

**TRAFFIC IMPACT STUDY  
FOR  
PROPOSED MOUNT PISGAH CHRISTIAN SCHOOL  
EXPANSION AT 9725 NESBIT FERRY ROAD  
JOHNS CREEK, FULTON COUNTY, GEORGIA**



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# 1.0 INTRODUCTION

The purpose of this study is to determine the traffic impact of the proposed Mount Pisgah Christian School Expansion project at 9725 Nesbit Ferry Road and located in the northeast corner of the intersection of Nesbit Ferry Road and Nesbit Lakes Drive in City of Johns Creek, Georgia. The expansion project is carried out in three 5-year phases. The traffic analysis evaluates the current operations and future “No-Build” and “Build” conditions for Phase 1 (2029), Phase 2 (2034) and Phase 3 (2039) conditions with the traffic generated by the development. The proposed development will consist of:

Phase 1 consists of Curriculum Enhancement Building with 180 students and a single-family housing unit in 2029. Phase 2 (2034) will consist of Academic building with 125 students, Performing Arts building with 543 seats capacity and 6 tennis courts. In Phase 3 (2039), an additional 125 students are added (second Academic Building) and 31,500 sf Natatorium is constructed.



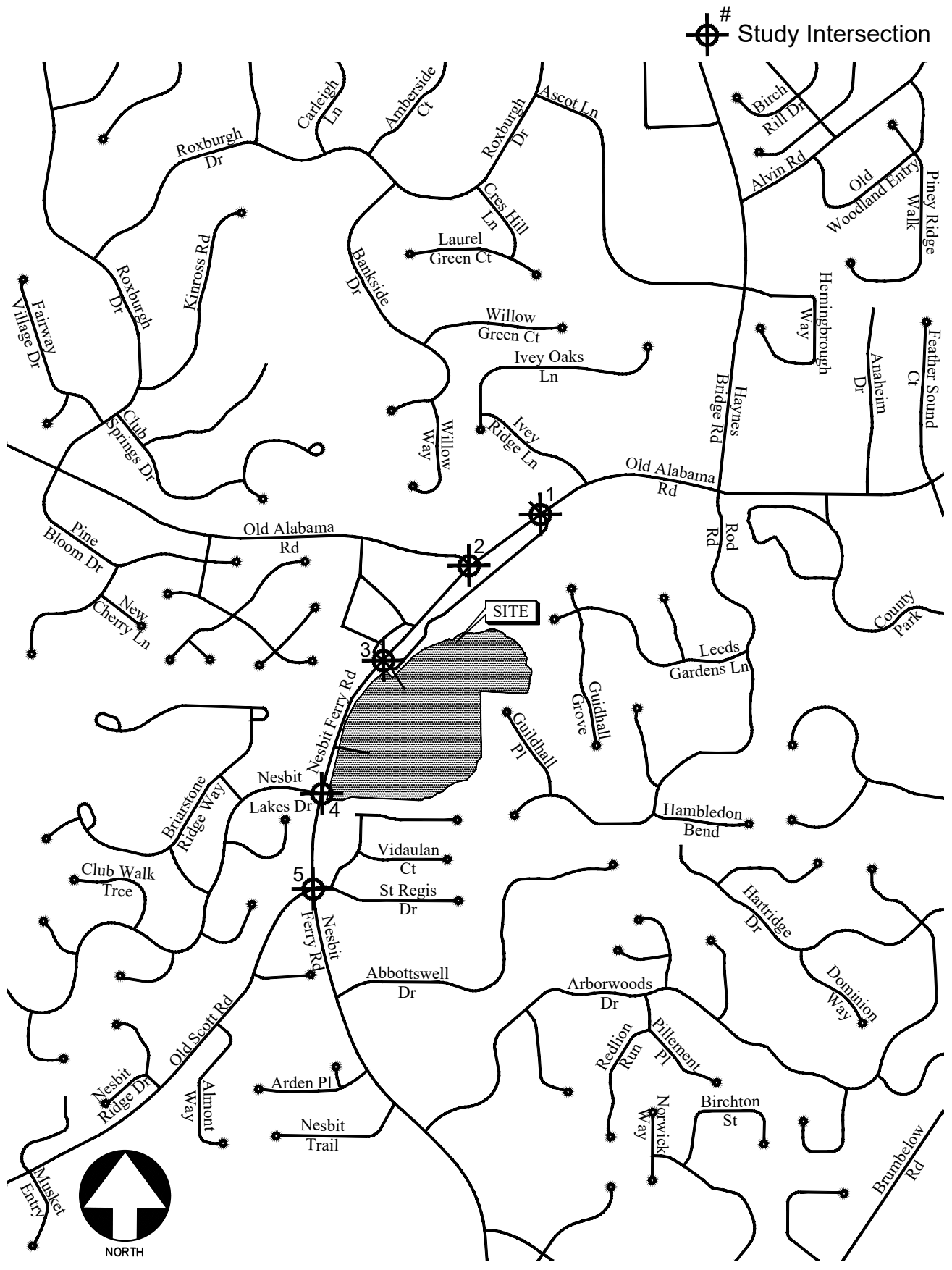
In addition to the two existing full access driveways, the school is proposing to have a third full access driveway to the south on Nesbit Ferry Rd, north of Nesbit Lakes Drive. The driveways are listed below:

- Site Driveway 1: Full-access (existing) northern driveway on Old Alabama Road (Nesbit Ferry Road changes name to Old Alabama Road), aligned with Mt. Pisgah Church’s northern driveway.
- Site Driveway 2: Full-access (existing) driveway on Nesbit Ferry Road aligned with Mt. Pisgah Church’s southern driveway.
- Site Driveway 3: Proposed full access driveway on Nesbit Ferry Rd north of Nesbit Lakes Drive.

This study is based on the methodology approved by City of Johns Creek. In this study, the AM, PM and School Dismissal peak hours have been analysed for “Existing”, “No-Build” and the three phases of “Build” conditions. The study includes the evaluation of traffic operations at the intersections of:

1. Nesbit Ferry Road at Mount Pisgah Christian School Northern Driveway/Mount Pisgah Church Driveway
2. Nesbit Ferry Road at Old Alabama Road
3. Nesbit Ferry Road at Mount Pisgah Christian School Southern Driveway
4. Nesbit Ferry Road at Proposed School Driveway 3
5. Nesbit Ferry Road at Nesbit Lakes Drive
6. Nesbit Ferry Road at Old Scott Road / St. Regis Drive

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report. The location of the development and the surrounding roadway network is shown in Figure 1.



LOCATION MAP

FIGURE 1

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## **2.0 EXISTING FACILITIES / CONDITIONS**

### **2.1 Roadway Facilities**

The following is a brief description of each of the roadway facilities located in proximity to the site:

#### **2.1.1 Nesbit Ferry Road**

Nesbit Ferry Road is a north-south, two-lane, undivided roadway with a two-way left turn lane and a posted speed limit of 40 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID's: 121-6006 & 121-6004) indicate that the daily traffic volume on Nesbit Ferry Road in 2022 was 11,500 vehicles per day, north of Nesbit Place and 18,600 vehicles per day, northeast of Community Road. GDOT classifies Nesbit Ferry Road as an urban minor arterial roadway.

#### **2.1.2 Old Alabama Road**

Old Alabama Road is an east-west, four-lane, undivided roadway with a two-way left turn lane and a posted speed limit of 45 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID 121-0863) indicate that the daily traffic volume on Old Alabama Road in 2022 was 15,600 vehicles per day, northwest of Laurel Mill Drive. GDOT classifies Old Alabama Road as an urban minor arterial roadway.

#### **2.1.3 Nesbit Lakes Drive**

Nesbit Lakes Drive is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

#### **2.1.4 Old Scott Road**

Old Scott Road is an east-west, two-lane, undivided roadway with a posted speed limit of 40 mph in the vicinity of the site.

#### **2.1.5 St Regis Drive**

St Regis Drive is an east-west, two-lane, undivided roadway in the vicinity of the site.

## 3.0 STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board’s Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

### 3.1 Unsignalized Intersections

For unsignalized intersections controlled by a stop sign on minor streets, the level-of-service (LOS) for motor vehicles with controlled movements is determined by the computed control delay according to the thresholds stated in Table 1 below. LOS is determined for each minor street movement (or shared movement), as well as major street left turns. LOS is not defined for the intersection as a whole or for major street approaches. The LOS of any controlled movement which experiences a volume to capacity ratio greater than 1 is designated as “F” regardless of the control delay.

Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from “A” through “F”. Level-of-service “A” indicates excellent operations with little delay to motorists, while level-of-service “F” exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross the main road without experiencing long delays.

TABLE 1 — LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS		
Control Delay (sec/vehicle)	LOS by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	v/c > 1.0
≤ 10	A	F
> 10 and ≤ 15	B	F
> 15 and ≤ 25	C	F
> 25 and ≤ 35	D	F
> 35 and ≤ 50	E	F
> 50	F	F

\*The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection.

Source: Highway Capacity Manual, 6<sup>th</sup> edition, Exhibit 20-2 *LOS Criteria: Motorized Vehicle Mode*

### 3.2 Signalized Intersections

According to HCM procedures, LOS can be calculated for the entire intersection, each intersection approach, and each lane group. HCM uses control delay alone to characterize LOS for the entire intersection or an approach. Control delay per vehicle is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Both control delay and volume-to-capacity



ratio is used to characterize LOS for a lane group. A volume-to-capacity ratio of 1.0 or more for a lane group indicates failure from capacity perspective. Therefore, such a lane group is assigned LOS F regardless of the amount of control delay.

Table 2 below summarizes the LOS criteria from HCM for motorized vehicles at signalized intersection.

TABLE 2 – LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS		
Control Delay (sec/vehicle)*	LOS for Lane Group by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	v/c > 1.0
≤ 10	A	F
> 10 and ≤ 20	B	F
> 20 and ≤ 35	C	F
> 35 and ≤ 55	D	F
> 55 and ≤ 80	E	F
> 80	F	F

\*For approach-based and intersection wide assessments, LOS is defined solely by control delay

Source: Highway Capacity Manual, 6<sup>th</sup> edition, Exhibit 19-8 *LOS Criteria: Motorized Vehicle Mode*

LOS A is typically assigned when the volume-to-capacity (v/c) ratio is low and either progression is exceptionally favourable, or the cycle length is very short. LOS B is typically assigned when the v/c ratio is low and either progression is highly favourable, or the cycle length is short. However, more vehicles are stopped than with LOS A. LOS C is typically assigned when progression is favourable, or the cycle length is moderate. Individual *cycle failures* (one or more queued vehicles are not able to depart because of insufficient capacity during the cycle) may begin to appear at this level. Many vehicles still pass through the intersection without stopping, but the number of vehicles stopping is significant. LOS D is typically assigned when the v/c ratio is high and either progression is ineffective, or the cycle length is long. There are many vehicle-stops and individual cycle failures are noticeable. LOS E is typically assigned when the v/c ratio is high, progression is very poor, the cycle length is long, and individual cycle failures are frequent. LOS F is typically assigned when the v/c ratio is very high, progression is very poor, the cycle length is long, and most cycles fail to clear the queue.

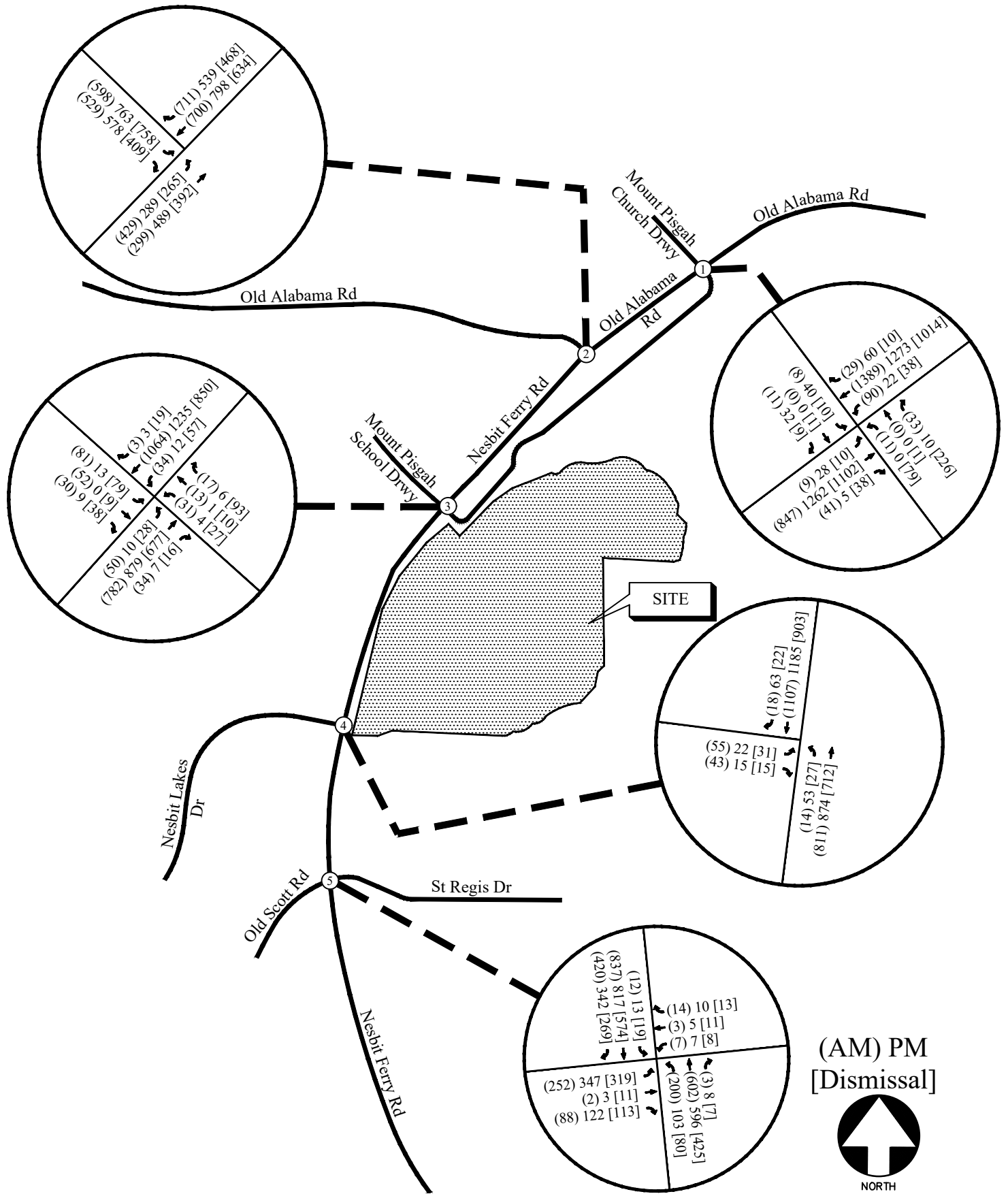
## **4.0 EXISTING 2024 TRAFFIC ANALYSIS**

### **4.1 Existing Traffic Volumes**

Existing traffic counts were obtained at the following study intersections:

1. Nesbit Ferry Road at Mount Pisgah Christian School Northern Driveway/Mount Pisgah Church Driveway
2. Nesbit Ferry Road at Old Alabama Road
3. Nesbit Ferry Road at Mount Pisgah Christian School Southern Driveway
4. Nesbit Ferry Road at Nesbit Lakes Drive
5. Nesbit Ferry Road at Old Scott Road / St. Regis Drive

Turning movement counts were collected on Wednesday, May 01, 2024. All turning movement counts were recorded during the AM, PM and school dismissal peak hours between 7:00 AM to 9:00 AM, 2:00 PM to 6:00 PM respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections was then determined. These counted volumes make up the peak hour traffic volumes for the intersection and are shown in Figure 2. The existing traffic control and lane geometry for the intersection is shown in Figure 3.







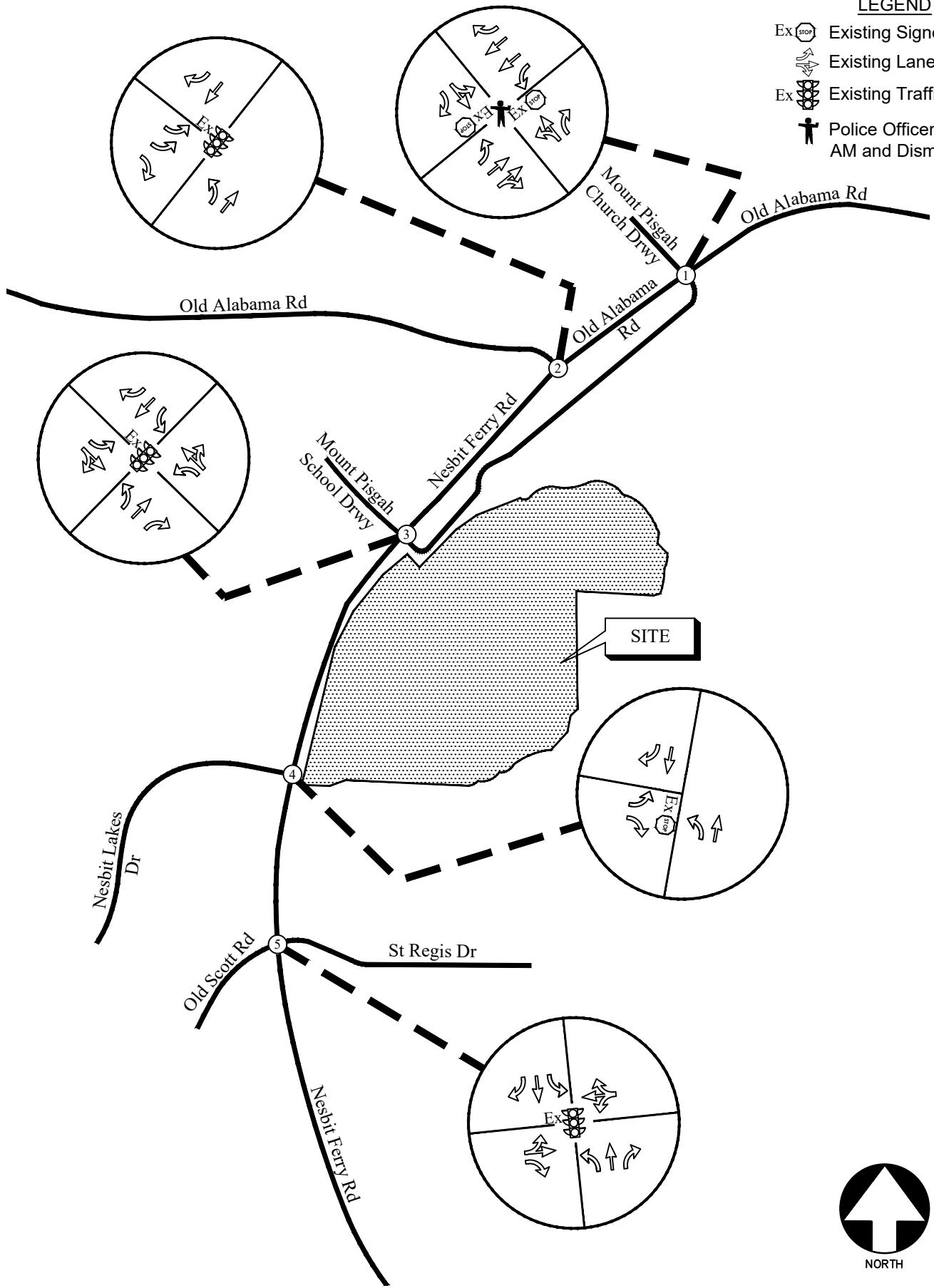
EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 2

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**LEGEND**

- Ex  Existing Signed Approach
-  Existing Lane Geometry
- Ex  Existing Traffic Signal
-  Police Officer during AM and Dismissal



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 3

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## 4.2 Existing Traffic Operations

Existing 2024 traffic operations were analysed at the study intersections in accordance with the HCM methodology. The results of the analyses are shown in Tables 3. The existing traffic control and lane geometry for the intersection is shown in Figure 3.

TABLE 3 – EXISTING INTERSECTION OPERATIONS				
Intersection	Traffic Control	LOS (Delay)		
		AM Peak	PM Peak	School Dismissal
<b>1</b> <b><u>Nesbit Ferry Road @ Mount Pisgah Christian School Northern Driveway/ Church Driveway</u></b> -Eastbound Approach -Westbound Approach -Northbound Left -Southbound Left	Police Officer in AM & Dismissal. Stop Controlled on EB and WB Approaches In PM peak	<b><u>A (8.5)</u></b> D (36.4) C (34.8) A (6.3) A (8.8)	F (*) B (14.0) B (12.7) B (12.2)	<b><u>C (22.5)</u></b> C (30.6) E (72.8) B (16.2) B (14.6)
<b>2</b> <b><u>Nesbit Ferry Road @ Old Alabama Road</u></b> -Eastbound Approach -Northbound Approach -Southbound Approach	Signalized	<b><u>F (91.3)</u></b> E (76.5) E (77.7) F (129.3)	<b><u>E (79.5)</u></b> E (76.6) D (38.9) F (124.0)	<b><u>D (40.0)</u></b> D (53.8) C (20.3) D (34.8)
<b>3</b> <b><u>Nesbit Ferry Road @ Mount Pisgah Christian School Southern Driveway</u></b> -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach	Signalized	<b><u>C (23.0)</u></b> E (68.4) E (66.6) B (11.8) C (22.7)	<b><u>A (9.8)</u></b> E (72.8) E (72.0) A (5.4) B (11.4)	<b><u>B (19.8)</u></b> E (66.0) E (60.3) B (11.8) B (14.1)
<b>4</b> <b><u>Nesbit Ferry Road @ Nesbit Lakes Drive</u></b> -Eastbound Approach -Northbound Left	Stop Controlled on EB Approach	F (293.9) B (11.5)	F (180.3) B (12.2)	F (79.9) B (10.4)
<b>5</b> <b><u>Nesbit Ferry Road @ Old Scott Road/ St. Regis Drive</u></b> -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach	Signalized	<b><u>E (60.3)</u></b> F (147.7) D (35.5) C (34.9) D (49.9)	<b><u>E (70.5)</u></b> F (187.2) C (33.6) C (24.5) D (44.3)	<b><u>E (70.9)</u></b> F (138.7) C (29.4) C (33.5) D (54.9)

\* Delay exceeds 300 seconds

The results of existing traffic operations analysis indicate that the signalized intersection of Nesbit Ferry Road @ Old Alabama Road is operating at an overall level-of-service (LOS) “F” in AM peak and LOS “E” in PM peak hour with its southbound Old Alabama Road approach operating at LOS “F” in both peak hours. The signalized intersection of Nesbit Ferry Road @ Old Scott Road is operating at an overall LOS “E” in all three peak hours with its eastbound Old Scott Road approach operating at LOS “F” in all three peak hours. The stop-controlled eastbound approach of Nesbit Lakes Drive at Nesbit Ferry Road is also operating at LOS “F” in all three studied peak hours. The stop-controlled Mt. Pisgah Church driveway at Old Alabama Road will also operate at LOS “F” in the PM peak hour when there is no police officer controlling the school traffic.

## 5.0 PROPOSED DEVELOPMENT

The proposed Mount Pisgah Christian School Expansion project at 9725 Nesbit Ferry Road and located in the northeast corner of the intersection of Nesbit Ferry Road and Nesbit Lakes Drive in City of Johns Creek, Fulton County. A site plan is shown in Figure 4.

Phase 1 consists of Curriculum Enhancement Building with 180 students and a single-family housing unit in 2029. Phase 2 (2034) will consist of Academic building with 125 students, Performing Arts building with 543 seats capacity and 6 tennis courts. In Phase 3 (2039), an additional 125 students are added (second Academic Building) and 31,500 sf Natatorium is constructed.



The development proposes access at the following locations:

- Site Driveway 1: Full-access (existing) northern driveway on Old Alabama Road (Nesbit Ferry Road changes name to Old Alabama Road), aligned with Mt. Pisgah Church's northern driveway.
- Site Driveway 2: Full-access (existing) driveway on Nesbit Ferry Road aligned with Mt. Pisgah Church's southern driveway.
- Site Driveway 3: Proposed full access driveway on Nesbit Ferry Rd north of Nesbit Lakes Drive.

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**REVISIONS**

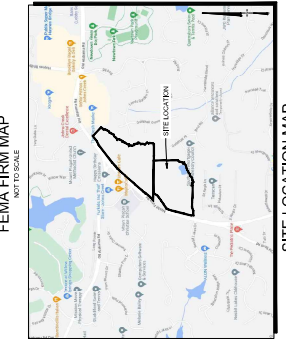
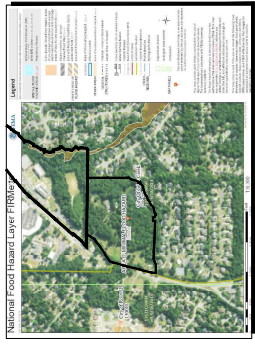
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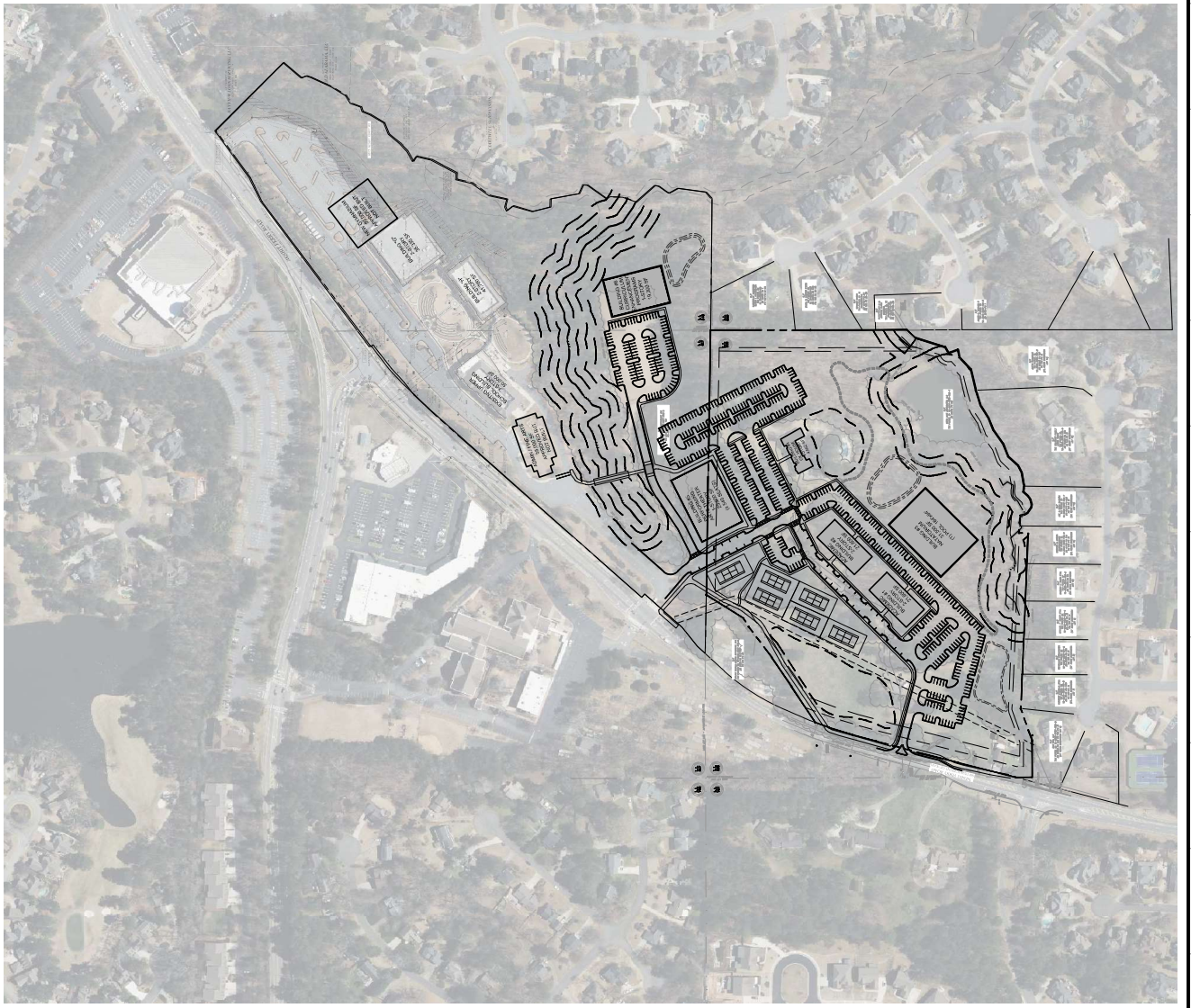
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 PROJECT: 23037.00

**72** SHEET



**SITE DATA**

EXISTING SCHOOLS - CITY AREA	24,477 STUDENTS (1,088,000 SF)
EXISTING SCHOOLS - SITE AREA	12,500 STUDENTS (500,000 SF)
TOTAL SFP	4,628 ACRES (2,037,271 SF)
<b>SCENARIOS</b>	AC-1 (SFP SPECIAL USE PERMIT) (SFP-1,500)
PROPOSED ZONING	AC-1 (SFP SPECIAL USE PERMIT)
JURISDICTION	CITY OF JOHNS CREEK
<b>DESIGN REQUIREMENTS</b>	
MAX LOT COVER	5.00% (SFP-1,500)
PROPOSED ACADEMIC DENSITY	1.0000 SF/ACRE
PROPOSED ACADEMIC DENSITY	4.0000 SF/ACRE
TOTAL SFP SITE DENSITY	1.0000 SF/ACRE
<b>ACADEMIC BUILDINGS</b>	
EXISTING AND APPROVED (SFP-1,500)	30,000 SF
PROPOSED (SFP-1,500)	50,000 SF
EXISTING (SFP-1,500)	50,000 SF
NEW (SFP-1,500)	50,000 SF
EXISTING AND APPROVED (SFP-1,500)	20,000 SF
PROPOSED	19,000 SF
CURRICULAR ENHANCEMENT BLDGS	19,000 SF
PERFORMANCE ARTS THEATER	50,000 SF
PERFORMANCE ARTS CENTER	50,000 SF
PERFORMANCE ARTS CENTER	4,000 SF
ACADEMIC BUILDINGS	41,200 SF
EXISTING & APPROVED TOTAL	200,200 SF
PROPOSED TOTAL	139,000 SF
<b>GENERAL TOTAL</b>	339,200 SF
<b>RECREATION FACILITIES</b>	
1 SPACE PER 100 STUDENTS (10 SPACES)	
2 PER 100 STUDENTS (20 SPACES)	
3 PER 100 STUDENTS (30 SPACES)	
4 PER 100 STUDENTS (40 SPACES)	
5 PER 100 STUDENTS (50 SPACES)	
6 PER 100 STUDENTS (60 SPACES)	
7 PER 100 STUDENTS (70 SPACES)	
8 PER 100 STUDENTS (80 SPACES)	
9 PER 100 STUDENTS (90 SPACES)	
10 PER 100 STUDENTS (100 SPACES)	
11 PER 100 STUDENTS (110 SPACES)	
12 PER 100 STUDENTS (120 SPACES)	
13 PER 100 STUDENTS (130 SPACES)	
14 PER 100 STUDENTS (140 SPACES)	
15 PER 100 STUDENTS (150 SPACES)	
16 PER 100 STUDENTS (160 SPACES)	
17 PER 100 STUDENTS (170 SPACES)	
18 PER 100 STUDENTS (180 SPACES)	
19 PER 100 STUDENTS (190 SPACES)	
20 PER 100 STUDENTS (200 SPACES)	
21 PER 100 STUDENTS (210 SPACES)	
22 PER 100 STUDENTS (220 SPACES)	
23 PER 100 STUDENTS (230 SPACES)	
24 PER 100 STUDENTS (240 SPACES)	
25 PER 100 STUDENTS (250 SPACES)	
26 PER 100 STUDENTS (260 SPACES)	
27 PER 100 STUDENTS (270 SPACES)	
28 PER 100 STUDENTS (280 SPACES)	
29 PER 100 STUDENTS (290 SPACES)	
30 PER 100 STUDENTS (300 SPACES)	
31 PER 100 STUDENTS (310 SPACES)	
32 PER 100 STUDENTS (320 SPACES)	
33 PER 100 STUDENTS (330 SPACES)	
34 PER 100 STUDENTS (340 SPACES)	
35 PER 100 STUDENTS (350 SPACES)	
36 PER 100 STUDENTS (360 SPACES)	
37 PER 100 STUDENTS (370 SPACES)	
38 PER 100 STUDENTS (380 SPACES)	
39 PER 100 STUDENTS (390 SPACES)	
40 PER 100 STUDENTS (400 SPACES)	
41 PER 100 STUDENTS (410 SPACES)	
42 PER 100 STUDENTS (420 SPACES)	
43 PER 100 STUDENTS (430 SPACES)	
44 PER 100 STUDENTS (440 SPACES)	
45 PER 100 STUDENTS (450 SPACES)	
46 PER 100 STUDENTS (460 SPACES)	
47 PER 100 STUDENTS (470 SPACES)	
48 PER 100 STUDENTS (480 SPACES)	
49 PER 100 STUDENTS (490 SPACES)	
50 PER 100 STUDENTS (500 SPACES)	



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## 5.1 Trip Generation

Trip generation estimates for the project were based on the rates and equations published in the 11<sup>th</sup> edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. As approved by City of Johns Creek in the methodology, the trip generation was based on the following ITE Land Uses: 532 – *Academic Buildings*, 532 – *Curriculum Enhancement Buildings*, 493 – *Natatorium*, 560 – *Performing Arts*, 210 – *Single Family Detached Housing*, 490 – *Tennis Courts*. The calculated total trip generation for the proposed development will be built in three phases is shown in Table 4A, 4B and 4C.

