Mayor and Council Work Session

700 Doug Davis Drive Hapeville, GA 30354

October 15, 2019 6:00PM

Agenda

- 1. Call To Order
- 2. Roll Call

Mayor Alan Hallman Alderman Mike Rast Councilman at Large Travis Horsley Councilman Ward I Mark Adams Councilman Ward II Chloe Alexander

- 3. Welcome
- 4. Presentation
 - 4.I. Presentation Of Donated Funds To Ms. Barbara Riley Of The Amanda Riley Foundation By Chief Bloodworth

Background:

Fire Chief Bloodworth will give recognition to all those that made contributions to the Amanda Riley Foundation on behalf of the Hapeville Fire Department and will present the donated funds to Ms. Barbara Riley, President of the Amanda Riley Foundation.

- 5. Public Hearing
 - 5.I. Consideration And Action On A Special Exception At 600 South Central Avenue

Background:

Michael Foster on behalf of Regions Bank is requesting approval of a special exception to authorize the installation of an Automated Teller Machine (ATM) at 600 South Central Avenue, Parcel Identification Number 14 009800200513. The property is zoned RMU, Residential Mixed Use and is located in the Arts District Overlay (A-D). The Planning Commission considered this item on Tuesday, October 8, 2019 and recommended the Mayor and Council grant the special exception as requested. Staff supported their recommendation.

Staff Comment Applicant Comment Public Comment

Documents:

600 SOUTH CENTRAL AVENUE - SPECIAL EXCEPTION _REDACTED.PDF PLANNERS REPORT SPECIAL EXCEPTION 600 S CENTRAL AVE ATM (002).PDF LEGAL ADV. - 600 SOUTH CENTRAL AVENUE, SPECIAL EXCEPTION 10-15-2019.PDF MINUTES 10-8-2019 (DRAFT).PDF

6. Questions On Agenda Items

The public is encouraged to communicate their questions, concerns, and suggestions during Public Comments. The Council does listen to your concerns and will have Staff

follow-up on any questions you raise. Any and all comments should be addressed to the Governing Body, not to the general public and delivered in a civil manner in keeping with common courtesy and decorum.

- 7. Consent Agenda
- 8. Old Business
 - 8.I. Consideration And Action To Amend And Update Mobile Food Vendor Ordinance To Be Consistent With Transient Merchant Ordinance 1st Reading

Background:

Attached for approval is an amended Mobile Food Vendor ordinance. Legal has updated the language in this ordinance so that it is identical and consistent with the Transient Merchant ordinance.

Staff respectfully requests Mayor and Council to waive first reading due to the upcoming events this month

Documents:

ORDINANCE - MOBILE FOOD VENDOR.PDF

- 9. New Business
 - 9.I. Consideration And Action On Bond Refinancing Recommendation For The Development Authority

Background:

With the recent low interest rates, the City and Development Authority explored refinancing the 2004A, 2004B and 2007 bonds. The City issued and RFP on behalf of the Authority. Twenty five requests were issued with 3 bids returned. BB&T returned a winning bid as detailed in the packet. For Council consideration and approval is a resolution approving the issuance by the Hapeville Development Authority of \$4,705,000 Revenue bonds to refinance the Series 2004A, 2004B and 2007 Bonds and approving an Intergovernmental contract between the Authority and the City securing the Bonds in order to effect approx \$120,000 in interest cost savings by lowering the interest rate from approx 4.5% to approx 2.4%".

An additional document will be uploaded to the City's website on Monday.

Documents:

HDA REFUNDING 2004A, 2004B AND 2007.PDF AUTHORIZING RESOLUTION - 2019 - HAPEVILLE DEVELOPMENT AUTHORITY (2019 REFUNDING BONDS).PDF

9.II. Consideration And Action To Renew The Annual Water & Sewer And Stormwater Repair Contract With The Corbett Group, LLC.

Background:

An RFP was issued in 2018 for Annual Repairs to the Water & Sewer and Stormwater infrastrcture. This annual contract is for jobs that require the assistance of a contractor due to the complexity of the repair. The Corbett Group was the low bidder and the annual contract has two additional one year options to renew. Staff recommends renewal of the first year option with no changes in the bid unit pricing.

Documents:

CHANGE ORDER NO. 1 STORM.PDF SKM_368E19100811380.PDF

9.III. Consideration And Action On Acceptance Of LCI Wayfinding And Virginia Avenue Roundabout Project

Background:

As a follow up to the 2017 LCI study, with funding from the Atlanta Regional Commission, the City of Hapeville engaged Stantec Consulting Services, Inc. to perform a feasibility study for the Virginia Avenue Roundabout and Wayfinding recommendations for the Virginia Avenue Corridor. The study and recommendations were completed in September 2019 and are now being presented to Council. Staff recommendation is for the Council to accept delivery of the study. Staff requests the Council review the results of the study and direct Staff at a later date for any desired action.

Documents:

VIRGINIA_AVE_FEASIBILITY_STUDY_ROUNDABOUT.PDF 2019_09_26_HAPEVILLEWAYFINDING_REPORT (002).PDF

9.IV. Consideration On Ordinance Amendment For Mayor And Council Regular Meeting Schedule - 1st Reading

Background:

Attached for consideration is an ordinance amendment for the Mayor and Council regular meeting schedule. The ordinance has been amended to include November 19, 2019 as a regular meeting date.

Documents:

AMENDMENT TO ORDINANCE FOR REGULAR MEETINGS.PDF

- 10. City Manager Report
- 11. Public Comments

Members of the public wishing to speak shall sign in with the City Clerk prior to the start of the meeting. Time limitations for Registered Comments are three (3) minutes per person. The total Registered Comment session shall not last more than fifteen (15) minutes unless extended by Council. Each member of the public, who fails to sign up with the City Clerk prior to the start of the meeting, wishing to address Mayor and Council shall have a total of two (2) minutes. The entire general comment session for Unregistered Comments shall not last more than ten (10) minutes unless extended by Council.

- 12. Mayor And Council Comments
- 13. Executive Session

When Executive Session is Required one will be called for the following issues: 1) Litigation O.C.G.A. §50-14-2; 2) Real Estate O.C.G.A. §50-14-3(b)(1); or 3) Personnel O.C.G.A. §50-14-3(b)(2).

14. Adjourn

Public involvement and citizen engagement is welcome as Hapeville operates a very open, accessible and transparent government. We do however remind our attendees/residents that there are times allocated for public comments on the agenda. In order for council to conduct their necessary business at each meeting, we respectfully ask that side-bar conversations and comments be reserved for the appropriate time during the meeting. This will allow the City Council

to conduct the business at hand and afford our meeting attendees ample time for comments at the appropriate time during the meeting.

19-PC-10-23

CITY OF HAPEVILLE ECONOMIC DEVELOPMENT DEPARTMENT PLANNING COMMISSION APPLICATION

th, Birmingham, AL 35203
Email_michael.foster@bdgllp.com
Earley)
ay East, Birmingham, AL 35244
_ Mobile #
Central Avenue
VIDED): 14 009800200513
Size of Tract: <u>1.4053</u> acre(s)
n
Other (Please State) Special Exception
orgia for the above referenced property. I do hereby and above is true, complete and accurate, and I just cause for invalidation of this application and any City of Hapeville, Georgia, reserves the right to enforce is my/our responsibility to conform with all of City of that all requirements of the City of Hapeville shall be and/or this document has been read and explained plication. I understand that it is a felony to make false cursuant to O.C.G.A. 16-10-20 and I may be prosecuted Applicant's signature Date: 9/5/2019

CITY OF HAPEVILLE ECONOMIC DEVELOPMENT DEPARTMENT PLANNING COMMISSION APPLICATION

WRITTEN SUMMARY

In detail, provide a summary of the proposed project in the space provided below. (Please type or print legibly.) Addition of a new thru-wall ATM and removal of existing drive-thru window.

CITY OF HAPEVILLE ECONOMIC DEVELOPMENT DEPARTMENT PLANNING COMMISSION APPLICATION

AUTHORIZATION OF PROPERTY OWNER

I CERTIFY THAT I AM THE OWNER OF THE PROPERTY LOCATED AT: 600 South Central Avenue
Hapeville, GA
City of Hapeville, County of Fulton, State of Georgia
WHICH IS THE SUBJECT MATTER OF THIS APPLICATION. I AUTHORIZE THE APPLICANT NAMED BELOW TO ACT AS THE APPLICANT IN THE PURSUIT OF THIS APPLICATION FOR PLANNING COMMISSION REVIEW.
Name of Applicant
Address of Applicant 2100 First Avenue North, Birmingham, AL 35203
Telephone of Applicant
Julian
Jøhn Earley
Print Name of Owner
Personally Appeared Before Me this 4 day of Juplemby 20 19. Kandi Dum Notary Public
RANDI L. DICUS Notary Public Alabama State at Large

Site Plan Checklist – <u>Please include with your application</u>.

A site plan is used to determine the practical ability to develop a particular property within the City of Hapeville. Information relating to environmental condition, zoning, development impact, consistency with the Hapeville Comprehensive Plan and relevant town master plans will be considered in the decision process. To be considered, a site plan <u>must</u> contain the following information:

(Please <u>initial</u> each item on the list above certifying the all required information has been included on the site plan)



A brief project report shall be provided to include an explanation of the character of the proposed development, verification of the applicant's ownership and/or contractual interest in the subject site, and the anticipated development schedule. Please complete and submit all forms contained within the application for site plan review.



Site plans shall be submitted indicating project name, applicant's name, adjoining streets, scale, north arrow and date drawn.



The locations, size (sf) and height (ft) of all existing and proposed structures on the site. Height should be assessed from the base of the foundation at grade to the peak of the tallest roofline.



Site plans shall include the footprint/outline of existing structures on adjoining properties. For detached single-family residential infill development, the front yard setback shall be assessed based on the average setback of existing structures on adjoining lots. Where practical, new construction shall not deviate more than ten (10) feet from the average front yard setback of the primary residential structure on an adjoining lot. Exemption from this requirement due to unnecessary hardship or great practical difficulty can be approved at the discretion of the Planning Commission. To be considered for an exemption, the applicant must submit a "Request for Relief" in writing with their site plan application, including the conditions that necessitate relief (i.e. floodplain, wetland encroachment, excessive slope, unusual lot configuration, legally nonconforming lot size, unconventional sitting of adjoining structures, etc).

ME

The location and general design cross-section characteristics of all driveways, curb cuts and sidewalks including connections to building entrances. A walkway from the primary entrance directly to the public sidewalk is required for all single-family residential development.

ME

The locations, area and number of proposed parking spaces. Please refer to Article 22.1 Chart of Dimensional Requirements to determine the correct number of parking spaces for your particular type of development.

ME

Existing and proposed grades at an interval of five (5) feet or less.

NA

The location and general type of all existing trees over six (6) inch caliper and, in addition, an identification of those to be retained. Requirements for the tree protection plan are available in Code Section 93-2-14(f). Please refer to Sec. 93-2-14(y) to determine the required tree density for your lot(s).

NA

A Landscape Plan: The location and approximate size of all proposed plant material to be used in landscaping, by type such as hardwood deciduous trees, evergreen trees, flowering trees and shrub masses, and types of ground cover (grass, ivies, etc.). Planting in parking areas should be included, as required in Section 93-23-18.



The proposed general use and development of the site, including all recreational and open space areas, plazas and major landscape areas by function, and the general location and description of all proposed, outdoor furniture (seating, lighting, telephones, etc.). Detached single-family residential development may be exempt from this requirement.



The location of all retaining walls, fences (including privacy fences around patios, etc.) and earth berms. Detached single-family residential development may be exempt from this requirement.



The identification and location of all refuse collection facilities, including screening to be provided. Detached single-family residential development may be exempt from this requirement.

Provisions for both on-site and offsite storm-water drainage and detention related to the proposed development.

Location and size of all signs. Detached single-family residential development may be exempt from requirement.

Typical elevations of proposed building provided at a reasonable scale (1/8" = 1'0") and include the identification of proposed exterior building materials. Exterior elevations should show all sides of a proposed building.

Site area (square feet and acres).

Allocation of site area by building coverage, parking, loading and driveways, and open space areas, including total open space, recreation areas, landscaped areas and others. Total dwelling units and floor area distributed generally by dwelling type (one-bedroom, two-bedroom, etc.) applicable.



Floor area in nonresidential use by category. Detached single-family residential development may be exempt from this requirement.



Total floor area ratio and/or residential density distribution.



Number of parking spaces and area of paved surface for parking and circulation



At the discretion of the planning commission, analyses by qualified technical personnel or consultants may be required as to the market and financial feasibility, traffic impact, environmental impact, storm water and erosion control, etc. of the proposed development.

Please *initial* each item on the list above certifying the all required information has been included on the site plan, sign and submit this form with your site plan application. Failure to include this form and information required herein may result in additional delays for the consideration of your application.

Applicant Signature: Much Date 9/5/2019



August 9, 2019

To Whom it May Concern:

We are writing in support of the proposed text amendment to the code to allow construction of drive thru lanes on a limited basis. Drive thru ATM usage is central to the modern banking experience, and the level of service and convenience these stations afford our customers is widely used and universally expected.

We understand the intent of the drive thru restriction is to protect the character of the City of Hapeville, but suggest that this should not apply to financial institutions because they do not produce the negative results associated with other uses. The modern fast food chain drive thru, for example, is often associated with wide swathes of impervious surfaces; dramatically increased vehicular traffic; long lines of queuing cars that can stack out and obstruct adjacent roadways; large, garish lighting and signage infrastructure for wayfinding and branding. In contrast, bank drive thru ATMs are small, limited in number, and rarely stack up beyond one or two cars.

The most important distinction, however, is related to customer service. Bank drive thru ATMs allow us to deliver a high level of financial service to our customers during nights and weekends when such services would otherwise be unavailable. Bank drive thru ATMs are useful and convenient during normal branch operations, but absolutely essential when bank branches are closed. Our goal is to make this level of service available to our Hapeville branch patrons.

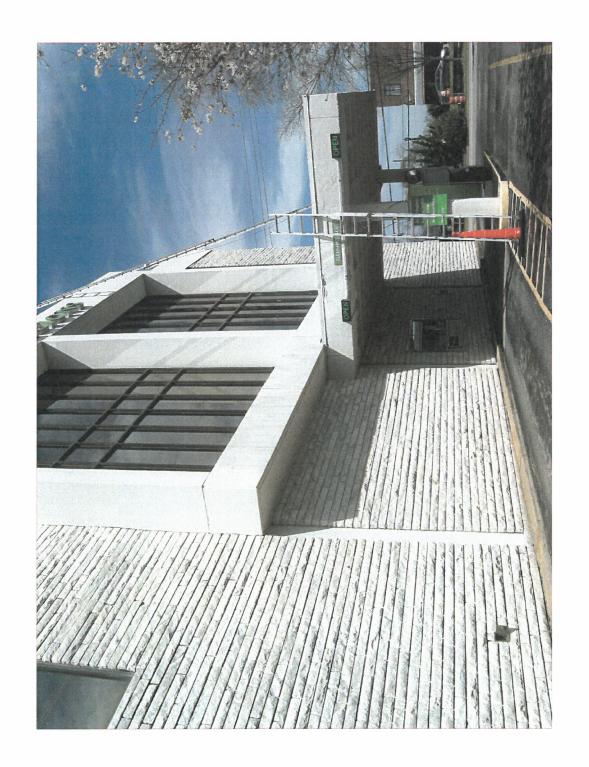
In our view, bank drive thrus deliver a high level of service to the community without the drawbacks often associated with other drive thru lane usage. They provide valuable services to the community when no other such service can be delivered. Further, with any new drive thru construction, we are committed to doing all that is required to meet the City of Hapeville's high standards and further enhance this community. With these considerations in mind, we encourage the Commission to approve the zoning amendment at issue.

Thank you for your consideration.

Sincerely,

John Earley Vice President

Corporate Real Estate & Properties Department



OP015475



600 South Central Ave. Hapeville, GA 30354 6/5/19 RFC #
Project Number: Gite Name:
Address: 6
City, ST, Zip: H
Date: 6

Site Approved: Date:

VOUR BRAND AT ITS BEST "

Awning Concept Design Page 2 of 3 DOWN LIGHTING SPECIFICATIONS: QTY (2) NEW XSL S LED 50 SS CW LIGHT FIXTURES FOR NEW AWNING, 1 ON EACH SIDE OF AWNING PAINTED GREEN TO MATCH AWNING RIGHT SIDE VIEW SCALE: 1/2" = 1'-0" DOWN LIGHTING CLOSED BOTTOM WITH HOLES CUT FOR XSL S LED 50 SS CW LIGHT FIXTURES 3.-0. OZS .0-.9 8'-0" 8'-0" **FRONT VIEW** SCALE: 1/2" = 1'-0" **TOP VIEW** SCALE: 1/2" = 1'-0" .9-,1 3,-0,, "0-'Z GROUNDED ELECTRICAL CONNECTIONS ALUMINUM AWNING W/ DOWN LIGHTING. ALUMINUM FRAMING & SUPPORT'S PAINTED PMS 370C ALUMINUM FRAME, WITH .080" ALUMINUM CLADDING, CLOSED ENDS, CLOSED BACKS. PAINTED PMS 370C. Men Industries (ME) us ELECTRIC SIGN THEI SIGN IS INTENDED TO BE INSTALLED IN ACCORDANGE WITH THE REQUIREMENTS OF ARTICLE 600 OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER APPLICABLE LOCAL CODES. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SIGN. SCALE: 1/2" = 1'-0" 3'-0" CANOPY SPECIFICATIONS

COLOR SPECIFICATIONS PMS 370C GREEN WHITE 1-800-967-2553 www.allenindustries.com

Project Information
Cleri Regions Bank
600 South Central Ave.
Hapeville, GA 30354
File OPD15475 Hapeville, GA 301
Sales House Desgn LB PM JC

Issue Date

Change light spec

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Name

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Allen Industries





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REGIONS

REGIONS®

ATM ADDITION
600 SOUTH CENTRAL AVENUE,

THESE DRAWINGS AND PLANS, ANY REPRODUCTION THEREOF, AND ANY CAD OR ELECTRONIC FILE OF THESE DRAWINGS AND PLANS (HEREINAFTER "PLANS") ARE THE SOLE AND EXCLUSIVE, PROPRIETARY PROPERTY OF BDG ARCHITECTS, AND MAY NOT BE REPRODUCED, PUBLISHED, MODIFIED OR USED IN ANY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF BDG ARCHITECTS. USE OF THESE PLANS FOR CONSTRUCTION SHALL BE CONSIDERED ACCEPTANCE OF THE TERMS CONTAINED HEREIN AND THE SUITABILITY AND CONSTRUCTABILITY OF THE PLANS. THE PLANS SHALL NOT BE SCALED OR MODIFIED FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS. ANY CHANGES TO THESE PLANS, REGARDLESS OF HOW MINOR, WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS. ANY CONSTRUCTION EXECUTED FROM THESE PLANS WITHOUT THE EXPRESS WRITTEN APPROVAL OF BDG ARCHITECTS; OR ANY CHANGE IN THE SCOPE, DESIGN, OR INTENT OF THESE PLANS FOR ANY REASON, BY ANY PERSON OTHER THAN BDG ARCHITECTS SHALL AUTOMATICALLY VOID ANY DESIGN-RELATED OBLIGATIONS BDG ARCHITECTS MAY HAVE ON THE PROJECT, AND RESULT IN THE FULL AND COMPLETE RELEASE OF BDG ARCHITECTS FROM ANY LIABILITY, CLAIMS, OR DAMAGES INCLUDING ERRORS AND OMISSIONS ARISING OUT OF OR RELATED TO THE PLANS, ANY DISCREPANCIES OR CONFLICTS IN THE PLANS SHALL BE REFERRED IMMEDIATELY TO BDG ARCHITECTS PRIOR TO PERFORMING WORK SHALL RESULT IN THE WORK, FAILURE TO REFER DISCREPANCIES OR CONFLICTS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, SCHEDULING AND CONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY SUBCONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY SUBCONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY SUBCONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY SUBCONFORMANCE OF ITS WORK AND ALL WORK PERFORMED BY

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JOB	#		183305
DATE	:		05-10-2019
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	01/50	- 14	

SHEET TITLE

CHECKED BY:

OVERALL ARCHITECTURAL SITEPLAN

SHEET NUMBER

A-100



DEPARTMENT OF PLANNING AND ZONING PLANNER'S REPORT

DATE: September 30, 2019
TO: Adrienne Senter
FROM: Michael Smith

RE: Special Exception Request – 600 South Central Avenue

BACKGROUND

The City of Hapeville has received a special exception application from Mr. Michael Foster to permit a drive-up ATM accessory to a Regions Bank located at 600 South Central Avenue. The ATM would be located on the east side of the building, adjacent to an existing drive-through teller window, and would use the existing drive-through lane.

The property is zoned RMU, Residential Mixed-Use, and is within the A-D, Arts District overlay.

At the request of the applicant and in conjunction with this proposal, Mayor & City Council voted on September 17, 2019, to adopt a text amendment permitting drive-throughs in the A-D overlay when used by banks.

REVIEW

The following code sections are applicable to this application:

ARTICLE 11.5. - RMU ZONE (RESIDENTIAL MIXED USE)

Sec. 93-11.5-1. - Intent.

The RMU district is established in order to:

- (1) Ensure development that is consistent with neo-traditional planning practices, which are often defined by pedestrian-oriented buildings, interconnected streets, a mix of uses and housing types, and a compact walkable scale.
- (2) Help create a compact, dense, and distinguishable core area;
- (3) Provide for an urban form allowing mid-rise structures;
- (4) Encourage multiple uses within the same structure; and
- (5) Include street oriented activity and pedestrian amenities at the street level of structures.

Sec. 93-11.5-3. - Permitted uses.

The following are permitted within the RMU zone:

- (1) Business and professional offices/agencies, including:
 - j. Banks and other financial institutions (not including pawnshops, check cashing businesses, title pawn, and payday loans).

ARTICLE 28. - A-D ZONE (ARTS DISTRICT OVERLAY)

Sec. 93-28-3. - Purpose.

The purpose of the arts district overlay is to facilitate creation of an arts destination, sustain established arts and cultural uses and promote new arts and cultural uses. The arts district overlay seeks integration of the arts into the fabric of the community and is conceived as the location of art galleries and art studios forming the core of an arts district. A complementary mix of shops, restaurants and entertainment venues will support these uses. These elements are expected to generate interest in downtown Hapeville and attract arts and cultural events.

The arts district overlay features an expanded range of permitted uses focused on the arts while retaining all property rights established by the underlying zoning. The arts district overlay encourages adaptive reuse of historic buildings and new construction technologies, affording owners expanded development options. These measures will enhance the market attractiveness of the arts district.

Arts venues, community festivals, expanded arts uses and pedestrian character are expected to promote an arts district. Planned investment in public art, lighting, sidewalks and off-street parking will leverage private investment and enhance public safety. This combination of public and private investment is expected to advance Hapeville's position in regional leadership in the arts and stimulate broad economic revitalization. Importantly, the arts district overlay features walkable distances from nearby neighborhoods to small-scale establishments and live entertainment venues accommodated by the arts district overlay and compatible with the neighborhood character.

Sec. 93-28-8. - Prohibited uses.

The following uses shall be prohibited in the Arts District Overlay:

 All drive-through facilities other than those permitted by special exception for accessory use by banks or credit unions.

Sec. 93-24-10. - Special exceptions.

- (a) Special exceptions and special property use permits shall be decided by the mayor and council.
- (b) The planning commission shall review and make nonbinding recommendations to the mayor and council on special exceptions and special property use permits.
- (c) Special exceptions may be sought for:
 - (1) Reduction of the number and size of parking spaces and off-street loading space requirements;

- (2) Location of off-street parking space and off-street loading spaces; and
- (3) Location and number of drive-throughs.
- (d) When acting upon an application for a special exception, in addition to the requirements listed under the above references, the planning commission and the mayor and council shall give consideration to the following factors where applicable:
 - (1) The proposed design and location of the particular development;
 - (2) The possible traffic generating characteristics of the proposed development;
 - (3) The effects the proposed development will have on the present or intended character of the area in which it proposes to locate;
 - (4) The availability of public utilities, facilities and services; and
 - (5) The character, and effect of the parking demands of the proposed development.
- (e) After considering the above-listed factors and after reviewing the planning commission recommendation, the mayor and council shall take any actions or establish any reasonable conditions of approval, such as planted buffers, as will accomplish the intent and purpose of this chapter.

RECOMMENDATION

The proposed design and location will partially obscure the ATM from the right-of-way by placing it behind an existing teller window and canopy. The Design Review Committee approved the design on August 21, 2019. No new drive-through lanes or infrastructure other than the ATM itself and the associated canopy will be required. As there is already a daytime teller window and a walk-up ATM adjacent to parking at the site, traffic generated by those seeking ATM access will likely reflect existing levels.

The intent of the Arts District is to generate interest in downtown Hapeville and attract arts and cultural events in part by promoting a pedestrian character. It was specifically designed to provide for walkable distances between nearby neighborhoods and small-scale establishments compatible with the neighborhood character. Allowing for a proliferation of typical drive-through establishments may compromise this goal of the district.

In the past, Hapeville has required new outdoor ATMs to be walk-up models, accessible via the sidewalk but not by car. Staff consulted with the Hapeville Chief of Police to determine if there are any safety concerns regarding vehicle or drive-up ATMs. Chief Glavosek suggested that walk-up ATMs may leave people more vulnerable to being targets of thieves, whereas drive-up ATMs could be a safer alternative. Regions Bank has indicated in conversations that the market and industry standards are changing to address convenience and thus teller windows are being replaced with more ATMs and similar automated machines.

In considering the special exception, staff recommends the Planning Commission and City Council carefully consider the intent of the Arts-District, safety, and changing industry and market conditions. Staff recommends approval for the drive-up ATM.

STATE OF GEORGIA COUNTY OF FULTON

Before me, the undersigned, a Notary Public, this day personally came the undersigned who, being duly sworn, according to law, says she is an agent of ALM Media, LLC., publishers of the **Daily Report**, the official newspaper published in Atlanta, GA, in said county and state, and that the publication, of which the annexed is a true copy. was published in said newspaper as provided by law on the following dates: 09/30/2019.

Subscribed and sworn to before me this September 30, 2019



9005051-0000429153-01 Page 2 of 3

NOTICE City of Hapeville

The Mayor and Council of the City of Hapeville will hold a Public Hearing at 6:00 p.m. on Tuesday, October 15, 2019 at the City of Hapeville Municipal Court Annex located at 700 Doug Davis Drive, Hapeville, Georgia 30354, to consider the following application:

Michael Foster on behalf of Regions Bank is requesting approval of a special exception to authorize the installation of an Automated Teller Machine (ATM) at 600 South Central Avenue, Parcel Identification number 14 009800200513. The property is zoned RMU, Residential Mixed Use and is located in the Arts District Overlay (A-D) (A-D). #0000429153:09/30-1AS

9005051-0000429153-01 Page 3 of 3

Planning Commission Meeting 700 Doug Davis Drive Hapeville, Georgia 30354

October 8, 2019 SUMMARY MINUTES 6:00 PM

1. Welcome and Introduction

Chairman Brian Wismer called the meeting to order at 6:00 p.m. in the City of Hapeville Municipal Annex located at 700 Doug Davis Drive, Hapeville, Georgia 30354. Members in attendance inlcuded Vice Chairman Jeanne Rast, Leah Davis, Lucy Dolan, Larry Martin, Charlotte Rentz and Cliff Thomas. City Planner Lynn Patterson and Secretary Adrienne Senter were also present.

2. Minutes of September 10, 2019

MOTION ITEM: Charlotte Rentz made a motion, Cliff Thomas seconded to approve the minutes of September 10, 2019 as amended. Motion Carried: 5-1; Jeanne Rast abstained.

3. New Business

3.I. 600 South Central Avenue

Special Exception Request

Michael Foster on behalf of Regions Bank requested approval of a special exception to authorize the installation of an Automated Teller Machine (ATM) at 600 South Central Avenue, Parcel Identification Number 14 009800200513. The property is zoned RMU, Residential Mixed use and is located in the Arts District Overlay (A-D).

Staff Comment:

The ATM would be located on the east side of the building adjacent to an existing drive-through teller window, and would use the exisiting drive-through lane.

At the request of the applicant and in conjunction with this proposal, Mayor and City Council voted on September 17, 2019, to adopt a text amendment permitting drivethroughs in the A-D overlay when used by banks.

Commissioner Rast inquired if the full service window would be open or closed during business hours.

Commissioner Rentz asked if Council's vote would be final.

Dr. Patterson stated Council voted to approve the text amendment to the Arts District Overlay so the vote would be final.

Applicant Comment:

The existing drive-through window will remain. The ATM window should not create any impact and will keep with the goal of the Arts District. The project will be for a drive-up ATM and not a walk-up ATM for safety concerns. The ATM will be located on the inside lane as the outside lane will not allow for the infrastructor.

Public Comment: None.

MOTION ITEM: Charlotte Rentz made a motion, Lucy Dolan seconded to recommend the Mayor and Council grant the special exception to allow the installation of a driveup Automated Teller Machine (ATM) at 600 South Central Avenue.

Motion Carried: 6-0

3.II. 0 Porsche Avenue

Site Plan Review

Steven Ellis of PRO Building Systems, Inc. and authorized representative of Porsche Cars North America, Inc. is requesting site plan approval to develop a specialty auto service center and repair facility to be located at 0 Porsche Avenue, Parcel Identification 14 0096 LL0593. The property is zoned B-P, Business Park and is subject to the Commercial/Mixed-Use area, Subarea B, of the Architectural Design Standards.

Staff Comments:

The lot is currently partially paved but is otherwise undeveloped. The site area under construction is 2.5 acres. The facility is shown as a 20' high, 17,600/20,815 square foot building surrounded by parking as well as one accessory structure.

The project as proposed will require the following variances from the Board of Appeals.

- Parking in excess of the 110% requirement.
- Reduction in the number of compact parking spaces
- Increase the width of the curb cut along Porsche Avenue

Staff supports these variances.

In addition, the site plan should be revised to address the following concerns identified per the planner's review for zoning compliance:

- The applicant should clarify the actual square footage.
- The applicant should provide the distance between accessory structure and the nearest property line.
- The applicant should clarify if the curb cut is new or existing. A new curb cut is not allowed. An existing curb cut may be relocated.
- The applicant should provide the width of the new curb cut.
- No sidewalk is shown at the street as required by the Architectural Design Standards. Sidewalk must adhere to the Commercial/Mixed Use standard (5' landscape zone, 10' sidewalk/clear area).
- The applicant should provide site coverage broken down by type, such as

- building area and parking.
- The applicant should indicate one dedicated loading space on the plans.
- The applicant should indicate the need for additional parking, if shared parking is the intent.
- The applicant should provide an anticipated development schedule.
- At least 30% of provided parking spaces must be compact size. The plans state that 21 (14%) of the 148 provided spaces are compact size, which is not compliant. However, the locations and dimensions of those spaces are unclear.
- The majority of provided spaces are between the dimensional requirements for full-size spaces and compact-size spaces, being too narrow for the former and too long for the latter.
- 10 of the provided parking spaces are at angles of less than 90 degrees to the curb and do not have lengths provided.
- The applicant must provide three ADA parking spaces.
- The applicant should provide one 15' high, 15' wide, and 60' long loading space.

Per the B-P regulations, the building elevations, landscape architecture and parking lot landscaping will be reviewed by the Design Review Committee for compliance with the Architectural Design Standards.

Should the site plan address all the planner's comments and the City Engineer's comments then the site plan is recommended for approval by the Planning Commission subject to approval of the required variances by the Board of Appeals.

Commissioner Martin stated per the code 30 percent of the parking must be compact car parking spaces. The plan indicates 21 compact parking spaces will be required but they need 43-44 spaces. He confirmed that the remaining spaces will accommodate regular size cars.

Dr. Patterson stated the plan currently exceeds the parking requirement.

Commissioner Martin asked for clarification regarding the variances that will go before the Board of Appeals.

Dr. Patterson stated that the project will require the following variances:

- Parking in excess of the 110% requirement.
- Reduction in the number of compact parking spaces
- Increase the width of the curb cut along Porsche Avenue

Commissioner Rentz asked for clarification of Sec. 93-23-17, Continuing character of obligation that is mentioned as part of the planner's report.

Dr. Patterson stated that this property does not apply to section 93-23-17 as there is not an existing structure onsite but if the property had an existing structure and it was sold or transferred, then the owner must continue to maintain the parking lot.

Applicant Comment:

Laurel David on behalf of Galloway Law Group, LLC. stated that the square footage of the project is 20,815-sf and requires 70 parking spaces. The parking that will be provided will not be shared with any future development. The parking will service the staff, technicians and customers, loaner vehicles and overnight parking for next day car service. Porsche Cars will have a joint partnership with Jim Ellis Automotive and Hennessy Automotive and they are relying on their partners to anticipate the parking need. The driveway will include 3 lanes to accommodate a turning lane and for future development. Porsche Cars will install a pedestrian crossing treatment such as a stamped concrete to provide a continuation of the sidewalk over the driveway area. The compact parking will be located to the rear of the property and fenced off for loaner cars.

Chairman Wismer stated that they will be required to obtain a variance for a reduction to the number of compact spaces.

Commissioner Dolan inquired if company events would be held onsite and if additional parking would be required.

Ms. David stated that no events would be held onsite. The parking would be for overnight parking or loaners and it is not designed for any types of events.

Commission Dolan inquired regarding the days of operation.

Ms. David stated the facility will be closed on Sundays.

Commissioner Thomas inquired if the decision to install 2 exit lanes was based upon a traffic study.

Ms. David stated that it was based upon anticipation of future need. Also, from a traffic perspective, left turn movement usually presents more conflict and the additional lane would help for backup and limits the number of curb cuts.

Dr. Patterson stated that the goal is to minimize the number of curb cuts and encourage inner parcel circulation.

Commissioner Rentz inquired regarding the numbers on the Kimley Horn plan.

Ms. David stated those numbers covers the number of parking spaces for that area.

Chairman Wismer stated that 2 ADA spaces are indicated on the site and inquired if that would decrease their parking by one space.

Ms. David confirmed that one space will be lost and will increase the ADA spaces as required.

Commissioner Martin confirmed that the additional width of the driveway would accommodate for one entry lane and two exit lanes. Ms. David confirmed.

Chairman Wismer asked Dr. Patterson to give the Commission a description of staff's recommendation to keep the curb cut treatment and raise the driveway up to grade. Dr. Patterson stated the sidewalk would continue across the driveway and include some type of concrete treatment to slow the traffic down and encourage a pedestrian friendly crossing.

Ms. David stated that there are a few Porsche designs that are too low, and they would not be able to raise the driveway grade up to the sidewalk but will install a pedestrian friendly crosswalk that will include a texture change.

Public Comment: None.

MOTION ITEM: Larry Martin made a motion, Charlotte Rentz seconded to approve the site plan request for the property located at 0 Porsche Avenue subject to the deficiencies outlined in the planner's and engineer's reports with the following recommendations:

- Recommend the Board of Appeals grant variances to increase the parking limitation, reduce the number of compact parking spaces, increase the width of the curb cut along Porsche Avenue and include a pedestrian-friendly crosswalk treatment. Motion Carried: 6-0.
- 4. Next Meeting Date November 12, 2019 at 6:00 PM
- 5. Adjourn

MOTION ITEM: Larry Martin made a motion, Charlotte Rentz seconded to adjourn the meeting at 6:37 p.m. Motion Carried; 6-0.

Respectfully submitted by,

Chairman, Brian Wismer

Secretary, Adrienne Senter

ORDINANCE NO.

AN ORDINANCE TO REVISE CHAPTER 11 ("BUSINESS LICENSING AND REGULATION"), ARTICLE 11 ("COMMERCIAL SOLICITATIONS AND TRANSIENT MERCHANTS"), SECTION 11-11-3 ("REGULATION AND LICENSING MOBILE FOOD VENDORS") OF THE CODE OF ORDINANCES, CITY OF HAPEVILLE, GEORGIA TO PROVIDE FOR THE REGULATION OF MOBILE FOOD VENDORS; TO PROVIDE FOR SEVERABILITY; TO REPEAL CONFLICTING ORDINANCES; TO PROVIDE AN EFFECTIVE DATE; AND TO PROVIDE FOR OTHER LAWFUL PURPOSES.

WHEREAS, the mayor and council shall have full power and authority to provide for the execution of all powers, functions, rights, privileges, duties and immunities of the city, its officers, agencies, or employees granted by the City of Hapeville's Charter or by state law; and,

WHEREAS, the municipal government of the City of Hapeville (hereinafter "City") and all powers of the City shall be vested in the mayor and council. The mayor and council shall be the legislative body of the City; and,

WHEREAS, existing ordinances, resolutions, rules and regulations of the City and its agencies now lawfully in effect not inconsistent with the provisions of the City's charter shall remain effective until they have been repealed, modified or amended; and,

WHEREAS, amendments to any of the provisions of the City's Code may be made by amending such provisions by specific reference to the section number of the City's Code; and,

WHEREAS, every official act of the mayor and council which is to become law shall be by ordinance; and,

WHEREAS, the governing authority of the City finds it desirable to provide for the licensing, operation and regulation of Mobile Food Vendors and to make updates regarding the same.

BE IT, AND IT IS HEREBY ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF HAPEVILLE, GEORGIA THAT:

Section One. Chapter 11 (Business Licensing and Regulation), Article 11 (Commercial Solicitations and Transient Merchants), Section 11-11-3 (Regulation and Licensing Mobile Food Vendors) of the City Code of Ordinances is hereby amended by stricking said section in its entirety and replacing it with the following language:

Section 11-11-3 - Regulation and Licensing of Mobile Food Vendors.

- (a) It shall be unlawful for any person to sell, or offer for sale, food of any type from a Mobile Food Vendor without a permit first having been granted under this section.
- (b) An application for a permit hereunder shall be submitted to the City Clerk or his or her designee setting forth all information required hereunder and in compliance with this ordinance. The City Clerk or his or her designee shall develop a form application for the purpose of compliance with this article. The application shall be accompanied by an executed indemnity agreement indemnifying and releasing the City, its agents, employees and elected officials from any and all liability against any and all claims, actions and suits of any type whatsoever arising in connection with the activities of the Mobile Food Vendor pursuant to the permit issued hereunder.
- Mobile Food Vendor permits shall be active for: 54

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- a. ninety (90) days commencing on the day of issuance; or
- b. three (3) consecutive days as expressly stated on the permit. 56
 - (c) The following information shall be provided with each application for a Mobile Food Vendor permit, along with an application fee of \$100.00 for a 90-day permit or \$50.00 for a three consecutive day permit, and an executed Release and Indemnification Agreement provided by the City:
 - (1) Name of the Mobile Food Vendor;
 - Make, model and license plate number of vending unit; (2)
- (3) Owner's contact information; 63
- (4) Operator's contact information; 64
 - Copy of approved permit from the Fulton County Health Department; (5)
 - (6) List of operating locations and times including map detailing the position of the vehicle, and current zoning in said locations;
 - Signatures from property owners indicating consent for the use of their property; (7) and
 - Signature of applicant indicating agreement to the listed requirements. (8)
 - (d) A waiver of the application fee may be requested at the time of application by the applicant if: (1) the event is a 501(c) non-profit event and proof is submitted thereof; or (2) the event is a city-sponsored event as determined by the City Manager. However, all mobile food vendors must fill out an application form, execute an Indemnification Agreement, and provided the City with all necessary documentation required by the City.
 - (e) Mobile Food Vendors may conduct business or operate in the public right-of-way, only if parking in the right-of-way is legally allowed and it does not impede the flow of traffic. A determination of traffic impediment shall be made by the City of Hapeville Police Department.

Mobile Food Vendors must be located in a lot that can safely be accessible by patrons. Mobile Food Vendors cannot be parked on sidewalks. Parking on public, city-owned grass areas is permissible with prior approval from the City Manager at the time of application.

- (f) A Mobile Food Vendor shall not operate on any private property without the prior written consent of the owner. A Mobile Food Vendor shall not be allowed to park overnight on any private property without the prior written consent of the owner.
- (g) A Mobile Food Vendor may operate on City owned property, if: (1) the Mobile Food Vendor has received permission to do so from the City Manager; and (2) has indicated the appropriate City owned location, date, and times of use on the application. At no time shall a Mobile Food Vendor be allowed to park overnight on any City owned property. Designated City lots, dates and times are attached hereto and incorporated herein as Exhibit "A".
- (h) A Mobile Food Vendor shall maintain a one million-dollar (\$1,000,000.00) liability insurance policy. Proof of current liability insurance, issued by an insurance company licensed to do business in Georgia, protecting the Mobile Food Vendor, the public and the City from all claims for damage to property and bodily injury, including death, which may arise from operation under or in connection with the permit, shall be provided to the City as part of its permit application. If the Mobile Food Vendor does not have insurance, the Mobile Food Vendor may be under the umbrella of an existing business with the business' permission to do so. Such arrangement documentation shall be included with the application to the City.
- (i) A Mobile Food Vendor shall not make sounds or announcements to call attention to the mobile food vehicle either while traveling on the public rights-of-way or when stationary. At all times said Mobile Food Vendor shall be in compliance with the City's noise ordinance.
- (j) The permit under which a Mobile Food Vendor is operating must be firmly attached and visible on the Mobile Food Vendor at all times.
- (k) Any driver of a Mobile Food Vendor motorized vehicle must possess a valid Georgia driver's license.
- (l) Mobile Food Vendors shall not be located within fifteen (15) feet of any street intersection or pedestrian crosswalk or ten (10) feet of any driveway.
- 107 (m) A Mobile Food Vendor shall not sell or offer to sell any goods, foods, products, or services 108 between the hours of 10:00 p.m. to 9:00 a.m., unless otherwise approved and extended by the City 109 Manager.
 - (n) Vending structures shall not be left unattended or stored at any time on the open vending site when vending is not taking place or during restricted hours of operation.
- 112 (o) No sale or offer for sale of ice cream, frozen milk, frozen dairy or ice confection products 113 shall be made from a Mobile Food Vendor unless each side of the vehicle is marked, in letters and 114 numbers at least three (3) inches in height, with the name and address of the Mobile Food Vendor 115 licensee.

- (p) Mobile Food Vendors shall comply with all state, federal and local health and safety regulations and requirements and shall obtain and maintain any and all license and permits required by any other health organization or governmental organization having jurisdiction over this subject matter.
- (q) The following safety regulations shall apply to any and all vehicles operating under this article or used for mobile retail food establishments:
 - Every vehicle shall be equipped with a reverse gear signal alarm with a sound (1) distinguishable from the surrounding noise level.
 - (2) Every vehicle shall be equipped with two (2) rear-vision mirrors, one (1) at each side, firmly attached to the outside of the motor vehicle, and so located as to reflect to the driver a view of the highway to the rear, along both sides of the vehicle.
- (r) A Mobile Food Vendor may only sell food and non-alcoholic beverage items. A Mobile Food Vendor may sale alcoholic beverages if all proper licensing requirements are satisfied and if the Mobile Food Vendor has all necessary permits and/or licenses.
- Section Two. Codification and Certify. This Ordinance adopted hereby shall be codified and certified in a manner consistent with the laws of the State of Georgia and the City.

Section Three. Severability.

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- (a) It is hereby declared to be the intention of the Mayor and Council that all sections, paragraphs, sentences, clauses and phrases of this Ordinance are or were, upon their enactment, believed by the Mayor and Council to be fully valid, enforceable and constitutional.
- (b) It is hereby declared to be the intention of the Mayor and Council that, to the greatest extent allowed by law, each and every section, paragraph, sentence, clause or phrase of this Ordinance is severable from every other section, paragraph, sentence, clause or phrase of this Ordinance. It is hereby further declared to be the intention of the Mayor and Council that, to the greatest extent allowed by law, no section, paragraph, sentence, clause or phrase of this Ordinance is mutually dependent upon any other section, paragraph, sentence, clause or phrase of this Ordinance.
- (c) In the event that any phrase, clause, sentence, paragraph or section of this Ordinance shall, for any reason whatsoever, be declared invalid, unconstitutional or otherwise unenforceable by the valid judgment or decree of any court of competent jurisdiction, it is the express intent of the Mayor and Council that such invalidity, unconstitutionality or unenforceability shall, to the greatest extent allowed by law, not render invalid, unconstitutional or otherwise unenforceable any of the remaining phrases, clauses, sentences, paragraphs or sections of the Ordinance and that, to the greatest extent allowed by law, all remaining phrases, clauses, sentences, paragraphs and sections of the Ordinance shall remain valid, constitutional, enforceable, and of full force and effect.

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		Ordinances. All ordinances and parts of ordinances
in conflict herewith are hereby	expressly repea	lled.
Section Five Effective	ve Date The ef	fective date of this Ordinance shall be the date of
adoption unless otherwise state		rective date of this Ordinance shall be the date of
adoption diffess offer wise state	ca norom.	
ORDAINED this	day of	, 2019.
		CITY OF HAPEVILLE, GEORGIA
		Alan Hallman, Mayor
		Alan Haimian, Mayor
ATTEST:		
City Clerk		
APPROVED BY:		
City Attorney		

Hapeville Development Authority Refunding of the Series 2004A, 2004B and 2007 Bonds Summary Presentation to Authority 10 October 2019

- I. Debt Service Schedules from 2004A, 2004B and 2007 Bonds being refunded
- II. Term Sheet and Distribution List
- III. Summary of Bids and Refunding results
- IV. BB & T Proposal (winning bid)

BOND DEBT SERVICE

Hapeville Development Authority Revenue Bonds, Series 2004A

Period Ending	Principal	Coupon	Interest	Debt Service
06/30/2020			39,000	39,000
06/30/2021	620,000	4.800%	63,120	683,120
06/30/2022	650,000	4.800%	32,640	682,640
06/30/2023	110,000	4.800%	14,400	124,400
06/30/2024	120,000	4.800%	8,880	128,880
06/30/2025	125,000	4.800%	3,000	128,000
	1,625,000		161,040	1,786,040

BOND DEBT SERVICE

Hapeville Development Authority Revenue Bonds, Series 2004A

Annual Debi	Debt				Period
Service	Service	Interest	Coupon	Principal	Ending
	39,000	39,000			02/01/2020
39,000	•	·			06/30/2020
•	659,000	39,000	4.800%	620,000	08/01/2020
	24,120	24,120			02/01/2021
683,120					06/30/2021
•	674,120	24,120	4.800%	650,000	08/01/2021
	8,520	8,520		•	02/01/2022
682,640	·	,			06/30/2022
•	118,520	8,520	4.800%	110,000	08/01/2022
	5,880	5,880		,	02/01/2023
124,400	,	,			06/30/2023
,	125,880	5,880	4.800%	120,000	08/01/2023
	3,000	3,000		•	02/01/2024
128,880	•	,			06/30/2024
-	128,000	3,000	4.800%	125,000	08/01/2024
128,000				-	06/30/2025
1,786,040	1,786,040	161,040		1,625,000	

BOND DEBT SERVICE

Hapeville Development Authority Revenue Bonds, Series 2004B

Period Ending	Principal	Coupon	Interest	Debt Service
06/30/2020			39,129.75	39,129.75
06/30/2021	305,000	4.590%	71,259.75	376,259.75
06/30/2022	320,000	4.590%	56,916.00	376,916.00
06/30/2023	340,000	4.590%	41,769.00	381,769.00
06/30/2024	360,000	4.590%	25,704.00	385,704.00
06/30/2025	380,000	4.590%	8,721.00	388,721.00
	1,705,000		243,499.50	1,948,499.50

Hapeville Development Authority Revenue Bonds, Series 2004B

Annual Debt Service	Debt Service	Interest	Coupon	Principal	Period Ending
	39,129.75	39,129.75			02/01/2020
39,129.75					06/30/2020
	344,129.75	39,129.75	4.590%	305,000	08/01/2020
	32,130.00	32,130.00		•	02/01/2021
376,259.75		•			06/30/2021
	352,130.00	32,130.00	4.590%	320,000	08/01/2021
	24,786.00	24,786.00			02/01/2022
376,916.00					06/30/2022
	364,786.00	24,786.00	4.590%	340,000	08/01/2022
	16,983.00	16,983.00		•	02/01/2023
381,769.00					06/30/2023
	376,983.00	16,983.00	4.590%	360,000	08/01/2023
	8,721.00	8,721.00		•	02/01/2024
385,704.00		•			06/30/2024
	388,721.00	8,721.00	4.590%	380,000	08/01/2024
388,721.00					06/30/2025
1,948,499.50	1,948,499.50	243,499.50		1,705,000	

Hapeville Development Authority Revenue Bond, Series 2007

Debt Servic	Interest	Coupon	Principal	Period Ending
51,085.2	51,085.27			06/30/2008
50,943.7	50,943.76			06/30/2009
50,943.7	50,943.76			06/30/2010
50,943.7	50,943.76			06/30/2011
50,943.7	50,943.76			06/30/2012
50,943.7	50,943.76			06/30/2013
50,943.7	50,943.76			06/30/2014
50,943.7	50,943.76			06/30/2015
50,943.70	50,943.76			06/30/2016
50,943.7	50,943.76			06/30/2017
50,943.70	50,943.76			06/30/2018
50,943.70	50,943.76			06/30/2019
175,943.70	50,943.76	4.250%	125,000	06/30/2020
180,631.20	45,631.26	4.250%	135,000	06/30/2021
179,893.70	39,893.76	4.250%	140,000	06/30/2022
178,943.70	33,943.76	4.250%	145,000	06/30/2023
177,781.20	27,781.26	4.375%	150,000	06/30/2024
176,218.70	21,218.76	4.375%	155,000	06/30/2025
174,437.50	14,437.50	4.375%	160,000	06/30/2026
177,437.50	7,437.50	4.375%	170,000	06/30/2027
2,032,754.19	852,754.19		1,180,000	

Hapeville Development Authority Revenue Bond, Series 2007

Period		_	_		Annual
Ending	Principal	Coupon	Interest	Debt Service	Debt Service
08/01/2007			25,613.39	25,613.39	
02/01/2008			25,471.88	25,471.88	
06/30/2008			23,171.00	25,171.00	51,085.27
08/01/2008			25,471.88	25,471.88	01,000.21
02/01/2009			25,471.88	25,471.88	
06/30/2009			20,772.00	,.,.	50,943.76
08/01/2009			25,471.88	25,471.88	,-
02/01/2010			25,471.88	25,471.88	
06/30/2010			,	•	50,943.76
08/01/2010			25,471.88	25,471.88	,
02/01/2011			25,471.88	25,471.88	
06/30/2011			ŕ		50,943.76
08/01/2011			25,471.88	25,471.88	
02/01/2012			25,471.88	25,471.88	
06/30/2012			-		50,943.76
08/01/2012			25,471.88	25,471.88	
02/01/2013			25,471.88	25,471.88	
06/30/2013					50,943.76
08/01/2013			25,471.88	25,471.88	
02/01/2014			25,471.88	25,471.88	
06/30/2014					50,943.76
08/01/2014			25,471.88	25,471.88	
02/01/2015			25,471.88	25,471.88	
06/30/2015					50,943.76
08/01/2015			25,471.88	25,471.88	
02/01/2016			25,471.88	25,471.88	
06/30/2016					50,943.76
08/01/2016			25,471.88	25,471.88	
02/01/2017			25,471.88	25,471.88	
06/30/2017					50,943.76
08/01/2017			25,471.88	25,471.88	
02/01/2018			25,471.88	25,471.88	
06/30/2018					50,943.76
08/01/2018			25,471.88	25,471.88	
02/01/2019			25,471.88	25,471.88	
06/30/2019				25 454 00	50,943.76
08/01/2019			25,471.88	25,471.88	
02/01/2020	125,000	4.250%	25,471.88	150,471.88	155.040.56
06/30/2020			22.015.62	22.015.62	175,943.76
08/01/2020	10 = 000	4.0500/	22,815.63	22,815.63	
02/01/2021	135,000	4.250%	22,815.63	157,815.63	100 (21 20
06/30/2021			10.047.00	10.046.00	180,631.26
08/01/2021	140.000	4.2500/	19,946.88	19,946.88	
02/01/2022	140,000	4.250%	19,946.88	159,946.88	170 902 76
06/30/2022			16,971.88	16,971.88	179,893.76
08/01/2022	145,000	4.250%	16,971.88	161,971.88	
02/01/2023	143,000	4.23070	10,7/1.00	101,7/1.00	178,943.76
06/30/2023 08/01/2023			13,890.63	13,890.63	170,545.70
02/01/2024	150,000	4.375%	13,890.63	163,890.63	
06/30/2024	150,000	T.J /J /0	13,070.03	103,070.03	177,781.26
08/01/2024			10,609.38	10,609.38	177,701.20
02/01/2025	155,000	4.375%	10,609.38	165,609.38	
06/30/2025	155,000	T.J / J / O	10,009.50	100,007.00	176,218.76
08/01/2025			7,218.75	7,218.75	1.0,210.70
00/01/2023			.,=10.72	.,	

Hapeville Development Authority Revenue Bond, Series 2007

Annual Debt Service	Debt Service	Interest	Coupon	Principal	Period Ending
	167,218.75	7,218.75	4.375%	160,000	02/01/2026
174,437.50	,	,		,	06/30/2026
,	3,718.75	3,718.75			08/01/2026
	173,718.75	3,718.75	4.375%	170,000	02/01/2027
177,437.50				,	06/30/2027
2,032,754.19	2,032,754.19	852,754.19		1,180,000	

HAPEVILLE DEVELOPMENT AUTHORITY, GEORGIA REVENUE REFUNDING BONDS, SERIES 2019A (TAX-EXEMPT) AND 2019B (TAXABLE)

Proposed Term Sheet

Issuer:

Hapeville Development Authority, Georgia (the "Issuer")

Issue:

Revenue Refunding Bond, Series 2019A (Tax-Exempt) and

Revenue Refunding Bond, Series 2019B (Taxable), collectively the "2019 Bonds"

Amount:

Series 2019A \$2,910,000* Series 2019B \$1,765,000*

Purpose:

The proceeds of the loan will be used to provide funds to refinance (i) the Authority's Series

2004A, Series 2004B (Taxable) and Series 2007 Bonds and (ii) the costs of issuance of the

Bonds.

Bids Due:

Bids must be submitted on September 17, 2019 by 12:00 PM ET.

Rating:

The Series 2019 Bonds will not be rated.

Tax Status:

The interest on the Series 2019A Bond will be exempt from federal and state income taxation.

The interest on the Series 2019B Bond will be federally taxable.

Bank Qualification:

The Series 2019A Bond will be designated as bank qualified.

Average Life:

Series 2019A Bond: 2.730 years Series 2019B Bond: 2.860 years

Interest Rate:

Series 2019A: TBD Series 2019B: TBD

Interest Payments:

Semiannually on February 1 and August 1, beginning February 1, 2020

Principal Payments:

Series 2019A: Semiannually on February 1 and August 1, beginning February 1, 2020

Series 2019B: Annually on August 1, beginning August 1, 2020

Call Feature:

Callable after 5 years* of issuance.

Investment Letter:

An Investment Letter will specify that the Purchaser acknowledges that (a) no official statement

is being prepared and, (b) it has undertaken an independent review of the credit and been

provided with all information necessary to purchase the bond.

Estimated Closing Date:

October 2019

Source of Security:

The Series 2019 Bonds are secured by an Intergovernmental Contract ("Contract") between the Authority and the City of Hapeville (the "City") whereby the City will agree in the Contract to levy an annual ad valorem tax on all taxable property located within corporate limits of the City, at such rates, without limitation as to rate or amount, as may be necessary to produce in each

year revenues that are sufficient to fulfill the City's obligation under the Contract.

HAPEVILLE DEVELOPMENT AUTHORITY, GEORGIA REVENUE REFUNDING BONDS, SERIES 2019A (TAX-EXEMPT) AND 2019B (TAXABLE)

Bond Counsel:

Nelson Mullins Riley & Scarborough, Atlanta, GA, Earle Taylor, 404.322.6130

Financial Advisor:

Piper Jaffray & Co., Atlanta, GA, Ed Wall, 404.846.9571

Amortization Schedule:

Proposed Amortization Schedule

Series 2019A (Tax-Exempt)

February 1	Principal*	August 1	Principal*
2020	\$ 160,000	2020	400,000
2021	400,000	2021	410,000
2022	405,000	2022	130,000
2023	130,000	2023	135,000
2024	140,000	2024	140,000
2025	140,000	2025	80,000
2026	75,000	2026	80,000
2027	80,000		

Series 2019B (Taxable)

August 1	Principal*
2020	\$ 330,000
2021	340,000
2022	355,000
2023	365,000
2024	375,000

Hapeville, Georgia

Financial Statements:

2019/20 Budget: http://hapeville.org/DocumentCenter/View/3540
2018: http://hapeville.org/DocumentCenter/View/3486
2017: http://hapeville.org/DocumentCenter/View/3299
2016: http://hapeville.org/DocumentCenter/View/3300

Attachments:

Preliminary Number Runs

POTENTIAL BOND PURCHASER

DISTRIBUTION LIST

Wells Fargo Bank

Wells Fargo Bank, N.A. 360 Interstate North Parkway, 5th Floor Atlanta, GA 30339-2204

Michelle Knowles
Senior Vice President
Southeast Relationship Team Leader
Government Banking
(678) 589-4318 (office)
(770) 656-9107 (cell)
(678) 589-4315 (fax)
michelle.knowles@wellsfargo.com

Banc of America Merrill Lynch

2170 Satellite Blvd., Suite 250 Duluth, Georgia 30097

Mike Romano (770) 510-4046 (office) (404) 260-9681 (fax) mike.romano@baml.com

J.P. Morgan

3475 Piedmont Rd, NE 18th Floor Atlanta, Georgia 30305

Dan Lally (404) 926-2726 dan.lally@chase.com

Alison Hastings (404) 926-2627 alison.a.hastings@jpmorgan.com

SunTrust

STI Institutional & Government, Inc. Mail Code GA-ATL-0030 1155 Peachtree Street NE, 9th Floor Atlanta, Georgia 30309

Charlene Craig (404) 230-1914 (office) (404) 783-9018 (cell) Charlene.H.Craig@SunTrust.com>

U.S. Bank, NA

425 Walnut Street, 11th Floor Cincinnati, Ohio 45202

Cameron M. Parker Vice President, Public Sector Banking (513) 449-7186 (office) Cell: 513-290-6680 Fax: 513-632-4362 cameron.parker@usbank.com

PNC Financial Services Group

1075 Peachtree St. NE Ste 1800 Atlanta, Georgia 30309.

Charles DiGiacomo, Vice President Public Finance (404) 495-6007 charles.digiacomoii@pnc.com

Fadzai Mugobogobo Assistant Vice President – Public Finance PNC Certified Women's Business Advocate

The PNC Financial Services Group 1075 Peachtree Street NE, Ste. 1800 Atlanta, GA 30309 404-877-5884 (O) 317-590-4920 (M) Fadzai.mugobogobo@pnc.com

BB&T Corporation

Mary Parish Coley (704) 954-1706 5130 Parkway Plaza Charlotte, NC 28202 mcoley@bbandt.com

Fabian Wilson, Commercial Banking Relationship Mgr.
Assistant Vice President – Commercial Banking
271 17th Street NW
Suite 900
Atlanta, GA 30363
(850) 322-5421 (cell)
(404) 260-4487 (office)
FWilson@BBandT.com

POTENTIAL BOND PURCHASER

DISTRIBUTION LIST

Iberia Bank

Fred Andrew Vice President, Branch Manager 2970 Peachtree Road, NW, Suite 100 Atlanta, Georgia 30305 (404) 240-5001 Direct (404) 240-5000 Main fred.andrew@iberiabank.com

BBVA Compass Bank

Two Alliance Center 3560 Lenox Rd. Suite 3050 Atlanta, Georgia 30326

Zennie Lynch (404) 504-6155 Zennie.lynch@bbva.com

Citizens Trust Bank

230 Peachtree Street, NW, Suite 2700 Atlanta, Georgia 30303

Frederick L. Daniels, Jr. EVP/Chief Credit Officer (404) 575-8282 fred.daniels@ctbatl.com

Regions Bank

Jeremy Fisher
Senior VP, Government and Institutional Banking
(828) 729-3105
jeremy.fisher@regions.com

Synovus Bank

David Abee
Senior VP, Government and Institutional Banking
(770) 751-4768
davidabee@synovus.com



Piper Jaffray & Co. Since 1895. Member SIPC and NYSE

Memo

To: Randy Brewer & Tim Young, City of Hapeville

From: Ed Wall & Whit Moloney Date: 17 September 2019

Re: Hapeville Development Authority Refunding Review

The Hapeville Development Authority (the "Authority") received bids from 3 lenders on the proposed refunding of the Series 2004A, 2004B and Series 2007 Bonds. The results are below:

<u>Bidders</u>	<u>2019A</u>	<u>2019B</u>	Call Provisions
PNC Financial Services Group	2.22%	2.69%	Yield Maintenance Provisions
BB&T Corporation	2.18%	2.66%	Callable at Any Time
Iberia Bank	2.27%	2.80%	None Described

BB&T was the low bidder for both issues. If BB&T is selected, if the Bonds were to close on October 15th, the Authority would realize total interest savings, net of cost of issuance, of \$125,725.83 for a present value savings of \$124,747.51 over the life of the issue. The refunding is structured as a cash defeasance of the refunded bonds and does not take into consideration interest earnings in the escrow for 30 days.

The 2019A Bonds would be lowering the interest rate from an average of 4.52% to 2.18%. The 2019B Bonds would be lowering and fixing the interest rate from a 2019 average of 4.811% to 2.66%.

On August 15th, Piper shared with City of Hapeville these refunding opportunities. In the month since, MMD, the benchmark index for tax-exempt rates, has increased on average 32.5 basis points from 2020 - 2027. US Treasuries, the benchmark indecies for taxable rates, have increased on average 23.5 basis points.

Attached you find the associated number runs.

Please let us know if you have questions.

Regards,

Ed Wall

Managing Director

Whit Moloney

Senior Vice President

Fax: (404) 745-8098

SOURCES AND USES OF FUNDS

Hapeville Development Authority Revenue Refunding Bonds, Series 2019A (Tax-Exempt) and 2019B (Taxable)
BB&T Bid
Refunding of the Series 2004A, 2004B and 2007 Bonds
Callable at Anytime

Interest rate good until November 5, 2019

Sources:	
Bond Proceeds:	
Par Amount	4,695,000.00
	4,695,000.00
Uses:	
Refunding Escrow Deposits:	
Cash Deposit	4,569,283.15
Delivery Date Expenses:	
Cost of Issuance	121,950.00
Other Uses of Funds:	
Additional Proceeds	3,766.85
	4,695,000.00

SUMMARY OF REFUNDING RESULTS

Hapeville Development Authority Revenue Refunding Bonds, Series 2019A (Tax-Exempt) and 2019B (Taxable) BB&T Bid

Refunding of the Series 2004A, 2004B and 2007 Bonds Callable at Anytime Interest rate good until November 5, 2019

Dated Date Delivery Date Arbitrage yield Escrow yield Value of Negative Arbitrage	10/15/2019 10/15/2019 2.180546% 0.000000%
Bond Par Amount	4,695,000.00
True Interest Cost	2.368022%
Net Interest Cost	2.366760%
Average Coupon	2.366760%
Average Life	2.786
Par amount of refunded bonds	4,510,000.00
Average coupon of refunded bonds	4.550054%
Average life of refunded bonds	2.816
PV of prior debt to 10/15/2019 @ 2.180546%	4,839,372.70
Net PV Savings	124,747.51
Percentage savings of refunded bonds	2.766020%
Percentage savings of refunding bonds	2.657029%

SAVINGS

Hapeville Development Authority
Revenue Refunding Bonds, Series 2019A (Tax-Exempt) and 2019B (Taxable)
BB&T Bid
Refunding of the Series 2004A, 2004B and 2007 Bonds
Callable at Anytime

Interest rate good until November 5, 2019

Date	Prior Debt Service	Refunding Debt Service	Savings	Present Value to 10/15/2019 @ 2.1805456%
06/30/2020	228,601.63	197,645.35	30,956.28	30,759.23
06/30/2021	1,240,011.01	1,223,579.50	16,431.51	18,598.33
06/30/2022	1,239,449.76	1,227,174.00	12,275.76	14,331.47
06/30/2023	685,112.76	673,161.00	11,951.76	10,956.08
06/30/2024	692,365.26	677,632.50	14,732.76	13,345.51
06/30/2025	692,939.76	676,608.00	16,331.76	14,518.71
06/30/2026	174,437.50	161,158.50	13,279.00	10,906.68
06/30/2027	177,437.50	167,670.50	9,767.00	7,564.64
	5,130,355.18	5,004,629.35	125,725.83	120,980.66

Savings Summary

PV of savings from cash flow	120,980.66
Plus: Refunding funds on hand	3,766.85
Net PV Savings	124,747.51

SUMMARY OF BONDS REFUNDED

Hapeville Development Authority Revenue Refunding Bonds, Series 2019A (Tax-Exempt) and 2019B (Taxable) BB&T Bid

Refunding of the Series 2004A, 2004B and 2007 Bonds Callable at Anytime Interest rate good until November 5, 2019

1,180,000.00 4,510,000.00

	Maturity	Interest	Par	Call	Call
Bond	Date Rate Amount		Date	Price	
Revenue Bonds, Seri	es 2004A, 04A:				
TERM_24	08/01/2024	4.800%	1,625,000.00	11/14/2019	100.000
Revenue Bonds, Seri	es 2004B, 04B:				
TERM_24	08/01/2024	4.590%	1,705,000.00	11/14/2019	100.000
Revenue Bond, Serie	s 2007, 07:				
TERM_23	02/01/2023	4.250%	545,000.00	11/14/2019	100.000
TERM 27	02/01/2027	4.375%	635,000,00	11/14/2019	100.000

Hapeville Development Authority
Revenue Refunding Bonds, Series 2019A (Tax-Exempt) and 2019B (Taxable)
BB&T Bid
Refunding of the Series 2004A, 2004B and 2007 Bonds
Callable at Anytime

Interest rate good until November 5, 2019

Period	Dain ain al	C	Tude med	D.I.O.
Ending	Principal	Coupon	Interest	Debt Service
06/30/2020	165,000	2.180%	32,645.35	197,645.35
06/30/2021	1,125,000	** %	98,579.50	1,223,579.50
06/30/2022	1,155,000	** %	72,174.00	1,227,174.00
06/30/2023	625,000	** %	48,161.00	673,161.00
06/30/2024	645,000	** %	32,632.50	677,632.50
06/30/2025	660,000	** %	16,608.00	676,608.00
06/30/2026	155,000	2.180%	6,158.50	161,158.50
06/30/2027	165,000	2.180%	2,670.50	167,670.50
	4,695,000		309,629.35	5,004,629.35

Hapeville Development Authority Revenue Refunding Bonds, Series 2019A (Tax-Exempt) BB&T Bid Refunding of the Series 2004A and 2007 Bonds

Callable at Anytime
Interest rate good until November 5, 2019

Annua Debt Service	Debt Service	Interest	Coupon	Principal	Period Ending
183,743.16	183,743.16	18,743.16	2.180%	165,000	06/30/2020
,	425,029.50	30,029.50	2.180%	395,000	12/30/2020
850,753.50	425,724.00	25,724.00	2.180%	400,000	06/30/2021
,	431,364.00	21,364.00	2.180%	410,000	12/30/2021
853,259,00	421,895.00	16,895.00	2.180%	405,000	06/30/2022
,	147,480,50	12,480.50	2.180%	135,000	12/30/2022
293,489,50	146,009.00	11,009.00	2.180%	135,000	06/30/2023
	144,537,50	9,537.50	2.180%	135,000	12/30/2023
292,603.50	148,066.00	8,066.00	2.180%	140,000	06/30/2024
,	146,540,00	6,540.00	2.180%	140,000	12/30/2024
291,554.00	145,014.00	5,014.00	2.180%	140,000	06/30/2025
	78,488.00	3,488.00	2.180%	75,000	12/30/2025
161,158.50	82,670.50	2,670.50	2.180%	80,000	06/30/2026
,	86,798.50	1,798.50	2.180%	85,000	12/30/2026
167,670.50	80,872.00	872.00	2.180%	80,000	06/30/2027
3,094,231.66	3,094,231.66	174,231.66		2,920,000	

Hapeville Development Authority Revenue Refunding Bonds, Series 2019B (Taxable) BB&T Bid Refunding of the Series 2004B Bond Callable at Anytime

Interest rate good until November 5, 2019

Annua Debt Service	Debt Service	Interest	Coupon	Principal	Period Ending
13,902.19	13,902.19	13,902.19			06/30/2020
,	353,607.50	23,607.50	2.660%	330,000	12/30/2020
372,826.00	19,218.50	19,218.50			06/30/2021
,	359,218.50	19,218.50	2.660%	340,000	12/30/2021
373,915.00	14,696.50	14,696.50			06/30/2022
	369,696.50	14,696.50	2.660%	355,000	12/30/2022
379,671.50	9,975.00	9,975.00		•	06/30/2023
_ , , , , , , , , ,	379,975.00	9,975.00	2.660%	370,000	12/30/2023
385,029,00	5,054.00	5,054.00		•	06/30/2024
,	385,054.00	5,054.00	2.660%	380,000	12/30/2024
385,054.00				•	06/30/2025
1,910,397.69	1,910,397.69	135,397.69		1,775,000	

ESCROW COST

Hapeville Development Authority
Revenue Refunding Bonds, Series 2019A (Tax-Exempt) and 2019B (Taxable)
BB&T Bid
Refunding of the Series 2004A, 2004B and 2007 Bonds
Callable at Anytime

Interest rate good until November 5, 2019

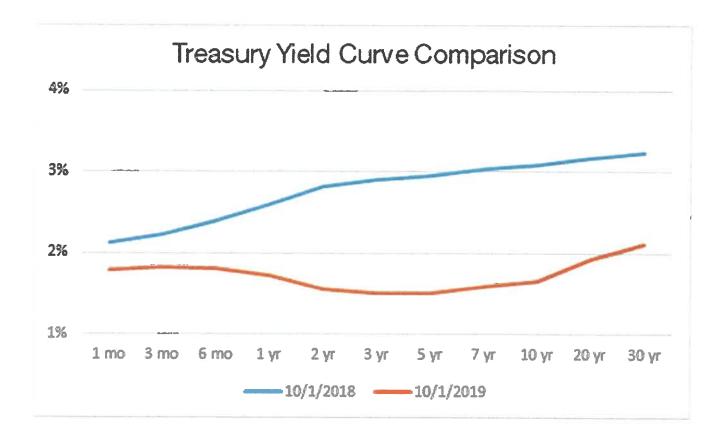
Purchase Date	Cost of Securities	Cash Deposit	Total Escrow Cost
10/15/2019		4,569,283.15	4,569,283.15
	0	4,569,283.15	4,569,283.15

ESCROW SUFFICIENCY

Hapeville Development Authority Revenue Refunding Bonds, Series 2019A (Tax-Exempt) and 2019B (Taxable) BB&T Bid

Refunding of the Series 2004A, 2004B and 2007 Bonds Callable at Anytime Interest rate good until November 5, 2019

Date	Escrow Requirement	Net Escrow Receipts	Excess Receipts	Excess Balance
10/15/2019		4,569,283.15	4,569,283.15	4,569,283.15
11/14/2019	4,569,283.15		(4,569,283.15)	
	4,569,283.15	4,569,283.15	0.00	





5130 Parkway Plaza Boulevard Charlotte, North Carolina 28217 (704) 954-1700 Fax (704) 954-1799

September 17, 2019

Mr. Randy Brewer City of Hapeville, Georgia

Mr. Ed Wall Piper Jaffray & Co.

Via Electronic Mail: RBrewer@hapeville.org; Edmund.J.Wall@pjc.com;

Re: Hapeville Development Authority

Gentlemen:

Branch Banking and Trust Company ("BB&T") is pleased to offer this proposal for the financing requested by Hapeville Development Authority (the "Authority").

(1) Project:

Revenue Refunding Bond, Series 2019A

(2) Amount To Be Financed:

\$2,910,000

(3) Interest Rates, Financing Terms and Corresponding Payments:

Maturity	Rate
February 1, 2027	2.18%
(one term bond)	

Principal payments shall be annually in arrears commencing February 1, 2020. Interest shall be paid semi-annually commencing February 1, 2020. The interest rate stated above is valid for a closing not later than November 5, 2019. Closing of the financing is contingent upon completing documentation acceptable to BB&T and its counsel. The financing documents shall allow prepayment of the principal balance in whole at par at any time, beginning February 1, 2023.

Remuneration for our legal review and underwriting expenses for this financing transaction shall not exceed \$5,000. All applicable costs of counsel for the Authority and any other costs shall be the Authority's responsibility and separately payable by the Authority.

The stated interest rate assumes that the Authority expects to borrow less than \$10,000,000 in calendar year 2019 and that the Authority shall comply with IRS Code Sections 141, 148, 149(e) and Section 265(b)(3) as they may pertain to the Bond, and in accordance with Georgia state laws.

BB&T reserves the right to terminate its interest in this bid or to negotiate a mutually acceptable rate if the financing is not a qualified tax-exempt financing.

Please note that BB&T will disperse bond proceeds via wire or check, allowing a maximum of four (4) disbursements per transaction.

(4) Financing Documents:

It shall be the responsibility of the Authority to retain and compensate counsel to appropriately structure the Bond according to federal and state laws. Additionally, the financing documents shall include provisions that will outline appropriate changes to be implemented in the event that this transaction is determined to be non-bank qualified or taxable in accordance with Georgia state statutes or the Internal Service Revenue Code. Documentation should not include presentation language in order to receive payments (including final maturity).

(5) Security:

The Bond is secured by an intergovernmental contract between the Authority and the City of Hapeville, Georgia, whereby the City will agree in the contract to levy an annual ad valorem tax on all taxable property located within corporate limits of the City at such rates, without limitation as to rate or amount, as may be necessary to produce in each year revenues that are sufficient to fulfill the City's obligation under the contract.

* * * * * *

BB&T appreciates the opportunity to provide this financing proposal and requests to be notified within ten days of this proposal should BB&T be the successful proposer.

BB&T shall have the right to cancel this offer by notifying the Authority of its election to do so (whether or not this offer has previously been accepted by the Authority) if at any time prior to the closing there is a material adverse change in the Authority's financial condition, if we discover adverse circumstances of which we are currently unaware, if we are unable to agree on acceptable documentation with the Authority or if there is a change in law (or proposed change in law) that changes the economic effect of this financing to BB&T. We reserve the right to negotiate and/or terminate our interest in this transaction should we be the successful proposer.

Please call me at (704) 954-1706 with your questions and comments. We look forward to hearing from you.

Sincerely,

Branch Banking and Trust Company

Mary Parrish Coley Senior Vice President

Many Panish Colux



5130 Parkway Plaza Boulevard Charlotte, North Carolina 28217 (704) 954-1700 Fax (704) 954-1799

September 17, 2019

Mr. Randy Brewer City of Hapeville, Georgia

Mr. Ed Wall Piper Jaffray & Co.

Via Electronic Mail: RBrewer@hapeville.org; Edmund.J.Wall@pjc.com;

Re: Hapeville Development Authority

Gentlemen:

Branch Banking and Trust Company ("BB&T") is pleased to offer this proposal for the financing requested by Hapeville Development Authority (the "Authority").

(1) Project:

Revenue Refunding Bond, Taxable Series 2019B

(2) Amount To Be Financed:

\$1,765,000

(3) Interest Rates, Financing Terms and Corresponding Payments:

Maturity	Rate	
August 1, 2024	2.66%	
(one term bond)		

Principal payments shall be annually in arrears commencing August 1, 2020. Interest shall be paid semi-annually commencing February 1, 2020. The interest rate stated above is valid for a closing not later than November 5, 2019. Closing of the financing is contingent upon completing documentation acceptable to BB&T and its counsel. The financing documents shall allow prepayment of the principal balance in whole at par at any time.

Remuneration for our legal review and underwriting expenses for this financing transaction shall not exceed \$5,000. All applicable costs of counsel for the Authority and any other costs shall be the Authority's responsibility and separately payable by the Authority.

The stated interest rate assumes that the Authority shall comply with IRS Code Sections 141, 148, 149(e) and Section 265(b)(3) as they may pertain to the Bond, and in accordance with Georgia state laws.

Please note that BB&T will disperse bond proceeds via wire or check, allowing a maximum of four (4) disbursements per transaction.

(4) Financing Documents:

It shall be the responsibility of the Authority to retain and compensate counsel to appropriately structure the Bond according to federal and state laws. Documentation should not include presentation language in order to receive payments (including final maturity).

(5) Security:

The Bond is secured by an intergovernmental contract between the Authority and the City of Hapeville, Georgia, whereby the City will agree in the contract to levy an annual ad valorem tax on all taxable property located within corporate limits of the City at such rates, without limitation as to rate or amount, as may be necessary to produce in each year revenues that are sufficient to fulfill the City's obligation under the contract.

* * * * * *

BB&T appreciates the opportunity to provide this financing proposal and requests to be notified within ten days of this proposal should BB&T be the successful proposer.

BB&T shall have the right to cancel this offer by notifying the Authority of its election to do so (whether or not this offer has previously been accepted by the Authority) if at any time prior to the closing there is a material adverse change in the Authority's financial condition, if we discover adverse circumstances of which we are currently unaware, if we are unable to agree on acceptable documentation with the Authority or if there is a change in law (or proposed change in law) that changes the economic effect of this financing to BB&T. We reserve the right to negotiate and/or terminate our interest in this transaction should we be the successful proposer.

Please call me at (704) 954-1706 with your questions and comments. We look forward to hearing from you.

Sincerely,

Branch Banking and Trust Company

Mary Parrish Coley Senior Vice President

Many Panish Colux

AUTHORIZING RESOLUTION

WHEREAS, in furtherance of the purposes for which it was created, the Hapeville Development Authority (the "Authority") proposes to issue \$4,705,000 in original aggregate principal amount of its Refunding Revenue Bond, Series 2019A and its Refunding Revenue Bond, Series 2019B (each a "Bond" and collectively the "Bonds"), in order (1) to refund all of the Authority's outstanding Tax-Exempt Revenue Bond, Series 2004A, Taxable Revenue Bond, Series 2004B, and Tax-Exempt Revenue Bonds, Series 2007 (collectively the "Prior Bonds"), in order to refinance (a) the costs of acquiring, constructing, and installing a garbage truck, streetscape improvements, and water and sewer system improvements located in Hapeville, Georgia (collectively the "Series 2019A Projects") and (b) the costs of acquiring land located in Hapeville, Georgia for commercial and residential uses (collectively the "Series 2019B Projects") and (2) to finance a portion of the costs of issuing the Bonds; and

WHEREAS, Section 5(f) of an amendment to Article IX, Section IV, Paragraph II of the Constitution of the State of Georgia of 1976 (1982 Ga. Laws 2524 to 2540, inclusive), now specifically continued as part of the Constitution of the State of Georgia of 1983 pursuant to Article XI, Section I, Paragraph IV of the Constitution of the State of Georgia of 1983, and an Act of the General Assembly of the State of Georgia (1987 Ga. Laws 4961 to 4962, inclusive) (the "Act"), authorizes the City to enter into contracts and related agreements for the use by the City or the residents thereof of any project, structure, building, or facility or a combination of two or more projects, structures, buildings, or facilities of the Authority for a term not exceeding fifty years; and authorizes the City to levy taxes, without limitation as to rate or amount, and to expend tax monies of the City and any other available funds and to obligate the City to make payment thereof to the Authority upon such terms as may be provided in any contract entered into by and between the Authority and the City, in order to enable the Authority to pay the principal of and interest on any of its bonds as same mature and to create and maintain a reserve for that purpose and also to enable the Authority to pay the cost of maintaining, repairing, and operating the property or facilities so furnished by the Authority; and

WHEREAS, in consideration of the issuance of the Bonds by the Authority to refund the Prior Bonds, in order to refinance the costs of acquiring, constructing, and installing the Series 2019A Projects and the Series 2019B Projects, the City proposes to enter into an Intergovernmental Availability Contract, to be dated the date of its execution and delivery (the "Contract"), with the Authority, under the terms of which the City (1) will agree to make payments to the Authority in amounts sufficient to enable the Authority to pay, among other things, the principal of, premium, if any, and interest on the Bonds when due and (2) will agree to levy an annual ad valorem tax on all taxable property located within the corporate limits of the City, at such rates, without limitation, as may be necessary to produce in each year revenues that are sufficient to fulfill the City's obligations under the Contract; and

WHEREAS, the Authority will sell the Bonds to Branch Banking and Trust Company (the "Bond Buyer") pursuant to a Bond Purchase Agreement, to be dated the date of its execution and delivery, between the Authority and the Bond Buyer; and

WHEREAS, pursuant to the terms of an Assignment and Security Agreement, to be dated the date of its execution and delivery, between the Authority and the Bond Buyer, the Authority will

assign and pledge, and grant a first priority security interest in, its right, title, and interest in the Contract to the Bond Buyer as security for payment of the Bonds; and

WHEREAS, after careful study and investigation, the City desires to enter into the Contract;

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the City of Hapeville as follows:

- 1. The form, terms, and conditions and the execution, delivery, and performance of the Contract, which has been filed with the City, are hereby approved and authorized. The Contract shall be in substantially the form submitted to the Mayor and Council of the City with such changes, corrections, deletions, insertions, variations, additions, or omissions as may be approved by the Mayor or Mayor Pro Tempore of the City, whose approval thereof shall be conclusively evidenced by the execution of the Contract.
- 2. The Mayor or Mayor Pro Tempore of the City is hereby authorized and directed to execute on behalf of the City the Contract, and the City Clerk or Deputy City Clerk of the City is hereby authorized and directed to affix thereto and attest the seal of the City, upon proper execution and delivery by the Authority, provided, that in no event shall any such attestation or affixation of the seal of the City be required as a prerequisite to the effectiveness thereof, and the Mayor or Mayor Pro Tempore and City Clerk or Deputy City Clerk of the City are authorized and directed to deliver the Contract on behalf of the City to the Authority, and to execute and deliver all such other instruments (including, without limitation, deeds and bills of sale conveying to the Authority title to any of the Series 2019A Projects presently owned by the City), contracts, documents, affidavits, or certificates and to do and perform all such things and acts as each shall deem necessary or appropriate in furtherance of the issuance of the Bonds and the carrying out of the transactions authorized by this Resolution or contemplated by the instruments and documents referred to in this Resolution.
- 3. The issuance of the Bonds to refund the Prior Bonds and to finance related costs is hereby approved, as required by Section 6 of the Act.
- 4. This Resolution and the Contract, as approved by this Resolution, which is hereby incorporated in this Resolution by this reference thereto, shall be placed on file at the office of the City and made available for public inspection by any interested party immediately following the passage and approval of this Resolution.

