	J.Z	0.0 A			0.0 A	24.0 C	10.5 B	
Approach Delay	A	2.0	~	A	3.1	A			A	C	20.6	
Approach LOS		2.0 A			3.1 A						20.0 C	
90th %ile Green (s)	5.8	33.7	33.7	5.8	33.7	33.7	0.0	5.5	5.5	4.0	13.5	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Skip	Gap	Gap	Max	Hold	
70th %ile Green (s)	0.0	61.0	61.0	0.0	61.0	61.0	0.0	0.0	0.0	0.0	0.0	
70th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Skip	Skip	Skip	Skip	
50th %ile Green (s)	0.0	61.0	61.0	0.0	61.0	61.0	0.0	0.0	0.0	0.0	0.0	
50th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Skip	Skip	Skip	Skip	
30th %ile Green (s)	0.0	61.0	61.0	0.0	61.0	61.0	0.0	0.0	0.0	0.0	0.0	
30th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Skip		Skip	Skip	
10th %ile Green (s)	0.0	61.0	61.0	0.0	61.0	61.0	0.0	0.0	Skip 0.0	0.0	0.0	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Skip	Skip	Skip	Skip	
Queue Length 50th (ft)	Зкір 0	0	0	•	0	0	Зкір	Зкір	Зкір 0		Зкір 2	
Queue Length 95th (ft)	m1	35	m0	0	158	0			0	6 19	16	
Internal Link Dist (ft)	1111	883	IIIU	3	899	0		453	0	19	668	
· · · · · · · · · · · · · · · · · · ·	250	003	250	200	077	200		405			000	
Turn Bay Length (ft)	250	4505	250		2100				710	100	110	
Base Capacity (vph)	579	4595	1445	861	3198	1445			719	192	419	
Starvation Cap Reductn	0	0	0	0 0	0	0			0	0	0	
Spillback Cap Reductn										0		
Storage Cap Reductn	0	0	0	0	0	0			0	0	0	
Reduced v/c Ratio	0.01	0.10	0.00	0.01	0.29	0.02			0.01	0.08	0.04	
Intersection Summary	01											
Area Type:	Other											
Cycle Length: 65												

### Lanes, Volumes, Timings 2: Hammond Dr.& Shopping Center Dr

Actuated Cycle Length: 65
Offset: 47 (72%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.29
Intersection Signal Delay: 3.1 Intersection LOS: A
Intersection Capacity Utilization 33.2% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hammond Dr.

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8 s 🛛 👘	29 s	8 s	20 s
▶ ø5	● ● Ø6 (R)	▶ 97	<b>▲</b> <b>#</b> <i>ø</i> 8
8 s 🛛 👘	29 s	8 s	20 s

Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

5. Ashiola-Dahwoo	uy Nu.	a nan		<i>D</i> Г.								7 (11)
	٦	-	$\mathbf{r}$	4	-	*	1	t	۲	1	ŧ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	5	र्भ	11	ሻሻ	<b>†</b>	1	ካካ	4111		ካካ	1111	1
Volume (vph)	155	65	210	20	10	40	680	2180	320	20	1345	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	1		2	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.88	0.97	1.00	1.00	0.97	0.86	0.86	0.97	0.86	1.00
Frt			0.850			0.850		0.981				0.850
Flt Protected	0.950	0.980		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1734	2787	3433	1863	1583	3433	6286	0	3433	6408	1583
Flt Permitted	0.950	0.980		0.950			0.950			0.950		
Satd. Flow (perm)	1681	1734	2787	3433	1863	1583	3433	6286	0	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			228			158		51				196
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		979			481			1611			970	
Travel Time (s)		14.8			7.3			24.4			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	168	71	228	22	11	43	739	2370	348	22	1462	196
Shared Lane Traffic (%)	30%					10		2070	0.10			170
Lane Group Flow (vph)	118	121	228	22	11	43	739	2718	0	22	1462	196
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	2011	24	. ugut	2011	24	. ugi u	Lon	24	. ugi u	2011	24	rugru
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	1.00	9	15	1.00	9	15	1.00	9	15	1.00	9
Number of Detectors	1	2	1	1	2	1	1	2	,	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	OFFER	OFFER	OTTEX	OTTEX		OFFER	OTTEX	OTTEX		OFFER	OTTEX	OTTER
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	0.0	94	0.0	0.0	94	0.0	0.0	94		0.0	94	0.0
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		OFLA			OFLA			OHEX			OFLA	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	Spiit 4	4	μι+0ν 4 5	Spiit 8	8	1 CIIII	5	2		1	6	I CIIII
Permitted Phases	4	4	4 J	0	U	8	J	2		I	0	6
Detector Phase	4	4	4 5	8	8	8	5	2		1	6	6
	4	4	40	0	0	U	0	۷		I	0	0

Synchro 8 Report Page 7 Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

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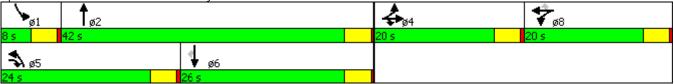
3: Ashford-Dunwo	•	& Harr	nmond	Dr.								AM
	٦	-	$\mathbf{\hat{v}}$	4	-	•	1	t	۲	1	Ļ	-
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	20.0	20.0		20.0	20.0	20.0	24.0	42.0		8.0	26.0	26.0
Total Split (%)	22.2%	22.2%		22.2%	22.2%	22.2%	26.7%	46.7%		8.9%	28.9%	28.9%
Maximum Green (s)	16.0	16.0		16.0	16.0	16.0	20.0	38.0		4.0	22.0	22.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	Min		None	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	0
Act Effct Green (s)	10.6	10.6	32.2	6.1	6.1	6.1	19.7	43.0		4.1	22.1	22.1
Actuated g/C Ratio	0.15	0.15	0.46	0.09	0.09	0.09	0.28	0.61		0.06	0.31	0.31
v/c Ratio	0.46	0.46	0.16	0.07	0.07	0.15	0.77	0.70		0.00	0.73	0.31
Control Delay	34.8	34.5	1.5	33.8	34.4	1.2	31.8	13.5		36.8	25.5	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	34.8	34.5	1.5	33.8	34.4	1.2	31.8	13.5		36.8	25.5	5.3
LOS	04.0 C	С С	A	00.0 C	C	A	C	В		00.0 D	20.0 C	A
Approach Delay	U	18.5	71	Ŭ	15.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Ū	17.4		D	23.3	~
Approach LOS		B			B			B			C	
90th %ile Green (s)	16.0	16.0		7.0	7.0	7.0	20.0	38.0		4.0	22.0	22.0
90th %ile Term Code	Max	Max		Gap	Gap	Gap	Max	Max		Max	Max	Max
70th %ile Green (s)	13.2	13.2		6.3	6.3	6.3	20.0	38.0		4.0	22.0	22.0
70th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Max	Max		Max	Max	Max
50th %ile Green (s)	10.5	10.5		5.9	5.9	5.9	20.0	46.0		0.0	22.0	22.0
50th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Max	Hold		Skip	Max	Max
30th %ile Green (s)	8.3	8.3		0.0	0.0	0.0	20.0	46.0		0.0	22.0	22.0
30th %ile Term Code	Gap	Gap		Skip	Skip	Skip	Max	Hold		Skip	Max	Max
10th %ile Green (s)	6.5	6.5		0.0	0.0	0.0	17.1	41.9		0.0	20.8	20.8
10th %ile Term Code	Gap	Gap		Skip	Skip	Skip	Gap	Hold		Skip	Gap	Gap
Queue Length 50th (ft)	53	54	0	5 SKIP	5	Зкір 0	163	211		5 SKIP	177	0ap
Queue Length 95th (ft)	105	107	12	16	20	0	#280	410		17	246	47
Internal Link Dist (ft)	105	899	12	10	401	0	#200	1531		17	890	47
Turn Bay Length (ft)		077			401		300	1001			070	
Base Capacity (vph)	389	401	1482	796	432	488	995	3865		199	2043	638
Starvation Cap Reductn	369 0	401	1402	/90 0	43Z 0	400	995	3000 0		0	2043	030
Spillback Cap Reductin	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductin	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.30	0.30	0.15	0.03	0.03	0.09	0.74	0.70		0.11	0.72	0.31
	0.30	0.30	0.15	0.03	0.05	0.09	0.74	0.70		0.11	0.72	0.51
Intersection Summary	Other											
Area Type:	Other											
Cycle Length: 90												

Lanes, Volumes, Timings	
3: Ashford-Dunwoody Rd. & Hammond Dr.	•

Actuated Cycle Length: 70.3		
Natural Cycle: 90		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 0.77		
Intersection Signal Delay: 19.2	Intersection LOS: B	
Intersection Capacity Utilization 62.9%	ICU Level of Service B	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 81		
70th %ile Actuated Cycle: 77.5		
50th %ile Actuated Cycle: 74.4		
30th %ile Actuated Cycle: 62.3		
10th %ile Actuated Cycle: 56.4		
# 95th percentile volume exceeds capacity, queue may be	e longer.	
Quouo shown is maximum after two cyclos		

Queue shown is maximum after two cycles.

Splits and Phases: 3: Ashford-Dunwoody Rd. & Hammond Dr.



### Lanes, Volumes, Timings 4: Perimeter Center Pkwy & Goldkist Dr.

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Lane Group         WB         WBR         NBT         NBR         SBL         SBT           Lane Configurations         7         75         210         5         30         385           Volume (vph)         1900         1900         1900         1900         1900         1900         1900           Storage Length (ft)         0         0         0         200         200         200           Storage Length (ft)         0         0         0         905         30         352           Lane Util. Factor         1.00         1.00         0.95         0.950         5         353           Stat. Flow (prot)         1770         1583         3529         0         1131         3539           Righ Turn on Red         Ves         Ves         Ves         5         45           Link Distance (ft)         661         742         670         70           Shared Lane Traffic (%)         2         228         5         33         418           Shared Lane Traffic (%)         2         223         0         33         418           Shared Lane Traffic (%)         2         223         0         33         418
Volume (vph)         5         75         210         5         30         385           Ideal Flow (vphp)         1900         1900         1900         1900         1900         1900           Storage Lanes         1         1         0         1         1         0         0.95           Lane Util. Factor         1.00         1.00         0.95         0.95         1.00         0.955           Fit Protected         0.950         0.950         0.950         0.950         5           Satd. Flow (perd)         1770         1583         3529         0         1770         3539           Right Turn on Red         Yes         Yes         Yes         Yes         5         45         45           Link Nostance (ft)         661         742         670         7         720         3533         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2         10.2 <td< td=""></td<>
Ideal Flow (vphpl)       1900       1900       1900       1900       1900         Storage Length (ft)       0       0       0       200         Storage Lanes       1       1       0       1         Taper Length (ft)       25       25         Lane Util. Factor       1.00       1.00       0.95       0.95       1.00       0.95         Fit       0.850       0.997       0.950       5       5       5       5         Stad. Flow (prot)       1770       1583       3529       0       1131       3539         Right Turn on Red       Yes       Yes       Yes       5       45         Link Speed (mph)       45       45       45       45         Link Speed (mph)       661       742       670         Travel Time (s)       10.0       11.2       10.2         Peak Hour Factor       0.92       0.92       0.92       0.92       0.92       0.92         Adj. Flow (vph)       5       82       233       0       33       418         Shared Lane Traffic (%)       12       12       12       12       12         Lane Alignment       Left       Right
Storage Length (ft)         0         0         0         200           Storage Lanes         1         1         0         1           Taper Length (ft)         25         25         25           Lane Util, Factor         1.00         1.00         0.95         0.95         1.00         0.95           Frt         0.850         0.975         0.955         5         5         5           Stad. Flow (port)         1770         1583         3529         0         1131         3539           Fit Permitted         0.950         0.607         0.607         5         5         5           Stad. Flow (perm)         1770         1583         3529         0         1131         3539           Right Turn on Red         Yes         Yes         Yes         5         45           Link Speed (mph)         45         45         45         10.2         10.2           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92           Lane Alignment         Left         Right         Left         Right         Left         Median Widh(ft)         16         16         16         16
Storage Lanes         1         1         0         1           Tape Length (ft)         25         25           Lane Util. Factor         1.00         1.00         0.95         0.95         1.00         0.95           Fit         0.850         0.997         1770         3539         1770         3539           Fit Pernitted         0.950         0.607         3539         1111         3539           Fit Pernitted         0.950         0.607         3534         1583         3529         0         1131         3539           Stat. Flow (pern)         1770         1583         3529         0         1131         3539           Stat. Flow (RTOR)         82         5         5         45         45           Link Speed (mph)         45         45         45         10.2         10.2           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.9
Taper Length (ft)       25       25         Lane Util. Factor       1.00       1.00       0.95       0.95       1.00       0.95         Frt       0.850       0.997       0       1770       3539         Flt Protected       0.950       0.607       3539         Stadt. Flow (perm)       1770       1583       3529       0       1131       3539         Right Turn on Red       Yes       Yes       Yes       1111       3539         Stadt. Flow (Perm)       45       45       45       45         Link Speed (mph)       45       45       45       45         Link Distance (ft)       661       742       670       70         Travel Time (s)       10.0       11.2       10.2       92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.9
Lane Util. Factor1.001.000.950.951.000.95Frt0.8500.9970.9500.9500.950Satd. Flow (prot)17701583352901131Flt Permitted0.9500.6070.607Satd. Flow (perm)17701583352901131Right Turn on RedYesYesYesSatd. Flow (RTOR)8255Link Speed (mph)454545Link Distance (ft)661742670Travel Time (s)10.011.210.2Peak Hour Factor0.920.920.920.92Adj. Flow (vph)5822285Lane Group Flow (vph)582233033AtlaShared Lane Traffic (%)121212Link Offset(ft)0000Crosswalk Width(ft)161616Two way Left Turn Lane1001.001.001.00Headway Factor1.001.001.001.001.00Turing Speed (mph)159915Number of Detectors11212Detector Thylit0000Crosswalk Width(ft)10000Turning Speed (mph)159915Number of Detectors11212Detector Thylit0000
Lane Util. Factor1.001.000.950.951.000.95Fit0.8500.9970.9500.9500.9500.950Fit Protected0.9500.9500.6070.539Fit Permilted0.9500.6070.539111313539Satd. Flow (perm)1770158335290113133539Right Turn on RedYesYesYes100112110.2Satd. Flow (RTOR)82510.011.210.2Peak Hour Factor0.920.920.920.920.920.92Adj. Flow (vph)582233033418Shared Lane Traffic (%)1212121212Lane Group Flow (vph)582233033418Enter Blocked IntersectionNoNoNoNoNoNoLane AlignmentLeftRightLeftRightLeftLeftHeadway Factor1.001.001.001.001.001.001.00Turning Speed (mph)15991515122122Detector flot0000000000000000000000000000000000000000 <t< td=""></t<>
Frt       0.850       0.997         Flt Protected       0.950       0.950         Satd, Flow (prot)       1770       1583       3529       0       1770       3539         Flt Permitted       0.950       0.607       5       5       1311       3539         Right Turn on Red       Yes       Yes       Yes       Yes       1311       3539         Right Turn on Red       Yes       Yes       Yes       45       45       45         Link Speed (mph)       45       45       45       45       45         Link Distance (ft)       661       742       670       10.2       10.2       10.2         Peak Hour Factor       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92 <t< td=""></t<>
Fit Protected       0.950       0.950         Satd. Flow (prot)       1770       1583       3529       0       1770       3539         Fit Permitted       0.950       0.607         Satd. Flow (perm)       1770       1583       3529       0       1131       3539         Satd. Flow (perm)       1770       1583       3529       0       1131       3539         Satd. Flow (perm)       1770       1583       3529       0       1131       3539         Right Turn on Red       Yes       Yes       Yes       Yes       1512       160         Satd. Flow (RTOR)       82       5       112       10.2       10.2       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.93       318       18
Satd. Flow (prot)         1770         1583         3529         0         1770         3539           Fit Permitted         0.950         0.607           Satd. Flow (perm)         1770         1583         3529         0         1131         3539           Right Turn on Red         Yes         Yes         Yes         Yes         Yes           Satd. Flow (RTOR)         82         5         45         45         45           Link Distance (ft)         661         742         670         722         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         Als         No
Fit Permitted         0.950         0.607           Satd. Flow (perm)         1770         1583         3529         0         1131         3539           Right Turn on Red         Yes         Yes         Yes         Yes         Yes           Satd. Flow (RTOR)         82         5         45         45         45           Link Speed (mph)         45         45         45         45           Link Distance (ft)         661         742         670           Travel Time (s)         10.0         11.2         10.2           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         5         82         233         0         33         418           Shared Lane Traffic (%)         Iane Group Flow (vph)         5         82         233         0         33         418           Enter Blocked Intersection         No         No         No         No         No         No           Lane Alignment         Left         Right         Left         Right         Left         Left         Median Width(ft)         16         16         12           Itmik Offset(ft)         0
Satd. Flow (perm)         1770         1583         3529         0         1131         3539           Right Turn on Red         Yes         Yes         Yes         Yes         Yes           Satd. Flow (RTOR)         82         5         45         45           Link Speed (mph)         45         45         45           Link Distance (ft)         661         742         670           Travel Time (s)         10.0         11.2         10.2           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         5         82         233         0         33         418           Shared Lane Traffic (%)         Left         Right         Left         Right         Left         Left           Lane Alignment         Left         Right         Left         Right         Left         Left           Median Width(ft)         16         16         16         16         16           Turning Speed (mph)         15         9         9         15         100           Number of Detectors         1         1         2         1         2           Number of Detectors
Right Turn on Red         Yes         Yes           Satd. Flow (RTOR)         82         5           Link Speed (mph)         45         45         45           Link Speed (mph)         45         45         670           Travel Time (s)         10.0         11.2         670           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         5         82         228         5         33         418           Shared Lane Traffic (%)              0.92         0.92         0.92         0.92           Lane Group Flow (vph)         5         82         233         0         33         418           Enter Blocked Intersection         No         No         No         No         No         Left         Left         Left         Left         Might         Left         Left         Might         Left         Left         Left         Might         Left         Left         Thou         Left         Left         Might         Left         Left         Left         Might         Thru         Left         Thru         Left         Link Ofts
Said. Flow (RTOR)         82         5           Link Speed (mph)         45         45         45           Link Distance (ft)         661         742         670           Travel Time (s)         10.0         11.2         10.2           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         5         82         228         5         33         418           Shared Lane Traffic (%)            No
Link Speed (mph)454545Link Distance (ft)661742670Travel Time (s)10.011.210.2Peak Hour Factor0.920.920.920.920.92Adj. Flow (vph)582228533418Shared Lane Traffic (%) </td
Link Distance (ft)661742670Travel Time (s)10.011.210.2Peak Hour Factor0.920.920.920.920.92Adj. Flow (vph)582228533418Shared Lane Traffic (%) </td
Travel Time (s)10.011.210.2Peak Hour Factor0.920.920.920.920.920.92Adj. Flow (vph)582228533418Shared Lane Traffic (%) </td
Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         5         82         228         5         33         418           Shared Lane Traffic (%)              33         418           Enter Blocked Intersection         No         No         No         No         No         No         No           Lane Alignment         Left         Right         Left         Right         Left         Left         Left           Median Width(ft)         12         12         12         12         12           Link Offset(ft)         0         0         0         0         0         0           Crosswalk Width(ft)         16         16         16         16         16           Two way Left Turn Lane          9         9         15         Number of Detectors         1         1         2         1         2           Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         0         0         0         0         0           Detec
Adj. Flow (vph)       5       82       228       5       33       418         Shared Lane Traffic (%)       Lane Group Flow (vph)       5       82       233       0       33       418         Enter Blocked Intersection       No       No       No       No       No       No       No         Lane Alignment       Left       Right       Left       Right       Left       Left       Left         Median Width(ft)       12       12       12       12       12         Link Offset(ft)       0       0       0       0       0         Crosswalk Width(ft)       16       16       16       16         Two way Left Turn Lane       Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00         Turning Speed (mph)       15       9       9       9       15       2       20       100       20       100       100       100       1.00       1.00       1.00       1.00       100       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0
Shared Lane Traffic (%)           Lane Group Flow (vph)         5         82         233         0         33         418           Enter Blocked Intersection         No         No         No         No         No         No           Lane Alignment         Left         Right         Left         Right         Left         Left         Left           Median Width(ft)         12         12         12         12         12           Link Offset(ft)         0         0         0         0         0           Crosswalk Width(ft)         16         16         16         16           Two way Left Turn Lane
Lane Group Flow (vph)         5         82         233         0         33         418           Enter Blocked Intersection         No         No         No         No         No         No           Lane Alignment         Left         Right         Left         Right         Left         Right         Left         Left           Median Width(ft)         12         12         12         12         12           Link Offset(ft)         0         0         0         0         0           Crosswalk Width(ft)         16         16         16         16           Two way Left Turn Lane          1         12         1         2           Headway Factor         1.00         1.00         1.00         1.00         1.00           Turning Speed (mph)         15         9         9         15         1           Number of Detectors         1         1         2         1         2           Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         0         0         0         0         0         0           Detector 1 Position(ft) <td< td=""></td<>
Enter Blocked Intersection         No         No         No         No         No         No           Lane Alignment         Left         Right         Left         Right         Left         Right         Left         Left         Left         Left         Right         Left         Left         Left         Left         Right         Left         Left         Left         Right         Left         Left         Left         Left         No         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         0         0         0         0         0         0         0         0         0         0         0
Lane AlignmentLeftRightLeftRightLeftRightLeftLeftMedian Width(ft)12121212Link Offset(ft)0000Crosswalk Width(ft)161616Two way Left Turn Lane1.001.001.001.00Headway Factor1.001.001.001.001.00Turning Speed (mph)1599915Number of Detectors11212Detector TemplateLeftRightThruLeftThruLeading Detector (ft)202010000Trailing Detector (ft)00000Detector 1 Position(ft)00000Detector 1 Size(ft)20206206Detector 1 ChannelU00.00.00.0Detector 1 Channel949494Detector 2 Position(ft)949494Detector 2 Size(ft)666Detector 2 Size(ft)666Detector 2 Channel0.00.00.00.0Detector 2 Extend (s)0.00.00.00.0Turn TypeProtPermNAPermProtected Phases8266
Median Width(ft)         12         12         12           Link Offset(ft)         0         0         0           Crosswalk Width(ft)         16         16         16           Two way Left Turn Lane         100         1.00         1.00         1.00         1.00           Headway Factor         1.00         1.00         1.00         1.00         1.00         1.00           Turning Speed (mph)         15         9         9         15           Number of Detectors         1         1         2         1         2           Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0           Detector 1 Position(ft)         0         0         0         0         0         0           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Channel
Link Offset(ft)         0         0         0           Crosswalk Width(ft)         16         16         16           Two way Left Turn Lane
Crosswalk Width(ft)         16         16         16           Two way Left Turn Lane         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         <
Two way Left Turn Lane         Headway Factor       1.00       1.00       1.00       1.00       1.00         Turning Speed (mph)       15       9       9       15         Number of Detectors       1       1       2       1       2         Detector Template       Left       Right       Thru       Left       Thru         Leading Detector (ft)       20       20       100       20       100         Trailing Detector (ft)       0       0       0       0       0         Detector 1 Position(ft)       0       0       0       0       0         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Channel       U       U       0       0.0       0.0       0.0         Detector 1 Channel       U       94       94       94         Detector 1 Delay (s)       0.0       0.0       0.0       0.0       0.0         Detector 2 Position(ft)       94       94       94       94       94       94       94       94       94       94       94       94 </td
Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00         Turning Speed (mph)       15       9       9       15         Number of Detectors       1       1       2       1       2         Detector Template       Left       Right       Thru       Left       Thru         Leading Detector (ft)       20       20       100       20       100         Trailing Detector (ft)       0       0       0       0       0         Detector 1 Position(ft)       0       0       0       0       0         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Channel       20       20       6       20       6         Detector 1 Channel       0.0       0.0       0.0       0.0       0.0         Detector 1 Queue (s)       0.0       0.0       0.0       0.0       0.0         Detector 2 Position(ft)       94       94       94       94       94       94       94       94       94       94       94       94       94       9
Turning Speed (mph)       15       9       9       15         Number of Detectors       1       1       2       1       2         Detector Template       Left       Right       Thru       Left       Thru         Leading Detector (ft)       20       20       100       20       100         Trailing Detector (ft)       0       0       0       0       0       0         Detector 1 Position(ft)       0       0       0       0       0       0       0         Detector 1 Size(ft)       20       20       6       20       6       20       6         Detector 1 Size(ft)       20       20       6       20       6       20       6         Detector 1 Channel       20       20       0.0       0.0       0.0       0.0       0.0         Detector 1 Channel       20       0.0       0.0       0.0       0.0       0.0       0.0         Detector 1 Queue (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0         Detector 2 Position(ft)       94       94       94       94       94       94       94       24       24       24<
Turning Speed (mph)       15       9       9       15         Number of Detectors       1       1       2       1       2         Detector Template       Left       Right       Thru       Left       Thru         Leading Detector (ft)       20       20       100       20       100         Trailing Detector (ft)       0       0       0       0       0         Detector 1 Position(ft)       0       0       0       0       0         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Channel       20       20       0.0       0.0       0.0         Detector 1 Channel       20       0.0       0.0       0.0       0.0       0.0         Detector 1 Queue (s)       0.0       0.0       0.0       0.0       0.0       0.0         Detector 2 Position(ft)       94       94       94       94       94       94         Detector 2 Size(ft)       6       6       6       6       6       6       6       6       14       14       14       14
Number of Detectors         1         1         2         1         2           Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0           Detector 1 Position(ft)         0         0         0         0         0         0         0           Detector 1 Size(ft)         20         20         6         20         6         20         6           Detector 1 Size(ft)         20         20         6         20         6         20         6           Detector 1 Channel         20         20         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 </td
Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0           Detector 1 Position(ft)         0         0         0         0         0         0         0           Detector 1 Size(ft)         20         20         6         20         6         20         6           Detector 1 Size(ft)         20         20         6         20         6         20         6           Detector 1 Size(ft)         20         20         6         20         6         20         6           Detector 1 Channel         U         CI+Ex         CI+Ex         CI+Ex         Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0
Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""></td<>
Trailing Detector (ft)       0       0       0       0       0       0         Detector 1 Position(ft)       0       0       0       0       0       0         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Type       Cl+Ex       Cl+Ex       Cl+Ex       Cl+Ex       Cl+Ex         Detector 1 Channel
Detector 1 Position(ft)         0         0         0         0         0           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Type         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex           Detector 1 Channel
Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Type         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex           Detector 1 Channel              Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Detector 1 Channel                                                                                   <
Detector 1 Type         CI+Ex         CI+Ex         CI+Ex         CI+Ex         CI+Ex         CI+Ex         CI+Ex         CI+Ex         Detector         Detector 1 Channel         CI+Ex         CI+Ex         CI+Ex         CI+Ex         Detector         Detector 1 Channel         CI+Ex         CI+Ex         CI+Ex         CI+Ex         Detector         Detector 1 Extend (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 </td
Detector 1 Channel           Detector 1 Extend (s)         0.0         0.0         0.0         0.0           Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94           Detector 2 Size(ft)         6         6           Detector 2 Type         Cl+Ex         Cl+Ex           Detector 2 Channel         0.0         0.0           Detector 2 Extend (s)         0.0         0.0           Turn Type         Prot         Perm         NA           Protected Phases         8         2         6           Permitted Phases         8         6         6
Detector 1 Extend (s)         0.0         0.0         0.0         0.0         0.0           Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94           Detector 2 Size(ft)         6         6         6           Detector 2 Type         Cl+Ex         Cl+Ex         Detector 2 Channel           Detector 2 Extend (s)         0.0         0.0         0.0           Turn Type         Prot         Perm         NA         Perm           Protected Phases         8         2         6           Permitted Phases         8         6         6
Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94           Detector 2 Size(ft)         6         6           Detector 2 Type         Cl+Ex         Cl+Ex           Detector 2 Channel         0.0         0.0           Detector 2 Extend (s)         0.0         0.0           Turn Type         Prot         Perm         NA           Protected Phases         8         2         6           Permitted Phases         8         6         6
Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94           Detector 2 Size(ft)         6         6         6           Detector 2 Size(ft)         6         0.0         0.0           Detector 2 Size(ft)         0.0         Cl+Ex         Cl+Ex           Detector 2 Channel         0.0         0.0         0.0           Turn Type         Prot         Perm         NA         Perm           Protected Phases         8         2         6           Permitted Phases         8         6         6
Detector 2 Position(ft)9494Detector 2 Size(ft)66Detector 2 Size(ft)66Detector 2 TypeCI+ExCI+ExDetector 2 Channel0.00.0Detector 2 Extend (s)0.00.0Turn TypeProtPermNAProtected Phases826Permitted Phases86
Detector 2 Size(ft)6Detector 2 TypeCI+ExDetector 2 ChannelDetector 2 ChannelDetector 2 Extend (s)0.0Turn TypeProtProtected Phases826Permitted Phases886
Detector 2 TypeCI+ExCI+ExDetector 2 Channel0.00.0Detector 2 Extend (s)ProtPermNAProtected Phases826Permitted Phases866
Detector 2 ChannelDetector 2 Extend (s)0.0Turn TypeProtProtected Phases826Permitted Phases86
Detector 2 Extend (s)0.00.0Turn TypeProtPermNAPermNAProtected Phases826Permitted Phases86
Turn TypeProtPermNAPermNAProtected Phases826Permitted Phases86
Protected Phases826Permitted Phases86
Permitted Phases 8 6
Detector Phase 8 8 2 6 6

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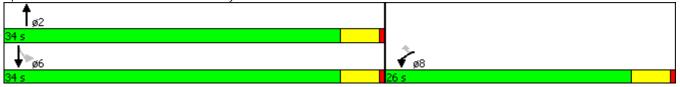
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Lanes, Volumes, Timings	6
4: Perimeter Center Pkw	y & Goldkist Dr.

	4	*	1	1	1	ţ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Switch Phase					, J.L.	
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0
Minimum Split (s)	20.0	20.0	20.0		20.0	20.0
Total Split (s)	26.0	26.0	34.0		34.0	34.0
Total Split (%)	43.3%	43.3%	56.7%		56.7%	56.7%
Maximum Green (s)	43.376	43.370	30.778		30.0	30.7 %
Yellow Time (s)	3.5				30.0	
.,		3.5	3.5			3.5
All-Red Time (s)	0.5	0.5	0.5		0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		Max	Мах
Walk Time (s)	5.0	5.0	5.0		5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	6.3	6.3	43.3		43.3	43.3
Actuated g/C Ratio	0.12	0.12	0.83		0.83	0.83
v/c Ratio	0.12	0.12	0.03		0.03	0.03
Control Delay	19.4	9.2	2.0		2.4	2.0
3						
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	19.4	9.2	2.0		2.4	2.0
LOS	В	A	А		А	A
Approach Delay	9.8		2.0			2.0
Approach LOS	А		А			А
90th %ile Green (s)	8.2	8.2	33.1		33.1	33.1
90th %ile Term Code	Gap	Gap	Dwell		Dwell	Dwell
70th %ile Green (s)	6.7	6.7	39.3		39.3	39.3
70th %ile Term Code	Gap	Gap	Dwell		Dwell	Dwell
50th %ile Green (s)	5.6	5.6	45.0		45.0	45.0
50th %ile Term Code	Gap	Gap	Dwell		Dwell	Dwell
30th %ile Green (s)	0.0	0.0	45.0		45.0	45.0
30th %ile Term Code	Skip	Skip	Dwell		Dwell	Dwell
10th %ile Green (s)	0.0		45.0			45.0
		0.0 Skip			45.0	
10th %ile Term Code	Skip	Skip	Dwell		Dwell	Dwell
Queue Length 50th (ft)	2	0	6		2	13
Queue Length 95th (ft)	8	28	16		8	28
Internal Link Dist (ft)	581		662			590
Turn Bay Length (ft)					200	
Base Capacity (vph)	752	720	2942		942	2949
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.01	0.11	0.08		0.04	0.14
	0.01	0.11	0.00		5.51	0.11
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						

Splits and Phases: 4: Perimeter Center Pkwy & Goldkist Dr.



Existing

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	<u>ነ</u> ካ		<b>†</b> †	77	<u></u> ካካ	
Volume (vph)	55	210	290	120	235	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	0.95	0.88	0.97	1.00
Frt	0.77	0.75	0.75	0.850	0.77	0.850
Flt Protected	0.950			0.000	0.950	0.000
Satd. Flow (prot)	3433	3539	3539	2787	3433	1583
Flt Permitted	0.950	5557	3337	2101	0.950	1505
Satd. Flow (perm)	3433	3539	3539	2787	3433	1583
Right Turn on Red	3433	5557	3337	Yes	3433	Yes
Satd. Flow (RTOR)				130		87
Link Speed (mph)		45	45	130	45	07
Link Distance (ft)		45 806	45 1749		45 1830	
,,,		806 12.2	26.5			
Travel Time (s)	0.00			0.00	27.7	0.92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	60	228	315	130	255	87
Shared Lane Traffic (%)	10	220	01E	100	255	07
Lane Group Flow (vph)	60	228	315 No	130	255 No	87
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane	4.00	4.00	4.00	4.00	4.00	4.00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	<u>^</u>	-	9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
	0.0	20.0	20.0	20.0	20.0	20.0

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)	10.0	36.0	26.0	26.0	24.0	24.0
Total Split (%)	16.7%	30.0 60.0%	43.3%	43.3%	40.0%	40.0%
	6.0	32.0	43.3%	43.3%	40.0%	40.0%
Maximum Green (s)	6.0 3.5	32.0	3.5	22.0 3.5	20.0	20.0
Yellow Time (s)	3.5 0.5	3.5 0.5	3.5 0.5	3.5 0.5	3.5 0.5	3.5 0.5
All-Red Time (s)			0.5 0.0			0.5 0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes	0.0	Yes	Yes	0.0	2.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	6.1	15.2	11.9	11.9	8.1	8.1
Actuated g/C Ratio	0.19	0.48	0.37	0.37	0.25	0.25
v/c Ratio	0.09	0.13	0.24	0.12	0.29	0.19
Control Delay	12.7	4.8	9.2	3.3	11.0	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.7	4.8	9.2	3.3	11.0	4.9
LOS	В	А	А	А	В	А
Approach Delay		6.4	7.4		9.5	
Approach LOS		А	А		А	
90th %ile Green (s)	6.0	21.6	11.6	11.6	10.0	10.0
90th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
70th %ile Green (s)	6.0	20.2	10.2	10.2	8.7	8.7
70th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
50th %ile Green (s)	0.0	8.3	8.3	8.3	7.8	7.8
50th %ile Term Code	Skip	Hold	Gap	Gap	Gap	Gap
30th %ile Green (s)	0.0	8.2	8.2	8.2	6.6	6.6
30th %ile Term Code	Skip	Dwell	Dwell	Dwell	Gap	Gap
10th %ile Green (s)	0.0	21.2	21.2	21.2	6.4	6.4
10th %ile Term Code	Skip	Dwell	Dwell	Dwell	Gap	Gap
Queue Length 50th (ft)	зкір 2	Dwell 8	Dweir 12	Dwell 0	Gap 10	Gap 0
	17					22
Queue Length 95th (ft)	17	21	50 1440	13	44 1750	22
Internal Link Dist (ft)		726	1669		1750	
Turn Bay Length (ft)	(00	2027	25.04	2010	207/	1070
Base Capacity (vph)	683	3237	2581	2068	2276	1079
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.07	0.12	0.06	0.11	0.08
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						
Actuated Cycle Length: 31	.8					
Natural Cycle: 50						
Control Type: Semi Act-Ur	ncoord					

Control Type: Semi Act-Uncoord

# Lanes, Volumes, Timings 5: Lake Hearn Dr. & Perimeter Center Pkwy

Maximum v/c Ratio: 0.29		
Intersection Signal Delay: 7.8	Intersection LOS: A	
Intersection Capacity Utilization 28.1%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 39.6		
70th %ile Actuated Cycle: 36.9		
50th %ile Actuated Cycle: 24.1		
30th %ile Actuated Cycle: 22.8		
10th %ile Actuated Cycle: 35.6		

Splits and Phases: 5: Lake Hearn Dr. & Perimeter Center Pkwy

<b>→</b> ø2		<b>∕</b> _{ø4}
36 s		24 s
∕ _ ∞5	ø6	
10 s	26 s	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	A		<u>۲</u>	<u></u>	1	۲	<b>∱</b> î≽		ኘኘ	<u></u>	1
Volume (vph)	225	575	90	70	400	120	275	260	85	230	315	285
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	250		500	160		0	250		300
Storage Lanes	2		0	1		1	1		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	0.97	0.95	1.00
Frt		0.980				0.850		0.963				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3468	0	1770	3539	1583	1770	3408	0	3433	3539	1583
Flt Permitted	0.950			0.325			0.459			0.950		
Satd. Flow (perm)	3433	3468	0	605	3539	1583	855	3408	0	3433	3539	1583
Right Turn on Red	0.00	0.00	Yes			Yes		0.00	Yes	0.00	0007	Yes
Satd. Flow (RTOR)		30	. 55			164		72	. 55			296
Link Speed (mph)		45			45	101		45			45	270
Link Distance (ft)		2029			963			670			786	
Travel Time (s)		30.7			14.6			10.2			11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	245	625	98	76	435	130	299	283	92	250	342	310
Shared Lane Traffic (%)	24J	025	70	70	433	150	277	205	72	230	342	510
Lane Group Flow (vph)	245	723	0	76	435	130	299	375	0	250	342	310
Enter Blocked Intersection	No	No	No	No	435 No	No	No	No	No	No	No	No
	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Lane Alignment Median Width(ft)	Leit	24	кіўні	Leit	24	Right	Len	24	Right	Leit	24	Right
Link Offset(ft)		24			24			24			24	
Crosswalk Width(ft)		16			16			16			16	
• •		10			10			10			10	
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1 00
Headway Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph) Number of Detectors	15	2	9	15	2	9 1	15	2	9	15	2	9 1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel		0.0					0.0					0.0
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		pm+pt	NA	Perm	pm+pt	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases				6		6	8					4
Detector Phase	5	2		1	6	6	3	8		7	4	4

## Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

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Synchro 8 Report Page 1

Existing pm

Lanes, Volumes, 1: Perimeter Cent	•	/Perime	eter Co	enter F	۶ kwv. ٤	& Ham	mond	Dr.			Ex	t <b>isting</b> pm
	<u>ر الله الم</u>	-	$\mathbf{r}$	<b></b>	-	•	1	1	1	1	ţ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0		8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	9.0	22.0		8.0	21.0	21.0	10.0	20.0		10.0	20.0	20.0
Total Split (%)	15.0%	36.7%		13.3%	35.0%	35.0%	16.7%	33.3%		16.7%	33.3%	33.3%
Maximum Green (s)	5.0	18.0		4.0	17.0	17.0	6.0	16.0		6.0	16.0	16.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)		5.0			5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)		11.0			11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0	0		0			0	0
Act Effct Green (s)	7.6	22.6		22.4	16.7	16.7	20.4	12.7		7.0	11.9	11.9
Actuated g/C Ratio	0.13	0.38		0.37	0.28	0.28	0.34	0.21		0.12	0.20	0.20
v/c Ratio	0.56	0.55		0.23	0.44	0.23	0.73	0.48		0.63	0.49	0.56
Control Delay	33.3	17.4		6.1	16.5	6.4	27.9	18.4		34.8	23.1	7.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	33.3	17.4		6.1	16.5	6.4	27.9	18.4		34.8	23.1	7.6
LOS	С	В		А	В	А	С	В		С	С	А
Approach Delay		21.4			13.2			22.6			21.0	
Approach LOS		С			В			С			С	
90th %ile Green (s)	5.0	18.0		4.0	17.0	17.0	6.0	16.0		6.0	16.0	16.0
90th %ile Term Code	Max	Coord		Мах	Coord	Coord	Мах	Hold		Мах	Мах	Мах
70th %ile Green (s)	7.0	18.0		6.0	17.0	17.0	6.0	14.0		6.0	14.0	14.0
70th %ile Term Code	Max	Coord		Max	Coord	Coord	Max	Hold		Мах	Gap	Gap
50th %ile Green (s)	9.1	18.6		6.8	16.3	16.3	6.7	11.9		6.7	11.9	11.9
50th %ile Term Code	Мах	Coord		Gap	Coord	Coord	Max	Hold		Max	Gap	Gap
30th %ile Green (s)	9.3	27.2		0.0	13.9	13.9	11.0	12.0		8.8	9.8	9.8
30th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Max	Hold		Gap	Gap	Gap
10th %ile Green (s)	7.8	31.2		0.0	19.4	19.4	8.8	9.5		7.3	8.0	8.0
10th %ile Term Code	Gap	Coord		Skip	Coord	Coord	Gap	Hold		Gap	Gap	Gap
Queue Length 50th (ft)	42	112		2	80	5	79	51		45	58	4
Queue Length 95th (ft)	#103	167		7	116	57	#153	78		#93	84	55
Internal Link Dist (ft)		1949		,	883	07	# 100	590		"70	706	00
Turn Bay Length (ft)	260	1717		250	000	500	160	070		250	100	300
Base Capacity (vph)	437	1324		336	1030	577	407	961		398	943	639
Starvation Cap Reductn	437	0		0	0	0	0	0		0	0	037
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.56	0.55		0.23	0.42	0.23	0.73	0.39		0.63	0.36	0.49
Intersection Summary												
Area Type:	Other											
Cycle Length: 60	Outor											
S Joio Longini OO												

Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Cente	er Pkwy. & Hammond Dr.	Existing pm
Actuated Cycle Length: 60		
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start	t of Green, Master Intersection	
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.73		
Intersection Signal Delay: 19.9	Intersection LOS: B	
Intersection Capacity Utilization 59.9%	ICU Level of Service B	
Analysis Period (min) 15		
# 95th percentile volume exceeds capacity, queue may be lo	onger.	
Queue shown is maximum after two cycles.		

Splits and Phases: 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

<b>√</b> ø1	<b>↓</b> <b>▶</b> <b>₩</b> <b>₩</b> <b>2</b> (R)	<b>▲</b> ø3	🛊 ø4
8 s 🛛 👘	22 s	10 s	20 s
∕ _ ø5	♥ ♥ ø6 (R)	<b>₩</b> ø7	<b>↑↑</b> _{ø8}
9s 🛛	21 s	10 s	20 s

#### Lanes, Volumes, Timings 2: Hammond Dr. & Shopping Center Dr

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2: Hammond Dr. &	Snoppi	ng Ce	nter D	ſ								pm
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		٦	-	$\mathbf{F}$	4	←	•	1	1	۲	1	Ļ	~
Volume (vph)         45         800         45         40         495         55         40         20         60         100         100         1900           Storage Length (t)         250         250         200         200         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)         45         800         45         40         495         55         40         20         60         100         100         1900           Storage Length (t)         250         250         200         200         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100         100	Lane Configurations	1	***	1	1	<b>*</b>	*	1	•	*	2	f)	
Ideal Flow (php)         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900	0												55
Slorage Langh (ft)         250         260         200         200         100         0         0           Slorage Lanes         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1			1900	1900	1900	1900	1900	1900	1900		1900	1900	1900
Slorage Lanes         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         <				250	200		200	100		0	0		
Tape:         125         25         25         25           Lane Uili. Factor         1.00         0.91         1.00         1.00         0.95         0.850         0.850           Fit         0.850         0.950         0.950         0.950         0.950         0.950           Fit Protected         0.950         1583         1770         1583         1770         1683         1583         1770         1683         1583         1770         1683         1883         186         1683         1770         1658         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         0.449         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164         164<											1		
Lane Ult. Factor         1.00         9.91         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00	J.	25			25			25			25		
Fit Prodecid       0.950       0.950       0.950       0.950       0.950         Sald. Flow (prot)       1770       5085       1583       1770       3539       1583       1770       1863       1770       1863       1770       1658       0.800       0.849         Fit Permitted       0.407       0.303       0.803       1583       1490       1863       1583       836       1658       0.449         Sald. Flow (RTOR)       164       164       164       164       60       164       164       163       1770       378       163       1770       378       163       178       163       178       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163		1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fit Prodecid       0.950       0.950       0.950       0.950       0.950         Sald. Flow (prot)       1770       5085       1583       1770       3539       1583       1770       1863       1770       1863       1770       1658       0.800       0.849         Fit Permitted       0.407       0.303       0.803       1583       1490       1863       1583       836       1658       0.449         Sald. Flow (RTOR)       164       164       164       164       60       164       164       163       1770       378       163       1770       378       163       178       163       178       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163       163	Frt												
Satal. Flow (prot)         1770         5085         1583         1770         3539         1583         1770         1863         1583         1770         1658         0           FI Permited         0.407         0.303         0.800         0.800         0.449         0.449           Satal. Flow (perm)         758         508         1583         554         3539         1583         1700         1863         1583         356         1658         0           Right Turn on Red         Yes         Yes <t< td=""><td></td><td>0.950</td><td></td><td></td><td>0.950</td><td></td><td></td><td>0.950</td><td></td><td></td><td>0.950</td><td></td><td></td></t<>		0.950			0.950			0.950			0.950		
Fit Permitted       0.407       0.303       0.800       0.449         Satd. Flow (perm)       788       508       1583       544       3539       1583       1490       1863       1583       846       0         Satd. Flow (perm)       786       5085       1583       544       3539       1583       1490       164       60       Ves       Yes       Yes<			5085	1583		3539	1583		1863	1583		1658	0
Satd. Flow (perm)         758         5085         1583         564         3539         1583         1490         1863         1583         836         1658         0           Right Turn on Red         Yes													
Right Turn on RedYesYesYesYesYesSatd. Flow (RTOR)1641646016460Link Speed (nph)454545533788Travel Time (s)14.614.89798.111.311.3Peak Hour Factor0.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.92	Satd. Flow (perm)	758	5085	1583	564	3539	1583	1490	1863	1583	836	1658	0
Said. Flow (RTOR)       164       164       164       60         Link Speed (mph)       45       45       45       45       45       45       45       45       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.3       11.4       11.4       11.4       11.4       11.4       11.4       11.4       11.4       11.4       11.4       11.4       11.4       11.4       11.4       11.4				Yes			Yes			Yes			Yes
Link Speed (mph)         45         45         45         45         45           Link Distance (ft)         963         979         533         748         11.3           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.9         1.92         122         12 <td>0</td> <td></td> <td></td> <td>164</td> <td></td> <td></td> <td>164</td> <td></td> <td></td> <td>164</td> <td></td> <td>60</td> <td></td>	0			164			164			164		60	
Link Distance (ft)         963         979         533         748           Travel Time (s)         14.6         14.8         8.1         11.3           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92			45			45			45				
Travel Time (s)       14.6       14.8       8.1       11.3         Peak Hour Factor       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92													
Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.91         0.92         0.92													
Adj. Flow (vph)       49       870       49       43       538       60       43       22       65       120       22       60         Shared Lane Traffic (%)       149       870       49       43       538       60       43       22       65       120       82       0         Enter Blocked Intersection       No       No <td></td> <td>0.92</td> <td></td> <td>0.92</td> <td>0.92</td> <td></td> <td>0.92</td> <td>0.92</td> <td></td> <td>0.92</td> <td>0.92</td> <td></td> <td>0.92</td>		0.92		0.92	0.92		0.92	0.92		0.92	0.92		0.92
Shared Lane Traffic (%)         Lane Group Flow (vph)         49         870         49         43         538         60         43         22         65         120         82         0           Enter Blocked Intersection         No         No <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
Lane Group Flow (vph)         49         870         49         43         538         60         43         22         65         120         82         0           Enter Blocked Intersection         No         No <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
Enter Blocked Intersection         No         No <th< td=""><td></td><td>49</td><td>870</td><td>49</td><td>43</td><td>538</td><td>60</td><td>43</td><td>22</td><td>65</td><td>120</td><td>82</td><td>0</td></th<>		49	870	49	43	538	60	43	22	65	120	82	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $													No
Median Width(ft)         12         12         12         12         12         12         12           Link Offset(ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00													
Link Offset(ft)         0         0         0         0         0           Crosswalk Width(ft)         16         16         16         16         16         16           Two way Left Turn Lane				5			5			5			J
Crosswalk Width(ft)         16         16         16         16         16           Two way Left Turn Lane         Headway Factor         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00													
Two way Left Turn Lane         Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00	, <i>,</i>					16						16	
Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00<													
Turning Speed (mph)         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1 </td <td>3</td> <td>1.00</td>	3	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Number of Detectors         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1		15		9	15		9	15		9	15		
Detector Template         Left         Thru         Right         Left         Thru           Leading Detector (ft)         20         100         20         20         100         20         20         100         20         20         100         20         20         100         20         20         100         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< td=""><td></td><td></td><td>2</td><td>1</td><td>1</td><td>2</td><td>1</td><td></td><td>2</td><td>1</td><td>1</td><td>2</td><td></td></t<>			2	1	1	2	1		2	1	1	2	
Leading Detector (ft)         20         100         20         20         100         20         20         100         20         20         100         20         20         100         20         20         100         20         20         100         20         20         100         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Trailing Detector (ft)       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td></td> <td>20</td> <td>100</td> <td></td> <td>20</td> <td>100</td> <td></td> <td>20</td> <td>100</td> <td></td> <td>20</td> <td>100</td> <td></td>		20	100		20	100		20	100		20	100	
Detector 1 Position(ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	•	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Type         Cl+Ex         Queree		0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Channel         Detector 1 Extend (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0	Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Extend (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Queue (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0	Detector 1 Channel												
Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Size(ft)666Detector 2 TypeCI+ExCI+ExCI+ExDetector 2 Channel0.00.00.00.0Detector 2 Extend (s)0.00.00.00.0Turn Typepm+ptNAPermpm+ptNAProtected Phases5216387Permitted Phases2266884	Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 TypeCI+ExCI+ExCI+ExCI+ExDetector 2 ChannelDetector 2 Extend (s)0.00.00.00.0Turn Typepm+ptNAPermpm+ptNAPermProtected Phases52163874Permitted Phases2266884	Detector 2 Position(ft)		94			94			94			94	
Detector 2 TypeCl+ExCl+ExCl+ExCl+ExDetector 2 ChannelDetector 2 Extend (s)0.00.00.00.0Turn Typepm+ptNAPermpm+ptNAPermProtected Phases52163874Permitted Phases2266884			6			6			6			6	
Detector 2 Channel         0.0         0.0         0.0         0.0         0.0           Turn Type         pm+pt         NA         Perm         pm+pt         Quevavavavavavavavavavavavavavavavavavava			CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Turn Typepm+ptNAPermpm+ptNAPermpm+ptNAProtected Phases52163874Permitted Phases2266884													
Turn Typepm+ptNAPermpm+ptNAPermpm+ptNAProtected Phases52163874Permitted Phases2266884	Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Protected Phases         5         2         1         6         3         8         7         4           Permitted Phases         2         2         6         6         8         4         4	Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
	Protected Phases	5	2		1	6		3	8		7	4	
Detector Phase 5 2 2 1 6 6 3 8 8 7 4	Permitted Phases	2		2	6		6	8		8	4		
	Detector Phase	5	2	2	1	6	6	3	8	8	7	4	

## Lanes, Volumes, Timings 2: Hammond Dr. & Shopping Center Dr

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Existing

2: Hammond Dr. & Shopping Center Dr										pm		
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	8.0	23.0	23.0	8.0	23.0	23.0	8.0	20.0	20.0	9.0	21.0	
Total Split (%)	13.3%	38.3%	38.3%	13.3%	38.3%	38.3%	13.3%	33.3%	33.3%	15.0%	35.0%	
Maximum Green (s)	4.0	19.0	19.0	4.0	19.0	19.0	4.0	16.0	16.0	5.0	17.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	39.0	37.0	37.0	38.1	34.9	34.9	9.6	6.5	6.5	12.2	10.0	
Actuated g/C Ratio	0.65	0.62	0.62	0.64	0.58	0.58	0.16	0.11	0.11	0.20	0.17	
v/c Ratio	0.08	0.28	0.05	0.09	0.26	0.06	0.16	0.11	0.21	0.44	0.25	
Control Delay	1.8	6.1	1.6	6.0	10.5	0.1	17.9	24.7	1.5	23.0	12.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	1.8	6.1	1.6	6.0	10.5	0.1	17.9	24.7	1.5	23.0	12.0	
LOS	А	А	А	А	В	А	В	С	А	С	В	
Approach Delay		5.6			9.2			10.8			18.6	
Approach LOS		А			А			В			В	
90th %ile Green (s)	7.3	23.4	23.4	7.1	23.2	23.2	4.0	8.5	8.5	5.0	9.5	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold	Hold	Max	Gap	
70th %ile Green (s)	6.6	25.1	25.1	6.5	25.0	25.0	4.7	6.7	6.7	5.7	7.7	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap	Gap	Max	Hold	
50th %ile Green (s)	6.2	32.5	32.5	0.0	22.3	22.3	0.0	6.1	6.1	9.4	19.5	
50th %ile Term Code	Gap	Coord	Coord	Skip	Coord	Coord	Skip	Gap	Gap	Gap	Hold	
30th %ile Green (s)	0.0	44.1	44.1	0.0	44.1	44.1	0.0	0.0	0.0	7.9	7.9	
30th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Skip	Skip	Gap	Hold	
10th %ile Green (s)	0.0	56.0	56.0	0.0	56.0	56.0	0.0	0.0	0.0	0.0	0.0	
10th %ile Term Code	Skip	Coord	Coord	Skip	Coord	Coord	Skip	Skip	Skip	Skip	Skip	
Queue Length 50th (ft)	1	3	0	7	73	0	11	7	0	31	5	
Queue Length 95th (ft)	m4	112	m3	17	107	0	31	24	0	68	39	
Internal Link Dist (ft)		883			899			453			668	
Turn Bay Length (ft)	250		250	200		200	100					
Base Capacity (vph)	597	3137	1039	481	2059	989	263	496	542	275	525	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.08	0.28	0.05	0.09	0.26	0.06	0.16	0.04	0.12	0.44	0.16	
Intersection Summary	0.1											
Area Type:	Other											
Cycle Length: 60												

Lanes, Volumes, Timings 2: Hammond Dr. & Shopping Center	r Dr	Existing pm					
Actuated Cycle Length: 60							
Offset: 37 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green							
Natural Cycle: 60							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.44							
Intersection Signal Delay: 8.5	Intersection LOS: A						
Intersection Capacity Utilization 41.6%	ICU Level of Service A						
Analysis Period (min) 15							

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hammond Dr.

🖌 ø1	📕 🔶 🙀 🖉 (R)	<b>▲</b> ø3	₩ø4
8 s 🛛 👘	23 s	8s 2	1 s
▶ ø5	● ● Ø6 (R)	<b>▶</b> ø7	<b>≜</b>
8 s 🛛 👘	23 s	9 s 👘	20 s

# Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

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Existing	
pm	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	5	र्भ	11	ሻሻ	<b>†</b>	1	ካካ	4111		ሻሻ	1111	1
Volume (vph)	200	20	750	325	60	30	425	1735	50	10	1790	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	.,	0	0	.,	0	300		0	0		0
Storage Lanes	1		2	2		1	2		0	2		1
Taper Length (ft)	25		_	25		·	25		Ŭ	25		·
Lane Util. Factor	0.95	0.95	0.88	0.97	1.00	1.00	0.97	0.86	0.86	0.97	0.86	1.00
Frt			0.850			0.850		0.996				0.850
Flt Protected	0.950	0.961		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1701	2787	3433	1863	1583	3433	6382	0	3433	6408	1583
Flt Permitted	0.950	0.961	2.07	0.950			0.950	0002	Ŭ	0.950	0.00	
Satd. Flow (perm)	1681	1701	2787	3433	1863	1583	3433	6382	0	3433	6408	1583
Right Turn on Red			Yes	0.00		Yes	0.00	0002	Yes	0.00	0.00	Yes
Satd. Flow (RTOR)			55			142		7				142
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		979			481			1611			970	
Travel Time (s)		14.8			7.3			24.4			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	22	815	353	65	33	462	1886	54	11	1946	114
Shared Lane Traffic (%)	45%		0.0	000			102	1000	01		1710	
Lane Group Flow (vph)	119	120	815	353	65	33	462	1940	0	11	1946	114
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	4 5	8	8		5	2		1	6	
Permitted Phases						8						6
Detector Phase	4	4	4 5	8	8	8	5	2		1	6	6

Lanes, Volumes, Timings
3: Ashford-Dunwoodv Rd. & Hammond Dr.