**TABLE 4A – TRIP GENERATION – PHASE 1**

Land Use	Size	Phase 1 (0-5 years)									Two-way
		AM Peak Hour			PM Peak Hour			School Dismissal Peak Hour			
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	
ITE 532 – Academic Buildings	-	-	-	-	-	-	-	-	-	-	-
ITE 532 – Curriculum Enhancement Bldg.	180 students	90	52	142	13	18	31	40	55	95	446
ITE 493 – Natatorium	-	-	-	-	-	-	-	-	-	-	-
ITE 560 – Performing Arts	-	-	-	-	-	-	-	-	-	-	-
ITE 210 – Single-family Detached Housing	1 unit	0	1	1	1	0	1	1	0	1	15
ITE 490 – Tennis Court	-	-	-	-	-	-	-	-	-	-	-
<b>Total trips</b>		<b>90</b>	<b>53</b>	<b>143</b>	<b>14</b>	<b>18</b>	<b>32</b>	<b>41</b>	<b>55</b>	<b>96</b>	<b>461</b>

**TABLE 4B – TRIP GENERATION – PHASE 1 AND PHASE 2**

Land Use	Size	Phase 1 + Phase 2 (6-10 years)									Two-way
		AM Peak Hour			PM Peak Hour			School Dismissal Peak Hour			
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	
ITE 532 – Academic Buildings	125 students	62	37	99	9	12	21	28	38	66	310
ITE 532 – Curriculum Enhancement Bldg.	180 students	90	52	142	13	18	31	40	55	95	446
ITE 493 – Natatorium	-	-	-	-	-	-	-	-	-	-	-
ITE 560 – Performing Arts	543 seats	23	15	38	24	30	54	52	35	87	489
ITE 210 – Single-family Detached Housing	1 unit	0	1	1	1	0	1	1	0	1	15
ITE 490 – Tennis Court	6 Units	13	12	25	12	13	25	-	-	-	182
<b>Total trips</b>		<b>188</b>	<b>117</b>	<b>305</b>	<b>59</b>	<b>73</b>	<b>132</b>	<b>121</b>	<b>128</b>	<b>249</b>	<b>1,442</b>

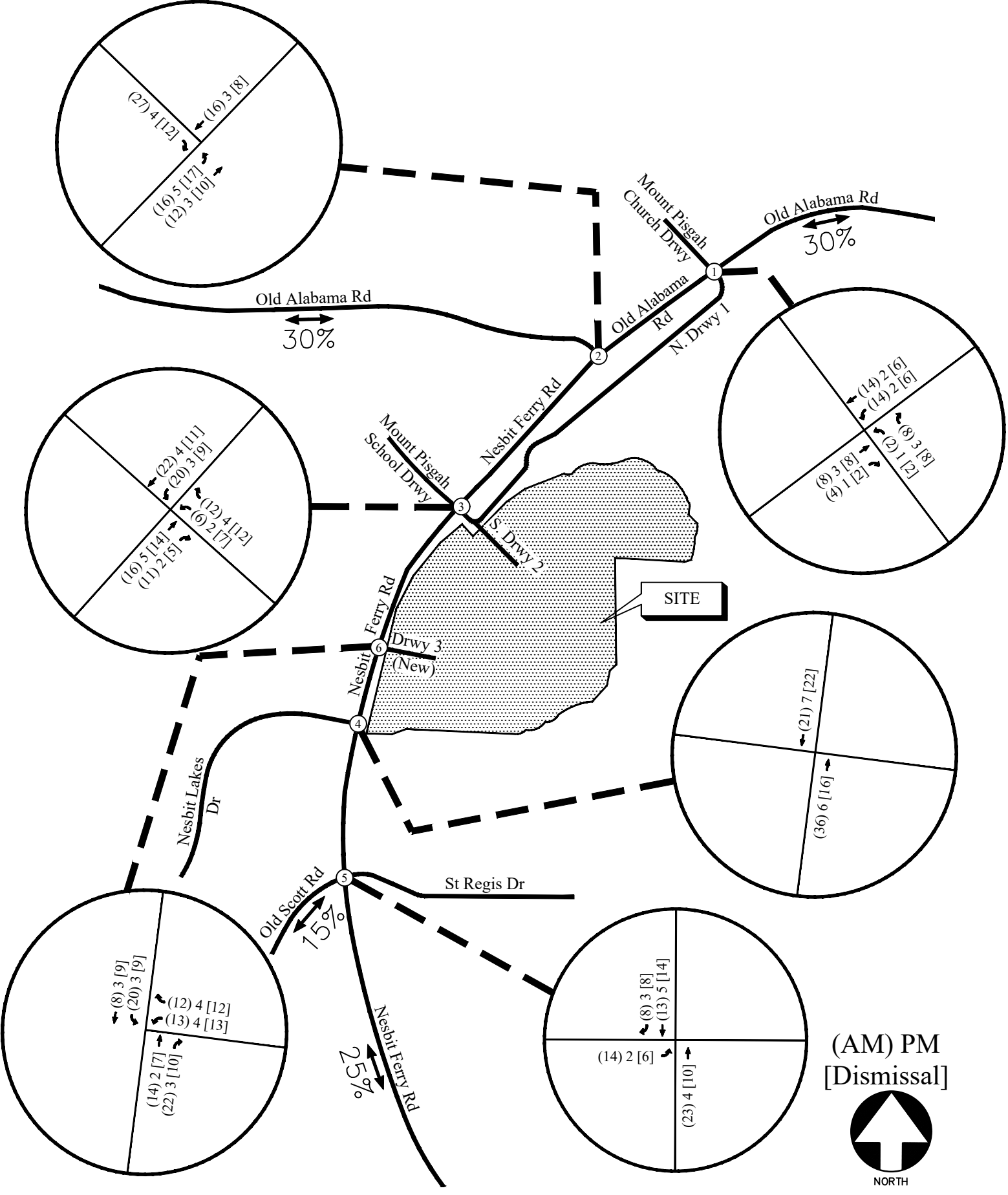


**TABLE 4C – TRIP GENERATION - PHASE 1, PHASE 2 AND PHASE 3**

Land Use	Size	PHASE 1 + PHASE 2 + PHASE 3 (11-15 Years)									Two-way
		AM Peak Hour			PM Peak Hour			School Dismissal Peak Hour			
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	
ITE 532 – Academic Buildings	250 students	124	74	198	18	25	43	56	77	133	620
ITE 532 – Curriculum Enhancement Bldg.	180 students	90	52	142	13	18	31	40	55	95	446
ITE 493 – Natatorium	31,500 sf	61	39	100	123	75	198	126	74	200	198
ITE 560 – Performing Arts	543 seats	23	15	38	24	30	54	52	35	87	489
ITE 210 – Single-family Detached Housing	1 unit	0	1	1	1	0	1	1	0	1	15
ITE 490 – Tennis Court	6 Units	13	12	25	12	13	25	-	-	-	182
<b>Total trips</b>		<b>311</b>	<b>193</b>	<b>504</b>	<b>191</b>	<b>161</b>	<b>352</b>	<b>275</b>	<b>241</b>	<b>516</b>	<b>1,950</b>

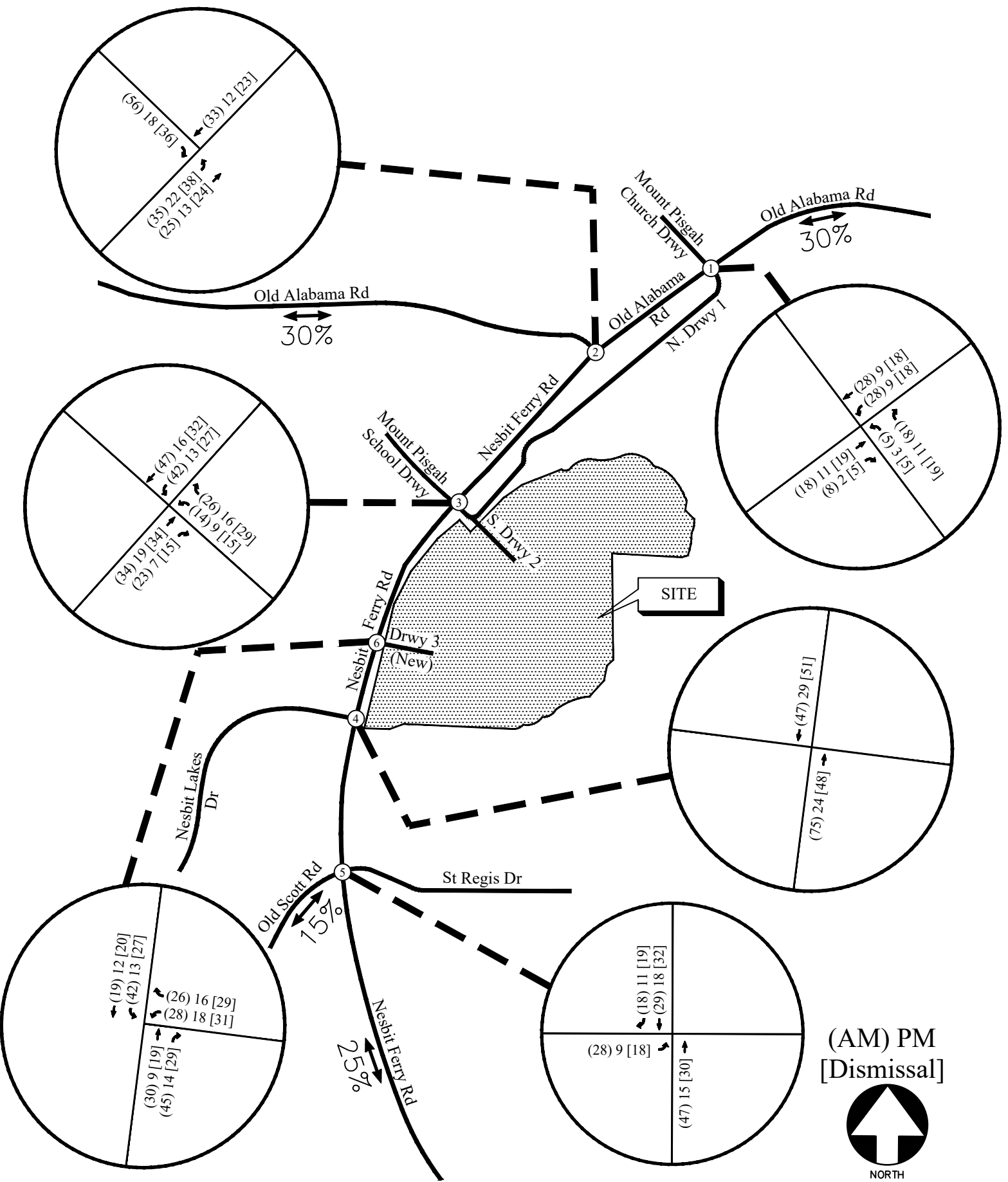
## 5.2 Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on a review of the existing travel patterns in the area and the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4A, 4B and 4C, were assigned to the study area intersection based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 5A, 5B and 5C.



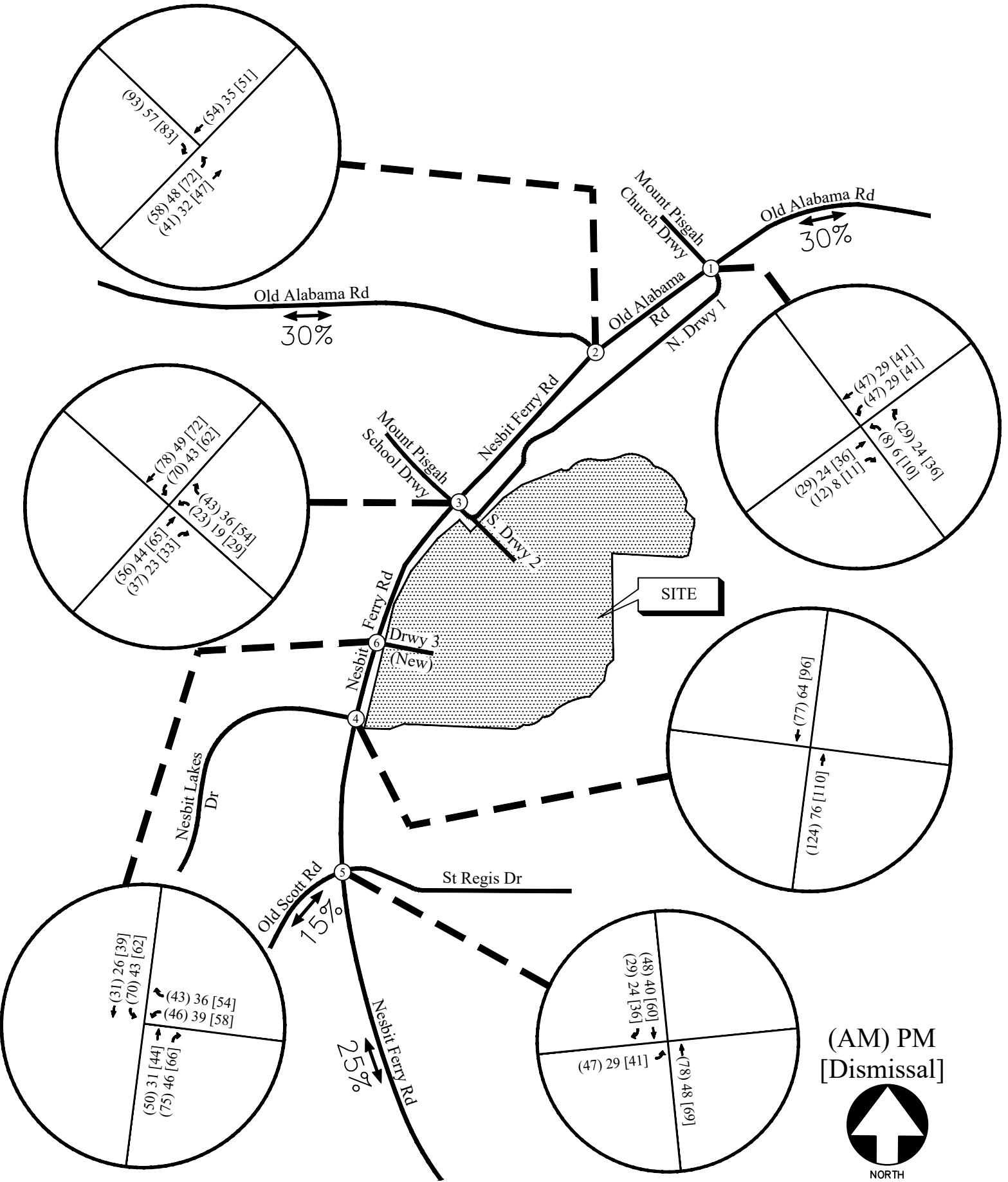
TRIP DISTRIBUTION AND NEW SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES (PHASE-1)

FIGURE 5A  
A&R Engineering Inc.



TRIP DISTRIBUTION AND NEW SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES (PHASE-2)

FIGURE 5B  
A&R Engineering Inc.



TRIP DISTRIBUTION AND NEW SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES (PHASE-3)

FIGURE 5C A&R Engineering Inc.

## **6.0 FUTURE TRAFFIC ANALYSIS**

The future 2026 traffic operations are analyzed for the “Build” and “No-Build” conditions.

The future traffic operations are analyzed for Phase 1 (2029), Phase 2 (2034) and Phase 3 (2039) for both the “Build” and “No-Build” conditions. This provides a basis of reference for determining both the contribution of the site to overall traffic conditions and the additional improvements needed to provide sufficient site access and capacity for passing traffic.

### **6.1 Future “No-Build” Conditions**

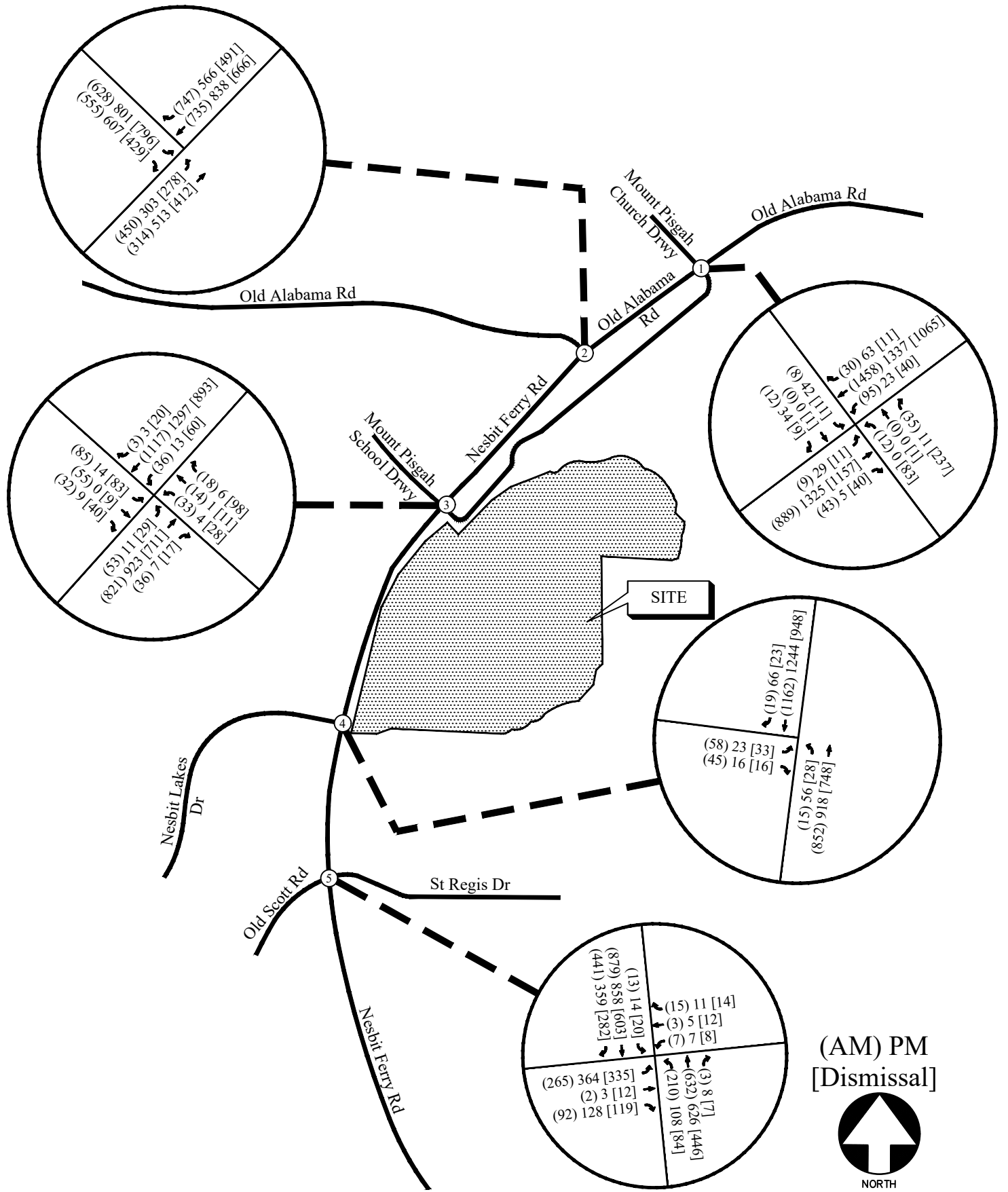
The “No-Build” (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future “No-Build” volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of through traffic.

#### **6.1.1 Annual Traffic Growth**

To evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last five years (2017-2019 & 2021-2022) revealed growth of approximately 1% in the area was used in the analysis. This growth factor was applied to the existing traffic volumes between collector and arterial roadways in order to estimate the future year traffic volumes prior to the addition of site-generated traffic. The future “No-Build” peak hour volumes for years 2029, 2034 and 2039 are shown in Figures 6A, 6B and 6C respectively.

### **6.2 Future “Build” Conditions**

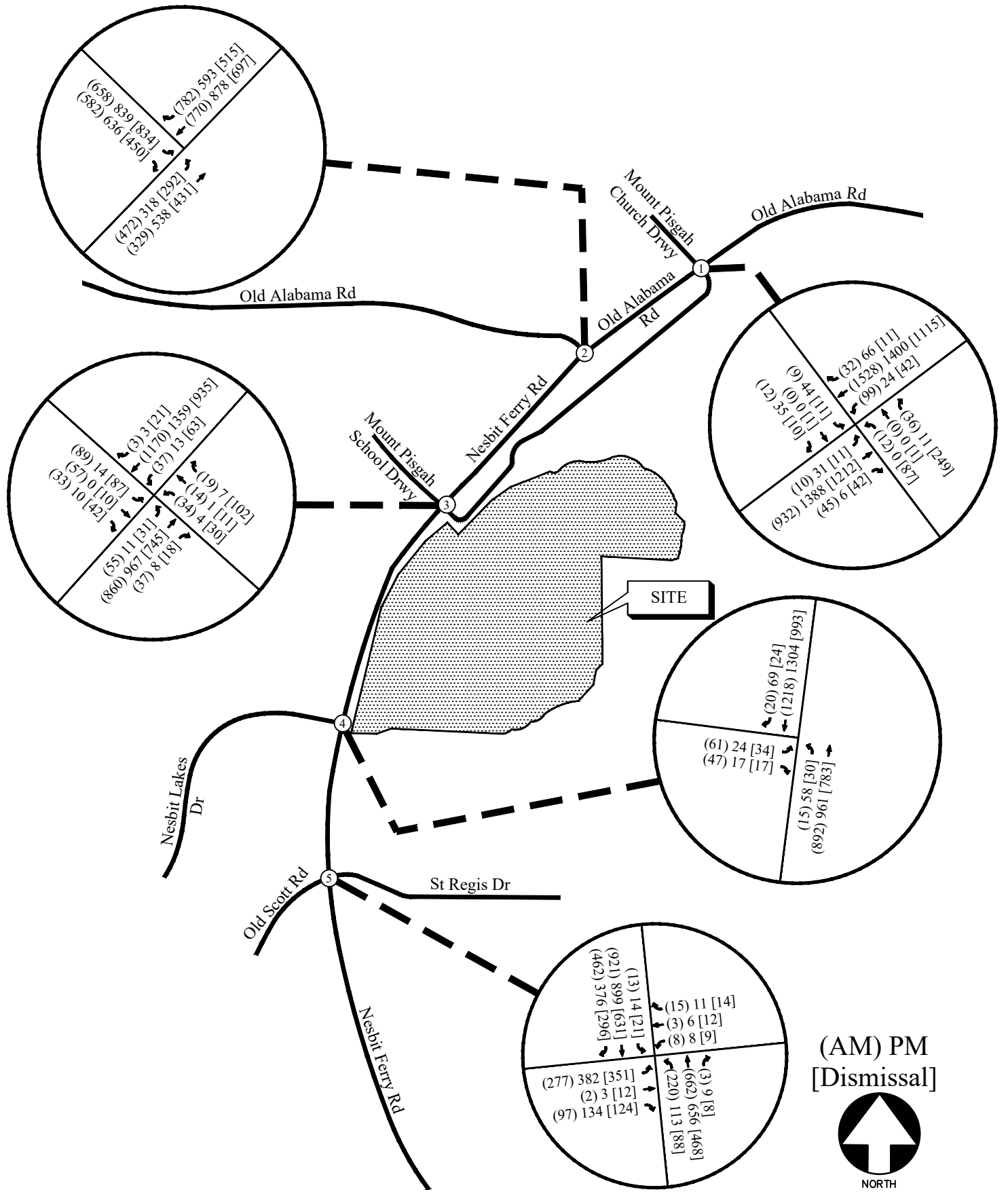
The “Build” or development conditions include the estimated background traffic from the “No-Build” conditions plus the added traffic from the proposed development. In order to evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 5A, 5B and 5C) were added to base traffic volumes (Figures 6A, 6B and 6C) to calculate the future traffic volumes after the construction of the development. These total future “Build” traffic volumes are shown in Figures 7a, 7B and 7C.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES (2029)

FIGURE 6A

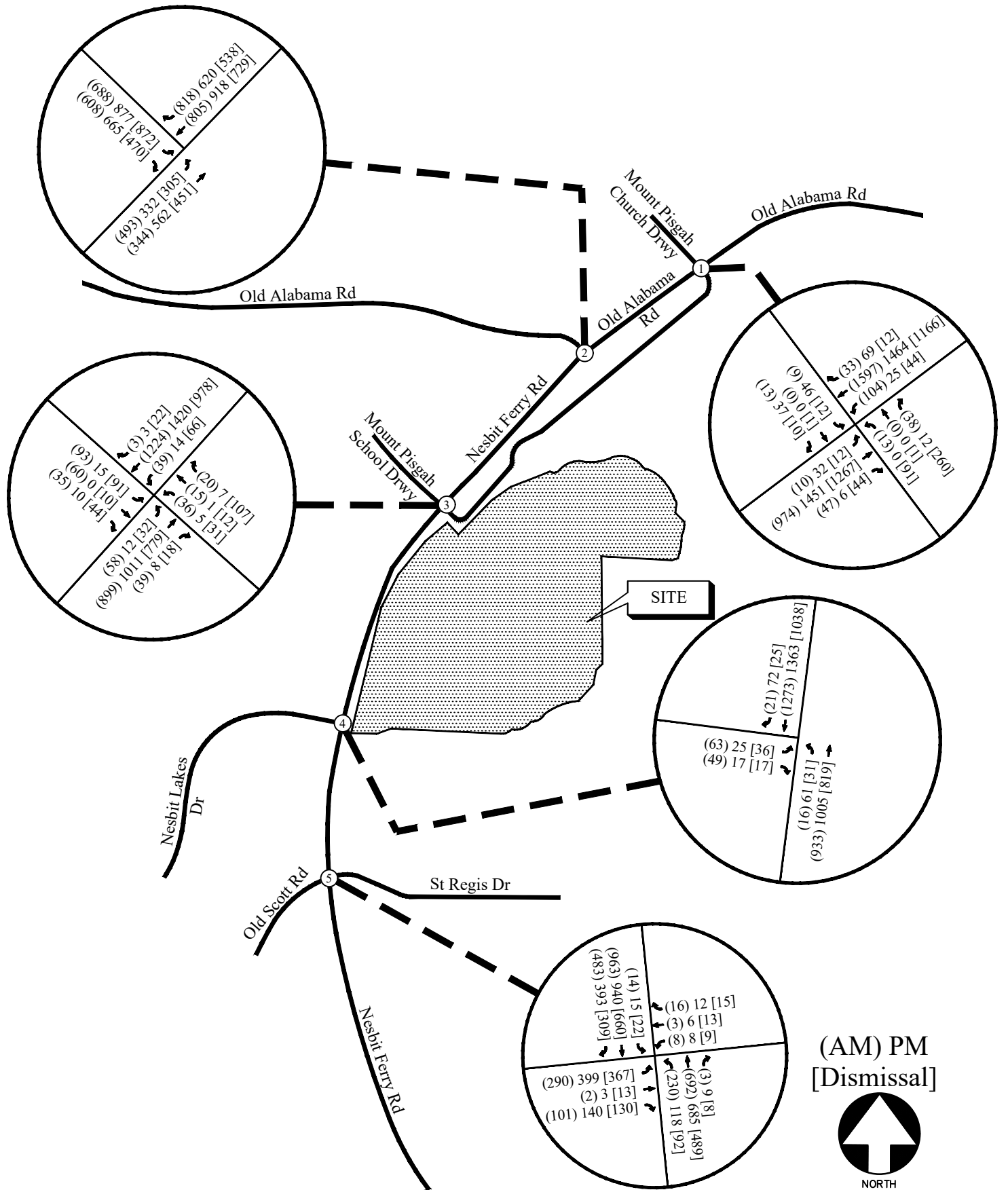
A&R Engineering Inc.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES (2034)

FIGURE 6B

A&R Engineering Inc.

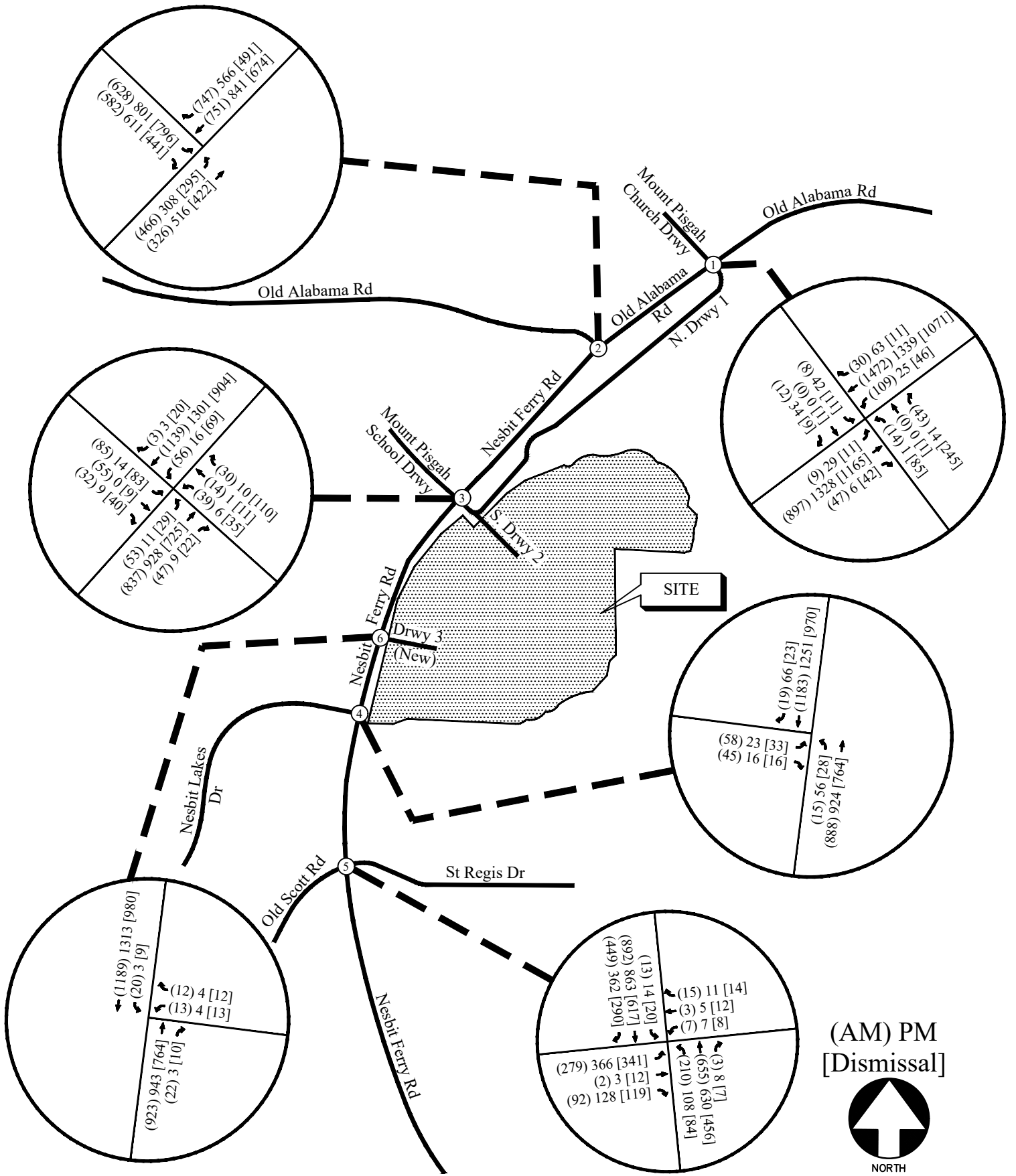


FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES (2039)

FIGURE 6C

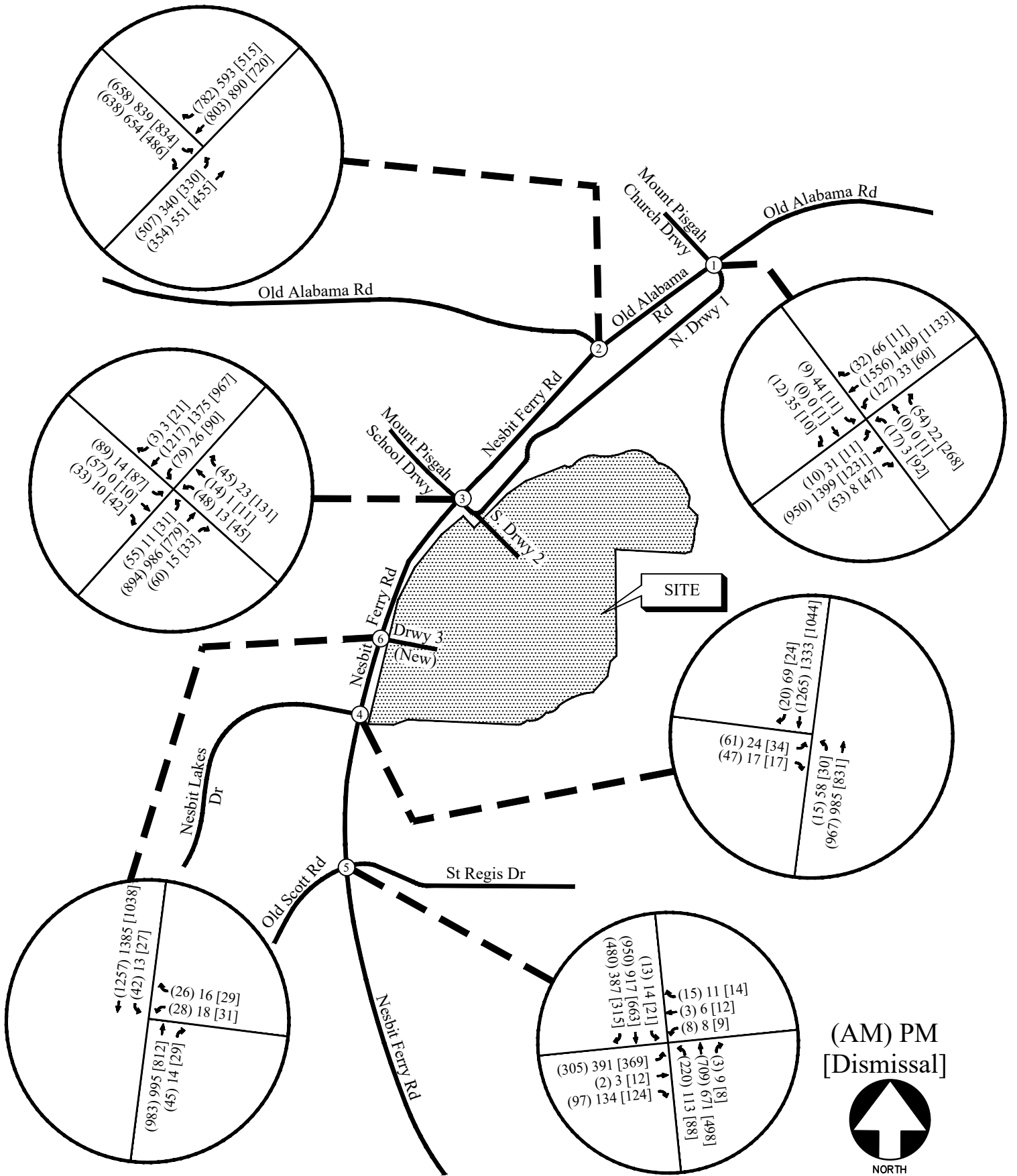
A&R Engineering Inc.





FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES  
(2029)

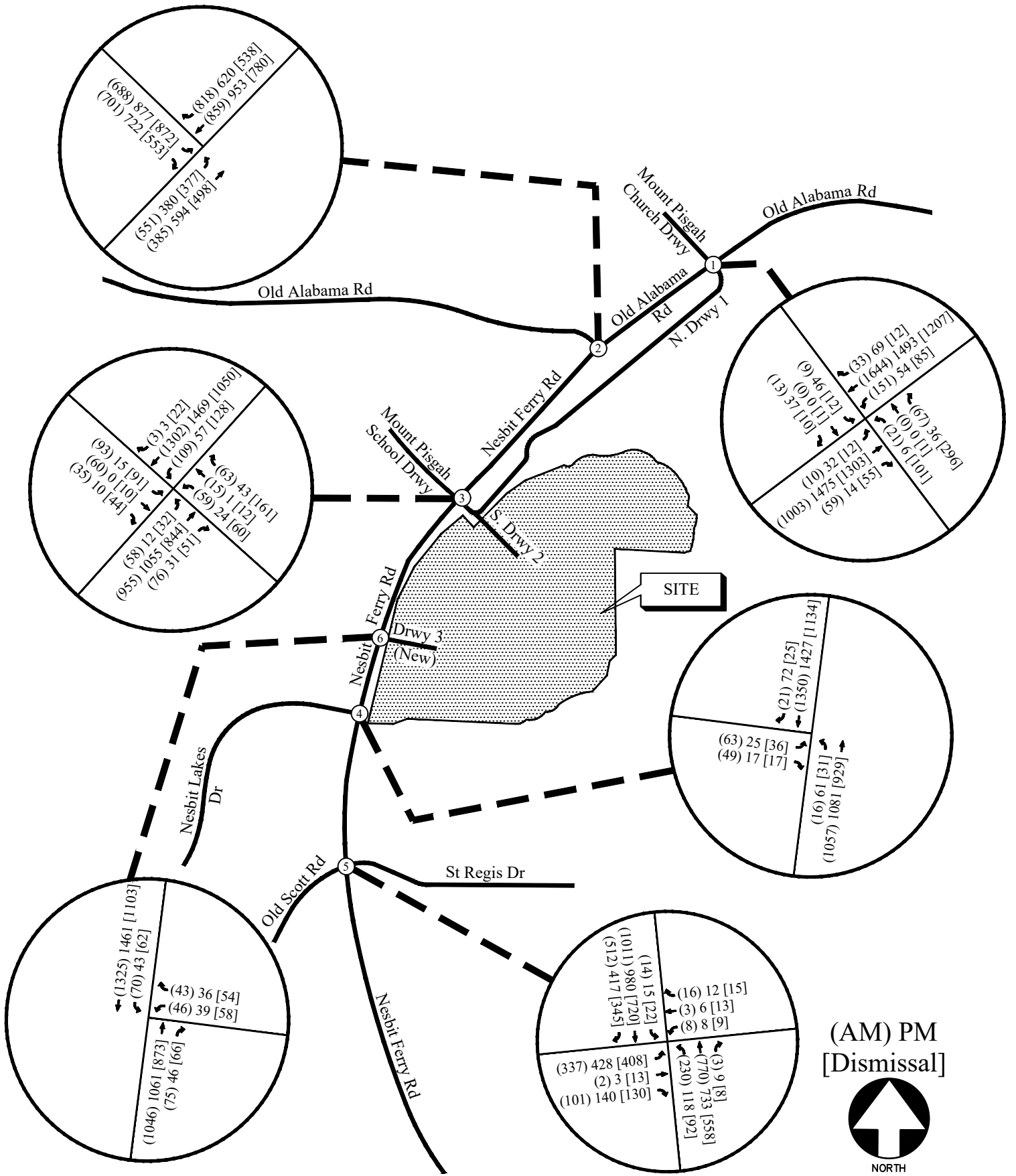
FIGURE 7A  
A&R Engineering Inc.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES (2034)

FIGURE 7B

A&R Engineering Inc.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES (2039)

FIGURE 7C

A&R Engineering Inc.

### 6.3 Auxiliary Lane Analysis

Included below are analyses for left-turn lanes and deceleration lanes for all site driveways per City of Johns Creek’s standards. The analyses below are based off the trip distribution included in Section 5.2. According to the trip distribution, the 24-hour two-way volume entering and exiting the site is 461, 1442 and 1950 for the years 2029, 2034 and 2039 respectively.

#### 6.3.1 Left Turn Lane Analysis

According to City of Johns Creek standards, for a two-lane roadway with 40 mph speed limit and AADT’s greater than 6,000 vehicles, the threshold of peak hour site generated left-turn volume to warrant a left-turn lane is 30 vehicles. The projected peak hour and daily left-turn volume for the proposed driveways is shown in Table 5.