PASSED, ADOPTED, SIGNED, APPROVED, and EFFECTIVE this 15th day of October 2019. CITY OF HAPEVILLE (SEAL) By: Mayor Attest: City Clerk APPROVED AS TO FORM:

City Attorney

CITY CLERK'S CERTIFICATE

I, CRYSTAL GRIGGS EPPS, the duly ap	pointed, qualified, and acting City Clerk of the
City of Hapeville (the "City"), DO HEREBY CE	RTIFY that the foregoing pages of typewritten
matter constitute a true and correct copy of a resolu-	tion adopted on October 15, 2019 by the Mayor
and Council of the City in a meeting duly called and	* *
and with the procedures of the City, by a vote of	•
to the public and at which a quorum was present an	
foregoing resolution appears of public record in the	Minute Book of the City, which is in my custody
and control.	
GIVEN under my hand and the seal of the	City, this 15th day of October 2019.
(CEAL)	
(SEAL)	City Clerk, City of Hapeville
•	They Clerk, City of Hapeville

					Change Order No. 2	
Date of Issu	nance: 10/2/19]	Effective Date	e: 9/13/19	
Owner:	City of Hapeville, Georg	ia	(Owner's Cont	ract No.:	
Contractor:	The Corbett Group, LLC	1	(Contractor's F	Project No.:	
Engineer:	Keck & Wood		i	Engineer's Pro	oject No.: 180130	
Project:	Annual contract for cons	truction and mainten	ance of (Contract Nam	ne:	
	water lines, gravity sewe	rs, and force mains				
The Contrac	et is modified as follows u	pon execution of this	s Change Or	der:		
Description:						
	newal for a year.					
Attachments	s: ntract agreement.					
Liction of con	titaet agreement.	-				
C	CHANGE IN CONTRAC	T PRICE		CHANGE I	IN CONTRACT TIMES	
Original Co	ntract Price:		Original C	Contract Time	95'	
			_	al Completion		
\$					nt: 365 Days	
		1			days or dates	
	Decrease] from previously	approved Change				
Orders No.	to No:					
\$						
Ψ						
Contract Price	ce prior to this Change Or	der:	Contract T	imes prior to	this Change Order:	
				l Completion		
\$	/		Ready for	Final Paymer		
					days or dates	
[Increase] [L	Decrease] of this Change C	Order:		f this Change		
\$			1	l Completion:		
•			Ready for	Final Paymer	days or dates	
Contract Price	ce incorporating this Chan	ge Order:	Contract T	imes with all	approved Change Orders:	
	in or porasing time chan	Bo Graen		I Completion:		
\$			1	Final Paymen		
					days or dates	
RE	COMMENDED:	ACCE	PTED:		- ACCEPTED:	
By:	landfulto	By:		By:	Siena	ر
a di	Engineer (if required)	•	thorized Sign	,	Contractor (Authorized Signatu	,
11,00	OC., VP	Title		Title	U I TOTAL	er
Date: 10/	2/19	Date		Date	10/2/19	



September 27, 2019

Keck & Wood, Inc Attn: Adam Shelton, PE 3090 Premiere Pkwy, Ste 200 Duluth, GA 30097

Ref:

Annual Contract for Construction and Maintenance of Water Lines, Gravity Sewers, and Force

Mains

Contract Renewal

Mr. Shelton,

The Corbett Group, LLC will like to express our interest in renewing the above referenced project at our current contract prices. We look forward to continuing to work with you on future projects.

Sincerely,

Michael Corbett

President

CC: File

			Change Order No.	L
Date of Issu	ance: 10/2/19		Effective Date: 9/13/19	
Owner:	City of Hapeville, Georgia		Owner's Contract No.:	
Contractor:	The Corbett Group, LLC		Contractor's Project No.:	
Engineer:	Keck & Wood		Engineer's Project No.: 180177	
Project:	Annual Contract for Construction and Mainte Storm Sewers	nance of	Contract Name:	
The Contrac	t is modified as follows upon execution of this	Change (Order:	_
Description:	ewal for a year.	J		
Attachments Letter of con	: tract agreement.		181	
C	HANGE IN CONTRACT PRICE		CHANGE IN CONTRACT TIMES	_
Original Con	stract Price:	Original	Contract Times:	
			tial Completion: 365 Days	
\$		Ready for	or Final Payment: 365 Days	_
			days or dates	
[Increase] [D Orders No	pecrease] from previously approved Change to No:			
\$				
Contract Pric	e prior to this Change Order:	Contract	Times prior to this Change Order:	-
•		Substant	ial Completion: 365 Days	
p		Ready for	r Final Payment: 365 Days	_
[Increase] [D	egrease] of this Change Order:	Ť	days or dates	_
Increased [D	corease] of this Change Order:		of this Change Order:	
ή /		Bubsiant	ial Completion: 365 Days	

\$					
Contra	act Price prior to this Change Or	der:		Contract Times p	rior to this Change Order:
				Substantial Comp	
\$					ayment: 365 Days
FY					days or dates
Increa	ase] [Deorease] of this Change C	rder:		Increase of this C	
ф				Substantial Comp	
\$	/			Ready for Final P	ayment: 365 Days
0 ./	/				days or dates
Contra	ct Price incorporating this Chan	ge Order	:	Contract Times w	ith all approved Change Orders:
0				Substantial Comp	
\$				Ready for Final P	ayment: 730 Days
					days or dates
	RECOMMENDED:		ACCE	PTED:	O -ACCEPTED:
By:	Man Sette	_ By:			By: Dena
	Engineer (if required)		Owner (Autl	norized Signature)	Contractor (Authorized Signature)
Title:	ASSOC. UP	Title			Title OPERATIONS MANAGER
Date:	10/2/19	Date			Date 10 2 19
		- 9			102 19



September 27, 2019

Keck & Wood, Inc Attn: Adam Shelton, PE 3090 Premiere Pkwy, Ste 200 Duluth, GA 30097

Ref:

Annual Contract for Construction and Maintenance of Storm Sewers

Contract Renewal

Mr. Shelton,

The Corbett Group, LLC will like to express our interest in renewing the above referenced project at our current contract prices. We look forward to continuing to work with you on future projects.

Sincerely,

Michael Corbett

President

CC: File



3090 Premiere Parkway Suite 200 Duluth, Georgia 30097 Office: (678) 417-4000 Fax: (678) 417-4055 www.keckwood.com

August 2, 2018

Honorable Mayor and Council City of Hapeville 3468 N Fulton Avenue Hapeville, Georgia 30354

Re:

Annual Contracts for Construction and Maintenance of Water Lines, Sanitary Sewers and Storm Sewers Our Reference No. 180130.00

Dear Mayor and Council Members:

We have reviewed the bids received at City Hall, at 2:00 p.m., local time on July 31, 2018 for construction of the referenced project. Two (2) bids were received. The following is a summary of the two (2) bids.

	<u>Bidder</u>	Construction and Maintenance of Water Lines, Gravity Sewers, and Force Mains (Contract No.1)	Construction and Maintenance of Storm Sewers (Contract No.2)
1.	The Corbett Group, LLC 6535 Bankhead Highway Douglasville, GA 30134	\$243,262.50	\$117,384.00
2.	RDJE, Inc. 679 Highway 29 South, Suite A Newnan, GA 30263	\$1,002,939.50	\$539,040.00

A certified tabulation of all bids received is attached. A copy of the tabulation has been mailed to each bidder for their information.

Each bidder submitted a 5% bid bond from a surety company listed on U. S. Treasury Circular 570 (07/01/18). The low bid of \$243,262.50 is within the funds allocated for Contract No. 1. The low bid of \$117,384.00 is within the funds allocated for Contract No. 2.

Keck & Wood, Inc. has worked with The Corbett Group, LLC on projects of similar scope and size and consider them capable of performing the required activities to successfully complete this project.

Keck & Wood, Inc., therefore, recommends contract award to The Corbett Group, LLC in the amount of \$243,262.50 for construction of Contract No.1 and \$117,384.00 for construction of Contract No.2 of the Annual Contracts for Construction and Maintenance of Water Lines, Sanitary Sewers and Storm Sewers.

Merchants National Bonding, Inc. is the surety company for the recommended bidder's bid bond and will likely be the surety company used for the payment and performance bonds on the project. In addition to being listed on the U.S. Treasury Department Circular 570, the surety is shown as being licensed in Georgia, having an Active/Compliance status, and with an underwriting limitation that is greater than the bond amount. Please note that in accordance with Georgia Law (OCGA 36-91-40 (a)(2)), the City must have an "officer of the government entity" to "approve as to form and as to the solvency of the surety" for the proposed surety company named above. We recommend that your legal counsel be contacted to handle or suggest the procedures necessary to comply with this Georgia law. We can provide additional information on this issue if needed.

If there are any questions, please contact our office.

Very truly yours,

KECK & WOOD, INC.

James A. Brenton, P.E. Associate Vice President

Enclosure

BID TABULATION

ANNUAL CONTRACT FOR CONSTRUCTION AND MAINTENANCE OF WATER LINES, GRAVITY SEWERS, AND FORCE MAINS CITY OF HAPEVILLE, GEORGIA

RECEIVED BY: CITY OF HAPEVILLE, GEORGIA

AT HAPEVILLE CITY HALL 2:00 P.M., LOCAL TIME, JULY 31, 2018

		BIDDER NO. 1	R NO. 1	BIDDER NO.	R NO. 2
		The Call		-	
		Tie Corpett	The Corpett Group, LLC	ביים ביים	RDJE, Inc.
		6535 Bankhead Highway	ad Highway	679 Highway 2	679 Highway 29 South, Suite A
		Douglasville, GA 30134	GA 30134	Newnan,	Newnan, GA 30263
ITEM		TIND		LIND	
NO. ITEM DESCRIPTION	QUANTITY UNIT	PRICE	AMOUNT	PRICE	AMOUNT
1 Contract Bonds and Insurance	1 LS	\$7,050.00	\$7,050.00	\$77,000.00	\$77,000.00
2 6" Water Main DIPW-1	5 LF	\$55.00	\$275.00	\$2,406.00	\$12,030.00
3 8" Water Main DIPW-1	5 LF	\$70.00	\$350.00	\$2,452.00	\$12,260.00
4 10" Water Main DIPW-1	5 LF	\$75.00	\$375.00	\$2,500.00	\$12,500.00
5 12" Water Main DIPW-1	5 LF	\$81.00	\$405.00	\$2,510.00	\$12,550.00
6 16" Water Main DIPW-1	5 LF	\$120.00	\$600.00	\$2,667.00	\$13,335.00
7 18" Water Main DIPW-1	5 LF	\$140.00	\$700.00	\$2,680.00	\$13,400.00
8 8" Water Main DIPW-2	5 LF	\$65.00	\$325.00	\$2,475.00	\$12,375.00
	5 LF	\$75.00	\$375.00	\$2,489.00	\$12,445.00
10 12" Water Main DIPW-2	5 LF	\$95.00	\$475.00	\$2,545.00	\$12,725.00
11 2" Water Main PVCPW-1	י ביי	\$35.00	\$175.00	\$2,386.00	\$11,930.00
12 4" Water Main PVCPW-1	5 LF	\$35.00	\$175.00	\$2,388.00	\$11,940.00
13 6" Water Main PVCPW-2		\$40.00	\$200.00	\$2,435.00	\$12,175.00
14 8" Water Main PVCPW-2	2 LF	\$45.00	\$225.00	\$2,441.00	\$12,205.00
	S L	\$55.00	\$275.00	\$2,449.00	\$12,245.00
	5 LF	\$65.00	\$325.00	\$2,499.00	\$12,495.00
	- 2 CF	\$200.00	\$1,000.00	\$2,903.00	\$14,515.00
-		\$250.00	\$1,250.00	\$2,935.00	\$14,675.00
	2 ·	\$400.00	\$2,000.00	\$2,959.00	\$14,795.00
20 16" HDPE-1 Water Main by HDD	2 LF	\$400.00	\$2,000.00	\$3,029.00	\$15,145.00
	上 3 9	\$300.00	\$1,500.00	\$3,071.00	\$15,355.00
	N-	\$8,000.00	\$8,000.00	\$15,831.00	\$15,831.00
	1 EA	\$2,500.00	\$2,500.00	\$4,578.00	\$4,578.00
	1 EA	\$3,500.00	\$3,500.00	\$4,731.00	\$4,731.00
	1 EA	\$4,000.00	\$4,000.00	\$186.00	\$186.00
	1 EA	\$6,000.00	\$6,000.00	\$5,932.00	\$5,932.00
	1 EA	\$8,000.00	\$8,000.00	\$6,085.00	\$6,085.00
	1 EA	\$200.00	\$200.00	\$1,479.00	\$1,479.00
	1 EA	\$900.00	\$900.00	\$2,002.00	\$2,002.00
	1 EA	\$1,200.00	\$1,200.00	\$2,806.00	\$2,806.00
	1 EA	\$1,600.00	\$1,600.00	\$3,468.00	\$3,468.00
	L EA	\$2,200.00	\$2,200.00	\$4,713.00	\$4,713.00
	1 EA	\$7,500.00	\$7,500.00	\$11,175.00	\$11,175.00
	1 EA	\$9,000.00	\$9,000.00	\$15,776.00	\$15,776.00
35 Removal of ex. Fire Hydrants	1 EA	\$250.00	\$250.00	\$1,512.00	\$1,512.00
	EA	\$5,500.00	\$5,500.00	\$4,430.00	\$4,430.00
37 Fire Hydrants	1 EA	\$4,600.00	\$4,600.00	\$5,125.00	\$5,125.00
38 Adjusting existing Fire Hydrants	1 VF	\$250.00	\$250.00	\$1,211.00	\$1,211.00

BID TABULATION

ANNUAL CONTRACT FOR CONSTRUCTION AND MAINTENANCE OF WATER LINES, GRAVITY SEWERS, AND FORCE MAINS CITY OF HAPEVILLE, GEORGIA

RECEIVED BY: CITY OF HAPEVILLE, GEORGIA AT HAPEVILLE CITY HALL

2:00 P.M., LOCAL TIME, JULY 31, 2018

			וברים ביינים		i	
			RIDUE	BIDDER NO. 1	מוטטבו	BIDDER NO. 2
			The Corbett	The Corbett Group, LLC	RDJE, Inc.	, Inc.
			6535 Bankh	6535 Bankhead Highway	679 Highway 29 South, Suite A	South, Suite A
			Douglasville	Douglasville, GA 30134	Newnan, GA 30263	3A 30263
TEM			E		TINI	
	ITEM DESCRIPTION	QUANTITY UNIT	PRICE	AMOUNT	PRICE	AMOUNT
39 Service tubing system, 3/4" -1.25"	'-1.25"	5 LF	\$20.00	\$100.00	\$54.00	\$270.00
40 Service tubing system, 1.50" -2"	"-2"	5 LF	\$20.00	\$100.00	\$75.00	\$375.00
41 Copper service tubing system, 3/4"-1.25"	em, 3/4"-1.25"	5 LF	\$35.00	\$175.00	\$138.00	\$690.00
42 Copper service tubing system, 1.50" -2"	em, 1.50" -2"	5 LF	\$35.00	\$175.00	\$189.00	\$945.00
43 Service tubing under roadway	ay	5 LF	\$35.00	\$175.00	\$175.00	\$875.00
	3/4" - 2.0"	1 EA	\$1,500.00	\$1,500.00	\$4,578.00	\$4,578.00
45 Service connection in 6" thru 10" water mains	ru 10" water mains	1 EA	\$1,000.00	\$1,000.00	\$1,125.00	\$1,125.00
	ıru 18" water mains	1 EA	\$2,500.00	\$2,500.00	\$1,394.00	\$1,394.00
47 Service saddle repair or rep	Service saddle repair or replacement in 6" thru 10" water mains	1 EA	\$1,000.00	\$1,000.00	\$5,932.00	\$5,932.00
48 Service saddle repair or rep	Service saddle repair or replacement in 12" thru 18" water mains	1 EA	\$1,200.00	\$1,200.00	\$6,466.00	\$6,466.00
	up to 1"	1 EA	\$500.00	\$500.00	\$1,444.00	\$1,444.00
-	> 1" to 2"	1 EA	\$1,000.00	\$1,000.00	\$1,444.00	\$1,444.00
-	' thru 2"	1 EA	\$3,500.00	\$3,500.00	\$1,444.00	\$1,444.00
_	3/4" thru 2"	1 EA	\$1,500.00	\$1,500.00	\$1,444.00	\$1,444.00
_	Fapping sleeve and Valve connection (TSVW) 6" x 6"	1 EA	\$3,600.00	\$3,600.00	\$5,528.00	\$5,528.00
	rapping sleeve and Valve connection (TSVW) $8" \times 6"$ to $8"$ (side outlet)	1 EA	\$2,700.00	\$2,700.00	\$8,077.00	\$8,077.00
•	Fapping sleeve and Valve connection (TSVW) 10" $x \in$ " to 10" (side outlet)	1 EA	\$3,000.00	\$3,000.00	\$13,906.00	\$13,906.00
•	Tapping sleeve and Valve connection (TSVW) 12" x 6" to 12" (side outlet)	L EA	\$7,500.00	\$7,500.00	\$20,318.00	\$20,318.00
	Connection to existing water main less than 6" (Wet cut in)	1 EA	\$1,200.00	\$1,200.00	\$7,543.00	\$7,543.00
_	r main 6" - 8" (Wet cut in)	- EA	\$4,000.00	\$4,000.00	\$7,696.00	\$7,696.00
_	Connection to existing water main 10" - 16" (Wet cut in)	1 EA	\$6,500.00	\$6,500.00	\$7,424.00	\$7,424.00
	nel Liner	5 F	\$40.00	\$200.00	\$1,073.00	\$5,365.00
	ıel Liner	2 LF	\$50.00	\$250.00	\$1,136.00	\$5,680.00
	iel Liner	2 F	\$70.00	\$350.00	\$1,247.00	\$6,235.00
	iel Liner	- E	\$80.00	\$400.00	\$1,344.00	\$6,720.00
	ıan 6"	T EA	\$12,000.00	\$12,000.00	\$5,763.00	\$5,763.00
		- EA	\$15,000.00	\$15,000.00	\$7,120.00	\$7,120.00
	2"	1 EA	\$18,000.00	\$18,000.00	\$14,917.00	\$14,917.00
•	s to be Removed	- C	\$15.00	\$75.00	\$111.00	\$555.00
		1 EA	\$1,800.00	\$1,800.00	\$1,651.00	\$1,651.00
	-8-	1 EA	\$2,000.00	\$2,000.00	\$1,796.00	\$1,796.00
	'-12"	1 EA	\$3,200.00	\$3,200.00	\$1,978.00	\$1,978.00
		1 EA	\$4,000.00	\$4,000.00	\$2,195.00	\$2,195.00
	Concrete Blocking – Thrust Restraint on Existing Components	- - - - - - - -	\$200.00	\$200.00	\$421.00	\$421.00
	pth	5 LF	\$105.00	\$525.00	\$1,793.00	\$8,965.00
74 8" DIPS Sewer, >10' to 14' Depth	Depth	5 LF	\$115.00	\$575.00	\$2,038.00	\$10,190.00
75 8" DIPS Sewer, >14' to 18' Depth	Depth	5 LF	\$125.00	\$625.00	\$2,240.00	\$11,200.00
76 8" DIPS Sewer, >18' to 22' Depth	Depth	2 LF	\$135.00	\$675.00	\$2,644.00	\$13,220.00

BID TABULATION

ANNUAL CONTRACT FOR CONSTRUCTION AND MAINTENANCE OF WATER LINES, GRAVITY SEWERS, AND FORCE MAINS CITY OF HAPEVILLE, GEORGIA

RECEIVED BY: CITY OF HAPEVILLE, GEORGIA

AT HAPEVILLE CITY HALL

2:00 P.M., LOCAL TIME, JULY 31, 2018

		* CN GRACIE	- T	ממממ	ני כא משמחום
		The Corbett Group, LLC	Sroup, LLC	RDJE. Inc.	. Inc.
		6535 Bankhead Highway	ad Highway	679 Highway 29	679 Highway 29 South, Suite A
		Douglasville, GA	GA 30134	Newnan, GA 30263	3A 30263
ITEM		LIND		LINO	
NO. ITEM DESCRIPTION	QUANTITY UNIT	PRICE	AMOUNT	PRICE	AMOUNT
77 10" DIPS Sewer, 0' to 10' Depth		\$110.00	\$550.00	\$1,978.00	\$9,890.00
78 10" DIPS Sewer, >10' to 14' Depth		\$120.00	\$600.00	\$2,045.00	\$10,225.00
79 10" DIPS Sewer, >14' to 18' Depth		\$130.00	\$650.00	\$2,247.00	\$11,235.00
80 10" DIPS Sewer, >18' to 22' Depth		\$140.00	\$700.00	\$2,652.00	\$13,260.00
81 12" DIPS Sewer, 0' to 10' Depth	_	\$120.00	\$600.00	\$1,987.00	\$9,935.00
DIPS		\$130.00	\$650.00	\$2,055.00	\$10,275.00
83 12" DIPS Sewer, >14' to 18' Depth		\$140.00	\$700.00	\$2,257.00	\$11,285.00
84 12" DIPS Sewer, >18' to 22' Depth	9 LF	\$150.00	\$750.00	\$2,661.00	\$13,305.00
85 18" DIPS Sewer, 0' to 10' Depth	5 LF	\$155.00	\$775.00	\$2,028.00	\$10,140.00
86 18" DIPS Sewer, >10' to 14' Depth	5 LF	\$165.00	\$825.00	\$2,182.00	\$10,910.00
<u></u>		\$175.00	\$875.00	\$2,317.00	\$11,585.00
		\$200.00	\$1,000.00	\$2,721.00	\$13,605.00
	9 LF	\$200.00	\$1,000.00	\$2,096.00	\$10,480.00
		\$215.00	\$1,075.00	\$2,163.00	\$10,815.00
		\$230.00	\$1,150.00	\$2,365.00	\$11,825.00
		\$250.00	\$1,250.00	\$2,769.00	\$13,845.00
	_	\$65.00	\$325.00	\$1,972.00	\$9,860.00
	2 1	\$75.00	\$375.00	\$2,040.00	\$10,200.00
	- 2 	\$75.00	\$375.00	\$1,980.00	\$9,900.00
_	- 2 LF	\$85.00	\$425.00	\$2,045.00	\$10,225.00
		\$85.00	\$425.00	\$1,982.00	\$9,910.00
		\$95.00	\$475.00	\$2,050.00	\$10,250.00
•	5 F	\$35.00	\$175.00	\$684.00	\$3,420.00
	5 LF	\$45.00	\$225.00	\$694.00	\$3,470.00
	5 LF	\$45.00	\$225.00	\$696.00	\$3,480.00
_	5 LF	\$50.00	\$250.00	\$711.00	\$3,555.00
	5 LF	\$100.00	\$500.00	\$704.00	\$3,520.00
	2 LF	\$150.00	\$750.00	\$751.00	\$3,755.00
	1 EA	\$500.00	\$500.00	\$1,760.00	\$1,760.00
	1 EA	\$1,000.00	\$1,000.00	\$2,086.00	\$2,086.00
107 4" DIPS Sewer Service Line	5 LF	\$38.00	\$190.00	\$192.00	\$960.00
	5 LF	\$48.00	\$240.00	\$199.00	\$995.00
109 DIPS Sewer Service Cleanout	1 EA	\$450.00	\$450.00	\$1,950.00	\$1,950.00
110 8" to 10" Sewer Service Wye or Tee	1 EA	\$250.00	\$250.00	\$1,112.00	\$1,112.00
		\$350.00	\$350.00	\$1,112.00	\$1,112.00
112 CCTV Inspection and Video Record 4" to 12" Dia. Sewer	5 LF	\$2.00	\$10.00	\$4.00	\$20.00
113 CCTV Inspection and Video Record 14" to 24" Dia. Sewer	— H I :	\$2.45	\$12.25	\$5.00	\$25.00
114 Light Sewer Cleaning 4" to 12" Dia. Sewer	5 LF	\$2.45	\$12.25	\$3.00	\$15.00

BID TABULATION

ANNUAL CONTRACT FOR CONSTRUCTION AND MAINTENANCE OF WATER LINES, GRAVITY SEWERS, AND FORCE MAINS CITY OF HAPEVILLE, GEORGIA

RECEIVED BY: CITY OF HAPEVILLE, GEORGIA AT HAPEVILLE CITY HALL

2:00 P.M., LOCAL TIME, JULY 31, 2018

		RIDDE	RIDDER NO 1	C ON GENERAL	NO 2
		The Corbett	The Corbett Group, LLC	RDJE, Inc.	, Inc.
		6535 Bankhead Highway	ad Highway	679 Highway 29 South, Suite A	South, Suite A
		Douglasville, GA 30134	, GA 30134	Newnan, GA 30263	3A 30263
ITEM		TINO		LINO	
NO. ITEM DESCRIPTION	QUANTITY UNIT	PRICE	AMOUNT	PRICE	AMOUNT
	5 F	\$5.25	\$26.25	\$4.00	\$20.00
_	-5 -5 	\$4.25	\$21.25	\$7.00	\$35.00
	5 LF	\$15.25	\$76.25	\$8.00	\$40.00
118 Root Cutting Sewer Cleaning 4" to 12" Dia. Sewer	5 LF	\$3.00	\$15.00	\$9.00	\$45.00
119 Root Cutting Sewer Cleaning 14" to 24" Dia. Sewer	5 LF	\$18.00	\$90.00	\$11.00	\$55.00
	1 EA	\$1,800.00	\$1,800.00	\$4,490.00	\$4,490.00
	5 VF	\$100.00	\$500.00	\$280.00	\$1,400.00
	1 EA	\$1,800.00	\$1,800.00	\$4,735.00	\$4,735.00
	5 VF	\$100.00	\$500.00	\$406.00	\$2,030.00
	1 EA	\$675.00	\$675.00	\$566.00	\$566.00
	1 EA	\$850.00	\$850.00	\$675.00	\$675.00
	1 EA	\$800.00	\$800.00	\$672.00	\$672.00
	1 EA	\$1,200.00	\$1,200.00	\$1,420.00	\$1,420.00
	1 EA	\$500.00	\$500.00	\$1,238.00	\$1,238.00
	1 EA	\$800.00	\$800.00	\$12,504.00	\$12,504.00
	EA	\$800.00	\$800.00	\$1,451.00	\$1,451.00
	EA :	\$1,500.00	\$1,500.00	\$5,582.00	\$5,582.00
	J FA	\$800.00	\$800.00	\$561.00	\$561.00
133 Adjust Nianhole Frame/Cover to Grade – 1 VF or Less, Non-Pavement	T EA	\$800.00	\$800.00	\$610.00	\$610.00
	EA :	\$800.00	\$800.00	\$1,017.00	\$1,017.00
٠.	EA	\$800.00	\$800.00	\$1,695.00	\$1,695.00
	EA	\$1,500.00	\$1,500.00	\$2,850.00	\$2,850.00
	T EA	\$2,500.00	\$2,500.00	\$2,754.00	\$2,754.00
	T FA	\$2,500.00	\$2,500.00	\$2,754.00	\$2,754.00
Sewage Bypass Pumping Mobilization/Demobilization	1 EA	\$3,500.00	\$3,500.00	\$7,520.00	\$7,520.00
		\$25.00	\$125.00	\$167.00	\$835.00
	1 DAY	\$650.00	\$650.00	\$5,574.00	\$5,574.00
_	1 DAY	\$900.00	\$900.00	\$6,300.00	\$6,300.00
	1 DAY	\$1,500.00	\$1,500.00	\$7,025.00	\$7,025.00
	1 CY	\$350.00	\$350.00	\$2,032.00	\$2,032.00
	5 F	\$2.00	\$10.00	\$0.50	\$2.50
	一	\$550.00	\$550.00	\$397.00	\$397.00
147 Temporary Traffic Control	5 LF	\$100.00	\$500.00	\$73.00	\$365.00
	1 DAY	\$1,000.00	\$1,000.00	\$729.00	\$729.00
	5 CY	\$35.00	\$175.00	\$95.00	\$475.00
	2 CY	\$200.00	\$1,000.00	\$475.00	\$2,375.00
	- C-	\$50.00	\$250.00	\$284.00	\$1,420.00
1 152 Pavement Patch Type 2	S L	\$50.00	\$250.00	\$284.00	\$1 A20 O0

ANNUAL CONTRACT FOR CONSTRUCTION AND MAINTENANCE OF WATER LINES, GRAVITY SEWERS, AND FORCE MAINS CITY OF HAPEVILLE, GEORGIA **BID TABULATION**

RECEIVED BY: CITY OF HAPEVILLE, GEORGIA AT HAPEVILLE CITY HALL

2:00 P.M., LOCAL TIME, JULY 31, 2018

		BIDDER NO.	2 NO. 1	BIDDI	BIDDER NO. 2
		The Corbett Group, LLC	Group, LLC	RDJ	RDJE, Inc.
		6535 Bankhead Highway	ad Highway	679 Highway	679 Highway 29 South, Suite A
		Douglasville, GA 30134	, GA 30134	Newnan,	Newnan, GA 30263
ITEM		LINI		LINO	
NO. ITEM DESCRIPTION	QUANTITY UNIT	PRICE	AMOUNT	PRICE	AMOUNT
153 Sidewalk removal and restoration	5 SY	\$35.00	\$175.00	\$197.00	\$985.00
154 Curb and Gutter removal and restoration	5 LF	\$26.00	\$130.00	\$101.00	\$505.00
155 Curb removal and restoration	5 LF	\$20.00	\$100.00	\$271.00	\$1,355.00
156 Temporary Construction Exit	1 EA	\$800.00	\$800.00	\$3,390.00	\$3,390.00
157 Temporary Stone Check Dam	1 EA	\$125.00	\$125.00	\$542.00	\$542.00
158 Temporary Hay Bale Check Dam	1 EA	\$85.00	\$85.00	\$542.00	\$542.00
159 Temporary Silt Fence – Sensitive	5 LF	\$3.00	\$15.00	\$4.00	\$20.00
160 Temporary Silt Fence – Non Sensitive	5 LF	\$2.00	\$10.00	\$3.00	\$15.00
161 Rip Rap Stabilization	5 SY	\$45.00	\$225.00	\$69.00	\$345.00
162 Erosion and Sedimentation Control	5 LF	\$2.85	\$14.25	\$271.00	\$1,355.00
163 Earth Fill	5 CY	\$35.00	\$175.00	\$169.00	\$845.00
164 Geotechnical Compaction Testing	1 EA	\$250.00	\$250.00	\$1,153.00	\$1,153.00
TOTAL OF ALL CONTRACT NO.1 UNIT PRICE BID ITEMS			\$243,262.50 *		\$1,002,939.50
BID BOND	QN		2%		2%
NOTE REFERENCE	CE		(1)		(1)
MINIMARIA MINIMARIA			UC302014		UC302155

NOTES:

* DENOTES CORRECTED VALUE

(1) SURETY COMPANY LISTED ON U. S. TREASURY CIRCULAR 570 (7/1/18).

THIS IS TO CERTIFY THAT THIS IS A TRUE AND CORRECT TABULATION OF BIDS RECEIVED AT THE TIME AND PLACE STATED ABOVE. BIDS WERE SEALED WHEN RECEIVED AND OPENED AND READ ALOUD IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.

WEEK & WOOD INC.

BID TABULATION ANNUAL CONTRACT FOR CONSTRUCTION AND MAINTENANCE OF STORM SEWERS CITY OF HAPEVILLE, GEORGIA

RECEIVED BY: CITY OF HAPEVILLE, GEORGIA AT HAPEVILLE CITY HALL 2:00 P.M., LOCAL TIME, JULY 31, 2018

		The Corbett Group, LLC	RDJE, Inc.	
		6535 Bankhead Highway	679 Highway 29 South, Suite A	uite A
		Douglasville, GA 30134	Newnan, GA 30263	
WELL		FINIT	H	
NO. ITEM DESCRIPTION	DUANTITY UNIT	PRICE AMOLINE	TOING	TMUOMA
1 Contract Bonds and Insurance		65	\$75,000,00	00 00
2 12" DIPS Storm Sewer	20 LF		\$1,128.00	30.00
	20 LF	Ġ	\$1,203.00	90.00
4 Storm Drain Pipe, 15 inch CMP	20 LF	\$36.00 \$720.00	\$328.00	\$6,560.00
		\$45.00 \$900.00	\$353.00	\$7,060.00
6 Storm Drain Pipe, 21 inch CMP		\$55.00 \$1,100.00	\$376.00	\$7,520.00
			\$429.00	\$8,580.00
		\$60.00 \$1,200.00	\$544.00 \$	30.00
9 Storm Drain Pipe, 15 inch RCP			\$285.00	\$5,700.00
10 Storm Drain Pipe, 18 inch RCP			\$324.00	\$6,480.00
			\$432.00	\$8,640.00
			\$458.00	\$9,160.00
			\$544.00 \$	30.00
			\$2,400.00	00.00
				00.00
24" HDPE Storm Sewer by Pipe Bursting		\$12	\$2,500.00 \$50	00.00
			\$5.00	\$100.00
			\$7.00	\$140.00
			\$357.00	\$714.00
			\$165.00	\$1,650.00
			\$357.00	\$714.00
			\$380.00	\$3,800.00
	2 EA			\$1,270.00
	2 EA		\$738.00 \$	\$1,476.00
	2 EA		\$206.00	\$412.00
	2 EA		\$957.00	\$1,914.00
	2 EA		\$957.00	\$1,914.00
	2 EA		\$14,999.00	98.00
	2 EA		\$3,661.00	\$7,322.00
30 Connect to Existing Manhole	2 EA	€Đ	\$6,788.00	76.00
•	2 EA	\$450.00 \$900.00	\$616.00	\$1,232.00
_	2 EA	\$800.00 \$1,600.00	\$1,026.00	\$2,052.00
33 Adjust Manhole Frame/Cover to Grade – Over 1VF	2 EA	\$1,200.00 \$2,400.00	\$1,711.00	\$3,422.00
		\$800.00 \$1,600.00	\$1,997.00	\$3,994.00
35 Plug Existing Storm Sewer	2 EA	\$500.00 \$1,000.00	\$2,560.00	\$5,120.00
			\$10,063.00 \$20,126.00	26.00
37. Drop Inlet Additional Depth	10 VF		\$165.00	\$1,650.00
38 Catch Basin			\$5,212.00 \$	24.00
39 Catch Basin Additional Depth	10 VF	\$150.00 \$1,500.00	\$165.00	\$1,650.00

ANNUAL CONTRACT FOR CONSTRUCTION AND MAINTENANCE OF STORM SEWERS CITY OF HAPEVILLE, GEORGIA **BID TABULATION**

RECEIVED BY: CITY OF HAPEVILLE, GEORGIA

AT HAPEVILLE CITY HALL

2:00 P.M., LOCAL TIME, JULY 31, 2018

		BIDDER NO. 1	NO. 1	BIDDE	BIDDER NO. 2
		The Corbett Group, LLC	Group, LLC	RDJE	RDJE, Inc.
		6535 Bankhead Highway	ad Highway	679 Highway 2	679 Highway 29 South, Suite A
		Douglasville, GA 30134	GA 30134	Newnan,	Newnan, GA 30263
ITEM		TINO		UNIT	
NO. ITEM DESCRIPTION	QUANTITY UNIT	PRICE	AMOUNT	PRICE	AMOUNT
40 Junction Box	2 EA	\$1,500.00	\$3,000.00	\$5,293.00	\$10,586.00
41 Concrete Headwall	2 EA	\$1,800.00	\$3,600.00	\$7,374.00	\$14,748.00
42 Concrete Support Piers		\$1,000.00	\$5,000.00	\$2,050.00	\$10,250.00
43 Pipe Tracer wire	20 LF	\$1.00	\$20.00	\$2.00	\$40.00
44 Exploratory Excavation	1 H	\$450.00	\$450.00	\$401.00	\$401.00
45 Temporary Traffic Control	20 LF	\$75.00	\$1,500.00	\$293.00	\$5,860.00
46 Temporary Traffic Control Detour	1 DAY	\$750.00	\$750.00	\$736.00	\$736.00
47 Stabilization Stone	5 CY	\$50.00	\$250.00	\$22.00	\$110.00
48 Rock excavation	5 CY	\$250.00	\$1,250.00	\$156.00	\$780.00
49 Pavement Patch Type 1	20 LF	\$50.00	\$1,000.00	\$232.00	\$4,640.00
50 Pavement Patch Type 2		\$50.00	\$1,000.00	\$232.00	\$4,640.00
51 Sidewalk removal and restoration	5 SY	\$60.00	\$300.00	\$198.00	\$990.00
52 Curb and Gutter removal and restoration		\$60.00	\$1,200.00	\$103.00	\$2,060.00
53 Curb removal and restoration	20 LF	\$40.00	\$800.00	\$274.00	\$5,480.00
54 Temporary Construction Exit	1 EA	\$1,800.00	\$1,800.00	\$3,422.00	\$3,422.00
55 Temporary Stone Check Dam	1 EA	\$125.00	\$125.00	\$567.00	\$567.00
56 Temporary Hay Bale Check Dam		\$35.00	\$35.00	\$547.00	\$547.00
57 Temporary Silt Fence – Sensitive		\$3.00	\$60.00	\$6.00	\$120.00
58 Temporary Silt Fence - Non Sensitive		\$2.00	\$40.00	\$4.00	\$80.00
59 Rip Rap Stabilization		\$65.00	\$325.00	\$44.00	\$220.00
60 Erosion and Sedimentation Control		\$10.00	\$200.00	\$274.00	\$5,480.00
61 Earth Fill	5 CY	\$60.00	\$300.00	\$274.00	\$1,370.00
62 Geotechnical Compaction Testing	1 EA	\$250.00	\$250.00	\$1,163.00	\$1,163.00
TOTAL OF ALL CONTRACT NO.2 UNIT PRICE BID ITEMS			\$117,384.00 *		\$539,040.00
GIB	BID BOND		2%		5%
NOTE REFERENCE	ENCE		(1)		(1)
	אם בוע		0000014		00302155

NOTES:

THIS IS TO CERTIFY THAT THIS IS A TRUE AND CORRECT TABULATION OF BIDS RECEIVED AT THE TIME AND PLACE STATED ABOVE. BIDS WERE SEALED WHEN RECEIVED AND OPENED AND READ ALOUD IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.

KECK & WOOD, INC.

Page 2 of 2

^{*} DENOTES CORRECTED VALUE

⁽¹⁾ SURETY COMPANY LISTED ON U. S. TREASURY CIRCULAR 570 (7/1/18).



Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place Roundabout Feasibility Study

September 16, 2019

Prepared for:

City of Hapeville

Prepared by:

Stantec Consulting Services Inc.

This document entitled Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place Roundabout Feasibility Study was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of City of Hapeville (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by	Mutehin	Drum 9	
–	(signature)	

WITH A MAN

Mitchell Greenway, PE

Reviewed by _____

(signature)

Keith Strickland, PE

Approved by _______(signature)

Mike Holt, PE, PTOE

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INTRODUCTION

1.0 INTRODUCTION

1.1 PURPOSE AND NEED STATEMENT

The City of Hapeville Comprehensive Plan/LCI Study Update (LCI Study Update) of 2017 identified Virginia Avenue as a gateway corridor into downtown. This study suggested growth and redevelopment would continue along the corridor. The intersection of Virginia Avenue, Little Virginia Avenue, Doug Davis Drive, and Clay Place is a major intersection and currently serves as a central hub for dining establishments. Pedestrian, bicycle, and vehicular traffic will increase as the area grows with denser residential and mixed-use commercial developments. The proposed project will enhance safety and improve operational efficiency at the intersection of Virginia Avenue, Little Virginia Avenue, Doug Davis Drive, and Clay Place.

1.2 BACKGROUND

The LCI Study Update identified several gateway corridors into downtown Hapeville. Virginia Avenue was one such corridor, providing access from I-85 into downtown Hapeville. The LCI Study Update recommended denser commercial and residential development along Virginia Avenue by eliminating surface parking adjacent to the street and building taller, multi-floor structures. It also suggested improving bicycle and pedestrian facilities to encourage a more walkable city. There are currently several hotels and businesses at the I-85 interchange, which is just 0.5 miles or a 10-15 minute walk from the study area. There are also parking issues associated with lunch and dinner traffic at several of the restaurants at the intersection. The LCI Study Update suggests that making the corridor more walkable (and redeveloping the corridor) could transform Virginia Avenue into a "vibrant, mixed use...gateway node that serve[s] the residents, visitors, business, and employees, while celebrating the city's small-town charm and character." To help create this welcoming gateway and improve functionality, the LCI Study Update proposed a roundabout at the Virginia Avenue, Little Virginia Avenue, Doug Davis Drive, Clay Place intersection. It also proposed streetscape improvements along the corridor. This feasibility study will consider various intersection improvement options to promote the desired outcome of the LCI Study Update.

It should be noted that Aerotropolis Atlanta Community Improvement Districts (CIDs) is currently working on a Virginia Avenue project that is anticipated to introduce a road diet to the corridor. At the time of this study, that project had not developed to a stage where information could be utilized for this study. Additionally, the City of Hapeville has a future road diet project along Doug Davis Drive. As such, this feasibility study proposed ideas that could easily function within the context of existing conditions or be easily modified to accommodate proposed improvements as part of the two road diet projects.



CONCEPTUAL DESIGN ALTERNATIVE

2.0 CONCEPTUAL DESIGN ALTERNATIVE

The study area for this project included detailed traffic analysis for the intersections of Virginia Avenue at Hamilton Avenue and Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place. Additionally, geometric improvements were analyzed in the east-west direction from Oakridge Avenue to South Whitney Avenue (Delta Airlines driveway) and in the south-north direction from 856 Virginia Avenue to Hamilton Park. See Appendix A for a map of the study area.

2.1 EXISTING ROADWAY

Virginia Avenue is listed as a major collector on the Georgia Department of Transportation's (GDOT) functional classification map. The posted speed limit is 35 miles per hour (mph). Doug Davis Drive and Clay Place are both local roads. Doug Davis Drive is posted at 35 mph. Clay Place does not have a posting, but it is a short segment with maximum speeds of about 25 mph. The existing intersection is signalized. All legs of the intersection have curb-and-gutter and sidewalks. The sidewalks were constructed as part of a streetscape project. Overall, the sidewalks are in good condition, but trees in the middle of the sidewalk restrict pedestrian movement by narrowing up the usable sidewalk width. Virginia Avenue makes up the western and northern legs of the intersection; Clay Place is the southern leg; and Doug Davis Drive is the eastern leg. The following is a list of characteristics of each leg of the intersection.

- The western leg of Virginia Avenue is an urban five-lane section with two thru-lanes in each direction and an eastbound left-turn lane.
- The northern leg of Virginia Avenue is a two-lane urban section. It has one wide (15-16 feet) thru lane in each direction. As it approaches the intersection the thru lanes are reduced to approximately 10 feet, and a short left-turn lane is added.
- Doug Davis Drive is an urban five-lane section with two eastbound thru lanes and one westbound thru lane. It also has a westbound left-turn lane and a westbound right-turn lane.
- Clay Place functions like a large commercial driveway. It is an urban section with a single thru-lane in each direction and a northbound left-turn lane. It also has a right-turn lane separated by a large landscaped island.
- The east-west corridor of Virginia Avenue/Little Virginia Avenue/Doug Davis Drive has a large deflection of about 30-degrees at the intersection.

Approximately 125 feet west of the Virginia Avenue, Little Virginia Avenue, Doug Davis Drive, and Clay Place intersection is the Virginia Avenue/Hamilton Avenue intersection. Hamilton Avenue is a low-volume neighborhood street that serves as an access point to the Virginia Park neighborhood. It is an urban section with one travel lane in each direction. It is currently stop controlled with Virginia Avenue being the primary road.



CONCEPTUAL DESIGN ALTERNATIVE

About 180 feet west of Hamilton Avenue is the intersection of Virginia Avenue and Harding Avenue. Harding Avenue also provides access to the Virginia Park neighborhood. It is also an urban two-lane section with one travel lane in each direction. It is currently stop controlled with Virginia Avenue being the primary road.

In addition to the public road intersections, there are several commercial driveways within the study area. Most of the driveways provide access to restaurants. Some provide access to local businesses or vacant commercial buildings.

2.2 PROPOSED DESIGN CRITERIA

For this study, the GDOT <u>Design Policy Manual</u> (DPM) was the guiding document. This document provides "design guidelines and standards adopted by the Georgia Department of Transportation (GDOT) for the design of roadways and related infrastructure" for Federal-Aid and State-Aid projects in Georgia. For the roundabout analysis, the DPM references the National Cooperative Highway Research Program (NCHRP) Report 672, Roundabouts: An Informational Guide, 2nd Edition, also known as NCHRP 672.

2.2.1 Design Vehicle

The design vehicle for an urban collector should be at least a BUS-40 or SU, which is an intercity bus or single-unit truck. Based on conversations with local officials and stakeholders, WB-40 trucks (a semi-trailer) frequently travel through the intersection to make deliveries at local businesses. For the purposes of this study, a WB-40 was the selected design vehicle. Also, because the City of Hapeville Fire Department operates a fire engine with a 95' ladder, turning templates were used to verify this vehicle could be accommodated.

Based on the GDOT DPM Table 6.5, the design speed for an urban collector should be 35 mph. For a roundabout, NCHRP 672 states the entry

Roadway Type	Design	Vehicle	Typical Design Speed (mph) ₍₃₎
tural			(,)
nterstate / Freeway	WB-67		70
lamp			
Free-Flow	WB-67		35 (1)
Entrance / Exit	WB-67		35 (1)
Loop	WB-67		35 (1)
rincipal Arterial	≥WB-40	2)	(See Table 6.6)
linor Arterial	≥SU ₍₂₎		(See Table 6.6)
ollector	≥SU ₍₂₎		(See Table 6.5)
ocal Road	.,		
Paved	≥S-BUS	36 ₍₂₎	(See Table 6.4)
Gravel	≥S-BUS		35
rban		(-)	
iterstate / Freeway	WB-67		65
amp			
Free-Flow	WB-67		35 (1)
Entrance / Exit	WB-67		35 (1)
Loop	≥WB-40	2)	35 (1)
rincipal Arterial	≥WB-40	2)	(See Table 6.6)
linor Arterial	≥W B-40	or ≥BUS-40 ₍₂₎	(See Table 6.6)
collector -	(≥BUS-40	0 or ≥SU ₍₂₎	(See Table 6.5)
esidential/Local Road	≥SU or ≥	<u>•</u> P ₍₂₎	(See Table 6.4)
Refer to Section 3.3.3 Fr	eeway Exit	t and Entrance I	Ramps.
Refer to Section 3.2.2 Lo			
Refer to Section 3.3 Des		_	•
esign Vehicle Type Syn			
=Passenger Car, S-BUS=	School Bu	s, SU=Single-U	nit Truck, WB=Semi
railer			

Table 1. Design Vehicles and Typical Design Speeds (Source: GDOT Design Policy Manual)



CONCEPTUAL DESIGN ALTERNATIVE

design speed is 20-25 mph. Typically, circulating speeds are slightly lower, and departure speeds are in a similar range. Curvature is introduced on the approaches to forcibly reduce speeds from 35 mph to the 20-25 mph range.

2.2.2 Bicycle and Pedestrian Accommodations

All proposed alternatives will include improved sidewalks for pedestrians with a minimum width of five feet and a desirable width of 10 feet. Bicycle facilities will be considered both on-street and off-street. The minimum width sidewalks are possible if on-street bike lanes are utilized. If dedicated bike lanes are not feasible, then wider 8-10 foot shared-use paths may be proposed. Within the footprint of roundabout options, sidewalk will be a minimum width of 10 feet. Any bicyclist uncomfortable with navigating through the roundabout with vehicular traffic can mix with pedestrians along the wide sidewalks to pass through the intersection.

2.3 PROPOSED ALTERNATIVES

Two alternatives were analyzed. One is an improved signalized intersection, and one is converting the intersection to a roundabout. Sketches of both alternatives are attached in the Appendices.

2.3.1 Alternative 1

Alternative 1 is very similar to existing conditions with a few modifications. A raised, landscaped median will replace the flush median in front of 3435 Hamilton Avenue (Schlotzky's Deli) and in front of 832/834 Virginia Avenue (Johnny's New York Style Pizza, Touch Nails, and Jimmy John's). The left-turn lanes on Virginia Avenue and Doug Davis Drive will be shortened. Turn lanes on Clay Place will be removed. The traffic signal timing will be optimized. Other improvements will include unobstructed sidewalks and new landscaping.

2.3.2 Alternative 2

Alternative 2 converts the existing signalized intersection to a single lane modern roundabout. The roundabout will have a 110' inscribed diameter (outside diameter of circulating roadway). The circulating roadway will be 18' wide with a 10' truck apron to accommodate larger vehicles. The central island will have a 54' diameter, and it will be landscaped. It could potentially have a sculpture or some form of wayfinding and signage as part of a gateway improvement. Five parallel parking spots are proposed along Doug Davis Drive to offset two lost spaces at Johnny's New York Style Pizza (Johnny's). Eight parallel parking spaces are proposed along Hamilton Avenue to offset lost spaces at 855 Virginia Avenue (Grecian Gyro). A cul-de-sac is proposed along Hamilton Avenue to allow traffic to u-turn to access the parallel parking. The driveway off Virginia Avenue for the Grecian Gyro restaurant will be closed, and an interparcel driveway connection is recommended between the Grecian Gyro and 839 Virginia Avenue (Waffle House). Hamilton Avenue will be converted to a right-in/right-out intersection with no left-turns allowed. Johnny's driveway on Doug Davis Drive will be converted to a right-in/right-out driveway for passenger cars. A median cut will be provided with a reduced median height (similar to the truck apron)



CONCEPTUAL DESIGN ALTERNATIVE

or other treatment to allow passage of delivery trucks but deter usage by passenger cars. All approaches to the roundabout will be tapered down to a single lane. Other improvements will include new unobstructed sidewalks and new landscaping.



TRAFFIC AND SAFETY

3.0 TRAFFIC AND SAFETY

A traffic study was performed for two intersections:

- 1. Virginia Avenue at Hamilton Avenue
- 2. Virginia Avenue/Doug Davis Drive at Little Virginia Avenue/Clay Place.

The full traffic data report can be found in the Appendices.

3.1 TRAFFIC VOLUME FORECASTING

Existing peak hour volumes and future peak hour volumes – based on a 0.9% annual growth rate – were calculated from traffic counts. For this study, the project opening year was estimated to be 2023 with a design year of 2043, or a 20-year design horizon. It was determined that the midday peak hour volumes were slightly higher than morning or afternoon peak hour volumes. The two-way Average Annual Daily Traffic volume is forecasted to be 13,625 vehicles/day in 2043.

3.2 CAPACITY ANALYSIS

Two alternatives were analyzed for capacity. The first alternative was an improved intersection that optimizes signal timing while maintaining existing lane configurations. This alternative does add a section of extended median along Virginia Avenue and Doug Davis Drive, but the median does not adversely impact the two study intersections. The second alternative is a single lane roundabout.

Levels of service (LOS) for the both alternatives are within acceptable ranges for the type of facility. Alternative 1 will experience LOS ranging from A to D, depending on time of day and intersecting street. Alternative 2 will experience LOS ranging from A to B, again depending on time of day and intersecting street. Alternative 2 is a slight improvement over Alternative 1, which has very similar results to the No Build scenario. This is to be expected because the intersection configuration is very similar between existing conditions and Alternative 1. The noon peak hour was selected for analysis instead of the morning peak hour since the noon peak hour volumes were significantly greater than the typical morning peak hour volumes.



TRAFFIC AND SAFETY

	2043: N	lo Build	2043: Alto	ernative 1	2043: Alto	ernative 2
Approach	Noon Peak LOS (Delay)	PM Peak LOS (Delay)	Noon Peak LOS (Delay)	PM Peak LOS (Delay)	Noon Peak LOS (Delay)	PM Peak LOS (Delay)
Clay Place	D (40.7 s)	D (38.6 s)	D (39.6 s)	D (39.5 s)	A (8 s)	A (6 s)
Clay Place (Right Turn Lane)	A (9.3 s)	A (9.2 s)	N/A	N/A	N/A	N/A
Little Virginia Ave (North Leg)	C (34.3 s)	C (33.7 s)	C (34.3 s)	C (33.9 s)	A (10 s)	A (8 s)
Virginia Ave (West Leg)	B (12.5)	A (9.6 s)	B (13.9 s)	B (10.9 s)	B (10 s)	A (7 s)
Doug Davis Dr	B (16.2 s)	B (17.3 s)	C (23.7 s)	C (20.5 s)	A (8 s)	A (9 s)

Table 2. Level of Service and Delay for Projected Traffic Volumes

3.3 SAFETY ANALYSIS

There were two total crashes at Virginia Avenue at Hamilton Avenue intersection from 2016 to 2018. One crash was an angle collision, and one crash was a sideswipe. There were no injuries or fatalities reported.

There were 13 total crashes at the Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place intersection from 2016 to 2018. 42% of the crashes were rear end collisions; 23% were angle crashes; and 42% were sideswipe collisions. There was one reported injury and no fatalities.

Crashes for Alternative 1 can be expected to increase as traffic volumes increase. Alternative 2 will reduce crashes by as much as 39%, and it will reduce serious (injury and fatality) crashes by as much as 78%. Alternative 2 will also reduce pedestrian exposure to vehicular traffic by providing refuge islands between opposing directions of travel. Pedestrians will cross single lane of one direction of traffic at a time.

		ia Avenue/D e Virginia Av					Avenue @ n Avenue	
Year	Total	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal
2016	4	4	0	0	1	1	0	0
2017	4	4	0	0	0	0	0	0
2018	5	4	1	0	1	1	0	0

Table 3. Crash Totals by Intersection

PUBLIC OUTREACH AND STAKEHOLDER ENGAGEMENT

4.0 PUBLIC OUTREACH AND STAKEHOLDER ENGAGEMENT

Understanding the concerns, needs, and desires of the users from the communities that travel through the Virginia Avenue at Hamilton Avenue and Virginia Avenue/Doug Davis Drive at Little Virginia Avenue/Clay Place intersections, as well as those who live and/or work within the project study area, are important components of this project's development. Our team worked with three levels of stakeholders throughout this process:

- 1. Project Management Team (PMT)
- 2. Advisory Group
- 3. General Public.

The PMT met bi-weekly to discuss project development and plan larger outreach efforts. The PMT members included staff from the City of Hapeville, Stantec, and Sizemore Group.

The Advisory Group consisted of business and property owners, community leaders, ARC, GDOT, MARTA, and Aerotropolis Atlanta CIDs. The members were selected through a collaborative effort of the Mayor, City Council, and City Management. The Advisory Group met on three occasions to brainstorm ideas and provide the planning team more local knowledge of the area.

Finally, the General Public was engaged at key junctures of the process. A Demonstration Project was held on site and a Community Meeting with a questions and answers session was held. The results of the process were shared with the City Council and Planning Commission prior to the Community Meeting.

4.1 MEETING PROCESS

At the first Advisory Group meeting, the planning team discussed the project background and traffic analysis performed at that time. The discussion focused on the process moving forward and included the following design themes and guiding principles for the project:

- Safety for ALL users
- Connectivity
- Gateway
- · Focus on intersection treatment/service
- Mitigate right-of-way takings where possible
- Consistent and unique signage/messaging

Examples of similar projects were presented to promote positive brainstorming activities. Following a brief presentation, the group discussed "problem areas" and identified issues related to turning movements, traffic queuing, walking, bicycling, parking, etc. The team then discussed possible solutions to consider during the planning process to resolve or mitigate some of these design challenges.



PUBLIC OUTREACH AND STAKEHOLDER ENGAGEMENT

During the second Advisory Group meeting, the design presented further developed conceptual layouts for a design charette. The group separated into two smaller teams for a discussion of three alternatives. Based on the feedback from this meeting, the layouts were refined for the upcoming Demonstration Project and Community Meeting.

For the Demonstration Project, the design team set up a mock roundabout within the existing intersection. It was installed at a smaller scale than the proposed roundabout, and it functioned effectively for passenger cars. During the Advisory Group meetings, several people thought a roundabout may be confusing to some motorists, and the Demonstration Project showed how quickly people could adapt to a reconfigured intersection. However, several business owners expressed concern over the disruption to business both during construction and after implementation of a proposed roundabout. They're biggest concern was loss of parking and flow of delivery traffic. Their comments were noted, and the conceptual layouts were further refined to address some of those concerns.



Figure 1. Demonstration Project

After the Demonstration Project, the

Advisory Group reconvened to review the new layouts and to discuss the outcome of the Demonstration Project. Then presentations were made to the City Council and the Planning Commission to show the proposed conceptual layouts and address questions and concerns they may have. Finally, a Community Meeting was held where the final conceptual layouts were presented, and the public could ask questions and provide comments to the design team. The design team received four comment cards from this meeting. These comments are provided in Appendix A4.



IMPACT EVALUATION

5.0 IMPACT EVALUATION

5.1 HUMAN ENVIRONMENT

5.1.1 Relocations

Neither alternative is expected to require a business relocation. However, for Alternative 2, if interparcel connectivity between 839 Virginia Avenue and 855 Virginia Avenue is not provided, then 855 Virginia Avenue may be severely impacted and require relocating. Parallel parking is proposed along Hamilton Avenue to offset the lost parking on 855 Virginia Avenue.



Figure 2. Tax Map with Street Numbers (Source: Fulton County Tax Assessor)



IMPACT EVALUATION

5.1.2 Historic Resources

For the project area, there are no known historic resources except for the Hapeville Historic District (HHD), and the alternatives presented do not propose improvements that would impact the HHD. Figure 3 shows the HHD boundary relative to the project. The National Register of Historic Places Registration Form is attached in Appendix A.5. It extends to Virginia Avenue at Harding Avenue, across from

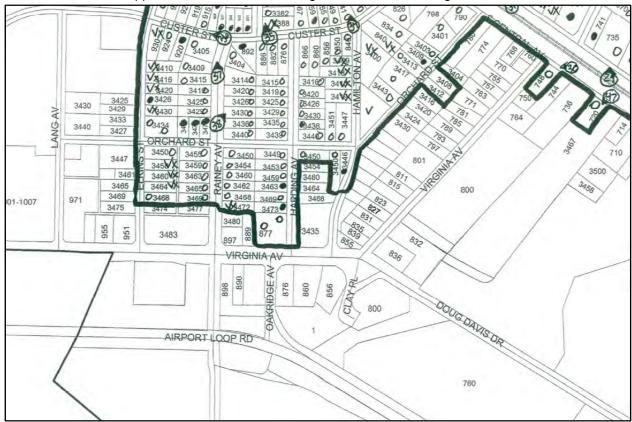


Figure 3. Hapeville Historic District Boundary Map (Source: National Register of Historic Places)

Oakridge Avenue and includes 877 Virginia Avenue (See Figure 3).

5.2 NATURAL ENVIRONMENT

5.2.1 Streams and Wetlands

There are no streams or wetlands within the study area.



IMPACT EVALUATION

5.2.2 Threatened and Endangered Species

The project area is mostly urban in nature with a large amount of maintained/disturbed land. Protected species are not anticipated to be found within the study area; however, future studies should include natural resource surveys to preclude the presence of protected species or their habitat.

5.3 IMPACT SUMMARY

IMPACT CATEGORY	ALTERNATIVE 1	ALTERNATIVE 2
Residential Relocations	0	00
Business Relocations	0	\$100,000
National Register Properties	0	0
Cemeteries	0	0
Stream Impacts (ft)	0	0
Wetland Impacts (acres)	0	0
Permanent Right-of-Way Acquisition (acres)	0	0.47
Temporary Construction Easement (acres)	0.10	0.23
Construction Costs	\$250,000	\$1,500,000
Utility Costs	\$25,000	\$150,000
Right-of-Way Costs	\$70,000	\$1,165,000
Total Costs	\$345,000	\$2,915,000

Table 4. Impact and Cost Summary

CONCLUSIONS AND RECOMMENDATIONS

6.0 CONCLUSIONS AND RECOMMENDATIONS

The existing signalized intersection will continue to function at an acceptable level of service in 2043 without intersection improvements. However, if redevelopment occurs per the Comprehensive Plan/LCI Study Update suggests, improvements are recommended. Particularly, improvements for pedestrian and bicycle facilities should be considered. This could mean wider, unobstructed sidewalks; dedicated bicycle lanes; and pedestrian refuge islands. Both proposed alternatives provide functional improvements with Alternative 2 providing slight operational improvements.

Alternative 1 proposes wider, unobstructed sidewalks and more visible pavement markings, but it does little to slow traffic and provide pedestrian refuge locations. Alternative 2 includes wider sidewalks and refuge islands, as well as reducing traffic velocities. It provides more opportunities for gateway features per the LCI Study Update and greater access control for improved safety. The sidewalks for Alternative 2 also accommodate bicycles.

Neither Alternative 1 nor Alternative 2 includes dedicated bicycle lanes. As the Aerotropolis Atlanta CIDs' and City of Hapeville's road diet projects along the Virginia Avenue/Doug Davis Drive corridor progress, dedicated bicycle lanes should be considered. If bicycle lanes are incorporated along the corridor, Alternatives 1 and 2 should be revisited to accommodate the bicycle lanes.

Alternative 2 does have the potential to create a business relocation (Grecian Gyro) and disrupt deliveries at other businesses. Further investigation is required based on topographic surveys and property research to determine the exact limits of impacts to these properties. If a practical alternative is not available for the Grecian Gyro property, acquisition may be required.

Alternative 2 also causes relocation of existing parking spaces for Johnny's Pizza and Grecian Gyro. The plan has options to mitigate the parking, but further analysis should be performed to determine the feasibility of the proposed parking solution.

In conclusion, Alternative 1 does little to improve the intersection and satisfy the need and purpose of the project. Alternative 2 addresses the project need, but there are some unresolved issues that require further investigation based on more detailed information to determine the extent of the impacts.



Appendix A

Appendix A

A.1 EXISTING ROADWAY & STUDY AREA



Appendix A

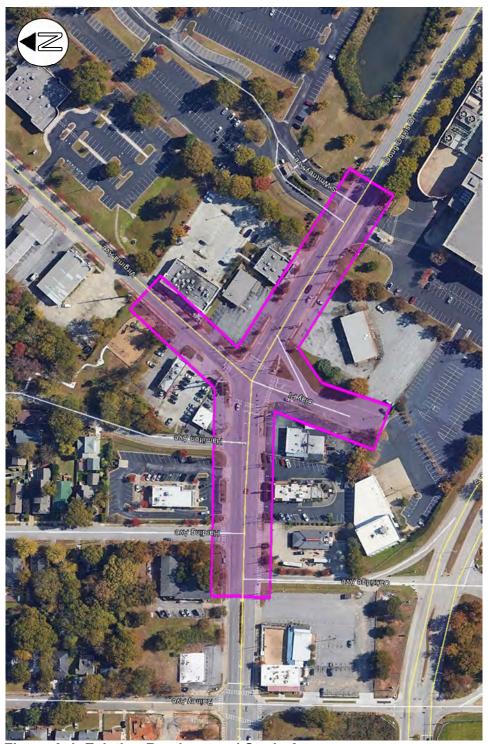


Figure A-1. Existing Roadway and Study Area (Source: Google Earth Pro)



Appendix A

A.2 PROPOSED ALTERNATIVES



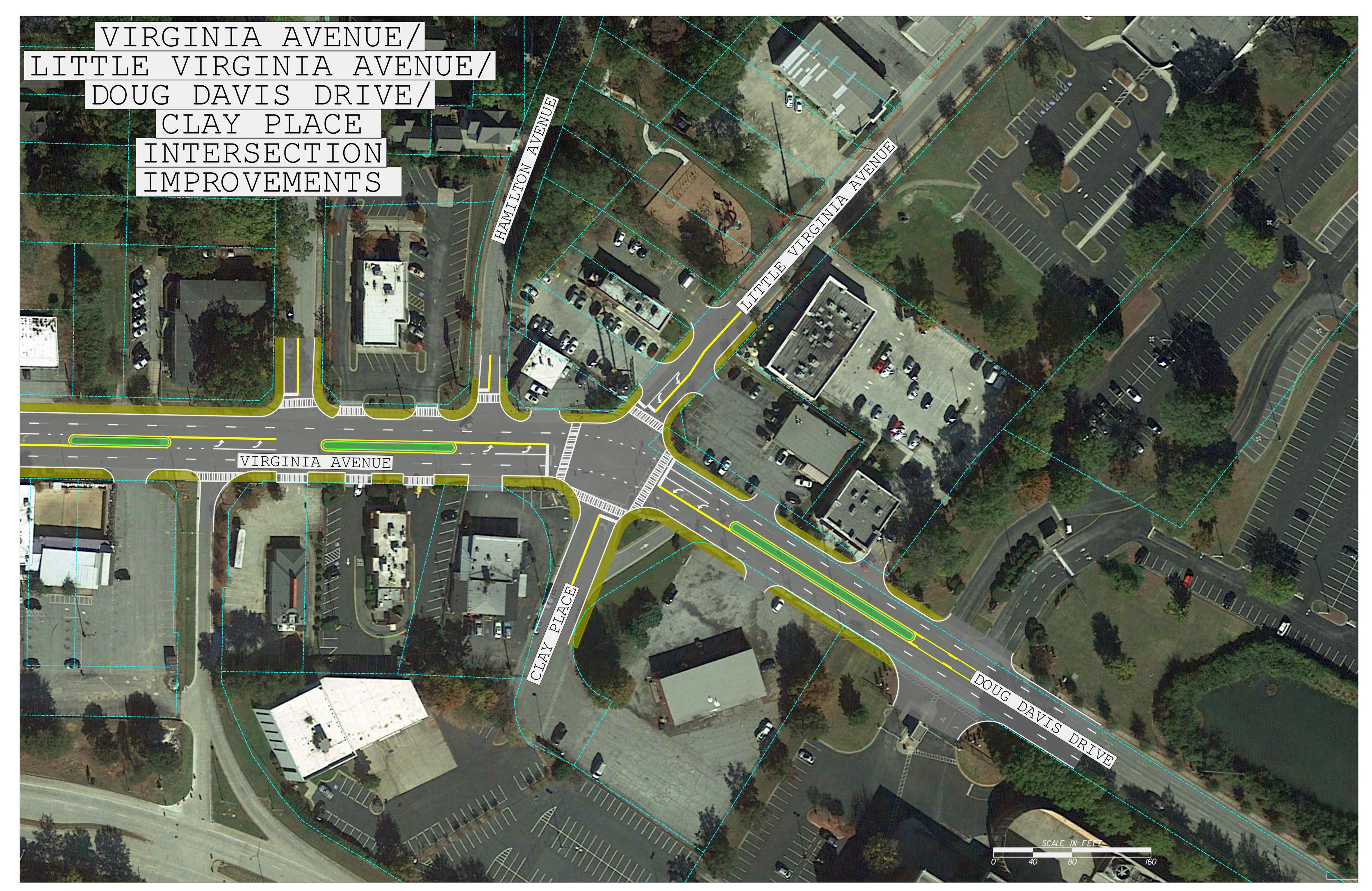


Figure B-1. Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place Intersection Improvements

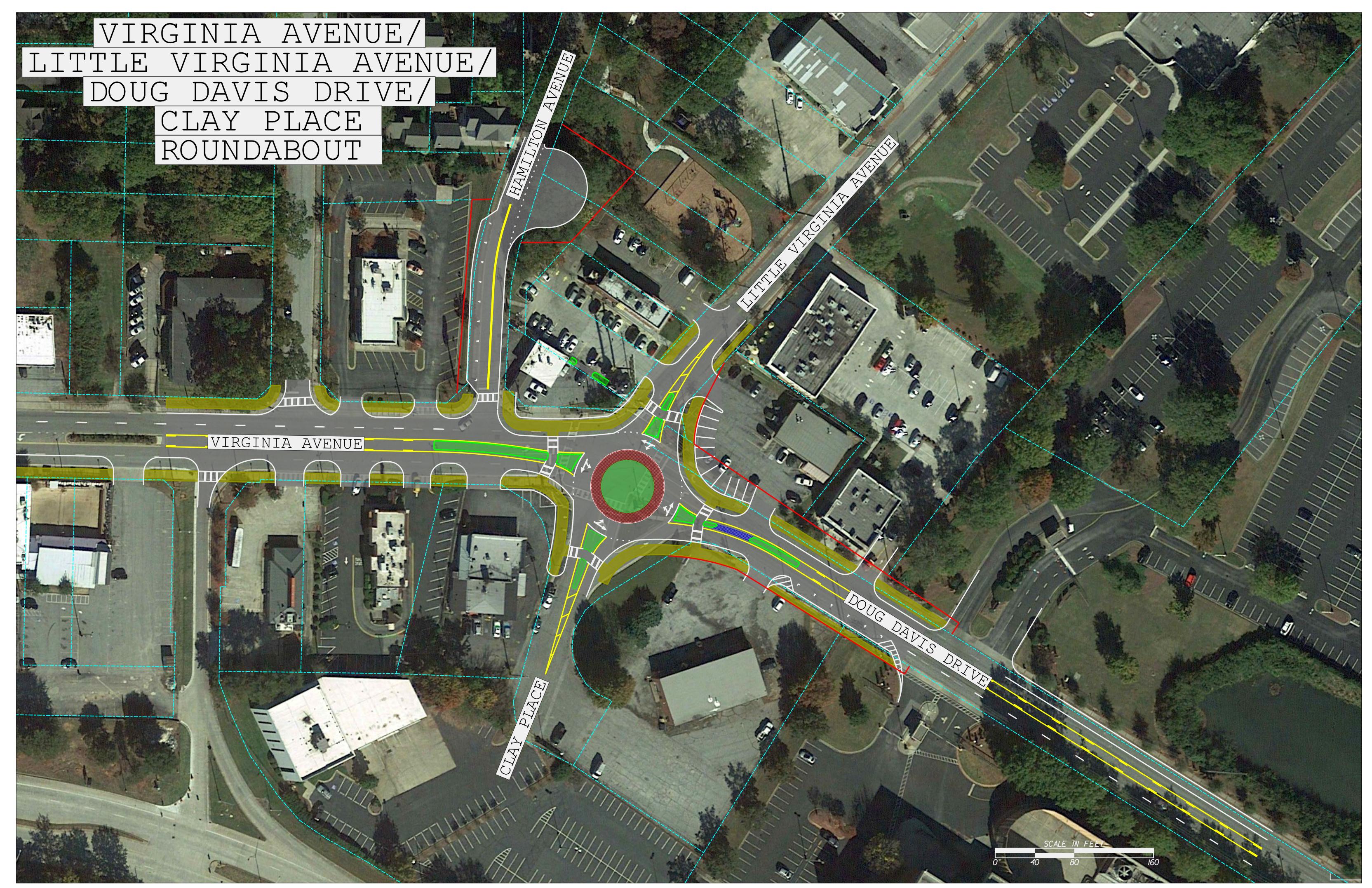


Figure B-2. Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place Roundabout

Appendix A

A.3 TRAFFIC DATA REPORT



Virginia Avenue/Doug Davis Drive at Clay Place/Virginia Avenue Traffic Data Report

Project Number: 171007021 - Virginia Avenue/Doug Davis Drive at Clay Place/Virginia Avenue Roundabout Feasibility Study City of Hapeville, Fulton County, GA



Prepared for: City of Hapeville

Prepared by: Stantec Consulting Services Inc.

Sign-off Sheet

This document entitled Virginia Avenue/Doug Davis Drive at Clay Place/Virginia Avenue Roundabout Feasibility Study was prepared by Stantec Consulting Services Inc. ("Stantec") for the City of Hapeville (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

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- G Synchro Analysis Results H GDOT Roundabout Analysis Tool Results



Introduction September 11, 2019

1.0 INTRODUCTION

The purpose of this report is to document the traffic data and analysis for the Virginia Avenue/Doug Davis Drive at Clay Place/Virginia Avenue Roundabout Feasibility Study. The analysis considers existing conditions and traffic volumes and projections of future traffic volumes and proposed improvements to the intersections in this study. These improvements were identified in the Comprehensive Plan/LCI Study Update of 2017.

For the purpose of this report, Virginia Avenue is referred to as an east-west route throughout the entire study area. As illustrated in **Figure 1** on the following page, the two study intersections are:

- 1. Virginia Avenue at Hamilton Avenue;
- 2. Virginia Avenue/Doug Davis Drive at Clay Place/Virginia Avenue;

This project is analyzing the feasibility of a roundabout that could include roadway streetscape and pedestrian/bicycle facility improvements at the Virginia Avenue/Doug Davis Drive and Clay Place/Virginia Avenue intersection. A roundabout may reduce vehicular crash severity and improve overall operations at the intersection. Vehicular conflict points are reduced from 32 to eight, and total crashes may be expected to decrease by approximately 26% per the Crash Modification Factors Clearinghouse for conversion of a signalized intersection into a single-lane roundabout. Pedestrian and bicyclist safety would also increase at the intersection by providing wider sidewalks and shorter crossing distances. By providing this increased safety, the addition of a roundabout could encourage increased pedestrian and bicycle traffic in the area, which could facilitate future growth.



Introduction September 11, 2019

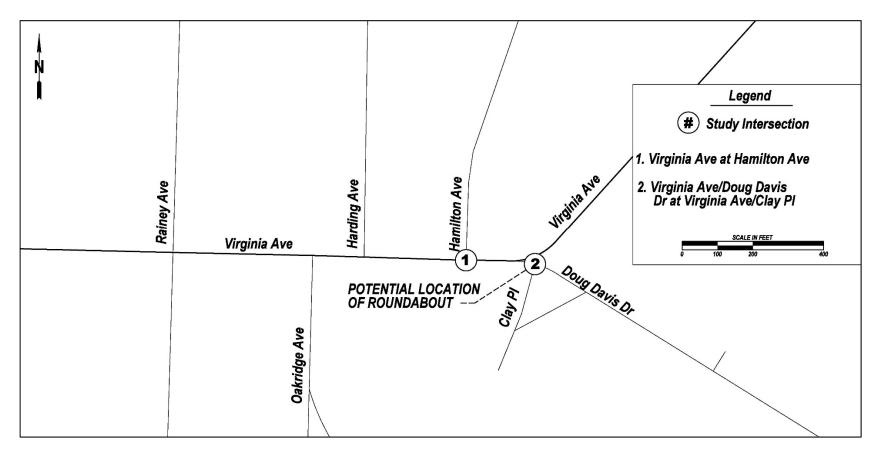


Figure 1: Site Location Map



Existing Conditions September 11, 2019

2.0 EXISTING CONDITIONS

2.1 CORRIDOR DESCRIPTION

The study area includes Virginia Avenue from Hamilton Avenue to the intersection of Virginia Avenue/Doug Davis Drive and Clay Pl/Virginia Avenue. Virginia Avenue is an urban major collector for its entire extent; bounded from the west by E Main Street in College Park and from the east by S Central Avenue. To the west of Clay Place, Virginia Avenue is a 5-lane east/west collector with auxiliary left turn lanes at signalized intersections and a two-way left turn lane running throughout for access to businesses and minor roads. Once Virginia Avenue intersects with Clay Place, it becomes a 2-lane street and bears north/south; this is illustrated above in **Figure 1**. As noted in **Figure 1** above, Hamilton Avenue has stop-controlled access to Virginia Avenue at intersection 1. The south leg of intersection 1 is a marked entry-only driveway for the Virginia Curve Package store. Intersection 2 in **Figure 1** is a signalized intersection and the location of the potential roundabout that is the subject of this study. The posted speed limit is 35 miles per hour on Virginia Ave.

Sidewalks line the street along both sides of the corridor and range from 4.5 feet to 9 feet in width. However, in several locations along the corridor there are trees and utility poles located on the sidewalk that reduce the available width. These obstacles severely limit wheelchair access along the sidewalk. There is street lighting and pedestrian lighting along the Virginia Avenue study area. On the south end of Intersection 2, there is a triangular pedestrian refuge island that shortens the crossing distance needed to navigate north or south along the 5-lane road. Intersection 2 has pedestrian signals on all corners, except between the pedestrian refuge island and the south sidewalk of Doug Davis Drive.

2.2 DATA COLLECTION

Weekday 48-hour directional volume and vehicle classification counts were collected in two different periods. Counts were collected on Tuesday-Wednesday 5/14-5/15/2019. Additionally, peak-period turning movement counts (TMCs) were conducted at the study intersections on Tuesday, 5/14/2019. The counts were conducted during a typical commuter AM peak period (7:00 AM – 10:00 AM) and a typical commuter PM peak period (3:30 PM – 6:30 PM). Based on the peak hour of the daily counts, the identified peak hours stray from typical times dictated predominantly by commuter traffic. As a result, there is no AM peak hour, instead there is a noon peak of 12:00 PM – 1:00 PM and a PM Peak hour of 4:45 PM – 5:45 PM. The approved map indicating the count location numbers and corresponding vendor labels, Noon and PM peak hour turning movement counts, and bi-directional 48-hour classification counts, are included in **Appendix A**.



Existing Conditions September 11, 2019

2.3 PEAK HOUR DETERMINIATION

As previously discussed, the early peak hour of the study area was 12:00 PM to 1:00 PM and the late peak hour is 4:45 PM to 5:45 PM. In order to further support the use of a noon peak hour instead of a traditional AM peak, a table of diurnal distribution data for the intersection was computed and compared to a control from Report 765 by the National Cooperative Highway Research Program (NCHRP). NCHRP Report 765 contains a table showing diurnal distribution factors by functional class for an urban area with population over 1,000,000, which is similar to the Atlanta metro area. By comparing the NCHRP table of diurnal distributions to the one computed for the project site, it becomes clear how much smaller the AM distributions are at the project site and how much larger the noon peak distribution is as compared to a typical noon peak. PM distribution amongst the two were approximately the same. Both the NCHRP table and the Project site table are shown in Appendix B. An excerpt of both are shown below in **Table 1** for the hours of 7 AM to 4 PM, for both Virginia Avenue west of Hamilton Street and a typical large-urban collector on a weekday.

Table 1: Diurnal Distribution Comparison

Hour Begins	Virginia Ave, W of Hamilton Ave (Day 1/Day 2 Average)	Typical Large-Urban Collector (Weekday)	
7:00 AM	4.20%	5.92%	
8:00 AM	5.02%	6.05%	
9:00 AM	3.97%	5.82%	
10:00 AM	4.14%	5.78%	
11:00 AM	6.66%	6.55%	
12:00 PM	8.88%	7.08%	
1:00 PM	7.69%	6.95%	
2:00 PM	6.60%	7.20%	
3:00 PM	6.69%	7.97%	

In addition to the traffic volume data supporting the choice of using a noon peak hour, it is also supported by the kinds of businesses that line the study area. From the center of Intersection 2, there are 9 restaurants within a 300 ft radius. The many employees at nearby Delta, Wells Fargo, and Porsche facilities likely contribute to the meal-time traffic in the study area, particularly during lunch, which is when the busiest hour of the day (12:00 PM – 1:00 PM) occurs.



Existing Conditions September 11, 2019

2.4 PEAK HOUR DATA COMPUTATION

As mentioned, TMC data was collected during the hours of 7:00 AM – 10:00 AM and 3:30 PM – 6:30 PM, based on typical commuter traffic patterns. Therefore, no TMC data was collected during the noon peak hour. Since the pattern of traffic favors lunch and dinner rush times, emphasis on traffic behavior must be placed on these times in the determination of design hour volumes to be tested for roundabout feasibility. In order to do so, traffic projections for turning movement ADTs for both early and late peak hours were made based on the turning movement percentages during the 3 PM hours of the TMC field data (3:30-6:30 PM). This decision was made under the assumption that relative turning movement volumes during the noon peak hour is likely similar to turning movement volumes during the PM peak.

In order to visualize existing noon turning movement volumes, steps were taken to generate this data. However, the data was not directly utilized for any traffic projections, instead they act as a baseline for comparison. Using the reasoning described in the previous paragraph, the turning movement percentages of the PM peak (4:45-5:45 PM) were mirrored in the AM peak (12:00-1:00 PM). Then, using ADT data collected from the 12:00-1:00 PM ADT field counts, the volume entering the intersection from a particular leg was multiplied by each turning movement percentage to find a volume for each turning movement in the hour of 12:00-1:00 PM. An example calculation is shown below for the north bound approach of Intersection 2.

Table 2: Noon Baseline Volume Calculations

	NB Left	NB Through	NB Right	NB U-Turn
Turning Movement Distribution ¹	36.7%	15.2%	48.1%	0.0%
Vehicle Volume per movement	62 * .0367 = 23 vehicles	62 * .0152 = 9 vehicles	62 * .0481 = 30 vehicles	62 * 0 = 0 vehicles

^{1.} Pulled from corresponding PM peak turning movement percentages

As previously mentioned, the volumes produced using this method are not used for making any peak hour turning movement projections but are only used for a baseline of comparison. However, the turning movement percentages (those which were mirrored from the PM peak turning movement percentages) are used when projecting the peak hour turning movement volumes for the noon peak hour. Volumes computation tables are included in **Appendix B**.