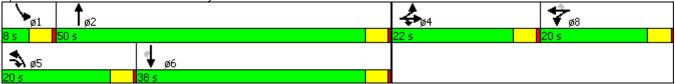
3: Ashford-Dunwo	ody Rd.	& Harr	nmonc	Dr.								pm
	٦	-	$\mathbf{F}$	4	←	•	1	1	۲	1	Ļ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	22.0	22.0		20.0	20.0	20.0	20.0	50.0		8.0	38.0	38.0
Total Split (%)	22.0%	22.0%		20.0%	20.0%	20.0%	20.0%	50.0%		8.0%	38.0%	38.0%
Maximum Green (s)	18.0	18.0		16.0	16.0	16.0	16.0	46.0		4.0	34.0	34.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	Min		None	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	0
Act Effct Green (s)	17.9	17.9	33.6	14.3	14.3	14.3	15.7	52.2		4.0	34.0	34.0
Actuated g/C Ratio	0.18	0.18	0.34	0.15	0.15	0.15	0.16	0.53		0.04	0.35	0.35
v/c Ratio	0.39	0.39	0.82	0.70	0.24	0.09	0.84	0.57		0.08	0.88	0.18
Control Delay	40.1	40.0	24.1	48.0	39.3	0.5	55.1	16.7		47.5	35.8	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	40.1	40.0	24.1	48.0	39.3	0.5	55.1	16.7		47.5	35.8	3.0
LOS	D	D	С	D	D	А	E	В		D	D	A
Approach Delay		27.7			43.3			24.1			34.0	
Approach LOS		С			D			С			С	
90th %ile Green (s)	18.0	18.0		16.0	16.0	16.0	16.0	46.0		4.0	34.0	34.0
90th %ile Term Code	Мах	Мах		Max	Max	Max	Мах	Мах		Max	Мах	Мах
70th %ile Green (s)	18.0	18.0		16.0	16.0	16.0	16.0	54.0		0.0	34.0	34.0
70th %ile Term Code	Мах	Мах		Max	Max	Мах	Мах	Hold		Skip	Мах	Мах
50th %ile Green (s)	18.0	18.0		15.4	15.4	15.4	16.0	54.0		0.0	34.0	34.0
50th %ile Term Code	Мах	Мах		Gap	Gap	Gap	Мах	Hold		Skip	Мах	Мах
30th %ile Green (s)	18.0	18.0		13.6	13.6	13.6	16.0	54.0		0.0	34.0	34.0
30th %ile Term Code	Max	Мах		Gap	Gap	Gap	Max	Hold		Skip	Max	Мах
10th %ile Green (s)	17.4	17.4		10.9	10.9	10.9	14.7	52.7		0.0	34.0	34.0
10th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Gap	Hold		Skip	Мах	Мах
Queue Length 50th (ft)	70	71	151	109	37	0	147	220		3	335	0
Queue Length 95th (ft)	129	129	#205	157	76	0	#228	310		12	390	24
Internal Link Dist (ft)		899			401			1531			890	
Turn Bay Length (ft)							300					
Base Capacity (vph)	309	312	1003	560	304	377	560	3402		140	2224	641
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.39	0.38	0.81	0.63	0.21	0.09	0.83	0.57		0.08	0.88	0.18
Intersection Summary												
Area Type:	Other											
Cycle Length: 100												

#### Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

Actuated Cycle Length: 98	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 29.6	Intersection LOS: C
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	
90th %ile Actuated Cycle: 100	
70th %ile Actuated Cycle: 100	
50th %ile Actuated Cycle: 99.4	
30th %ile Actuated Cycle: 97.6	
10th %ile Actuated Cycle: 93	
# 95th percentile volume exceeds capacity, queue may be lon	iger.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Ashford-Dunwoody Rd. & Hammond Dr.



pm

Lane Cong         WBL         WBR         NBT         NBR         SBL         SBT           Lane Configurations         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑         ↑		*	•	1	۲	1	Ŧ
Lane Configurations         Image: Configurations	Lane Group	WBI	WBR	NBT	NBR	SBL	SBT
Volume (vph)         5         25         595         0         45         430           Ideal Flow (vphp)         1900         1900         1900         1900         1900         1900           Storage Lanes         1         1         0         1         1         0         1           Taper Length (ft)         25         25         25         25         1         1         0         0         0.950         0.951         0.951         0.955         53         53         0         1770         3539         0         1770         3539         0         1770         3539         0         1760         3539         1170         3539         0         1770         3539         10         11.2         0.406         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53         53 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Ideal Flow (vppl)         1900         1900         1900         1900         1900         1900           Storage Length (ft)         0         0         0         200           Storage Lanes         1         1         0         1           Taper Length (ft)         25         25           Lane Util. Factor         1.00         1.00         0.95         0.95         1.00         0.95           Fit         0.850         0         1770         3539         0         776         3539           Stat. Flow (perm)         1770         1583         3539         0         776         3539           Right Turn on Red         Yes         Yes         Yes         Yes         Stat. Flow (RTOR)         27         10.2         10.2           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92					0		
Storage Length (ft)         0         0         0         200           Storage Lanes         1         1         0         1           Taper Length (ft)         25         25           Lane Util Factor         1.00         0.95         0.95         1.00         0.95           Fit Protected         0.950         0.950         0.406         0.505         0.406           Satd. Flow (prot)         1770         1583         3539         0         756         3539           Right Turn on Red         Yes         Yes         Yes         Yes         545         45           Link Speed (mph)         45         45         45         10.2         Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92							
Storage Lanes       1       1       0       1         Taper Length (ft)       25       25         Lane Utili, Factor       1.00       1.00       0.95       0.95       1.00       0.95         Fit Protected       0.950       0.950       0.950       5339       1770       3539         Fit Protected       0.950       0.406       5339       0       1770       3539         Stat. Flow (pern)       1770       1583       3539       0       756       3539         Right Turn on Red       Yes       Yes       Yes       534d. Flow (RTOR)       27       10.2       10.2         Link Distance (ft)       661       742       670       774       10       49       467         Shared Lane Traffic (%)       10.0       11.2       10.2       10.2       10.2       10.2         Lane Group Flow (vph)       5       27       647       0       49       467         Shared Lane Traffic (%)       12       12       12       12       12         Lane Group Flow (vph)       5       27       647       0       49       467         Shared Lane Traffic (%)       12       12       12				1700			1700
Taper Length (ft)         25         25           Lane Util. Factor         1.00         1.00         0.95         0.95         1.00         0.95           Fit         0.850         0         950         5         5         5         5         0.950         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         7         5         3         5         9         0         7         5         3         5         9         0         17.0         15         3         5         3         5         3         5         3         5         3         5         3         5         3         5         3         5         3         5         3         5         1         1         2         1         2         1         2         1         2         1         2         1         2 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Lane Util. Factor         1.00         1.00         0.95         0.95         1.00         0.95           Frt         0.850         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.406         5334         Fliv Permitted         0.950         0.406         5339         Right Turn on Red         Yes         Yes         Yes         Yes         Yes         756         3539         Right Turn on Red         Yes         10.0         11.2         10.2         670         77avel Time (s)         10.0         11.2         10.2         Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         10.2         10.2			I		0		
Frit         0.850         0.950           Satd. Flow (prot)         1770         1583         3539         0         1770         3539           Flit Permitted         0.950         0.406         5539         539         1710         3539           Flit Permitted         0.950         27         5339         1710         1583         3539         0         756         3539           Right Turn on Red         Yes         Yes         Yes         45         45         45           Link Speed (mph)         45         45         45         10.2         10.2         10.2           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92			1.00	0.05	0.05		0.05
Fit Protected         0.950         0.950           Satd. Flow (prot)         1770         1583         3539         0         1770         3539           Fit Permitted         0.950         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406         0.406		1.00		0.95	0.95	1.00	0.95
Satd. Flow (prot)       1770       1583       3539       0       1770       3539         Fit Permitted       0.950       0.406         Satd. Flow (perm)       1770       1583       3539       0       756       3539         Right Turn on Red       Yes       Yes       Yes       Yes       Statd. Flow (RTOR)       27       1112       10.2         Link Speed (mph)       45       45       45       670       17avel Time (s)       10.0       11.2       10.2         Peak Hour Factor       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0		0.050	0.850			0.050	
Fit Permitted       0.950       0.406         Satd. Flow (perm)       1770       1583       3539       0       756       3539         Right Turn on Red       Yes       Yes       Yes       Yes       Yes         Satd. Flow (RTOR)       27       111       112       670         Link Speed (mph)       45       45       45       45         Link Distance (ft)       661       742       670         Travel Time (s)       10.0       11.2       10.2         Peak Hour Factor       0.92       0.92       0.92       0.92       0.92         Adj. Flow (vph)       5       27       647       0       49       467         Shared Lane Traffic (%)       Lane Group Flow (vph)       5       27       647       0       49       467         Enter Blocked Intersection       No       No       No       No       No       No       No       No         Link Offset(ft)       0       0       0       0       0       0       0       Crosswalk Width(ft)       16       16       16       16       100       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00 </td <td></td> <td></td> <td>4500</td> <td>0500</td> <td>0</td> <td></td> <td>0500</td>			4500	0500	0		0500
Satd. Flow (perm)       1770       1583       3539       0       756       3539         Right Turn on Red       Yes       Yes       Yes       Yes       Yes         Satd. Flow (RTOR)       27       27       11       10       45       45       45         Link Distance (ft)       661       742       670       10.2       10.2       10.2         Peak Hour Factor       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92 <td< td=""><td></td><td></td><td>1583</td><td>3539</td><td>0</td><td></td><td>3539</td></td<>			1583	3539	0		3539
Right Turn on Red         Yes         Yes           Satd. Flow (RTOR)         27         1           Link Speed (mph)         45         45         45           Link Distance (II)         661         742         670           Travel Time (s)         10.0         11.2         10.2           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         5         27         647         0         49         467           Shared Lane Traffic (%)              1647         0         49         467           Enter Blocked Intersection         No         No         No         No         No         No         No           Link Offset(ft)         12         12         12         12         14           Median Width(ft)         16         16         16         16         16           Two way Left Turn Lane          1         2         1         2         1         2         1         2         1         12         12         100         100         100         100         100         100         100							
Satd. Flow (RTOR)       27         Link Speed (mph)       45       45       45         Link Distance (ft)       661       742       670         Travel Time (s)       10.0       11.2       10.2         Peak Hour Factor       0.92       0.92       0.92       0.92       0.92       0.92         Adj. Flow (vph)       5       27       647       0       49       467         Shared Lane Traffic (%)       Lane Group Flow (vph)       5       27       647       0       49       467         Enter Blocked Intersection       No       No       No       No       No       No       No         Link Offset(ft)       0       0       0       0       0       0       0         Crosswalk Width(ft)       16       16       16       16       16       16         Two way Left Turn Lane       1       2       1       2       12       2       12       2       12       2       12       2       16       100       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       10       0		1770		3539		756	3539
Link Speed (mph)454545Link Distance (ft)661742670Travel Time (s)10.011.210.2Peak Hour Factor0.920.920.920.920.92Adj. Flow (vph)527647049467Shared Lane Traffic (%) </td <td></td> <td></td> <td></td> <td></td> <td>Yes</td> <td></td> <td></td>					Yes		
Link Distance (f)661742670Travel Time (s)10.011.210.2Peak Hour Factor0.920.920.920.920.92Adj. Flow (vph)527647049467Shared Lane Traffic (%) </td <td>Satd. Flow (RTOR)</td> <td></td> <td>27</td> <td></td> <td></td> <td></td> <td></td>	Satd. Flow (RTOR)		27				
Link Distance (tt)661742670Travel Time (s)10.011.210.2Peak Hour Factor0.920.920.920.920.92Adj. Flow (vph)527647049Shared Lane Traffic (%)110.210.2Lane Group Flow (vph)527647049Adis Enter Blocked IntersectionNoNoNoNoNoLane AlignmentLeftRightLeftRightLeftMedian Width(ft)1212121212Link Offset(ft)00000Crosswalk Width(ft)16161616Two way Left Turn Lane1001.001.001.001.00Headway Factor1.001.001.001.001.001.00Turning Speed (mph)1599915Number of Detectors11212Detector TemplateLeftRightThruLeftThruLeading Detector (ft)202010000Detector 1 Size(ft)20206206Detector 1 Size(ft)0.00.00.00.00.0Detector 1 Size(ft)6666Detector 1 Channel949494Detector 2 Position(ft)949494Detector 2 Size(ft)666Detector 2 Size	Link Speed (mph)	45		45			45
Peak Hour Factor $0.92$ $0.92$ $0.92$ $0.92$ $0.92$ $0.92$ $0.92$ Adj. Flow (vph)527647049467Shared Lane Traffic (%) </td <td>Link Distance (ft)</td> <td>661</td> <td></td> <td>742</td> <td></td> <td></td> <td>670</td>	Link Distance (ft)	661		742			670
Peak Hour Factor $0.92$ $0.92$ $0.92$ $0.92$ $0.92$ $0.92$ $0.92$ Adj. Flow (vph)527647049467Shared Lane Traffic (%) </td <td>Travel Time (s)</td> <td>10.0</td> <td></td> <td>11.2</td> <td></td> <td></td> <td>10.2</td>	Travel Time (s)	10.0		11.2			10.2
Adj. Flow (vph)       5       27       647       0       49       467         Shared Lane Traffic (%)       Lane Group Flow (vph)       5       27       647       0       49       467         Enter Blocked Intersection       No       No       No       No       No       No       No       No         Lane Alignment       Left       Right       Left       Right       Left       Might       Left       Left       Left       Left       Left       Left       Might       Left       Left       Might       Left       Left       Left       Might       Left       Left       Might       Left       Left       Left       Might       Left       Left       Might       Socon       0       0       O       O       Do	• •		0.92		0.92	0.92	
Shared Lane Traffic (%)Lane Group Flow (vph)527647049467Enter Blocked IntersectionNoNoNoNoNoNoLane AlignmentLeftRightLeftRightLeftLeftLeftMedian Width(ft)1212121212Link Offset(ft)00000Crosswalk Width(ft)16161616Two way Left Turn Lane							
Lane Group Flow (vph)527647049467Enter Blocked IntersectionNoNoNoNoNoNoLane AlignmentLeftRightLeftRightLeftLeftMedian Width(ft)1212121212Link Offset(ft)00000Crosswalk Width(ft)16161616Two way Left Turn Lane		U	د ع	017	U U	17	107
Enter Blocked IntersectionNoNoNoNoNoNoLane AlignmentLeftRightLeftRightLeftLeftLeftLeftMedian Width(ft)121212121212Link Offset(ft)00000Crosswalk Width(ft)16161616Two way Left Turn Lane1.001.001.001.001.00Headway Factor1.001.001.001.001.00Turning Speed (mph)1599915Number of Detectors11212Detector TemplateLeftRightThruLeftThruLeading Detector (ft)202010020100Trailing Detector (ft)00000Detector 1 Position(ft)00000Detector 1 Size(ft)20206206Detector 1 ChannelU00.00.00.0Detector 1 Channel949494Detector 2 Position(ft)949494Detector 2 Size(ft)666Detector 2 TypeCl+ExCl+ExCl+ExDetector 2 Channel0.00.00.00.0Detector 2 Extend (s)0.00.00.00.0Turn TypeProtPermNAPermProtected Phases826	. ,	5	27	647	0	49	467
Lane AlignmentLeftRightLeftRightLeftRightLeftMedian Width(ft)12121212Link Offset(ft)000Crosswalk Width(ft)161616Two way Left Turn Lane1001.001.001.001.00Headway Factor1.001.001.001.001.001.00Turning Speed (mph)1599915Number of Detectors11212Detector TemplateLeftRightThruLeftThruLeading Detector (ft)202010020100Trailing Detector (ft)00000Detector 1 Position(ft)00000Detector 1 Size(ft)20206206Detector 1 ChannelU00.00.00.0Detector 1 Queue (s)0.00.00.00.00.0Detector 2 Position(ft)949494Detector 2 Size(ft)666Detector 2 Size(ft)666Detector 2 ChannelU0.00.00.0Detector 2 Extend (s)0.00.00.00.0Turn TypeProtPermNAPermProtected Phases826							
Median Width(ft)         12         12         12         12           Link Offset(ft)         0         0         0         0           Crosswalk Width(ft)         16         16         16         16           Two way Left Turn Lane         100         1.00         1.00         1.00         1.00         1.00         1.00           Headway Factor         1.00         1.00         1.00         1.00         1.00         1.00         1.00           Turning Speed (mph)         15         9         9         15         9         9         15           Number of Detectors         1         1         2         1         2         1         2           Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0           Detector 1 Position(ft)         0         0         0         0         0         0         0           Detector 1 Channel         E         E         E         E         E         E							
Link Offset(ft)         0         0         0           Crosswalk Width(ft)         16         16         16           Two way Left Turn Lane			Right		Right	Len	
Crosswalk Width(ft)       16       16       16         Two way Left Turn Lane       1.00       1.00       1.00       1.00       1.00       1.00         Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00       1.00         Turning Speed (mph)       15       9       9       15       2         Number of Detectors       1       1       2       1       2         Detector Template       Left       Right       Thru       Left       Thru         Leading Detector (ft)       20       20       100       20       100         Trailing Detector (ft)       0       0       0       0       0       0         Detector 1 Position(ft)       0       0       0       0       0       0         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Channel       Detector 1 Channel       Undetector       Undetector       0.0       0.0       0.0         Detector 1 Delay (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0         Detector 2 Position(ft)       94       94       94       94       04<	• •						
Two way Left Turn LaneHeadway Factor $1.00$ $1.00$ $1.00$ $1.00$ $1.00$ Turning Speed (mph) $15$ $9$ $9$ $15$ Number of Detectors $1$ $1$ $2$ $1$ $2$ Detector TemplateLeftRightThruLeftThruLeading Detector (ft) $20$ $20$ $100$ $20$ $100$ Trailing Detector (ft) $0$ $0$ $0$ $0$ $0$ Detector 1 Position(ft) $0$ $0$ $0$ $0$ $0$ Detector 1 Size(ft) $20$ $20$ $6$ $20$ $6$ Detector 1 Type $CI+Ex$ $CI+Ex$ $CI+Ex$ $CI+Ex$ $CI+Ex$ Detector 1 Channel $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ Detector 1 Delay (s) $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ Detector 2 Position(ft) $94$ $94$ $94$ Detector 2 Size(ft) $6$ $6$ $6$ Detector 2 Channel $0.0$ $0.0$ $0.0$ $0.0$ Detector 2 Extend (s) $0.0$ $0.0$ $0.0$ $0.0$ Turn TypeProtPermNAPermProtected Phases $8$ $2$ $6$ Permitted Phases $8$ $2$ $6$	.,						
Headway Factor1.001.001.001.001.001.00Turning Speed (mph)159915Number of Detectors11212Detector TemplateLeftRightThruLeftThruLeading Detector (ft)202010020100Trailing Detector (ft)00000Detector 1 Position(ft)00000Detector 1 Size(ft)20206206Detector 1 Size(ft)20206206Detector 1 Channel0.00.00.00.00.0Detector 1 Channel0.00.00.00.00.0Detector 1 Delay (s)0.00.00.00.00.0Detector 2 Position(ft)949494Detector 2 Size(ft)666Detector 2 Channel0.00.00.00.0Detector 2 Extend (s)0.00.00.00.0Turn TypeProtPermNAPermProtected Phases826Permitted Phases86	. ,	16		16			16
Turning Speed (mph)         15         9         9         15           Number of Detectors         1         1         2         1         2           Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0           Detector 1 Position(ft)         0         0         0         0         0         0           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Channel         0.0         0.0         0.0         0.0         0.0           Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0           Detector 2 Size(ft)         6         6         6         6         0.0         0.0         0.0         0.0							
Number of Detectors         1         1         2         1         2           Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0           Detector 1 Position(ft)         0         0         0         0         0         0           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Channel				1.00			1.00
Detector Template         Left         Right         Thru         Left         Thru           Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0           Detector 1 Position(ft)         0         0         0         0         0         0           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Channel         CI+Ex         CI+Ex         CI+Ex         CI+Ex         CI+Ex           Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0           Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94         94         94         94         94         94         94         94         94         94         94         94         94         94         94 <td></td> <td></td> <td></td> <td></td> <td>9</td> <td></td> <td></td>					9		
Leading Detector (ft)         20         20         100         20         100           Trailing Detector (ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td></td<>			1				
Trailing Detector (ft)       0       0       0       0       0         Detector 1 Position(ft)       0       0       0       0       0         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Size(ft)       20       20       6       20       6         Detector 1 Type       Cl+Ex       Cl+Ex       Cl+Ex       Cl+Ex       Cl+Ex         Detector 1 Channel	Detector Template	Left	Right	Thru		Left	Thru
Detector 1 Position(ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Leading Detector (ft)	20	20	100		20	100
Detector 1 Position(ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Trailing Detector (ft)	0	0	0		0	0
Detector 1 Size(ft)         20         20         6         20         6           Detector 1 Type         Cl+Ex         Detector 1 Channel         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	<b>3</b>	0	0	0		0	0
Detector 1 Type         Cl+Ex         Detector         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Detector         Detector         Cl+Ex         Cl+Ex         Cl+Ex         Cl+Ex         Detector         Detector         Cl+Ex         O.0         0.0         0.0         0.0         D.0							
Detector 1 Channel           Detector 1 Extend (s)         0.0         0.0         0.0         0.0           Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0           Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94         94           Detector 2 Size(ft)         6         6         6           Detector 2 Type         Cl+Ex         Cl+Ex         Cl+Ex           Detector 2 Channel         0.0         0.0         0.0           Detector 2 Extend (s)         0.0         0.0         0.0           Turn Type         Prot         Perm         NA         Perm         NA           Protected Phases         8         2         6         6           Permitted Phases         8         6         6         6	, ,						
Detector 1 Extend (s)         0.0         0.0         0.0         0.0         0.0           Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94         94           Detector 2 Size(ft)         6         6         6           Detector 2 Type         Cl+Ex         Cl+Ex         Cl+Ex           Detector 2 Channel         0.0         0.0         0.0           Detector 2 Extend (s)         0.0         0.0         0.0           Turn Type         Prot         Perm         NA         Perm         NA           Protected Phases         8         2         6         6         6		OFFER	OFFER	OHEA		OTLA	OTLA
Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0           Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94           Detector 2 Size(ft)         6         6         6           Detector 2 Type         Cl+Ex         Cl+Ex         Detector 2 Cl+Ex           Detector 2 Channel         0.0         0.0         0.0           Detector 2 Extend (s)         0.0         0.0         0.0           Turn Type         Prot         Perm         NA         Perm         NA           Protected Phases         8         2         6         6		0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0           Detector 2 Position(ft)         94         94         94           Detector 2 Size(ft)         6         6         6           Detector 2 Type         Cl+Ex         Cl+Ex         Detector 2 Channel           Detector 2 Extend (s)         0.0         0.0         0.0           Turn Type         Prot         Perm         NA           Protected Phases         8         2         6           Permitted Phases         8         6         6							
Detector 2 Position(ft)9494Detector 2 Size(ft)66Detector 2 TypeCI+ExCI+ExDetector 2 Channel0.00.0Detector 2 Extend (s)0.00.0Turn TypeProtPermNAProtected Phases826Permitted Phases86							
Detector 2 Size(ft)66Detector 2 TypeCI+ExCI+ExDetector 2 Channel0.00.0Detector 2 Extend (s)0.00.0Turn TypeProtPermNAProtected Phases826Permitted Phases86		0.0	0.0			0.0	
Detector 2 TypeCI+ExCI+ExDetector 2 Channel0.00.0Detector 2 Extend (s)0.00.0Turn TypeProtPermNAProtected Phases826Permitted Phases86	. ,						
Detector 2 ChannelDetector 2 Extend (s)0.0Turn TypeProtProtected Phases826Permitted Phases86							
Detector 2 Extend (s)0.00.0Turn TypeProtPermNAPermNAProtected Phases826Permitted Phases86				CI+Ex			CI+Ex
Turn TypeProtPermNAPermNAProtected Phases826Permitted Phases86							
Protected Phases826Permitted Phases86	Detector 2 Extend (s)						
Protected Phases826Permitted Phases86	Turn Type	Prot	Perm	NA		Perm	NA
Permitted Phases 8 6		8		2			6
			8			6	
Detector Phase 8 8 2 6 6	Detector Phase	8	8	2		6	6

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0	38.0		38.0	38.0	
Total Split (%)	36.7%	36.7%	63.3%		63.3%	63.3%	
	18.0	18.0	34.0		34.0	34.0	
Maximum Green (s)					34.0		
Yellow Time (s)	3.5	3.5	3.5			3.5	
All-Red Time (s)	0.5	0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	Max		Мах	Max	
Walk Time (s)	5.0	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	
Act Effct Green (s)	6.1	6.1	51.8		51.8	51.8	
Actuated g/C Ratio	0.11	0.11	0.91		0.91	0.91	
v/c Ratio	0.03	0.14	0.20		0.07	0.15	
Control Delay	25.2	13.2	1.3		1.7	1.2	
Queue Delay	0.0	0.0	0.0		0.0	0.0	
	25.2	13.2	1.3		1.7	1.2	
Total Delay							
LOS	C	В	A		A	A	
Approach Delay	15.0		1.3			1.3	
Approach LOS	В		А			А	
90th %ile Green (s)	7.5	7.5	48.1		48.1	48.1	
90th %ile Term Code	Gap	Gap	Dwell		Dwell	Dwell	
70th %ile Green (s)	6.3	6.3	49.0		49.0	49.0	
70th %ile Term Code	Gap	Gap	Dwell		Dwell	Dwell	
50th %ile Green (s)	0.0	0.0	49.0		49.0	49.0	
50th %ile Term Code	Skip	Skip	Dwell		Dwell	Dwell	
30th %ile Green (s)	0.0	0.0	49.0		49.0	49.0	
30th %ile Term Code	Skip	Skip	Dwell		Dwell	Dwell	
10th %ile Green (s)	0.0	0.0	49.0		49.0	49.0	
10th %ile Term Code	Skip	Skip	Dwell		Dwell	Dwell	
Queue Length 50th (ft)							
	2	0	0		0	0	
Queue Length 95th (ft)	11	20	40		10	28	
Internal Link Dist (ft)	581		662		0.00	590	
Turn Bay Length (ft)					200		
Base Capacity (vph)	561	520	3206		685	3206	
Starvation Cap Reductn	0	0	0		0	0	
Spillback Cap Reductn	0	0	0		0	0	
Storage Cap Reductn	0	0	0		0	0	
Reduced v/c Ratio	0.01	0.05	0.20		0.07	0.15	
Intersection Summary							
Area Type:	Other						
Cycle Length: 60							
, <u></u>							

Actuated Cycle Length: 57.2		
Natural Cycle: 40		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.20		
Intersection Signal Delay: 1.7	Intersection LOS: A	
Intersection Capacity Utilization 33.1%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 63.6		
70th %ile Actuated Cycle: 63.3		
50th %ile Actuated Cycle: 53		
30th %ile Actuated Cycle: 53		
10th %ile Actuated Cycle: 53		

Splits and Phases: 4: Perimeter Center Pkwy & Goldkist Dr.



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	-	-		`	-	-
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ካካ	- <b>††</b>	- <b>††</b>	11	ካካ	1
Volume (vph)	210	410	475	265	390	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.95	0.95	0.88	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	3539	3539	2787	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	2787	3433	1583
Right Turn on Red	0100	0007	0007	Yes	0100	Yes
Satd. Flow (RTOR)				288		179
Link Speed (mph)		45	45	200	45	177
Link Distance (ft)		806	1749 24 E		1830	
Travel Time (s)	0.00	12.2	26.5	0.02	27.7	0.00
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	446	516	288	424	179
Shared Lane Traffic (%)						
Lane Group Flow (vph)	228	446	516	288	424	179
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	, 1	1	, 1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6	T CHIII	4	T CITI
Permitted Phases	J	2	0	6	4	4
	Г	n	L		4	
Detector Phase	5	2	6	6	4	4
Switch Phase	1.0	1.0	1.0	1.0	1.0	1.0
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)	14.0	38.0	24.0	24.0	22.0	22.0
	23.3%	38.0 63.3%	24.0 40.0%	24.0 40.0%	22.0 36.7%	22.0 36.7%
Total Split (%)	23.3%	03.3% 34.0		40.0%	30.7% 18.0	30.7% 18.0
Maximum Green (s)			20.0			
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	8.6	23.1	13.8	13.8	11.5	11.5
Actuated g/C Ratio	0.20	0.53	0.32	0.32	0.26	0.26
v/c Ratio	0.33	0.24	0.46	0.27	0.46	0.32
Control Delay	19.4	5.5	14.5	2.9	17.0	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	5.5	14.5	2.9	17.0	5.2
LOS	19.4 B	5.5 A	14.5 B	2.9 A	Т7.0 В	D.Z
	D	A 10.2	ы 10.4	A	ы 13.5	A
Approach Delay						
Approach LOS	10.0	B	B	20.0	B	1/ 4
90th %ile Green (s)	10.0	34.0	20.0	20.0	16.4	16.4
90th %ile Term Code	Max	Hold	Max	Max	Gap	Gap
70th %ile Green (s)	9.6	29.9	16.3	16.3	12.7	12.7
70th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
50th %ile Green (s)	8.4	25.9	13.5	13.5	10.9	10.9
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
30th %ile Green (s)	7.3	22.2	10.9	10.9	9.3	9.3
30th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
10th %ile Green (s)	0.0	8.1	8.1	8.1	7.5	7.5
10th %ile Term Code	Skip	Hold	Gap	Gap	Gap	Gap
Queue Length 50th (ft)	26	24	55	0	48	0
Queue Length 95th (ft)	64	53	108	22	97	38
Internal Link Dist (ft)		726	1669		1750	
Turn Bay Length (ft)		120	1007		1700	
Base Capacity (vph)	871	2741	1796	1556	1568	820
Starvation Cap Reductn	0/1	2741	0	1550	1506	020
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.16	0.29	0.19	0.27	0.22
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						
Actuated Cycle Length: 43	3.4					
Natural Cycle: 50						

Natural Cycle: 50 Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.46		
Intersection Signal Delay: 11.2	Intersection LOS: B	
Intersection Capacity Utilization 40.2%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 58.4		
70th %ile Actuated Cycle: 50.6		
50th %ile Actuated Cycle: 44.8		
30th %ile Actuated Cycle: 39.5		
10th %ile Actuated Cycle: 23.6		

Splits and Phases: 5: Lake Hearn Dr. & Perimeter Center Pkwy

<b>→</b> ø2		A 64	
38 s		22 s	
▶ ₀5	<b>4</b> ≏ ø6		
14 s	24 s		

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Lanes,	Volumes,	Timings
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1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

Lane Coroup         EBL         EBT         EBR         WBL         WBT         NBR         NBT         NBR         SBL         SSR         SSR <th< th=""><th></th><th>۶</th><th>-</th><th>7</th><th>4</th><th>+</th><th>*</th><th>1</th><th>1</th><th>1</th><th>1</th><th>ţ</th><th>~</th></th<>		۶	-	7	4	+	*	1	1	1	1	ţ	~
Volume (wph)         240         950         310         450         660         370         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         <	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (wph)         240         950         310         450         660         370         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         <	Lane Configurations	ሻሻ	**	1	ካካ	44	1	ካካ	<b>4</b> 16		ሻሻ	**	1
Ideal Flow (php)         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900         1900									305	90			
Slorage Langhi (ti)         260         0         250         500         80         0         250         300           Slorage Lanes         2         1         2         1         2         0         2         1           Lane Uli Factor         0.97         0.95         1.00         0.97         0.95         0.95         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950													
Storage Lanes         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         <													
Tape:         25         25         25         25           Lane IUII. Factor         0.97         0.95         1.00         0.97         0.95         1.00         0.97         0.95         0.950         0.950         0.850           FII Protected         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.850           Statl. Flow (pern)         3433         3539         1583         3433         3539         1583         3433         3519         0.833         3539         1583         3433         3519         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950													1
Lane Util. Factor         0.97         0.95         1.00         0.97         0.95         0.95         0.95         0.95         0.95         0.850         0.860         0.850         0.860         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850         0.850										Ŭ			
Frt         0.850         0.850         0.966         0.960         0.950           FI Protected         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950 <t< td=""><td></td><td></td><td>0.95</td><td>1.00</td><td></td><td>0.95</td><td>1.00</td><td></td><td>0.95</td><td>0.95</td><td></td><td>0.95</td><td>1.00</td></t<>			0.95	1.00		0.95	1.00		0.95	0.95		0.95	1.00
Fit Protected       0.950       0.950       0.950       0.950       0.950         Satd. Flow (prot)       3433       3539       1583       3433       3539       1583       3433       3419       0       3433       3539       1583         Riph Turn on Red       Yes       Ye		0177	0170		0177	0170		0177		0170	0177	0170	
Said. Flow (prot)         3433         3539         1583         3433         3419         0         3433         3539         1583           FI Permited         0.950         0.172         0.410         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92		0.950		0.000	0.950		0.000	0.950	01700		0.950		01000
FIP ermitted       0.950       0.172       0.410       0.950         Satd. Flow (perm)       3433       3539       1583       622       3539       1583       1482       3419       0       3433       3539       1583         Right Turn on Red       Yes       Yes </td <td></td> <td></td> <td>3539</td> <td>1583</td> <td></td> <td>3539</td> <td>1583</td> <td></td> <td>3419</td> <td>0</td> <td></td> <td>3539</td> <td>1583</td>			3539	1583		3539	1583		3419	0		3539	1583
Satd. Flow (perm)         3433         3539         1583         622         3539         1583         1482         3419         0         3433         3539         1583           Right Turn on Red         Yes	4 7		0007	1000		0007	1000		0117	U		0007	1000
Right Turn on RedYesYesYesYesYesYesYesSald. Flow (RTOR)26312615180Link Speed (rph)4545454545Link Distance (ti)2029920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920920 <td></td> <td></td> <td>3530</td> <td>1583</td> <td></td> <td>3530</td> <td>1583</td> <td></td> <td>3419</td> <td>0</td> <td></td> <td>3530</td> <td>1583</td>			3530	1583		3530	1583		3419	0		3530	1583
Saftd. Flow (RTOR)       263       126       51       80         Link Speed (mph)       45       45       45       45       45       45       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100 <td< td=""><td>4 /</td><td>3433</td><td>3337</td><td></td><td>022</td><td>5557</td><td></td><td>1402</td><td>5417</td><td></td><td>3433</td><td>3337</td><td></td></td<>	4 /	3433	3337		022	5557		1402	5417		3433	3337	
Link Speed (mph)         45         45         45         45         45           Link Distance (tt)         2029         963         30.7         14.6         5.0         11.9           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0									51	103			
Link Distance (ft)         2029         963         330         786           Travel Time (s)         30.7         14.6         5.0         11.9           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         Dist			45	205		45	120					45	00
Travel Time (s)         30.7         14.6         5.0         11.9           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.72         0.72         0.72         0.													
Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.9         0.5         9         1.5	<b>、</b> ,												
Adj. Flow (vph)       261       1033       337       489       717       402       217       332       98       402       516       250         Shared Lane Traffic (%)       Lane Group Flow (vph)       261       1033       337       489       717       402       217       430       0       402       516       250         Enter Blocked Intersection       No       No <td></td> <td>0.02</td> <td></td> <td>0.02</td> <td>0.02</td> <td></td> <td>0.02</td> <td>0.02</td> <td></td> <td>0.02</td> <td>0.02</td> <td></td> <td>0.02</td>		0.02		0.02	0.02		0.02	0.02		0.02	0.02		0.02
Shared Lane Traffic (%)         Lane Group Flow (vph)         261         1033         337         489         717         402         217         430         0         402         516         250           Enter Blocked Intersection         No         Start         Start         Start         Start         Start													
Lane Group Flow (vph)         261         1033         337         489         717         402         217         430         0         402         516         250           Enter Blocked Intersection         No		201	1033	337	489	/1/	402	217	33Z	98	402	010	250
Enter Blocked Intersection         No         No <th< td=""><td>· · ·</td><td>2/1</td><td>1022</td><td>227</td><td>400</td><td>717</td><td>400</td><td>017</td><td>420</td><td>0</td><td>400</td><td>Γ1/</td><td>250</td></th<>	· · ·	2/1	1022	227	400	717	400	017	420	0	400	Γ1/	250
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $													
Median Width(ft)         24         24         24         24         24         24           Link Offset(ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00													
Link Offset(ft)         0         0         0         0         0           Crosswalk Width(ft)         16         16         16         16         16         16           Two way Left Turn Lane		Leit		Right	Leit		Right	Leit		Right	Leit		Right
Crosswalk Width(ft)         16         16         16         16           Two way Left Turn Lane         Headway Factor         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00													
Two way Left Turn Lane         Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00	,,,												_
Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00<	.,		16			16			16			16	
Turning Speed (mph)         15         9         15         9         15         9         15         9         15         9           Number of Detectors         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         1         2         1         1         2         1         1         1         2         1         1         1         2 <td></td> <td>1.00</td> <td>1 00</td> <td>1 0 0</td> <td>1 0 0</td> <td>1 0 0</td> <td>1.00</td> <td>1 00</td> <td>1.00</td> <td>4.00</td> <td>1.00</td> <td>1.00</td> <td>1.00</td>		1.00	1 00	1 0 0	1 0 0	1 0 0	1.00	1 00	1.00	4.00	1.00	1.00	1.00
Number of Detectors         1         2         1         1         2         1         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         0         1         2         1			1.00			1.00			1.00			1.00	
Detector Template         Left         Thru         Right         Left         Thru         Right         Left         Thru         Right           Leading Detector (ft)         20         100         20         20         100         20         20         100         20         20         100         20         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         100	<b>U U U U</b>		0			0			0	9		0	
Leading Detector (ft)         20         100         20         20         100         20         20         100         20         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         20         100         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0													
Trailing Detector (ft)       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td></td>													
Detector 1 Position(ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0													
Detector 1 Size(ft)         20         6         20         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         6         20         Detector 1         Clean         Detector         Do         D.0													
Detector 1 Type         Cl+Ex													
Detector 1 Channel         Detector 1 Extend (s)       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0 <td></td>													
Detector 1 Extend (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0													
Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0													0.0
Detector 2 Position(ft)         94         94         94         94           Detector 2 Size(ft)         6         6         6         6           Detector 2 Size(ft)         6         6         6         6           Detector 2 Type         CI+Ex         CI+Ex         CI+Ex         CI+Ex           Detector 2 Channel         0.0         0.0         0.0         0.0           Detector 2 Extend (s)         0.0         0.0         0.0         0.0           Turn Type         Prot         NA         Perm         pm+pt         NA         pm+ov         pm+pt         NA         pm+ov           Protected Phases         5         2         1         6         7         3         8         7         4         5           Permitted Phases         2         6         6         8         4         4	Detector 1 Queue (s)		0.0			0.0		0.0				0.0	0.0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 TypeCl+ExCl+ExCl+ExCl+ExDetector 2 ChannelDetector 2 Extend (s)0.00.00.00.0Turn TypeProtNAPermpm+ptNApm+ovpm+ptNAProtected Phases5216738745Permitted Phases26684	Detector 2 Position(ft)		94			94			94			94	
Detector 2 Channel         0.0         0.0         0.0         0.0           Detector 2 Extend (s)         0.0         0.0         0.0         0.0           Turn Type         Prot         NA         Perm         pm+pt         NA         pm+pt         NA         Prot         NA         pm+ov           Protected Phases         5         2         1         6         7         3         8         7         4         5           Permitted Phases         2         6         6         8         4	Detector 2 Size(ft)		6			6			6			6	
Detector 2 Extend (s)         0.0         0.0         0.0         0.0           Turn Type         Prot         NA         Perm         pm+pt         NA         pm+pt         NA         Prot         NA         pm+ov           Protected Phases         5         2         1         6         7         3         8         7         4         5           Permitted Phases         2         6         6         8         4         4	Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Turn TypeProtNAPermpm+ptNApm+ovpm+ptNAProtNApm+ovProtected Phases5216738745Permitted Phases26684													
Turn TypeProtNAPermpm+ptNApm+ovpm+ptNAProtNApm+ovProtected Phases5216738745Permitted Phases26684			0.0			0.0			0.0			0.0	
Protected Phases         5         2         1         6         7         3         8         7         4         5           Permitted Phases         2         6         6         8         4		Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov
Permitted Phases 2 6 6 8 4					· · · .		•	•					
				2	6								
	Detector Phase	5	2	2	1	6	7	3	8		7	4	5

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0		8.0	20.0	8.0
Total Split (s)	11.0	27.0	27.0	10.0	26.0	13.0	9.0	20.0		13.0	24.0	11.0
Total Split (%)	15.7%	38.6%	38.6%	14.3%	37.1%	18.6%	12.9%	28.6%		18.6%	34.3%	15.7%
Maximum Green (s)	7.0	23.0	23.0	6.0	22.0	9.0	5.0	16.0		9.0	20.0	7.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None		None	None	None
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	8.6	22.9	22.9	32.2	23.3	36.5	18.1	12.9		9.3	16.9	29.5
Actuated g/C Ratio	0.12	0.33	0.33	0.46	0.33	0.52	0.26	0.18		0.13	0.24	0.42
v/c Ratio	0.62	0.89	0.48	0.76	0.61	0.45	0.41	0.64		0.89	0.61	0.35
Control Delay	37.6	34.0	7.5	26.3	22.9	10.8	17.2	27.5		54.2	26.5	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	37.6	34.0	7.5	26.3	22.9	10.8	17.2	27.5		54.2	26.5	10.3
LOS	D	С	А	С	С	В	В	С		D	С	В
Approach Delay		29.1			20.9			24.1			32.5	
Approach LOS		С			С			С			С	
90th %ile Green (s)	7.0	23.0	23.0	6.0	22.0	9.0	5.0	16.0		9.0	20.0	7.0
90th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Max	Max		Max	Max	Max
70th %ile Green (s)	8.4	23.0	23.0	7.4	22.0	9.0	5.0	14.6		9.0	18.6	8.4
70th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Max	Gap		Max	Hold	Max
50th %ile Green (s)	10.0	23.0	23.0	9.0	22.0	9.0	5.0	13.0		9.0	17.0	10.0
50th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Max	Gap		Max	Hold	Max
30th %ile Green (s)	9.7	23.0	23.0	10.5	23.8	9.0	5.0	11.5		9.0	15.5	9.7
30th %ile Term Code	Gap	Coord	Coord	Max	Coord	Max	Max	Gap		Max	Hold	Gap
10th %ile Green (s)	8.0	22.7	22.7	11.8	26.5	10.3	6.3	9.2		10.3	13.2	8.0
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Max	Max	Gap		Max	Hold	Gap
Queue Length 50th (ft)	54	218	22	64	115	47	31	79		89	103	44
Queue Length 95th (ft)	#111	#333	82	m#156	236	m187	48	117		#167	141	91
Internal Link Dist (ft)		1949			883			250			706	
Turn Bay Length (ft)	260			250		500	80			250		300
Base Capacity (vph)	422	1162	696	645	1176	886	530	820		454	1011	712
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.62	0.89	0.48	0.76	0.61	0.45	0.41	0.52		0.89	0.51	0.35
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												

## Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

#E.1.

Lanes, Volumes, Timings	
1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hamr	nond Dr.

Actuated Cycle Length: 70		
Offset: 0 (0%), Referenced to phase 2:EBT and 6:	WBTL, Start of Green, Master Intersection	
Natural Cycle: 70		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay: 26.6	Intersection LOS: C	
Intersection Capacity Utilization 74.3%	ICU Level of Service D	
Analysis Period (min) 15		
# 95th percentile volume exceeds capacity, queu	ie may be longer.	
Queue shown is maximum after two cycles.		
m Volume for 95th percentile queue is metered b	y upstream signal.	

Splits and Phases: 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

<b>√</b> ø1	₩ ₩ ₩ 2 (R)	<b>↑</b> ø3	🛊 ø4
10 s	27 s	9 s 👘	24 s
🐓 ø5	♥ ♥ ø6 (R)	<b>\$</b> _{ø7}	<b>1</b> ø8
11 s	26 s	13 s	20 s

# Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

No-Build 2026 AM

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Lane Group EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	<u> </u>	1	<u>`````````````````````````````````````</u>	<b>†</b> †	1	۲	<u></u>	1	1	¢	0.011
Volume (vph) 5	850	365	360	1350	25	120	5	110	15	5	10
	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft) 250	1700	250	200	1700	200	100	1700	0	0	1700	0
Storage Lanes 1		1	1		1	100		1	1		0
Taper Length (ft) 25			25			25			25		U
	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.71	0.850	1.00	0.75	0.850	1.00	1.00	0.850	1.00	0.897	1.00
Flt Protected 0.950		0.000	0.950		0.000	0.950		0.000	0.950	0.077	
	5085	1583	1770	3539	1583	1770	1863	1583	1770	1671	0
Flt Permitted 0.179	5005	1000	0.224	0007	1000	0.769	1005	1000	1770	1071	U
	5085	1583	417	3539	1583	1432	1863	1583	1863	1671	0
Right Turn on Red	5005	Yes	717	0007	Yes	1452	1005	Yes	1005	1071	Yes
Satd. Flow (RTOR)		397			140			203		11	103
Link Speed (mph)	45	577		45	140		45	200		45	
Link Distance (ft)	963			979			533			748	
Travel Time (s)	14.6			14.8			8.1			11.3	
Peak Hour Factor 0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph) 5	924	397	391	1467	27	130	5	120	16	5	11
Shared Lane Traffic (%)	724	577	571	1407	21	150	5	120	10	5	
Lane Group Flow (vph) 5	924	397	391	1467	27	130	5	120	16	16	0
Enter Blocked Intersection No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	24	Right	Lon	24	Right	Lon	12	Right	Lon	12	Right
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane	10			10			10			10	
Headway Factor 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph) 15	1.00	9	15	1.00	9	15	1.00	9	15	1.00	9
Number of Detectors 1	2	1	1	2	1	1	2	1	1	2	,
	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft) 20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft) 0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft) 0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft) 20	6	20	20	6	20	20	6	20	20	6	
.,,	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel											
Detector 1 Extend (s) 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s) 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s) 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	94			94			94			94	
Detector 2 Size(ft)	6			6			6			6	
.,	CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel											
Detector 2 Extend (s)	0.0			0.0			0.0			0.0	
Turn Type pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases 5	2		1	6		3	8		7	4	
Permitted Phases 2		2	6		6	8		8	4		
Detector Phase 5	2	2	1	6	6	3	8	8	7	4	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	8.0	23.0	23.0	19.0	34.0	34.0	8.0	20.0	20.0	8.0	20.0	
Total Split (%)	11.4%	32.9%	32.9%	27.1%	48.6%	48.6%	11.4%	28.6%	28.6%	11.4%	28.6%	
Maximum Green (s)	4.0	19.0	19.0	15.0	30.0	30.0	4.0	16.0	16.0	4.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	41.6	36.0	36.0	56.0	54.8	54.8	7.3	6.3	6.3	6.0	6.0	
Actuated g/C Ratio	0.59	0.51	0.51	0.80	0.78	0.78	0.10	0.09	0.09	0.09	0.09	
v/c Ratio	0.02	0.35	0.39	0.61	0.53	0.02	0.73	0.03	0.37	0.10	0.10	
Control Delay	3.2	4.2	2.1	9.0	6.2	0.0	54.2	29.2	4.0	28.0	20.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	3.2	4.2	2.1	9.0	6.2	0.0	54.2	29.2	4.0	28.0	20.6	
LOS	А	А	А	А	А	А	D	С	А	С	С	
Approach Delay		3.6			6.7			30.1			24.3	
Approach LOS		А			А			С			С	
90th %ile Green (s)	5.8	21.0	21.0	21.8	37.0	37.0	4.0	7.2	7.2	4.0	7.2	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold	Hold	Мах	Gap	
70th %ile Green (s)	0.0	34.1	34.1	18.0	56.1	56.1	5.9	5.9	5.9	0.0	0.0	
70th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Hold	Gap	Gap	Skip	Skip	
50th %ile Green (s)	0.0	36.8	36.8	15.6	56.4	56.4	5.6	5.6	5.6	0.0	0.0	
50th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Hold	Gap	Gap	Skip	Skip	
30th %ile Green (s)	0.0	36.9	36.9	13.7	54.6	54.6	7.4	7.4	7.4	0.0	0.0	
30th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Мах	Hold	Hold	Skip	Skip	
10th %ile Green (s)	0.0	51.3	51.3	10.7	66.0	66.0	0.0	0.0	0.0	0.0	0.0	
10th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Skip	Skip	Skip	Skip	Skip	
Queue Length 50th (ft)	0	9	0	26	70	0	57	2	0	7	2	
Queue Length 95th (ft)	m1	m109	m54	135	333	0	94	11	8	20	19	
Internal Link Dist (ft)		883			899			453			668	
Turn Bay Length (ft)	250		250	200		200	100					
Base Capacity (vph)	312	2616	1007	663	2771	1270	177	425	518	154	390	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.02	0.35	0.39	0.59	0.53	0.02	0.73	0.01	0.23	0.10	0.04	
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
-												

## Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

#E.1.	

Actuated Cycle Length: 70							
Offset: 31 (44%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green							
Natural Cycle: 70							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.73							
Intersection Signal Delay: 7.4	Intersection LOS: A						
Intersection Capacity Utilization 64.0%	ICU Level of Service B						
Analysis Period (min) 15							
m Volume for 95th percentile queue is metered by upstream signal.							

Splits and Phases: 2: Shopping Center & Hammond Dr.

<b>√</b> ø1	🕹 🖗 🖉 (R)	<b>↑</b> ø3	ø4
19 s	23 s	8 s 🛛 👘	20 s
▶ ø5 ♦ ø6 (R)	•	<b>▶</b> ø7	<b>↑</b> _{ø8}
8s <mark>3</mark> 4s		8 s 🛛 👘	20 s

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	र्स	11	ካካ	<b>†</b>	1	ኘኘ	4111		ሻሻ	1111	1
Volume (vph)	265	120	590	70	95	70	1340	2400	395	90	1395	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	1		2	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.88	0.97	1.00	1.00	0.97	0.86	0.86	0.97	0.86	1.00
Frt			0.850			0.850		0.979				0.850
Flt Protected	0.950	0.981		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1736	2787	3433	1863	1583	3433	6273	0	3433	6408	1583
Flt Permitted	0.950	0.981		0.950			0.950		-	0.950		
Satd. Flow (perm)	1681	1736	2787	3433	1863	1583	3433	6273	0	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			266			101		52				274
Link Speed (mph)		45	200		45			45			45	<u> </u>
Link Distance (ft)		979			481			1611			970	
Travel Time (s)		14.8			7.3			24.4			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	288	130	641	76	103	76	1457	2609	429	98	1516	326
Shared Lane Traffic (%)	29%	100	011	10	100	70	1107	2007	127	70	1010	020
Lane Group Flow (vph)	204	214	641	76	103	76	1457	3038	0	98	1516	326
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Lon	24	rtigrit	Lon	24	Right	Lon	24	rtigitt	Lon	24	rtigrit
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	1.00	9	15	1.00	9	1.00	1.00	9	1.00	1.00	9
Number of Detectors	1	2	1	1	2	1	1	2	,	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	OFLA	OFLA	OFLA	OTLA	OTLA	OHEA	OHEA			OHEA	OHEA	OLLY
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	0.0	94	0.0	0.0	94	0.0	0.0	94		0.0	94	0.0
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	ntiou	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	•		pt+ov	Split		Pellili						Pelill
	4	4	4 5	8	8	0	5	2		1	6	1
Permitted Phases	4	4	4 5	0	0	8	-	2		1	,	6
Detector Phase	4	4	4 5	8	8	8	5	2		1	6	6

Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd, & Hammond Dr. #E.1.

No-Build 2026

3: Ashford-Dunwoody Rd. & Hammond Dr.											-Dullu	AM
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	21.0	21.0		20.0	20.0	20.0	62.0	87.0		12.0	37.0	37.0
Total Split (%)	15.0%	15.0%		14.3%	14.3%	14.3%	44.3%	62.1%		8.6%	26.4%	26.4%
Maximum Green (s)	17.0	17.0		16.0	16.0	16.0	58.0	83.0		8.0	33.0	33.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	Min		None	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	0
Act Effct Green (s)	17.0	17.0	75.0	12.5	12.5	12.5	58.0	83.3		7.7	33.0	33.0
Actuated g/C Ratio	0.12	0.12	0.55	0.09	0.09	0.09	0.42	0.61		0.06	0.24	0.24
v/c Ratio	0.98	0.99	0.39	0.24	0.61	0.32	1.00	0.79		0.51	0.98	0.55
Control Delay	115.9	118.7	6.1	59.1	74.9	8.3	62.5	21.9		72.5	69.6	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	115.9	118.7	6.1	59.1	74.9	8.3	62.5	21.9		72.5	69.6	12.7
LOS	F	F	А	E	E	А	E	С		Е	Е	В
Approach Delay		50.0			50.4			35.1			60.2	
Approach LOS		D			D			D			Е	
90th %ile Green (s)	17.0	17.0		16.0	16.0	16.0	58.0	83.0		8.0	33.0	33.0
90th %ile Term Code	Мах	Max		Мах	Max	Мах	Мах	Мах		Мах	Мах	Мах
70th %ile Green (s)	17.0	17.0		14.9	14.9	14.9	58.0	83.0		8.0	33.0	33.0
70th %ile Term Code	Мах	Max		Gap	Gap	Gap	Max	Мах		Мах	Мах	Мах
50th %ile Green (s)	17.0	17.0		12.9	12.9	12.9	58.0	83.0		8.0	33.0	33.0
50th %ile Term Code	Мах	Max		Gap	Gap	Gap	Max	Мах		Мах	Мах	Мах
30th %ile Green (s)	17.0	17.0		10.8	10.8	10.8	58.0	83.0		8.0	33.0	33.0
30th %ile Term Code	Мах	Max		Gap	Gap	Gap	Max	Мах		Мах	Мах	Max
10th %ile Green (s)	17.0	17.0		8.0	8.0	8.0	58.0	84.3		6.7	33.0	33.0
10th %ile Term Code	Max	Max		Gap	Gap	Gap	Max	Hold		Gap	Max	Max
Queue Length 50th (ft)	193	203	59	32	89	0	~663	559		44	392	37
Queue Length 95th (ft)	#375	#391	86	58	152	28	#863	638		77	#495	134
Internal Link Dist (ft)		899			401			1531			890	
Turn Bay Length (ft)							300					
Base Capacity (vph)	209	216	1651	402	218	274	1459	3848		201	1549	590
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.98	0.99	0.39	0.19	0.47	0.28	1.00	0.79		0.49	0.98	0.55
Intersection Summary												
Area Type:	Other											
Cycle Length: 140												

Actuated Cycle Length: 136.5	
Natural Cycle: 140	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 43.9	Intersection LOS: D
Intersection Capacity Utilization 85.6%	ICU Level of Service E
Analysis Period (min) 15	
90th %ile Actuated Cycle: 140	
70th %ile Actuated Cycle: 138.9	
50th %ile Actuated Cycle: 136.9	
30th %ile Actuated Cycle: 134.8	
10th %ile Actuated Cycle: 132	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be I	onger.
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Ashford-Dunwoody Rd. & Hammond Dr.

▶ _{ø1}	<b>↑</b> ø2		<b>4</b> _{ø4}	<b>*</b> ø8
12 s 💦	87 s		21 s	20 s
<b>\$</b> ø5		<b>∲</b> ø6		
62 s		37 s		

Lanes, Volumes, Timings

4: Perimeter Center Pkwy & State Farm Dr

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			1			1		<b>↑</b> ĵ≽		ሻ	A1⊅	
Volume (vph)	0	0	20	0	0	50	0	545	60	140	710	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	80		0
Storage Lanes	0		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.865			0.865		0.985			0.965	
Flt Protected										0.950		
Satd. Flow (prot)	0	0	1611	0	0	1611	0	3486	0	1770	3415	0
Flt Permitted										0.950		
Satd. Flow (perm)	0	0	1611	0	0	1611	0	3486	0	1770	3415	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		391			524			338			330	
Travel Time (s)		5.9			7.9			5.1			5.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	22	0	0	54	0	592	65	152	772	239
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	22	0	0	54	0	657	0	152	1011	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
J1	Other											
Control Type: Unsignalized												
Intersection Capacity Utilizat	ion 36.7%			IC	U Level	of Service	A					
Analysis Period (min) 15												

No-Build 2026 AM

Lanes, Volumes, Timings
5: Perimeter Center Pkwy & Goldkist Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	eî		<u>۲</u>	eî		٦	<u></u> ∱1≽		۲	A	
Volume (vph)	25	0	20	20	0	40	50	540	20	40	590	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	200		200
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.850			0.850			0.995			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1770	1583	0	1770	3522	0	1770	3461	0
Flt Permitted							0.342			0.416		
Satd. Flow (perm)	1863	1583	0	1863	1583	0	637	3522	0	775	3461	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		513			353			5			26	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		402			1304			742			338	
Travel Time (s)		6.1			19.8			11.2			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	0.72	22	22	0.72	43	54	587	22	43	641	109
Shared Lane Traffic (%)	27	Ű			Ű	10	01	007		10	011	10,
Lane Group Flow (vph)	27	22	0	22	43	0	54	609	0	43	750	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Lon	12	rugni	Lon	12	rtigitt	Lon	12	rugin	Eon	12	rtight
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	-	1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94		0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		5 EA			5 EA			5 EA			G. EA	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4	т		8	U		2	2		6	U	
Detector Phase	7	4		3	8		5	2		1	6	
	1	т		5	U		5	۷		1	U	

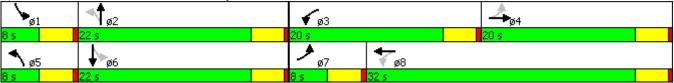
# Lanes, Volumes, Timings 5: Perimeter Center Pkwy & Goldkist Dr.

No-Build 2026 AM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase			LBR	TIDE .		<b>HBR</b>	HDL		HBR	ODL	001	001
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0		20.0	32.0		8.0	20.0		8.0	20.0	
Total Split (%)	11.4%	28.6%		28.6%	45.7%		11.4%	31.4%		11.4%	31.4%	
Maximum Green (s)	4.0	16.0		16.0	28.0		4.0	18.0		4.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead			Lead			Lead			Lead		
0	Yes	Lag Yes		Yes	Lag Yes		Yes	Lag Yes		Yes	Lag Yes	
Lead-Lag Optimize? Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None			None		None	S.U Min		None	S.U Min	
	None	5.0		None 5.0	5.0		None	5.0		none	5.0	
Walk Time (s)		5.0 11.0			5.0 11.0			5.0 11.0			5.0 11.0	
Flash Dont Walk (s)				11.0								
Pedestrian Calls (#/hr)	F 0	0		0	0		22.2	0		22.2	0	
Act Effct Green (s)	5.3	6.0		7.5	6.4		23.3	25.3		23.3	25.3	
Actuated g/C Ratio	0.16	0.18		0.23	0.19		0.70	0.76		0.70	0.76	
v/c Ratio	0.09	0.03		0.05	0.07		0.09	0.23		0.06	0.28	
Control Delay	13.1	0.1		12.1	0.2		4.1	5.9		4.1	6.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.1	0.1		12.1	0.2		4.1	5.9		4.1	6.1	
LOS	В	A		В	А		А	A		А	A	
Approach Delay		7.3			4.3			5.8			6.0	
Approach LOS		A			А			А			A	
90th %ile Green (s)	4.0	5.5		6.7	8.2		4.0	18.0		4.0	18.0	
90th %ile Term Code	Max	Gap		Gap	Hold		Max	Max		Max	Max	
70th %ile Green (s)	0.0	5.5		0.0	5.5		4.0	18.0		4.0	18.0	
70th %ile Term Code	Skip	Hold		Skip	Gap		Мах	Hold		Max	Max	
50th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	18.0		0.0	18.0	
50th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
30th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	23.7		0.0	23.7	
30th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
10th %ile Green (s)	0.0	0.0		0.0	0.0		0.0	22.2		0.0	22.2	
10th %ile Term Code	Skip	Skip		Skip	Skip		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	2	0		2	0		0	0		1	0	
Queue Length 95th (ft)	18	0		16	0		19	107		16	133	
Internal Link Dist (ft)		322			1224			662			258	
Turn Bay Length (ft)							200			200		
Base Capacity (vph)	290	1078		941	1402		597	2688		676	2646	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.09	0.02		0.02	0.03		0.09	0.23		0.06	0.28	
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												

Actuated Cycle Length: 33.1	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay: 5.9	Intersection LOS: A
Intersection Capacity Utilization 40.9%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 50.2	
70th %ile Actuated Cycle: 39.5	
50th %ile Actuated Cycle: 22	
30th %ile Actuated Cycle: 27.7	
10th %ile Actuated Cycle: 26.2	

Splits and Phases: 5: Perimeter Center Pkwy & Goldkist Dr.



## Lanes, Volumes, Timings 6: Perimeter Center Pkwy & Connector

No-Build 2026 AM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	eî 🗧			4		٦	<b>≜</b> †⊅		۲	<b>^</b>	1
Volume (vph)	100	0	20	15	0	20	90	490	10	10	555	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	300		0	300		300
Storage Lanes	1		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.850			0.922			0.997				0.850
Flt Protected	0.950	01000			0.979		0.950	01777		0.950		0.000
Satd. Flow (prot)	1770	1583	0	0	1681	0	1770	3529	0	1770	3539	1583
Flt Permitted	0.732	1000	Ū	U	0.879	Ū	0.424	0027	Ū	0.449	0007	1000
Satd. Flow (perm)	1364	1583	0	0	1510	0	790	3529	0	836	3539	1583
Right Turn on Red	1004	1000	Yes	U	1010	Yes	170	5527	Yes	000	5557	Yes
Satd. Flow (RTOR)		266	105		22	105		5	103			71
Link Speed (mph)		45			45			45			45	/ 1
Link Distance (ft)		654			1393			1830			742	
Travel Time (s)		9.9			21.1			27.7			11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
	109		0.92	0.92		0.92	0.92 98	533	0.92	0.92	603	0.92
Adj. Flow (vph)	109	0	22	10	0	22	98	533	11	11	003	/ 1
Shared Lane Traffic (%)	100	22	0	0	20	0	00	E 4 4	0	11	(02	71
Lane Group Flow (vph)	109	22	0	0	38	0	98	544	0	11	603	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane	1.00	1.00	1 00	1 00	1.00	1.00	1 00	1.00	1.00	1 00	1 00	1 00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	0	9	15	0	9	15	0	9	15	0	9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6

Lanes, Volumes, Timings
6: Perimeter Center Pkwy & Connector

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	43.0
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	61.4%
Maximum Green (s)	23.0	23.0		23.0	23.0		39.0	39.0		39.0	39.0	39.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	8.2	8.2		Ū	8.1		19.9	19.9		19.9	19.9	19.9
Actuated g/C Ratio	0.25	0.25			0.25		0.61	0.61		0.61	0.61	0.61
v/c Ratio	0.32	0.04			0.10		0.20	0.25		0.02	0.28	0.07
Control Delay	12.7	0.1			6.5		6.6	5.0		5.0	5.2	2.0
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	12.7	0.1			6.5		6.6	5.0		5.0	5.2	2.0
LOS	B	A			A		A	A		A	A	A
Approach Delay	_	10.6			6.5			5.3			4.9	
Approach LOS		В			A			A			A	
90th %ile Green (s)	10.8	10.8		10.8	10.8		17.0	17.0		17.0	17.0	17.0
90th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	Hold
70th %ile Green (s)	8.8	8.8		8.8	8.8		13.9	13.9		13.9	13.9	13.9
70th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
50th %ile Green (s)	8.0	8.0		8.0	8.0		16.5	16.5		16.5	16.5	16.5
50th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
30th %ile Green (s)	7.4	7.4		7.4	7.4		23.6	23.6		23.6	23.6	23.6
30th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
10th %ile Green (s)	0.0	0.0		0.0	0.0		21.3	21.3		21.3	21.3	21.3
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	Dwell
Queue Length 50th (ft)	15	0		onip	2		8	23		1	26	0
Queue Length 95th (ft)	39	0			14		28	49		5	55	11
Internal Link Dist (ft)	0,	574			1313		20	1750		Ŭ	662	
Turn Bay Length (ft)	300	071			1010		300	1700		300	002	300
Base Capacity (vph)	981	1213			1092		790	3529		836	3539	1583
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.11	0.02			0.03		0.12	0.15		0.01	0.17	0.04
Intersection Summary	V. 1 1	0.02			0.00		0.12	0.10		0.01	0.17	0.04
Area Type:	Other											
Cycle Length: 70	Outor											
ogoio Longin. 70												

Actuated Cycle Length: 32.7	
Natural Cycle: 40	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.32	
Intersection Signal Delay: 5.6	Intersection LOS: A
Intersection Capacity Utilization 41.5%	ICU Level of Service A
Analysis Period (min) 15	
90th %ile Actuated Cycle: 35.8	
70th %ile Actuated Cycle: 30.7	
50th %ile Actuated Cycle: 32.5	
30th %ile Actuated Cycle: 39	
10th %ile Actuated Cycle: 25.3	

#### Splits and Phases: 6: Perimeter Center Pkwy & Connector



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	EDI	EDT		WBR	<b>CDI</b>	SBR
Lane Group	EBL	EBT	WBT		SBL	SBK
Lane Configurations	<b>ካካ</b> 210	<b>*</b>	<b>*</b>	200	<b>11</b>	
Volume (vph)	310	230	300	280	320	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	300	0
Storage Lanes	2			2	1	1
Taper Length (ft)	25	0.05	0.05	0.00	25	1.00
Lane Util. Factor	0.97	0.95	0.95	0.88	0.97	1.00
Frt	0.050			0.850	0.050	0.850
Flt Protected	0.950	0500	0500	0707	0.950	
Satd. Flow (prot)	3433	3539	3539	2787	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	2787	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				304		293
Link Speed (mph)		45	45		45	
Link Distance (ft)		806	1941		1830	
Travel Time (s)		12.2	29.4		27.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	337	250	326	304	348	293
Shared Lane Traffic (%)	50.	200	520	501	5.0	2.5
Lane Group Flow (vph)	337	250	326	304	348	293
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	LCII	24	24	Nyn	24	Nyn
Link Offset(ft)		24	24		24	
.,		16	16		16	
Crosswalk Width(ft)		10	10		10	
Two way Left Turn Lane	1.00	1.00	1.00	1 00	1.00	1 00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	0.0	94	94	0.0	0.0	0.0
Detector 2 Size(ft)		6 CL Ev	6 CL Ev			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			_
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4

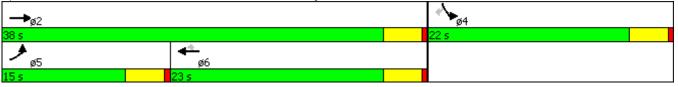
No-Build 2026 AM

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	15.0	38.0	23.0	23.0	22.0	22.0
Total Split (%)	25.0%	63.3%	38.3%	38.3%	36.7%	36.7%
Maximum Green (s)	11.0	34.0	19.0	19.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	1.0	Lag	Lag	1.0	1.0
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None
Walk Time (s)	NULLE	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	9.2	23.6	10.2	10.2	10.0	10.0
Actuated g/C Ratio	9.2 0.22	23.0 0.56	0.24	0.24	0.24	0.24
v/c Ratio	0.22	0.56	0.24	0.24	0.24	0.24
Control Delay	0.45	4.7	15.0	0.33 3.5	16.0	5.6
5		4.7	15.0 0.0	3.5 0.0	16.0 0.0	0.0 0.0
Queue Delay	0.0 17.4	0.0 4.7	0.0 15.0	0.0 3.5	0.0 16.0	0.0 5.6
Total Delay LOS						
	В	A	B	А	B	А
Approach Delay		12.0	9.5		11.3	
Approach LOS	11.0	B	A	1 - 1	B	14.0
90th %ile Green (s)	11.0	30.1	15.1	15.1	14.0	14.0
90th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
70th %ile Green (s)	10.9	27.2	12.3	12.3	11.9	11.9
70th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
50th %ile Green (s)	9.4	23.5	10.1	10.1	9.6	9.6
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
30th %ile Green (s)	8.1	20.1	8.0	8.0	8.3	8.3
30th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
10th %ile Green (s)	6.8	17.6	6.8	6.8	6.9	6.9
10th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
Queue Length 50th (ft)	34	11	32	0	35	0
Queue Length 95th (ft)	78	27	68	24	74	46
Internal Link Dist (ft)		726	1861		1750	
Turn Bay Length (ft)					300	
Base Capacity (vph)	928	2927	1654	1464	1520	863
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.09	0.20	0.21	0.23	0.34
Intersection Summary	Other					
Area Type:	Other					
Cycle Length: 60						

## Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

Actuated Cycle Length: 41.8		
Natural Cycle: 50		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.49		
Intersection Signal Delay: 10.9	Intersection LOS: B	
Intersection Capacity Utilization 36.3%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 52.1		
70th %ile Actuated Cycle: 47.1		
50th %ile Actuated Cycle: 41.1		
30th %ile Actuated Cycle: 36.4		
10th %ile Actuated Cycle: 32.5		

Splits and Phases: 7: Lake Hearn Dr. & Perimeter Center Pkwy



## Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

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No-Build 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<u></u>	1	ሻሻ	<u></u>	1	ኘኘ	A		ኘኘ	<u></u>	1
Volume (vph)	290	705	190	225	810	350	385	550	270	440	425	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	250		500	80		0	250		300
Storage Lanes	2		1	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.951				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3366	0	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3366	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			75			61		91				61
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2029			963			330			786	
Travel Time (s)		30.7			14.6			5.0			11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	766	207	245	880	380	418	598	293	478	462	359
Shared Lane Traffic (%)												
Lane Group Flow (vph)	315	766	207	245	880	380	418	891	0	478	462	359
Enter Blocked Intersection	No	No	No									
Lane Alignment	Left	Left	Right									
Median Width(ft)		24	5		24	5		24	J -		24	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		01. 21			on En			011 2.1			on En	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases	5	2	2		5	6	0	U		,	,	4
Detector Phase	5	2	3	1	6	7	3	8		7	4	5
	J	2	J	I	U	1	J	U		I	4	J

No-Build 2026 8:00 am 12/16/2019 PM daf

Lanes,	Volumes,	Timings
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1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	- <b>††</b>	1	ካካ	- <b>†</b> †	1	ሻሻ	<b>∱</b> î≽		ካካ	- <b>†</b> †	1
Volume (vph)	240	950	585	650	660	370	255	365	125	370	600	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	250		500	80		0	250		300
Storage Lanes	2		1	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3405	0	3433	3539	1583
Flt Permitted	0.950			0.112			0.256			0.950		
Satd. Flow (perm)	3433	3539	1583	405	3539	1583	925	3405	0	3433	3539	1583
Right Turn on Red	0.00		Yes		0007	Yes	, 20	0.00	Yes	0.00	0007	Yes
Satd. Flow (RTOR)			202			66		46	100			86
Link Speed (mph)		45	202		45	00		45			45	00
Link Distance (ft)		2029			963			330			786	
Travel Time (s)		30.7			14.6			5.0			11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1033	636	707	717	402	277	397	136	402	652	250
Shared Lane Traffic (%)	201	1055	000	101	/ 1/	402	211	577	150	702	052	250
Lane Group Flow (vph)	261	1033	636	707	717	402	277	533	0	402	652	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Leit	24	Night	Len	24	Right	Leit	24	Right	Leit	24	Nyn
Link Offset(ft)		24			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Number of Detectors	15	2	9	10	2	9	15	2	9	15	2	9
	Left	Z		Left			Left	Z Thru		Left	Z Thru	
Detector Template	20	100	Right 20	20	Thru 100	Right 20	20	100		20	100	Right
Leading Detector (ft)												20
Trailing Detector (ft)	0 0	0 0	0	0 0	0	0	0	0		0 0	0	0
Detector 1 Position(ft)			0		0	0		0			0	0
Detector 1 Size(ft)	20	6 CL Ex	20	20 CI+Ex	6 CL Ev	20	20 Cl+Ex	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+EX	CI+Ex	CI+Ex	CI+EX	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6 CL Ev			6 CL Ev			6 CL Ex			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)		0.0	D		0.0			0.0		<b>P</b> .	0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov
Protected Phases	5	2	-	1	6	7	3	8		7	4	5
Permitted Phases	_		2	6		6	8	-		_		4
Detector Phase	5	2	2	1	6	7	3	8		7	4	5

# Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

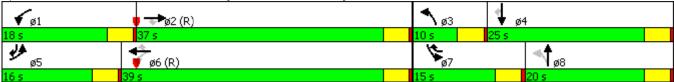
Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase			LDR	nibL		, ibit	NDL		HBR	ODL	001	ODIN
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0		8.0	20.0	8.0
Total Split (s)	16.0	37.0	37.0	18.0	39.0	15.0	10.0	20.0		15.0	25.0	16.0
Total Split (%)	17.8%	41.1%	41.1%	20.0%	43.3%	16.7%	11.1%	22.2%		16.7%	27.8%	17.8%
Maximum Green (s)	12.0	33.0	33.0	14.0	35.0	11.0	6.0	16.0		11.0	21.0	12.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None		None	None	None
Walk Time (s)	Tiono	5.0	5.0	110110	5.0	110110	110110	5.0		Homo	5.0	1 tono
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	11.1	32.1	32.1	49.5	35.7	51.3	22.0	15.6		11.6	20.7	35.8
Actuated g/C Ratio	0.12	0.36	0.36	0.55	0.40	0.57	0.24	0.17		0.13	0.23	0.40
v/c Ratio	0.62	0.82	0.92	0.99	0.51	0.43	0.68	0.85		0.91	0.80	0.37
Control Delay	44.0	32.4	38.6	54.6	20.0	7.9	32.3	47.2		65.9	41.3	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	44.0	32.4	38.6	54.6	20.0	7.9	32.3	47.2		65.9	41.3	13.6
LOS	D	С	D	D	В	A	С	D		E	D	В
Approach Delay		36.0			30.7			42.1			43.6	
Approach LOS		D			С			D			D	
90th %ile Green (s)	12.0	33.0	33.0	14.0	35.0	11.0	6.0	16.0		11.0	21.0	12.0
90th %ile Term Code	Мах	Coord	Coord	Мах	Coord	Мах	Мах	Мах		Мах	Мах	Мах
70th %ile Green (s)	12.0	33.0	33.0	14.0	35.0	11.0	6.0	16.0		11.0	21.0	12.0
70th %ile Term Code	Мах	Coord	Coord	Мах	Coord	Мах	Мах	Мах		Мах	Мах	Мах
50th %ile Green (s)	12.0	33.0	33.0	14.0	35.0	11.0	6.0	16.0		11.0	21.0	12.0
50th %ile Term Code	Мах	Coord	Coord	Мах	Coord	Max	Мах	Мах		Мах	Мах	Мах
30th %ile Green (s)	10.7	33.0	33.0	14.0	36.3	11.0	6.0	16.0		11.0	21.0	10.7
30th %ile Term Code	Gap	Coord	Coord	Мах	Coord	Max	Мах	Мах		Мах	Hold	Gap
10th %ile Green (s)	8.8	28.7	28.7	17.5	37.4	14.0	8.2	13.8		14.0	19.6	8.8
10th %ile Term Code	Gap	Coord	Coord	Мах	Coord	Gap	Gap	Gap		Gap	Hold	Gap
Queue Length 50th (ft)	72	272	243	~140	167	115	57	142		119	184	60
Queue Length 95th (ft)	111	351	#465	#297	151	67	#91	#223		#209	#248	118
Internal Link Dist (ft)		1949			883			250			706	
Turn Bay Length (ft)	260			250		500	80			250		300
Base Capacity (vph)	457	1297	708	717	1405	931	405	643		442	825	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.57	0.80	0.90	0.99	0.51	0.43	0.68	0.83		0.91	0.79	0.36
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												

### Lanes, Volumes, Timings Bu 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

Actuated Cycle Length: 90							
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green, Master Intersection							
Natural Cycle: 90							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.99							
Intersection Signal Delay: 36.9	Intersection LOS: D						
Intersection Capacity Utilization 82.8%	ICU Level of Service E						
Analysis Period (min) 15							
<ul> <li>Volume exceeds capacity, queue is theoretically</li> </ul>	/ infinite.						
Queue shown is maximum after two cycles.							
# 95th percentile volume exceeds capacity, queue may be longer.							
Queue shown is maximum after two cycles.							