TABLE 5 – CITY OF JOHNS CREEK REQUIREMENTS FOR LEFT TURN LANES							
Year	Intersection	Left turn traffic (% total entering)	Left-turn Volume (vehicles/day)	Peak Hour left turns	Threshold Daily left turn volume	Threshold Peak hour left turn volume	Warrants met?
2029	Nesbit Ferry Road @ New Site Driveway	22.5%	52 (total trips) ÷ 2 × 0.225 = (461) ÷ 2 × 0.225 = 52	20	300	30	No
2034			162 (total trips) ÷ 2 × 0.225 = (1442) ÷ 2 × 0.225 = 162	42			Yes
2039			219 (total trips) ÷ 2 × 0.225 = (1950) ÷ 2 × 0.225 = 219	70			Yes

A left-turn lane is warranted at the new site driveway per City of Johns Creek’s standards from phase 2 in 2034 on peak hour left-turn volumes. Left-turn lanes are already available at the other two driveways.

### 6.3.2 Deceleration Turn Lane Analysis

According to City of Johns Creek standards, for two lane roadways with 40 mph speed limit and AADT's greater than 6,000 vehicles, the threshold of peak hour site generated right-turn volume to warrant a right-turn lane is 15 vehicles. The projected right-turn volume in peak hour and per day for the site driveways is shown in Table 6.

TABLE 6 – CITY OF JOHNS CREEK REQUIREMENTS FOR RIGHT TURN LANES							
Year	Intersection	Right turn traffic (% total entering)	Right-turn Volume (vehicles/day) New Trips	Peak Hour Right turns	Threshold Daily Right turn volume	Threshold Peak hour Right turn volume	Warrants met?
2029	Nesbit Ferry Road @ Existing School Northern Driveway	New 4%	9 $(\text{total trips}) \div 2 \times 0.04 = (461) \div 2 \times 0.04 = 9$	47	150	15	Yes
2034			29 $(\text{total trips}) \div 2 \times 0.04 = (1442) \div 2 \times 0.04 = 29$	53			Yes
2039			39 $(\text{total trips}) \div 2 \times 0.04 = (1950) \div 2 \times 0.04 = 39$	59			Yes
2029	Nesbit Ferry Road @ New Site Driveway	24%	55 $(\text{total trips}) \div 2 \times 0.24 = (461) \div 2 \times 0.24 = 55$	22			Yes
2034			173 $(\text{total trips}) \div 2 \times 0.24 = (1442) \div 2 \times 0.24 = 173$	45			Yes
2039			234 $(\text{total trips}) \div 2 \times 0.24 = (1950) \div 2 \times 0.24 = 234$	75			Yes

A right-turn lane is warranted at both the new site driveway and the existing northern driveway as per City of Johns Creek standards from Phase 1 in 2029.

## 6.4 Future Traffic Operations (Phase 1 – 2029)

The future 2029 “No-Build” and “Build” traffic operations were analyzed using the volumes in Figure 6A and Figure 7A, respectively. The results of the future traffic operations analysis are shown below in Table 7-1.

TABLE 7-1 – FUTURE 2029 (PHASE 1) INTERSECTION OPERATIONS							
Intersection		LOS (Delay)					
		NO-BUILD			BUILD		
		AM	PM	Dismissal	AM	PM	Dismissal
1	<b><u>Nesbit Ferry Road @ Mount Pisgah Christian School Northern Driveway 1/ Church Driveway</u></b>	<b><u>A (9.6)</u></b>		<b><u>B (17.5)</u></b>	<b><u>B (10.6)</u></b>		<b><u>C (24.8)</u></b>
	-Eastbound Approach	D (37.5)	F (*)	C (31.5)	D (38.3)	F (*)	C (33.4)
	-Westbound Approach	D (35.9)	B (14.5)	E (74.8)	D (36.7)	D (25.4)	F (89.0)
	-Northbound Left	A (6.9)	B (13.3)	A (9.9)	A (7.4)	B (13.3)	B (16.5)
	-Southbound Left	B (10.1)	B (12.6)	A (9.0)	B (11.2)	B (12.7)	B (14.8)
2	<b><u>Nesbit Ferry Road @ Old Alabama Road</u></b>	<b><u>F (105.7)</u></b>	<b><u>F (89.0)</u></b>	<b><u>D (42.6)</u></b>	<b><u>F (116.3)</u></b>	<b><u>F (90.7)</u></b>	<b><u>D (47.1)</u></b>
	-Eastbound Approach	F (85.9)	E (77.1)	D (53.3)	F (97.3)	E (78.3)	D (52.7)
	-Northbound Approach	F (82.0)	E (67.3)	C (25.5)	F (90.4)	E (70.0)	C (33.7)
	-Southbound Approach	F (162.4)	F (130.1)	D (40.6)	F (174.2)	F (131.6)	D (51.3)
3	<b><u>Nesbit Ferry Road @ Mount Pisgah Christian School Southern Driveway 2</u></b>	<b><u>C (27.5)</u></b>	<b><u>B (11.7)</u></b>	<b><u>C (21.1)</u></b>	<b><u>C (31.6)</u></b>	<b><u>B (12.3)</u></b>	<b><u>C (22.3)</u></b>
	-Eastbound Approach	E (67.9)	E (72.8)	E (66.2)	E (67.0)	E (72.6)	E (66.4)
	-Westbound Approach	E (66.1)	E (71.9)	E (59.6)	E (65.0)	E (72.3)	E (59.1)
	-Northbound Approach	B (13.7)	A (5.9)	B (12.9)	B (15.5)	A (6.2)	B (13.9)
	-Southbound Approach	C (30.2)	B (14.3)	B (16.0)	D (36.8)	B (14.9)	B (17.2)
4	<b><u>Nesbit Ferry Road @ Nesbit Lakes Drive</u></b>						
	-Eastbound Approach	F (*)	F (253.2)	F (102.1)	F (*)	F (266.0)	F (112.3)
	-Northbound Left	B (11.8)	B (12.7)	B (10.7)	B (12.0)	B (12.7)	B (10.8)
5	<b><u>Nesbit Ferry Road @ Old Scott Road/ St. Regis Drive</u></b>	<b><u>E (75.8)</u></b>	<b><u>F (83.1)</u></b>	<b><u>F (85.0)</u></b>	<b><u>E (77.8)</u></b>	<b><u>F (84.3)</u></b>	<b><u>F (87.7)</u></b>
	-Eastbound Approach	F (176.7)	F (222.9)	F (175.3)	F (200.5)	F (225.7)	F (184.2)
	-Westbound Approach	D (35.5)	C (33.5)	C (29.2)	D (35.5)	C (33.5)	C (29.2)
	-Northbound Approach	D (49.4)	C (26.1)	C (34.9)	D (49.2)	C (26.3)	D (35.5)
	-Southbound Approach	E (61.2)	D (53.4)	D (63.9)	E (55.9)	D (54.7)	E (64.1)
6	<b><u>Nesbit Ferry Road @ New Site Driveway 3</u></b>				<b><u>A (8.0)</u></b>		<b><u>A (5.0)</u></b>
	-Westbound Approach	-	-	-	D (45.1)	F (76.3)	D (45.1)
	-Northbound Approach	-	-	-	A (5.0)	-	A (3.5)
	-Southbound Approach/Left	-	-	-	A (9.6)	B (10.4)	A (5.2)

\* Delay exceeds 300 seconds

The results of future “No-Build” traffic operations analysis indicate that the signalized intersection of Nesbit Ferry Road @ Old Alabama Road will continue to operate at an overall level-of-service (LOS) “F” in AM and PM peak hours with all three approaches operating at LOS “F” in AM peak. The signalized intersection of Nesbit Ferry Road @ Old Scott Road will be operating at an overall LOS “E” in AM peak hour and LOS “F” in PM and school dismissal peak hour with its eastbound Old Scott Road approach operating at LOS “F” in all three peak hours. The stop-controlled eastbound approach of Nesbit Lakes Drive at Nesbit Ferry Road will be operating at LOS “F” in all three studied peak hours. The stop-controlled Mt. Pisgah Church driveway at Old Alabama Road will also operate at LOS “F” in the PM peak hour when there is no police officer controlling the school traffic.

Results of future “Build” traffic operations analysis indicate that all study intersections will continue to operate at similar levels-of-service as in “No-Build” conditions with marginal increase in delays.

#### **6.4.1 Recommended System Improvements (Phase 1 – 2029)**

Following system improvements are recommended:

##### Intersection # 2: Nesbit Ferry Road @ Old Alabama Road

The southbound approach of Old Alabama Road that changes name to Nesbit Ferry Road at intersection # 2 becomes a single through lane from a two-lane roadway and carries volumes of about 1000 southbound through cars in one peak hour. Similarly, the northbound left approach of Nesbit Ferry Road has volumes of 551 cars in the AM peak with only one left-turn lane onto Old Alabama Road.

- Add a southbound through lane along with a receiving lane.
- Add a northbound left turn lane creating dual left turn lanes with “protected only” phasing.
- Southbound right turn lane to be “Yield” controlled instead of “Free”.

##### Intersection # 5: Nesbit Ferry Road @ Old Scott Road / St. Regis Drive

Old Scott Road approach has volumes of more than 300 cars in each PM with only one shared lane with through volumes.

- Change eastbound approach on Old Scott Road to consist of a dedicated left turn lane and a shared through/right turn lane.
- Provide “protected + permissive” phasing for eastbound left turn lane.

Table 7-2 below shows results at the intersections of Nesbit Ferry Road at Old Alabama Road and Nesbit Ferry Road at Old Scott Road / St. Regis Drive with the above system improvements.

**TABLE 7-2 — FUTURE 2029 PHASE 1 INTERSECTION OPERATIONS WITH IMPROVEMENTS**

Intersection		LOS (Delay)					
		NO-BUILD			BUILD		
		AM	PM	Dismissal	AM	PM	Dismissal
2	<b><u>Nesbit Ferry Rd @ Old Alabama Road</u></b>	<b><u>D (47.1)</u></b>	<b><u>D (46.8)</u></b>	<b><u>D (42.5)</u></b>	<b><u>D (53.8)</u></b>	<b><u>D (47.0)</u></b>	<b><u>D (43.8)</u></b>
	-Eastbound Approach	E (59.6)	D (50.4)	D (53.3)	E (59.1)	D (50.4)	D (54.3)
	-Northbound Approach	D (41.6)	D (45.9)	D (38.2)	D (54.6)	D (46.3)	D (40.3)
	-Southbound Approach	C (29.8)	D (41.8)	C (27.2)	D (44.3)	D (41.9)	C (28.2)
5	<b><u>Nesbit Ferry Road @ Old Scott Road/ St. Regis Drive</u></b>	<b><u>C (33.1)</u></b>	<b><u>C (31.1)</u></b>	<b><u>C (28.7)</u></b>	<b><u>C (28.6)</u></b>	<b><u>C (31.5)</u></b>	<b><u>C (29.1)</u></b>
	-Eastbound Approach	E (70.0)	E (59.1)	E (57.4)	E (73.7)	E (71.9)	E (59.4)
	-Westbound Approach	E (57.1)	E (55.7)	E (56.8)	E (56.1)	E (55.7)	E (56.8)
	-Northbound Approach	B (14.8)	B (16.9)	B (13.9)	B (16.8)	B (15.6)	B (14.1)
	-Southbound Approach	B (20.0)	C (26.7)	B (18.4)	C (20.7)	C (21.6)	B (18.0)

Results of future 2029 “No-Build” and “Build” Improved conditions indicate that both intersections will be operating at overall satisfactory levels-of-service in all three peak hours.

### 6.5 Future Traffic Operations (Phase 1 & 2 – 2034)

The future 2034 “No-Build” and “Build” traffic operations were analyzed using the volumes in Figure 6B and Figure 7B, respectively. The results of the future traffic operations analysis are shown below in Table 8-1.

**TABLE 8-1 — FUTURE 2034 PHASE 2 INTERSECTION OPERATIONS**

Intersection		LOS (Delay)					
		NO-BUILD			BUILD		
		AM	PM	Dismissal	AM	PM	Dismissal
1	<b><u>Nesbit Ferry Road @ Mount Pisgah Christian School Northern Driveway/ Church Driveway</u></b>	<b><u>B (10.7)</u></b>		<b><u>C (22.2)</u></b>	<b><u>B (11.5)</u></b>		<b><u>C (27.2)</u></b>
	-Eastbound Approach	D (38.9)	F (*)	C (33.5)	D (40.1)	F (*)	D (35.1)
	-Westbound Approach	D (36.7)	C (15.0)	F (90.2)	D (38.4)	E (44.6)	F (108.8)
	-Northbound Left	A (7.4)	B (13.8)	B (13.4)	A (7.6)	B (13.9)	B (16.1)
	-Southbound Left	B (11.5)	B (13.1)	B (12.0)	B (12.4)	B (13.4)	B (14.5)
2	<b><u>Nesbit Ferry Road @ Old Alabama Road</u></b>	<b><u>F (120.0)</u></b>	<b><u>F (102.7)</u></b>	<b><u>D (53.9)</u></b>	<b><u>F (143.5)</u></b>	<b><u>F (110.9)</u></b>	<b><u>E (69.2)</u></b>
	-Eastbound Approach	F (101.9)	E (77.5)	E (55.1)	F (128.8)	F (83.5)	D (54.7)
	-Northbound Approach	F (94.0)	E (75.7)	D (38.5)	F (114.0)	F (89.5)	D (43.3)
	-Southbound Approach	F (176.2)	F (171.3)	E (67.7)	F (199.0)	F (178.3)	F (123.9)
3	<b><u>Nesbit Ferry Road @ Mount Pisgah Christian School Southern Driveway</u></b>	<b><u>C (34.4)</u></b>	<b><u>B (14.5)</u></b>	<b><u>C (22.6)</u></b>	<b><u>D (45.7)</u></b>	<b><u>B (17.1)</u></b>	<b><u>C (25.0)</u></b>
	-Eastbound Approach	E (67.5)	E (72.8)	E (66.5)	E (65.8)	E (72.7)	E (73.1)
	-Westbound Approach	E (65.6)	E (72.1)	E (58.9)	E (63.6)	E (74.2)	E (61.1)
	-Northbound Approach	B (15.8)	A (6.5)	B (14.2)	B (19.0)	A (7.7)	B (15.4)
	-Southbound Approach	D (42.3)	B (18.7)	B (18.1)	E (62.3)	C (21.4)	B (20.0)
4	<b><u>Nesbit Ferry Road @ Nesbit Lakes Drive</u></b>						
	-Eastbound Approach	F (*)	F (*)	F (131.3)	F (*)	F (*)	F (173.4)
	-Northbound Left	B (12.2)	B (13.2)	B (10.9)	B (12.6)	B (13.4)	B (11.2)



5	<b><u>Nesbit Ferry Road @ Old Scott Road/ St. Regis Drive</u></b>	<b><u>E (79.1)</u></b>	<b><u>F (90.5)</u></b>	<b><u>F (88.7)</u></b>	<b><u>F (87.6)</u></b>	<b><u>F (95.3)</u></b>	<b><u>F (98.9)</u></b>
	-Eastbound Approach	F (148.9)	F (270.7)	F (169.9)	F (189.2)	F (284.3)	F (192.8)
	-Westbound Approach	D (36.3)	D (35.5)	C (29.8)	D (36.3)	D (35.5)	C (29.8)
	-Northbound Approach	D (47.7)	C (23.5)	D (36.3)	D (47.7)	C (24.3)	D (38.0)
	-Southbound Approach	F (81.8)	D (46.4)	E (76.6)	F (85.0)	D (50.1)	F (86.1)
6	<b><u>Nesbit Ferry Road @ New Site Driveway 3</u></b>				<b><u>B (15.2)</u></b>		<b><u>A (7.7)</u></b>
	-Westbound Approach	-	-	-	D (48.5)	F (221.4)	D (50.0)
	-Northbound Approach				A (6.9)	-	A (4.7)
	-Southbound Approach/Left				C (20.4)	B (10.8)	A (7.5)

\* Delay exceeds 300 seconds

The results of future 2034 “No-Build” and “Build” conditions, without any recommended system improvements implemented, indicate that all study intersections will continue to operate at overall similar levels-of-service as in 2029 “No-Build” and “Build” conditions with increased delays. With the recommended system improvements implemented the intersections of Nesbit Ferry Road at Old Alabama Road and Nesbit Ferry Road @ Old Scott Road will operate satisfactorily in all three peak hours as shown in Table 8-2 below.

TABLE 8-2 – FUTURE 2034 PHASE 2 INTERSECTION OPERATIONS WITH IMPROVEMENTS							
Intersection		LOS (Delay)					
		NO-BUILD			BUILD		
		AM	PM	Dismissal	AM	PM	Dismissal
2	<b><u>Nesbit Ferry Road @ Old Alabama Road</u></b>	<b><u>E (56.2)</u></b>	<b><u>D (50.5)</u></b>	<b><u>D (44.0)</u></b>	<b><u>E (63.3)</u></b>	<b><u>D (51.7)</u></b>	<b><u>D (45.1)</u></b>
	-Eastbound Approach	E (68.8)	E (56.7)	E (55.1)	E (79.3)	E (57.7)	D (53.1)
	-Northbound Approach	D (49.9)	D (47.2)	D (38.7)	D (55.0)	D (48.4)	D (42.7)
	-Southbound Approach	D (42.6)	D (43.2)	C (29.0)	D (46.4)	D (45.1)	C (32.9)
5	<b><u>Nesbit Ferry Road @ Old Scott Road/ St. Regis Drive</u></b>	<b><u>C (32.6)</u></b>	<b><u>C (34.7)</u></b>	<b><u>C (30.6)</u></b>	<b><u>D (36.9)</u></b>	<b><u>C (34.4)</u></b>	<b><u>C (34.5)</u></b>
	-Eastbound Approach	E (60.1)	E (71.8)	E (62.9)	E (64.6)	E (76.3)	E (78.7)
	-Westbound Approach	E (56.2)	E (55.8)	E (56.9)	E (56.2)	E (55.8)	E (56.9)
	-Northbound Approach	C (23.0)	B (17.1)	B (14.4)	C (31.2)	B (17.5)	B (14.3)
	-Southbound Approach	C (30.0)	C (28.0)	B (19.1)	C (30.4)	C (24.6)	B (18.2)

## 6.6 Future Traffic Operations (Phase 1, 2 and 3 – 2039)

The future 2039 “No-Build” and “Build” traffic operations were analyzed using the volumes in Figure 6C and Figure 7C, respectively. The results of the future traffic operations analysis are shown below in Table 9. Recommendations on traffic control and lane geometry are shown graphically in Figure 8.







TABLE 9-1 – FUTURE 2039 PHASE 3 INTERSECTION OPERATIONS							
Intersection		LOS (Delay)					
		NO-BUILD			BUILD		
		AM	PM	Dismissal	AM	PM	Dismissal
1	<b><u>Nesbit Ferry Road @ Mount Pisgah Christian School Northern Driveway/ Church Driveway</u></b>	<b><u>B (11.5)</u></b>		<b><u>C (26.1)</u></b>	<b><u>B (13.0)</u></b>		<b><u>C (30.9)</u></b>
	-Eastbound Approach	D (39.5)	F (*)	D (35.5)	D (40.6)	F (*)	D (38.1)
	-Westbound Approach	D (37.6)	C (15.6)	F (105.3)	D (39.8)	F (91.2)	F (138.7)
	-Northbound Left	A (7.7)	B (14.5)	B (16.0)	A (7.9)	B (14.8)	B (15.2)
	-Southbound Left	B (12.7)	B (13.6)	B (14.0)	B (14.4)	B (14.6)	B (14.3)
2	<b><u>Nesbit Ferry Road @ Old Alabama Road</u></b>	<b><u>F (134.3)</u></b>	<b><u>F (115.7)</u></b>	<b><u>E (62.6)</u></b>	<b><u>F (175.6)</u></b>	<b><u>F (139.5)</u></b>	<b><u>F (89.9)</u></b>
	-Eastbound Approach	F (112.9)	F (86.9)	E (59.6)	F (160.3)	F (107.6)	E (76.4)
	-Northbound Approach	F (114.4)	F (83.7)	E (59.5)	F (151.0)	F (115.9)	F (104.9)
	-Southbound Approach	F (189.5)	F (195.3)	E (71.2)	F (227.2)	F (217.2)	F (97.4)
3	<b><u>Nesbit Ferry Road @ Mount Pisgah Christian School Southern Driveway</u></b>	<b><u>D (42.8)</u></b>	<b><u>B (19.0)</u></b>	<b><u>C (24.4)</u></b>	<b><u>E (67.0)</u></b>	<b><u>C (30.5)</u></b>	<b><u>C (30.6)</u></b>
	-Eastbound Approach	E (67.2)	E (72.7)	E (67.5)	E (65.5)	E (71.4)	F (105.0)
	-Westbound Approach	E (65.4)	E (71.9)	E (58.5)	E (62.2)	E (73.3)	E (66.9)
	-Northbound Approach	B (17.6)	A (7.3)	B (15.4)	C (24.3)	B (10.9)	B (17.5)
	-Southbound Approach	E (57.7)	C (26.0)	C (20.7)	F (100.4)	D (42.0)	C (24.8)
4	<b><u>Nesbit Ferry Road @ Nesbit Lakes Drive</u></b>						
	-Eastbound Approach	F (*)	F (253.2)	F (102.1)	F (*)	F (*)	F (*)
	-Northbound Left	B (11.8)	B (12.7)	B (10.7)	B (13.3)	B (14.4)	B (11.9)
5	<b><u>Nesbit Ferry Road @ Old Scott Road/ St. Regis Drive</u></b>	<b><u>F (93.1)</u></b>	<b><u>F (105.0)</u></b>	<b><u>F (102.4)</u></b>	<b><u>F (116.2)</u></b>	<b><u>F (121.4)</u></b>	<b><u>F (130.9)</u></b>
	-Eastbound Approach	F (176.4)	F (*)	F (221.9)	F (251.9)	F (*)	F (281.7)
	-Westbound Approach	D (36.3)	D (35.5)	C (29.9)	D (36.3)	D (35.5)	C (29.9)
	-Northbound Approach	D (52.8)	C (26.5)	D (35.2)	D (53.1)	C (27.9)	D (39.7)
	-Southbound Approach	F (99.2)	E (58.1)	E (75.1)	F (121.7)	E (69.8)	F (105.1)
6	<b><u>Nesbit Ferry Road @ New Site Driveway 3</u></b>				<b><u>B (11.1)</u></b>		<b><u>B (19.6)</u></b>
	-Westbound Approach	-	-	-	D (43.7)	F (*)	D (45.2)
	-Northbound Approach				A (6.4)	-	A (8.3)
	-Southbound Approach/Left				B (11.7)	B (11.8)	C (27.0)

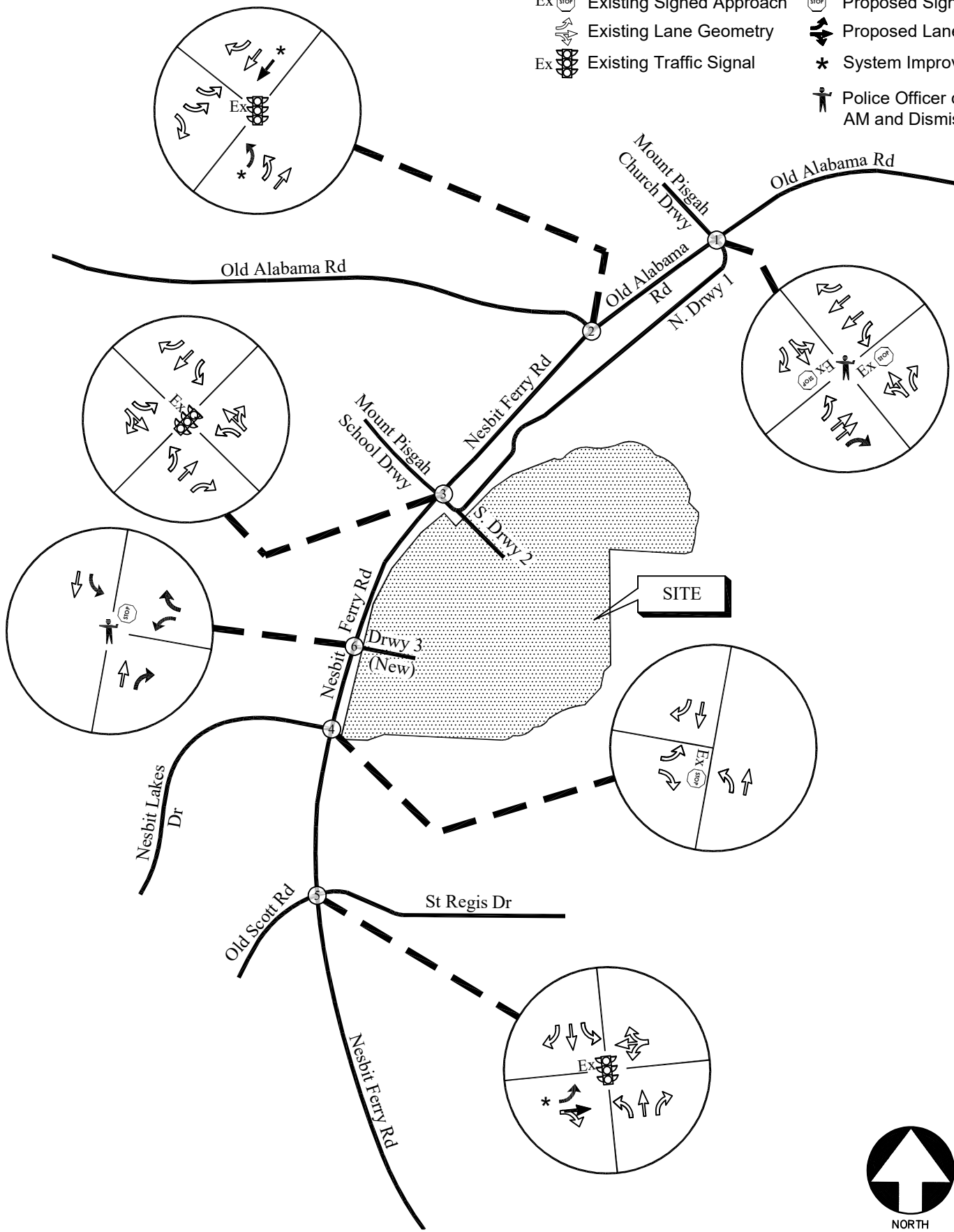
\* Delay exceeds 300 seconds

The results of future 2039 “No-Build” and “Build” conditions, without any recommended system improvements implemented, indicate that all study intersections will continue to operate at overall similar levels-of-service as in 2034 “No-Build” and “Build” conditions with even larger delays. The intersection of Nesbit Ferry Road and Old Alabama Road will operate at LOS “F” in school dismissal peak which operated at LOS “E” in 2034. The stop-controlled approaches of Nesbit Lakes Drive and northern driveways of Mt. Pisgah Church and the school will continue to operate at LOS “F” in all three peak hours. The volumes at these approaches do not meet traffic signal warrants and no other improvements will aid the traffic operations. It is not unusual for stop-controlled side-streets along arterial roadways to have elevated delays during peak periods as delays caused by side-streets wait times to turn left onto the mainline. With the recommended system improvements implemented the intersections of Nesbit Ferry Road at Old Alabama Road and Nesbit Ferry Road @ Old Scott Road will operate at overall LOS “E” or better as shown in Table 9-2 below.

<b>TABLE 9-2 — FUTURE 2039 PHASE 3 INTERSECTION OPERATIONS WITH IMPROVEMENTS</b>							
<b>Intersection</b>		<b>LOS (Delay)</b>					
		<b>NO-BUILD</b>			<b>BUILD</b>		
		<b>AM</b>	<b>PM</b>	<b>Dismissal</b>	<b>AM</b>	<b>PM</b>	<b>Dismissal</b>
<b>2</b>	<b><u>Nesbit Ferry Road @ Old Alabama Road</u></b>	<b><u>D (59.0)</u></b>	<b><u>D (53.2)</u></b>	<b><u>D (47.1)</u></b>	<b><u>E (66.5)</u></b>	<b><u>E (61.5)</u></b>	<b><u>D (48.2)</u></b>
	-Eastbound Approach	E (72.7)	E (60.1)	E (59.6)	E (75.0)	E (75.3)	D (54.1)
	-Northbound Approach	D (51.1)	D (48.6)	D (41.6)	E (58.8)	D (50.9)	D (45.9)
	-Southbound Approach	D (45.2)	D (46.2)	C (29.8)	E (61.2)	D (49.1)	D (39.8)
<b>5</b>	<b><u>Nesbit Ferry Road @ Old Scott Road/ St. Regis Drive</u></b>	<b><u>D (40.5)</u></b>	<b><u>D (38.4)</u></b>	<b><u>C (33.1)</u></b>	<b><u>E (58.6)</u></b>	<b><u>D (39.5)</u></b>	<b><u>D (35.3)</u></b>
	-Eastbound Approach	E (68.1)	E (80.0)	E (70.0)	E (73.0)	E (64.2)	E (68.0)
	-Westbound Approach	E (56.3)	E (55.9)	E (57.1)	E (56.3)	E (55.9)	E (57.1)
	-Northbound Approach	C (32.1)	B (18.2)	B (14.8)	D (54.4)	C (24.1)	B (18.3)
	-Southbound Approach	D (37.1)	C (31.6)	B (20.0)	E (56.6)	D (38.1)	C (25.1)

**LEGEND**

- |  |  |
|--|--|
| Ex  Existing Signed Approach  |  Proposed Signed Approach                 |
|  Existing Lane Geometry     |  Proposed Lane Geometry                 |
| Ex  Existing Traffic Signal | * System Improvement   |
|  |  Police Officer during AM and Dismissal |



**FUTURE TRAFFIC CONTROL AND LANE GEOMETRY**

**FIGURE 8**

**A&R Engineering Inc.**

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed Mount Pisgah Christian School Expansion project at 9725 Nesbit Ferry Road and located in the northeast corner of the intersection of Nesbit Ferry Road and Nesbit Lakes Drive in City of Johns Creek, Fulton County, Georgia.

The expansion project is carried out in three 5-year phases. Phase 1 consists of Curriculum Enhancement Building with 180 students and a single-family housing unit in 2029. Phase 2 (2034) will consist of Academic building with 125 students, Performing Arts building with 543 seats capacity and 6 tennis courts. In Phase 3 (2039), an additional 125 students are added (second Academic Building) and 31,500 sf Natatorium is constructed.

In addition to the two existing full access driveways, the school is proposing to have a third full access driveway to the south on Nesbit Ferry Road, north Nesbit Lakes Drive. The driveways are listed below:

- Site Driveway 1: Full-access (existing) northern driveway on Old Alabama Road (Nesbit Ferry Road changes name to Old Alabama Road), aligned with Mt. Pisgah Church's northern driveway.
- Site Driveway 2: Full-access (existing) driveway on Nesbit Ferry Road aligned with Mt. Pisgah Church's southern driveway.
- Site Driveway 3: Proposed full access driveway on Nesbit Ferry Rd north of Nesbit Lakes Drive.

Existing and future operations after completion of the project were analysed at the intersections of:

1. Nesbit Ferry Road at Mount Pisgah Christian School Northern Driveway 1/Mount Pisgah Church Driveway
2. Nesbit Ferry Road at Old Alabama Road
3. Nesbit Ferry Road at Mount Pisgah Christian School Southern Driveway 2
4. Nesbit Ferry Road @ Nesbit Lakes Drive
5. Nesbit Ferry Road @ Old Scott Road / St. Regis Drive
6. Nesbit Ferry Road @ Proposed Site Driveway 3

The results of future 2039 "No-Build" and "Build" conditions, without any recommended system improvements implemented, indicate that all study intersections will continue to operate at overall similar levels-of-service as in 2034 "No-Build" and "Build" conditions with even larger delays. The intersection of Nesbit Ferry Road and Old Alabama Road will operate at LOS "F" in school dismissal peak which operated at LOS "E" in 2034. The stop-controlled approaches of Nesbit Lakes Drive and northern driveways of Mt. Pisgah Church and the school will continue to operate at LOS "F" in all three peak hours. The volumes at these approaches do not meet traffic signal warrants and no other improvements will aid the traffic operations. It is not unusual for stop-controlled side-streets along arterial roadways to have elevated delays during peak periods as delays caused by side-streets wait times to turn left onto the mainline. With the recommended system improvements implemented the intersections of Nesbit Ferry Road at Old Alabama Road and Nesbit Ferry Road @ Old Scott Road will operate at overall LOS "E" or.

## 7.1 Recommendation for Site Access Configuration

The following access configuration is recommended at the site driveway intersections:

- Site Driveway 1: Full-access (existing) northern driveway on Old Alabama Road (Nesbit Ferry Road changes name to Old Alabama Road), aligned with Mt. Pisgah Church's northern driveway.
  - Existing one entering and two exiting lanes.
  - Stop-sign controlled on the driveway approach with Old Alabama Road remaining free flow with a Police Officer during the AM and School Dismissal peaks.
  - Existing two-way left turn lane for entering traffic.
  - Construct a northbound right-turn lane on Old Alabama Road for entering traffic.
  
- Site Driveway 2: Full-access (existing) driveway on Nesbit Ferry Road aligned with Mt. Pisgah Church's southern driveway.
  - Existing one entering and two exiting lanes.
  - Existing Left and Right Turn Lanes on Nesbit Ferry Road for entering traffic.
  
- Site Driveway 3: Proposed full access driveway on Nesbit Ferry Road north of Nesbit Lakes Drive
  - One entering and two exiting lanes (a left and a right-turn lane).
  - Stop-sign controlled on the driveway approach with Nesbit Ferry Road remaining free flow with a Police Officer during the AM and School Dismissal peaks.
  - Southbound left turn Lane on Nesbit Ferry Road for entering traffic.
  - Northbound right turn Lane on Nesbit Ferry Road for entering traffic.
  - Provide adequate sight distance per AASHTO standards.

Received  
May 29, 2024  
SUP-24-0001  
Planning & Zoning

## Appendix

Existing Intersection Traffic Counts .....	
Linear Regression of Daily Traffic.....	
Existing Intersection Analysis.....	
Future 2029 “No-Build” Intersection Analysis.....	
Future 2029 “No-Build” Improved.....	
Future 2029 Phase 1 “Build” Intersection Analysis.....	
Future 2029 Phase 1 “Build” Improved .....	
Future 2034 “No-Build” Intersection Analysis.....	
Future 2034 “No-Build” Improved.....	
Future 2034 Phase 2 “Build” Intersection Analysis.....	
Future 2034 Phase 2 “Build” Improved .....	
Future 2039 “No-Build” Intersection Analysis.....	
Future 2039 “No-Build” Improved.....	
Future 2039 Phase 2 “Build” Intersection Analysis.....	
Future 2039 Phase 2 “Build” Improved Traffic Volume Worksheets .....	