^{2.} There are 62 NB Vehicles during Noon Peak Hour (From 48 Hour ADT Data).

Existing Baseline Volumes September 11, 2019

3.0 EXISTING BASELINE VOLUMES

3.1 APPLIED FACTORS

Seasonal, daily, and axle factors provided by the Georgia Department of Transportation (GDOT) were applied to the 48-hour daily counts to develop baseline Annual Average Daily Traffic (AADT). Additionally, the K and D factors were calculated. The K factor is the proportion of traffic occurring during the 30th highest hourly volume of the year. The D factor is the directional distribution of traffic moving the peak travel direction. **Table 3** on the following page shows the K and D factors used in this project. A summary of the K and D factor calculations is shown in **Appendix C.**



Existing Baseline Volumes September 11, 2019

Table 3. K & D Factor Calculations

				Ų.							-		Volume														
Location	Functional Class (Factor	Count # (Class in	Enter		Day 1	. 1		Day 2	aw Data		ige of Do	y1&2	K&D	Factors		GDOT Traffic	Factors	_	Calc.		- (alance	d & Roui	nded Vo	lumes		
boganer	Group)	yellow)	Line	NE - VOL	SW - VOL	Total	NE - VOL	SW -	Total	NE - VOL	SW - VOL	Total	к	D	SF (Monthly)	DF1 (Daily1)	DF2 (Daily2)	AXF (Axle)	AADT	AADT	NE - VOL	SW - VOL	Hourly Total	T NE - VOL	T SW - VOL	к	D Margin of Error
17-2-1- a - 11-614-5-11-			12:00 PM	519	467	986	518	506	1,024	519	487	1,005	8,9%	0,52							15	10	25	3.00F	1 00F	0.3%).60
Virginia Ave W of Hamilton Ave	Urban Major Collector (4)	1 - 1	4:45 PM	350	546	896	401	536	937	376	541	917	8.1%	0.59	0.96	0.93	0.92	0.96	9,630	9,850	10	10	20	4,925	4,925	0.2%).50 2%
VA.E.			Daily	5,550	5,604	11,154	5,646	5,794	11,440	5,598	5,699	11,297							-								
Hamilton Ave N of Virginia		CAST	12:00 PM	15	15	30	9	10	19	12	13	25		0.51					LOSS.	100	15	40	55	100	100	27.5%	
Åve	Urban Local Road (4)	2	4:45 PM	10	9	19	. 7	10	17	9	10	18	7.4%	0,53	0.96	0.93	0.92	0,96	207	200	15	40	55	100	1,00	27.5%	0.73 3%
737-7			Dally	109	142	251	97	137	234	103	140	243														-	
Virginia Ave N of Doug Davis	The second secon	35 7	12:00 PM	237	313	550	275	289	564	256	301	557	10.0%		14.40	2.20		444			500	450	950	2,400	2,400	19.8%	
Dr	Urban Major Collector (4)	3	4:45 PM	212	178	390	246	198	444	229	188	417	7.5%	0,55	0.96	0.93	0.92	0.96	4,/40	4,800	360	435	795	1.37	253033	16.6%	1.55 1%
+			Daily	2,694	2,816	5,510	2,743	2,869	5,612	2,719	2,843	5,561	0.707	1 0.50							(0)	1 40	100			L 1 507 L 4	1.70
Doug Davis Dr E of Virginia	Urban Local Road (4)	4	12:00 PM 4:45 PM	380	333 462	713	277	304	724	388 263	344 455	732 718		0,53	0.96	0.93	0.92	0.96	7 190	6,800	60	40	100	3,400	3,400	1.5% (0.60 5%
Ave/Clay Pl	orban recai reaer(4)	4	Daily	4.202	4.209	8,411	4,263	4.193	8,456	4.233	4,201	8,434	0.0%	0.00	.0.20	0.75	0.72	0.70	7,107	0,000	- 00	40	100			1.5/6	.00
		*	12:00 PM	53	34	87	70	42170	112	62	38	100	10.6%	0.62				*		1	60	35	95	1		10.6%	1.63
Clay PIS of Doug Davis Dr	Urban Local Road (4)	5	4:45 PM	65	37	102	60	40	100	63	39	101		0.62	0.96	0.93	0.92	0,96	797	900	60	35	95	450	450	10.6%	
,	State of the state		Daily	500	372	872	539	459	998	520	416	935	1.5.000				/			,,,,,			الشنا			1.2.0001	1000



Future Build Conditions September 11, 2019

3.2 TRUCK PERCENTAGES

The 2019 vehicle classification counts were used to determine the Truck Percentages in the study area. **Table 4** shows the Truck Percentages used in this project. A summary of the truck percentage calculations is shown in **Appendix D**.

Count	Count Location		24 Hour T%	,		Peak H	lour T%	
Number	Coon Location	S.U.	Comb.	Total	Period	S.U.	Comb.	Total
1	Virginia Ave W of Hamilton Ave	4.0%	0.0%	4.0%	AM	3.5%	0.0%	3.5%
l	virginia Ave W Oi Hamilton Ave	4.070	0.076	4.076	PM	3.0%	0.0%	3.0%
2	Llamilton Ava N of Virginia Ava	4.5%	0.0%	4.5%	AM	10.0%	0.0%	10.0%
2	Hamilton Ave N of Virginia Ave	4.5%	0.0%	4.5%	PM	3.0%	0.0%	3.0%
3	Virginia Ava N of Doug Dovis Dr	2.5%	0.0%	2.5%	AM	4.0%	0.5%	4.5%
3	Virginia Ave N of Doug Davis Dr	2.5%	0.0%	2.5%	PM	1.5%	0.0%	1.5%
4	Doug Davis Dr E of Virginia	3.0%	0.0%	3.0%	AM	3.0%	0.0%	3.0%
4	Ave/Clay Pl	3.0%	0.0%	3.0%	PM	2.5%	0.0%	2.5%
5	Clay DIS of Days Dayis Dr	4.00/	0.0%	4.00/	AM	3.5%	0.0%	3.5%
5	Clay PI S of Doug Davis Dr	4.0%	0.0%	4.0%	PM	2.5%	0.0%	2.5%

Table 4. Truck Percentages

3.3 EXISTING 2019 VOLUMES

Traffic diagrams are provided in **Appendix E**. Diagrams were created for the 2019 existing Annual Average Daily Traffic (AADT) volumes, the Design Hourly Volumes (DHV). To allow for easy comparison, the projections of the AADT and DHV for 2023, 2025, 2043, and 2045 are also provided in traffic diagrams in **Appendix E**. Section 4.2 will cover how these traffic volume projections were calculated in greater detail.

4.0 FUTURE BUILD CONDITIONS

4.1 DESCRIPTION OF PROPOSED ROUNDABOUT

While the selection of a final design is beyond the scope of this analysis, there are common aspects of roundabouts that would be present if it is ultimately constructed. As will be discussed later in the report, the traffic volumes are low enough at this location that they can be handled by a single lane roundabout. A roundabout this size could fit at this location, although not without impacts to the adjacent properties. The roundabout would have splitter islands on each approach that would act as pedestrian refuges. This would dramatically reduce the crossing distance for pedestrians, which would also reduce their exposure to automobiles. Additionally, the layout of a roundabout allows a pedestrian to cross while checking for traffic in one direction at a time. The perimeter of the roundabout would include wider sidewalks to allow both cyclists and pedestrians to safely travel around the roundabout. Lower circulating speeds in the roundabout would also improve the safety of cyclists who choose to travel in the roundabout roadway instead of on the wider sidewalks.



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4.2 GROWTH RATE AND FUTURE VOLUMES

Several measures were taken in order to determine a growth rate that best fits the study area in question between existing conditions and the design year (2043). One factor considered for arriving at a growth rate for the project was using historical AADT data provided by GDOT at counting stations in the vicinity of the site. From this, annual growth trends were calculated for the project. The Historical GDOT Traffic Count data and growth rate calculations are shown in **Appendix F.1.** The GDOT count stations identified as being of good use for this project are as follows:

- 1. #121-5586 Virginia Avenue North of Doug Davis Drive
- 2. #121-5598 Virginia Avenue West of Hamilton Avenue

Calculated growth rates are summarized below in **Table 5**.

Table 5: Historical Annual Growth Rates – GDOT Counts

	5-Year Growth Rate	10-Year Growth Rate
Station #121-5586	7.0%	3.8%
Station #121-5598	-2.9%	0.2%

The growth rates found using this method, however, were determined as being less accurate than desired, as the count stations found near the study area only have one year of actual AADT counts between both stations. All other years of AADT data reported were either estimates or the collection methods were not indicated. As a result, this method did not make its way into being factored into the final growth rate used.

The 2010-2018 US Census population estimates were another factor considered to calculate a growth rate for the study area. Population estimates were pulled for Census tracts 108 and 403.08. Tract 108 in Fulton County is the location of the project site, and tract 403.08 in Clayton County is adjacent to the project site. Tract 403.08 had a negative historical growth, which is not feasible to use, so only tract 108's growth was considered, which was 0.9%. The Historical US census population data and growth rate calculations are shown in **Appendix F.2**.

The last method for finding growth in the area used was to analyze the growth trends from the Atlanta Regional Commission's (ARC) Regional Transportation Plan (RTP), last updated May 2019. The RTP projects an average annual growth rate of 1.5% for the Atlanta Region from 2015 to 2040.



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After using several methods to create a clear picture of the study area's growth, the census growth rate of 0.9% was chosen for the study area. The 0.9% annual growth rate will be applied to the existing turning movement and AADT volumes to forecast volumes for the 2023, 2025, 2043, and 2045 future years under the No Build and Build conditions. Due to the nature of this project, all No Build volumes are the same as the Build out volumes for each respective year, so no distinction between the two is made in the traffic diagrams. The 2019, 2023, 2025, 2043, and 2045 traffic diagrams are presented in **Appendix E**.

5.0 CAPACITY ANALYSIS

5.1 SIGNALIZED INTERSECTION ANALYSIS

Synchro was used to model the existing and 2043 projected capacity of both intersections under the assumption that no roundabout is constructed, and the existing layout is maintained. In addition to these two scenarios, a third scenario that included a road diet on Virginia Avenue, Doug Davis Drive, and Clay Place was also analyzed (See **Figures 2** and **3** for a comparison). It should also be noted that for both future scenarios a new signal timing was used in the Synchro model. This was done to reflect the possibility that even if the layout of the intersection remains unchanged, the signal timings could be updated to better handle projected traffic volumes.

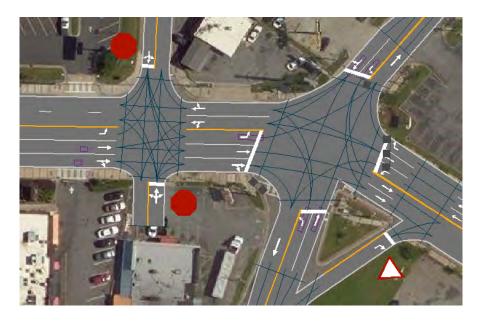


Figure 2: Synchro Model with Existing Layout



Capacity analysis September 11, 2019

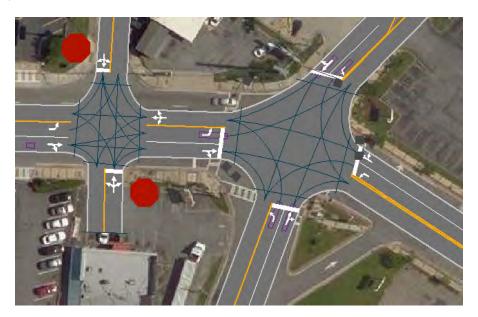


Figure 3: Synchro Model with Road Diet

Table 6 contains the results of the Synchro capacity analysis for intersection 1. Intersection 1 is currently operating well under existing conditions with the level of service (LOS) on each approach being at a C or above. As expected, the increased 2043 volumes decrease the LOS for the Hamilton Avenue and Driveway approaches while having little effect on Virginia Avenue since it is free flowing. The outputs from the Synchro analyses are provided in **Appendix G**.

Table 6. Intersection 1 Level of Service for Existing and Projected Traffic Volumes

	2019 Existin	g Volumes	2043 Volum	es: No Build	2043 Volume	es: Road Diet
Approach	Noon Peak LOS (Delay)	PM Peak LOS (Delay)	Noon Peak LOS (Delay)	PM Peak LOS (Delay)	Noon Peak LOS (Delay)	PM Peak LOS (Delay)
Driveway	C (18.3 s)	B (14.9 s)	C (24.4 s)	C (18.4 s)	E (36.3 s)	D (26.3 s)
Hamilton Ave	C (15.8 s)	B (14.3 s)	C (19.7 s)	C (17.5 s)	D (28.2 s)	C (22.4 s)
Virginia Ave (West Leg)	A (0.1 s)	A (0 s)	A (0.1 s)	A (0 s)	A (0.1 s)	A (0 s)
Virginia Ave (East Leg)	A (0.1 s)	A (0.1 s)	A (0.2 s)	A (0.1 s)	A (0.1 s)	A (0.1 s)



Capacity analysis September 11, 2019

Table 7 contains the results of the Synchro capacity analysis for intersection 2. The eastbound and westbound legs of this intersection are currently operating well at a LOS of A or B. The northbound and southbound legs are both operating at a LOS of D. The intersection operates at a similar level of perform in the 2043 scenarios due to signal timings being optimized for the increased volumes. Delay for the northbound and south bound approaches is lower in both 2043 scenarios than in the existing 2019 scenario. In the road diet scenario, the delay on Virginia Avenue and Doug Davis Drive does increase to the point that both of these approaches drop to a lower LOS. The outputs from the Synchro analyses are provided in **Appendix G**.

Table 7. Intersection 2 Level of Service for Existing and Projected Traffic Volumes

	2019 Existin	g Volumes	2043 Volum	es: No Build	2043 Volume	es: Road Diet
Approach	Noon Peak LOS (Delay)	PM Peak LOS (Delay)	Noon Peak LOS (Delay)	PM Peak LOS (Delay)	Noon Peak LOS (Delay)	PM Peak LOS (Delay)
Clay Place	D (50.7 s)	D (53.9 s)	D (40.7 s)	D (38.6 s)	D (39.6 s)	D (39.5 s)
Clay Place (Right Turn Lane)	A (9.3 s)	A (9.1 s)	A (9.3 s)	A (9.2 s)	N/A	N/A
Virginia Ave (North Leg)	D (44.9 s)	D (48.8 s)	C (34.3 s)	C (33.7 s)	C (34.3 s)	C (33.9 s)
Virginia Ave (West Leg)	A (9.0 s)	A (7.1 s)	В (12.5)	A (9.6 s)	B (13.9 s)	B (10.9 s)
Doug Davis Dr	B (15.2 s)	B (12.3 s)	B (16.2 s)	B (17.3 s)	C (23.7 s)	C (20.5 s)

5.2 ROUNDABOUT ANALYSIS

The existing and projected traffic volumes were also modeled in the GDOT Roundabout Analysis Tool version 4.1. This tool aids in preliminary analysis of the capacity, delay, and other operational factors of a proposed roundabout. The roundabout was modeled as a single lane roundabout with 4 approaches. Models were created for the Noon and PM Peaks for the 2019, 2023, 2025, 2043, and 2045 traffic volumes. In each of these scenarios, the LOS was at an A for all approaches except for the occasional LOS of B on the westbound approach. Results for the 2019 existing volumes and 2043 projected volumes are provided in **Table 8** below. According to this analysis this intersection could function better as a roundabout than as a signalized intersection. The output from each of the roundabout models and roundabout traffic diagrams are provided in **Appendix H**.



Conclusion September 11, 2019

Table 8. Roundabout Level of Service for Existing and Projected Traffic Volumes

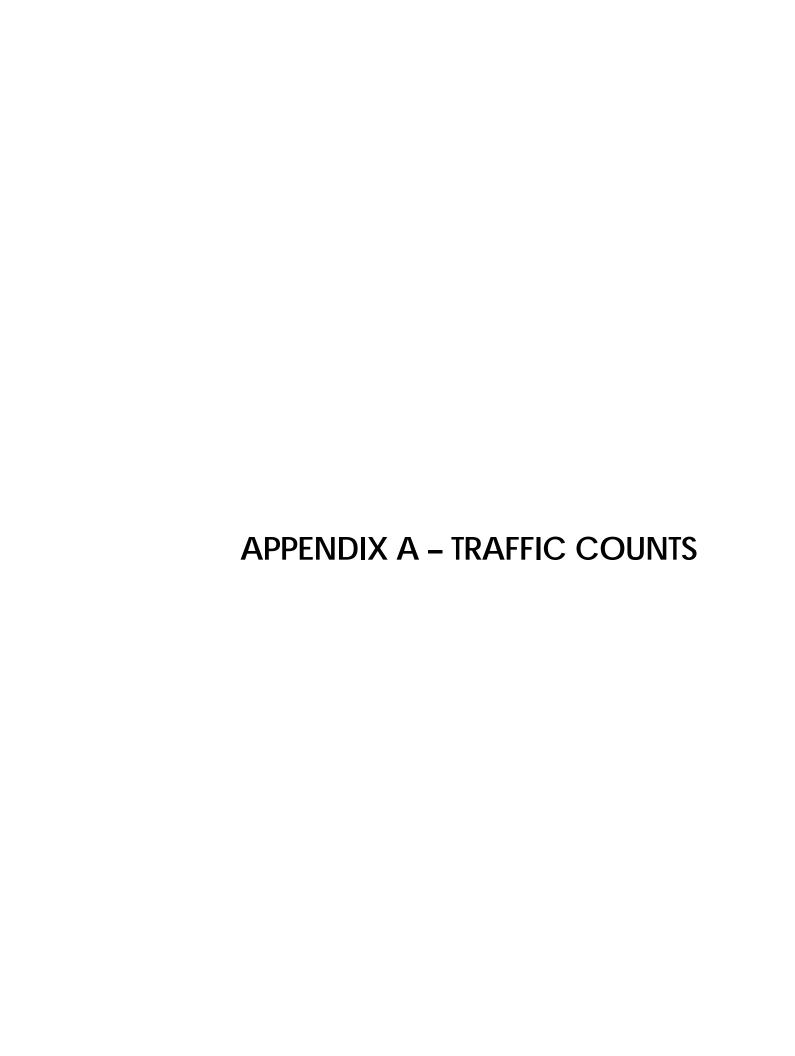
	2019 Existin	g Volumes	2043 Volu	mes: Build
Approach	Noon Peak LOS (Delay)	PM Peak LOS (Delay)	Noon Peak LOS (Delay)	PM Peak LOS (Delay)
Clay Place	A (7 s)	A (5 s)	A (8 s)	A (6 s)
Virginia Ave (North Leg)	A (7 s)	A (6 s)	A (10 s)	A (8 s)
Virginia Ave (West Leg)	A (8 s)	A (6 s)	B (10 s)	A (7 s)
Doug Davis Dr	A (7 s)	A (7 s)	A (8 s)	A (9 s)

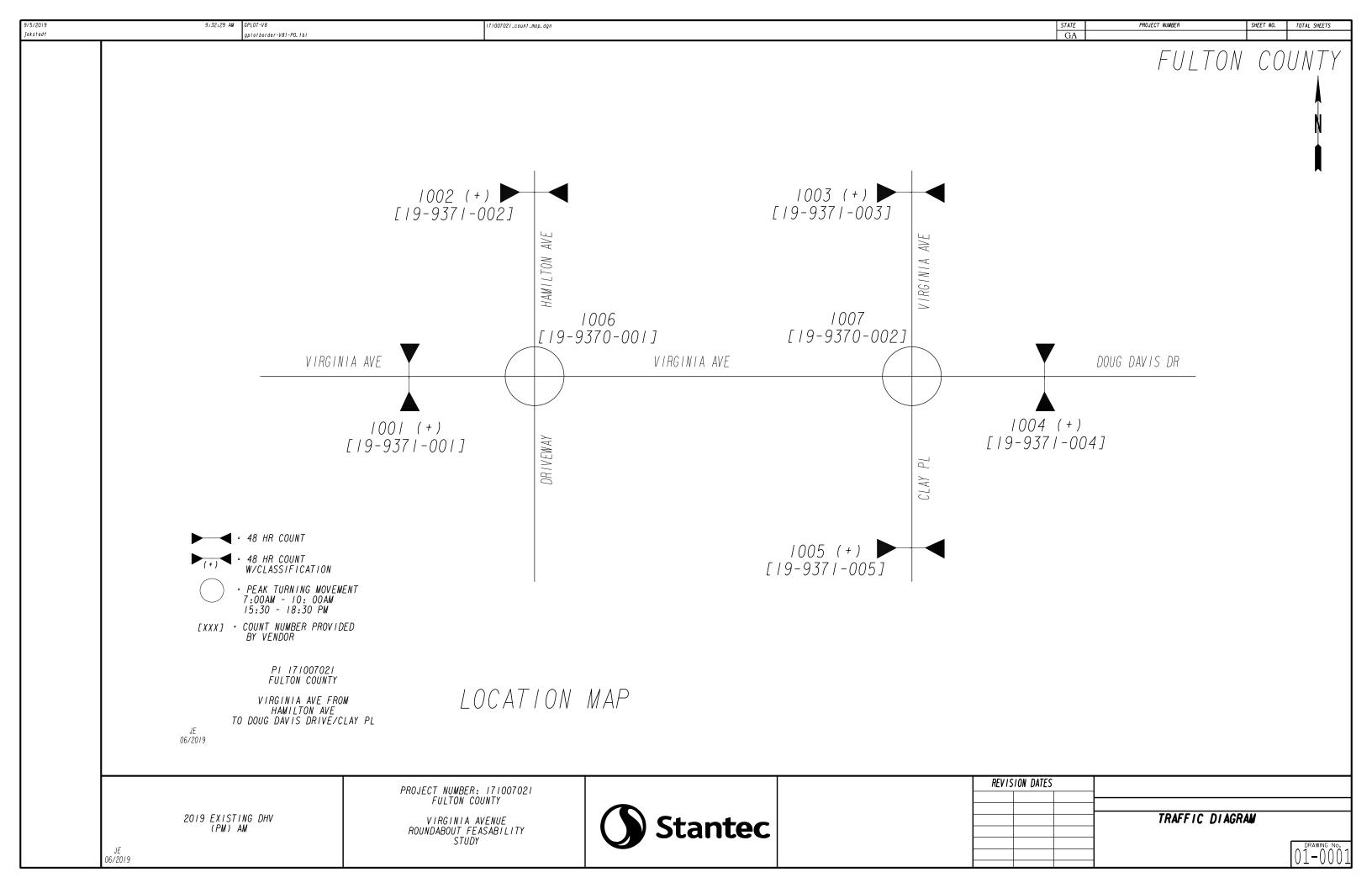
6.0 CONCLUSION

The key conclusions to be drawn from this report are as follows:

- 1. The Virginia Avenue and Clay Place intersection is currently operating at an acceptable level of service. Looking to the future, if the existing layout of the intersection is maintained it may still operate at an acceptable level if it is possible to update the signal timings.
- 2. This analysis found that this intersection could operate more efficiently as a single lane roundabout than as a signalized intersection. In analyzed years and in both the Noon and PM Peaks, the roundabout would operate at a LOS of A overall, with only one approach dropping to a B in select scenarios. It is therefore the conclusion of this report that a roundabout is feasible in terms of traffic operations.







ADT

Count #	Vendor Count #	Class*	Description**
1001	19-9371-001	+	Virginia Ave, West of Hamilton Ave
1002	19-9371-002	+	Hamilton Ave, North of Virginia Ave
1003	19-9371-003	+	Virginia Ave, North of Doug Davis Dr
1004	19-9371-004	+	Doug Davis Dr, East of Virginia Ave/Clay Pl
1005	19-9371-005	+	Clay Pl, South of Doug Davis Dr

TMCs

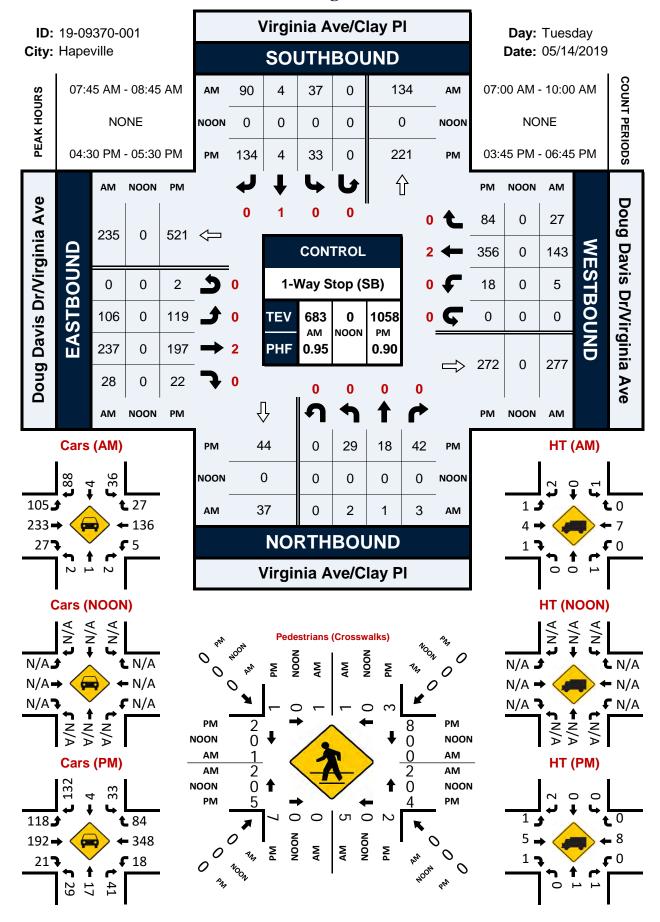
Count #	Vendor Count #	Class*	Description**
1006	19-9370-001	+	Virginia Ave/Clay PI & Doug Davis Dr/Virginia Ave
1007	19-9370-002	+	Hamilton Ave & Virginia Ave

^{* &}quot;+" indicates ADT classification counts or TMCs with bicycle and pedestrian counts.

 $^{^{\}star\star}$ All two way or bi-directional unless otherwise stated.

Virginia Ave/Clay Pl & Doug Davis Dr/Virginia Ave

Peak Hour Turning Movement Count



Intersection Turning Movement Count
City: Hapeville
Control: 1-Way Stop (SB) Project ID: 19-09370-001 Date: 5/14/2019

Control:	1-Way Sto	b (SR)						_						Date:	5/14/2019		
Г								То	tal								
NS/EW Streets:		Virginia Av	e/Clay Pl			Virginia Av	e/Clay PI		Doi	ug Davis Dr	/Virginia Av	/e	Dou	ug Davis Dr	/Virginia A	ve	
		NORTH	BOUND			SOUTH	BOUND			EASTB	OUND			WESTE	OUND		
AM	0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	2 ET	0 ER	0 EU	0 WL	2 WT	0 WR	0 WU	TOTAL
7:00 AM	1	0	0	0	7	1	13	0	14	54	0	0	1	29	10	0	130
7:15 AM	Ō	0	Ö	Ö	12	Ō	20	Ö	12	60	1	0	Ô	29	3	Ö	137
7:30 AM	Ô	Ô	Ö	ő	8	Ö	26	ő	13	60	î	Ô	1	29	5	ŏ	143
7:45 AM	ō	ō	Ö	ō	19	2	20	ō	20	56	2	ō	1	44	7	ō	171
8:00 AM	1	0	1	0	2	2	24	0	33	54	4	0	1	30	4	0	156
8:15 AM	0	0	2	Ó	6	0	17	Ó	38	58	12	0	1	32	11	0	177
8:30 AM	1	1	0	0	10	0	29	0	15	69	10	0	2	37	5	0	179
8:45 AM	0	1	1	0	22	2	28	1	16	58	4	0	4	26	8	0	171
9:00 AM	0	1	2	0	16	3	22	0	19	43	2	0	1	24	5	0	138
9:15 AM	0	0	2	0	10	0	17	0	21	35	1	0	2	30	9	0	127
9:30 AM	3	1	2	0	18	0	20	0	14	44	3	0	0	26	2	0	133
9:45 AM	0	0	0	0	10	2	18	0	23	45	1	0	0	30	4	0	133
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES:	6	4	10	0	140	12	254	1	238	636	41	0	14	366	73	0	1795
APPROACH %'s:	30.00%		50.00%	0.00%	34.40%	2.95%	62.41%	0.25%	26.01%	69.51%	4.48%	0.00%	3.09%	80.79%	16.11%	0.00%	TOTAL
PEAK HR :		07:45 AM -						_				_	_			_	TOTAL
PEAK HR VOL :	2	1	3	0	37	4	90	0	106	237	28	0	5	143	27	0	683
PEAK HR FACTOR :	0.500	0.250 0.7	0.375	0.000	0.487	0.500	0.776	0.000	0.697	0.859	0.583	0.000	0.625	0.813	0.614	0.000	0.954
		0.7	30			0.7	77			0.0.	פנ			0.0	†1		
		NORTH	BOUND			SOUTH	BOLIND			EASTB	OLIND		1	WESTE	OUND		
PM	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
FIVI	NL	NT	NR	NU	SL	ST	SR	SU	EL	ĒΤ	ER	EU	WL	WT	WR	WU	TOTAL
3:45 PM	3	0	3	0	5	2	39	0	29	42	0	0	4	65	15	0	207
4:00 PM	6	3	4	0	5	2	30	0	21	51	8	0	4	63	19	0	216
4:15 PM	2	2	5	0	8	3	32	0	30	44	4	0	1	77	18	0	226
4:30 PM	6	8	8	0	5	1	27	0	33	64	8	0	4	79	18	0	261
4:45 PM	3	3	6	0	4	0	31	0	27	37	4	1	0	87	13	0	216
5:00 PM	8	2	12	0	17	1	39	0	26	45	4	0	6	98	29	0	287
5:15 PM	12	5	16	0	7	2	37	0	33	51	6	1	8	92	24	0	294
5:30 PM	6	2	4	0	3	1	48	0	35	50	2	0	4	85	20	0	260
5:45 PM	6	2	2	0	6	3	32	0	35	49	7	0	2	51	15	0	210
6:00 PM	2	4	4	0	6	1	32	0	30	42	5	0	2	57	10	0	195
6:15 PM	7	2 4	3 9	0	6 2	4	33 39	0	30 26	43	4	0	3 2	65 48	12	0	212 197
6:30 PM	4	4	9	U	2	3	39	0	26	44	4	U	2	48	12	U	197
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES:	65	37	76	0	74	23	419	0	355	562	56	2	40	867	205	0	2781
APPROACH %'s:	36.52%		42.70%	0.00%	14.34%	4.46%	81.20%	0.00%	36.41%	57.64%	5.74%	0.21%	3.60%	77.97%	18.44%	0.00%	
PEAK HR:		04:30 PM -															TOTAL
PEAK HR VOL :	29	18	42	0	33	4	134	0	119	197	22	2	18	356	84	0	1058
PEAK HR FACTOR :	0.604	0.563	0.656	0.000	0.485	0.500	0.859	0.000	0.902	0.770	0.688	0.500	0.563	0.908	0.724	0.000	0.900
		0.6	74			0.71	50			0.8	10			0.86	51		0.505

Intersection Turning Movement Count

Location: Virginia Ave/Clay Pl & Doug Davis Dr/Virginia Ave City: Hapeville Control: 1-Way Stop (SB)

Project ID: 19-09370-001 Date: 5/14/2019

		virginia AV	/e/Clay Pl			Virginia Av	e/Clay Pl		Dou	ug Davis Dr	/Virginia A	ve	Dou	ıg Davis Dr	/Virginia A	/e	
		NORTH	IBOUND			SOUTH	BOUND			EASTB	OUND			WESTE	OUND		
AM	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	0	0	7	1	12	0	14	54	0	0	1	28	10	0	128
7:15 AM	0	0	0	0	12	0	20	0	12	57	1	0	0	28	3	0	133
7:30 AM	0	0	0	0	8	0	26	0	13	56	1	0	1	27	5	0	137
7:45 AM	0	0	0	0	18	2	20	0	19	56	2	0	1	43	7	0	168
8:00 AM	1	0	0	0	2	2	23	0	33	54	4	0	1	29	4	0	153
8:15 AM	0	0	2	0	6	0	16	0	38	56	12 9	0	1	28	11	0	170
8:30 AM	1	1	0	0	10	0	29	0	15	67	-	0	2	36	5	0	175
8:45 AM	0	1	1	0	22	3	26	1	16 17	58	4 2	0	4 1	24 20	6 4	0	165
9:00 AM 9:15 AM	0	0	2	0	16 10	0	22 17	0	20	42 35	2	0	2	20 28	9	0	130 124
9:15 AM 9:30 AM	2	1	2	0	18	0	19	0	13	33 43	3	0	0	26 25	2	0	124
9:30 AM 9:45 AM	0	0	0	0	10	1	17	0	22	43	1	0	0	25 27	3	0	128
J.43 AM	U	U	U	U	10	1	17	U	22	41	1	U	U	2/	3	U	122
	NL	NT	NR	NU	SL	ST	SR	SU	FL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	4	9	0	139	11	247	1	232	619	40	0	14	343	69	0	1733
APPROACH %'s:	27.78%	22.22%	50.00%	0.00%	34.92%	2.76%	62.06%	0.25%	26.04%	69.47%	4.49%	0.00%	3.29%	80.52%	16.20%	0.00%	1755
PEAK HR :		07:45 AM -		010070	5 115270	217070	0210070	012570	2010170	0311770	11.13.70	010070	5.2570	0015270	1012070	0.0070	TOTAL
PEAK HR VOL :	2	1	2	0	36	4	88	0	105	233	27	0	5	136	27	0	666
PEAK HR FACTOR :	0.50	0.250	0.250	0.000	0.500	0.500	0.759	0.000	0.691	0.869	0.563	0.000	0.625	0.791	0.614	0.000	
		0.6	25			0.80				0.86	51			0.8	24		0.951
		NORTH	IBOUND			SOUTH	BOUND			EASTB	OUND			WESTE	OUND		
PM	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:45 PM	3	0	3	0	5	2	39	0	27	37	0	0	4	63	15	0	198
4:00 PM	6	3	4	0	5	2	30	0	21	48	7	0	4	62	19	0	211
4:15 PM	2	2	5	0	8	3	32	0	30	42	4	0	1	75	18	0	222
												-					255
	<u>_</u>					-											214
																	282
												-	-				288 254
	-										_						254
			-			-											189
	_					-					-						205
																	193
0.30 FIN	7	7	9	U	_	3	30	J	20	72	7	J	-	7/	12	٠	193
	NI	NT	NR	NU	SI	ST	SR	SU	FI	FT	FR	FU	WI	WT	WR	WU	TOTAL
TOTAL VOLUMES:	64			0	74		414	0	349		53		40			0	2716
				0.0070	1111070	50 /0	J1.02 /0	0.0070	37.10370	3, .0, 70	3.03 /0	J.L.1 70	3.0, 70	. 7 . 5 5 7 0	_0.02 /0	0.0070	TOTAL
PEAK HR :			-3.00 . 14														
PEAK HR : PEAK HR VOL :		17	41	0	33	4	132	0	118	192	21	2	18	348	84	0	1039
PEAK HR : PEAK HR VOL : PEAK HR FACTOR :	29 0.60	17 0.607	41 0.641	0.000	33 0.485	4 0.500	132 0.846	0.000	118 0.894	192 0.762	21 0.750	2 0.500	18 0.563	348 0.906	84 0.724	0 0.000	1039 0.902
4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:15 PM 6:30 PM	6 3 8 12 6 6 6 2 6 4 NL 64 36.57%	7 3 2 5 2 2 4 2 4 NT 36 20.57% 04:30 PM -	7 6 12 16 4 2 4 3 9 NR 75 42.86%	0 0 0 0 0 0 0	5 4 17 7 3 6 6 6 2 SL 74 14.48%	1 0 1 2 1 3 1 4 3 ST 23 4.50%	25 31 39 37 48 32 32 31 38 SR 414 81.02%	0 0 0 0 0 0 0 0 0 0 0 0 0	33 27 26 32 35 33 29 30 26 EL 349 37.09%	63 37 42 50 48 48 39 41 42 ET 537 57.07%	5.63%	0 1 0 1 0 0 0 0 0 0 0	3.67%	79 85 96 88 81 50 55 63 47 WT 844 77.50%	18 13 29 24 20 15 10 12 12 12 WR 205 18.82%	0.00%	

Intersection Turning Movement Count

Location: Virginia Ave/Clay Pl & Doug Davis Dr/Virginia Ave City: Hapeville

Project ID: 19-09370-001

	L-Way Stop	(SB)												Date: :	5/14/2019		
-								Н	T								
NS/EW Streets:		Virginia Av	e/Clay Pl			Virginia Av	e/Clay Pl		Dou	ug Davis Dr	/Virginia Av	ve	Do	ug Davis Dr	/Virginia Av	e	
		NORTH	BOUND			SOUTH	BOUND			EASTB	OUND			WESTE	BOUND		
AM	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	3 4	0	0	0	1	0	0	4
7:30 AM 7:45 AM	0	0	0	0	0 1	0	0	0	1	0	0	0	0	2	0	0	6 3
8:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	3
8:15 AM	Ô	0	ō	o l	Ô	Ô	i	ő	Ö	2	Ô	ő	Ô	4	ŏ	ŏ	7
8:30 AM	ō	Ō	Ō	Ō	Ō	Ō	Ō	ō	Ō	2	1	Ō	ō	1	ō	ō	4
8:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	Ō	2	2	0	6
9:00 AM	0	0	0	0	0	0	0	0	2	1	0	0	0	4	1	0	8
9:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3
9:30 AM	1	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	5
9:45 AM	0	0	0	0	0	1	1	0	1	4	0	0	0	3	1	0	11
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTA
TOTAL VOLUMES : APPROACH %'s :	1 50.00%	0 0.00%	1 50.00%	0 0.00%	1 11.11%	1 11.11%	7 77.78%	0 0.00%	6 25.00%	17 70.83%	1 4.17%	0 0.00%	0 0.00%	23 85.19%	4 14.81%	0 0.00%	62
PEAK HR:		0.00% 07:45 AM -		0.00%	11.11%	11.11%	//./6%	0.00%	25.00%	70.63%	4.17%	0.00%	0.00%	05.19%	14.01%	0.00%	TOTA
PEAK HR :	0	0 0	1 1	0	1	0	2	0	1	4	1	0	0	7	0	0	10 TAI
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.250	0.000	0.500	0.000	0.250	0.500	0.250	0.000	0.000	0.438 0.43	0.000	0.000	0.607
		0.000	0.250			0.000	0.500			0.500	0.250			0.438	0.000		
PEAK HR FACTOR :	0.000	0.000 0.25 NORTH	0.250 50 BOUND	0.000	0.250	0.000 0.75 SOUTH	0.500 50 BOUND	0.000	0.250	0.500 0.50	0.250 00 OUND	0.000	0.000	0.438 0.43 WESTE	0.000 38 BOUND	0.000	
	0.000	0.000 0.29 NORTH 0	0.250 50 BOUND 0	0.000	0.250	0.000 0.79 SOUTH 1	0.500 50 BOUND 0	0.000	0.250	0.500 0.50 EASTB 2	0.250 00 OUND 0	0.000	0.000	0.438 0.43 WESTE 2	0.000 38 BOUND 0	0.000	0.607
PEAK HR FACTOR:	0.000 0 NL	0.000 0.25 NORTH 0 NT	0.250 50 BOUND 0 NR	0.000 0 NU	0.250 0 SL	0.000 0.75 SOUTH 1 ST	0.500 50 BOUND 0 SR	0.000 0 SU	0.250 0 EL	0.500 0.500 EASTB 2 ET	0.250 00 OUND 0 ER	0.000 0 EU	0.000 0 WL	0.438 0.43 WESTE 2 WT	0.000 38 BOUND 0 WR	0.000 0 WU	0.607 TOTA
PEAK HR FACTOR: PM 3:45 PM	0.000 0 NL 0	0.000 0.29 NORTH 0 NT 0	0.250 50 BOUND 0 NR 0	0.000 0 NU 0	0.250 0 SL 0	0.000 0.75 SOUTH 1 ST 0	0.500 50 BOUND 0 SR 0	0.000 0 SU 0	0.250 0 EL 2	0.500 0.500 EASTB 2 ET 5	0.250 00 OUND 0 ER 0	0.000 0 EU 0	0.000 0 WL 0	0.438 0.43 WESTE 2 WT 2	0.000 38 BOUND 0 WR	0.000 WU 0	0.607 TOTAl
PM 3:45 PM 4:00 PM	0.000 0 NL 0	0.000 0.2! NORTH 0 NT 0	0.250 50 BOUND 0 NR 0	0.000 0 NU 0	0.250 0 SL 0	0.000 0.79 SOUTH 1 ST 0	0.500 50 BOUND 0 SR 0	0.000 0 SU 0	0.250 0 EL 2	0.500 0.500 EASTB 2 ET 5	0.250 00 OUND 0 ER 0	0.000 0 EU 0	0.000 0 WL 0	0.438 0.43 WESTE 2 WT 2 1	0.000 38 BOUND 0 WR 0	0.000 WU 0	0.607 TOTA 9 5
PM 3:45 PM 4:00 PM 4:15 PM	0.000 0 NL 0	0.000 0.29 NORTH 0 NT 0	0.250 50 BOUND 0 NR 0 0	0.000 0 NU 0 0	0.250 0 SL 0 0	0.000 0.79 SOUTH 1 ST 0 0	0.500 50 BOUND 0 SR 0 0	0.000 0 SU 0 0	0.250 0 EL 2 0 0	0.500 0.50 EASTB 2 ET 5 3 2	0.250 00 OUND 0 ER 0 1	0.000 0 EU 0 0 0	0.000 0 WL 0 0	0.438 0.43 WESTE 2 WT 2 1 2	0.000 38 BOUND 0 WR 0 0	0.000 WU 0 0	0.607 TOTA 9 5 4
PM 3:45 PM 4:00 PM	0.000 0 NL 0 0	0.000 0.29 NORTH 0 NT 0 0	0.250 50 BOUND 0 NR 0	0.000 0 NU 0	0.250 0 SL 0	0.000 0.79 SOUTH 1 ST 0	0.500 50 BOUND 0 SR 0	0.000 0 SU 0	0.250 0 EL 2	0.500 0.500 EASTB 2 ET 5	0.250 00 OUND 0 ER 0	0.000 0 EU 0	0.000 0 WL 0	0.438 0.43 WESTE 2 WT 2 1	0.000 38 BOUND 0 WR 0	0.000 WU 0	0.607 TOTA 9 5
PIM 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:30 PM	0.000 0 NL 0 0 0	0.000 0.2! NORTH 0 NT 0 0 0	0.250 50 BOUND 0 NR 0 0 0 1	0.000 0 NU 0 0 0 0	0.250 0 SL 0 0 0	0.000 0.75 SOUTH 1 ST 0 0 0	0.500 50 BOUND 0 SR 0 0 0	0.000 SU 0 0 0	0.250 0 EL 2 0 0	0.500 0.500 EASTB 2 ET 5 3 2	0.250 00 OUND 0 ER 0 1 0	0.000 EU 0 0 0	0.000 0 WL 0 0 0	0.438 0.43 WESTE 2 WT 2 1 2	0.000 38 38 30UND 0 WR 0 0 0	0.000 WU 0 0 0	0.607 TOTA 9 5 4 6
PEAK HR FACTOR: PM 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:30 PM 5:00 PM 5:15 PM	0.000 0 NL 0 0 0 0 0	0.000 0.29 NORTH 0 NT 0 0 0 1 0 0	0.250 50 BOUND 0 NR 0 0 1 0 0 0	0.000 NU 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0	0.000 0.75 SOUTH 1 ST 0 0 0 0 0	0.500 50 BOUND 0 SR 0 0 0 2 0 0	0.000 SU 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 0 1	0.500 0.500 EASTB 2 ET 5 3 2 1 0	0.250 00 OUND 0 ER 0 1 0 0 0	0.000 0 EU 0 0 0 0 0 0	0.000 WL 0 0 0 0 0 0	0.438 0.42 WESTE 2 WT 2 1 2 0 2	0.000 38 30UND 0 WR 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6
PEAK HR FACTOR: 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM	0.000 0 NL 0 0 0 0 0 0 0	0.000 0.29 NORTH 0 NT 0 0 0 1 0 0 0	0.250 50 BOUND 0 NR 0 0 1 0 0 0 0	0.000 NU 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0	0.000 0.75 SOUTH 1 ST 0 0 0 0 0 0	0.500 50 BOUND 0 SR 0 0 0 2 0 0 0	0.000 SU 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 0 1 0	0.500 0.500 EASTB 2 ET 5 3 2 1 0 3 1	0.250 00 OUND 0 ER 0 1 0 1 0	0.000 EU 0 0 0 0 0 0 0	0.000 WL 0 0 0 0 0 0 0	0.438 0.42 WESTE 2 WT 2 1 2 0 2	0.000 38 38 30UND 0 WR 0 0 0 0 0	0.000 WU 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6
PEAK HR FACTOR: PIVI 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:30 PM 5:34 PM	0.000 NL 0 0 0 0 0 0 0 0	0.000 0.29 NORTH 0 NT 0 0 0 1 0 0 0 0	0.250 50 BOUND 0 NR 0 0 1 0 0 0 0 0	0.000 NU 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0	0.000 0.79 SOUTH 1 ST 0 0 0 0 0 0 0	0.500 50 BOUND 0 SR 0 0 2 0 0 0 0	0.000 0 SU 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 0 1 0 2	0.500 0.500 EASTB 2 ET 5 3 2 1 0 3 1 2 1	0.250 00 OUND 0 ER 0 1 0 0 0 0 0	0.000 0 EU 0 0 0 0 0 0 0 0	0.000 WL 0 0 0 0 0 0 0	0.438 0.43 WESTE 2 WT 2 1 2 0 2 2 4 4 1	0.000 38 BOUND 0 WR 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6 5
PEAK HR FACTOR: 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM	0.000 NL 0 0 0 0 0 0 0 0 0 0	0.000 0.29 NORTH 0 NT 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0	0.250 BOUND 0 NR 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 NU 0 0 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0 0 0	0.000 0.79 SOUTH 1 ST 0 0 0 0 0 0 0	0.500 50 BOUND 0 SR 0 0 0 0 0 0 0 0	0.000 SU 0 0 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 1 0 2 1	0.500 0.500 EASTB 2 ET 5 3 2 1 0 3 1 2 1 3	0.250 00 00 00 00 ER 00 11 00 00 00 01 10 00 00 00	0.000 EU 0 0 0 0 0 0 0 0	0.000 0 WL 0 0 0 0 0 0 0 0 0 0	0.438 0.438 WESTE 2 WT 2 1 2 0 2 4 4 4 1 2	0.000 38 SOUND 0 WR 0 0 0 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0	0.607 TOTAI 9 5 4 6 2 5 6 6 5 6
PEAK HR FACTOR: 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:15 PM	0.000 NL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0.29 NORTH 0 NT 0 0 0 0 0 0 0 0	0.250 50 BOUND 0 NR 0 0 1 0 0 0 0 0 0	0.000 NU 0 0 0 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0.79 SOUTH 1 ST 0 0 0 0 0 0 0	0.500 50 BOUND 0 SR 0 0 0 2 0 0 0 0 2	0.000 SU 0 0 0 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 1 0 2 1	0.500 0.500 EASTB 2 ET 5 3 2 1 0 3 1 2 1 3	0.250 00 00 00 ER 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 EU 0 0 0 0 0 0 0 0 0 0	0.000 0 WL 0 0 0 0 0 0 0 0 0	0.438 0.438 WESTE 2 WT 2 1 2 0 2 2 4 4 1 2 2	0.000 38 30UND 0 WR 0 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6 5 6 7
PEAK HR FACTOR: 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM	0.000 0 NL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0.29 NORTH 0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 BOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 NU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0.79 SOUTH 1 ST 0 0 0 0 0 0 0 0 0 0	0.500 BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 SU 0 0 0 0 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 1 0 2 1 0 0	0.500 0.500 2 EASTB 2 ET 5 3 2 1 0 3 1 2 1 2 2 1 3 2 2 2 2 2 2 2 2 2 2 2 2	0.250 OUND 0 ER 0 1 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 EU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 WL 0 0 0 0 0 0 0 0 0 0 0 0	0.438 0.438 WESTE 2 WT 2 1 2 0 2 4 4 4 1 2 2 1	0.000 38 30UND 0 WR 0 0 0 0 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6 5 6 7 4
PEAK HR FACTOR: PIVI 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 6:15 PM 6:30 PM	0.000 NL 0 0 0 0 0 0 0 0 1 0 NL	0.000 0.29 NORTH 0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 BOUND 0 NR 0 0 0 1 0 0 0 0 0 NR NR	0.000 0 NU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0 0 0 0 0 SL	0.000 0.7: SOUTH 1 ST 0 0 0 0 0 0 0 0 0 0 0 0	0.500 BOUND 0 SR 0 0 0 0 0 0 2 0 0 0 0 0 1 SR SR	0.000 SU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 1 0 2 1 0 0 EL	0.500 0.501 EASTB 2 ET 5 3 2 1 0 3 1 2 1 2 2 1 2 2 ET 2 ET 2 5 5 7 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	0.250 000 OUND 0 ER 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 EU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 WL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.438 0.43 WESTE 2 WT 2 1 2 0 0 2 2 4 4 4 1 2 2 1	0.000 38 30UND 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6 7 4 TOTA
PEAK HR FACTOR: 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM	0.000 0 NL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0.2! NORTH 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 50 BOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 NU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0 0 0 0 SL 0 0 0 SL 0 0 0 0	0.000 0.79 SOUTH 1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.500 500 BOUND 0 SR 0 0 0 0 0 0 0 2 0 0 0 0 2 1 SR 5	0.000 0 SU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 1 0 2 1 0 0 EL 6	0.500 0.500 EASTB 2 ET 5 3 2 1 0 3 1 2 1 2 2 ET 2 2 2 1 0 3 2 2 1 2 2 2 2 2 3 4 5 6 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	0.250 000 OUND 0 ER 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 EU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 WL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.438 0.438 WESTE 2 WT 2 1 2 2 4 4 4 1 2 2 1 WT 2 2 4 4 4 1 2 2 1 2 4 4 4 4 1 2 2 1 4 4 4 4 4 4 4 4 4 4 4 4 4	0.000 388 30UND 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6 5 6 7 4
PEAK HR FACTOR: 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES: APPROACH %'s:	0.000 0 NL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0.2! NORTH 0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 50 BOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 NU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0 0 0 0 0 SL	0.000 0.79 SOUTH 1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.500 BOUND 0 SR 0 0 0 0 0 0 2 0 0 0 0 0 1 SR SR	0.000 SU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 1 0 2 1 0 0 EL	0.500 0.501 EASTB 2 ET 5 3 2 1 0 3 1 2 1 2 2 1 2 2 ET 2 ET 2 5 5 7 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	0.250 00 00 00 00 00 ER 0 1 0 0 0 0 0 0 0 0 0	0.000 EU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 WL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.438 0.43 WESTE 2 WT 2 1 2 0 0 2 2 4 4 4 1 2 2 1	0.000 38 30UND 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6 7 4 TOTA 65
PEAK HR FACTOR: 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 FM 5:30 PM 6:15 PM 6:00 PM 6:15 PM 6:30 PM 6:30 PM	0.000 NL 0 0 0 0 0 0 0 0 0 1 1 33.33%	0.000 0.2! NORTH 0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 50 BOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 NU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0.79 SOUTH 1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.500 500 BOUND 0 SR 0 0 0 0 0 0 2 0 0 0 0 2 1 SR 5 100.00%	0.000 SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.500 0.500 EASTB 2 ET 5 3 2 1 0 3 1 2 2 1 3 2 2 5 7 3.53%	0.250 000 OUND 0 ER 0 1 1 0 0 0 0 1 1 0 0 0 0 0 0 0 1 0 0 0 0	0.000 0 EU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 WL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.438 0.438 WESTE 2 WT 2 1 2 2 4 4 1 2 2 1 WT 23 100.00%	0.000 388 30UND 0 WR 0 0 0 0 0 0 0 0 0 WR 0 0 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6 7 4 TOTA 65
PEAK HR FACTOR: 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES: APPROACH %'s:	0.000 0 NL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0.2! NORTH 0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 50 BOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 NU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 SL 0 0 0 0 0 0 0 0 0 0 SL 0 0 0 SL 0 0 0 0	0.000 0.79 SOUTH 1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.500 50 BOUND 0 SR 0 0 0 0 0 0 0 2 0 0 0 0 2 1 SR 5	0.000 0 SU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.250 0 EL 2 0 0 0 1 0 2 1 0 0 EL 6	0.500 0.500 EASTB 2 ET 5 3 2 1 0 3 1 2 1 2 2 ET 2 2 2 1 0 3 2 2 1 2 2 2 2 2 3 4 5 6 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	0.250 000 OUND 0 ER 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 EU 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 0 WL 0 0 0 0 0 0 0 0 0 0 0 0 0	0.438 0.438 WESTE 2 WT 2 1 2 2 4 4 4 1 2 2 1 WT 2 2 4 4 4 1 2 2 1 2 4 4 4 4 1 2 2 1 4 4 4 4 4 4 4 4 4 4 4 4 4	0.000 388 30UND 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.000 WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.607 TOTA 9 5 4 6 2 5 6 6 7 4 TOTA

Intersection Turning Movement Count

Location: Virginia Ave/Clay Pl & Doug Davis Dr/Virginia Ave City: Hapeville Control: 1-Way Stop (SB)

Project ID: 19-09370-001 Date: 5/14/2019

									es								
NS/EW Streets:		Virginia A	ve/Clay Pl			Virginia A	ve/Clay Pl		Dou	ug Davis Dr	/Virginia Av	/e	Do	ug Davis Dr	/Virginia A	ve	
		NORTI	HBOUND			SOUTH	IBOUND			EASTB	OUND			WESTE	BOUND		
AM	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
7	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	2	0	1	1	0	0	0	1	0	0	5
APPROACH %'s:					0.00%	0.00%	100.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :			- 08:45 AM														TOTAL
PEAK HR VOL:	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
																	0.250
														0.2	50		0.250
		NORTH				001177				54070	O. IND						0.250
DN4			HBOUND		0		BOUND	0		EASTB				WESTE	BOUND	0	0.250
PM	0	0	HBOUND 0	0	0	1	IBOUND 0	0	0	2	0	0	0	WESTE 2	BOUND 0	0	
	NL	0 NT	HBOUND 0 NR	NU	SL	1 ST	IBOUND 0 SR	SU	EL	2 ET	0 ER	0 EU	WL	WESTE 2 WT	BOUND 0 WR	WU	TOTAL
3:45 PM	NL 0	0 NT 0	HBOUND 0 NR 0	NU 0	SL 0	1 ST 0	IBOUND 0 SR 0	SU 0	EL 0	ET 0	0 ER 0	0 EU 0	WL 0	WESTE 2 WT 0	BOUND 0 WR 0	WU 0	TOTAL 0
3:45 PM 4:00 PM	NL 0 0	0 NT 0	HBOUND 0 NR 0	NU 0 0	SL 0 0	1 ST 0	BOUND 0 SR 0	SU 0 0	0 0	2 ET 0	0 ER 0	0 EU 0	WL 0 0	WESTE 2 WT 0	BOUND 0 WR 0	0 0	TOTAL 0
3:45 PM 4:00 PM 4:15 PM	NL 0 0 0	0 NT 0 0	HBOUND 0 NR 0 0	NU 0 0 0	SL 0 0 0	1 ST 0 0 0	IBOUND 0 SR 0 0	SU 0 0 0	EL 0 0 0	2 ET 0 0	0 ER 0 0	0 EU 0 0	WL 0 0 0	WESTE 2 WT 0 0 0	80UND 0 WR 0 0	0 0 0	TOTAL 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:30 PM	NL 0 0 0 0	0 NT 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0	NU 0 0 0 0	SL 0 0 0 0	1 ST 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0	SU 0 0 0 0	0 0 0 0	2 ET 0 0 0 0	0 ER 0 0 0	0 EU 0 0 0	WL 0 0	WESTE 2 WT 0 0 0 0 0 0 0	80UND 0 WR 0 0 0	0 0 0 0	TOTAL 0 0 0 0
3:45 PM 4:00 PM 4:15 PM	NL 0 0 0	0 NT 0 0	HBOUND 0 NR 0 0	NU 0 0 0	SL 0 0 0	1 ST 0 0 0	IBOUND 0 SR 0 0	SU 0 0 0	EL 0 0 0	2 ET 0 0	0 ER 0 0	0 EU 0 0	WL 0 0 0 0	WESTE 2 WT 0 0 0	80UND 0 WR 0 0	0 0 0	TOTAL 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM	NL 0 0 0 0 0	0 NT 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0	SL 0 0 0 0 0	1 ST 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0	0 ER 0 0 0 0	0 EU 0 0 0 0	WL 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 WR 0 0 0	WU 0 0 0 0	TOTAL 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM	NL 0 0 0 0 0 0	0 NT 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0	0 ER 0 0 0 0 0 0	0 EU 0 0 0 0 0	WL 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 WR 0 0 0 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM	NL 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0	0 ER 0 0 0 0 0 0	0 EU 0 0 0 0 0	WL 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0	BOUND 0 WR 0 0 0 0 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM	NL 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0	0 EU 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0	80UND 0 WR 0 0 0 0 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM	NL 0 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0	0 EU 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 1 1	80UND 0 WR 0 0 0 0 0 0 0	WU 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0 1
3:45 PM 4:00 PM 4:15 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:30 PM 5:30 PM 5:45 PM 6:00 PM	NL 0 0 0 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0 0 0	0 EU 0 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0	80UND 0 WR 0 0 0 0 0 0 0 0	WU 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:10 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:15 PM	NL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0 0 0 0	0 EU 0 0 0 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	80UND 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:35 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:30 PM 6:00 PM 6:30 PM	NL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SOUND 0 WR O O O O O O O O O O O O O O O O O O	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:45 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:15 PM 6:30 PM	NL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0 0 0 0	0 EU 0 0 0 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	80UND 0 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:45 PM 4:45 PM 5:10 PM 5:15 PM 5:30 PM 6:00 PM 6:30 PM 6:30 PM TOTAL VOLUMES:	NL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SOUND 0 WR O O O O O O O O O O O O O O O O O O	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:45 PM 4:45 PM 5:00 PM 5:30 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM 6:30 PM 6:30 PM	NL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 NTT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SOUND 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:15 PM 4:45 PM 4:45 PM 5:00 PM 5:30 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES: APPROACH %'s: PEAK HR: PEAK HR:	NL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST O O O O O O O O O O O O O O O O O O	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30UND 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3:45 PM 4:00 PM 4:15 PM 4:45 PM 4:45 PM 5:00 PM 5:30 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM 6:30 PM 6:30 PM	NL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 NTT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HBOUND 0 NR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 ET 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 ER 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WESTE 2 WT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SOUND 0 WR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Intersection Turning Movement Count Location: Virginia Ave/Clay PI & Doug Davis Dr/Virginia Ave City: Hapeville City: Hapeville City: Hapeville Date: 5/14/2019

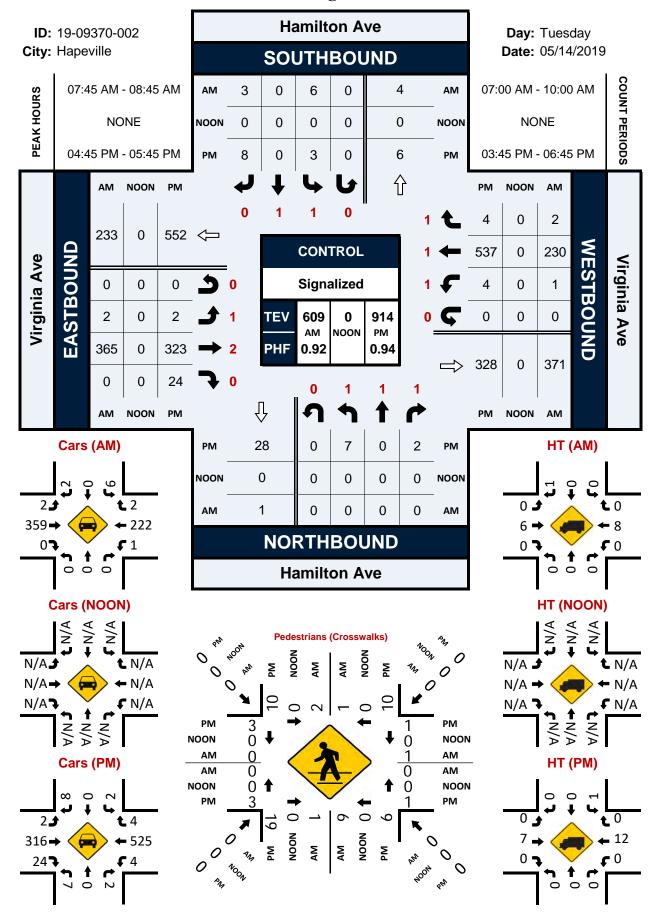
Pedestrians (Crosswalks)

NS/EW Streets:	Virginia Ave/Clay Pl		Virginia Ave/Clay Pl		_	Dr/Virginia	a Doug Davis Dr/Virginia Ave				Ī
-,						ve					<u> </u>
AM		H LEG		H LEG		Γ LEG	_	Γ LEG		2 CUT OUT	
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
7:00 AM	1	1	2	0	0	0	0	1	2	0	7
7:15 AM		0	1	1	0	1	0	0	0	0	3
7:30 AM	0	0	1	1	1	0	0	0	1	1	5
7:45 AM	0	1	0	0	0	0	1	0	0	0	2
8:00 AM	1	0	0	3	1	0	1	1	0	4	11
8:15 AM	0	0	0	1	0	0	0	0	0	1	2
8:30 AM	0	0	0	1	1	0	0	0	0	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	1	0	1	0	0	0	0	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	1	1	1	1	2	2	0	1	9
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
TOTAL VOLUMES:	2	2	6	8	5	2	4	4	3	8	44
APPROACH %'s:	50.00%	50.00%	42.86%	57.14%	71.43%	28.57%	50.00%	50.00%	27.27%	72.73%	
PEAK HR:	07:45 AM	- 08:45 AM									TOTAL
PEAK HR VOL:	1	1	0	5	2	0	2	1	0	6	18
PEAK HR FACTOR:	0.250	0.250		0.417	0.500		0.500	0.250		0.375	0.400
		500	0.4	117		500		375	0.3	375	0.409

PM	NORT	H LEG	SOUT	H LEG	EAST	Γ LEG	WES	Γ LEG	SOUTH LEG	2 CUT OUT	
PIVI	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
3:45 PM	0	0	4	3	1	0	3	2	3	3	19
4:00 PM	0	1	0	2	0	2	0	1	0	1	7
4:15 PM	0	2	0	0	0	0	0	0	0	0	2
4:30 PM	0	1	0	1	1	6	0	0	6	1	16
4:45 PM	0	0	4	0	0	1	0	2	4	0	11
5:00 PM	0	1	2	1	2	0	4	0	1	3	14
5:15 PM	1	1	1	0	1	1	1	0	1	0	7
5:30 PM	1	1	5	2	2	0	4	6	2	2	25
5:45 PM	3	8	0	3	1	2	6	2	1	2	28
6:00 PM	1	4	6	3	2	0	0	2	4	4	26
6:15 PM	1	7	1	0	0	0	0	0	1	0	10
6:30 PM	0	3	3	0	2	0	0	1	1	0	10
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
TOTAL VOLUMES:	7	29	26	15	12	12	18	16	24	16	175
APPROACH %'s:	19.44%	80.56%	63.41%	36.59%	50.00%	50.00%	52.94%	47.06%	60.00%	40.00%	
PEAK HR :	04:30 PM	- 05:30 PM									TOTAL
PEAK HR VOL :	1	3	7	2	4	8	5	2	12	4	48
PEAK HR FACTOR:	0.250	0.750	0.438	0.500	0.500	0.333	0.313	0.250	0.500	0.333	0.750
	0.5	500	0.5	563	0.4	129	0.4	138	0.5	571	0.750

Hamilton Ave & Virginia Ave

Peak Hour Turning Movement Count



Intersection Turning Movement Count
City: Hapeville
Control: Signalized Project ID: 19-09370-002 Date: 5/14/2019

								To	tal								_
NS/EW Streets:		Hamilto	n Ave			Hamilto	n Ave			Virginia	a Ave			Virginia	a Ave		
		NORTH	BOUND			SOUTH	BOUND			EASTB	OUND			WESTE	OUND		
AM	1	1	1	0	1	1	0	0	1	2	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	1	67	0	0	0	46	0	0	115
7:15 AM	0	0	0	0	3	0	0	0	0	70	0	0	1	45	0	0	119
7:30 AM	0	0	0	0	0	0	1	0	0	74	0	0	0	57	0	0	132
7:45 AM	0	0	0	0	1	0	0	0	1	81	0	0	0	60	2	0	145
8:00 AM	0	0	0	0	2	0	0	0	0	85	0	0	0	51	0	0	138
8:15 AM	0	0	0	0	2	0	2	0	1	103	0	0	1	52	0	0	161
8:30 AM	0	0	0	0	1	0	1	0	0	96	0	0	0	67	0	0	165
8:45 AM	0	0	0	0	1	0	0	0	1	77	0	0	0	52	1	0	132
9:00 AM	0	0	0	0	0	1	0	0	0	59	0	0	1	46	0	0	107
9:15 AM	1	0	0	0	0	0	0	0	0	62	2	0	0	46	1	0	112
9:30 AM	1	0	0	0	2	0	2	0	1	61	0	1	0	49	1	0	118
9:45 AM	0	0	0	0	0	0	0	0	1	65	1	0	1	46	0	0	114
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	13	1	6	0	6	900	3	1	4	617	5	0	1558
APPROACH %'s:	100.00%	0.00%	0.00%	0.00%	65.00%	5.00%	30.00%	0.00%	0.66%	98.90%	0.33%	0.11%	0.64%	98.56%	0.80%	0.00%	
PEAK HR :			08:45 AM		_	_	_	_	_		_	_			_	_	TOTAL
PEAK HR VOL :	0	0	0	0	6	0	3	0	2	365	0	0	1	230	2 0.250	0	609
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.750	0.000	0.375	0.000	0.500	0.886	0.000	0.000	0.250	0.858		0.000	0.923
						0.5	03			0.00	32			0.00	09		
		NORTH	BOUND			SOUTH	BOUND			EASTB	OUND			WESTE	OUND		
PM	1	1	1	0	1	1	0	0	1	2	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:45 PM	1	0	0	0	1	0	2	0	0	71	3	0	1	108	1	0	188
4:00 PM	4	0	0	0	0	0	0	0	1	78	7	0	1	95	0	0	186
4:15 PM	5	0	2	0	1	0	1	0	1	83	3	0	1	108	2	0	207
4:30 PM	3	0	1	0	0	0	0	0	2	91	6	0	2	110	0	0	215
4:45 PM	0	0	0	0	0	0	5	0	0	74	4	0	1	120	1	0	205
5:00 PM	2	0	0	0	1	0	3	0	0	70	8	0	0	145	1	0	230
5:15 PM	2	0	0	0	1	0	0	0	1	95	4	0	0	139	2	0	244
5:30 PM	3	0	2	0	1	0	0	0	1	84	8	0	3	133	0	0	235
5:45 PM	4	0	0	0	1	0	1	0	0	89	3	0	1	90	1	0	190
6:00 PM	1	0	1	0	2	0	0	0	1	76	4	0	1	90	4	0	180
6:15 PM	4	1	1	0	0	0	3	0	1	77	5	0	0	100	1	0	193
6:30 PM	0	0	1	0	2	0	2	0	4	67	7	0	1	85	3	0	172
TOTAL WOLLD	NL 20	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	29	1	8	0	10	0	17	0	12	955	62	0	12	1323	16	0	2445
APPROACH %'s:	76.32%	2.63%	21.05%	0.00%	37.04%	0.00%	62.96%	0.00%	1.17%	92.81%	6.03%	0.00%	0.89%	97.93%	1.18%	0.00%	TOT4:
PEAK HR :)4:45 PM -															TOTAL
PEAK HR VOL:	7	0	2	0	3	0	8							537			
PEAK HR FACTOR:	0.583	0.000	0.250	0.000	0.750	0.000	0.400	0 0.000	2 0.500	323 0.850	24 0.750	0 0.000	4 0.333	0.926	4 0.500	0.000	914

Intersection Turning Movement Count

Location: Hamilton Ave & Virginia Ave City: Hapeville Control: Signalized

Project ID: 19-09370-002 Date: 5/14/2019

	Cars																
NS/EW Streets:		Hamilto	n Ave			Hamilto	n Ave			Virginia	Ave			Virginia	Ave		
		NORTH	BOUND			SOUTH	BOUND			EASTB	OUND			WESTB	OUND		
AM	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	1 WT	1 WR	0 WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	1	67	0	0	0	43	0	0	112
7:15 AM	0	0	0	0	2	0	0	0	0	68	0	0	1	45	0	0	116
7:30 AM	0	0	0	0	0	0	1	0	0	70	0	0	0	54	0	0	125
7:45 AM	0	0	0	0	1	0	0	0	1	80	0	0	0	60	2	0	144
8:00 AM	0	0	0	0	2	0	0	0	0	85	0	0	0	49	0	0	136
8:15 AM	0	0	0	0	2 1	0	1	0	1 0	101	0	0	1	47	0	0	153
8:30 AM	0	0	0	0	1	0	0	0	U	93	0	0	0	66	0	0	161
8:45 AM 9:00 AM	0	0	0	0	0	0	U	0	0	77 56	0	0	1	48 42	0	0	128 100
9:15 AM	1	0	0	0	0	0	0	0	0	61	2	0	0	42 44	1	0	100
9:30 AM	1	0	0	0	2	0	2	0	1	59	0	1	0	46	1	0	113
9:45 AM	0	0	0	0	0	0	0	0	1	60	1	0	1	42	0	0	105
3. 13 ATT	٠	•	•	•	•	•	•	·	•	00	-	·	•	12	·	٠	103
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	12	1	5	0	6	877	3	1	4	586	5	0	1502
APPROACH %'s:	100.00%	0.00%	0.00%	0.00%	66.67%	5.56%	27.78%	0.00%	0.68%	98.87%	0.34%	0.11%	0.67%	98.49%	0.84%	0.00%	
PEAK HR :		07:45 AM -	08:45 AM														TOTAL
PEAK HR VOL:	0	0	0	0	6	0	2	0	2	359	0	0	1	222	2	0	594
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.750	0.000	0.500	0.000	0.500	0.889	0.000	0.000	0.250	0.841	0.250	0.000	0.922
						0.66	57			0.88	15			0.85			0.922
															52		0.922
211		NORTH				SOUTH	BOUND			EASTB	OUND			WESTB	OUND		0.922
PM	1	1	1	0	1	SOUTHI 1	BOUND 0	0	1	EASTB 2	OUND 0	0	1	WESTB 1	OUND 1	0	
	NL	1 NT	1 NR	NU	SL	SOUTHI 1 ST	BOUND 0 SR	SU	EL	EASTB 2 ET	OUND 0 ER	EU	WL	WESTB 1 WT	OUND 1 WR	WU	TOTAL
3:45 PM	NL 1	1 NT 0	1 NR 0	NU 0	SL 0	SOUTHI 1 ST 0	BOUND 0 SR 2	SU 0	EL 0	EASTB 2 ET 64	OUND 0 ER 3	EU 0	WL 1	WESTB 1 WT 106	00UND 1 WR 1	WU 0	TOTAL
3:45 PM 4:00 PM	NL 1 4	1 NT 0	1 NR 0	NU 0 0	SL 0 0	SOUTHI 1 ST 0	BOUND 0 SR 2	SU 0 0	EL 0 1	EASTB 2 ET 64 76	OUND 0 ER 3 7	EU 0 0	WL 1 1	WESTB 1 WT 106 94	60UND 1 WR 1 0	0 0	TOTAL 178 183
3:45 PM 4:00 PM 4:15 PM	NL 1 4 5	1 NT 0 0 0	1 NR 0 0 2	NU 0 0 0	SL 0 0 1	SOUTHI 1 ST 0 0	BOUND 0 SR 2 0 1	SU 0 0 0	EL 0 1 1	EASTB 2 ET 64 76 80	OUND 0 ER 3 7	0 0 0 0	WL 1 1 1	WESTB 1 WT 106 94 106	60UND 1 WR 1 0 2	WU 0 0 0	TOTAL 178 183 202
3:45 PM 4:00 PM 4:15 PM 4:30 PM	NL 1 4 5 3	1 NT 0 0 0 0	1 NR 0 0 2 1	NU 0 0 0 0	SL 0 0 1	SOUTHI 1 ST 0 0 0	BOUND 0 SR 2 0 1	SU 0 0 0 0	EL 0 1 1 2	EASTB 2 ET 64 76 80 90	OUND 0 ER 3 7 3 6	0 0 0 0 0	WL 1 1 1 2	WESTB 1 WT 106 94 106 108	OUND 1 WR 1 0 2	WU 0 0 0 0	TOTAL 178 183 202 212
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM	NL 1 4 5 3 0	1 NT 0 0 0 0 0	1 NR 0 0 2 1	NU 0 0 0 0 0	SL 0 0 1 0 0	SOUTHI 1 ST 0 0 0 0	BOUND 0 SR 2 0 1	SU 0 0 0 0 0	EL 0 1 1 2 0	EASTB 2 ET 64 76 80 90 74	OUND 0 ER 3 7 3 6 4	EU 0 0 0 0 0	WL 1 1 1 2 1	WESTB 1 WT 106 94 106 108 118	OUND 1 WR 1 0 2 0	WU 0 0 0 0 0	TOTAL 178 183 202 212 203
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM	NL 1 4 5 3 0 2	1 NT 0 0 0 0	1 NR 0 0 2 1	NU 0 0 0 0 0 0	SL 0 0 1 0 0 0	SOUTHI 1 ST 0 0 0	BOUND 0 SR 2 0 1	SU 0 0 0 0 0 0	EL 0 1 1 2	EASTB 2 ET 64 76 80 90 74 68	OUND 0 ER 3 7 3 6	0 0 0 0 0	WL 1 1 1 2 1 0	WESTB 1 WT 106 94 106 108 118 143	OUND 1 WR 1 0 2 0 1 1	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM	NL 1 4 5 3 0	1 NT 0 0 0 0 0 0	1 NR 0 0 2 1 0	NU 0 0 0 0 0	SL 0 0 1 0 0	SOUTHI 1 ST 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5	SU 0 0 0 0 0	EL 0 1 1 2 0 0 0	EASTB 2 ET 64 76 80 90 74	OUND 0 ER 3 7 3 6 4	EU 0 0 0 0 0 0	WL 1 1 1 2 1	WESTB 1 WT 106 94 106 108 118	OUND 1 WR 1 0 2 0	WU 0 0 0 0 0	TOTAL 178 183 202 212 203
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM	NL 1 4 5 3 0 2 2	1 NT 0 0 0 0 0 0 0	1 NR 0 0 2 1 0 0	NU 0 0 0 0 0 0	SL 0 0 1 0 0 0	SOUTHI 1 ST 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 3	SU 0 0 0 0 0 0	EL 0 1 1 2 0 0 0 1	EASTB 2 ET 64 76 80 90 74 68 92	OUND 0 ER 3 7 3 6 4	EU 0 0 0 0 0 0	WL 1 1 1 2 1 0 0 0	WESTB 1 WT 106 94 106 108 118 143 135	OUND 1 WR 1 0 2 0 1 1 2	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM	NL 1 4 5 3 0 2 2 2 3	1 NT 0 0 0 0 0 0 0 0	1 NR 0 0 2 1 0 0 0 2	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 1 0 0 0 1 1	SOUTHI 1 ST 0 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 3 0	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 2 0 0 0 1 1 1 1	EASTB 2 ET 64 76 80 90 74 68 92 82	OUND 0 ER 3 7 3 6 4 8 4	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 2 1 0 0 3	WESTB 1 WT 106 94 106 108 118 143 135 129	OUND 1 WR 1 0 2 1 1 1 2 0	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229
3:45 PM 4:00 PM 4:15 PM 4:35 PM 4:45 PM 5:10 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:15 PM	NL 1 4 5 3 0 2 2 3 4 1 4	1 NT 0 0 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 2 1 0 0 0 0 2 2 1 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 1 1 0 0 0 1 1 1 1 1 2 0 0 0 0 0 0	SOUTHI 1 ST 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 3 0 0 0 1 0 3 3	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 2 0 0 0 1 1 1 0 0 1 1 1 1	EASTB 2 2 ET 64 76 80 90 74 68 92 82 82 83 73 76	OUND 0 ER 3 7 3 6 4 4 8 4 4 8 3 3 4 5 5	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 2 1 0 0 3 1 1 0	WESTB 1 WT 106 94 106 108 118 143 135 129 89 88 95	OUND 1 WR 1 0 2 0 1 1 1 2 0 1 1 1 2	WU 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175 187
3:45 PM 4:00 PM 4:15 PM 4:13 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM	NL 1 4 5 3 0 2 2 2 3 4	1 NT 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 2 1 0 0 0 2 2 1 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 1 0 0 0 0 1 1 1 1 1 2 2	SOUTHI 1 ST 0 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 3 0 0 1	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 2 0 0 1 1 1 0 1 1 0 1 1	EASTB 2 ET 64 76 80 90 74 68 92 82 83 73	OUND 0 ER 3 7 3 6 4 8 4 8 3	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 2 1 0 0 3 1 1	WESTB 1 WT 106 94 106 108 118 143 135 129 89 88	OUND 1 WR 1 0 2 0 1 1 2 0 0 1 4 4	WU 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175
3:45 PM 4:00 PM 4:15 PM 4:35 PM 4:45 PM 5:10 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:15 PM	NL 1 4 5 3 0 2 2 2 3 4 1 4 0	1 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 2 1 0 0 0 0 2 0 1 1 1 1 1 1 1 1 1 1	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 1 1 0 0 0 1 1 1 1 2 0 0 2 2	SOUTHI 1 ST 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 3 0 0 1 0 0 3 2 2	SU 0 0 0 0 0 0 0 0 0	EL 0 1 1 1 2 2 0 0 0 1 1 1 0 0 1 1 1 4	EASTB 2 ET 64 76 80 90 74 68 92 82 83 73 76 65	OUND 0 ER 3 7 3 6 4 4 8 4 4 8 3 4 5 7 7	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 2 1 0 0 0 3 1 1 1 0 1 1	WESTB 1 106 94 106 108 118 143 135 129 89 88 95 83	OUND 1 WR 1 0 2 0 1 1 1 2 0 1 4 1 3	WU 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175 187 168
3:45 PM 4:00 PM 4:15 PM 4:35 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 6:00 PM 6:30 PM	NL 1 4 5 3 0 2 2 2 3 4 1 4 4 0 0 NL	1 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 2 1 1 0 0 0 2 2 1 1 0 0 0 1 1 1 1 1	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 1 1 0 0 0 1 1 1 1 2 0 0 2 2 SL	SOUTHI 1 ST 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 5 3 0 0 0 1 1 0 3 2 2 SR	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 2 0 0 0 1 1 1 0 0 1 1 4 4 EL	EASTB 2 ETT 64 76 80 90 74 892 82 83 73 76 65 ETT	OUND 0 ER 3 7 3 6 4 4 8 4 4 5 7 7	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 2 1 0 0 0 3 1 1 1 0 1 1 WL	WESTE 1 WT 106 94 106 108 118 143 143 129 89 88 88 95 83 WT	OUND 1 WR 1 0 0 1 1 2 0 0 1 1 4 1 3 WR	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175 187 168
3:45 PM 4:00 PM 4:15 PM 4:35 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM	NL 1 4 5 5 3 0 0 2 2 2 3 3 4 4 1 4 0 0 NL 29	1 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 0 2 1 0 0 0 0 2 2 1 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 1 1 0 0 0 1 1 1 1 1 2 0 2 SL 8	SOUTHI 1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 5 3 0 0 0 1 1 0 3 2 2 SR 17	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 2 0 0 1 1 1 0 1 1 1 4 EL 12	EASTB 2 ET 64 76 80 90 74 68 82 83 76 65 ET 923	OUND 0 ER 3 7 3 6 4 4 8 4 4 8 3 4 5 7 ER 62	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 2 1 0 0 3 1 1 0 1 1 WL 12	WESTB 1 WT 106 94 106 108 118 143 135 129 89 88 88 WT 1294	OUND 1 WR 1 0 2 0 1 1 2 0 1 1 4 1 3 WR 16	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175 187 168
3:45 PM 4:00 PM 4:15 PM 4:35 PM 4:45 PM 5:10 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:30 PM 6:30 PM	NL 1 4 5 3 0 0 2 2 2 3 4 4 0 0 NL 29 76.32%	1 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 0 2 1 0 0 0 0 2 0 1 1 1 1 NR 8 2 2.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 1 1 0 0 0 1 1 1 1 2 0 0 2 2 SL	SOUTHI 1 ST 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 5 3 0 0 0 1 1 0 3 2 2 SR	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 2 0 0 0 1 1 1 0 0 1 1 4 4 EL	EASTB 2 ETT 64 76 80 90 74 892 82 83 73 76 65 ETT	OUND 0 ER 3 7 3 6 4 4 8 4 4 5 7 7	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 2 1 0 0 0 3 1 1 1 0 1 1 WL	WESTE 1 WT 106 94 106 108 118 143 143 129 89 88 88 95 83 WT	OUND 1 WR 1 0 0 1 1 2 0 0 1 1 4 1 3 WR	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175 187 168 TOTAL 2382
3:45 PM 4:00 PM 4:15 PM 4:35 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:35 PM 6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES: APPROACH %s:	NL 1 4 5 3 0 0 2 2 2 3 4 4 1 4 0 0 NL 29 76.32%	1 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 2 1 0 0 0 2 0 1 1 1 1 NR 8 21.05%	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 1 1 0 0 0 1 1 1 1 2 0 0 2 2 SL 8 32.00%	SOUTHI 1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 0 1 0 5 5 3 0 0 1 1 0 0 3 2 2 SR 17 68.00%	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 1 2 0 0 1 1 1 1 4 4 EL 12 1.20%	EASTB 2 ET 64 76 80 90 74 68 92 82 83 76 65 ET 923 92.58%	OUND 0 ER 3 7 7 3 6 4 4 8 8 3 4 4 5 5 7 7 ER 62 6.22%	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 1 2 2 1 1 0 0 0 3 1 1 1 0 1 1 WL 12 0.91%	WESTB 1 WT 106 94 106 108 118 143 135 129 89 88 87 WT 1294 97.88%	OUND 1 WR 1 0 2 0 1 1 1 2 0 1 1 3 WR 16 1.21%	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175 187 168 TOTAL 2382
3:45 PM 4:00 PM 4:15 PM 4:15 PM 4:45 PM 5:00 PM 5:00 PM 5:30 PM 5:30 PM 6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES: APPROACH %'s: PEAK HR: PEAK HR:	NL 1 4 5 3 3 0 2 2 2 3 4 4 1 4 0 0 NL 29 76.32%	1 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 2 1 0 0 0 2 0 1 1 1 1 1 NR 8 21.05% 0 05:45 PM	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 1 1 0 0 0 1 1 1 1 2 2 0 2 SL 8 32.00%	SOUTHI 1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 1 0 5 3 0 0 1 0 3 2 2 SR 17 68.00%	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 1 2 0 0 0 1 1 1 0 1 1 4 4 EL 12 1.20%	EASTB 2 ET 64 76 80 90 74 68 92 82 83 73 76 65 ET 923 92.58%	OUND 0 ER 3 7 7 3 6 4 4 8 4 8 8 3 4 5 7 ER 62 6.22%	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 1 2 1 1 0 0 0 3 1 1 1 0 0 1 1 WL 12 0.91%	WESTB 1 WT 106 94 106 108 118 143 135 129 89 88 95 83 WT 1294 97.88%	OUND 1 WR 1 0 0 2 0 1 1 2 0 0 1 1 3 3 WR 16 1.21%	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175 187 168 TOTAL 2382
3:45 PM 4:00 PM 4:15 PM 4:35 PM 4:45 PM 5:00 PM 5:15 PM 5:30 PM 5:35 PM 6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES: APPROACH %s:	NL 1 4 5 3 0 0 2 2 2 3 4 4 1 4 0 0 NL 29 76.32%	1 NT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 NR 0 0 2 1 1 0 0 2 2 0 1 1 1 1 1 1 NR 8 21.05% 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SL 0 0 0 1 1 0 0 0 1 1 1 1 2 0 0 2 2 SL 8 32.00%	SOUTHI 1 ST 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BOUND 0 SR 2 0 1 1 0 5 5 3 0 0 1 1 0 3 2 2 SR 17 68.00% 8 0.400	SU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EL 0 1 1 1 2 0 0 1 1 1 1 4 4 EL 12 1.20%	EASTB 2 ET 64 76 80 90 74 68 92 82 83 76 65 ET 923 92.58%	DUND 0 ER 3 7 7 3 6 4 4 8 8 4 4 5 7 7 ER 62 6.22%	EU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WL 1 1 1 1 2 2 1 1 0 0 0 3 1 1 1 0 1 1 WL 12 0.91%	WESTB 1 WT 106 94 106 108 118 143 135 129 89 88 87 WT 1294 97.88%	OUND 1 WR 1 0 2 0 1 1 1 2 0 1 1 4 1 3 WR 16 1.21%	WU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TOTAL 178 183 202 212 203 225 237 229 183 175 187 168 TOTAL 2382