Splits and Phases: 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.



# Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	<u> </u>	1	<u>۲</u>	<u></u>	1	7	1	1	۲	¢Î	
Volume (vph)	5	885	365	360	1550	25	120	5	110	15	5	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	200		200	100		0	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.897	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	3539	1583	1770	1863	1583	1770	1671	0
Flt Permitted	0.123			0.218			0.702					
Satd. Flow (perm)	229	5085	1583	406	3539	1583	1308	1863	1583	1863	1671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			397			109			158		11	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		963			979			533			748	
Travel Time (s)		14.6			14.8			8.1			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	962	397	391	1685	27	130	5	120	16	5	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	962	397	391	1685	27	130	5	120	16	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24	J -		24	J -		12	5		12	<u> </u>
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	0.0	94	0.0	0.0	94	0.0	0.0	94	0.0	0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			CI+Ex			CI+Ex	
Detector 2 Channel								STI EN			577 EA	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2	1 CIIII	μπ+μ 1	6	1 CHII	рш+рі 3	8	1 0111	- pπ+pt 7	4	
Permitted Phases	2	2	2	6	U	6	8	0	8	4	4	
Detector Phase	5	2	2	1	6	6	3	8	8	4	4	
	U	Z	Z	I	U	U	J	U	U	1	4	

Lanes, Volumes, Timings
2: Shopping Center & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	8.0	34.0	34.0	28.0	54.0	54.0	8.0	20.0	20.0	8.0	20.0	
Total Split (%)	8.9%	37.8%	37.8%	31.1%	60.0%	60.0%	8.9%	22.2%	22.2%	8.9%	22.2%	
Maximum Green (s)	4.0	30.0	30.0	24.0	50.0	50.0	4.0	16.0	16.0	4.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		5.0	5.0	110110	5.0	5.0		5.0	5.0	1.0110	5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	52.6	47.1	47.1	69.7	67.8	67.8	11.5	8.5	8.5	7.4	6.3	
Actuated g/C Ratio	0.58	0.52	0.52	0.77	0.75	0.75	0.13	0.09	0.09	0.08	0.07	
v/c Ratio	0.00	0.36	0.39	0.65	0.63	0.02	0.60	0.03	0.41	0.00	0.12	
Control Delay	4.6	12.5	3.2	11.7	8.0	0.0	48.5	37.8	7.5	36.5	25.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	4.6	12.5	3.2	11.7	8.0	0.0	48.5	37.8	7.5	36.5	25.9	
LOS	A	В	A	B	A	A	D	07.0 D	A	D	C	
Approach Delay	,,	9.7		D	8.6	7.	D	29.0	7.	D	31.2	
Approach LOS		A			A			C			C	
90th %ile Green (s)	5.8	36.2	36.2	25.2	55.6	55.6	4.0	8.6	8.6	4.0	8.6	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap	Gap	Max	Hold	
70th %ile Green (s)	0.0	40.5	40.5	20.6	65.1	65.1	16.9	6.0	6.0	6.9	0.0	
70th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Hold	Gap	Gap	Gap	Skip	
50th %ile Green (s)	0.0	47.6	47.6	19.1	70.7	70.7	11.3	11.3	11.3	0.0	0.0	
50th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold	Skip	Skip	
30th %ile Green (s)	0.0	52.2	52.2	16.4	72.6	72.6	9.4	9.4	9.4	0.0	0.0	
30th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold	Skip	Skip	
10th %ile Green (s)	0.0	58.8	58.8	12.0	74.8	74.8	7.2	7.2	7.2	0.0	0.0	
10th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold	Skip	Skip	
Queue Length 50th (ft)	1	98	21	46	156	0	71	3	0	9	3	
Queue Length 95th (ft)	m1	m90	m35	152	426	0	#133	13	29	25	22	
Internal Link Dist (ft)		883			899	0		453	- /	20	668	
Turn Bay Length (ft)	250		250	200	0,7,7	200	100				000	
Base Capacity (vph)	229	2659	1017	681	2664	1218	216	331	411	146	306	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.02	0.36	0.39	0.57	0.63	0.02	0.60	0.02	0.29	0.11	0.05	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												

# Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Build	Existing	Zoning	2026
			AM

Actuated Cycle Length: 90							
Offset: 17 (19%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green							
Natural Cycle: 80							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.65							
Intersection Signal Delay: 10.6	Intersection LOS: B						
Intersection Capacity Utilization 69.5%	ICU Level of Service C						
Analysis Period (min) 15							
# 95th percentile volume exceeds capacity, queue may be longer.							
Queue shown is maximum after two cycles.							
m Volume for 95th percentile queue is metered by up	stream signal.						

Splits and Phases: 2: Shopping Center & Hammond Dr.

<b>√</b> ø1	📕 💠 🕫 2 (R)	ø3	ø4
28 s	34 s	8s	20 s
✓ _{ø5} ♥ _{ø6 (R)}		ø7	<b>1</b>
8 s <mark>54 s</mark>		8s	20 s

Lanes, Volumes, Tim	ings
3: Ashford-Dunwoody	Rd. & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	र्स	11	ካካ	<b>†</b>	1	ኘኘ	4111 ·		ኘኘ	1111	1
Volume (vph)	265	120	625	70	95	70	1540	2400	395	90	1395	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	1		2	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.88	0.97	1.00	1.00	0.97	0.86	0.86	0.97	0.86	1.00
Frt			0.850			0.850		0.979				0.850
Flt Protected	0.950	0.981		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1736	2787	3433	1863	1583	3433	6273	0	3433	6408	1583
Flt Permitted	0.950	0.981		0.950			0.950			0.950		
Satd. Flow (perm)	1681	1736	2787	3433	1863	1583	3433	6273	0	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			283			101		53				258
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		979			481			1611			970	
Travel Time (s)		14.8			7.3			24.4			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	288	130	679	76	103	76	1674	2609	429	98	1516	326
Shared Lane Traffic (%)	29%		017		100			2007	127	70		020
Lane Group Flow (vph)	204	214	679	76	103	76	1674	3038	0	98	1516	326
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Lon	24	rugin	Lon	24	rugin	Lon	24	rugin	Lon	24	rtigitt
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	1.00	9	15	1.00	9	15	1.00	9	15	1.00	9
Number of Detectors	1	2	1	1	2	1	1	2	,	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	OFLA	OFLA	OTLA	OHLA	OFLA	OFLA	OFLA	OHEA		OHEA	OTLA	OFLA
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	0.0	94	0.0	0.0	94	0.0	0.0	94		0.0	94	0.0
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		CITLA			CITLA			CITEX			CITLA	
		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	Split	0.0 NA	ntiov	Split	0.0 NA	Perm	Prot	0.0 NA		Prot	0.0 NA	Dorm
Turn Type Protected Phases	•		pt+ov	•		Pellil						Perm
Protected Phases	4	4	4 5	8	8	0	5	2		1	6	1
Permitted Phases	4	4	4 5	0	0	8	-	2		1	/	6
Detector Phase	4	4	4 5	8	8	8	5	2		1	6	6

Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	20.0	20.0		20.0	20.0	20.0	66.0	88.0		12.0	34.0	34.0
Total Split (%)	14.3%	14.3%		14.3%	14.3%	14.3%	47.1%	62.9%		8.6%	24.3%	24.3%
Maximum Green (s)	16.0	16.0		16.0	16.0	16.0	62.0	84.0		8.0	30.0	30.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	1.0	1.0		1.0	1.0	1.0	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	Min		None	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	NULL	5.0		None	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	
Act Effct Green (s)	16.0	16.0	78.0	12.5	12.5	12.5	62.0	84.3		7.7	30.0	0 30.0
Actuated g/C Ratio	0.12	0.12	0.57	0.09	0.09	0.09	0.45	0.62		0.06	0.22	0.22
v/c Ratio	1.04	1.05	0.40	0.24	0.61	0.32	1.07	0.78		0.51	1.08	0.59
Control Delay	132.0	134.9	5.6	59.1	74.9	8.3	81.5	21.1		72.5	97.1	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	132.0	134.9	5.6	59.1	74.9	8.3	81.5	21.1		72.5	97.1	16.1
LOS	F	F	А	E	E	А	F	С		E	F	В
Approach Delay		54.3			50.4			42.5			82.3	
Approach LOS	44.0	D		1/ 0	D	1/ 0	(0.0	D		0.0	F	
90th %ile Green (s)	16.0	16.0		16.0	16.0	16.0	62.0	84.0		8.0	30.0	30.0
90th %ile Term Code	Max	Max		Мах	Мах	Max	Мах	Max		Max	Max	Мах
70th %ile Green (s)	16.0	16.0		14.9	14.9	14.9	62.0	84.0		8.0	30.0	30.0
70th %ile Term Code	Мах	Мах		Gap	Gap	Gap	Мах	Мах		Max	Мах	Мах
50th %ile Green (s)	16.0	16.0		12.9	12.9	12.9	62.0	84.0		8.0	30.0	30.0
50th %ile Term Code	Max	Max		Gap	Gap	Gap	Мах	Мах		Max	Мах	Мах
30th %ile Green (s)	16.0	16.0		10.8	10.8	10.8	62.0	84.0		8.0	30.0	30.0
30th %ile Term Code	Max	Max		Gap	Gap	Gap	Max	Мах		Max	Max	Мах
10th %ile Green (s)	16.0	16.0		8.0	8.0	8.0	62.0	85.3		6.7	30.0	30.0
10th %ile Term Code	Max	Max		Gap	Gap	Gap	Мах	Hold		Gap	Max	Max
Queue Length 50th (ft)	~205	~218	58	32	89	0	~853	547		44	~436	50
Queue Length 95th (ft)	#387	#403	83	58	152	28	#1026	626		77	#533	155
Internal Link Dist (ft)		899			401			1531			890	
Turn Bay Length (ft)							300					
Base Capacity (vph)	197	203	1714	402	218	274	1559	3894		201	1409	549
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.04	1.05	0.40	0.19	0.47	0.28	1.07	0.78		0.49	1.08	0.59
Intersection Summary												
Area Type:	Other											
Cycle Length: 140												

## Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

Actuated Cycle Length: 136.5	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 54.0	Intersection LOS: D
Intersection Capacity Utilization 91.3%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 140	
70th %ile Actuated Cycle: 138.9	
50th %ile Actuated Cycle: 136.9	
30th %ile Actuated Cycle: 134.8	
10th %ile Actuated Cycle: 132	
<ul> <li>Volume exceeds capacity, queue is theoretically infinite.</li> </ul>	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be low	nger.
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Ashford-Dunwoody Rd. & Hammond Dr.

▶ _{ø1}	<b>↑</b> _{ø2}	<b>4</b> ₀₄	<b>★</b> _{ø8}
12 s 💦	38 s	20 s	20 s
<b>\$</b> ø5	🤹 ø6		
66 s	34 s		

## Lanes, Volumes, Timings 4: Perimeter Center Pkwy & State Farm Dr.

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			1			1		A		ľ	A	
Volume (vph)	0	0	20	0	0	50	0	695	60	140	1310	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	80		0
Storage Lanes	0		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.865			0.865		0.988			0.983	
Flt Protected										0.950		
Satd. Flow (prot)	0	0	1611	0	0	1611	0	3497	0	1770	3479	0
Flt Permitted										0.950		
Satd. Flow (perm)	0	0	1611	0	0	1611	0	3497	0	1770	3479	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		391			524			338			330	
Travel Time (s)		5.9			7.9			5.1			5.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	22	0	0	54	0	755	65	152	1424	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	22	0	0	54	0	820	0	152	1603	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type: C	Other											
Control Type: Unsignalized												
Intersection Capacity Utilizati	ion 51.5%			IC	U Level	of Service	A					
Analysis Period (min) 15												

Lanes, Volumes, Timings
5: Perimeter Center Pkwy & Goldkist Dr

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦ ۲	¢Î		1	4	11	۲	<u>††</u>	1	ኘኘ	<u></u> ∱1≱	
Volume (vph)	25	0	20	90	0	190	50	540	505	640	590	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	150		0
Storage Lanes	1		0	1		2	1		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	1.00	0.97	0.95	0.95
Frt		0.850				0.850			0.850		0.978	
Flt Protected	0.950			0.950	0.950		0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1681	1681	2787	1770	3539	1583	3433	3461	0
Flt Permitted	0.950			0.950	0.950		0.367			0.950		
Satd. Flow (perm)	1770	1583	0	1681	1681	2787	684	3539	1583	3433	3461	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		323				207			549		26	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		402			1304			742			338	
Travel Time (s)		6.1			19.8			11.2			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	0	22	98	0	207	54	587	549	696	641	109
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	27	22	0	49	49	207	54	587	549	696	750	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	0		12	Ū		24	Ū		24	Ŭ
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8	2		2			
Detector Phase	4	4		8	8	8	5	2	2	1	6	

## Lanes, Volumes, Timings 5: Perimeter Center Pkwy & Goldkist Dr.

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	43.0	43.0	37.0	72.0	
Total Split (%)	16.7%	16.7%		16.7%	16.7%	16.7%	6.7%	35.8%	35.8%	30.8%	60.0%	
Maximum Green (s)	16.0	16.0		16.0	16.0	16.0	4.0	39.0	39.0	33.0	68.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0		0	0		0	
Act Effct Green (s)	7.3	7.3		8.3	8.3	8.3	26.4	21.9	21.9	21.1	43.5	
Actuated g/C Ratio	0.10	0.10		0.12	0.12	0.12	0.38	0.31	0.31	0.30	0.62	
v/c Ratio	0.15	0.05		0.25	0.25	0.41	0.17	0.53	0.63	0.68	0.35	
Control Delay	39.8	0.2		39.0	39.0	8.9	10.9	24.0	6.0	27.2	8.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	39.8	0.2		39.0	39.0	8.9	10.9	24.0	6.0	27.2	8.5	
LOS	D	А		D	D	А	В	С	А	С	А	
Approach Delay		22.0			18.6			15.1			17.5	
Approach LOS		С			В			В			В	
90th %ile Green (s)	9.1	9.1		11.4	11.4	11.4	4.0	32.3	32.3	32.4	60.7	
90th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Мах	Gap	Gap	Gap	Hold	
70th %ile Green (s)	7.6	7.6		9.2	9.2	9.2	4.0	26.2	26.2	25.6	47.8	
70th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Мах	Gap	Gap	Gap	Hold	
50th %ile Green (s)	6.7	6.7		7.8	7.8	7.8	4.0	21.9	21.9	20.8	38.7	
50th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Мах	Gap	Gap	Gap	Hold	
30th %ile Green (s)	0.0	0.0		6.5	6.5	6.5	0.0	16.5	16.5	15.3	35.8	
30th %ile Term Code	Skip	Skip		Gap	Gap	Gap	Skip	Gap	Gap	Gap	Hold	
10th %ile Green (s)	0.0	0.0		5.5	5.5	5.5	0.0	12.9	12.9	12.2	29.1	
10th %ile Term Code	Skip	Skip		Gap	Gap	Gap	Skip	Gap	Gap	Gap	Hold	
Queue Length 50th (ft)	12	0		22	22	0	8	116	0	145	95	
Queue Length 95th (ft)	44	0		69	69	36	22	216	78	257	152	
Internal Link Dist (ft)		322			1224			662			258	
Turn Bay Length (ft)							200		200	150		
Base Capacity (vph)	445	640		423	423	856	324	2172	1183	1783	3052	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.06	0.03		0.12	0.12	0.24	0.17	0.27	0.46	0.39	0.25	
Intersection Summary	0.1											
Area Type:	Other											
Cycle Length: 120												

## Lanes, Volumes, Timings 5: Perimeter Center Pkwy & Goldkist Dr.

Actuated Cycle Length: 70.4		
Natural Cycle: 80		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.68		
Intersection Signal Delay: 16.7	Intersection LOS: B	
Intersection Capacity Utilization 62.9%	ICU Level of Service B	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 101.2		
70th %ile Actuated Cycle: 84.6		
50th %ile Actuated Cycle: 73.2		
30th %ile Actuated Cycle: 50.3		
10th %ile Actuated Cycle: 42.6		

Splits and Phases: 5: Perimeter Center Pkwy & Goldkist Dr.



# Lanes, Volumes, Timings 6: Perimeter Center Pkwy & Connector

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u> </u>	1	LDR	WDL	4	WDR	<u>الالا</u>	<b>†</b> ‡	NDR	<u>, 100</u>	<u></u>	1
Volume (vph)	180	0	30	15	0	20	160	895	10	10	570	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300	1700	1900	1900	1700	0	300	1900	0	300	1900	300
	300		0	0		0	300		0	300		300
Storage Lanes	25		0	25		0	25		0	25		1
Taper Length (ft)		1.00	1.00		1.00	1 00		0.05	0.05		0.05	1 00
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt	0.050	0.850			0.922		0.050	0.998		0.050		0.850
Flt Protected	0.950	4500	•	•	0.979	0	0.950	0500	<u>^</u>	0.950	0500	4500
Satd. Flow (prot)	1770	1583	0	0	1681	0	1770	3532	0	1770	3539	1583
Flt Permitted	0.732				0.896		0.417			0.256		
Satd. Flow (perm)	1364	1583	0	0	1539	0	777	3532	0	477	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		263			22			3				130
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		654			1393			1830			742	
Travel Time (s)		9.9			21.1			27.7			11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	0	33	16	0	22	174	973	11	11	620	130
Shared Lane Traffic (%)		-			-							
Lane Group Flow (vph)	196	33	0	0	38	0	174	984	0	11	620	130
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Len	12	Right	Len	12	Night	Len	12	Nyn	Leit	12	Right
Link Offset(ft)		0			0			0			0	
, <i>i</i>		16			16			16			16	
Crosswalk Width(ft)		10			10			10			10	
Two way Left Turn Lane	1 00	1.00	1 00	1 00	1.00	1 00	1.00	1.00	1.00	1.00	1.00	1 00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	0	9	15	0	9	15	0	9	15	0	9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			CI+Ex			CI+Ex	
Detector 2 Channel								SHEA				
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	Femi			Feiiii			Felli			Felli		Femi
	Δ	4		0	8		2	2		1	6	1
Permitted Phases	4	4		8	0		2	0		6	,	6
Detector Phase	4	4		8	8		2	2		6	6	6

Lanes, Volumes, Timings
6: Perimeter Center Pkwy & Connector

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Lane Group	EBL	EBT	EBR	- WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase			LBR	IIDL		<b>HBR</b>	HDL		TIDI (	ODL	001	ODI
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	20.0	20.0		20.0	20.0		38.0	38.0		38.0	38.0	38.0
Total Split (%)	36.7%	36.7%		36.7%	36.7%		63.3%	63.3%		63.3%	63.3%	63.3%
Maximum Green (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	34.0
Yellow Time (s)	3.5	3.5		3.5	3.5		34.0	34.0		34.0	34.0	34.0
All-Red Time (s)	3.5 0.5	5.5 0.5		0.5	3.5 0.5		0.5	3.5 0.5		5.5 0.5	5.5 0.5	5.5 0.5
• •	0.5	0.0		0.5	0.0		0.0	0.0		0.0	0.0	0.0
Lost Time Adjust (s)												
Total Lost Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	11.4	11.4			11.1		26.3	26.3		26.3	26.3	26.3
Actuated g/C Ratio	0.27	0.27			0.27		0.63	0.63		0.63	0.63	0.63
v/c Ratio	0.53	0.05			0.09		0.36	0.44		0.04	0.28	0.12
Control Delay	20.2	0.2			9.2		9.3	6.9		6.0	5.9	1.8
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	20.2	0.2			9.2		9.3	6.9		6.0	5.9	1.8
LOS	С	А			А		А	А		А	А	А
Approach Delay		17.3			9.2			7.3			5.2	
Approach LOS		В			А			А			А	
90th %ile Green (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	34.0
90th %ile Term Code	Max	Max		Hold	Hold		Max	Max		Hold	Hold	Hold
70th %ile Green (s)	13.4	13.4		13.4	13.4		23.4	23.4		23.4	23.4	23.4
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	Hold
50th %ile Green (s)	10.7	10.7		10.7	10.7		19.1	19.1		19.1	19.1	19.1
50th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
30th %ile Green (s)	9.4	9.4		9.4	9.4		21.9	21.9		21.9	21.9	21.9
30th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
10th %ile Green (s)	0.0	0.0		0.0	0.0		23.2	23.2		23.2	23.2	23.2
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	Dwell
Queue Length 50th (ft)	34	0			2		20	63		1	35	0
Queue Length 95th (ft)	112	0			22		71	140		7	81	18
Internal Link Dist (ft)		574			1313			1750			662	
Turn Bay Length (ft)	300						300			300		300
Base Capacity (vph)	626	869			719		635	2890		390	2895	1318
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.31	0.04			0.05		0.27	0.34		0.03	0.21	0.10
Intersection Summary					1.00					2.00		
Area Type:	Other											
Cycle Length: 60	Carlor											

Actuated Cycle Length: 41.8		
Natural Cycle: 40		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.53		
Intersection Signal Delay: 7.6	Intersection LOS: A	
Intersection Capacity Utilization 55.0%	ICU Level of Service B	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 60		
70th %ile Actuated Cycle: 44.8		
50th %ile Actuated Cycle: 37.8		
30th %ile Actuated Cycle: 39.3		
10th %ile Actuated Cycle: 27.2		

#### Splits and Phases: 6: Perimeter Center Pkwy & Connector



# Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

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	-		WDT			4
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ካካ	<u></u>	<u></u>	11	ካካ	1
Volume (vph)	550	230	300	515	335	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	300	0
Storage Lanes	2			2	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	0.88	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	3539	3539	2787	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	2787	3433	1583
Right Turn on Red	5755	3337	3337	Yes	3433	Yes
Satd. Flow (RTOR)				560		304
Link Speed (mph)		45	45	000	45	304
1 1 1						
Link Distance (ft)		806	1941		1830	
Travel Time (s)	0.00	12.2	29.4	0.00	27.7	0.00
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	250	326	560	364	304
Shared Lane Traffic (%)						
Lane Group Flow (vph)	598	250	326	560	364	304
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	1.00	1.00	9	15	9
Number of Detectors	1	2	2	1	13	1
Detector Template	Left	Z	Z	Right	Left	
•	20		100		20	Right
Leading Detector (ft)		100		20		20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel		OT EX	OT EX			
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases				Feilil		Femil
	5	2	6	1	4	4
Permitted Phases	-	0	,	6		4
Detector Phase	5	2	6	6	4	4

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase		201		, OK	ODL	ODI
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	20.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	33.3%	66.7%	33.3%	33.3%	33.3%	33.3%
Maximum Green (s)	16.0	36.0	16.0	16.0	16.0	16.0
Yellow Time (s)	3.5	30.0	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	4.0	Lag	Lag	4.0	4.0
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	S.U Min	S.0 Min	S.U Min	None	None
Walk Time (s)	NUTE	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		5.0 11.0	5.0 11.0	5.0 11.0	5.0 11.0	5.0 11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	13.1	28.6	11.3	11.3	10.8	10.8
Actuated g/C Ratio	0.27	28.0	0.24	0.24	0.23	0.23
v/c Ratio	0.27	0.60	0.24	0.24	0.23	0.23
	0.64 19.7	4.5	17.5	3.9	19.0	6.2
Control Delay	0.0	4.5 0.0	0.0	3.9 0.0	0.0	0.2 0.0
Queue Delay	0.0 19.7	4.5	17.5	0.0 3.9	0.0 19.0	6.2
Total Delay LOS		4.5 A	17.5 B	3.9 A		
	В	A 15.2	В 8.9	А	B 13.2	А
Approach Delay						
Approach LOS	14.0	B	A	14.0	B	15 /
90th %ile Green (s)	16.0	36.0	16.0	16.0	15.4	15.4
90th %ile Term Code	Max	Hold	Max	Max	Gap	Gap
70th %ile Green (s)	16.0 Max	34.0	14.0	14.0	13.1 Can	13.1 Can
70th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
50th %ile Green (s)	13.4	29.0	11.6	11.6	10.4	10.4
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
30th %ile Green (s)	11.3	24.6	9.3	9.3	8.9	8.9
30th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
10th %ile Green (s)	8.9	19.8	6.9	6.9	7.2	7.2
10th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
Queue Length 50th (ft)	72	12	38	0	45	0
Queue Length 95th (ft)	144	29	80	34	88	50
Internal Link Dist (ft)		726	1861		1750	
Turn Bay Length (ft)		0750	4004	4004	300	7.40
Base Capacity (vph)	1194	2750	1231	1334	1194	749
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.09	0.26	0.42	0.30	0.41
Intersection Summary						
Area Type:	Other					
Cycle Length: 60	Other					

## Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

Actuated Cycle Length: 47.7		
Natural Cycle: 55		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.64		
Intersection Signal Delay: 12.3	Intersection LOS: B	
Intersection Capacity Utilization 43.5%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 59.4		
70th %ile Actuated Cycle: 55.1		
50th %ile Actuated Cycle: 47.4		
30th %ile Actuated Cycle: 41.5		
10th %ile Actuated Cycle: 35		

#### Splits and Phases: 7: Lake Hearn Dr. & Perimeter Center Pkwy

<b>→</b> ø2		<b>∼&gt;</b> ø4
40 s		20 s
≯ _{ø5}	<b>4</b> ≏ ø6	
20 s	20 s	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	8.0	8.0	20.0	8.0	8.0	20.0		8.0	20.0	8.0
Total Split (s)	14.0	31.0	20.0	13.0	30.0	18.0	20.0	28.0		18.0	26.0	14.0
Total Split (%)	15.6%	34.4%	22.2%	14.4%	33.3%	20.0%	22.2%	31.1%		20.0%	28.9%	15.6%
Maximum Green (s)	10.0	27.0	16.0	9.0	26.0	14.0	16.0	24.0		14.0	22.0	10.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	None	None	C-Min	None	None	None		None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	10.1	27.2	46.1	8.9	26.1	44.1	14.9	23.8		14.1	23.0	37.1
Actuated g/C Ratio	0.11	0.30	0.51	0.10	0.29	0.49	0.17	0.26		0.16	0.26	0.41
v/c Ratio	0.82	0.72	0.24	0.72	0.86	0.47	0.74	0.93		0.89	0.51	0.52
Control Delay	57.8	32.5	8.2	51.3	34.7	10.4	44.1	46.6		58.1	31.4	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	57.8	32.5	8.2	51.3	34.7	10.4	44.1	46.6		58.1	31.4	19.8
LOS	E	С	А	D	С	В	D	D		E	С	В
Approach Delay		34.8			31.3			45.8			38.0	
Approach LOS		С			С			D			D	
90th %ile Green (s)	10.0	27.0	16.0	9.0	26.0	14.0	16.0	24.0		14.0	22.0	10.0
90th %ile Term Code	Max	Coord	Max	Max	Coord	Max	Max	Max		Max	Hold	Max
70th %ile Green (s)	10.0	27.0	16.0	9.0	26.0	14.0	16.0	24.0		14.0	22.0	10.0
70th %ile Term Code	Max	Coord	Max	Max	Coord	Max	Max	Max		Max	Hold	Max
50th %ile Green (s)	10.0	27.0	16.0	9.0	26.0	14.0	16.0	24.0		14.0	22.0	10.0
50th %ile Term Code	Max	Coord	Max	Max	Coord	Max	Max	Max		Max	Hold	Max
30th %ile Green (s)	10.0	27.0	14.4	9.0	26.0	14.0	14.4	24.0		14.0	23.6	10.0
30th %ile Term Code	Max	Coord	Gap	Max	Coord	Max	Gap	Max		Max	Hold	Max
10th %ile Green (s)	10.4	28.2	11.9	8.6	26.4	14.3	11.9	22.9		14.3	25.3	10.4
10th %ile Term Code	Gap	Coord	Gap	Gap	Coord	Gap	Gap	Gap		Gap	Hold	Gap
Queue Length 50th (ft)	91	204	37	76	145	68	115	236		139	120	125
Queue Length 95th (ft)	#159	270	75	m102	m240	m91	165	#356		#226	169	210
Internal Link Dist (ft)	2/0	1949		250	883	F 0 0	00	250		250	706	200
Turn Bay Length (ft)	260	1070	0//	250	1005	500	80	0/4		250	000	300
Base Capacity (vph)	384	1070	866	343	1025	807	610	964		536	903	687
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0 71	0	0 47	0	0 0.92		0	0	052
Reduced v/c Ratio	0.82	0.72	0.24	0.71	0.86	0.47	0.69	0.92		0.89	0.51	0.52
Intersection Summary	Other											
Area Type:	Other											

## Cycle Length: 90

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## Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

No-Build 2026 PM

Lanes, Volumes, Timings	No-Build 2026
1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.	PM
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green, Master Intersection	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	

Intersection LOS: D

ICU Level of Service D

Intersection Signal Delay: 37.3

Intersection Capacity Utilization 80.4%

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

<b>√</b> ø1	<b>₩</b> \$2 (R)	<b>\$</b> ø3	<b>∮</b> ø4
13 s	31 s	20 s	26 s
🐓 ø5	<b>▲</b> ● ø6 (R)	<b>\$</b> _{ø7}	<b>1</b> ø8
14 s	30 s	18 s	28 s

# Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

No-Build 2026 PM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<u></u>	1	5	<u>†</u> †	1	ሻ	<b>†</b>	1	ሻ	¢Î,	
Volume (vph)	50	1230	210	315	965	55	360	20	370	120	20	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	200		200	100		0	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.888	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	3539	1583	1770	1863	1583	1770	1654	0
Flt Permitted	0.249	0000	1000	0.101	0007	1000	0.421	1000	1000	0.743	1001	U
Satd. Flow (perm)	464	5085	1583	188	3539	1583	784	1863	1583	1384	1654	0
Right Turn on Red	101	0000	Yes	100	0007	Yes	701	1000	Yes	1001	1001	Yes
Satd. Flow (RTOR)			228			158			373		65	105
Link Speed (mph)		45	220		45	100		45	070		45	
Link Distance (ft)		963			979			533			748	
Travel Time (s)		14.6			14.8			8.1			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1337	228	342	1049	60	391	22	402	130	22	65
Shared Lane Traffic (%)	J4	1337	220	J4Z	1047	00	371	22	402	150	22	03
Lane Group Flow (vph)	54	1337	228	342	1049	60	391	22	402	130	87	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Len	24	Right	Len	24	Right	Len	12	Nyn	Len	12	Night
Link Offset(ft)		24			24			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	1.00	1.00	1.00	9	1.00	1.00	9	1.00	1.00	1.00
Number of Detectors	13	2	1	1	2	1	15	2	1	15	2	7
Detector Template	Left	∠ Thru	Right	Left	∠ Thru	Right	Left	∠ Thru	Right	Left	∠ Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	20	0	20	20	0	20	20	0	20	20	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel	CITLA	OITLA	CITLA	CITLA	OIT LA	CITLA	CITLA	CITLA	OITLA	CITLA	CITLA	
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	0.0	94	0.0	0.0	94	0.0	0.0	94	0.0	0.0	94	
Detector 2 Size(ft)		94			94			94			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
		CI+LX						CITEX				
Detector 2 Channel		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	nm . nt		Dorm	nment		Dorm	nment		Dorm	nment		
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2	2	1	6	1	3	8	0	7	4	
Permitted Phases	2	2	2	6	,	6	8	0	8	4	A	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	9.0	31.0	31.0	21.0	43.0	43.0	18.0	28.0	28.0	10.0	20.0	
Total Split (%)	10.0%	34.4%	34.4%	23.3%	47.8%	47.8%	20.0%	31.1%	31.1%	11.1%	22.2%	
Maximum Green (s)	5.0	27.0	27.0	17.0	39.0	39.0	14.0	24.0	24.0	6.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	43.0	36.4	36.4	57.7	49.0	49.0	24.3	14.1	14.1	12.8	7.7	
Actuated g/C Ratio	0.48	0.40	0.40	0.64	0.54	0.54	0.27	0.16	0.16	0.14	0.09	
v/c Ratio	0.17	0.65	0.29	0.81	0.54	0.06	1.05	0.08	0.72	0.58	0.44	
Control Delay	9.6	23.1	5.7	35.0	16.4	0.1	93.3	30.2	12.7	37.9	21.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	9.6	23.1	5.7	35.0	16.4	0.1	93.3	30.2	12.7	37.9	21.5	
LOS	А	С	А	D	В	А	F	С	В	D	С	
Approach Delay		20.2			20.1			51.8			31.3	
Approach LOS		С			С			D			С	
90th %ile Green (s)	8.1	27.0	27.0	20.8	39.7	39.7	14.0	20.2	20.2	6.0	12.2	
90th %ile Term Code	Gap	Coord	Coord	Мах	Coord	Coord	Max	Gap	Gap	Мах	Hold	
70th %ile Green (s)	7.0	30.5	30.5	21.1	44.6	44.6	14.0	16.4	16.4	6.0	8.4	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Мах	Hold	Hold	Мах	Gap	
50th %ile Green (s)	6.5	35.4	35.4	17.9	46.8	46.8	14.0	14.7	14.7	6.0	6.7	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Мах	Hold	Hold	Мах	Gap	
30th %ile Green (s)	6.0	39.4	39.4	15.1	48.5	48.5	14.0	13.5	13.5	6.0	5.5	
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Мах	Hold	Hold	Мах	Gap	
10th %ile Green (s)	0.0	49.5	49.5	11.7	65.2	65.2	16.8	5.5	5.5	7.3	0.0	
10th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Hold	Gap	Gap	Gap	Skip	
Queue Length 50th (ft)	12	158	14	131	202	0	~223	11	14	58	12	
Queue Length 95th (ft)	m18	m258	m24	#241	312	0	#306	29	97	96	54	
Internal Link Dist (ft)		883			899			453			668	
Turn Bay Length (ft)	250	200	250	200	<i></i>	200	100					
Base Capacity (vph)	317	2054	775	450	1925	933	371	496	695	224	347	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.17	0.65	0.29	0.76	0.54	0.06	1.05	0.04	0.58	0.58	0.25	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												

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#### Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Offset: 11 (12%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Actuated Cycle Length: 90

43 s

Natural Cycle: 70

Control Type: Actuated-Coordinated								
Maximum v/c Ratio: 1.05								
Intersection Signal Delay: 27.1								
Intersection Capacity Utilization 77.8%	ICU Level of Service D							
Analysis Period (min) 15								
<ul> <li>Volume exceeds capacity, queue is theoretically infinite.</li> </ul>								
Queue shown is maximum after two cycles.								
# 95th percentile volume exceeds capacity, queue may be long	ger.							
Queue shown is maximum after two cycles.								
m Volume for 95th percentile queue is metered by upstream si	ignal.							
Splits and Phases: 2: Shopping Center & Hammond Dr.								
🖌 ø1 🙀 📥 ø2 (R)	<b>↑</b> ø3	<b>↓</b> ø4						
21 s 31 s	18 s	20 s						
∮ø5   ♥ø6(R) ■	<b>→</b> ₉₇ <b>→</b>	ø8						

10 s

28 s

Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	<del>ا</del>	77	ካካ	•	1	ኘኘ	4111		ሻሻ	1111	1
Volume (vph)	290	45	1385	435	140	90	1065	2000	55	30	1700	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	1		2	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.88	0.97	1.00	1.00	0.97	0.86	0.86	0.97	0.86	1.00
Frt			0.850			0.850		0.996				0.850
Flt Protected	0.950	0.965		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1708	2787	3433	1863	1583	3433	6382	0	3433	6408	1583
Flt Permitted	0.950	0.965		0.950			0.950			0.950		
Satd. Flow (perm)	1681	1708	2787	3433	1863	1583	3433	6382	0	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			36			95		5				95
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		979			481			1611			970	
Travel Time (s)		14.8			7.3			24.4			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	49	1505	473	152	98	1158	2174	60	33	1848	141
Shared Lane Traffic (%)	43%											
Lane Group Flow (vph)	180	184	1505	473	152	98	1158	2234	0	33	1848	141
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24	, T		24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	. 4	4	4 5	. 8	8		5	2		1	6	
Permitted Phases						8						6
Detector Phase	4	4	4 5	8	8	8	5	2		1	6	6

No-Build 2026 8:00 am 12/16/2019 PM

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Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

No-Build 2026 ΡM

3: Ashford-Dunwo	oay Ra.	& Harr	imona	Dr.								PM
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	34.0	34.0		22.0	22.0	22.0	49.0	86.0		8.0	45.0	45.0
Total Split (%)	22.7%	22.7%		14.7%	14.7%	14.7%	32.7%	57.3%		5.3%	30.0%	30.0%
Maximum Green (s)	30.0	30.0		18.0	18.0	18.0	45.0	82.0		4.0	41.0	41.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	Min		None	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	0
Act Effct Green (s)	30.0	30.0	75.0	18.0	18.0	18.0	45.0	83.6		4.0	41.0	41.0
Actuated g/C Ratio	0.20	0.20	0.50	0.12	0.12	0.12	0.30	0.56		0.03	0.27	0.27
v/c Ratio	0.54	0.54	1.07	1.15	0.68	0.36	1.13	0.63		0.36	1.06	0.28
Control Delay	60.5	60.5	70.5	148.7	79.4	15.4	116.4	23.8		82.9	89.5	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	60.5	60.5	70.5	148.7	79.4	15.4	116.4	23.8		82.9	89.5	16.9
LOS	E	E	E	F	E	В	F	С		F	F	В
Approach Delay		68.5			116.1			55.4			84.3	
Approach LOS		E			F			E			F	
90th %ile Green (s)	30.0	30.0		18.0	18.0	18.0	45.0	82.0		4.0	41.0	41.0
90th %ile Term Code	Max	Мах		Мах	Мах	Мах	Мах	Мах		Мах	Max	Мах
70th %ile Green (s)	30.0	30.0		18.0	18.0	18.0	45.0	82.0		4.0	41.0	41.0
70th %ile Term Code	Max	Мах		Мах	Мах	Мах	Мах	Hold		Мах	Max	Мах
50th %ile Green (s)	30.0	30.0		18.0	18.0	18.0	45.0	82.0		4.0	41.0	41.0
50th %ile Term Code	Max	Мах		Мах	Мах	Мах	Мах	Hold		Мах	Max	Max
30th %ile Green (s)	30.0	30.0		18.0	18.0	18.0	45.0	82.0		4.0	41.0	41.0
30th %ile Term Code	Max	Мах		Мах	Max	Мах	Max	Hold		Мах	Мах	Max
10th %ile Green (s)	30.0	30.0		18.0	18.0	18.0	45.0	90.0		0.0	41.0	41.0
10th %ile Term Code	Мах	Мах		Мах	Max	Max	Мах	Hold		Skip	Max	Max
Queue Length 50th (ft)	168	171	~660	~279	145	3	~672	429		16	~573	34
Queue Length 95th (ft)	254	260	#977	#394	#228	59	#809	465		36	#648	93
Internal Link Dist (ft)		899			401			1531			890	
Turn Bay Length (ft)							300					
Base Capacity (vph)	336	341	1411	411	223	273	1029	3559		91	1751	501
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.54	0.54	1.07	1.15	0.68	0.36	1.13	0.63		0.36	1.06	0.28
Intersection Summary												
Area Type:	Other											
Cycle Length: 150												

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Actuated Cycle Length: 150	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 71.3	Intersection LOS: E
Intersection Capacity Utilization 95.5%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 150	
70th %ile Actuated Cycle: 150	
50th %ile Actuated Cycle: 150	
30th %ile Actuated Cycle: 150	
10th %ile Actuated Cycle: 150	
<ul> <li>Volume exceeds capacity, queue is theoretically infinite.</li> </ul>	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be lo	nger.
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Ashford-Dunwoody Rd. & Hammond Dr.

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8 s 86 s		34 s	22 s
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49 s	45 s		

Lanes, Volumes, Timings 4: Perimeter Center Pkwy & State Farm Driveway

#E.1	

No-Build 2026 PM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			1			1		<b>∱1</b> ≱		ሻ	<b>↑</b> ĵ≽	
Volume (vph)	0	0	70	0	0	180	0	1025	25	50	660	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	80		0
Storage Lanes	0		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.865			0.865		0.996			0.984	
Flt Protected										0.950		
Satd. Flow (prot)	0	0	1611	0	0	1611	0	3525	0	1770	3483	0
Flt Permitted										0.950		
Satd. Flow (perm)	0	0	1611	0	0	1611	0	3525	0	1770	3483	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		391			524			338			330	
Travel Time (s)		5.9			7.9			5.1			5.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	76	0	0	196	0	1114	27	54	717	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	76	0	0	196	0	1141	0	54	804	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
51	Other											
Control Type: Unsignalized												
Intersection Capacity Utilizat	ion 46.9%			IC	U Level	of Service	A					
Analysis Period (min) 15												

Lanes, Volumes, Timings
5: Perimeter Center Pkwy & Goldkist Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	¢Î		۲.	¢Î		۲.	A		ሻ	A	
Volume (vph)	105	0	110	105	0	235	20	710	5	20	665	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		0	200		200
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.850			0.850			0.999			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1770	1583	0	1770	3536	0	1770	3504	0
Flt Permitted	0.690			0.563			0.266			0.263		
Satd. Flow (perm)	1285	1583	0	1049	1583	0	495	3536	0	490	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		408			298			1			10	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		402			1304			742			338	
Travel Time (s)		6.1			19.8			11.2			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	114	0	120	114	0	255	22	772	5	22	723	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	120	0	114	255	0	22	777	0	22	772	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	0		12	5		12	5		12	Ŭ
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8	-		2			6	-	
Detector Phase	7	4		3	8		5	2		1	6	

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## Lanes, Volumes, Timings 5: Perimeter Center Pkwy & Goldkist Dr.

No-Build 2026 PM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		20.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	10.0	20.0		20.0	30.0		8.0	22.0		8.0	22.0	
Total Split (%)	14.3%	28.6%		28.6%	42.9%		11.4%	31.4%		11.4%	31.4%	
Maximum Green (s)	6.0	16.0		16.0	26.0		4.0	18.0		4.0	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)		5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)		11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0		0	0			0			0	
Act Effct Green (s)	10.4	5.8		12.9	7.1		16.9	16.3		16.9	16.3	
Actuated g/C Ratio	0.26	0.14		0.32	0.18		0.42	0.40		0.42	0.40	
v/c Ratio	0.28	0.21		0.24	0.49		0.07	0.55		0.07	0.54	
Control Delay	11.9	0.8		10.9	5.6		8.0	12.5		8.0	12.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.9	0.8		10.9	5.6		8.0	12.5		8.0	12.4	
LOS	В	A		В	A		A	B		A	В	
Approach Delay	_	6.2		_	7.3			12.4			12.3	
Approach LOS		A			A			В			В	
90th %ile Green (s)	6.0	5.7		10.1	9.8		4.0	18.0		4.0	18.0	
90th %ile Term Code	Мах	Hold		Gap	Gap		Max	Max		Max	Max	
70th %ile Green (s)	6.0	5.5		7.9	7.4		0.0	18.0		0.0	18.0	
70th %ile Term Code	Мах	Gap		Gap	Hold		Skip	Max		Skip	Max	
50th %ile Green (s)	6.0	5.5		7.1	6.6		0.0	15.9		0.0	15.9	
50th %ile Term Code	Мах	Gap		Gap	Hold		Skip	Gap		Skip	Hold	
30th %ile Green (s)	6.0	5.5		6.4	5.9		0.0	13.5		0.0	13.5	
30th %ile Term Code	Мах	Gap		Gap	Hold		Skip	Gap		Skip	Hold	
10th %ile Green (s)	0.0	5.5		0.0	5.5		0.0	14.1		0.0	14.1	
10th %ile Term Code	Skip	Hold		Skip	Gap		Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	15	0		15	0		3	67		3	66	
Queue Length 95th (ft)	52	0		52	36		12	159		12	157	
Internal Link Dist (ft)	02	322		02	1224		12	662		12	258	
Turn Bay Length (ft)		011					200	002		200	200	
Base Capacity (vph)	406	894		757	1161		338	1646		336	1636	
Starvation Cap Reductn	400	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.28	0.13		0.15	0.22		0.07	0.47		0.07	0.47	
	0.20	0.10		0.10	0.22		0.07	0.17		0.07	0.17	
Intersection Summary Area Type:	Other											
Cycle Length: 70	Uner											
Cycle Lengul. 70												

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Actuated Cycle Length: 40.5		
Natural Cycle: 70		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.55		
Intersection Signal Delay: 10.8	Intersection LOS: B	
Intersection Capacity Utilization 50.2%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 53.8		
70th %ile Actuated Cycle: 43.4		
50th %ile Actuated Cycle: 40.5		
30th %ile Actuated Cycle: 37.4		
10th %ile Actuated Cycle: 27.6		

Splits and Phases: 5: Perimeter Center Pkwy & Goldkist Dr.

øı	<b>↑</b> _{ø2}	<b>√</b> ø3	<u></u> ø4
8s	22 s	20 s	20 s
<b>1</b> ø5	<b>↓</b> ø6	▶ _{ø7} ★ _{ø8}	
8 s 🛛 👘	22 s	10 s 30 s	

# Lanes, Volumes, Timings 6: Perimeter Center Pkwy & Connector

No-Build 2026 ΡМ

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	¢î	2011		4		1	<b>≜</b> î∌		<u> </u>	<b>†</b> †	1
Volume (vph)	175	0	115	15	0	15	75	545	15	10	655	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300	1700	0	0	1700	0	300	1700	0	300	1700	300
Storage Lanes	1		0	0		0	1		0	1		1
Taper Length (ft)	25		0	25		U	25		U	25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt	1.00	0.850	1.00	1.00	0.932	1.00	1.00	0.996	0.75	1.00	0.70	0.850
Flt Protected	0.950	0.000			0.976		0.950	0.770		0.950		0.000
Satd. Flow (prot)	1770	1583	0	0	1694	0	1770	3525	0	1770	3539	1583
Flt Permitted	0.736	1000	0	0	0.864	0	0.361	5525	0	0.420	3337	1505
Satd. Flow (perm)	1371	1583	0	0	1500	0	672	3525	0	782	3539	1583
Right Turn on Red	1371	1000	Yes	0	1500	Yes	072	3929	Yes	702	3337	Yes
Satd. Flow (RTOR)		168	163		16	163		5	163			234
		45			45			45			45	204
Link Speed (mph)		45 654			1393			45 1830			742	
Link Distance (ft)		054 9.9										
Travel Time (s)	0.00		0.00	0.00	21.1	0.00	0.00	27.7	0.00	0.00	11.2	0.00
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	190	0	125	16	0	16	82	592	16	11	712	234
Shared Lane Traffic (%)	100	105	0	0	20	0	00	(00	0	11	710	004
Lane Group Flow (vph)	190	125	0	0	32	0	82	608	0	11	712	234
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	_
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6

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Lanes, Volumes, Timings
6: Perimeter Center Pkwy & Connector

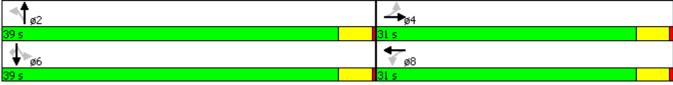
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	31.0	31.0		31.0	31.0		39.0	39.0		39.0	39.0	39.0
Total Split (%)	44.3%	44.3%		44.3%	44.3%		55.7%	55.7%		55.7%	55.7%	55.7%
Maximum Green (s)	27.0	27.0		27.0	27.0		35.0	35.0		35.0	35.0	35.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	10.8	10.8			10.8		18.2	18.2		18.2	18.2	18.2
Actuated g/C Ratio	0.29	0.29			0.29		0.49	0.49		0.49	0.49	0.49
v/c Ratio	0.48	0.22			0.07		0.25	0.35		0.03	0.41	0.26
Control Delay	15.1	2.4			7.3		9.0	7.0		6.3	7.5	2.2
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	15.1	2.4			7.3		9.0	7.0		6.3	7.5	2.2
LOS	В	А			А		А	А		А	А	A
Approach Delay		10.0			7.3			7.3			6.2	
Approach LOS		В			А			А			А	
90th %ile Green (s)	16.2	16.2		16.2	16.2		22.4	22.4		22.4	22.4	22.4
90th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	Gap
70th %ile Green (s)	12.1	12.1		12.1	12.1		17.1	17.1		17.1	17.1	17.1
70th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	Gap
50th %ile Green (s)	10.0	10.0		10.0	10.0		14.3	14.3		14.3	14.3	14.3
50th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	Gap
30th %ile Green (s)	8.6	8.6		8.6	8.6		13.7	13.7		13.7	13.7	13.7
30th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
10th %ile Green (s)	7.3	7.3		7.3	7.3		24.2	24.2		24.2	24.2	24.2
10th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
Queue Length 50th (ft)	25	0			2		8	32		1	38	0
Queue Length 95th (ft)	80	16			16		34	76		7	91	25
Internal Link Dist (ft)		574			1313			1750			662	
Turn Bay Length (ft)	300						300			300		300
Base Capacity (vph)	1019	1219			1118		615	3227		716	3240	1469
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.19	0.10			0.03		0.13	0.19		0.02	0.22	0.16
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												

No-Build 2026 8:00 am 12/16/2019 PM daf

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# 6: Perimeter Center Pkwy & Connector PM Actuated Cycle Length: 37.2 Natural Cycle: 40 Control Type: Semi Act-Uncoord Maximum v/c Ratio: 0.48 Intersection Signal Delay: 7.2 Intersection LOS: A Intersection Capacity Utilization 48.6% ICU Level of Service A Analysis Period (min) 15 90th %ile Actuated Cycle: 46.6 70th %ile Actuated Cycle: 37.2 50th %ile Actuated Cycle: 32.3 30th %ile Actuated Cycle: 30.3 10th %ile Actuated Cycle: 39.5

### Splits and Phases: 6: Perimeter Center Pkwy & Connector



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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	 ካካ	<u>†</u> †		11 11	<u></u> ነነ	
Volume (vph)	210	<b>TT</b> 430	<b>TT</b> 495	425	<b>4</b> 40	<b>r</b> 345
	1900	430 1900	495 1900	425 1900	440 1900	345 1900
Ideal Flow (vphpl)		1900	1900		300	
Storage Length (ft)	0 2			0		0
Storage Lanes				2	1 25	1
Taper Length (ft)	25	0.05	0.05	0.00	25	1.00
Lane Util. Factor	0.97	0.95	0.95	0.88	0.97	1.00
Frt Flt Droto ato d	0.050			0.850	0.050	0.850
Flt Protected	0.950	0500	0500	0707	0.950	4500
Satd. Flow (prot)	3433	3539	3539	2787	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	2787	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				462		375
Link Speed (mph)		45	45		45	
Link Distance (ft)		806	1941		1830	
Travel Time (s)		12.2	29.4		27.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	467	538	462	478	375
Shared Lane Traffic (%)						
Lane Group Flow (vph)	228	467	538	462	478	375
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	Lon	24	24	i tigrit	24	i tigrit
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		10	10		10	
	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor		1.00	1.00			
Turning Speed (mph)	15	0	2	9	15	9
Number of Detectors	1	2	2	1	1	1 Dialat
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel		OTIEN	OTIEN			
Detector 2 Extend (s)		0.0	0.0			
.,	Prot	NA	NA	Perm	Prot	Perm
Turn Type				Peilli		Peilli
Protected Phases	5	2	6	,	4	
Permitted Phases	-	0	,	6	4	4
Detector Phase	5	2	6	6	4	4

No-Build 2026 8:00 am 12/16/2019 PM daf

No-Build 2026 PM

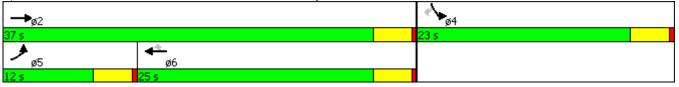
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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase					555	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	12.0	37.0	25.0	25.0	23.0	23.0
Total Split (%)	20.0%	61.7%	41.7%	41.7%	38.3%	38.3%
Maximum Green (s)	8.0	33.0	21.0	21.0	19.0	19.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	4.0	Lag	Lag	4.0	4.0
Lead-Lag Optimize?	Yes		Yes	Yes		
	3.0	3.0	3.0	3.0	3.0	3.0
Vehicle Extension (s)						
Recall Mode	None	Min	Min	Min	None	None
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	3.6	0	0	0	0	0
Act Effct Green (s)	7.9	23.7	15.1	15.1	12.8	12.8
Actuated g/C Ratio	0.17	0.52	0.33	0.33	0.28	0.28
v/c Ratio	0.38	0.25	0.46	0.37	0.49	0.52
Control Delay	21.9	6.2	14.5	2.7	16.8	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.9	6.2	14.5	2.7	16.8	5.2
LOS	С	А	В	А	В	А
Approach Delay		11.3	9.0		11.7	
Approach LOS		В	А		В	
90th %ile Green (s)	8.0	33.0	21.0	21.0	18.5	18.5
90th %ile Term Code	Max	Hold	Max	Max	Gap	Gap
70th %ile Green (s)	8.0	29.6	17.6	17.6	14.6	14.6
70th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
50th %ile Green (s)	8.0	26.9	14.9	14.9	12.7	12.7
50th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
30th %ile Green (s)	7.4	23.7	12.3	12.3	10.0	10.0
30th %ile Term Code		Hold		Gap		
10th %ile Green (s)	Gap 0.0	9.3	Gap 9.3	9.3	Gap 8.1	Gap 8.1
10th %ile Term Code						
	Skip	Hold	Gap	Gap	Gap	Gap
Queue Length 50th (ft)	29	28	62	0	57	0
Queue Length 95th (ft)	69	62	113	27	106	51
Internal Link Dist (ft)		726	1861		1750	
Turn Bay Length (ft)					300	
Base Capacity (vph)	660	2598	1788	1636	1569	927
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.18	0.30	0.28	0.30	0.40
Intersection Summary						
Area Type:	Other					
Cycle Length: 60	Und					
Cycle Length. 00						

No-Build 2026 8:00 am 12/16/2019 PM daf

## Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

Actuated Cycle Length: 45.3		
Natural Cycle: 50		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.52		
Intersection Signal Delay: 10.6	Intersection LOS: B	
Intersection Capacity Utilization 42.2%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 59.5		
70th %ile Actuated Cycle: 52.2		
50th %ile Actuated Cycle: 47.6		
30th %ile Actuated Cycle: 41.7		
10th %ile Actuated Cycle: 25.4		

Splits and Phases: 7: Lake Hearn Dr. & Perimeter Center Pkwy



Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

Build Existing Zoning 2026 ΡМ

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ኘ	<b>^</b>	1	ኘ	<b>††</b>	1	ኘኘ	A		ኘኘ	<b>^</b>	1
Volume (vph)	290	705	315	355	710	350	730	725	380	440	520	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	250		500	80		0	250		300
Storage Lanes	2		1	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.948				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3355	0	3433	3539	1583
Flt Permitted	0.950			0.133			0.270			0.950		
Satd. Flow (perm)	3433	3539	1583	481	3539	1583	976	3355	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			342			82		87	100			82
Link Speed (mph)		45	0.12		45	02		45			45	01
Link Distance (ft)		2029			963			330			786	
Travel Time (s)		30.7			14.6			5.0			11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	766	342	386	772	380	793	788	413	478	565	359
Shared Lane Traffic (%)	010	700	012	000	112	000	170	700	110	170	000	007
Lane Group Flow (vph)	315	766	342	386	772	380	793	1201	0	478	565	359
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Lon	24	rtigrit	Lon	24	Right	Lon	24	Right	Lon	24	Right
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	9	1.00	1.00	9	15	1.00	9	1.00	1.00	9
Number of Detectors	13	2	, 1	13	2	, 1	1	2	,	1	2	, 1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel		OITLA		CITLA			OITLA					
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)	0.0	94	0.0	0.0	94	0.0	0.0	94		0.0	94	0.0
Detector 2 Size(ft)		94			94						94	
		CI+Ex			CI+Ex			6 CI+Ex			CI+Ex	
Detector 2 Type Detector 2 Channel		CI+EX			CI+EX			CI+EX			CI+EX	
		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	Drot	0.0	Dorm	nmint	0.0	nmiair	nmint	0.0		Drot	0.0	nmiou
Turn Type	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov
Protected Phases	5	2	0	1	6	7	3	8		7	4	5
Permitted Phases	- -	0	2	6	,	6	8	0		7	4	4
Detector Phase	5	2	2	1	6	7	3	8		7	4	5

Lanes, Volumes, Timings	Bu
1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Ham	mond Dr.