## **EXISTING INTERSECTION TRAFFIC COUNTS**



# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Mt Pisgah Christian  
School Southern Driveway-School Drwy  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240162  
Site Code : 20240162  
Start Date : 05-01-2024  
Page No : 1

Groups Printed- Cars, Buses & Trucks

Start Time	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Mt Pisgah Christian School Southern Driveway Eastbound				School Drwy Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	8	134	3	145	1	135	4	140	2	0	0	2	0	0	1	1	288
07:15 AM	7	183	4	194	2	236	3	241	1	0	1	2	0	2	5	7	444
07:30 AM	3	237	1	241	8	264	0	272	0	0	1	1	1	2	3	6	520
07:45 AM	2	196	2	200	2	287	0	289	0	1	0	1	3	1	1	5	495
Total	20	750	10	780	13	922	7	942	3	1	2	6	4	5	10	19	1747
08:00 AM	0	189	2	191	3	291	2	296	0	0	0	0	4	0	1	5	492
08:15 AM	6	168	3	177	3	286	0	289	0	2	0	2	5	1	3	9	477
08:30 AM	25	209	7	241	6	223	1	230	26	40	16	82	7	6	3	16	569
08:45 AM	19	216	22	257	22	264	0	286	55	10	14	79	15	6	10	31	653
Total	50	782	34	866	34	1064	3	1101	81	52	30	163	31	13	17	61	2191
*** BREAK ***																	
02:00 PM	3	138	1	142	4	171	0	175	2	0	0	2	2	1	2	5	324
02:15 PM	1	166	0	167	2	192	0	194	0	0	0	0	0	0	0	0	361
02:30 PM	11	185	5	201	21	168	0	189	5	2	0	7	0	2	4	6	403
02:45 PM	12	171	6	189	17	213	0	230	55	6	23	84	1	3	12	16	519
Total	27	660	12	699	44	744	0	788	62	8	23	93	3	6	18	27	1607
03:00 PM	9	138	8	155	30	206	19	255	15	1	9	25	20	5	64	89	524
03:15 PM	6	164	2	172	9	212	0	221	2	0	6	8	3	1	7	11	412
03:30 PM	1	204	0	205	1	219	0	220	7	2	0	9	3	1	10	14	448
03:45 PM	4	206	1	211	2	238	1	241	5	0	2	7	7	2	10	19	478
Total	20	712	11	743	42	875	20	937	29	3	17	49	33	9	91	133	1862
04:00 PM	2	159	2	163	2	213	0	215	6	0	2	8	0	0	6	6	392
04:15 PM	3	181	2	186	2	241	0	243	4	0	3	7	2	1	2	5	441
04:30 PM	0	169	1	170	2	268	0	270	1	2	3	6	4	3	4	11	457
04:45 PM	2	218	2	222	2	283	0	285	3	0	0	3	3	0	4	7	517
Total	7	727	7	741	8	1005	0	1013	14	2	8	24	9	4	16	29	1807
05:00 PM	4	205	0	209	0	305	0	305	1	0	4	5	1	0	1	2	521
05:15 PM	4	232	1	237	1	296	0	297	4	0	1	5	0	0	1	1	540
05:30 PM	2	208	3	213	2	306	3	311	3	0	3	6	1	0	2	3	533
05:45 PM	0	234	3	237	9	328	0	337	5	0	1	6	2	1	2	5	585
Total	10	879	7	896	12	1235	3	1250	13	0	9	22	4	1	6	11	2179
Grand Total	134	4510	81	4725	153	5845	33	6031	202	66	89	357	84	38	158	280	11393
Apprch %	2.8	95.4	1.7		2.5	96.9	0.5		56.6	18.5	24.9		30	13.6	56.4		
Total %	1.2	39.6	0.7	41.5	1.3	51.3	0.3	52.9	1.8	0.6	0.8	3.1	0.7	0.3	1.4	2.5	

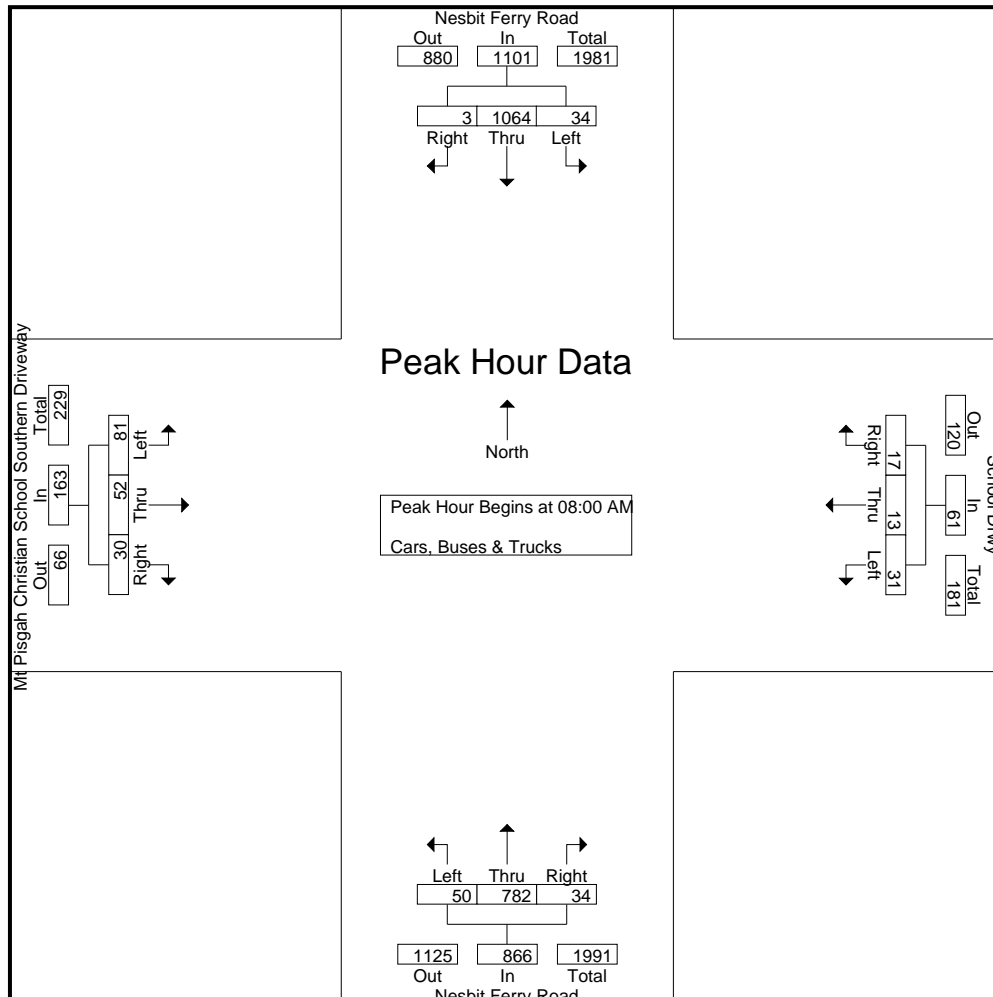
# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Mt Pisgah Christian  
School Southern Driveway-School Drwy  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240162  
Site Code : 20240162  
Start Date : 05-01-2024  
Page No : 2

Start Time	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Mt Pisgah Christian School Southern Driveway Eastbound				School Drwy Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	189	2	191	3	291	2	296	0	0	0	0	4	0	1	5	492
08:15 AM	6	168	3	177	3	286	0	289	0	2	0	2	5	1	3	9	477
08:30 AM	25	209	7	241	6	223	1	230	26	40	16	82	7	6	3	16	569
08:45 AM	19	216	22	257	22	264	0	286	55	10	14	79	15	6	10	31	653
Total Volume	50	782	34	866	34	1064	3	1101	81	52	30	163	31	13	17	61	2191
% App. Total	5.8	90.3	3.9		3.1	96.6	0.3		49.7	31.9	18.4		50.8	21.3	27.9		
PHF	.500	.905	.386	.842	.386	.914	.375	.930	.368	.325	.469	.497	.517	.542	.425	.492	.839



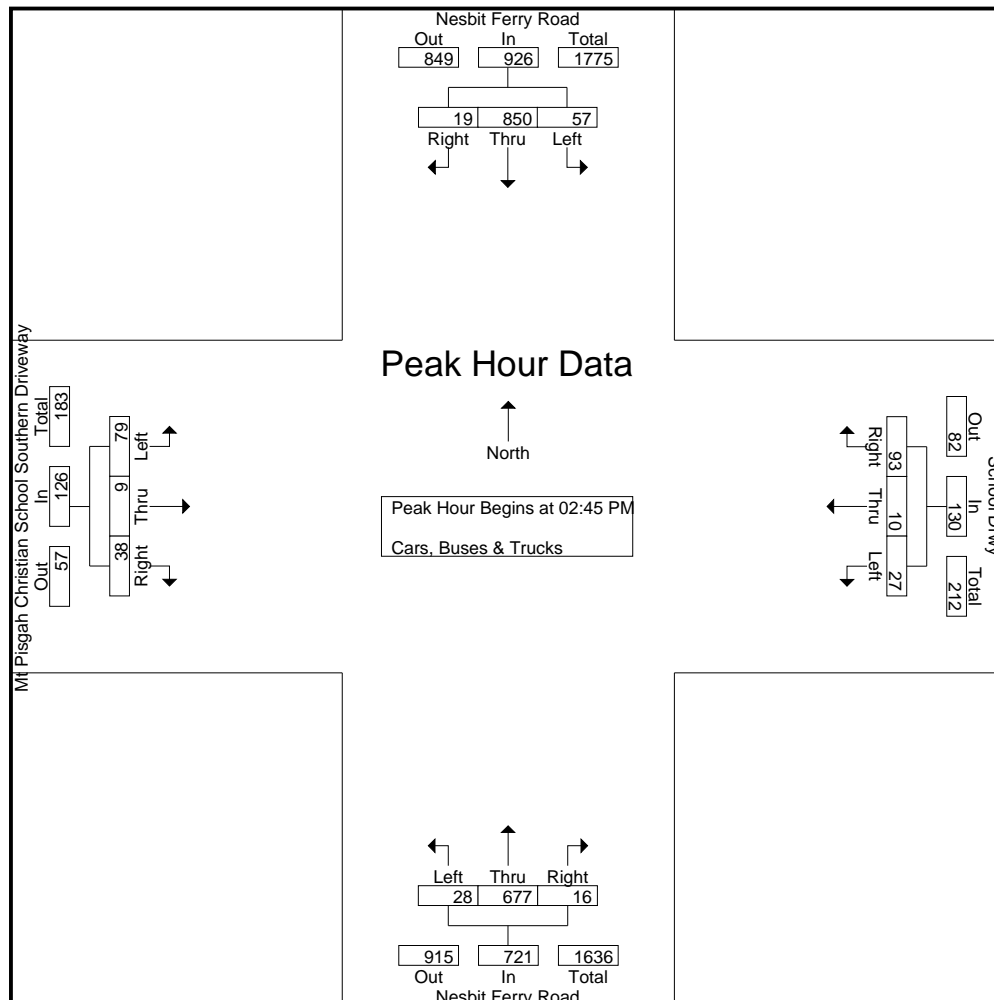
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TMC Data  
Nesbit Ferry Road @ Mt Pisgah Christian  
School Southern Driveway-School Drwy  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240162  
Site Code : 20240162  
Start Date : 05-01-2024  
Page No : 3

Start Time	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Mt Pisgah Christian School Southern Driveway Eastbound				School Drwy Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:45 PM																	
02:45 PM	12	171	6	189	17	213	0	230	55	6	23	84	1	3	12	16	519
03:00 PM	9	138	8	155	30	206	19	255	15	1	9	25	20	5	64	89	524
03:15 PM	6	164	2	172	9	212	0	221	2	0	6	8	3	1	7	11	412
03:30 PM	1	204	0	205	1	219	0	220	7	2	0	9	3	1	10	14	448
Total Volume	28	677	16	721	57	850	19	926	79	9	38	126	27	10	93	130	1903
% App. Total	3.9	93.9	2.2		6.2	91.8	2.1		62.7	7.1	30.2		20.8	7.7	71.5		
PHF	.583	.830	.500	.879	.475	.970	.250	.908	.359	.375	.413	.375	.338	.500	.363	.365	.908



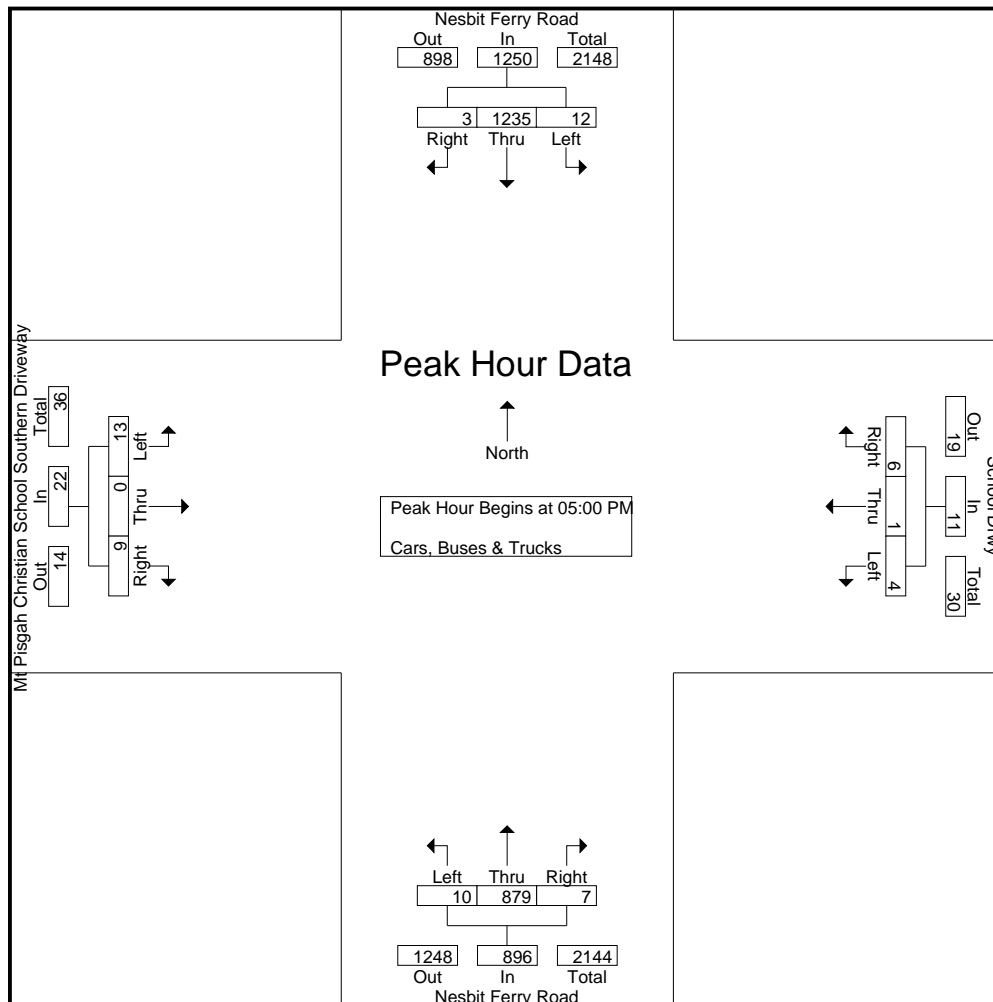
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TMC Data  
Nesbit Ferry Road @ Mt Pisgah Christian  
School Southern Driveway-School Drwy  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240162  
Site Code : 20240162  
Start Date : 05-01-2024  
Page No : 4

Start Time	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Mt Pisgah Christian School Southern Driveway Eastbound				School Drwy Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	4	205	0	209	0	305	0	305	1	0	4	5	1	0	1	2	521
05:15 PM	4	232	1	237	1	296	0	297	4	0	1	5	0	0	1	1	540
05:30 PM	2	208	3	213	2	306	3	311	3	0	3	6	1	0	2	3	533
05:45 PM	0	234	3	237	9	328	0	337	5	0	1	6	2	1	2	5	585
Total Volume	10	879	7	896	12	1235	3	1250	13	0	9	22	4	1	6	11	2179
% App. Total	1.1	98.1	0.8		1	98.8	0.2		59.1	0	40.9		36.4	9.1	54.5		
PHF	.625	.939	.583	.945	.333	.941	.250	.927	.650	.000	.563	.917	.500	.250	.750	.550	.931



# A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Old Alabama Road

File Name : 20240163  
Site Code : 20240163  
Start Date : 05-01-2024  
Page No : 1

7-9 am | 2-4 pm | 4-6 pm

Groups Printed- Cars, Buses & Trucks

Start Time	Nesbit Ferry Rd Northbound				Old Alabama Rd Southbound				Old Alabama Rd Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	61	62	0	123	0	44	193	237	80	0	64	144	0	0	0	0	504
07:15 AM	70	26	0	96	0	245	180	425	154	0	105	259	0	0	0	0	780
07:30 AM	87	135	0	222	0	222	123	345	110	0	160	270	0	0	0	0	837
07:45 AM	81	110	0	191	0	204	192	396	124	0	155	279	0	0	0	0	866
Total	299	333	0	632	0	715	688	1403	468	0	484	952	0	0	0	0	2987
08:00 AM	85	60	0	145	0	185	165	350	125	0	149	274	0	0	0	0	769
08:15 AM	118	50	0	168	0	206	138	344	134	0	145	279	0	0	0	0	791
08:30 AM	132	44	0	176	0	121	230	351	175	0	126	301	0	0	0	0	828
08:45 AM	94	145	0	239	0	188	178	366	164	0	109	273	0	0	0	0	878
Total	429	299	0	728	0	700	711	1411	598	0	529	1127	0	0	0	0	3266
*** BREAK ***																	
02:00 PM	42	87	0	129	0	101	110	211	147	0	64	211	0	0	0	0	551
02:15 PM	56	90	0	146	0	148	137	285	155	0	90	245	0	0	0	0	676
02:30 PM	69	43	0	112	0	127	118	245	160	0	94	254	0	0	0	0	611
02:45 PM	82	76	0	158	0	159	107	266	180	0	109	289	0	0	0	0	713
Total	249	296	0	545	0	535	472	1007	642	0	357	999	0	0	0	0	2551
03:00 PM	59	65	0	124	0	179	117	296	209	0	108	317	0	0	0	0	737
03:15 PM	69	199	0	268	0	169	112	281	133	0	92	225	0	0	0	0	774
03:30 PM	69	85	0	154	0	112	122	234	182	0	117	299	0	0	0	0	687
03:45 PM	68	43	0	111	0	174	117	291	234	0	92	326	0	0	0	0	728
Total	265	392	0	657	0	634	468	1102	758	0	409	1167	0	0	0	0	2926
04:00 PM	76	133	0	209	0	162	118	280	163	0	114	277	0	0	0	0	766
04:15 PM	66	56	0	122	0	145	131	276	223	0	106	329	0	0	0	0	727
04:30 PM	86	94	0	180	0	209	138	347	212	0	156	368	0	0	0	0	895
04:45 PM	40	70	0	110	0	195	140	335	215	0	129	344	0	0	0	0	789
Total	268	353	0	621	0	711	527	1238	813	0	505	1318	0	0	0	0	3177
05:00 PM	96	146	0	242	0	195	132	327	187	0	143	330	0	0	0	0	899
05:15 PM	67	179	0	246	0	199	129	328	149	0	150	299	0	0	0	0	873
05:30 PM	52	107	0	159	0	247	104	351	209	0	151	360	0	0	0	0	870
05:45 PM	60	161	0	221	0	151	148	299	157	0	134	291	0	0	0	0	811
Total	275	593	0	868	0	792	513	1305	702	0	578	1280	0	0	0	0	3453
Grand Total	1785	2266	0	4051	0	4087	3379	7466	3981	0	2862	6843	0	0	0	0	18360
Apprch %	44.1	55.9	0		0	54.7	45.3		58.2	0	41.8		0	0	0		
Total %	9.7	12.3	0	22.1	0	22.3	18.4	40.7	21.7	0	15.6	37.3	0	0	0	0	

# A & R Engineering, Inc.

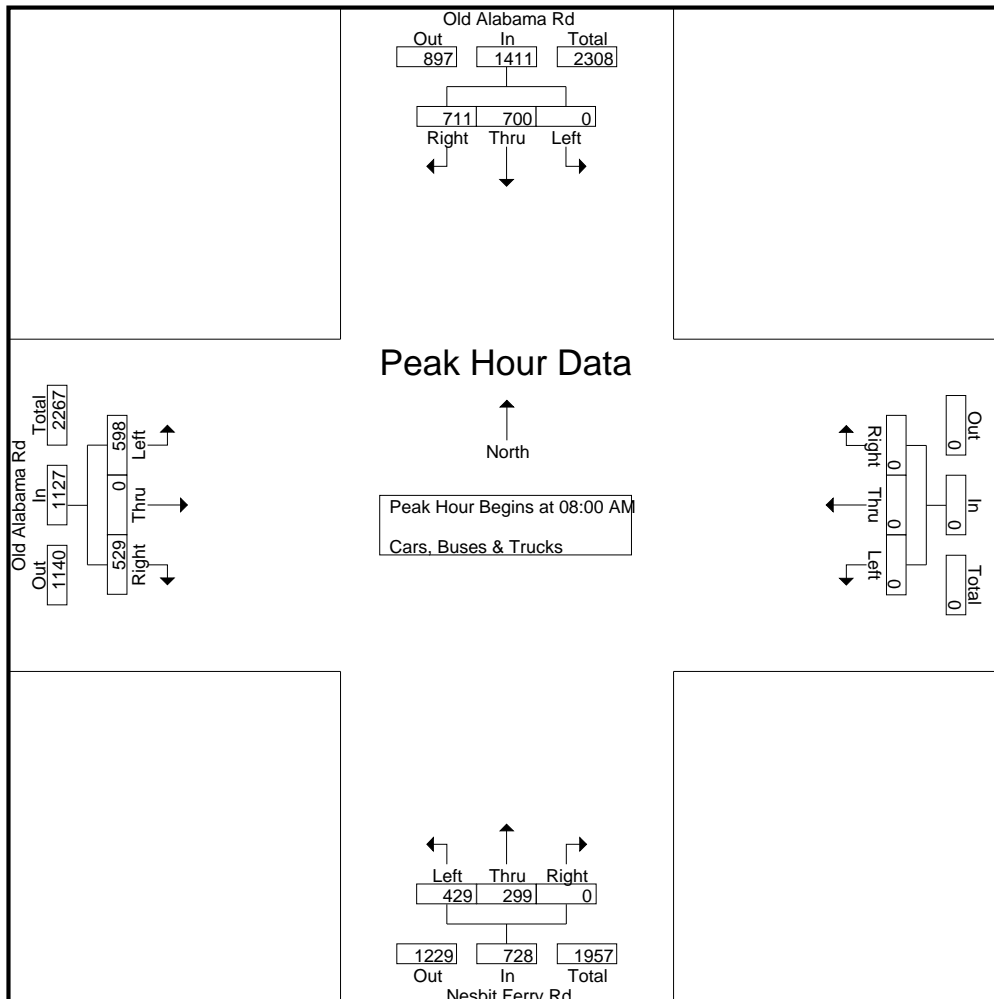
2160 Kingston Court, Suite 'O'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Old Alabama Road

7-9 am | 2-4 pm | 4-6 pm

File Name : 20240163  
Site Code : 20240163  
Start Date : 05-01-2024  
Page No : 2

Start Time	Nesbit Ferry Rd Northbound				Old Alabama Rd Southbound				Old Alabama Rd Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	85	60	0	145	0	185	165	350	125	0	149	274	0	0	0	0	769
08:15 AM	118	50	0	168	0	206	138	344	134	0	145	279	0	0	0	0	791
08:30 AM	132	44	0	176	0	121	230	351	175	0	126	301	0	0	0	0	828
08:45 AM	94	145	0	239	0	188	178	366	164	0	109	273	0	0	0	0	878
Total Volume	429	299	0	728	0	700	711	1411	598	0	529	1127	0	0	0	0	3266
% App. Total	58.9	41.1	0		0	49.6	50.4		53.1	0	46.9		0	0	0		
PHF	.813	.516	.000	.762	.000	.850	.773	.964	.854	.000	.888	.936	.000	.000	.000	.000	.930



# A & R Engineering, Inc.

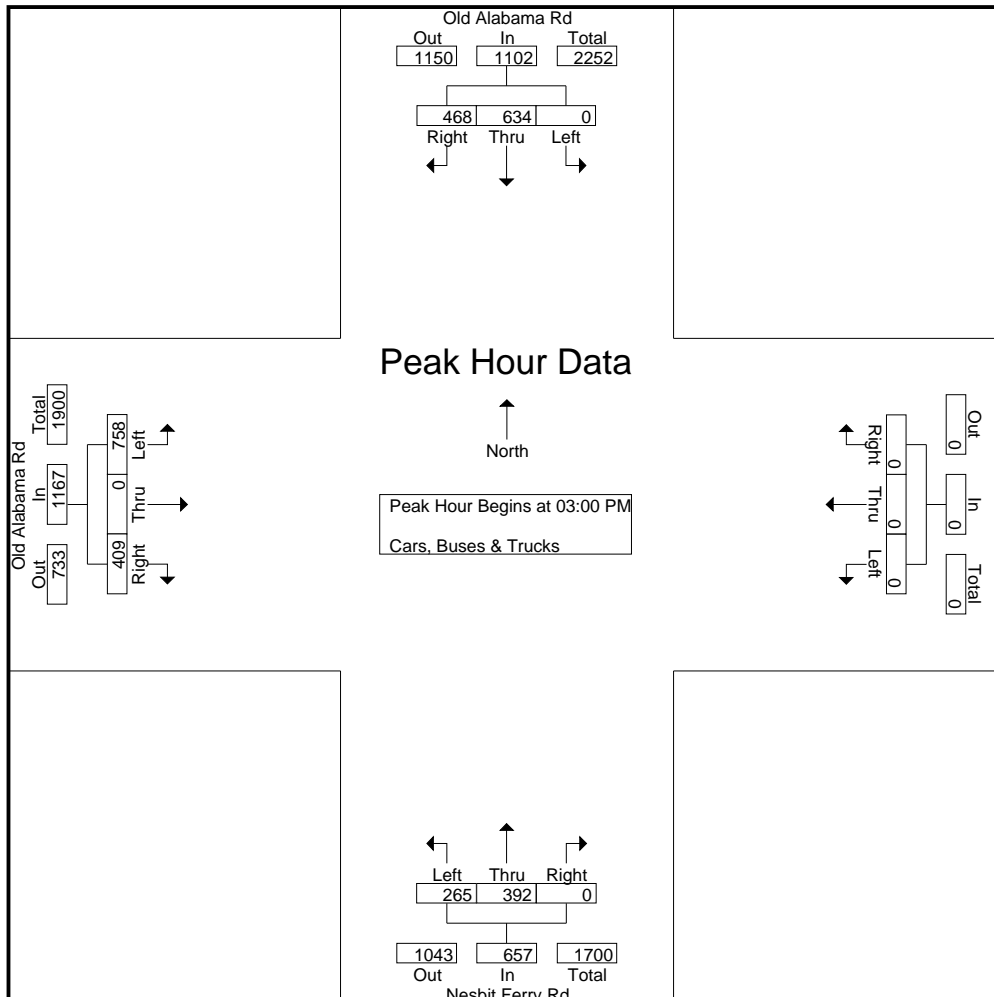
2160 Kingston Court, Suite 'O'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Old Alabama Road

7-9 am | 2-4 pm | 4-6 pm

File Name : 20240163  
Site Code : 20240163  
Start Date : 05-01-2024  
Page No : 3

Start Time	Nesbit Ferry Rd Northbound				Old Alabama Rd Southbound				Old Alabama Rd Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	59	65	0	124	0	179	117	296	209	0	108	317	0	0	0	0	737
03:15 PM	69	199	0	268	0	169	112	281	133	0	92	225	0	0	0	0	774
03:30 PM	69	85	0	154	0	112	122	234	182	0	117	299	0	0	0	0	687
03:45 PM	68	43	0	111	0	174	117	291	234	0	92	326	0	0	0	0	728
Total Volume	265	392	0	657	0	634	468	1102	758	0	409	1167	0	0	0	0	2926
% App. Total	40.3	59.7	0		0	57.5	42.5		65	0	35		0	0	0		
PHF	.960	.492	.000	.613	.000	.885	.959	.931	.810	.000	.874	.895	.000	.000	.000	.000	.945



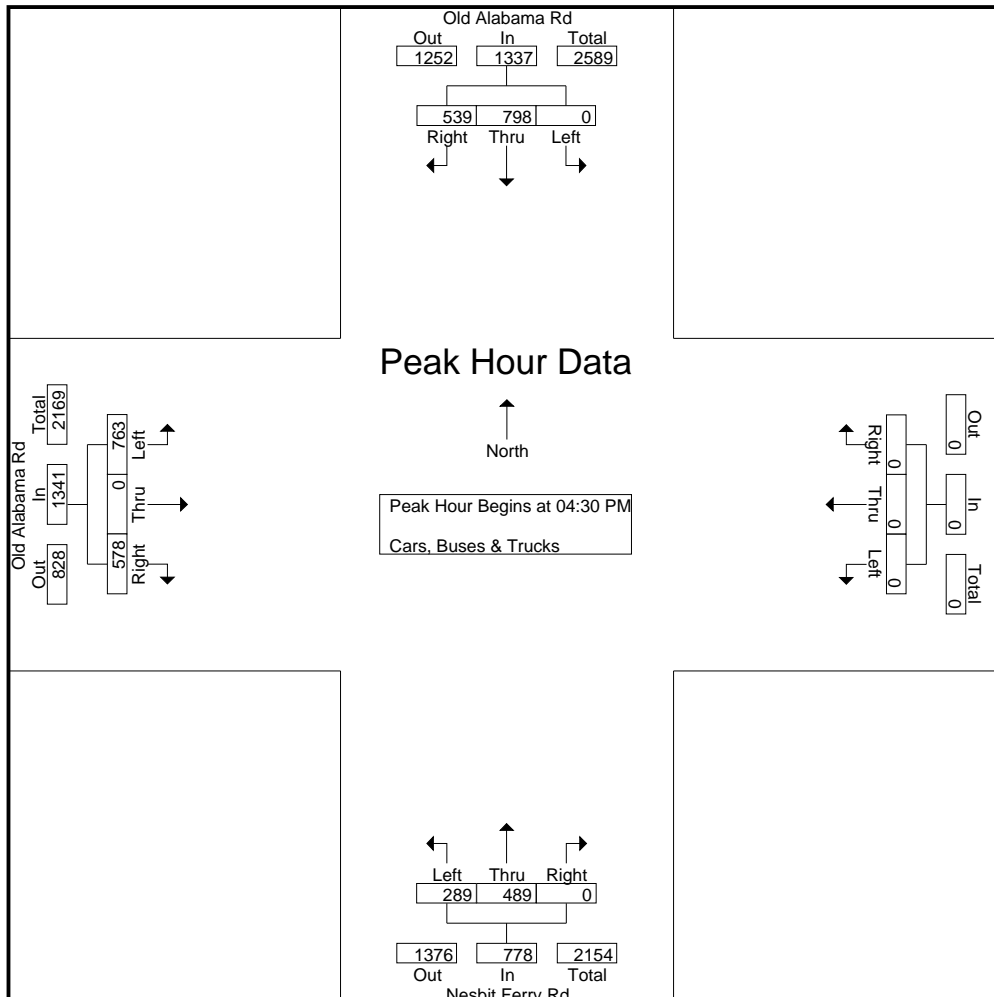
# A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Old Alabama Road  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240163  
Site Code : 20240163  
Start Date : 05-01-2024  
Page No : 4

Start Time	Nesbit Ferry Rd Northbound				Old Alabama Rd Southbound				Old Alabama Rd Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	86	94	0	180	0	209	138	347	212	0	156	368	0	0	0	0	895
04:45 PM	40	70	0	110	0	195	140	335	215	0	129	344	0	0	0	0	789
05:00 PM	96	146	0	242	0	195	132	327	187	0	143	330	0	0	0	0	899
05:15 PM	67	179	0	246	0	199	129	328	149	0	150	299	0	0	0	0	873
Total Volume	289	489	0	778	0	798	539	1337	763	0	578	1341	0	0	0	0	3456
% App. Total	37.1	62.9	0		0	59.7	40.3		56.9	0	43.1		0	0	0		
PHF	.753	.683	.000	.791	.000	.955	.963	.963	.887	.000	.926	.911	.000	.000	.000	.000	.961





# A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Old Scott Road  
-St. Regis Drive  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240164  
Site Code : 20240164  
Start Date : 05-01-2024  
Page No : 1

Groups Printed- Cars, Buses & Trucks

Start Time	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Old Scott Road Eastbound				St. Regis Drive Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	53	126	1	180	1	102	67	170	27	0	12	39	2	1	3	6	395
07:15 AM	62	141	0	203	1	150	90	241	78	1	40	119	1	2	3	6	569
07:30 AM	33	149	0	182	0	171	103	274	66	0	28	94	1	1	4	6	556
07:45 AM	67	126	1	194	5	181	127	313	53	0	20	73	1	0	3	4	584
Total	215	542	2	759	7	604	387	998	224	1	100	325	5	4	13	22	2104
08:00 AM	65	154	0	219	1	208	120	329	64	0	30	94	3	3	3	9	651
08:15 AM	33	154	2	189	5	231	102	338	54	2	26	82	1	0	4	5	614
08:30 AM	35	168	0	203	1	217	71	289	81	0	12	93	2	0	4	6	591
08:45 AM	24	170	1	195	2	191	73	266	56	0	10	66	3	1	4	8	535
Total	157	646	3	806	9	847	366	1222	255	2	78	335	9	4	15	28	2391
*** BREAK ***																	
02:00 PM	18	118	1	137	6	111	48	165	40	0	21	61	1	3	4	8	371
02:15 PM	19	92	0	111	2	146	77	225	60	1	34	95	1	1	6	8	439
02:30 PM	15	126	0	141	3	104	41	148	81	2	36	119	0	1	1	2	410
02:45 PM	15	130	1	146	7	140	60	207	45	1	25	71	2	0	4	6	430
Total	67	466	2	535	18	501	226	745	226	4	116	346	4	5	15	24	1650
03:00 PM	25	94	2	121	3	156	81	240	72	4	16	92	2	3	6	11	464
03:15 PM	23	101	2	126	6	120	82	208	54	3	18	75	3	6	3	12	421
03:30 PM	18	110	2	130	2	147	49	198	121	4	43	168	3	2	2	7	503
03:45 PM	14	120	1	135	8	151	57	216	72	0	36	108	0	0	2	2	461
Total	80	425	7	512	19	574	269	862	319	11	113	443	8	11	13	32	1849
04:00 PM	21	131	2	154	3	172	44	219	47	2	26	75	0	1	2	3	451
04:15 PM	16	132	2	150	8	172	62	242	54	2	13	69	0	1	0	1	462
04:30 PM	33	127	1	161	5	176	89	270	67	2	20	89	1	1	3	5	525
04:45 PM	30	160	5	195	6	178	82	266	77	2	30	109	2	2	3	7	577
Total	100	550	10	660	22	698	277	997	245	8	89	342	3	5	8	16	2015
05:00 PM	31	161	4	196	2	208	82	292	71	1	31	103	3	0	3	6	597
05:15 PM	24	148	1	173	3	198	100	301	100	0	36	136	1	2	1	4	614
05:30 PM	25	159	0	184	4	197	77	278	80	2	31	113	3	0	4	7	582
05:45 PM	23	128	3	154	4	214	83	301	96	0	24	120	0	3	2	5	580
Total	103	596	8	707	13	817	342	1172	347	3	122	472	7	5	10	22	2373
Grand Total	722	3225	32	3979	88	4041	1867	5996	1616	29	618	2263	36	34	74	144	12382
Apprch %	18.1	81.1	0.8		1.5	67.4	31.1		71.4	1.3	27.3		25	23.6	51.4		
Total %	5.8	26	0.3	32.1	0.7	32.6	15.1	48.4	13.1	0.2	5	18.3	0.3	0.3	0.6	1.2	

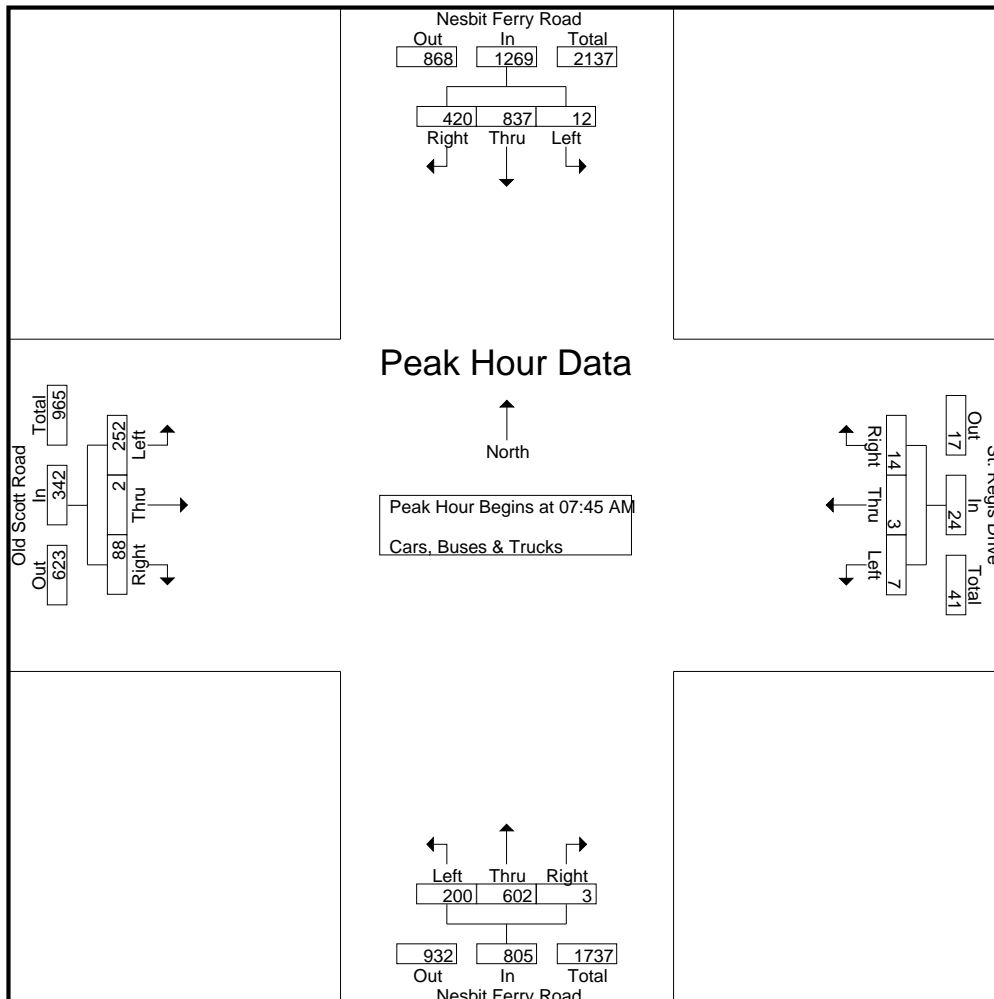
# A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Old Scott Road  
-St. Regis Drive  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240164  
Site Code : 20240164  
Start Date : 05-01-2024  
Page No : 2