Intersection Turning Movement Count

Location: Hamilton Ave & Virginia Ave
City: Hapeville

Project ID: 19-09370-002

Control: S	Signalize	d							_					Date: 5	5/14/2019		
-								Н	T								
NS/EW Streets:		Hamilt	on Ave			Hamilto	n Ave			Virginia	Ave			Virginia	Ave		
		NORTI	HBOUND			SOUTH				EASTB				WESTB	OUND		
AM	1 NL	1	1 NR	0	1	1 ST	0 SR	0 SU	1	2	0	0 EU	1 WL	1	1 WR	0	тота
7:00 AM	NL 0	NT 0	NK 0	NU 0	SL 0	0	SK	0	EL	ET 0	ER 0	0 0	O NVL	WT 3	0 0	WU 0	TOTA 3
7:15 AM	Ö	Ö	Ö	Ö	1	0	0	0	0	2	0	o l	0	0	Ö	Ö	3
7:30 AM	ō	ō	Ō	ō	Ō	ō	ō	Ō	Ō	4	Ō	Ō	ō	3	ō	ō	7
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:15 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	5	0	0	8
8:30 AM 8:45 AM	0	0	0	0 0	0	0	0	0	0	3 0	0	0	0	1	0	0	4
9:00 AM	0	0	U	0	0	0	0	0	0	3	0	0	U	4	0	0	7
9:15 AM	Ö	Ö	0	0	0	0	0	0	0	1	0	0	0	2	Ö	Ö	3
9:30 AM	ō	ō	Ō	Ō	0	Ō	Ō	0	0	2	0	0	Ō	3	Ō	Ō	5
9:45 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTA
TOTAL VOLUMES : APPROACH %'s :	0	0	0	0	1 50.00%	0 0.00%	1 50.00%	0 0.00%	0 0.00%	23 100.00%	0 0.00%	0 0.00%	0 0.00%	31 100.00%	0 0.00%	0 0.00%	56
PEAK HR:		07:45 AM	- 08:45 AM														TOT
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	6	0	0	0	8	0	0	15
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.400	0.000	0.000	0.469
						0.23	00			0.50	10			0.40	JU		
		NORTI	HBOUND			SOUTH	BOUND			EASTB	OUND			WESTB	OUND		
PM	1	1	1	0	1	1	0	0	1	2	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTA
3:45 PM	0	0	0	0	1	0	0	0	0	<u> </u>	0	0	0	2	0	0	10
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
4:15 PM 4:30 PM	0	0	0	0 0	0	0	0	0	0	3	0	0	0	2	0	0	5 3
4:45 PM	Ö	Ö	0	Ö	0	0	0	0	0	0	0	0	0	2	0	Ö	2
5:00 PM	0	0	0	0	1	0	0	0	0	2	0	0	0	2	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	7
5:45 PM					† <u>-</u>				0		0	0	0			0	5
6:00 PM	0	0	0	0	0	0	0	0		3				2	0		
6:00 PM 6:15 PM	0	0	Ō	0	0	Ö	Ö	0	Ö	1	0	0	ŏ	5	0	0	6
6:00 PM	0 0 0	0	0	0 0 0	0	0	0	0	0	1 2	0	0	0	5 2	0	0	6 4
6:00 PM 6:15 PM 6:30 PM	0 0 0 0	0 0 NT	0 0 NR	0 0 0	0 0 SL	0 0 ST	0 0 SR	0 0 SU	0 0	1 2 ET	0 0	0 0	0 0 WL	5 2 WT	0 0 WR	0 0 WU	6 4 TOT
6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES:	0 0 0	0	0	0 0 0	0 0 SL 2	0 0 ST 0	0 0 SR 0	0 0 SU 0	0 0 EL 0	1 2 ET 32	0 0 ER 0	0 0 EU 0	0 0 WL 0	5 2 WT 29	0 0 WR 0	0 0 WU 0	6 4 TOT
6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES: APPROACH %'s:	0 0 0 0	0 0 NT 0	0 0 0 NR 0	0 0 0 0 NU 0	0 0 SL	0 0 ST	0 0 SR	0 0 SU	0 0	1 2 ET	0 0	0 0	0 0 WL	5 2 WT	0 0 WR	0 0 WU	6 4 TOT. 63
6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES:	0 0 0 0	0 0 NT 0	0 0 NR	0 0 0 0 NU 0	0 0 SL 2	0 0 ST 0	0 0 SR 0	0 0 SU 0	0 0 EL 0	1 2 ET 32	0 0 ER 0	0 0 EU 0	0 0 WL 0	5 2 WT 29	0 0 WR 0	0 0 WU 0	6 4 TOT/ 63
6:00 PM 6:15 PM 6:30 PM TOTAL VOLUMES: APPROACH %'s: PEAK HR:	0 0 0 0 NL 0	0 0 NT 0	0 0 NR 0	0 0 0 NU 0	0 0 SL 2 100.00%	0 0 ST 0 0.00%	0 0 0 SR 0 0.000%	0 0 SU 0 0.00%	0 0 EL 0 0.00%	ET 32 100.00%	0 0 ER 0 0.00%	0 0 EU 0 0.00%	0 0 WL 0 0.00%	5 2 WT 29 100.00%	0 0 WR 0 0.00%	0 0 WU 0 0.00%	6 4 TOTA 63

Intersection Turning Movement Count

Location: Hamilton Ave & Virginia Ave City: Hapeville Control: Signalized

Project ID: 19-09370-002 Date: 5/14/2019

Di	koc
DI	VG2

								BII	(es								
NS/EW Streets:		Hamilt	ton Ave			Hamil	ton Ave			Virginia	a Ave			Virginia	a Ave		
		NORT	HBOUND			SOUT	HBOUND			EASTE	OUND			WESTE	OUND		
AM	1	1	1	0	1	1	0	0	1	2	0	0	1	1	1	0	ı
,	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	0	0	0
9:00 AM 9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:15 AM 9:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
9:30 AM 9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
J.43 AITI	U	U	U	U	U	U	U	U	U	U	U	U	U	1	U	U	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
APPROACH %'s:	·	ŭ	·	•		•	·	·	0.00%		0.00%	0.00%		100.00%	0.00%	0.00%	ı
PEAK HR:		07:45 AM	- 08:45 AM	1													TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
														0.25	50		0.230
D0.4			HBOUND	_			HBOUND			EASTE		_		WESTE		_	ı
PM	1	1	1	0	1	1	0	0	1	2	0	0	1	1	1	0	l
2.4E PM	NL	NT	NR	NU	SL	ST	SR 0	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:45 PM 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	Ö	0	0	Ö	0	Ö	0	0	0	1	0	Ö	0	n	0	Ö	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	ō	Ō	Ō	Ō	0	ō	Ō	ō	0	Ō	ō	ō	0	Ō	Ō	ō	ō
5:30 PM	ō	Ō	ō	ō	Ō	ō	ō	Ō	0	Ō	ō	ō	Ō	Ō	ō	ō	Ō
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s:									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	TOTAL
PEAK HR:			- 05:45 PM					0			0		0	0			TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250

Intersection Turning Movement Count City: Hapeville Date: 5/14/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Hamilt	on Ave	Hamilt	on Ave	Virgir	nia Ave	Virgini	a Ave	
ARA	NORT	H LEG	SOUT	H LEG	EAS	T LEG	WEST	LEG	
AM	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	0	1	1	0	0	1	0	5
7:15 AM	0	0	1	2	0	1	0	0	4
7:30 AM	1	0	1	1	0	0	0	0	3
7:45 AM	0	1	1	1	0	0	0	0	3
8:00 AM	1	0	0	3	0	1	0	0	5
8:15 AM	1	0	0	1	0	0	0	0	2
8:30 AM	0	0	0	1	0	0	0	0	1
8:45 AM	0	3	0	0	0	0	0	0	3
9:00 AM	0	1	0	0	0	0	0	0	1
9:15 AM	0	0	1	0	0	0	0	0	1
9:30 AM	3	0	1	2	0	1	0	0	7
9:45 AM	0	0	0	0	0	0	1	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES:	8	5	6	12	0	3	2	0	36
APPROACH %'s:	61.54%	38.46%	33.33%	66.67%	0.00%	100.00%	100.00%	0.00%	
PEAK HR:	07:45 AM	- 08:45 AM							TOTAL
PEAK HR VOL:	2	1	1	6	0	1	0	0	11
PEAK HR FACTOR:	0.500	0.250	0.250	0.500		0.250			0.550
	0.7	750	0.5	83	0.	250			0.550

PM	NORT	'H LEG	SOUT	H LEG	EAST	LEG	WES	Γ LEG	
PIVI	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:45 PM	2	4	3	1	0	0	0	1	11
4:00 PM	8	4	0	4	5	3	0	0	24
4:15 PM	1	2	0	3	1	0	0	0	7
4:30 PM	0	2	0	2	0	1	1	0	6
4:45 PM	0	0	5	1	0	0	0	3	9
5:00 PM	6	3	4	1	0	1	3	0	18
5:15 PM	2	4	3	6	1	0	0	0	16
5:30 PM	2	3	7	1	0	0	0	0	13
5:45 PM	5	9	7	5	0	0	1	0	27
6:00 PM	4	7	5	3	1	0	0	0	20
6:15 PM	1	10	2	1	0	0	0	0	14
6:30 PM	2	4	2	1	2	2	0	0	13
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES:	33	52	38	29	10	7	5	4	178
APPROACH %'s:	38.82%	61.18%	56.72%	43.28%	58.82%	41.18%	55.56%	44.44%	
PEAK HR :	04:45 PM	- 05:45 PM							TOTAL
PEAK HR VOL :	10	10	19	9	1	1	3	3	56
PEAK HR FACTOR :	0.417	0.625	0.679	0.375	0.250	0.250	0.250	0.250	0.770
	0.5	556	0.7	778	0.5	500	0.5	500	0.778

CLASSIFICATION

Virginia Ave W/O Hamilton Ave

Day: Tuesday **Date:** 5/14/2019

City: Hapeville
Project #: GA19_9371_001

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	114	11	1	6	0	0	0	0	0	0	0	0	132
01:00	0	76	8	0	0	0	0	0	0	0	0	0	0	84
02:00	0	58	7	0	0	0	0	0	0	0	0	0	0	65
03:00	0	36	6	0	3	0	0	0	1	0	0	0	0	46
04:00	1	95	16	2	3	0	0	0	1	0	0	0	0	118
05:00	0	216	35	1	7	0	0	0		0	0	0	0	260
06:00	0	273	47	2	11	0	0	0		0	0	0	0	334
07:00	0	417	50	2	11	0	0	0			0	0	0	480
08:00	1	486	59	3	13	1	0	1	0	0	0	0	0	564
09:00	1	354	51	3	19	1	0	1	0	_	0	0	0	430
10:00	0	330	57	3	22	0	0	0		_	0	0	0	412
11:00	1	629	98	6	29	4	0	1	1	0	0		0	769
12:00 PM	3	816	128	2	36	0	0	1	0	_	0	0	0	986
13:00	0	697	120	6	31	0	0	1	0	_	0	0	0	855
14:00	1	604	94	8	20	1	0	0	0	_	0	0	0	728
15:00	0	625	91	5	23	1	0	0			0		0	745
16:00	0	667	105	2	11	1	0	0	0		0	0	0	786
17:00	0	751	105	5	18	0	0	1	0		0	0	0	881
18:00	0	543 473	83 63	5 2	15	0	0	0		0	_	0	0	646 554
19:00 20:00	0	362	50	1	15 12	0	0	0			0	0	0	425
21:00	0	290	39	1	8	1	0	0			0	0	0	339
22:00	0	235	28	0	4	0	0	0	0	0	0	0	0	267
23:00	0	208	29	0	10	1	0	0	Ū	_	•		J	
Totals	9	9355	1380	60	327	11	U	6	6	O	0	U	J	11154
% of Totals	0%	84%	12%	1%	3%	0%		0%	0%					100%
AM Volumes	4	3084	445	23	124	6	0	3		0	0	0	0	3694
% AM	0%	28%	4%	0%	1%	0%		0%	0%					33%
AM Peak Hour	04:00	11:00	11:00	11:00	11:00	11:00		08:00	03:00					11:00
Volume	1	629	98	6	29	4		1	1					769
PM Volumes	5	6271	935	37	203	5	0	3		0	0	0	0	,
% PM	0%	56%	8%	0%	2%	0%		0%	0%					67%
PM Peak Hour	12:00	12:00	12:00	14:00	12:00	14:00		12:00						12:00
Volume	3	816	128	8	36	1		1	1					986
Dire	ectional Pea			AM 7-9			NOON 12-2			PM 4-6			Peak Volun	
	A	All Classes	Volume	←→	% 0%	Volume	\longleftrightarrow	% 1 7 %	Volume	←→	% 15%	Volume	←→	% 50%
			1044		9%	1841		17%	1667		15%	6602		59%

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- 6 3-Axle Single Units
- 7 > =4-Axle Single Units
- 8 <=4-Axle Single Trailers
- 9 5-Axle Single Trailers
- **10** >=6-Axle Single Trailers
- 11 <=5-Axle Multi-Trailers
- **12** 6-Axle Multi-Trailers
- **13** >=7-Axle Multi-Trailers

Prepared by NDS/ATD Prepared by National Data & Surveying Services

VOLUME

Virginia Ave W/O Hamilton Ave

Day: Tuesday **Date:** 5/14/2019

City: Hapeville
Project #: GA19_9371_001

AN Period NB SB EB WB TOTAL PM Period NB SB EB WB Period NB SB EB WB TOTAL PM Period NB SB EB WB TOTAL PM Period NB SB EB WB Period NB SB SB EB WB Period NB SB EB WB Period NB SB		DAI	LY TOTALS			NB		SB		EB	1	WB_					То	otal
DOI:10.000		DAI	LITOTALS			0		0		5,550	5,	604					11,	154
00.15 0 0 1 13 16 29 12:15 0 0 136 127 283 00.00 0 0 0 136 127 283 00.00 0 0 0 13 59 14 73 27 132 12:30 0 0 109 99 208 995 00.00 0 0 13 59 14 73 27 132 12:45 0 0 0 143 519 137 467 289 995 00.00 0 0 0 1 15 11 1 27 13:00 0 0 125 11 1 27 13:00 0 0 10.00 135 11 1 27 13:00 0 0 10.00 135 11 1 27 13:00 0 0 10.00 135 11 1 27 13:00 0 0 10.00 135 11 1 26 13:00 0 0 0 10.00 135 11 1 26 13:00 0 0 0 10.00 135 11 1 1 26 1 13:00 0 0 0 10.00 137 138 138 13 13:00 0 0 0 10.00 130 137 138 139 134 135 10 0 0 0 10.00 130 137 138 139 134 135 10 0 0 0 10.00 130 130 130 130 130 130 130 130 130 1	AM Period	NB	SB					ТО	TAL		NB	SB			WB		TO	TAL
00:30																		
Dilico										_								
01:15 0 0 0 9 8 8 17 13:15 0 0 135 106 241 10:16 10:16 10:16 10 0 15 11 26 13:30 0 0 15 15 11 26 10:330 0 0 0 15 18 80 177 10:22 14:00 0 0 0 91 80 171 10:22 14:00 0 0 0 91 80 171 10:22 14:00 0 0 91 80 171 10:22 14:00 0 0 95 180 171 10:22 14:00 0 0 95 180 171 10:22 14:00 0 0 95 180 171 10:22 14:00 0 0 95 180 171 10:22 14:00 0 0 95 180 171 10:22					59		73		132					519		467		986
01:30 0 0 0 15 11 2 26 13:30 0 0 0 101 87 404 188 855 0 0 0 77 39 12 45 19 84 13:45 0 0 0 91 100 10 10 10 20 14:40 0 0 0 91 80 417 100:11 11 12 22 14:15 0 0 91 100:193 180 171 180 192 193 180 171 180 193 180 171 180 193 180 171 180 193 180 171 180 193 180 171 180 180 171 180 180 171 180 180 171 180 180 171 180 180 171 180 180 180 180 180 180 180 180 180 18											-							
D2:00																		
02:15					39		45		84					451		404		855
02:30																		
03:15 0				5							-							
03:15					32		33		65					370		358		728
03:30			-	-														
O4:00				5		5				15:30								
Od-15					16		30		46					357		388		745
October Octo								_			-							
05:00	04:30	0	0	14		11		25		16:30		0	106		110		216	
OS:15					57		61		118					361		425		786
05:30			-					_			-							
Control Cont	05:30			39		26		65				0	88		139		227	
O6:15 O					142		118		260					361		520		881
O6:45								_										
O7:00																		
O7:15					165		169		334					273		373		646
O7:45			-					_			-						_	
DB:00			-								-							
08:15 0 0 0 104 52 156 20:35 0 0 0 37 45 82 08:30 0 0 0 0 65 62 127 08:45 0 0 0 74 348 51 216 125 564 20:45 0 0 0 47 202 51 223 98 425 09:00 0 0 0 59 49 108 21:00 0 0 0 51 47 98 09:15 0 0 0 60 42 102 21:15 0 0 0 31 52 83 09:30 0 0 0 66 42 49 109 21:30 0 0 0 31 55 37 184 68 39 09:30 0 0 0 64 243 47 187 111 430 21:45 0 0 0 31 155 37 184 68 39 10:00 0 0 0 59 59 54 113 22:00 0 0 0 29 39 68 10:15 0 0 0 64 243 47 187 111 430 21:45 0 0 0 31 155 37 184 68 39 10:00 0 0 0 0 29 39 68 10:00 0 0 37 39 76 22:30 0 0 0 29 39 68 10:30 0 0 0 37 39 76 22:30 0 0 0 24 33 57 10:45 0 0 0 37 147 75 267 11:00 0 0 85 83 83 168 23:00 0 0 29 49 78 11:15 0 0 0 85 88 168 23:00 0 0 0 29 49 78 11:15 0 0 0 85 88 168 23:00 0 0 0 29 49 78 11:30 0 0 0 102 88 190 23:30 0 0 0 29 49 78 11:30 0 0 0 102 88 190 23:30 0 0 0 33 3 34 67 11:30 0 0 0 102 88 190 23:30 0 0 0 33 3 34 67 11:30 0 0 0 102 88 190 23:30 0 0 0 33 3 34 67 11:30 0 0 0 102 88 190 23:30 0 0 0 33 3 34 67 11:30 0 0 0 102 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 102 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 102 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 0 33 3 34 67 11:30 0 0 0 10:20 88 190 33:30 0 0 0 0 0 33 3 34 67 11:30 0 0 0 0 10:20 88 190 33:30 0 0 0 0 0 33 3 34 67 11:30 0 0 0 0 10:20 88 190 33:30 0 0 0 0 0 33 3 34 67 11:30 11:30 0 0 0 0 10:20 88 190 30 10:30 10:30 10:30 10:30 10:30 10:30 10:3					281		199		480					257		297		554
08:45 0 0 74 348 51 216 125 564 20:45 0 0 47 202 51 223 98 425 09:00 0 0 59 49 108 21:00 0 0 51 47 98 09:15 0 0 60 42 102 21:15 0 0 31 52 83 09:30 0 0 60 49 109 21:30 0 0 42 48 90 09:45 0 0 64 243 47 187 111 430 21:45 0 0 31 155 37 184 68 339 10:00 0 0 64 243 47 187 111 430 21:45 0 0 31 155 37 184 68 339 10:15 0 0 64			-															
09:00			-		2.0		246							200		222		
09:15					348		216		564					202		223		425
09:45			-															
10:00		-	-		242		407		420		-			455		404		220
10:15					243		187		430					155		184		339
10:45			-															
11:00 0 0 85 83 168 23:00 0 0 29 49 78 11:15 0 0 89 90 179 23:15 0 0 34 36 70 11:30 0 0 102 88 190 23:30 0 0 33 34 67 11:45 0 0 127 403 105 366 232 769 23:45 0 0 16 112 17 136 33 248 TOTALS NB SB EB WB SPLIT % 47.4% 52.6% 66.99 TOTALS 35.550 5,604 TOTALS NB SB EB WB DAILY TOTALS 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:45 11:4					227		405		442					420		4.47		267
11:15 0 0 89 90 179 23:15 0 0 34 36 70 11:30 0 0 102 88 190 23:30 0 0 33 34 67 11:45 0 0 127 403 105 366 232 769 23:45 0 0 16 112 17 136 33 248 TOTALS 2012 1682 3694 TOTALS 3538 3922 7460 SPLIT % 47.4% 52.6% 66.95 TOTALS NB SB EB WB O 0 5,550 5,604 Total AM Peak Hour AM Peak Hour AM Pk Volume SON SON SON SON SON SON SON SO					221		185		412					120		14/		26/
11:45 0 0 127 403 105 366 232 769 23:45 0 0 16 112 17 136 33 248 TOTALS 2012 1682 3694 TOTALS 3538 3922 7460 SPLIT % 47.4% 52.6% 66.99 NB SB EB WB Total 11,154 AM Peak Hour 11:45	11:15	0	0	89		90		179		23:15	0	0	34		36		70	
TOTALS 2012 1682 3694 TOTALS 3538 3922 7460 SPLIT % 47.4% 52.6% 66.99 DAILY TOTALS NB SB EB WB WB Total AM Peak Hour 11:45 1		-	-		402		200		760					112		126		240
SPLIT % 47.4% 52.6% 66.99 DAILY TOTALS NB SB EB WB Total AM Peak Hour 11:45 <td< th=""><th></th><th>U</th><th>U</th><th>127</th><th></th><th>105</th><th></th><th>232</th><th></th><th></th><th>0</th><th>U</th><th>16</th><th></th><th>1/</th><th></th><th>33</th><th></th></td<>		U	U	127		105		232			0	U	16		1/		33	
NB SB EB WB Total 11,154 0 0 5,550 5,604 12:00 16:45 11,154 AM Peak Hour AM Pk Volume Pk Hr Factor 503 435 938 PM Pk Volume Pk Volume 519 546 993 Pk Hr Factor 0.925 0.856 0.892 Pk Hr Factor 0.907 0.892 0.882 7 - 9 Volume 0 629 415 1044 4 - 6 Volume 0 0 722 945 1667																		
DAILY IOTALS 0 5,550 5,604 11,154 AM Peak Hour 11:45 11:	JFLII //				34.370		45.5%		33.1%	JFLII /6				47.470		32.0%	<u> </u>	00.5%
AM Peak Hour 11:45 11:45 11:45 11:45 PM Peak Hour 12:00 16:45 12:15 AM Pk Volume 503 435 938 Pk Hr Factor 0.925 0.856 0.892 Pk Hr Factor 0.907 0.892 0.885 7 - 9 Volume 0 629 415 1044 4 - 6 Volume 0 722 945 1667		DAI	LY TOTALS															
AM Pk Volume 503 435 938 PM Pk Volume 519 546 993 Pk Hr Factor 0.925 0.856 0.892 Pk Hr Factor 0.907 0.892 0.882 7 - 9 Volume 629 415 1044 4 - 6 Volume 722 945 1667						0		0		5,550	5,	604					11,	154
Pk Hr Factor 0.925 0.856 0.892 Pk Hr Factor 0.907 0.892 0.887 7 - 9 Volume 0 629 415 1044 4 - 6 Volume 0 722 945 1667					11:45		11:45		11:45					12:00		16:45		12:15
7 - 9 Volume 0 0 629 415 1044 4 - 6 Volume 0 0 722 945 1667																		993
			0 0)								0 0)					
																		16:45
7 - 9 Pk Volume 0 352 224 576 4 - 6 Pk Volume 0 368 546 896																		896
Pk Hr Factor 0.000 0.000 0.846 0.875 0.911 Pk Hr Factor 0.000 0.000 0.868 0.892 0.937	Pk Hr Factor	0	.000 0.0	000	0.846		0.875		0.911	Pk Hr Factor	0	.000 0.0	000	0.868		0.892		0.937

CLASSIFICATION

Virginia Ave W/O Hamilton Ave

 Day: Tuesday
 City: Hapeville

 Date: 5/14/2019
 Project #: GA19_9371_001

Summary														
Time	#1	# 2	# 3	# 4	#5	#6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0		4	0	2	0	0	0	0	0	0	0	0	39
00:15	0		2	0	0	0	0	0	0	0	0	0	0	29
00:30	0	0_	3	0	2	0	0	0	0	0	0	0	0	37
00:45	0		2	1	2	0	0	0	0	0	0	0	0	27
01:00	0	_	3	0	0	0	0	0	0	0	0	0	0	22
01:15	0		2	0	0	0	0	0	0	0	0	0	0	17
01:30	0		1	0	0	0	0	0	0	0	0	0	0	26
01:45	0		2	0	0	_	0	•	_	_	_			_
02:00	0	_	2	0	0	0	0	0	0	0	0	0	0	
02:15	0		3	0	0	0	0	0	0	0	0	0	0	22
02:30	0		1	0	0	0	0	0	0	0	0	0	0	13
02:45	0		1	0	0	0	0	0	0	0	0	0	0	10
03:00	0	•	2	0	1	0	0	0	1	0	_	0	0	11
03:15	0	9	1	0	1	0	0	0	0	0	_	0	0	11
03:30	0	•	1	0	0	0	0	0	0	0	~	0	0	10
03:45	0		2	0	1	0	0	_		_				
04:00	0	-	3	0	0	0	0	0	0	0	0	0	0	16
04:15	0		5	0	1	0	0	0	1	0	0	0	0	32
04:30	1	20	2	1	1	0	0	0	0	0	0	0	0	25
04:45	0		6	1	1	0	0	0	0	0	0	0	0	45
05:00	0		5	0	1	0	0	0	0	0	0	0	0	46
05:15	0		11 9	0	2	0	0	0	1	0	0	0	0	70
05:30	0		_	0	2	0	0	0	0	0	0	0	0	65 70
05:45	0		10	1	2	0	0	_	_	-	_	0		
06:00 06:15	0		13 12	2	2	0	0	0	0	0	0	0	0	75 76
06:15	0		12	0	3	0	0	0	1	0	0	0	0	76 86
06:45	0		11	0	3 3	0	0	0	0	0	0	0	0	97
07:00	0		10	1	2	0	0	0	0	0	0	0	0	
07:00	0		10	0	2	0	0	0	0	0	0	0	0	110
07:30	0		13	1	2	0	0	0	0	0	0	0	0	122
07:45	0		17	0	1	0	0	0	0	0	0	0	Ŭ	
08:00	0			0	2	0	0			-	_			
00.00	U	103	14	U		U	U	U	U	U	U	U	ı	123

CLASSIFICATIONVirginia Ave W/O Hamilton Ave

Day: Tuesday City: Hapeville Date: 5/14/2019 Project #: GA19_9371_001

Jannary														
Time	#1	# 2	#3	# 4	# 5	#6	#7	# 8	# 9	# 10	# 11	# 12	# 13	Total
08:15	1	132	15	0	7	1	0	0	0	0	0	0	0	156
08:30	0	138	16	1	2	0	0	1	0	0	0	0	0	158
08:45	0	107	14	2	2	0	0	0	0	0	0	0	0	125
09:00	0	89	12	1	6	0	0	0	0	0	0	0	0	108
09:15	1	85	13	0	3	0	0	0	0	0	0	0	0	102
09:30	0	90	14	0	4	0	0	1	0	0	0	0	0	109
09:45	0		12	2	6	1	0	0	0	0	0	0	0	111
10:00	0	89	14	2	8	0	0	0	0	0	0	0	0	113
10:15	0	89	16	1	2	0	0	0	0	0	0	0	0	108
10:30	0	62	10	0	4	0	0	0	0	0	0	0	0	76
10:45	0	90	17	0	8	0	0	0	0	0	0	0	0	115
11:00	0	134	25	1	7	0	0	0	1	0	0	0	0	168
11:15	0	149	21	0	9	0	0	0	0	0	0	0	0	179
11:30	0	157	21	3	7	2	0	0	0	0	0	0	0	190
11:45	1	189	31	2	6	2	0	1	0	0	0	0	0	232
12:00 PM	1	200	26	0	8	0	0	0	0	0	0	0	0	235
12:15	0	216	36	2	9	0	0	0	0	0	0	0	0	263
12:30	1	168	30	0	8	0	0	1	0	0	0	0	0	208
12:45	1	232	36	0	11	0	0	0	0	0	0	0	0	280
13:00	0	191	39	1	11	0	0	0	0	0	0	0	0	242
13:15	0	198	32	2	9	0	0	0	0	0	0	0	0	241
13:30	0	155	24	2	7	0	0	0	0	0	0	0	0	188
13:45	0	153	25	1	4	0	0	1	0	0	0	0	0	184
14:00	0	144	22	1	4	0	0	0	0	0	0	0	0	171
14:15	0	154	29	4	6	0	0	0	0	0	0	0	0	193
14:30	1	149	23	0	6	1	0	0	0	0	0	0	0	180
14:45	0	157	20	3	4	0	0	0	0	0	0	0	0	184
15:00	0	153	23	1	7	1	0	0	0	0	0	0	0	185
15:15	0	160	25	0	4	0	0	0	0	0	0	0	0	189
15:30	0	153	21	1	6	0	0	0	0	0	0	0	0	181
15:45	0	159	22	3	6	0	0	0	0	0	0	0	0	190
16:00	0	151	23	0	3	1	0	0	0	0	0	0	0	178
16:15	0	158	30	1	4	0	0	0	0	0	0	0	0	193

CLASSIFICATIONVirginia Ave W/O Hamilton Ave

Day: Tuesday City: Hapeville Date: 5/14/2019 Project #: GA19_9371_001

Summary														
Time	# 1	# 2	#3	#4	# 5	# 6	#7	# 8	# 9	# 10	# 11	# 12	# 13	Total
16:30	0	188	25	0	3	0	0	0	0	0	0	0	0	216
16:45	0	170	27	1	1	0	0	0	0	0	0	0	0	199
17:00	0	208	27	3	1	0	0	0	0	0	0	0	0	239
17:15	0	196	28	1	6	0	0	0	0	0	0	0	0	231
17:30	0	194	27	1	5	0	0	0	0	0	0	0	0	227
17:45	1	153	23	0	6	0	0	1	0	0	0	0	0	184
18:00	0	140	21	1	4	0	0	0	0	0	0	0	0	166
18:15	0	143	24	1	5	0	0	0	0	0	0	0	0	173
18:30	0	136	19	2	2	0	0	0	0	0	0	0	0	159
18:45	0		19	1	4	0	0	0	0	0	0	0	0	148
19:00	0	147	16	1	6	0	0	0	0	0	0	0	0	170
19:15	0		16	0	4	0	0	0	1	0	0	0	0	144
19:30	0		16	1	5	0	0	0	0	0	0	0	0	127
19:45	0		15	0	0	0	0	0	0	0	0	0	0	113
20:00	0		13	0	1	0	0	0	0	0	0	0	0	118
20:15	0		8	0	5	0	0	0	0	0	0	0	0	82
20:30	0		17	1	4	0	0	0	0	0	0	0	0	127
20:45	0	84	12	0	2	0	0	0	0	0	0	0	0	98
21:00	0		11	0	1	0	0	0	0	0	0	0	0	98
21:15	0	71	8	1	3	0	0	0	0	0	0	0	0	83
21:30	0		11	0	0	1	0	0	0	0	0	0	0	90
21:45	0		9	0	4	0	0	0	0	0	0	0	0	68
22:00	0	~_	5	0	0	0	0	0	0	0	0	0	0	67
22:15	0	60	8	0	0	0	0	0	0	0	0	0	0	68
22:30	0		7	0	1	0	0	0	0	0	0	0	0	57
23:00	0	67	7	0	4	0	0	0	0	0	0	0	0	78
23:15	0		10	0	2	0	0	0	0	0	0	0	0	70
23:30	0	55	8	0	3	1	0	0	0	0	0	0	0	67
23:45	0	28	4	0	1	0	0	0	0	0	0	0	0	33

Totals	#1	# 2	#3	# 4	# 5	# 6	#7	# 8	# 9	# 10	# 11	# 12	# 13	Total
Totals	9	9355	1380	60	327	11		6	6					11154
% of Totals	0%	84%	12%	1%	3%	0%		0%	0%					100%
AM Volumes	4	3084	445	23	124	6	0	3	3	0	0	0	0	3694
% AM	0%	28%	4%	0%	1%	0%		0%	0%					33%
AM Peak Hour	11:45	11:45	11:45	11:30	10:45	11:00		11:45	02:15					11:45
Volume	3	773	123	7	31	4		2	1					938
PM Volumes	5	6271	935	37	203	5	0	3	1	0	0	0	0	7460
% PM	0%	56%	8%	0%	2%	0%		0%	0%					67%
PM Peak Hour	12:00	12:00	12:15	13:30	12:15	14:15		12:00	18:30					12:15
Volume	3	816	141	8	39	2		1	1					993

Directional Peak Periods	AM	7-9	NOON	N 12-2	PM	4-6	Off Peal	(Volumes
All Classes	Volume	%	Volume	%	Volume	%	Volume	%
	1044	9%	1841	17%	1667	15%	6602	59%

Classification Definitions

1 Motorcycles 2 Passenger Cars3 2-Axle, 4-Tire Single Units **4** Buses

5 2-Axle, 6-Tire Single Units

6 3-Axle Single Units

7 > =4-Axle Single Units

8 <=4-Axle Single Trailers **9** 5-Axle Single Trailers

10 >=6-Axle Single Trailers

12 6-Axle Multi-Trailers

11 <=5-Axle Multi-Trailers

13 >=7-Axle Multi-Trailers

CLASSIFICATION

Virginia Ave W/O Hamilton Ave

Day: Wednesday **Date:** 5/15/2019

City: Hapeville **Project #:** GA19_9371_001

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	107	14	0	7	0	0	0	0	0	0	0	0	128
01:00	0	53	8	0	1	0	0	0	0	0	0	0	0	62
02:00	0	39	5	0	1	0	0	0	1	0	0	0	0	46
03:00	0	39	6	0	0	1	0		0	0	0	0	0	46
04:00	0	78	9	3	3	0	0	0	0	0	0	0	0	93
05:00	1	205	32	1	13	0	0				0	0	0	252
06:00	0	263	46	6	13	2	0	0			0	0	0	330
07:00	0	384	68	4	13	1	0			0	0	0	0	471
08:00	0	464	79	3	20	3	0	0	0	0	0	0	0	569
09:00	1	362	79	6	16	0	0	0		0	0	0	0	466
10:00	0	419	80	2	22	1	0	1	0	0	0	0	0	525
11:00	2	588	114	2	31	0	0	1	0				0	
12:00 PM	2	830	156	5	29	0	0	1	1	0	0	0	0	1024
13:00	1	713	127	7	34	1	0		0	0	0	0	0	885
14:00	0	607	120	7	29	2	0	0	0	_	0	0	0	765
15:00	0	617	118	3	27	2	0		0		0		0	768
16:00	0	658	123	6	28	0	0	0	0		0	0	0	815
17:00	1	750 576	129	3	30	0	0	0	0	0 0	0	0	0	913
18:00	0	576 434	86 69	8	19	0	0			_	_	0	0	691 515
19:00 20:00	0	391	72	0	11 8	0	0	0			0	0	0	471
21:00	1	274	47	2	13	0	0	_			0	0	0	337
22:00	0	234	47	1	11	0	0	0	0	0	0	0	0	288
23:00	0	198	33	0	11	0	0		Ū		•		Ŭ	
Totals	11	9283	1662	70	390	13	U	6	5	J	U	J	U	11440
% of Totals	0%	81%	15%	1%	3%	0%		0%	0%					100%
							_							
AM Volumes	4	3001	540	27	140	8	0	2	4	0	0	0	0	3726
% AM	0%	26%	5%	0%	1%	0%		0%	0%					33%
AM Peak Hour	11:00	11:00	11:00	06:00	11:00	08:00		10:00	09:00					11:00
Volume	2	588	114	6	31	3		1	2					738
PM Volumes	7	6282	1122	43	250	5	0	4	1	0	0	0	0	,,_,
% PM	0%	55%	10%	0%	2%	0%		0%	0%					67%
PM Peak Hour	12:00	12:00	12:00	18:00	13:00	14:00		13:00						12:00
Volume	2	830	156	8	34	2		2	1				-	1024
Dire	ectional Pea			AM 7-9			NOON 12-2			PM 4-6			Peak Volun	
	A	All Classes	Volume	4	%	Volume	4	%	Volume	4	% 4.50/	Volume	4	%
	All Clas		1040	<u></u>	9%	1909	<u></u>	17%	1728	→	15%	6763	←	59%

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- 6 3-Axle Single Units
- 7 > =4-Axle Single Units

9 5-Axle Single Trailers

- 10 >=6-Axle Single Trailers 8 <=4-Axle Single Trailers
- 11 <=5-Axle Multi-Trailers **12** 6-Axle Multi-Trailers
- 13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD Prepared by National Data & Surveying Services

VOLUME

Virginia Ave W/O Hamilton Ave

Day: Wednesday Date: 5/15/2019 City: Hapeville
Project #: GA19_9371_001

	DAII	Y TOTALS			NB		SB		EB		WB					To	tal
	DAIL	II IOIALS			0		0		5,646		5,794					11,	440
AM Period	NB	SB	EB		WB			TAL	PM Period	NB	SB	ЕВ		WB			TAL
00:00 00:15	0 0	0 0	17 9		21 26		38 35		12:00 12:15	0	0 0	105 142		124 138		229 280	
00:30	0	0	13		18		31		12:30	0	0	143		120		263	
00:45	0	0	12	51	12	77	24	128	12:45	0	0	128	518	124	506	252	1024
01:00 01:15	0 0	0 0	9 6		9 11		18 17		13:00 13:15	0	0 0	115 116		100 115		215 231	
01:30	0	0	1		6		7		13:30	0	0	123		95		218	
01:45 02:00	0	0	<u>6</u> 7	22	<u>14</u> 5	40	20 12	62	13:45 14:00	0	0	117 96	471	104 117	414	221 213	885
02:15	0	Ö	3		6		9		14:15	0	Ő	84		99		183	
02:30	0	0 0	3	22	7	22	10	10	14:30	0	0 0	105	250	86	406	191	765
02:45 03:00	0	0	10 2	23	<u>5</u> 3	23	<u>15</u> 5	46	14:45 15:00	0	0	74 86	359	104 112	406	178 198	765
03:15	0	0	1		9		10		15:15	0	0	91		85		176	
03:30 03:45	0 0	0 0	7 6	16	8 10	30	15 16	46	15:30 15:45	0	0 0	85 105	367	96 108	401	181 213	768
04:00	0	0	6	10	5	30	11	40	16:00	0	0	88	307	101	401	189	700
04:15	0	0	7		11		18		16:15	0	0	86		110		196	
04:30 04:45	0 0	0 0	18 21	52	10 15	41	28 36	93	16:30 16:45	0	0 0	88 103	365	118 121	450	206 224	815
05:00	0	0	27		23		50	30	17:00	0	0	87		145	.50	232	010
05:15 05:30	0 0	0 0	35 26		30 35		65 61		17:15 17:30	0	0 0	120 91		134 136		254 227	
05:30	0	0	35	123	35 41	129	76	252	17:30 17:45	0	0	96	394	104	519	200	913
06:00	0	0	27		41		68		18:00	0	0	74		111		185	
06:15 06:30	0 0	0 0	30 60		36 32		66 92		18:15 18:30	0	0 0	79 73		97 101		176 174	
06:45	0	Ö	59	176	45	154	104	330	18:45	0	Ő	73 77	303	79	388	156	691
07:00	0	0	53		41		94		19:00	0	0	66		69		135	
07:15 07:30	0 0	0 0	74 72		41 50		115 122		19:15 19:30	0	0 0	58 50		94 60		152 110	
07:45	0	0	86	285	54	186	140	471	19:45	0	0	56	230	62	285	118	515
08:00 08:15	0 0	0 0	70 88		54 60		124 148		20:00 20:15	0	0 0	59 51		72 55		131 106	
08:30	0	0	97		54		151		20:30	0	0	65		68		133	
08:45	0	0	85	340	61	229	146	569	20:45	0	0	45	220	56	251	101	471
09:00 09:15	0 0	0 0	72 64		48 51		120 115		21:00 21:15	0	0 0	49 35		57 49		106 84	
09:30	0	0	66		50		116		21:30	0	0	33		48		81	
09:45 10:00	0	0	68 70	270	47 55	196	115 125	466	21:45 22:00	0	0	27 39	144	39 39	193	66 78	337
10:00	0	0	70 74		56		130		22:15	0	0	28		29		78 57	
10:30	0	0	62		65		127		22:30	0	0	37		51		88	
10:45 11:00	0	0	79 76	285	64 78	240	143 154	525	22:45 23:00	0	0	36 41	140	29 36	148	65 77	288
11:15	0	0	85		96		181		23:15	0	0	25		32		57	
11:30	0	0	94	276	111	262	205	720	23:30	0	0	28	116	26	120	54	242
11:45 TOTALS	0	0	121	376 2019	77	362 1707	198	738 3726	23:45 TOTALS	0	0	22	3627	32	126 4087	54	242 7714
SPLIT %				54.2%		45.8%		32.6%	SPLIT %				47.0%		53.0%		67.4%
	DAIL	Y TOTALS			NB		SB		EB		WB						tal
	- 9/ IIL	I TO TALS			0		0		5,646	!	5,794					11,	440
AM Peak Hour				11:45		11:45		11:45	PM Peak Hour				12:15		16:45		12:00
AM Pk Volume				511		459		970	PM Pk Volume				528		536		1024
Pk Hr Factor				0.893		0.832		0.866	Pk Hr Factor			0	0.923		0.924		0.914
7 - 9 Volume 7 - 9 Peak Hour				625 07:45		415 08:00		1040 08:00	4 - 6 Volume 4 - 6 Peak Hour				759 16:45		969 16:45		1728 16:45
7 - 9 Pk Volume				341		229		569	4 - 6 Pk Volume				401		536		937
Pk Hr Factor	0.0	0.000		0.879		0.939		0.942	Pk Hr Factor		0.000 0	.000	0.835		0.924		0.922

CLASSIFICATION

Virginia Ave W/O Hamilton Ave

Day: Wednesday

City: Hapeville

Project #: GA19_9371_001

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	28	6	0	4	0	0	0	0	0	0	0	0	38
00:15	0	30	4	0	1	0	0	0	0	0	0	0	0	35
00:30	0	30	1	0	0	0	0	0	0	0	0	0	0	31
00:45	0	19	3	0	2	0	0	0	0	0	0	0	0	24
01:00	0	14	4	0	0	0	0	0	0	0	0	0	0	18
01:15	0	14	3	0	0	0	0	0	0	0	0	0	0	17
01:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7
01:45	0	18	1	0	1	0	0	0	0	0	0	0	0	20
02:00 02:15	0	11 7	1	0	0	0	0	0	0	0	0	0	0	12
02:15	0	9	1	0	0	0	0	0	0	0	0	0	0	10
02:30	0	12	2	0	0	0	0	0	1	0	0	0	0	15
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
03:15	0	10	0	0	0	0	0	0	0	0	0	0	0	10
03:30	0	11	3	0	0	1	0	0	0	0	0	0	0	15
03:45	0	13	3	0	0	0	0	0	0	0	0	0	0	16
04:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11
04:15	0	14	3	1	0	0	0	0	0	0	0	0	0	18
04:30	0	24	1	0	3	0	0	0	0	0	0	0	0	28
04:45	0	32	2	2	0	0	0	0	0	0	0	0	0	36
05:00	0	40	6	0	4	0	0	0	0	0	0	0	0	50
05:15	0	55	8	0	2	0	0	0	0	0	0	0	0	65
05:30	1	48	8	0	4	0	0	0	0	0	0	0	0	61
05:45	0	62	10	1	3	0	0	0	0	0	0	0	0	76
06:00	0	50	12	1	5	0	0	0	_	0	0	0	0	68
06:15	0	54	11	0	1	0	0	0	0	0	0	0	0	66
06:30	0	78		1	1	1	0	0	0	0	0	0	0	92
06:45	0	81	12	4	6	1	0	0	0	0	0	0	0	104
07:00 07:15	0 0	79 97	14 14	0	1	0	0	0	0	0	0	0	0	94 115
07:15 07:30	0	97 95	14 19	2	3	0	0	0	0	0	0	0	0	115 122
07:45	0	113	21	1	3	1	0	0	1	0	0	0	0	140
08:00	0			2	3	0	· ·	Ŭ	0	~	J	-	0	124

CLASSIFICATIONVirginia Ave W/O Hamilton Ave

Day: Wednesday Date: 5/15/2019

City: Hapeville **Project #:** GA19_9371_001

Summary														
Time	#1	# 2	#3	#4	#5	#6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
08:15	0		17	1	7	2	0	0	0	0	0	0	0	148
08:30	0	122	22	0	6	1	0	0	0	0	0	0	0	151
08:45	0	119	23	0	4	0	0	0	0	0	0	0	0	146
09:00	1	93	18	3	5	0	0	0	0	0	0	0	0	120
09:15	0	90	19	1	4	0	0	0	1	0	0	0	0	115
09:30	0	92	21	1	2	0	0	0	0	0	0	0	0	116
09:45	0	87	21	1	5	0	0	0	1	0	0	0	0	115
10:00	0	101	17	0	6	1	0	0	0	0	0	0	0	125
10:15	0	109	17	0	3	0	0	1	0	0	0	0	0	130
10:30	0	98	18	1	10	0	0	0	0	0	0	0	0	127
10:45	0	111	28	1	3	0	0	0	0	0	0	0	0	143
11:00	2	115	26	0	11	0	0	0	0	0	0	0	0	154
11:15	0	147	25	0	9	0	0	0	0	0	0	0	0	181
11:30	0	168	33	0	3	0	0	1	0	0	0	0	0	205
11:45	0		30	2	8	0	0	0	0	0	0	0	0	198
12:00 PM	0	188	35	1	5	0	0	0	0	0	0	0	0	229
12:15	1	219	47	3	9	0	0	1	0	0	0	0	0	280
12:30	0	215	40	1	7	0	0	0	0	0	0	0	0	263
12:45	1	208	34	0	8	0	0	0	1	0	0	0	0	252
13:00	0	173	32	4	6	0	0	0	0	0	0	0	0	215
13:15	0	186	34	2	9	0	0	0	0	0	0	0	0	231
13:30	1	175	28	1	11	0	0	2	0	0	0	0	0	218
13:45	0	= 1	33	0	8	1	0	0	0	0	0	0	0	221
14:00	0	167	36	1	8	1	0	0	0	0	0	0	0	213
14:15	0	147	28	0	8	0	0	0	0	0	0	0	0	183
14:30	0	155	25	3	7	1	0	0	0	0	0	0	0	191
14:45	0	138	31	3	6	0	0	0	0	0	0	0	0	178
15:00	0	161	28	1	8	0	0	0	0	0	0	0	0	198
15:15	0	_	29	1	5	0	0	1	0	0	0	0	0	176
15:30	0		26	1	4	2	0	0	0	0	0	0	0	181
15:45	0		35	0	10	0	0	0	0	0	0	0	0	213
16:00	0		31	0	5	0	0	0	0	0	0	0	0	189
16:15	0	162	27	1	6	0	0	0	0	0	0	0	0	196

CLASSIFICATIONVirginia Ave W/O Hamilton Ave

Day: Wednesday Date: 5/15/2019

City: Hapeville Project #: GA19_9371_001

Summary														
Time	#1	# 2	#3	#4	#5	# 6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
16:30	0	164	29	3	10	0	0	0	0	0	0	0	0	206
16:45	0	179	36	2	7	0	0	0	0	0	0	0	0	224
17:00	0	192	32	1	7	0	0	0	0	0	0	0	0	232
17:15	0	206	37	0	11	0	0	0	0	0	0	0	0	254
17:30	0	189	31	0	7	0	0	0	0	0	0	0	0	227
17:45	1	163	29	2	5	0	0	0	0	0	0	0	0	200
18:00	1	149	23	2	10	0	0	0	0	0	0	0	0	185
18:15	1	149	22	1	3	0	0	0	0	0	0	0	0	176
18:30	0	146	21	4	3	0	0	0	0	0	0	0	0	174
18:45	0	132	20	1	3	0	0	0	0	0	0	0	0	156
19:00	0	111	20	1	3	0	0	0	0	0	0	0	0	135
19:15	0	133	17	0	2	0	0	0	0	0	0	0	0	152
19:30	0	91	16	0	3	0	0	0	0	0	0	0	0	110
19:45	0		16	0	3	0	0	0	0	0	_	-	0	118
20:00	0		15	0	5	0	0	0	0	0	0	0	0	131
20:15	0	86	17	0	3	0	0	0	0	0	0	0	0	106
20:30	0	106	27	0	0	0	0	0	0	0	0	0	0	133
20:45	0	88	13	0	0	0	0	0	0	0	0	0	0	101
21:00	0	87	13	2	4	0	0	0	0	0	0	0	0	106
21:15	1	66	14	0	3	0	0	0	0	0	0	0	0	84
21:30	0	69	10	0	2	0	0	0	0	0	0	0	0	81
21:45	0		10	0	4	0	0	0	0	0	0	0	0	66
22:00	0	64	11	0	3	0	0	0	0	0	0	0	0	78
22:15	0	46	9	0	2	0	0	0	0	0	0	0	0	57
22:30	0	73	13	1	1	0	0	0	0	0	0	0	0	88
23:00	0		9	0	2	0	0	0	0	0	0	0	0	77
23:15	0	42	9	0	6	0	0	0	0	0	0	0	0	57
23:30	0	47	6	0	1	0	0	0	0	0	0	0	0	54
23:45	0	43	9	0	2	0	0	0	0	0	0	0	0	54

Totals	#1	# 2	#3	# 4	# 5	# 6	#7	# 8	# 9	# 10	# 11	# 12	# 13	Total
	11	9283	1662	70	390	13		6	5					11440
% of Totals	0%	81%	15%	1%	3%	0%		0%	0%					100%
AM Volumes	4	3001	540	27	140	8	0	2	4	0	0	0	0	3726
% AM	0%	26%	5%	0%	1%	0%		0%	0%					33%
AM Peak Hour	10:15	11:45	11:45	06:45	10:30	07:45		11:30	09:00					11:45
Volume	2	780	152	7	33	4		2	2					970
PM Volumes	7	6282	1122	43	250	5	0	4	1	0	0	0	0	7714
% PM	0%	55%	10%	0%	2%	0%		0%	0%					67%
PM Peak Hour	17:30	12:00	12:00	17:45	13:15	13:45		12:45	12:00					12:00
Volume	3	830	156	9	36	3		2	1					1024
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%

Classification Definitions

1909

1 Motorcycles2 Passenger Cars

3 2-Axle, 4-Tire Single Units

4 Buses

1040

5 2-Axle, 6-Tire Single Units

9%

6 3-Axle Single Units

7 > =4-Axle Single Units

8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

17%

1728

10 >=6-Axle Single Trailers

11 <=5-Axle Multi-Trailers

15%

6763

59%

13 >=7-Axle Multi-Trailers

12 6-Axle Multi-Trailers

CLASSIFICATION

Hamilton Ave N/O Virginia Ave

Day: Tuesday **Date:** 5/14/2019

City: Hapeville **Project #:** GA19_9371_002

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	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
03:00	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
05:00	0		0	0	0	0	0				0	0	0	0
06:00	0	2	0	0	0	0	0	0			0	0	0	2
07:00	0		0	1	0	0	0				0		0	10
08:00	0	_	0	0	1	0	0	0			0	0	0	11
09:00	0	_	0	0	0	0	0				0		0	10
10:00	0	12	1	0	0	0	0	0			0	0	0	13
11:00	0	5	3	0	0	0	0				0		0	8
12:00 PM	0		6	1	1	0	0	0		_	0	0	0	30
13:00	0		4	0	0	0	0				0		0	25
14:00	0		1	0	2	0	0	0			0		0	20
15:00	0	_	2	0	1 0	0	0	0			0	0 0	0	19
16:00 17:00	0	14 17	3	0	1	0	0	_			0	0	0	15 21
18:00	0		2	0	0	0	0	0			0	0	0	25
19:00	0		3	0	0	0	0	_			0		0	10
20:00	0	9	3	0	0	0	0	0			0	0	0	12
21:00	0		1	0	0	0	0	0			0	0	0	8
22:00	0		1	0	0	0	0	0			0	0	0	5
23:00	0	_	0	0	0	0	0	0	_	_	0		0	4
Totals		212	31	2	6									251
% of Totals		84%	12%	1%	2%									100%
	-	•	•	•	•	•	•						•	
AM Volumes	0	51	4	1	1	0	0	0	0	0	0	0	0	57
% AM		20%	2%	0%	0%									23%
AM Peak Hour		10:00	11:00	07:00	08:00									10:00
Volume		12	3	1	1									13
PM Volumes			27	1	5	0	0	0	0	0	0	0	0	
% PM		64%	11%	0%	2%									77%
PM Peak Hour		18:00	12:00	12:00	14:00									12:00
Volume		23	6	1	2									30
Dire	Directional Peak Periods			AM 7-9		NOON 12-2			PM 4-6		Off Peak Volumes		nes	
	All Classes				%	Volume		%	Volume		%	Volume		%
			21	←→	8%	55	←	22%	36	←→	14%	139	←→	55%

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- **6** 3-Axle Single Units
- 7 > =4-Axle Single Units

9 5-Axle Single Trailers

- 8 <=4-Axle Single Trailers
- 10 >=6-Axle Single Trailers
- 11 <=5-Axle Multi-Trailers
- **12** 6-Axle Multi-Trailers

13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD Prepared by National Data & Surveying Services

VOLUME

Hamilton Ave N/O Virginia Ave

Day: Tuesday **Date:** 5/14/2019

City: Hapeville
Project #: GA19_9371_002

DAILY TOTALS	251
00:00 0 0 0 0 12:00 4 3 0 0 00:15 0 1 0 0 1 12:15 6 7 0 0 00:30 0 1 0 0 1 12:30 3 4 0 0 00:45 0 0 2 0 0 2 12:45 2 15 1 15 0 0 01:00 1 0 0 0 0 1 13:00 5 4 0 0 0 01:35 0 0 0 0 13:15 2 1 0 0 0 01:45 0 1 0 0 0 1 13:45 5 15 4 10 0 0 02:00 0 0 0 0 1 13:45 5 15 4 10 0	
00:15 0 1 0 0 1 12:15 6 7 0	TOTAL
00:30 0 1 0 0 1 12:30 3 4 0 0 00:45 0 0 2 0 0 1 12:30 3 4 0 0 01:00 1 0 0 0 1 13:00 5 4 0 0 01:15 0 0 0 0 13:15 2 1 0 0 01:30 0 0 0 0 13:30 3 1 0 0 01:45 0 1 0 0 0 1 13:45 5 15 4 10 0 02:00 0 0 0 14:00 2 4 0 0	7
00:45 0 0 2 0 0 2 12:45 2 15 1 15 0 0 01:00 1 0 0 0 0 1 13:00 5 4 0 0 0 01:15 0 0 0 0 13:15 2 1 0 0 0 01:30 0 0 0 0 13:30 3 1 0 0 0 02:00 0 0 0 1 13:45 5 15 4 10 0 0 02:00 0 0 0 14:00 2 4 0 0	13
01:00 1 0 0 0 1 13:00 5 4 0 0 01:15 0 0 0 0 13:15 2 1 0 0 01:30 0 0 0 0 13:30 3 1 0 0 01:45 0 1 0	7 3 30
01:15 0 0 0 0 13:15 2 1 0 0 01:30 0 0 0 0 13:30 3 1 0 0 01:45 0 1 0 0 0 0 0 0 02:00 0 0 0 0 0 0 0 0 0 0	9
01:45 0 1 0 0 1 13:45 5 15 4 10 0 0 02:00 0 0 0 0 14:00 2 4 0 0	3
02:00 0 0 0 0 14:00 2 4 0 0	4
	9 25
	7
02:30	3
02:45 0 0 0 0 14:45 2 8 2 12 0 0	4 20
03:00 0 0 0 0 15:00 1 4 0 0	5
03:15 0 0 0 0 15:15 1 2 0 0	3
03:30 0 0 0 0 0 0 15:30 3 5 0 0 0 0 03:45 0 0 0 0 15:45 0 5 3 14 0 0	8 3 19
04:00 0 0 0 0 16:00 1 4 0 0	5
04:15 0 0 0 0 16:15 1 1 0 0	2
04:30 0 0 0 0 16:30 3 2 0 0	5
04:45 0 0 0 16:45 2 7 1 8 0 0	3 15
05:00 0 0 0 0 0 17:00 4 5 0 0 0 05:15 0 0 0 0 17:15 3 1	9
05:30 0 0 0 0 0 17:30 1 2 0 0	3
05:45 0 0 0 0 0 17:45 1 9 4 12 0 0	5 21
06:00 1 1 0 0 2 18:00 7 3 0 0	10
06:15 0 0 0 0 18:15 2 1 0 0	3
06:30 0 0 0 0 0 18:30 7 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 4 25
06:45 0 1 0 0 2 18:45 1 17 3 8 0 0 07:00 1 0 0 1 19:00 0 1 0 0	4 25 1
07:15 0 2 0 0 12 19:15 0 4 0 0	4
07:30 1 2 0 0 3 19:30 0 2 0 0	2
07:45 2 4 2 6 0 0 4 10 19:45 2 2 1 8 0 0	3 10
08:00 0 1 0 0 1 20:00 1 2 0 0 08:15 0 5 0 0 5 20:15 2 1 0 0	3
08:15 0 5 0 0 5 20:15 2 1 0 0 08:30 1 3 0 0 4 20:30 1 2 0 0	3
08:45 1 2 0 9 0 0 1 11 20:45 1 5 2 7 0 0	3 12
09:00 1 1 0 0 2 21:00 1 3 0 0	4
09:15 1 2 0 0 3 21:15 1 1 0 0	2
09:30 2 0 0 0 2 21:30 0 2 0 0 00:45 1 5 3 5 0	2
09:45 1 5 2 5 0 0 3 10 21:45 0 2 0 6 0 0 10:00 0 3 0 0 3 22:00 1 0 0 0	1
10:15 2 3 0 0 5 22:15 1 1 0 0	2
10:30 0 1 0 0 1 22:30 1 0 0 0	1
10:45 2 4 2 9 0 0 4 13 22:45 1 4 0 1 0 0	1 5
11:00 2 3 0 0 5 23:00 1 2 0 0	3
11:15 0 2 0 0 0 2 23:15 0 0 0 0 1 1:30 0 0 0 0	1
11:45 0 2 1 6 0 0 1 8 23:45 0 1 0 3 0 0	4
TOTALS 19 38 57 TOTALS 90 104	194
SPLIT % 33.3% 66.7% 22.7% SPLIT % 46.4% 53.6%	77.3%
DAILY TOTALS NB SB EB WB 100 143	Total
109 142 0 0	251
AM Peak Hour 11:45 11:45 11:45 PM Peak Hour 17:45 12:15	12:15
AM Pk Volume 13 15 28 PM Pk Volume 17 16	32
Pk Hr Factor 0.542 0.536 0.538 Pk Hr Factor 0.607 0.571	0.615
7 - 9 Volume 6 15 0 0 21 4 - 6 Volume 16 20 0	36
7 - 9 Peak Hour 07:00 07:45 07:45 4 - 6 Peak Hour 16:30 17:00	16:30
7 - 9 Pk Volume 4 11 0 0 14 4 - 6 Pk Volume 12 12 0 0	21
Pk Hr Factor 0.500 0.550 0.000 0.000 Pk Hr Factor 0.750 0.600 0.000	0.583

Hamilton Ave N/O Virginia Ave

Day: Tuesday **Date:** 5/14/2019

City: Hapeville

Project #: GA19_9371_002

Jannina y														
Time	# 1	# 2	# 3	#4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:45	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
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
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
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
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	1	0	1	0	0	0	0	0	0	0	0	0	2
07:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3

CLASSIFICATION Hamilton Ave N/O Virginia Ave

Day: Tuesday **Date:** 5/14/2019

City: Hapeville **Project #:** GA19_9371_002

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
07:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
08:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
08:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
08:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
09:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
09:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
09:30	0	2	0	•	0	0	0	0	0	0	0	0	0	2
09:45	0	3	0	_	0	0	0	0	0	0	0	0	0	3
10:00	0	3	0		0	0	0	0	0	0	0	0	0	3
10:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
10:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
10:45	0	3	1	0	0	0	0	0	0	U	0	0	0	4
11:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
11:15 11:30	0	0	0	0	0	0	0	0	0	0 0	0	0	0	2
11:45	0	0	J	Ŭ	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	5	2	0	0	0	0	0	0	0	0	0	0	7
12:15	0	13		0	0	0	0	0	0	0	0	0	0	13
12:30	0	2	3	1	1	0	0	0	0	0	0	0	0	7
12:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
13:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
13:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
13:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
13:45	0	7	2	0	0	0	0	0	0	0	0	0	0	9
14:00	0	3	1	0	2	0	0	0	0	0	0	0	0	6
14:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
14:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
14:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4
15:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
15:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
15:30	0	7	1	0	0	0	0	0	0	0	0	0	0	8
15:45	0	2	0	0	1	0	0	0	0	0	0	0	0	3

CLASSIFICATION Hamilton Ave N/O Virginia Ave

Day: Tuesday City: Hapeville **Date:** 5/14/2019 **Project #:** GA19_9371_002

Summary								_						
Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
16:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
16:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
16:30	0	4	1	0	0	0	0	0	0	0	0	0	0	5
16:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
17:00	0	7	1	0	1	0	0	0	0	0	0	0	0	9
17:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
17:30	0	_		0	0	0	0	0	0	0	0	0	0	3
17:45	0	_		0	0	0	0	0	0	0	0		0	5
18:00	0	_	0	0	0	0	0	0	0	0	0	_	0	10
18:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
18:30	0	7	1	0	0	0	0	0	0	0	0	0	0	8
18:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
19:00	0	_	0	0	0	0	0	0	0	0	0	0	0	1
19:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
19:30	0	_	1	0	0	0	0	0	0	0	0	0	0	2
19:45	0		2	0	0	0	0	0	0	0	0		0	3
20:00	0	_	1	0	0	0	0	0	0	0	0	0	0	3
20:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
20:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
20:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
21:00 21:15	0		0	0	0	0	0 0	0	0 0	0	0	0 0	0	4
21:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0		0	0	0	0	0	0	0	0	0	0	0	1
22:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:45	0	_	1	0	0	0	0	0	0	0	0	0	0	1
23:00	0	_	0	0	0	0	0	0	0	0	0	0	0	3
23:15	0			0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0		0	0		0	0	0	Ŭ	0	•	_	_	0
_00	ı	U	o l	U	- J	U	U	- 0	U	U	U	J	0	

Prepared by National Data & Surveying Services

CLASSIFICATION Hamilton Ave N/O Virginia Ave

Day: Tuesday **Date:** 5/14/2019

City: Hapeville Project #: GA19_9371_002

Summary

Julililary														
Totals	#1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
Totals		212	31	2	6									251
% of Totals		84%	12%	1%	2%									100%
AM Volumes	0	51	4	1	1	0	0	0	0	0	0	C	0	57
% AM		20%	2%	0%	0%									23%
AM Peak Hour		11:45	11:45	06:30	07:45									11:45
Volume		20	6	1	1									28
PM Volumes	0	161	27	1	5	0	0	0	0	0	0	C	0	194
% PM		64%	11%	0%	2%									77%
PM Peak Hour		12:15	12:00	12:00	13:15									12:15
Volume		25	6	1	2									32
Dire	ctional Pe	ak Periods		AM 7-9			NOON 12-2			PM 4-6		Off	Peak Volui	mes
		All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			21	\longleftrightarrow	8%	55	\longleftrightarrow	22%	36	\longleftrightarrow	14%	139	\longleftrightarrow	55%

Classification Definitions

1	Motorcycles
2	Passenger Cars

3 2-Axle, 4-Tire Single Units

- **4** Buses
- **5** 2-Axle, 6-Tire Single Units

6 3-Axle Single Units

- 7 > =4-Axle Single Units **9** 5-Axle Single Trailers
- 8 <=4-Axle Single Trailers
- 11 <=5-Axle Multi-Trailers
- **10** >=6-Axle Single Trailers
 - **12** 6-Axle Multi-Trailers

13 >=7-Axle Multi-Trailers

Hamilton Ave N/O Virginia Ave

Day: Wednesday **Date:** 5/15/2019

City: Hapeville

Project #: GA19_9371_002

13 >=7-Axle Multi-Trailers

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	#7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	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
04:00	0	2	0	0	0	0	0	0			0	0	0	2
05:00	0	1	0	0	0	0	0	0	0		0	0	0	1
06:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
07:00	0	13	1	1	0	0	0	0	0		0	0	0	15
08:00	0	19	0	0	0	0	0	0		_	0	0	0	19
09:00	0	8	1	0	2	0	0	0			0	0	0	11
10:00	0	10	2	1	1	0	0	0	0	0	0	0	0	14
11:00	1	24	2	0	3	0	0	0		0	0	0	0	30
12:00 PM	0	15	1	2	0	0	1	0	0	0	0	0	0	19
13:00	0	12	1	1	0	0	0	0		0 0	0	0	0	14
14:00	0	6 14	4	0	0	0	0	0		0	0	0 0	0	11 15
15:00 16:00	0	13	2	0	0	0	0	0	0	0	0	0	0	16
17:00	1	12	2	0	0	0	0	0	_		0	0	0	15
18:00	0	9	5	0	0	0	0	0		0	0	0	0	14
19:00	0	10	0	0	1	0	0	0			0	0	0	11
20:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
21:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
22:00	0	1	3	0	0	0	0	0	0	0	0	0	0	4
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Totals	2	190	28	5	8		1							234
% of Totals	1%	81%	12%	2%	3%		0%							100%
AM Volumes	1	81	7	2	6	0	n	0	0	0	0	0	n	97
% AM	0%	35%	3%	1%	3%					J				41%
AM Peak Hour	11:00	11:00	10:00	07:00	11:00									11:00
Volume	1	24	2	1	3									30
PM Volumes	1	109		3	2	0	1	0	0	0	0	0	0	137
% PM	0%	47%	9%	1%	1%		0%							59%
PM Peak Hour	17:00	12:00	18:00	12:00	14:00		12:00							12:00
Volume	1	15	5	2	1		1							19
Dire	ectional Pea	k Periods		AM 7-9			NOON 12-2			PM 4-6		Off	Peak Volun	nes
	A	All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			34	←	15%	33	←	14%	31	←	13%	136	←	58%

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- **6** 3-Axle Single Units
- 7 > =4-Axle Single Units
- 8 <=4-Axle Single Trailers **9** 5-Axle Single Trailers
- 10 >=6-Axle Single Trailers
- **11** <=5-Axle Multi-Trailers
- **12** 6-Axle Multi-Trailers

Prepared by NDS/ATD Prepared by National Data & Surveying Services

VOLUME

Hamilton Ave N/O Virginia Ave

 Day:
 Wednesday
 City:
 Hapeville

 Date:
 5/15/2019
 Project #: GA19_9371_002

	ъ.	AILY T	OT.	ALC		NB		SB		EB		WB					To	otal
	יט	AILY I	UI	ALS		97		137		0		0					2	34
AM Period	NB		SB		EB	WB		TO	TAL	PM Period	NB		SB	EB		NΒ	TO	TAL
00:00	0		0		0	0			TAL	12:00	0		1	0		0	1	IAL
00:15	0		Ö		0	Ö				12:15	3		3	Ö		Ö	6	
00:30	0		0		0	0				12:30	3		5	0		0	8	
00:45	0		1	1	0	0		1	1	12:45	3	9	1 10			0	4	19
01:00	0		0		0	0				13:00	4		0	0		0	4	
01:15	0		0		0	0				13:15	2		1	0		0	3	
01:30 01:45	0		0		0 0	0 0				13:30 13:45	1 1	8	3 2 6	0		0	4	14
02:00	0		0		0	0				14:00	2	- 0	1	0		0	3	14
02:15	0		Ö		0	Ö				14:15	1		0	Ö		Ö	1	
02:30	0		0		0	0				14:30	3		1	0		0	4	
02:45	0		0		0	0				14:45	1	7	2 4			0	3	11
03:00	0		0		0	0				15:00	0		2	0		0	2	
03:15	0		0		0	0				15:15	2		3	0		0	5	
03:30 03:45	0		0		0 0	0 0				15:30 15:45	1 3	6	0 4 9	0		0	1 7	15
04:00	1		0		0	0		1		16:00	1	- 0	3	0		0	4	
04:15	0		0		0	0				16:15	1		2	0		0	3	
04:30	0		0		0	0				16:30	1		4	0		0	5	
04:45	0	1	1	1	0	0		1	2	16:45	1	4	3 12			0	4	16
05:00	0		0		0	0				17:00	3		3	0		0	6	
05:15	0		0		0	0		1		17:15	2		3	0		0	5	
05:30 05:45	1 0	1	0		0 0	0 0		1	1	17:30 17:45	1 1	7	1 1 8	0		0	2	15
06:00	0		0		0	0				18:00	0		0	0		0		13
06:15	0		Ö		Ö	Ő				18:15	6		1	0		0	7	
06:30	0		0		0	0				18:30	3		1	0		0	4	
06:45	1	1	3	3	0	0		4	4	18:45	1	10	2 4			0	3	14
07:00	1		1		0	0		2		19:00	0		1	0		0	1	
07:15 07:30	3 0		2		0 0	0 0		5 3		19:15 19:30	1 1		2	0		0	3 4	
07:30	0	4	5	11	0	0		5	15	19:45	1	3	2 8			0	3	11
08:00	1		2		0	0		3		20:00	1		4	0		0	5	
08:15	1		5		0	0		6		20:15	0		3	0		0	3	
08:30	1		3		0	0		4		20:30	1		1	0		0	2	
08:45	1	4	5	15	0	0		6	19	20:45	1	3	0 8			0	1	11
09:00 09:15	0		2		0 0	0 0		2 4		21:00 21:15	0		1	0		0	1 3	
09:15	1		1		0	0		2		21:15	0		3 1	0		0	1	
09:45	3	6	Ō	5	0	0		3	11	21:45	1	1	0 5			0	1	6
10:00	0		1		0	0		1		22:00	1		2	0		0	3	
10:15	1		7		0	0		8		22:15	1		0	0		0	1	
10:30	1		1		0	0		2		22:30	0		0	0		0		
10:45	0	2	3	12	0	0		3	14	22:45	0	2	0 2			0		4
11:00 11:15	1 4		5 2		0 0	0 0		6 6		23:00 23:15	0		0 0	0		0		
11:15	5		4		0	0		9		23:15	1		0	0		0	1	
11:45	7	17	2	13	Ö	0		9	30	23:45	0	1	0	0		0	_	1
TOTALS		36		61					97	TOTALS		61	76	j				137
SPLIT %		37.1%		62.9%					41.5%	SPLIT %		44.5%	55.	5%				58.5%
						NB		SB		EB		WB					To	otal
	D	AILY T	OT	ALS		97		137		0		0						34
AM Play Values		11:00		10:15					11:00	PM Peak Hour		12:15	15:					12:15
AM Pk Volume		17		16					30	PM Pk Volume Pk Hr Factor		13	13					22
Pk Hr Factor 7 - 9 Volume		0.607 8		0.571 26	(0		0.833	4 - 6 Volume		0.813	0.8		n	0		0.688
7 - 9 Peak Hour		07:00		07:30					08:00	4 - 6 Peak Hour		16:30	16:					16:30
7 - 9 Pk Volume		4		15					19	4 - 6 Pk Volume		7	13					20
Pk Hr Factor		0.333		0.750					0.792	Pk Hr Factor		0.583	0.8					0.833

Hamilton Ave N/O Virginia Ave

Day: WednesdayCity: HapevilleDate: 5/15/2019Project #: GA19_9371_002

Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	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	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
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
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
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
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	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 05:45	0	0	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	0	0	0	0
06:00 06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	9
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	9
06:30 06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	4
07:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
07:15	0	7	0	0	0	0	0	0	0	0	0	0	0	5
07:30	0	2	0	1	0	0	0	0	0	0	0	0	0	2
07:45	0	5	J	0	0	0	0	0	0	0	0	0	0	5
07:45	0	3	_	0		0	~	0		-	-		0	3

CLASSIFICATION Hamilton Ave N/O Virginia Ave

Day: Wednesday Date: 5/15/2019

City: Hapeville Project #: GA19_9371_002

Summary														
Time	#1	# 2	#3	#4	#5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
08:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6
08:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
08:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
09:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
09:15	0	3	0	0	1	0	0	0	0	0	0	0	0	4
09:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
09:45	0	2	0	0	1	0	0	0	0	0	0	0	0	3
10:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
10:15	0	5	1	1	1	0	0	0	0	0	0	0	0	8
10:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
10:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
11:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
11:15	1	4	0	0	1	0	0	0	0	0	0	0	0	6
11:30	0	8	0	0	1	0	0	0	0	0	0	0	0	9
11:45	0	8	1	0	0	0	0	0	0	0	0	0	0	9
12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
12:15	0	6	0	0	0	0	0	0	0	0	0	0	0	6
12:30	0	7	0	1	0	0	0	0	0	0	0	0	0	8
12:45	0	1	1	1	0	0	1	0	0	0	0	0	0	4
13:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
13:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
13:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
13:45	0	2	0	1	0	0	0	0	0	~	0	0	0	3
14:00	0	0	2	0	1	0	0	0	0	0	0	0	0	3
14:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
14:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
14:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
15:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
15:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
15:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
15:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
16:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
16:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3

CLASSIFICATION Hamilton Ave N/O Virginia Ave

Day: Wednesday Date: 5/15/2019

City: Hapeville Project #: GA19_9371_002

Julililary														
Time	#1	# 2	#3	# 4	#5	#6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
16:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
16:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
17:00	1	4	1	0	0	0	0	0	0	0	0	0	0	6
17:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
17:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
17:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	4	3	0	0	0	0	0	0	0	0	0	0	7
18:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
18:45	0	1	2	0	0	0	0	0	0	0	0	0	0	3
19:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
19:30	0	3	0	0	1	0	0	0	0	0	0	0	0	4
19:45	0	_	0	0	0	0	0	0	0	0	0	0	0	3
20:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
20:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
20:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
20:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:15 21:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
21:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	_	2	0	0	0	0	0	0	0	0	0	0	2
22:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	U	U	0	0	0	0	U	0	0	0	U	U

Totals	#1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
TOLAIS	2	190	28	5	8		1							234
% of Totals	1%	81%	12%	2%	3%		0%							100%
AM Volumes	1	81	7	2	6	0	0	0	0	0	0	0	0	97
% AM	0%	35%	3%	1%	3%									41%
AM Peak Hour	10:30	11:00	10:15	06:45	10:45									11:00
Volume	1	24	3	1	3									30
PM Volumes	1	109	21	3	2	0	1	0	0	0	0	0	0	137
% PM	0%	47%	9%	1%	1%		0%							59%
PM Peak Hour	16:15	12:15	18:00	12:00	13:15		12:00							12:15
Volume	1	18	5	2	1		1							22
Dire	ctional Pea	k Periods		AM 7-9			NOON 12-2			PM 4-6		Off	Peak Volun	nes
	A	All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			34		15%	33		14%	31		13%	136		58%

Classification Definitions

1 Motorcycles 2 Passenger Cars

3 2-Axle, 4-Tire Single Units

4 Buses

5 2-Axle, 6-Tire Single Units

6 3-Axle Single Units

7 > =4-Axle Single Units 8 <=4-Axle Single Trailers 10 >=6-Axle Single Trailers

13 >=7-Axle Multi-Trailers

11 <=5-Axle Multi-Trailers **9** 5-Axle Single Trailers

12 6-Axle Multi-Trailers

Virginia Ave N/O Doug Davis Dr

Day: Tuesday **Date:** 5/14/2019

City: Hapeville **Project #:** GA19_9371_003

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	48	6	0	1	0	0	0	0	0	0	0	0	55
01:00	1	38	4	0	1	0	0	1	0	0	0	0	0	45
02:00	0	37	4	0	0	0	0	0	0	0	0	0	0	41
03:00	0	18	2	0	0	0	0	0	0	0	0	0	0	20
04:00	0	34	4	0	1	1	0	0			0	0	0	40
05:00	0	71	6	1	1	0	0	0	1	0	0	0	0	80
06:00	0	118	19	1	2	0	0	0	0	0	0	0	0	140
07:00	0	174	26	0	3	0	0	0	0		0	0	0	203
08:00	0	253	33	4	2	0	0	0	0		0	0	0	292
09:00	0	191	26	5	5	0	0	0			0	0	0	227
10:00	0	181	41	0	10	0	1	0	0		0	0	0	233
11:00	0	317	55	2	10	1	0	3			0	0	0	388
12:00 PM	2	443	78	2	19	4	1	1	0	•	0	0	0	550
13:00	1	380	58	1	14	1	1	1	0		0	0	0	457
14:00	0	294	50	0	1	0	0	0	1	0	0	0	0	346
15:00	2	333	43	4	8	0	0	0			0	0	0	391
16:00	1 1	305	44 52	1 0	3	0	0	0	0	0	0	0	0	353
17:00 18:00	1	342 280	36	2	3 4	0	0	0			0	0	0	400 323
19:00	0	262	25	0	5	0	0	0			0	0	0	292
20:00	0	197	19	0	2	0	0	0	0	0	0	0	0	218
21:00	0	156	20	1	2	0	0	0	0		0	0	0	179
22:00	0	126	9	0	0	0	0	0	1	0	0	0	0	136
23:00	0	87	10	0	4	0	0	0	0		0	0	0	101
Totals	11	4685	670	24	100	8	3	6	3		J	J	Ü	5510
% of Totals	0%	85%	12%	0%	2%	0%	0%	0%	0%					100%
AM Volumes	1	1480	226	13	36	2	1	4	1	0	0	0	0	1764
% AM	0%	27%	4%	0%	1%	0%	0%	0%	0%					32%
AM Peak Hour	01:00	11:00	11:00	09:00	10:00	04:00	10:00	11:00	_					11:00
Volume	1	317	55	5	10	1	1	3	1					388
PM Volumes % PM	10	3205	444	11	64	6	2	2		0	0	0	0	0.10
% PIVI PM Peak Hour	0% 17:00	58%	12:00	0% 15:00	1%	12:00	12:00	0% 12:00	0% 14:00					68%
Volume	3	12:00 443	12:00 78	15:00 4	12:00 19	12:00 4	12:00 1	12:00 1	14:00 1					12:00 550
	ectional Pea		70	AM 7-9	19		<u> </u>	1	1	PM 4-6		Ott.	<u> </u>	
Dire		All Classes	Volume	AIVI /-9	0/		NOON 12-2	%	Volumo	FIVI 4-0	%		reak voiun	
	<i>F</i>	111 CIASSES	volume 495	\longleftrightarrow	% 9%	Volume 1007	\longleftrightarrow	% 18%	Volume 753	\longleftrightarrow	% 14%	Volume 3255	← →	% 59%
			490		3 70	1007		1070	/55		1470	3233		J J 70