Build 2026 - Proposed Zoning AM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<u>†</u> †	1	ሻሻ	<b>†</b> †	1	ሻሻ	A1⊅		ሻሻ	<b>†</b> †	7
Volume (vph)	240	950	650	660	660	370	300	390	130	370	610	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260	1700	0	250	1700	500	80	1700	0	250	1700	300
Storage Lanes	200		1	230		1	2		0	230		1
Taper Length (ft)	25		1	25		1	25		0	25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	0.95	1.00
Frt	0.77	0.75	0.850	0.77	0.75	0.850	0.77	0.963	0.75	0.77	0.75	0.850
Fit Protected	0.950		0.650	0.950		0.650	0.950	0.903		0.950		0.000
		2520	1583		2520	1583		2400	0		2520	1500
Satd. Flow (prot)	3433	3539	1003	3433	3539	1003	3433	3408	0	3433	3539	1583
Flt Permitted	0.950	2520	1500	0.111	2520	1500	0.253	2400	0	0.950	2520	1500
Satd. Flow (perm)	3433	3539	1583	401	3539	1583	914	3408	0	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			201			61		44				83
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2029			963			330			786	
Travel Time (s)		30.7			14.6			5.0			11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1033	707	717	717	402	326	424	141	402	663	250
Shared Lane Traffic (%)												
Lane Group Flow (vph)	261	1033	707	717	717	402	326	565	0	402	663	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24	Ũ		24	Ŭ		24	Ũ		24	Ũ
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	,	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	20	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0			0		
	20		20	20		0 20	20	0		20	0	0 20
Detector 1 Size(ft)		6 CL Ex			6 CI+Ex	CI+Ex					6 CL Ex	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+EX	CI+EX	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov
Protected Phases	5	2		1	6	. 7	3	8		7	4	. 5
Permitted Phases			2	6		6	8					4
Detector Phase	5	2	2	1	6	7	3	8		7	4	5
		-	-		5		-	-			•	

Lanes, Volumes, Timings Bu 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

Build 2026 - Proposed Zoning Dr. _____AM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0		8.0	20.0	8.0
Total Split (s)	16.0	37.0	37.0	18.0	39.0	15.0	10.0	20.0		15.0	25.0	16.0
Total Split (%)	17.8%	41.1%	41.1%	20.0%	43.3%	16.7%	11.1%	22.2%		16.7%	27.8%	17.8%
Maximum Green (s)	12.0	33.0	33.0	14.0	35.0	11.0	6.0	16.0		11.0	21.0	12.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None		None	None	None
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	11.1	33.0	33.0	49.9	36.1	51.1	21.8	15.8		11.0	20.8	35.9
Actuated g/C Ratio	0.12	0.37	0.37	0.55	0.40	0.57	0.24	0.18		0.12	0.23	0.40
v/c Ratio	0.62	0.80	1.00	1.02	0.51	0.43	0.84	0.89		0.96	0.81	0.37
Control Delay	44.0	31.1	56.2	62.2	24.9	13.8	44.4	51.4		75.9	41.9	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	44.0	31.1	56.2	62.2	24.9	13.8	44.4	51.4		75.9	41.9	13.9
LOS	D	С	E	Е	С	В	D	D		E	D	В
Approach Delay		41.6			37.0			48.8			46.9	
Approach LOS		D			D			D			D	
90th %ile Green (s)	12.0	33.0	33.0	14.0	35.0	11.0	6.0	16.0		11.0	21.0	12.0
90th %ile Term Code	Max	Coord	Coord	Мах	Coord	Мах	Max	Max		Max	Max	Max
70th %ile Green (s)	12.0	33.0	33.0	14.0	35.0	11.0	6.0	16.0		11.0	21.0	12.0
70th %ile Term Code	Max	Coord	Coord	Мах	Coord	Мах	Max	Max		Max	Max	Max
50th %ile Green (s)	12.0	33.0	33.0	14.0	35.0	11.0	6.0	16.0		11.0	21.0	12.0
50th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Max	Max		Max	Max	Max
30th %ile Green (s)	10.7	33.0	33.0	14.0	36.3	11.0	6.0	16.0		11.0	21.0	10.7
30th %ile Term Code	Gap		Coord	Мах	Coord	Max	Max	Max		Max	Hold	Gap
10th %ile Green (s)	8.8	33.0	33.0	15.0	39.2	11.0	6.0	15.0		11.0	20.0	8.8
10th %ile Term Code	Gap	Coord	Coord	Мах	Coord	Max	Мах	Gap		Max	Hold	Gap
Queue Length 50th (ft)	72	272	309	~180	136	83	68	154		119	187	61
Queue Length 95th (ft)	111	351	#561	#284	279	268	#112	#247		#209	#257	120
Internal Link Dist (ft)		1949			883			250			706	
Turn Bay Length (ft)	260			250		500	80			250		300
Base Capacity (vph)	457	1297	707	700	1419	925	389	642		419	825	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.57	0.80	1.00	1.02	0.51	0.43	0.84	0.88		0.96	0.80	0.36
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												

### Lanes, Volumes, Timings Build 2026 - Proposed Zoning 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

Actuated Cycle Length: 90							
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green, Master Intersection							
Natural Cycle: 90	Natural Cycle: 90						
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 1.02							
Intersection Signal Delay: 42.4	Intersection Signal Delay: 42.4 Intersection LOS: D						
Intersection Capacity Utilization 85.9%	ICU Level of Service E						
Analysis Period (min) 15							
<ul> <li>Volume exceeds capacity, queue is theoretical</li> </ul>	Ily infinite.						
Queue shown is maximum after two cycles.							
# 95th percentile volume exceeds capacity, queue may be longer.							
Queue shown is maximum after two cycles.							

Splits and Phases: 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.



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# Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Build 2026 - Proposed Zoning

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>†</b> ††	1	5	<u>††</u>	1	٦	↑	1	٦	4Î	
Volume (vph)	5	890	365	360	1560	25	120	5	110	15	5	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	200		200	100		0	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25		·	25			25		·	25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.71	0.850	1.00	0.70	0.850	1.00	1.00	0.850	1.00	0.897	1.00
Flt Protected	0.950		0.000	0.950		0.000	0.950		0.000	0.950	0.077	
Satd. Flow (prot)	1770	5085	1583	1770	3539	1583	1770	1863	1583	1770	1671	0
Flt Permitted	0.120	0000	1000	0.217	0007	1000	0.702	1000	1000	1770	1071	U
Satd. Flow (perm)	224	5085	1583	404	3539	1583	1308	1863	1583	1863	1671	0
Right Turn on Red	227	5005	Yes	FOF	5557	Yes	1000	1005	Yes	1005	1071	Yes
Satd. Flow (RTOR)			397			109			158		11	103
Link Speed (mph)		45	577		45	107		45	150		45	
Link Distance (ft)		963			979			533			748	
Travel Time (s)		14.6			14.8			8.1			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
	0.92	967	397	391	1696	0.92	130	0.92	120	16	0.92	0.92
Adj. Flow (vph)	0	907	397	391	1090	21	130	0	120	10	0	11
Shared Lane Traffic (%)	E	047	207	201	1404	77	120	E	120	14	17	0
Lane Group Flow (vph)	5	967	397	391	1696	27	130	5	120	16	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1.00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	0	9	15	0	9	15	0	9	15	0	9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	_
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	_
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			Cl+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	

Lanes, Volumes, Timings
2: Shopping Center & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	8.0	34.0	34.0	28.0	54.0	54.0	8.0	20.0	20.0	8.0	20.0	
Total Split (%)	8.9%	37.8%	37.8%	31.1%	60.0%	60.0%	8.9%	22.2%	22.2%	8.9%	22.2%	
Maximum Green (s)	4.0	30.0	30.0	24.0	50.0	50.0	4.0	16.0	16.0	4.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	52.7	47.1	47.1	69.7	67.8	67.8	11.5	8.5	8.5	7.4	6.3	
Actuated g/C Ratio	0.59	0.52	0.52	0.77	0.75	0.75	0.13	0.09	0.09	0.08	0.07	
v/c Ratio	0.02	0.36	0.39	0.66	0.64	0.02	0.60	0.03	0.41	0.00	0.12	
Control Delay	6.2	8.4	5.0	11.8	8.1	0.0	48.5	37.8	7.5	36.5	25.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	6.2	8.4	5.0	11.8	8.1	0.0	48.5	37.8	7.5	36.5	25.9	
LOS	A	A	A	B	A	A	D	07.0 D	A	D	C	
Approach Delay	7.	7.4		D	8.7	7.	D	29.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	D	31.2	
Approach LOS		A			A			27.0 C			C	
90th %ile Green (s)	5.8	36.1	36.1	25.3	55.6	55.6	4.0	8.6	8.6	4.0	8.6	
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Gap	Gap	Max	Hold	
70th %ile Green (s)	0.0	40.6	40.6	20.5	65.1	65.1	16.9	6.0	6.0	6.9	0.0	
70th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Hold	Gap	Gap	Gap	Skip	
50th %ile Green (s)	0.0	47.6	47.6	19.1	70.7	70.7	11.3	11.3	11.3	0.0	0.0	
50th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold	Skip	Skip	
30th %ile Green (s)	0.0	52.3	52.3	16.3	72.6	72.6	9.4	9.4	9.4	0.0	0.0	
30th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold	Skip	Skip	
10th %ile Green (s)	0.0	58.8	58.8	12.0	74.8	74.8	7.2	7.2	7.2	0.0	0.0	
10th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold	Skip	Skip	
Queue Length 50th (ft)	- Зкір 1	53	17	46	158	0	-0ap 71	3	0	Экір 9	3	
Queue Length 95th (ft)	m1	m185	m108	153	433	0	#133	13	29	25	22	
Internal Link Dist (ft)	1111	883	IIII00	155	899	0	#133	453	۲7	23	668	
Turn Bay Length (ft)	250	005	250	200	077	200	100	455			000	
Base Capacity (vph)	230	2659	1017	681	2664	1218	216	331	411	146	306	
Starvation Cap Reductn			0	001	2004	1210			411	140	0	
	0	0			0		0	0	0		0	
Spillback Cap Reductn	0		0	0		0	0	0		0		
Storage Cap Reductn Reduced v/c Ratio	0 0.02	0 0.36	0 0.39	0 0.57	0 0.64	0 0.02	0 0.60	0 0.02	0 0.29	0 0.11	0 0.05	
	0.02	0.00	0.37	0.37	0.04	0.02	0.00	0.02	0.27	0.11	0.00	
Intersection Summary	Other											
Area Type:	Other											
Cycle Length: 90												

# Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Actuated Cycle Length: 90								
Offset: 52 (58%), Referenced to phase 2:EBTL and 6:WBTL	Offset: 52 (58%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green							
Natural Cycle: 80								
Control Type: Actuated-Coordinated								
Maximum v/c Ratio: 0.66	Maximum v/c Ratio: 0.66							
Intersection Signal Delay: 9.8	Intersection LOS: A							
Intersection Capacity Utilization 69.8%	ICU Level of Service C							
Analysis Period (min) 15								
# 95th percentile volume exceeds capacity, queue may be longer.								
Queue shown is maximum after two cycles.								
m Volume for 95th percentile queue is metered by upstream	am signal.							

Splits and Phases: 2: Shopping Center & Hammond Dr.

<b>√</b> ø1	≠ <b>\$</b> ø2 (R)	ø3	<b>↓</b> _{ø4}
28 s	34 s	8s	20 s
✓ _{ø5} ♥ _{ø6(R)}		ø7	<b>▲</b> <i>ø</i> 8
8s <mark>5</mark> 4s		8s	20 s

Lanes, Volumes, Timings
3: Ashford-Dunwoody Rd. & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	ę	77	ካካ	•	1	ካካ	4111		ካካ	1111	1
Volume (vph)	265	120	630	70	95	70	1550	2400	395	90	1395	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	1		2	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.88	0.97	1.00	1.00	0.97	0.86	0.86	0.97	0.86	1.00
Frt			0.850			0.850		0.979				0.850
Flt Protected	0.950	0.981		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1736	2787	3433	1863	1583	3433	6273	0	3433	6408	1583
Flt Permitted	0.950	0.981		0.950			0.950			0.950		
Satd. Flow (perm)	1681	1736	2787	3433	1863	1583	3433	6273	0	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			283			101		53				258
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		979			481			1611			970	
Travel Time (s)		14.8			7.3			24.4			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	288	130	685	76	103	76	1685	2609	429	98	1516	326
Shared Lane Traffic (%)	29%											
Lane Group Flow (vph)	204	214	685	76	103	76	1685	3038	0	98	1516	326
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	. ng n
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		OTTEX			OTTEX			OTTER			OTTER	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	4 5	8 8	8	1 0111	5	2		1	6	1 0111
Permitted Phases	+	т	тJ	0	0	8	5	2			U	6
Detector Phase	4	4	4 5	8	8	8	5	2		1	6	6
	4	4	40	U	U	U	5	2		I	U	

Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	20.0	20.0		20.0	20.0	20.0	66.0	88.0		12.0	34.0	34.0
Total Split (%)	14.3%	14.3%		14.3%	14.3%	14.3%	47.1%	62.9%		8.6%	24.3%	24.3%
Maximum Green (s)	16.0	16.0		16.0	16.0	16.0	62.0	84.0		8.0	30.0	30.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	Min		None	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	0
Act Effct Green (s)	16.0	16.0	78.0	12.5	12.5	12.5	62.0	84.3		7.7	30.0	30.0
Actuated g/C Ratio	0.12	0.12	0.57	0.09	0.09	0.09	0.45	0.62		0.06	0.22	0.22
v/c Ratio	1.04	1.05	0.40	0.24	0.61	0.32	1.08	0.78		0.51	1.08	0.59
Control Delay	132.0	134.9	5.6	59.1	74.9	8.3	84.0	21.1		72.5	97.1	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	132.0	134.9	5.6	59.1	74.9	8.3	84.0	21.1		72.5	97.1	16.1
LOS	F	F	А	Е	Е	А	F	С		E	F	В
Approach Delay		54.1			50.4			43.5			82.3	
Approach LOS		D			D			D			F	
90th %ile Green (s)	16.0	16.0		16.0	16.0	16.0	62.0	84.0		8.0	30.0	30.0
90th %ile Term Code	Max	Max		Мах	Max	Max	Max	Max		Max	Max	Max
70th %ile Green (s)	16.0	16.0		14.9	14.9	14.9	62.0	84.0		8.0	30.0	30.0
70th %ile Term Code	Max	Max		Gap	Gap	Gap	Max	Max		Max	Max	Max
50th %ile Green (s)	16.0	16.0		12.9	12.9	12.9	62.0	84.0		8.0	30.0	30.0
50th %ile Term Code	Max	Max		Gap	Gap	Gap	Мах	Max		Max	Max	Max
30th %ile Green (s)	16.0	16.0		10.8	10.8	10.8	62.0	84.0		8.0	30.0	30.0
30th %ile Term Code	Max	Max		Gap	Gap	Gap	Мах	Мах		Max	Max	Max
10th %ile Green (s)	16.0	16.0		8.0	8.0	8.0	62.0	85.3		6.7	30.0	30.0
10th %ile Term Code	Max	Max		Gap	Gap	Gap	Мах	Hold		Gap	Max	Max
Queue Length 50th (ft)	~205	~218	59	32	89	0	~863	547		44	~436	50
Queue Length 95th (ft)	#387	#403	85	58	152	28	#1036	626		77	#533	155
Internal Link Dist (ft)		899			401			1531			890	
Turn Bay Length (ft)							300					
Base Capacity (vph)	197	203	1714	402	218	274	1559	3894		201	1409	549
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.04	1.05	0.40	0.19	0.47	0.28	1.08	0.78		0.49	1.08	0.59
Intersection Summary												
Area Type:	Other											
Cycle Length: 140												

# Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

Actuated Cycle Length: 136.5	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 54.6	Intersection LOS: D
Intersection Capacity Utilization 91.6%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 140	
70th %ile Actuated Cycle: 138.9	
50th %ile Actuated Cycle: 136.9	
30th %ile Actuated Cycle: 134.8	
10th %ile Actuated Cycle: 132	
<ul> <li>Volume exceeds capacity, queue is theoretically infinite.</li> </ul>	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be lo	nger.
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Ashford-Dunwoody Rd. & Hammond Dr.

► _{ø1}	<b>↑</b> ø2	<b>4</b> ₀₄	<b>♥</b> _{ø8}
12 s 💦	85	20 s	20 s
<b>\$</b> ø5	🚽 ø6		
66 s	34 s		

# Lanes, Volumes, Timings

Build 2026 - Proposed Zoning

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ane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBI
ane Configurations			1			1		A		ľ	A	
/olume (vph)	0	0	20	0	0	50	0	770	60	140	1395	16
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Storage Length (ft)	0		0	0		0	0		0	80		
Storage Lanes	0		1	0		1	0		0	1		
Taper Length (ft)	25			25			25			25		
ane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.9
Frt			0.865			0.865		0.989			0.984	
-It Protected										0.950		
Satd. Flow (prot)	0	0	1611	0	0	1611	0	3500	0	1770	3483	
-It Permitted										0.950		
Satd. Flow (perm)	0	0	1611	0	0	1611	0	3500	0	1770	3483	
ink Speed (mph)		45			45			45			45	
ink Distance (ft)		391			524			338			330	
Travel Time (s)		5.9			7.9			5.1			5.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.9
Adj. Flow (vph)	0	0	22	0	0	54	0	837	65	152	1516	17
Shared Lane Traffic (%)												
ane Group Flow (vph)	0	0	22	0	0	54	0	902	0	152	1695	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	Ν
ane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Rigl
Vedian Width(ft)		0			0			24			24	
_ink Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
Furning Speed (mph)	15		9	15		9	15		9	15		
Sign Control		Stop			Stop			Free			Free	
ntersection Summary												
	other											
Control Type: Unsignalized												
ntersection Capacity Utilizati	on 53.8%			IC	U Level	of Service	А					

Lanes, Volumes, Timings	
5: Perimeter Center Pkwy & Goldkist	Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	el el		1	<del>ا</del>	77	ľ	<u></u>	1	ሻሻ	A	
Volume (vph)	25	0	20	115	0	265	50	540	515	725	590	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	150		0
Storage Lanes	1		0	1		2	1		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	1.00	0.97	0.95	0.95
Frt		0.850				0.850			0.850		0.978	
Flt Protected	0.950			0.950	0.950		0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1681	1681	2787	1770	3539	1583	3433	3461	0
Flt Permitted	0.950			0.950	0.950		0.367			0.950		
Satd. Flow (perm)	1770	1583	0	1681	1681	2787	684	3539	1583	3433	3461	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		304				288			555		26	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		402			1304			742			338	
Travel Time (s)		6.1			19.8			11.2			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	0	22	125	0	288	54	587	560	788	641	109
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	27	22	0	62	63	288	54	587	560	788	750	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	Ū		12	Ű		24	Ű		24	Ű
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases	. 4	4		8	8		5	2		1	6	
Permitted Phases						8	2		2			
Detector Phase	4	4		8	8	8	5	2	2	1	6	

Lanes, Volumes, Timings 5: Perimeter Center Pkwy & Goldkist Dr. Build 2026 - Proposed Zoning

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	39.0	39.0	41.0	72.0	
Total Split (%)	16.7%	16.7%		16.7%	16.7%	16.7%	6.7%	32.5%	32.5%	34.2%	60.0%	
Maximum Green (s)	16.0	16.0		16.0	16.0	16.0	4.0	35.0	35.0	37.0	68.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	0.1	4.0		7.0	1.0	1.0	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	NOTIC	5.0	5.0	NONC	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0		0	0		0	
Act Effct Green (s)	7.4	7.4		9.2	9.2	9.2	27.3	22.9	22.9	24.3	47.7	
Actuated g/C Ratio	0.10	0.10		0.12	0.12	0.12	0.36	0.30	0.30	0.32	0.63	
v/c Ratio	0.10	0.05		0.12	0.12	0.12	0.30	0.55	0.65	0.52	0.34	
Control Delay	43.4	0.03		41.8	41.8	8.4	12.2	26.5	6.6	28.6	8.5	
Queue Delay	0.0	0.2		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	43.4	0.2		41.8	41.8	8.4	12.2	26.5	6.6	28.6	8.5	
LOS	D	A		-1.0 D	ч1.0 D	A	B	20.0 C	A	20.0 C	0.5 A	
Approach Delay	D	24.0		U	18.5	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	U	16.6	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0	18.8	
Approach LOS		24.0 C			В			B			B	
90th %ile Green (s)	9.3	9.3		14.1	14.1	14.1	4.0	34.1	34.1	37.0	67.1	
90th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Max	Gap	Gap	Max	Hold	
70th %ile Green (s)	7.8	7.8		10.4	10.4	10.4	4.0	27.1	27.1	29.5	52.6	
70th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Max	Gap	Gap	Gap	Hold	
50th %ile Green (s)	6.8	6.8		8.7	8.7	8.7	4.0	22.8	22.8	24.9	43.7	
50th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Max	Gap	Gap	Gap	Hold	
30th %ile Green (s)	0.0	0.0		7.0	7.0	7.0	0.0	17.0	17.0	17.4	38.4	
30th %ile Term Code	Skip	Skip		Gap	Gap	Gap	Skip	Gap	Gap	Gap	Hold	
10th %ile Green (s)	0.0	0.0		5.7	5.7	5.7	0.0	13.3	13.3	13.7	31.0	
10th %ile Term Code	Skip	Skip		Gap	Gap	Gap	Skip	Gap	Gap	Gap	Hold	
Queue Length 50th (ft)	13	0		30	30	0	8	129	2	176	98	
Queue Length 95th (ft)	47	0		87	88	42	26	237	90	315	162	
Internal Link Dist (ft)	11	322		07	1224	72	20	662	70	515	258	
Turn Bay Length (ft)		522			1227		200	002	200	150	200	
Base Capacity (vph)	417	606		396	396	877	311	1827	1085	1874	2927	
Starvation Cap Reductn	0	000		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.06	0.04		0.16	0.16	0.33	0.17	0.32	0.52	0.42	0.26	
Intersection Summary				0.110			0	0.02	0.02	0.112	0.20	
Area Type: Cycle Length: 120	Other											

# Lanes, Volumes, Timings 5: Perimeter Center Pkwy & Goldkist Dr.

Actuated Cycle Length: 75.7		
Natural Cycle: 80		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.71		
Intersection Signal Delay: 18.0	Intersection LOS: B	
Intersection Capacity Utilization 65.9%	ICU Level of Service C	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 110.5		
70th %ile Actuated Cycle: 90.8		
50th %ile Actuated Cycle: 79.2		
30th %ile Actuated Cycle: 53.4		
10th %ile Actuated Cycle: 44.7		

Splits and Phases: 5: Perimeter Center Pkwy & Goldkist Dr.



# Lanes, \ 6: Perim

Volumes, Timings	
meter Center Pkwv	& Connector

Build 2026 - Proposed Zonir	١g
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u>۲</u>	eî.			\$		۲	A		۲	<u></u>	1
Volume (vph)	190	0	30	15	0	20	160	895	10	10	630	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	300		0	300		300
Storage Lanes	1		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.850			0.922			0.998				0.850
Flt Protected	0.950	01000			0.979		0.950	01770		0.950		01000
Satd. Flow (prot)	1770	1583	0	0	1681	0	1770	3532	0	1770	3539	1583
Flt Permitted	0.732	1000	0	U	0.897	Ū	0.385	0002	Ū	0.256	0007	1000
Satd. Flow (perm)	1364	1583	0	0	1541	0	717	3532	0	477	3539	1583
Right Turn on Red	1304	1000	Yes	0	1041	Yes	, , , ,	0002	Yes	777	5557	Yes
Satd. Flow (RTOR)		225	103		22	103		3	103			136
Link Speed (mph)		45			45			45			45	130
Link Distance (ft)		654			1393			1830			742	
Travel Time (s)		9.9			21.1			27.7			11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	0	33	16	0	22	174	973	11	11	685	136
Shared Lane Traffic (%)	207	22	0	0	20	0	174	00.4	0	11	(05	10/
Lane Group Flow (vph)	207	33	0	0	38	0	174	984	0	11	685	136
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1 0111	4		1 0111	8		1 0111	2		1 0111	6	1 0111
Permitted Phases	4	т		8	U		2	2		6	U	6
Detector Phase	4	4		8	8		2	2		6	6	6
	4	4		0	0		۷	Z		U	U	0

Lanes, Volumes, Timings
6: Perimeter Center Pkwy & Connector

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	22.0	22.0		22.0	22.0		38.0	38.0		38.0	38.0	38.0
Total Split (%)	36.7%	36.7%		36.7%	36.7%		63.3%	63.3%		63.3%	63.3%	63.3%
Maximum Green (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	34.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	11.9	11.9			11.3		26.9	26.9		26.9	26.9	26.9
Actuated g/C Ratio	0.28	0.28			0.26		0.63	0.63		0.63	0.63	0.63
v/c Ratio	0.55	0.05			0.09		0.39	0.44		0.04	0.31	0.13
Control Delay	20.8	0.2			9.3		10.2	7.0		6.0	6.1	1.8
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	20.8	0.2			9.3		10.2	7.0		6.0	6.1	1.8
LOS	С	А			А		В	А		А	А	А
Approach Delay		17.9			9.3			7.5			5.4	
Approach LOS		В			А			А			А	
90th %ile Green (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	34.0
90th %ile Term Code	Max	Max		Hold	Hold		Max	Мах		Hold	Hold	Hold
70th %ile Green (s)	14.3	14.3		14.3	14.3		25.1	25.1		25.1	25.1	25.1
70th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Gap		Hold	Hold	Hold
50th %ile Green (s)	11.0	11.0		11.0	11.0		19.0	19.0		19.0	19.0	19.0
50th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
30th %ile Green (s)	9.6	9.6		9.6	9.6		21.3	21.3		21.3	21.3	21.3
30th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
10th %ile Green (s)	0.0	0.0		0.0	0.0		25.7	25.7		25.7	25.7	25.7
10th %ile Term Code	Skip	Skip		Skip	Skip		Dwell	Dwell		Dwell	Dwell	Dwell
Queue Length 50th (ft)	36	0			2		21	64		1	40	0
Queue Length 95th (ft)	118	0			22		75	140		7	90	18
Internal Link Dist (ft)		574			1313			1750			662	
Turn Bay Length (ft)	300	000			(0)		300	0007		300	00.40	300
Base Capacity (vph)	606	828			696		596	2937		396	2943	1339
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.34	0.04			0.05		0.29	0.34		0.03	0.23	0.10
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												

Build 2026 - Proposed Zoning

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Actuated Cycle Length: 42.8		
Natural Cycle: 45		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.55		
Intersection Signal Delay: 7.9	Intersection LOS: A	
Intersection Capacity Utilization 55.6%	ICU Level of Service B	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 60		
70th %ile Actuated Cycle: 47.4		
50th %ile Actuated Cycle: 38		
30th %ile Actuated Cycle: 38.9		
10th %ile Actuated Cycle: 29.7		

Splits and Phases: 6: Perimeter Center Pkwy & Connector



# Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ካካ	<u></u>	<u></u>	11	ካካ	1
Volume (vph)	550	230	300	515	335	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	300	0
Storage Lanes	2			2	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	0.88	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	3539	3539	2787	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	2787	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				560		370
Link Speed (mph)		45	45		45	
Link Distance (ft)		806	1941		1830	
Travel Time (s)		12.2	29.4		27.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	250	326	560	364	370
Shared Lane Traffic (%)	090	200	320	500	304	370
	E 00	250	224	E40	244	270
Lane Group Flow (vph)	598	250	326	560	364	370
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		24	24		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel		CITEX	OI+LX			
	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase					555	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	20.0	40.0	20.0	20.0	20.0	20.0
Total Split (%)	33.3%	66.7%	33.3%	33.3%	33.3%	33.3%
		36.0	16.0	16.0	33.3 <i>1</i> 0 16.0	33.3 <i>1</i> 0 16.0
Maximum Green (s)	16.0					
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0
Act Effct Green (s)	13.1	28.6	11.3	11.3	10.9	10.9
Actuated g/C Ratio	0.27	0.60	0.24	0.24	0.23	0.23
v/c Ratio	0.27	0.00	0.24	0.24	0.23	0.23
Control Delay	19.9	4.6	17.7	3.9	18.9	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	4.6	17.7	3.9	18.9	6.5
LOS	В	А	В	А	В	А
Approach Delay		15.3	8.9		12.6	
Approach LOS		В	А		В	
90th %ile Green (s)	16.0	36.0	16.0	16.0	16.0	16.0
90th %ile Term Code	Мах	Hold	Мах	Мах	Max	Max
70th %ile Green (s)	16.0	34.0	14.0	14.0	13.1	13.1
70th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
50th %ile Green (s)	13.4	29.0	11.6	11.6	10.4	10.4
50th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
30th %ile Green (s)	11.3	24.6	9.3	9.3	8.9	8.9
30th %ile Term Code		Hold				
	Gap		Gap	Gap	Gap	Gap
10th %ile Green (s)	8.9	19.8	6.9	6.9	7.2	7.2
10th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
Queue Length 50th (ft)	72	12	38	0	45	0
Queue Length 95th (ft)	146	30	81	35	88	55
Internal Link Dist (ft)		726	1861		1750	
Turn Bay Length (ft)					300	
Base Capacity (vph)	1192	2746	1229	1333	1192	791
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.09	0.27	0.42	0.31	0.47
Intersection Summary						
Area Type:	Other					
Cycle Length: 60	Other					
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# Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

Actuated Cycle Length: 47.8		
Natural Cycle: 55		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.64		
Intersection Signal Delay: 12.2	Intersection LOS: B	
Intersection Capacity Utilization 43.5%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 60		
70th %ile Actuated Cycle: 55.1		
50th %ile Actuated Cycle: 47.4		
30th %ile Actuated Cycle: 41.5		
10th %ile Actuated Cycle: 35		

### Splits and Phases: 7: Lake Hearn Dr. & Perimeter Center Pkwy

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40 s		20 s
≯ _{ø5}	<b>4</b> ≏ ø6	
20 s	20 s	

# Lanes, Volumes, Timings 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0		8.0	20.0	8.0
Total Split (s)	16.0	38.0	38.0	14.0	36.0	22.0	32.0	46.0		22.0	36.0	16.0
Total Split (%)	13.3%	31.7%	31.7%	11.7%	30.0%	18.3%	26.7%	38.3%		18.3%	30.0%	13.3%
Maximum Green (s)	12.0	34.0	34.0	10.0	32.0	18.0	28.0	42.0		18.0	32.0	12.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None		None	None	None
Walk Time (s)	10110	5.0	5.0	110110	5.0	110110	nono	5.0		110110	5.0	110110
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	12.3	32.7	32.7	41.4	30.9	53.4	62.8	42.3		18.6	38.0	54.3
Actuated g/C Ratio	0.10	0.27	0.27	0.34	0.26	0.44	0.52	0.35		0.16	0.32	0.45
v/c Ratio	0.89	0.80	0.50	0.91	0.85	0.51	0.81	0.97		0.90	0.50	0.47
Control Delay	81.3	47.5	6.3	60.8	47.4	14.5	24.3	55.3		71.1	36.4	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	81.3	47.5	6.3	60.8	47.4	14.5	24.3	55.3		71.1	36.4	20.8
LOS	F	D	A	E	D	B	C 21.5	E		E	D	20.0 C
Approach Delay	•	45.1	7.	-	42.6	D	Ŭ	43.0		L	44.2	Ű
Approach LOS		D			D			D			D	
90th %ile Green (s)	12.0	34.0	34.0	10.0	32.0	18.0	28.0	42.0		18.0	32.0	12.0
90th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Max	Max		Max	Hold	Max
70th %ile Green (s)	12.0	34.0	34.0	10.0	32.0	18.0	26.4	42.0		18.0	33.6	12.0
70th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Gap	Max		Max	Hold	Max
50th %ile Green (s)	12.0	34.0	34.0	10.0	32.0	18.0	23.3	42.0		18.0	36.7	12.0
50th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Gap	Max		Max	Hold	Max
30th %ile Green (s)	12.0	31.5	31.5	10.0	29.5	20.5	19.8	42.0		20.5	42.7	12.0
30th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Gap	Max		Max	Hold	Max
10th %ile Green (s)	13.5	29.8	29.8	12.5	28.8	18.4	16.8	43.3		18.4	44.9	13.5
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Gap	Gap	Gap		Gap	Hold	Gap
Queue Length 50th (ft)	126	285	0	123	203	99	184	453		190	190	148
Queue Length 95th (ft)	#212	360	71	m#174	m303	m134	232	#610		#291	262	254
Internal Link Dist (ft)	"212	1949	7.1	111// 17-4	883	IIII J T	202	250		11 2 7 1	706	201
Turn Bay Length (ft)	260	1/4/		250	005	500	80	200		250	700	300
Base Capacity (vph)	352	1002	693	424	943	750	1100	1237		531	1120	761
Starvation Cap Reductn	0	0	075	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.89	0.76	0.49	0.91	0.82	0.51	0.72	0.97		0.90	0.50	0.47
Intersection Summary	0.07	0.70	0.77	0.71	0.02	0.01	0.72	0.77		0.70	0.00	0.77
· · · · · · · · · · · · · · · · · · ·	Other											
Area Type: Cyclo Longth: 120	Unel											
Cycle Length: 120												

Lanes, Volumes, Timings

Actuated Cycle Length: 120									
Offset: 0 (0%), Referenced to phase 2:EBT and 6:W	Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green, Master Intersection								
Natural Cycle: 80									
Control Type: Actuated-Coordinated									
Maximum v/c Ratio: 0.97									
Intersection Signal Delay: 43.6	Intersection LOS: D								
Intersection Capacity Utilization 87.7%	ICU Level of Service E								
Analysis Period (min) 15									
# 95th percentile volume exceeds capacity, queue	e may be longer.								
Queue shown is maximum after two cycles.									
m Volume for 95th percentile queue is metered by	upstream signal.								

Splits and Phases: 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

<b>√</b> ø1	<b>₩</b> ø2 (R)	<b>▲</b> ø3	ø4
14 s	38 s	32 s	36 s
<b>₽</b> ø5	🕈 🗸 🗸 🗸	<b>\$</b> _{ø7}	
16 s	36 s	22 s	46 s

ΡМ

# Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	<u> </u>	1	5	<b>†</b> †	1	ሻ	1	1	۲	eî 👘	
Volume (vph)	50	1340	210	315	995	55	360	20	370	120	20	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	200		200	100		0	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.888	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	3539	1583	1770	1863	1583	1770	1654	0
Flt Permitted	0.248			0.076			0.365			0.743		
Satd. Flow (perm)	462	5085	1583	142	3539	1583	680	1863	1583	1384	1654	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			211			118			384		65	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		963			979			533			748	
Travel Time (s)		14.6			14.8			8.1			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1457	228	342	1082	60	391	22	402	130	22	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	1457	228	342	1082	60	391	22	402	130	87	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24	5		24	5		12	5		12	5
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2	2	2	6	Ū	6	8	U	8	4	,	
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
	5	2	2		0	0	0	0	5	,	'	

Lanes, Volumes, Timings
2: Shopping Center & Hammond Dr.

z. Shopping Cente	٠		~	~	+	•	•	+	*	5	1	7
	-		•	•	MOT	•			7		<b>*</b>	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBI
Switch Phase	1.0	4.0	4.0	1.0	4.0	4.0	4.0	1.0	1.0	1.0	1.0	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	9.0	44.0	44.0	29.0	64.0	64.0	27.0	34.0	34.0	13.0	20.0	
Total Split (%)	7.5%	36.7%	36.7%	24.2%	53.3%	53.3%	22.5%	28.3%	28.3%	10.8%	16.7%	
Maximum Green (s)	5.0	40.0	40.0	25.0	60.0	60.0	23.0	30.0	30.0	9.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	56.8	49.9	49.9	77.0	68.1	68.1	35.0	21.9	21.9	16.9	7.8	
Actuated g/C Ratio	0.47	0.42	0.42	0.64	0.57	0.57	0.29	0.18	0.18	0.14	0.06	
v/c Ratio	0.18	0.69	0.29	0.84	0.54	0.06	0.96	0.06	0.67	0.58	0.52	
Control Delay	8.6	21.8	1.6	50.2	18.5	0.1	74.9	39.8	11.1	45.1	29.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	8.6	21.8	1.6	50.2	18.5	0.1	74.9	39.8	11.1	45.1	29.9	
LOS	А	С	А	D	В	А	E	D	В	D	С	
Approach Delay		18.8			25.1			42.5			39.0	
Approach LOS		В			С			D			D	
90th %ile Green (s)	8.4	40.0	40.0	29.1	60.7	60.7	23.0	25.9	25.9	9.0	11.9	
90th %ile Term Code	Gap	Coord	Coord	Мах	Coord	Coord	Max	Hold	Hold	Max	Gap	
70th %ile Green (s)	7.4	44.6	44.6	27.3	64.5	64.5	23.0	23.1	23.1	9.0	9.1	
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold	Hold	Max	Gap	
50th %ile Green (s)	6.8	50.6	50.6	23.3	67.1	67.1	23.0	21.1	21.1	9.0	7.1	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold	Hold	Max	Gap	
30th %ile Green (s)	6.3	53.0	53.0	19.9	66.6	66.6	25.6	20.7	20.7	10.4	5.5	
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Max	Hold	Hold	Gap	Gap	
10th %ile Green (s)	0.0	61.2	61.2	16.2	81.4	81.4	21.1	18.6	18.6	8.0	5.5	
10th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold	Gap	Gap	
Queue Length 50th (ft)	10	246	0	200	267	0	279	14	12	78	17	
Queue Length 95th (ft)	m15	m383	m11	306	372	0	#405	37	105	124	67	
Internal Link Dist (ft)		883			899			453			668	
Turn Bay Length (ft)	250		250	200		200	100					
Base Capacity (vph)	293	2113	781	447	2007	949	411	465	683	226	276	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.18	0.69	0.29	0.77	0.54	0.06	0.95	0.05	0.59	0.58	0.32	
Intersection Summary												
Area Type:	Other											
Cycle Length: 120												

# Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Actuated Cycle Length: 120						
Offset: 24 (20%), Referenced to phase 2:EBTL and 6:WBTL,	Start of Green					
Natural Cycle: 80						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.96						
Intersection Signal Delay: 26.5	Intersection LOS: C					
Intersection Capacity Utilization 80.0%	ICU Level of Service D					
Analysis Period (min) 15						
# 95th percentile volume exceeds capacity, queue may be le	onger.					
Queue shown is maximum after two cycles.						
m Volume for 95th percentile queue is metered by upstream	i signal.					

Splits and Phases: 2: Shopping Center & Hammond Dr.

<b>√</b> ø1	■ 🕹 ø2 (R)	<b>1</b> ø3		₩ø4
29 s	44 s	27 s		20 s
▶ 🗲 🗲 ø6 (R)	•	<b>▶</b> ø7	<b>1</b> ø8	
9s <mark>6</mark> 4s		13 s	34 s	

Lanes, Volumes, Timing	gs
3: Ashford-Dunwoody R	Rd. & Hammond Dr.

	٦	-	$\mathbf{F}$	4	+	•	1	Ť	۲	1	ŧ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	र्भ	11	ካካ	<b>†</b>	1	ኘኘ	4111 ·		ኘኘ	1111	1
Volume (vph)	290	45	1495	435	140	90	1095	2000	55	30	1700	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	0		0
Storage Lanes	1		2	2		1	2		0	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.88	0.97	1.00	1.00	0.97	0.86	0.86	0.97	0.86	1.00
Frt			0.850			0.850		0.996				0.850
Flt Protected	0.950	0.965		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1708	2787	3433	1863	1583	3433	6382	0	3433	6408	1583
Flt Permitted	0.950	0.965		0.950			0.950			0.950		
Satd. Flow (perm)	1681	1708	2787	3433	1863	1583	3433	6382	0	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			39			101		5				102
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		979			481			1611			970	
Travel Time (s)		14.8			7.3			24.4			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	49	1625	473	152	98	1190	2174	60	33	1848	141
Shared Lane Traffic (%)	43%											
Lane Group Flow (vph)	180	184	1625	473	152	98	1190	2234	0	33	1848	141
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24	0		24	0		24	0		24	Ŭ
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	4 5	8	8		5	2		1	6	
Permitted Phases					-	8	-	_		·	-	6
Detector Phase	4	4	4 5	8	8	8	5	2		1	6	6
		•						_		•		

Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

Build Existing Zoning 2026 PM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	35.0	35.0		20.0	20.0	20.0	43.0	77.0		8.0	42.0	42.0
Total Split (%)	25.0%	25.0%		14.3%	14.3%	14.3%	30.7%	55.0%		5.7%	30.0%	30.0%
Maximum Green (s)	31.0	31.0		16.0	16.0	16.0	39.0	73.0		4.0	38.0	38.0
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	110	110		1.0	110	1.0	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	Min		None	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	NONC	5.0		NOTIC	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	0
Act Effct Green (s)	31.0	31.0	70.0	16.0	16.0	16.0	39.0	76.2		4.0	38.0	38.0
• •	0.22	0.22	0.50	0.11	0.11	0.11	0.28	0.54		0.03	0.27	0.27
Actuated g/C Ratio	0.22	0.22	1.15	1.21		0.11	1.24	0.54			1.06	0.27
v/c Ratio		0.49 52.7			0.72		1.24	23.8		0.34		
Control Delay	52.6		100.9	165.6	79.0	13.5				76.1	88.8	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	52.6	52.7	100.9	165.6	79.0	13.5	161.1	23.8		76.1	88.8	14.4
LOS Annuach Dalau	D	D	F	F	E	В	F	C		E	F	В
Approach Delay		92.0			126.8			71.5			83.4	
Approach LOS	01.0	F		1/0	F	1/ 0	20.0	E		1.0	F	20.0
90th %ile Green (s)	31.0	31.0		16.0	16.0	16.0	39.0	73.0		4.0	38.0	38.0
90th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Max	Max
70th %ile Green (s)	31.0	31.0		16.0	16.0	16.0	39.0	73.0		4.0	38.0	38.0
70th %ile Term Code	Max	Max		Max	Max	Max	Max	Max		Max	Max	Max
50th %ile Green (s)	31.0	31.0		16.0	16.0	16.0	39.0	73.0		4.0	38.0	38.0
50th %ile Term Code	Max	Max		Max	Max	Max	Max	Hold		Max	Max	Max
30th %ile Green (s)	31.0	31.0		16.0	16.0	16.0	39.0	81.0		0.0	38.0	38.0
30th %ile Term Code	Max	Max		Max	Max	Max	Max	Hold		Skip	Max	Max
10th %ile Green (s)	31.0	31.0		16.0	16.0	16.0	39.0	81.0		0.0	38.0	38.0
10th %ile Term Code	Max	Мах		Мах	Мах	Мах	Мах	Hold		Skip	Max	Мах
Queue Length 50th (ft)	151	155	~880	~269	136	0	~693	422		15	~537	27
Queue Length 95th (ft)	234	237	#1134	#382	#233	53	#829	461		34	#613	83
Internal Link Dist (ft)		899			401			1531			890	
Turn Bay Length (ft)							300					
Base Capacity (vph)	372	378	1413	392	212	270	956	3476		98	1739	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.48	0.49	1.15	1.21	0.72	0.36	1.24	0.64		0.34	1.06	0.28
Intersection Summary												
Area Type:	Other											
Cycle Length: 140												

# Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

Actuated Cycle Length: 140	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 84.3	Intersection LOS: F
Intersection Capacity Utilization 99.3%	ICU Level of Service F
Analysis Period (min) 15	
90th %ile Actuated Cycle: 140	
70th %ile Actuated Cycle: 140	
50th %ile Actuated Cycle: 140	
30th %ile Actuated Cycle: 140	
10th %ile Actuated Cycle: 140	
<ul> <li>Volume exceeds capacity, queue is theoretically infinite.</li> </ul>	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be lo	nger.
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Ashford-Dunwoody Rd. & Hammond Dr.

▶ø1 <b>†</b> ø2		<b>4</b> _{ø4}	<b>♥</b> _{ø8}
8 s 77 s		35 s	20 s
<b>\$</b> ø5	🔹 ø6		
43 s	42 s		

# Lanes, Volumes, Timings 4: Perimeter Center Pkwy & State Farm Dr

Build Existing Zoning 2026 PM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			1			1		<b>≜1</b> }-		ሻ	<b>∱</b> î≽	
Volume (vph)	0	0	70	0	0	180	0	1655	25	50	1010	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	80		0
Storage Lanes	0		1	0		1	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.865			0.865		0.998			0.989	
Flt Protected										0.950		
Satd. Flow (prot)	0	0	1611	0	0	1611	0	3532	0	1770	3500	0
Flt Permitted										0.950		
Satd. Flow (perm)	0	0	1611	0	0	1611	0	3532	0	1770	3500	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		391			524			338			330	
Travel Time (s)		5.9			7.9			5.1			5.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	76	0	0	196	0	1799	27	54	1098	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	76	0	0	196	0	1826	0	54	1185	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
JI JI JI	Other											
Control Type: Unsignalized												
Intersection Capacity Utilization 64.4% ICU Level of Service C												
Analysis Period (min) 15												

Lanes, Volumes, Timings
5: Perimeter Center Pkwy & Goldkist Dr

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	ef 👘		<u>۲</u>	र्स	11	7	<u></u>	1	ኘኘ	A	
Volume (vph)	105	0	110	560	0	865	20	710	75	375	660	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	150		0
Storage Lanes	1		0	1		2	1		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	1.00	0.97	0.95	0.95
Frt		0.850				0.850			0.850		0.990	
Flt Protected	0.950			0.950	0.950		0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1681	1681	2787	1770	3539	1583	3433	3504	0
Flt Permitted	0.950			0.950	0.950		0.361			0.950		
Satd. Flow (perm)	1770	1583	0	1681	1681	2787	672	3539	1583	3433	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		140				613			118		7	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		402			1304			742			338	
Travel Time (s)		6.1			19.8			11.2			5.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	114	0	120	609	0	940	22	772	82	408	717	49
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	114	120	0	304	305	940	22	772	82	408	766	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12	Ŭ		12	Ū		24	Ū		24	Ŭ
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2	. 5111	1	6	
Permitted Phases		·		5	5	8	2	_	2	·		
Detector Phase	4	4		8	8	8	5	2	2	1	6	
	·	•		5	<u> </u>	0	°	-	-	•	5	

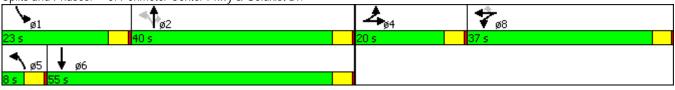
# Lanes, Volumes, Timings 5: Perimeter Center Pkwy & Goldkist Dr.

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	20.0	20.0		20.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	20.0	20.0		37.0	37.0	37.0	8.0	40.0	40.0	23.0	55.0	
Total Split (%)	16.7%	16.7%		30.8%	30.8%	30.8%	6.7%	33.3%	33.3%	19.2%	45.8%	
Maximum Green (s)	16.0	16.0		33.0	33.0	33.0	4.0	36.0	36.0	19.0	51.0	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0		0	0		0	
Act Effct Green (s)	11.9	11.9		27.7	27.7	27.7	32.9	28.7	28.7	16.6	46.8	
Actuated g/C Ratio	0.12	0.12		0.27	0.27	0.27	0.32	0.28	0.28	0.16	0.46	
v/c Ratio	0.55	0.39		0.67	0.67	0.78	0.08	0.77	0.15	0.73	0.47	
Control Delay	56.8	9.3		42.7	42.8	17.2	17.6	40.4	2.8	51.0	21.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	56.8	9.3		42.7	42.8	17.2	17.6	40.4	2.8	51.0	21.5	
LOS	E	A		D	D	B	В	D	A	D	С	
Approach Delay		32.4		_	27.3	_	_	36.3			31.7	
Approach LOS		С			С			D			С	
90th %ile Green (s)	16.0	16.0		33.0	33.0	33.0	4.0	36.0	36.0	19.0	51.0	
90th %ile Term Code	Мах	Max		Мах	Max	Max	Max	Max	Мах	Max	Hold	
70th %ile Green (s)	14.9	14.9		33.0	33.0	33.0	4.0	35.6	35.6	19.0	50.6	
70th %ile Term Code	Gap	Gap		Мах	Max	Max	Max	Gap	Gap	Max	Hold	
50th %ile Green (s)	12.5	12.5		31.6	31.6	31.6	0.0	30.7	30.7	18.5	53.2	
50th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Skip	Gap	Gap	Gap	Hold	
30th %ile Green (s)	9.9	9.9		24.7	24.7	24.7	0.0	24.4	24.4	15.1	43.5	
30th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Skip	Gap	Gap	Gap	Hold	
10th %ile Green (s)	7.2	7.2		17.2	17.2	17.2	0.0	18.3	18.3	11.4	33.7	
10th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Skip	Gap	Gap	Gap	Hold	
Queue Length 50th (ft)	77	0		194	195	117	8	262	0	140	177	
Queue Length 95th (ft)	144	40		326	327	229	23	354	17	213	282	
Internal Link Dist (ft)		322		020	1224	/	20	662		2.0	258	
Turn Bay Length (ft)		JLL			!		200	302	200	150	200	
Base Capacity (vph)	290	376		569	569	1348	262	1306	659	668	1850	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
		0.32		0.53	0.54	0.70	0.08	0.59	0.12	0.61	0.41	
Reduced v/c Ratio	0.39	0.52		0.00	0.0.1							
Intersection Summary	0.39	0.32		0.00	0.01							
Intersection Summary	0.39 Other	0.32		0.00								

Actuated Cycle Length: 101.6		
Natural Cycle: 75		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.78		
Intersection Signal Delay: 31.0	Intersection LOS: C	
Intersection Capacity Utilization 66.7%	ICU Level of Service C	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 120		
70th %ile Actuated Cycle: 118.5		
50th %ile Actuated Cycle: 109.3		
30th %ile Actuated Cycle: 90.1		
10th %ile Actuated Cycle: 70.1		

Splits and Phases: 5: Perimeter Center Pkwy & Goldkist Dr.



### Lanes, Volumes, Timings 6: Perimeter Center Pkwy & Connector

Build Existing Zoning 2026

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	4Î			\$		ľ	A		ľ	<u></u>	1
Volume (vph)	290	0	210	15	0	15	140	500	15	10	925	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	300		0	0		0	300		0	300		300
Storage Lanes	1		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.850			0.932			0.996				0.850
Flt Protected	0.950				0.976		0.950			0.950		
Satd. Flow (prot)	1770	1583	0	0	1694	0	1770	3525	0	1770	3539	1583
Flt Permitted	0.736				0.852		0.221			0.433		
Satd. Flow (perm)	1371	1583	0	0	1479	0	412	3525	0	807	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		112	100		18			8				429
Link Speed (mph)		45			45			45			45	,
Link Distance (ft)		654			1393			1830			742	
Travel Time (s)		9.9			21.1			27.7			11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	0.72	228	16	0.72	16	152	543	16	11	1005	429
Shared Lane Traffic (%)	515	0	220	10	0	10	152	545	10		1005	727
Lane Group Flow (vph)	315	228	0	0	32	0	152	559	0	11	1005	429
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	429 No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Len	12	Right	Leit	12	Right	Leit	12	Night	Leit	12	Right
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
.,		10			10			10			10	
Two way Left Turn Lane Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Number of Detectors	10	2	9	10	2	9	15	2	9	15	2	9
	Left	Z Thru		Left	∠ Thru		Left	Z Thru		Left	∠ Thru	
Detector Template	20	100		20	100		20	100		20	100	Right
Leading Detector (ft)					001		20			20		20
Trailing Detector (ft)	0	0		0				0			0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6 CL Ex		20	6 CL Ex		20	6 CL Ex	20
Detector 1 Type Detector 1 Channel	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	D	0.0		D	0.0		D	0.0		D	0.0	D
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4		-	8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6

Lanes, Volumes, Timings
6: Perimeter Center Pkwy & Connector

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	21.0	21.0		21.0	21.0		39.0	39.0		39.0	39.0	39.0
Total Split (%)	35.0%	35.0%		35.0%	35.0%		65.0%	65.0%		65.0%	65.0%	65.0%
Maximum Green (s)	17.0	17.0		17.0	17.0		35.0	35.0		35.0	35.0	35.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	15.1	15.1		Ū	15.1		24.8	24.8		24.8	24.8	24.8
Actuated g/C Ratio	0.31	0.31			0.31		0.51	0.51		0.51	0.51	0.51
v/c Ratio	0.74	0.40			0.07		0.72	0.31		0.03	0.55	0.42
Control Delay	30.4	10.8			10.4		32.0	7.0		5.8	9.1	2.1
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	30.4	10.8			10.4		32.0	7.0		5.8	9.1	2.1
LOS	C	B			В		C	A		A	A	A
Approach Delay	Ŭ	22.2			10.4		Ű	12.4		7.	7.0	
Approach LOS		C			В			B			A	
90th %ile Green (s)	17.0	17.0		17.0	17.0		35.0	35.0		35.0	35.0	35.0
90th %ile Term Code	Max	Max		Hold	Hold		Max	Max		Max	Max	Max
70th %ile Green (s)	17.0	17.0		17.0	17.0		32.8	32.8		32.8	32.8	32.8
70th %ile Term Code	Max	Max		Hold	Hold		Gap	Gap		Hold	Hold	Hold
50th %ile Green (s)	17.0	17.0		17.0	17.0		23.4	23.4		23.4	23.4	23.4
50th %ile Term Code	Max	Max		Hold	Hold		Hold	Hold		Gap	Gap	Gap
30th %ile Green (s)	13.7	13.7		13.7	13.7		19.5	19.5		19.5	19.5	19.5
30th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	Gap
10th %ile Green (s)	10.2	10.2		10.2	10.2		15.6	15.6		15.6	15.6	15.6
10th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
Queue Length 50th (ft)	72	22		TIOIU	3		32	45		2	97	0 Dweii
Queue Length 95th (ft)	#228	84			21		#123	4J 68		7	137	29
Internal Link Dist (ft)	#220	574			1313		πIZJ	1750		1	662	27
Turn Bay Length (ft)	300	574			1313		300	1750		300	002	300
Base Capacity (vph)	505	654			556		310	2653		607	2662	1297
Starvation Cap Reductn	0	004			0		0	2005		007	2002	
Spillback Cap Reductin	0	0			0		0	0		0	0	0
Storage Cap Reductin	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.62	0.35			0.06		0.49	0.21		0.02	0.38	0.33
Intersection Summary	0.02	0.00			0.00		0.77	0.21		0.02	0.00	0.00
Area Type:	Other											
Cycle Length: 60	Uner											
Cycle Length. 00												

Build Existing Zoning 2026

Actuated Cycle Length: 48.2		
Natural Cycle: 55		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.74		
Intersection Signal Delay: 11.5	Intersection LOS: B	
Intersection Capacity Utilization 66.1%	ICU Level of Service C	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 60		
70th %ile Actuated Cycle: 57.8		
50th %ile Actuated Cycle: 48.4		
30th %ile Actuated Cycle: 41.2		
10th %ile Actuated Cycle: 33.8		
# 95th percentile volume exceeds capacity, queue may	be longer.	

Queue shown is maximum after two cycles.

Splits and Phases: 6: Perimeter Center Pkwy & Connector

	<b>↓</b> ₀₄
39 s	21 s
↓ _{ø6}	<b>₩</b> ø8
39 s	21 s

### Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

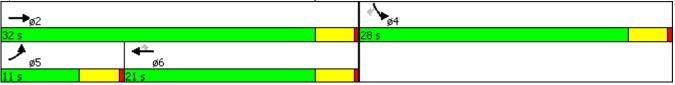
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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ካካ			17	<u></u>	1
Volume (vph)	210	430	495	445	620	530
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	300	0
Storage Lanes	2			2	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.95	0.95	0.88	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	3539	3539	2787	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	2787	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				484		380
Link Speed (mph)		45	45		45	
Link Distance (ft)		806	1941		1830	
Travel Time (s)		12.2	29.4		27.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	467	538	484	674	576
Shared Lane Traffic (%)	220	107	550	FOF	074	570
Lane Group Flow (vph)	228	467	538	484	674	576
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left 24	Right	Left	Right
Median Width(ft)		24			24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane	1.00	1 00	1 0 0	1 0 0	1 0 0	1 0 0
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	0.0	94	94	0.0	0.0	0.0
Detector 2 Size(ft)		94	94			
			o CI+Ex			
Detector 2 Type		CI+Ex	UI+EX			
Detector 2 Channel		0.0	0.0			
Detector 2 Extend (s)		0.0	0.0	5	<b>D</b> .	5
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Switch Phase		201			502	CDR
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	11.0	32.0	20.0	20.0	28.0	28.0
Total Split (%)	18.3%	53.3%	35.0%	35.0%	46.7%	46.7%
Maximum Green (s)	7.0	28.0	17.0	17.0	24.0	24.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	1.0	Lag	Lag	1.0	1.0
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	Min	None	None
Walk Time (s)	NULLE	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	5.0 11.0	11.0	5.0 11.0
Pedestrian Calls (#/hr)		0	0	0	0	11.0 0
Act Effct Green (s)	7.0	25.3	14.2	14.2	16.9	16.9
Actuated g/C Ratio	0.14	0.50	0.28	0.28	0.34	0.34
v/c Ratio	0.14	0.50	0.28	0.28	0.34	0.34
Control Delay	26.0	8.4	18.3	3.3	16.2	11.6
5	20.0	0.4	0.0	0.0	0.0	0.0
Queue Delay Total Delay	26.0	8.4	18.3	3.3	16.2	11.6
LOS	20.0 C	0.4 A	10.3 B	3.3 A	10.2 B	B
Approach Delay	C	14.2	ы 11.2	А	ь 14.1	D
Approach LOS		14.Z B	H.Z B			
90th %ile Green (s)	7.0	В 28.0	в 17.0	17.0	B 24.0	24.0
90th %ile Term Code	7.0 Max	28.0 Hold	Max	Max	Z4.0 Max	Z4.0 Max
				17.0		20.9
70th %ile Green (s) 70th %ile Term Code	7.0 Max	28.0	17.0 Max		20.9	
		Hold	Max	Max	Gap	Gap
50th %ile Green (s) 50th %ile Term Code	7.0	26.3	15.3	15.3	16.8	16.8
	Max	Hold	Gap	Gap	Gap	Gap
30th %ile Green (s)	7.0	23.6	12.6	12.6	13.5 Con	13.5 Con
30th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
10th %ile Green (s)	6.3	19.9	9.6	9.6	10.9	10.9
10th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
Queue Length 50th (ft)	33	36	68	0	85	44
Queue Length 95th (ft)	71	78	128	32	131	141
Internal Link Dist (ft)		726	1861		1750	
Turn Bay Length (ft)	100	001/	4004	1001	300	0/7
Base Capacity (vph)	489	2016	1224	1281	1676	967
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.23	0.44	0.38	0.40	0.60
Intersection Summary						
Area Type:	Other					
Cycle Length: 60	Other					

### Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

Actuated Cycle Length: 50.4		
Natural Cycle: 60		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.74		
Intersection Signal Delay: 13.1	Intersection LOS: B	
Intersection Capacity Utilization 53.2%	ICU Level of Service A	
Analysis Period (min) 15		
90th %ile Actuated Cycle: 60		
70th %ile Actuated Cycle: 56.9		
50th %ile Actuated Cycle: 51.1		
30th %ile Actuated Cycle: 45.1		
10th %ile Actuated Cycle: 38.8		

Splits and Phases: 7: Lake Hearn Dr. & Perimeter Center Pkwy



Lanes, Volumes, Timings Bu 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

Build 2026 - Proposed Zoning

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ካካ	<u></u>	1	ኘ	<b>†</b> †	1	ካካ	At≱		ኘኘ	<b>†</b> †	1
Volume (vph)	290	705	340	370	710	350	735	755	390	440	520	330
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	0.95	1.00
Frt			0.850			0.850		0.949				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3359	0	3433	3539	1583
Flt Permitted	0.950			0.135			0.277			0.950		
Satd. Flow (perm)	3433	3539	1583	488	3539	1583	1001	3359	0	3433	3539	1583
Satd. Flow (RTOR)			370			82		86				82
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	766	370	402	772	380	799	821	424	478	565	359
Shared Lane Traffic (%)												
Lane Group Flow (vph)	315	766	370	402	772	380	799	1245	0	478	565	359
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	0.0	0.0				0.0	0.0					0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	Prot	NA	Dorm	nmint		nmiou	nmint	NA		Drot		nm i ou
Turn Type Protected Phases		NA 2	Perm	pm+pt	NA	pm+ov 7	pm+pt 3			Prot 7	NA	pm+ov
Permitted Phases	5	Z	2	1	6	6	8	8		/	4	5 4
Detector Phase	5	2	2	1	6	7	3	8		7	4	4
Switch Phase	0	Z	Z	I	0	/	3	0		/	4	5
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	8.0	8.0	20.0		8.0	20.0	4.0
	16.0	37.0	37.0	14.0	35.0	22.0	33.0	47.0		22.0	36.0	16.0
Total Split (s) Total Split (%)	13.3%	30.8%	30.8%	11.7%	29.2%	18.3%	27.5%	47.0 39.2%		18.3%	30.0%	13.3%
Maximum Green (s)	12.0	30.076	30.076	10.0	31.0	18.0	27.57	43.0		18.0	30.078	12.0
Yellow Time (s)	3.5	3.5	33.0	3.5	31.0	3.5	3.5	43.0 3.5		3.5	32.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	5.5 0.5	0.5	0.5	3.5 0.5		0.5	0.5	0.5
	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5		0.0	0.0	0.0

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Lanes,	Volumes,	Timings
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1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None		None	None	None
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	12.2	31.7	31.7	39.9	29.7	52.1	64.1	43.8		18.3	39.2	55.4
Actuated g/C Ratio	0.10	0.26	0.26	0.33	0.25	0.43	0.53	0.36		0.15	0.33	0.46
v/c Ratio	0.91	0.82	0.54	0.98	0.88	0.52	0.80	0.97		0.91	0.49	0.46
Control Delay	83.2	49.5	6.5	74.0	51.5	15.2	23.0	55.0		73.1	35.4	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	83.2	49.5	6.5	74.0	51.5	15.2	23.0	55.0		73.1	35.4	20.4
LOS	F	D	А	E	D	В	С	E		E	D	С
Approach Delay		45.8			48.5			42.5			44.4	
Approach LOS		D			D			D			D	
90th %ile Green (s)	12.0	33.0	33.0	10.0	31.0	18.0	29.0	43.0		18.0	32.0	12.0
90th %ile Term Code	Мах	Coord	Coord	Max	Coord	Max	Мах	Мах		Max	Hold	Max
70th %ile Green (s)	12.0	33.0	33.0	10.0	31.0	18.0	26.4	43.0		18.0	34.6	12.0
70th %ile Term Code	Мах	Coord	Coord	Max	Coord	Max	Gap	Max		Max	Hold	Max
50th %ile Green (s)	12.0	33.0	33.0	10.0	31.0	18.0	23.2	43.0		18.0	37.8	12.0
50th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Gap	Мах		Max	Hold	Max
30th %ile Green (s)	12.0	31.7	31.7	10.0	29.7	19.3	19.7	43.0		19.3	42.6	12.0
30th %ile Term Code	Max	Coord	Coord	Max	Coord	Max	Gap	Мах		Мах	Hold	Max
10th %ile Green (s)	12.8	28.0	28.0	10.8	26.0	18.4	16.1	46.8		18.4	49.1	12.8
10th %ile Term Code	Max	Coord	Coord	Мах	Coord	Gap	Gap	Gap		Gap	Hold	Max
Queue Length 50th (ft)	126	289	0	132	211	100	182	475		190	187	145
Queue Length 95th (ft)	#212	364	75	m#191	m312	m137	230	#637		#291	262	254
Internal Link Dist (ft)		1949			883			250			706	
Turn Bay Length (ft)	260			250		500	80			250		300
Base Capacity (vph)	348	973	703	411	914	733	1138	1279		524	1156	774
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.91	0.79	0.53	0.98	0.84	0.52	0.70	0.97		0.91	0.49	0.46
Intersection Summary												
Cycle Length: 120												
Actuated Cycle Length: 120												
Offset: 0 (0%), Referenced to	o phase 2	:EBT and	6:WBTL	, Start of (	Green, Ma	aster Inter	section					
Natural Cycle: 90												
	Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 0.98												
	Intersection Signal Delay: 45.1 Intersection LOS: D											
	Intersection Capacity Utilization 89.3% ICU Level of Service E											
Analysis Period (min) 15												
# 95th percentile volume e	xceeds ca	ipacity, qi	ueue may	v be longe	r.							

Build 2026 - Proposed Zoning ΡM

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

<b>√</b> ø1	<b>₩</b> \$2(R)	<b>↑</b> ø3	v ø4
14 s 💦	37 s	33 s	36 s
🐓 ø2	📕 🕈 ø6 (R)	<b>\$</b> _{ø7}	<1ø8
16 s	35 s	22 s	47 s

Splits and Phases: 1: Perimeter Center Pkwy/Perimeter Center Pkwy. & Hammond Dr.