Start Time	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Old Scott Road Eastbound				St. Regis Drive Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	67	126	1	194	5	181	127	313	53	0	20	73	1	0	3	4	584
08:00 AM	65	154	0	219	1	208	120	329	64	0	30	94	3	3	3	9	651
08:15 AM	33	154	2	189	5	231	102	338	54	2	26	82	1	0	4	5	614
08:30 AM	35	168	0	203	1	217	71	289	81	0	12	93	2	0	4	6	591
Total Volume	200	602	3	805	12	837	420	1269	252	2	88	342	7	3	14	24	2440
% App. Total	24.8	74.8	0.4		0.9	66	33.1		73.7	0.6	25.7		29.2	12.5	58.3		
PHF	.746	.896	.375	.919	.600	.906	.827	.939	.778	.250	.733	.910	.583	.250	.875	.667	.937



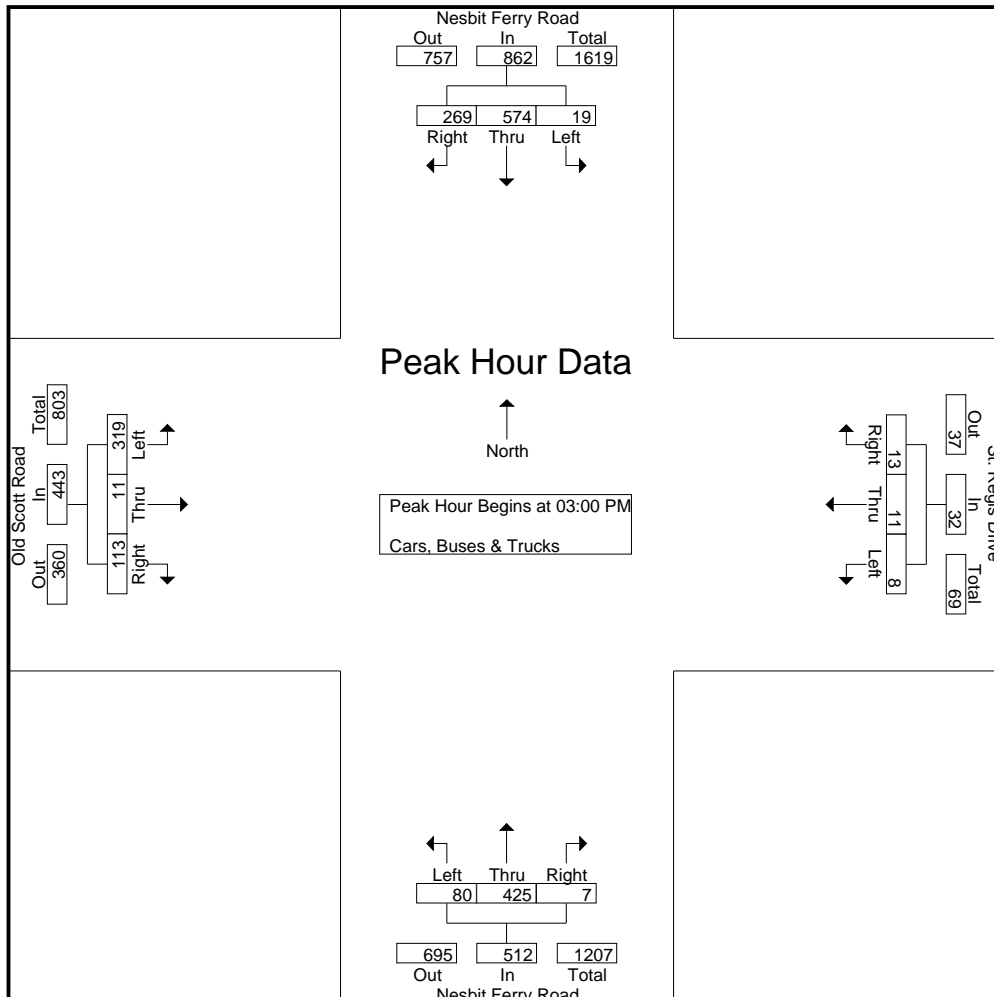
# A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Old Scott Road  
-St. Regis Drive  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240164  
Site Code : 20240164  
Start Date : 05-01-2024  
Page No : 3

Start Time	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Old Scott Road Eastbound				St. Regis Drive Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	25	94	2	121	3	156	81	240	72	4	16	92	2	3	6	11	464
03:15 PM	23	101	2	126	6	120	82	208	54	3	18	75	3	6	3	12	421
03:30 PM	18	110	2	130	2	147	49	198	121	4	43	168	3	2	2	7	503
03:45 PM	14	120	1	135	8	151	57	216	72	0	36	108	0	0	2	2	461
Total Volume	80	425	7	512	19	574	269	862	319	11	113	443	8	11	13	32	1849
% App. Total	15.6	83	1.4		2.2	66.6	31.2		72	2.5	25.5		25	34.4	40.6		
PHF	.800	.885	.875	.948	.594	.920	.820	.898	.659	.688	.657	.659	.667	.458	.542	.667	.919



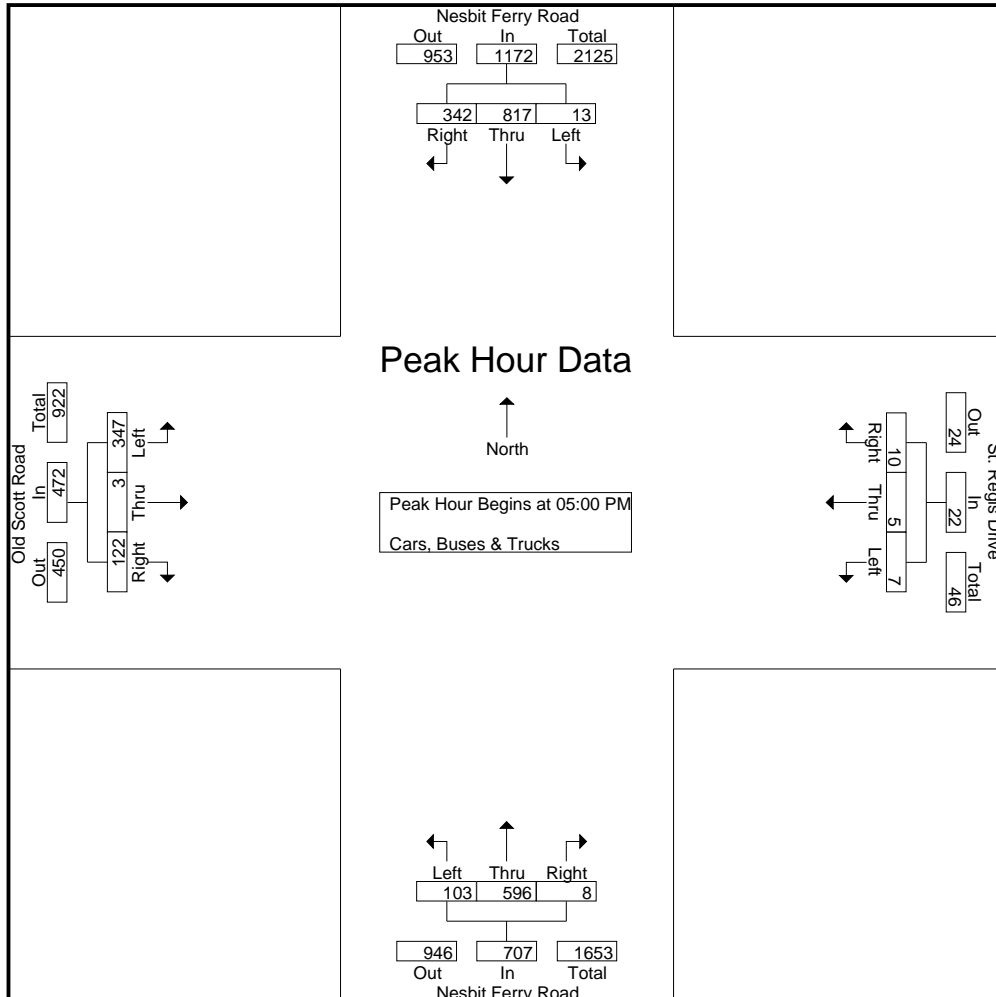
# A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Old Scott Road  
-St. Regis Drive  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240164  
Site Code : 20240164  
Start Date : 05-01-2024  
Page No : 4

Start Time	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Old Scott Road Eastbound				St. Regis Drive Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	31	161	4	196	2	208	82	292	71	1	31	103	3	0	3	6	597
05:15 PM	24	148	1	173	3	198	100	301	100	0	36	136	1	2	1	4	614
05:30 PM	25	159	0	184	4	197	77	278	80	2	31	113	3	0	4	7	582
05:45 PM	23	128	3	154	4	214	83	301	96	0	24	120	0	3	2	5	580
Total Volume	103	596	8	707	13	817	342	1172	347	3	122	472	7	5	10	22	2373
% App. Total	14.6	84.3	1.1		1.1	69.7	29.2		73.5	0.6	25.8		31.8	22.7	45.5		
PHF	.831	.925	.500	.902	.813	.954	.855	.973	.868	.375	.847	.868	.583	.417	.625	.786	.966



# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Old Alabama Road @ Nesbit Ferry Road /  
Northern Drwy-Church Drwy  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240165  
Site Code : 20240165  
Start Date : 05-01-2024  
Page No : 1

Groups Printed- Cars, Buses & Trucks

Start Time	Old Alabama Rd Northbound				Old Alabama Rd Southbound				Northern Drwy-Church Drwy Eastbound				Nesbit Ferry Road Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	139	0	142	7	236	6	249	1	0	1	2	0	0	1	1	394
07:15 AM	6	174	0	180	7	419	5	431	1	0	6	7	0	0	0	0	618
07:30 AM	5	238	2	245	13	338	6	357	3	1	7	11	0	0	1	1	614
07:45 AM	5	222	7	234	13	388	12	413	2	3	6	11	2	0	13	15	673
Total	19	773	9	801	40	1381	29	1450	7	4	20	31	2	0	15	17	2299
08:00 AM	1	183	1	185	2	349	9	360	4	0	1	5	0	0	3	3	553
08:15 AM	4	178	2	184	8	341	6	355	1	0	1	2	2	0	2	4	545
08:30 AM	2	207	10	219	7	341	7	355	0	0	9	9	1	0	7	8	591
08:45 AM	2	279	28	309	73	358	7	438	3	0	0	3	8	0	21	29	779
Total	9	847	41	897	90	1389	29	1508	8	0	11	19	11	0	33	44	2468
*** BREAK ***																	
02:00 PM	0	232	2	234	4	208	0	212	3	0	2	5	1	0	3	4	455
02:15 PM	0	243	2	245	7	284	5	296	0	0	0	0	1	2	7	10	551
02:30 PM	0	195	8	203	19	243	2	264	2	0	2	4	0	0	2	2	473
02:45 PM	0	241	15	256	17	262	1	280	4	0	1	5	3	0	4	7	548
Total	0	911	27	938	47	997	8	1052	9	0	5	14	5	2	16	23	2027
03:00 PM	0	243	31	274	17	233	0	250	2	1	1	4	62	1	152	215	743
03:15 PM	2	326	4	332	14	269	2	285	2	0	1	3	11	0	42	53	673
03:30 PM	3	262	2	267	5	227	4	236	3	0	4	7	3	0	16	19	529
03:45 PM	5	271	1	277	2	285	4	291	3	0	3	6	3	0	16	19	593
Total	10	1102	38	1150	38	1014	10	1062	10	1	9	20	79	1	226	306	2538
04:00 PM	1	294	1	296	6	273	5	284	5	0	5	10	2	0	13	15	605
04:15 PM	8	269	2	279	9	271	6	286	5	0	5	10	0	0	2	2	577
04:30 PM	6	296	4	306	7	339	4	350	6	0	5	11	3	0	14	17	684
04:45 PM	2	281	2	285	3	330	7	340	3	0	5	8	0	0	7	7	640
Total	17	1140	9	1166	25	1213	22	1260	19	0	20	39	5	0	36	41	2506
05:00 PM	8	324	1	333	2	316	7	325	7	0	11	18	0	0	8	8	684
05:15 PM	10	317	1	328	2	320	23	345	11	0	8	19	0	0	1	1	693
05:30 PM	8	306	2	316	3	340	21	364	14	0	11	25	0	0	0	0	705
05:45 PM	2	315	1	318	15	297	9	321	8	0	2	10	0	0	1	1	650
Total	28	1262	5	1295	22	1273	60	1355	40	0	32	72	0	0	10	10	2732
Grand Total	83	6035	129	6247	262	7267	158	7687	93	5	97	195	102	3	336	441	14570
Apprch %	1.3	96.6	2.1		3.4	94.5	2.1		47.7	2.6	49.7		23.1	0.7	76.2		
Total %	0.6	41.4	0.9	42.9	1.8	49.9	1.1	52.8	0.6	0	0.7	1.3	0.7	0	2.3	3	

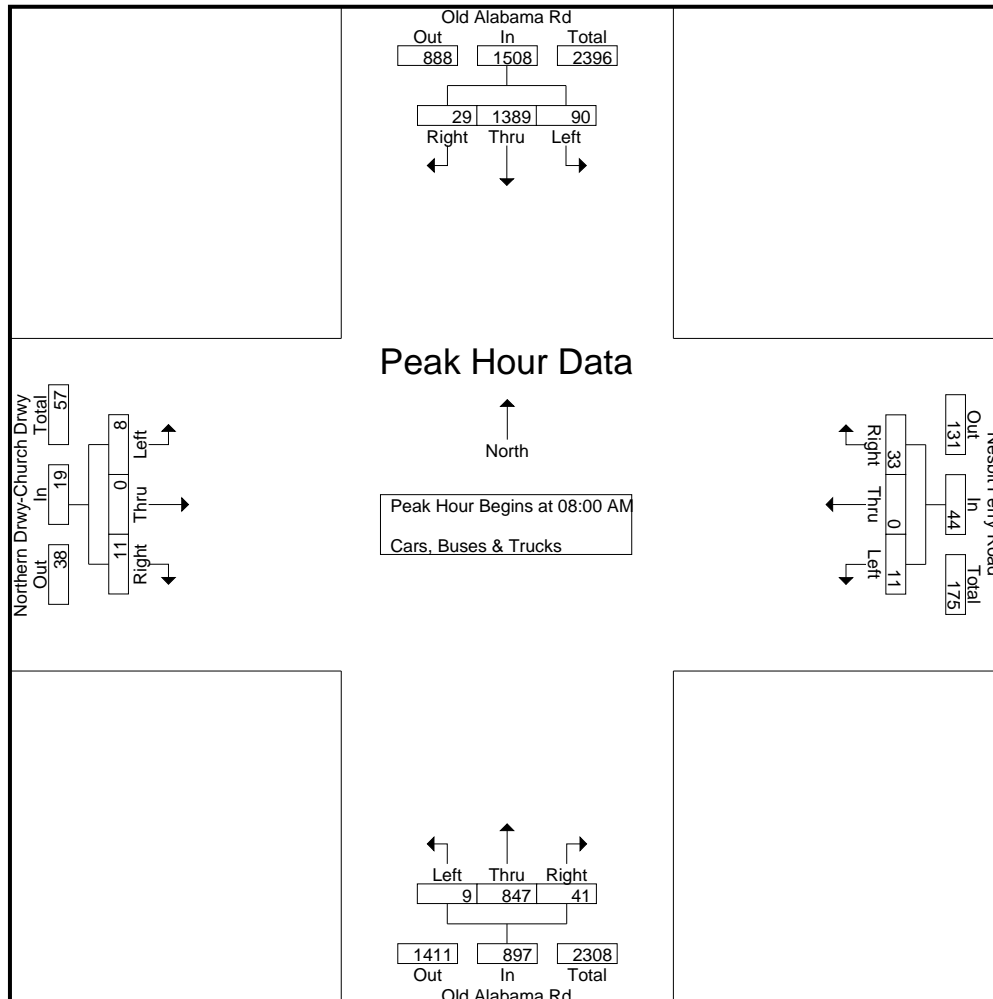
# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Old Alabama Road @ Nesbit Ferry Road /  
Northern Drwy-Church Drwy  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240165  
Site Code : 20240165  
Start Date : 05-01-2024  
Page No : 2

Start Time	Old Alabama Rd Northbound				Old Alabama Rd Southbound				Northern Drwy-Church Drwy Eastbound				Nesbit Ferry Road Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	1	183	1	185	2	349	9	360	4	0	1	5	0	0	3	3	553
08:15 AM	4	178	2	184	8	341	6	355	1	0	1	2	2	0	2	4	545
08:30 AM	2	207	10	219	7	341	7	355	0	0	9	9	1	0	7	8	591
08:45 AM	2	<b>279</b>	<b>28</b>	<b>309</b>	<b>73</b>	<b>358</b>	7	<b>438</b>	3	0	0	3	<b>8</b>	0	<b>21</b>	<b>29</b>	<b>779</b>
Total Volume	9	847	41	897	90	1389	29	1508	8	0	11	19	11	0	33	44	2468
% App. Total	1	94.4	4.6		6	92.1	1.9		42.1	0	57.9		25	0	75		
PHF	.563	.759	.366	.726	.308	.970	.806	.861	.500	.000	.306	.528	.344	.000	.393	.379	.792



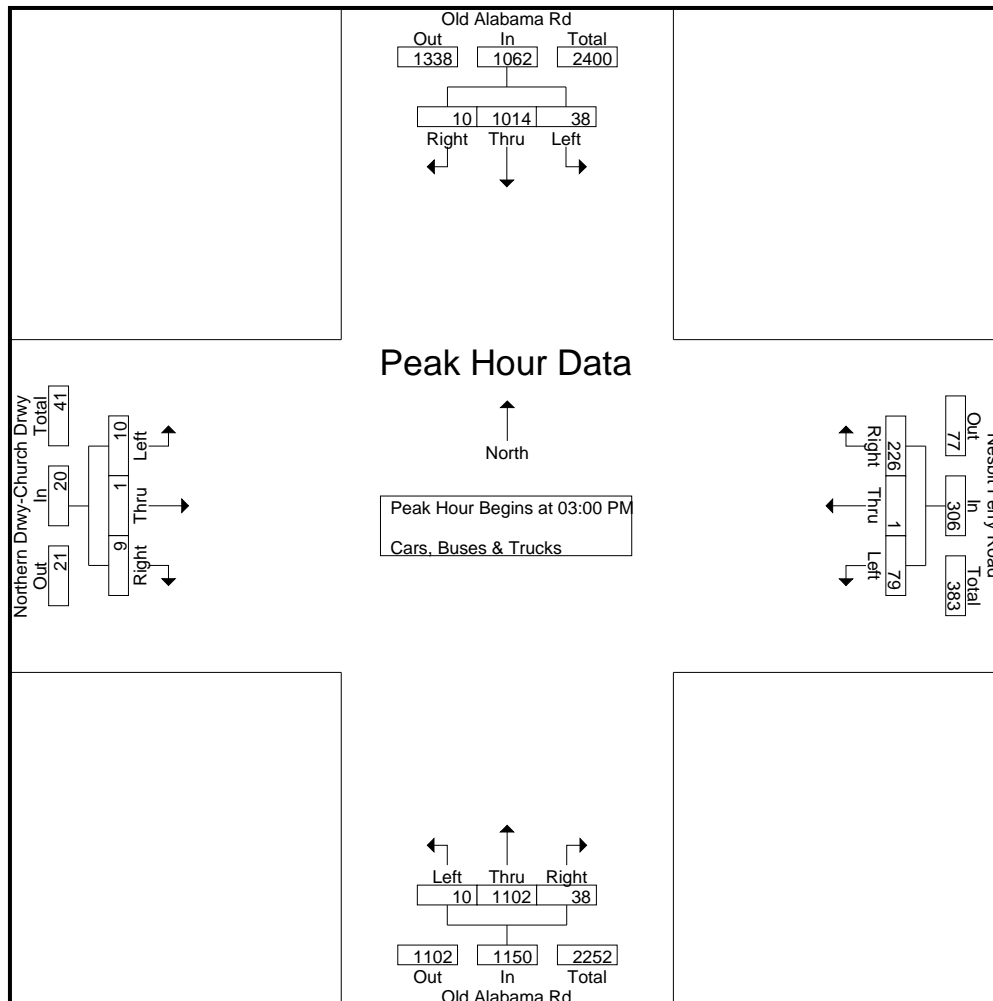
# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Old Alabama Road @ Nesbit Ferry Road /  
Northern Drwy-Church Drwy  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240165  
Site Code : 20240165  
Start Date : 05-01-2024  
Page No : 3

Start Time	Old Alabama Rd Northbound				Old Alabama Rd Southbound				Northern Drwy-Church Drwy Eastbound				Nesbit Ferry Road Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	0	243	31	274	17	233	0	250	2	1	1	4	62	1	152	215	743
03:15 PM	2	326	4	332	14	269	2	285	2	0	1	3	11	0	42	53	673
03:30 PM	3	262	2	267	5	227	4	236	3	0	4	7	3	0	16	19	529
03:45 PM	5	271	1	277	2	285	4	291	3	0	3	6	3	0	16	19	593
Total Volume	10	1102	38	1150	38	1014	10	1062	10	1	9	20	79	1	226	306	2538
% App. Total	0.9	95.8	3.3		3.6	95.5	0.9		50	5	45		25.8	0.3	73.9		
PHF	.500	.845	.306	.866	.559	.889	.625	.912	.833	.250	.563	.714	.319	.250	.372	.356	.854



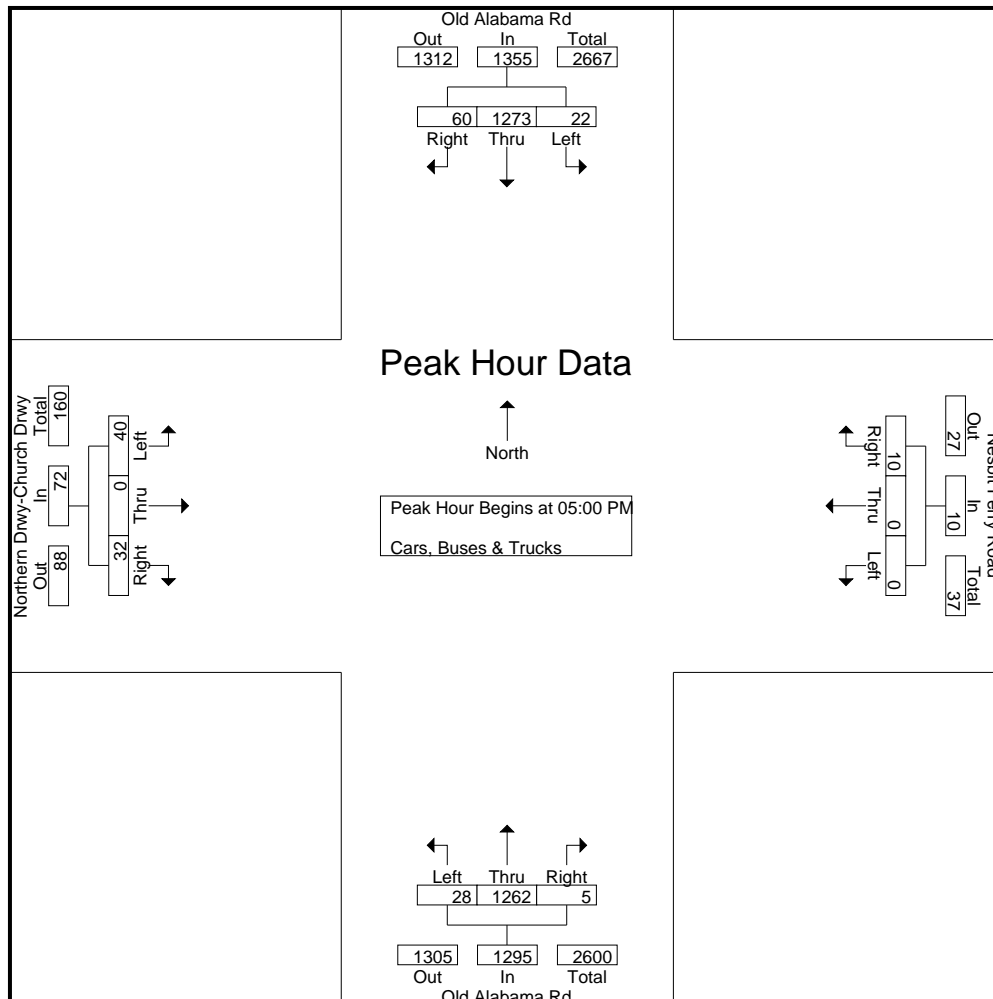
# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Old Alabama Road @ Nesbit Ferry Road /  
Northern Drwy-Church Drwy  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240165  
Site Code : 20240165  
Start Date : 05-01-2024  
Page No : 4

Start Time	Old Alabama Rd Northbound				Old Alabama Rd Southbound				Northern Drwy-Church Drwy Eastbound				Nesbit Ferry Road Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	8	324	1	333	2	316	7	325	7	0	11	18	0	0	8	8	684
05:15 PM	10	317	1	328	2	320	23	345	11	0	8	19	0	0	1	1	693
05:30 PM	8	306	2	316	3	340	21	364	14	0	11	25	0	0	0	0	705
05:45 PM	2	315	1	318	15	297	9	321	8	0	2	10	0	0	1	1	650
Total Volume	28	1262	5	1295	22	1273	60	1355	40	0	32	72	0	0	10	10	2732
% App. Total	2.2	97.5	0.4		1.6	93.9	4.4		55.6	0	44.4		0	0	100		
PHF	.700	.974	.625	.972	.367	.936	.652	.931	.714	.000	.727	.720	.000	.000	.313	.313	.969





# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Nesbit Lakes Dr  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240176  
Site Code : 20240176  
Start Date : 05-01-2024  
Page No : 1

Groups Printed- Cars, Buses & Trucks

Start Time	Nesbit Ferry Rd Northbound				Nesbit Ferry Road Southbound				Nesbit Lakes Dr Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	134	0	137	0	130	5	135	11	0	9	20	0	0	0	0	292
07:15 AM	4	179	0	183	0	233	4	237	15	0	10	25	0	0	0	0	445
07:30 AM	2	223	0	225	0	262	4	266	18	0	12	30	0	0	0	0	521
07:45 AM	3	184	0	187	0	287	3	290	16	0	11	27	0	0	0	0	504
Total	12	720	0	732	0	912	16	928	60	0	42	102	0	0	0	0	1762
08:00 AM	5	177	0	182	0	289	6	295	14	0	13	27	0	0	0	0	504
08:15 AM	4	164	0	168	0	286	5	291	13	0	11	24	0	0	0	0	483
08:30 AM	2	226	0	228	0	242	4	246	15	0	10	25	0	0	0	0	499
08:45 AM	3	244	0	247	0	290	3	293	13	0	9	22	0	0	0	0	562
Total	14	811	0	825	0	1107	18	1125	55	0	43	98	0	0	0	0	2048
*** BREAK ***																	
02:00 PM	5	136	0	141	0	173	0	173	6	0	4	10	0	0	0	0	324
02:15 PM	7	160	0	167	0	184	8	192	7	0	5	12	0	0	0	0	371
02:30 PM	6	195	0	201	0	162	6	168	6	0	3	9	0	0	0	0	378
02:45 PM	5	184	0	189	0	232	5	237	5	0	5	10	0	0	0	0	436
Total	23	675	0	698	0	751	19	770	24	0	17	41	0	0	0	0	1509
03:00 PM	7	148	0	155	0	228	7	235	7	0	4	11	0	0	0	0	401
03:15 PM	6	164	0	170	0	215	6	221	8	0	2	10	0	0	0	0	401
03:30 PM	6	198	0	204	0	217	5	222	7	0	4	11	0	0	0	0	437
03:45 PM	8	202	0	210	0	243	4	247	9	0	5	14	0	0	0	0	471
Total	27	712	0	739	0	903	22	925	31	0	15	46	0	0	0	0	1710
04:00 PM	12	155	0	167	0	206	9	215	8	0	6	14	0	0	0	0	396
04:15 PM	14	180	0	194	0	233	13	246	6	0	7	13	0	0	0	0	453
04:30 PM	13	165	0	178	0	261	14	275	5	0	6	11	0	0	0	0	464
04:45 PM	16	215	0	231	0	274	12	286	7	0	4	11	0	0	0	0	528
Total	55	715	0	770	0	974	48	1022	26	0	23	49	0	0	0	0	1841
05:00 PM	15	203	0	218	0	295	15	310	6	0	3	9	0	0	0	0	537
05:15 PM	14	232	0	246	0	280	17	297	5	0	5	10	0	0	0	0	553
05:30 PM	13	206	0	219	0	294	16	310	7	0	4	11	0	0	0	0	540
05:45 PM	11	233	0	244	0	316	15	331	4	0	3	7	0	0	0	0	582
Total	53	874	0	927	0	1185	63	1248	22	0	15	37	0	0	0	0	2212
Grand Total	184	4507	0	4691	0	5832	186	6018	218	0	155	373	0	0	0	0	11082
Apprch %	3.9	96.1	0		0	96.9	3.1		58.4	0	41.6		0	0	0		
Total %	1.7	40.7	0	42.3	0	52.6	1.7	54.3	2	0	1.4	3.4	0	0	0	0	

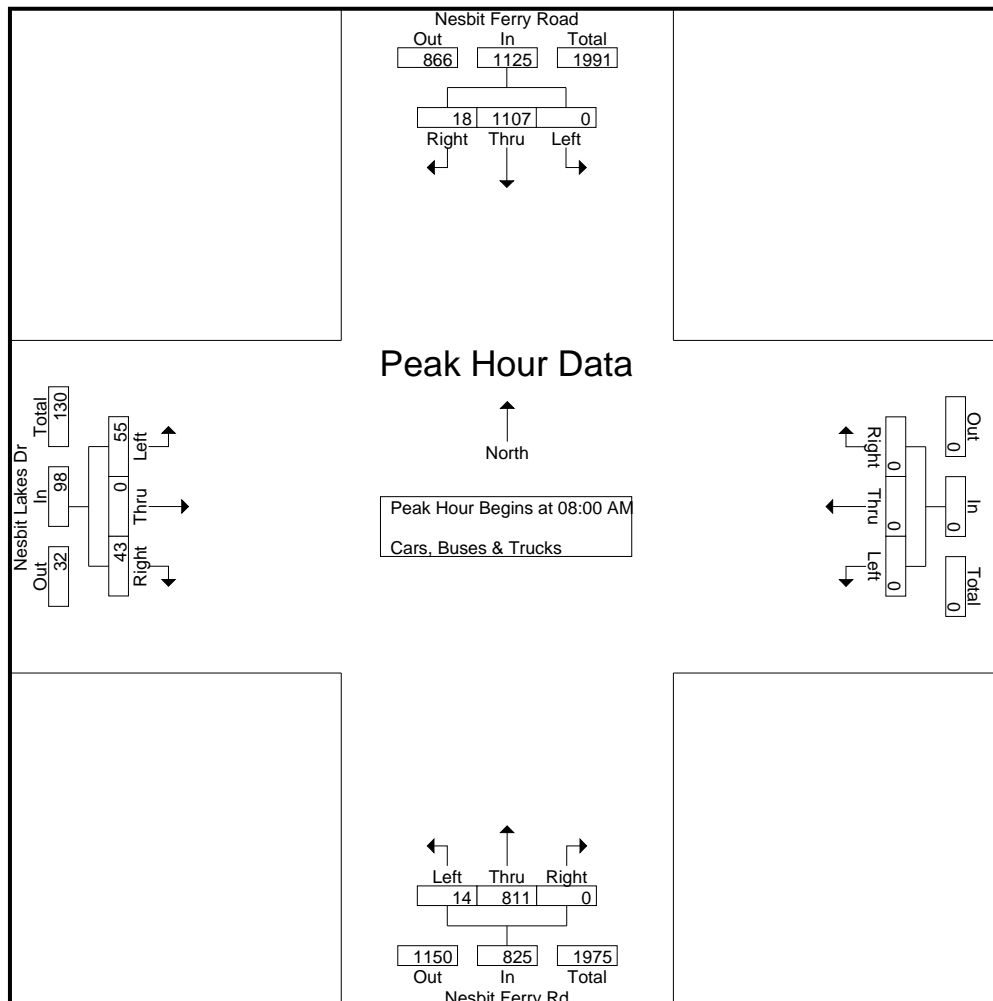
# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Nesbit Lakes Dr  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240176  
Site Code : 20240176  
Start Date : 05-01-2024  
Page No : 2

Start Time	Nesbit Ferry Rd Northbound				Nesbit Ferry Road Southbound				Nesbit Lakes Dr Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	5	177	0	182	0	289	6	295	14	0	13	27	0	0	0	0	504
08:15 AM	4	164	0	168	0	286	5	291	13	0	11	24	0	0	0	0	483
08:30 AM	2	226	0	228	0	242	4	246	15	0	10	25	0	0	0	0	499
08:45 AM	3	244	0	247	0	290	3	293	13	0	9	22	0	0	0	0	562
Total Volume	14	811	0	825	0	1107	18	1125	55	0	43	98	0	0	0	0	2048
% App. Total	1.7	98.3	0		0	98.4	1.6		56.1	0	43.9		0	0	0		
PHF	.700	.831	.000	.835	.000	.954	.750	.953	.917	.000	.827	.907	.000	.000	.000	.000	.911



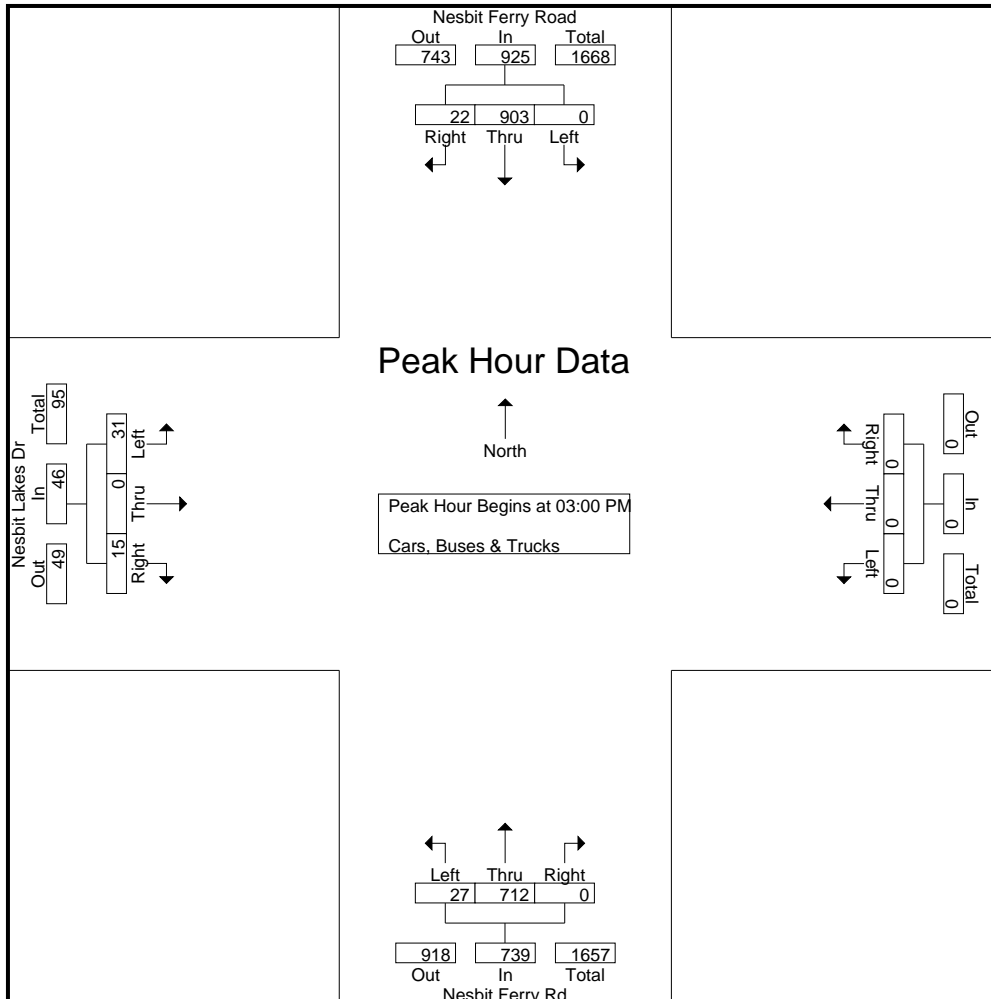
# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Nesbit Lakes Dr  
7-9 am | 2-4 pm | 4-6 pm

File Name : 20240176  
Site Code : 20240176  
Start Date : 05-01-2024  
Page No : 3

Start Time	Nesbit Ferry Rd Northbound				Nesbit Ferry Road Southbound				Nesbit Lakes Dr Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:00 PM																	
03:00 PM	7	148	0	155	0	228	7	235	7	0	4	11	0	0	0	0	401
03:15 PM	6	164	0	170	0	215	6	221	8	0	2	10	0	0	0	0	401
03:30 PM	6	198	0	204	0	217	5	222	7	0	4	11	0	0	0	0	437
03:45 PM	<b>8</b>	<b>202</b>	0	<b>210</b>	0	<b>243</b>	4	<b>247</b>	<b>9</b>	0	<b>5</b>	<b>14</b>	0	0	0	0	<b>471</b>
Total Volume	27	712	0	739	0	903	22	925	31	0	15	46	0	0	0	0	1710
% App. Total	3.7	96.3	0		0	97.6	2.4		67.4	0	32.6		0	0	0		
PHF	.844	.881	.000	.880	.000	.929	.786	.936	.861	.000	.750	.821	.000	.000	.000	.000	.908



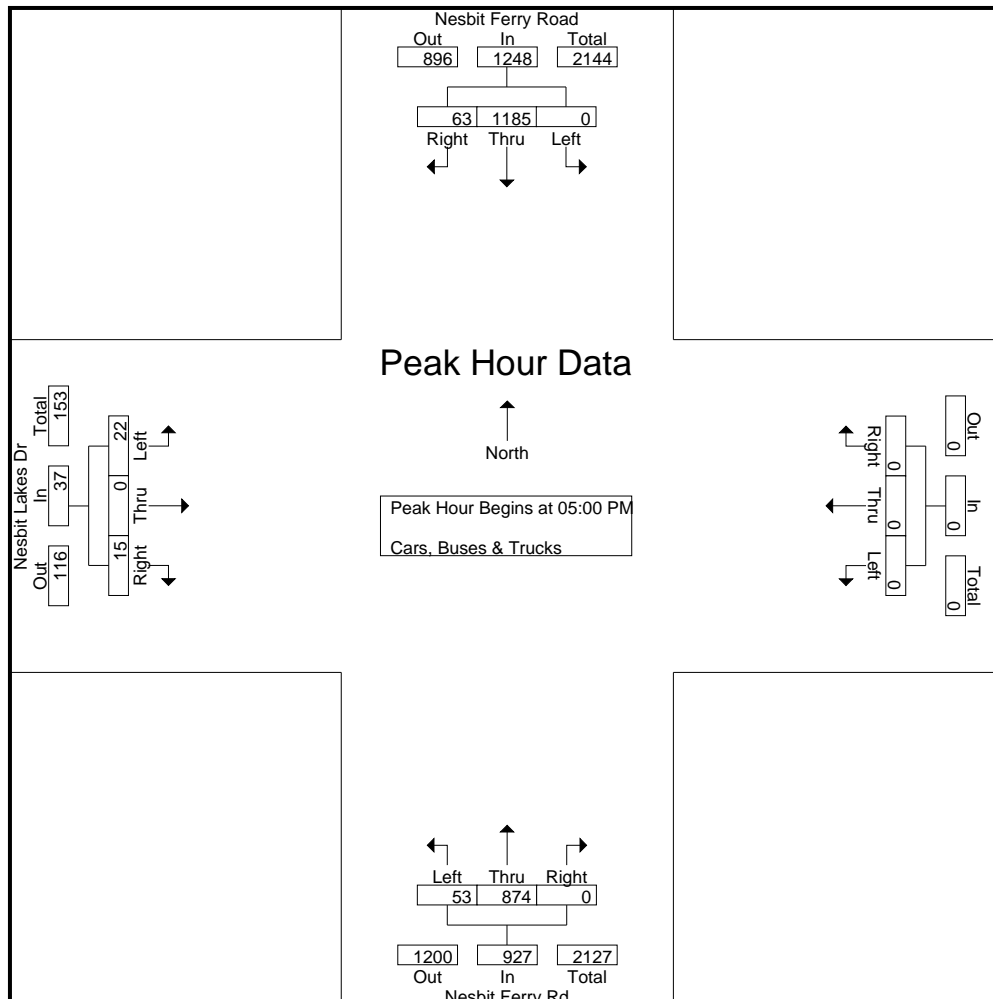
# A & R Engineering, Inc.