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- **6** 3-Axle Single Units
- 7 > =4-Axle Single Units

9 5-Axle Single Trailers

- 8 <=4-Axle Single Trailers
- **11** <=5-Axle Multi-Trailers

10 >=6-Axle Single Trailers

- **12** 6-Axle Multi-Trailers
- 13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Virginia Ave N/O Doug Davis Dr

Day: Tuesday **Date:** 5/14/2019

City: Hapeville
Project #: GA19_9371_003

	D	AILY 1	OTA	ALS		NB		SB		EB		WB							otal
						2,694		2,816		0		0							510
AM Period	NB		SB		EB	WB		_	TAL	PM Period	NB		SB		EB		NB .		TAL
00:00 00:15	6 6		4 16		0 0	0 0		10 22		12:00 12:15	67 50		66 96		0 0		0	133 146	
00:30	9		4		0	0		13		12:30	54		57		0		0	111	
00:45	4	25	6	30	0	0		10	55	12:45	66	237	94	313	0		0	160	550
01:00 01:15	3 7		3 8		0 0	0 0		6 15		13:00 13:15	69 56		67 65		0 0		0	136 121	
01:30	5		0 11		0	0		16		13:30	59		47		0		0	106	
01:45	4	19	4	26	0	0		8	45	13:45	42	226	52	231	0		0	94	457
02:00	5 7		2 9		0 0	0 0		7 16		14:00 14:15	47 46		34 51		0 0		0	81 97	
02:15 02:30	6		5		0	0		10		14:30	46 47		43		0		0	90	
02:45	5	23	2	18	0	0		7	41	14:45	36	176	42	170	0		0	78	346
03:00	3		3		0	0		6		15:00	51		54		0		0	105	
03:15 03:30	2		3 2		0 0	0 0		5 4		15:15 15:30	50 58		43 43		0		0	93 101	
03:45	5	12	0	8	0	0		5	20	15:45	43	202	49	189	0		0	92	391
04:00	3		5		0	0		8		16:00	45		38		0		0	83	
04:15 04:30	2 5		3		0 0	0 0		5 13		16:15 16:30	52 59		43		0 0		0	95 95	
04:30	4	14	8 10	26	0	0		14	40	16:45	43	199	36 37	154	0		0	80	353
05:00	6		7		0	0		13		17:00	55	233	50		0		0	105	333
05:15	4		11		0	0		15		17:15	61		49		0		0	110	
05:30 05:45	9 12	31	13 18	49	0 0	0 0		22 30	80	17:30 17:45	53 48	217	42 42	183	0 0		0	95 90	400
06:00	10	- 31	17	73	0	0		27	- 00	18:00	42	217	38	103	0		0	80	700
06:15	12		5		0	0		17		18:15	39		45		0		0	84	
06:30 06:45	24 18	64	29 25	76	0 0	0 0		53 43	140	18:30 18:45	44 33	158	38 44	165	0 0		0	82 77	323
07:00	22	04	25	70	0	0		47	140	19:00	49	136	47	103	0		0	96	323
07:15	11		26		0	0		37		19:15	55		27		0		0	82	
07:30	17	75	34	120	0	0		51	202	19:30	31	150	35	126	0		0	66	202
07:45 08:00	25 37	75	43 33	128	0	0		68 70	203	19:45 20:00	21 42	156	27 35	136	0		0	48 77	292
08:15	44		24		Ö	Ö		68		20:15	23		17		Ö		0	40	
08:30	22		46		0	0		68		20:30	27		26		0		0	53	
08:45 09:00	26 24	129	60 38	163	0	0		86 62	292	20:45 21:00	16 25	108	32 20	110	0		0	48 45	218
09:15	29		25		0	0		54		21:15	26		24		0		0	50	
09:30	20		37		0	0		57		21:30	28		22		0		0	50	
09:45	22	95	32 31	132	0	0		54 52	227	21:45 22:00	22 18	101	12 21	78	0		0	34 39	179
10:00 10:15	28		20		0	0		52 48		22:15	18		18		0		0	32	
10:30	21		44		Ö	Ö		65		22:30	17		7		Ö		0	24	
10:45	29	99	39	134	0	0		68	233	22:45	20	69	21	67	0		0	41	136
11:00 11:15	40 36		38 52		0 0	0 0		78 88		23:00 23:15	14 15		15 13		0		0	29 28	
11:30	63		54		0	0		117		23:30	16		8		0		0	24	
11:45	61	200	44	188	0	0		105	388	23:45	14	59	6	42	0		0	20	101
TOTALS		786		978					1764	TOTALS		1908		1838					3746
SPLIT %		44.6%		55.4%					32.0%	SPLIT %		50.9%		49.1%					68.0%
	_	A 11.24.5	· O.T.	11.0		NB		SB		EB		WB						To	otal
	D.	AILY 1	TO I A	ALS.		2,694		2,816		0		0							510
AM Peak Hour		11:30		11:45					11:30	PM Peak Hour		12:45		12:15					12:15
AM Pk Volume		241		263					501	PM Pk Volume		250		314					553
Pk Hr Factor		0.899		0.685					0.858	Pk Hr Factor		0.906		0.818					0.864
7 - 9 Volume		204		291		0	0		495	4 - 6 Volume		416		337		0	0		753
7 - 9 Peak Hour		08:00		08:00					08:00	4 - 6 Peak Hour		16:30		17:00					17:00
7 - 9 Pk Volume		129		163					292	4 - 6 Pk Volume		218		183					400
Pk Hr Factor		0.733		0.679		0.000	0.000		0.849	Pk Hr Factor		0.893		0.915		0.000	0.000		0.909

Virginia Ave N/O Doug Davis Dr

Day: Tuesday

City: Hapeville

Date: 5/14/2019 **Project #:** GA19_9371_003

Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0		1	0	0	0	0	0	0	0	0	0	0	10
00:15	0	19	3	0	0	0	0	0	0	0	0	0	0	22
00:30	0	_~	2	0	1	0	0	0	0	0	0	0	0	13
00:45	0			0	0	0	0	0	0	0	0	0	0	10
01:00	0	Ŭ	0	0	0	0	0	0	0	0	0	0	0	6
01:15	1	13	1	0	0	0	0	0	0	0	0	0	0	15
01:30	0		2	0	1	0	0	1	0	0	0	0	0	16
01:45 02:00	0		1	0	0	0	0	0	0	0	_	0	0	8
02:00	0		2	0	0	0	0	0	0	0	0	0	0	16
02:30	0		0	0	0	0	0	0	0	0	0	0	0	11
02:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
03:00	0	_	1	0	0	0	0	0	0	0	0	0	0	6
03:15	0	_	0	0	0	0	0	0	0	0	0	0	0	5
03:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:45	0	4	1	0	0	0	0	0	0	0	0	0	0	5
04:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
04:15	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:30	0	10	2	0	1	0	0	0	0	0	0	0	0	13
04:45	0		1	0	0	1	0	0	0	0	0	0	0	14
05:00	0	_		0	0	0	0	0	0	0	0	0	0	13
05:15	0	_		0	0	0	0	0	0	0	0	0	0	15
05:30	0			0	1	0	0	0	1	0	0	0	0	22
05:45	0		3	1	0	0	0	0	0	0	_	0	0	30
06:00 06:15	0		2	0	0	0	0	0	0	0	0	0	0	27 17
06:15	0		5 7	0	1	0	0	0	0	0	0	0	0	53
06:45	0		7	1	1	0	0	0	0	0	0	0	0	43
07:00	0		5	0	0	0	0	0	0	0	0	0	0	47
07:15	0		4	0	0	0	0	0	0	0	0	0	0	37
07:30	0		8	0	1	0	0	0	0	0	0	0	0	51
07:45	0		9	0	2	0	0	0	0	0	0	0	0	68
08:00	0		10	0	1	0		0	0	0	0	0	0	70

CLASSIFICATIONVirginia Ave N/O Doug Davis Dr

Day: Tuesday **Date:** 5/14/2019

City: Hapeville **Project #:** GA19_9371_003

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
08:15	0	59	8	1	0	0	0	0	0	0	0	0	0	68
08:30	0	65	3	0	0	0	0	0	0	0	0	0	0	68
08:45	0	70	12	3	1	0	0	0	0	0	0	0	0	86
09:00	0	52	7	2	1	0	0	0	0	0	0	0	0	62
09:15	0	48	5	1	0	0	0	0	0	0	0	0	0	54
09:30	0	49	6	1	1	0	0	0	0	0	0	0	0	57
09:45	0	42	8	1	3	0	0	0	0	0	0	0	0	54
10:00	0	45	5	0	2	0	0	0	0	0	0	0	0	52
10:15	0	36	11	0	1	0	0	0	0	0	0	0	0	48
10:30	0	53	7	0	4	0	1	0	0	0	0	0	0	65
10:45	0	47	18	0	3	0	0	0	0	0	0	0	0	68
11:00	0	59	14	1	2	0	0	2	0	0	0	0	0	78
11:15	0	74	11	0	2	0	0	1	0	0	0	0	0	88
11:30	0	100	10	1	6	0	0	0	0	0	0	0	0	117
11:45	0	84	20	0	0	1	0	0	0	0	0	0	0	105
12:00 PM	0	110	17	1	5	0	0	0	0	0	0	0	0	133
12:15	0	124	19	0	3	0	0	0	0	0	0	0	0	146
12:30	0	91	13	0	6	1	0	0	0	0	0	0	0	111
12:45	2	118	29	1	5	3	1	1	0	0	0	0	0	160
13:00	0	114	21	0	1	0	0	0	0	0	0	0	0	136
13:15	0	99	13	1	6	0	1	1	0	0	0	0	0	121
13:30	0	87	14	0	4	1	0	0	0	0	0	0	0	106
13:45	1	80	10	0	3	0	0	0	0	0	0	0	0	94
14:00	0	68	13	0	0	0	0	0	0	0	0	0	0	81
14:15	0	79	18	0	0	0	0	0	0	0	0	0	0	97
14:30	0	77	12	0	0	0	0	0	1	0	0	0	0	90
14:45	0	70	7	0	1	0	0	0	0	0	0	0	0	78
15:00	0	90	10	1	3	1	0	0	0	0	0	0	0	105
15:15	1	77	11	2	2	0	0	0	0	0	0	0	0	93
15:30	1	86	12	0	2	0	0	0	0	0	0	0	0	101
15:45	0	80	10	1	1	0	0	0	0	0	0	0	0	92
16:00	0	73	10	0	0	0	0	0	0	0	0	0	0	83
16:15	0	83	12	0	0	0	0	0	0	0	0	0	0	95

CLASSIFICATIONVirginia Ave N/O Doug Davis Dr

Day: Tuesday **Date:** 5/14/2019

City: Hapeville **Project #:** GA19_9371_003

Summary														
Time	# 1	# 2	#3	# 4	#5	#6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
16:30	0	81	11	1	2	0	0	0	0	0	0	0	0	95
16:45	1	68	11	0	0	0	0	0	0	0	0	0	0	80
17:00	1	92	12	0	0	0	0	0	0	0	0	0	0	105
17:15	1	91	17	0	1	0	0	0	0	0	0	0	0	110
17:30	1	84	10	0	0	0	0	0	0	0	0	0	0	95
17:45	0	75	13	0	2	0	0	0	0	0	0	0	0	90
18:00	0	72	7	1	0	0	0	0	0	0	0	0	0	80
18:15	1	71	10	0	2	0	0	0	0	0	0	0	0	84
18:30	0	74	7	0	1	0	0	0	0	0	0	0	0	82
18:45	0	63	12	1	1	0	0	0	0	0	0	0	0	77
19:00	0	87	8	0	1	0	0	0	0	0	0	0	0	96
19:15	0	76	5	0	1	0	0	0	0	0	0	0	0	82
19:30	0	56	7	0	3	0	0	0	0	0	0	0	0	66
19:45	0	43	5	0	0	0	0	0	0	0	_	0	0	48
20:00	0	66	9	0	2	0	0	0	0	0	0	0	0	77
20:15	0	37	3	0	0	0	0	0	0	0	0	0	0	40
20:30	0	48	5	0	0	0	0	0	0	0	0	0	0	53
20:45	0	46	2	0	0	0	0	0	0	0	0	0	0	48
21:00	0	41	3	0	1	0	0	0	0	0	0	0	0	45
21:15	0	46	4	0	0	0	0	0	0	0	0	0	0	50
21:30	0	42	7	0	1	0	0	0	0	0	0	0	0	50
21:45	0	27	6	1	0	0	0	0	0	0	0	0	0	34
22:00	0	35	3	0	0	0	0	0	1	0	0	0	0	39
22:15	0	29	3	0	0	0	0	0	0	0	0	0	0	32
22:30	0	23	1	0	0	0	0	0	0	0	0	0	0	24
23:00	0	23	6	0	0	0	0	0	0	0	0	0	0	29
23:15	0	25	2	0	1	0	0	0	0	0	0	0	0	28
23:30	0	22	1	0	1	0	0	0	0	0	0	0	0	24
23:45	0	17	1	0	2	0	0	0	0	0	0	0	0	20

Totals	#1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
Totals	11	4685	670	24	100	8	3	6	3					5510
% of Totals	0%	85%	12%	0%	2%	0%	0%	0%	0%					100%
AM Volumes	1	1480	226	13	36	2	1	4	1	0	0	C	0	1764
% AM	0%	27%	4%	0%	1%	0%	0%	0%	0%					32%
AM Peak Hour	00:30	11:30	11:45	08:45	11:30	11:45	09:45	10:30	04:45					11:30
Volume	1	418	69	7	14	2	1	3	1					501
PM Volumes	10	3205	444	11	64	6	2	2	2	0	0	C	0	3746
% PM	0%	58%	8%	0%	1%	0%	0%	0%	0%					68%
PM Peak Hour	16:45	12:15	12:15	15:00	12:00	12:00	12:30	12:30	13:45					12:15
Volume	4	447	82	4	19	4	2	2	1					553
Dire	ectional Pea	k Periods		AM 7-9			NOON 12-2			PM 4-6		Of	f Peak Volu	mes
	P	All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			495		9%	1007		18%	753		14%	3255		59%

Classification Definitions

1 Motorcycles 2 Passenger Cars3 2-Axle, 4-Tire Single Units

4 Buses

5 2-Axle, 6-Tire Single Units

6 3-Axle Single Units

7 > =4-Axle Single Units

8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

10 >=6-Axle Single Trailers 11 <=5-Axle Multi-Trailers

13 >=7-Axle Multi-Trailers

12 6-Axle Multi-Trailers

Virginia Ave N/O Doug Davis Dr

Day: Wednesday **Date:** 5/15/2019

City: Hapeville

Project #: GA19_9371_003

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	48	4	1	2	0	0	0	0	0	0	0	0	55
01:00	0	35	6	0	1	0	0	0	0	0	0	0	0	42
02:00	0	25	4	0	3	0	0	0	0	0	0	0	0	32
03:00	0	25	4	0	0	1	0	1	0	0	0	0	0	31
04:00	0	27	4	0	3	1	0	0	0		0	0	0	35
05:00	0	73	14	0	4	0	0	1	0		0	0	0	92
06:00	1	135	15	0	4	0	0	1	0	0	0	0	0	156
07:00	0	172	27	3	4	0	0	0	0		0	0	0	206
08:00	0	243	38	2	5	0	0	1	0		0	0	0	289
09:00	1	195	30	1	3	1	0	0	2	0	0	0	0	233
10:00	0	217	36	0	9	0	0	0	1	0	0	0	0	263
11:00	1	297	73	1	15	1	0		0		0	0	0	389
12:00 PM	1	443	102	1	12	3	0	2	0	•	0	0	0	564
13:00	0	350	60	0	9	1	0	0	0		0	0	0	420
14:00	0	319	46	1	12	1	0	0		0	0	0	0	380
15:00 16:00	4	277 309	49 53	1	3 6	0	0	0	0	0 0	0	0 0	0	334 374
17:00	1	362	57	5 0	8	0	0	0	_		0	0	0	428
18:00	5	302	43	0	0	0	0	0			0	0	0	353
19:00	0	214	27	0	7	0	0	_			0	0	0	248
20:00	0	223	33	0	1	0	0	0	0	0	0	0	0	260
21:00	1	137	12	0	3	0	0	0	0		0	0	0	153
22:00	0	134	14	0	1	0	0	0	0	0	0	0	0	149
23:00	0	115	8	0	2	0	0	0	1	0	0	0	0	126
Totals	16	4676	759	16	124	9	J	7	5					5612
% of Totals	0%	83%	14%	0%	2%	0%		0%	0%					100%
AM Volumes	3	1492	255	8	53	4	0	5	3	0	0	0	0	1823
% AM	0%	27%	5%	0%	1%	0%		0%	0%					32%
AM Peak Hour	06:00	11:00	11:00	07:00	11:00	03:00		03:00						11:00
Volume	1	297	73	3	15	1		1	2	2				389
PM Volumes % PM	13	3184	504	8	71	5	0	2		0	0	0	0	0.00
% PIVI PM Peak Hour	18:00	57% 12:00	9% 12:00	0% 16:00	1%	12:00		12:00	0% 14:00					68%
	PM Peak Hour 18:00 12:0 Volume 5 443			16:00 5	12:00 12	12:00 3		12:00 2	14:00 1					12:00 564
	Directional Peak Period			AM 7-9	12		<u> </u>		1	PM 4-6		Ott	<u> </u>	
	All Classe			AIVI /-3	0/		NOON 12-2		Volumo	FIVI 4-0	%		reak voiun	
	All Classes			\longleftrightarrow	% 9%	Volume 984	← →	% 18%	Volume 802	\longleftrightarrow	% 14%	Volume 3331	\longleftrightarrow	% 59%
					3 70	J04	. •	1070	002		1470	2221		J J 70

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- **6** 3-Axle Single Units
- 7 > =4-Axle Single Units
- 8 <=4-Axle Single Trailers
- **9** 5-Axle Single Trailers
- 10 >=6-Axle Single Trailers
- **11** <=5-Axle Multi-Trailers
- **12** 6-Axle Multi-Trailers
- 13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD Prepared by National Data & Surveying Services

VOLUME

Virginia Ave N/O Doug Davis Dr

Day: Wednesday Date: 5/15/2019 City: Hapeville
Project #: GA19_9371_003

	ח	AILY 1	OT/	\IS		NB	SB		EB		WB						To	otal
		AIL!	017	1LJ		2,743	2,869	1	0		0						5,	612
AM Period	NB		SB		EB	WB	то	TAL	PM Period	NB		SB		EB	W	В	TO	TAL
00:00 00:15	9 12		3 11		0	0 0	12 23		12:00 12:15	76 73		68 71		0	(144 144	
00:30	4		7		0	0	11		12:30	61		80		0	(141	
00:45	4	29	5	26	0	0	9	55	12:45	65	275	70	289	0	(135	564
01:00 01:15	8 4		6 5		0 0	0 0	14 9		13:00 13:15	57 56		57 54		0	(114 110	
01:30	3		4		0	0	7		13:30	48		54		Ö	Č		102	
01:45	1	16	11	26	0	0	12	42	13:45	40	201	54	219	0			94	420
02:00 02:15	4 4		5 1		0 0	0 0	9 5		14:00 14:15	53 49		50 48		0	(103 97	
02:30	5		3		0	0	8		14:30	41		46		0	Ċ)	87	
02:45 03:00	9	22	1 5	10	0	0	10 8	32	14:45 15:00	49 35	192	44 38	188	0	(93 73	380
03:00	3		6		0	0	9		15:15	52		42		0	(94	
03:30	4		4		0	0	8		15:30	39		40		0	Ċ		79	
03:45 04:00	2	11	5 4	20	0	0	6	31	15:45 16:00	45 42	171	43 35	163	0	(88 77	334
04:00	3		2		0	0	5		16:15	57		42		0	(99	
04:30	3		7		0	0	10		16:30	63		37		0	Ċ)	100	
04:45 05:00	7	12	10 5	23	0	0	14 12	35	16:45 17:00	48 77	210	50 45	164	0	(98 122	374
05:00 05:15	9		11		0	0	20		17:15	63		43 48		0	(111	
05:30	8		23		0	0	31		17:30	58		55		0	Ċ		113	
05:45 06:00	7 18	31	22 11	61	0	<u> </u>	29 29	92	17:45 18:00	48 60	246	34 54	182	0	(82 114	428
06:00	15		18		0	0	33		18:15	40		54 44		0	(84	
06:30	21		24		0	0	45		18:30	42		43		0	Ċ)	85	
06:45	28 17	82	21	74	0	0	49 37	156	18:45 19:00	43 32	185	27 38	168	0	(70 70	353
07:00 07:15	20		29		0	0	49		19:15	32 28		38 32		0	(60	
07:30	13		40		0	0	53		19:30	35		32		0	Ċ)	67	
07:45 08:00	28 27	78	39 47	128	0	0	67 74	206	19:45 20:00	22 33	117	29 42	131	0	(51 75	248
08:00	36		29		0	0	65		20:15	33 40		27		0	(67	
08:30	22		46		0	0	68		20:30	33		27		0	Ċ		60	
08:45 09:00	25 21	110	57 36	179	0	0	82 57	289	20:45 21:00	26 24	132	32 22	128	0	(58 46	260
09:00	24		27		0	0	51		21:15	16		17		0	(33	
09:30	21		38		0	0	59		21:30	18		18		0	Ċ		36	
09:45 10:00	21 32	87	45 29	146	0	0	66 61	233	21:45 22:00	16 22	74	22 14	79	0	(38 36	153
10:00	26		32		0	0	58		22:15	22		17		0	(39	
10:30	34		41		0	0	75		22:30	16		22		0	Ċ)	38	
10:45	27	119	42 47	144	0	0	69 85	263	22:45 23:00	21 29	81	15 10	68	0	(36 39	149
11:00 11:15	38 32		47 45		0	0	85 77		23:15	29 18		10		0	(29	
11:30	52		65		0	0	117		23:30	19		12		0	Ċ)	31	
11:45	59	181	51	208	0	0	110	389	23:45	15	81	12	45	0	()	27	126
TOTALS		778		1045				1823	TOTALS		1965		1824					3789
SPLIT %		42.7%		57.3%				32.5%	SPLIT %		51.9%		48.1%					67.5%
	ח	AILY 1	OT/	\IS		NB	SB		EB		WB						To	otal
	- D	AILI	-O I F	TLJ		2,743	2,869		0		0						5,	612
AM Peak Hour		11:45		11:45				11:45	PM Peak Hour		12:00		12:00					12:00
AM Pk Volume		269		270				539	PM Pk Volume		275		289					564
Pk Hr Factor		0.885		0.844				0.936	Pk Hr Factor		0.905		0.903					0.979
7 - 9 Volume		188		307				495	4 - 6 Volume		456		346					802 16.45
7 - 9 Peak Hour 7 - 9 Pk Volume		07:45 113		08:00 179				08:00 289	4 - 6 Peak Hour 4 - 6 Pk Volume		16:30 251		16:45 198					16:45 444
Pk Hr Factor		0.785		0.785				0.881	Pk Hr Factor		0.815		0.900					0.910

Virginia Ave N/O Doug Davis Dr

City: Hapeville

Day: Wednesday Date: 5/15/2019 Project #: GA19_9371_003

Time	# 1	# 2	#3	# 4	#5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	_	3	0	0	0	0	0	0	0	0	0	0	12
00:15	0	22	0	0	1	0	0	0	0	0	0	0	0	23
00:30	0	9		0	1	0	0	0	0	0	0	0	0	11
00:45	0	_	_	1	0	0	0	0	0	0	0	0	0	9
01:00	0			0	0	0	0	0	0	0	Ŭ	0	0	14
01:15	0	=	_	0	0	0	0	0	ŭ	0	0	0	0	9
01:30	0	Ŭ		0	1	0	0	0	0	0	0	0	0	7
01:45	0	_		0	0	0	0	0	0	0	~	0	0	12
02:00	0	_	2	0	2	0	0	0	-	0	0	0	0	9
02:15 02:30	0	· ·	1	0	0	0	0	0	0	0	0	0	0	5
02:30 02:45	0	_	1	0	0	0	0	0	0	0	0	0	0	8 10
03:00	0	_	2	0	_	0	0	0	_	0	· ·	0	0	0
03:15	0		1	0		0	0	1	0	0	Ŭ	0	0	a
03:30	0	=	0	0	0	1	0	0	0	0	0	0	0	8
03:45	0	=	0	0	_	0	0	0	0	0	Ŭ	0	0	6
04:00	0			0		0	0	0	0	0		0	0	6
04:15	0		0	0	-	0	0	0	0	0	0	0	0	5
04:30	0	6	1	0	2	1	0	0	0	0	0	0	0	10
04:45	0	12	2	0	0	0	0	0	0	0	0	0	0	14
05:00	0			0	0	0	0	1	0	0	0	0	0	12
05:15	0			0	2	0	0	0	0	0	0	0	0	20
05:30	0	26	4	0	1	0	0	0	0	0	0	0	0	31
05:45	0	24	4	0	1	0	0	0	0	0	0	0	0	29
06:00	0	25	2	0	1	0	0	1	0	0	0	0	0	29
06:15	0			0	0	0	0	0	0	0	0	0	0	33
06:30	1	38		0	1	0	0	0	0	0	0	0	0	45
06:45	0	. —		0	2	0	0	0	0	0	0	0	0	49
07:00	0			0	2	0	0	0	0	0	0	0	0	37
07:15	0			0	0	0	0	0	0	0	0	0	0	49
07:30	0	. •		0	0	0	0	0	0	0	0	0	0	53
07:45	0					0	0	0	_	0	_	0	0	67
08:00	0	63	11	0	0	0	0	0	0	0	0	0	0	74

CLASSIFICATIONVirginia Ave N/O Doug Davis Dr

Day: Wednesday Date: 5/15/2019

City: Hapeville **Project #:** GA19_9371_003

Summary														
Time	# 1	# 2	#3	#4	#5	#6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
08:15	0	57	7	0	1	0	0	0	0	0	0	0	0	65
08:30	0	56	9	2	1	0	0	0	0	0	0	0	0	68
08:45	0	67	11	0	3	0	0	1	0	0	0	0	0	82
09:00	1	45	9	0	1	1	0	0	0	0	0	0	0	57
09:15	0	41	7	1	0	0	0	0	2	0	0	0	0	51
09:30	0	52	6	0	1	0	0	0	0	0	0	0	0	59
09:45	0	57	8	0	1	0	0	0	0	0	0	0	0	66
10:00	0	52	7	0	1	0	0	0	1	0	0	0	0	61
10:15	0	50	6	0	2	0	0	0	0	0	0	0	0	58
10:30	0	63	9	0	3	0	0	0	0	0	0	0	0	75
10:45	0	52	14	0	3	0	0	0	0	0	0	0	0	69
11:00	0	64	13	0	7	1	0	0	0	0	0	0	0	85
11:15	0	62	15	0	0	0	0	0	0	0	0	0	0	77
11:30	1	90	20	0	6	0	0	0	0	0	0	0	0	117
11:45	0	81	25	1	2	0	0	1	0	0	0	0	0	110
12:00 PM	0	110	24	0	8	1	0	1	0	0	0	0	0	144
12:15	1	109	30	0	2	1	0	1	0	0	0	0	0	144
12:30	0	113	27	0	1	0	0	0	0	0	0	0	0	141
12:45	0	111	21	1	1	1	0	0	0	0	0	0	0	135
13:00	0	89	22	0	3	0	0	0	0	0	0	0	0	114
13:15	0	92	15	0	3	0	0	0	0	0	0	0	0	110
13:30	0	95 74	6 17	0	1	0	J	0	0	J	0	0	0	102 94
13:45 14:00	0	74 86		0	2	0	0	0	0	= 1	0	0	0	
14:00	0	80	13 13	0	4	1	0	0	0	0	0	0	0	103 97
14:15	0	72	13	0	1	0	0	0	1	0	0	0	0	87 87
14:45	0	72 81	7	1	1	0	0	0	0	0	0	0	0	93
15:00	1	59	12	0	1	0	0	0	0	0	0	0	0	73
15:15	2	76		0	1	0	0	0	0	0	0	0	0	94
15:30	0	70 70		0	1	0	0	0	0	0	0	0	0	79
15:45	1	70 72	14	1	0	0	0	0	0	0	0	0	0	88
16:00	0	65	10	0	2	0	0	0	0	0	0	0	0	77
16:15	0	80		1	2	0	0	0	0	Ŭ	0	0	0	99
1 -0.10	ı Yı	30	10	-1	4	٧	U	٧	٧	· ·	٠	٠	٠	25

CLASSIFICATIONVirginia Ave N/O Doug Davis Dr

Day: Wednesday Date: 5/15/2019

City: Hapeville Project #: GA19_9371_003

Summary														
Time	#1	# 2	#3	# 4	# 5	#6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
16:30	0	82	15	3	0	0	0	0	0	0	0	0	0	100
16:45	1	82	12	1	2	0	0	0	0	0	0	0	0	98
17:00	0	103	16	0	3	0	0	0	0	0	0	0	0	122
17:15	0	92	16	0	3	0	0	0	0	0	0	0	0	111
17:30	1	97	14	0	1	0	0	0	0	0	0	0	0	113
17:45	0	70	11	0	1	0	0	0	0	0	0	0	0	82
18:00	2	91	19	0	2	0	0	0	0	0	0	0	0	114
18:15	1	73	10	0	0	0	0	0	0	0	0	0	0	84
18:30	0	76	8	0	1	0	0	0	0	0	0	0	0	85
18:45	2	61	6	0	1	0	0	0	0	0	0	0	0	70
19:00	0	55	11	0	4	0	0	0	0	0	0	0	0	70
19:15	0	55	4	0	1	0	0	0	0	0	0	0	0	60
19:30	0	60	/	0	0	0	0	0	0	0	0	0	0	67
19:45	0		5	0	2	0	0	0	0	0	-	0	0	51
20:00	0		12	0	0	0	0	0	0	0	0	0	0	75
20:15	0	59	8	0	0	0	0	0	0	0	0	0	0	67
20:30	0	51	8	0	1	0	0	0	0	0	0	0	0	60
20:45	0	50	5	0	3	0	0	0	0	0	0	0	0	58
21:00	0		4	0	2	0	0	0	0	0	0	0	0	46
21:15	0	32	1	0	0	0	0	0	0	0	0	0	0	33
21:30	1	30 35	5	0	0	0	0	0	0	0	0	0	0	36 38
21:45	0		2	0	1	· ·	-	0		0	~	0	0	
22:00	0	32	4	0	0	0	0	0	0	0	0	0	0	36
22:15	0	36	3	0	0	0	0	0	0	0	0	0	0	39
22:30	0	34	3	0	1	0	0	0	0	0	0	0	0	38
23:00	0	33	5	0	1	0	0	0	0	0	0	0	0	39
23:15	0	29	0	0	0	0	0	0	0	0	0	0	0	29
23:30	0	28	2	0	1	0	0	0	0	0	0	0	0	31
23:45	0	25	1	0	0	0	0	0	1	0	0	0	0	27

Totals	# 1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
Totals	16	4676	759	16	124	9		7	5					5612
% of Totals	0%	83%	14%	0%	2%	0%		0%	0%					100%
AM Volumes	3	1492	255	8	53	4	0	5	3	0	0	0	0	1823
% AM	0%	27%	5%	0%	1%	0%		0%	0%					32%
AM Peak Hour	11:30	11:45	11:45	07:45	11:30	11:30		11:30	09:15					11:45
Volume	2	413	106	5	18	2		3	3					539
PM Volumes	13	3184	504	8	71	5	0	2	2	0	0	0	0	3789
% PM	0%	57%	9%	0%	1%	0%		0%	0%					68%
PM Peak Hour	18:00	12:00	12:00	15:45	12:00	12:00		12:00	13:45					12:00
Volume	5	443	102	5	12	3		2	1					564
Directional Peak Period		k Periods		AM 7-9			NOON 12-2			PM 4-6		Off	Peak Volu	nes
	Δ	All Classes	Volume		%	Volume		%	Volume		%	Volume		%
					9%	984		18%	802		14%	3331		59%

Classification Definitions

1 Motorcycles

4 Buses

2 Passenger Cars

3 2-Axle, 4-Tire Single Units

5 2-Axle, 6-Tire Single Units

6 3-Axle Single Units

7 > =4-Axle Single Units 8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

10 >=6-Axle Single Trailers

12 6-Axle Multi-Trailers

11 <=5-Axle Multi-Trailers

13 >=7-Axle Multi-Trailers

Doug Davis Dr E/O Virginia Ave /Clay Pl

Day: Tuesday

Date: 5/14/2019 **Project #:** GA19_9371_004

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	85	12	1	1	0	0	0	0	0	0	0	0	99
01:00	0	47	8	0	0	0	0	0	0	0	0	0	0	55
02:00	0	35	3	1	0	0	0	0	0	0	0	0	0	39
03:00	0	31	3	0	0	0	0	0	0	0	0	0	0	34
04:00	0	77	13	1	0	0	0	0	0	0	0	_		91
05:00	0	194	30	0	5	0	0	0	0	0	0		0	
06:00	1	255	38	3	10	0	0	0	0	0	0	0	0	307
07:00	1	370	50	4	9	0	0	0	0	0	0			434
08:00	0	354	62	1	13	0	1	0	0	0	0	0		431
09:00	0	303	50	1	17	0	0	0	0		0	_	_	
10:00	0	274	38	3	11	0	0	0	0	0	0	0	0	326
11:00	1	471	81	4	18	1	0	1	0	0	0			577
12:00 PM	0	606	87	5	15	0	0	0	0	0	0	0		713
13:00	0	528	83	4	17	2	0	0	0	0	0			634
14:00	0	450	57	7	13	2	0	0	0	0	0			529
15:00 16:00	0	446 535	66 68	8	12 8	0	0	0	0	0 0	0	0	0 0	532
17:00	0	610	64	4	14	0	0	0	0	0	0			616 692
18:00	0	381	51	5	14	0	0	0	0	0	0	0		451
19:00	0	312	37	4	6	0	0	0	0	0	0			
20:00	1	241	29	0	5	0	0	0	0	0	0	0	0	276
21:00	0	194	27	2	3	0	0	0	0	0	0		0	226
22:00	0	171	22	2	1	0	0	0	0	0	0	0		196
23:00	0	171	20	1	2	0	0	0	0		0			194
Totals	4	7141	999	65	194	6	1	1						8411
% of Totals	0%	85%	12%	1%	2%	0%	0%	0%						100%
		•		•			•							
AM Volumes	3	2496	388	19	84	1	1	1	0	0	0	0	0	2993
% AM	0%	30%	5%	0%	1%	0%	0%	0%						36%
AM Peak Hour	06:00	11:00	11:00	07:00	11:00	11:00	08:00	11:00						11:00
Volume	1	471	81	4	18	1	1	1						577
PM Volumes	1	4645	611	46	110	5	0	0	0	0	0	0	0	
% PM	0%	55%	7%	1%	1%	0%								64%
PM Peak Hour	20:00	17:00	12:00 87	15:00	13:00	13:00								12:00
	Volume 1 610			8	17	2								713
Dire	Directional Peak Period			AM 7-9			NOON 12-2			PM 4-6			Peak Volur	nes
	All Classes				%	Volume		%	Volume		%	Volume		%
				←	10%	1347	←→	16%	1308	←→	16%	4891	←	58%

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- 6 3-Axle Single Units
- 7 > =4-Axle Single Units
- 8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

- 10 >=6-Axle Single Trailers
- **11** <=5-Axle Multi-Trailers
- **12** 6-Axle Multi-Trailers
- **13** >=7-Axle Multi-Trailers

City: Hapeville

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Doug Davis Dr E/O Virginia Ave /Clay Pl

Day: Tuesday **Date:** 5/14/2019

City: Hapeville
Project #: GA19_9371_004

	DAI	LY TOTALS			NB		SB		EB		WB					To	otal
	DAI	LITOTALS			0		0		4,202		4,209					8,	411
AM Period	NB	SB	EB		WB		TO	TAL	PM Period	NB	SB	E	В	WB		TO	TAL
00:00	0	0	6		22		28		12:00	0	0	8		92		173	
00:15	0	0	14		14		28		12:15	0	0	10		72		173	
00:30 00:45	0	0 0	11 9	40	16 7	59	27 16	99	12:30 12:45	0 0	0	12	8 20 380	87 82	333	165 202	713
01:00	0	0	5	40	9	33	14	33	13:00	0	0	10		83	333	191	/13
01:15	0	0	4		2		6		13:15	0	0	9		83		180	
01:30	0	0	9		8		17		13:30	0	0	8		56		138	
01:45 02:00	0	0	<u>8</u> 7	26	10 8	29	18 15	55	13:45 14:00	0	0			54 68	276	125 132	634
02:00	0	0	10		6		16		14:15	0	0	6		61		127	
02:30	0	0	2		3		5		14:30	0	0	6		66		135	
02:45	0	0	2	21	1	18	3	39	14:45	0	0	6		73	268	135	529
03:00	0	0 0	3 0		6		9		15:00 15:15	0	0	5 7		73 62		130	
03:15 03:30	0	0	3		8 3		8 6		15:30	0	0	5		91		132 141	
03:45	Ö	Ö	4	10	7	24	11	34	15:45	0	Ö	5		76	302	129	532
04:00	0	0	7		2		9		16:00	0	0	6		88		152	
04:15	0	0	13		12		25		16:15	0	0	5		99		152	
04:30 04:45	0	0 0	13 19	52	8 17	39	21 36	91	16:30 16:45	0 0	0	7 5		92 95	374	167 145	616
05:00	0	0	24	32	12	33	36	<u> </u>	17:00	0	0			132	3/4	206	010
05:15	0	0	36		27		63		17:15	0	0	6	8	124		192	
05:30	0	0	42	400	24		66	222	17:30	0	0	5		111		168	600
05:45 06:00	0	0	36 32	138	28 35	91	64 67	229	17:45 18:00	0	0	<u>5</u>		71 61	438	126 111	692
06:00	0	0	32		33 44		76		18:15	0	0	5		77		130	
06:30	Ö	Ö	46		32		78		18:30	Ö	Ö	5		57		107	
06:45	0	0	49	159	37	148	86	307	18:45	0	0	3		65	260	103	451
07:00	0	0	59		41		100		19:00	0	0	4		71		118	
07:15 07:30	0	0 0	71 71		26 38		97 109		19:15 19:30	0 0	0	4		61 48		103 78	
07:45	0	0	75	276	53	158	128	434	19:45	0	0	2		37	217	60	359
08:00	0	0	58		29		87		20:00	0	0	4		44		88	
08:15	0	0	65		43		108		20:15	0	0	2		26		46	
08:30	0	0 0	81 78	202	42 35	140	123	121	20:30 20:45	0 0	0	3		39	125	77 65	276
08:45 09:00	0	0	64	282	36	149	113	431	21:00	0	0	3		26 25	135	60	276
09:15	Ö	Ö	46		43		89		21:15	0	Ö		2	35		57	
09:30	0	0	64		28		92		21:30	0	0	2		35		58	
09:45	0	0	54	228	36	143	90	371	21:45	0	0	3		18	113	51	226
10:00 10:15	0	0 0	48 46		32 32		80 78		22:00 22:15	0	0	2 1		25 24		50 41	
10:30	0	0	44		22		66		22:30	0	0	1		29		46	
10:45	Ő	Ö	66	204	36	122	102	326	22:45	0	0	3	1 90	28	106	59	196
11:00	0	0	46		74		120		23:00	0	0	2		38		58	
11:15 11:30	0	0 0	77 75		59 72		136 147		23:15 23:30	0 0	0	2 1		35 25		63 42	
11:30	0	0	75 86	284	72 88	293	174	577	23:45	0	0	1		25 16	114	31	194
TOTALS			30	1720	55	1273		2993	TOTALS		<u> </u>		2482		2936		5418
SPLIT %				57.5%		42.5%		35.6%	SPLIT %				45.8%	5	54.2%		64.4%
					NB		SB		EB		WB					T	otal
	DAI	LY TOTALS			O IND		<u>эв</u> 0		4,202		4,209						411
					U		U		4,202		4,209					٥,٠	777
AM Peak Hour				11:45		11:45		11:45	PM Peak Hour				12:15		16:45		12:30
AM Pk Volume				346		339		685	PM Pk Volume				407		462		738
Pk Hr Factor				0.856		0.921		0.984	Pk Hr Factor				0.848		0.875		0.913
7 - 9 Volume				558		307		865	4 - 6 Volume				496		812		1308
7 - 9 Peak Hour				08:00		07:45		07:45	4 - 6 Peak Hour				16:30		16:45		16:45
7 - 9 Pk Volume				282		167 0.788		446 0.871	4 - 6 Pk Volume Pk Hr Factor				267		462 0.875		711
Pk Hr Factor		0.000		0.870		0.788		0.871	PK HI Factor		0.000	0.000	0.890		0.875		0.863

Doug Davis Dr E/O Virginia Ave /Clay Pl

Day: Tuesday City: Hapeville

Date: 5/14/2019 **Project #:** GA19_9371_004

ounnary														
Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	22		0	1	0	0	0	0	0	0	0	0	28
00:15	0	23		1	0	0	0	0	0	0	0	0	0	28
00:30	0	25		0	0	0	0	0	0	0	0	0	0	27
00:45	0	15		0	0	0	0	0	0	0	0	0	0	16
01:00	0	12		0	0	0	0	0	0	Ŭ	0	0	0	14
01:15	0	6		0	0	0	0	0	0	Ŭ	0	0	0	6
01:30	0	14		0	0	0	0	0	0	0	0	0	0	17
01:45	0	15		0	0	0	0	0	0	_	0	0	0	18
02:00	0	13		0	0	0	0	0	ŭ	0	0	0	0	15
02:15	0	14		1	0	0	0	0	0	0	0	0	0	16
02:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	8	1	0	0	0	0	0	0	_	0	0	0	9
03:15	0	/	1	0	0	0	0	0	0	0	0	0	0	8
03:30	0	6		0	0	0	0	0	0	0	0	0	0	6
03:45 04:00	0	10		0	0	0	0	0	0	0	0	0	0	11
04:00	0	6 22	2	0	0	0	0	0	0	0	0	0	0	25
04:30	0	18	2	0	0	0	0	0	0	0	0	0	0	23
04:45	0	31		0	0	0	0	0	0	0	0	0	0	36
05:00	0	32		0	0	0	0	0	0	0	0	0	0	36
05:15	0	53		0	3	0	0	0	0	0	0	0	0	63
05:30	0	53		0	1	0	0	0	0	0	0	0	0	66
05:45	0	56		0	1	0	0	0	0	0	0	0	0	64
06:00	0	55		1	1	0	0	0	0	0	0	0	0	67
06:15	1	66		0	1	0	0	0	0	0	0	0	0	76
06:30	0	64		1	4	0	0	0	0	0	0	0	0	78
06:45	0	70	11	1	4	0	0	0	0	0	0	0	0	86
07:00	0	88	11	0	1	0	0	0	0	0	0	0	0	100
07:15	1	82	10	2	2	0	0	0	0	0	0	0	0	97
07:30	0	89	14	2	4	0	0	0	0	0	0	0	0	109
07:45	0	111	15	0	2	0	0	0	0	0	0	0	0	128
08:00	0	73	12	0	1	0	1	0	0	0	0	0	0	

CLASSIFICATIONDoug Davis Dr E/O Virginia Ave /Clay Pl

Day: Tuesday **Date:** 5/14/2019

City: Hapeville **Project #:** GA19_9371_004

Summary														
Time	#1	# 2	#3	# 4	#5	#6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
08:15	0	87	15	1	5	0	0	0	0	0	0	0	0	108
08:30	0	101	19	0	3	0	0	0	0	0	0	0	0	123
08:45	0	93	16	0	4	0	0	0	0	0	0	0	0	113
09:00	0	78	15	1	6	0	0	0	0	0	0	0	0	100
09:15	0	75	12	0	2	0	0	0	0	0	0	0	0	89
09:30	0	78	12	0	2	0	0	0	0	0	0	0	0	92
09:45	0	72	11	0	7	0	0	0	0	0	0	0	0	90
10:00	0	70	8	1	1	0	0	0	0	0	0	0	0	80
10:15	0	68	7	1	2	0	0	0	0	0	0	0	0	78
10:30	0	51	10	1	4	0	0	0	0	0	0	0	0	66
10:45	0	85	13	0	4	0	0	0	0	0	0	0	0	102
11:00	1	93	19	1	5	0	0	1	0	0	0	0	0	120
11:15	0	111	20	0	4	1	0	0	0	0	0	0	0	136
11:30	0	117	22	2	6	0	0	0	0	0	0	0	0	147
11:45	0	150	20	1	3	0	0	0	0	0	0	0	0	174
12:00 PM	0	147	20	2	4	0	0	0	0	0	0	0	0	173
12:15	0	146	24	1	2	0	0	0	0	0	0	0	0	173
12:30	0	143	18	1	3	0	0	0	0	0	0	0	0	165
12:45	0	170	25	1	6	0	0	0	0	0	0	0	0	202
13:00	0	158	26	2	4	1	0	0	0	0	0	0	0	191
13:15	0	149	24	1	6	0	0	0	0	0	0	0	0	180
13:30	0	113	19	1	4	1	0	0	0	0	0	0	0	138
13:45	0	108	14	0	3	0	0	0	0	= 1	0	0	0	125
14:00	0	115	13	1	3	0	0	0	0	0	0	0	0	132
14:15	0	108	14	0	4	1	0	0	0	0	0	0	0	127
14:30	0	113	16	3	2	1	0	0	0	0	0	0	0	135
14:45	0	114	14	3	4	0	0	0	0	0	0	0	0	135
15:00	0	109	16	3	2	0	0	0	0	0	0	0	0	130
15:15	0	109	18	2	3	0	0	0	0	0	0	0	0	132
15:30	0	121	17	0	3	0	0	0	0	0	0	0	0	141
15:45	0	107	15	3	4	0	0	0	0	0	0	0	0	129
16:00	0	130	18	1	3	0	0	0	0	0	0	0	0	152
16:15	0	133	15	1	3	0	0	0	0	0	0	0	0	152

Prepared by National Data & Surveying Services

CLASSIFICATIONDoug Davis Dr E/O Virginia Ave /Clay Pl

Day: Tuesday **Date:** 5/14/2019

City: Hapeville Project #: GA19_9371_004

Summary														
Time	# 1	# 2	#3	#4	#5	#6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
16:30	0	143	21	1	1	1	0	0	0	0	0	0	0	167
16:45	0	129	14	1	1	0	0	0	0	0	0	0	0	145
17:00	0	183	18	2	3	0	0	0	0	0	0	0	0	206
17:15	0	168	19	2	3	0	0	0	0	0	0	0	0	192
17:30	0	147	15	0	6	0	0	0	0	0	0	0	0	168
17:45	0	112	12	0	2	0	0	0	0	0	0	0	0	126
18:00	0	٥.	13	2	2	0	0	0	0	0	0	0	0	111
18:15	0	111	15	1	3	0	0	0	0	0	0	0	0	130
18:30	0	91	13	0	3	0	0	0	0	0	0	0	0	107
18:45	0	85	10	2	6	0	0	0	0	0	0	0	0	103
19:00	0	101	12	2	3	0	0	0	0	0	0	0	0	118
19:15	0	91	10	0	2	0	0	0	0	0	0	0	0	103
19:30	0	U ,	9	2	0	0	0	0	0	0	0	0	0	78
19:45	0			0	1	0	0	0	0	0	-	0	0	60
20:00	0		9	0	2	0	0	0	0	0	0	0	0	88
20:15	0	39	6	0	1	0	0	0	0	0	0	0	0	46
20:30	0	66	9	0	2	0	0	0	0	0	0	0	0	77
20:45	1	59	5	0	0	0	0	0	0	0	0	0	0	65
21:00	0	49	9	1	1	0	0	0	0	0	0	0	0	60
21:15	0	51	5	1	0	0	0	0	0	0	0	0	0	57
21:30	0	51	6	0	1	0	0	0	0	0	0	0	0	58
21:45	0		/	0	1	0	0	0	0	0	~	0	0	51
22:00	0	42	8	0	0	0	0	0	0	0	0	0	0	50
22:15	0	38	3	0	0	0	0	0	0	0	0	0	0	41
22:30	0	40	4	2	0	0	0	0	0	0	0	0	0	46
23:00	0	. •		1	1	0	0	0	0	0	0	0	0	58
23:15	0	56		0	1	0	0	0	0	0	0	0	0	63
23:30	0	38		0	0	0	0	0	0	0	0	0	0	42
23:45	0	28	3	0	0	0	0	0	0	0	0	0	0	31

Totals	#1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
Totals	4	7141	999	65	194	6	1	1						8411
% of Totals	0%	85%	12%	1%	2%	0%	0%	0%						100%
AM Volumes	3	2496	388	19	84	1	1	1	0	0	0	0	0	2993
% AM	0%	30%	5%	0%	1%	0%	0%	0%						36%
AM Peak Hour	05:30	11:45	11:30	11:30	10:45	10:30	07:15	10:15						11:45
Volume	1	586	86	6	19	1	1	1						685
PM Volumes	1	4645	611	46	110	5	0	0	0	0	0	0	0	5418
% PM	0%	55%	7%	1%	1%	0%								64%
PM Peak Hour	20:00	16:45	12:45	14:30	12:45	12:45								12:30
Volume	1	627	94	11	20	2								738
Dire	Directional Peak Perio			AM 7-9			NOON 12-2			PM 4-6		Off	f Peak Volu	mes
		All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			865		10%	1347		16%	1308		16%	4891		58%

Classification Definitions

1 Motorcycles

4 Buses

2 Passenger Cars3 2-Axle, 4-Tire Single Units

5 2-Axle, 6-Tire Single Units

6 3-Axle Single Units

7 > =4-Axle Single Units

8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

10 >=6-Axle Single Trailers

13 >=7-Axle Multi-Trailers

11 <=5-Axle Multi-Trailers12 6-Axle Multi-Trailers

Doug Davis Dr E/O Virginia Ave /Clay Pl

Day: Wednesday **Date:** 5/15/2019

City: Hapeville **Project #:** GA19_9371_004

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	1	87	16	2	2	0	0	0	0	0	0	0	0	108
01:00	0	43	3	0	0	0	0	0	0	0	0	0	0	46
02:00	0	29	2	0	0	0	0	0	0	0	0	0	0	31
03:00	0	21	2	1	1	0	0	0	0	0	0	0	0	_
04:00	0	68	11	0	1	0	0	0	0	0	0	0		80
05:00	0	189		2	7	0	0	0	0	0	0		0	_
06:00	2	270	36	4	8	1	0	0	0	0	0	0	0	321
07:00	1	355	48	8	12	0	0	0		0	0			424
08:00	0	392	65	3	13	0	0	0	0	_	0	_		473
09:00	0	320		4	9	0	0	0		0	0			382
10:00	0	312	49	4	12	0	0	0	0	0	0	0		377
11:00	1	481	85	0	14	1	0	0	0	0	0			582
12:00 PM	0	609	116	8	16	1	0	0	0	0	0	0		750
13:00	0	548	80	4	13	0	0	0		0		_	0	
14:00	0	470		4	15	1	0	0	0	0	0	0	0	553
15:00	1	460		7	15	0	0	0		0	0			549
16:00	1	468	61	3	13	0	0	0	0	0	0	0	0	546
17:00	0	606		3	16	0	0	0		0	0			707
18:00	1	414	57	4	10	0	0	0	0	0	0	0		486
19:00	0	293 227	44 33	1 0	9	0	0	0		0 0	0			347
20:00 21:00	0	168	21	0	6	0	0	0	0	0	0	0	0	269
22:00	0	160		0	3	0	0	0	0	0	0	0	0	195 184
23:00	0	131		0	2	0	0				0		0	
Totals	8	7121	1055	62	206	4	U	U	U	U	U	U	U	8456
% of Totals	0%	84%	12%	1%	2%	0%								100%
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	9791	0.75	/3	-/-[-/-	•/-								
AM Volumes	5	2567	397	28	79	2	0	0	0	0	0	0	0	3078
% AM	0%	30%	5%	0%	1%	0%								36%
AM Peak Hour	06:00	11:00	11:00	07:00	11:00	06:00								11:00
Volume	2	481	85	8	14	1								582
PM Volumes	3	4554	658	34	127	2	0	0	0	0	0	0	0	5378
% PM	0%	54%	8%	0%	2%	0%								64%
PM Peak Hour	15:00	12:00	12:00	12:00	12:00	12:00								12:00
Volume				8	16	1								750
Dire	Directional Peak Period			AM 7-9		<u></u>	NOON 12-2			PM 4-6		Off	Peak Volur	nes
	All Classe				%	Volume		%	Volume		%	Volume		%
	All Classe			← →	11%	1395	\longleftrightarrow	16%	1253	← →	15%	4911	← →	58%

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- 4 Buses
- **5** 2-Axle, 6-Tire Single Units
- 6 3-Axle Single Units
- 7 > =4-Axle Single Units
- 8 <=4-Axle Single Trailers
- **9** 5-Axle Single Trailers
- 10 >=6-Axle Single Trailers
- **11** <=5-Axle Multi-Trailers
 - **12** 6-Axle Multi-Trailers
- 13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD Prepared by National Data & Surveying Services

VOLUME

Doug Davis Dr E/O Virginia Ave /Clay Pl

Day: Wednesday Date: 5/15/2019 City: Hapeville
Project #: GA19_9371_004

	DAII	Y TOTALS			NB		SB		EB		WB					То	tal
	DAIL	II IOIALS			0		0		4,263		4,193					8,4	456
AM Period	NB	SB	EB		WB		то	TAL	PM Period	NB	SB	ЕВ		WB		TO	TAL
00:00 00:15	0	0 0	12 10		20 23		32 33		12:00 12:15	0	0	83 103		113 97		196 200	
00:30	0	0	12		9		21		12:30	0	0	115		60		175	
00:45	0	0	13	47	9	61	22	108	12:45	0	0	95	396	84	354	179	750
01:00 01:15	0	0 0	6 4		6 5		12 9		13:00 13:15	0	0 0	84 89		71 71		155 160	
01:30	0	0	3		6		9		13:30	0	0	89		85		174	
01:45 02:00	0	0	<u>7</u> 3	20	<u>9</u> 5	26	16 8	46	13:45 14:00	0	0	90 73	352	66 81	293	156 154	645
02:15	0	Ö	2		3		5		14:15	0	0	57		75		132	
02:30	0	0 0	5	12	5	10	10	21	14:30	0	0 0	71	257	66	206	137	FF2
02:45 03:00	0	0	2	12	<u>6</u> 4	19	8 6	31	14:45 15:00	0	0	56 60	257	74 77	296	130 137	553
03:15	0	0	1		3		4		15:15	0	0	61		77		138	
03:30 03:45	0	0 0	3 5	11	3 4	14	6 9	25	15:30 15:45	0	0 0	60 71	252	74 69	297	134 140	549
04:00	0	0	7	- 11	2	14	9	23	16:00	0	0	52	232	72	231	124	343
04:15	0	0	6		9		15		16:15	0	0	41		91		132	
04:30 04:45	0	0 0	16 23	52	8 9	28	24 32	80	16:30 16:45	0	0 0	51 63	207	98 78	339	149 141	546
05:00	0	0	23	<u> </u>	13	_0	36	- 50	17:00	0	0	78	0,	134		212	0.0
05:15 05:30	0	0 0	37 30		33 21		70 51		17:15 17:30	0	0 0	78 58		108 127		186 185	
05:45	0	0	42	132	30	97	72	229	17:45	0	0	54	268	70	439	124	707
06:00	0	0	22		43		65		18:00	0	0	53		78		131	
06:15 06:30	0	0 0	30 60		33 33		63 93		18:15 18:30	0	0 0	56 47		72 69		128 116	
06:45	0	0	62	174	38	147	100	321	18:45	0	0	44	200	67	286	111	486
07:00	0	0	52		40		92		19:00	0	0	36		58		94	
07:15 07:30	0	0 0	75 79		26 27		101 106		19:15 19:30	0	0	45 33		57 41		102 74	
07:45	0	0	86	292	39	132	125	424	19:45	0	0	41	155	36	192	77	347
08:00 08:15	0	0 0	62 70		37 38		99 108		20:00 20:15	0	0 0	32 33		32 42		64 75	
08:30	0	0	89		46		135		20:30	0	0	42		30		72	
08:45	0	0	97	318	34	155	131	473	20:45	0	0	28	135	30	134	58	269
09:00 09:15	0	0 0	70 55		36 34		106 89		21:00 21:15	0	0	26 23		30 26		56 49	
09:30	0	0	62		33		95		21:30	0	0	17		32		49	
09:45 10:00	0	0	63 64	250	29 37	132	92 101	382	21:45 22:00	0	0	17 19	83	24 14	112	41 33	195
10:15	0	0	44		40		84		22:15	0	0	20		15		35	
10:30	0	0	37	0.5.5	43	4	80		22:30	0	0	23		40	0.7	63	46.
10:45 11:00	0	0	61 65	206	51 67	171	112 132	377	22:45 23:00	0	0	26 14	88	27 27	96	53 41	184
11:15	0	0	69		78		147		23:15	0	0	17		26		43	
11:30 11:45	0	0 0	74 96	304	76 57	278	150 153	582	23:30 23:45	0	0	9 12	52	17 25	95	26 37	147
TOTALS	U	U	90	1818	١٦/	1260	133	3078	TOTALS	U	U	12	2445	23	2933	37	5378
SPLIT %				59.1%		40.9%		36.4%	SPLIT %				45.5%		54.5%		63.6%
31 211 70				33.170		40.570		30.470					43.370		34.370		
	DAII	Y TOTALS			NB 0		SB 0		EB 4,263		WB 4,193						tal 456
					U		U				4, 133					0,4	.30
AM Peak Hour				11:45		11:30		11:45	PM Peak Hour				12:15		16:45		12:00
AM Pk Volume Pk Hr Factor				397 0.863		343 0.759		724 0.905	PM Pk Volume Pk Hr Factor				397 0.863		447 0.834		750 0.938
7 - 9 Volume		0 0		610		287		897	4 - 6 Volume		0	0	475		778		1253
7 - 9 Peak Hour				08:00		07:45		08:00	4 - 6 Peak Hour				16:45		16:45		16:45
7 - 9 Pk Volume				318		160		473	4 - 6 Pk Volume				277		447		724
Pk Hr Factor	0.	0.000		0.820		0.870		0.876	Pk Hr Factor		0.000	0.000	0.888		0.834		0.854

Doug Davis Dr E/O Virginia Ave /Clay Pl

City: Hapeville

Day: Wednesday

Date: 5/15/2019 **Project #:** GA19_9371_004

Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0		5	1	0	0	0	0	0	0	0	0	0	32
00:15	1	27	4	1	0	0	0	0	0	0	0	0	0	33
00:30	0		4	0	0	0	0	0	0	0	0	0	0	21
00:45	0			0	2	0	0	0	0	0	0	0	0	22
01:00	0			0	0	0	0	~	0	0	Ŭ	0	0	12
01:15	0	•		0	0	0	0	0	0	0	0	0	0	9
01:30	0	•	0	0	0	0	0	0	0	0	0	0	0	9
01:45	0		2	0	0	0	0	0	0	0	~	0	0	16
02:00	0	_	0	0	0	0	0	0	-	0	0	0	0	8
02:15 02:30	0		1	0	0	0	0	0	0	0	0	0	0	10
02:30 02:45	0	_	1	0	0	0	0	0	0	0	0	0	0	10
03:00	0	•	0	0	0	0	0	_	_	0	J	0	0	6
03:15	0		0	0	0	0	0	_	0	0	Ŭ	0	0	4
03:30		-	1	0	0	0	0	0	0	0	0	0	0	6
03:45	0			1	1	0	0	Ŭ	0	0	0	0	0	9
04:00	0			0	0	0	0	0	0	0		0	0	9
04:15	0			0	0	0	0	0	0	0	0	0	0	15
04:30	0		3	0	0	0	0	0	0	0	0	0	0	24
04:45	0		5	0	1	0	0	0	0	0	0	0	0	32
05:00	0			0	1	0	0	0	0	0	0	0	0	36
05:15	0	58	9	0	3	0	0	0	0	0	0	0	0	70
05:30	0	42	7	1	1	0	0	0	0	0	0	0	0	51
05:45	0	61	8	1	2	0	0	0	0	0	0	0	0	72
06:00	0			1	2	0	0	0	0	0	0	0	0	65
06:15	0			0	1	0	0	0	0	0	0	0	0	63
06:30	2	78		0	2	1	0	0	0	0	0	0	0	93
06:45	0	0_	13	3	3	0	0	0	0	0	_	0	0	100
07:00	1	77	10	1	3	0	0	0	0	0	0	0	0	92
07:15	0			4	2	0	0	0	0	0	0	0	0	101
07:30	0			3	3	0	0	0	0	0	0	0	0	106
07:45	0		14	0		0	0		_	0	_	0	0	125
08:00	0	82	15	0	2	0	0	0	0	0	0	0	0	99

CLASSIFICATIONDoug Davis Dr E/O Virginia Ave /Clay Pl

Day: Wednesday Date: 5/15/2019

City: Hapeville **Project #:** GA19_9371_004

Summary														
Time	#1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
08:15	0	87	15	3	3	0	0	0	0	0	0	0	0	108
08:30	0	112	18	0	5	0	0	0	0	0	0	0	0	135
08:45	0	111	17	0	3	0	0	0	0	0	0	0	0	131
09:00	0		16	0	2	0	0	0	0	0	0	0	0	106
09:15	0	76	9	2	2	0	0	0	0	0	0	0	0	89
09:30	0	77	15	1	2	0	0	0	0	0	0	0	0	95
09:45	0	79	9	1	3	0	0	0	0	0	0	0	0	92
10:00	0	85	12	1	3	0	0	0	0	0	0	0	0	101
10:15	0	71	11	1	1	0	0	0	0	0	0	0	0	84
10:30	0	65	10	1	4	0	0	0	0	0	0	0	0	80
10:45	0	91	16	1	4	0	0	0	0	0	0	0	0	112
11:00	0	107	20	0	5	0	0	0	0	0	0	0	0	132
11:15	0	122	23	0	2	0	0	0	0	0	0	0	0	147
11:30	0	124	23	0	2	1	0	0	0	0	0	0	0	150
11:45	1	128	19	0	5	0	0	0	0	0	0	0	0	153
12:00 PM	0	162	28	1	4	1	0	0	0	0	0	0	0	196
12:15	0	158	33	4	5	0	0	0	0	0	0	0	0	200
12:30	0	144	27	1	3	0	0	0	0	0	0	0	0	175
12:45	0	145	28	2	4	0	0	0	0	0	0	0	0	179
13:00	0	134	19	1	1	0	0	0	0	0	0	0	0	155
13:15	0	133	21	1	5	0	0	0	0	0	0	0	0	160
13:30	0	149	22	0	3	0	0	0	0	0	0	0	0	174
13:45	0	132	18	2	4	0	0	0	0	0	0	0	0	156
14:00	0	134	15	1	4	0	0	0	0	0	0	0	0	154
14:15	0	110	16	2	4	0	0	0	0	0	0	0	0	132
14:30	0	111	20	1	5	0	0	0	0	0	0	0	0	137
14:45	0	115	12	0	2	1	0	0	0	0	0	0	0	130
15:00	0	113	18	3	3	0	0	0	0	0	0	0	0	137
15:15	1	112	17	2	6	0	0	0	0	0	0	0	0	138
15:30	0		14	1	4	0	0	0	0	0	0	0	0	134
15:45	0		17	1	2	0	0	0	0	0	0	0	0	140
16:00	0		15	1	3	0	0	0	0	0	0	0	0	124
16:15	0			0	3	0	0	0	0	0	0	0	0	132
	ı "			U	9	Ŭ	U	· ·	ı "		Ŭ	v	Ŭ	

Prepared by National Data & Surveying Services

CLASSIFICATIONDoug Davis Dr E/O Virginia Ave /Clay Pl

Day: Wednesday Date: 5/15/2019

City: Hapeville Project #: GA19_9371_004

Summary														
Time	#1	# 2	#3	# 4	#5	#6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
16:30	1	124	18	2	4	0	0	0	0	0	0	0	0	149
16:45	0	123	15	0	3	0	0	0	0	0	0	0	0	141
17:00	0	185	23	0	4	0	0	0	0	0	0	0	0	212
17:15	0	159	19	2	6	0	0	0	0	0	0	0	0	186
17:30	0	158	24	0	3	0	0	0	0	0	0	0	0	185
17:45	0	104	16	1	3	0	0	0	0	0	0	0	0	124
18:00	0	111	15	2	3	0	0	0	0	0	0	0	0	131
18:15	0	110	16	0	2	0	0	0	0	0	0	0	0	128
18:30	0	101	12	1	2	0	0	0	0	0	0	0	0	116
18:45	1	92	14	1	3	0	0	0	0	0	0	0	0	111
19:00	0	80	12	1	1	0	0	0	0	0	0	0	0	94
19:15	0	87	12	0	3	0	0	0	0	0	0	0	0	102
19:30	0	~ —	9	0	4	0	0	0	0	0	0	0	0	74
19:45	0		11	0	1	0	0	0	0	0	~	0	0	77
20:00	0		7	0	1	0	0	0	0	0	0	0	0	64
20:15	0	61	11	0	3	0	0	0	0	0	0	0	0	75
20:30	0	59	9	0	4	0	0	0	0	0	0	0	0	72
20:45	0	51	6	0	1	0	0	0	0	0	0	0	0	58
21:00	0		6	0	3	0	0	0	0	0	0	0	0	56
21:15	0	44	5	0	0	0	0	0	0	0	0	0	0	49
21:30	0	42	5	0	2	0	0	0	0	0	0	0	0	49
21:45	0		5	0	1	0	0	0	0	0	-	0	0	41
22:00	0		3	0	0	0	0	0	0	0	0	0	0	33
22:15	0	31	4	0	0	0	0	0	0	0	0	0	0	35
22:30	0	53	7	0	3	0	0	0	0	0	0	0	0	63
23:00	0	-	5	0	1	0	0	0	0	0	0	0	0	41
23:15	0		4	0	0	0	0	0	0	0	0	0	0	43
23:30	0	24	1	0	1	0	0	0	0	0	0	0	0	26
23:45	0	33	4	0	0	0	0	0	0	0	0	0	0	37

Totals	# 1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
Totals	8	7121	1055	62	206	4								8456
% of Totals	0%	84%	12%	1%	2%	0%								100%
AM Volumes	5	2567	397	28	79	2	0	0	0	0	0	0	0	3078
% AM	0%	30%	5%	0%	1%	0%								36%
AM Peak Hour	06:15	11:45	11:45	06:45	11:45	11:15								11:45
Volume	3	592	107	11	17	2								724
PM Volumes	3	4554	658	34	127	2	0	0	0	0	0	0	0	5378
% PM	0%	54%	8%	0%	2%	0%								64%
PM Peak Hour	14:30	16:45	12:00	12:00	13:45	12:00								12:00
Volume	1	625	116	8	17	1								750
Dire	Directional Peak Peri			AM 7-9			NOON 12-2			PM 4-6		Off	Peak Volui	nes
	A	All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			897		11%	1395		16%	1253		15%	4911		58%

Classification Definitions

1 Motorcycles2 Passenger Cars

3 2-Axle, 4-Tire Single Units

4 Buses

5 2-Axle, 6-Tire Single Units

6 3-Axle Single Units

7 > =4-Axle Single Units

8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

10 >=6-Axle Single Trailers

13 >=7-Axle Multi-Trailers

11 <=5-Axle Multi-Trailers12 6-Axle Multi-Trailers

Clay PI S/O Doug Davis Dr

Day: Tuesday **Date:** 5/14/2019

City: Hapeville
Project #: GA19_9371_005

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	0	0	0	0	0	0	0		1
05:00	0	0	0	0	0	0	0	0	2	0				2
06:00	0	1	1	0	0	0	0	0	0	0	0			2
07:00	0	9	3	0	0	0	0	0	0	0				
08:00	0	29	9	0	2	0	0	0	0	0	0	0		40
09:00	1	18	2	0	1	1	0	0	0	0	0			
10:00	1	16	5	0	0	0	0	0	0	0	0	_		22
11:00	0	50	15	0	1	2	0	0		0	0			
12:00 PM	1	70	11	0	5	0	0	0	0	0	0	0		87
13:00	3	74	27	0	5	0	0	0	0	0	0			109
14:00	0	22	4	1	0	0	0	0	0	0	0			27
15:00	0	21 87	5	1	2	0	0		0	0		0		
16:00	0	97	11 10	0	4	0	0	0	0	0	0			102
17:00 18:00	0	63	7	0	0	0	0	0	0	0	0	0		108 71
19:00	0	53	6	0	1	0	0	0	1	0	_			
20:00	0	39	7	0	3	0	0	0	1	0	0	0		50
21:00	0	29	8	0	1	0	0	0	0	0	0			
22:00	0	9	1	1	0	0	0	0	0	0	0	0		11
23:00	0	3	2	0	0	1	0		0		0		_	
Totals	6	693	135	3	26	5	J	J	4	J	J		J.	872
% of Totals	1%	79%	15%	0%	3%	1%			0%					100%
AM Volumes	2	126	36	0	4	3	0	0	2	0	0	0	0	173
% AM	0%	14%	4%		0%	0%			0%					20%
AM Peak Hour	09:00	11:00	11:00		08:00	11:00			05:00					11:00
Volume	1	50	15		2	2			2					68
PM Volumes	4	567	99	3	22	2	0	0	2	0	0	0	0	699
% PM	0%	65%	11%	0%	3%	0%			0%					80%
PM Peak Hour	13:00	17:00	13:00	14:00	12:00	17:00			19:00					13:00
Volume	3	97	27	1	5	1			1					109
Dire	Directional Peak Periods			AM 7-9	Ţ	Ī	NOON 12-2			PM 4-6		Off	Peak Volur	nes
		All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			52	←	6%	196	←	22%	210	←	24%	414	←	47%

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- 6 3-Axle Single Units
- 7 > =4-Axle Single Units
- 8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

- 10 >=6-Axle Single Trailers
- **11** <=5-Axle Multi-Trailers
- 12 6-Axle Multi-Trailers
- **13** >=7-Axle Multi-Trailers

Prepared by NDS/ATD Prepared by National Data & Surveying Services

VOLUME

Clay PI S/O Doug Davis Dr

Day: Tuesday **Date:** 5/14/2019 City: Hapeville
Project #: GA19_9371_005

	D	AILY T	OTA	VI C		NB		SB		EB		WB						Ţ	otal
	<i>D</i> ,	AILT	UIF	1L3		500		372		0		0							872
AM Period	NB		SB		EB	WB		TO	TAL	PM Period	NB		SB		EB	,	WB	T	OTAL
00:00	0		0		0	0				12:00	8		9		0		0	17	
00:15	0		0		Ō	0				12:15	20		9		0		0	29	
00:30	0		0		0	0				12:30	9		8		0		0	17	
00:45	0		0		0	0				12:45	16	53	8	34	0		0	24	87
01:00	0		0		0	0				13:00	15		16		0		0	31	
01:15	0		0		0	0				13:15	18		16		0		0	34	
01:30 01:45	0		0 0		0 0	0 0				13:30 13:45	12 13	EO	5 14	E 1	0 0		0	17 27	109
02:00	0		0		0	0				14:00	9	58	7	51	0		0	16	109
02:15	0		0		0	0				14:15	9		2		0		0	11	
02:30	0		Ö		Ö	Ö				14:30	Ö		0		Ö		0		
02:45	2	2	0		0	0		2	2	14:45	0	18	0	9	0		0		27
03:00	0		1		0	0		1		15:00	0		0		0		0		
03:15	0		0		0	0				15:15	8		5		0		0	13	
03:30	0		0		0	0				15:30	9		1		0		0	10	
03:45	0		0	1	0	0			1	15:45	2	19	4	10	0		0	6	29
04:00	0		1		0	0		1		16:00	16		9		0		0	25	
04:15 04:30	0		0 0		0 0	0				16:15 16:30	14 19		11 16		0 0		0	25 35	
04:45	0		0	1	0	0			1	16:45	14	63	3	39	0		0	17	102
05:00	0		0		0	0				17:00	19	03	11	33	0		0	30	102
05:15	0		1		Ö	Ö		1		17:15	22		17		Ö		0	39	
05:30	1		0		0	0		1		17:30	10		6		0		0	16	
05:45	0	1	0	1	0	0			2	17:45	17	68	6	40	0		0	23	108
06:00	1		0		0	0		1		18:00	9		4		0		0	13	
06:15	0		0		0	0				18:15	15		11		0		0	26	
06:30	0		1	_	0	0		1		18:30	14		12		0		0	26	
06:45	0	1	0	11	0	0		2	2	18:45	4	42	2	29	0		0	6	71
07:00	1		2		0	0 0		3		19:00 19:15	8 14		6		0		0	14 21	
07:15 07:30	0		2		0 0	0		2		19:30	5		7 6		0 0		0	11	
07:45	0	1	5	11	0	0		5	12	19:45	4	31	11	30	0		0	15	61
08:00	2		5		0	0		7		20:00	15	31	4	30	0		0	19	- 01
08:15	2		10		0	Ō		12		20:15	11		3		Ō		0	14	
08:30	2		10		0	0		12		20:30	6		3		0		0	9	
08:45	2	8	7	32	0	0		9	40	20:45	4	36	4	14	0		0	8	50
09:00	3		6		0	0		9		21:00	8		4		0		0	12	
09:15	3		1		0	0		4		21:15	5		1		0		0	6	
09:30	6	12	2	11	0	0		8	22	21:30	4	20	3		0		0	7	20
09:45 10:00	2	12	0	11	0	0		2	23	21:45 22:00	13 2	30	0	8	0		0	13	38
10:00	1		2		0	0		3		22:15	1		2		0		0	3	
10:30	3		2		0	0		5		22:30	4		0		0		0	4	
10:45	6	12	6	10	0	0		12	22	22:45	2	9	0	2	0		0	2	11
11:00	5		13		0	0		18		23:00	2		1	-	0		0	3	
11:15	8		3		0	0		11		23:15	1		0		0		0	1	
11:30	7		9		0	0		16		23:30	2		0		0		0	2	
11:45	11	31	12	37	0	0		23	68	23:45	0	5	0	1	0		0	_	6
TOTALS		68		105					173	TOTALS		432		267					699
SPLIT %		39.3%		60.7%					19.8%	SPLIT %		61.8%		38.2%					80.2%
	_	A 11.34.5	-0=-			NB		SB		EB		WB							otal
	D	AILY T	OTA	ALS.		500		372		0		0							872
AM Peak Hour		11:45		11:30					11:45	PM Peak Hour		16:30		13:00					16:30
AM Pk Volume		48		39					86	PM Pk Volume		74		51					121
Pk Hr Factor		0.600		0.813					0.741	Pk Hr Factor		0.841		0.797					0.776
7 - 9 Volume		9		43		n	0		52	4 - 6 Volume		131		79		0	0		210
7 - 9 Peak Hour		08:00		08:00					08:00	4 - 6 Peak Hour		16:30		16:30					16:30
7 - 9 Pk Volume		8		32					40	4 - 6 Pk Volume		74		47					121
Pk Hr Factor		1.000		0.800					0.833	Pk Hr Factor		0.841		0.691					0.776
I K III Factor		1.000		0.000			0.000		0.033	7 K III Tactor		0.041		0.031		3.000	0.0		0.770

CLASSIFICATION

Clay PI S/O Doug Davis Dr

Day: Tuesday

City: Hapeville

Date: 5/14/2019 **Project #:** GA19_9371_005

Time	# 1	# 2	#3	# 4	# 5	# 6	# 7	#8	#9	# 10	# 11	# 12	# 13	Total
00:00 AM	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
01:00	0	0	0	0	0	0	0	0	0	ŭ	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	Ŭ	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	Ŭ	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	_	0	0	0	0
02:00 02:15	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	٥
02:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	_	ŭ	0	0	0	1
03:15	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
03:45	0	0	0	0	0	0	0	0	0	~	0	0	0	0
04:00	0	0	1	0	0	0	0	0	0		0	0	0	1
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
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1
05:30	0	0	0	0	0	0	0	0	1	0	0	0	0	1
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
07:15	0	1	1	0	0	0	0	0	0	-	0	0	0	2
07:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
07:45 08:00	0	4 5	1	0	0 1	0	0	0	_		0	0 0	0	5

CLASSIFICATIONClay PI S/O Doug Davis Dr

Day: Tuesday **Date:** 5/14/2019

City: Hapeville **Project #:** GA19_9371_005

Summary														
Time	#1	# 2	#3	# 4	#5	# 6	#7	# 8	# 9	# 10	# 11	# 12	# 13	Total
08:15	0	10	2	0	0	0	0	0	0	0	0	0	0	12
08:30	0	7	4	0	1	0	0	0	0	0	0	0	0	12
08:45	0	7	2	0	0	0	0	0	0	0	0	0	0	9
09:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
09:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
09:30	1	5	1	0	0	1	0	0	0	0	0	0	0	8
09:45	0	1	0	0	1	0	0	0	0	0	0	0	0	2
10:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
10:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
10:30	1	3	1	0	0	0	0	0	0	0	0	0	0	5
10:45	0	9	3	0	0	0	0	0	0	0	0	0	0	12
11:00	0	15	1	0	1	1	0	0	0	0	0	0	0	18
11:15	0	8	3	0	0	0	0	0	0	0	0	0	0	11
11:30	0	11	4	0	0	1	0	0	0	0	0	0	0	16
11:45	0	16	7	0	0	0	0	0	0	0	0	0	0	23
12:00 PM	0	15	2	0	0	0	0	0	0	0	0	0	0	17
12:15	0	26	1	0	2	0	0	0	0	0	0	0	0	29
12:30	1	13	2	0	1	0	0	0	0	0	0	0	0	17
12:45	0	16	6	0	2	0	0	0	0	0	0	0	0	24
13:00	1	20	7	0	3	0	0	0	0	0	0	0	0	31
13:15	1	24	8	0	1	0	0	0	0	0	0	0	0	34
13:30	0	13	4	0	0	0	0	0	0	0	0	0	0	17
13:45	1	17	8	0	1	0	0	0	0	0	0	0	0	27
14:00	0	13	3	0	0	0	0	0	0	0	0	0	0	16
14:15	0	9	1	1	0	0	0	0	0	0	0	0	0	11
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	8	3	0	2	0	0	0	0	0	0	0	0	13
15:30	0	9	0	1	0	0	0	0	0	0	0	0	0	10
15:45	0	4	2	0	0	0	0	0	0	0	0	0	0	6
16:00	0	22	2	0	1	0	0	0	0	0	0	0	0	25
16:15	0	24	1	0	0	0	0	0	0	0	0	0	0	25

CLASSIFICATIONClay PI S/O Doug Davis Dr

Day: Tuesday **Date:** 5/14/2019

City: Hapeville **Project #:** GA19_9371_005

Summary														
Time	#1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
16:30	0	27	5	0	3	0	0	0	0	0	0	0	0	35
16:45	0	14	3	0	0	0	0	0	0	0	0	0	0	17
17:00	0	28	2	0	0	0	0	0	0	0	0	0	0	30
17:15	0	35	4	0	0	0	0	0	0	0	0	0	0	39
17:30	0	14	2	0	0	0	0	0	0	0	0	0	0	16
17:45	0	20	2	0	0	1	0	0	0	0	0	0	0	23
18:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13
18:15	0	22	3	0	1	0	0	0	0	0	0	0	0	26
18:30	0	25	1	0	0	0	0	0	0	0	0	0	0	26
18:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6
19:00	0	12	2	0	0	0	0	0	0	0	0	0	0	14
19:15	0	19	1	0	0	0	0	0	1	0	0	0	0	21
19:30	0	10	1	0	0	0	0	0	0	0	0	0	0	11
19:45	0	12	2	0	1	0	0	0	0	0	0	0	0	15
20:00	0	15	2	0	1	0	0	0	1	0	0	0	0	19
20:15	0	11	3	0	0	0	0	0	0	0	0	0	0	14
20:30	0	7	2	0	0	0	0	0	0	0	0	0	0	9
20:45	0	6	0	0	2	0	0	0	0	0	0	0	0	8
21:00	0	8	3	0	1	0	0	0	0	0	0	0	0	12
21:15	0	4	2	0	0	0	0	0	0	0	0	0	0	6
21:30	0	5	2	0	0	0	0	0	0	0	0	0	0	7
21:45	0	12	1	0	0	0	0	0	0	0	-	0	0	13
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:15	0	2	1	0	0	0	0	0	0	0	0	0	0	3
22:30	0	3	0	1	0	0	0	0	0	0	0	0	0	4
23:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
23:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:30	0	1	0	0	0	1	0	0	0	0	0	0	0	2
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Totals	# 1	# 2	#3	#4	# 5	#6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
Totals	6	693	135	3	26	5			4					872
% of Totals	1%	79%	15%	0%	3%	1%			0%					100%
AM Volumes	2	126	36	0	4	3	0	0	2	0	0	0	0	173
% AM	0%	14%	4%		0%	0%			0%					20%
AM Peak Hour	08:45	11:45	11:15		11:45	10:45			04:45					11:45
Volume	1	70	16		3	2			2					86
PM Volumes	4	567	99	3	22	2	0	0	2	0	0	0	0	699
% PM	0%	65%	11%	0%	3%	0%			0%					80%
PM Peak Hour	12:30	16:30	13:00	13:30	12:15	17:00			19:15					16:30
Volume	3	104	27	1	8	1			2					121
Dire	ectional Pea	ak Periods		AM 7-9			NOON 12-2			PM 4-6		Off	Peak Volui	mes
		All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			52		6%	196		22%	210		24%	414		47%