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Lanes, Volumes, Timings	
2: Shopping Center & Hammond D	r.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<u>۲</u>	<u></u>	1	ኘ	<b>^</b>	1	<u>۲</u>	<b>†</b>	1	<u>۲</u>	ef 👘	
Volume (vph)	50	1350	210	315	1010	55	360	20	370	120	20	60
Lane Util. Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.888	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5085	1583	1770	3539	1583	1770	1863	1583	1770	1654	0
Flt Permitted	0.241			0.075			0.362			0.743		
Satd. Flow (perm)	449	5085	1583	140	3539	1583	674	1863	1583	1384	1654	0
Satd. Flow (RTOR)			210			118			384		65	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1467	228	342	1098	60	391	22	402	130	22	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	1467	228	342	1098	60	391	22	402	130	87	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24	0		24	5		12	0		12	5
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	-
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	
Switch Phase	-				-	-	-	-	-	-	-	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	
Total Split (s)	9.0	44.0	44.0	29.0	64.0	64.0	27.0	34.0	34.0	13.0	20.0	
Total Split (%)	7.5%	36.7%	36.7%	24.2%	53.3%	53.3%	22.5%	28.3%	28.3%	10.8%	16.7%	
Maximum Green (s)	5.0	40.0	40.0	25.0	60.0	60.0	23.0	30.0	30.0	9.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5	

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### Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Build 2026 - Proposed Zoning ΡM

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
_ead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	56.8	50.0	50.0	77.1	68.1	68.1	34.9	21.8	21.8	16.9	7.8	
Actuated g/C Ratio	0.47	0.42	0.42	0.64	0.57	0.57	0.29	0.18	0.18	0.14	0.06	
/c Ratio	0.19	0.69	0.29	0.85	0.55	0.06	0.96	0.07	0.67	0.58	0.52	
Control Delay	8.2	21.3	1.4	50.8	18.6	0.1	75.9	39.8	11.1	45.2	29.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	8.2	21.3	1.4	50.8	18.6	0.1	75.9	39.8	11.1	45.2	29.9	
.OS	A	C	A	D	B	A	E	D	В	D	C	
Approach Delay		18.3	73	D	25.2	71	L	43.0	D	D	39.1	
Approach LOS		В			23.2 C			40.0 D			57.1 D	
Poth %ile Green (s)	8.4	40.0	40.0	29.1	60.7	60.7	23.0	25.9	25.9	9.0	11.9	
Oth %ile Term Code	Gap	Coord	Coord	Max	Coord	Coord	Max	Hold	Hold	Max	Gap	
Oth %ile Green (s)	7.4	44.6	44.6	27.3	64.5	64.5	23.0	23.1	23.1	9.0	9.1	
Oth %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Z3.0 Max	Hold	Hold	Max	Gap	
ioth %ile Green (s)	6.8	50.6	50.6	23.3	67.1	67.1	23.0	21.1	21.1	9.0	7.1	
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Z3.0 Max	Hold	Hold	Max	Gap	
Oth %ile Green (s)	6.3	53.3	53.3	19.9	66.9	66.9	25.3	20.4	20.4	10.4	5.5	
80th %ile Term Code	Gap	Coord	Coord	Gap	Coord	Coord	Z3.3 Max	Hold	Hold	Gap	Gap	
Oth %ile Green (s)	0.0	61.3	61.3	16.1	81.4	81.4	21.1	18.6	18.6	8.0	5.5	
10th %ile Term Code	Skip	Coord	Coord	Gap	Coord	Coord	Gap	Hold	Hold			
Queue Length 50th (ft)	зкір 10	234	0	201	273	0	279	14	12	Gap 78	Gap 17	
Queue Length 95th (ft)	m14	234 m376	m11	307	380	0	#406	37	105	124	67	
<b>o</b> .,	11114	883	11111	307	899	0	#400	453	105	124	668	
nternal Link Dist (ft)	250	003	250	200	077	200	100	405			000	
Furn Bay Length (ft)		0117	250		2000			14 E	402	224	276	
Base Capacity (vph)	288	2117	781	446	2008	949	410	465	683	226		
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn Reduced v/c Ratio	0	0	0	0	0	0	0	0	0	0	0	
	0.19	0.69	0.29	0.77	0.55	0.06	0.95	0.05	0.59	0.58	0.32	
ntersection Summary												
Cycle Length: 120												
Actuated Cycle Length: 120												
Offset: 24 (20%), Referenced	d to phase	e 2:EBTL	and 6:WB	TL, Start	of Green							
latural Cycle: 80												
Control Type: Actuated-Coor	dinated											
/laximum v/c Ratio: 0.96												
ntersection Signal Delay: 26												
ntersection Capacity Utilizat Analysis Period (min) 15						of Service	e D					
			Jeue may	halanga	r							

#### Lanes, Volumes, Timings 2: Shopping Center & Hammond Dr.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

#### Splits and Phases: 2: Shopping Center & Hammond Dr.



### Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

Build 2026 - Proposed Zoning

Lane Group         EBL         EBT         EBR         WBL         WBT         WBR         NBL         NBT         NBR         SBL         SBT           Lane Configurations         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< th=""><th>SBR 130 1.00 0.850 1583 1583</th></t<>	SBR 130 1.00 0.850 1583 1583
Volume (vph)290451505435140901110200055301700Lane Util. Factor0.950.950.880.971.001.000.970.860.860.970.86Frt0.8500.9500.9500.9500.9500.9500.9500.9500.950Satd. Flow (prot)16811708278734331863158334336382034336408Flt Permitted0.9500.9650.9500.9500.9500.9500.9500.950Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811686473152981207217460331848Shared Lane Traffic (%)43%163647315298120722340331848	130 1.00 0.850 1583 1583
Volume (vph)290451505435140901110200055301700Lane Util. Factor0.950.950.880.971.001.000.970.860.860.970.86Frt0.8500.9500.9500.9500.9500.9500.9500.9500.950Satd. Flow (prot)16811708278734331863158334336382034336408Flt Permitted0.9500.9650.9500.9500.9500.9500.9500.950Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (prOR)16811708278734331863158334336382034336408Satd. Flow (vph)315491636473152981207217460331848Shared La	1.00 0.850 1583 1583
Frt0.8500.9500.996Flt Protected0.9500.9650.9500.9500.950Satd. Flow (prot)16811708278734331863158334336382034336408Flt Permitted0.9500.9650.9500.9500.9500.9500.9500.950Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811686473152981207217460331848Shared Lane Traffic (%)43%163647315298120722340331848	0.850 1583 1583
Flt Protected0.9500.9650.9500.9500.950Satd. Flow (prot)16811708278734331863158334336382034336408Flt Permitted0.9500.9650.9500.9500.9500.9500.950Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (perm)16811708278734331863158334336382034336408Satd. Flow (RTOR)3910166666666Peak Hour Factor0.920.920.920.920.920.920.920.920.920.920.920.92Adj. Flow (vph)315491636473152981207217460331848Shared Lane Traffic (%)43%163647315298120722340331848	1583 1583
Satd. Flow (prot)       1681       1708       2787       3433       1863       1583       3433       6382       0       3433       6408         Flt Permitted       0.950       0.965       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.952       0.92	1583
Flt Permitted       0.950       0.965       0.950       0.950       0.950       0.950         Satd. Flow (perm)       1681       1708       2787       3433       1863       1583       3433       6382       0       3433       6408         Satd. Flow (perm)       1681       1708       2787       3433       1863       1583       3433       6382       0       3433       6408         Satd. Flow (RTOR)       39       101       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       6       3       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1848       1	1583
Satd. Flow (perm)       1681       1708       2787       3433       1863       1583       3433       6382       0       3433       6408         Satd. Flow (RTOR)       39       101       6       6       6       6       6       6       6         Peak Hour Factor       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92 </td <td></td>	
Satd. Flow (RTOR)391016Peak Hour Factor0.920.920.920.920.920.920.920.920.92Adj. Flow (vph)315491636473152981207217460331848Shared Lane Traffic (%)43%15298120722340331848	
Peak Hour Factor0.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.920.9	
Adj. Flow (vph)315491636473152981207217460331848Shared Lane Traffic (%)43%Lane Group Flow (vph)180184163647315298120722340331848	102
Shared Lane Traffic (%)         43%           Lane Group Flow (vph)         180         184         1636         473         152         98         1207         2234         0         33         1848	0.92
Lane Group Flow (vph) 180 184 1636 473 152 98 1207 2234 0 33 1848	141
	141
Enter Blocked Intersection No	No
Lane Alignment Left Left Right Left Left Right Left Right Left Left	Right
Median Width(ft) 24 24 24 24 24	Ŭ
Link Offset(ft) 0 0 0 0	
Crosswalk Width(ft) 16 16 16 16	
Two way Left Turn Lane	
Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
Turning Speed (mph) 15 9 15 9 15 9 15	9
Number of Detectors         1         2         1         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         1         2         2         3	1
Detector Template Left Thru Right Left Thru Right Left Thru Left Thru	Right
Leading Detector (ft) 20 100 20 20 100 20 20 100 20 100	20
Trailing Detector (ft) 0 0 0 0 0 0 0 0 0 0	0
Detector 1 Position(ft) 0 0 0 0 0 0 0 0 0 0 0	0
Detector 1 Size(ft) 20 6 20 20 6 20 20 6 20 6	20
Detector 1 Type CI+Ex	CI+Ex
Detector 1 Channel	
Detector 1 Extend (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0
Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	0.0
Detector 1 Delay (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.0
Detector 2 Position(ft) 94 94 94 94	
Detector 2 Size(ft) 6 6 6	
Detector 2 Type CI+Ex CI+Ex CI+Ex CI+Ex	
Detector 2 Channel	
Detector 2 Extend (s) 0.0 0.0 0.0 0.0	
Turn Type Split NA pt+ov Split NA Perm Prot NA Prot NA	Perm
Protected Phases 4 4 4 5 8 8 5 2 1 6	
Permitted Phases 8	6
Detector Phase         4         4         4         5         8         8         5         2         1         6	6
Switch Phase	
Minimum Initial (s)         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0	4.0
Minimum Split (s)         20.0         20.0         20.0         20.0         20.0         20.0         8.0         20.0         8.0         20.0	20.0
Total Split (s)         34.0         34.0         20.0         20.0         20.0         44.0         78.0         8.0         42.0	42.0
Total Split (%)         24.3%         24.3%         14.3%         14.3%         31.4%         55.7%         5.7%         30.0%	30.0%
Maximum Green (s) 30.0 30.0 16.0 16.0 16.0 40.0 74.0 4.0 38.0	38.0
Yellow Time (s) 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	3.5
All-Red Time (s)         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5	0.5

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Lanes, Volumes, Timings 3: Ashford-Dunwoody Rd. & Hammond Dr.

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag							Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	Min		None	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0		0			0	0
Act Effct Green (s)	30.0	30.0	70.0	16.0	16.0	16.0	40.0	77.2		4.0	38.0	38.0
Actuated g/C Ratio	0.21	0.21	0.50	0.11	0.11	0.11	0.29	0.55		0.03	0.27	0.27
v/c Ratio	0.50	0.50	1.16	1.21	0.72	0.36	1.23	0.63		0.34	1.06	0.28
Control Delay	54.0	54.0	104.3	165.6	79.0	13.5	155.3	23.0		76.1	88.8	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	54.0	54.0	104.3	165.6	79.0	13.5	155.3	23.0		76.1	88.8	14.4
LOS	D	D	F	F	E	В	F	С		E	F	В
Approach Delay		95.2			126.8			69.4			83.4	
Approach LOS		F			F			E			F	
90th %ile Green (s)	30.0	30.0		16.0	16.0	16.0	40.0	74.0		4.0	38.0	38.0
90th %ile Term Code	Мах	Мах		Max	Max	Max	Мах	Max		Мах	Max	Мах
70th %ile Green (s)	30.0	30.0		16.0	16.0	16.0	40.0	74.0		4.0	38.0	38.0
70th %ile Term Code	Max	Max		Max	Max	Max	Max	Hold		Мах	Max	Max
50th %ile Green (s)	30.0	30.0		16.0	16.0	16.0	40.0	74.0		4.0	38.0	38.0
50th %ile Term Code	Max	Мах		Max	Max	Max	Мах	Hold		Мах	Max	Max
30th %ile Green (s)	30.0	30.0		16.0	16.0	16.0	40.0	82.0		0.0	38.0	38.0
30th %ile Term Code	Max	Мах		Max	Max	Max	Мах	Hold		Skip	Max	Max
10th %ile Green (s)	30.0	30.0		16.0	16.0	16.0	40.0	82.0		0.0	38.0	38.0
10th %ile Term Code	Max	Мах		Max	Max	Max	Мах	Hold		Skip	Max	Max
Queue Length 50th (ft)	153	156	~906	~269	136	0	~697	415		15	~537	27
Queue Length 95th (ft)	236	241	#1146	#382	#233	53	#834	454		34	#613	83
Internal Link Dist (ft)		899			401			1531			890	
Turn Bay Length (ft)							300					
Base Capacity (vph)	360	366	1413	392	212	270	980	3522		98	1739	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.50	0.50	1.16	1.21	0.72	0.36	1.23	0.63		0.34	1.06	0.28
Intersection Summary												
Cycle Length: 140												
Actuated Cycle Length: 140												
Natural Cycle: 140												
Control Type: Semi Act-Unco	oord											
Maximum v/c Ratio: 1.23												
Intersection Signal Delay: 84					tersection							
Intersection Capacity Utilizat	ion 99.7%			IC	CU Level	of Service	e F					
Analysis Period (min) 15	•											
90th %ile Actuated Cycle: 14												
70th %ile Actuated Cycle: 14	0											

#### 50th %ile Actuated Cycle: 140 30th %ile Actuated Cycle: 140

10th %ile Actuated Cycle: 140

- Volume exceeds capacity, queue is theoretically infinite.
   Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

#### Splits and Phases: 3: Ashford-Dunwoody Rd. & Hammond Dr.

▶ø1 <b>1</b> ø2		<b>4</b> ₀₄	<b>₽</b> ø8
8 s <mark>7</mark> 8 s		34 s	20 s
<b>\$</b> ø5	<b>↓</b> ø6		
44 s	42 s		

Lanes, Volumes, Timings
4: Perimeter Center Pkwy

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			1			1		<b>↑</b> ĵ≽		ľ	A	
Volume (vph)	0	0	70	0	0	180	0	1700	25	50	1050	80
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.865			0.865		0.998			0.989	
Flt Protected										0.950		
Satd. Flow (prot)	0	0	1611	0	0	1611	0	3532	0	1770	3500	0
Flt Permitted										0.950		
Satd. Flow (perm)	0	0	1611	0	0	1611	0	3532	0	1770	3500	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	76	0	0	196	0	1848	27	54	1141	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	76	0	0	196	0	1875	0	54	1228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization	on 65.6%			IC	U Level	of Service	С					
Analysis Dariad (min) 15												

Analysis Period (min) 15

### Lanes, Volumes, Timings 5: Perimeter Center Pkwy & Goldkist Dr.

Build 2026 - Proposed Zoning

Lane Group         EBL         EBT         EBR         WBI         WBT         WBR         NBT         NBT         NBT         SBL         SBL <th< th=""><th></th><th>۶</th><th>-</th><th>$\rightarrow$</th><th>4</th><th>•</th><th>*</th><th>1</th><th>1</th><th>1</th><th>1</th><th>Ļ</th><th>~</th></th<>		۶	-	$\rightarrow$	4	•	*	1	1	1	1	Ļ	~
Volume (vph)         105         0         110         570         0         910         20         710         140         415         660         45           Lane Ull, Factor         1.00         1.00         0.95         0.95         0.850         0.950         0.950           FIt Protected         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)         105         0         110         570         0         910         20         710         140         145         660         45           Lane Ull, Factor         1.00         1.00         0.95         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950         0.950	Lane Configurations	۲	el el		<u>۲</u>	र्स	11	<u>۲</u>	<b>^</b>	1	ሻሻ	<b>∱1</b> ≱	
Fri       0.850       0.850       0.850       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.950       0.951       0.950       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0.953       0				110									45
FIP Producted       0.950       0.950       0.950       0.950       0.950       0.950         Satil. Flow (prot)       1770       1583       0       1681       1681       2787       1770       3539       1583       3433       3504       0         Satil. Flow (prot)       1770       1583       0       1681       1681       2787       672       3539       1583       3433       3504       0         Satil. Flow (prot)       114       0       120       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92 <td< td=""><td>Lane Util. Factor</td><td>1.00</td><td>1.00</td><td>1.00</td><td>0.95</td><td>0.95</td><td>0.88</td><td>1.00</td><td>0.95</td><td>1.00</td><td>0.97</td><td>0.95</td><td>0.95</td></td<>	Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	1.00	0.97	0.95	0.95
Satid Flow (prot)         1770         1583         0         1681         1681         2787         1770         3539         1583         3433         3504         0           FIt Permitted         0.950         0.950         0.361         1770         1583         0         1681         2787         1770         3539         1583         3433         3504         0           Satid Flow (perm)         1770         1583         0         1681         12787         672         3539         1583         3433         3504         0           Satid Flow (perm)         1710         158         0         620         02         022         022         022         022         022         022         022         022         022         022         022         451         766         0           Ener Blocked Intersection         No	Frt		0.850				0.850			0.850		0.990	
FI Permitad       0.950       0.950       0.681       072       353       1583       3433       3504       0         Satd. Flow (perm)       1770       158	Flt Protected	0.950			0.950	0.950		0.950			0.950		
Said. Flow (perm)       1770       1583       0       1681       1681       2787       672       3539       1583       3433       3504       0         Said. Flow (PTOR)       158       0       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0.92       0	Satd. Flow (prot)	1770	1583	0	1681	1681	2787	1770	3539	1583	3433	3504	0
Said. Flow (RTOR)         158         9           Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.9	Flt Permitted	0.950			0.950	0.950		0.361			0.950		
Peak Hour Factor         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92         0.92	Satd. Flow (perm)	1770	1583	0	1681	1681	2787	672	3539	1583	3433	3504	0
Adj. Flow (vph)       114       0       120       6.20       0       989       2.2       772       152       451       717       49         Shared Lane Traffic (%)       50%       50%       50%       772       152       451       766       0         Lane Group Flow (vph)       114       120       0       310       989       22       772       152       451       766       0         Lane Group Flow (vph)       16       Left       Right       Left       Right <td>Satd. Flow (RTOR)</td> <td></td> <td>158</td> <td></td> <td></td> <td></td> <td>681</td> <td></td> <td></td> <td>158</td> <td></td> <td>9</td> <td></td>	Satd. Flow (RTOR)		158				681			158		9	
Shared Lane Traffic (%)         50%           Lane Group Flow (vph)         114         120         0         310         989         22         772         152         451         766         0           Enter Block de Intersection         No	Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lane Group Flow (vph)         114         120         0         310         310         989         22         772         152         451         766         0           Enter Blocked Intersection         No	Adj. Flow (vph)	114	0	120	620	0	989	22	772	152	451	717	49
Enter Blocked Intersection         No         No <th< td=""><td>Shared Lane Traffic (%)</td><td></td><td></td><td></td><td>50%</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	Shared Lane Traffic (%)				50%								
Lane Alignment         Left         Right         Left	Lane Group Flow (vph)	114	120	0	310	310	989	22	772	152	451	766	0
Median Ŵidth(ft)         12         12         24         24         24           Link Offset(ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00	Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Median Width(ft)         12         12         24         24           Link Offset(ft)         0         0         0         0         0         0           Crosswalk Width(ft)         16         16         16         16         16         100         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00	Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Crosswalk Width(ft)         16         16         16         16         16           Two way Left Turn Lane         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1.00         1	Median Width(ft)		12			12			24			24	
Two way Left Turn Lane         Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00	Link Offset(ft)		0			0			0			0	
Headway Factor       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00<	Crosswalk Width(ft)		16			16			16			16	
Turning Speed (mph)         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         9         15         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         1         2         1         1         1	Two way Left Turn Lane												
Number of Detectors         1         2         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1	Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Detector Template         Left         Thru         Right         Left         Thru         Right         Left         Thru         Right         Left         Thru           Leading Detector (ft)         20         100         20         100         20         20         100         20         20         100         20         20         100           Trailing Detector (ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Turning Speed (mph)	15		9	15		9	15		9	15		9
Leading Detector (ft)         20         100         20         100         20         20         100         20         20         100         20         20         100         20         20         100         20         20         100         20         20         100         20         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Number of Detectors	1	2		1	2	1	1	2	1	1	2	
Trailing Detector (ft)       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td>Detector Template</td> <td>Left</td> <td>Thru</td> <td></td> <td>Left</td> <td>Thru</td> <td>Right</td> <td>Left</td> <td>Thru</td> <td>Right</td> <td>Left</td> <td>Thru</td> <td></td>	Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	
Detector 1         Position(ft)         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	
Detector 1 Size(ft)         20         6         20         6         20         20         6         20         20         6           Detector 1 Type         CI+Ex         O         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Type         CI+Ex	Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	
Detector 1 Channel           Detector 1 Extend (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         <	Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	
Detector 1         Extend (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Queue (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Detector 1 Channel												
Detector 1 Delay (s)         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Detector 1 Extend (s)		0.0		0.0		0.0	0.0		0.0			
Detector 2 Position(ft)         94         94         94         94           Detector 2 Size(ft)         6         6         6         6           Detector 2 Type         CI+Ex         CI+Ex         CI+Ex         CI+Ex           Detector 2 Channel         0.0         0.0         0.0         0.0           Turn Type         Split         NA         Split         NA         Perm         Prot         NA           Protected Phases         4         4         8         8         5         2         1         6           Permitted Phases         4         4         8         8         5         2         1         6           Switch Phase         4         4         8         8         5         2         1         6           Minimun Initial (s)         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0		0.0	0.0		0.0	0.0	0.0	0.0		0.0		0.0	
Detector 2 Size(ft)6666Detector 2 Type $Cl+Ex$ $Cl+Ex$ $Cl+Ex$ $Cl+Ex$ Detector 2 ChannelDetector 2 Extend (s)0.00.00.00.0Turn TypeSplitNASplitNAPermpm+ptNAProtected Phases4488521Permitted Phases $4$ 488522Detector Phase44885221Detector Phase4488221Detector Phase44.04.04.04.04.04.0Minimum Initial (s)4.04.04.04.04.04.04.0Minimum Split (s)20.020.025.025.08.027.027.018.037.0Total Split (%)22.2%22.2%27.8%27.8%8.9%30.0%30.0%20.0%41.1%Maximum Green (s)16.016.021.021.021.04.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.53.53.53.53.5	Detector 1 Delay (s)	0.0			0.0		0.0	0.0		0.0	0.0		
Detector 2 TypeCl+ExCl+ExCl+ExCl+ExDetector 2 Channel $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ Turn TypeSplitNASplitNAPermpm+ptNAPermProtNAProtected Phases44885216Permitted Phases $$			94			94			94			94	
Detector 2 Extend (s)         0.0         0.0         0.0         0.0           Turn Type         Split         NA         Split         NA         Perm         pm+pt         NA         Perm         Prot         NA           Protected Phases         4         4         8         8         5         2         1         6           Permitted Phases         4         4         8         8         5         2         2         1         6           Permitted Phases         8         8         8         5         2         2         1         6           Detector Phase         4         4         8         8         5         2         2         1         6           Switch Phase	Detector 2 Size(ft)		6			6			•			6	
Detector 2 Extend (s) $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ Turn TypeSplitNASplitNAPermpm+ptNAPermProtNAProtected Phases44885216Permitted Phases82216Detector Phase448852216Switch PhaseMinimum Initial (s)4.04.04.04.04.04.04.04.04.04.0Minimum Split (s)20.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.0			CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Turn TypeSplitNASplitNAPermpm+ptNAPermProtNAProtected Phases44885216Permitted Phases822216Detector Phase448852216Switch Phase4488852216Minimum Initial (s)4.04.04.04.04.04.04.04.04.0Minimum Split (s)20.020.020.020.020.020.020.020.020.020.0Total Split (s)20.020.025.025.025.08.027.027.018.037.0Total Split (%)22.2%22.2%27.8%27.8%8.9%30.0%30.0%20.0%41.1%Maximum Green (s)16.016.021.021.04.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.5	Detector 2 Channel												
Protected Phases       4       4       8       8       5       2       1       6         Permitted Phases       8       2       2       2       1       6         Detector Phase       4       4       8       8       5       2       2       1       6         Switch Phase	Detector 2 Extend (s)												
Permitted Phases822Detector Phase448852216Switch PhaseMinimum Initial (s)4.04.04.04.04.04.04.04.04.0Minimum Split (s)20.020.020.020.020.08.020.020.08.020.0Total Split (s)20.020.025.025.08.027.027.018.037.0Total Split (%)22.2%22.2%27.8%27.8%8.9%30.0%30.0%20.0%41.1%Maximum Green (s)16.016.021.021.04.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.53.5	Turn Type	Split	NA		Split	NA	Perm	pm+pt	NA	Perm	Prot	NA	
Detector Phase4488852216Switch PhaseMinimum Initial (s)4.04.04.04.04.04.04.04.04.04.0Minimum Split (s)20.020.020.020.020.08.020.020.08.020.0Total Split (s)20.020.025.025.025.08.027.027.018.037.0Total Split (%)22.2%22.2%27.8%27.8%8.9%30.0%30.0%20.0%41.1%Maximum Green (s)16.016.021.021.021.04.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.53.5	Protected Phases	4	4		8	8			2		1	6	
Switch PhaseMinimum Initial (s)4.04.04.04.04.04.04.04.04.0Minimum Split (s)20.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.0<	Permitted Phases						8	2		2			
Minimum Initial (s)4.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.04.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.020.0 <td>Detector Phase</td> <td>4</td> <td>4</td> <td></td> <td>8</td> <td>8</td> <td>8</td> <td>5</td> <td>2</td> <td>2</td> <td>1</td> <td>6</td> <td></td>	Detector Phase	4	4		8	8	8	5	2	2	1	6	
Minimum Split (s)20.020.020.020.020.020.020.020.020.0Total Split (s)20.020.025.025.025.025.08.027.027.018.037.0Total Split (%)22.2%22.2%27.8%27.8%27.8%8.9%30.0%30.0%20.0%41.1%Maximum Green (s)16.016.021.021.021.04.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.5	Switch Phase												
Total Split (s)20.020.025.025.025.08.027.027.018.037.0Total Split (%)22.2%22.2%27.8%27.8%27.8%8.9%30.0%30.0%20.0%41.1%Maximum Green (s)16.016.021.021.021.04.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.5	Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Total Split (%)22.2%22.2%27.8%27.8%27.8%8.9%30.0%30.0%20.0%41.1%Maximum Green (s)16.016.021.021.021.04.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.53.5	Minimum Split (s)	20.0	20.0			20.0	20.0	8.0	20.0	20.0	8.0		
Total Split (%)22.2%22.2%27.8%27.8%27.8%8.9%30.0%30.0%20.0%41.1%Maximum Green (s)16.016.021.021.021.04.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.53.5	Total Split (s)	20.0	20.0		25.0	25.0	25.0	8.0	27.0	27.0	18.0	37.0	
Maximum Green (s)16.016.021.021.021.021.023.023.014.033.0Yellow Time (s)3.53.53.53.53.53.53.53.53.53.53.5		22.2%	22.2%		27.8%	27.8%	27.8%	8.9%	30.0%	30.0%	20.0%	41.1%	
Yellow Time (s)         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5         3.5		16.0	16.0				21.0	4.0	23.0	23.0	14.0		
		3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
	All-Red Time (s)	0.5			0.5	0.5	0.5	0.5	0.5		0.5		

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Lanes, Volumes, Timings
5: Perimeter Center Pkwy & Goldkist Dr.

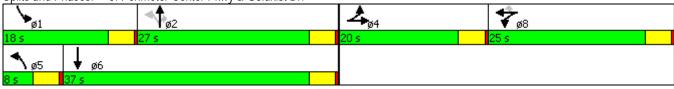
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	Min	Min	None	Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0		11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0	0		0	0		0	
Act Effct Green (s)	10.6	10.6		20.2	20.2	20.2	25.9	21.9	21.9	13.6	36.5	
Actuated g/C Ratio	0.13	0.13		0.25	0.25	0.25	0.31	0.27	0.27	0.17	0.44	
v/c Ratio	0.50	0.35		0.75	0.75	0.83	0.08	0.82	0.28	0.80	0.49	
Control Delay	42.0	5.6		43.3	43.3	16.4	14.4	37.8	5.8	46.1	18.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	42.0	5.6		43.3	43.3	16.4	14.4	37.8	5.8	46.1	18.9	
LOS	D	А		D	D	В	В	D	А	D	В	
Approach Delay		23.3			26.8			32.1			29.0	
Approach LOS		С			С			С			С	
90th %ile Green (s)	15.3	15.3		21.0	21.0	21.0	4.0	23.0	23.0	14.0	33.0	
90th %ile Term Code	Gap	Gap		Max	Max	Max	Мах	Max	Мах	Мах	Hold	
70th %ile Green (s)	12.5	12.5		21.0	21.0	21.0	4.0	23.0	23.0	14.0	33.0	
70th %ile Term Code	Gap	Gap		Мах	Мах	Мах	Мах	Max	Мах	Мах	Hold	
50th %ile Green (s)	10.7	10.7		21.0	21.0	21.0	0.0	23.0	23.0	14.0	41.0	
50th %ile Term Code	Gap	Gap		Max	Max	Max	Skip	Max	Мах	Мах	Hold	
30th %ile Green (s)	9.0	9.0		21.0	21.0	21.0	0.0	23.0	23.0	14.0	41.0	
30th %ile Term Code	Gap	Gap		Мах	Мах	Мах	Skip	Max	Мах	Мах	Hold	
10th %ile Green (s)	6.5	6.5		16.8	16.8	16.8	0.0	17.5	17.5	11.8	33.3	
10th %ile Term Code	Gap	Gap		Gap	Gap	Gap	Skip	Gap	Gap	Gap	Hold	
Queue Length 50th (ft)	58	0		161	161	84	6	201	0	120	133	
Queue Length 95th (ft)	108	26		#308	#308	#193	20	#312	42	#205	237	
Internal Link Dist (ft)		322			1224			662			258	
Turn Bay Length (ft)							200		200	150		
Base Capacity (vph)	346	437		432	432	1222	265	996	558	588	1556	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.33	0.27		0.72	0.72	0.81	0.08	0.78	0.27	0.77	0.49	
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 82.4	4											
Natural Cycle: 80												
Control Type: Semi Act-Unc	coord											
Maximum v/c Ratio: 0.83												
Intersection Signal Delay: 2	8.5			In	itersectior	LOS: C						
Intersection Capacity Utiliza					CU Level		еC					
Analysis Period (min) 15												
90th %ile Actuated Cycle: 8	9.3											
70th %ile Actuated Cycle: 8												

50th %ile Actuated Cycle: 84.7 30th %ile Actuated Cycle: 83

10th %ile Actuated Cycle: 68.6

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Perimeter Center Pkwy & Goldkist Dr.



Lanes, Volumes, Timings
6: Perimeter Center Pkwy & Connector

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ኘ	el el			\$		۲	<b>∱</b> î≽		۲	<u></u>	1
Volume (vph)	305	0	210	15	0	15	140	550	15	10	925	405
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.850			0.932			0.996				0.850
Flt Protected	0.950				0.976		0.950			0.950		
Satd. Flow (prot)	1770	1583	0	0	1694	0	1770	3525	0	1770	3539	1583
Flt Permitted	0.736				0.854		0.219			0.399		
Satd. Flow (perm)	1371	1583	0	0	1483	0	408	3525	0	743	3539	1583
Satd. Flow (RTOR)		104			18			7				440
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	332	0	228	16	0	16	152	598	16	11	1005	440
Shared Lane Traffic (%)												
Lane Group Flow (vph)	332	228	0	0	32	0	152	614	0	11	1005	440
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Detector Phase	4	4		8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	20.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	20.0
Total Split (s)	22.0	22.0		22.0	22.0		38.0	38.0		38.0	38.0	38.0
Total Split (%)	36.7%	36.7%		36.7%	36.7%		63.3%	63.3%		63.3%	63.3%	63.3%
Maximum Green (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	34.0
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5

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# Lanes, Volumes, Timings 6: Perimeter Center Pkwy & Connector

Build 2026 - Proposed Zoning PM

6. Penmeter Center	ГКМУ		IECIUI									FIVI
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		Min	Min		Min	Min	Min
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	0
Act Effct Green (s)	15.8	15.8			15.8		25.4	25.4		25.4	25.4	25.4
Actuated g/C Ratio	0.32	0.32			0.32		0.51	0.51		0.51	0.51	0.51
v/c Ratio	0.76	0.40			0.07		0.73	0.34		0.03	0.55	0.43
Control Delay	31.5	11.2			10.2		34.0	7.6		6.2	9.5	2.2
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	31.5	11.2			10.2		34.0	7.6		6.2	9.5	2.2
LOS	С	В			В		С	А		А	А	А
Approach Delay		23.2			10.2			12.8			7.3	
Approach LOS		С			В			В			А	
90th %ile Green (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	34.0
90th %ile Term Code	Max	Max		Hold	Hold		Мах	Max		Мах	Мах	Мах
70th %ile Green (s)	18.0	18.0		18.0	18.0		34.0	34.0		34.0	34.0	34.0
70th %ile Term Code	Max	Мах		Hold	Hold		Мах	Max		Hold	Hold	Hold
50th %ile Green (s)	18.0	18.0		18.0	18.0		25.2	25.2		25.2	25.2	25.2
50th %ile Term Code	Max	Мах		Hold	Hold		Gap	Gap		Hold	Hold	Hold
30th %ile Green (s)	14.2	14.2		14.2	14.2		19.7	19.7		19.7	19.7	19.7
30th %ile Term Code	Gap	Gap		Hold	Hold		Hold	Hold		Gap	Gap	Gap
10th %ile Green (s)	10.5	10.5		10.5	10.5		16.1	16.1		16.1	16.1	16.1
10th %ile Term Code	Gap	Gap		Hold	Hold		Dwell	Dwell		Dwell	Dwell	Dwell
Queue Length 50th (ft)	83	25			3		34	53		2	103	0
Queue Length 95th (ft)	#235	84			20		#126	79		7	144	31
Internal Link Dist (ft)		574			1313			1750			662	
Turn Bay Length (ft)	300						300			300		300
Base Capacity (vph)	521	666			575		293	2533		533	2542	1261
Starvation Cap Reductn	0	0			0		0	0		0	0	0
Spillback Cap Reductn	0	0			0		0	0		0	0	0
Storage Cap Reductn	0	0			0		0	0		0	0	0
Reduced v/c Ratio	0.64	0.34			0.06		0.52	0.24		0.02	0.40	0.35
Intersection Summary												
Cycle Length: 60												
Actuated Cycle Length: 49.5	i											
Natural Cycle: 55												
Control Type: Semi Act-Unc	oord											
Maximum v/c Ratio: 0.76												
Intersection Signal Delay: 12	2.0			In	tersectior	n LOS: B						
Intersection Capacity Utilizat						of Service	С					
Analysis Period (min) 15												
90th %ile Actuated Cycle: 60	)											
70th %ile Actuated Cycle: 60												

### Lanes, Volumes, Timings 6: Perimeter Center Pkwy & Connector

50th %ile Actuated Cycle: 51.2 30th %ile Actuated Cycle: 41.9 10th %ile Actuated Cycle: 34.6

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

#### Splits and Phases: 6: Perimeter Center Pkwy & Connector

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38 s	22 s
ø6	<b>★</b> ø8
38 s	22 s

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ሻሻ	- <b>†</b> †	- <b>††</b>	11	ካካ	1
Volume (vph)	260	430	495	445	620	530
Lane Util. Factor	0.97	0.95	0.95	0.88	0.97	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	3539	3539	2787	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3433	3539	3539	2787	3433	1583
Satd. Flow (RTOR)				484		413
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	283	467	538	484	674	576
Shared Lane Traffic (%)						
Lane Group Flow (vph)	283	467	538	484	674	576
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	Lon	24	24	. ugin	24	· · · · · ·
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		10	10		10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	1.00	9	1.00	9
Number of Detectors	15	2	2	9	15	9
Detector Template	Left	Z Thru	Z Thru	Right	Left	Right
•	Len 20	100	100	-	20	Right 20
Leading Detector (ft)				20		
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	0.0	0.0	~ ~ ~		0.0	~ ~
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	5	-	5	6	,	4
Detector Phase	5	2	6	6	4	4
Switch Phase	5	2	0	0	Ŧ	т
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	4.0	20.0	20.0	20.0	20.0	20.0
		20.0	20.0	20.0		20.0
Total Split (s)	12.0				28.0	
Total Split (%)	20.0%	53.3%	33.3%	33.3%	46.7%	46.7%
Maximum Green (s)	8.0	28.0	16.0	16.0	24.0	24.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5

# Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

-	≯	-	+	×.	1	~
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	4.0 Lead	4.0	Lag	4.0 Lag	4.0	4.0
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode						
	None	Min	Min	Min	None	None
Walk Time (s)		5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	7.0	0	0	0	0	0
Act Effct Green (s)	7.9	25.9	13.9	13.9	16.8	16.8
Actuated g/C Ratio	0.16	0.51	0.27	0.27	0.33	0.33
v/c Ratio	0.53	0.26	0.56	0.43	0.59	0.72
Control Delay	25.7	8.3	19.1	3.5	16.6	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	8.3	19.1	3.5	16.6	10.3
LOS	С	А	В	А	В	В
Approach Delay		14.9	11.7		13.7	
Approach LOS		В	В		В	
90th %ile Green (s)	8.0	28.0	16.0	16.0	24.0	24.0
90th %ile Term Code	Max	Hold	Max	Max	Max	Max
70th %ile Green (s)	8.0	28.0	16.0	16.0	19.8	19.8
70th %ile Term Code	Max	Hold	Max	Max	Gap	Gap
50th %ile Green (s)	8.0	27.5	15.5	15.5	16.9	16.9
50th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
	8.0	24.7	0ap 12.7	0ap 12.7	13.7	13.7
30th %ile Green (s)						
30th %ile Term Code	Max	Hold	Gap	Gap	Gap	Gap
10th %ile Green (s)	6.8	20.5	9.7	9.7	11.0	11.0
10th %ile Term Code	Gap	Hold	Gap	Gap	Gap	Gap
Queue Length 50th (ft)	42	37	71	0	88	37
Queue Length 95th (ft)	84	78	132	32	131	125
Internal Link Dist (ft)		726	1861		1750	
Turn Bay Length (ft)					300	
Base Capacity (vph)	552	1992	1138	1225	1656	977
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.23	0.47	0.40	0.41	0.59
Intersection Summary						
Cycle Length: 60						
Actuated Cycle Length: 50.8						
Natural Cycle: 55						
Control Type: Semi Act-Unco	ord					
Maximum v/c Ratio: 0.72	oru -					
Intersection Signal Delay: 13.	2			In	tersectior	
ů,						
Intersection Capacity Utilization	011 03.2%			IC	U Level (	of Service A
Analysis Period (min) 15						
90th %ile Actuated Cycle: 60						
70th %ile Actuated Cycle: 55.	.8					

#### Lanes, Volumes, Timings 7: Lake Hearn Dr. & Perimeter Center Pkwy

Build 2026 - Proposed Zoning

50th %ile Actuated Cycle: 52.4 30th %ile Actuated Cycle: 46.4 10th %ile Actuated Cycle: 39.5

Splits and Phases: 7: Lake Hearn Dr. & Perimeter Center Pkwy



daf

Analysis Date: 3/25/2016

#### DeKalb County School District Zoning Review Comments

Submitted to:	City of Dunwoody	Case:	RZ 16-041
Name of Development:	Dunwoody Crown Towers	Location:	244 Perimeter Center Pkwy
Description:	Rezoning to allow for building	g of 380 own	er-occupied units in two towers.

Impact of Development: If approved, this rezoning will add approximately 37 students to local schools: 17 to Dunwoody ES, 7 to Peachtree MS, 11 to Dunwoody HS and 2 to another DCSD school. An additional 3 students would be expected to attend a private school. Overcrowding ranges from almost 115% to almost 130%. Each school will be gaining additional portables for the 2016 school year. By school the number of units are: Dunwoody ES: +2, Peachtree MS: +4 and Dunwoody HS: +1. The combined enrollment for these three schools is forecast to increase from 4,372 in 2016 to 4,970 for the 2020 school year. This is an increase of 598 students (13.68%.) By 2020, Peachtree MS will be at 133% of capacity, while Dunwoody ES and Dunwoody HS will be at 141% - 142% of capacity.

	Dunwoody	Peachtree	Dunwoody	Other DSCD	Private	
Current Condition of Schools	ES	MS	HS	Schools	Schools	Total
Capacity	973	1,212	1,403			
Portables (Oct. 2016)	3	16	5			
Enrollment (Oct. 2016)	1,117	1,541	1,809			
Seats Available	-144	-329	-406			
Utilization (%)	114.8%	127.1%	128.9%			
New students from development	17	7	11	2	3	40
New Enrollment	1,134	1,548	1,820			
New Seats Available	-161	-336	-417			
New Utilization	116.5%	127.7%	129.7%			

		Attend other		
	Attend Home	DCSD	Private	
Yield Rates	School	School	School	Total
Elementary	0.04329	0.00238	0.00381	0.04948
Middle	0.01903	0.00095	0.00190	0.02188
High	0.02997	0.00095	0.00285	0.03378
Total	0.09229	0.00428	0.00856	0.10514

#### **Student Calculations**

#### Proposed Units 380

	Attend other					
	Attend Home	DCSD	Private			
Units x Yield	School	School	School	Total		
Elementary	16.45	0.90	1.45	18.80		
Middle	7.23	0.36	0.72	8.31		
High	11.39	0.36	1.08	12.83		
Total	35.07	1.62	3.25	39.94		

		Attend other		
Anticipated Students	Attend Home School	DCSD School	Private School	Total
Dunwoody ES	17	1	1	19
Peachtree MS	7	0	1	8
Dunwoody HS	11	1	1	13
Total	35	2	3	40

#### DeKalb County School District Zoning Review Comments

Page 2 of 2 -206-



G. Douglas Dillard 404-665-1244

E-Mail ddillard@pftlegal.com

March 30, 2016

#### Via Hand Delivery and E-mail

Mayor Shortal and Members of the City Council c/o Steve Foote, Community Development Director City of Dunwoody 41 Perimeter Center East Dunwoody, Georgia 30346

#### Re: Amended Amendment Application; Dunwoody Crown Towers; 244 Perimeter Center Parkway

Dear Steve:

-207-

Please find enclosed Applicant's revised Amendment Application for approximately 4.75 acres of the above-referenced property. The following revisions were made to the Amendment Application package submitted on February 2, 2016:

- Revised Site Plan to address Staff's 3-14-16 review comments;
- Revised Tract designations on conceptual plat/subdivision exhibit to be consistent with site plan; and
- Revisions to the Letter of Intent to reflect the above-referenced revisions.

Please contact me with any questions.

Sincerely,

PURSLEY FRIESE TORGRIMSON

G. Douglas Dillard Jillian S. Arnold

Enclosures



	Community Development
AMENDMENT	Dunwoody
APPLICATION	* Smart people – Smart city
	41 Perimeter Center East   Dunwoody, GA 30346
	Phone: (678) 382-6800   Fax: (770) 396-4828
Applicant Information:	
Company Name: Dunwoody Crown	
Contact Name: Charlie R. Brown	
	y Road, ste 400, Atlanta, GA 30338
	Email: cbrown@crownhgroup.com
Pre-application conference date (required):	
• Owner Information: M Check here if same as	applicant
Owner's Name:	
Owner's Address:	
Phone:Fax:	Email:
Property Information:	× .
Property Address: 244 Perimeter Center Parkway,	NE, 30.346 Parcel ID: 18-329-04-055
Current Zoning Classification:	
Requested Zoning Classification:	
Applicant Affidavit:	
reby certify that to the best of my knowledge, this amendin	nent application form is correct and complete. If additional materials are ble for filing additional materials as specified by the City of Dunwoody
Coning Ordinance. I certify that I, the applicant (if different), and associated actions.	am authorized to act on the owner's behalf, pursuant to this application
Applicant's Name: Dunwoody Crowa To	wers, LLC, By: Emilia Pearson
Applicant's Signature: By:	Date: 01/27/2016
Notary:	
Sworn to and subscribed before me this	- Day of <u>January</u> , 20 16
Notary Public, Scondnie Grant.	8
Signature:	
Ay Commission Expires:	
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#### **Applicant-Initiated Meeting**

Rezoning Application: Dunwoody Crown Towers, LLC

#### February 1, 2016

# 1. Efforts to notify neighbors about the proposal (how and when notification occurred, and who was notified);

The Applicant held an applicant-initiated meeting on Monday, February 1, 2016 at the D.W. Brooks Conference Center, 244 Perimeter Center Parkway, Dunwoody, GA 30346. Notice of the applicant-initiated meeting was published in the Dunwoody Crier on January 20, 2016. A copy of the legal advertisement is attached.

On January 11, 2016, notice of the applicant-initiated meeting was also mailed to the two residentially-zoned properties within 1,000 feet of the subject 4.75-acre property. According to the City's GIS map, there are two properties within 1,000 feet of the subject property zoned for residential use. The first is the Martin Cemetery parcel located at 1191 Ashford Dunwoody (Tax Parcel ID 18 348 02 002) which is zoned R-150. The Dunwoody Preservation Trust maintains the Martin Cemetery and notice was mailed to the Executive Director of the Dunwoody Preservation Trust at 5455 Chamblee Dunwoody Rd Dunwoody, GA 30338. The second property is located at 11 Ravinia Parkway (Parcel ID 18 347 01 049), is owned by Hines Ravinia Four Limited, and is zoned OCR. Notice was mailed to Hines Ravinia Four Limited at 1 Ravinia Drive, Ste. 1160, Atlanta, GA 30346. Attached is the notice letter mailed to the Dunwoody Preservation Trust and Hines Ravinia Four Limited. Finally, notice of the meeting was also sent to the Planning Department.

#### 2. Meeting location, date and time;

The Applicant held an applicant-initiated meeting on Monday, February 1, 2016 at the D.W. Brooks Conference Center, 244 Perimeter Center Parkway, Dunwoody, GA 30346. The meeting started at 7:00pm.

#### 3. Who was involved in the discussions;

Mr. Charles Brown and Mr. Doug Dillard attended the meeting on behalf of the Applicant, Dunwoody Crown Towers, L.L.C. Please see the attached sign-in sheet for the meeting attendees.

#### 4. Suggestions and concerns raised by neighbors; and

The neighbors raised concerns about the overall density and the residential component of the plan, though the concerns were directed primarily at rental units which are not being proposed by the Applicant.

# 5. What specific changes to the proposal were considered and/or made as a result of the meeting.

No changes are proposed at this time.



#### NOTICE OF NONDISCRIMINATORY POLICY AS TO STUDENTS

North Atlanta Children's Ministries, Inc., 5676 Roberts Dr., Atlanta, GA 30338, admits students of any race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students of the organization. It does not discriminate on the basis of race, color, national, and ethnic origin in administration of its educational policies, and other organization-administered programs.

### NOTICE OF MEETING FOR THE PUBLIC

Dunwoody Crown Towers, LLC intends to submit a Rezoning Application and three Special Land Use Permit Applications to the City of Dunwoody for land within 1,000 feet of your property. The Applicant will be submitting a rezoning application and three Special Land Use Permit ("SLUP") Applications for property at 244 Perimeter Center Parkway in order to develop Dunwoody Crown Towers, a mixed use development with residential and non-residential uses. The Applicant will be holding a neighborhood meeting to discuss the proposed rezoning application and to answer any questions that you may have regarding the applications and proposed development. Specific details regarding the Rezoning Application, Special Land Use Permit Applications, and Applicant-initiated neighborhood meeting are below.

CASE NUMBER: TBD (this will be provided at the time the application is filed with the City)

APPLICANT NAME: Dunwoody Crown Towers, LLC

JURISDICTION: City of Dunwoody

ZONING CHANGE: O-I to CR-1 (Commercial-Resi dential)

SLUP Request: (1) SLUP to increase the height of the multi-unit building; (2) SLUP to increase the height of the mixed use vertical building; and a (3) SLUP to allow a multi-unit residential building within the CR-1 zoning district

STREET LOCATION: 244 Perimeter Center Parkway; +/- 4.75 acres

PROPOSED DEVELOPMENT: Multi-Unit Residential Tower; Mixed Use Vertical Tower (Hotel and Residential uses); 3-story Retail Building

APPLICANT-INITIATED MEETING D.W. Brooks Conference Center 244 Perimeter Center Parkway (1st floor) Dunwoody, GA 30346 February 1, 2016 7:00 pm

If you have questions about the Applications or the applicant-initiated meeting, please contact Jill Arnold at (404) 665-1243 or jarnold@pftlegal.com.

#### Brookhaven, from page

takes place today.

The council met later last have a third party resolve That contract was changed week to complete the process these disputes. We wish Marie to a more conventional but decided to send the issue Garrett well." to third-party mediation. That

"The City honors its obliga- \$214,000 per year, could be nature of a new city. tions," said Mayor John Ernst. eligible for nine months pay, "Unfortunately some of the terms of the [Garrett's] con- surance and retirement pay. tract negotiated by previous

She originally came to the administrations is ambiguous city as a consultant when it and does not allow the City to was incorporated and later pro-tem. He was elected to know what its duties are," was hired by Mayor J. Max Mayor, John Ernst said in a Davis. Her original contract statement. "While working to- drew some fire when it was re- was succeeded by Rebecca wards an orderly transition, vealed she was to work only we have become mired in con- four days a week and was to flict over the terms and condibe paid at her consultant the employment of the city tions of that agreement. The hourly rate if asked to work on clerk and finance director. responsible thing to do is to Fridays.

arrangement, but Garrett was Garrett, the highest paid able to command a higher city manager in the state at salary because of the start-up Police Chief Gary Yandura

continued health and life in- is to be the interim city manager.

In other actions, the council elected Bates Mattison mayor that position last year when Mayor Davis left office and Williams The mayor also reaffirmed

#### THE CITY OF DUNWOODY, GEORGIA NOTICE OF PUBLIC HEARING

The City of Dunwoody Mayor and City Council will meet on Monday, February 08, 2016 at 6:00 p.m. in the Council Chambers of Dunwoody City Hall, which is located at 41 Perimeter Center East, Dunwoody, Georgia 30346, for the purpose of due process of the following:

CQ Dunwoody Village Court, LLC, owner of 1530 and 1536 Dunwoody Village Parkway, Dunwoody, GA 30338, by Marian Adeimy, attorney for contract purchaser, seeks the following for the subject property to allow for construction of a 79-unit townhome development. The property consists of two tax parcels: 18-366-06-061 located at 1530 Dunwoody Village Parkway, Dunwoody, GA 30338, and 18-366-06-065 located at 1536 Dunwoody Village Parkway, Dunwoody, GA 30338.

RZ 16-021: Rezone property currently zoned Office-Institution (O-I) District to Multidwelling Residential-100 (RM-100) District.

SLUP 16-021: Special Land Use Permit to waive the requirement for a development to come into full compliance with the Dunwoody Village Overlay District regulations to allow for reduction in sidewalk width from 12 ft. to 6 ft.

RZ 16-022: Kathryn B. Zickert, applicant, on behalf of Hines Atlanta Associates Limited Partnership, owner of 4453 Ashford Dunwoody Road, Dunwoody, GA 30346, seeks permission to rezone property currently zoned Office-Institution conditional (O-Ic) District to Local Commercial conditional (C-1c) District to allow for development of a restaurant with drive-through. The tax parcel number is 18 347 01 033.

Should you have any questions, comments, or would like to view the application and supporting materials, please contact the City of Dunwoody Community Development Department at 678-382-6800. Members of the public are encouraged to call or schedule a meeting with staff in advance of the Public Hearing if they have questions or are unfamiliar with the process. Staff is available to answer questions, discuss the decision-making process, and receive comments and concerns.



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Terry Landrum Direct: 404.665.1227 tlandrum@pftlegal.com

January 11, 2016

Rebecca Keefer, AICP City Planner/Director of Sustainability City of Dunwoody 41 Perimeter Center East, Suite 250, Dunwoody, GA 30346

RE: Dunwoody Crown Towers Applicant-Initiated Neighborhood Meeting 244 Perimeter Center Parkway, DeKalb County, Atlanta, GA

Dear Rebecca:

-211-

Enclosed please find the Applicant-Initiated Meeting notice that was mailed on January 11, 2016 to residential owners of property within 1,000 feet of the subject property.

Sincerely, PURSLEY FRIESE TORGRIMSON, LLP

Terry Landrum Paralegal

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Enclosure





Dunwoody Crown Towers, LLC c/o Doug Dillard, Esq. Pursley Friese Torgrimson Promenade, Suite 1200 1230 Peachtree Street NE Atlanta, GA 30309

January 11, 2016

Dear Property Owner:

This letter is to inform you that Dunwoody Crown Towers, LLC intends to submit a Rezoning Application and three Special Land Use Permit Applications to the City of Dunwoody for land within 1,000 feet of your property. The Applicant will be submitting a rezoning application and three Special Land Use Permit ("SLUP") Applications for property at 244 Perimeter Center Parkway in order to develop Dunwoody Crown Towers, a mixed use development with residential and non-residential uses. The Applicant will be holding a neighborhood meeting to discuss the proposed rezoning application and to answer any questions that you may have regarding the applications and proposed development. Specific details regarding the Rezoning Application, Special Land Use Permit Applications, and Applicant-initiated neighborhood meeting are below.

CASE NUMBER: TBD (this will be provided at the time the application is filed with the City)

APPLICANT NAME: Dunwoody Crown Towers, LLC

JURISDICTION: City of Dunwoody

ZONING CHANGE: O-I to CR-1 (Commercial-Residential)

**SLUP Request:** (1) SLUP to increase the height of the multi-unit building; (2) SLUP to increase the height of the mixed use vertical building; and a (3) SLUP to allow a multi-unit residential building within the CR-1 zoning district

STREET LOCATION: 244 Perimeter Center Parkway; +/- 4.75 acres

**PROPOSED DEVELOPMENT:** Multi-Unit Residential Tower; Mixed Use Vertical Tower (Hotel and Residential uses); 3-story Retail Building

APPLICANT-INITIATED MEETING D.W. Brooks Conference Center 244 Perimeter Center Parkway (1st floor) Dunwoody, GA 30346 February 1, 2016 7:00 pm

If you have questions about the Applications or the applicant-initiated meeting, please contact Jill Arnold at (404) 665-1243 or jarnold@pftlegal.com.

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# SIGN IN SHEET for NEIGHBORS

# Dunwoody Crown Towers

# February 1, 2016

			8. 
NAME	ADDRESS	PHONE	E-MAIL
Bu	5061 HIMDEN BRANCHES DR	770 551	BILL, GROSSMAN @
GROSSMAN	5061 HIMEN BATACHES AR DUHINDONY, Et 30235	0324	COMCAST. NET
150h	1445 VAlley View Rol	770.331.4040	bobda/lass@gmail.com
DAllas	DUNWOOdy, 6A 30333		guinned
Dyana	645 Forest HillsD	404-353-8514	dyanalocigby @
Bagley	Sandy Springs 30342	1 === 05/4	reporternecispapers.n
KYAN	1416 WOMACK 120	(404)273-0185	RESSLING @GMAIL. com
Essincer	DUNWWPY, GA 30338		
OHERYL	TILLY MILL RO		CASUMMERS 76
_ N UMMERS	DUNWOODY 30338		@ BMAIL. COM
( nutres Dillad	1230 Preachtruch		
	attenti 30309		
SenyWall	1344 Vernon North	. UAL	Terry. Nalle
	Dunwoody GA 30.	338 915-6693	dunwoodyga,gov
John Henoghan	4624 Buckley Ct	770-234-	John- Heneghand
Heneghan	Junwoody 67 30338	0678	dunwoody GA - gov
Chartie	Crown Holdings.		
Brown	0		
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## Letter of Intent and Review Criteria

City of Dunwoody Amendment Application

Applicant: Dunwoody Crown Towers, LLC

Property: 244 Perimeter Center Parkway

+/- 4.75 acres of Land Located in Land Lot 329 of the 18th District, DeKalb County

O-I to CR-1

## Submitted for Applicant by:

G. Douglas Dillard Jillian Skinner Arnold PURSLEY FRIESE TORGRIMSON 1230 Peachtree Street, Suite 1200 Atlanta, Georgia 30309 (404) 665-1243 <u>ddillard@pftlegal.com</u> jarnold@pftlegal.com

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### I. INTRODUCTION

The +/- 4.75 acre property is located at 244 Perimeter Center Parkway and is currently zoned O-I (the "Property"). It is bordered by I-285 to the south, Perimeter Center Parkway to the west, Ashford-Dunwoody Road to the east, and a shopping center development to the north. The Applicant, Dunwoody Crown Towers, LLC, intends to develop Dunwoody Crown Towers, a mixed use development with residential and non-residential uses that will significantly enrich the design and livability of the Perimeter Center area and create a true gateway to the City of Dunwoody.

Concurrent with the Amendment application, the Applicant is also submitting 3 Special Land Use Permit ("SLUP") Applications and a Variance Application for the Property. The SLUP requests are for the following: (1) a SLUP to increase the height of the multi-unit residential building ("Crown Tower 1" on enclosed conceptual drawings); (2) a SLUP to increase the height of the mixed use vertical building ("Crown Tower 2" on conceptual drawings); and (3) a SLUP to allow multi-unit residential use in the CR-1 zoning district. The requested 0' front yard setback variance is for the existing Goldkist building on the adjacent 9.2-acre property, which will be set back 0' from the proposed new road extending to the Property.

The Property is currently part of a larger 15 acre-parcel, but will be subdivided as a legally separate lot upon approval of the rezoning request by the Dunwoody City Council. Therefore, the current 15-acre parcel will be split into two tracts-Site A (+/-9.2 acres, after dedication) and Site B (+/-4.75 acres, after dedication) as shown on the enclosed Site Plan. The owner is dedicating approximately 1.03 acres for the extension of a new road from the existing Goldkist Road to the Property at Site B. This subdivision is necessitated by the City's prohibition of dual-zoned parcels. Please note, the rezoning and SLUP applications are for Site B. <u>Site A is NOT included in the rezoning or SLUP applications.</u> Site A is shown on the conceptual plans to illustrate existing entitlements pursuant to the variance granted by DeKalb County on February 9, 1999. Site A will remain zoned O-I with existing entitlements as shown on the enclosed conceptual plans.

### II. REZONING REQUEST

The Applicant, Dunwoody Crown Towers, LLC, is requesting said Property (Site B) be rezoned from O-I to CR-1 in order to develop Dunwoody Crown Towers, which includes (i) one mixed use vertical building with a hotel, residential units, and accessory uses ("Crown Tower 2" on the enclosed conceptual drawings), (ii) one multi-unit residential building ("Crown Tower 1" on enclosed conceptual drawings), and (iii) a retail building. A site plan showing the proposed buildings and uses is included in the rezoning application. The Applicant proposes a residential density of 380 units spread between Crown Tower 1 and Crown Tower 2. The residential density calculation is based on the 4.75-acre Site B, *exclusive* of the 1.03 acres of property to be dedicated for public right of way to the Site B Property.



The luxury residences will include the following features:

- Hardwood flooring in foyer, kitchens and bathrooms
- Quartz countertops throughout the homes
- 10-foot ceilings
- Stainless steel appliances, with side by side refrigerators and wine coolers
- Front load washers in each home
- Ceiling fans in each bedroom
- Walk-in closets with custom shelving
- Patio/Balcony in all homes
- High-speed fiber internet and cable packages
- Tile surround soaking tubs/showers with frameless shower doors
- LED light fixtures
- Smart home technology with thermostats and keyless locks

A Homeowners Association will be created to manage residential operations.

In addition to the luxury features included in each individual unit, residents will have access to various amenities including a spacious club room with bar, indoor & outdoor fireplaces, and state of the art outdoor kitchen, a business center, fitness center, pools and cabanas, and a massage/treatment room. Though the room distribution has not been solidified, the Applicant anticipates approximately 50% of the residential units to be 2-bedroom units, approximately 25% to be 1-bedroom units, approximately 10% to be studio units, and approximately 15% to be 3-bedroom units.

The proposed luxury hotel will have a local, authentic feel and include a destination food and beverage outlet, approximately 4,500 square feet of meeting space, and on-site boutique retail. The hotel will also feature a pool, cabanas, spa, Club room, WIFI in the lobby and Club level, and a fitness center. The hotel's close proximity to the Perimeter Center Mall and MARTA offers guests easy and convenient access to restaurants, shopping, and entertainment.

The proposed CR-1 zoning satisfies the City's criteria for amendment applications as set forth in Section III below. As such, the Applicant respectfully requests the City Council grant the Amendment application, as requested by the Applicant.

#### **Zoning History**

The 15-acre parcel currently has significant non-residential development entitlements. In 1999, DeKalb County approved four variances for the 15-acre parcel at 244 Perimeter Center Parkway: (1) a 28-story hotel; (2) a conference center and parking structure (6 levels with 600 parking spaces); (3) two 24-story office buildings; and (4) two 10-level parking decks with 4,304 parking spaces. These entitlements remain on the 15-acre parcel today. The Applicant intends to concentrate the existing above-referenced entitlements on the adjacent 9.2-acre parcel, and rezone

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the subject Property to CR-1 in order to add a residential mix of uses into the overall development to create a true transit-oriented mixed use community. The current development entitlements (i.e. a 28-story hotel, conference center with parking structure, two 28-story office buildings, and a parking deck) fit within the 9.2-acre parcel while still complying with O-I development regulations, including lot coverage.

### The Proposed Development is Consistent with Dunwoody's Comprehensive Plan

The Applicant's proposed development and rezoning requests are consistent with the City of Dunwoody's Comprehensive Plan. The subject property is located in the Perimeter Center Character Area, which seeks to be a "livable regional center with first-class office, retail, entertainment, hotels, and high-end restaurants" to create a true "live-work" environment.¹ The City recognizes the value in mixed-use, transit-oriented development, but has concerns about the impact on schools.² Additional goals of the City's Comprehensive Plan include:

- Achieve a lifelong-community for residents who can age in place with safe access to medical, recreational, and other necessary services.³
- Increase connectivity and enhance transportation options for all forms of travel.⁴
- Reduce surface parking and promote livable centers in the immediate areas surrounding the MARTA station.⁵
- Encourage hotel and convention development near MARTA in order to foster commerce along the mass transportation route.⁶

The Applicant's rezoning request and proposed mixed-use development is consistent with the goals and intent of the Perimeter Center Character Area. The rezoning request seeks to add high-quality residential units to the area, thereby creating a true "livable" center where Dunwoody residents are able to live, work, shop, play, and access mass transit within one development. Looking at the broader context, this Property is situated next to the new State Farm site, Perimeter Center Mall, and the yet-to-be-developed GID/High Street site, which likewise includes a mix of land uses. This development complements each of those developments by adding residential opportunities for the employees of State Farm and the adjacent office uses.

- ² Id. at 25.
- ³ Id. ⁴ Id.



¹ City of Dunwoody Comprehensive Plan, p. 25.

⁵ *Id.* at 26.

⁶ *Id.* at 26.

Moreover, the residential component of the mixed use project will be well-suited for those Dunwoody residents looking to "age in place" within the City. These individuals are looking to downsize from larger single-family detached homes to smaller residences with less maintenance, yet still remain in the community and part of their established social networks. The Applicant's proposed residences will provide an "age in place" opportunity for Dunwoody residents looking to downsize yet remain in Dunwoody.

Overall, the proposed mixed use development will complement the surrounding mix of uses in the area, is consistent with the City's Comprehensive Plan and its vision for a "live work" mixed use environment in the Perimeter Center area, and provides residential options to those already living in Dunwoody and those who want to move to the area. Sufficient parking is provided on site, and MARTA is within walking distance of the Property making transit a realistic transportation alternative.

### III. IMPACT ANALYSIS

The Applicant satisfies all of the criteria for rezoning as set forth in the City's Zoning Code, Section 27-335(b).

### 1. Whether the zoning proposal is consistent with the policies of the comprehensive plan;

Yes, the proposed use is consistent with the policies and intent of the City's Comprehensive Plan. The subject property is located in the Perimeter Center Character Area, which seeks to be a "livable regional center with first-class office, retail, entertainment, hotels, and highend restaurants" to create a true "live-work" environment. The rezoning request seeks to add high-quality residential units to the area, thereby creating a true "livable" center where Dunwoody residents are able to live, work, shop, play, and access mass transit within one development.

Overall, the proposed mixed use development will complement the surrounding mix of uses in the area, is consistent with the City's Comprehensive Plan and its vision for a "live work" mixed use environment in the Perimeter Center area, and provides residential options to those already living in Dunwoody and those who want to move to the area.

### 2. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties;

Yes, the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties. The Property is bordered by I-285 to the

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south, Perimeter Center Parkway to the west, Ashford-Dunwoody Road to the east, and two shopping center developments, one of which is Perimeter Center Mall, to the north. The Property is located next to a Marriott hotel, the new State Farm campus, Rooms to Go, Perimeter Center Mall, Best Buy, the mixed-use GID site, and the Dunwoody MARTA station. The proposed residential uses on the Property within the broader mixed-use campus will promote the "live work" goals of the Perimeter Center area and complement nearby employment centers by providing residential opportunities for employees. The proposed CR-1 zoning is also consistent with the zoning on the adjacent parcels, which includes O-I, OCR, PD, and C-1.