2160 Kingston Court Suite '0'  
Marietta, GA 30067

TMC Data  
Nesbit Ferry Road @ Nesbit Lakes Dr  
7-9 am | 2-4 pm | 4-6 pm

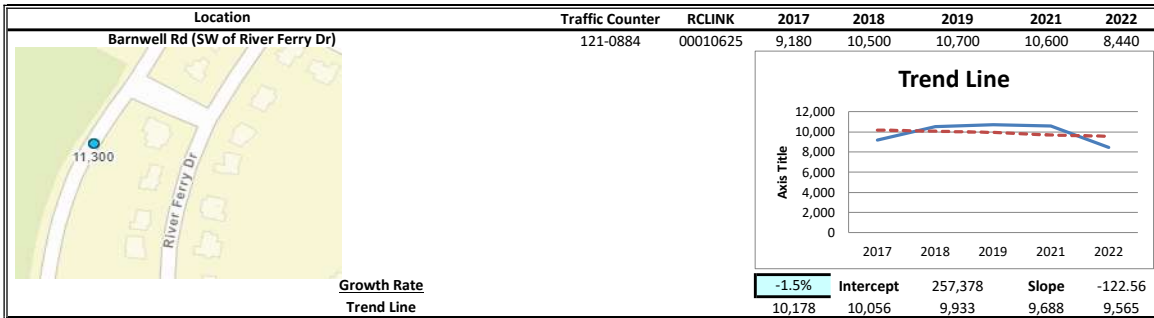
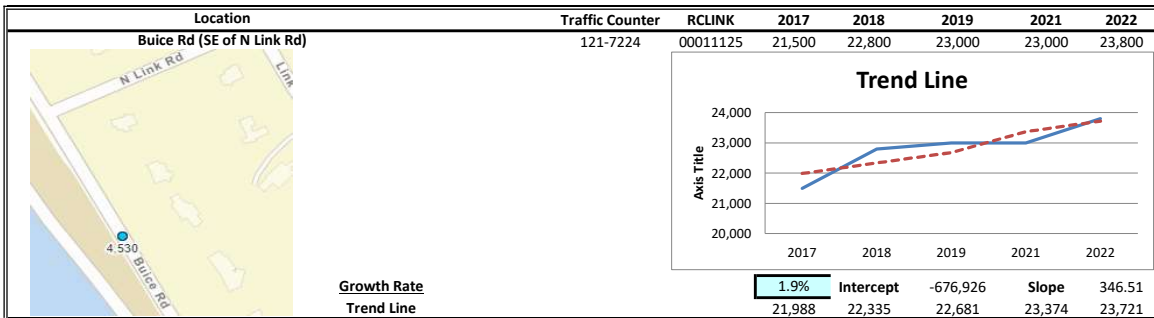
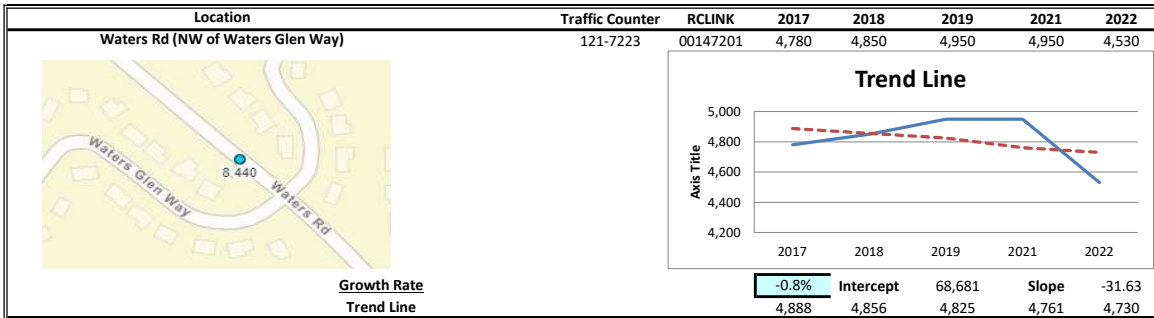
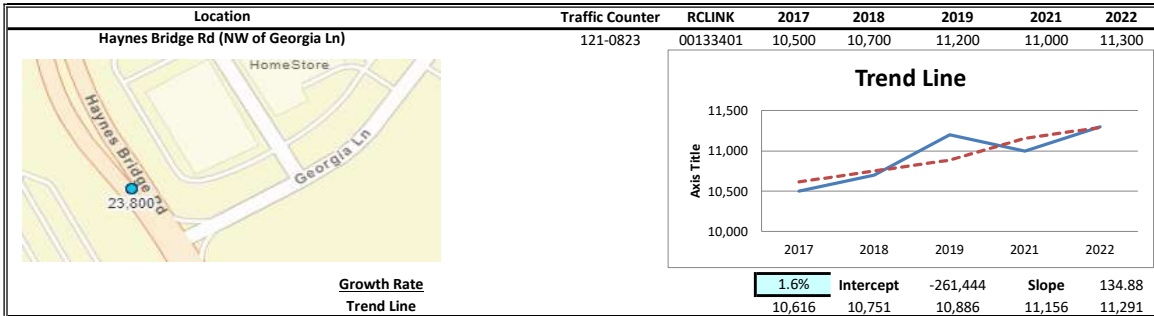
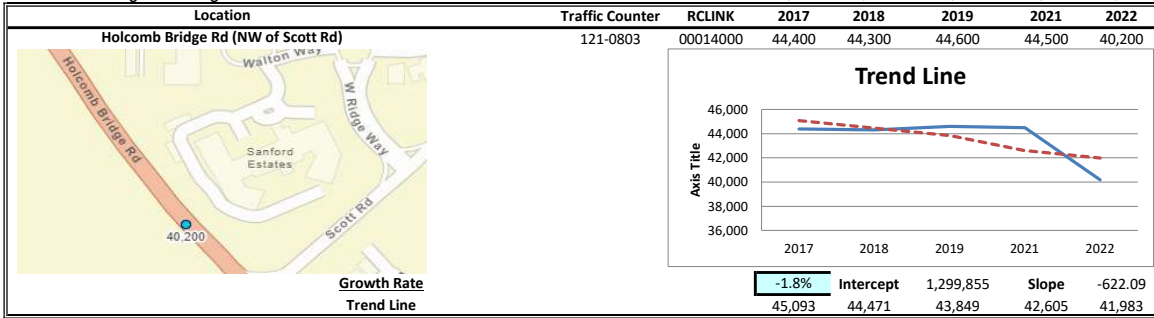
File Name : 20240176  
Site Code : 20240176  
Start Date : 05-01-2024  
Page No : 4

Start Time	Nesbit Ferry Rd Northbound				Nesbit Ferry Road Southbound				Nesbit Lakes Dr Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	15	203	0	218	0	295	15	310	6	0	3	9	0	0	0	0	537
05:15 PM	14	232	0	246	0	280	17	297	5	0	5	10	0	0	0	0	553
05:30 PM	13	206	0	219	0	294	16	310	7	0	4	11	0	0	0	0	540
05:45 PM	11	233	0	244	0	316	15	331	4	0	3	7	0	0	0	0	582
Total Volume	53	874	0	927	0	1185	63	1248	22	0	15	37	0	0	0	0	2212
% App. Total	5.7	94.3	0		0	95	5		59.5	0	40.5		0	0	0		
PHF	.883	.938	.000	.942	.000	.938	.926	.943	.786	.000	.750	.841	.000	.000	.000	.000	.950



# LINEAR REGRESSION OF DAILY TRAFFIC

Location	Growth Rate	R Squared	Station ID	Route	2017	2018	2019	2021	2022
Holcomb Bridge Rd (NW of Scott Rd)	-1.8%	0.46	121-0803	00014000	44,400	44,300	44,600	44,500	40,200
Haynes Bridge Rd (NW of Georgia Ln)	1.6%	0.69	121-0823	00133401	21,500	22,800	23,000	23,000	23,800
Waters Rd (NW of Waters Glen Way)	-0.8%	0.14	121-7223	00147201	9,180	10,500	10,700	10,600	8,440
Buice Rd (SE of N Link Rd)	1.9%	0.75	121-7224	00011125	4,780	4,850	4,950	4,950	4,530
Barnwell Rd (SW of River Ferry Dr)	-1.5%	0.06	121-0884	00010625	10,500	10,700	11,200	11,000	11,300
<b>Weighted Average</b>	<b>-0.4%</b>	<b>0.05</b>	<b>Sum of Count Stations =</b>		<b>90,360</b>	<b>93,150</b>	<b>94,450</b>	<b>94,050</b>	<b>88,270</b>



## **EXISTING INTERSECTION ANALYSIS**

Timings

1a.Existing 2024 AM

1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

05/17/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕↔	↖	↕↕	↗
Traffic Volume (vph)	8	0	11	11	0	33	9	847	90	1389	29
Future Volume (vph)	8	0	11	11	0	33	9	847	90	1389	29
Lane Group Flow (vph)	0	10	14	0	14	42	11	1124	114	1758	37
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	76.0	76.0	76.0	76.0	76.0
Total Split (%)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.09	0.09		0.12	0.25	0.07	0.41	0.33	0.64	0.03
Control Delay		39.5	8.5		40.3	16.5	3.2	3.3	5.5	5.1	1.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		39.5	8.5		40.3	16.5	3.2	3.3	5.5	5.1	1.1
Queue Length 50th (ft)		5	0		7	0	1	67	12	144	1
Queue Length 95th (ft)		18	8		23	24	4	83	27	165	5
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		324	389		325	400	167	3007	382	3027	1358
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.03	0.04		0.04	0.10	0.07	0.37	0.30	0.58	0.03

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 81.2

Natural Cycle: 65

Control Type: Actuated-Uncoordinated























Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway





HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

1a.Existing 2024 AM  
 05/17/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	0	11	11	0	33	9	847	41	90	1389	29
Future Volume (veh/h)	8	0	11	11	0	33	9	847	41	90	1389	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	0	14	14	0	42	11	1072	52	114	1758	37
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	0	273	101	0	273	193	2430	118	369	2503	1116
Arrive On Green	0.17	0.00	0.17	0.17	0.00	0.17	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	104	0	1585	117	0	1585	263	3450	167	501	3554	1585
Grp Volume(v), veh/h	10	0	14	14	0	42	11	552	572	114	1758	37
Grp Sat Flow(s),veh/h/ln	104	0	1585	117	0	1585	263	1777	1840	501	1777	1585
Q Serve(g_s), s	0.6	0.0	0.7	0.9	0.0	2.0	2.2	11.9	11.9	11.1	25.8	0.6
Cycle Q Clear(g_c), s	14.8	0.0	0.7	15.0	0.0	2.0	26.8	11.9	11.9	22.6	25.8	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	99	0	273	101	0	273	193	1251	1296	369	2503	1116
V/C Ratio(X)	0.10	0.00	0.05	0.14	0.00	0.15	0.06	0.44	0.44	0.31	0.70	0.03
Avail Cap(c_a), veh/h	147	0	329	150	0	329	216	1405	1455	413	2810	1254
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	30.8	43.7	0.0	31.4	15.2	5.7	5.7	10.4	7.7	4.0
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.6	0.0	0.3	0.3	0.5	0.5	1.0	1.0	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	0.2	0.0	0.3	0.3	0.0	0.8	0.1	3.4	3.5	1.2	7.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	0.0	30.9	44.4	0.0	31.6	15.5	6.2	6.2	11.4	8.7	4.0
LnGrp LOS	D	A	C	D	A	C	B	A	A	B	A	A
Approach Vol, veh/h		24			56			1135			1909	
Approach Delay, s/veh		36.4			34.8			6.3			8.8	
Approach LOS		D			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.5		21.6		68.5		21.6				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		70.5		18.5		70.5		18.5				
Max Q Clear Time (g_c+I1), s		27.8		16.8		28.8		17.0				
Green Ext Time (p_c), s		35.4		0.0		19.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			8.5									
HCM 6th LOS			A									

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	598	529	429	299	700	711
Future Volume (vph)	598	529	429	299	700	711
Lane Group Flow (vph)	643	569	461	322	753	765
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	55.0	55.0	37.0	95.0	58.0	58.0
Total Split (%)	36.7%	36.7%	24.7%	63.3%	38.7%	38.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.79	0.79	0.80	0.25	1.15	0.93
Control Delay	60.5	19.8	56.1	11.1	126.8	39.3
Queue Delay	0.0	0.2	0.0	0.0	0.8	0.0
Total Delay	60.5	19.9	56.1	11.1	127.6	39.3
Queue Length 50th (ft)	307	115	404	97	~866	400
Queue Length 95th (ft)	349	258	#634	224	#1118	#691
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1132	821	579	1282	656	825
Starvation Cap Reductn	0	0	0	0	29	0
Spillback Cap Reductn	0	20	0	0	71	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.71	0.80	0.25	1.29	0.93

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

1a.Existing 2024 AM  
 05/17/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (veh/h)	598	529	429	299	700	711
Future Volume (veh/h)	598	529	429	299	700	711
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	643	569	461	322	753	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1140	523	422	1116	655	
Arrive On Green	0.33	0.33	0.21	0.60	0.35	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	643	569	461	322	753	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	23.0	49.5	31.5	12.6	52.5	0.0
Cycle Q Clear(g_c), s	23.0	49.5	31.5	12.6	52.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1140	523	422	1116	655	
V/C Ratio(X)	0.56	1.09	1.09	0.29	1.15	
Avail Cap(c_a), veh/h	1140	523	422	1116	655	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.73	0.00
Uniform Delay (d), s/veh	41.4	50.3	50.2	14.7	48.8	0.0
Incr Delay (d2), s/veh	0.6	65.3	71.0	0.7	80.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	28.5	23.4	5.4	38.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.0	115.6	121.2	15.4	129.3	0.0
LnGrp LOS	D	F	F	B	F	
Approach Vol, veh/h	1212			783	753	
Approach Delay, s/veh	76.5			77.7	129.3	
Approach LOS	E			E	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	37.0	58.0		55.0		95.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	52.5		49.5		89.5
Max Q Clear Time (g_c+I1), s	33.5	54.5		51.5		14.6
Green Ext Time (p_c), s	0.0	0.0		0.0		4.2

Intersection Summary

HCM 6th Ctrl Delay	91.3
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	81	52	31	13	50	782	34	34	1064	3
Future Volume (vph)	81	52	31	13	50	782	34	34	1064	3
Lane Group Flow (vph)	96	98	37	35	60	931	40	40	1267	4
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.67	0.49	0.32	0.18	0.37	0.66	0.03	0.10	0.91	0.00
Control Delay	85.7	59.2	67.3	33.4	12.1	13.1	0.8	1.9	17.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0
Total Delay	85.7	59.2	67.3	33.4	12.1	13.1	0.8	1.9	22.7	0.0
Queue Length 50th (ft)	92	76	34	14	9	419	0	2	418	0
Queue Length 95th (ft)	139	122	65	44	23	586	5	m5	m202	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	223	301	181	294	189	1412	1214	421	1399	1203
Starvation Cap Reductn	0	0	0	0	0	0	0	0	100	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.33	0.20	0.12	0.32	0.66	0.03	0.10	0.98	0.00

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

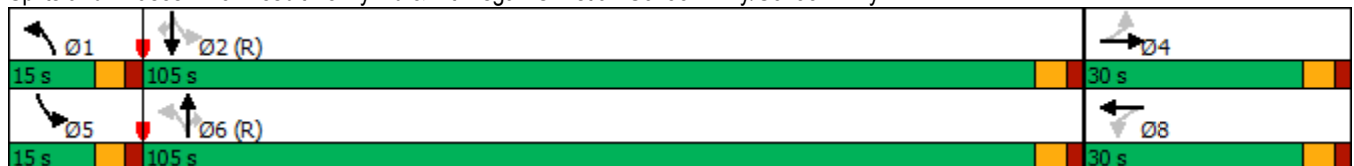
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

1a.Existing 2024 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	52	30	31	13	17	50	782	34	34	1064	3
Future Volume (veh/h)	81	52	30	31	13	17	50	782	34	34	1064	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	62	36	37	15	20	60	931	40	40	1267	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	116	67	115	76	101	207	1419	1202	397	1412	1197
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.03	0.76	0.76	0.03	0.76	0.76
Sat Flow, veh/h	1373	1110	644	1297	727	969	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	96	0	98	37	0	35	60	931	40	40	1267	4
Grp Sat Flow(s),veh/h/ln	1373	0	1754	1297	0	1696	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.3	0.0	7.9	4.2	0.0	2.8	1.1	35.9	0.9	0.8	77.2	0.1
Cycle Q Clear(g_c), s	13.1	0.0	7.9	12.1	0.0	2.8	1.1	35.9	0.9	0.8	77.2	0.1
Prop In Lane	1.00		0.37	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	183	115	0	177	207	1419	1202	397	1412	1197
V/C Ratio(X)	0.58	0.00	0.54	0.32	0.00	0.20	0.29	0.66	0.03	0.10	0.90	0.00
Avail Cap(c_a), veh/h	246	0	287	191	0	277	266	1419	1202	461	1412	1197
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.4	0.0	63.7	69.5	0.0	61.4	26.6	8.7	4.5	8.1	14.0	4.5
Incr Delay (d2), s/veh	3.2	0.0	2.4	1.6	0.0	0.5	0.8	2.4	0.1	0.1	9.3	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	3.8	0.0	3.7	1.5	0.0	1.3	1.3	13.4	0.3	0.3	30.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.6	0.0	66.1	71.1	0.0	62.0	27.3	11.1	4.5	8.2	23.2	4.5
LnGrp LOS	E	A	E	E	A	E	C	B	A	A	C	A
Approach Vol, veh/h		194			72			1031			1311	
Approach Delay, s/veh		68.4			66.6			11.8			22.7	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	118.8		21.2	9.6	119.3		21.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	3.1	79.2		15.1	2.8	37.9		14.1				
Green Ext Time (p_c), s	0.0	16.9		0.5	0.0	21.4		0.1				

Intersection Summary												
HCM 6th Ctrl Delay				23.0								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	8.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	55	43	14	811	1107	18
Future Vol, veh/h	55	43	14	811	1107	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	47	15	891	1216	20

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2137	-	1216	0	0
Stage 1	1216	-	-	-	-
Stage 2	921	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	~ 54	0	573	-	-
Stage 1	280	0	-	-	-
Stage 2	388	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 53	-	573	-	-
Mov Cap-2 Maneuver	~ 53	-	-	-	-
Stage 1	273	-	-	-	-
Stage 2	388	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	293.9	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	573	-	53	-	-	-
HCM Lane V/C Ratio	0.027	-	1.14	-	-	-
HCM Control Delay (s)	11.5	-	293.9	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	5.2	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

1a.Existing 2024 AM  
05/17/2024

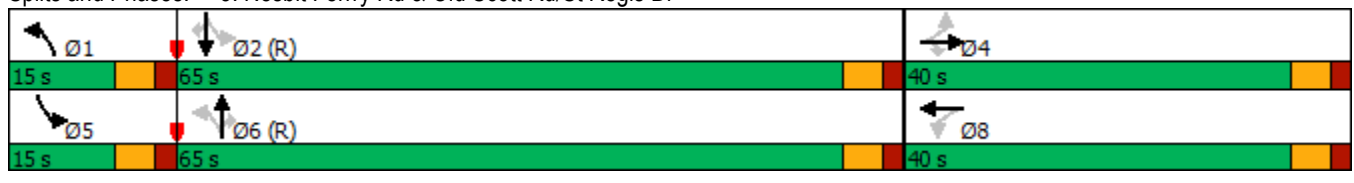


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	252	2	88	7	3	200	602	3	12	837	420
Future Volume (vph)	252	2	88	7	3	200	602	3	12	837	420
Lane Group Flow (vph)	0	270	94	0	25	213	640	3	13	890	447
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	15.0	65.0	65.0	15.0	65.0	65.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	12.5%	54.2%	54.2%	12.5%	54.2%	54.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.86	0.22		0.07	0.79	0.55	0.00	0.03	0.95	0.46
Control Delay		67.8	12.1		18.9	50.6	17.1	0.0	8.9	48.2	6.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		67.8	12.1		18.9	50.6	17.1	0.0	8.9	48.2	6.6
Queue Length 50th (ft)		198	12		6	109	236	0	3	646	48
Queue Length 95th (ft)		290	53		27	#292	480	0	12	#937	124
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		379	507		458	270	1174	1024	477	941	962
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.71	0.19		0.05	0.79	0.55	0.00	0.03	0.95	0.46

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

1a.Existing 2024 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↑	↗	↖	↑	↗
Traffic Volume (veh/h)	252	2	88	7	3	14	200	602	3	12	837	420
Future Volume (veh/h)	252	2	88	7	3	14	200	602	3	12	837	420
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	268	2	94	7	3	15	213	640	3	13	890	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	1	456	38	29	43	225	1048	888	347	927	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.08	0.56	0.56	0.01	0.50	0.00
Sat Flow, veh/h	546	4	1585	0	100	150	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	270	0	94	25	0	0	213	640	3	13	890	0
Grp Sat Flow(s),veh/h/ln	550	0	1585	251	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	5.4	0.0	0.0	0.0	8.6	27.4	0.1	0.4	54.9	0.0
Cycle Q Clear(g_c), s	34.5	0.0	5.4	34.5	0.0	0.0	8.6	27.4	0.1	0.4	54.9	0.0
Prop In Lane	0.99		1.00	0.28		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	456	110	0	0	225	1048	888	347	927	
V/C Ratio(X)	1.24	0.00	0.21	0.23	0.00	0.00	0.95	0.61	0.00	0.04	0.96	
Avail Cap(c_a), veh/h	218	0	456	110	0	0	225	1048	888	462	927	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.5	0.0	32.4	34.5	0.0	0.0	33.6	17.6	11.6	16.1	29.1	0.0
Incr Delay (d2), s/veh	140.3	0.0	0.2	1.0	0.0	0.0	45.3	2.7	0.0	0.0	21.3	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	15.0	0.0	2.1	0.6	0.0	0.0	5.8	11.8	0.0	0.2	28.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	187.8	0.0	32.6	35.5	0.0	0.0	78.9	20.3	11.6	16.2	50.4	0.0
LnGrp LOS	F	A	C	D	A	A	E	C	B	B	D	
Approach Vol, veh/h		364			25			856			903	
Approach Delay, s/veh		147.7			35.5			34.9			49.9	
Approach LOS		F			D			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	65.0		40.0	7.3	72.7		40.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	59.5		34.5	9.5	59.5		34.5				
Max Q Clear Time (g_c+I1), s	10.6	56.9		36.5	2.4	29.4		36.5				
Green Ext Time (p_c), s	0.0	1.9		0.0	0.0	8.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay	60.3
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



**Intersection**

Int Delay, s/veh 8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Vol, veh/h	40	0	32	0	0	10	28	1262	5	22	1273	60
Future Vol, veh/h	40	0	32	0	0	10	28	1262	5	22	1273	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	75	-	-	75	70	-	-	50	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	0	33	0	0	10	29	1301	5	23	1312	62

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2067	2722	656	2064	2782	653	1374	0	0	1306	0	0
Stage 1	1358	1358	-	1362	1362	-	-	-	-	-	-	-
Stage 2	709	1364	-	702	1420	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 31	20	408	32	19	410	495	-	-	526	-	-
Stage 1	157	215	-	156	214	-	-	-	-	-	-	-
Stage 2	391	214	-	395	201	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 28	18	408	27	17	410	495	-	-	526	-	-
Mov Cap-2 Maneuver	~ 28	18	-	27	17	-	-	-	-	-	-	-
Stage 1	148	206	-	147	201	-	-	-	-	-	-	-
Stage 2	359	201	-	347	192	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	312.4	14	0.3	0.2
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	495	-	-	28	408	-	410	526	-	-
HCM Lane V/C Ratio	0.058	-	-	1.473	0.081	-	0.025	0.043	-	-
HCM Control Delay (s)	12.7	-	-	550.6	14.6	0	14	12.2	-	-
HCM Lane LOS	B	-	-	F	B	A	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	4.8	0.3	-	0.1	0.1	-	-

**Notes**  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	763	578	289	489	798	539
Future Volume (vph)	763	578	289	489	798	539
Lane Group Flow (vph)	795	602	301	509	831	561
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	57.0	57.0	37.0	93.0	56.0	56.0
Total Split (%)	38.0%	38.0%	24.7%	62.0%	37.3%	37.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.82	0.79	0.89	0.43	1.01	0.66
Control Delay	57.0	20.2	78.8	14.5	74.8	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.0	20.2	78.8	14.5	74.8	22.6
Queue Length 50th (ft)	375	154	262	228	~858	229
Queue Length 95th (ft)	419	299	376	297	#1305	443
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1178	832	418	1197	824	850
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.72	0.72	0.43	1.01	0.66

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

1b.Existing 2024 PM  
 05/17/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	763	578	289	489	798	539
Future Volume (veh/h)	763	578	289	489	798	539
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	795	602	301	509	831	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1186	544	326	1091	730	
Arrive On Green	0.34	0.34	0.16	0.58	0.39	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	795	602	301	509	831	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	29.4	51.5	20.9	23.4	58.6	0.0
Cycle Q Clear(g_c), s	29.4	51.5	20.9	23.4	58.6	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1186	544	326	1091	730	
V/C Ratio(X)	0.67	1.11	0.92	0.47	1.14	
Avail Cap(c_a), veh/h	1186	544	422	1091	730	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	42.0	49.3	50.0	17.9	45.7	0.0
Incr Delay (d2), s/veh	1.5	71.0	22.0	1.4	78.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	30.4	13.1	10.2	42.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.5	120.2	72.0	19.3	124.0	0.0
LnGrp LOS	D	F	E	B	F	
Approach Vol, veh/h	1397			810	831	
Approach Delay, s/veh	76.6			38.9	124.0	
Approach LOS	E			D	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	28.9	64.1		57.0		93.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	50.5		51.5		87.5
Max Q Clear Time (g_c+I1), s	22.9	60.6		53.5		25.4
Green Ext Time (p_c), s	0.6	0.0		0.0		7.5

Intersection Summary

HCM 6th Ctrl Delay	79.5
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	13	0	4	1	10	879	7	12	1235	3
Future Volume (vph)	13	0	4	1	10	879	7	12	1235	3
Lane Group Flow (vph)	14	10	4	7	11	945	8	13	1328	3
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.19	0.04	0.05	0.08	0.04	0.57	0.01	0.03	0.80	0.00
Control Delay	73.6	0.3	68.5	42.1	1.7	5.4	0.0	0.8	13.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
Total Delay	73.6	0.3	68.5	42.1	1.7	5.4	0.0	0.8	13.9	0.0
Queue Length 50th (ft)	13	0	4	1	1	159	0	1	178	0
Queue Length 95th (ft)	38	0	17	18	3	454	0	m1	m611	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	253	395	253	269	290	1664	1420	528	1665	1421
Starvation Cap Reductn	0	0	0	0	0	0	0	0	126	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.03	0.02	0.03	0.04	0.57	0.01	0.02	0.86	0.00

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

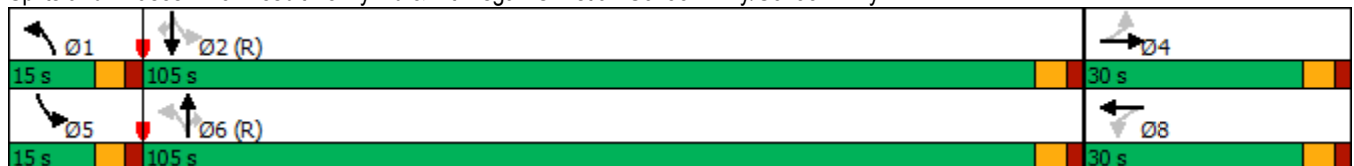
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

1b.Existing 2024 PM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	13	0	9	4	1	6	10	879	7	12	1235	3
Future Volume (veh/h)	13	0	9	4	1	6	10	879	7	12	1235	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	0	10	4	1	6	11	945	8	13	1328	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	0	49	82	7	43	264	1581	1340	478	1584	1343
Arrive On Green	0.03	0.00	0.03	0.03	0.03	0.03	0.01	0.85	0.85	0.01	0.85	0.85
Sat Flow, veh/h	1409	0	1585	1405	231	1389	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	14	0	10	4	0	7	11	945	8	13	1328	3
Grp Sat Flow(s),veh/h/ln	1409	0	1585	1405	0	1620	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	0.0	0.9	0.4	0.0	0.6	0.1	23.7	0.1	0.2	56.2	0.0
Cycle Q Clear(g_c), s	2.1	0.0	0.9	1.3	0.0	0.6	0.1	23.7	0.1	0.2	56.2	0.0
Prop In Lane	1.00		1.00	1.00		0.86	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	0	49	82	0	50	264	1581	1340	478	1584	1343
V/C Ratio(X)	0.16	0.00	0.21	0.05	0.00	0.14	0.04	0.60	0.01	0.03	0.84	0.00
Avail Cap(c_a), veh/h	272	0	259	269	0	265	355	1581	1340	566	1584	1343
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.8	0.0	70.9	71.6	0.0	70.8	12.2	3.6	1.8	3.4	6.1	1.8
Incr Delay (d2), s/veh	0.9	0.0	2.1	0.2	0.0	1.3	0.1	1.7	0.0	0.0	5.5	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	0.6	0.0	0.4	0.2	0.0	0.3	0.1	6.7	0.0	0.0	16.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.7	0.0	73.0	71.8	0.0	72.0	12.3	5.3	1.8	3.4	11.5	1.8
LnGrp LOS	E	A	E	E	A	E	B	A	A	A	B	A
Approach Vol, veh/h		24			11			964			1344	
Approach Delay, s/veh		72.8			72.0			5.4			11.4	
Approach LOS		E			E			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	132.6		10.1	7.6	132.3		10.1				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.1	58.2		4.1	2.2	25.7		3.3				
Green Ext Time (p_c), s	0.0	32.3		0.0	0.0	22.6		0.0				

Intersection Summary												
HCM 6th Ctrl Delay				9.8								
HCM 6th LOS				A								

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	22	15	53	874	1185	63
Future Vol, veh/h	22	15	53	874	1185	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	16	56	920	1247	66

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2279	-	1247	0	-	0
Stage 1	1247	-	-	-	-	-
Stage 2	1032	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	44	0	558	-	-	-
Stage 1	271	0	-	-	-	-
Stage 2	344	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	40	-	558	-	-	-
Mov Cap-2 Maneuver	40	-	-	-	-	-
Stage 1	244	-	-	-	-	-
Stage 2	344	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	180.3	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	558	-	40	-	-	-
HCM Lane V/C Ratio	0.1	-	0.579	-	-	-
HCM Control Delay (s)	12.2	-	180.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.3	-	2.1	-	-	-

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

1b.Existing 2024 PM  
05/17/2024

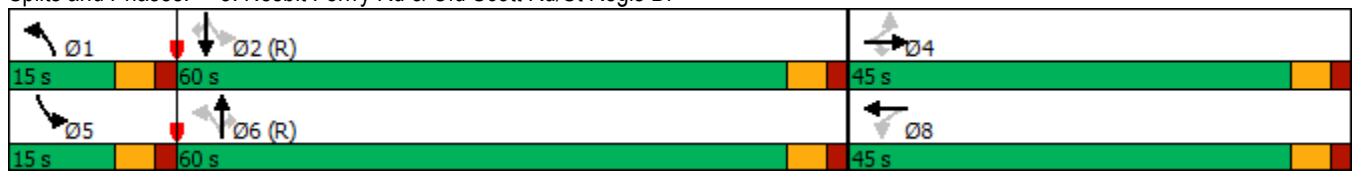


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	347	3	122	7	5	103	596	8	13	817	342
Future Volume (vph)	347	3	122	7	5	103	596	8	13	817	342
Lane Group Flow (vph)	0	361	126	0	22	106	614	8	13	842	353
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	45.0	45.0	45.0	45.0	45.0	15.0	60.0	60.0	15.0	60.0	60.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.91	0.24		0.05	0.58	0.58	0.01	0.04	0.91	0.39
Control Delay		68.0	14.6		19.0	31.4	21.6	0.0	11.2	45.1	7.3
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		68.0	14.6		19.0	31.4	21.6	0.0	11.2	45.1	7.3
Queue Length 50th (ft)		259	29		6	34	279	0	4	618	43
Queue Length 95th (ft)		#420	74		26	93	497	0	13	#919	113
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		436	570		520	200	1061	933	422	921	910
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.83	0.22		0.04	0.53	0.58	0.01	0.03	0.91	0.39