Classification Definitions

1 Motorcycles

4 Buses

2 Passenger Cars **3** 2-Axle, 4-Tire Single Units **5** 2-Axle, 6-Tire Single Units

6 3-Axle Single Units

7 > =4-Axle Single Units

8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

10 >=6-Axle Single Trailers 12 6-Axle Multi-Trailers

11 <=5-Axle Multi-Trailers

13 >=7-Axle Multi-Trailers

CLASSIFICATION

Clay PI S/O Doug Davis Dr

Day: Wednesday Date: 5/15/2019

City: Hapeville
Project #: GA19_9371_005

Summary														
Time	# 1	# 2	#3	# 4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	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
04:00	0	0	1	0	0	0	0	0	0	0	0	0		1
05:00	0	0	0	0	0	0	0	0	0	0				0
06:00	0		0	0	2	0	0	0	0	0	0			3
07:00	0		1	0	1	0	0	0	0	0				
08:00	0	32	9	1	1	0	0	0	0	0	0	0		43
09:00	0	8	3	2	1	0	0	0	0	0	0			14
10:00	0	39	9	0	1	0	0	0	0	0	0	_		49
11:00	0		26	0	5	0	0	0		0	0			
12:00 PM	3	79	28	1	0	1	0	0	0	0	0	0		112
13:00	0	78	17	1	3	0	0	0	0	0	0			99
14:00	1	60	9	0	3	1	0	0	0	0	0			74
15:00	0	41	5	0	0	4	0	0	0	0		0		
16:00	0		12	0	3	0	0	0	0	0	0			100 93
17:00 18:00	0	78 62	17	0	3	0	0	0	0	0	0	0		82
19:00	0		7	0	2	0	0	0	0	0				
20:00	0	48	12	0	2	0	0	0	0	0	0	0		62
21:00	0		9	0	1	0	0	0	0	0	0			
22:00	0	13	5	0	0	1	0	0	0	0	0	0		19
23:00	0		2	0	1	0	0	0	J		0		_	
Totals	5	771	179	5	31	7	ű	ű	ű	ű	J	J	Ü	998
% of Totals	1%		18%	1%	3%	1%								100%
AM Volumes	0	151	49	3	11	0	0	0	0	0	0	0	0	214
% AM		15%	5%	0%	1%									21%
AM Peak Hour		11:00	11:00	09:00	11:00									11:00
Volume		66	26	2	5									97
PM Volumes	5	620	130	2	20	7	0	0	0	0	0	0	0	784
% PM	1%	62%	13%	0%	2%	1%								79%
PM Peak Hour	12:00	16:00	12:00	12:00	13:00	15:00								12:00
Volume	3	90	28	1	3	4								112
Dire	ectional Pea	ak Periods		AM 7-9		1	NOON 12-2			PM 4-6		Off	Peak Volur	nes
		All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			50	←	5%	211	←	21%	193	←	19%	544	←	55%

Classification Definitions

- 1 Motorcycles
- 2 Passenger Cars
- **3** 2-Axle, 4-Tire Single Units
- **4** Buses
- **5** 2-Axle, 6-Tire Single Units
- **6** 3-Axle Single Units
- 7 > =4-Axle Single Units
- 8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

- 10 >=6-Axle Single Trailers
- 11 <=5-Axle Multi-Trailers
- 12 6-Axle Multi-Trailers
- 13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD Prepared by National Data & Surveying Services

VOLUME

Clay PI S/O Doug Davis Dr

Day: Wednesday Date: 5/15/2019 City: Hapeville
Project #: GA19_9371_005

	ם	AILY 1	OT/	VI C		NB		SB		EB		WB						Т	otal
	D.	AILT	UIF	4L3		539		459		0		0						9	998
AM Period	NB		SB		ЕВ	WB		TO	TAL	PM Period	NB		SB		ЕВ	,	WB	T	DTAL
00:00	0		0		0	0				12:00	25		11		0		0	36	
00:15	0		0		0	0				12:15 12:30	16 12		8		0		0	24	
00:30 00:45	0		0		0 0	0 0				12:45	17	70	8 15	42	0 0		0	20 32	112
01:00	0		0		0	0				13:00	14	70	12	72	0		0	26	112
01:15	0		0		0	0				13:15	13		13		0		0	26	
01:30	0		0		0 0	0 0				13:30 13:45	11	гэ	9	46	0		0	20 27	00
01:45 02:00	0		0		0	0				14:00	15 10	53	12 10	46	0		0	20	99
02:15	0		0		0	ő				14:15	12		9		0		Ö	21	
02:30	0		0		0	0				14:30	6		9		0		0	15	
02:45	0		0		0	0				14:45	10	38	8	36	0		0	18	74
03:00 03:15	0		0 0		0 0	0 0				15:00 15:15	6 4		3 10		0 0		0	9	
03:30	0		0		0	0				15:30	7		7		0		0	14	
03:45	0		0		0	0				15:45	11	28	2	22	0		0	13	50
04:00	0		1		0	0		1		16:00	18		9		0		0	27	
04:15	0		0		0	0				16:15 16:30	15		8		0		0	23	
04:30 04:45	0		0	1	0 0	0 0			1	16:45	13 15	61	12 10	39	0		0	25 25	100
05:00	0		0		0	0				17:00	19	- 01	6	33	0		0	25	100
05:15	0		0		0	0				17:15	17		12		0		0	29	
05:30	0		0		0	0				17:30	9	F-7	12	26	0		0	21	02
05:45 06:00	0 1		0 1		0	<u> </u>		2		17:45 18:00	12 12	57	<u>6</u> 4	36	0		0	18 16	93
06:15	0		0		0	0		2		18:15	7		10		0		0	17	
06:30	0		0		0	0				18:30	18		13		0		0	31	
06:45	0	1	1	2	0	0		1	3	18:45	10	47	8	35	0		0	18	82
07:00 07:15	0		1 0		0 0	0 0		1		19:00 19:15	2 8		6 7		0		0	8 15	
07:15 07:30	0		2		0	0		2		19:30	6		6		0		0	12	
07:45	Ö		4	7	0	Ö		4	7	19:45	6	22	7	26	Ö		0	13	48
08:00	2		8		0	0		10		20:00	14		6		0		0	20	
08:15	0		11		0	0		11		20:15	6		4		0		0	10	
08:30 08:45	1 4	7	13 4	36	0 0	0 0		14 8	43	20:30 20:45	15 8	43	5 4	19	0		0	20 12	62
09:00	2		3	30	0	0		5	73	21:00	8	73	7	13	0		0	15	02
09:15	1		2		0	0		3		21:15	13		3		0		0	16	
09:30	0		3		0	0		3		21:30	1		1	4.0	0		0	2	••
09:45 10:00	2	4	<u>2</u> 1	10	0	0		3	14	21:45 22:00	5 6	27	2	13	0		0	7	40
10:15	5		8		0	0		13		22:15	1		1		0		0	2	
10:30	1		8		Ö	Ö		9		22:30	2		4		Ö		0	6	
10:45	7	15	17	34	0	0		24	49	22:45	3	12	0	7	0		0	3	19
11:00	12		11		0	0 0		23		23:00	2		0		0		0	2	
11:15 11:30	9 13		7 15		0 0	0		16 28		23:15 23:30	1 0		0 0		0		0 0	1	
11:45	16	50	14	47	0	0		30	97	23:45	1	4	1	1	0		0	2	5
TOTALS		77		137					214	TOTALS		462		322					784
SPLIT %		36.0%		64.0%					21.4%	SPLIT %		58.9%		41.1%					78.6%
						NB		SB		EB		WB						т	otal
	D.	AILY 1	OT/	ALS		539		459		0		0							998
						339		433		_ 0		- U							-056
AM Peak Hour		11:30		10:45					11:30	PM Peak Hour		12:00		12:45					12:00
AM Pk Volume		70		50					118	PM Pk Volume		70		49					112
Pk Hr Factor		0.700		0.735					0.819	Pk Hr Factor		0.700		0.817					0.778
7 - 9 Volume		7		43					50	4 - 6 Volume		118		75					193
7 - 9 Peak Hour 7 - 9 Pk Volume		08:00		07:45					08:00	4 - 6 Peak Hour		16:30		16:30					16:30
Pk Hr Factor		7 0.438		36 0.692					43 0.768	4 - 6 Pk Volume Pk Hr Factor		64 0.842		40 0.833					104 0.897
PK HI FACTOR		0.438		0.692		0.000	0.000		0.708	CK HI FACIUL		0.842		0.833		0.000	0.00	10	0.897

CLASSIFICATION

Clay PI S/O Doug Davis Dr

City: Hapeville

Day: Wednesday

Date: 5/15/2019 **Project #:** GA19_9371_005

00:00 AM	0 0 0 0 0 0
00:30 0 <th>0 0 0 0 0</th>	0 0 0 0 0
00:45 0 <th>0 0 0 0</th>	0 0 0 0
01:00 0 <th>0 0 0 0</th>	0 0 0 0
01:15 0 <th>0</th>	0
01:30 0 <th>0</th>	0
01:45 0 <th>0</th>	0
02:00 0 <th></th>	
02:15 0 <th>0</th>	0
02:30 0 <th>0</th>	0
03:00 0 <th>0</th>	0
03:15 0 <th>0</th>	0
03:30 0 <th>0</th>	0
03:45 0 <th>0</th>	0
04:00 0 0 1 0 <th>0</th>	0
04:15 0 <th>0</th>	0
04:30 0 <th>1</th>	1
04:45 0 <th>U_I</th>	U _I
05:00 0 <th>U_I</th>	U _I
05:15 0 0 0 0 0 0 0 0 0 0 0	0
	0
05:30 0 0 0 0 0 0 0 0 0 0 0 0	0
05:45 0 0 0 0 0 0 0 0 0 0	0
06:00 0 0 0 2 0 0 0 0 0 0 0	2
06:15 0 0 0 0 0 0 0 0 0 0 0	0
06:30 0 0 0 0 0 0 0 0 0 0 0 0	0
06:45 0 1 0 0 0 0 0 0 0 0 0 0	1
07:00 0 0 0 0 1 0 0 0 0 0 0	1
07:15 0 0 0 0 0 0 0 0 0 0 0 0	0
07:30 0 1 1 0 0 0 0 0 0 0 0 0 0	2
07:45 0 4 0 <th></th>	

CLASSIFICATIONClay PI S/O Doug Davis Dr

Day: Wednesday Date: 5/15/2019

City: Hapeville **Project #:** GA19_9371_005

Summary														
Time	#1	# 2	#3	# 4	#5	# 6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
08:15	0	9	2	0	0	0	0	0	0	0	0	0	0	11
08:30	0	10	4	0	0	0	0	0	0	0	0	0	0	14
08:45	0	5	2	1	0	0	0	0	0	0	0	0	0	8
09:00	0	2	2	0	1	0	0	0	0	0	0	0	0	5
09:15	0	1	0	2	0	0	0	0	0	0	0	0	0	3
09:30	0	2	1	0	0	0	0	0	0	0	0	0	0	3
09:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
10:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
10:15	0	11	2	0	0	0	0	0	0	0	0	0	0	13
10:30	0	7	1	0	1	0	0	0	0	0	0	0	0	9
10:45	0	19		0	0	0	0	0	0	0	0	0	0	24
11:00	0	18		0	2	0	0	0	0	0	0	0	0	23
11:15	0	14	2	0	0	0	0	0	0	0	0	0	0	16
11:30	0	16		0	1	0	0	0	0	0	0	0	0	28
11:45	0			0	2	0	0	0	0	0	0	0	0	30
12:00 PM	2	26		0	0	0	0	0	0	0	0	0	0	36
12:15	0	17		0	0	0	0	0	0	0	0	0	0	24
12:30	0	13		0	0	0	0	0	0	0	0	0	0	20
12:45	1	23		1	0	1	0	0	0	0	0	0	0	32
13:00	0	21		0	1	0	0	0	0	0	0	0	0	26
13:15	0	20		1	0	0	0	0	0	0	0	0	0	26
13:30	0	_~		0	0	0	0	0	0	0	0	0	0	20
13:45	0			0	2	0	0	0	0	0	0	0	0	27
14:00	0	16	3	0	0	1	0	0	0	0	0	0	0	20
14:15	1	17	2	0	1	0	0	0	0	0	0	0	0	21
14:30	0	12	2	0	1	0	0	0	0	0	0	0	0	15
14:45	0	15		0	1	0	0	0	0	0	0	0	0	18
15:00	0	6		0	0	1	0	0	0	0	0	0	0	9
15:15	0			0	0	0	0	0	0	0	0	0	0	14
15:30	0	_0		0	0	1	0	0	0	0	0	0	0	14
15:45	0			0	0	2	0	0	0	0	0	0	0	13
16:00	0	25		0	0	0	0	0	0	0	0	0	0	27
16:15	0	22	1	0	0	0	0	0	0	0	0	0	0	23

CLASSIFICATIONClay PI S/O Doug Davis Dr

Day: Wednesday Date: 5/15/2019

City: Hapeville Project #: GA19_9371_005

Summary														
Time	#1	# 2	#3	#4	#5	#6	#7	#8	#9	# 10	# 11	# 12	# 13	Total
16:30	0	20	4	0	1	0	0	0	0	0	0	0	0	25
16:45	0	23	0	0	2	0	0	0	0	0	0	0	0	25
17:00	0	24	1	0	0	0	0	0	0	0	0	0	0	25
17:15	0	23	5	0	1	0	0	0	0	0	0	0	0	29
17:30	0	16	3	0	2	0	0	0	0	0	0	0	0	21
17:45	0	15	3	0	0	0	0	0	0	0	0	0	0	18
18:00	0	13	3	0	0	0	0	0	0	0	0	0	0	16
18:15	0	13	4	0	0	0	0	0	0	0	0	0	0	17
18:30	1	22	7	0	1	0	0	0	0	0	0	0	0	31
18:45	0	14	3	0	1	0	0	0	0	0	0	0	0	18
19:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
19:15	0	11	3	0	1	0	0	0	0	0	0	0	0	15
19:30	0	12	0	0	0	0	0	0	0	0	0	0	0	12
19:45	0	11	2	0	0	0	0	0	0	0	0	0	0	13
20:00	0	17	2	0	1	0	0	0	0	0	0	0	0	20
20:15	0	8	1	0	1	0	0	0	0	0	0	0	0	10
20:30	0	16	4	0	0	0	0	0	0	0	0	0	0	20
20:45	0	7	5	0	0	0	0	0	0	0	0	0	0	12
21:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15
21:15	0	12	4	0	0	0	0	0	0	0	0	0	0	16
21:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
21:45	0	5	1	0	1	0	0	0	0	0	0	0	0	7
22:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
22:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
22:30	0	4	1	0	0	1	0	0	0	0	0	0	0	6
23:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
23:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2

Totals	# 1	# 2	#3	#4	# 5	# 6	#7	#8	# 9	# 10	# 11	# 12	# 13	Total
Totals	5	771	179	5	31	7								998
% of Totals	1%	77%	18%	1%	3%	1%								100%
AM Volumes	0	151	49	3	11	0	0	0	0	0	0	C	0	214
% AM		15%	5%	0%	1%									21%
AM Peak Hour	11:15	11:30	11:30	08:30	11:00									11:30
Volume	2	77	36	3	5									118
PM Volumes	5	620	130	2	20	7	0	0	0	0	0	C	0	784
% PM	1%	62%	13%	0%	2%	1%								79%
PM Peak Hour	12:00	16:00	12:00	12:30	16:45	15:00								12:00
Volume	3	90	28	2	5	4								112
Dire	ectional Pea	ak Periods		AM 7-9			NOON 12-2			PM 4-6		Of	f Peak Volu	mes
		All Classes	Volume		%	Volume		%	Volume		%	Volume		%
			50		5%	211		21%	193		19%	544		55%

Classification Definitions

1 Motorcycles

4 Buses

2 Passenger Cars

5 2-Axle, 6-Tire Single Units

3 2-Axle, 4-Tire Single Units

6 3-Axle Single Units

7 > =4-Axle Single Units

8 <=4-Axle Single Trailers

9 5-Axle Single Trailers

10 >=6-Axle Single Trailers

12 6-Axle Multi-Trailers

11 <=5-Axle Multi-Trailers

13 >=7-Axle Multi-Trailers

APPENDIX B – PEAK HOUR DETERMINATION & COMPUTATION

Table 8-10. Total traffic diurnal distribution factors by functional class: urban area, large: >1,000,000 population.

			Weekday				Saturday			24000	Sunday		W		Average Da	ıy.	
Hour Begins	Hour Ends	Interstate	Arterial CBD	Other	Collector	Interstate	Arterial CBD	Other	Collector	Interstate	Arterial CBD	Other	Collector	Interstate	Arterial CBD	Other	Collector
12:00 AM	12:59 AM	0.96	1.22	0.78	0.59	1.95	2.55	1.70	1.54	2.32	3.27	2.24	1.95	1.22	1.61	1.07	0.84
1:00 AM	1:59 AM	0.61	0.75	0.48	0.38	1.26	1.75	1.10	0.96	1.50	2.32	1.48	1.28	0.78	1.05	0.67	0.53
2:00 AM	2:59 AM	0.51	0.58	0.37	0.30	1.00	1.38	0.83	0.71	1.20	1.81	1.11	0.95	0.64	0.81	0.52	0.41
3:00 AM	3:59 AM	0.53	0.57	●.37	0.33	0.79	1.23	0.62	0.46	0.85	1.61	0.79	0.57	0.59	0.76	0.45	0.37
4:00 AM	4:59 AM	0.85	0.79	0.61	0,59	0.83	1.10	0.59	0.50	0.73	1.29	0.64	0.47	0.83	0.89	0.61	0.56
5:00 AM	5:59 AM	2.13	1,74	1.70	1.16	1.29	1.36	0.92	0.84	0.97	1.35	0.76	0.73	1.90	1.67	1.49	1.07
6:00 AM	6:59 AM	5.11	4.23	4.17	2.72	2.30	2.16	1.72	1.65	1.63	1.92	1.25	1.34	4.40	3.75	3.53	2.44
7:00 AM	7:59 AM	7.27	6.31	6.58	5.92	3.32	3.02	2.74	3.02	2.14	2,40	1.91	2.13	6.25	5.52	5.57	5.16
MA 00:8	8:59 AM	6.61	6.24	6.08	6.05	4.33	3.90	3.95	4.39	2.93	2.94	2,99	3.23	5.95	5.61	5.46	5.58
9:00 AM	9:59 AM	5.27	5.43	5.04	5.82	5.07	4.79	5.05	5.81	4.18	4.09	4.35	4.94	5.14	5.20	4.97	5.74
10:00 AM	10:59 AM	4.86	5.18	4.96	5.78	5.76	5.42	6.03	6.62	5.44	5.28	5.67	6.15	5.03	5.20	5.18	5.93
11:00 AM	11:59 AM	5.01	5.40	5.39	6.55	6.39	5.98	6.80	7.23	6.35	5.64	6.46	6.95	5.32	5.49	5.69	6.68
12:00 PM	12:59 PM	5.20	5.72	5.81	7.08	6.73	6.35	7.20	7.40	7.16	6.33	7.87	8.39	5.59	5.85	6.22	7.26
1:00 PM	1:59 PM	5.39	5.77	5.93	6.95	6.69	6.42	7.18	7.27	7.39	6.81	8.00	8.02	5.76	5.95	6.32	7. 1 1
2:00 PM	2:59 PM	6.02	6.07	6.31	7.20	6.75	6.43	7.11	7.07	7.47	6.91	7.87	7.80	6.26	6,19	6.58	7.25
3:00 PM	3:59 PM	7.05	6.66	7.05	7.97	6.80	6.40	7.05	7.19	7.50	6.64	7,67	7. 7 8	7.07	6.63	7.12	7.86
4:00 PM	4:59 PM	7.78	7.07	7.85	7.94	5.70	6.22	6.89	6.92	7.52	6.42	7.56	7.61	7.63	6.91	7.69	7.79
5:00 PM	5:59 PM	7.98	7.45	8.33	7.60	6.52	6.12	6.68	6.54	7.17	6.34	7.18	7.28	7.72	7.18	7.99	7.44
6:00 PM	6:59 PM	6.11	6.12	6.52	5.66	6.04	5.92	6.16	5,96	6.52	6.28	6.40	6.25	6.14	6.10	6.46	5.77
7:00 PM	7:59 PM	4.27	4.72	4.80	4.20	4.97	5.31	5.24	4.89	5.54	5.56	5.49	5.16	4.49	4.87	4.93	4.38
8:00 PM	8:59 PM	3.37	3.77	3.88	3.29	4.14	4.55	4.45	3.97	4.69	4.76	4.56	4.12	3,60	3.96	4.02	3.45
9:00 PM	9:59 PM	2.97	3.30	3.17	2.66	3.88	4.17	3. 9 9	3.48	3.77	3.98	3.54	3.18	3.16	3.47	3.32	2.81
10:00 PM	10:59 PM	2.41	2.77	2.28	1.97	3.61	3.94	3.37	3.12	2.96	3.44	2.54	2.30	2.61	2.97	2.45	2.14
11:00 PM	11:59 PM	1.73	2.14	1,53	1.28	2.88	3,51	2.61	2.43	2.07	2.60	1.67	1.44	1.91	2.35	1.69	1.43

Hour Begins	Virgini	a Ave, W of Hami	ton Ave	Ham	ilton Ave, N of Vir	ginia Ave	Virgin	ia Ave, N of Doug [Davis Dr	Doug Davis	Dr, E of Virginia	Ave/Clay PI	Clay P	l, South of Doug D	avis Dr
Hour Begins	Day 1 Dist	Day 2 Dist	Average Dist	Day 1 Dist	Day 2 Dist	Average Dist	Day 1 Dist	Day 2 Dist	Average Dist	Day 1 Dist	Day 2 Dist	Average Dist	Day 1 Dist	Day 2 Dist	Average Dist
0:00:00	1.18%	1.12%	1.16%	0.80%	0.43%	1.13%	1.00%	0.98%	1.00%	1.18%	1.28%	1.23%	0.00%	0.00%	0.00%
1:00:00	0.75%	0.54%	0.65%	0.40%	0.00%	0.38%	0.82%	0.75%	0.79%	0.65%	0.54%	0.60%	0.00%	0.00%	0.00%
2:00:00	0.58%	0.40%	0.50%	0.00%	0.00%	0.00%	0.74%	0.57%	0.68%	0.46%	0.37%	0.44%	0.23%	0.00%	0.10%
3:00:00	0.41%	0.40%	0.42%	0.00%	0.00%	0.00%	0.36%	0.55%	0.47%	0.40%	0.30%	0.35%	0.11%	0.00%	0.10%
4:00:00	1.06%	0.81%	0.94%	0.00%	0.85%	0.75%	0.73%	0.62%	0.68%	1.08%	0.95%	1.02%	0.11%	0.10%	0.10%
5:00:00	2.33%	2.20%	2.27%	0.00%	0.43%	0.38%	1.45%	1.64%	1.58%	2.72%	2.71%	2.72%	0.23%	0.00%	0.21%
6:00:00	2.99%	2.88%	2.94%	0.80%	1.71%	1.13%	2.54%	2.78%	2.65%	3.65%	3.80%	3.73%	0.23%	0.30%	0.42%
7:00:00	4.30%	4.12%	4.20%	3.98%	6.41%	5.28%	3.68%	3.67%	3.67%	5.16%	5.01%	5.09%	1.38%	0.70%	1.05%
8:00:00	5.06%	4.97%	5.02%	4.38%	8.12%	6.04%	5.30%	5.15%	5.21%	5.12%	5.59%	5.35%	4.59%	4.31%	4.50%
9:00:00	3.86%	4.07%	3.97%	3.98%	4.70%	4.15%	4.12%	4.15%	4.14%	4.41%	4.52%	4.46%	2.64%	1.40%	2.09%
10:00:00	3.69%	4.59%	4.14%	5.18%	5.98%	5.66%	4.23%	4.69%	4.46%	3.88%	4.46%	4.16%	2.52%	4.91%	3.77%
11:00:00	6.89%	6.45%	6.66%	3.19%	12.82%	7.55%	7.04%	6.93%	6.99%	6.86%	6.88%	6.87%	7.80%	9.72%	8.80%
12:00:00	8.84%	8.95%	8.88%	11.95%	8.12%	9.81%	9.98%	10.05%	9.99%	8.48%	8.87%	8.67%	9.98%	11.22%	10.58%
13:00:00	7.67%	7.74%	7.69%	9.96%	5.98%	7.55%	8.29%	7.48%	7.86%	7.54%	7.63%	7.57%	12.50%	9.92%	10.99%
14:00:00	6.53%	6.69%	6.60%	7.97%	4.70%	6.42%	6.28%	6.77%	6.52%	6.29%	6.54%	6.41%	3.10%	7.41%	5.34%
15:00:00	6.68%	6.71%	6.69%	7.57%	6.41%	6.79%	7.10%	5.95%	6.50%	6.33%	6.49%	6.41%	3.33%	5.01%	4.29%
16:00:00	7.05%	7.12%	7.08%	5.98%	6.84%	6.42%	6.41%	6.66%	6.52%	7.32%	6.46%	6.87%	11.70%	10.02%	10.58%
17:00:00	7.90%	7.98%	7.93%	8.37%	6.41%	7.55%	7.26%	7.63%	7.43%	8.23%	8.36%	8.28%	12.39%	9.32%	10.68%
18:00:00	5.79%	6.04%	5.92%	9.96%	5.98%	7.55%	5.86%	6.29%	6.07%	5.36%	5.75%	5.55%	8.14%	8.22%	8.17%
19:00:00	4.97%	4.50%	4.73%	3.98%	4.70%	4.15%	5.30%	4.42%	4.85%	4.27%	4.10%	4.19%	7.00%	4.81%	5.76%
20:00:00	3.81%	4.12%	3.97%	4.78%	4.70%	4.53%	3.96%	4.63%	4.30%	3.28%	3.18%	3.24%	5.73%	6.21%	5.97%
21:00:00	3.04%	2.95%	2.99%	3.19%	2.56%	3.40%	3.25%	2.73%	2.99%	2.69%	2.31%	2.50%	4.36%	4.01%	4.19%
22:00:00	2.39%	2.52%	2.46%	1.99%	1.71%	2.26%	2.47%	2.66%	2.58%	2.33%	2.18%	2.26%	1.26%	1.90%	1.68%
23:00:00	2.22%	2.12%	2.18%	1.59%	0.43%	1.13%	1.83%	2.25%	2.06%	2.31%	1.74%	2.02%	0.69%	0.50%	0.63%

						Intersect	ion 1: Virg	inia Ave & Ho	amilton A	ve						
					<u>2019</u>	Existing Pe	ak Hr TMC	(RAW DATA)							
		Drive	way			Hamil	ton Ave			Virgir	nia Ave			Virg	inia Ave	
BY MOVEMENT	NB LT	NB THRU	NB RT	NB U-TURN	SB LT	SB THRU	SB RT	SB U-TURN	EB LT	EB THRU	EB RT	EB U-TURN	WB LT	WB THRU	WB RT	WB U-TURN
12:00 PM					3	0	9	0	3	480	36	0	4	479	4	0
Percentage	77.8%	0.0%	22.2%	0.0%	27.3%	0.0%	72.7%	0.0%	0.6%	92.6%	6.9%	0.0%	0.7%	98.5%	0.7%	0.0%
4:45 PM	7	0	2	0	3	0	8	0	2	323	24	0	4	537	4	0
Percentage	77.8%	0.0%	22.2%	0.0%	27.3%	0.0%	72.7%	0.0%	0.6%	92.6%	6.9%	0.0%	0.7%	98.5%	0.7%	0.0%
BY APPROACH	IN			OUT	IN			OUT	IN			OUT	IN			OUT
AM:	0			39	13			7	519			488	487			483
PM:	9			28	11			6	349			552	545			328
3-HOUR TOTAL	29	1	8	0	10	0	17	0	12	955	62	0	12	1323	16	0
Percentage	76.3%	2.6%	21.1%	0.0%	37.0%	0.0%	63.0%	0.0%	1.2%	92.8%	6.0%	0.0%	0.9%	97.9%	1.2%	0.0%

^{*}Note: Driveway noon peak hour volumes could not be computed because no ADT data was collected from this location

					Intersecti	on 2: Virgi	nia Ave/C	lay Pl & Doug	Davis Dr	/Virginia /	lve					
					<u>2019</u>	Existing P	eak Hr TM	C (RAW DATA	<u>()</u>							
		CI	ay Pl	•		Virgir	nia Ave			Virgi	nia Ave	•		Dou	g Davis D	r
BY MOVEMENT	NB LT	NB THRU	NB RT	NB U-TURN	SB LT	SB THRU	SB RT	SB U-TURN	EB LT	EB THRU	EB RT	EB U-TURN	WB LT	WB THRU	WB RT	WB U-TURN
12:00 PM	23	9	30	0	49	6	246	0	195	295	26	3	13	267	63	0
Percentage	36.7%	15.2%	48.1%	0.0%	16.3%	2.1%	81.6%	0.0%	37.6%	56.8%	5.0%	0.6%	3.9%	77.7%	18.5%	0.0%
4:45 PM	29	12	38	0	31	4	155	0	121	183	16	2	18	362	86	0
Percentage	36.7%	15.2%	48.1%	0.0%	16.3%	2.1%	81.6%	0.0%	37.6%	56.8%	5.0%	0.6%	3.9%	77.7%	18.5%	0.0%
BY APPROACH	IN			OUT	IN			OUT	IN			OUT	IN			OUT
AM:	61.5			45	301			268	519			538	344			373
PM:	79			38	190			219	322			548	466			252
3-HOUR TOTAL	65	37	76	0	74	23	419	0	355	562	56	2	40	867	205	0
Percentage	36.5%	20.8%	42.7%	0.0%	14.3%	4.5%	81.2%	0.0%	36.4%	57.6%	5.7%	0.2%	3.6%	78.0%	18.4%	0.0%

APPENDIX C - K FACTOR AND D FACTOR CALCULATIONS

K AND D FACTOR CALCULATIONS

(PI# 171007021 - Fulton County)

												Traffic V	olumos																					Truck	Percent	2000	
				-				D-	aw Data			ii dilic v	Olullies						1	1							_		_				Hour T%		reiceili	Peak	Цели
	Functional Class (Factor	Count #		-	D 1		1		aw Dala	A	f D	. 1 0 0	V 0 D 1			GDOT Traffic	Factors					Balanced	& Rounde	ed Volume	s				_				HOUI 1/6	•		reak	noui
Location	Group)	(Class in	Enter		Day 1			Day 2		Averag	e or Day	/ 1 & 2	K & D F	actors					Calc.	_						_	_		_			_	-				
	Gloop)	yellow)		NE -	SW -	Total	NE -	SW -	Total	NE -	SW -	Total	ĸ	D	SF (Monthly)	DE1 (Daily1)	DF2	AXF (Axle)	AADT	AADT	NE - VC	SW -	Hourly T	NE - TS			Margin					s.u.	сомв 1	TOTAL	PEAK HOUR	S.U.	COMB TOTAL
				VOL	VOL	loidi	VOL	VOL	iolai	VOL	VOL	Iolai	K		3F (MOHITIN)	Dri (Dally1)	(Daily2)	AAF (Axie)		AADI	145 - 40	VOL	Total \	OL V	DL "		of Error					/.u.	.CIVID	IOIAL	HOUR	3.0.	COMB TOTAL
			12:00 PM	519	467	986	518	506	1,024	519	487	1,005	8.9%	0.52							15	10	25	005 4.6	0.39	% 0.60		8.69	% -8	.0%		1.00/	0.00/	4.00/	AM	3.5%	0.0% 3.5%
Virginia Ave W of Hamilton	Urban Major Collector (4)	1	4:45 PM	350	546	896	401	536	937	376	541	917	8.1%	0.59	0.96	0.93	0.92	0.96	9,630	9,850	10	10	20	,925 4,9	0.29	% 0.50	2%	7.99	% 9	.0%	-	4.0%	0.0%	4.0%	PM	3.0%	0.0% 3.0%
Ave			Daily	5,550	5,604	11,154	5,646	5,794	11,440	5,598	5,699	11,297																0.09	% 0	.0%							
			12:00 PM	15	15	30	9	10	19	12	13	25	10.1%	0.51							15	40	55	100 10	27.5	% 0.73		-17.4	4% -2	2.0%		1.5%	0.0%	4.5%	AM	10.0%	0.0% 10.0%
Hamilton Ave N of Virginia Ave	Urban Local Road (4)	2	4:45 PM	10	9	19	7	10	17	9	10	18	7.4%	0.53	0.96	0.93	0.92	0.96	207	200	15	40	55	100 10	27.5	% 0.73	3%	-20.1	1% -2	0.0%	4	.5%	0.0%	4.5%	PM	3.0%	0.0% 3.0%
Ave			Daily	109	142	251	97	137	234	103	140	243																0.09	% 0	.0%							
Virginia Avo N of Doug Davis			12:00 PM	237	313	550	275	289	564	256	301	557	10.0%	0.54							500	450	950	,400 2,4	19.8	% 0.53		-9.8	3% 1	.0%		2.5%	0.0%	2.5%	AM	4.0%	0.5% 4.5%
Virginia Ave N of Doug Davis Dr	Urban Major Collector (4)	3	4:45 PM	212	178	390	246	198	444	229	188	417	7.5%	0.55	0.96	0.93	0.92	0.96	4,740	4,800	360	435	795	,400 2,4	16.6	% 0.55	1%	-9.1	% 0	.0%		.570	0.070	2.570	PM	1.5%	0.0% 1.5%
DI .			Daily	2,694	2,816	5,510	2,743	2,869	5,612	2,719	2,843	5,561																0.09	% 0	.0%							
Doug Davis Dr E of Virginia			12:00 PM	380	333	713	396	354	750	388	344	732	8.7%	0.53							60	40	100	,400 3,4	1.59	% 0.60	1	7.29	% -7	.0%		3.0%	0.0%	3.0%	AM	3.0%	0.0% 3.0%
Ave/Clay Pl	Urban Local Road (4)	4	4:45 PM	249	462	711	277	447	724	263	455	718	8.5%	0.63	0.96	0.93	0.92	0.96	7,189	6,800	60	40	100	,400 3,4	1.59	% 0.60	5%	7.09	% 3	.0%	`	.070	0.070	3.070	PM	2.5%	0.0% 2.5%
Averciayiii			Daily	4,202	4,209	8,411	4,263	4,193	8,456	4,233	4,201	8,434																0.09	% 0	.0%							
			12:00 PM	53	34	87	70	42	112	62	38	100	10.6%	0.62							60	35	95	150 45	10.6	% 0.63		0.19	% -1	.0%		0.0%	0.0%	0.0%	AM	2.5%	0.0% 2.5%
Clay PIS of Doug Davis Dr	Urban Local Road (4)	5	4:45 PM	65	37	102	60	40	100	63	39	101	10.8%	0.62	0.96	0.93	0.92	0.96	797	900	60	35	95	100 40	10.6	% 0.63	13%	0.29	% -1	.0%	,	.070	0.070	0.076	PM	0.0%	0.0% 0.0%
			Daily	500	372	872	539	459	998	520	416	935																0.09	% 0	.0%							

APPENDIX D – TRUCK PERCENTAGE CALCULATIONS

Truck Percentages

PI #0015005 - Fulton County, GA Virginia Avenue Roundabout Feasibility Study from Virginia Avenue to Doug Davis Dr

Count	Count Location	2	24 Hour T%	76		Peak F	lour T%	
Number	Count Location	S.U.	Comb.	Total	Period	S.U.	Comb.	Total
1	Virginia Ave W of Hamilton Ave	4.0%	0.0%	4.0%	AM	3.5%	0.0%	3.5%
ı	Vilginia Ave W of Hamilton Ave	4.070	0.070	4.070	PM	3.0%	0.0%	3.0%
2	Hamilton Ave N of Virginia Ave	4.5%	0.0%	4.5%	AM	10.0%	0.0%	10.0%
Z	Harrillorr Ave IV or Virginia Ave	4.576	0.076	4.570	PM	3.0%	0.0%	3.0%
3	Virginia Ave N of Doug Davis Dr	2.5%	0.0%	2.5%	AM	4.0%	0.5%	4.5%
3	Vilgilia Ave N of Doug Davis Di	2.570	0.076	2.570	PM	1.5%	0.0%	1.5%
4	Doug Davis Dr E of Virginia	3.0%	0.0%	3.0%	AM	3.0%	0.0%	3.0%
4	Ave/Clay Pl	3.076	0.076	3.076	PM	2.5%	0.0%	2.5%
5	Clay PIS of Doug Davis Dr	4.0%	0.0%	4.0%	AM	3.5%	0.0%	3.5%
5	Clay F13 01 Doug Davis DI	4.0%	0.0%	4.0%	PM	2.5%	0.0%	2.5%

Truck Percentage Calculations
PI # 171007021 - Fulton County, GA
Virginia Ave/Doug Davis Ave @ Clay PI/Virginia Ave Roundabout Feasibility Study

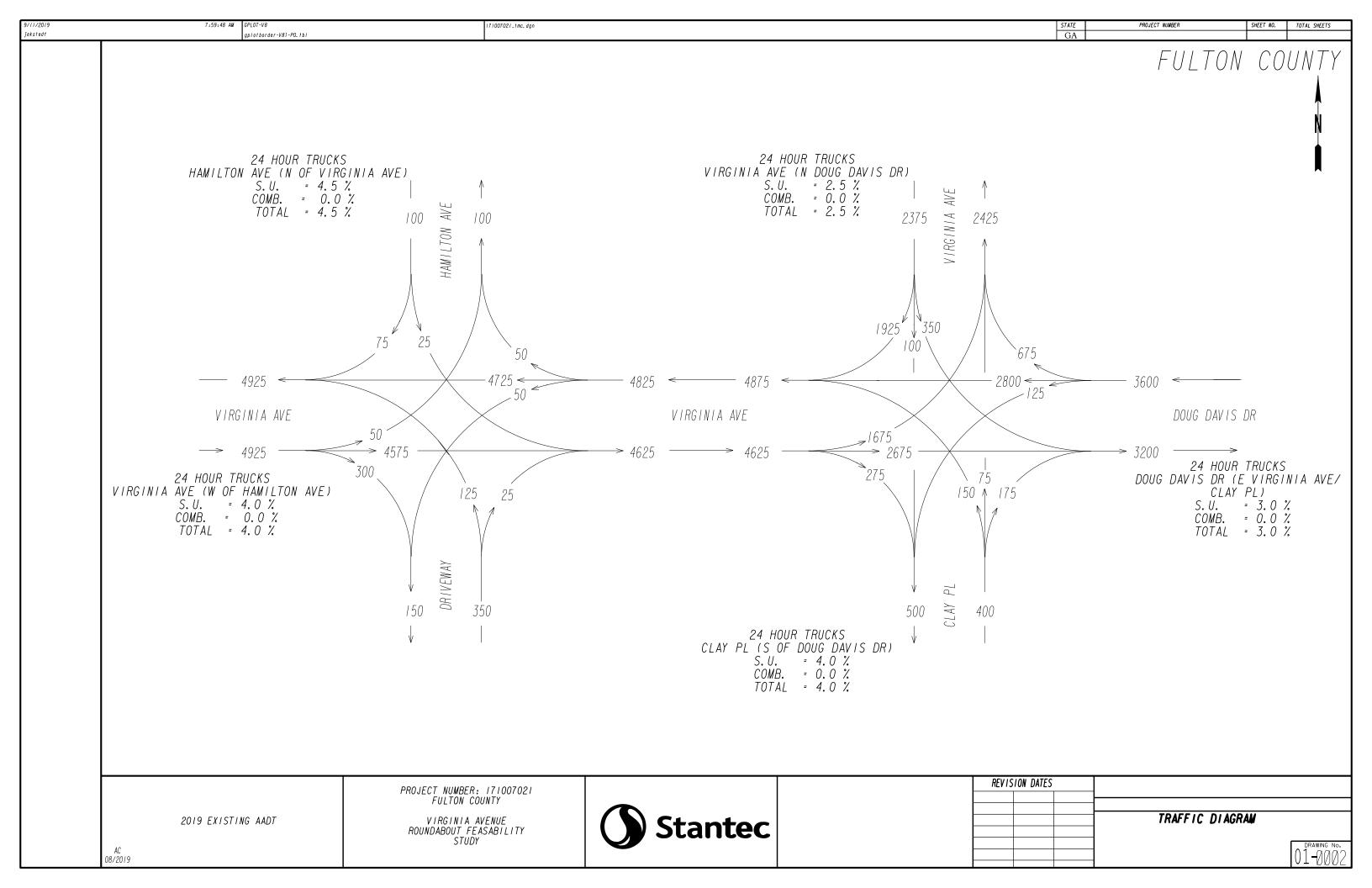
#1 Virgini	a Ave V	W of Hamilto																
		Direction		Class 1		Class 3	Class 4				Class 8	Class 9				2 Class 13	S.U. T%	Comb. T%
12:00 PM	Day 1		519	2	427	70	1	18		0	1	0	0	0		,	3.9%	0.1%
		WB	467	1	389	58	1	18	0	0	0	0	0	0	(0 0	3.970	0.176
	Day 2	EB EB	518	1	425	73	3	15	0	0	0	1	0	0	(0 0	0.40/	0.00/
		WB	42	1	29	11	0	0	1	0	0	0	0	0	(0 0	3.4%	0.2%
																	3.7%	0.1%
															AM I	OHV T%	3.5%	0.0%
		Direction	Total	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 1:	2 Class 13	S.U. T%	Comb. T%
4:45 PM	Day 1	EB	350	0	296	47	1	6	0	0	0	0	0	0	(0 0	0.40/	0.00/
		WB	546	0	472	62	5	7	0	0	0	0	0	0	(0 0	2.1%	0.0%
	Day 2	EB	401	0	331	55	2	13	0	0	0	0	0	0	(0 0		
		WB	536	0	435	81	1	19	0	0	0	0	0	0	(0 0	3.7%	0.0%
						ı	1										2.9%	0.0%
															PM D	OHV T%	3.0%	0.0%
																	5.5,5	5.575
		Direction	Total	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 1:	2 Class 13	S.U. T%	Comb. T%
24-hr T	Day 1	EB	5,550	7	4,614	723	35	158	6	0	4	3	0	0	(0 0		
		WB	5,604	2	4,741	657	25	169	5	0	2	3	0	0	(0	3.6%	0.1%
	Day 2	EB	5,646	6	4,612	782	33	198	8	0	4	3	0	0	(0 0		
	,	WB	5.794	5	4,671	000											4.1%	0.1%
					4,071	880	37	192	5	0	2	2	0	0	(0		
			0,774	J	4,071	880	3/	192	5	0	2	2	0	0	<u> </u>	-1		
			3,774	J	4,071	880	37	192	5	0	2	2	0	0	<u> </u>	ily T%	3.9% 4.0%	0.1%
			3,774		4,071	880	37	192	5	0	2	2	0	0	<u> </u>	-1	3.9%	0.1%
#2 Hamilt	on Ave	N of Virgini		3	4,071	880	37	192	5	0	2	2	0	0	<u> </u>	-1	3.9%	0.1%
#2 Hamilt	on Ave	1	a Ave	Class 1		Class 3	Class 4	192		Class 7	Class 8				Dai	-1	3.9%	0.1%
#2 Hamili		N of Virgini	a Ave	Class 1	Class 2	Class 3			Class 6		Class 8	Class 9			Dai	ily T%	3.9% 4.0% S.U. 1%	0.1% 0.0%
		N of Virgini	a Ave Total		Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Dai	ily T%	3.9% 4.0%	0.1%
	Day 1	N of Virgini Direction NB SB	a Ave Total 15	0	Class 2 10	Class 3 5	Class 4 0	Class 5	Class 6	Class 7	Class 8	Class 9 0	Class 10 0	Class 11	Class 1:	ily T% 2 Class 13 0 0 0 0	3.9% 4.0% S.U. T% 6.7%	0.1% 0.0% Comb. 1%
		N of Virgini Direction NB SB NB	a Ave Total	0 0	Class 2 10 12 7	Class 3 5 1 1 1	Class 4 0 1	Class 5	Class 6 0 0	Class 7	Class 8	Class 9 0 0	Class 10 0	Class 11	Class 1:	ily T% 2 Class 13	3.9% 4.0% S.U. 1%	0.1% 0.0%
	Day 1	N of Virgini Direction NB SB	a Ave Total 15 15	0 0	Class 2 10 12 7	Class 3 5 1 1 1	Class 4 0 1	Class 5	Class 6 0 0	Class 7 0 0 1	Class 8	Class 9 0 0	Class 10 0 0	Class 11	Class 1:	2 Class 13	3.9% 4.0% S.U. T% 6.7%	0.1% 0.0% Comb. 1% 0.0%
	Day 1	N of Virgini Direction NB SB NB	a Ave Total 15 15	0 0	Class 2 10 12 7	Class 3 5 1 1 1	Class 4 0 1	Class 5	Class 6 0 0	Class 7 0 0 1	Class 8	Class 9 0 0	Class 10 0 0	Class 11	Class 1:	2 Class 13	3.9% 4.0% S.U. T% 6.7% 15.8% 10.2%	0.1% 0.0% Comb. T% 0.0% 0.0%
	Day 1	N of Virgini Direction NB SB NB	a Ave Total 15 15	0 0	Class 2 10 12 7	Class 3 5 1 1 1	Class 4 0 1	Class 5	Class 6 0 0	Class 7 0 0 1	Class 8	Class 9 0 0	Class 10 0 0	Class 11	Class 1:	2 Class 13	3.9% 4.0% S.U. T% 6.7%	0.1% 0.0% Comb. 1% 0.0%
	Day 1	N of Virgini Direction NB SB NB	a Ave Total 15 15	0 0 0	Class 2 10 12 7 8	Class 3 5 1 1 0	Class 4 0 1 0 2	Class 5 0 1 0 0 0 0	Class 6 0 0 0	Class 7 0 0 1	Class 8 00 00 00	Class 9 0 0 0	Class 10 0 0 0	Class 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 12	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.9% 4.0% 5.U. T% 6.7% 15.8% 10.2%	0.1% 0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0%
12:00 PM	Day 1	N of Virgini Direction NB SB NB SB Direction	a Ave Total 15 15 9 10	0 0 0 0	Class 2 10 12 7 8	Class 3 5 1 1 0	Class 4 0 1 0 2	Class 5 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 6 0 0 0 0 0 Class 6	Class 7 0 0 0 1 1 0 0 Class 7	Class 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 9 0 0 0 0 Class 9	Class 10 0 0 0 0	Class 11	Class 1:	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.9% 4.0% S.U. T% 6.7% 15.8% 10.2% 10.0% S.U. T%	0.1% 0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1%
	Day 1	N of Virgini Direction NB SB NB SB Direction	a Ave Total 15 15 9 10 Total 10	0 0 0 0	Class 2 10 12 7 8	Class 3 5 1 1 0 0 Class 3 1	Class 4 0 0 1 1 0 0 2 2 Class 4 0 0	Class 5 0 1 0 0 0 0	Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 7 0 0 1 0 Class 7	Class 8	Class 9 0 0 0 0 0 Class 9	Class 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1:	2 Class 13 0	3.9% 4.0% 5.U. T% 6.7% 15.8% 10.2%	0.1% 0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0%
12:00 PM	Day 1 Day 2 Day 1	N of Virgini Direction NB SB NB SB NB SB NB SB NB SB	a Ave Total 15 9 10 Total 10 9	0 0 0 0	Class 2 10 12 7 8 8 Class 2 9 8	Class 3 1 0	Class 4 0 11 02 2	Class 5 0 1 0 0 0 Class 5	Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 7 0 0 1 0 Class 7	Class 8	Class 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1: (((((((((2Class 13 0	3.9% 4.0% S.U. T% 6.7% 15.8% 10.2% 10.0% S.U. T%	0.1% 0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1%
12:00 PM	Day 1	N of Virgini Direction NB SB NB SB Direction NB SB	a Ave Total 15 9 10 Total 10 9 7	0 0 0 0	Class 2 Class 2 Class 2 Class 2 Second S	Class 3 5 1 1 0 0 1 1	Class 4 0 1 0 2 Class 4 0 0 0 0 0 0 0 0 0 0 0	Class 5 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 6 Class 6 Class 6 Class 6	Class 7 Class 7 Class 7	Class 8 Class 8 Class 8	Class 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 10 0 0 0 0 0	Class 11	Class 1:	2Class 13 0	3.9% 4.0% S.U. T% 6.7% 15.8% 10.2% 10.0% S.U. T%	0.1% 0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1%
12:00 PM	Day 1 Day 2 Day 1	N of Virgini Direction NB SB NB SB NB SB NB SB NB SB	a Ave Total 15 9 10 Total 10 9	0 0 0 0	Class 2 Class 2 Class 2 8	Class 3 5 1 1 0 0 1 1	Class 4 0 11 02 2	Class 5 0 1 0 0 0 Class 5	Class 6 Class 6 Class 6 Class 6	Class 7 0 0 1 0 Class 7	Class 8 Class 8 Class 8	Class 9	Class 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1:	2Class 13 0	3.9% 4.0% 5.U. 1% 6.7% 15.8% 10.2% 10.0% 5.U. 1% 5.3%	0.1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
12:00 PM	Day 1 Day 2 Day 1	N of Virgini Direction NB SB NB SB Direction NB SB	a Ave Total 15 9 10 Total 10 9 7	0 0 0 0	Class 2 Class 2 Class 2 Class 2 Second S	Class 3 5 1 1 0 0 1 1	Class 4 0 1 0 2 Class 4 0 0 0 0 0 0 0 0 0 0 0	Class 5 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 6 Class 6 Class 6 Class 6	Class 7 Class 7 Class 7	Class 8 Class 8 Class 8	Class 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 10 0 0 0 0 0	Class 11	Class 1: (((((((((2Class 13 0	3.9% 4.0% S.U. 1% 6.7% 15.8% 10.2% 10.0% S.U. 1% 5.3% 0.0% 2.8%	0.1% 0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
12:00 PM	Day 1 Day 2 Day 1	N of Virgini Direction NB SB NB SB Direction NB SB	a Ave Total 15 9 10 Total 10 9 7	0 0 0 0	Class 2 Class 2 Class 2 Class 2 Second S	Class 3 5 1 1 0 0 1 1	Class 4 0 1 0 2 Class 4 0 0 0 0 0 0 0 0 0 0 0	Class 5 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 6 Class 6 Class 6 Class 6	Class 7 Class 7 Class 7	Class 8 Class 8 Class 8	Class 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 10 0 0 0 0 0	Class 11	Class 1: (((((((((2 Class 13	3.9% 4.0% 5.U. 1% 6.7% 15.8% 10.2% 10.0% 5.U. 1% 5.3%	0.1% 0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
12:00 PM	Day 1 Day 2 Day 1	N of Virgini Direction NB SB NB SB Direction NB SB SB SB SB SB	a Ave Total 15 15 15 9 10 10 10 10 10 10 10 10 10 10 10 10 10	0 0 0 0 0	Class 2 10 12 7 8 8 Class 2 9 8 8 5 8	Class 3 5 1 0 0 0 1 1 2	Class 4 0 2 Class 4 0 0 0 0 0 0 0	Class 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 8 Class 8 Class 8	Class 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 11 Class 11 Class 11 Class 11 Class 11	Class 1:	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.9% 4.0% S.U. T% 6.7% 15.8% 10.2% 10.0% S.U. T% 5.3% 0.0% 2.8% 3.0%	0.1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
12:00 PM 4:45 PM	Day 1 Day 2 Day 1 Day 2	N of Virgini Direction NB SB NB SB Direction NB SB SB Direction NB SB NB SB	a Ave Total 15 15 15 10 10 10 10 10 10 10 10 10 10 10 10 10	0 0 0 0	Class 2	Class 3 5 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 4 0 2 Class 4 0 0 0 0 0 0 0	Class 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 7 0 0 0 1 1 0 Class 7	Class 8 Class 8 Class 8	Class 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 10 0 0 0 0 0 0 0 0 0 0 0 0 Class 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 11 C C C C C C C C C C C C C C C C C	Class 1: (((((((((2 Class 13 0	3.9% 4.0% S.U. 1% 6.7% 15.8% 10.2% 10.0% S.U. 1% 5.3% 0.0% 2.8%	0.1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
12:00 PM 4:45 PM	Day 1 Day 2 Day 1	N of Virgini Direction NB SB NB SB Direction NB SB NB SB NB	a Ave Total 15 9 10 10 10 9 7 10 10 10 10 10 10 10 10 10 10 10 10 10	0 0 0 0 0 0 0 0 1 1 0 0	Class 2	Class 3 5 1 1 0 0 1 1 2 2 Class 3 1 1 5	Class 4 0 2 Class 4 0 0 0 0 0 0 0	Class 5 0 0 1 0 0 0 Class 5 0 1 0 0 0 Class 5	Class 6	Class 7 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 8 Class 8 Class 8 Class 8	Class 9	Class 10 Class 10 Class 10 Class 10 Class 10	Class 11 CC CC CC CC CC CC CC CC CC	Class 1:	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.9% 4.0% S.U. T% 6.7% 15.8% 10.2% 10.0% S.U. T% 5.3% 0.0% 2.8% 3.0%	0.1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
12:00 PM 4:45 PM	Day 1 Day 2 Day 1 Day 2	N of Virgini Direction NB SB NB SB Direction NB SB SB Direction NB SB SB SB SB	a Ave Total 15 15 15 10 10 10 10 10 10 10 10 10 10 10 10 10	0 0 0 0 0	Class 2	Class 3 1 0 0 Class 3 2 Class 3 1 1 1 2 2 Class 3 1 5 1 5 1 6	Class 4 0 2 Class 4 0 0 0 0 0 0 0	Class 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 6	Class 7 0 0 0 1 1 0 Class 7	Class 8 Class 8 Class 8	Class 9	Class 10 0 0 0 0 0 0 0 0 0 0 0 0 Class 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 11 C C C C C C C C C C C C C C C C C	Class 1:	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.9% 4.0% S.U. T% 6.7% 15.8% 10.2% 10.0% S.U. T% 0.0% 2.8% 3.0% S.U. T%	0.1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%

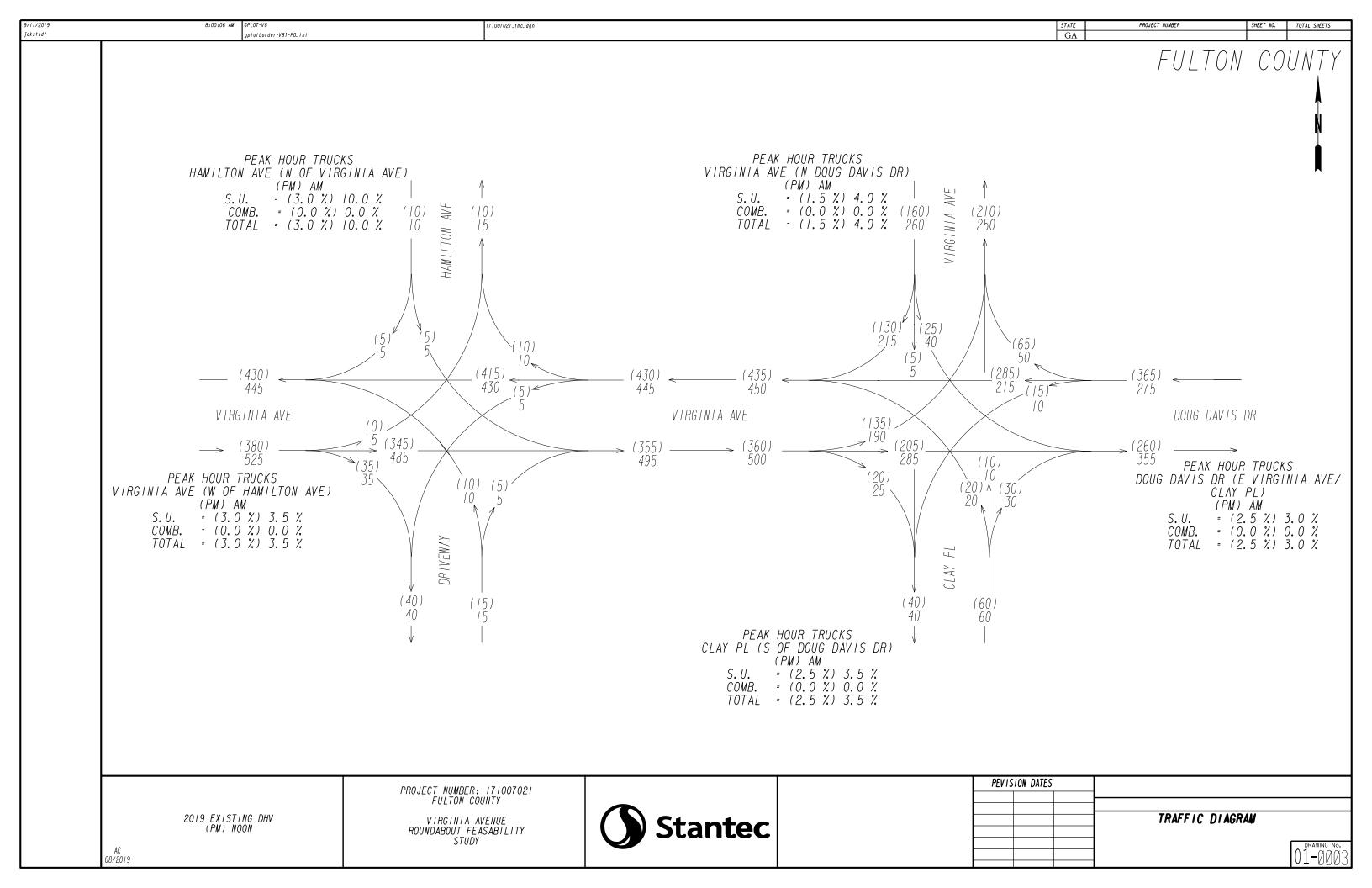
	Direction	Iotai	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	S.U. T%	Comb. 1%
T Day 1	NB	109	0	93	15	0	1	0	0	0	0	0	0	0	0	3.2%	0.0%
	SB	142	0	119	16	2	5	0	0	0	0	0	0	0	0	3.2%	0.0%
Day 2	NB	97	2	76	14	0	4	0	1	0	0	0	0	0	0	/ 00/	0.0%
	SB	137	0	114	14	5	4	0	0	0	0	0	0	0	0	6.0%	0.0%
														Dail	, T07	4.5%	0.0%
														Dali	y 1 70	A 5%	0.0%

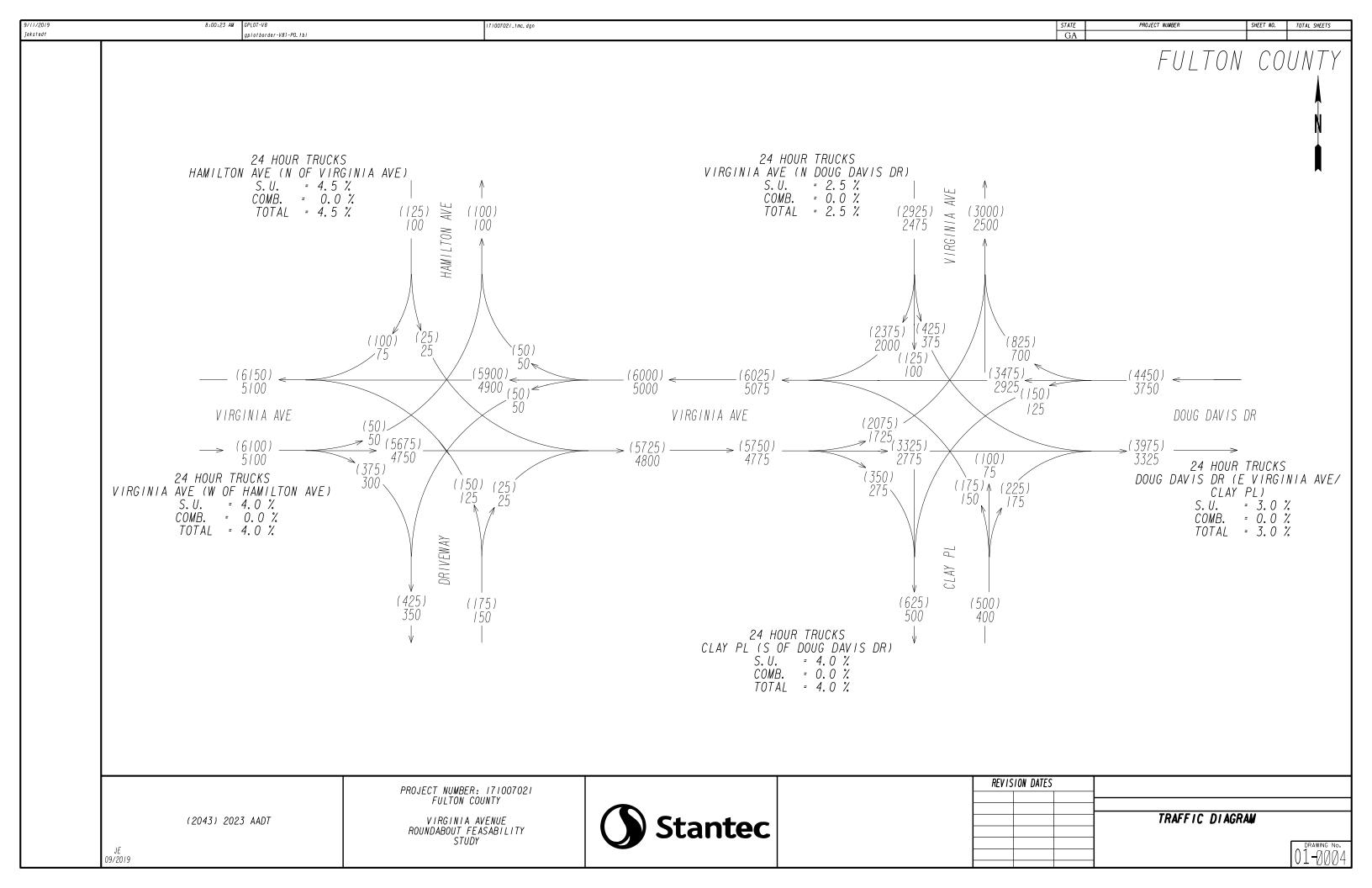
Truck Percentage Calculations PI # 171007021 - Fulton County, GA Virginia Ave/Doug Davis Ave @ Clay PI/Virginia Ave Roundabout Feasibility Study

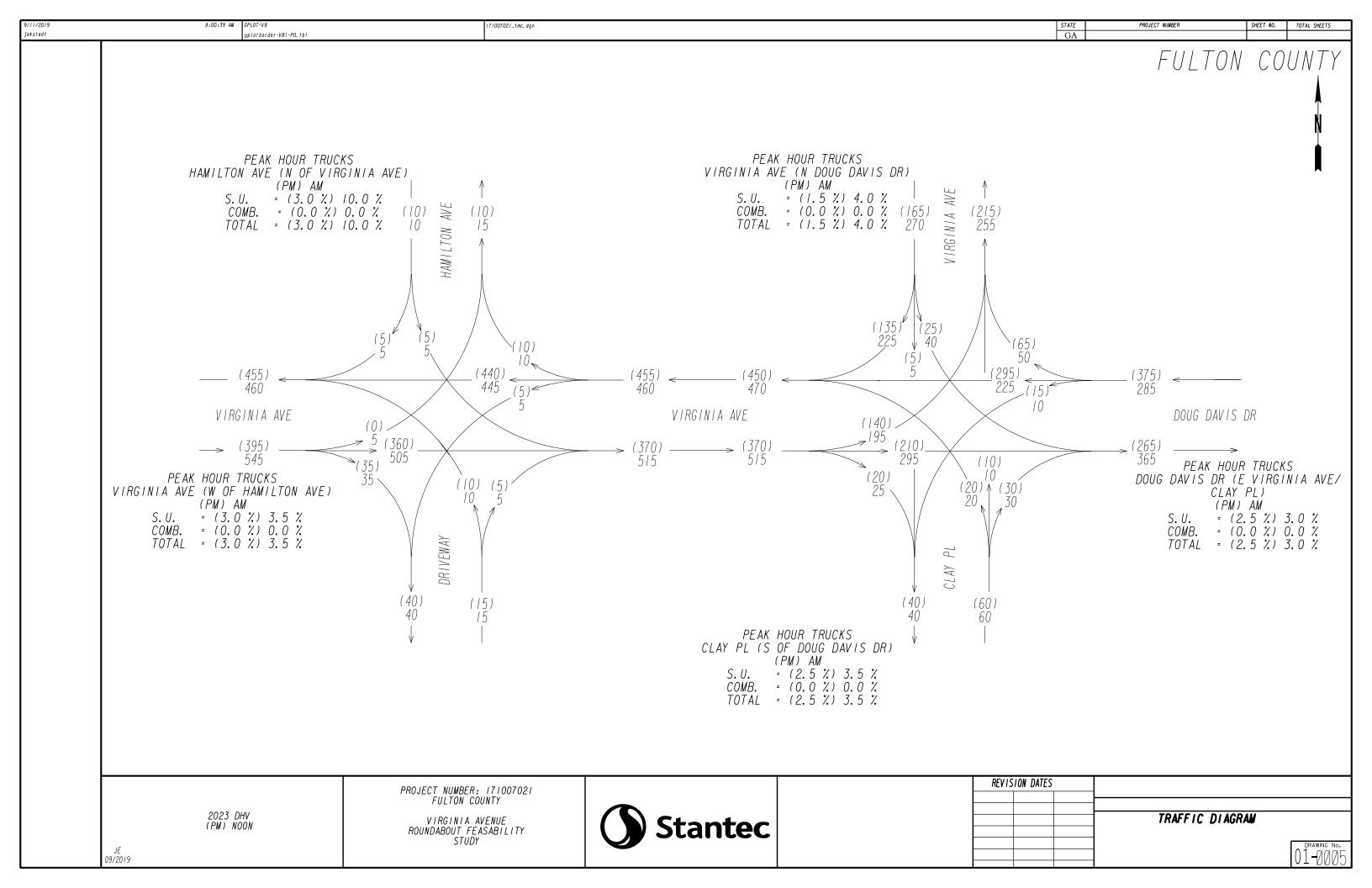
	of Doug D																
12:00 PM Day 1	NB	Total 237	Class 1	193	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10		Class 1	2 Class 13	S.U. T%	Comb. T%
12.00 FIVE Day I	SB	313	2	250	44	1		3	1	1	0	0			0 0	4.7%	0.2%
Day 2	NB	275	1	211	52	1	8	1	0		0	C		- (0 0	2.8%	0.4%
	SB	289	0	232	50	0	4	2	0	1	0	C	0	-	0 0		
														AMI	DHV T%	3.8% 4.0%	0.3%
														<u> </u>		4.0%	0.5%
	Direction		Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 1	2 Class 13	S.U. T%	Comb. T%
4:45 PM Day 1		212	1	189	21	0		0	0		0	0			-	0.3%	0.0%
Day 3	SB NB	178 246	3	146 210	29 29	0		0	0		0	0			0 0		
Day 2	SB	198	2	164	29	1	2	0	0		0	C			0 0	2.3%	0.0%
		<u> </u>												D44 F	NIIV T07	1.3%	0.0%
														PMI	OHV T%	1.5%	0.0%
	Direction	lotal	Class 1	Class 2	Class 3	Class 4	Class 5	Class A	Class 7	Class 8	Class 9	IClass 10	IClass 11	Class 1	2 Class 13	S.U. T%	Comb. T%
24-hr T Day 1		2.694	3	2,301	317	12		3	1	3	3	Cluss 10		Class			
	SB	2,816	8	2,384	353	12		5	2	3	0	C		1	0 0	2.5%	0.2%
Day 2		2,743	7	2,300	363	7	59	3	0		0	0				2.7%	0.2%
	SB	2,869	9	2,376	396	9	65	6	0	3	5	C	0	· '	0 0	2.6%	0.2%
														Da	ily T%	2.5%	0.2%
#4 Doug Davis D	r E of Virgini																
12:00 PM Day 1		Total 380	Class I	Class 2 318	Class 3	Class 4	Class 5	Class 6	Class /	Class 8	Class 9	Class IC		Class I	2 Class 13	S.U. T%	Comb. T%
12.00 TWI Day I	WB	333	0	288	34	3	8	0	-		0	0			0 0	2.8%	0.0%
Day 2	EB	396	0	314	70	5		0	0		0	C	0	-	0 0	3.3%	0.0%
	WB	354	0	295	46	3	9	1	0	0	0	0	0		0 0		
														AM	DHV T%	3.1%	0.0%
																3.0%	0.0%
	Direction	Total	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 1	2 Class 13	S.U. T%	Comb. T%
4:45 PM Day 1		249	0	213	30	2	4	0	0		0	C			-	2.5%	0.0%
D 2	WB	462 277	0	414	36	3		0	0		0	0				2.070	0.070
Day 2	WB	447	0	235 390	35 46	1	10	0	0		0	0			0 0	2.5%	0.0%
										_		-					
																2.5%	0.0%
														PM I	OHV T%	2.5% 2.5%	0.0% 0.0%
	Direction	I Total I	Class 1 I	Class 2	Class 2	Class 4	Class 5	Class (Class 7	Class 9	Class 0	Clean 10	Olean 11			2.5%	0.0%
24-hr T Day 1	Direction		Class 1	Class 2			Class 5				Class 9			Class 1	2 Class 13	2.5% S.U. T%	0.0% Comb. 1%
24-hrT Day 1		Total 4,202 4,209	Class 1 4 0	Class 2 3,446 3,695	Class 3 616 383	Class 4 36 29		Class 6 6 0	Class 7 0 1		Class 9	Class 10	0	Class 1	2 Class 13	2.5%	0.0%
24-hr T Day 1 Day 2	EB WB EB	4,202 4,209 4,263	4 0 6	3,446 3,695 3,522	616 383 593	36 29 36	94 100 103	6	0 1 0	0 1 0	0	0	0 0	Class 1	2 Class 13 0 0 0 0 0 0	2.5% S.U. T% 3.2%	0.0% Comb. T% 0.0%
	EB WB	4,202 4,209	4 0	3,446 3,695	616 383	36 29	94 100 103	6	0 1	0 1 0	0	C	0 0	Class 1	2 Class 13 0 0 0	2.5% S.U. T% 3.2% 3.2%	0.0% Comb. 1% 0.0% 0.0%
	EB WB EB	4,202 4,209 4,263	4 0 6	3,446 3,695 3,522	616 383 593	36 29 36	94 100 103	6	0 1 0	0 1 0	0	0	0 0	Class 1	2 Class 13 0 0 0 0 0 0	2.5% S.U. T% 3.2% 3.2% 3.2%	0.0% Comb. 1% 0.0% 0.0%
Day 2	EB WB EB WB	4,202 4,209 4,263 4,193	4 0 6	3,446 3,695 3,522	616 383 593	36 29 36	94 100 103	6	0 1 0	0 1 0	0	0	0 0	Class 1	2 Class 13 0 0 0 0 0 0	2.5% S.U. T% 3.2% 3.2%	0.0% Comb. 1% 0.0% 0.0%
Day 2	EB WB EB WB Oug Davis D Direction	4,202 4,209 4,263 4,193	4 0 6 2	3,446 3,695 3,522 3,599 Class 2	616 383 593 462	36 29 36 26	94 100 103 103	6 0 3 1	0 1 0 0	0 1 0 0	0 0 0 0	Class 10	0 0 0	Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0%
Day 2	EB WB EB WB Oug Davis D Direction NB	4,202 4,209 4,263 4,193	4 0 6 2	3,446 3,695 3,522 3,599 Class 2	616 383 593 462 Class 3	36 29 36 26 Class 4	94 100 103 103 103	6 0 3 1	0 1 0 0	0 1 0 0	0 0 0 0	Class 10	0 0 0 0	Class 1 Da Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0%
Day 2 #5 Clay PI S of Do 12:00 PM Day 1	EB WB EB WB OUG Davis D Direction NB SB	4,202 4,209 4,263 4,193 Total 53 34	4 0 6 2	3,446 3,695 3,522 3,599 Class 2 44 26	616 383 593 462 Class 3 7	36 29 36 26 Class 4 0	94 100 103 103 Class 5	6 0 3 1	0 1 0 0 Class 7	0 1 0 0 Class 8	0 0 0 0	Class 10	0 0 0 0 0 Class 11	Class 1 Da Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 1 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0% S.U. 1% 5.7%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1%
Day 2	EB WB EB WB OUG Davis D Direction NB SB	4,202 4,209 4,263 4,193	4 0 6 2 Class 1 0	3,446 3,695 3,522 3,599 Class 2	616 383 593 462 Class 3	36 29 36 26 Class 4	94 100 103 103 103 Class 5 2 3	6 0 3 1	0 1 0 0	0 1 0 0 0	0 0 0 0 0	Class 10	0 0 0 0 0 0 Class 11 0	Da Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. T% 3.2% 3.2% 3.2% 3.0% S.U. T%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1%
Day 2 #5 Clay PI S of Do 12:00 PM Day 1	EB WB EB WB OUG Davis D Direction NB SB NB	4,202 4,209 4,263 4,193 Total 53 34 70	4 0 6 2 Class 1 0	3,446 3,695 3,522 3,599 Class 2 44 26 50	616 383 593 462 Class 3 7 4	36 29 36 26 Class 4 0 0	94 100 103 103 103 Class 5 2 3	6 0 3 1	0 1 0 0 0 Class 7 0 0	0 1 0 0 Class 8 0	Class 9	Class 10	0 0 0 0 0 0 Class 11 0	Da	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. T% 3.2% 3.2% 3.0% S.U. T% 5.7% 1.8% 3.5%	0.0% Comb. 1% 0.0% 0.0% 0.0% Comb. 1% 0.0% 0.0% 0.0%
Day 2 #5 Clay PI S of Do 12:00 PM Day 1	EB WB EB WB OUG Davis D Direction NB SB NB	4,202 4,209 4,263 4,193 Total 53 34 70	4 0 6 2 Class 1 0	3,446 3,695 3,522 3,599 Class 2 44 26 50	616 383 593 462 Class 3 7 4	36 29 36 26 Class 4 0 0	94 100 103 103 103 Class 5 2 3	6 0 3 1	0 1 0 0 0 Class 7 0 0	0 1 0 0 Class 8 0	Class 9	Class 10	0 0 0 0 0 0 Class 11 0	Da	2 Class 13 0 0 0 0 0 0 0 0 0 ily T% 2 Class 13 0 0 0 0 0 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0% S.U. T% 5.7%	0.0% Comb. 1% 0.0% 0.0% 0.0% Comb. 1% 0.0%
Day 2 #5 Clay PI S of Do 12:00 PM Day 1	EB WB EB WB OUG Davis D Direction NB SB NB	4,202 4,209 4,263 4,193 4,193 7 Total 53 34 70 42	4 0 6 2 Class 1 0	3,446 3,695 3,522 3,599 Class 2 44 26 50	616 383 593 462 Class 3 7 4 17	36 29 36 26 Class 4 0 0	94 100 103 103 103 Class 5 2 3	6 0 3 1	0 11 0 0 0 Class 7	0 11 0 0 0	Class 9	Class 10 C C C C C C C C C	0 0 0 0 0 Class 11 0 0	Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. T% 3.2% 3.2% 3.0% S.U. T% 5.7% 1.8% 3.5%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1% 0.0% 0.0% 0.0%
Day 2 #5 Clay PI S of Do 12:00 PM Day 1	EB WB EB WB OUG Davis D Direction NB SB NB SB Direction NB	4,202 4,209 4,263 4,193 Total 53 34 70 42	Class 1 2 1 Class 1 0 0	3,446 3,695 3,522 3,599 Class 2 44 266 50 29	616 383 593 462 Class 3 7 4 17 11	36 29 36 26 Class 4 0 0 1 1	94 100 103 103 103 Class 5 2 3 0 0	6 0 0 3 3 1 1 Class 6 0 0 0 1 1 1 Class 6 0 0 0 0 0 1 1 1 Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 11 0 0 0 Class 7 0 0 0	0 11 0 0 0 Class 8 0 0 0	Class 9 Class 9 Class 9	Class 10 Class 10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1 Class 1 Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. 1% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% S.U. 1%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1% 0.0% Comb. 1% 0.0% Comb. 1%
#5 Clay PI S of Do 12:00 PM Day 1 Day 2	EB WB EB WB DUIG DAYS D DIrection NB SB Direction NB SB	4,202 4,209 4,263 4,193 Total 53 34 70 42	Class 1 0 0 0 0	3,446 3,695 3,522 3,599 Class 2 44 266 50 29 Class 2 58	616 383 593 462 Class 3 7 11 Class 3 7 4	36 29 36 26 Class 4 0 0 0 1 1 0	94 100 103 103 103 Class 5 2 3 0 0	6 0 0 3 3 1 1 Class 6 0 0 0 1 1 Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 11 0 0 0 0 0 0 0 0 0 0	0 11 0 0 0 0 0 0 0 0 0 0	Class 9 Class 9 Class 9	Class 10 Class 10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1 Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. T% 3.2% 3.2% 3.0% S.U. T% 5.7% 1.8% 3.5%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1% 0.0% 0.0% 0.0%
Day 2 #5 Clay PI S of Do 12:00 PM Day 1 Day 2	EB WB EB WB Direction NB SB NB SB NB NB NB	4,202 4,209 4,263 4,193 Total 53 34 70 42	4 0 0 6 2 2 Class 1 0 1 2 1 1 Class 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,446 3,695 3,522 3,599 Class 2 44 26 50 29 Class 2	616 383 593 462 Class 3 7 4 17 11	36 29 36 26 Class 4 0 0 0 0 Class 4	94 100 103 103 103 Class 5 2 3 0 0	Class 6 Class 6 Class 6 Class 6 Class 6	0 1 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 0 0	Class 9 Class 9 Class 9	Class 10 Class 10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1 Class 1 Class 1	2 Class 13 0	2.5% S.U. 1% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% S.U. 1%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% Comb. 1% 0.0% Comb. 1%
#5 Clay PI S of Do 12:00 PM Day 1 Day 2	EB WB EB WB DUIG DAYS D DIrection NB SB Direction NB SB	4,202 4,209 4,263 4,193 Total 53 34 70 42	Class 1 0 0 0 0	3,446 3,695 3,522 3,599 Class 2 44 266 50 29 Class 2 58	616 383 593 462 Class 3 7 11 Class 3 7 4	36 29 36 26 Class 4 0 0 0 0 Class 4	94 100 103 103 103 Class 5 2 3 0 0	Class 6 Class 6 Class 6 Class 6 Class 6	0 1 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 0 0	Class 9 Class 9 Class 9	Class 10 Class 10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1	2 Class 13 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% 3.5% S.U. 1% 0.0%	0.0% Comb. 17% 0.0% 0.0% 0.0% 0.0% 0.0% Comb. 17% 0.0% 0.0% 0.0% 0.0%
Day 2 #5 Clay PI S of Do 12:00 PM Day 1 Day 2	EB WB EB WB Direction NB SB NB SB NB NB NB	4,202 4,209 4,263 4,193 Total 53 34 70 42	4 0 0 6 2 2 Class 1 0 1 2 1 1 Class 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,446 3,695 3,522 3,599 Class 2 44 26 50 29 Class 2	616 383 593 462 Class 3 7 4 17 11	36 29 36 26 Class 4 0 0 0 0 Class 4	94 100 103 103 103 Class 5 2 3 0 0	Class 6 Class 6 Class 6 Class 6 Class 6	0 1 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 0 0	Class 9 Class 9 Class 9	Class 10 Class 10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1	2 Class 13 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% 3.5% S.U. 1% 5.0%	0.0% Comb. 17% 0.0% 0.0% 0.0% 0.0% 0.0% Comb. 17% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
#5 Clay PI S of Do 12:00 PM Day 1 Day 2	EB WB OUG Davis D Direction NB SB NB SB Direction NB SB SB NB SB	4,202 4,209 4,263 4,193 4,193 Total 53 34 70 42 Total 65 37 60 40	4 0 6 2 2 Class 1 0 1 1 2 1 1 1 Class 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,446 3,695 3,522 3,599 Class 2 44 26 50 29 Class 2 58 33 54 32	616 383 593 462 Class 3 7 4 177 111	36 29 36 26 26 Class 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	94 100 103 103 103 103 103 103 103 103 103	6 0 0 3 1 1 Class 6 0 0 0 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 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 9 Class 9 Class 9 Class 9 Class 9	Class 10 Class 10	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1 Class 1 Class 1 PM I	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% 3.5% S.U. 1% 0.0% 5.U. 1% 2.5%	0.0% Comb. 17/ 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0
#5 Clay PI S of Do 12:00 PM Day 1 Day 2 4:45 PM Day 1 Day 2	EB WB OUG Davis D Direction NB SB	4,202 4,209 4,263 4,193 4,193 4,193 34 70 42 Total 65 37 60 40	Class 1 0 0 0 0 0 0 Class 1	3,446 3,695 3,592 3,599 Class 2 44 26 50 29 Class 2 58 33 54 32	616 383 593 462 Class 3 7 4 17 11 Class 3 7 4 5 Class 3	36 29 366 26 Class 4 0 0 1 1 0 Class 4 0 0 0 0	94 100 103 103 103 103 103 103 103 103 103	6 0 0 3 1 1 Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 7 Class 7 Class 7 Class 7 Class 7	Class 8 Class 8 Class 8 Class 8 Class 8 Class 8	Class 9 Class 9 Class 9 Class 9 Class 9	Class 16 Class 16	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 1 AM I Class 1 PM I Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% 3.5% S.U. 1% 0.0% 5.0% 2.5% S.U. 1%	0.0% Comb. 17% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.
#5 Clay PI S of Do 12:00 PM Day 1 Day 2	EB WB OUG Davis D Direction NB SB	4,202 4,209 4,263 4,193 4,193 Total 53 34 70 42 Total 65 37 60 40	4 0 6 2 2 Class 1 0 1 1 2 1 1 1 Class 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,446 3,695 3,522 3,599 Class 2 44 26 50 29 Class 2 58 33 54 32	616 383 593 462 Class 3 7 4 177 111	36 29 36 26 26 Class 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	94 100 100 100 100 100 100 100 100 100 10	6 0 0 3 1 1 Class 6 0 0 0 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 0 0 0 0 0 0 0 0	Class 8 Class 8 Class 8 Class 8	Class 9 Class 9 Class 9 Class 9 Class 9	Class 10 Class 10	Class 11	Class 1 AM I Class 1 Class 1 Class 1	2 Class 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% 3.5% S.U. 1% 0.0% 5.U. 1% 2.5%	0.0% Comb. 17% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.
#5 Clay PI S of Do 12:00 PM Day 1 Day 2 4:45 PM Day 1 Day 2	EB WB EB WB OUG Davis D Direction NB SB Direction NB SB Direction NB SB NNB SB SB	4,202 4,209 4,263 4,193 4,193 34 70 42 Total 65 37 60 40	Class 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3,446 3,695 3,592 3,599 Class 2 44 26 50 29 Class 2 58 33 33 32 44 44 26 50 29	616 383 593 462 Class 3 7 4 17 11 Class 3 7 4 4 5 Class 3 7 7 7 7 7 7 7 7 7 7 8 8 8 8 8 8 8 8 8	36 29 36 26 26 26 26 26 26 26 26 26 26 26 26 26	94 100 103 103 103 103 103 103 103 103 103	6 0 0 3 1 1 Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 7 Class 7 Class 7	Class 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 9 Class 9 Class 9 Class 9 Class 9 Class 9	Class 10 Class 10	Class 11	Class 1 AM I Class 1 Class 1 Class 1	2 Class 13 0	2.5% S.U. 1% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% 3.5% S.U. 1% 0.0% 5.0% 2.5% S.U. 1% 3.9%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Comb. 1% 0.0% 0.0% 0.0%
#5 Clay PI S of Do 12:00 PM Day 1 Day 2 4:45 PM Day 1 Day 2	EB WB EB WB OUG Davis D Direction NB SB Direction NB SB Direction NB SB NNB SB SB	4,202 4,209 4,263 4,193 4,193 70 42 70 42 70 42 70 42 70 42 70 40 70 40 70 40 70 70 70 70 70 70 70 70 70 70 70 70 70	Class 1 0 0 0 0 0 Class 1 4 4 4 2	3,446 3,695 3,592 3,599 Class 2 44 26 50 29 Class 2 407 32	616 383 593 462 Class 3 7 4 17 11 Class 3 5 Class 3 6 Class 3 6 Class 3 6 6 6 6 6	36 29 366 26	94 100 103 103 103 103 103 103 103 103 103	6 0 0 0 3 3 1 1 Class 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Class 8 Class 8	Class 9 Class 9 Class 9 Class 9 Class 9	Class 10 Class 10	Class 11	Class 1 Class 1 Class 1 PM I Class 1	2 Class 13 0	2.5% S.U. 1% 3.2% 3.2% 3.2% 3.0% S.U. 1% 5.7% 1.8% 3.5% 3.5% S.U. 1% 0.0% 5.0% 2.5% S.U. 1%	0.0% Comb. 1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.