### 3. Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned;

While the Property does have some economic value as currently zoned, the highest and best use of the Property would include a residential component.

### 4. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property;

No, the zoning proposal will not adversely affect the existing use or usability of adjacent or nearby property. On the contrary, the zoning proposal will benefit surrounding land uses since the proposed mixed use development will provide residential options for employees working in nearby employment centers and those already living in Dunwoody who want to downsize but remain within the Dunwoody community. The proposed transportation improvements proposed as part of this development will also help mitigate traffic congestion for the broader Perimeter Center area.

# 5. Whether there are other existing or changing conditions affecting the use and development of the property that provide supporting grounds for either approval or disapproval of the zoning proposal;

The Applicant's proposed development will benefit the public health, safety and welfare by promoting necessary transit-oriented development in the Perimeter Center area. Land uses in the Perimeter Center area are changing in such a way as to necessitate locating residential land uses within walking distance of transit and employment centers. The areas surrounding the subject property have significant density entitlements which make the proposed zoning proposal and construction of luxury residences highly beneficial to those within the Perimeter Center area.



### 6. Whether the zoning proposal will adversely affect historic buildings, sites, districts, or archaeological resources; and

No, the zoning proposal will not adversely affect historic buildings, sites, districts, or archaeological resources. The proposed development is located next to the Martin family cemetery. The development will have no impact on the cemetery or the easement providing ingress to and from the cemetery. The cemetery will at all times be protected. The Applicant has spoken with representatives from the Dunwoody Preservation Trust, the organization tasked with maintaining the cemetery, to work on a mutually beneficial strategy for the cemetery's continued maintenance and accessibility.

### 7. Whether the zoning proposal will result in a use that will or cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.

No, the zoning proposal will not create an excessive or burdensome use of streets, transportation facilities, utilities or schools. The proposed zoning proposal may generate a nominal number of new students, some of which may choose to attend private schools and therefore have no impact on the DeKalb County public school system. Using statistics provided by DeKalb County regarding owner-occupied condominium developments, the number of school-age children generated from the proposed 380 units will be approximately 23 students (9 elementary students, 5 middle school students, and 9 high school students).

Moreover, the proposed development may actually reduce the burden on road infrastructure and existing transportation facilities in the area by providing new transportation infrastructure. Although existing entitlements are being maintained on the 9.2-acre parcel (Site A), the existing entitlements permit the property owner to develop approximately 2.1 Million square feet of non-residential uses because the variance approvals on the property limit only the *height* of the buildings rather than the density or overall building footprint and bulk.

The proposed development reduces the development potential on Site A to approximately 1.58 Million square feet. When the 1.58 Million square feet on Site A is combined with the +/- 460,100-529,115 square feet of residential, hotel, retail, and accessory uses on Site B, the overall development is approximately 2.11 Million (1.58 Million square feet + 529,115 square feet = 2,109,115), which is consistent with the current entitlements, in terms of density, on the entire 15-acre parcel.

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Moreover, the location of the project adjacent to the Dunwoody MARTA station promotes transit ridership and reduces the number of single-occupancy vehicles commuting to Property.

### IV. REQUIRED CONSTITUTIONAL NOTICE

Georgia law and the procedures of the City of Dunwoody require us to raise Federal and State constitutional objections during the Amendment application process. While the Applicant anticipates a smooth application process, failure to raise constitutional objections at this stage may mean that the Applicant will be barred from raising important legal claims later in the process. Accordingly, we are required to raise the following constitutional objections at this time:

The portions of the City of Dunwoody Zoning Ordinance, facially and as applied to the Property, which restrict the Property to any zoning classification, uses, or to any zoning district other than that proposed by the Applicant are unconstitutional in that they would destroy the Applicant's property rights without first paying fair, adequate and just compensation for such rights, in violation of Article I, Section I, Paragraph I and Section III, Paragraph I of the Constitution of the State of Georgia of 1983, and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

The application of the City of Dunwoody Zoning Ordinance, facially and as applied to the Property, which restricts the Property to any zoning classification, uses, or to any zoning classification other than the classification as proposed by the Applicant is unconstitutional, illegal, null and void, constituting a taking of Applicant's Property in violation of the Just Compensation Clause of the Fifth Amendment to the Constitution of the United States; Article I, Section I, Paragraph I, and Section III, Paragraph I of the Constitution of the State of Georgia of 1983; and the Equal Protection and Due Process Clauses of the Fourteenth Amendment to the Constitution of the United States denying the Applicant an economically viable use of its land while not substantially advancing legitimate state interests.

A denial of this Application would constitute an arbitrary and capricious act by the City of Dunwoody City Council without any rational basis therefore constituting an abuse of discretion in violation of Article I, Section I, Paragraph I and Section III, Paragraph I of the Constitution of the State of Georgia of 1983, and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

A refusal by City of Dunwoody City Council to rezone the subject property in accordance with the zoning criteria requirements as requested by the Applicant would be unconstitutional and discriminate in an arbitrary, capricious and unreasonable manner between the Applicant and owners of the similarly situated property in violation of Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983 and the Equal Protection Clause of the Fourteenth



Amendment to the Constitution of the United States. Any rezoning of the Property subject to conditions which are different from the conditions requested by the Applicant, to the extent such different conditions would have the effect of further restricting Applicant's utilization of the Property, would also constitute an arbitrary, capricious and discriminatory act in zoning the Property to a unconstitutional classification and would likewise violate each of the provisions of the State and Federal Constitutions set forth hereinabove.

For all the foregoing reasons, it is submitted on behalf of the Applicant that the Amendment Application meets the requirements of the City of Dunwoody Zoning Code.

If there are any questions about this rezoning request, you may contact me at 404-665-1243 or at jarnold@pftlegal.com.

Sincerely, G. Douglas Dillard

Jillian S. Arnold Attorneys for the Applicant

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### Environmental Site Analysis

Dunwoody Crown Towers, LLC

### Conformance to the Comprehensive Plan:

### Describe the proposed project and the existing environmental conditions on the site.

The Applicant, Dunwoody Crown Towers, LLC, is requesting said Property (Site B) be rezoned from O-I to CR-1 in order to develop Dunwoody Crown Towers, which includes (i) one mixed use vertical building with a hotel, residential units, and accessory uses ("Crown Tower 2" on the enclosed conceptual drawings), (ii) one multi-unit residential building ("Crown Tower 1" on enclosed conceptual drawings), and (iii) a retail building. A site plan showing the proposed buildings and uses is included in the rezoning application. The proposed transit-oriented mixed use development will significantly enrich the design and livability of the Perimeter Center area and create a true gateway to the City of Dunwoody.

### The project conforms to the City's Comprehensive Plan

The proposed use is consistent with the policies and intent of the City's Comprehensive Plan. The subject property is located in the Perimeter Center Character Area, which seeks to be a "livable regional center with first-class office, retail, entertainment, hotels, and high-end restaurants" to create a true "live-work" environment. The rezoning request seeks to add high-quality residential units to the area, thereby creating a true "livable" center where Dunwoody residents are able to live, work, shop, play, and access mass transit within one development.

Overall, the proposed mixed use development will complement the surrounding mix of uses in the area, is consistent with the City's Comprehensive Plan and its vision for a "live work" mixed use environment in the Perimeter Center area, and provides residential options to those already living in Dunwoody and those who want to move to the area.

### Describe adjacent properties. Include a site plan that depicts the proposed project.

A site plan of the project is included in the Application. The Property is bordered by I-285 to the south, Perimeter Center Parkway to the west, Ashford-Dunwoody Road to the east, and two shopping center developments, one of which is Perimeter Center Mall, to the north. Surrounding land uses include a Marriott hotel, the new State Farm campus, Rooms to Go, Perimeter Center Mall, Best Buy, the mixed-use GID site, and the Dunwoody MARTA station.



## Include the portion of the Comprehensive Plan Land Use Map which supports the project's conformity to the Plan.

Attached.

### **Environmental Impacts of the Proposed Project**

### a) Wetlands

There are no wetlands on the subject property.

### b) Floodplain

The subject property is not located in a floodplain.

### c) Streams/stream buffers

No such conditions are known.

### d) Slopes exceeding 25 percent over a 10-foot rise in elevation

No such conditions exist on the property.

e) <u>Vegetation</u>

No such conditions are known.

### f) Wildlife Species (including fish)

No such conditions are located near the property.

### g) Archeological/Historical Sites

No such conditions exist on the property. The proposed development is located next to the Martin family cemetery. The development will have no impact on the cemetery or the easement providing ingress to and from the cemetery. The cemetery will at all times be protected. The Applicant has spoken with representatives from the Dunwoody Preservation Trust, the organization tasked with maintaining the cemetery, to work on a mutually beneficial strategy for the cemetery's continued maintenance and accessibility.

### **Project Implementation Measures**

a. Protection of environmentally sensitive areas, i.e., floodplain, slopes exceeding 25

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#### percent, river corridors.

No such conditions are known to exist on the property.

### b. Protection of water quality.

The Applicant will include appropriate erosion control procedures in the project and comply with local, state, and federal water quality regulations.

### c. Minimization of negative impacts on existing infrastructure

The proposed use will be limited to the boundaries of the property and will, therefore, not impact any existing nearby structures. Existing and proposed infrastructure is sufficient to handle the proposed use and development.

### d. Minimization on archeological/historically significant areas

The development will have no impact on the cemetery or the easement providing ingress to and from the cemetery. The cemetery will at all times be protected.

e. Minimization of negative impacts on environmentally stressed communities where environmentally stressed communities are defined as communities exposed to a minimum of two environmentally adverse conditions resulting from public and private municipal (e.g., solid waste and wastewater treatment facilities, utilities, airports, and railroads) and industrial (e.g., landfills, quarries and manufacturing facilities) uses.

No such conditions are known to exist.

### f. Creation and preservation of green space and open space

The Applicant will incorporate open space as shown on the site plan, which exceeds the amount of open space required in the CR-1 zoning district.

### g. Protection of citizens from the negative impacts of noise and lighting

The Applicant will take reasonable measures to protect citizens from the negative impacts of noise and lighting, if any, resulting from the proposed development.

### h. Protection of parks and recreational green space

No parks or recreational green space currently exist on the property.

### i. Minimization of impacts to wildlife habitats

No such conditions are known to exist on the property.



### **PERIMETER CENTER**

### Vision/Intent

Perimeter Center will be a visitor friendly "livable" regional center with first-class office, retail, entertainment, hotels, and high-end restaurants in a pedestrian and bicycle-oriented environment. The area will serve as a regional example of high quality design standards. The City of Dunwoody works in partnership with the Perimeter Community Improvement Districts (PCIDs) and adjacent communities to implement and compliment the framework plan and projects identified in the Perimeter Center Livable Centers Initiative study (LCI) and its current and future updates.

In the future, the area should add public gathering space and pocket parks, venues for live music and entertainment and continue to create transportation alternatives, mitigate congestion, and reduce remaining excessive surface parking. The area creates the conditions of possible true "live-work" environment. All future development continues to emphasize high quality design standards and building materials and incorporates the current national best practices on energy efficiency, where possible.

The City of Dunwoody recognizes the value of creating mixed-use, transit-oriented development within walking distance of public transit stations. However, the City has concerns about the impact of such development on the City's infrastructure and schools.

### **Future Development**

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The Perimeter Center Character Area will be divided into four subareas (PC-1, PC-2, PC-3, and PC-4) which match the draft proposed overlay district outline that the City is reviewing as part of the Perimeter Center Zoning Code. This area was the subject of a previous LCI Study. The cities of Dunwoody, Sandy Springs, and Brookhaven work in partnership with the Perimeter Community Improvement Districts (PCIDs) to implement and complement the framework plan and projects identified in the Perimeter Center Livable Centers Initiative study (LCI) and its current and future updates.

For specific recommendations on height, density and use refer to the provisions of the Perimeter Center Overlay District and Zoning, available from the Dunwoody Community Development Department.

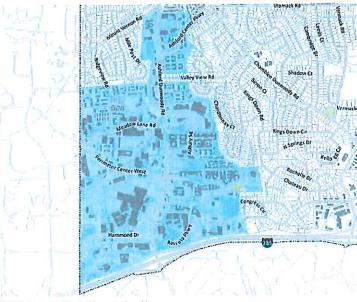


FIGURE 13: Perimeter Center Character Area Map

PC-1: Intended to apply to the central core area of Perimeter Center, including the area directly surrounding the Dunwoody MARTA train station. This district allows for the highest intensity of buildings, a high level of employment uses, and active ground story uses and design that support pedestrian mobility.

PC-2: Made up primarily of employment uses and limited shop front retail, residential, and services.

PC-3: A smaller scale, less intensive commercial district, permitting both shop front and office buildings.

PC-4: Made up primarily of residential uses at a scale that provides a transition between the intensity of Perimeter Center and the surrounding single-family residential neighborhoods.

### **Action Items**



Perimeter Mall



Housing in Perimeter Center

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### Campaign Disclosure Statement



Have you, within the two years immediately preceding the filing of this application, made campaign contributions aggregating \$250.00 or more to a member of the City of Dunwoody City Council or a member of the City of Dunwoody Planning Commission?

* Applicant/Owner: Dunwoody Crown Towers, LLC Signature: By: Duilia March Date: 01/27/2016 Address: 4828 Ashford Dunwody Road, Ste 400, Atlanta, GA 30338

If the answer above is yes, please complete the following section:

Date	Government Official	Official Position	Description	Amount
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### **CAMPAIGN DISCLOSURE STATEMENT**

G. DOUGLAS DILLARD and JILLIAN S. ARNOLD, of the law firm of PURSLEY FRIESE TORGRIMSON, and formerly of WEISSMAN, NOWACK, CURRY & WILCO, P.C., have been retained to represent DUNWOODY CROWN TOWERS, LLC before the CITY OF DUNWOODY, GEORGIA. Pursuant to the provisions of O.C.G.A. §36-67A-3, please find below a list of the contributions made by the above-named individuals, or the law firms of WEISSMAN, NOWACK, CURRY & WILCO, P.C. and PURSLEY FRIESE TORGRIMSON, in the past two years, aggregating \$250.00 or more, to local government officials who may review this Application.

NAME OF		AMOUNT OF	DATE OF
GOV'T. OFFICIAL	POSITION	CONTRIBUTION	CONTRIBUTION

None

-228-

### PURSLEY FRIESE TORGRIMSON

By: G. Douglas Dillard By: Jillian S. Arnold 2/116 Date:

1230 Peachtree Street, NE Suite 1200 Atlanta, GA 30309 404-665-1243

#E.1.

### **LEGAL DESCRIPTION – TRACT B**

ALL THAT TRACT OR PARCEL OF LAND lying and being in Land Lot(s) 329 & 330 of the 18th District, DeKalb County, Georgia and being more particularly described as follows:

Beginning at a point at the intersection of the Western Right-of-Way line of Ashford Dunwoody Rd (Right-of-Way Varies), and the Northern Right-of-Way line of Interstate 285 (Right-of-Way Varies), said point being the TRUE POINT OF BEGINNING;

Thence leaving the Western Right-of-Way line of Ashford Dunwoody Rd and following along the Northern Right-of-Way line of Interstate 285, South 59 degrees 59 minutes 24 seconds West, a distance of 768.56 feet to a point;

Thence leaving the Northern Right-of-Way line of Interstate 285 (Right-of-Way Varies), North 00 degrees 12 minutes 53 seconds West, a distance of 218.34 feet to a point;

Thence North 89 degrees 47 minutes 07 seconds West, a distance of 207.86 feet to a point;

Thence North 00 degrees 12 minutes 53 seconds East, a distance of 161.70 feet to a point;

Thence South 89 degrees 47 minutes 07 seconds East, a distance of 100.09 feet to a point;

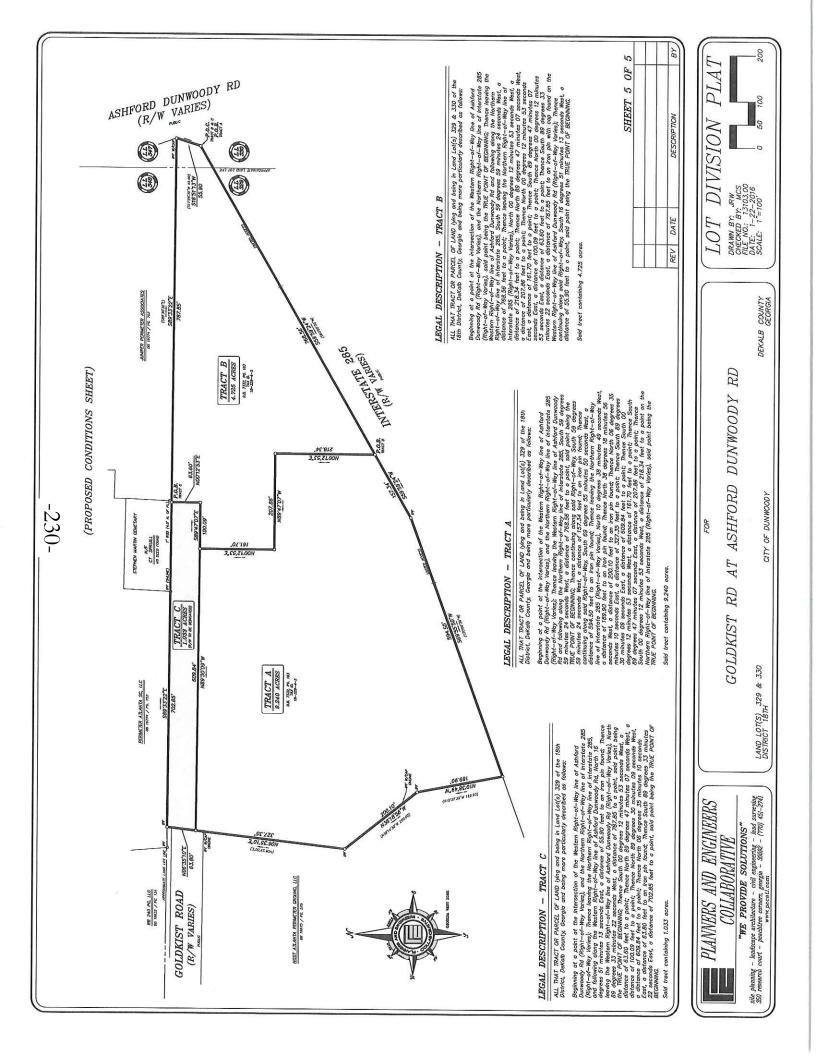
Thence North 00 degrees 12 minutes 53 seconds East, a distance of 63.60 feet to a point;

Thence South 89 degrees 33 minutes 22 seconds East, a distance of 787.85 feet to an iron pin with cap found on the Western Right-of-Way line of Ashford Dunwoody Rd (Right-of-Way Varies);

Thence continuing along said Right-of-Way, South 16 degrees 51 minutes 13 seconds West, a distance of 55.90 feet to a point, said point being the TRUE POINT OF BEGINNING.

Said tract containing 4.725 acres.





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# **DUNWOODY CROWN TOWERS**

**RE-ZONING APPLICATION FOR SITE "B"** 

244 PERIMETER CENTER PARKWAY, DUNWOODY GA

### DRI NUMBER: 2567

### **PROJECT TEAM**

### OWNER

### **CROWN HOLDINGS GROUP**

4828 ASHFORD DUNWOODY RD, ATLANTA GA 30338 Contact: NAME CHARLIE BROWN

### ARCHITECT

231-

THOMPSON, VENTULETT, STAINBACK & **ASSOCIATES, INC ARCHITECTS** 1230 PEACHTREE ST NE, SUITE 2700 ATLANTA GA 30309 Contact:

404.840.4762

### **ATTORNEYS**

### PURSLEY FRIESE TORGRIMSON

PROMENADE SUITE 1200 1230 PEACHTREE ST NE ATLANTA GA 30309 Contact: G. DOUG DILLARD

### **TRAFFIC CONSULTANT**

#### MORELAND ALTOBELLI ASSOCIATES, INC.

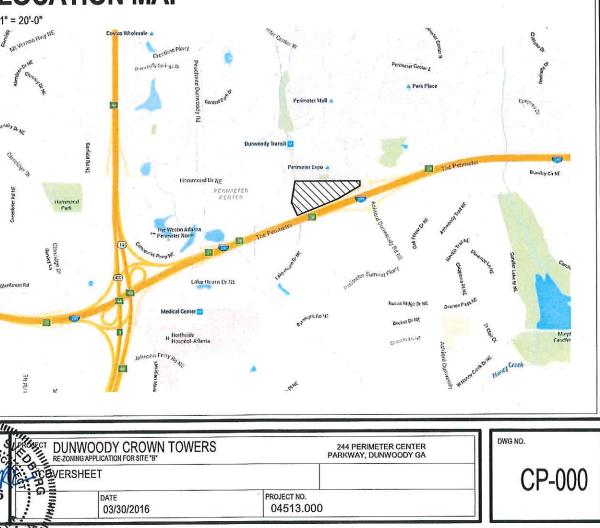
2450 COMMERCE AVENUE, SUITE 100, DULUTH, GA 30096 KARLA POSHEDLY Contact:

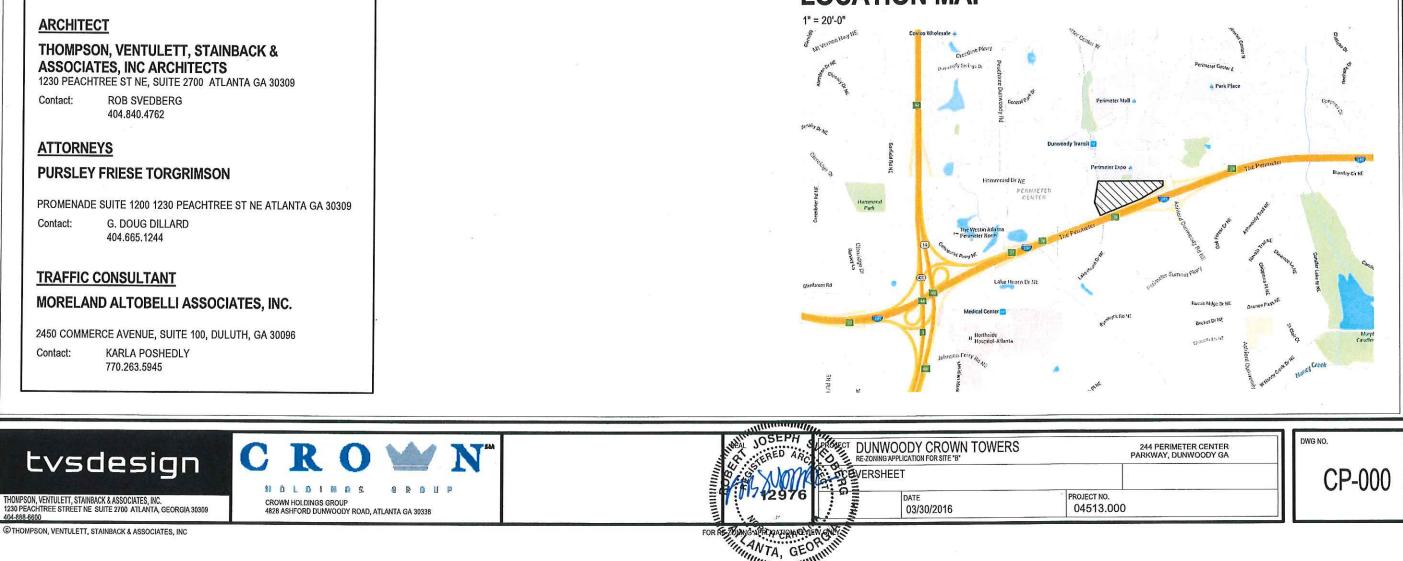
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CP-002	<b>CONCEPTUAL PLAN - ELEVA</b>
CP-003	<b>CONCEPTUAL PLAN - MASSI</b>
CP-004	STREET SECTION & TRANSIT
CP-005	PEDESTRIAN CIRCULATION
CP-006	<b>CONCEPTUAL PLAN - QUALI</b>
CP-007	<b>CONCEPTUAL PLAN - QUALI</b>
CP-008	<b>CONCEPTUAL PLAN - QUALI</b>

NOTE: PARKING FOR SITE "B" IS ACCOMMODATED WITHIN PARKING DECKS; THEREFORE LANDSCAPING PLAN FOR PARKING AREAS IS NOT INCLUDED.

### LOCATION MAP





"Internation

© THOMPSON, VENTULETT, STAINBACK & ASSOCIATES, INC

404-888-660

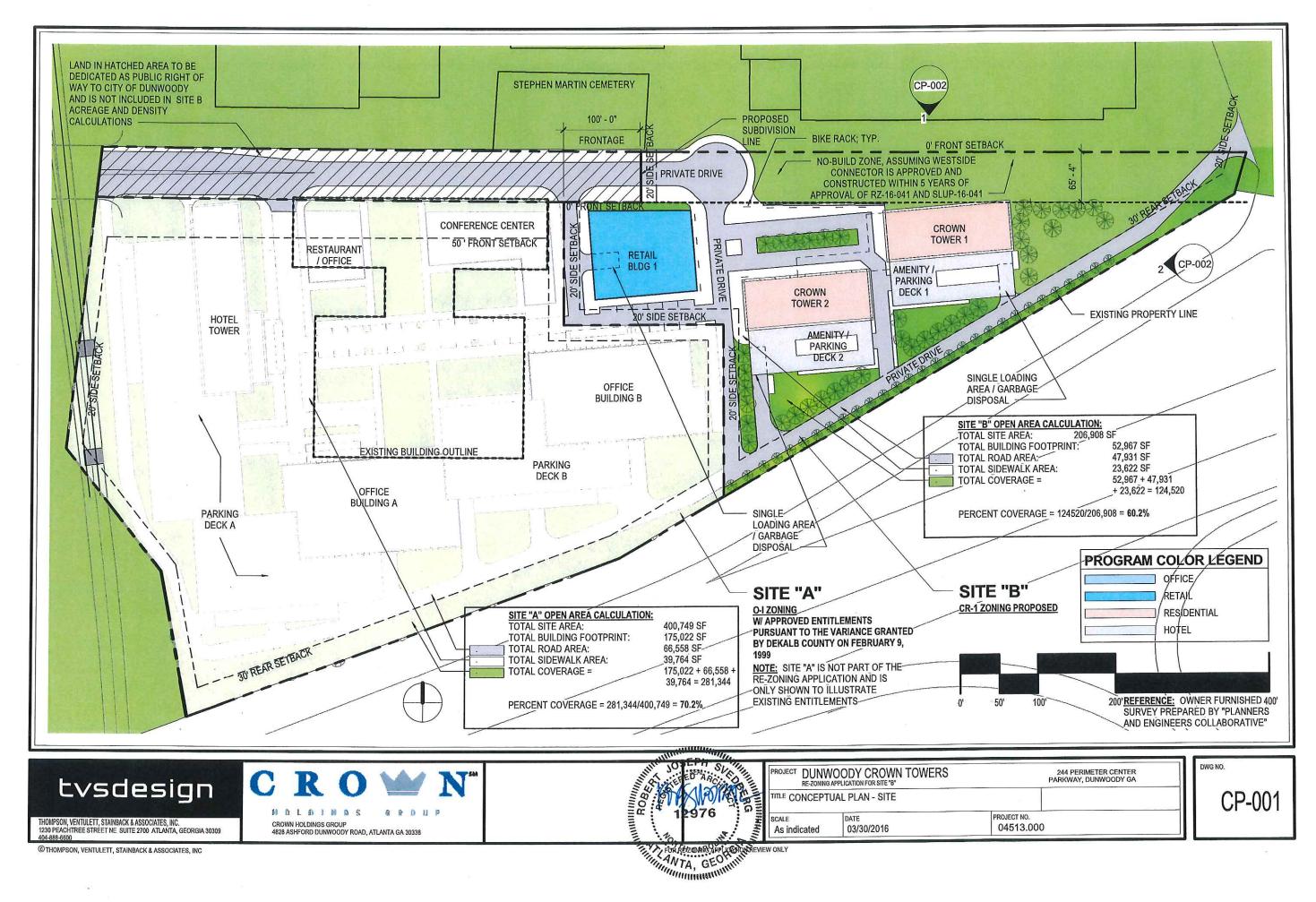
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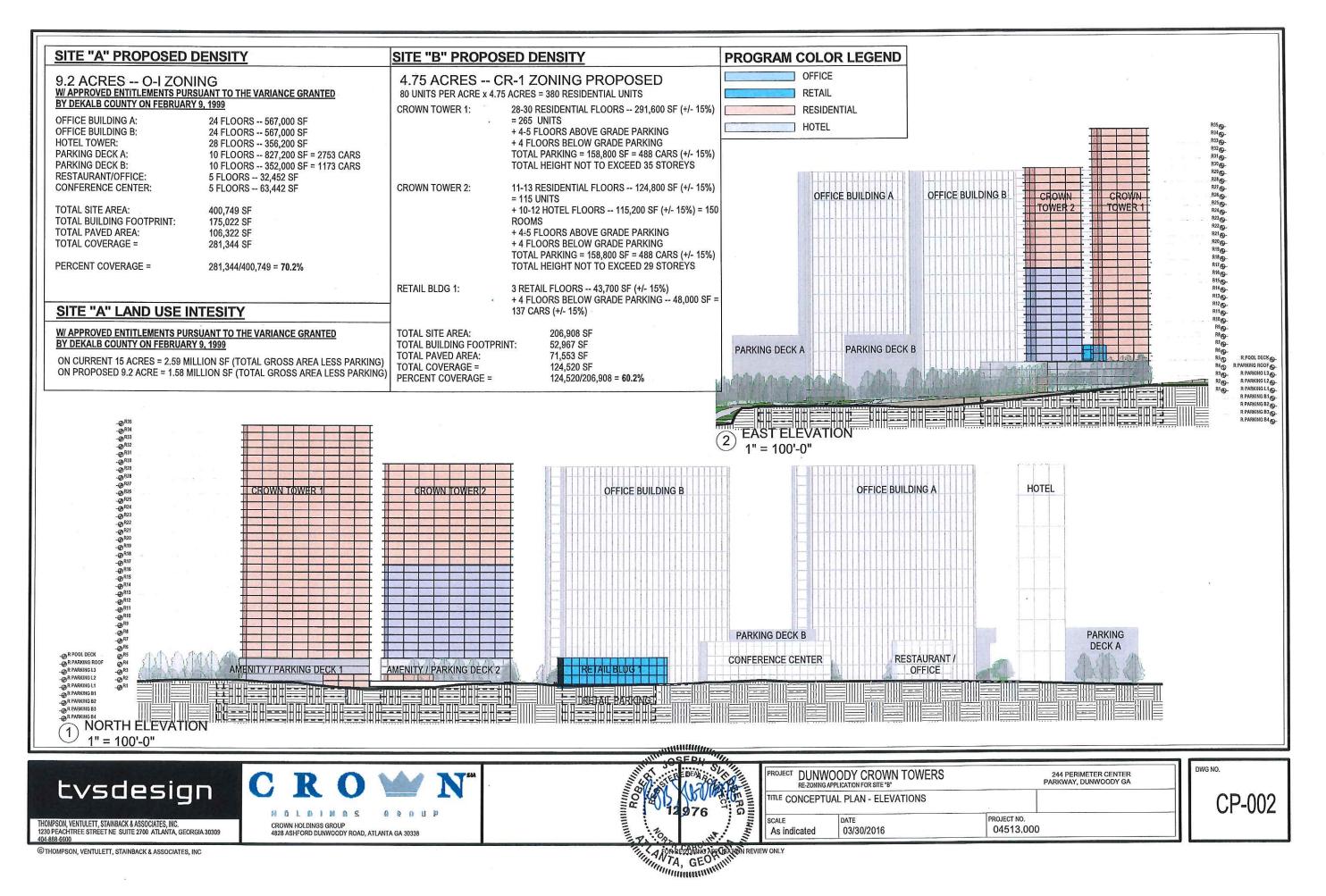
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© THOMPSON, VENTULETT, STAINBACK & ASSOCIATES, INC

HOLDINDS

4828 ASHFORD DUNWOODY ROAD, ATLANTA GA 30338

CROWN HOLDINGS GROUP

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ANTA, GEORIAN REVIEW ONLY Manufantin GEO



380 RESIDENTIAL UNITS = 190 2BR + 95 1BR + 95 3BR TOTAL BEDROOMS = 760 = 760 PARKING SPACES + 1 VISITOR SPACE PER 8 UNITS = 380/8 = 48 SPACES TOTAL PARKING RQUIRED FOR RESIDENTIAL = 760+48 = 808 SPACES

HOTEL: 150 ROOMS x 1.25 SPACES PER ROOM = 188 SPACES 188 x .75 = 141 (25% ALLOWED MOTOR VEHICLE PARKING REDUCTION FOR TRANSIT SERVED LOCATIONS WITHIN 1500 FEET OF COMMUTER RAIL APPLIES TO THIS REDUCED PARKING REQUIRED FOR HOTEL = 141 SPACES

TOTAL PARKING REQUIRED = 949 SPACES TOTAL PARKING PROPOSED = 976 SPACES

RETAIL: 4 SPACES PER 1,000 SF; 43,700 SF / 1,000 = 43.7 43.7 x 4 = 175 SPACES 171 x .75 = 131 SPACES (25% ALLOWED MOTOR VEHICLE PARKING REDUCTION FOR TRANSIT SERVED LOCATIONS WITHIN 1500 FEET OF COMMUTER RAIL APPLIES TO THIS

WILL BE PROVIDED.

PER SECTION 27-212:

- 1 LOADING SPACE HAS BEEN PROVIDED FOR RETAIL BUILDING (43,700 SF)

### PROGRAM COLOR LEGEND OFFICE RETAIL RESIDENTIAL HOTEL



### SITE "B" PARKING REQUIREMENTS:

REDUCED PARKING REQUIREMENT FOR RETAIL = 131 SPACES

TOTAL PARKING REQUIRED = 131 SPACES TOTAL PARKING PROPOSED = 137 SPACES

NOTE: IF SAP IS NOT APPROVED, 188 SPACES (HOTEL) AND 175 SPACES (RETAIL)

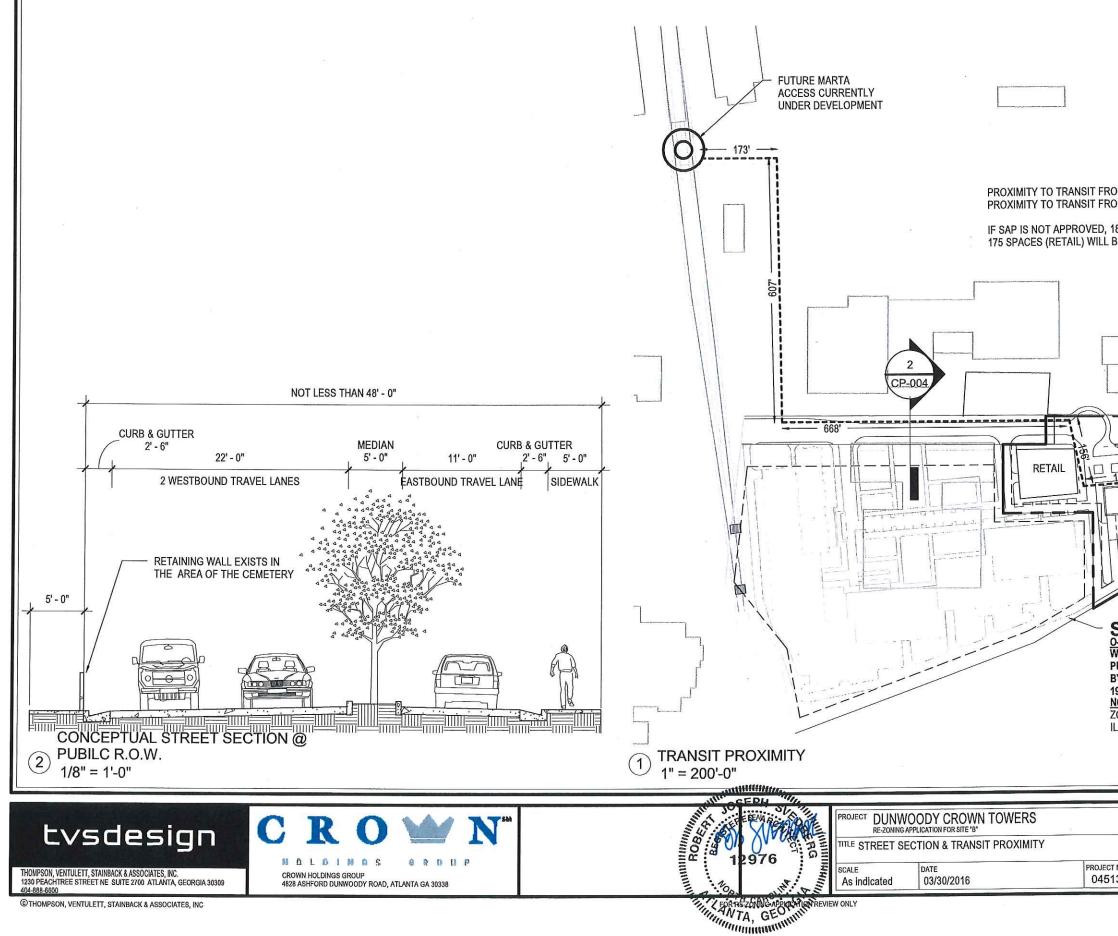
SITE "B" OFF-STREET LOADING REQUIREMENTS:

- 1 LOADING SPACE HAS BEEN PROVIDED FOR CROWN TOWER 1 (265 UNITS) FOR CROWN TOWER 2 (115 RESIDENTIAL UNITS & 150 HOTEL ROOMS)

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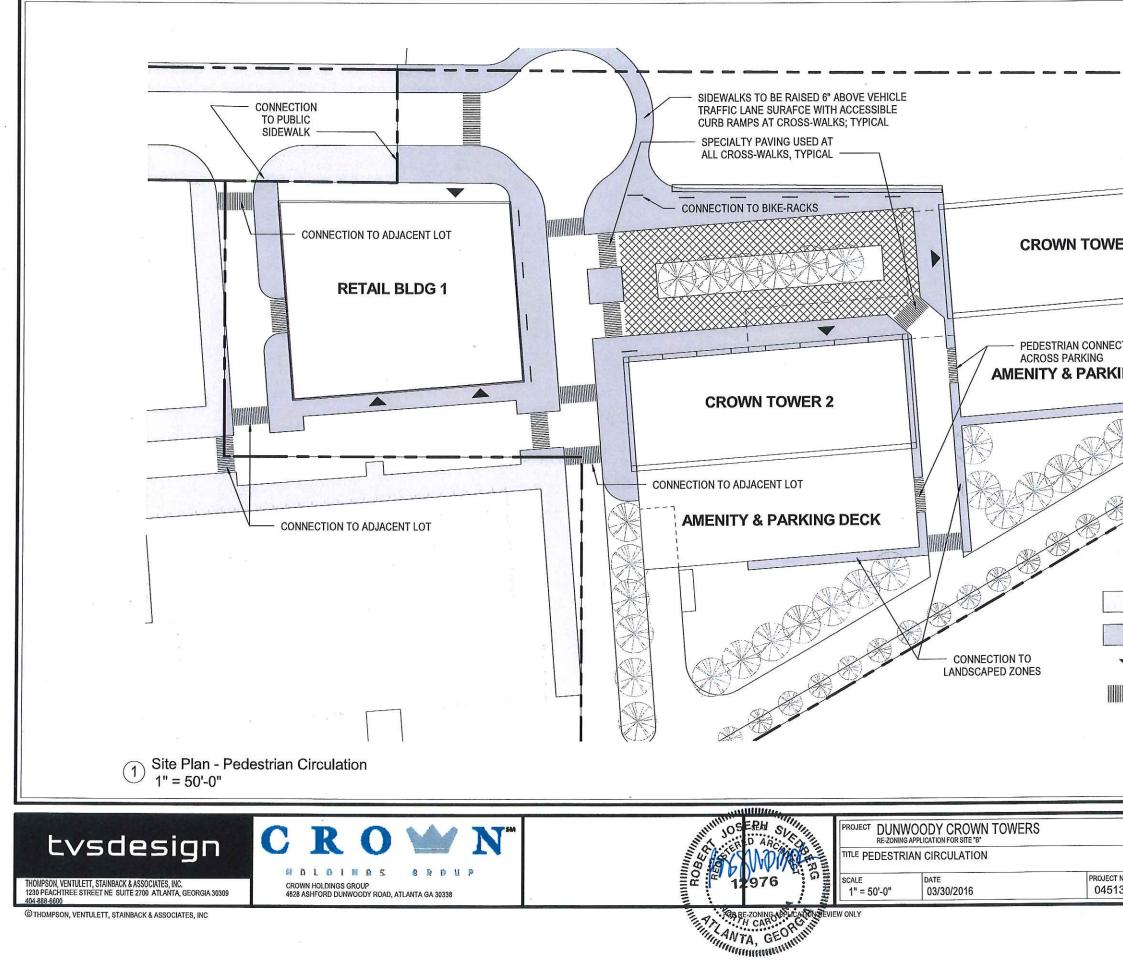
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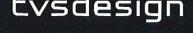
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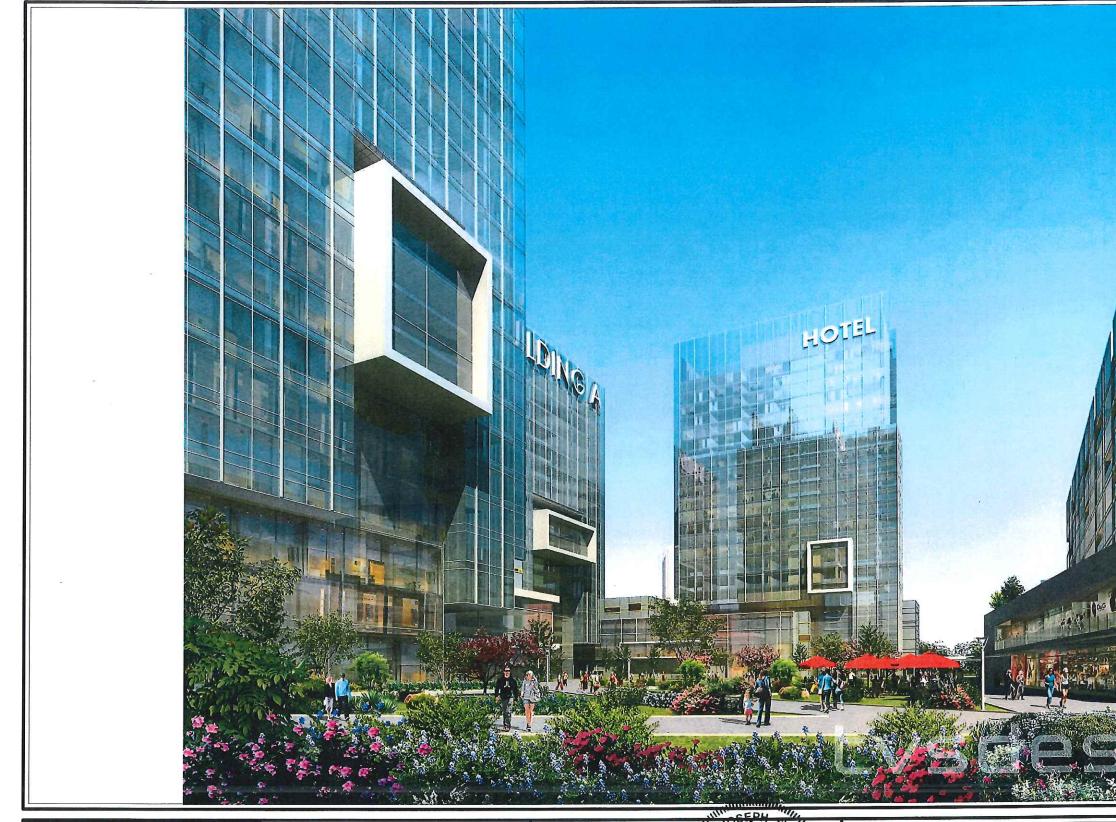


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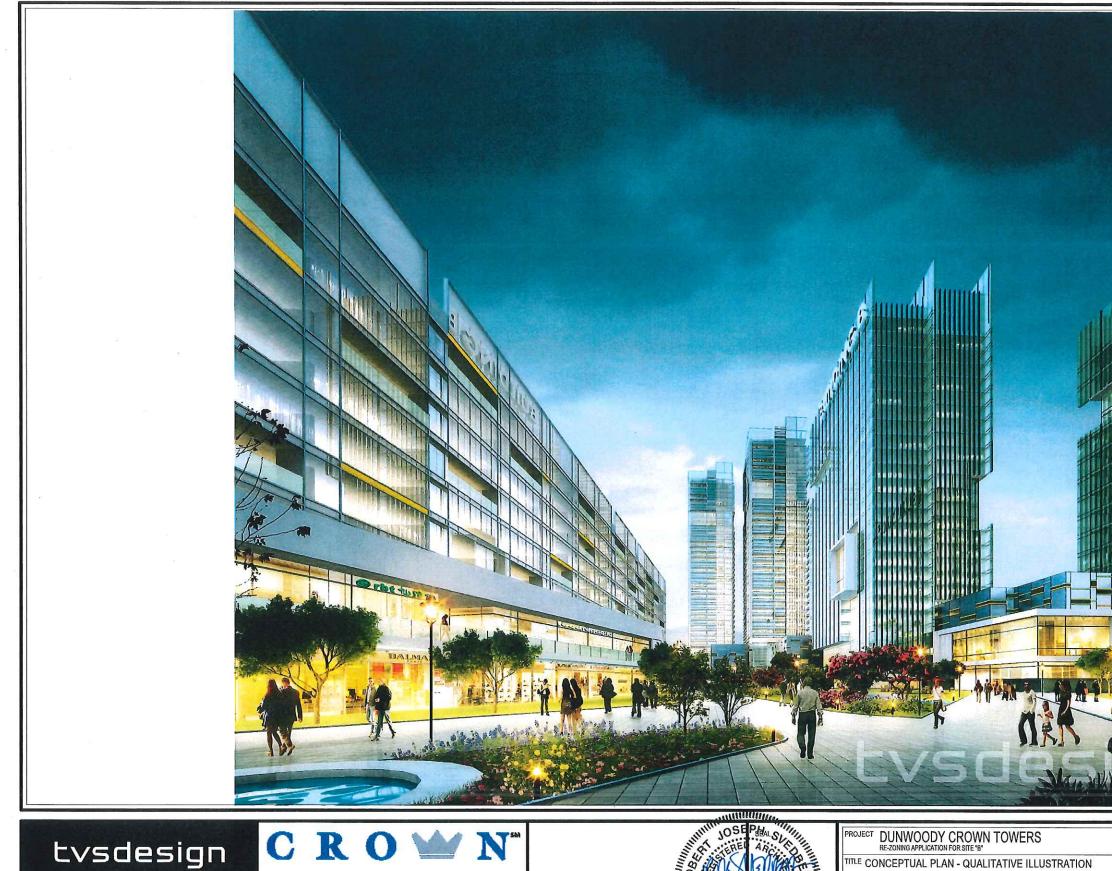


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 CROWN HOLDINGS GROUP
 4628 ASHFORD DUNWOODY ROAD, ATLANTA GA 30338



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### **MEMORANDUM**

To: Planning Commission

From: Rebecca Keefer, AICP

Date: April 12, 2016

**Subject: SLUP 16-041:** Dunwoody Crown Towers, LLC, owner of 244 Perimeter Center Parkway, Dunwoody, GA 30346, by G. Douglas Dillard, attorney for the property owner, seeks three (3) Special Land Use Permits to: a) Increase the height of the multi-unit residential building ("Crown Tower 1" on enclosed conceptual drawings); b) Increase the height of the mixed used vertical building ("Crown Tower 2" on conceptual drawings); and c) Allow multi-unit residential use in the CR-1 Zoning District. The tax parcel number is 18-329-04-055.



### BACKGROUND

The subject property, Site B in the image above, is located on a 14.95 acre site bordered by I-285 to the south, Perimeter Center Parkway to the west, Ashford-Dunwoody Road to the east, and a shopping center development to the north. The applicant seeks approval of three (3) Special Land Use Permits to increase the maximum building height to allow for the construction of a proposed mixed-use development.



The entire parcel in full has several non-residential development entitlements that pertain to 'height.' In 1999, DeKalb County approved four variances:

- A maximum of 28 stories for a hotel
- A maximum of six (6) stories for a conference center and parking structure
- A maximum of 24 stories for two office buildings
- A maximum of 10 stories for parking decks

The applicant plans to utilize the above entitlements on the 10.2 acres identified as Site A. Development would also have to comply with the existing zoning requirements of the O-I District.

This application has a companion application, RZ 16-041 which seeks to rezone the subject property, Site B, from Office-Institution (O-I) to Commercial-Residential Mixed-Use (CR-1). The applicant also applied for a variance (ZBA 16-045) from Chapter 27, Section 27-73 to change the front yard building setback from 50 feet to 0 feet for Site A only.

The variance application, ZBA 16-045, was approved with the following conditions at the March 31, 2016 Zoning Board of Appeals meeting:

Exhibit A: Lot Division Plat, Sheet 5 of 5, submitted by applicant (undated)

- 1. The variance to reduce the setback from 50' to 0' shall apply to the existing building, accessory structures, and equipment, only.
- 2. The variance shall apply to the right-of-way depicted on Exhibit A and to future rightof-way for the Westside Connector, only.
- 3. If adequate clear zone cannot be met for any future road improvements, the existing building, accessory structures, and equipment shall be adjusted to comply.

The application has been through the DRI process with the Atlanta Regional Commission (ARC). As of this writing, GRTA has issued recommendations that may be modified before GRTA's final decision on April 8, 2016. The final notice of decision will be forwarded to the Planning Commission in advance of the April 12 meeting.

### ANALYSIS

### Site Plan Analysis

According to the site plan dated March 30, 2016, the property owner plans to construct two (2) hotel/condo towers and a retail building on the 4.75 acre lot ("Site B").

The applicant proposes to construct two towers. They are seeking to increase the height of the Multi-Unit Residential Building ("Crown Tower 1") to 35 stories and the height of the Mixed-Use, Vertical Building ("Crown Tower 2") to 29 stories. The applicant is further requesting a SLUP, as required by the use table in the Zoning Ordinance, to allow Multi-dwelling Residential Use in the CR-1 district.

The applicant has met all regulations for applicant initiated neighborhood meetings as required by ordinance, holding a meeting with the public on Monday, February 1, 2016, and providing the applicable reports to the City.



Direction	Zoning	Zoning Use	Current Land Use
Ν	R-150 (cemetery) C-1	Residential Commercial	Institutional Office/Commercial
S	I-285	I-285	I-285
E	OCR	Office-Commercial- Residential	Proposed Development
W	O-I PD	Office-Institution Planned Development	Office/Commercial

The City is currently working on a study of the Perimeter Center area that will produce overlay district regulations and new zoning districts. The proposed development is within a location proposed for PC-1 zoning, which, as currently drafted, would allow a maximum height of 30 stories. Based on this position, a maximum of 30 stories is recommended.

### ANALYSIS

### **Review and Approval Criteria**

Chapter 27, Section 27-359 identifies the following criteria to be applied by the department of planning, the planning commission, and the city council in evaluating and deciding any application for a special land use permit. No application for a special land use permit shall be granted by the city council unless satisfactory provisions and arrangements have been made concerning each of the following factors, all of which are applicable to each application:

1. Whether the proposed use is consistent with the policies of the comprehensive plan; Yes, the proposed use is consistent with the policies of the Comprehensive Plan. The site is located in the Perimeter Center character area, which seeks to be a "livable regional center with first-class office, retail, entertainment, hotels, and high-end restaurants" to facilitate the creation of a true "livework environment."

The proposed development is a mixed-use project that aims to incorporate all of the above uses while complementing the surrounding mix of uses that characterizes the Perimeter Area. A rezoning application has been submitted for this property to allow for owner-occupied residential units on the property.

2. Whether the proposed use complies with the requirements of this zoning ordinance; Yes, the proposed use complies with the requirements of the CR-1 Zoning District. CR-1 allows for residential and commercial uses in a single mixeduse development. Though the CR-1 district only allows for a 3 story building as of right, it does provide for the SLUP process to increase the allowable height.

The proposed use is also compatible with the current draft of the Perimeter Center Zoning District (PC-1). PC-1 envisions mixed use developments and allows for owner-occupied residential buildings up to 30 stories tall. Based on this draft document, the height should not exceed 30 stories.



3. Whether the proposed site provides adequate land area for the proposed use, including provision of all required open space, off-street parking and all other applicable requirements of the subject zoning district;

Yes, the proposed site provides adequate land area for the proposed use, including provision of all required open space, off-street parking and all other applicable requirements of the CR-1 zoning district.

The CR-1 district calls for 20% open space; the most recent proposal shows 40% open space. The Dunwoody Municipal Code allows for a 25% reduction in the number of required parking spaces, provided that the property is located 1,500 feet from a MARTA station (Sec. 27-204). As the development is not located within 1,500 feet of the Dunwoody MARTA station (per sheet CP-004), the proposed parking reduction is not allowable. The applicant will either have to provide the additional parking in accordance with the required ratios or utilize a different reduction method enabled in the Code (e.g.: shared and bicycle parking). Staff has requested that an open space and amenities plan be provided to ensure that what is being counted toward the open space calculation will be adequate for the residential and commercial users.

### The calculations of use of space are subject to change with the planned purchase of property by GDOT for transportation improvements.

- 4. Whether the proposed use is compatible with adjacent properties and land uses, including consideration of:
  - Whether the proposed use will create adverse impacts upon any adjoining land use by reason of noise, smoke, odor, dust or vibration generated by the proposed use;

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of noise, smoke, odor, dust or vibration generated.

- b. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of the hours of operation of the proposed use;
   No, the proposed use will not create adverse impact upon any adjoining land use by reason of the hours of operation of the proposed use. The surrounding land uses are all non-residential uses, which shall not be affected negatively by the hours of operation of the proposed development's residential, hotel, retail, and accessory uses.
- c. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of the manner of operation of the proposed use;
  No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the manner of operation of the proposed use.
- d. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of the character of vehicles or the volume of traffic generated by the proposed use;

With the requested revisions to the traffic study, staff expects that the study will show that the Ashford Dunwoody Road and Hammond Drive corridors will experience increasing congestion. Substituting



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residential and other uses for some of the office space would help distribute the trips to and from the site more evenly since residential trips would be outbound at times when the majority of the area traffic is inbound and vice versa. Additional turn lanes at congested intersections as recommended in this and other traffic impact studies can help reduce delays. However, at intersections like Ashford Dunwoody Road and Hammond Drive where multiple turn lanes already exist on all the approaches, adding additional lanes is not realistic or desirable. Additional connectivity to the interstate and other arterials, such as proposed with the Westside Connector Road from Ashford Dunwoody Road to Perimeter Center Parkway, is needed to address congestion in a significant way.

The Westside Connector would allow cars from I-285 to bypass Ashford Dunwoody Rd and Hammond Drive to access the property. Additionally, GRTA has conditioned the proposal to provide a southbound left turn lane along Perimeter Center Parkway and a westbound left turn lane along Gold Kist Road, as well as internal connectivity between all site access driveways.

The property's proximity to MARTA is expected to have a positive effect on the volume of vehicular traffic.

e. Whether the size, scale and massing of proposed buildings are appropriate in relation to the size of the subject property and in relation to the size, scale and massing of adjacent and nearby lots and buildings; and **Yes, the size, scale, and massing of the proposed building are appropriate in relation to the size of the subject property and in** 

appropriate in relation to the size of the subject property and in relation to the size, scale and massing of adjacent and nearby lots and buildings.

The applicant is asking for a 32-35 story residential tower. The adjacent 9.2 acre parcel of the property is entitled for a 28-story hotel and two 24-story office buildings. The commercial parcel directly north of the property is also entitled for similarly tall buildings. The proposed development will be along the I-285 corridor, adding to a skyline that includes the 31-story Ravinia and the 28-story King and Queen towers.

f. Whether the proposed plan will adversely affect historic buildings, sites, districts, or archaeological resources.

No, the proposed plan will not adversely affect historic buildings, sites, districts, or archaeological resources. The development abuts the Martin family cemetery to the north. The development will have no impact on the cemetery. Staff has requested easement records from the applicant to determine what rights exist on the subject property (15 acre site) for the purpose of access to the cemetary. These easements will be respected in the redevelopment of the site. The applicant has spoken with representatives from the Dunwoody Preservation Trust, the entity that maintains the cemetery, to work on an acceptable strategy for the cemetery's continued maintenance and accessibility.



- 5. Whether public services, public facilities and utilities—including motorized and nonmotorized transportation facilities—are adequate to serve the proposed use; *Reference 4.d above for discussion of traffic impacts. The site is in close proximity to the Dunwoody MARTA station, making public transit a realistic alternative for those commuting to and from the property. Additionally, GRTA has conditioned the proposal to provide sidewalks along all property frontage and both side of all internal roadways.*
- 6. Whether adequate means of ingress and egress are proposed, with particular reference to non-motorized and motorized traffic safety and convenience, traffic flow and control and emergency vehicle access;

Yes, with the inclusion of road improvements discussed with GDOT and GRTA, the development of the Westside Connector, and intersection improvements at Perimeter Center Parkway, adequate means of ingress and egress are proposed. A newly-created road off of Perimeter Center Parkway will provide primary access and will be capable of handling any new trips generated by the development. The property is accessible by transit, as MARTA is in close proximity, and pedestrian pathways.

Sidewalks and bicycle facilities should be required along Goldkist Drive to facilitate connectivity to MARTA.

- 7. Whether adequate provision has been made for refuse and service areas; and *Yes, adequate provision has been made for refuse and service areas.*
- 8. Whether the proposed building as a result of its proposed height will create a negative shadow impact on any adjoining lot or building.
   No, the proposed building will not create a negative shadow impact on any adjoining lot or building. Buildings with similar heights (28-stories, 24-stories, 31-stories) already exist along the property in close proximity to the property. The southern property line is bordered by I-285.

### RECOMMENDATION

Staff recommends **approval** of Special Land Use Permit application a.) to increase the height of the multi-unit residential building ("Crown Tower 1" on enclosed conceptual drawings), subject to the following conditions:

- 1. The multi-unit residential building shall be a maximum height of 30 stories.
- 2. All road improvements required by the companion rezoning request and/or development agreement shall be provided.

Staff recommends **approval** of the Special Land Use Permit application to the height of the mixed used vertical building ("Crown Tower 2" on conceptual drawings), subject to the following conditions:

- 1. The mixed use vertical building shall be a maximum height of 29 stories
- 2. All road improvements required by the companion rezoning request and/or development agreement shall be provided.



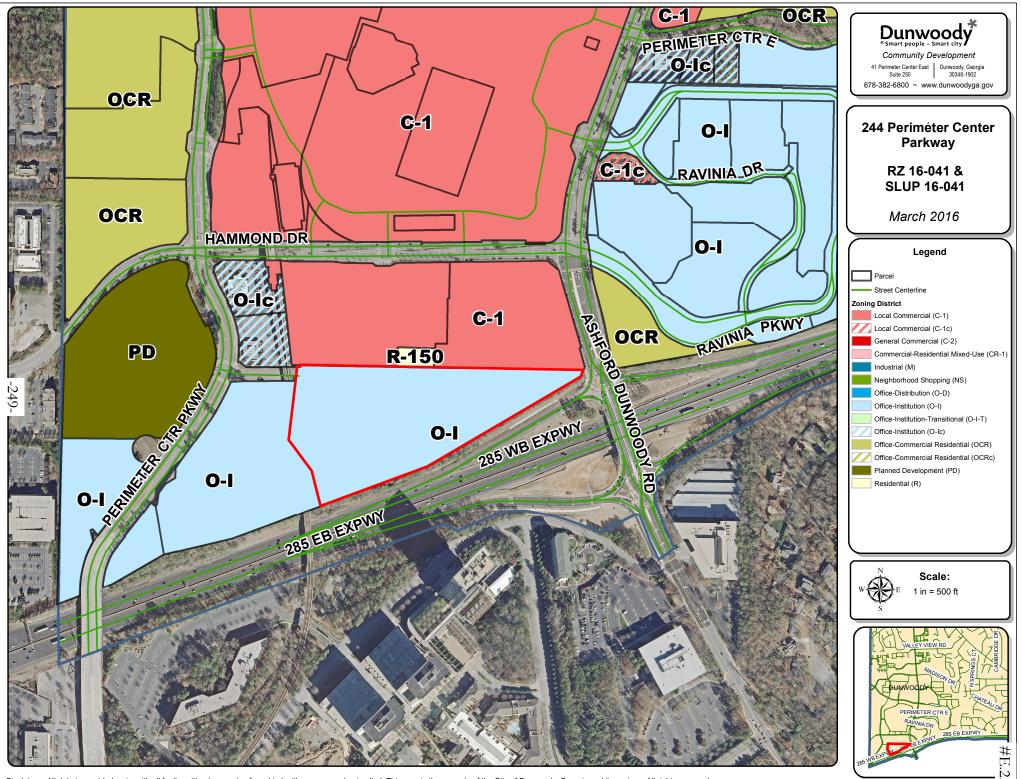
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Staff recommends **approval** of the Special Land Use Permit application to allow a multi-unit residential use in the Commercial-Residential Mixed-Use (CR-1) District, subject to the following conditions:

1. All road improvements required by the companion rezoning request and/or development agreement shall be provided.

### **Attachments**

- Location Map, Zoning Map
- Article II, Division 1 Excerpt
- Comprehensive Plan Excerpt
- Application Packet



Disclaimer: All data is provided as is, with all faults, without warranty of any kind, either expressed or implied. This map is the property of the City of Dunwoody, Georgia and its assigns. All rights reserved.

### 244 Perimeter Ctr Pkwy Lot Division









#### CHAPTER 27 - ZONING ORDINANCE^[1]

#### Footnotes:

#### ---- (1) ----

**Editor's note**—Ord. No. 2013-10-15, § 1, adopted Oct. 14, 2013, repealed former Ch. 27, §§ 27-1—27-1654, and enacted a new Ch. 27 as set out herein. Former Ch. 27 pertained to similar subject matter. See the Code Comparative Table for a complete derivation. For stylistic purposes, a uniform system of headings, catchlines, capitalization, citation to state statutes, and expression of numbers in text have been used to conform to the Code of Ordinances. Additions made for clarity are indicated by brackets and obvious misspellings and punctuation errors have been corrected without notation.