Intersection Summary






















Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

1b.Existing 2024 PM  
 05/17/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	347	3	122	7	5	10	103	596	8	13	817	342
Future Volume (veh/h)	347	3	122	7	5	10	103	596	8	13	817	342
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	358	3	126	7	5	10	106	614	8	13	842	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	2	522	40	34	28	186	970	822	313	913	
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.05	0.52	0.52	0.01	0.49	0.00
Sat Flow, veh/h	603	5	1585	0	102	85	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	361	0	126	22	0	0	106	614	8	13	842	0
Grp Sat Flow(s),veh/h/ln	608	0	1585	187	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	7.0	0.0	0.0	0.0	3.5	28.2	0.3	0.4	50.3	0.0
Cycle Q Clear(g_c), s	39.5	0.0	7.0	39.5	0.0	0.0	3.5	28.2	0.3	0.4	50.3	0.0
Prop In Lane	0.99		1.00	0.32		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	260	0	522	101	0	0	186	970	822	313	913	
V/C Ratio(X)	1.39	0.00	0.24	0.22	0.00	0.00	0.57	0.63	0.01	0.04	0.92	
Avail Cap(c_a), veh/h	260	0	522	101	0	0	246	970	822	428	913	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.8	0.0	29.3	32.5	0.0	0.0	26.4	20.7	14.0	17.5	28.6	0.0
Incr Delay (d2), s/veh	197.4	0.0	0.2	1.1	0.0	0.0	2.7	3.1	0.0	0.1	16.1	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	22.0	0.0	2.7	0.5	0.0	0.0	1.5	12.4	0.1	0.2	25.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	242.2	0.0	29.6	33.6	0.0	0.0	29.2	23.8	14.0	17.6	44.7	0.0
LnGrp LOS	F	A	C	C	A	A	C	C	B	B	D	
Approach Vol, veh/h		487			22			728			855	
Approach Delay, s/veh		187.2			33.6			24.5			44.3	
Approach LOS		F			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	64.1		45.0	7.3	67.7		45.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5		39.5				
Max Q Clear Time (g_c+I1), s	5.5	52.3		41.5	2.4	30.2		41.5				
Green Ext Time (p_c), s	0.1	1.6		0.0	0.0	7.8		0.0				

Intersection Summary												
HCM 6th Ctrl Delay				70.5								
HCM 6th LOS				E								

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Timings

1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↖	↗	↖	↕	↖	↕	↗
Traffic Volume (vph)	10	1	9	79	1	226	10	1102	38	1014	10
Future Volume (vph)	10	1	9	79	1	226	10	1102	38	1014	10
Lane Group Flow (vph)	0	13	11	0	94	266	12	1341	45	1193	12
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	65.0	65.0	65.0	65.0	65.0
Total Split (%)	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	65.0%	65.0%	65.0%	65.0%	65.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.04	0.03		0.31	0.66	0.06	0.62	0.27	0.55	0.01
Control Delay		25.5	3.8		28.9	29.9	7.7	10.7	12.6	9.7	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		25.5	3.8		28.9	29.9	7.7	10.7	12.6	9.7	1.2
Queue Length 50th (ft)		5	0		35	82	2	163	8	136	0
Queue Length 95th (ft)		19	5		83	175	10	285	32	241	3
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		653	713		590	731	289	2913	228	2926	1313
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.02	0.02		0.16	0.36	0.04	0.46	0.20	0.41	0.01

Intersection Summary

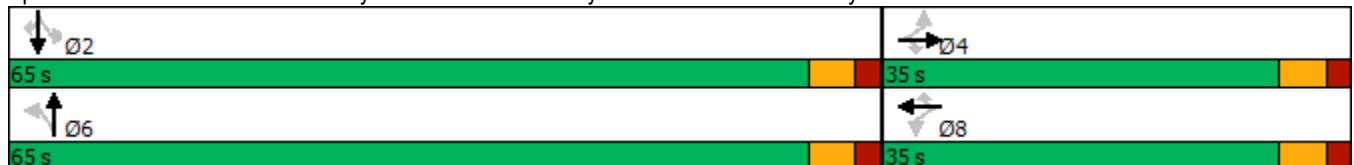
Cycle Length: 100

Actuated Cycle Length: 72

Natural Cycle: 60

Control Type: Actuated-Uncoordinated























Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

1c.Existing 2024 Dismissal

05/17/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1	9	79	1	226	10	1102	38	38	1014	10
Future Volume (veh/h)	10	1	9	79	1	226	10	1102	38	38	1014	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1	11	93	1	266	12	1296	45	45	1193	12
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	3	514	79	0	514	232	1944	67	199	1972	880
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	0	11	1585	0	1	1585	464	3504	122	408	3554	1585
Grp Volume(v), veh/h	13	0	11	94	0	266	12	657	684	45	1193	12
Grp Sat Flow(s),veh/h/ln	11	0	1585	1	0	1585	464	1777	1848	408	1777	1585
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	12.4	1.6	23.7	23.8	8.0	20.5	0.3
Cycle Q Clear(g_c), s	29.5	0.0	0.4	29.5	0.0	12.4	22.1	23.7	23.8	31.8	20.5	0.3
Prop In Lane	0.92		1.00	0.99		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	80	0	514	79	0	514	232	986	1026	199	1972	880
V/C Ratio(X)	0.16	0.00	0.02	1.19	0.00	0.52	0.05	0.67	0.67	0.23	0.60	0.01
Avail Cap(c_a), veh/h	80	0	514	79	0	514	278	1162	1209	239	2324	1036
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	0.0	20.9	45.3	0.0	25.0	21.0	14.3	14.3	25.5	13.6	9.1
Incr Delay (d2), s/veh	1.0	0.0	0.0	160.1	0.0	0.9	0.2	1.9	1.9	1.2	0.7	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	0.3	0.0	0.2	5.3	0.0	4.7	0.2	8.8	9.1	0.8	7.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	0.0	20.9	205.4	0.0	25.9	21.2	16.2	16.2	26.8	14.2	9.1
LnGrp LOS	D	A	C	F	A	C	C	B	B	C	B	A
Approach Vol, veh/h		24			360			1353			1250	
Approach Delay, s/veh		30.6			72.8			16.2			14.6	
Approach LOS		C			E			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		56.0		35.0		56.0		35.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		59.5		29.5		59.5		29.5				
Max Q Clear Time (g_c+I1), s		33.8		31.5		25.8		31.5				
Green Ext Time (p_c), s		16.7		0.0		21.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				22.5								
HCM 6th LOS				C								

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

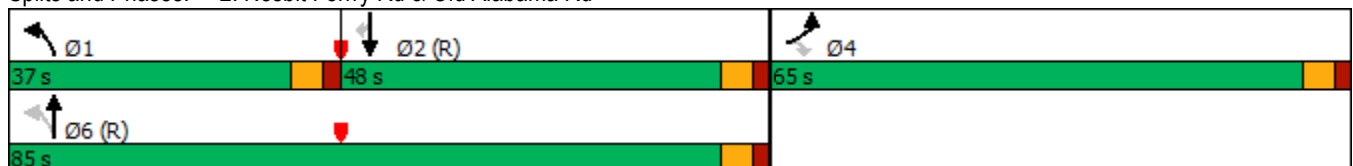


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↕	↕	↖
Traffic Volume (vph)	758	409	265	392	634	468
Future Volume (vph)	758	409	265	392	634	468
Lane Group Flow (vph)	806	435	282	417	674	498
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	65.0	65.0	37.0	85.0	48.0	48.0
Total Split (%)	43.3%	43.3%	24.7%	56.7%	32.0%	32.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.81	0.62	0.73	0.35	0.81	0.58
Control Delay	56.4	13.4	40.0	15.0	46.1	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	56.4	13.4	40.0	15.0	46.1	18.3
Queue Length 50th (ft)	379	70	174	157	557	158
Queue Length 95th (ft)	421	174	285	301	#997	345
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1361	834	479	1188	837	861
Starvation Cap Reductn	0	0	0	0	0	53
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.52	0.59	0.35	0.81	0.62

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	758	409	265	392	634	468
Future Volume (veh/h)	758	409	265	392	634	468
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	806	435	282	417	674	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1058	485	370	1161	916	
Arrive On Green	0.31	0.31	0.09	0.62	0.49	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	806	435	282	417	674	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	31.7	39.4	11.4	16.3	43.1	0.0
Cycle Q Clear(g_c), s	31.7	39.4	11.4	16.3	43.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1058	485	370	1161	916	
V/C Ratio(X)	0.76	0.90	0.76	0.36	0.74	
Avail Cap(c_a), veh/h	1371	629	577	1161	916	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.82	0.00
Uniform Delay (d), s/veh	47.1	49.8	25.2	13.9	30.5	0.0
Incr Delay (d2), s/veh	1.9	13.0	3.3	0.9	4.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	16.9	4.8	7.0	20.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.0	62.8	28.5	14.8	34.8	0.0
LnGrp LOS	D	E	C	B	C	
Approach Vol, veh/h	1241			699	674	
Approach Delay, s/veh	53.8			20.3	34.8	
Approach LOS	D			C	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.6	79.0		51.4		98.6
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	42.5		59.5		79.5
Max Q Clear Time (g_c+I1), s	13.4	45.1		41.4		18.3
Green Ext Time (p_c), s	0.7	0.0		4.5		5.7

Intersection Summary

HCM 6th Ctrl Delay			40.0			
HCM 6th LOS			D			

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

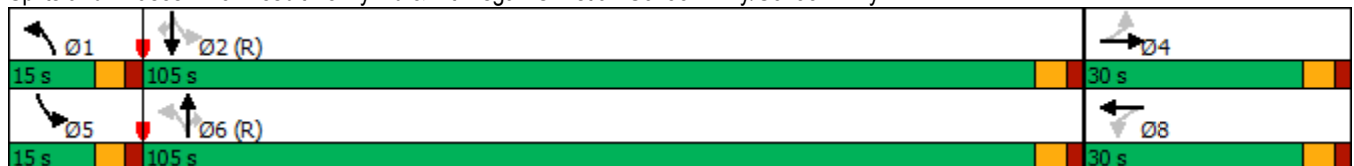


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	79	9	27	10	28	677	16	57	850	19
Future Volume (vph)	79	9	27	10	28	677	16	57	850	19
Lane Group Flow (vph)	87	52	30	113	31	744	18	63	934	21
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.77	0.24	0.20	0.42	0.08	0.53	0.02	0.13	0.66	0.02
Control Delay	101.9	22.7	60.7	17.3	4.0	11.1	0.0	1.6	5.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Total Delay	101.9	22.7	60.7	17.3	4.0	11.1	0.0	1.6	5.9	0.0
Queue Length 50th (ft)	84	9	27	10	5	292	0	3	88	0
Queue Length 95th (ft)	142	49	59	67	15	485	0	m7	135	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	165	302	220	348	419	1394	1199	530	1425	1224
Starvation Cap Reductn	0	0	0	0	0	0	0	0	124	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.17	0.14	0.32	0.07	0.53	0.02	0.12	0.72	0.02

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

1c.Existing 2024 Dismissal

05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	9	38	27	10	93	28	677	16	57	850	19
Future Volume (veh/h)	79	9	38	27	10	93	28	677	16	57	850	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	10	42	30	11	102	31	744	18	63	934	21
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	46	192	207	23	212	350	1334	1131	472	1347	1141
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.02	0.71	0.71	0.03	0.72	0.72
Sat Flow, veh/h	1280	314	1319	1352	157	1452	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	87	0	52	30	0	113	31	744	18	63	934	21
Grp Sat Flow(s),veh/h/ln	1280	0	1633	1352	0	1609	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.1	0.0	4.2	3.0	0.0	9.7	0.7	28.4	0.5	1.4	41.9	0.6
Cycle Q Clear(g_c), s	19.7	0.0	4.2	7.2	0.0	9.7	0.7	28.4	0.5	1.4	41.9	0.6
Prop In Lane	1.00		0.81	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	0	238	207	0	234	350	1334	1131	472	1347	1141
V/C Ratio(X)	0.57	0.00	0.22	0.14	0.00	0.48	0.09	0.56	0.02	0.13	0.69	0.02
Avail Cap(c_a), veh/h	174	0	267	231	0	263	420	1334	1131	530	1347	1141
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	0.0	56.5	59.7	0.0	58.9	11.1	10.2	6.2	8.0	11.7	6.0
Incr Delay (d2), s/veh	3.4	0.0	0.5	0.3	0.0	1.5	0.1	1.7	0.0	0.1	3.0	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	3.5	0.0	1.8	1.1	0.0	4.1	0.3	11.2	0.2	0.5	16.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.3	0.0	57.0	60.0	0.0	60.4	11.2	11.9	6.3	8.2	14.7	6.0
LnGrp LOS	E	A	E	E	A	E	B	B	A	A	B	A
Approach Vol, veh/h		139			143			793			1018	
Approach Delay, s/veh		66.0			60.3			11.8			14.1	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	113.5		27.4	10.1	112.5		27.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.7	43.9		21.7	3.4	30.4		11.7				
Green Ext Time (p_c), s	0.0	20.6		0.1	0.0	14.0		0.5				

Intersection Summary

HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	31	15	27	712	903	22
Future Vol, veh/h	31	15	27	712	903	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	16	30	782	992	24

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1834	-	992	0	-	0
Stage 1	992	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	84	0	697	-	-	-
Stage 1	359	0	-	-	-	-
Stage 2	423	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	80	-	697	-	-	-
Mov Cap-2 Maneuver	80	-	-	-	-	-
Stage 1	344	-	-	-	-	-
Stage 2	423	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	79.9	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	697	-	80	-	-	-
HCM Lane V/C Ratio	0.043	-	0.426	-	-	-
HCM Control Delay (s)	10.4	-	79.9	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	1.7	-	-	-

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

1c.Existing 2024 Dismissal  
05/17/2024

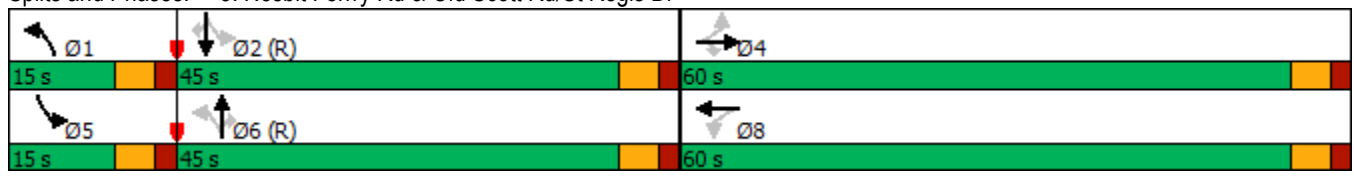


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	319	11	113	8	11	80	425	7	19	574	269
Future Volume (vph)	319	11	113	8	11	80	425	7	19	574	269
Lane Group Flow (vph)	0	359	123	0	35	87	462	8	21	624	292
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.83	0.22		0.07	0.29	0.46	0.01	0.05	0.72	0.34
Control Delay		52.5	11.8		16.1	16.1	22.7	0.0	14.6	34.5	7.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		52.5	11.8		16.1	16.1	22.7	0.0	14.6	34.5	7.5
Queue Length 50th (ft)		255	27		11	28	191	0	7	380	26
Queue Length 95th (ft)		325	61		29	66	415	0	23	#721	104
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		599	758		731	317	1001	884	497	864	858
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.60	0.16		0.05	0.27	0.46	0.01	0.04	0.72	0.34

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.






















Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr





HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

1c.Existing 2024 Dismissal  
 05/17/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	319	11	113	8	11	13	80	425	7	19	574	269
Future Volume (veh/h)	319	11	113	8	11	13	80	425	7	19	574	269
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	347	12	123	9	12	14	87	462	8	21	624	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	8	720	38	50	34	176	724	614	269	680	
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.04	0.39	0.39	0.02	0.36	0.00
Sat Flow, veh/h	482	17	1585	0	111	74	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	359	0	123	35	0	0	87	462	8	21	624	0
Grp Sat Flow(s),veh/h/ln	499	0	1585	185	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	5.5	0.0	0.0	0.0	3.6	24.1	0.4	0.9	38.2	0.0
Cycle Q Clear(g_c), s	54.5	0.0	5.5	54.5	0.0	0.0	3.6	24.1	0.4	0.9	38.2	0.0
Prop In Lane	0.97		1.00	0.26		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	0	720	122	0	0	176	724	614	269	680	
V/C Ratio(X)	1.26	0.00	0.17	0.29	0.00	0.00	0.49	0.64	0.01	0.08	0.92	
Avail Cap(c_a), veh/h	285	0	720	122	0	0	237	724	614	373	680	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.4	0.0	19.4	28.1	0.0	0.0	28.9	29.9	22.6	24.9	36.5	0.0
Incr Delay (d2), s/veh	141.2	0.0	0.1	1.3	0.0	0.0	2.1	4.3	0.0	0.1	19.4	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	19.8	0.0	2.1	0.6	0.0	0.0	1.6	11.4	0.1	0.4	20.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	179.5	0.0	19.5	29.4	0.0	0.0	31.1	34.2	22.7	25.1	55.9	0.0
LnGrp LOS	F	A	B	C	A	A	C	C	C	C	E	
Approach Vol, veh/h		482			35			557			645	
Approach Delay, s/veh		138.7			29.4			33.5			54.9	
Approach LOS		F			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	49.1		60.0	8.0	52.0		60.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	39.5		54.5	9.5	39.5		54.5				
Max Q Clear Time (g_c+I1), s	5.6	40.2		56.5	2.9	26.1		56.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	4.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay				70.9								
HCM 6th LOS				E								

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

**FUTURE 2029 "NO-BUILD" INTERSECTION  
ANALYSIS**

Timings

1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↔	↗	↕↕	↗
Traffic Volume (vph)	8	0	12	12	0	35	9	889	95	1458	30
Future Volume (vph)	8	0	12	12	0	35	9	889	95	1458	30
Lane Group Flow (vph)	0	10	15	0	15	44	11	1179	120	1846	38
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	76.0	76.0	76.0	76.0	76.0
Total Split (%)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.09	0.10		0.13	0.26	0.08	0.43	0.36	0.66	0.03
Control Delay		39.5	9.5		40.7	16.4	3.6	3.3	6.2	5.4	1.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		39.5	9.5		40.7	16.4	3.6	3.3	6.2	5.4	1.1
Queue Length 50th (ft)		5	0		8	0	1	72	13	161	1
Queue Length 95th (ft)		18	9		23	24	4	88	31	181	5
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		310	374		312	387	144	2945	352	2964	1330
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.03	0.04		0.05	0.11	0.08	0.40	0.34	0.62	0.03

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 84

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

2a.No Build 2029 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔↔		↔	↔↔	↔
Traffic Volume (veh/h)	8	0	12	12	0	35	9	889	43	95	1458	30
Future Volume (veh/h)	8	0	12	12	0	35	9	889	43	95	1458	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	0	15	15	0	44	11	1125	54	120	1846	38
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	0	287	96	0	287	172	2418	116	345	2489	1110
Arrive On Green	0.18	0.00	0.18	0.18	0.00	0.18	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	86	0	1585	101	0	1585	241	3452	166	476	3554	1585
Grp Volume(v), veh/h	10	0	15	15	0	44	11	579	600	120	1846	38
Grp Sat Flow(s),veh/h/ln	86	0	1585	101	0	1585	241	1777	1841	476	1777	1585
Q Serve(g_s), s	0.7	0.0	0.7	1.0	0.0	2.2	2.7	13.5	13.5	13.8	30.1	0.7
Cycle Q Clear(g_c), s	16.5	0.0	0.7	16.6	0.0	2.2	31.3	13.5	13.5	26.7	30.1	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	93	0	287	96	0	287	172	1245	1289	345	2489	1110
V/C Ratio(X)	0.11	0.00	0.05	0.16	0.00	0.15	0.06	0.47	0.47	0.35	0.74	0.03
Avail Cap(c_a), veh/h	117	0	315	120	0	315	186	1346	1395	372	2693	1201
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	0.0	31.5	45.8	0.0	32.1	18.0	6.2	6.2	12.0	8.7	4.3
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.8	0.0	0.2	0.3	0.6	0.6	1.3	1.4	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	0.2	0.0	0.3	0.4	0.0	0.9	0.2	4.0	4.1	1.4	8.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	0.0	31.6	46.6	0.0	32.3	18.3	6.8	6.8	13.2	10.0	4.3
LnGrp LOS	D	A	C	D	A	C	B	A	A	B	B	A
Approach Vol, veh/h		25			59			1190			2004	
Approach Delay, s/veh		37.5			35.9			6.9			10.1	
Approach LOS		D			D			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		70.9		23.2		70.9		23.2				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		70.5		18.5		70.5		18.5				
Max Q Clear Time (g_c+I1), s		32.1		18.5		33.3		18.6				
Green Ext Time (p_c), s		33.5		0.0		19.2		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			9.6									
HCM 6th LOS			A									

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	628	555	450	314	735	747
Future Volume (vph)	628	555	450	314	735	747
Lane Group Flow (vph)	675	597	484	338	790	803
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	55.0	55.0	38.0	95.0	57.0	57.0
Total Split (%)	36.7%	36.7%	25.3%	63.3%	38.0%	38.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.79	0.81	0.84	0.27	1.24	0.99
Control Delay	59.2	21.3	59.1	12.6	160.9	52.8
Queue Delay	0.0	0.2	0.0	0.0	1.0	0.0
Total Delay	59.2	21.6	59.1	12.6	161.8	52.8
Queue Length 50th (ft)	322	142	442	106	~954	480
Queue Length 95th (ft)	358	286	#711	248	#1207	#782
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1132	825	574	1261	639	812
Starvation Cap Reductn	0	0	0	0	21	0
Spillback Cap Reductn	0	24	0	0	79	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.75	0.84	0.27	1.41	0.99

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
2: Nesbit Ferry Rd & Old Alabama Rd

2a.No Build 2029 AM  
05/17/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	628	555	450	314	735	747
Future Volume (veh/h)	628	555	450	314	735	747
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	675	597	484	338	790	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1140	523	434	1116	642	
Arrive On Green	0.33	0.33	0.22	0.60	0.34	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	675	597	484	338	790	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	24.4	49.5	32.5	13.3	51.5	0.0
Cycle Q Clear(g_c), s	24.4	49.5	32.5	13.3	51.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1140	523	434	1116	642	
V/C Ratio(X)	0.59	1.14	1.12	0.30	1.23	
Avail Cap(c_a), veh/h	1140	523	434	1116	642	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.70	0.00
Uniform Delay (d), s/veh	41.8	50.3	49.9	14.9	49.3	0.0
Incr Delay (d2), s/veh	0.8	84.5	78.4	0.7	113.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	31.3	25.0	5.8	43.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.7	134.8	128.3	15.6	162.4	0.0
LnGrp LOS	D	F	F	B	F	
Approach Vol, veh/h	1272			822	790	
Approach Delay, s/veh	85.9			82.0	162.4	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	38.0	57.0		55.0		95.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	32.5	51.5		49.5		89.5
Max Q Clear Time (g_c+I1), s	34.5	53.5		51.5		15.3
Green Ext Time (p_c), s	0.0	0.0		0.0		4.4

Intersection Summary

HCM 6th Ctrl Delay	105.7
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.  
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

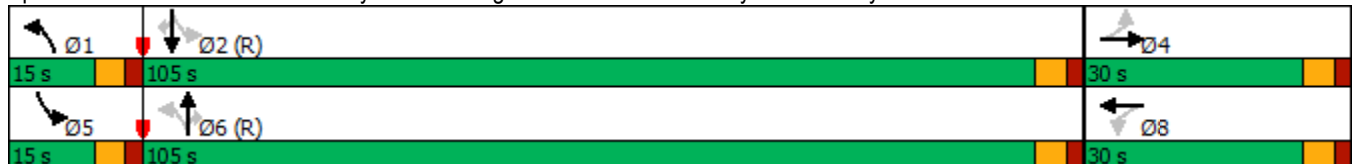


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	85	55	33	14	53	821	36	36	1117	3
Future Volume (vph)	85	55	33	14	53	821	36	36	1117	3
Lane Group Flow (vph)	101	103	39	38	63	977	43	43	1330	4
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.68	0.50	0.33	0.19	0.46	0.70	0.04	0.12	0.96	0.00
Control Delay	85.5	59.4	67.2	34.0	28.1	14.6	1.0	1.9	18.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0
Total Delay	85.5	59.4	67.2	34.0	28.1	14.6	1.0	1.9	33.2	0.0
Queue Length 50th (ft)	97	80	36	15	10	472	0	3	518	0
Queue Length 95th (ft)	145	126	68	46	55	658	7	m6	m214	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	222	301	176	296	164	1404	1207	386	1390	1195
Starvation Cap Reductn	0	0	0	0	0	0	0	0	96	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.34	0.22	0.13	0.38	0.70	0.04	0.11	1.03	0.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

2a.No Build 2029 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷		↶	↷	↷	↶	↷	↷
Traffic Volume (veh/h)	85	55	32	33	14	18	53	821	36	36	1117	3
Future Volume (veh/h)	85	55	32	33	14	18	53	821	36	36	1117	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	65	38	39	17	21	63	977	43	43	1330	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	121	71	118	83	103	157	1408	1193	364	1402	1188
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.03	0.75	0.75	0.03	0.75	0.75
Sat Flow, veh/h	1370	1107	647	1291	761	940	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	101	0	103	39	0	38	63	977	43	43	1330	4
Grp Sat Flow(s),veh/h/ln	1370	0	1754	1291	0	1701	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.9	0.0	8.3	4.4	0.0	3.1	1.2	40.6	1.0	0.8	92.5	0.1
Cycle Q Clear(g_c), s	13.9	0.0	8.3	12.8	0.0	3.1	1.2	40.6	1.0	0.8	92.5	0.1
Prop In Lane	1.00		0.37	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	0	192	118	0	187	157	1408	1193	364	1402	1188
V/C Ratio(X)	0.59	0.00	0.54	0.33	0.00	0.20	0.40	0.69	0.04	0.12	0.95	0.00
Avail Cap(c_a), veh/h	244	0	286	187	0	278	215	1408	1193	427	1402	1188
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.2	0.0	63.2	69.2	0.0	60.8	37.5	9.6	4.7	9.6	16.3	4.7
Incr Delay (d2), s/veh	3.3	0.0	2.3	1.6	0.0	0.5	1.6	2.8	0.1	0.1	14.6	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	4.0	0.0	3.9	1.5	0.0	1.4	1.7	15.4	0.3	0.4	38.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.4	0.0	65.5	70.8	0.0	61.3	39.1	12.5	4.8	9.8	30.9	4.7
LnGrp LOS	E	A	E	E	A	E	D	B	A	A	C	A
Approach Vol, veh/h		204			77			1083			1377	
Approach Delay, s/veh		67.9			66.1			13.7			30.2	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	117.9		22.0	9.7	118.4		22.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	3.2	94.5		15.9	2.8	42.6		14.8				
Green Ext Time (p_c), s	0.0	4.7		0.5	0.0	23.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay	27.5
HCM 6th LOS	C



Intersection						
Int Delay, s/veh	11.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	58	45	15	852	1162	19
Future Vol, veh/h	58	45	15	852	1162	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	49	16	936	1277	21

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2245	-	1277	0	-
Stage 1	1277	-	-	-	-
Stage 2	968	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	~ 46	0	544	-	-
Stage 1	262	0	-	-	-
Stage 2	368	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 45	-	544	-	-
Mov Cap-2 Maneuver	~ 45	-	-	-	-
Stage 1	254	-	-	-	-
Stage 2	368	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	423.2	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	544	-	45	-	-	-
HCM Lane V/C Ratio	0.03	-	1.416	-	-	-
HCM Control Delay (s)	11.8	-	423.2	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	6.2	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2a.No Build 2029 AM  
05/17/2024

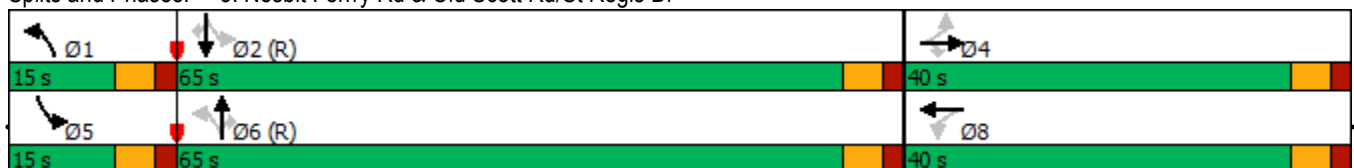


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	265	2	92	7	3	210	632	3	13	879	441
Future Volume (vph)	265	2	92	7	3	210	632	3	13	879	441
Lane Group Flow (vph)	0	284	98	0	26	223	672	3	14	935	469
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	15.0	65.0	65.0	15.0	65.0	65.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	12.5%	54.2%	54.2%	12.5%	54.2%	54.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.87	0.22		0.07	0.83	0.58	0.00	0.04	1.01	0.49
Control Delay		68.5	12.5		18.5	57.0	18.4	0.0	9.1	62.5	7.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		68.5	12.5		18.5	57.0	18.4	0.0	9.1	62.5	7.5
Queue Length 50th (ft)		208	15		6	121	266	0	4	~728	59
Queue Length 95th (ft)		#326	56		28	#312	519	0	12	#1012	142
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		379	507		458	268	1157	1011	443	927	952
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.75	0.19		0.06	0.83	0.58	0.00	0.03	1.01	0.49

Intersection Summary






















Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2a.No Build 2029 AM  
 05/17/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	2	92	7	3	15	210	632	3	13	879	441
Future Volume (veh/h)	265	2	92	7	3	15	210	632	3	13	879	441
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	282	2	98	7	3	16	223	672	3	14	935	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	1	456	38	29	47	201	1046	887	326	927	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.08	0.56	0.56	0.02	0.50	0.00
Sat Flow, veh/h	529	4	1585	0	101	162	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	284	0	98	26	0	0	223	672	3	14	935	0
Grp Sat Flow(s),veh/h/ln	532	0	1585	264	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	5.6	0.0	0.0	0.0	9.5	29.6	0.1	0.5	59.5	0.0
Cycle Q Clear(g_c), s	34.5	0.0	5.6	34.5	0.0	0.0	9.5	29.6	0.1	0.5	59.5	0.0
Prop In Lane	0.99		1.00	0.27		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	0	456	114	0	0	201	1046	887	326	927	
V/C Ratio(X)	1.33	0.00	0.22	0.23	0.00	0.00	1.11	0.64	0.00	0.04	1.01	
Avail Cap(c_a), veh/h	213	0	456	114	0	0	201	1046	887	440	927	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.6	0.0	32.5	34.5	0.0	0.0	39.2	18.2	11.7	16.5	30.2	0.0
Incr Delay (d2), s/veh	178.8	0.0	0.2	1.0	0.0	0.0	95.8	3.0	0.0	0.1	31.6	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	17.0	0.0	2.2	0.6	0.0	0.0	11.3	12.8	0.0	0.2	32.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	226.4	0.0	32.7	35.5	0.0	0.0	135.1	21.2	11.7	16.5	61.8	0.0
LnGrp LOS	F	A	C	D	A	A	F	C	B	B	F	
Approach Vol, veh/h		382			26			898			949	
Approach Delay, s/veh		176.7			35.5			49.4			61.2	
Approach LOS		F			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	65.0		40.0	7.4	72.6		40.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	59.5		34.5	9.5	59.5		34.5				
Max Q Clear Time (g_c+I1), s	11.5	61.5		36.5	2.5	31.6		36.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	75.8
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection												
Int Delay, s/veh	11.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Vol, veh/h	42	0	34	0	0	11	29	1325	5	23	1337	63
Future Vol, veh/h	42	0	34	0	0	11	29	1325	5	23	1337	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	75	-	-	75	70	-	-	50	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	0	35	0	0	11	30	1366	5	24	1378	65

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2169	2857	689	2166	2920	686	1443	0	0	1371	0	0
Stage 1	1426	1426	-	1429	1429	-	-	-	-	-	-	-
Stage 2	743	1431	-	737	1491	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 26	17	388	26	15	390	466	-	-	497	-	-
Stage 1	142	199	-	142	199	-	-	-	-	-	-	-
Stage 2	373	198	-	376	185	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 23	15	388	22	13	390	466	-	-	497	-	-
Mov Cap-2 Maneuver	~ 23	15	-	22	13	-	-	-	-	-	-	-
Stage 1	133	189	-	133	186	-	-	-	-	-	-	-
Stage 2	339	185	-	326	176	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 435	14.5	0.3	0.2
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	466	-	-	23	388	-	390	497	-	-
HCM Lane V/C Ratio	0.064	-	-	1.883	0.09	-	0.029	0.048	-	-
HCM Control Delay (s)	13.3	-	-	\$ 774.9	15.2	0	14.5	12.6	-	-
HCM Lane LOS	B	-	-	F	C	A	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	5.5	0.3	-	0.1	0.1	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	801	607	303	513	838	566
Future Volume (vph)	801	607	303	513	838	566
Lane Group Flow (vph)	834	632	316	534	873	590
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	59.0	59.0	25.0	91.0	66.0	66.0
Total Split (%)	39.3%	39.3%	16.7%	60.7%	44.0%	44.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.79	0.90	0.86	0.46	1.16	0.72
Control Delay	52.9	41.0	70.6	15.8	127.6	23.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	41.0	70.6	15.8	127.6	23.4
Queue Length 50th (ft)	384	341	243	218	~1009	250
Queue Length 95th (ft)	431	504	#514	265	#1266	405
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1224	764	366	1152	751	816
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.83	0.86	0.46	1.16	0.72

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

2b.No Build 2029 PM  
 05/17/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (veh/h)	801	607	303	513	838	566
Future Volume (veh/h)	801	607	303	513	838	566
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	834	632	316	534	873	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1233	565	280	1066	754	
Arrive On Green	0.36	0.36	0.13	0.57	0.40	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	834	632	316	534	873	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	30.7	53.5	19.5	25.8	60.5	0.0
Cycle Q Clear(g_c), s	30.7	53.5	19.5	25.8	60.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1233	565	280	1066	754	
V/C Ratio(X)	0.68	1.12	1.13	0.50	1.16	
Avail Cap(c_a), veh/h	1233	565	280	1066	754	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	40.9	48.2	51.9	19.4	44.7	0.0
Incr Delay (d2), s/veh	1.5	74.5	93.6	1.7	85.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	32.1	13.4	11.4	45.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.4	122.8	145.5	21.1	130.1	0.0
LnGrp LOS	D	F	F	C	F	
Approach Vol, veh/h	1466			850	873	
Approach Delay, s/veh	77.1			67.3	130.1	
Approach LOS	E			E	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	66.0		59.0		91.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	19.5	60.5		53.5		85.5
Max Q Clear Time (g_c+I1), s	21.5	62.5		55.5		27.8
Green Ext Time (p_c), s	0.0	0.0		0.0		8.0

Intersection Summary

HCM 6th Ctrl Delay	89.0
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	14	0	4	1	11	923	7	13	1297	3
Future Volume (vph)	14	0	4	1	11	923	7	13	1297	3
Lane Group Flow (vph)	15	10	4	7	12	992	8	14	1395	3
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.20	0.04	0.05	0.08	0.06	0.60	0.01	0.03	0.84	0.00
Control Delay	74.1	0.3	68.2	42.0	1.9	5.9	0.0	1.2	12.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
Total Delay	74.1	0.3	68.2	42.0	1.9	5.9	0.0	1.2	13.3	0.0
Queue Length 50th (ft)	14	0	4	1	1	177	0	1	366	0
Queue Length 95th (ft)	39	0	17	18	4	510	0	m1	m330	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	248	388	248	269	240	1663	1419	498	1663	1419
Starvation Cap Reductn	0	0	0	0	0	0	0	0	101	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.03	0.02	0.03	0.05	0.60	0.01	0.03	0.89	0.00

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

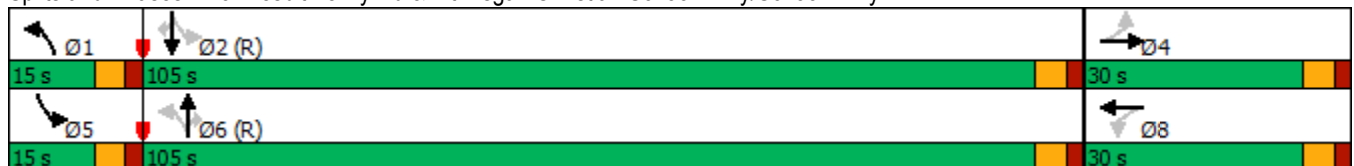
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