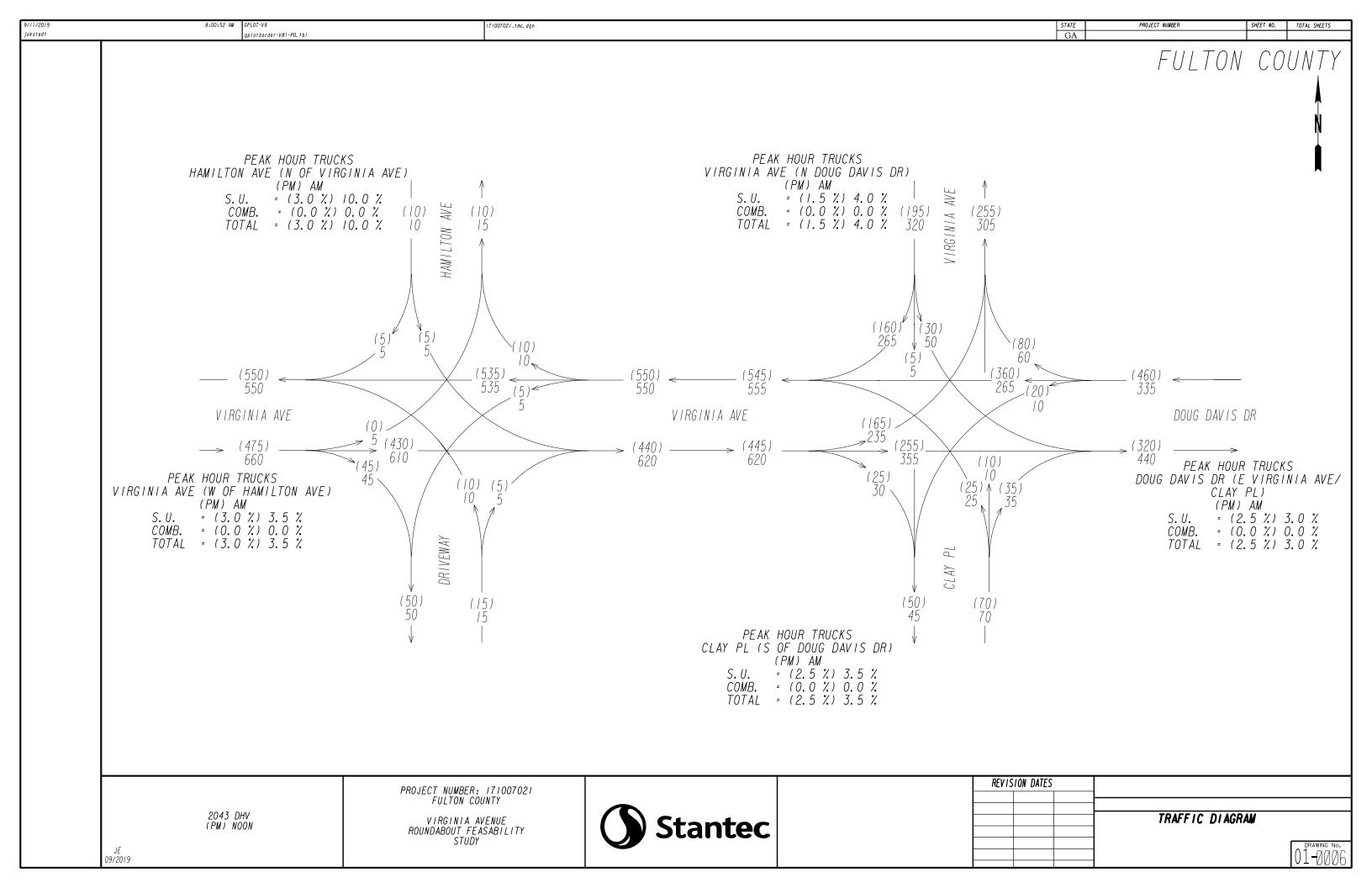
APPENDIX E – TRAFFIC MOVEMENT FIGURES

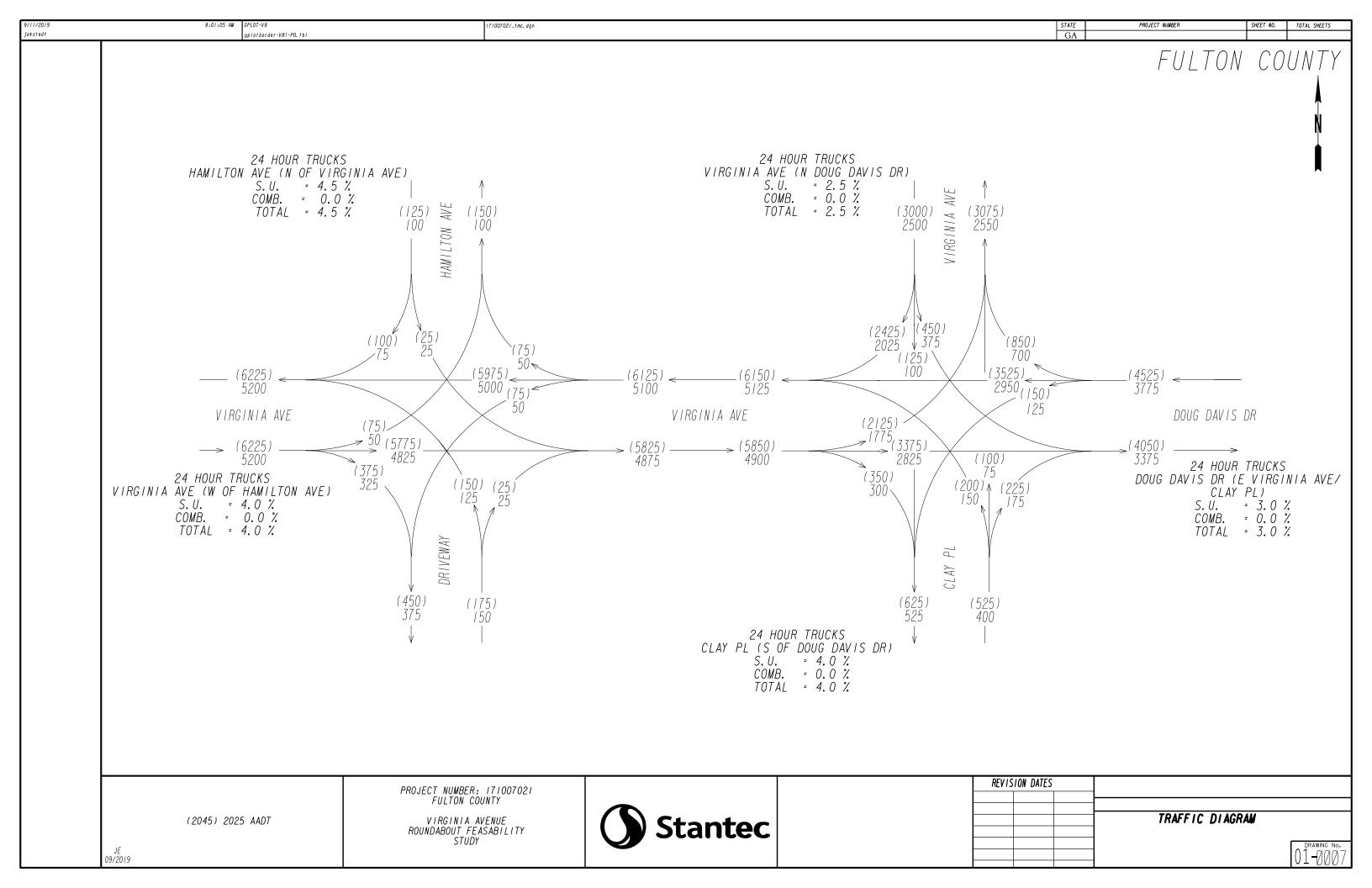


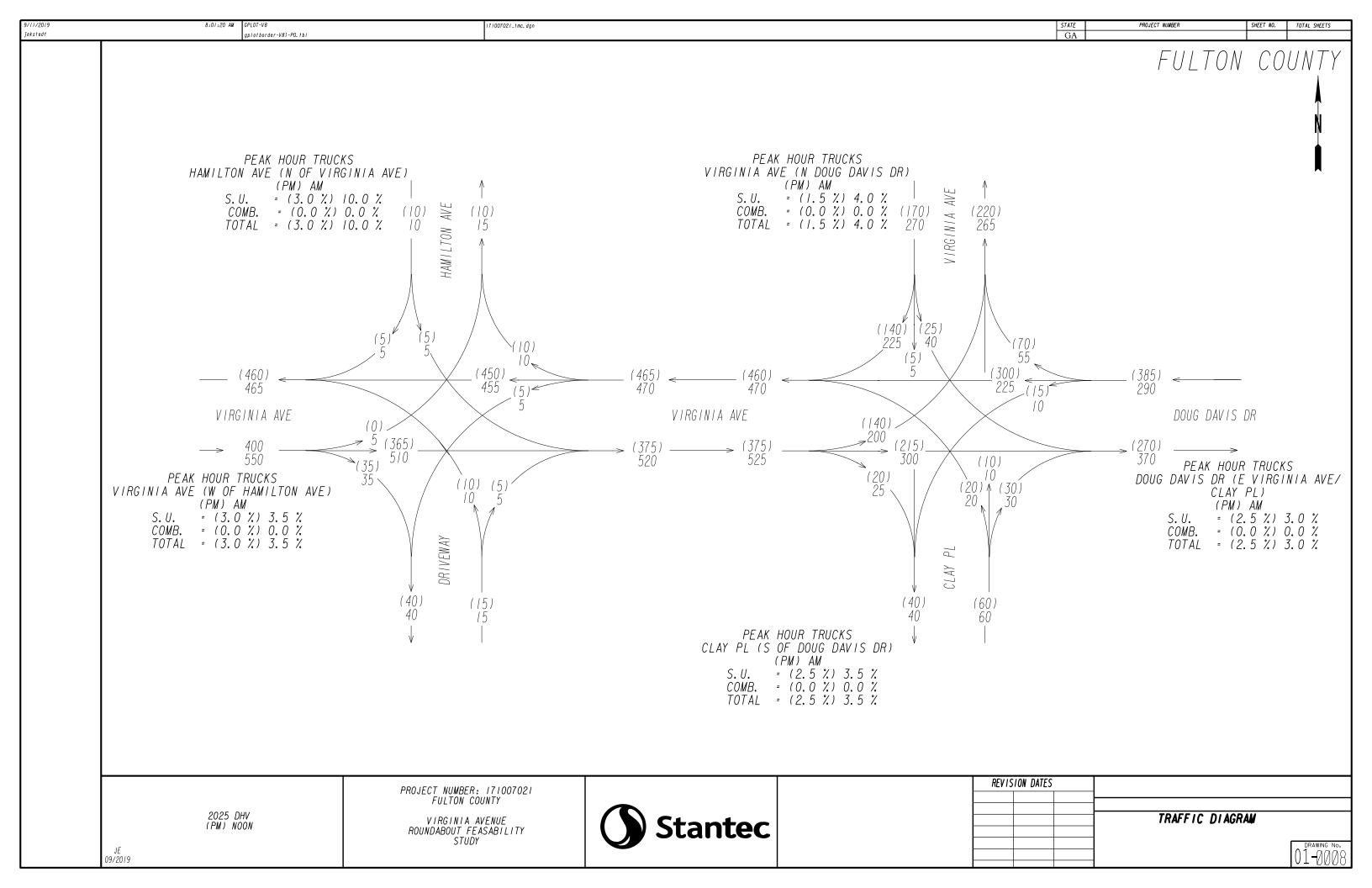


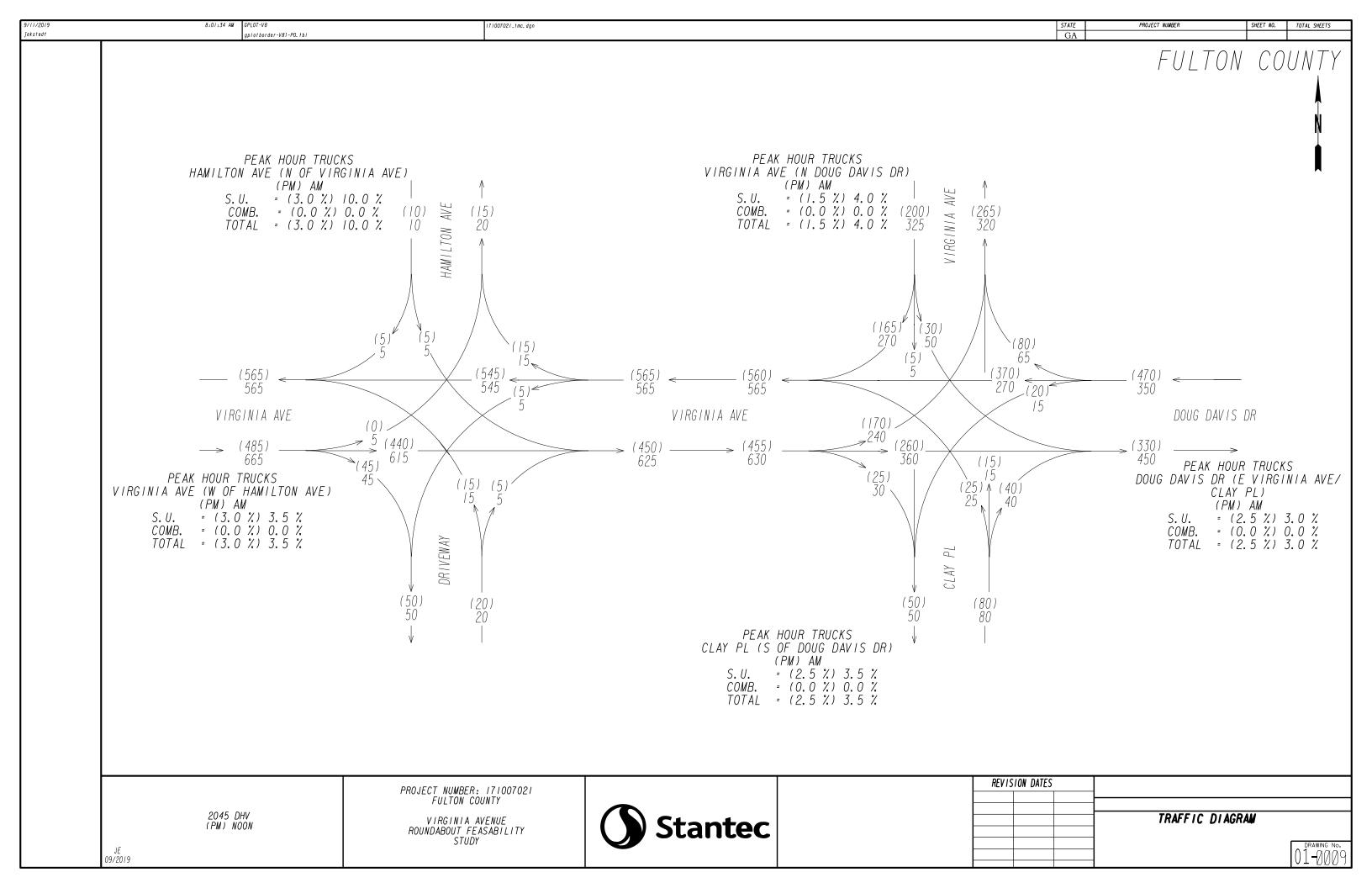












APPENDIX F.1 – GROWTH RATE CALCULATIONS (GDOT HISTORICAL DATA)

Historical Growth Calculations for Lenox Rd (PI# 0015005 - Fulton County)

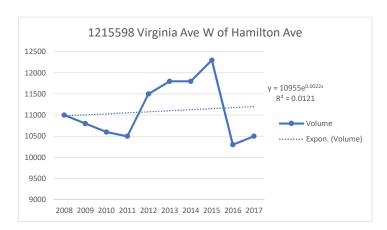
- Based on local GDOT Count Stations

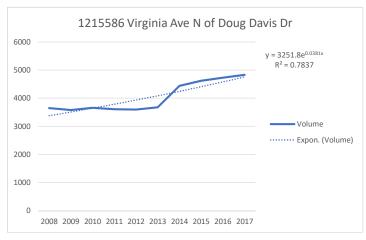
Study Corridor

Growth Rate based on data from 2008-2017

12155	98 Virginia A Hamilton Av	
Year	Volume	Actuals?
2017	10,500	Estimated
2016	10,300	Actual
2015	12,300	Estimated
2014	11,800	-
2013	11,800	-
Growth		-2.9%
2012	11500	-
2011	10500	-
2010	10600	-
2009	10800	-
2008	11000	-
Trend Growth Rate		0.2%

1215586 Vir	ginia Aver Davis Driv	nue N of Doug ve
Year	Volume	Actuals?
2017	4,830	Estimtaed
2016	4,730	Estimtaed
2015	4,620	Estimtaed
2014	4,440	-
2013	3,680	-
Growth Rate		7.0%
2012	3600	-
2011	3610	-
2010	3660	-
2009	3580	-
2008	3650	-
Trend Growth Rate		3.8%





Single Station Annualized Statistics - 121-5586

Data Item	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Data Item
Statistics type	-	-	-	-	-	-	-	Estimated	Estimated	Estimated	Statistics type
AADT	3650	3580	3660	3610	3600	3680	4440	4620	4730	4830	AADT
Single- Unit Truck AADT	-	-	-	-	-	-	-	-	-	-	Single- Unit Truck AADT
Combo- Unit Truck AADT	-	-	-	-	-	-	-	-	-	-	Combo- Unit Truck AADT
% Peak SU Trucks	-	-	-	-	-	-	-	-	-	-	% Peak SU Trucks
% Peak CU Trucks	-	-	-	-	-	-	-	-	-	-	% Peak CU Trucks
K-Factor	-	_	_	_	-	-	0.123	0.123	0.123	-	K-Factor
D-Factor	-	-	-	-	-	-	0.500	0.500	0.500	-	D-Factor
Future AADT	-	-	-	-	-	-	-	-	6250	7840	Future AADT

Single Station Annualized Statistics - 121-5593

Data Item	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Data Item
Statistics type	-	-	-	-	-	-	-	Estimated	Actual	Estimated	Statistics type
AADT	11000	10800	10600	10500	11500	11800	11800	12300	10300	10500	AADT
Single- Unit Truck AADT	-	-	-	-	-	-	-	-	392	-	Single- Unit Truck AADT
Combo- Unit Truck AADT	-	-	-	-	-	-	-	-	22	-	Combo- Unit Truck AADT
% Peak SU Trucks	-	-	-	-	-	-	-	-	0.252	-	% Peak SU Trucks
% Peak CU Trucks	-	-	-	-	-	-	-	-	0.039	-	% Peak CU Trucks
K-Factor	-	-	-	-	-	-	-	-	0.114	-	K-Factor
D-Factor	-	-	-	-	-	-	-	-	0.600	-	D-Factor
Future AADT	-	-	-	-	-	-	-	-	13200	11800	Future AADT

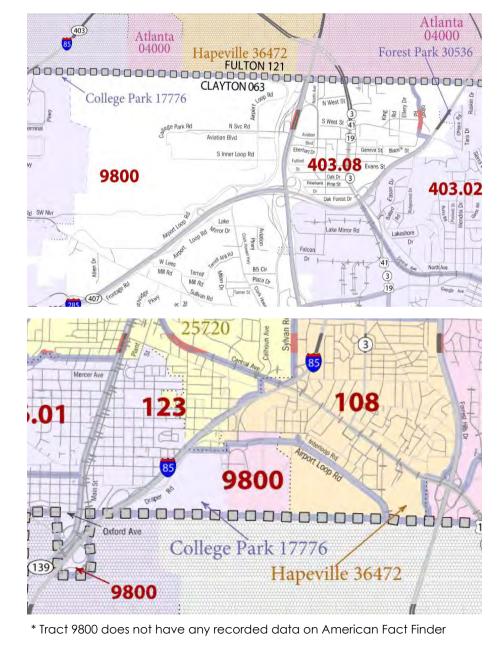
APPENDIX F.2 – GROWTH RATE CALCULATIONS (US CENSUS DATA)

Historical Growth Calculations for P.I. #0015005 (Fulton) - Lenox Road

- Based on local US Census Data

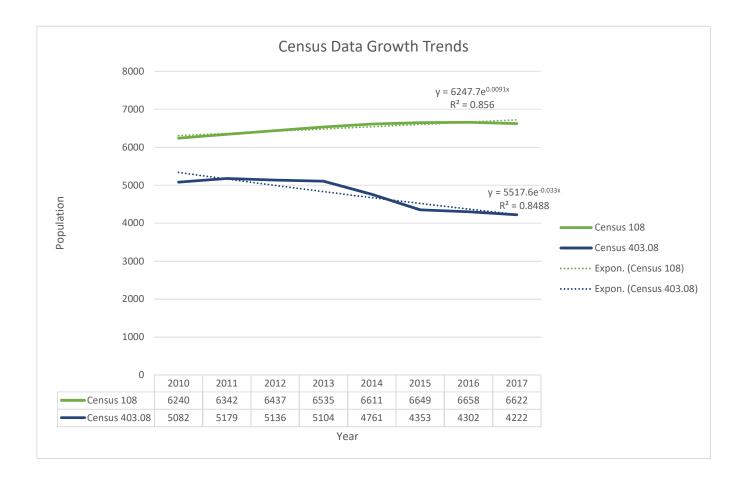
Census Tract 1 Location	•
Year	Volume
2018	-
2017	6,622
2016	6,658
2015	6,649
2014	6,611
2013	6,535
2012	6,437
2011	6,342
2010	6,240
Growth Rate	0.9%
Avg Volumes	6,510
Trendline Growth	0.9%

Census Tract 403.08 (Directly Adjascent to Project Location)	
Year	Volume
2018	-
2017	4,222
2016	4,302
2015	4,353
2014	4,761
2013	5,104
2012	5,136
2011	5,179
2010	5,082
Growth Rate	-2.6%
Avg Volumes	4,770
Trendline Growth	-0.3%



Historical Growth Calculations for P.I. #0015005 (Fulton) - Lenox Road

- Based on local US Census Data





TOTAL POPULATION

Universe: Total population 2006-2010 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, for 2010, the 2010 Census provides the official counts of the population and housing units for the nation, states, counties, cities and towns. For 2006 to 2009, the Population Estimates Program provides intercensal estimates of the population for the nation, states, and counties.

	Census Tract 108, Fulton County, Georgia	
	Estimate	Margin of Error
Total	6,240	+/-21

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2006-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2006-2010 American Community Survey

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
- 2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
 - 3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
 - 4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
- 5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
 - 6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 - 8. An '(X)' means that the estimate is not applicable or not available.



TOTAL POPULATION

Universe: Total population 2007-2011 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Census Tract 108, Fulton County, Georgia	
	Estimate	Margin of Error
Total	6,342	+/-18

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2007-2011 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
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 - 3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
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- 5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
 - 6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 - 8. An '(X)' means that the estimate is not applicable or not available.



TOTAL POPULATION

Universe: Total population 2008-2012 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Census Tract 108, Fulton County, Georgia	
	Estimate	Margin of Error
Total	6,437	+/-20

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2008-2012 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2008-2012 American Community Survey

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
- 2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
 - 3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
 - 4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
- 5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
 - 6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 - 8. An '(X)' means that the estimate is not applicable or not available.



TOTAL POPULATION

Universe: Total population 2009-2013 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Census Tract 108, Fulton County, Georgia	
	Estimate	Margin of Error
Total	6,535	+/-30

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
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- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 - 8. An '(X)' means that the estimate is not applicable or not available.



TOTAL POPULATION

Universe: Total population 2010-2014 American Community Survey 5-Year Estimates

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	Census Tract 108, Fulton County, Georgia	
	Estimate	Margin of Error
Total	6,611	+/-24

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

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TOTAL POPULATION

Universe: Total population 2011-2015 American Community Survey 5-Year Estimates

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	Census Tract 108, Fulton County, Georgia	
	Estimate	Margin of Error
Total	6,649	+/-28

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Explanation of Symbols:

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TOTAL POPULATION

Universe: Total population 2012-2016 American Community Survey 5-Year Estimates

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		Census Tract 108, Fulton County, Georgia	
	Estimate	Margin of Error	
Total	6,658	+/-18	

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Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

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TOTAL POPULATION

Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Census Tract 108, Fulton County, Georgia	
	Estimate	Margin of Error
Total	6,622	+/-19

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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TOTAL POPULATION

Universe: Total population 2006-2010 American Community Survey 5-Year Estimates

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Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, for 2010, the 2010 Census provides the official counts of the population and housing units for the nation, states, counties, cities and towns. For 2006 to 2009, the Population Estimates Program provides intercensal estimates of the population for the nation, states, and counties.

		Census Tract 403.08, Clayton County, Georgia	
	Estimate	Margin of Error	
Total	5,08	2 +/-619	

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2006-2010 American Community Survey (ACS) data generally reflect the December 2009 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2000 data. Boundaries for urban areas have not been updated since Census 2000. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2006-2010 American Community Survey

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TOTAL POPULATION

Universe: Total population 2007-2011 American Community Survey 5-Year Estimates

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	Census Tract 403.08, Clayton County, Georgia	
	Estimate	Margin of Error
Total	5,179	+/-663

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Source: U.S. Census Bureau, 2007-2011 American Community Survey

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TOTAL POPULATION

Universe: Total population 2008-2012 American Community Survey 5-Year Estimates

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		Census Tract 403.08, Clayton County, Georgia	
	Estimate	Margin of Error	
Total	5,136	+/-630	

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	Census Tract 403.08, Clayton County, Georgia	
	Estimate	Margin of Error
Total	5,104	+/-630

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	Census Tract 40 County, G	*
	Estimate	Margin of Error
Total	4,761	+/-527

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

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TOTAL POPULATION

Universe: Total population 2011-2015 American Community Survey 5-Year Estimates

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	Census Tract 40 County, 0	
	Estimate	Margin of Error
Total	4,353	+/-487

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2011-2015 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
- 2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
 - 3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
 - 4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
- 5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
 - 6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 - 8. An '(X)' means that the estimate is not applicable or not available.



TOTAL POPULATION

Universe: Total population 2012-2016 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Census Tract 4 County,	
	Estimate	Margin of Error
Total	4,302	+/-454

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2012-2016 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
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 - 3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
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 - 6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 - 8. An '(X)' means that the estimate is not applicable or not available.



TOTAL POPULATION

Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Census Tract 40 County, C	
	Estimate	Margin of Error
Total	4,222	+/-463

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

- 1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
- 2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
 - 3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
 - 4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
- 5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
 - 6. An '***** entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- 7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 - 8. An '(X)' means that the estimate is not applicable or not available.

APPENDIX G – SYNCHRO ANALYSIS RESULTS

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		∱ }			414			4			4	
Traffic Vol, veh/h	5	485	35	5	430	10	10	0	5	5	0	5
Future Vol, veh/h	5	485	35	5	430	10	10	0	5	5	0	5
Conflicting Peds, #/hr	20	0	28	28	0	20	6	0	2	2	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	84	84	84	51	51	51	52	52	52
Heavy Vehicles, %	4	4	4	3	3	3	0	0	0	10	10	10
Mvmt Flow	5	533	38	6	512	12	20	0	10	10	0	10
Major/Minor N	/lajor1		N	Major2		N	Minor1		N	/linor2		
Conflicting Flow All	544	0	0	599	0	0	864	1146	316	829	1159	288
Stage 1	-	-	-	-	-	-	590	590	-	550	550	-
Stage 2	-	-	-	-	-	-	274	556	-	279	609	-
Critical Hdwy	4.18	-	-	4.16	-	-	7.5	6.5	6.9	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.7	5.7	-
Follow-up Hdwy	2.24	-	-	2.23	-	-	3.5	4	3.3	3.6	4.1	3.4
Pot Cap-1 Maneuver	1007	-	-	967	-	-	251	201	686	250	183	685
Stage 1	-	-	-	-	-	-	466	498	-	467	495	-
Stage 2	-	-	-	-	-	-	714	516	-	682	464	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	991	-	-	939	-	-	236	189	665	240	172	671
Mov Cap-2 Maneuver	-	-	-	-	-	-	236	189	-	240	172	-
Stage 1	-	-	-	-	-	-	450	481	-	457	483	-
Stage 2	-	-	-	-	-	-	694	503	-	667	448	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.1			18.3			15.8		
HCM LOS							С			С		
Minor Lane/Major Mvm	t ſ	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SBLn1			
Capacity (veh/h)		301	991	-	_	939	-	-	354			
HCM Lane V/C Ratio			0.006	-	_	0.006	-	_	0.054			
HCM Control Delay (s)		18.3	8.7	-	-	8.9	0	-	15.8			
HCM Lane LOS		С	A	-	-	A	A	-	С			
HCM 95th %tile Q(veh)		0.3	0	-	-	0	-	-	0.2			
2(1011)		5.5				•						

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	¥	∱ }		Ť	†	7	Ţ	†		¥	-f	
Traffic Volume (veh/h)	190	285	25	10	215	50	20	10	0	40	5	215
Future Volume (veh/h)	190	285	25	10	215	50	20	10	0	40	5	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.98	0.98		1.00	0.97		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1841	1841	0	1767	1841	1841
Adj Flow Rate, veh/h	209	313	27	12	256	60	29	15	0	47	6	250
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	3	3	3	4	4	0	4	4	4
Cap, veh/h	661	2150	184	607	994	829	141	246	0	288	8	344
Arrive On Green	0.07	0.66	0.66	0.54	0.54	0.54	0.13	0.13	0.00	0.04	0.23	0.23
Sat Flow, veh/h	1753	3256	279	1022	1856	1548	1083	1841	0	1683	36	1496
Grp Volume(v), veh/h	209	167	173	12	256	60	29	15	0	47	0	256
Grp Sat Flow(s), veh/h/ln	1753	1749	1786	1022	1856	1548	1083	1841	0	1683	0	1531
Q Serve(g_s), s	6.2	4.3	4.4	0.7	8.9	2.2	3.1	0.9	0.0	2.8	0.0	18.6
Cycle Q Clear(g_c), s	6.2	4.3	4.4	0.7	8.9	2.2	10.1	0.9	0.0	2.8	0.0	18.6
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.00	1.00		0.98
Lane Grp Cap(c), veh/h	661	1155	1179	607	994	829	141	246	0	288	0	352
V/C Ratio(X)	0.32	0.14	0.15	0.02	0.26	0.07	0.21	0.06	0.00	0.16	0.00	0.73
Avail Cap(c_a), veh/h	661	1155	1179	607	994	829	251	433	0	337	0	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	7.7	7.7	13.1	15.0	13.5	52.7	45.4	0.0	40.6	0.0	42.7
Incr Delay (d2), s/veh	0.3	0.3	0.3	0.1	0.6	0.2	0.7	0.1	0.0	0.3	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.6	1.7	0.2	3.8	8.0	0.9	0.4	0.0	1.2	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.7	7.9	7.9	13.2	15.6	13.6	53.4	45.5	0.0	40.8	0.0	45.6
LnGrp LOS	В	Α	Α	В	В	В	D	D	Α	D	Α	D
Approach Vol, veh/h		549			328			44			303	
Approach Delay, s/veh		9.0			15.2			50.7			44.9	
Approach LOS		Α			В			D			D	
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	15.0	70.7	11.5	22.8		85.6		34.4				
Change Period (Y+Rc), s	* 6.8	6.4	* 6.8	* 6.8		6.4		* 6.8				
Max Green Setting (Gmax), s	* 8.2	48.6	* 8.2	* 28		63.6		* 43				
Max Q Clear Time (g_c+l1), s	8.2	10.9	4.8	12.1		6.4		20.6				
Green Ext Time (p_c), s	0.0	5.0	0.0	0.1		5.4		0.8				
Intersection Summary												
HCM 6th Ctrl Delay			21.0									
HCM 6th LOS			С									
Notes												

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Baseline Synchro 10 Report Page 1

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Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	^			ተተተ		7
Traffic Volume (veh/h)	355	0	0	275	0	30
Future Volume (Veh/h)	355	0	0	275	0	30
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.84	0.84	0.68	0.68
Hourly flow rate (vph)	390	0	0	327	0	44
Pedestrians	0,0			027		
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)	NOTIC			INOTIC		
Upstream signal (ft)	104					
pX, platoon unblocked	104		0.97		0.97	0.97
vC, conflicting volume			390		499	195
vC1, stage 1 conf vol			370		477	175
vC2, stage 2 conf vol						
vCu, unblocked vol			314		426	113
tC, single (s)			4.2		6.9	7.0
tC, 2 stage (s)			4.2		0.7	7.0
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
					536	886
cM capacity (veh/h)			1201		536	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NE 1
Volume Total	195	195	109	109	109	44
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	44
cSH	1700	1700	1700	1700	1700	886
Volume to Capacity	0.11	0.11	0.06	0.06	0.06	0.05
Queue Length 95th (ft)	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS						Α
Approach Delay (s)	0.0		0.0			9.3
Approach LOS						Α
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utiliz	zation		19.8%	IC	:III evel d	of Service
Analysis Period (min)	Lullott		15.070	IC	O LEVEL	JI JOI VICE
Analysis Fellou (IIIII)			10			

Intersection												
Int Delay, s/veh	8.0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	↑ ↑			414			4			4	
Traffic Vol, veh/h	0	345	35	5	415	10	10	0	5	5	0	5
Future Vol, veh/h	0	345	35	5	415	10	10	0	5	5	0	5
Conflicting Peds, #/hr	20	0	28	28	0	20	6	0	2	2	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	84	84	84	51	51	51	52	52	52
Heavy Vehicles, %	4	4	4	3	3	3	0	0	0	10	10	10
Mvmt Flow	0	379	38	6	494	12	20	0	10	10	0	10
Major/Minor N	1ajor1		N	Major2		N	/linor1		Λ	/linor2		
Conflicting Flow All	526	0	0	445	0	0	691	964	239	724	977	279
Stage 1	-	-	-	-	-	-	426	426	-	532	532	-
Stage 2	_	-	_	_	-	_	265	538	_	192	445	_
Critical Hdwy	4.18	-	-	4.16	-	-	7.5	6.5	6.9	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	_	-	-	-	6.5	5.5	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	_	-	-	-	6.5	5.5	-	6.7	5.7	-
Follow-up Hdwy	2.24	-	_	2.23	-	_	3.5	4	3.3	3.6	4.1	3.4
Pot Cap-1 Maneuver	1023	-	-	1104	-	-	335	257	768	299	236	695
Stage 1	-	-	-		-	-	582	589	-	479	504	-
Stage 2	-	-	-	-	-	-	723	526	-	769	553	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1007	-	-	1072	-	-	317	244	745	288	224	680
Mov Cap-2 Maneuver	-	-	-	-	-	-	317	244	-	288	224	-
Stage 1	-	-	-	-	-	-	565	572	-	471	492	-
Stage 2	-	-	-	-	-	-	703	513	-	758	537	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			14.9			14.3		
HCM LOS	U			U. I			14.9 B			14.3 B		
TIGIVI LOS							D			D		
Minor Lane/Major Mvmt	t l	VBLn1	EBL	EBT	EBR	WBL	WBT	WBR:				
Capacity (veh/h)		392	1007	-		1072	-	-	405			
HCM Lane V/C Ratio		0.075	-	-	-	0.006	-	-	0.047			
HCM Control Delay (s)		14.9	0	-	-	8.4	0	-	14.3			
HCM Lane LOS		В	Α	-	-	Α	Α	-	В			
HCM 95th %tile Q(veh)		0.2	0	-	-	0	-	-	0.1			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ř	∱ }		7		7	J.	†		۲	†	
Traffic Volume (veh/h)	135	205	20	15	285	65	20	10	0	25	5	130
Future Volume (veh/h)	135	205	20	15	285	65	20	10	0	25	5	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.96		1.00	0.96		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1841	1841	0	1767	1841	1841
Adj Flow Rate, veh/h	148	225	22	18	339	77	29	15	0	29	6	151
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	3	3	3	4	4	0	4	4	4
Cap, veh/h	635	2278	221	733	1130	944	169	199	0	234	11	280
Arrive On Green	0.05	0.71	0.71	0.61	0.61	0.61	0.11	0.11	0.00	0.03	0.19	0.19
Sat Flow, veh/h	1753	3217	311	1113	1856	1551	1166	1841	0	1683	58	1470
Grp Volume(v), veh/h	148	121	126	18	339	77	29	15	0	29	0	157
Grp Sat Flow(s), veh/h/ln	1753	1749	1780	1113	1856	1551	1166	1841	0	1683	0	1528
Q Serve(g_s), s	3.9	2.8	2.9	0.8	11.4	2.7	3.0	1.0	0.0	1.9	0.0	12.1
Cycle Q Clear(g_c), s	3.9	2.8	2.9	0.8	11.4	2.7	4.3	1.0	0.0	1.9	0.0	12.1
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.00	1.00		0.96
Lane Grp Cap(c), veh/h	635	1238	1261	733	1130	944	169	199	0	234	0	291
V/C Ratio(X)	0.23	0.10	0.10	0.02	0.30	0.08	0.17	0.08	0.00	0.12	0.00	0.54
Avail Cap(c_a), veh/h	731	1238	1261	733	1130	944	341	470	0	290	0	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.5	5.9	6.0	10.1	12.2	10.5	54.3	52.1	0.0	47.4	0.0	47.5
Incr Delay (d2), s/veh	0.2	0.2	0.2	0.1	0.7	0.2	0.5	0.2	0.0	0.2	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.0	1.1	0.2	4.8	0.9	0.9	0.4	0.0	8.0	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.7	6.1	6.1	10.2	12.8	10.6	54.8	52.3	0.0	47.7	0.0	49.0
LnGrp LOS	Α	Α	Α	В	В	В	D	D	Α	D	Α	D
Approach Vol, veh/h		395			434			44			186	
Approach Delay, s/veh		7.1			12.3			53.9			48.8	
Approach LOS		А			В			D			D	
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	12.9	85.6	10.7	20.8		98.5		31.5				
Change Period (Y+Rc), s	* 6.8	6.4	* 6.8	* 6.8		6.4		* 6.8				
Max Green Setting (Gmax), s	* 13	48.6	* 8.2	* 33		68.6		* 48				
Max Q Clear Time (g_c+I1), s	5.9	13.4	3.9	6.3		4.9		14.1				
Green Ext Time (p_c), s	0.2	6.8	0.0	0.1		3.8		0.5				
Intersection Summary												
HCM 6th Ctrl Delay			18.5									
HCM 6th LOS			В									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

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Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	^			^		7
Traffic Volume (veh/h)	260	0	0	365	0	30
Future Volume (Veh/h)	260	0	0	365	0	30
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.84	0.84	0.68	0.68
Hourly flow rate (vph)	286	0	0	435	0	44
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)	None			None		
Upstream signal (ft)	104					
pX, platoon unblocked	104		0.98		0.98	0.98
vC, conflicting volume			286		431	143
vC1, stage 1 conf vol			200		401	143
vC2, stage 2 conf vol						
vCu, unblocked vol			241		388	95
tC, single (s)			4.2		6.9	7.0
tC, 2 stage (s)			4.2		0.7	7.0
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
•			1294		573	921
cM capacity (veh/h)						
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NE 1
Volume Total	143	143	145	145	145	44
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	44
cSH	1700	1700	1700	1700	1700	921
Volume to Capacity	0.08	0.08	0.09	0.09	0.09	0.05
Queue Length 95th (ft)	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.1
Lane LOS						Α
Approach Delay (s)	0.0		0.0			9.1
Approach LOS						Α
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utiliz	zation		17.2%	IC	:Ulleveld	of Service
Analysis Period (min)	Lation		17.270	ıc	O LOVOI (J. JOI VICE
Analysis r cilou (IIIIII)			10			

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ች	† \$			414			4			4	
Traffic Vol, veh/h	5	610	45	5	535	10	10	0	5	5	0	5
Future Vol., veh/h	5	610	45	5	535	10	10	0	5	5	0	5
Conflicting Peds, #/hr	24	0	35	35	0	24	8	0	2	2	0	8
•	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	84	84	84	51	51	51	52	52	52
Heavy Vehicles, %	4	4	4	3	3	3	0	0	0	10	10	10
Mvmt Flow	5	670	49	6	637	12	20	0	10	10	0	10
Major/Minor M	ajor1		N	Major2			Minor1		N	Minor2		
Conflicting Flow All	673	0	0	754	0	0	1079	1425	397	1026	1443	357
Stage 1	-	-	-	-	-	-	740	740	-	679	679	-
Stage 2	_	_	_	_	-	-	339	685	-	347	764	_
Critical Hdwy	4.18	-	_	4.16	-	-	7.5	6.5	6.9	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.7	5.7	-
Follow-up Hdwy	2.24	-	-	2.23	-	-	3.5	4	3.3	3.6	4.1	3.4
Pot Cap-1 Maneuver	900	-	-	845	-	-	175	137	608	178	122	617
Stage 1	-	-	-	-	-	-	379	426	-	389	430	-
Stage 2	-	-	-	-	-	-	655	451	-	620	392	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	883	-	-	814	-	-	163	127	585	169	113	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	163	127	-	169	113	-
Stage 1	-	-	-	-	-	-	363	408	-	379	417	-
Stage 2	-	-	-	-	-	-	632	437	-	605	376	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.2			24.4			19.7		
HCM LOS							С			С		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1			
Capacity (veh/h)		215	883	-	-	814	_	_	264			
HCM Lane V/C Ratio		0.137		_	_	0.007	_	_	0.073			
HCM Control Delay (s)		24.4	9.1	_	-	9.5	0.1	-	19.7			
HCM Lane LOS		C	A	_	_	Α	A	_	C			
HCM 95th %tile Q(veh)		0.5	0	_	-	0	-	-	0.2			
/ 5 / 5 5 2 (1 6 11)		3.0							3.2			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	∱ ∱		7	†	7	ň	†		Ţ	f)	
Traffic Volume (veh/h)	235	355	30	10	265	60	25	10	0	50	5	265
Future Volume (veh/h)	235	355	30	10	265	60	25	10	0	50	5	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	0.98		1.00	0.97		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1841	1841	0	1767	1841	1841
Adj Flow Rate, veh/h	258	390	33	12	315	71	37	15	0	58	6	308
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	3	3	3	4	4	0	4	4	4
Cap, veh/h	535	1900	160	533	905	751	175	282	0	367	8	428
Arrive On Green	0.05	0.58	0.58	0.49	0.49	0.49	0.15	0.15	0.00	0.06	0.29	0.29
Sat Flow, veh/h	1753	3260	274	945	1856	1539	1026	1841	0	1683	29	1501
Grp Volume(v), veh/h	258	208	215	12	315	71	37	15	0	58	0	314
Grp Sat Flow(s), veh/h/ln	1753	1749	1785	945	1856	1539	1026	1841	0	1683	0	1530
Q Serve(g_s), s	5.0	5.6	5.7	0.7	10.5	2.5	3.4	0.7	0.0	2.7	0.0	18.5
Cycle Q Clear(g_c), s	5.0	5.6	5.7	0.7	10.5	2.5	8.6	0.7	0.0	2.7	0.0	18.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.00	1.00		0.98
Lane Grp Cap(c), veh/h	535	1019	1041	533	905	751	175	282	0	367	0	436
V/C Ratio(X)	0.48	0.20	0.21	0.02	0.35	0.09	0.21	0.05	0.00	0.16	0.00	0.72
Avail Cap(c_a), veh/h	535	1019	1041	533	905	751	246	409	0	414	0	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	9.9	9.9	13.3	15.8	13.8	42.0	36.2	0.0	30.2	0.0	32.1
Incr Delay (d2), s/veh	0.7	0.5	0.4	0.1	1.1	0.3	0.6	0.1	0.0	0.2	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.1	2.2	0.1	4.5	0.9	0.9	0.3	0.0	1.1	0.0	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	10.3	10.3	13.4	16.9	14.0	42.5	36.2	0.0	30.4	0.0	35.0
LnGrp LOS	В	В	В	В	В	В	D	D	Α	С	А	С
Approach Vol, veh/h		681			398			52			372	
Approach Delay, s/veh		12.5			16.2			40.7			34.3	
Approach LOS		В			В			D			С	
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	9.5	55.2	13.2	22.1		64.7		35.3				
Change Period (Y+Rc), s	4.5	6.4	* 6.8	* 6.8		6.4		* 6.8				
Max Green Setting (Gmax), s	5.0	32.6	* 9.2	* 22		48.6		* 38				
Max Q Clear Time (g_c+l1), s	7.0	12.5	4.7	10.6		7.7		20.5				
Green Ext Time (p_c), s	0.0	4.9	0.0	0.1		6.6		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			19.8									
HCM 6th LOS			В									
Notes												

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

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Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	† †			^		7
Traffic Volume (veh/h)	440	0	0	335	0	35
Future Volume (Veh/h)	440	0	0	335	0	35
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.84	0.84	0.68	0.68
Hourly flow rate (vph)	484	0.71	0.01	399	0.00	51
Pedestrians	101	Ü		077		01
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)	NOUG			INOHE		
Upstream signal (ft)	104					
pX, platoon unblocked	104		0.95		0.95	0.95
			484		617	242
vC, conflicting volume vC1, stage 1 conf vol			404		017	242
vC2, stage 2 conf vol						
vCu, unblocked vol			357		496	102
			4.2		6.9	7.0
tC, single (s)			4.2		0.9	7.0
tC, 2 stage (s)			2.2		2 5	2.2
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	94
cM capacity (veh/h)			1134		474	882
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NE 1
Volume Total	242	242	133	133	133	51
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	51
cSH	1700	1700	1700	1700	1700	882
Volume to Capacity	0.14	0.14	0.08	0.08	0.08	0.06
Queue Length 95th (ft)	0	0	0	0	0	5
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS						Α
Approach Delay (s)	0.0		0.0			9.3
Approach LOS						А
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utiliz	zation		22.2%	IC	:III evel d	of Service
Analysis Period (min)	Lation		15	ıc	O LOVOI (or octation
Analysis Fellou (IIIII)			10			

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	ħβ			414			4			4	
Traffic Vol, veh/h	0	430	45	5	535	10	10	0	5	5	0	5
Future Vol, veh/h	0	430	45	5	535	10	10	0	5	5	0	5
Conflicting Peds, #/hr	24	0	35	35	0	24	8	0	2	2	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	84	84	84	51	51	51	52	52	52
Heavy Vehicles, %	4	4	4	3	3	3	0	0	0	10	10	10
Mvmt Flow	0	473	49	6	637	12	20	0	10	10	0	10
Major/Minor M	lajor1			Major2		ı	Minor1		N	/linor2		
Conflicting Flow All	673	0	0	557	0	0	872	1218	298	918	1236	357
Stage 1	-	-	-	-	-	-	533	533	-	679	679	-
Stage 2	_	-	-	_	-	-	339	685	-	239	557	-
Critical Hdwy	4.18	-	-	4.16	-	-	7.5	6.5	6.9	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.7	5.7	-
Follow-up Hdwy	2.24	-	-	2.23	-	-	3.5	4	3.3	3.6	4.1	3.4
Pot Cap-1 Maneuver	900	-	-	1003	-	-	248	182	704	215	164	617
Stage 1	-	-	-	-	-	-	503	528	-	389	430	-
Stage 2	-	-	-	-	-	-	655	451	-	721	491	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	883	-	-	967	-	-	232	170	677	206	154	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	170	-	206	154	-
Stage 1	-	-	-	-	-	-	485	509	-	382	418	-
Stage 2	-	-	-	-	-	-	634	438	-	709	473	-
Ŭ												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			18.4			17.5		
HCM LOS							С			С		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBL _{n1}			
Capacity (veh/h)		297	883	-	-	967	-	-	307			
HCM Lane V/C Ratio		0.099	-	-	-	0.006	-	-	0.063			
HCM Control Delay (s)		18.4	0	-	-	8.7	0	-	17.5			
HCM Lane LOS		С	Α	-	-	Α	Α	-	С			
HCM 95th %tile Q(veh)		0.3	0	-	-	0	-	-	0.2			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	∱ β		ሻ	†	7	ሻ	1		ሻ	†	
Traffic Volume (veh/h)	165	255	25	20	360	80	25	10	0	30	5	160
Future Volume (veh/h)	165	255	25	20	360	80	25	10	0	30	5	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	0.97		1.00	0.96		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1841	1841	0	1767	1841	1841
Adj Flow Rate, veh/h	181	280	27	24	429	95	37	15	0	35	6	186
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	3	3	3	4	4	0	4	4	4
Cap, veh/h	477	2011	192	591	917	761	225	254	0	302	12	360
Arrive On Green	0.06	0.62	0.62	0.49	0.49	0.49	0.14	0.14	0.00	0.04	0.24	0.24
Sat Flow, veh/h	1753	3220	308	1049	1856	1539	1132	1841	0	1683	48	1480
Grp Volume(v), veh/h	181	151	156	24	429	95	37	15	0	35	0	192
Grp Sat Flow(s), veh/h/ln	1753	1749	1779	1049	1856	1539	1132	1841	0	1683	0	1528
Q Serve(g_s), s	4.9	3.5	3.6	1.2	15.2	3.3	2.9	0.7	0.0	1.7	0.0	10.9
Cycle Q Clear(g_c), s	4.9	3.5	3.6	1.2	15.2	3.3	3.3	0.7	0.0	1.7	0.0	10.9
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.00	1.00		0.97
Lane Grp Cap(c), veh/h	477	1092	1111	591	917	761	225	254	0	302	0	372
V/C Ratio(X)	0.38	0.14	0.14	0.04	0.47	0.12	0.16	0.06	0.00	0.12	0.00	0.52
Avail Cap(c_a), veh/h	477	1092	1111	591	917	761	308	390	0	377	0	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.9	7.7	7.7	13.1	16.6	13.6	38.7	37.4	0.0	33.1	0.0	32.7
Incr Delay (d2), s/veh	0.5	0.3	0.3	0.1	1.7	0.3	0.3	0.1	0.0	0.2	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.3	1.3	0.3	6.5	1.2	0.8	0.3	0.0	0.7	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	8.0	8.0	13.2	18.3	14.0	39.0	37.5	0.0	33.3	0.0	33.8
LnGrp LOS	В	Α	Α	В	В	В	D	D	Α	С	Α	С
Approach Vol, veh/h		488			548			52			227	
Approach Delay, s/veh		9.6			17.3			38.6			33.7	
Approach LOS		А			В			D			С	
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	13.0		10.5	20.6				31.2				
	* 6.8	55.8	* 6.8	* 6.8		68.8 6.4		* 6.8				
Change Period (Y+Rc), s Max Green Setting (Gmax), s	* 6.2	6.4	* 8.2	* 21		50.6		* 36				
Max Q Clear Time (q_c+l1), s	6.9	37.6 17.2	3.7	5.3		5.6		12.9				
.0_ ,						4.7						
Green Ext Time (p_c), s	0.0	7.1	0.0	0.1		4.7		0.6				
Intersection Summary			10.1									
HCM 6th Ctrl Delay			18.1									
HCM 6th LOS			В									
Notes												

Notes
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

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Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	† †			^		7
Traffic Volume (veh/h)	320	0	0	460	0	35
Future Volume (Veh/h)	320	0	0	460	0	35
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Peak Hour Factor	0.91	0.91	0.84	0.84	0.68	0.68
Hourly flow rate (vph)	352	0	0	548	0	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	104					
pX, platoon unblocked			0.97		0.97	0.97
vC, conflicting volume			352		535	176
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			272		460	91
tC, single (s)			4.2		6.9	7.0
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	94
cM capacity (veh/h)			1243		509	915
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NE 1
Volume Total	176	176	183	183	183	51
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	51
cSH	1700	1700	1700	1700	1700	915
Volume to Capacity	0.10	0.10	0.11	0.11	0.11	0.06
Queue Length 95th (ft)	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.2
Lane LOS						А
Approach Delay (s)	0.0		0.0			9.2
Approach LOS						А
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization	ation		18.8%	IC	U Level o	f Service
Analysis Period (min)			15			
<i>J</i> (<i>)</i>						

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ች	f			4			4			4	
Traffic Vol, veh/h	5	610	45	5	535	10	10	0	5	5	0	5
Future Vol, veh/h	5	610	45	5	535	10	10	0	5	5	0	5
Conflicting Peds, #/hr	24	0	35	35	0	24	8	0	2	2	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized		_	None	-	-	None	-	-	None	-	- 11	None
Storage Length	0	-	_	-	_	-	-	-	-	-	-	-
Veh in Median Storage		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	84	84	84	51	51	51	52	52	52
Heavy Vehicles, %	4	4	4	3	3	3	0	0	0	10	10	10
Mvmt Flow	5	670	49	6	637	12	20	0	10	10	0	10
Major/Minor I	Major1		N	Major2		ľ	Minor1		N	/linor2		
Conflicting Flow All	673	0	0	754	0	0	1408	1425	732	1391	1443	675
Stage 1	-	-	-	-	-	-	740	740	-	679	679	-
Stage 2	-	-	-	-	-	-	668	685	-	712	764	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.1	6.5	6.2	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-		-	-	6.1	5.5	-	6.2	5.6	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.5	4	3.3	3.59	4.09	3.39
Pot Cap-1 Maneuver	908	-	-	852	-	-	118	137	424	115	127	440
Stage 1	-	-	-	-	-	-	412	426	-	429	439	-
Stage 2	-	-	-	-	-	-	451	451	-	411	401	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	891	-	-	821	-	-	109	127	408	109	118	429
Mov Cap-2 Maneuver	-	-	-	-	-	-	109	127	-	109	118	-
Stage 1	-	-	-	-	-	-	395	408	-	418	426	-
Stage 2	-	-	-	-	-	-	433	437	-	398	384	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.1			36.3			28.2		
HCM LOS							Ε			D		
Minor Lane/Major Mvm	nt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SBLn1			
Capacity (veh/h)		144	891		-	821	-		174			
HCM Lane V/C Ratio		0.204		-	-	0.007	-	-	0.111			
HCM Control Delay (s)		36.3	9.1	-	-	9.4	0	-	28.2			
HCM Lane LOS		Е	Α	-	-	Α	Α	-	D			
HCM 95th %tile Q(veh))	0.7	0		-	0	-	-	0.4			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	¥	ĵ»		¥	ĵ»		Ţ	f)		ř	f)	
Traffic Volume (veh/h)	235	355	30	10	265	60	25	10	35	50	5	265
Future Volume (veh/h)	235	355	30	10	265	60	25	10	35	50	5	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	0.96		0.93	0.95		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1841	1841	1841	1767	1841	1841
Adj Flow Rate, veh/h	258	390	33	12	315	71	37	15	51	58	6	308
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	3	3	3	4	4	4	4	4	4
Cap, veh/h	489	970	82	468	613	138	174	54	184	321	8	426
Arrive On Green	0.09	0.58	0.58	0.42	0.42	0.42	0.16	0.16	0.16	0.06	0.29	0.29
Sat Flow, veh/h	1753	1671	141	943	1458	329	1011	347	1180	1683	29	1479
Grp Volume(v), veh/h	258	0	423	12	0	386	37	0	66	58	0	314
Grp Sat Flow(s), veh/h/ln	1753	0	1812	943	0	1786	1011	0	1528	1683	0	1508
Q Serve(g_s), s	8.1	0.0	12.8	0.7	0.0	16.0	3.4	0.0	3.8	2.7	0.0	18.7
Cycle Q Clear(g_c), s	8.1	0.0	12.8	0.7	0.0	16.0	8.9	0.0	3.8	2.7	0.0	18.7
Prop In Lane	1.00	0.0	0.08	1.00	0.0	0.18	1.00	0.0	0.77	1.00	0.0	0.98
Lane Grp Cap(c), veh/h	489	0	1052	468	0	751	174	0	238	321	0	434
V/C Ratio(X)	0.53	0.00	0.40	0.03	0.00	0.51	0.21	0.00	0.28	0.18	0.00	0.72
Avail Cap(c_a), veh/h	489	0.00	1052	468	0.00	751	241	0.00	339	368	0.00	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Upstream Filter(I)	15.0	0.00	11.5	17.0	0.00	21.4	42.0	0.00		30.1	0.00	32.0
Uniform Delay (d), s/veh	1.1		1.1	0.1		21.4			37.3 0.6	0.3		32.0
Incr Delay (d2), s/veh		0.0			0.0		0.6	0.0			0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.0	5.0	0.2	0.0	6.9	0.9	0.0	1.4	1.1	0.0	7.0
Unsig. Movement Delay, s/veh		0.0	10 /	171	0.0	22.0	40 /	0.0	27.0	20.4	0.0	25.1
LnGrp Delay(d),s/veh	16.1	0.0	12.6	17.1	0.0	23.9	42.6	0.0	37.9	30.4	0.0	35.1
LnGrp LOS	В	A	В	В	Α	С	D	A	D	С	Α	D
Approach Vol, veh/h		681			398			103			372	
Approach Delay, s/veh		13.9			23.7			39.6			34.3	
Approach LOS		В			С			D			С	
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	16.0	48.4	13.2	22.4		64.4		35.6				
Change Period (Y+Rc), s	* 6.8	6.4	* 6.8	* 6.8		6.4		* 6.8				
Max Green Setting (Gmax), s	* 9.2	32.6	* 9.2	* 22		48.6		* 38				
Max Q Clear Time (g_c+I1), s	10.1	18.0	4.7	10.9		14.8		20.7				
Green Ext Time (p_c), s	0.0	4.3	0.0	0.2		6.8		1.0				
Intersection Summary												
HCM 6th Ctrl Delay			23.0									
HCM 6th LOS			С									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

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Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	f)			4			4			4	
Traffic Vol, veh/h	0	430	45	5	535	10	10	0	5	5	0	5
Future Vol, veh/h	0	430	45	5	535	10	10	0	5	5	0	5
Conflicting Peds, #/hr	24	0	35	35	0	24	8	0	2	2	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	84	84	84	51	51	51	52	52	52
Heavy Vehicles, %	4	4	4	3	3	3	0	0	0	10	10	10
Mvmt Flow	0	473	49	6	637	12	20	0	10	10	0	10
Major/Minor	Major1			Major2		N	Minor1			Minor2		
Conflicting Flow All	673	0	0	557	0	0	1201	1218	535	1184	1236	675
Stage 1	-	-	-	-	-	-	533	533	-	679	679	-
Stage 2	-	-	-	-	-	-	668	685	-	505	557	-
Critical Hdwy	4.14	-	-	4.13	-	-	7.1	6.5	6.2	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.2	5.6	-
Follow-up Hdwy	2.236	-	-	2.227	-	-	3.5	4	3.3	3.59	4.09	3.39
Pot Cap-1 Maneuver	908	-	-	1009	-	-	163	182	549	160	170	440
Stage 1	-	-	-	-	-	-	534	528	-	429	439	-
Stage 2	-	-	-	-	-	-	451	451	-	535	499	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	891	-	-	973	-	-	151	170	528	153	159	429
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	170	-	153	159	-
Stage 1	-	-	-	-	-	-	515	509	-	421	426	-
Stage 2	-	-	-	-	-	-	433	438	-	524	481	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			26.3			22.4		
HCM LOS							D			С		
Minor Lane/Major Mvm	nt N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		198	891	-	-	973	-	-	226			
HCM Lane V/C Ratio		0.149	-	-	_	0.006	-	_	0.085			
HCM Control Delay (s)		26.3	0	-	-	8.7	0	-	22.4			
HCM Lane LOS		D	A	-	-	A	A	-	С			
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.3			
	,											

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	1>		ሻ	ĵ»		ሻ	î,		ሻ	1>	
Traffic Volume (veh/h)	165	255	25	20	360	80	25	10	35	30	5	160
Future Volume (veh/h)	165	255	25	20	360	80	25	10	35	30	5	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	0.94		0.92	0.95		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1856	1856	1856	1841	1841	1841	1767	1841	1841
Adj Flow Rate, veh/h	181	280	27	24	429	95	37	15	51	35	6	186
Peak Hour Factor	0.91	0.91	0.91	0.84	0.84	0.84	0.68	0.68	0.68	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	3	3	3	4	4	4	4	4	4
Cap, veh/h	426	1030	99	593	727	161	219	48	162	254	11	354
Arrive On Green	0.06	0.62	0.62	0.50	0.50	0.50	0.14	0.14	0.14	0.04	0.24	0.24
Sat Flow, veh/h	1753	1650	159	1049	1465	324	1105	345	1172	1683	47	1455
Grp Volume(v), veh/h	181	0	307	24	0	524	37	0	66	35	0	192
Grp Sat Flow(s), veh/h/ln	1753	0	1809	1049	0	1789	1105	0	1516	1683	0	1502
Q Serve(g_s), s	4.9	0.0	7.7	1.2	0.0	20.9	3.0	0.0	3.9	1.7	0.0	11.1
Cycle Q Clear(g_c), s	4.9	0.0	7.7	1.2	0.0	20.9	3.6	0.0	3.9	1.7	0.0	11.1
Prop In Lane	1.00	0.0	0.09	1.00	0.0	0.18	1.00	0.0	0.77	1.00	0.0	0.97
Lane Grp Cap(c), veh/h	426	0	1129	593	0	888	219	0	210	254	0	366
V/C Ratio(X)	0.42	0.00	0.27	0.04	0.00	0.59	0.17	0.00	0.31	0.14	0.00	0.52
Avail Cap(c_a), veh/h	426	0.00	1129	593	0.00	888	300	0.00	321	329	0.00	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	8.5	13.0	0.0	17.9	38.9	0.0	38.8	33.2	0.0	32.8
Incr Delay (d2), s/veh	0.7	0.0	0.6	0.1	0.0	2.9	0.4	0.0	0.8	0.2	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.9	0.3	0.0	8.8	0.8	0.0	1.5	0.7	0.0	4.1
Unsig. Movement Delay, s/veh		0.0	2.7	0.0	0.0	0.0	0.0	0.0	1.0	0.7	0.0	7.1
LnGrp Delay(d),s/veh	14.0	0.0	9.1	13.1	0.0	20.8	39.3	0.0	39.7	33.5	0.0	34.0
LnGrp LOS	В	Α	A	В	Α	C	D	Α	D	C	Α	C
Approach Vol, veh/h		488			548			103			227	
Approach Delay, s/veh		10.9			20.5			39.5			33.9	
Approach LOS		В			20.5 C			37.5 D			33.7 C	
					C						C	
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	12.8	56.0	10.5	20.6		68.8		31.2				
Change Period (Y+Rc), s	* 6.8	6.4	* 6.8	* 6.8		6.4		* 6.8				
Max Green Setting (Gmax), s	* 6	37.8	* 8.2	* 21		50.6		* 36				
Max Q Clear Time (g_c+I1), s	6.9	22.9	3.7	5.9		9.7		13.1				
Green Ext Time (p_c), s	0.0	6.2	0.0	0.2		4.8		0.6				
Intersection Summary												
HCM 6th Ctrl Delay			20.7									
HCM 6th LOS			С									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

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APPENDIX H – ROUNDABOUT ANALYSIS RESULTS

Roundabout Analysis Tool

v 4.1 5/19/17

Welcome to GDOT's Roundabout Analysis Tool. This tool is designed for the user to determine the functionality of a proposed roundabout. The analysis is based on the Highway Capacity Manual 2010 Edition and 6th Edition Methodologies, NCHRP Report 672, and FHWA's Roundabout Informational Guide. Please read the notes in the <u>Instructions</u> tab before using the spreadsheet.

Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study

Year, Peak Period: 2019, 12:00 PM
County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
the Mini, Single Lane
and Multi Lane
Worksheets.

Roundabout Considerations Worksheet

Roundabouts may not operate well if there is too much traffic entering the intersection or if the percentage of traffic on the major road is too high. Candidate intersections shall be analyzed to determine whether a roundabout will perform acceptably. Shown below are planning level thresholds. A capacity analysis should be performed to determine lane configuration based on traffic volumes.

# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	8,225	75%
Minor Street	2,775	25%
Total volumes	11,000	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

do up to next

Yes



<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

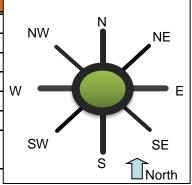
- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

Roundabout Type:	Single	Lane				Chart Key:		•
# of Approaches:	4			Mini/	Single Lane	Street	Name	
Name of Streets:	Virginia Ave	e				All		
	Clay Pl					Bypass?		
	Doug Davis	Dr			Multi-lane	Street	Name	
						Inner Ln	Outer Ln	
						Bypass?		
					•			
<u>Approach L</u>	eg Characte.	eristics:	_				_	
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
Ç	South Leg (5)	SW Leg (6)	,	West Leg (7)		NW Leg (8)	
Street Name:	Cla	y Pl			Virgin	ia Ave		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
	-	•		•				





General & Site Infor	mation	v 4.1	
Analyst:	Joshua Ekstedt		N
Agency/Co:	Stantec		IN
Date:	5/30/2019		
Project or PI#:	Virginia Ave Roundabout Feasibility Study		W
Year, Peak Hour:	2019, 12:00 PM		VV
County/District:	Fulton County		
Intersection	Virginia Ave/Doug Davis Dr @ Clay Pl/Virginia Ave		S
Name:			



Vc	olumes		Entry Legs (FROM)							
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)	
	N (1), vph	0	0	50	0	10	0	185	0	
Exit	NE (2), vph	0	0	0	0	0	0	0	0	
Legs	E (3), vph	40	0	0	0	30	0	285	0	
(TO)	SE (4), vph	0	0	0	0	0	0	0	0	
	S (5), vph	5	0	15	0	0	0	25	0	
	SW (6), vph	0	0	0	0	0	0	0	0	
	W (7), vph	210	0	205	0	20	0	0	0	
	NW (8), vph	0	0	0	0	0	0	0	0	
Output	Total Vehicles	255	0	270	0	60	0	495	0	

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	5	0	7	0	17	0	17	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.999	1.000	0.998	1.000	0.998	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	58	0	17	0	219	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	57	0	0	0	51	0	337	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	17	0	0	0	30	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	300	0	239	0	34	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	365	0	314	0	103	0	586	0
Conflicting flow, pcu/h	290	0	270	0	614	0	82	0



Results: Approach Measures of Effectiveness									
HCM 6th Edition	N	NE	Е	SE	S	SW	W	NW	
Entry Capacity, vph	1010	1380	1021	1380	718	1380	1230	1380	
Entry Flow Rates, vph	359	0	307	0	100	0	569	0	
V/C ratio	0.36	0.00	0.30	0.00	0.14	0.00	0.46	0.00	
Control Delay, sec/pcu	7	3	7	3	7	3	8	3	
LOS	Α	Α	Α	Α	Α	Α	Α	А	
95th % Queue (ft)	41	0	33	0	12	0	65	0	

Unit Legend:

				peu – puss	criger car t	arric
Bypass Lane Merge Point Analysis (if a	pplicable)				
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						2
Does the bypass have a dedicated receiving lane?						
Volumes						
Right Turn Volume removed from Entry Leg						
Volume Characteristics (for entry leg)						
PHF						
F_{HV}						
F _{ped}						
NOTE: Volume Characteristics for Exit Leg are already taken	n into accoun	t				
Entry/Conflicting Flows						
Entry Flow, pcu/hr						
Conflicting Flow, pcu/hr						
Bypass Lane Results (HCM 6th Edition)						
Entry Capacity of Bypass, vph						
Flow Rates of Exiting Traffic, vph						
V/C ratio						
Control Delay, s/veh						
LOS						
95th % Queue (ft)						
Approach w/Bypass Delay, s/veh						
Approach w/Bypass LOS						

V 4.1 5/19/17

Welcome to GDOT's Roundabout Analysis Tool. This tool is designed for the user to determine the functionality of a proposed roundabout. The analysis is based on the Highway Capacity Manual 2010 Edition and 6th Edition Methodologies, NCHRP Report 672, and FHWA's Roundabout Informational Guide. Please read the notes in the <u>Instructions</u> tab before using the spreadsheet.

Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study

Year, Peak Period: 2023, 12:00 PM
County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
the Mini, Single Lane
and Multi Lane
Worksheets.

Roundabout Considerations Worksheet

Roundabouts may not operate well if there is too much traffic entering the intersection or if the percentage of traffic on the major road is too high. Candidate intersections shall be analyzed to determine whether a roundabout will perform acceptably. Shown below are planning level thresholds. A capacity analysis should be performed to determine lane configuration based on traffic volumes.

# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	8,525	75%
Minor Street	2,875	25%
Total volumes	11,400	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

do up to flext secti



<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

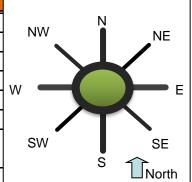
- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

Roundabout Type:	Single	Lane				Chart Key:		
# of Approaches:	4		-	Mini/	Single Lane	Street	Name	
Name of Streets:	Virginia Ave	2				All		
	Clay Pl					Bypass?		
	Doug Davis	Dr			Multi-lane	Street	Name	
						Inner Ln	Outer Ln	
						Bypass?		
					·			
<u>Approach L</u>	eg Characte	eristics:						
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No		No		No			
S	South Leg (5)	SW Leg (6)		West Leg (7)	NW Leg (8)	
Street Name:	Cla	y Pl			Virgin	ia Ave		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
			_					
Bypass to Adj Leg? Street Name: Entry Lane Config	No South Leg (5 Cla All	•			No West Leg (7 Virgin All		NW Leg (8)	





General & Site Infor	<i>rmation</i> v	4.1
Analyst:	Joshua Ekstedt	NW
Agency/Co:	Stantec	1444
Date:	5/30/2019	
Project or PI#:	Virginia Ave Roundabout Feasibility Study	□ w -
Year, Peak Hour:	2023, 12:00 PM	v
County/District:	Fulton County	
Intersection	Virginia Ave/Doug Davis Dr @ Clay Pl/Virginia Ave	sw
Name:		



Vo	olumes		Entry Legs (FROM)							
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)	
	N (1), vph	0	0	50	0	10	0	190	0	
Exit	NE (2), vph	0	0	0	0	0	0	0	0	
Legs	E (3), vph	40	0	0	0	30	0	295	0	
(TO)	SE (4), vph	0	0	0	0	0	0	0	0	
	S (5), vph	5	0	20	0	0	0	25	0	
	SW (6), vph	0	0	0	0	0	0	0	0	
	W (7), vph	220	0	210	0	20	0	0	0	
	NW (8), vph	0	0	0	0	0	0	0	0	
Output	Total Vehicles	265	0	280	0	60	0	510	0	

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	5	0	7	0	17	0	17	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.999	1.000	0.998	1.000	0.998	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	58	0	17	0	225	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	57	0	0	0	51	0	349	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	23	0	0	0	30	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	315	0	245	0	34	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	379	0	326	0	103	0	604	0
Conflicting flow, pcu/h	302	0	276	0	631	0	88	0



	Results: Approach Measures of Effectiveness											
HCM 6th Edition	N	NE	E	SE	S	SW	W	NW				
Entry Capacity, vph	998	1380	1015	1380	705	1380	1222	1380				
Entry Flow Rates, vph	373	0	318	0	100	0	586	0				
V/C ratio	0.37	0.00	0.31	0.00	0.14	0.00	0.48	0.00				
Control Delay, sec/pcu	8	3	7	3	7	3	8	3				
LOS	Α	Α	Α	Α	Α	Α	Α	А				
95th % Queue (ft)	44	0	35	0	13	0	69	0				

Unit Legend:

	peu – passenger ear unit											
Bypass Lane Merge Point Analysis (if a	pplicable)										
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6						
Select Entry Leg from Bypass (FROM)												
Select Exit Leg for Bypass (TO)						4						
Does the bypass have a dedicated receiving lane?												
Volumes												
Right Turn Volume removed from Entry Leg												
Volume Characteristics (for entry leg)	Į.											
PHF												
F_{HV}												
F _{ped}												
NOTE: Volume Characteristics for Exit Leg are already take	n into accoun	t										
Entry/Conflicting Flows												
Entry Flow, pcu/hr												
Conflicting Flow, pcu/hr												
Bypass Lane Results (HCM 6th Edition)												
Entry Capacity of Bypass, vph												
Flow Rates of Exiting Traffic, vph												
V/C ratio												
Control Delay, s/veh												
LOS												
95th % Queue (ft)												
Approach w/Bypass Delay, s/veh												
Approach w/Bypass LOS												

V 4.1 5/19/17

Welcome to GDOT's Roundabout Analysis Tool. This tool is designed for the user to determine the functionality of a proposed roundabout. The analysis is based on the Highway Capacity Manual 2010 Edition and 6th Edition Methodologies, NCHRP Report 672, and FHWA's Roundabout Informational Guide. Please read the notes in the <u>Instructions</u> tab before using the spreadsheet.

Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study

Year, Peak Period: 2025, 12:00 PM
County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
the Mini, Single Lane
and Multi Lane
Worksheets.

Roundabout Considerations Worksheet

Roundabouts may not operate well if there is too much traffic entering the intersection or if the percentage of traffic on the major road is too high. Candidate intersections shall be analyzed to determine whether a roundabout will perform acceptably. Shown below are planning level thresholds. A capacity analysis should be performed to determine lane configuration based on traffic volumes.

# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	8,675	75%
Minor Street	2,900	25%
Total volumes	11,575	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

Yes

Go up to next section...



<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

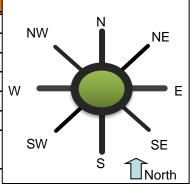
- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

Roundabout Type:	Single	Lane				Chart Key:		•			
# of Approaches:	4			Mini/	Single Lane	Street	Name				
Name of Streets:	Virginia Ave	e				All					
	Clay Pl					Bypass?					
	Doug Davis	Dr			Multi-lane	Street	Name				
						Inner Ln	Outer Ln				
						Bypass?					
					•						
<u>Approach L</u>	Approach Leg Characteristics:										
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)				
Street Name:	Virgin	ia Ave			Doug D	avis Dr					
Entry Lane Config	All				All						
Bypass to Adj Leg?	No				No						
Ç	South Leg (5)	SW Leg (6)	,	West Leg (7)		NW Leg (8)				
Street Name:	Cla	y Pl			Virgin	ia Ave					
Entry Lane Config	All				All						
Bypass to Adj Leg?	No				No						
	-	•		•							





General & Site Inf	ormation	v 4.1
Analyst:	Joshua Ekstedt	
Agency/Co:	Stantec	
Date:	5/30/2019	
Project or PI#:	Virginia Ave Roundabout Feasibility Study	
Year, Peak Hour:	2025, 12:00 PM	
County/District:	Fulton County	
Intersection	Virginia Ave/Doug Davis Dr @ Clay Pl/Virginia Ave	
Name:		



Vc	olumes			Entr	y Legs (FF	ROM)			
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)
	N (1), vph	0	0	55	0	10	0	195	0
Exit	NE (2), vph	0	0	0	0	0	0	0	0
Legs	E (3), vph	40	0	0	0	30	0	300	0
(TO)	SE (4), vph	0	0	0	0	0	0	0	
	S (5), vph	5	0	20	0	0	0	25	0
	SW (6), vph	0	0	0	0	0	0	0	0
	W (7), vph	220	0	210	0	20	0	0	0
	NW (8), vph	0	0	0	0	0	0	0	0
Output	Total Vehicles	265	0	285	0	60	0	520	0

Volume Characteristics	N	NE	Е	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	5	0	18	0	7	0	17	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.998	1.000	0.999	1.000	0.998	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	64	0	17	0	231	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	57	0	0	0	51	0	355	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	23	0	0	0	30	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	315	0	245	0	34	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	379	0	332	0	103	0	616	0
Conflicting flow, pcu/h	302	0	282	0	643	0	88	0



Results: Approach Measures of Effectiveness											
HCM 6th Edition	N	NE	E	SE	S	SW	W	NW			
Entry Capacity, vph	998	1380	1007	1380	698	1380	1222	1380			
Entry Flow Rates, vph	373	0	324	0	100	0	598	0			
V/C ratio	0.37	0.00	0.32	0.00	0.14	0.00	0.49	0.00			
Control Delay, sec/pcu	8	3	7	3	7	3	8	3			
LOS	Α	Α	Α	Α	Α	Α	Α	А			
95th % Queue (ft)	44	0	36	0	13	0	71	0			

Unit Legend:

Bypass Lane Merge Point Analysis (if a	pplicable)			renger car	
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						_
Does the bypass have a dedicated receiving lane?						
Volumes						
Right Turn Volume removed from Entry Leg						
Volume Characteristics (for entry leg)						
PHF						
F_{HV}						
F _{ped}						
NOTE: Volume Characteristics for Exit Leg are already take	n into accoun	t				
Entry/Conflicting Flows						
Entry Flow, pcu/hr						
Conflicting Flow, pcu/hr						
Bypass Lane Results (HCM 6th Edition)						
Entry Capacity of Bypass, vph						
Flow Rates of Exiting Traffic, vph						
V/C ratio						
Control Delay, s/veh						
LOS						
95th % Queue (ft)	_	_			_	
Approach w/Bypass Delay, s/veh						
Approach w/Bypass LOS						

V 4.1 5/19/17

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Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study

Year, Peak Period: 2043, 12:00 PM
County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
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and Multi Lane
Worksheets.