#### ARTICLE II. - ZONING DISTRICTS

#### DIVISION 2. - NONRESIDENTIAL AND MIXED-USE ZONING DISTRICTS

#### Sec. 27-71. - General.

#### (a) The districts. The city's nonresidential and mixed-use zoning districts are listed below.

	Zoning District	Map Symbol
	Office-Institution	O-I
Office	Office-Institution-Transitional	O-I-T
Unice	Office-Distribution	O-D
	Office-Commercial-Residential	OCR
	Neighborhood Shopping	NS
Commercial	Local Commercial	C-1
Commercial	Commercial-Residential Mixed-Use	CR-1
	General Commercial	C-2
Industrial	Industrial	M

#### (b) Purposes.

- (1) General. The nonresidential and mixed-use districts are generally intended to promote consistency with the comprehensive plan and provide opportunities for shopping, employment, entertainment and living.
- (2) Office-institution and office-institution-transitional. The primary purposes of the O-I and O-I-T districts are as follows:
  - a. To provide convenient locations for office and institutional uses;
  - b. To provide locations for the development of cultural, recreational, educational and health service facilities; and
  - c. To limit building heights to two stories in O-I-T zoned areas adjacent to single-dwelling residential districts.
- (3) Office-distribution. The primary purpose of the O-D district is to provide convenient locations for office and distribution establishments.
- (4) Office-commercial-residential. The primary purposes of the OCR district are as follows:
  - a. To provide for economic development within the city through redevelopment of parcels of land that have been used in the past for commercial and light industrial uses but that have become obsolete and now offer an opportunity for establishing new moderate-intensity mixed-use developments consisting of a combination of office, commercial and residential uses;
  - b. To promote redevelopment and new development in an environment that is pedestrianoriented and that provides employment, shopping, entertainment and living opportunities in close proximity thereby reduces auto dependency; and
  - c. To encourage the conversion of vacant commercial and industrial buildings into mixed-use projects.
- (5) Neighborhood shopping. The primary purposes of the NS district are as follows:
  - a. To provide convenient neighborhood retail shopping and service areas within the city;
  - b. To provide for the development of new neighborhood shopping districts;
  - c. To help ensure that the size and scale of neighborhood shopping centers and individual uses within shopping centers are compatible with the scale and character of surrounding neighborhoods; and
  - d. To accommodate uses designed to serve the convenience shopping and service needs of the immediate neighborhood.
- (6) Local commercial. The primary purposes of the C-1 district are as follows:
  - a. To provide convenient local retail shopping and service areas within the city;
  - b. To provide for the development of new local commercial districts; and
  - c. To accommodate uses designed to serve the convenience shopping and service needs of groups of neighborhoods.
- (7) Commercial-residential mixed-use. The primary purposes of the CR-1 district are as follows:
  - a. To provide convenient local retail shopping and service areas within a mixed-use (commercial-residential) setting;

- b. To provide for the development of new commercial-residential mixed-use districts; and
- c. To promote development patterns that accommodate residential, employment and entertainment within a walkable, mixed-use environment.
- (8) General commercial. The primary purposes of the C-2 district are as follows:
  - a. To provide convenient general business and commercial service areas within the city;
  - b. To provide for the development of new general commercial districts; and
  - c. To accommodate uses designed to serve the general business and commercial service needs of the city.
- (9) Industrial. The primary purposes of the M district are as follows:
  - a. To provide areas for the establishment of businesses engaged in the manufacturing, processing, creating, repairing, renovating, painting, cleaning, or assembling of goods, merchandise, or equipment;
  - b. To help ensure that establishments operate so as to not create adverse noise and other impacts on nearby residential, office, commercial and mixed-use districts; and
  - c. To help ensure that M districts are located in areas with access to major arterials and freeways.

(Ord. No. 2013-10-15, § 1(Exh. A § 27-5.10), 10-14-2013)

Sec. 27-72. - Uses allowed.

The following table identifies uses allowed in nonresidential and mixed-use zoning districts. See [subsection] 27-111(4) for information about how to interpret the use table.

USES				DIST	RIC	ΓS				Supplemental	
		0- I-T	O- D	OCR	NS	C- 1	CR- 1	C- 2	М	Regulations	
P = use permitted as of right / A = administrative permit req'd / E = special exception req'd / S = special use permit req'd							eq'd / S = special				
RES	IDE	NTIA	L								
House	ehol	d Liv	ving								
Detached house	-	Ρ	-	-	-	-	-	-	-	27-147	
Multi-unit building	-	-	-	S	-	-	S	-	-		
Mixed-use building, vertical	-	-	-	Р	-	-	Р	-	-		

Gro	oup	Livin	g							
Convent and monastery	Р	Р	-	Р	-	-	-	-	-	27-146
Fraternity house, sorority house or residence hall	Р	-	-	-	-	-	-	-	-	
Nursing home	Р	Р	-	-	-	-	-	-	Р	
Personal care home, family (1-4 persons)	-	-	Р	_	Р	Ρ	Р	Ρ	-	
Personal care home, group (5–7 persons)	-	-	Р	-	Р	Р	Р	Р	-	
Personal care home, community (8+ persons)	Р	Р	Р	-	Р	Ρ	Р	Р	-	27-145
Child caring institution (1–6 persons)	Р	Р	Р	_	Р	Ρ	Р	Р	-	
Child caring institution (7–15 persons)	Р	Р	Р	-	P	Р	Р	Ρ	-	
Child caring institution (16 or more)	Р	S	Р	-	P	Р	Р	Р	-	
Community living arrangement (1-4 persons)				Р		Р	Р			
Shelter, homeless	S	S	-	-	-	Ρ	Р	Ρ	-	27-140
Transitional housing facility	S	S	-	-	-	Р	Р	Р	-	27-140
QUASI-PUBLIC	AN	D INS	STITU		IAL	1	<u> </u>	1	<u>   </u>	
Ambulance Service	-	-	-	-	-	Р	Р	Р	Р	
Club or Lodge, Private	Р	Р	Р	-	-	Р	Р	Ρ	Ρ	
Cultural Exhibit	Р	Р	Р	-	-	Ρ	Р	Ρ	-	
Day care facility, adult (6 or fewer persons)	-	-	Р	-	-	-	-	-	-	27-137
Day care center, adult (7 or more)	Р	Р	Р	Р	P	Р	Р	Р	-	
Day care facility, child (6 or fewer persons)	-	-	Р	-	-	-	-	-	-	

Day care center, child (7 or more)	Р	Р	Р	Р	Р	Р	Р	Р		
Educa	tiona	l Ser	vice	S	1	1	1	1	1	1
College or university	Р	Р	Р	-	-	-	-	-	-	
Kindergarten	-	-	Р	Р	Р	Р	Р	Р	-	27-141
Research and training facility, college or university affiliated	P	Р	Р	_	-	-	-	-	Р	
School, private elementary, middle or senior high	Р	Р	Р	Р	-	Р	Р	Р	Р	27-148
School, specialized non-degree	Р	Р	Р	Р	-	Р	Р	Р	Р	
School, vocational or trade	Р	Р	Р	-	-	Р	Р	P	Р	
Hospital	Р	-	-	-	-	-	-	-	-	
Place of Worship	Р	Р	Р	Р	P	Р	Р	P	Р	27-146
Utility Facility, Essential	E	E	Р	E	E	Р	Р	Р	Ρ	27-151
CO	MME	ERCI	AL	I	1	1	1	1	1	1
A	dult	Use								
Body art service								Р	Р	
Sexually oriented business	Р	-	-	Р	-	-	-	P	Ρ	27-149
Anir	nal S	ervi	ces	1	1	1	1	1	1	1
Animal care/boarding	-	-	-	S	S	Р	Р	Р	Р	27-131
Animal grooming	-	-	-	Р	P	Ρ	Р	P	Р	27-131
Animal hospital/veterinary clinic	-	-	-	Р	Р	Ρ	Р	P	Ρ	27-131

Commun	icati	on S	ervi	ces						
Radio and television broadcasting stations	Р	Р	Р	-	-	Р	Р	Р	Р	
Recording studios	Р	Р	Р	-	-	Р	Р	Р	Ρ	
Telecommunication tower	A	-	A	-	S	A	A	A	A	27-150
Telecommunication antenna, co-located	Р	Р	Р	Р	Р	Р	Р	Р	Ρ	27-150
Construction and B	uildi	ing S	ales	and S	Servi	ces			<u> </u>	
Building or construction contractor	-	-	-	-	-	-	-	Р	Р	
Commercial greenhouse or plant nursery	-	-	-	-	-	-	-	Р	Ρ	
Electrical, plumbing and heating supplies and services	-	-	-	-	-	Р	Р	-	Р	
Lumber, hardware or other building materials establishment	-	-	-	-	-	Р	Р	Р	Р	
Eating and Drin	hkin	g Est	ablis	shmei	nts	1	1	1	1 1	
Restaurant, accessory to allowed office or lodging use	Р	-	-	Р	-	Р	Р	Р	Р	
Restaurant, drive-in or drive-through	-	-	-	-	-	Р	S	Р	Р	
Food truck	Р	Р	Р	Р	Р	Р	Р	Р	Р	27-138
Other eating or drinking establishment	-	-	-	Р	Р	Р	Р	Р	-	
Entertainment	and	Spe	ctato	or Spo	orts					
Auditorium or stadium	-	-	-	-	-	-	-	Р	Р	
Drive-in theater	-	-	-	-	-	-	-	Р		
Movie theater	-	-	-	Р	-	-	-	Р	-	

Special events facility	-	Р	-	-	-	Р	Р	Ρ	-	
Finan	cial	Serv	ices	<u> </u>		1				
Banks, credit unions, brokerage and investment services	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Convenient cash business	-	-	-	-	-	-	-	Р	-	27-136
Pawn shop	-	-	-	-	-	-	-	Ρ	-	27-144
Food and Be	evera	ige F	Retai	l Sale	S		1			1
Liquor store (as principal use)	-	-	-	-	-	Р	Р	Р	Р	
Liquor store (accessory to lodging or 3+ story office)	-	-	Р	Р	-	-	-	-	-	
Other food and beverage retail sales	-	-	Р	Р	Р	Ρ	Р	Ρ	Р	
Funeral and	Inte	rme	nt Se	ervice	S	1	<u> </u>	1		I
Cemetery, columbarium, or mausoleum	Р	Р	Р	-	-	-	-	-	-	
Crematory	-	-	-	-	-	-	-	-	S	
Funeral home or mortuary	Р	-	-	-	-	Р	Р	Ρ	Р	
Lodging	Р	-	Р	Р	-	Р	Р	Р	Ρ	
Medical Service										
Home health care service	Р	Р	-	-	-	-	-	-	-	1
Hospice	Р	Р	-	-	-	-	-	-	-	
Kidney dialysis center	Р	Р	-	-	-	-	-	-	-	1
Medical and dental laboratory	P	Р	-	Р	-	Р	Р	-	Р	

	<b>D</b>	<b>_</b>	<b>_</b>	<b>D</b>	<b>_</b>	<b>_</b>	<b>D</b>	<b>_</b>		
Medical office/clinic	Р	Р	Р	Р	P	Р	Р	P	P	
Office or Consumer Service	Р	Р	Р	Р	Р	Р	Р	Р	Р	
Parking, Non-accessory	S	-	Р	-	-	Р	Р	Ρ	Р	27-143
Personal Imp	orov	eme	ent S	ervice	2	1	1		<u> </u>	
Barber shop, beauty shop, nail salon, massage and/or spa establishments, estheticians, and other "typical" uses per [subsection] 27-114(14)	Р	-	_	Р	Р	Р	Р	Р	Р	27-114(14)
Other personal improvement service	-	-	-	-	-	Р	Р	Ρ	Р	
Repair or Laund	lry S	ervi	ce, C	Consul	mer	<u> </u>	1	<u> </u>	<u> </u>	
Laundromat, self-service	-	-	-	Р	Р	Р	Р	Р	-	
Laundry or dry cleaning drop-off/pick-up	Р	-	-	Р	Р	Р	Р	Р	Р	
Other consumer repair or laundry service	-	-	-	Р	Р	Р	Р	Р	Р	
Research and Testing Services	Р	-	Р	Р	-	-	-	Ρ	Р	
Re	tail S	Sales	5	1	1	1	1	1	<u> </u>	
Retail sales of goods produced on the premises	-	-	-	-	-	-	-	-	Р	
Shopping Center	-	-	-	Р	Р	Р	Р	Р	-	
Other retail sales	-	-	Р	Р	Р	Р	Р	Р	-	
Sports and Re	crea	tion	, Par	ticipa	nt	1	1	1	<u>.  </u>	
Golf course and clubhouse, private	Р	Р	Р	-	-	-	-	Р	Р	
Health club	-	-	Р	Р	Р	Р	Р	Р	Р	
Private park	Р	Р	Р	-	-	-	-	-	-	

Recreation center or swimming pool, neighborhood	Р	Р	Р	-	-	-	_	-	Р	
Recreation grounds and facilities	-	-	Р	-	-	-	-	Р	-	
Tennis center, club and facilities	Р	Р	Р	Р	-	Р	Р	Р	-	
Other participant sports and recreation (Indoor)	Р	-	-	Р	-	Р	Р	Р	-	
Other participant sports and recreation (Outdoor)	-	-	-	-	-	-	-	Р		
Vehicle and Equip	mei	nt, Sa	ales	and S	ervi	ce	1	<u> </u>	1	
Car wash	-	-	-	-	-	Р	-	Ρ	Ρ	27-134
Gasoline sales	-	-	-	-	-	Р	-	Р	Р	27-139
Vehicle repair, minor	-	-	-	-	-	Р	-	Р	Р	27-153
Vehicle repair, major	-	-	-	-	-	-	-	Р	Р	27-152
Vehicle sales and rental	-	-	-	-	-	S	S	Р	Р	27-154
Vehicle storage and towing	-	-	-	-	-	-	-	Р	Р	27-155
INI	SUS ⁻	TRIA	L	1	1	1	1	1	1	
Manufacturing and Production, Light	-	-	-	-	-	-	-	Р	Р	
Wholesaling, Wareho	usin	g and	d Fre	eight I	Nov	eme	ent	1		<u> </u>
Warehousing and storage	-	-	Р	-	-	-	-	-	-	
Self-storage warehouse	-	-	Р	-	-	-	-	-	Р	
Storage yard and truck terminal	-	-	-	-	-	-	-	-	S	
AGRICULTURE A	ND	TRAI	NSPO	ORTA	ΓΙΟΝ	I				

A	Agriculture									
Agricultural produce stand	-	-	-	-	-	-	-	-	Ρ	
Community garden	Р	Р	Р	Р	Р	Ρ	Р	Ρ	Ρ	27-135
Crops, production of	-	-	-	-	-	-	-	-	Р	
Tra	nspo	rtati	on							
Heliport	S	-	S	-	-	S	S	-	Ρ	
Stations and terminals for bus and rail passenger service	S	-	-	-	-	-	-	-	-	
Taxi stand and taxi dispatching office	-	-	-	-	-	Ρ	Ρ	-	Ρ	

(Ord. No. 2013-10-15, § 1(Exh. A § 27-5.20), 10-14-2013; Ord. No. 2015-01-05, § 1, 1-26-2015; Ord. No. 2015-06-13, § 1, 6-22-2015)

Sec. 27-73. - Lot and building regulations.

- (a) This section establishes basic lot and building regulations that apply in nonresidential and mixed-use zoning districts. These regulations offer certainty for property owners, developers and neighbors about the limits of what is allowed; they are not to be construed as a guarantee that stated minimums and maximums can be achieved on every lot. Other factors, such as topography, the presence of protected resources, off-street parking and other factors may work to further limit actual building and development potential.
- (b) The lot and building standards of the following table apply to all principal and accessory uses allowed in nonresidential and mixed-use districts, unless otherwise expressly stated in this zoning ordinance. Article VII, division 1, identifies exceptions to these regulations and rules for measuring compliance (see also Figure 5-1).

	Regulation	0-1	O-I-T	O-D	OCR	NS	C-1	CR-1	C-2	М
L1	Minimum Lot Area (sq. ft.)	20,000	20,000[1 ]	43,560	87,120	20,000	20,000	20,000	30,000	30,000
L2	Minimum Lot Frontage (ft.)	100	100	150	100	100	100	100	100	100

	Maximum Density (dwelling units per acre)	NA	NA	NA	30	NA	NA	80	NA	NA
	Minimum Building/Structur e Setbacks (ft.)									
S 1	Street, front and side	50	40	75	0	50	50	0	50	75
S 2	Side, interior	20	20	20	20	20	20	20[2]	20	20
S 3	Rear	30	30	30	40	30	30	30	30	30
С	Maximum Lot Coverage (%)	80	80	80	80	80	80	80	80	80
	Maximum Building Height (stories/ft.)	5/70[3 ]	2/35	2/35[4 ]	2/35[4 ]	2/25	2/35[4 ]	3/45[4 ]	2/35[4 ]	5/70[3 ]
	Maximum Building Floor Area (sq. ft.)	NA	NA	NA	NA	50,000[5 ]	NA	NA	NA	NA

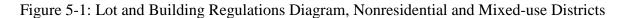
[1] Attached house developments are subject to a minimum lot area requirement of 4,000 square feet per dwelling unit.

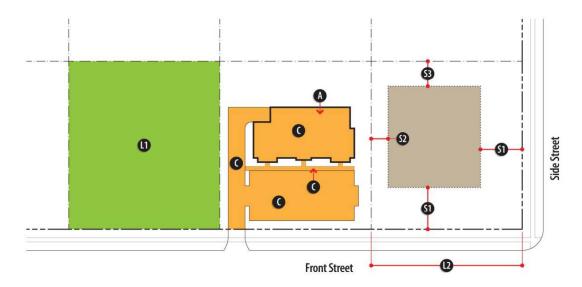
[2] No interior side setback required abutting C-1, CR-1 or C-2-zoned lots.

[3] Buildings may exceed three stories in height only if approved by fire and rescue services. Buildings in excess of five stories or 70 feet in height may be approved only through the special land use permit procedures of article V, division 3. Multi-unit residential and vertical mixed-use buildings that abut any attached single-dwelling residential district may not exceed 40 feet in height. Multi-unit residential buildings and vertical mixed-use buildings that abut any detached single-dwelling residential district may not exceed 35 feet in height.

[4] Buildings in excess stated height limits may be approved through the special land use permit procedures of article V, division 3. Buildings may exceed three stories in height only if approved by fire and rescue services.

[5] No individual building may exceed 50,000 sq. ft. (GSF). No multi-tenant center may exceed 100,000 sq. ft.





(Ord. No. 2013-10-15, § 1(Exh. A § 27-5.30), 10-14-2013; Ord. No. 2015-01-05, § 1, 1-26-2015)

Sec. 27-74. - Other regulations.

Uses and development in nonresidential and mixed-use zoning districts may be subject to other regulations and standards, including the following.

- (1) Nonconformities. See article VI, division 4.
- (2) Accessory uses and structures. See article III, division 3.
- (3) Parking. See article IV, division 1.
- (4) Landscaping and screening. See article IV, division 2.
- (5) Signs. See chapter 20 of the Municipal Code.
- (6) Outdoor storage. See section 27-286.
- (7) Temporary uses. See article III, division 4.
- (8) Outdoor lighting. See article IV, division 3.

(Ord. No. 2013-10-15, § 1(Exh. A § 27-5.40), 10-14-2013)

Secs. 27-75—27-85. - Reserved.

### **PERIMETER CENTER**

#### Vision/Intent

Perimeter Center will be a visitor friendly "livable" regional center with first-class office, retail, entertainment, hotels, and high-end restaurants in a pedestrian and bicycle-oriented environment. The area will serve as a regional example of high quality design standards. The City of Dunwoody works in partnership with the Perimeter Community Improvement Districts (PCIDs) and adjacent communities to implement and compliment the framework plan and projects identified in the Perimeter Center Livable Centers Initiative study (LCI) and its current and future updates.

In the future, the area should add public gathering space and pocket parks, venues for live music and entertainment and continue to create transportation alternatives, mitigate congestion, and reduce remaining excessive surface parking. The area creates the conditions of possible true "live-work" environment. All future development continues to emphasize high quality design standards and building materials and incorporates the current national best practices on energy efficiency, where possible.

The City of Dunwoody recognizes the value of creating mixed-use, transit-oriented development within walking distance of public transit stations. However, the City has concerns about the impact of such development on the City's infrastructure and schools.

#### **Future Development**

The Perimeter Center Character Area will be divided into four subareas (PC-1, PC-2, PC-3, and PC-4) which match the draft proposed overlay district outline that the City is reviewing as part of the Perimeter Center Zoning Code. This area was the subject of a previous LCI Study. The cities of Dunwoody, Sandy Springs, and Brookhaven work in partnership with the Perimeter Community Improvement Districts (PCIDs) to implement and complement the framework plan and projects identified in the Perimeter Center Livable Centers Initiative study (LCI) and its current and future updates.

For specific recommendations on height, density and use refer to the provisions of the Perimeter Center Overlay District and Zoning, available from the Dunwoody Community Development Department.

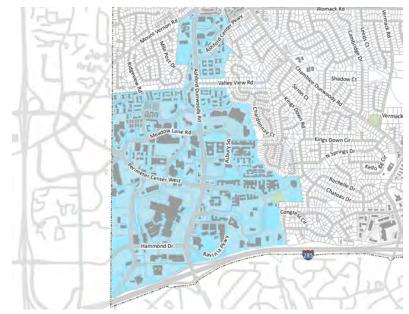


FIGURE 13: Perimeter Center Character Area Map

PC-1: Intended to apply to the central core area of Perimeter Center, including the area directly surrounding the Dunwoody MARTA train station. This district allows for the highest intensity of buildings, a high level of employment uses, and active ground story uses and design that support pedestrian mobility.

PC-2: Made up primarily of employment uses and limited shop front retail, residential, and services.

PC-3: A smaller scale, less intensive commercial district, permitting both shop front and office buildings.

PC-4: Made up primarily of residential uses at a scale that provides a transition between the intensity of Perimeter Center and the surrounding single-family residential neighborhoods.

#### **Action Items**







▲ Housing in Perimeter Center

- New development will include amenities and provide public functional green space.
- New development will be mindful of school capacity issues and applicants will work with Board of Education and City for better resolution of school issues.
- Reduce surface parking and promote livable centers in the immediate areas surrounding MARTA station.
- Encourage hotel and convention development near MARTA in order to foster commerce along the mass transportation route.
- Achieve a lifelong-community for residents who can age in place with safe access to medical, recreational and other necessary services.
- Create bicycle, pedestrian and non-auto related transportation options to connect with the rest of the City of Dunwoody.
- The 2012 PCID Commuter Trail System Master
   Plan proposed a network of commuter trails connecting to the MARTA station.

### The 2012 PCID Perimeter Circulator Implementation report recommended circulator transit to provide first/ last mile connectivity for commuters and reduction in CID area congestion.

- The PCIDs have proposed Perimeter Park at the Dunwoody MARTA Station.
- Work with the Perimeter Transportation Management Association (TMA) to actively reduce automobile dependency and emerge as a leader in alternative transportation for the region.
- Work to strengthen Board of Education relationship for creative solutions to school capacity.
- Work with the PCIDs' boards to implement vision.
- Coordinate with the City of Sandy Springs for LCI Updates and implementation.
- Coordinate with the Atlanta Regional Commission (ARC) for implementation of future LCI study updates.
- Coordinate with MARTA regarding Bus Rapid Transit (BRT) (or other regional service) and urban design surrounding all transit stations.
- Look for ways to encourage live entertainment for the benefit of visitors and residents.

#### **COMMUNITY IMPROVEMENT DISTRICT (CID)**

A Community Improvement District (CID) is an authorized self-taxing district dedicated to Infrastructure improvements within its boundaries. The PCIDs are governed by two boards – one each for Fulton and DeKalb. The PCIDs spent or leveraged public funds to invest \$55 million in Dunwoody alone; over \$7 million from ARC's LCI program was directed to the PCIDs. This makes it one of the most, if not the most, successful CIDs in the region. The PCIDs' mission focuses exclusively on transportation improvements:

To work continuously to develop efficient transportation services, with an emphasis on access, mobility, diversification and modernization.





G. Douglas Dillard 404-665-1244

E-Mail ddillard@pftlegal.com

March 30, 2016

#### Via Hand Delivery and E-mail

Mayor Shortal and Members of the City Council c/o Steve Foote, Community Development Director City of Dunwoody 41 Perimeter Center East Dunwoody, Georgia 30346

#### Re: Special Land Use Permit Application; Dunwoody Crown Towers; 244 Perimeter Center Parkway

Dear Steve:

Please find enclosed the Applicant's revised SLUP application for approximately 4.75 acres of the above-referenced property. The enclosed application includes 3 SLUP requests: (1) a SLUP to increase the height of the proposed multi-unit residential building; (2) a SLUP to increase the height of the proposed mixed use vertical building; and (3) a SLUP to allow multi-unit residential use in the CR-1 zoning district.

The following revisions were made to the SLUP Application package submitted on February 2, 2016:

- Revised Site Plan to address Staff's 3-14-16 review comments;
- Revised Tract designations on conceptual plat/subdivision exhibit to be consistent with site plan; and
- Revisions to the Letter of Intent to reflect the above-referenced revisions.

Please contact me with any questions.

Sincerely,

PURSLEY FRIESE TORGRIMSON

G. Douglas Dillard Jillian S. Arnold

Enclosures



#E.2.

## **SPECIAL LAND USE**

SPECIAL LAND USE PERMIT APPLICATION	Community Development *Smart people – Smart city 41 Perimeter Center East   Dunwoody, GA 30346 Phone: (678) 382-6800   Fax: (770) 396-4828
* Applicant Information:	
Company Name: Dunwoody Crow	n Towers, LLC
Contact Name:	
Address: 4828 Ashtord Dunwood	y Road, Ste 400, Atlanta, GA 30338
Phone: 770-391-1233 Fax:	Email:
Pre-application conference date (required):	
* Owner Information: Theck here if same	as applicant
Owner's Name:	
Owner's Address:	
	Email:
* Property Information:	
Property Address: 244 Perimder Center Parku	Dunwoody, GA Parcel ID: 18-329-04-055
Zoning Classification:	
Pequested Use of the Property: Mixed us	se residential - CR-1

#### **Applicant Affidavit:**

-266reby certify that to the best of my knowledge, this special land use application form is correct and complete. If additional materials are determined to be necessary, I understand that I am responsible for filing additional materials as specified by the City of Dunwoody Zoning Ordinance. I certify that I, the applicant (if different), am authorized to act on the owner's behalf, pursuant to this application and associated actions. 

Applicant's Name:	Dunwoody Crown Towe	IS, LLC. BV: Emilia	Pearson
Applicant's Signature:	Onilia Da	Date:	127/2016

#### * Notary:

Sworn to and subscribed before me this $274$	Day of $\Delta \Omega$ Note $0.000, 20   _{\rho}$	
Notary Public: Stephannie Grant.	1015803 976 M	
Signature: Hannin Mant	T T T N T	
My Commission Expires: 11-9-19		
* Owner Affidavit:		

#### **Owner Affidavit:** -

I hereby certify that to the best of my knowledge, this special land use application form is correct and complete. If additional materials are determined to be necessary, I understand that I am responsible for filing additional materials as pecified by the City of Dunwoody Zoning Ordinance. I certify that the applicant(s) (if different) are authorized to act on my behalf, pursuant to this application and associated actions.

Property Owner's Name: Dunwoody Crown LLC,	By: Emilia tearson
Property Owner's Signature:	Date: 01/27/2014
* Notary:	1
Sworn to and subscribed before me this Day of z Notary Public: Application of the second Day of z Signature: Application of the second Day of z My Commission Expires: 1199-19 Multiplication of the second Day of z Application of the second Day of z Application of the second of the s	ary, 20_16_

#### **Neighbor Communications Survey**

SLUP Applications: Dunwoody Crown Towers, LLC

February 1, 2016

### 1. Efforts to notify neighbors about the proposal (how and when notification occurred, and who was notified);

The Applicant held an applicant-initiated meeting on Monday, February 1, 2016 at the D.W. Brooks Conference Center, 244 Perimeter Center Parkway, Dunwoody, GA 30346. Notice of the applicant-initiated meeting was published in the Dunwoody Crier on January 20, 2016. A copy of the legal advertisement is attached.

On January 11, 2016, notice of the applicant-initiated meeting was also mailed to the two residentially-zoned properties within 1,000 feet of the subject 4.75-acre property. According to the City's GIS map, there are two properties within 1,000 feet of the subject property zoned for residential use. The first is the Martin Cemetery parcel located at 1191 Ashford Dunwoody (Tax Parcel ID 18 348 02 002) which is zoned R-150. The Dunwoody Preservation Trust maintains the Martin Cemetery and notice was mailed to the Executive Director of the Dunwoody Preservation Trust at 5455 Chamblee Dunwoody Rd Dunwoody, GA 30338. The second property is located at 11 Ravinia Parkway (Parcel ID 18 347 01 049), is owned by Hines Ravinia Four Limited, and is zoned OCR. Notice was mailed to Hines Ravinia Four Limited at 1 Ravinia Drive, Ste. 1160, Atlanta, GA 30346. Attached is the notice letter mailed to the Dunwoody Preservation Trust and Hines Ravinia Four Limited. Finally, notice of the meeting was also sent to the Planning Department.

#### 2. Meeting location, date and time;

The Applicant held an applicant-initiated meeting on Monday, February 1, 2016 at the D.W. Brooks Conference Center, 244 Perimeter Center Parkway, Dunwoody, GA 30346. The meeting started at 7:00pm.

#### 3. Who was involved in the discussions;

Mr. Charles Brown and Mr. Doug Dillard attended the meeting on behalf of the Applicant, Dunwoody Crown Towers, L.L.C. Please see the attached sign-in sheet for the meeting attendees.

#### 4. Suggestions and concerns raised by neighbors; and

The neighbors raised concerns about the overall density and the residential component of the plan, though the concerns were directed primarily at rental units which are not being proposed by the Applicant.

## 5. What specific changes to the proposal were considered and/or made as a result of the meeting.

No changes are proposed at this time.

#E.2.

That contract was changed

#### NOTICE OF NONDISCRIMINATORY POLICY AS TO STUDENTS

North Atlanta Children's Ministries, Inc., 5676 Roberts Dr., Atlanta, GA 30338, admits students of any race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students of the organization. It does not discriminate on the basis of race, color, national, and ethnic origin in administration of its educational policies, and other organization-administered programs.

#### NOTICE OF MEETING FOR THE PUBLIC

Dunwoody Crown Towers, LLC intends to submit a Rezoning Application and three Special Land Use Permit Applications to the City of Dunwoody for land within 1,000 feet of your property. The Applicant will be submitting a rezoning application and three Special Land Use Permit ("SLUP") Applications for property at 244 Perimeter Center Parkway in order to develop Dunwoody Crown Towers, a mixed use development with residential and non-residential uses. The Applicant will be holding a neighborhood meeting to discuss the proposed rezoning application and to answer any questions that you may have regarding the applications and proposed development. Specific details regarding the Rezoning Application, Special Land Use Permit Applications, and Applicant-initiated neighborhood meeting are below.

CASE NUMBER: TBD (this will be provided at the time the application is filed with the City)

APPLICANT NAME: Dunwoody Crown Towers, LLC

JURISDICTION: City of Dunwoody

ZONING CHANGE: O-I to CR-1 (Commercial-Residential)

SLUP Request: (1) SLUP to increase the height of the multi-unit building; (2) SLUP to increase the height of the mixed use vertical building; and a (3) SLUP to allow a multi-unit residential building within the CR-1 zoning district

STREET LOCATION: 244 Perimeter Center Parkway; +/- 4.75 acres

PROPOSED DEVELOPMENT: Multi-Unit Residential Tower; Mixed Use Vertical Tower (Hotel and Residential uses); 3-story Retail Building

APPLICANT-INITIATED MEETING D.W. Brooks Conference Center 244 Perimeter Center Parkway (1st floor) Dunwoody, GA 30346 February 1, 2016 7:00 pm

If you have questions about the Applications or the applicant-initiated meeting, please contact Jill Arnold at (404) 665-1243 or jarnold@pftlegal.com.

#### Brookhaven, from page

takes place today.

The council met later last have a third party resolve week to complete the process these disputes. We wish Marie to a more conventional but decided to send the issue Garrett well." Garrett, the highest paid to third-party mediation. That

"The City honors its obliga- \$214,000 per year, could be nature of a new city. tions," said Mayor John Ernst. eligible for nine months pay, "Unfortunately some of the continued health and life interms of the [Garrett's] con- surance and retirement pay. tract negotiated by previous

She originally came to the administrations is ambiguous city as a consultant when it and does not allow the City to was incorporated and later know what its duties are," was hired by Mayor J. Max Mayor, John Ernst said in a Davis. Her original contract Mayor Davis left office and statement. "While working to- drew some fire when it was re- was succeeded by Rebecca wards an orderly transition, vealed she was to work only we have become mired in con- four days a week and was to flict over the terms and condi- be paid at her consultant the employment of the city tions of that agreement. The hourly rate if asked to work on clerk and finance director. responsible thing to do is to Fridays.

#### arrangement, but Garrett was able to command a higher city manager in the state at salary because of the start-up Police Chief Gary Yandura is to be the interim city man-

ager. In other actions, the council elected Bates Mattison mayor pro-tem. He was elected to that position last year when Williams.

The mayor also reaffirmed

#### THE CITY OF DUNWOODY, GEORGIA NOTICE OF PUBLIC HEARING

The City of Dunwoody Mayor and City Council will meet on Monday, February 08, 2016 at 6:00 p.m. in the Council Chambers of Dunwoody City Hall, which is located at 41 Perimeter Center East, Dunwoody, Georgia 30346, for the purpose of due process of the following:

CQ Dunwoody Village Court, LLC, owner of 1530 and 1536 Dunwoody Village Parkway, Dunwoody, GA 30338, by Marian Adeimy, attorney for contract purchaser, seeks the following for the subject property to allow for construction of a 79-unit townhome development. The property consists of two tax parcels: 18-366-06-061 located at 1530 Dunwoody Village Parkway, Dunwoody, GA 30338, and 18-366-06-065 located at 1536 Dunwoody Village Parkway, Dunwoody, GA 30338.

RZ 16-021: Rezone property currently zoned Office-Institution (O-I) District to Multidwelling Residential-100 (RM-100) District.

SLUP 16-021: Special Land Use Permit to waive the requirement for a development to come into full compliance with the Dunwoody Village Overlay District regulations to allow for reduction in sidewalk width from 12 ft. to 6 ft.

RZ 16-022: Kathryn B. Zickert, applicant, on behalf of Hines Atlanta Associates Limited Partnership, owner of 4453 Ashford Dunwoody Road, Dunwoody, GA 30346, seeks permission to rezone property currently zoned Office-Institution conditional (O-Ic) District to Local Commercial conditional (C-1c) District to allow for development of a restaurant with drive-through. The tax parcel number is 18 347 01 033.

Should you have any questions, comments, or would like to view the application and supporting materials, please contact the City of Dunwoody Community Development Department at 678-382-6800. Members of the public are encouraged to call or schedule a meeting with staff in advance of the Public Hearing if they have questions or are unfamiliar with the process. Staff is available to answer questions, discuss the decision-making process, and receive comments and concerns.



#E.2



Terry Landrum Direct: 404.665.1227 tlandrum@pftlegal.com

January 11, 2016

Rebecca Keefer, AICP City Planner/Director of Sustainability City of Dunwoody 41 Perimeter Center East, Suite 250, Dunwoody, GA 30346

RE: Dunwoody Crown Towers Applicant-Initiated Neighborhood Meeting 244 Perimeter Center Parkway, DeKalb County, Atlanta, GA

Dear Rebecca:

Enclosed please find the Applicant-Initiated Meeting notice that was mailed on January 11, 2016 to residential owners of property within 1,000 feet of the subject property.

Sincerely, PURSLEY FRIESE TORGRIMSON, LLP

Terry Landrum

Paralegal

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#### Dunwoody Crown Towers, LLC c/o Doug Dillard, Esq. Pursley Friese Torgrimson Promenade, Suite 1200 1230 Peachtree Street NE Atlanta, GA 30309

#### January 11, 2016

Dear Property Owner:

This letter is to inform you that Dunwoody Crown Towers, LLC intends to submit a Rezoning Application and three Special Land Use Permit Applications to the City of Dunwoody for land within 1,000 feet of your property. The Applicant will be submitting a rezoning application and three Special Land Use Permit ("SLUP") Applications for property at 244 Perimeter Center Parkway in order to develop Dunwoody Crown Towers, a mixed use development with residential and non-residential uses. The Applicant will be holding a neighborhood meeting to discuss the proposed rezoning application and to answer any questions that you may have regarding the applications and proposed development. Specific details regarding the Rezoning Application, Special Land Use Permit Applications, and Applicant-initiated neighborhood meeting are below.

CASE NUMBER: TBD (this will be provided at the time the application is filed with the City)

APPLICANT NAME: Dunwoody Crown Towers, LLC

JURISDICTION: City of Dunwoody

ZONING CHANGE: O-I to CR-1 (Commercial-Residential)

**SLUP Request:** (1) SLUP to increase the height of the multi-unit building; (2) SLUP to increase the height of the mixed use vertical building; and a (3) SLUP to allow a multi-unit residential building within the CR-1 zoning district

STREET LOCATION: 244 Perimeter Center Parkway; +/- 4.75 acres

**PROPOSED DEVELOPMENT:** Multi-Unit Residential Tower; Mixed Use Vertical Tower (Hotel and Residential uses); 3-story Retail Building

APPLICANT-INITIATED MEETING D.W. Brooks Conference Center 244 Perimeter Center Parkway (1st floor) Dunwoody, GA 30346 February 1, 2016 7:00 pm

If you have questions about the Applications or the applicant-initiated meeting, please contact Jill Arnold at (404) 665-1243 or jarnold@pftlegal.com.

### SIGN IN SHEET for NEIGHBORS

### Dunwoody Crown Towers

### February 1, 2016

NAME	ADDRESS	PHONE	E-MAIL
BIL			BILL, GROSSMAN @
GROSSMAN	5061 HIMEN BATHCHES DA DUHNDONY, ET 30355	0324	COMCHST. NET
Boh	1445 Valley View Rel	770.331.4040	bobdallass@gmail.com
DAllas	DUNWOOdy, GA 30375		- growing ou
Dyana Bagley	645 Forest Hills D Sandy Springs 3024	404-353-8514	dyanabagby @ reporternewspapers.n
KYAN	1416 WOMACK RD	(404)273-0185	RESSLING @GMAIL. com
ESSLINGER	DUNWWPY, GA 30338		
OHERYL	TILLY MILL RO		CASUMMERS 76 @ GMAIL. COM
_ N UMMERS	DUNWOODY 30338		@ GMAIL. COM
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	attuti 30309	ъ.,	
SenyWall	1344 Vernon North	. UAUP	Terry. Nalle
	DunwoodyGA 30.	338 915-6693	dunwoodyga,gov
John Heneghan	4624 Buckley Ct	770-234.	John. Heneghand
Heneghan	Junwoody 67 30338	0678	dunwoody GA - gov
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### Letter of Intent and Review Criteria

City of Dunwoody Special Land Use Permit Application

Applicant: Dunwoody Crown Towers, LLC

Property: 244 Perimeter Center Parkway

+/- 4.75 acres of Land Located in Land Lot 329 of the 18th District, DeKalb County

**3 SLUP Requests**: (1) a SLUP to increase the height of the multi-unit residential building; (2) a SLUP to increase the height of the mixed use vertical building; and (3) a SLUP to allow multi-unit residential use in the CR-1 zoning district.

### Submitted for Applicant by:

G. Douglas Dillard Jillian Skinner Arnold PURSLEY FRIESE TORGRIMSON 1230 Peachtree Street, Suite 1200 Atlanta, Georgia 30309 (404) 665-1243 <u>ddillard@pftlegal.com</u> jarnold@pftlegal.com

#### I. INTRODUCTION

The +/- 4.75 acre property is located at 244 Perimeter Center Parkway and is currently zoned O-I (the "Property"). It is bordered by I-285 to the south, Perimeter Center Parkway to the west, Ashford-Dunwoody Road to the east, and a shopping center development to the north. The Applicant, Dunwoody Crown Towers, LLC, intends to develop Dunwoody Crown Towers, a mixed use development with luxury residential and non-residential uses that will significantly enrich the design and livability of the Perimeter Center area and create a true gateway to the City of Dunwoody.

The Applicant respectfully requests 3 Special Land Use Permits ("SLUPs") from the City of Dunwoody: (1) a SLUP to increase the height of the multi-unit residential building ("Crown Tower 1" on enclosed conceptual drawings); (2) a SLUP to increase the height of the mixed use vertical building ("Crown Tower 2" on conceptual drawings); and (3) a SLUP to allow multi-unit residential use in the CR-1 zoning district.

Concurrent with the 3 Special Land Use Permit ("SLUP") Applications, the Applicant is also submitting an Amendment Application for the Property and a Variance Application for the adjacent property. The Amendment Application requests said Property (4.75-acre parcel-"Site B" on the enclosed site plan) be rezoned from O-I to CR-1 in order to develop Dunwoody Crown Towers, which includes (i) one mixed use vertical building with a hotel, residential units, and accessory uses, (ii) one multi-unit residential building, and (iii) a retail building. The requested 0' front yard setback variance is for the existing Goldkist building on the adjacent 10.2-acre property, which will be set back 0' from the proposed new road extending to the Property.

The Property is currently part of a larger 15 acre-parcel, but will be subdivided as a legally separate lot upon approval of the rezoning request by the Dunwoody City Council. Therefore, the current 15-acre parcel will be split into two tracts-Site A (+/-9.2 acres, after road dedication) and Site B (+/-4.75 acres, after road dedication) as shown on the enclosed Site Plan. The owner is dedicating approximately 1.03 acres for the extension of a new road from the existing Goldkist Road to the Property at Site B. This subdivision is necessitated by the City's prohibition of dual-zoned parcels. Please note, the rezoning and SLUP applications are for Site B. <u>Site A is NOT included in the rezoning or SLUP applications.</u> Site A is shown on the conceptual plans to illustrate existing entitlements pursuant to the variance granted by DeKalb County on February 9, 1999. Site A will remain zoned O-I with existing entitlements as shown on the enclosed conceptual plans.

#### II. SLUP REQUEST

The Applicant has included its 3 SLUP requests in one SLUP application. Each SLUP request will be explained in detail below and evaluated based on the criteria established by the City of

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Dunwoody. The Applicant's 3 SLUP requests satisfy the City's criteria for SLUP applications as set forth in Section III below. As such, the Applicant respectfully requests the City Council grant the SLUP applications, as requested by the Applicant.

#### **Brief Zoning History**

The 15-acre parcel currently has significant non-residential development entitlements. In 1999, DeKalb County approved four variances for the 15-acre parcel at 244 Perimeter Center Parkway: (1) a 28-story hotel; (2) a conference center and parking structure (6 levels with 600 parking spaces); (3) two 24-story office buildings; and (4) two 10-level parking decks with 4,304 parking spaces. These entitlements remain on the 15-acre parcel today. The Applicant intends to concentrate the existing above-referenced entitlements on the adjacent 9.2-acre parcel (acreage calculation after road dedication), and rezone the subject Property to CR-1 in order to add a residential mix of uses into the overall development to create a true transit-oriented mixed use community. The current development entitlements (i.e. a 28-story hotel, conference center with parking structure, two 28-story office buildings, and a parking deck) fit within the 9.2-acre parcel while still complying with O-I development regulations, including lot coverage.

#### The Proposed Development is Consistent with Dunwoody's Comprehensive Plan

The Applicant's proposed development and SLUP requests are consistent with the City of Dunwoody's Comprehensive Plan. The subject property is located in the Perimeter Center Character Area, which seeks to be a "livable regional center with first-class office, retail, entertainment, hotels, and high-end restaurants" to create a true "live-work" environment.¹ The City recognizes the value in mixed-use, transit-oriented development, but has concerns about the impact on schools.² Additional goals of the City's Comprehensive Plan include:

- Achieve a lifelong-community for residents who can age in place with safe access to medical, recreational, and other necessary services.³
- Increase connectivity and enhance transportation options for all forms of travel.⁴
- Reduce surface parking and promote livable centers in the immediate areas surrounding the MARTA station.⁵
- Encourage hotel and convention development near MARTA in order to foster commerce along the mass transportation route.⁶

² Id. at 25.

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¹ City of Dunwoody Comprehensive Plan, p. 25.

³ Id.

⁴ Id.

⁵ *Id.* at 26.

⁶ *Id.* at 26.

The Applicant's proposed mixed use development and SLUP requests are consistent with the goals and intent of the Perimeter Center Character Area. The rezoning and SLUP requests seek to add luxury residences to the non-residential uses in the area, thereby creating a true "livable" center where Dunwoody residents are able to live, work, shop, play, and access mass transit within one development. Looking at the broader context, this Property is situated next to the new State Farm campus, Perimeter Center Mall, and the yet-to-be-developed GID/High Street site, which likewise includes a mix of land uses. This development complements each of those developments by adding residential opportunities for the employees of State Farm and the adjacent office uses.

Moreover, the residential component of the mixed use project will be well-suited for those Dunwoody residents looking to "age in place" within the City. These individuals are looking to downsize from larger single-family detached homes to smaller residences with less maintenance, yet still remain in the community and part of their established social networks. The Applicant's proposed residences will provide an "age in place" opportunity for Dunwoody residents looking to downsize yet remain in Dunwoody.

Overall, the proposed mixed use development will complement the surrounding mix of uses in the area, is consistent with the City's Comprehensive Plan and its vision for a "live work" mixed use environment in the Perimeter Center area, and provides residential options to those already living in Dunwoody and for those who want to move to the area. Sufficient parking is provided on site, and MARTA is within walking distance of the Property making transit a realistic transportation alternative. The heights and uses proposed in the enclosed SLUP applications are also consistent with the City's draft Perimeter Center District. The Perimeter Center District (PC-1) envisions a mix of uses in a development, and promotes heights up to 30 stories. Owner-occupied residences, hotels, and retail uses are permitted by right in the PC-1 District.

#### III. IMPACT ANALYSIS

This section includes the Applicant's responses for each of the three SLUP requests. As such, the Applicant respectfully requests the City Council grant the SLUP applications.

#### 1. <u>SLUP to Increase the Height of the Multi-Unit Residential Building to 35 Stories</u> (Crown Tower 1)

The Applicant satisfies all of the criteria for the requested SLUP as set forth in the City's Zoning Code, Section 27-359.

#### a. Whether the proposed use is consistent with the policies of the comprehensive plan.

Yes, the proposed use and height is consistent with the policies and intent of the City's Comprehensive Plan. The subject property is located in the Perimeter Center Character Area, which seeks to be a "livable regional center with first-class office, retail, entertainment, hotels,

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and high-end restaurants" to create a true "live-work" environment. The rezoning request seeks to add high-quality residential units to the area, thereby creating a true "livable" center where Dunwoody residents are able to live, work, shop, play, and access mass transit within one development. A well-designed, high-rise residential tower is appropriate for the area.

Overall, the proposed mixed use development will complement the surrounding mix of uses in the area, is consistent with the City's Comprehensive Plan and its vision for a "live work" mixed use environment in the Perimeter Center area, and provides residential options to those already living in Dunwoody and those who want to move to the area.

#### b. Whether the proposed use complies with the requirements of the zoning ordinance.

Yes, the proposed use complies with the requirements of the CR-1 Zoning District. The CR-1 Zoning District supports a mix of residential and commercial uses within one development, which is what is proposed by the Applicant here. Moreover, the Code anticipates the need to exceed the 3-story height limit in the CR-1 zoning district by permitting height increases through the SLUP process. The height is also consistent with the current draft copy of the Perimeter Center Zoning District (PC-1) which envisions a mix of uses in a development, and promotes buildings up to 30 stories. The proposed height of the multi-unit building, at 32-35 stories, is consistent with the future vision for this area. The Perimeter Center area has been designated a "gateway" to Dunwoody and as such must promote projects of the highest and most unique quality, such as the Applicant's proposed Crown Dunwoody Towers development.

## c. Whether the proposed site provides adequate land area for the proposed use, including provision of all required open space, off-street parking and all other applicable requirements of the subject zoning district.

Yes, the proposed site provides adequate land area for the proposed use, including provision of all required open space, off-street parking, and all other applicable requirements of the subject zoning district. The proposed development is well within the open space requirements of the CR-1 zoning district. The CR-1 zoning district requires 20% open space. The proposed development is currently showing approximately 40% open space on the Property. Moreover, the development is adequately parked. The Dunwoody Zoning Code allows a 25% reduction in the number of parking spaces if the property is located within 1,500 feet of a MARTA station. *See* Dunwoody Code, Section 27-204. Here, the Property is located within 1,500 feet of the MARTA station and therefore the reduction in parking provision is applicable upon approval by the Community Development Director. Moreover, the Property's close proximity to MARTA makes transit a realistic transportation

alternative.

### d. Whether the proposed use is compatible with adjacent properties and land uses, including consideration of:

The proposed use is compatible with adjacent properties and land uses which are mostly nonresidential in character. As noted above, the Property is bordered by I-285 to the south, Perimeter Center Parkway to the west, Ashford-Dunwoody Road to the east, and a shopping center development to the north. More specifically, the Property is situated next to the new State Farm site, Perimeter Center Mall, and the yet-to-be-developed GID/High Street site, which likewise includes a mix of land uses. The proposed residential uses on the Property within the broader mixed-use campus will promote the "live work" goals of the Perimeter Center area and complement nearby employment centers by providing residential opportunities for those Dunwoody employees.

### e. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of noise, smoke, odor, dust or vibration generated by the proposed use.

No, the proposed use will not create any adverse impacts upon adjoining land uses reason of noise, smoke, odor, dust or vibration generated by the proposed use. The proposed residential use is relatively low-impact and will not generate burdensome or obtrusive noise, smoke, odor, dust or vibration in its operations.

### f. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of the hours of operation of the proposed use.

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the hours of operation of the proposed use. The surrounding land uses are all non-residential uses, which will not be negatively impacted by the hours of operation of the proposed residential, hotel, retail, and accessory uses.

### g. Whether the proposed use will create adverse impact upon any adjoining land use by reason of the manner of operation of the proposed use.

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the manner of operation of the proposed use.

h. Whether the proposed use will create adverse impact upon any adjoining land use by reason of the character of vehicles or the volume of traffic generated by the propose use.

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No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the character of vehicles or the volume of traffic generated by the proposed use. The proposed development may actually reduce the burden on road infrastructure and existing transportation facilities in the area by providing new transportation infrastructure. Moreover, the Property's close proximity to the Dunwoody MARTA station makes transit a realistic transportation alternative.

i. Whether the size, scale and massing of proposed buildings are appropriate in relation to the size of the subject property and in relation to the size, scale and massing of adjacent and nearby lots and buildings.

Yes, the size, scale and massing of the proposed buildings are appropriate in relation to the size of the subject property and in relation to the size, scale and massing of adjacent and nearby lots and buildings. The proposed multi-unit building height will be between 32-35 stories in height. This height is appropriate in light of the significant height entitlements on the adjacent 9.2-acre parcel (Site A), which includes a 28-story hotel and two 24-story office buildings, and the heights of surrounding building in the Perimeter area, with the adjacent Ravinia building at 31 stories and the King and Queen towers along the I-285 Corridor at 28 stories.

### j. Whether the proposed plan will adversely affect historic buildings, sites, districts, or archaeological resources.

No, the zoning proposal will not adversely affect historic buildings, sites, districts, or archaeological resources. The proposed development is located next to the Martin family cemetery. The development will have no impact on the cemetery or the easement providing ingress to and from the cemetery. The cemetery will at all times be protected. The Applicant has spoken with representatives from the Dunwoody Preservation Trust, the organization tasked with maintaining the cemetery, to work on a mutually beneficial strategy for the cemetery's continued maintenance and accessibility.

#### k. Whether public services, public facilities and utilities – including motorized and nonmotorized transportation facilities – are adequate to serve the proposed use.

Yes, public services, facilities and utilities are adequate to serve the proposed use. The project is also adjacent to the Dunwoody MARTA station which makes transit a realistic transportation alternative for those commuting to and from the Property.

1. Whether adequate means of ingress and egress are proposed, with particular reference to non-motorized and motorized traffic safety and convenience, traffic flow and control and emergency vehicle access.

Yes, adequate means of ingress and egress are proposed for the site. The site may be accessed off of Perimeter Center Parkway from a newly-created road with sufficient capacity to handle any new trips generated by the Applicant's proposed development. Future transportation improvements in this area may also add another access point directly off of I-285 to the Property, though this access point (the proposed Westside Connector) has not yet been approved. The Property is also accessible by transit and a pedestrian path from the MARTA station to the Property.

m. Whether adequate provision has been made for refuse and service areas.

Yes, adequate provision has been made for refuse and service areas.

n. Whether the proposed building as a result of its proposed height will create a negative shadow impact on any adjoining lot or building.

No, the proposed building will not create a negative shadow impact on any adjoining lot or building. Buildings to the east and west of the Property have similar heights, at 28-stories, 24-stories, and 31-stories across Ashford-Dunwoody Road.

### 2. <u>SLUP to Increase the Height of the Mixed-Use</u>, Vertical Building to 29 Stories (Crown Tower 2)

The Applicant satisfies all of the criteria for the requested SLUP as set forth in the City's Zoning Code, Section 27-359.

#### a. Whether the proposed use is consistent with the policies of the comprehensive plan.

Yes, the proposed use and height is consistent with the policies and intent of the City's Comprehensive Plan. The subject property is located in the Perimeter Center Character Area, which seeks to be a "livable regional center with first-class office, retail, entertainment, hotels, and high-end restaurants" to create a true "live-work" environment. The rezoning request seeks to add high-quality residential units to the area, thereby creating a true "livable" center where Dunwoody residents are able to live, work, shop, play, and access mass transit within one development. A well-designed, high-rise vertical mixed use tower, with residences and hotel uses, is appropriate for the area.

Overall, the proposed mixed use development will complement the surrounding mix of uses in the area, is consistent with the City's Comprehensive Plan and its vision for a "live work"

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mixed use environment in the Perimeter Center area, and provides residential options to those already living in Dunwoody and those who want to move to the area.

#### b. Whether the proposed use complies with the requirements of the zoning ordinance.

Yes, the proposed use complies with the requirements of the CR-1 Zoning District. The CR-1 Zoning District supports a mix of residential and commercial uses within one development, which is what is proposed by the Applicant here. Moreover, the Code anticipates the need to exceed the 3-story height limit in the CR-1 zoning district by permitting height increases through the SLUP process. The height is also consistent with the current draft copy of the Perimeter Center Zoning District (PC-1) envisions a mix of uses in a development, and promotes buildings up to 30 stories. The proposed height of the mixed use vertical building, between 27-29 stories, is consistent with the future vision for this area. The Perimeter Center area has been designated a "gateway" to Dunwoody and as such must promote projects of the highest and most unique quality, such as the Applicant's proposed Crown Dunwoody Towers development.

## c. Whether the proposed site provides adequate land area for the proposed use, including provision of all required open space, off-street parking and all other applicable requirements of the subject zoning district.

Yes, the proposed site provides adequate land area for the proposed use, including provision of all required open space, off-street parking, and all other applicable requirements of the subject zoning district. The proposed development is well within the open space requirements of the CR-1 zoning district. The CR-1 zoning district requires 20% open space. The proposed development is currently showing approximately 40% open space on the Property. Moreover, the development is adequately parked. The Dunwoody Zoning Code allows a 25% reduction in the number of parking spaces if the property is located within 1,500 feet of a MARTA station. *See* Dunwoody Code, Section 27-204. Here, the Property is located within 1,500 feet of the MARTA station and therefore the reduction in parking provision is applicable upon approval by the Community Development Director. Moreover, the Property's close proximity to MARTA makes transit a realistic transportation alternative.

## d. Whether the proposed use is compatible with adjacent properties and land uses, including consideration of:

The proposed use is compatible with adjacent properties and land uses which are mostly non-residential in character. As noted above, the Property is bordered by I-285 to the south,

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Perimeter Center Parkway to the west, Ashford-Dunwoody Road to the east, and a shopping center development to the north. More specifically, the Property is situated next to the new State Farm site, Perimeter Center Mall, and the yet-to-be-developed GID/High Street site, which likewise includes a mix of land uses. The proposed residential uses on the Property within the broader mixed-use campus will promote the "live work" goals of the Perimeter Center area and complement nearby employment centers by providing residential opportunities for those Dunwoody employees.

### e. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of noise, smoke, odor, dust or vibration generated by the proposed use.

No, the proposed use will not create any adverse impacts upon adjoining land uses reason of noise, smoke, odor, dust or vibration generated by the proposed use. The proposed hotel, residential and retail uses are relatively low-impact uses that will not generate burdensome or obtrusive noise, smoke, odor, dust or vibration.

## f. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of the hours of operation of the proposed use.

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the hours of operation of the proposed use. The surrounding land uses are all nonresidential uses, which will not be negatively impacted by the hours of operation of the proposed residential, hotel, retail, and accessory uses.

## g. Whether the proposed use will create adverse impact upon any adjoining land use by reason of the manner of operation of the proposed use.

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the manner of operation of the proposed use.

# h. Whether the proposed use will create adverse impact upon any adjoining land use by reason of the character of vehicles or the volume of traffic generated by the propose use.

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the character of vehicles or the volume of traffic generated by the proposed use. The proposed development may actually reduce the burden on road infrastructure and existing transportation facilities in the area by providing new transportation infrastructure. Moreover, the Property's close proximity to the Dunwoody MARTA station makes transit a realistic transportation alternative.

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i. Whether the size, scale and massing of proposed buildings are appropriate in relation to the size of the subject property and in relation to the size, scale and massing of adjacent and nearby lots and buildings.

Yes, the size, scale and massing of the proposed buildings are appropriate in relation to the size of the subject property and in relation to the size, scale and massing of adjacent and nearby lots and buildings. The proposed mixed use vertical building will be between 27-29 stories in height. This height is appropriate in light of the significant height entitlements on the adjacent 9.2-acre parcel (Site A), which includes a 28-story hotel and two 24-story office buildings, and the heights of surrounding building in the Perimeter area, with the adjacent Ravinia building at 31 stories and the King and Queen towers along the I-285 Corridor at 28 stories.

j. Whether the proposed plan will adversely affect historic buildings, sites, districts, or archaeological resources.

No, the zoning proposal will not adversely affect historic buildings, sites, districts, or archaeological resources. The proposed development is located next to the Martin family cemetery. The development will have no impact on the cemetery or the easement providing ingress to and from the cemetery. The cemetery will at all times be protected. The Applicant has spoken with representatives from the Dunwoody Preservation Trust, the organization tasked with maintaining the cemetery, to work on a mutually beneficial strategy for the cemetery's continued maintenance and accessibility.

k. Whether public services, public facilities and utilities – including motorized and nonmotorized transportation facilities – are adequate to serve the proposed use.

Yes, public services, facilities and utilities are adequate to serve the proposed use. The project is also adjacent to the Dunwoody MARTA station which makes transit a realistic transportation alternative for those commuting to and from the Property.

1. Whether adequate means of ingress and egress are proposed, with particular reference to non-motorized and motorized traffic safety and convenience, traffic flow and control and emergency vehicle access.

Yes, adequate means of ingress and egress are proposed for the site. The site may be accessed off of Perimeter Center Parkway from a newly-created road with sufficient capacity to handle any new trips generated by the Applicant's proposed development. Future transportation improvements in this area may also add another access point directly off of I-285 to the Property, though this access point (the proposed Westside Connector) has

not yet been approved. The Property is also accessible by transit and a pedestrian path from the MARTA station to the Property.

#### m. Whether adequate provision has been made for refuse and service areas.

Yes, adequate provision has been made for refuse and service areas.

### n. Whether the proposed building as a result of its proposed height will create a negative shadow impact on any adjoining lot or building.

No, the proposed building will not create a negative shadow impact on any adjoining lot or building. Buildings to the east and west of the Property have similar heights, at 28-stories, 24-stories, and 31-stories across Ashford-Dunwoody Road.

#### 3. SLUP to Allow Multi-Unit Residential Use on the Property (Crown Tower 1)

The Applicant satisfies all of the criteria for the requested SLUP as set forth in the City's Zoning Code, Section 27-359.

#### a. Whether the proposed use is consistent with the policies of the comprehensive plan.

Yes, the proposed use and height is consistent with the policies and intent of the City's Comprehensive Plan. The subject property is located in the Perimeter Center Character Area, which seeks to be a "livable regional center with first-class office, retail, entertainment, hotels, and high-end restaurants" to create a true "live-work" environment. The rezoning request seeks to add high-quality residential units to the area, thereby creating a true "livable" center where Dunwoody residents are able to live, work, shop, play, and access mass transit within one development. A well-designed, residential tower is appropriate for the area.

The Comprehensive Plan also promotes "high quality design standards and building materials." The Applicant's proposed luxury residential tower will include high quality finishes and amenities, including hardwood flooring in foyer, kitchens and bathrooms, quartz countertops, stainless steel appliances, walk-in closets with custom shelving, and smart home technology with thermostats and keyless locks. A Homeowners Association will be created to manage residential operations.

In addition to the luxury features included in each individual unit, residents will have access to various amenities including a spacious club room with bar, indoor & outdoor fireplaces, and

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state of the art outdoor kitchen, a business center, fitness center, pools and cabanas, and a massage/treatment room.

Overall, the proposed mixed use development will complement the surrounding mix of uses in the area, is consistent with the City's Comprehensive Plan and its vision for a "live work" mixed use environment in the Perimeter Center area, and provides residential options to those already living in Dunwoody and those who want to move to the area.

#### b. Whether the proposed use complies with the requirements of the zoning ordinance.

Yes, the proposed use complies with the requirements of the CR-1 Zoning District. The CR-1 Zoning District supports a mix of residential and commercial uses within one development, which is what is proposed by the Applicant here. Moreover, the Code anticipates the need to exceed the 3-story height limit in the CR-1 zoning district by permitting height increases through the SLUP process. The Perimeter Center area has been designated a "gateway" to Dunwoody and as such must promote projects of the highest and most unique quality, such as the Applicant's proposed Crown Dunwoody Towers development.

# c. Whether the proposed site provides adequate land area for the proposed use, including provision of all required open space, off-street parking and all other applicable requirements of the subject zoning district.

Yes, the proposed site provides adequate land area for the proposed use, including provision of all required open space, off-street parking, and all other applicable requirements of the subject zoning district. The proposed development is well within the open space requirements of the CR-1 zoning district. The CR-1 zoning district requires 20% open space. The proposed development is currently showing approximately 40% open space on the Property. Moreover, the development is adequately parked. The Dunwoody Zoning Code allows a 25% reduction in the number of parking spaces if the property is located within 1,500 feet of a MARTA station. *See* Dunwoody Code, Section 27-204. Here, the Property is located within 1,500 feet of the MARTA station and therefore the reduction in parking provision is applicable upon approval by the Community Development Director. Moreover, the Property's close proximity to MARTA makes transit a realistic transportation alternative.

## d. Whether the proposed use is compatible with adjacent properties and land uses, including consideration of:

The proposed use is compatible with adjacent properties and land uses which are mostly nonresidential in character. As noted above, the Property is bordered by I-285 to the south, Perimeter Center Parkway to the west, Ashford-Dunwoody Road to the east, and a shopping

center development to the north. More specifically, the Property is situated next to the new State Farm site, Perimeter Center Mall, and the yet-to-be-developed GID/High Street site, which likewise includes a mix of land uses. The proposed residential uses on the Property within the broader mixed-use campus will promote the "live work" goals of the Perimeter Center area and complement nearby employment centers by providing residential opportunities for those Dunwoody employees.

### e. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of noise, smoke, odor, dust or vibration generated by the proposed use.

No, the proposed use will not create any adverse impacts upon adjoining land uses reason of noise, smoke, odor, dust or vibration generated by the proposed use. The proposed residential use is relatively low-impact and will not generate burdensome or obtrusive noise, smoke, odor, dust or vibration.

### f. Whether the proposed use will create adverse impacts upon any adjoining land use by reason of the hours of operation of the proposed use.

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the hours of operation of the proposed use. The surrounding land uses are all nonresidential uses, which will not be negatively impacted by the hours of operation of the proposed residential, hotel, retail, and accessory uses.

## g. Whether the proposed use will create adverse impact upon any adjoining land use by reason of the manner of operation of the proposed use.

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the manner of operation of the proposed use.

# h. Whether the proposed use will create adverse impact upon any adjoining land use by reason of the character of vehicles or the volume of traffic generated by the propose use.

No, the proposed use will not create adverse impacts upon any adjoining land use by reason of the character of vehicles or the volume of traffic generated by the proposed use. The proposed development may actually reduce the burden on road infrastructure and existing transportation facilities in the area by providing new transportation infrastructure. Moreover, the Property's close proximity to the Dunwoody MARTA station makes transit a realistic transportation alternative.

#E.2

i. Whether the size, scale and massing of proposed buildings are appropriate in relation to the size of the subject property and in relation to the size, scale and massing of adjacent and nearby lots and buildings.

Yes, the size, scale and massing of the proposed buildings are appropriate in relation to the size of the subject property and in relation to the size, scale and massing of adjacent and nearby lots and buildings. The proposed multi-unit building height will be between 32-35 stories in height. This height is appropriate in light of the significant height entitlements on the adjacent 9.2-acre parcel (Site A), which includes a 28-story hotel and two 24-story office buildings, and the heights of surrounding building in the Perimeter area, with the adjacent Ravinia building at 31 stories and the King and Queen towers along the I-285 Corridor at 28 stories.

j. Whether the proposed plan will adversely affect historic buildings, sites, districts, or archaeological resources.

No, the zoning proposal will not adversely affect historic buildings, sites, districts, or archaeological resources. The proposed development is located next to the Martin family cemetery. The development will have no impact on the cemetery or the easement providing ingress to and from the cemetery. The cemetery will at all times be protected. The Applicant has spoken with representatives from the Dunwoody Preservation Trust, the organization tasked with maintaining the cemetery, to work on a mutually beneficial strategy for the cemetery's continued maintenance and accessibility.

k. Whether public services, public facilities and utilities – including motorized and nonmotorized transportation facilities – are adequate to serve the proposed use.

Yes, public services, facilities and utilities are adequate to serve the proposed use. The project is also adjacent to the Dunwoody MARTA station which makes transit a realistic transportation alternative for those commuting to and from the Property.

1. Whether adequate means of ingress and egress are proposed, with particular reference to non-motorized and motorized traffic safety and convenience, traffic flow and control and emergency vehicle access.

Yes, adequate means of ingress and egress are proposed for the site. The site may be accessed off of Perimeter Center Parkway from a newly-created road with sufficient capacity to handle any new trips generated by the Applicant's proposed development. Future transportation improvements in this area may also add another access point directly off of I-285 to the Property, though this access point (the proposed Westside Connector) has

not yet been approved. The Property is also accessible by transit and a pedestrian path from the MARTA station to the Property.

#### m. Whether adequate provision has been made for refuse and service areas.

Yes, adequate provision has been made for refuse and service areas.

# n. Whether the proposed building as a result of its proposed height will create a negative shadow impact on any adjoining lot or building.

No, the proposed building will not create a negative shadow impact on any adjoining lot or building. Buildings to the east and west of the Property have similar heights, at 28-stories, 24-stories, and 31-stories across Ashford-Dunwoody Road.

#### IV. REQUIRED CONSTITUTIONAL NOTICE

Georgia law and the procedures of the City of Dunwoody require us to raise Federal and State constitutional objections during the Amendment application process. While the Applicant anticipates a smooth application process, failure to raise constitutional objections at this stage may mean that the Applicant will be barred from raising important legal claims later in the process. Accordingly, we are required to raise the following constitutional objections at this time:

The portions of the City of Dunwoody Zoning Ordinance, facially and as applied to the Property, which restrict the Property to any zoning classification, uses, or to any zoning district other than that proposed by the Applicant are unconstitutional in that they would destroy the Applicant's property rights without first paying fair, adequate and just compensation for such rights, in violation of Article I, Section I, Paragraph I and Section III, Paragraph I of the Constitution of the State of Georgia of 1983, and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

The application of the City of Dunwoody Zoning Ordinance, facially and as applied to the Property, which restricts the Property to any zoning classification, uses, or to any zoning classification other than the classification as proposed by the Applicant is unconstitutional, illegal, null and void, constituting a taking of Applicant's Property in violation of the Just Compensation Clause of the Fifth Amendment to the Constitution of the United States; Article I, Section I, Paragraph I, and Section III, Paragraph I of the Constitution of the State of Georgia of 1983; and the Equal Protection and Due Process Clauses of the Fourteenth Amendment to the Constitution of the United States denying the Applicant an economically viable use of its land while not substantially advancing legitimate state interests.

#E.2

A denial of this Application would constitute an arbitrary and capricious act by the City of Dunwoody City Council without any rational basis therefore constituting an abuse of discretion in violation of Article I, Section I, Paragraph I and Section III, Paragraph I of the Constitution of the State of Georgia of 1983, and the Due Process Clause of the Fourteenth Amendment to the Constitution of the United States.

A refusal by City of Dunwoody City Council to approve the Applicant's 3 requested SLUP applications in accordance with the zoning and SLUP criteria requirements as requested by the Applicant would be unconstitutional and discriminate in an arbitrary, capricious and unreasonable manner between the Applicant and owners of the similarly situated property in violation of Article I, Section I, Paragraph II of the Constitution of the State of Georgia of 1983 and the Equal Protection Clause of the Fourteenth Amendment to the Constitution of the United States. Any rezoning or SLUP approval of the Property subject to conditions which are different from the conditions requested by the Applicant, to the extent such different conditions would have the effect of further restricting Applicant's utilization of the Property to a unconstitutional classification and would likewise violate each of the provisions of the State and Federal Constitutions set forth hereinabove.

For all the foregoing reasons, it is submitted on behalf of the Applicant that the SLUP Applications meet the requirements of the City of Dunwoody Zoning Code.

If there are any questions about the SLUP requests, you may contact me at 404-665-1243 or at jarnold@pftlegal.com.

Sincerely, G. Douglas Dillard Jillian S. Arnold

Attorneys for the Applicant

## Campaign Disclosure Statement



Have you, within the two years immediately preceding the filing of this application, made campaign contributions aggregating \$250.00 or more to a member of the City of Dunwoody City Council or a member of the City of Dunwoody Planning Commission?

* Applicant/Owner: Dunwoody Crown Jowers,	-LC	
Signature:	Date: 01	27/2016
Address: 4828 Ashford Dunwoody Road, Ste 400	Atlanta.	GA 30338

If the answer above is yes, please complete the following section:

Date	Government Official	<b>Official Position</b>	Description	Amount
			5	

#E.2.

#### **CAMPAIGN DISCLOSURE STATEMENT**

G. DOUGLAS DILLARD and JILLIAN S. ARNOLD, of the law firm of PURSLEY FRIESE TORGRIMSON, and formerly of WEISSMAN, NOWACK, CURRY & WILCO, P.C., have been retained to represent DUNWOODY CROWN TOWERS, LLC before the CITY OF DUNWOODY, GEORGIA. Pursuant to the provisions of O.C.G.A. §36-67A-3, please find below a list of the contributions made by the above-named individuals, or the law firms of WEISSMAN, NOWACK, CURRY & WILCO, P.C. and PURSLEY FRIESE TORGRIMSON, in the past two years, aggregating \$250.00 or more, to local government officials who may review this Application.

NAME OF		AMOUNT OF	DATE OF
GOV'T. OFFICIAL	POSITION	CONTRIBUTION	CONTRIBUTION

None

PURSLEY FRIESE TORGRIMSON

By: G. Douglas D arc By: Jillian S. Arnold

112014 Date

1230 Peachtree Street, NE Suite 1200 Atlanta, GA 30309 404-665-1243

### **LEGAL DESCRIPTION – TRACT B**

ALL THAT TRACT OR PARCEL OF LAND lying and being in Land Lot(s) 329 & 330 of the 18th District, DeKalb County, Georgia and being more particularly described as follows:

Beginning at a point at the intersection of the Western Right-of-Way line of Ashford Dunwoody Rd (Right-of-Way Varies), and the Northern Right-of-Way line of Interstate 285 (Right-of-Way Varies), said point being the TRUE POINT OF BEGINNING;

Thence leaving the Western Right-of-Way line of Ashford Dunwoody Rd and following along the Northern Right-of-Way line of Interstate 285, South 59 degrees 59 minutes 24 seconds West, a distance of 768.56 feet to a point;

Thence leaving the Northern Right-of-Way line of Interstate 285 (Right-of-Way Varies), North 00 degrees 12 minutes 53 seconds West, a distance of 218.34 feet to a point;

Thence North 89 degrees 47 minutes 07 seconds West, a distance of 207.86 feet to a point;

Thence North 00 degrees 12 minutes 53 seconds East, a distance of 161.70 feet to a point;

Thence South 89 degrees 47 minutes 07 seconds East, a distance of 100.09 feet to a point;

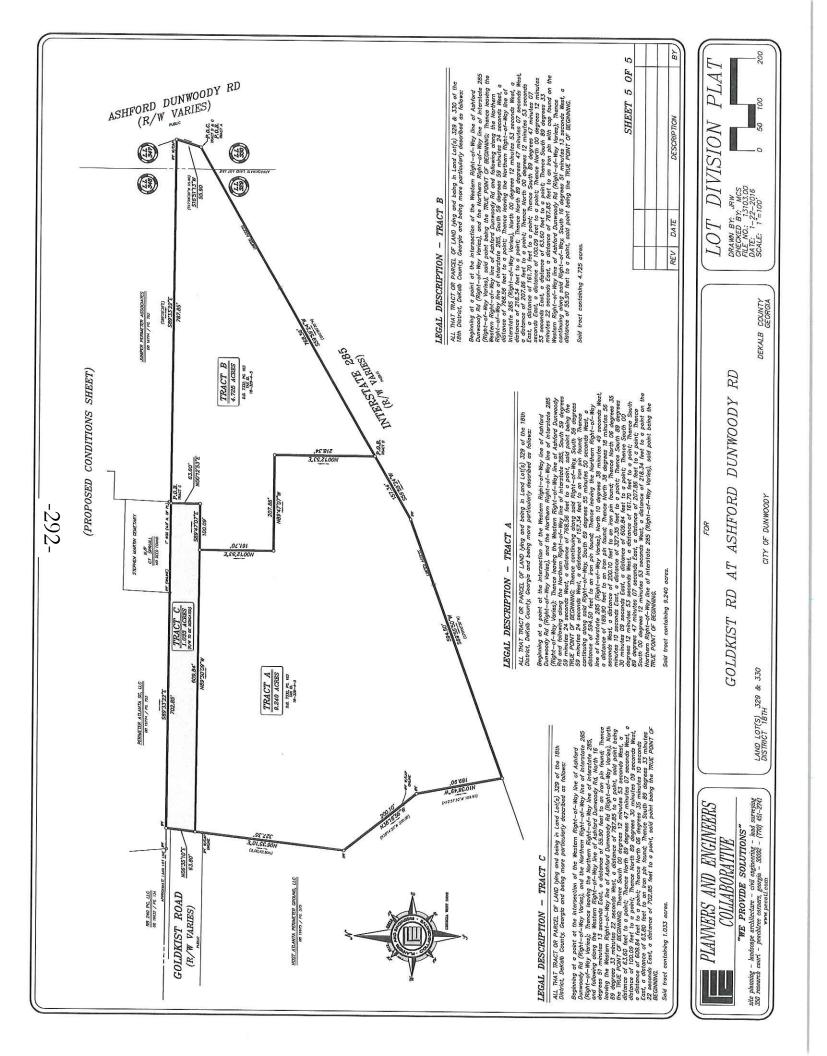
Thence North 00 degrees 12 minutes 53 seconds East, a distance of 63.60 feet to a point;

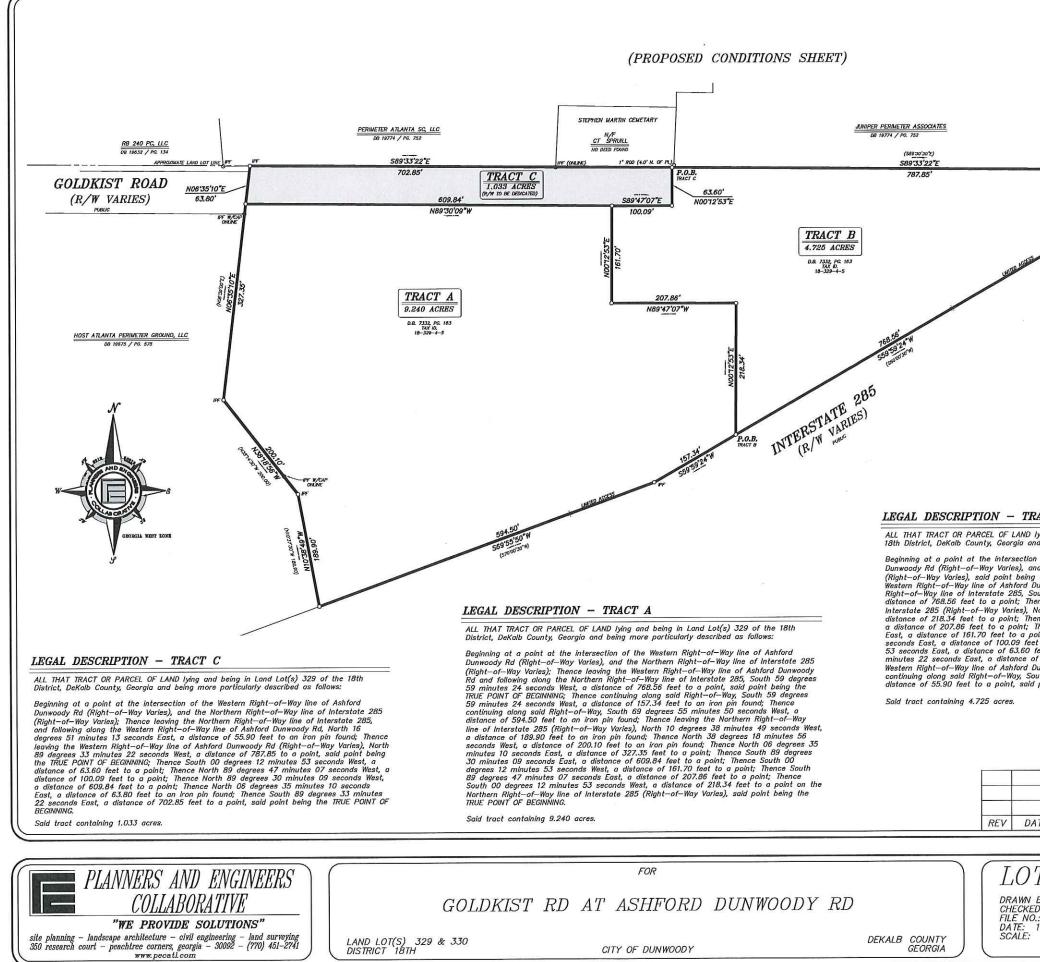
Thence South 89 degrees 33 minutes 22 seconds East, a distance of 787.85 feet to an iron pin with cap found on the Western Right-of-Way line of Ashford Dunwoody Rd (Right-of-Way Varies);

Thence continuing along said Right-of-Way, South 16 degrees 51 minutes 13 seconds West, a distance of 55.90 feet to a point, said point being the TRUE POINT OF BEGINNING.

Said tract containing 4.725 acres.

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CITY OF DUNWOODY

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# **DUNWOODY CROWN TOWERS**

**RE-ZONING APPLICATION FOR SITE "B"** 

244 PERIMETER CENTER PARKWAY, DUNWOODY GA

# DRI NUMBER: 2567

# **PROJECT TEAM**

#### **OWNER**

#### **CROWN HOLDINGS GROUP**

4828 ASHFORD DUNWOODY RD, ATLANTA GA 30338 Contact: NAME CHARLIE BROWN

#### ARCHITECT

THOMPSON, VENTULETT, STAINBACK & ASSOCIATES, INC ARCHITECTS 1230 PEACHTREE ST NE, SUITE 2700 ATLANTA GA 30309 Contact: ROB SVEDBERG 404.840.4762

ATTORNEYS

#### PURSLEY FRIESE TORGRIMSON

PROMENADE SUITE 1200 1230 PEACHTREE ST NE ATLANTA GA 30309 Contact: G. DOUG DILLARD 404.665.1244

#### **TRAFFIC CONSULTANT**

#### MORELAND ALTOBELLI ASSOCIATES, INC.

2450 COMMERCE AVENUE, SUITE 100, DULUTH, GA 30096 Contact: KARLA POSHEDLY 770.263.5945

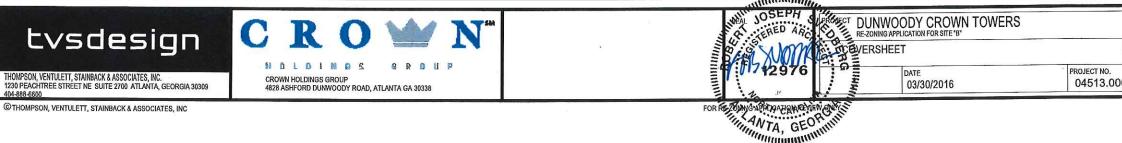
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<b>CONCEPTUAL PLAN - ELEVA</b>
<b>CONCEPTUAL PLAN - MASSI</b>
<b>STREET SECTION &amp; TRANSIT</b>
PEDESTRIAN CIRCULATION
<b>CONCEPTUAL PLAN - QUALI</b>
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NOTE: PARKING FOR SITE "B" IS ACCOMMODATED WITHIN PARI PARKING AREAS IS NOT INCLUDED.

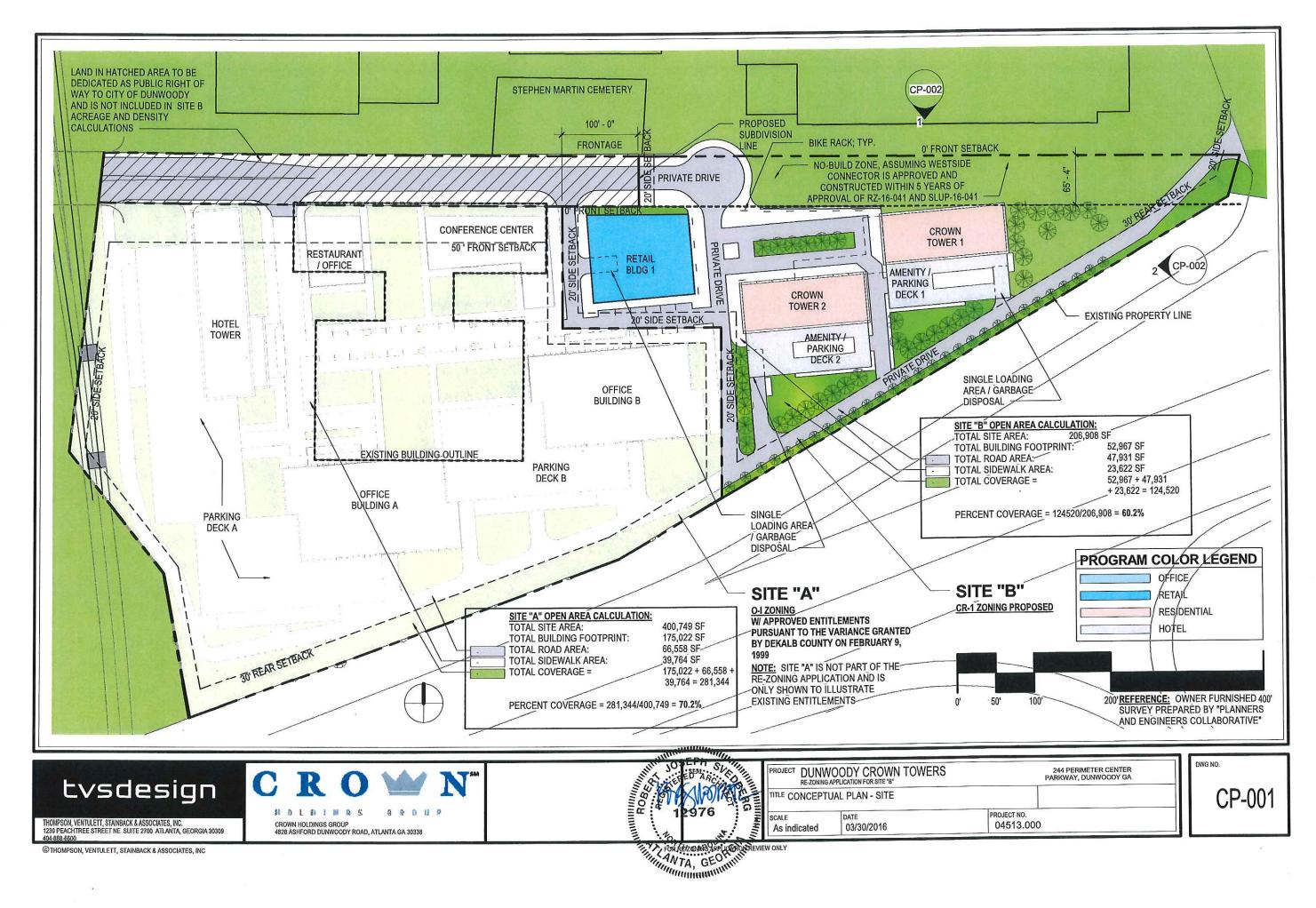
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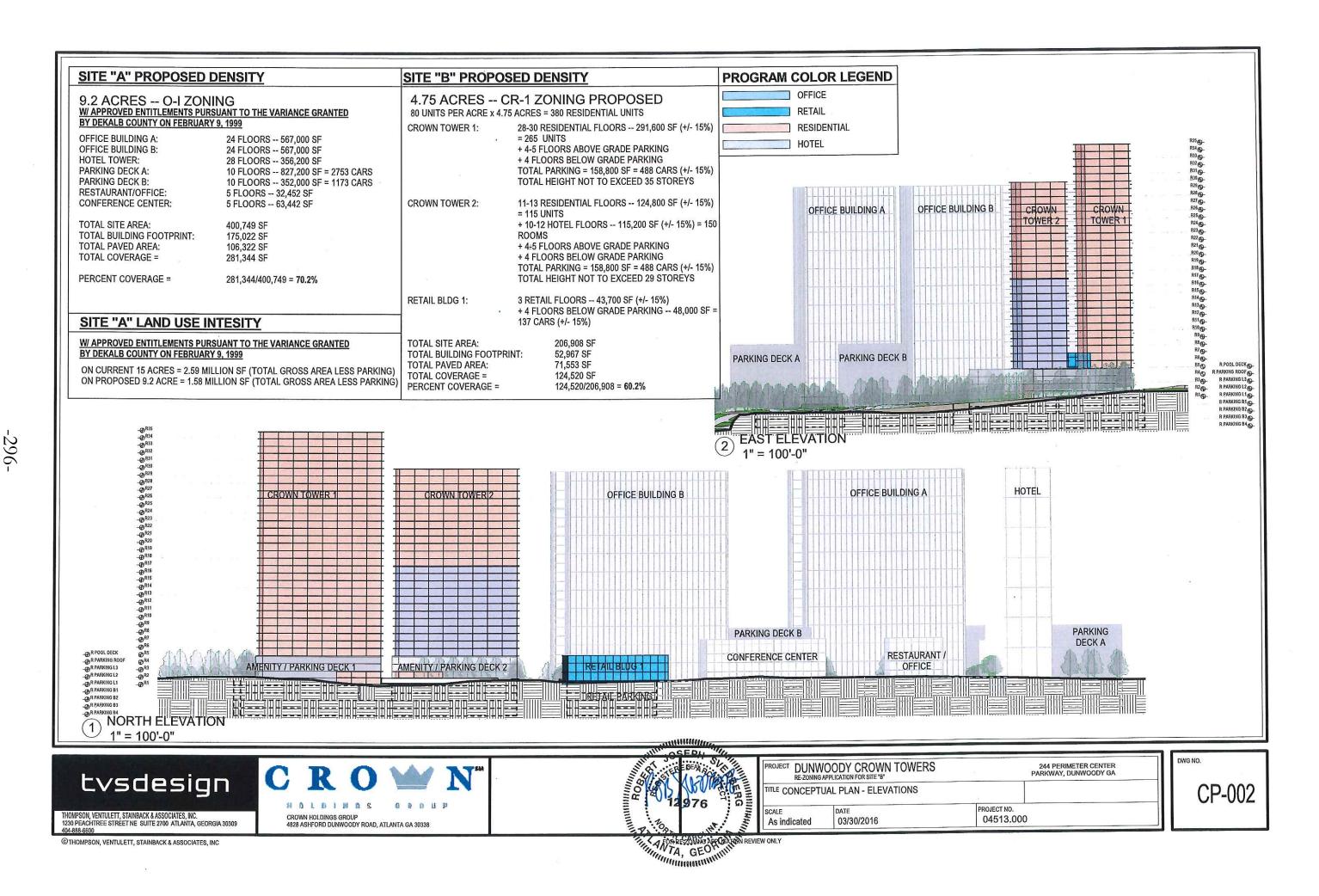


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244 PERIMETER CENTER PARKWAY, DUNWOODY GA	DWG NO.
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THOMPSON, VENTULETT, STAINBACK & ASSOCIATES, INC. 1230 PEACHTREE STREET NE SUITE 2700 ATLANTA, GEORGIA 30309 404-888-6600

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DATE

03/30/2016

SCALE

1/8" = 1'-0"

## SITE "B" PARKING REQUIREMENTS:

RESIDENTIAL: 380 RESIDENTIAL UNITS = 190 2BR + 95 1BR + 95 3BR TOTAL BEDROOMS = 760 = 760 PARKING SPACES + 1 VISITOR SPACE PER 8 UNITS = 380/8 = 48 SPACES TOTAL PARKING RQUIRED FOR RESIDENTIAL = 760+48 = 808 SPACES

150 ROOMS x 1.25 SPACES PER ROOM = 188 SPACES

(25% ALLOWED MOTOR VEHICLE PARKING REDUCTION FOR TRANSIT SERVED LOCATIONS WITHIN 1500 FEET OF COMMUTER RAIL APPLIES TO THIS

REDUCED PARKING REQUIRED FOR HOTEL = 141 SPACES

#### TOTAL PARKING REQUIRED = 949 SPACES TOTAL PARKING PROPOSED = 976 SPACES

(25% ALLOWED MOTOR VEHICLE PARKING REDUCTION FOR TRANSIT SERVED LOCATIONS WITHIN 1500 FEET OF COMMUTER RAIL APPLIES TO THIS

REDUCED PARKING REQUIREMENT FOR RETAIL = 131 SPACES

## TOTAL PARKING REQUIRED = 131 SPACES TOTAL PARKING PROPOSED = 137 SPACES

NOTE: IF SAP IS NOT APPROVED, 188 SPACES (HOTEL) AND 175 SPACES (RETAIL)

### SITE "B" OFF-STREET LOADING REQUIREMENTS:

- 1 LOADING SPACE HAS BEEN PROVIDED FOR CROWN TOWER 1 (265 UNITS) FOR CROWN TOWER 2 (115 RESIDENTIAL UNITS & 150 HOTEL ROOMS)

- 1 LOADING SPACE HAS BEEN PROVIDED FOR RETAIL BUILDING (43,700 SF)

#### PROGRAM COLOR LEGEND

OFFICE

RETAIL

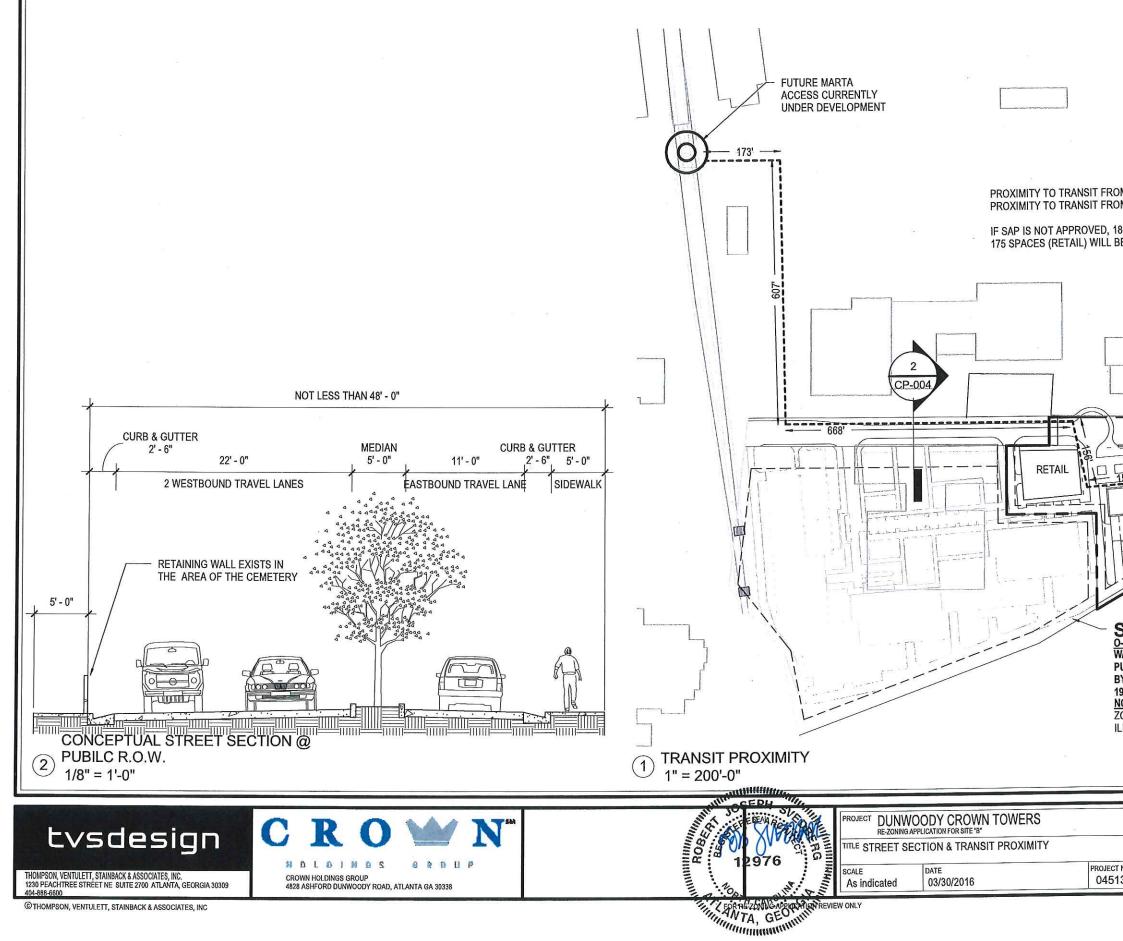
RESIDENTIAL

HOTEL

	244 PERIMETER CENTER PARKWAY, DUNWOODY GA	
PROJECT NO. 04513.0	00	

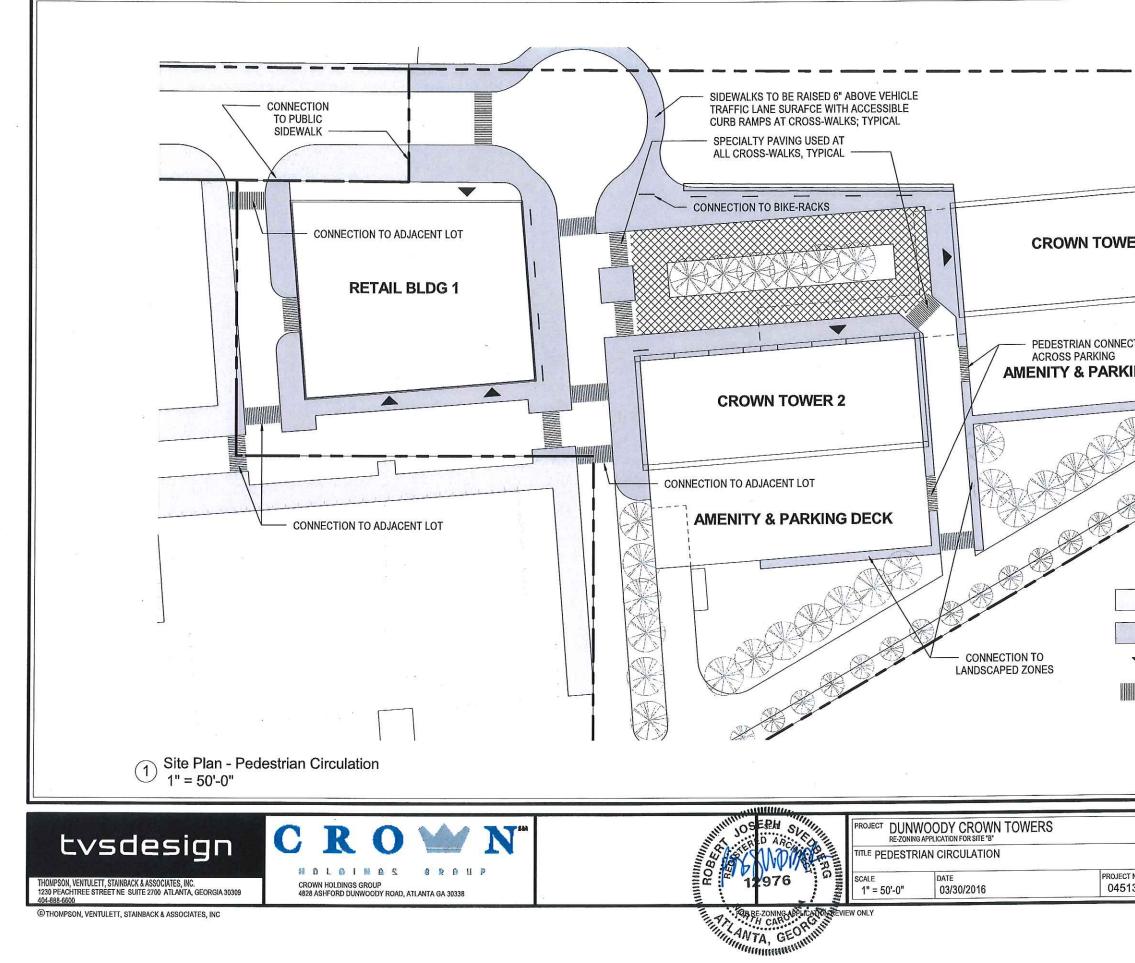
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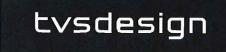
ROM RETAIL: <b>1,526'</b> ROM HOTEL: <b>1,760'</b> , 188 SPACES (HOTEL) AND L BE PROVIDED.	
SITE "A" <u>OI ZONING</u> WAPPROVED ENTITLEMENTS PURSUANT TO THE VARIANCE GRANTED BY DEKALB COUNTY ON FEBRUARY 9, 1999 <u>NOTE:</u> SITE "A" IS NOT PART OF THE RE- ZONING APPLICATION AND IS ONLY SHOWN ILLUSTRATE EXISTING ENTITLEMENTS	E "B" DNING PROPOSED
244 PERIMETER CENTER PARKWAY, DUNWOODY GA ECT NO. 1513.000	DWG NO. CP-004



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ECTION KING DECK		
<ul> <li>SITE "A" PEDESTRIAN CIRCULATION ZONE</li> <li>SITE "B" PEDESTRIAN CIRCULATION ZONE</li> <li>BUILDING ENTRY</li> <li>CROSSWALK</li> </ul>		
244 PERIMETER CENTER PARKWAY, DUNWOODY GA ICT NO. 513.000	DWG NO. CP-005	





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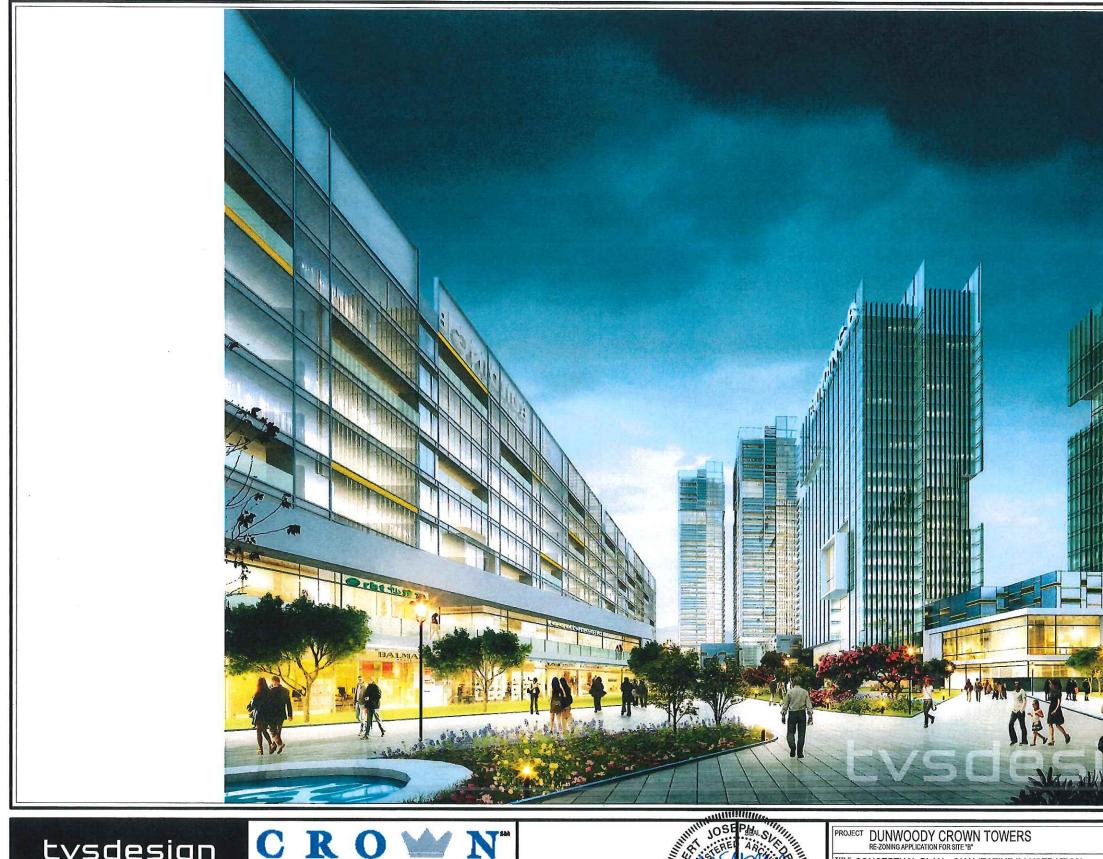




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**C R O** BLOINBS **A B O II B** CROWN HOLDINGS GROUP 4828 ASHFORD DUNWOODY ROAD, ATLANTA GA 30338



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# LED SIGNAGE RESEARCH AND INFORMATION

A compilation of various studies and articles addressing LED signage

### Table of Contents

- A. Executive Overview
- B. Table of Publications
  - 1. Compendium of Recent Research Studies on Distraction from Commercial Electronic Variable Message Signs (CEVMS) (February 2016)
  - 2. Digital Billboard Safety Amongst Motorists in Los Angeles (Spring 2009)
  - 3. Safety Impacts of the Emerging Digital Display Technology for Outdoor Advertising Signs – Final Report (April 2009)
  - 4. *Electronic Billboards and Highway Safety* (May 2003)
  - 5. Evaluation of the Visual Demands of Digital Billboards Using a Hybrid Driving Simulator (2014)
  - 6. Abstract of Investigation of the Potential Relationship Between Crash Occurrence and the Presence of Digital Advertising Billboards in Alabama and Florida (2015)
  - 7. March 4, 2016 article from insurancenewsnet.com regarding a field study by the Massachusetts Institute of Technology on the effects of digital billboards on glance behavior during highway driving
  - 8. Federal Highway Administration study confirms safety of digital billboards and signs (June 16, 2014)
  - 9. A Critical, Comprehensive Review of Two Studies Recently Released by the Outdoor Advertising Association of America (October 2007)
  - 10. Highway Agency Takes a Hit Over Safety Report on Electronic Billboards (Feb. 9, 2015)

- 11. Billboards in the Digital Age Unsafe (and Unsightly) at Any Speed (Scenic America Issue Alert 2 (2007): 1-8 (Mar. 30, 2009)
- 12. Citizens for a Scenic Florida Report (Obie Media Corporation)
- 13. Milwaukee County Stadium Variable Message Sign Study: Impacts of an Advertising Variable Message Sign on Freeway Traffic (Wisconsin Dept. of Transportation, Dec. 1994)
- 14. The Impact of Driver Inattention on Near-Crash/Crash Risk: An Analysis Using the 100 Car Naturalistic Driving Study Data, Executive Summary (U.S. Dept. of Transportation, National Highway Traffic Safety Administration, April, 2006)
- 15. Illuminating the Issues Digital Signage and Philadelphia's Green Future
- 16. Signs, Billboards and Your Community A citizen's manual for improving the roadside environment by effective control of billboards and outdoor advertising (Pennsylvania Resources Council, Inc. and Society Created to Reduce Urban Blight)
- C. Executive Summary of Each Publication

#### A. Executive Overview

The Georgia Constitution grants to local government the authority over planning and zoning. Ga. Const. 1983, Art. IX, Sect. II, Para. IV. The traditional litmus test for the propriety and enforceability of planning and zoning laws is whether the law is substantially related to the public health, general welfare, safety, and morals. <u>See, e.g., Gradous v. Board of Commissioners</u>, 256 Ga. 469(1986); <u>Barret v. Hamby</u>, 235 Ga. 262 (1975). Within these parameters it is recognized that regulating on the basics of aesthetics is consistent with these basic guidelines. <u>See, e.g., Warren v. City of Marietta</u>, 249 Ga. 205 (1982).

In addition to contending with these parameters, sign regulation is also impacted by the constitutional protections afforded to speech. Under consideration is the City's current prohibition of "LED signs and similar technologies." *Code of Ordinances*, Sect. 20-51(22).¹ Such a content-neutral regulation must be "the least restrictive means of furthering the government's significant interests, while still leaving open ample alternatives to communicate." <u>Grady v. Unified Government of Athens-Clarke County</u>, 289 Ga. 726, 728 (2011).

Against this backdrop, LED signage presents unique challenges and issues for local governments with a growing body of literature indicating that LED signage has a negative impact on the public health, safety, and general welfare, including the aesthetics of a community. Examples of this literature are provided. Included within the body of literature presented in these materials are various compendiums describing and assessing a much larger volume of study in this area. While you are encouraged to review the materials in their detail in addition to this Executive Overview and Executive Summary of the materials provided, a few points emerge that are pertinent to the City's authority over planning and zoning.

The literature increasingly suggests that LED signage presents more potential for distraction from the driving task. This, in turn, increases the potential for accidents and near-accidents. Threatened thereby is the public's safety, health, and general welfare. As some of the studies captured in these materials show, there appears to be a correlation between such signage and increases in accidents and near-accidents. In addition, the literature gathered and commented upon reflects that such signage is not as environmentally friendly, presenting unique challenges in recycling and requiring/consuming more energy. LED signage can also have an adverse aesthetic impact that can be described (as do some of the studies) as "the Las Vegas effect."

¹ "*LED sign* shall mean an electronically controlled sign utilizing light-emitting diodes to form some or all of the sign message." *Code of Ordinances*, Sect. 20-3.

The research is still ongoing into the effects and impact of LED signage on driver distraction and other areas of potential impact. Contained in the materials are references to two studies underwritten by the outdoor sign industry where researchers concluded that LED signs had no measurable adverse impact on driver distraction in comparison with more traditional signage. As other materials captured here reflect, these studies have been largely panned for deficiencies in the methodology used and conclusions reached on what data has been released by the researchers. The same types of criticisms also have been leveled against a Federal Highway Administration study. Because the research is ongoing and, as some of the materials note, is very complex, a definitive set of guidelines for when, where, and how LED signage may be used, if possible at all, remains to yet be developed even by those who study in this field. Local government, however, is not required to wait for definitive rules or wait for a tragic event before regulating.

### C. Executive Summary of Each Publication

1. Compendium of Recent Research Studies on Distraction from Commercial Electronic Variable Message Signs (CEVMS) (February 2016)

Summarizes various studies from around the world that have been conducted since 2008 and highlights the conclusions presented by those researchers and their studies. Then, synthesizing the information, the compendium highlights:

"Broadly summarized, the more recent studies have tended to find that outdoor advertising signs, particularly CEVMS, attract drivers' attention, and that more dramatic and salient signs attract longer and more frequent glances. This attention is often captured through a "bottom up" physiological process, in which the driver attends to the sign unintentionally and unconsciously, with the eyes captured involuntarily by the sign's changing imagery, brightness, conspicuity, and/or movement.

Several of the reported studies suggested that the distraction caused by outdoor advertising signs could be tolerated by experienced drivers and when attentional or cognitive demands of the driving task were low, but that the risk increased when such signs competed for the driver's visual attention with more demanding road, traffic, and weather conditions, when travel speeds were higher, or when an unanticipated event or action (such as a sudden lane change or hard braking by a lead vehicle) occurred to which the driver had to respond quickly and correctly.

In addition, the more recent research continues to show that the drivers most susceptible to unsafe levels of distraction from roadside billboards are the young (who are more prone to distraction and less adept at emergency vehicle response) and the elderly (who have more difficulty with rapidly shifting attention, poorer night vision and glare susceptibility, and slower mental processing time). As will be seen in this Compendium, these concerns are heightened today, with our elderly driver population growing quickly, traffic increasingly dense, more roads under maintenance or repair (construction and work zones create added risks), and larger, brighter digital and video roadside advertising signs competing for the driver's attention.

Finally, the most recent epidemiological studies (dating from 2014 and 2015) have begun to demonstrate what has long been suspected but not proven – that roadside billboards are associated with increases in crash rates where such billboards are located.

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While employing a broad array of approaches and methodologies, the common theme clearly indicates that the more that commercial digital signs succeed in attracting the attention of motorists that render them a worthwhile investment for owners and advertisers, the more they represent a threat to safety along our busiest streets and highways, where these signs tend to be located." (emphasis in original)

Author highlights some of the deficiencies and shortcomings of two principal studies relied upon by the outdoor sign industry and the fact that both studies received "overall negative reviews from peer-reviewers. Both studies were sponsored by the Outdoor Advertising Association of American and its researcharm, the Foundation for Outdoor Advertising Research and Education. Since these two studies were released, one group of researchers has continued to study the matter under industry auspices, but the industry has declined releasing the research data for peer review of the methodologies and conclusions.

2. Digital Billboard Safety Amongst Motorists in Los Angeles (Spring 2009)

The author undertook to study the impact of digital LED billboards on traffic safety. As part of the study the author briefly surveyed other studies, including studies that were critical of the methodologies and conclusions of industry-sponsored studies. The study undertaken concluded that digital LED billboards resulted in greater driver distraction than conventional static billboards and presented the following:

"Although evidence of several studies makes claims showing that there is no correlation between traffic collisions in environments with a digital billboard, most notably the two by the OAAA, there are others that prove legitimate increases in accidents, such as the WisDOT study. Therefore, this study cannot say with complete confidence whether digital billboards contribute to the accident rate in any given area. As it was found in this study as well, what can be inferred is that drivers are more likely to glance at a digital billboards [sic] as opposed to a standard billboard ...; and the odds of a vehicular accident or near accident are twice as likely when a driver turns away from looking forward on the road for more than two seconds .... Although some studies show no correlation or are inconclusive between digital billboards and hazardous driving conditions, it is not sufficient to say that they are not detrimental to drivers because they do distract drivers and it should not rule out that they could cause a traffic accident. Nevertheless, no study has yet to show them to be safe."

3. Safety Impacts of the Emerging Digital Display Technology for Outdoor Advertising Signs – Final Report (April 2009)

Undertook a comprehensive study of the then-existing literature associated with the technology, how the technology is used and deployed, and the stimuli impact on drivers and their reactions. The study notes that much more study is necessary to test any hypotheses on the relationship of the technology to driver distraction/inattentiveness and the correlating relationship, if any, on safety. The study also highlights the multitude of variables that are involved in such studies and the possibility that study methods have not yet caught up to the emerging digital technology. Though providing some recommendations for deployment of the technology, the author notes that it may be years before fully informed guidance and regulation can be provided to those whose job it is to adopt and enforce guidance and regulation. The study goes on to note:

"We now know that extended episodes (two seconds or longer) in which a driver's eyes are not attending to the driving task greatly increases (by 3.7 times) the likelihood of a crash. ...Other researchers have suggested that the upper limit for an acceptable distraction episode may be 0.75 second ... or 1.6 seconds .... And, as shown ... in an onroad study, and by [another study], there is growing evidence that billboards can attract and hold a driver's attention for the extended periods of time that we now know to be unsafe. As stated succinctly [in one of the studies] ... 'drivers are comfortable turning their attention away from the road for a set period of time, regardless of the demands of the driving task' .... And, '[t]hese data ... indicate that it is likely that our out-of-vehicle tasks (which not only engage attention but also draw the eyes and visual attention away from in front of the vehicle) would have quite significant detrimental effects on processing the roadway in front of the vehicle.'

We also have data to show, despite a lack of analysis by the researchers, that an on-road study ... using an instrumented vehicle found many more such long glances made to DBBs and similar 'comparison sites' consisting of (among other things) on-premise digital signs, than there were to sites containing traditional, static billboards, or sites with no obvious visual elements. Indeed, the mean values for these long glance durations proved to be significantly greater for the sites with digital signs than for the others. From the same study, we have evidence expressed by the researchers that if we were to conduct our research at night we would find that *all* measures of eye glance behavior would demonstrate significantly greater amounts of distraction to digital advertisements than to fixed billboards or to the natural roadside environment, and that driver vehicle control behaviors such as lane-keeping and speed maintenance would also suffer in the presence of these digital signs. Because the design of this study minimized the differences between the characteristics of DBB sites and the others, and did not report all of the pertinent data collected, it seems reasonable to believe that the differences found might be more pronounced in a more rigorous experiment.

When we add the results of these recent, applied research studies, to ... earlier theoretical work ..., in which was demonstrated that our attention and our eye gaze is reflexively drawn to an object of different luminance in the visual field, that this occurs even when we are engaged in a primary task, and regardless of whether we have any interest in this irrelevant stimulus, and that we may have no recollection of having been attracted to it, we have a growing, and consistent picture of the adverse impact of irrelevant, outside-the-vehicle distracters such as DBBs on driver performance."

The study concludes that:

"those who think that their job is to do what they can to enhance safety for the traveling public based upon the best available #F.1.

information, now have, in our opinion, access to a strong and growing body of evidence, including evidence from industry supported research, that roadside digital advertising, attract drivers' eyes away from the road for extended, demonstrably unsafe periods of time."

## 4. *Electronic Billboards and Highway Safety* (May 2003)

This is a report prepared for the Wisconsin Department of Transportation. It surveys and summarizes various studies and research papers concerning driver distraction and electronic signage. The study notes that "[c]ommercial EBBs [electronic billboards] are designed to 'catch the eye of drivers[,]" and notes that "[t]he consequences of distraction from the driving task can be profound." (Page 5) The report went on to highlight several studies including:

- A 1976 study of crashes at a major artery intersection of on-ramps, offramps and other signage where an electronic sign was erected, concluding that the electronic sign was a distraction and a safety risk.
- A 2001 study of crashes finding that driver distraction was a cause of approximately 13% of the crashes studied with the largest segment of these crashes caused by distractions outside the vehicle.
- 5. Evaluation of the Visual Demands of Digital Billboards Using a Hybrid Driving Simulator (2014)

A study was conducted of driver eye behavior and corresponding impact on driving while driving at 25mph and 50mph on a simulated straight roadway and exposed to digital billboards viewed in a drive-like progression with messages of varying lengths/characters. The study participants were college students averaging 22 years of age with visual acuity no worse than 20/28. So, not studied were: older drivers, including the elderly; those with poorer vision; and behavior where the road was not a straight line for the drive. The "[r]esults indicated that drivers gradually drift away from the centerline during the [digital billboard] inspection interval, and then execute large/sudden compensatory steering inputs to reestablish their position in the center of the land after the billboard had been overtaken." The study found that the more characters/words/images presented by the sign, the more pronounced was ineffective lane control.

6. Abstract of Investigation of the Potential Relationship Between Crash Occurrence and the Presence of Digital Advertising Billboards in Alabama and Florida (2015) Study examined historical crash data in Alabama and Florida adjacent to site locations where digital billboards existed. "The crash data analyses revealed that the presence of digital billboards increased the overall crash rates at digital advertising billboard influence zones by 25% in Florida and 29% in Alabama compared to control sites."

7. March 4, 2016 article from insurancenewsnet.com regarding a field study by the Massachusetts Institute of Technology on the effects of digital billboards on glance behavior during highway driving.

The article quotes the report as stating that:

"Decades of laboratory research have shown that rapidly changing or moving stimuli presented in peripheral vision tends to 'capture' covert attention."

According to the article the MIT report concludes:

"Since rapidly changing stimuli are difficult to ignore, the planned increase in episodically changing digital displays near the roadway may be argued to be a potential safety concern."

8. *Federal Highway Administration study confirms safety of digital billboards and signs* (June 16, 2014; <u>www.digitalsignagetoday.com</u>)

Article published in sign industry publication touting industry-favorable conclusions from a Federal Highway Administration study examining the impact of digital signage on safety.

9. A Critical, Comprehensive Review of Two Studies Recently Released by the Outdoor Advertising Association of America (October 2007)

This report was prepared for the Maryland State Highway Administration in light of the OAAA having declared that the occurrence of traffic accidents was unaffected by the presence of digital/electronic billboards. The study found that the studies touted by the OAAA (and sponsored by it) used flawed methodologies and assumptions and that even the researcher's own information and materials belied the conclusion that the billboards did not pose a traffic threat. The report did so by painstakingly reviewing and evaluating critical aspects of the studies' analyses. Unlike many other studies referenced in the materials compiled here, neither of the studies touted by the OAAA were peer-reviewed prior to being issued. The report concluded that:

"[h]aving completed this peer review, it is our opinion that acceptance of these reports as valid is inappropriate and unsupported by scientific data, and that ordinance or code changes based on their findings are ill-advised."

10. Highway Agency Takes a Hit Over Safety Report on Electronic Billboards (Feb. 9, 2015; www.fairwarning.org)

Article regarding a critique of the FHWA study touted by the outdoor advertising industry that highlighted some of the major criticisms and perceived deficiencies in the study.

11. Billboards in the Digital Age Unsafe (and Unsightly) at Any Speed (Scenic America Issue Alert 2 (2007): 1-8 (Mar. 30, 2009)

Overview of the problems and concerns posed by digital signage and commenting on how the use of LED signage presents a new source of blight in a community. The article goes on to note that:

- Electronic signage is extremely bright so it can be visible in the daylight and at night, drawing a driver's attention more strongly. This means it also stands out from a greater distance than traditional signage meaning that it can become distracting even before the message is visible. Digital signs are often the brightest object in the landscape, especially at night.
- The changing content of an electronic sign attracts the driver's attention as the driver is trying to determine what the next message is or will be.
- The Florida Department of Transportation states that it takes six seconds to comprehend the message on an electronic billboard which is three-times longer than what studies find to be safe.
- Younger drivers may be more easily distracted and older drivers may require a longer viewing time for comprehension.
- 12. Citizens for a Scenic Florida Report (Obie Media Corporation)

The report summarizes expert witness opinion finding that the amount of time needed by drivers to view a billboard is as long as eight seconds. During that time, drivers' attention is focused away from the roadway. An automobile would travel between 470 feet and 800 feet during the interval it takes to read the sign. Notes that driver attention is particularly important at high speeds, at intersections, and interchanges.

13. Milwaukee County Stadium Variable Message Sign Study: Impacts of an Advertising Variable Message Sign on Freeway Traffic (Wisconsin Dept. of Transportation, Dec. 1994)

A six-year analysis was performed starting three years before a variable message sign was erected at Milwaukee County Stadium and continuing over the next three years. The results of the study indicated a substantial increase in both side-swipe and rear-end collisions in the lane from which the sign was most visible. Both types of collisions together resulted in a 43% increase in accidents the year of installation and a 36% increase in collisions over the next three years.

14. The Impact of Driver Inattention on Near-Crash/Crash Risk: An Analysis Using the 100 Car Naturalistic Driving Study Data, Executive Summary (U.S. Dept. of Transportation, National Highway Traffic Safety Administration, April, 2006)

This study included a number of driver inattention tasks and conditions. The analysis of eye-glance behavior indicated that total eyes-off-road durations of greater than two seconds significantly increased individual near-crash/crash risk whereas eye-glance durations of less than two seconds did not significantly increase risk relative to normal, baseline driving.

15. Illuminating the Issues – Digital Signage and Philadelphia's Green Future (www.scenic.org/storage/documents/Digital_Signage_Final_Dec_14_ 2010/pdf)

Highlights the environmental impact and concerns of the use of digital signage. Generally, such signage consumes more energy to light and maintain than conventional signage because more lamps are used to present the light and digital signage requires auxiliary equipment that consumes energy (e.g., fans to cool the sign and electrical equipment controlling the display. Certain specific findings include: #F.1.

- LED signs generate heat and do not function well in the heat, thus requiring a cooling system to preserve the unit's useful life.
- An LED billboard measuring 672 square feet uses "about 46 times the power ... of a typical billboard lit by four halide lamps. ... It's almost 30 times the energy used in the average U.S. home."
- Digital signage can result in light trespass and light pollution, noting that to capture the driver's attention digital signs must be set at a very high brightness level because it competes with the sun. Also, the brighter the sign, the more energy that is required and used.
- LED signs have a lifespan of approximately eleven years in contrast to the fifteen years of a traditional sign, meaning that LED signs will be replaced more frequently. This creates a potential waste disposal challenge because the equipment is difficult to recycle.
- Notes that some cities and states have banned electronic signs successfully.
- 16. Signs, Billboards and Your Community A citizen's manual for improving the roadside environment by effective control of billboards and outdoor advertising (Pennsylvania Resources Council, Inc. and Society Created to Reduce Urban Blight)

The report highlights that:

- "[t]he visual identity of a community creates a sense of place and civic pride. A community is strengthened when people have positive attitudes toward it, and the visual environment can strongly affect those attitudes. Poorly controlled outdoor advertising can foster a sense of blight and reduce one's sense of community character, to the detriment of civic pride."
- "Experienced drivers learn to ignore features such as signage along roadways that they travel frequently. The outdoor advertising industry refers to the driver's learned behavior ignoring signs as 'site fatigue.' The advertiser is then put in the position of either having its message ignored or having to frequently rotate message and put up more eye-catching advertisement to draw driver's attention back away from the road."

• Public health issues are discussed, including the individual's inability to control his or her visual field, the unintended saturation of messages to children, and the contribution of visual clutter to blight and stress.

AN ORDINANCE OF THE CITY OF DUNWOODY, GEORGIA ADDRESSING AND PROHIBITING LED SIGNAGE; RECOGNIZING THE VARIOUS CONCERNS PRESENTED BY SUCH SIGNAGE AND THE IMPACT OF THOSE CONCERNS ON THE PUBLIC SAFETY, HEALTH, AND GENERAL WELFARE, INCLUDING AESTHETICS; TO REPEAL RESOLUTION 2016-____ THAT IMPOSED A 90-DAY MORATORIUM ON ACCEPTANCE OF NEW SIGN PERMITS AND VARIANCE APPLICATIONS FOR LED SIGNS; TO PROVIDE FOR SEVERABILITY; TO ESTABLISH AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

WHEREAS, Article IX, Section II, Paragraph IV of the Constitution of the State of Georgia confers on the City the authority to plan and zone; and

WHEREAS, pursuant to that delegation of authority the City of Dunwoody, Georgia ("City") regulates signage within its City limits in Chapter 20 of the City's Code of Ordinances ("Sign Ordinance") for purposes of protecting the public health, safety and general welfare as well as for preserving the unique aesthetics of the City; and

WHEREAS, the Section 20-51(22) of the Sign Ordinance prohibits "LED signs and similar type technologies" and defines "LED signs" in Section 20-3 of the Sign Ordinance; and

WHEREAS, the Mayor and Council have recently been notified of certain concerns that the City's prohibition on LED signs may be invalid; and

WHEREAS, the City was also recently involved in litigation challenging the enforceability of the City's prohibition on LED signage for which a disposition, had it been adverse to the City, may have exposed the City to having to permit signage it may nevertheless lawfully regulate; and

WHEREAS, the City authorized a limited review of the City's Sign Ordinance and preparation of any revisions to be considered addressing certain concerns raised about the Sign Ordinance's prohibition of LED signs; and

WHEREAS, as a part of that process the City adopted Resolution 2016-_____ imposing a 90-day moratorium on accepting new sign permit and variance applications for LED signs while the limited review was conducted because accepting same would have undermined the policy goals of the City and present long-lasting conflicts with those policies; and

WHEREAS, the limited review has been completed and materials generated by that review have been submitted to the City, including the Planning Commission and the Mayor and Council; and

WHEREAS, in accordance with the City's Code of Ordinances a public hearing was held by the Planning Commission on April 12, 2016 to consider

#### STATE OF GEORGIA CITY OF DUNWOODY

whether or not the City's prohibition on LED signage should remain in place or be repealed or modified in any way at which time the materials provided and associated issues were presented, discussed, and evaluated; and

WHEREAS, upon considering all that was provided to and considered by the Planning Commission, it recommended that the City's prohibition on LED signage continue; and

WHEREAS, the recommendation of the Planning Commission and the record developed before it was provided to the Mayor and Council in anticipation of a public hearing before the Mayor and Council to consider whether or not the City's prohibition on LED signage should continue or be repealed or modified; and

WHEREAS, in accordance with the City's Code of Ordinances a properly noticed public hearing was held by the Mayor and Council on ______ to consider whether or not the City's prohibition on LED signage should remain or be repealed or modified at which time the materials generated by the limited review as well as the record of proceedings before the Planning Commission were provided and associated issues were presented, discussed, and evaluated; and

WHEREAS, the Mayor and Council, having reviewed the materials provided and having considered the record of this matter as a whole, finds and concludes that demonstrated is a substantial and serious adverse impact by LED signage on driver distraction that, in turn, presents the same for traffic safety and the corresponding safety of the traveling public and property; and

WHEREAS, a prohibition on LED signage will serve as a means of managing traffic control in the City, a goal expressed in the City's current Comprehensive Plan adopted in October 2015; and

WHEREAS, the Mayor and Council, having reviewed the materials provided and having considered the record of this matter as a whole, finds and concludes that demonstrated are substantial and serious concerns about the environmental impact of such signage, including, but not limited to, its energy use and consumption and the recyclability of such signage when use is discontinued and ease of same; and

**WHEREAS**, a prohibition on LED signage will serve the goals expressed in the City's Comprehensive Plan of preserving the existing character of the City; and

**WHEREAS**, a prohibition on LED signage is consistent with the City's 2014 Sustainability Plan and its focus on resource conservation and waste reduction; and

WHEREAS, the Mayor and Council, having reviewed the materials provided and having considered the record of this matter as a whole, and in light of the foregoing especially, finds and concludes that the current prohibition on LED signage in the City should be continued, the public safety, health, and general welfare, including aesthetics being served substantially by same; and

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WHEREAS, the Mayor and Council, having reviewed the materials provided and having considered the record of this matter as a whole concludes that based on the materials and record before it, a prohibition on LED signage is the least restrictive manner of preserving the public safety, health, and general welfare, including aesthetics; and

WHEREAS, the Mayor and Council, having reviewed the materials provided and having considered the record of this matter as a whole concludes that a host of other signage avenues yet remain available for the communication of commercial and non-commercial speech.

**NOW, THEREFORE, BE IT ORDAINED** by the Mayor and Council of City of Dunwoody, Georgia as follows:

**SECTION 1**. The current prohibition on LED signage contained in Chapter 20 of the City's Code of Ordinances at Section 20-51(22) shall be preserved and continued.

**SECTION 2**. Resolution 2016-____ is repealed in its entirety.

**SECTION 3.** All ordinances and resolutions, or parts of same, in conflict with this Ordinance are, to the extent of such conflict, hereby repealed.

**SECTION 4.** In the event a court of competent jurisdiction declares any word, phrase, clause, sentence or paragraph of this Ordinance unconstitutional or otherwise unenforceable, such ruling shall not affect the remaining words, phrases, clauses, sentences and paragraphs of this Ordinance, but such invalidated provisions shall be severed from the Ordinance and its remaining contents shall stand.

**<u>SECTION 5.</u>** This Ordinance shall be effective upon its adoption by the Mayor and Council.

SO ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF DUNWOODY, GEORGIA on the ____ day of _____, 2016.

Approved by:

Denis L. Shortal, Mayor

Attest:

Approved as to Form and Content:

### STATE OF GEORGIA CITY OF DUNWOODY

ORDINANCE 2016-XX-XX

Sharon Lowery, City Clerk

City Attorney