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# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	10,200	75%
Minor Street	3,425	25%
Total volumes	13,625	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

Go up to liext st

Yes



<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

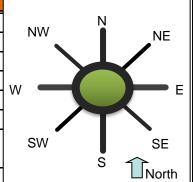
- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

Roundabout Type:	Single	Lane				Chart Key:		•
# of Approaches:	4			Mini/	Single Lane	Street	Name	
Name of Streets:	Virginia Ave	e				All		
	Clay Pl					Bypass?		
	Doug Davis	Dr			Multi-lane	Street	Name	
						Inner Ln	Outer Ln	
						Bypass?		
					•			
<u>Approach L</u>	eg Characte.	eristics:	_				_	
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
Ç	South Leg (5)	SW Leg (6)	,	West Leg (7)		NW Leg (8)	
Street Name:	Cla	y Pl			Virgin	ia Ave		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
	-	•		•				





General & Site Infor	rmation	v 4.1
Analyst:	Joshua Ekstedt	NW
Agency/Co:	Stantec	INVV
Date:	5/30/2019	
Project or PI#:	Virginia Ave Roundabout Feasibility Study	
Year, Peak Hour:	2043, 12:00 PM	
County/District:	Fulton County	
Intersection	Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave	sw
Name:		



Vo	olumes			Entr	y Legs (FR	ROM)			
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)
	N (1), vph	0	0	60	0	10	0	230	0
Exit	NE (2), vph	0	0	0	0	0	0	0	0
Legs	E (3), vph	50	0	0	0	35	0	355	0
(TO)	SE (4), vph	0	0	0		0	0	0	0
	S (5), vph	5	0	25	0	0	0	30	0
	SW (6), vph	0	0	0	0	0	0	0	0
	W (7) <i>,</i> vph	260	0	255	0	25	0	0	0
	NW (8), vph	0	0	0	0	0	0	0	0
Output	Total Vehicles	315	0	340	0	70	0	615	0

Volume Characteristics	N	NE	Е	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	6	0	8	0	21	0	21	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.999	1.000	0.997	1.000	0.997	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	70	0	17	0	272	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	71	0	0	0	60	0	420	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	29	0	0	0	36	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	372	0	297	0	43	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	450	0	396	0	120	0	728	0
Conflicting flow, pcu/h	369	0	332	0	764	0	108	0



Results: Approach Measures of Effectiveness								
HCM 6th Edition N NE E SE S SW W NW								
Entry Capacity, vph	933	1380	958	1380	616	1380	1197	1380
Entry Flow Rates, vph	444	0	386	0	117	0	707	0
V/C ratio	0.48	0.00	0.40	0.00	0.19	0.00	0.59	0.00
Control Delay, sec/pcu	10	3	8	3	8	3	10	3
LOS	Α	Α	Α	Α	Α	Α	В	Α
95th % Queue (ft)	66	0	51	0	18	0	105	0

Unit Legend:

peu – passenger ear unit						
Bypass Lane Merge Point Analysis (if a	pplicable)				
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						2
Does the bypass have a dedicated receiving lane?						
Volumes						
Right Turn Volume removed from Entry Leg						
Volume Characteristics (for entry leg)						
PHF						
F_{HV}						
F _{ped}						
NOTE: Volume Characteristics for Exit Leg are already taken	n into accoun	t				
Entry/Conflicting Flows						
Entry Flow, pcu/hr						
Conflicting Flow, pcu/hr						
Bypass Lane Results (HCM 6th Edition)						
Entry Capacity of Bypass, vph						
Flow Rates of Exiting Traffic, vph						
V/C ratio						
Control Delay, s/veh						
LOS						
95th % Queue (ft)						
Approach w/Bypass Delay, s/veh						
Approach w/Bypass LOS						

v 4.1 5/19/17

Welcome to GDOT's Roundabout Analysis Tool. This tool is designed for the user to determine the functionality of a proposed roundabout. The analysis is based on the Highway Capacity Manual 2010 Edition and 6th Edition Methodologies, NCHRP Report 672, and FHWA's Roundabout Informational Guide. Please read the notes in the <u>Instructions</u> tab before using the spreadsheet.

Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study

Year, Peak Period: 2045, 12:00 PM
County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
the Mini, Single Lane
and Multi Lane
Worksheets.

Roundabout Considerations Worksheet

Roundabouts may not operate well if there is too much traffic entering the intersection or if the percentage of traffic on the major road is too high. Candidate intersections shall be analyzed to determine whether a roundabout will perform acceptably. Shown below are planning level thresholds. A capacity analysis should be performed to determine lane configuration based on traffic volumes.

# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	10,375	75%
Minor Street	3,525	25%
Total volumes	13,900	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

GO UP to



<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

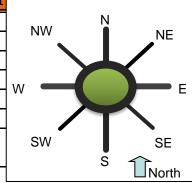
- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

Roundabout Type:	Single	Lane				Chart Key:		•
# of Approaches:	4			Mini/	Single Lane	Street	Name	
Name of Streets:	Virginia Ave	e				All		
	Clay Pl					Bypass?		
	Doug Davis	Dr			Multi-lane	Street	Name	
						Inner Ln	Outer Ln	
						Bypass?		
					•			
<u>Approach L</u>	eg Characte.	eristics:	_				_	
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
Ç	South Leg (5)	SW Leg (6)	,	West Leg (7)		NW Leg (8)	
Street Name:	Cla	y Pl			Virgin	ia Ave		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
		•		•				





General & Site Infor	mation	v 4.1
Analyst:	Joshua Ekstedt	NW
Agency/Co:	Stantec	1111
Date:	5/30/2019	<u> </u>
Project or PI#:	Virginia Ave Roundabout Feasibility Study	
Year, Peak Hour:	2045, 12:00 PM	
County/District:	Fulton County	
Intersection	Virginia Ave/Doug Davis Dr @ Clay Pl/Virginia Ave	sw
Name:		
Volumes	Francisco (FROM)	



Vo	olumes	Entry Legs (FROM)							
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)
	N (1), vph	0	0	65	0	15	0	235	0
Exit	NE (2), vph	0	0	0	0	0	0	0	0
Legs	E (3), vph	50	0	0	0	40	0	360	0
(TO)	SE (4), vph	0	0	0	0	0	0	0	0
	S (5), vph	5	0	25	0	0	0	30	0
	SW (6), vph	0	0	0	0	0	0	0	0
	W (7) <i>,</i> vph	265	0	260	0	25	0	0	0
	NW (8), vph	0	0	0	0	0	0	0	0
Output	Total Vehicles	320	0	350	0	80	0	625	0

Volume Characteristics	N	NE	Е	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	7	0	9	0	21	0	21	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.999	1.000	0.997	1.000	0.997	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	76	0	26	0	278	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	71	0	0	0	68	0	426	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	29	0	0	0	36	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	379	0	303	0	43	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	457	0	408	0	137	0	740	0
Conflicting flow, pcu/h	375	0	347	0	776	0	108	0



Results: Approach Measures of Effectiveness									
HCM 6th Edition	N	NE	E	SE	S	SW	W	NW	
Entry Capacity, vph	927	1380	944	1380	608	1380	1197	1380	
Entry Flow Rates, vph	451	0	398	0	133	0	718	0	
V/C ratio	0.49	0.00	0.42	0.00	0.22	0.00	0.60	0.00	
Control Delay, sec/pcu	10	3	9	3	9	3	10	3	
LOS	Α	Α	Α	Α	Α	Α	В	Α	
95th % Queue (ft)	69	0	54	0	21	0	108	0	

Unit Legend:

				pcu – pass	eriger car	unit
Bypass Lane Merge Point Analysis (if a	pplicable)				
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						٧
Does the bypass have a dedicated receiving lane?						
Volumes						
Right Turn Volume removed from Entry Leg						
Volume Characteristics (for entry leg)						
PHF						
F_HV						
F _{ped}						
NOTE: Volume Characteristics for Exit Leg are already taken	n into accoun	t				
Entry/Conflicting Flows						
Entry Flow, pcu/hr						
Conflicting Flow, pcu/hr						
Bypass Lane Results (HCM 6th Edition)						
Entry Capacity of Bypass, vph						
Flow Rates of Exiting Traffic, vph						
V/C ratio						
Control Delay, s/veh						
LOS						
95th % Queue (ft)						
Approach w/Bypass Delay, s/veh						
Approach w/Bypass LOS						

V 4.1 5/19/17

Welcome to GDOT's Roundabout Analysis Tool. This tool is designed for the user to determine the functionality of a proposed roundabout. The analysis is based on the Highway Capacity Manual 2010 Edition and 6th Edition Methodologies, NCHRP Report 672, and FHWA's Roundabout Informational Guide. Please read the notes in the <u>Instructions</u> tab before using the spreadsheet.

Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study

Year, Peak Period: 2019, 4:45 PM County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
the Mini, Single Lane
and Multi Lane
Worksheets.

Roundabout Considerations Worksheet

Roundabouts may not operate well if there is too much traffic entering the intersection or if the percentage of traffic on the major road is too high. Candidate intersections shall be analyzed to determine whether a roundabout will perform acceptably. Shown below are planning level thresholds. A capacity analysis should be performed to determine lane configuration based on traffic volumes.

# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	8,225	75%
Minor Street	2,775	25%
Total volumes	11,000	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

Yes

Go up to next section...



<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

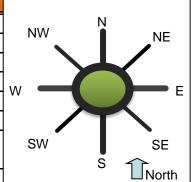
- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

	6: 1					Cl		
Roundabout Type:	Single	Lane				Chart Key:		
# of Approaches:	4			Mini/	, ,		Name	
Name of Streets:	Virginia Ave	9				All		
	Clay Pl				Bypass?			
	Doug Davis	Dr			Multi-lane	Street	Name	
						Inner Ln	Outer Ln	
						Bypass?		
					•		_	
<u>Approach Le</u>	eg Characte	ristics:						
Ŋ	lorth Leg (1)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config								
Bypass to Adj Leg?								
S	outh Leg (5)	SW Leg (6)	,	West Leg (7)		NW Leg (8)	
Street Name:	Cla	y Pl			Virgin			
Entry Lane Config								
Bypass to Adj Leg?								
•								





General & Site Infor	rmation	v 4.1	·
Analyst:	Joshua Ekstedt		NW
Agency/Co:	Stantec		INVV
Date:	5/30/2019		
Project or PI#:	Virginia Ave Roundabout Feasibility Study	v	v =
Year, Peak Hour:	2019, 4:45 PM	v	v —
County/District:	Fulton County		
Intersection	Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave	:	sw
Name:			



Vo	olumes		Entry Legs (FROM)							
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)	
	N (1), vph	0	0	65	0	10	0	135	0	
Exit	NE (2), vph	0	0	0	0	0	0	0	0	
Legs	E (3), vph	25	0	0	0	30	0	205	0	
(TO)	SE (4), vph	0	0	0	0	0	0	0	0	
	S (5), vph	5	0	15	0	0	0	20	0	
	SW (6), vph	0	0	0	0	0	0	0	0	
	W (7), vph	130	0	285	0	20	0	0	0	
	NW (8), vph	0	0	0	0	0	0	0	0	
Output	Total Vehicles	160	0	365	0	60	0	360	0	

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	5	0	7	0	17	0	17	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.999	1.000	0.998	1.000	0.998	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	76	0	17	0	160	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	36	0	0	0	51	0	243	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	17	0	0	0	24	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	186	0	332	0	34	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	229	0	425	0	103	0	426	0
Conflicting flow, pcu/h	384	0	211	0	438	0	60	0



Results: Approach Measures of Effectiveness											
HCM 6th Edition	N	NE	Е	SE	S	SW	W	NW			
Entry Capacity, vph	919	1380	1085	1380	859	1380	1257	1380			
Entry Flow Rates, vph	225	0	415	0	100	0	414	0			
V/C ratio	0.25	0.00	0.38	0.00	0.12	0.00	0.33	0.00			
Control Delay, sec/pcu	6	3	7	3	5	3	6	3			
LOS	Α	Α	Α	Α	Α	Α	Α	А			
95th % Queue (ft)	24	0	47	0	10	0	37	0			

Unit Legend:

vph = vehicles per hour
PHF = peak hour factor
F_{HV} = heavy vehicle factor
...

				pcu = pass	enger car i	unit
Bypass Lane Merge Point Analysis (if a	pplicable)				
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						4
Does the bypass have a dedicated receiving lane?						
Volumes			1			
Right Turn Volume removed from Entry Leg						
Volume Characteristics (for entry leg)						
PHF						
F_{HV}						
F _{ped}						
NOTE: Volume Characteristics for Exit Leg are already take	n into accoun	t				
Entry/Conflicting Flows						
Entry Flow, pcu/hr						
Conflicting Flow, pcu/hr						
Bypass Lane Results (HCM 6th Edition)						
Entry Capacity of Bypass, vph						
Flow Rates of Exiting Traffic, vph						
V/C ratio						
Control Delay, s/veh						
LOS						
95th % Queue (ft)						
Approach w/Bypass Delay, s/veh						
Approach w/Bypass LOS						

V 4.1 5/19/17

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Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study Year, Peak Period: 2023, 4:45 PM

County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
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Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	8,525	75%
Minor Street	2,875	25%
Total volumes	11,400	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

Yes

Go up to next section...



<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

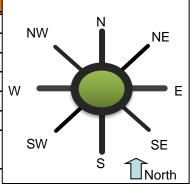
- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

Roundabout Type:	Single	Lane				Chart Key:		
# of Approaches:	4		-	Mini/	Single Lane	Street	Name	
Name of Streets:	Virginia Ave	2				All		
	Clay Pl					Bypass?		
	Doug Davis	Dr			Multi-lane	Street	Name	
						Inner Ln	Outer Ln	
						Bypass?		
					·			
<u>Approach L</u>	eg Characte	eristics:						
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No		No		No			
S	South Leg (5)	SW Leg (6)		West Leg (7)	NW Leg (8)	
Street Name:	Cla	y Pl			Virgin	ia Ave		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
			_					
Bypass to Adj Leg? Street Name: Entry Lane Config	No South Leg (5 Cla All	•			No West Leg (7 Virgin All		NW Leg (8)	





General & Site Info	ormation	v 4.1
Analyst:	Joshua Ekstedt	
Agency/Co:	Stantec	
Date:	5/30/2019	
Project or PI#:	Virginia Ave Roundabout Feasibility Study	
Year, Peak Hour:	2023, 4:45 PM	
County/District:	Fulton County	
Intersection	Virginia Ave/Doug Davis Dr @ Clay Pl/Virginia Ave	
Name:		



Vo	olumes			Entr	y Legs (FR	ROM)			
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)
	N (1), vph	0	0	65	0	10	0	140	0
Exit	NE (2), vph	0	0	0	0	0	0	0	0
Legs	E (3), vph	25	0	0	0	30	0	210	0
(TO)	SE (4), vph	0	0	0	0	0	0	0	0
	S (5), vph	5	0	15	0	0	0	20	0
	SW (6), vph	0	0	0	0	0	0	0	0
	W (7), vph	135	0	295	0	20	0	0	0
	NW (8), vph	0	0	0	0	0	0	0	0
Output	Total Vehicles	165	0	375	0	60	0	370	0

Volume Characteristics	N	NE	Е	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	5	0	7	0	17	0	17	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.999	1.000	0.998	1.000	0.998	1.000

Entry/Conflicting Flows	N	NE	Е	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	76	0	17	0	166	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	36	0	0	0	51	0	249	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	17	0	0	0	24	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	193	0	344	0	34	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	236	0	437	0	103	0	438	0
Conflicting flow, pcu/h	395	0	217	0	450	0	60	0



Results: Approach Measures of Effectiveness											
HCM 6th Edition	N	NE	Е	SE	S	SW	W	NW			
Entry Capacity, vph	908	1380	1078	1380	849	1380	1257	1380			
Entry Flow Rates, vph	232	0	426	0	100	0	425	0			
V/C ratio	0.26	0.00	0.40	0.00	0.12	0.00	0.34	0.00			
Control Delay, sec/pcu	7	3	7	3	5	3	6	3			
LOS	Α	Α	Α	Α	Α	Α	Α	Α			
95th % Queue (ft)	26	0	49	0	10	0	39	0			

Unit Legend:

				pcu – pass	seliger car	arric	
Bypass Lane Merge Point Analysis (if applicable)							
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6	
Select Entry Leg from Bypass (FROM)							
Select Exit Leg for Bypass (TO)						٧	
Does the bypass have a dedicated receiving lane?							
Volumes							
Right Turn Volume removed from Entry Leg							
Volume Characteristics (for entry leg)				•			
PHF							
F_HV							
F_ped							
NOTE: Volume Characteristics for Exit Leg are already take	NOTE: Volume Characteristics for Exit Leg are already taken into account						
Entry/Conflicting Flows							
Entry Flow, pcu/hr							
Conflicting Flow, pcu/hr							
Bypass Lane Results (HCM 6th Edition)							
Entry Capacity of Bypass, vph							
Flow Rates of Exiting Traffic, vph							
V/C ratio							
Control Delay, s/veh							
LOS							
95th % Queue (ft)							
Approach w/Bypass Delay, s/veh							
Approach w/Bypass LOS							

V 4.1 5/19/17

Welcome to GDOT's Roundabout Analysis Tool. This tool is designed for the user to determine the functionality of a proposed roundabout. The analysis is based on the Highway Capacity Manual 2010 Edition and 6th Edition Methodologies, NCHRP Report 672, and FHWA's Roundabout Informational Guide. Please read the notes in the <u>Instructions</u> tab before using the spreadsheet.

Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study

Year, Peak Period: 2025, 4:45 PM County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
the Mini, Single Lane
and Multi Lane
Worksheets.

Roundabout Considerations Worksheet

Roundabouts may not operate well if there is too much traffic entering the intersection or if the percentage of traffic on the major road is too high. Candidate intersections shall be analyzed to determine whether a roundabout will perform acceptably. Shown below are planning level thresholds. A capacity analysis should be performed to determine lane configuration based on traffic volumes.

# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	8,675	75%
Minor Street	2,900	25%
Total volumes	11,575	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

Yes

Go up to next section...



<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

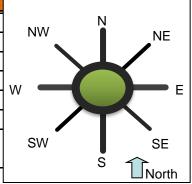
Roundabout Type:	Single	Lane				Chart Key:		•
# of Approaches:	4			Mini/	Single Lane Street		Name	
Name of Streets:	Virginia Ave	e				All		
	Clay Pl					Bypass?		
	Doug Davis Dr				Multi-lane	Street	Name	
					Inner Ln		Outer Ln	
						Bypass?		
				•	•		-	
<u>Approach L</u>	eg Characte.	eristics:						
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
Ç	South Leg (5)		SW Leg (6)	,	West Leg (7)		NW Leg (8)	
Street Name:	Cla	y Pl			Virgin	ia Ave		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
		•		•				



Preliminary Roundabout Rendering** North Leg (1) Virginia Ave ₹ West Leg (7) Virginia Ave All All East Leg (3) Doug Davis Dr South Leg (5) ₹ Clay Pl **Additional Legs NW Leg (8)** NE Leg (2) 0 **Note This roundabout sketch does not include the secondary cardinal **SW Leg (6)** direction legs due to restrictions in 0 the Excel software. For complex roundabouts, a separate sketch is **SE Leg (4)** recommended by the designer.



S. S	Single Earle		
General & Site Inform	nation	v 4.1	
Analyst:	Joshua Ekstedt		NW
Agency/Co:	Stantec		1444
Date:	5/30/2019		
Project or PI#:	Virginia Ave Roundabout Feasibility Stu	dy	w —
Year, Peak Hour:	2025, 4:45 PM		VV
County/District:	Fulton County		
Intersection	Virginia Ave/Doug Davis Dr @ Clay Pl/Virgin	ia Ave	SW
Name:			
Volumes	Entry Legs (FROM)	



Vo	olumes			Entr	y Legs (FR	ROM)			
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)
	N (1), vph	0	0	70	0	10	0	140	0
Exit	NE (2), vph	0	0	0	0	0	0	0	0
Legs	E (3), vph	25	0	0	0	30	0	215	0
(TO)	SE (4), vph	0	0	0	0	0	0	0	
	S (5), vph	5	0	15	0	0	0	20	0
	SW (6), vph	0	0	0	0	0	0	0	0
	W (7) <i>,</i> vph	135	0	300	0	20	0	0	0
	NW (8), vph	0	0	0	0	0	0	0	0
Output	Total Vehicles	165	0	385	0	60	0	375	0

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	5	0	18	0	7	0	17	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.998	1.000	0.999	1.000	0.998	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	82	0	17	0	166	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	36	0	0	0	51	0	255	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	17	0	0	0	24	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	193	0	349	0	34	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	236	0	448	0	103	0	444	0
Conflicting flow, pcu/h	401	0	217	0	456	0	60	0



Results: Approach Measures of Effectiveness									
HCM 6th Edition	N	NE	E	SE	S	SW	W	NW	
Entry Capacity, vph	903	1380	1076	1380	845	1380	1257	1380	
Entry Flow Rates, vph	232	0	438	0	100	0	431	0	
V/C ratio	0.26	0.00	0.41	0.00	0.12	0.00	0.34	0.00	
Control Delay, sec/pcu	7	3	8	3	5	3	6	3	
LOS	Α	Α	Α	Α	Α	Α	Α	Α	
95th % Queue (ft)	26	0	51	0	10	0	40	0	

Notes: v 4.0

Unit Legend:

vph = vehicles per hour
PHF = peak hour factor
F_{HV} = heavy vehicle factor
pcu = passenger car unit

Bypass Lane Merge Point Analysis (if a	pplicable)				
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						2
Does the bypass have a dedicated receiving lane?						
Volumes						
Right Turn Volume removed from Entry Leg						
Volume Characteristics (for entry leg)						
PHF						
F _{HV}						
F _{ped}						
NOTE: Volume Characteristics for Exit Leg are already take	n into accoun	t				
Entry/Conflicting Flows						
Entry Flow, pcu/hr						
Conflicting Flow, pcu/hr						
Bypass Lane Results (HCM 6th Edition)						
Entry Capacity of Bypass, vph						
Flow Rates of Exiting Traffic, vph						
V/C ratio						
Control Delay, s/veh						
LOS						
95th % Queue (ft)						
Approach w/Bypass Delay, s/veh						
Approach w/Bypass LOS						

Roundabout Analysis Tool

V 4.1 5/19/17

Welcome to GDOT's Roundabout Analysis Tool. This tool is designed for the user to determine the functionality of a proposed roundabout. The analysis is based on the Highway Capacity Manual 2010 Edition and 6th Edition Methodologies, NCHRP Report 672, and FHWA's Roundabout Informational Guide. Please read the notes in the <u>Instructions</u> tab before using the spreadsheet.

Analyst: Joshua Ekstedt

Agency/Company: Stantec

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study

Year, Peak Period: 2043, 4:45 PM County/District: Fulton County

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
the Mini, Single Lane
and Multi Lane
Worksheets.

Roundabout Considerations Worksheet

Roundabouts may not operate well if there is too much traffic entering the intersection or if the percentage of traffic on the major road is too high. Candidate intersections shall be analyzed to determine whether a roundabout will perform acceptably. Shown below are planning level thresholds. A capacity analysis should be performed to determine lane configuration based on traffic volumes.

# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split		
Major Street	10,200	75%		
Minor Street	3,425	25%		
Total volumes	13,625			

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

Go up to next section...

Yes



Proposed Design Configuration Chart

<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

Roundabout Characteristics

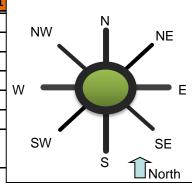
Roundabout Type:	Single	Lane				Chart Key:		•
# of Approaches:	4			Mini/	Single Lane	Street	Name	
Name of Streets:	Virginia Ave	e				All		
	Clay Pl					Bypass?		
	Doug Davis	ıg Davis Dr			Multi-lane		Name	
						Inner Ln	Outer Ln	
						Bypass?		
					•			
<u>Approach L</u>	eg Characte.	eristics:	_				_	
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
Ç	South Leg (5)	SW Leg (6)	,	West Leg (7)		NW Leg (8)	
Street Name:	Cla	y Pl			Virgin	ia Ave		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
	-	•		•				



Preliminary Roundabout Rendering** North Leg (1) Virginia Ave ₹ West Leg (7) Virginia Ave All All East Leg (3) Doug Davis Dr South Leg (5) ₹ Clay Pl **Additional Legs NW Leg (8)** NE Leg (2) 0 **Note This roundabout sketch does not include the secondary cardinal **SW Leg (6)** direction legs due to restrictions in 0 the Excel software. For complex roundabouts, a separate sketch is **SE Leg (4)** recommended by the designer.



General & Site Infor	mation	v 4.1
Analyst:	Joshua Ekstedt	NW
Agency/Co:	Stantec	INVV
Date:	5/30/2019	
Project or PI#:	Virginia Ave Roundabout Feasibility Study	
Year, Peak Hour:	2043, 4:45 PM	VV —
County/District:	Fulton County	
Intersection	Virginia Ave/Doug Davis Dr @ Clay Pl/Virginia Ave	sw
Name:		
Valuesa	Entry Logo (EDOM)	



Vo	olumes	Entry Legs (FROM)							
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)
	N (1), vph	0	0	80	0	10	0	165	0
Exit	NE (2), vph	0	0	0	0	0	0	0	0
Legs	E (3), vph	30	0	0	0	35	0	255	0
(TO)	SE (4), vph	0	0	0		0	0	0	0
	S (5), vph	5	0	20	0	0	0	25	0
	SW (6), vph	0	0	0	0	0	0	0	0
	W (7), vph	160	0	355	0	25	0	0	0
	NW (8), vph	0	0	0	0	0	0	0	0
Output	Total Vehicles	195	0	455	0	70	0	445	0

Volume Characteristics	N	NE	Е	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	6	0	8	0	21	0	21	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.999	1.000	0.997	1.000	0.997	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	93	0	17	0	195	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	43	0	0	0	60	0	302	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	23	0	0	0	30	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	229	0	413	0	43	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	279	0	530	0	120	0	527	0
Conflicting flow, pcu/h	479	0	255	0	540	0	73	0



	Results: Approach Measures of Effectiveness										
HCM 6th Edition	N	NE	Е	SE	S	SW	W	NW			
Entry Capacity, vph	833	1380	1037	1380	774	1380	1240	1380			
Entry Flow Rates, vph	275	0	517	0	117	0	511	0			
V/C ratio	0.33	0.00	0.50	0.00	0.15	0.00	0.41	0.00			
Control Delay, sec/pcu	8	3	9	3	6	3	7	3			
LOS	Α	Α	Α	Α	Α	Α	Α	A			
95th % Queue (ft)	37	0	73	0	14	0	53	0			

Notes: v 4.0

Unit Legend:

vph = vehicles per hour
PHF = peak hour factor
F_{HV} = heavy vehicle factor

	pcu = passenger car unit								
Bypass Lane Merge Point Analysis (if a	pplicable)							
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6			
Select Entry Leg from Bypass (FROM)									
Select Exit Leg for Bypass (TO)									
Does the bypass have a dedicated receiving lane?									
Volumes									
Right Turn Volume removed from Entry Leg									
Volume Characteristics (for entry leg)									
PHF									
F_{HV}									
F _{ped}									
NOTE: Volume Characteristics for Exit Leg are already taken	n into accoun	t							
Entry/Conflicting Flows									
Entry Flow, pcu/hr									
Conflicting Flow, pcu/hr									
Bypass Lane Results (HCM 6th Edition)									
Entry Capacity of Bypass, vph									
Flow Rates of Exiting Traffic, vph									
V/C ratio									
Control Delay, s/veh									
LOS									
95th % Queue (ft)									
Approach w/Bypass Delay, s/veh									
Approach w/Bypass LOS									

Roundabout Analysis Tool

v 4.1 5/19/17

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Analyst: Joshua Ekstedt

Agency/Company: Stantec

County/District:

Date: 5/30/2019

Project Name or PI#: Virginia Ave Roundabout Feasibility Study
Year, Peak Period: 2045, 4:45 PM

Intersection: Virginia Ave/Doug Davis Dr @ Clay PI/Virginia Ave

Fulton County

Insert Project
Information Here in the
BLUE SPACE. This
information is linked to
the Mini, Single Lane
and Multi Lane
Worksheets.

Roundabout Considerations Worksheet

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# of circulatory lanes	ADTs (current/build year)	Condition met?	% traffic on Major Road	Condition met?
Mini	less than 15,000	Yes	less than 90%	Yes
Single Lane	less than 25,000	Yes	less than 90%	Yes
Multi-Lane	less than 45,000	Yes	less than 90%	Yes

Other things to consider when evaluating roundabouts as an alternative are Right of Way, sight distance, environmental impacts, and access to adjacent properties.

Volume Information (for Analysis Time Period)

1 Enter the Major/Minor Street ADT Volumes in the Chart below:

	Volumes	Split
Major Street	10,375	75%
Minor Street	3,525	25%
Total volumes	13,900	

Proximity to Other Intersections

2 How close is the nearest signal (miles or feet)? 0 mi 682 '

3 Is the proposed intersection located within a coordinated signal network?

Yes

Go up to next section...



Proposed Design Configuration Chart

<u>Directions for this Section only:</u> (see Instructions Tab for other sections)

- 1. Select the type of roundabout you are analyzing.
- 2. Key in the number of approaches and the street names at the proposed intersections.
- 3. Complete the Approach Characteristics Chart:
 - a. Select the Street Name from the pulldown menu for each approach leg
 - b. <u>Select</u> the Lane Type for each entry apporach lane
 *The first box is the inner lane, the second box is the outer lane
 - c. Select Yes or No if a right turn bypass will be added to each approach leg

Roundabout Characteristics

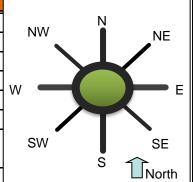
Roundabout Type:	Single	Lane				Chart Key:		•
# of Approaches:	4			Mini/	Single Lane	Street	Name	
Name of Streets:	Virginia Ave	e				All		
	Clay Pl					Bypass?		
	Doug Davis	Dr			Multi-lane	Street	Name	
						Inner Ln	Outer Ln	
						Bypass?		
					•			
<u>Approach L</u>	eg Characte.	eristics:	_				_	
1	North Leg (1	.)	NE Leg (2)		East Leg (3)		SE Leg (4)	
Street Name:	Virgin	ia Ave			Doug D	avis Dr		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
Ç	South Leg (5)	SW Leg (6)	,	West Leg (7)		NW Leg (8)	
Street Name:	Cla	y Pl			Virgin	ia Ave		
Entry Lane Config	All				All			
Bypass to Adj Leg?	No				No			
	-	•		•				



Preliminary Roundabout Rendering** North Leg (1) Virginia Ave ₹ West Leg (7) Virginia Ave All All East Leg (3) Doug Davis Dr South Leg (5) ₹ Clay Pl **Additional Legs NW Leg (8)** NE Leg (2) 0 **Note This roundabout sketch does not include the secondary cardinal **SW Leg (6)** direction legs due to restrictions in 0 the Excel software. For complex roundabouts, a separate sketch is **SE Leg (4)** recommended by the designer.



General & Site Infor	mation v 4.	1
Analyst:	Joshua Ekstedt	\exists NW
Agency/Co:	Stantec	
Date:	5/30/2019	
Project or PI#:	Virginia Ave Roundabout Feasibility Study	□w -
Year, Peak Hour:	2045, 4:45 PM	¬ vv –
County/District:	Fulton County	
Intersection	Virginia Ave/Doug Davis Dr @ Clay Pl/Virginia Ave	□ sw
Name:		



Vo	olumes	Entry Legs (FROM)							
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)
	N (1), vph	0	0	80	0	15	0	170	0
Exit	NE (2), vph	0	0	0	0	0	0	0	0
Legs	E (3), vph	30	0	0	0	40	0	260	0
(TO)	SE (4), vph	0	0	0	0	0	0	0	0
	S (5), vph	5	0	20	0	0	0	25	0
	SW (6), vph	0	0	0	0	0	0	0	0
	W (7), vph	165	0	360	0	25	0	0	0
	NW (8), vph	0	0	0	0	0	0	0	0
Output	Total Vehicles	200	0	460	0	80	0	455	0

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	98.5%	100.0%	97.5%	100.0%	97.5%	100.0%	97.0%	100.0%
% Heavy Vehicles	1.5%	0.0%	2.5%	0.0%	2.5%	0.0%	3.0%	0.0%
% Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
# of Pedestrians (ped/hr)	7	0	9	0	21	0	21	0
PHF	0.71	0.95	0.88	0.95	0.60	0.95	0.87	0.95
F _{HV}	0.985	1.000	0.976	1.000	0.976	1.000	0.971	1.000
F _{ped}	0.999	1.000	0.999	1.000	0.997	1.000	0.997	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	93	0	26	0	201	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	43	0	0	0	68	0	308	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	7	0	23	0	0	0	30	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	236	0	419	0	43	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	286	0	536	0	137	0	539	0
Conflicting flow, pcu/h	485	0	270	0	552	0	73	0



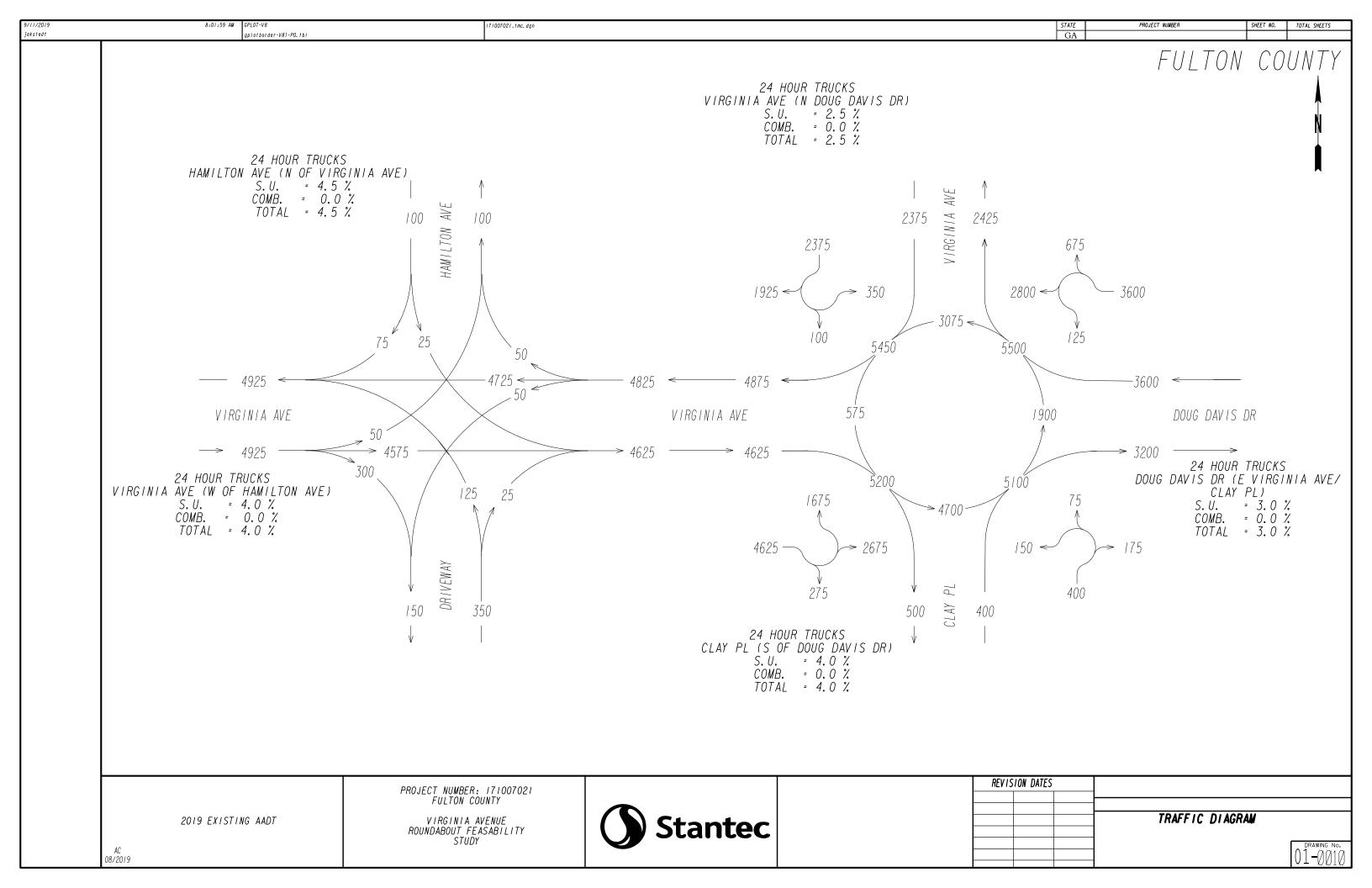
	Results: Approach Measures of Effectiveness										
HCM 6th Edition	N	NE	Е	SE	S	SW	W	NW			
Entry Capacity, vph	828	1380	1021	1380	765	1380	1240	1380			
Entry Flow Rates, vph	282	0	523	0	133	0	523	0			
V/C ratio	0.34	0.00	0.51	0.00	0.17	0.00	0.42	0.00			
Control Delay, sec/pcu	8	3	10	3	7	3	7	3			
LOS	Α	Α	Α	Α	Α	Α	Α	A			
95th % Queue (ft)	38	0	77	0	16	0	55	0			

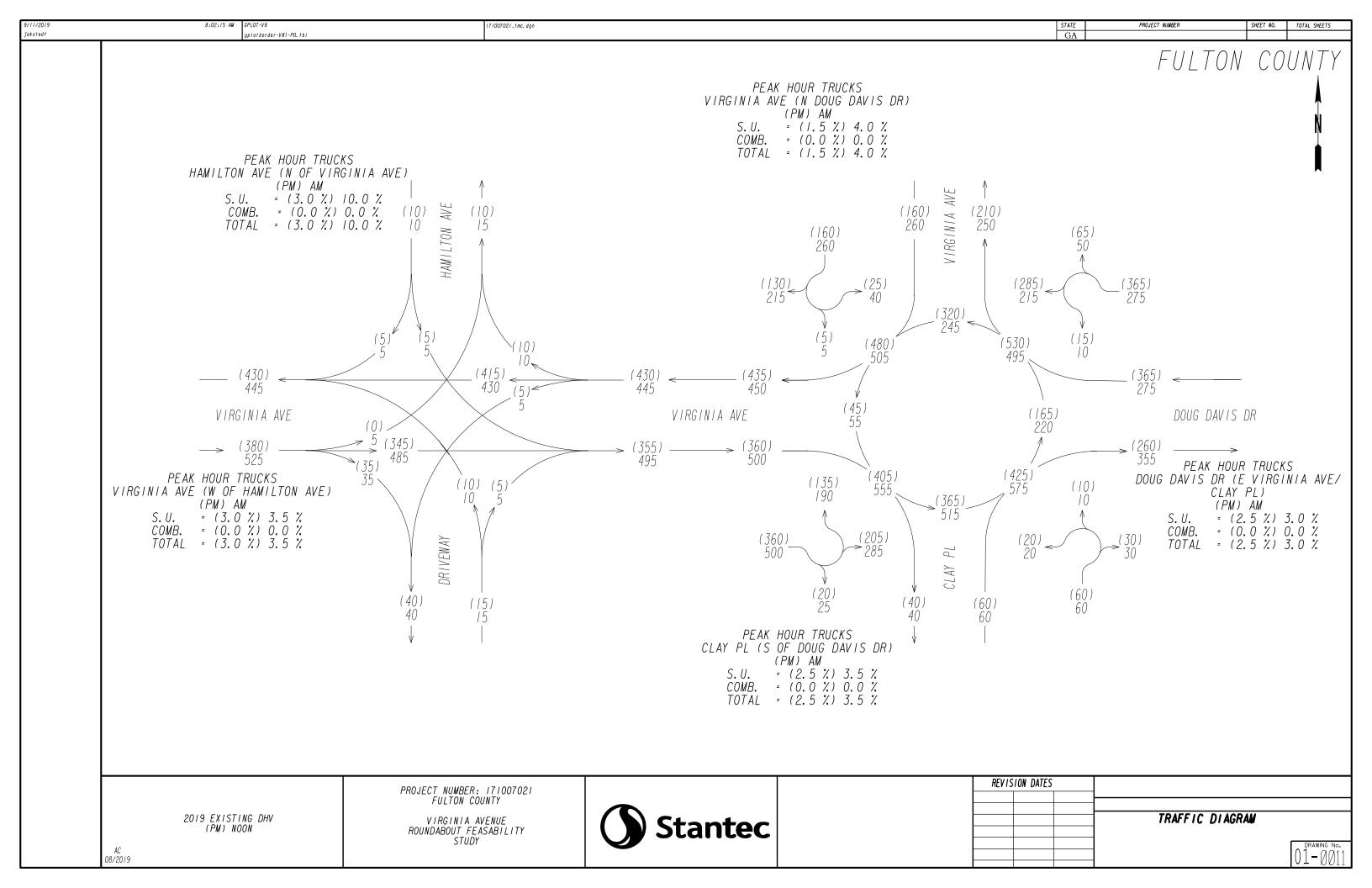
Notes: v 4.0

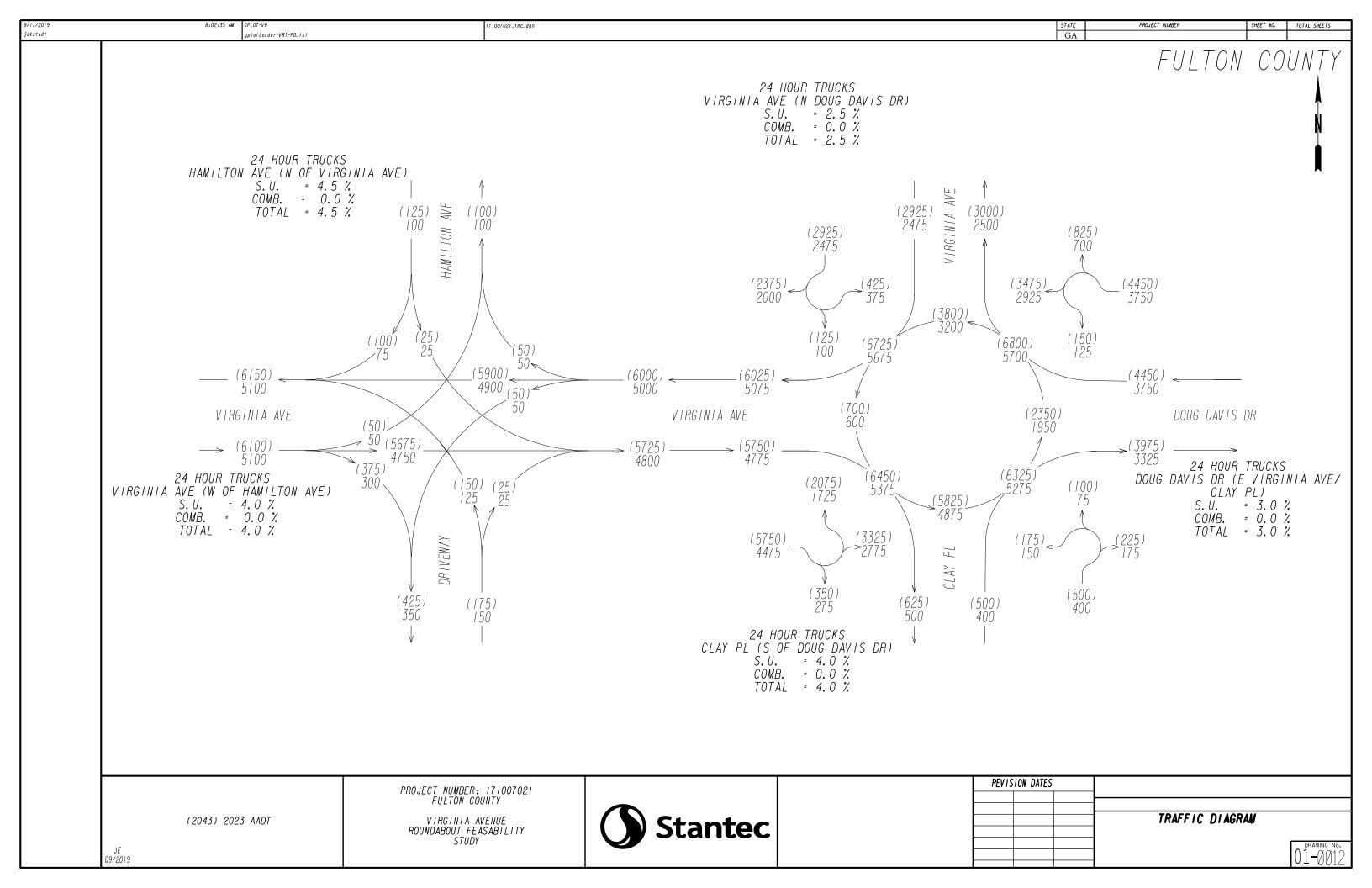
Unit Legend:

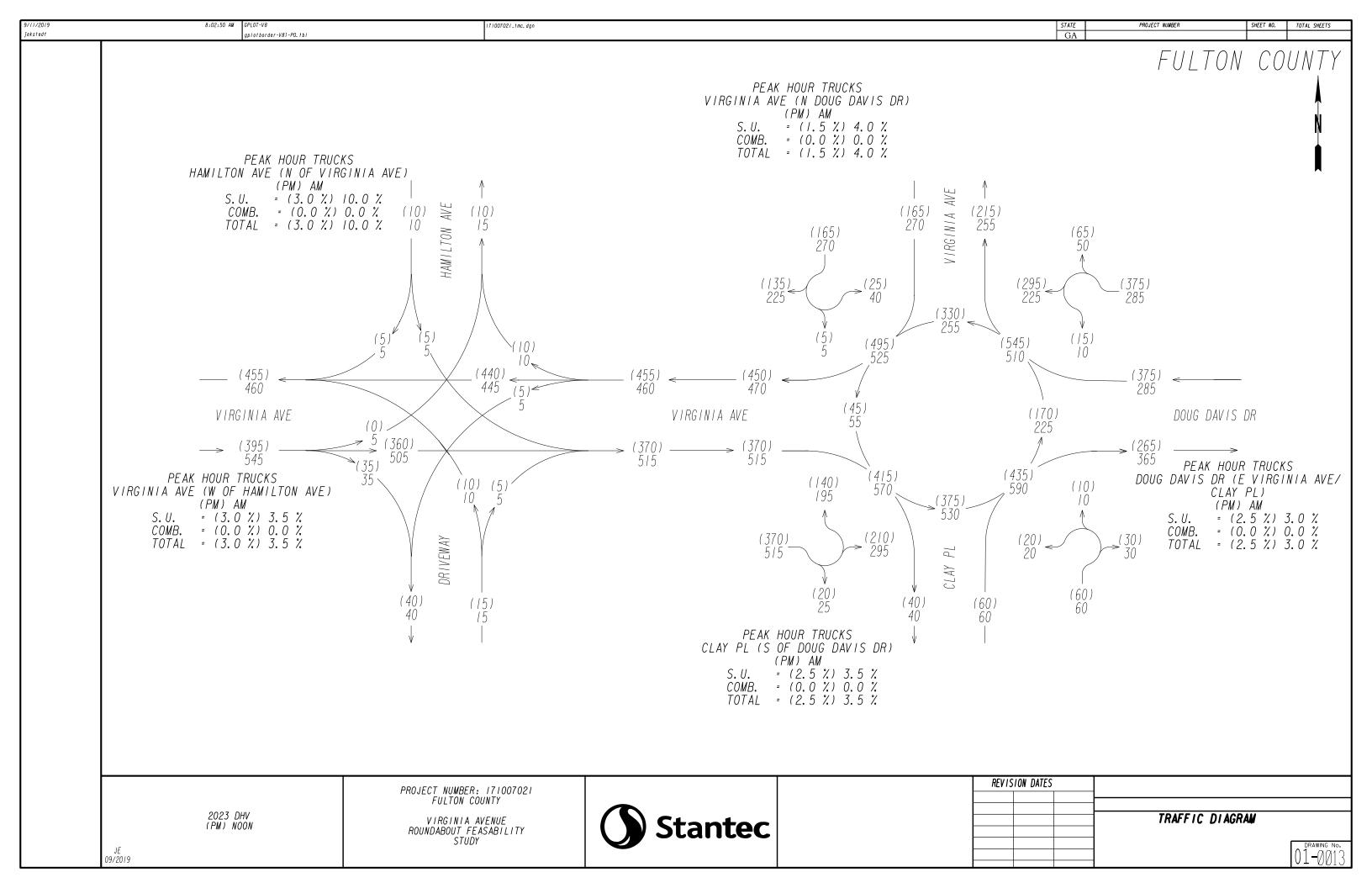
vph = vehicles per hour
PHF = peak hour factor
F_{HV} = heavy vehicle factor
pcu = passenger car unit

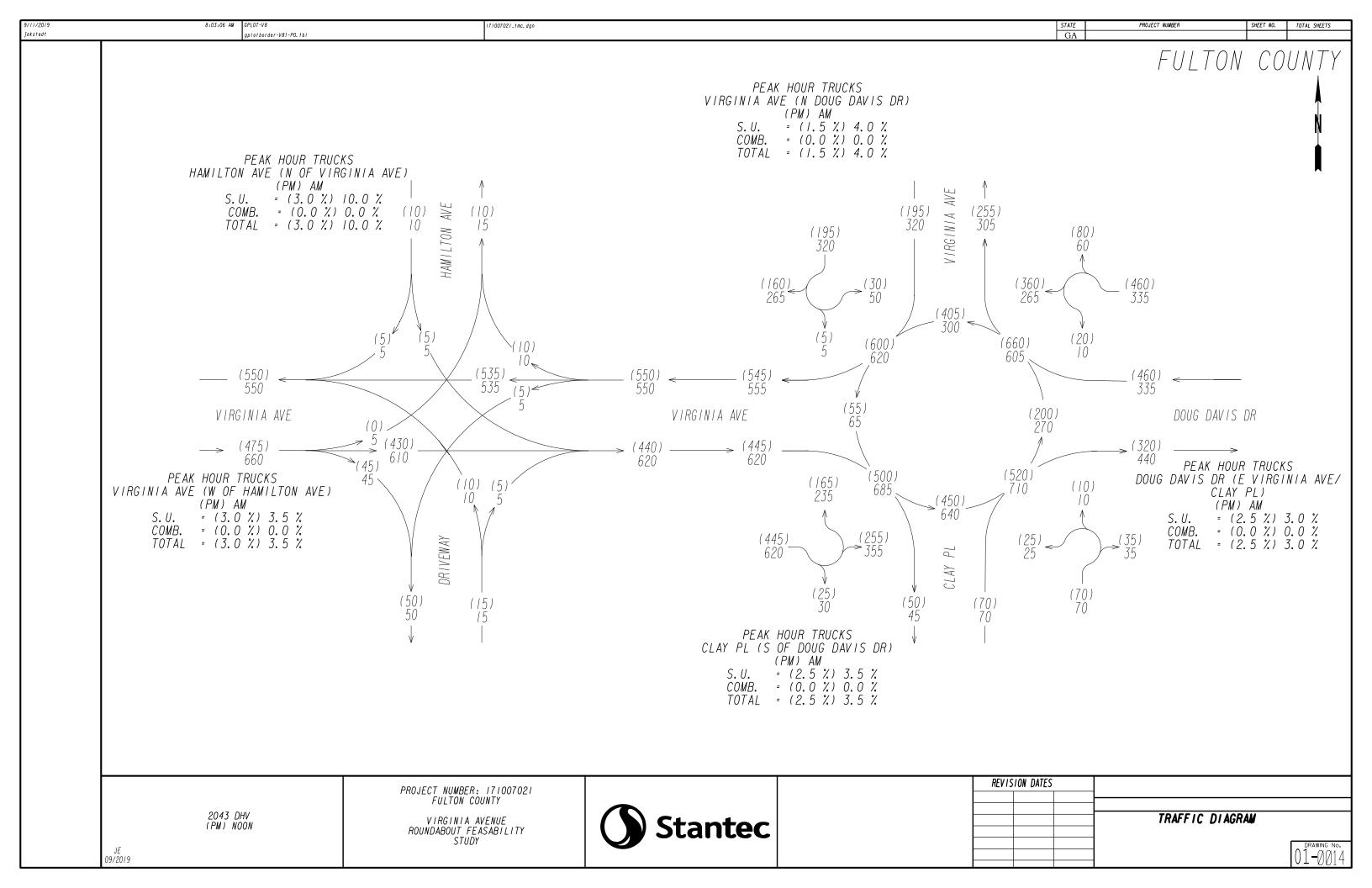
				pcu – pass	eriger car	unit
Bypass Lane Merge Point Analysis (if a	pplicable)				
Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						٧
Does the bypass have a dedicated receiving lane?						
Volumes						
Right Turn Volume removed from Entry Leg						
Volume Characteristics (for entry leg)						
PHF						
F_HV						
F _{ped}						
NOTE: Volume Characteristics for Exit Leg are already taken	n into accoun	t				
Entry/Conflicting Flows						
Entry Flow, pcu/hr						
Conflicting Flow, pcu/hr						
Bypass Lane Results (HCM 6th Edition)						
Entry Capacity of Bypass, vph						
Flow Rates of Exiting Traffic, vph						
V/C ratio						
Control Delay, s/veh						
LOS						
95th % Queue (ft)						
Approach w/Bypass Delay, s/veh						
Approach w/Bypass LOS						

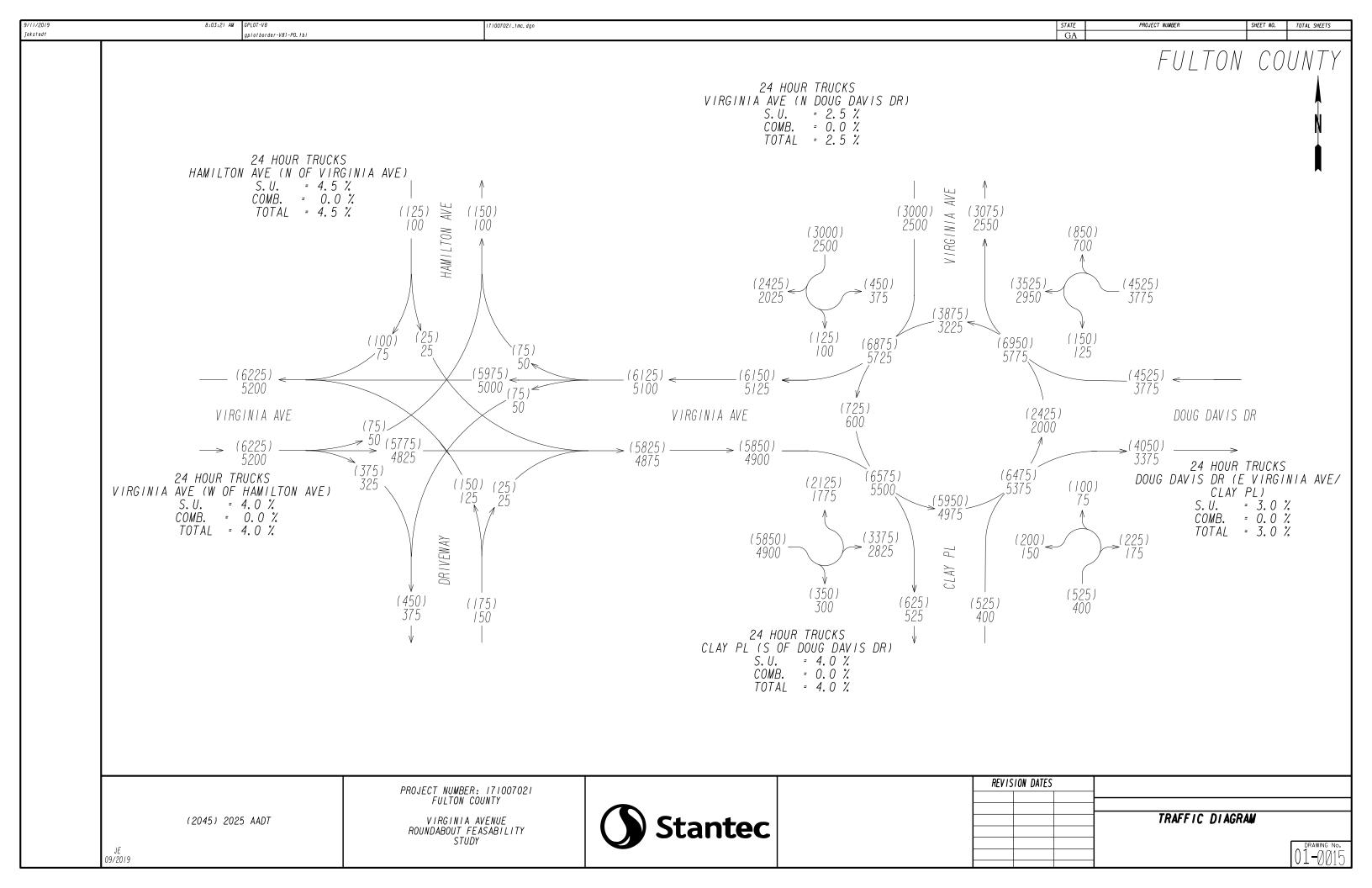


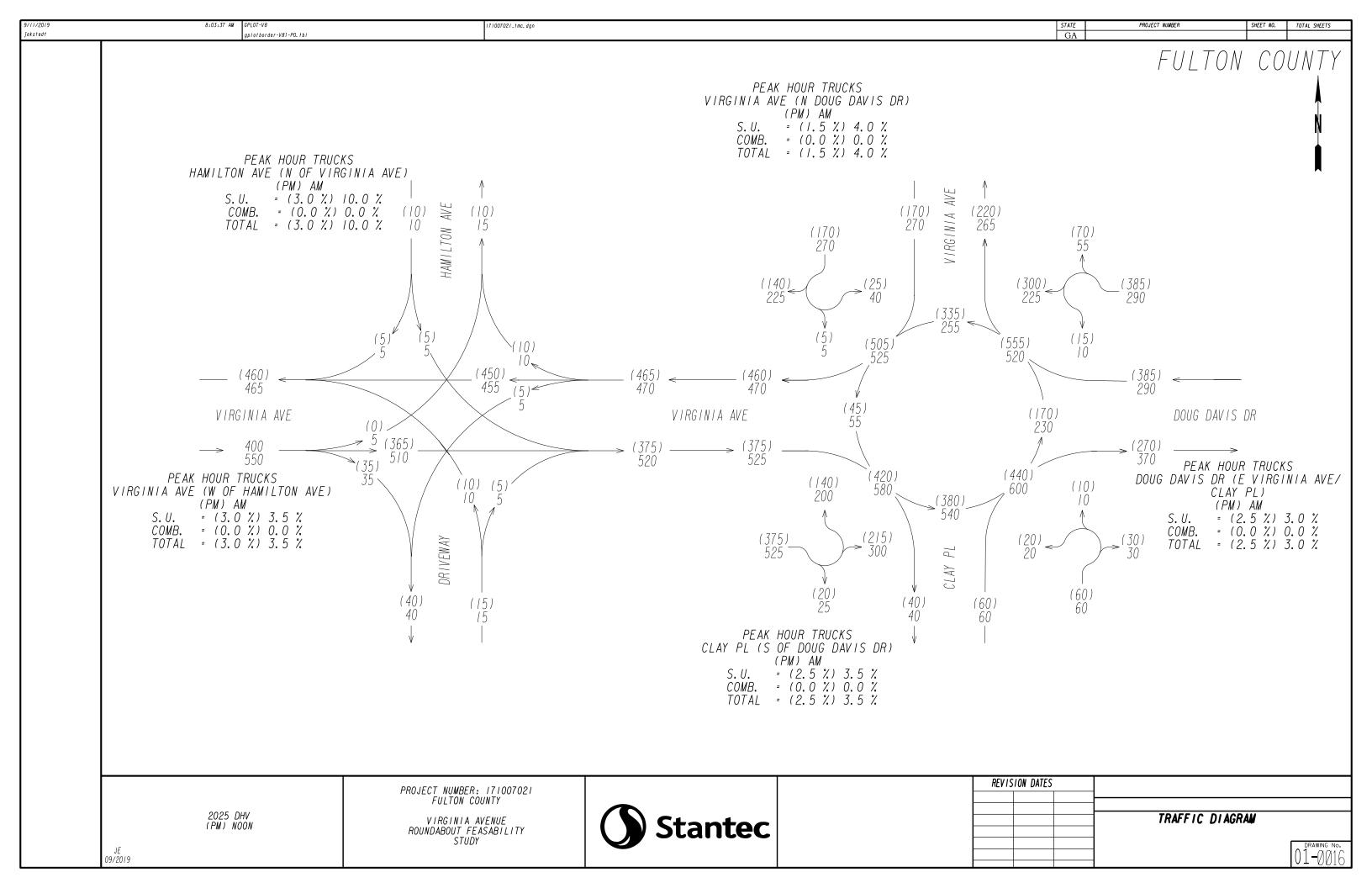


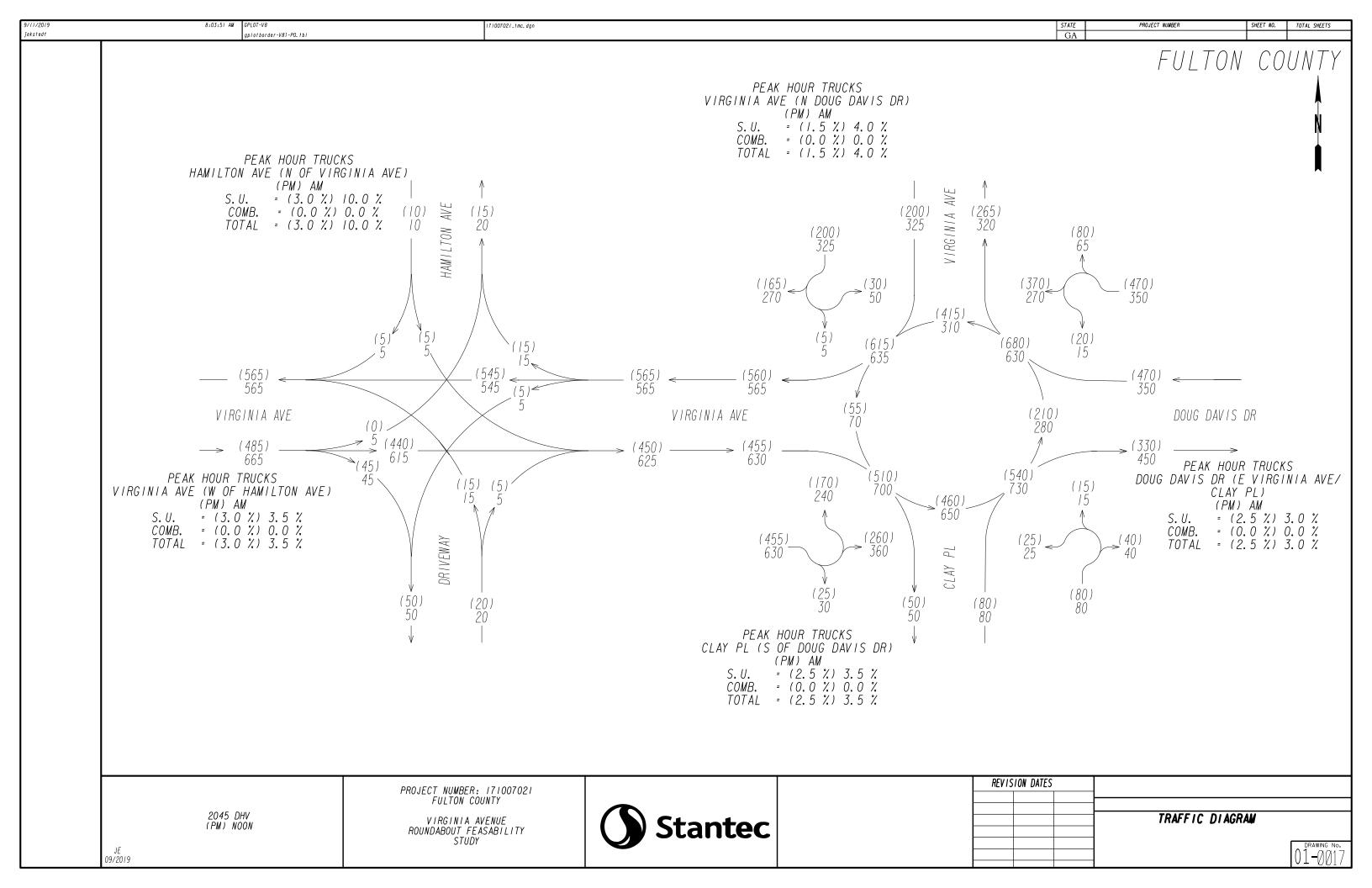












Appendix A

A.4 PUBLIC INVOLVEMENT PLAN & PUBLIC COMMENTS





HAPEVILLE ROUNDABOUT

PUBLIC INVOLVEMNT PLAN

OVERVIEW

Given the focused nature of this study, a focused and meaningful community engagement process is proposed. As part of the process, we will work closely with a wide range of stakeholders who are key to implementation, while engaging the community to achieve a supported and implementable study.

To achieve this, stakeholders will be engaged at three levels throughout the process:

- 1. Project Management Team
- 2. Advisory Group
- 3. General Public

Project Management Team (PMT)

The Project Management Team will include the consultant team, the ARC and the City of Hapeville The purpose of this team is to discuss the progress of the plan, brainstorm solutions and strategies to address challenges and needs, and to plan community engagement opportunities at a very high level. This team will meet (in-person or via phone) bi-weekly: Tuesdays, 9:30am, starting June 11

Members of the PMT include:

Adrienne Senter, City of Hapeville
Lynn Patterson, City of Hapeville (B+C Studios)
Rachelle Eyma, City of Hapeville
Mitchell Greenway, Stantec
Stephen Hopper, Stantec
Mike Holt, Stantec
Deanna Murphy, Sizemore Group
Jonathan Tuley, Atlanta Regional Commission

Advisory Group

The Advisory Group will consist of business and property owners, community leaders, ARC, GDOT, MARTA, Aerotropolis Atlanta CIDs, and others who bring knowledge and expertise to the process. The Advisory Group will be engaged in three meetings.

Members of the Advisory Group include: (City has already worked with Mayor and Council on appointees and will send list to team shortly).

Sizemore Group Memo September 13, 2019

*Consider representation from the Hapeville Arts Alliance, Hispanic Community, property and business owners near the roundabout.

General Public

The General Public will be engaged at key stages throughout the planning process. Methods for reaching out to the larger community include:

Flyer to be created by Sizemore Group and distributed by the City via

- Newsletter
- Facebook
- Email database
- Police Facebook and Twitter
- Direct mailers to business community
- A-Frame signs
- Rec Center
- City Hall and other City buildings
- City website

Critical Public Outreach Dates

June 1: Advisory Group Meeting Invites to be distributed by the City. Sizemore Group

can assist with text.

June 20: Advisory Group Meeting 1: Vision Session

Location: City Hall

Time: 6pm

June 21: Advisory Group Meeting reminder by the City.

June 26: Advisory Group Meeting 2: Draft Concepts

Location: City Hall

Time: 6pm

June 15-20: Community Meeting invites to be distributed (Sizemore Group to develop

flyers). City to send via:

Newsletter

Facebook

• Email database

Police Facebook and Twitter

• Direct mailers to business community

• A-Frame signs

Sizemore Group Memo September 13, 2019

• Rec Center

• City Hall and other City buildings

• City website

July 18: Demonstration Project

Location: Roundabout site

July 19: Advisory Group Meeting reminder by the City.

August 1: Advisory Group Meeting 3: Concept Updates and Demonstration Recap

Location: City Hall

Time: 6pm

July 15: Community Meeting 2 invitation distribution (Sizemore Group to develop flyers)

August 6: City Council Presentation: Final Draft Concepts (10 minutes presentation)

August 13: Planning Commission Presentation: Final Draft Concepts

August 15: Community Meeting 2: Final Draft Plan Concepts Presented

Location: Near Roundabout site

August 20: City Council Adoption of Plan (anticipated)

Community Meeting
Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place
Roundabout Feasibility Study
August 15, 2019

Please print responses.
Name GLAntz
Address 3041 Gordon Circle HApeville, GA 30354
Do you support the project?
Do you understand the project after attending this meeting? Yes No
Comments (feel free to use the back of this sheet for additional space)
I do not support this + DO NOT WANT to pay for this,
Existing businesses. This is not kight to hurt them, they have been good to the city!
How Are you going to substanite this need for A round-A-bout. Why? We can't grow Any more And should try to keep what we
AIREADY HAVE III
How did you hear about this meeting? Radio/Television Signs Word of Mouth Email Blast City Website
Please share your suggestions on improving the way Hapeville conducts public meetings:

Your comments can be submitted by any of the following ways:

1 – Complete this form and place in the drop box.
2 – Complete this form and mail to:
Mr. Mitchell Greenway
Stantec Consulting Services Inc.
229 Peachtree Street NE Suite 1900
Atlanta, GA 30303-1629

3 – Email your comments to mitchell.greenway@stantec.com

Community Meeting
Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place
Roundabout Feasibility Study
August 15, 2019

Please print responses.			
Name Thomas Moore Johnys Pizza Address 834/ Virginia Ave			
Do you support the project? Yes No Conditional Uncommitted Do you understand the project after attending this meeting? Yes No Comments (feel free to use the back of this sheet for additional space) I am Not in favor of this project based on Negative Impact on my business. The fotential loss of business bedusing Construction and after Completion of the project could be exponential			
How did you hear about this meeting? Radio/Television Signs Word of Mouth Email Blast City Website			
Please share your suggestions on improving the way Hapeville conducts public meetings:			

Your comments can be submitted by any of the following ways:

1 – Complete this form and place in the drop box.
2 – Complete this form and mail to:
Mr. Mitchell Greenway
Stantec Consulting Services Inc.
229 Peachtree Street NE Suite 1900
Atlanta, GA 30303-1629

3 - Email your comments to mitchell.greenway@stantec.com

Community Meeting
Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place
Roundabout Feasibility Study
August 15, 2019

Please print responses.				
Name Scott Accord Johnnys Pizza Jouren Address 834 VIRGINIA AUE				
Address 834 VIRGINIA FUE				
TIAPEVILLE 604 30354				
Do you support the project? Yes No Conditional Uncommitted				
Do you understand the project after attending this meeting? X Yes No				
Comments (feel free to use the back of this sheet for additional space)				
Too much impact on my Property + BUSINES				
How did you hear about this meeting? Radio/Television Signs Word of Mouth Email Blast City Website				
Please share your suggestions on improving the way Hapeville conducts public meetings:				
BETTER IMPORMATION distribution				

Your comments can be submitted by any of the following ways:

 $3-Email\ your\ comments\ to\ mitchell.greenway@stantec.com$

Community Meeting
Virginia Avenue/Little Virginia Avenue/Doug Davis Drive/Clay Place
Roundabout Feasibility Study
August 15, 2019

Please print responses.
Name Chery Kelley
Address 3435 HARDING Ave
Hapeville, 6A 30354
Do you support the project?
Do you understand the project after attending this meeting? Yes No
Comments (feel free to use the back of this sheet for additional space) I do not see a need for this
Roundabout. It will impede the exits
onto VA Avenue from my street & Elkins.
The Businesses that will be extented
that have been loyal businesses, are not
worth aggravatine or losing. They are obviously
opposed to this as ATT PARTICIPANTS
at this meeting.
STOP Lights help the tracker flow
in this area. Taking them out makes a
Constant flow
How did you hear about this meeting? Radio/Television Newspaper
Signs Word of Mouth
Email Blast City Website
Please share your suggestions on improving the way Hapeville conducts public meetings:
BETTER COMMUNICATION OF THE MEETING
I got an email 2 days ago from my
neighborhood association.

Your comments can be submitted by any of the following ways:

1 – Complete this form and place in the drop box.
2 – Complete this form and mail to:
Mr. Mitchell Greenway
Stantec Consulting Services Inc.

Stantec Consulting Services Inc. 229 Peachtree Street NE Suite 1900 Atlanta, GA 30303-1629

3 - Email your comments to mitchell.greenway@stantec.com



SUMMARY REPORT ON WAYFINDING SIGNAGE CONCEPTS FOR

CITY OF HAPEVILLE

SEPTEMBER 26, 2019



BACKGROUND

The City of Hapeville has been engaged in a process of rebranding concurrent with Stantec's efforts involving the study of pedestrian and vehicular circulation along main corridors of the Hapeville urban core.

As these two processes progressed, the City of Hapeville engaged Stantec to help create a wayfinding concept for each of the four logo iterations that were under review. Part of the wayfinding visioning should include monument signage as well as street identification signage and directional wayfiding.

To this end, Stantec began working through wayfinding design concepts for each of the four logo variations that reflected in color, form, texture and material the unique properties of each of the individual logos.

The logo variation sheet prepared by ETHIC shown on the opposite page reflects the branding chosen by the City of Hapeville. Stantec endeavoured to respond with contextual forms and materials that reinforced the simultaneously classic and contemporary feel of the logo design created by ETHIC.











MONUMENT SIGNAGE STREET ID SIGNAGE VEHICULAR DIRECTIONAL SIGNAGE

THE MONUMENT SIGN

While specific materials styles and products were not necessarily considered as part of this process, general ideas about texture and color combinations as well as forms and shapes that complemented the logo style were envisioned.

The monument sign has to be grand and give the literal and figurative sense of strength and timelessness.

A textured raw concrete sculptural form contrasted with a solid yellow color field reinforces the classic and contemporary feel of the logo design. It is important in designing the monument signage to provide a conceptual design that engages the strong and active arts community that is prevalent in Hapeville.

As with many monument signs, this design could be used multifunctionally with kiosk type applications or wayfinding.



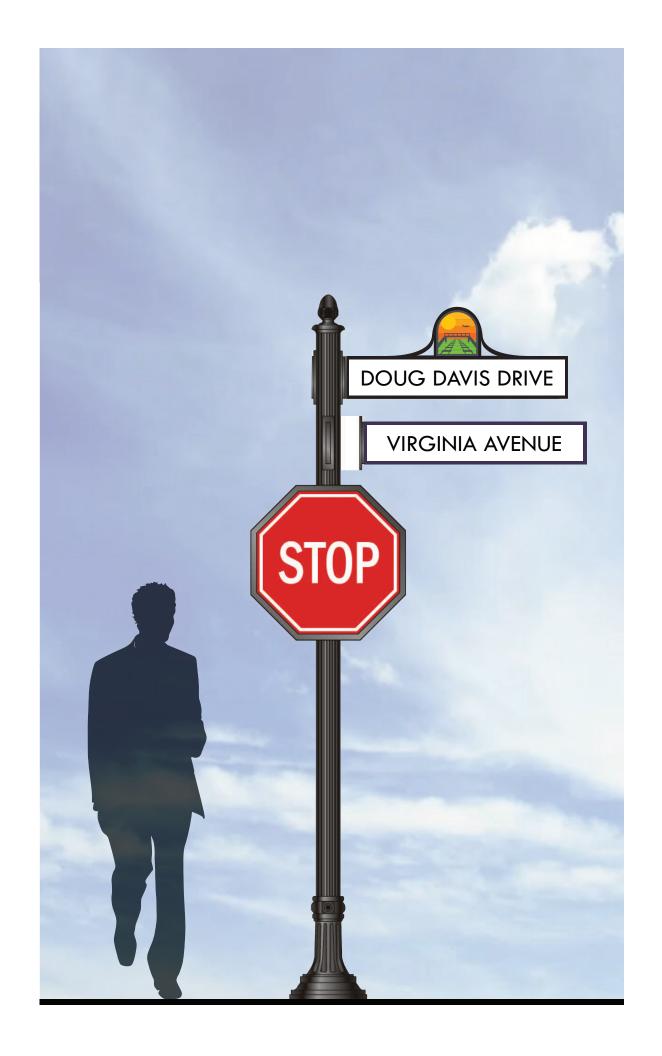
imagine



THE STREET IDENTIFICATION SIGN

The street identification sign design took a slightly more traditional approach in both the sign post material and street signage itself, opting more for clarity and visibility than splashy design. With street identification sign design, it is imperative to satisfy the Manual on Uniform Traffic Control Devices (MUTCD) for color and functionality.

The use of the arch in the logo, however, provided an opportunity to create an architectural element on the street sign while reinforcing the new Hapeville brand.



DIRECTIONAL **WAYFINDING SIGN**

The approach for the directional wayfinding sign took a slightly more playful direction. Taking a cue from the graphic sunset in the logo design, Hapeville destinations are separated by the descending colors that make up the logo's background.

The darkest orange anchors the left side of the sign, providing an ample space to apply the brand.

Hoping to achieve both strong legibility as well as create a striking image in the urban landscape the "sunset" color fields satisfy both. Between the bold, strking nature of the monument sign, the restrained classical approach of the street identification signage and the playfulness of the wayfinding signage, we feel the many facets and personalities of Hapeville expressed by

the logo design are represented in the wayfining concepts as well.



PREPARED FOR





STATE OF GEORGIA CITY OF HAPEVILLE

ORDINANCE NO.

AN AMENDMENT TO ORDINANCE NO. 2019-01 THAT PRESCRIBED THE SCHEDULING OF REGULAR MEETINGS OF THE MAYOR AND COUNCIL; TO PROVIDE FOR SEVERABILITY; TO REPEAL CONFLICTING ORDINANCES; TO PROVIDE AN EFFECTIVE DATE; AND FOR OTHER PURPOSES.

WHEREAS, the mayor and council shall have full power and authority to provide for the execution of all powers, functions, rights, privileges, duties and immunities of the city, its officers, agencies, or employees granted by the City of Hapeville's Charter or by state law; and,

WHEREAS, the municipal government of the City of Hapeville (hereinafter "City") and all powers of the City shall be vested in the mayor and council. The mayor and council shall be the legislative body of the City; and,

WHEREAS, existing ordinances, resolutions, rules and regulations of the City and its agencies now lawfully in effect not inconsistent with the provisions of the City's charter shall remain effective until they have been repealed, modified or amended; and,

WHEREAS, every official act of the mayor and council which is to become law shall be by ordinance; and,

WHEREAS, the Mayor and Council shall fix the date and time of regular meetings of the Mayor and Council by ordinance pursuant to Code of Ordinance Section 2-403; and

NOW, THEREFORE, BE IT, AND IT IS HEREBY ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF HAPEVILLE:

<u>SECTION 1.</u> <u>Scheduling of Regular</u> <u>Meetings.</u> At the January 8, 2019 Mayor and Council Meeting, Ordinance No. 2019-01 was adopted scheduling the regular meetings of Mayor and Council. Mayor and Council wish to update and amend the Regular Meeting Dates as follows:

Pursuant to Section 2-403 of the Code of Ordinances, the Mayor and Council hereby announce that they shall meet on a regular basis on the first and third Tuesday of every month at 6:00 p.m. Eastern Time (ET), and continue in session from day to day in their discretion. However, Regular Meetings falling on or after a government holiday, will be cancelled or rescheduled. These Regular Meetings not following on the first or third Tuesday are indicated by an asterisks. The

holiday schedule is attached hereto and incorporated herein as Exhibit "A". The Mayor and Council reserve the right to assemble and conduct official business on that date in the manner prescribed by law.

Regular Meeting Dates

January 8, 2019 *	July 2, 2019
January 22, 2019 *	July 16, 2019
February 5, 2019	July 18-19, 2019 **
February 7, 2019	August 6, 2019
February 19, 2019	August 20, 2019
March 5, 2019	September 17, 2019
March 19, 2019	October 1, 2019
April 2, 2019	October 15, 2019
April 16, 2019	November 5, 2019
May 7, 2019	November 19, 2019
May 21, 2019	December 3, 2019
June 4, 2019	December 17, 2019
June 18, 2019	

The meetings shall take place at 700 Doug Davis Drive, Hapeville, GA 30254. They shall begin at 6:00 p.m. and may be continued or adjourned as necessary. Notwithstanding any designation to the contrary, the Mayor and Council reserve the right to transact business without limitation at such meetings to the extent permitted by applicable law.

**The City Council Retreat will be held on July 18-19, 2019 from 7:00 a.m. to 4:00 p.m. at the Georgia Tech Hotel and Conference Center located at 800 Spring St NW, Atlanta, Georgia 30308.

<u>Section Two.</u> <u>Codification.</u> This Ordinance shall be codified in a manner consistent with the laws of the State of Georgia and the City.

Section Three. Severability.

- (a) It is hereby declared to be the intention of the Mayor and Council that all sections, paragraphs, sentences, clauses and phrases of this Ordinance are or were, upon their enactment, believed by the Mayor and Council to be fully valid, enforceable and constitutional.
- (b) It is hereby declared to be the intention of the Mayor and Council that, to the greatest extent allowed by law, each and every section, paragraph, sentence, clause or phrase of this Ordinance is severable from every other section, paragraph, sentence, clause or phrase of this Ordinance. It is hereby further declared to be the intention of the Mayor and Council that, to the greatest extent allowed by law, no section, paragraph, sentence, clause or phrase of this Ordinance

is mutually dependent upon any other section, paragraph, sentence, clause or phrase of this Ordinance.

(c) In the event that any phrase, clause, sentence, paragraph or section of this Ordinance shall, for any reason whatsoever, be declared invalid, unconstitutional or otherwise unenforceable by the valid judgment or decree of any court of competent jurisdiction, it is the express intent of the Mayor and Council that such invalidity, unconstitutionality or unenforceability shall, to the greatest extent allowed by law, not render invalid, unconstitutional or otherwise unenforceable any of the remaining phrases, clauses, sentences, paragraphs or sections of the Ordinance and that, to the greatest extent allowed by law, all remaining phrases, clauses, sentences, paragraphs and sections of the Ordinance shall remain valid, constitutional, enforceable, and of full force and effect.

<u>Section Four.</u> <u>Repeal of Conflicting Ordinances.</u> All ordinances and parts of ordinances in conflict herewith are hereby expressly repealed.

<u>Section Five.</u> <u>Effective Date.</u> The effective date of this Ordinance shall be the date of adoption unless otherwise stated herein.

ORDAINED this	day of	, 2019.
		CITY OF HAPEVILLE, GEORGIA
		Alan Hallman, Mayor
ATTEST:		
City Clerk		
APPROVED BY:		
City Attorney		