2b.No Build 2029 PM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↖	↗	↖	↗
Traffic Volume (veh/h)	14	0	9	4	1	6	11	923	7	13	1297	3
Future Volume (veh/h)	14	0	9	4	1	6	11	923	7	13	1297	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	0	10	4	1	6	12	992	8	14	1395	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	0	49	83	7	43	223	1579	1338	451	1582	1341
Arrive On Green	0.03	0.00	0.03	0.03	0.03	0.03	0.01	0.84	0.84	0.01	0.85	0.85
Sat Flow, veh/h	1409	0	1585	1405	231	1389	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	0	10	4	0	7	12	992	8	14	1395	3
Grp Sat Flow(s),veh/h/ln	1409	0	1585	1405	0	1620	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.6	0.0	0.9	0.4	0.0	0.6	0.1	26.4	0.1	0.2	67.9	0.0
Cycle Q Clear(g_c), s	2.2	0.0	0.9	1.3	0.0	0.6	0.1	26.4	0.1	0.2	67.9	0.0
Prop In Lane	1.00		1.00	1.00		0.86	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	0	49	83	0	50	223	1579	1338	451	1582	1341
V/C Ratio(X)	0.17	0.00	0.20	0.05	0.00	0.14	0.05	0.63	0.01	0.03	0.88	0.00
Avail Cap(c_a), veh/h	272	0	259	269	0	265	313	1579	1338	537	1582	1341
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.8	0.0	70.9	71.5	0.0	70.7	17.3	3.9	1.8	3.9	7.0	1.8
Incr Delay (d2), s/veh	1.0	0.0	2.0	0.2	0.0	1.2	0.1	1.9	0.0	0.0	7.4	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	0.6	0.0	0.4	0.2	0.0	0.3	0.2	7.5	0.0	0.1	20.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.7	0.0	72.9	71.7	0.0	72.0	17.4	5.8	1.8	3.9	14.5	1.8
LnGrp LOS	E	A	E	E	A	E	B	A	A	A	B	A
Approach Vol, veh/h		25			11			1012			1412	
Approach Delay, s/veh		72.8			71.9			5.9			14.3	
Approach LOS		E			E			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	132.4		10.2	7.7	132.1		10.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.1	69.9		4.2	2.2	28.4		3.3				
Green Ext Time (p_c), s	0.0	25.8		0.0	0.0	24.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B



Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	23	16	56	918	1244	66
Future Vol, veh/h	23	16	56	918	1244	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	17	59	966	1309	69

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2393	-	1309	0	-	0
Stage 1	1309	-	-	-	-	-
Stage 2	1084	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	37	0	529	-	-	-
Stage 1	253	0	-	-	-	-
Stage 2	324	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	33	-	529	-	-	-
Mov Cap-2 Maneuver	33	-	-	-	-	-
Stage 1	225	-	-	-	-	-
Stage 2	324	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	253.2	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	529	-	33	-	-	-
HCM Lane V/C Ratio	0.111	-	0.734	-	-	-
HCM Control Delay (s)	12.7	-	253.2	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.4	-	2.5	-	-	-

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2b.No Build 2029 PM

05/17/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	364	3	128	7	5	108	626	8	14	858	359
Future Volume (vph)	364	3	128	7	5	108	626	8	14	858	359
Lane Group Flow (vph)	0	378	132	0	23	111	645	8	14	885	370
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	45.0	45.0	45.0	45.0	45.0	15.0	60.0	60.0	15.0	60.0	60.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.93	0.25		0.05	0.60	0.62	0.01	0.04	0.98	0.41
Control Delay		70.2	15.1		18.6	33.1	23.0	0.0	11.3	57.4	8.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		70.2	15.1		18.6	33.1	23.0	0.0	11.3	57.4	8.1
Queue Length 50th (ft)		274	32		6	37	305	0	4	~736	52
Queue Length 95th (ft)		#451	80		26	98	536	0	14	#991	126
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		435	570		520	200	1044	919	388	903	898
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.87	0.23		0.04	0.56	0.62	0.01	0.04	0.98	0.41

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2b.No Build 2029 PM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	364	3	128	7	5	11	108	626	8	14	858	359
Future Volume (veh/h)	364	3	128	7	5	11	108	626	8	14	858	359
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	375	3	132	7	5	11	111	645	8	14	885	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	2	522	39	34	31	159	968	821	293	910	
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.05	0.52	0.52	0.02	0.49	0.00
Sat Flow, veh/h	579	5	1585	0	104	95	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	378	0	132	23	0	0	111	645	8	14	885	0
Grp Sat Flow(s),veh/h/ln	583	0	1585	199	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	7.3	0.0	0.0	0.0	3.7	30.5	0.3	0.5	55.4	0.0
Cycle Q Clear(g_c), s	39.5	0.0	7.3	39.5	0.0	0.0	3.7	30.5	0.3	0.5	55.4	0.0
Prop In Lane	0.99		1.00	0.30		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	0	522	105	0	0	159	968	821	293	910	
V/C Ratio(X)	1.50	0.00	0.25	0.22	0.00	0.00	0.70	0.67	0.01	0.05	0.97	
Avail Cap(c_a), veh/h	252	0	522	105	0	0	217	968	821	407	910	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.9	0.0	29.5	32.5	0.0	0.0	27.9	21.3	14.0	18.0	30.0	0.0
Incr Delay (d2), s/veh	245.4	0.0	0.3	1.0	0.0	0.0	5.8	3.6	0.0	0.1	24.0	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	24.7	0.0	2.9	0.5	0.0	0.0	1.7	13.5	0.1	0.2	29.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	290.3	0.0	29.7	33.5	0.0	0.0	33.8	24.9	14.0	18.1	54.0	0.0
LnGrp LOS	F	A	C	C	A	A	C	C	B	B	D	
Approach Vol, veh/h		510			23			764			899	
Approach Delay, s/veh		222.9			33.5			26.1			53.4	
Approach LOS		F			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	63.9		45.0	7.4	67.6		45.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5		39.5				
Max Q Clear Time (g_c+I1), s	5.7	57.4		41.5	2.5	32.5		41.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	7.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay	83.1
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↖	↗	↖	↕	↖	↕	↗
Traffic Volume (vph)	11	1	9	83	1	237	11	1157	40	1065	11
Future Volume (vph)	11	1	9	83	1	237	11	1157	40	1065	11
Lane Group Flow (vph)	0	14	11	0	99	279	13	1408	47	1253	13
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	76.0	76.0	76.0	76.0	76.0
Total Split (%)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.05	0.03		0.38	0.75	0.06	0.61	0.27	0.54	0.01
Control Delay		30.9	5.0		35.6	36.0	5.5	8.8	10.3	8.0	0.8
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		30.9	5.0		35.6	36.0	5.5	8.8	10.3	8.0	0.8
Queue Length 50th (ft)		5	0		41	85	2	176	8	147	0
Queue Length 95th (ft)		23	5		100	#215	8	226	25	190	2
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		376	434		350	476	298	3118	234	3132	1404
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.03		0.28	0.59	0.04	0.45	0.20	0.40	0.01

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 75.3

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

2c.No Build 2029 Dismissal  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕		↖	↗	↗
Traffic Volume (veh/h)	11	1	9	83	1	237	11	1157	40	40	1065	11
Future Volume (veh/h)	11	1	9	83	1	237	11	1157	40	40	1065	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	1	11	98	1	279	13	1361	47	47	1253	13
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	4	359	88	0	359	282	2238	77	244	2269	1012
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	0	16	1585	0	2	1585	438	3505	121	382	3554	1585
Grp Volume(v), veh/h	14	0	11	99	0	279	13	689	719	47	1253	13
Grp Sat Flow(s),veh/h/ln	16	0	1585	2	0	1585	438	1777	1849	382	1777	1585
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	13.5	1.4	18.7	18.8	6.8	16.1	0.2
Cycle Q Clear(g_c), s	18.5	0.0	0.4	18.5	0.0	13.5	17.5	18.7	18.8	25.5	16.1	0.2
Prop In Lane	0.93		1.00	0.99		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	89	0	359	88	0	359	282	1135	1180	244	2269	1012
V/C Ratio(X)	0.16	0.00	0.03	1.12	0.00	0.78	0.05	0.61	0.61	0.19	0.55	0.01
Avail Cap(c_a), veh/h	89	0	359	88	0	359	380	1535	1597	331	3070	1369
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	0.0	24.6	40.7	0.0	29.6	13.1	8.7	8.7	16.3	8.2	5.4
Incr Delay (d2), s/veh	0.8	0.0	0.0	132.5	0.0	10.3	0.1	1.1	1.1	0.8	0.5	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	0.3	0.0	0.2	5.0	0.0	6.1	0.1	5.8	6.0	0.6	4.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.0	0.0	24.6	173.2	0.0	39.9	13.3	9.8	9.8	17.1	8.7	5.4
LnGrp LOS	D	A	C	F	A	D	B	A	A	B	A	A
Approach Vol, veh/h		25			378			1421			1313	
Approach Delay, s/veh		31.5			74.8			9.9			9.0	
Approach LOS		C			E			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		57.6		24.0		57.6		24.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		70.5		18.5		70.5		18.5				
Max Q Clear Time (g_c+I1), s		27.5		20.5		20.8		20.5				
Green Ext Time (p_c), s		24.6		0.0		28.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

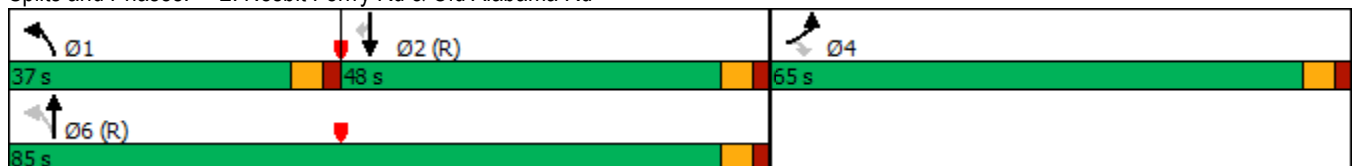


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↖	↖	↖
Traffic Volume (vph)	796	429	278	412	666	491
Future Volume (vph)	796	429	278	412	666	491
Lane Group Flow (vph)	847	456	296	438	709	522
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	65.0	65.0	37.0	85.0	48.0	48.0
Total Split (%)	43.3%	43.3%	24.7%	56.7%	32.0%	32.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.82	0.64	0.84	0.38	0.89	0.63
Control Delay	55.4	14.7	58.2	16.9	55.1	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	55.4	14.7	58.2	16.9	55.1	21.5
Queue Length 50th (ft)	395	92	226	175	637	192
Queue Length 95th (ft)	439	197	341	353	#1115	397
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1361	833	438	1165	797	832
Starvation Cap Reductn	0	0	0	0	0	33
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.55	0.68	0.38	0.89	0.65

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	796	429	278	412	666	491
Future Volume (veh/h)	796	429	278	412	666	491
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	847	456	296	438	709	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1103	506	336	1136	878	
Arrive On Green	0.32	0.32	0.10	0.61	0.47	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	847	456	296	438	709	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	33.2	41.2	12.4	18.0	48.6	0.0
Cycle Q Clear(g_c), s	33.2	41.2	12.4	18.0	48.6	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1103	506	336	1136	878	
V/C Ratio(X)	0.77	0.90	0.88	0.39	0.81	
Avail Cap(c_a), veh/h	1371	629	530	1136	878	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.83	0.00
Uniform Delay (d), s/veh	46.0	48.8	29.1	15.1	34.0	0.0
Incr Delay (d2), s/veh	2.1	14.0	10.2	1.0	6.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	17.9	5.9	7.8	23.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.2	62.8	39.3	16.1	40.6	0.0
LnGrp LOS	D	E	D	B	D	
Approach Vol, veh/h	1303			734	709	
Approach Delay, s/veh	53.3			25.5	40.6	
Approach LOS	D			C	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.7	75.9		53.4		96.6
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	42.5		59.5		79.5
Max Q Clear Time (g_c+I1), s	14.4	50.6		43.2		20.0
Green Ext Time (p_c), s	0.8	0.0		4.7		6.1

Intersection Summary

HCM 6th Ctrl Delay	42.6
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	83	9	28	11	29	711	17	60	893	20
Future Volume (vph)	83	9	28	11	29	711	17	60	893	20
Lane Group Flow (vph)	91	54	31	120	32	781	19	66	981	22
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.80	0.24	0.20	0.42	0.09	0.56	0.02	0.14	0.69	0.02
Control Delay	105.8	21.9	60.2	17.0	4.2	12.0	0.0	1.6	6.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Total Delay	105.8	21.9	60.2	17.0	4.2	12.0	0.0	1.6	6.8	0.0
Queue Length 50th (ft)	88	9	28	11	5	326	0	4	93	0
Queue Length 95th (ft)	148	50	59	69	15	526	0	m7	m288	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	160	303	219	353	383	1385	1191	499	1416	1217
Starvation Cap Reductn	0	0	0	0	0	0	0	0	118	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.18	0.14	0.34	0.08	0.56	0.02	0.13	0.76	0.02

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

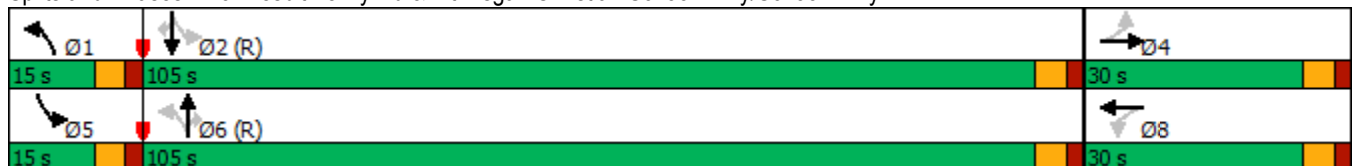
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy





HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

2c.No Build 2029 Dismissal  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	83	9	40	28	11	98	29	711	17	60	893	20
Future Volume (veh/h)	83	9	40	28	11	98	29	711	17	60	893	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	10	44	31	12	108	32	781	19	66	981	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	46	203	215	25	221	314	1321	1119	440	1333	1130
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.02	0.71	0.71	0.03	0.71	0.71
Sat Flow, veh/h	1272	302	1329	1350	161	1449	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	91	0	54	31	0	120	32	781	19	66	981	22
Grp Sat Flow(s),veh/h/ln	1272	0	1631	1350	0	1610	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.6	0.0	4.4	3.1	0.0	10.2	0.7	31.6	0.5	1.5	47.5	0.6
Cycle Q Clear(g_c), s	20.8	0.0	4.4	7.4	0.0	10.2	0.7	31.6	0.5	1.5	47.5	0.6
Prop In Lane	1.00		0.81	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	0	249	215	0	246	314	1321	1119	440	1333	1130
V/C Ratio(X)	0.59	0.00	0.22	0.14	0.00	0.49	0.10	0.59	0.02	0.15	0.74	0.02
Avail Cap(c_a), veh/h	169	0	266	229	0	263	383	1321	1119	498	1333	1130
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	0.0	55.7	58.9	0.0	58.2	13.2	11.1	6.6	9.1	13.0	6.3
Incr Delay (d2), s/veh	4.4	0.0	0.4	0.3	0.0	1.5	0.1	2.0	0.0	0.2	3.6	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	3.7	0.0	1.9	1.1	0.0	4.3	0.3	12.6	0.2	0.5	19.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	0.0	56.1	59.3	0.0	59.7	13.3	13.1	6.6	9.2	16.7	6.3
LnGrp LOS	E	A	E	E	A	E	B	B	A	A	B	A
Approach Vol, veh/h		145			151			832			1069	
Approach Delay, s/veh		66.2			59.6			12.9			16.0	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	112.4		28.4	10.2	111.4		28.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.7	49.5		22.8	3.5	33.6		12.2				
Green Ext Time (p_c), s	0.0	21.7		0.1	0.0	15.2		0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				21.1								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↗	↗	↘
Traffic Vol, veh/h	33	16	28	748	948	23
Future Vol, veh/h	33	16	28	748	948	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	18	31	822	1042	25

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1926	-	1042	0	-	0
Stage 1	1042	-	-	-	-	-
Stage 2	884	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	73	0	667	-	-	-
Stage 1	340	0	-	-	-	-
Stage 2	404	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	70	-	667	-	-	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	324	-	-	-	-	-
Stage 2	404	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	102.1	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	667	-	70	-	-	-
HCM Lane V/C Ratio	0.046	-	0.518	-	-	-
HCM Control Delay (s)	10.7	-	102.1	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	2.1	-	-	-

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

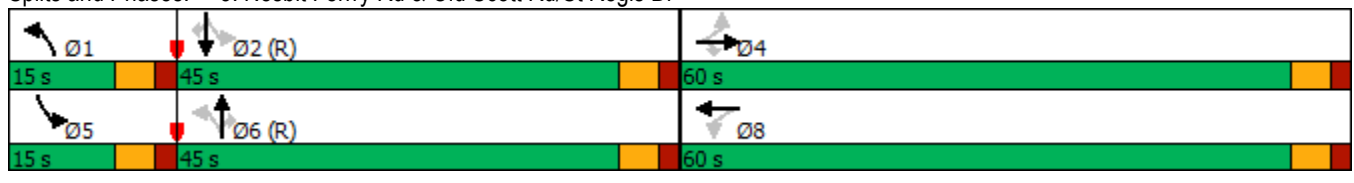


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	335	12	119	8	12	84	446	7	20	603	282
Future Volume (vph)	335	12	119	8	12	84	446	7	20	603	282
Lane Group Flow (vph)	0	377	129	0	37	91	485	8	22	655	307
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.84	0.22		0.07	0.35	0.52	0.01	0.05	0.78	0.37
Control Delay		51.7	11.8		15.2	18.2	26.3	0.0	15.6	38.6	8.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		51.7	11.8		15.2	18.2	26.3	0.0	15.6	38.6	8.6
Queue Length 50th (ft)		266	29		11	31	265	0	7	423	33
Queue Length 95th (ft)		337	62		30	71	454	0	24	#790	120
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		597	758		732	279	937	833	450	836	838
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.63	0.17		0.05	0.33	0.52	0.01	0.05	0.78	0.37

Intersection Summary






















Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2c.No Build 2029 Dismissal  
 05/17/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	12	119	8	12	14	84	446	7	20	603	282
Future Volume (veh/h)	335	12	119	8	12	14	84	446	7	20	603	282
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	364	13	129	9	13	15	91	485	8	22	655	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	7	720	37	54	37	157	723	613	254	677	
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.05	0.39	0.39	0.02	0.36	0.00
Sat Flow, veh/h	458	16	1585	0	118	81	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	377	0	129	37	0	0	91	485	8	22	655	0
Grp Sat Flow(s),veh/h/ln	474	0	1585	199	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	5.8	0.0	0.0	0.0	3.8	25.8	0.4	0.9	41.3	0.0
Cycle Q Clear(g_c), s	54.5	0.0	5.8	54.5	0.0	0.0	3.8	25.8	0.4	0.9	41.3	0.0
Prop In Lane	0.97		1.00	0.24		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	0	720	128	0	0	157	723	613	254	677	
V/C Ratio(X)	1.37	0.00	0.18	0.29	0.00	0.00	0.58	0.67	0.01	0.09	0.97	
Avail Cap(c_a), veh/h	274	0	720	128	0	0	215	723	613	356	677	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.6	0.0	19.5	28.0	0.0	0.0	29.8	30.5	22.7	25.3	37.6	0.0
Incr Delay (d2), s/veh	189.9	0.0	0.1	1.2	0.0	0.0	3.4	4.9	0.0	0.1	27.6	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	22.7	0.0	2.2	0.6	0.0	0.0	1.7	12.2	0.1	0.4	23.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	228.5	0.0	19.6	29.2	0.0	0.0	33.2	35.4	22.7	25.5	65.2	0.0
LnGrp LOS	F	A	B	C	A	A	C	D	C	C	E	
Approach Vol, veh/h		506			37			584			677	
Approach Delay, s/veh		175.3			29.2			34.9			63.9	
Approach LOS		F			C			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	48.9		60.0	8.1	51.9		60.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	39.5		54.5	9.5	39.5		54.5				
Max Q Clear Time (g_c+I1), s	5.8	43.3		56.5	2.9	27.8		56.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	3.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay	85.0
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

**FUTURE 2029 "NO-BUILD" IMPROVED**

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

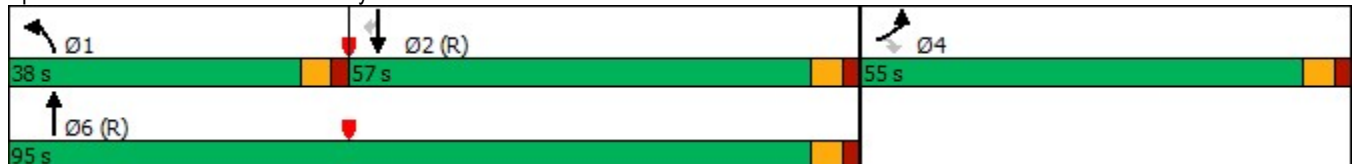


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	628	555	450	314	735	747
Future Volume (vph)	628	555	450	314	735	747
Lane Group Flow (vph)	675	597	484	338	790	803
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	55.0	55.0	38.0	95.0	57.0	57.0
Total Split (%)	36.7%	36.7%	25.3%	63.3%	38.0%	38.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.79	0.81	0.80	0.27	0.48	0.73
Control Delay	59.2	21.3	67.1	12.6	30.7	10.3
Queue Delay	0.0	0.9	0.0	0.0	0.7	0.3
Total Delay	59.2	22.2	67.1	12.6	31.4	10.6
Queue Length 50th (ft)	322	142	245	106	274	71
Queue Length 95th (ft)	358	286	298	248	405	306
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1132	825	743	1261	1645	1099
Starvation Cap Reductn	0	0	0	0	0	46
Spillback Cap Reductn	0	67	0	0	488	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.79	0.65	0.27	0.68	0.76

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

2d.No Build 2029 AM - Improved  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔	↔↔	↑	↓↓	↔
Traffic Volume (veh/h)	628	555	450	314	735	747
Future Volume (veh/h)	628	555	450	314	735	747
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	675	597	484	338	790	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1140	523	549	1116	1425	
Arrive On Green	0.33	0.33	0.16	0.60	0.40	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	675	597	484	338	790	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	24.4	49.5	20.5	13.3	25.7	0.0
Cycle Q Clear(g_c), s	24.4	49.5	20.5	13.3	25.7	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1140	523	549	1116	1425	
V/C Ratio(X)	0.59	1.14	0.88	0.30	0.55	
Avail Cap(c_a), veh/h	1140	523	749	1116	1425	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.70	0.00
Uniform Delay (d), s/veh	41.8	50.3	61.7	14.9	34.6	0.0
Incr Delay (d2), s/veh	0.8	84.5	9.3	0.7	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	31.3	9.6	5.8	11.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.7	134.8	71.0	15.6	35.7	0.0
LnGrp LOS	D	F	E	B	D	
Approach Vol, veh/h	1272			822	790	
Approach Delay, s/veh	85.9			48.2	35.7	
Approach LOS	F			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	29.3	65.7		55.0		95.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	32.5	51.5		49.5		89.5
Max Q Clear Time (g_c+I1), s	22.5	27.7		51.5		15.3
Green Ext Time (p_c), s	1.3	9.7		0.0		4.4

Intersection Summary

HCM 6th Ctrl Delay	61.4
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

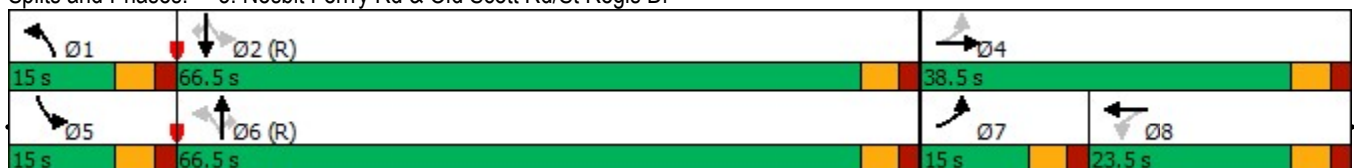


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	265	2	7	3	210	632	3	13	879	441
Future Volume (vph)	265	2	7	3	210	632	3	13	879	441
Lane Group Flow (vph)	282	100	0	26	223	672	3	14	935	469
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	15.0	38.5	23.5	23.5	15.0	66.5	66.5	15.0	66.5	66.5
Total Split (%)	12.5%	32.1%	19.6%	19.6%	12.5%	55.4%	55.4%	12.5%	55.4%	55.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.34	0.32		0.26	0.62	0.50	0.00	0.03	0.91	0.46
Control Delay	218.9	11.2		37.1	34.5	10.8	0.0	6.4	40.0	6.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	218.9	11.2		37.1	34.5	10.8	0.0	6.4	40.0	6.3
Queue Length 50th (ft)	~249	1		8	108	192	0	3	676	52
Queue Length 95th (ft)	#410	48		37	200	410	0	9	#994	132
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	211	508		237	361	1351	1182	559	1025	1022
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.34	0.20		0.11	0.62	0.50	0.00	0.03	0.91	0.46

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr





HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2d.No Build 2029 AM - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	2	92	7	3	15	210	632	3	13	879	441
Future Volume (veh/h)	265	2	92	7	3	15	210	632	3	13	879	441
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	282	2	98	7	3	16	223	672	3	14	935	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	6	271	51	17	48	321	1258	1066	461	1175	
Arrive On Green	0.08	0.17	0.17	0.05	0.05	0.05	0.06	0.67	0.67	0.02	0.63	0.00
Sat Flow, veh/h	1781	32	1558	258	350	973	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	282	0	100	26	0	0	223	672	3	14	935	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1581	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	9.5	0.0	6.7	0.0	0.0	0.0	5.1	22.0	0.1	0.3	44.6	0.0
Cycle Q Clear(g_c), s	9.5	0.0	6.7	1.8	0.0	0.0	5.1	22.0	0.1	0.3	44.6	0.0
Prop In Lane	1.00		0.98	0.27		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	0	277	116	0	0	321	1258	1066	461	1175	
V/C Ratio(X)	0.92	0.00	0.36	0.22	0.00	0.00	0.70	0.53	0.00	0.03	0.80	
Avail Cap(c_a), veh/h	305	0	437	269	0	0	354	1258	1066	575	1175	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.1	0.0	43.7	55.1	0.0	0.0	20.4	10.0	6.4	8.9	16.6	0.0
Incr Delay (d2), s/veh	32.5	0.0	0.8	1.0	0.0	0.0	5.2	1.6	0.0	0.0	5.6	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	6.5	0.0	2.6	0.8	0.0	0.0	3.9	8.5	0.0	0.1	18.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.6	0.0	44.4	56.1	0.0	0.0	25.5	11.7	6.4	8.9	22.2	0.0
LnGrp LOS	F	A	D	E	A	A	C	B	A	A	C	
Approach Vol, veh/h		382			26			898			949	
Approach Delay, s/veh		74.1			56.1			15.1			22.0	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.7	80.9		26.4	7.4	86.2	15.0	11.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	61.0		33.0	9.5	61.0	9.5	18.0				
Max Q Clear Time (g_c+I1), s	7.1	46.6		8.7	2.3	24.0	11.5	3.8				
Green Ext Time (p_c), s	0.1	9.3		0.5	0.0	10.3	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

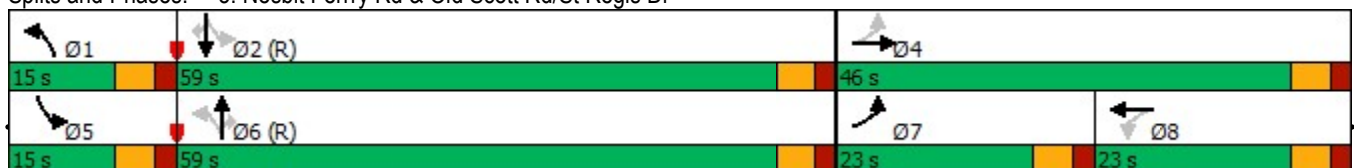


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	364	3	7	5	108	626	8	14	858	359
Future Volume (vph)	364	3	7	5	108	626	8	14	858	359
Lane Group Flow (vph)	375	135	0	23	111	645	8	14	885	370
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	23.0	46.0	23.0	23.0	15.0	59.0	59.0	15.0	59.0	59.0
Total Split (%)	19.2%	38.3%	19.2%	19.2%	12.5%	49.2%	49.2%	12.5%	49.2%	49.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.13	0.31		0.24	0.45	0.53	0.01	0.03	0.83	0.36
Control Delay	132.7	8.1		41.6	13.0	15.1	0.0	8.0	30.9	6.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	132.7	8.1		41.6	13.0	15.1	0.0	8.0	30.9	6.4
Queue Length 50th (ft)	~287	2		9	28	235	0	3	567	44
Queue Length 95th (ft)	#480	51		36	54	462	0	11	#945	120
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	331	623		224	266	1226	1084	497	1072	1017
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.13	0.22		0.10	0.42	0.53	0.01	0.03	0.83	0.36

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 105  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2e.No Build 2029 PM - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	3	128	7	5	11	108	626	8	14	858	359
Future Volume (veh/h)	364	3	128	7	5	11	108	626	8	14	858	359
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	375	3	132	7	5	11	111	645	8	14	885	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	424	9	375	53	27	38	261	1133	960	398	1084	
Arrive On Green	0.15	0.24	0.24	0.05	0.05	0.05	0.04	0.61	0.61	0.02	0.58	0.00
Sat Flow, veh/h	1781	35	1555	289	542	761	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	375	0	135	23	0	0	111	645	8	14	885	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1592	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	17.5	0.0	8.4	0.0	0.0	0.0	3.0	24.9	0.2	0.4	45.3	0.0
Cycle Q Clear(g_c), s	17.5	0.0	8.4	1.5	0.0	0.0	3.0	24.9	0.2	0.4	45.3	0.0
Prop In Lane	1.00		0.98	0.30		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	424	0	384	118	0	0	261	1133	960	398	1084	
V/C Ratio(X)	0.88	0.00	0.35	0.19	0.00	0.00	0.43	0.57	0.01	0.04	0.82	
Avail Cap(c_a), veh/h	424	0	537	264	0	0	328	1133	960	511	1084	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.2	0.0	37.7	54.9	0.0	0.0	19.6	14.2	9.4	11.9	20.1	0.0
Incr Delay (d2), s/veh	19.4	0.0	0.5	0.8	0.0	0.0	1.1	2.1	0.0	0.0	6.8	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	13.2	0.0	3.3	0.7	0.0	0.0	1.3	10.3	0.1	0.1	20.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.7	0.0	38.3	55.7	0.0	0.0	20.7	16.3	9.4	12.0	27.0	0.0
LnGrp LOS	E	A	D	E	A	A	C	B	A	B	C	
Approach Vol, veh/h		510			23			764			899	
Approach Delay, s/veh		59.1			55.7			16.9			26.7	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	75.0		34.5	7.4	78.2	23.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	53.5		40.5	9.5	53.5	17.5	17.5				
Max Q Clear Time (g_c+I1), s	5.0	47.3		10.4	2.4	26.9	19.5	3.5				
Green Ext Time (p_c), s	0.1	4.4		0.8	0.0	8.6	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

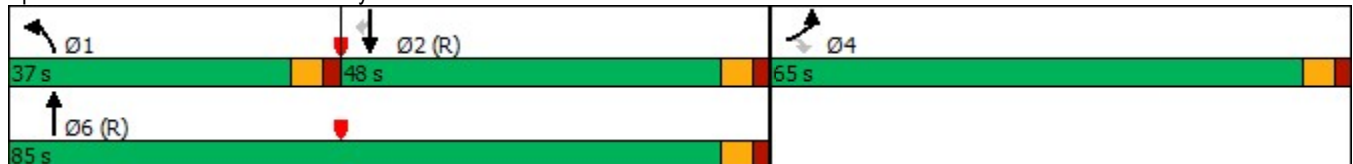


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↕	↕↕	↗
Traffic Volume (vph)	796	429	278	412	666	491
Future Volume (vph)	796	429	278	412	666	491
Lane Group Flow (vph)	847	456	296	438	709	522
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	65.0	65.0	37.0	85.0	48.0	48.0
Total Split (%)	43.3%	43.3%	24.7%	56.7%	32.0%	32.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.82	0.64	0.71	0.38	0.43	0.51
Control Delay	55.4	14.7	71.2	16.9	29.2	4.3
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.1
Total Delay	55.4	14.8	71.2	16.9	29.2	4.4
Queue Length 50th (ft)	395	92	147	175	241	0
Queue Length 95th (ft)	439	197	194	353	346	78
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1361	833	720	1165	1653	1017
Starvation Cap Reductn	0	0	0	0	0	60
Spillback Cap Reductn	0	27	0	0	7	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.57	0.41	0.38	0.43	0.55

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

2f.No Build 2029 Dismissal - Improved  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶↶	↶	↶↶	↷
Traffic Volume (veh/h)	796	429	278	412	666	491
Future Volume (veh/h)	796	429	278	412	666	491
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	847	456	296	438	709	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1103	506	357	1136	1661	
Arrive On Green	0.32	0.32	0.10	0.61	0.47	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	847	456	296	438	709	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	33.2	41.2	12.6	18.0	19.9	0.0
Cycle Q Clear(g_c), s	33.2	41.2	12.6	18.0	19.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1103	506	357	1136	1661	
V/C Ratio(X)	0.77	0.90	0.83	0.39	0.43	
Avail Cap(c_a), veh/h	1371	629	726	1136	1661	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.83	0.00
Uniform Delay (d), s/veh	46.0	48.8	66.0	15.1	26.6	0.0
Incr Delay (d2), s/veh	2.1	14.0	5.0	1.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	17.9	5.8	7.8	8.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.2	62.8	70.9	16.1	27.2	0.0
LnGrp LOS	D	E	E	B	C	
Approach Vol, veh/h	1303			734	709	
Approach Delay, s/veh	53.3			38.2	27.2	
Approach LOS	D			D	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.0	75.6		53.4		96.6
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	42.5		59.5		79.5
Max Q Clear Time (g_c+I1), s	14.6	21.9		43.2		20.0
Green Ext Time (p_c), s	0.9	8.0		4.7		6.1

Intersection Summary

HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2f.No Build 2029 Dismissal - Improved

05/29/2024

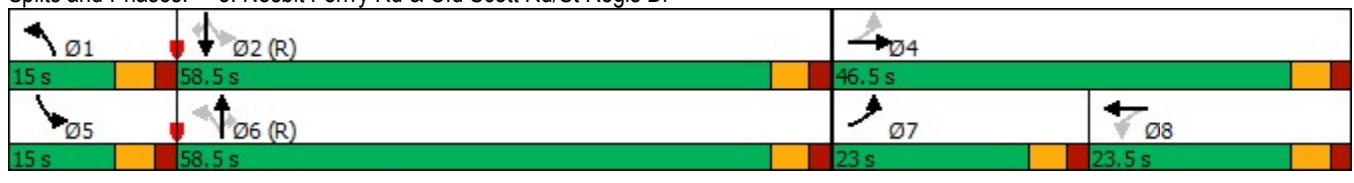


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	335	12	8	12	84	446	7	20	603	282
Future Volume (vph)	335	12	8	12	84	446	7	20	603	282
Lane Group Flow (vph)	364	142	0	37	91	485	8	22	655	307
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	23.0	46.5	23.5	23.5	15.0	58.5	58.5	15.0	58.5	58.5
Total Split (%)	19.2%	38.8%	19.6%	19.6%	12.5%	48.8%	48.8%	12.5%	48.8%	48.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.09	0.32		0.34	0.23	0.41	0.01	0.04	0.61	0.30
Control Delay	117.8	9.3		44.4	8.7	14.8	0.0	8.0	21.2	3.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	117.8	9.3		44.4	8.7	14.8	0.0	8.0	21.2	3.4
Queue Length 50th (ft)	267	8		17	23	212	0	5	342	10
Queue Length 95th (ft)	#454	57		51	46	323	0	16	518	58
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	334	634		243	419	1179	1047	602	1080	1034
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.22		0.15	0.22	0.41	0.01	0.04	0.61	0.30

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 85  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

2f.No Build 2029 Dismissal - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	12	119	8	12	14	84	446	7	20	603	282
Future Volume (veh/h)	335	12	119	8	12	14	84	446	7	20	603	282
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	364	13	129	9	13	15	91	485	8	22	655	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	418	36	353	50	36	33	407	1121	950	513	1087	
Arrive On Green	0.15	0.24	0.24	0.05	0.05	0.05	0.04	0.60	0.60	0.02	0.58	0.00
Sat Flow, veh/h	1781	147	1460	254	712	659	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	364	0	142	37	0	0	91	485	8	22	655	0
Grp Sat Flow(s),veh/h/ln	1781	0	1607	1625	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	17.5	0.0	8.8	0.5	0.0	0.0	2.4	16.8	0.2	0.6	27.1	0.0
Cycle Q Clear(g_c), s	17.5	0.0	8.8	2.5	0.0	0.0	2.4	16.8	0.2	0.6	27.1	0.0
Prop In Lane	1.00		0.91	0.24		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	418	0	388	118	0	0	407	1121	950	513	1087	
V/C Ratio(X)	0.87	0.00	0.37	0.31	0.00	0.00	0.22	0.43	0.01	0.04	0.60	
Avail Cap(c_a), veh/h	418	0	549	275	0	0	478	1121	950	616	1087	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.0	0.0	37.9	55.3	0.0	0.0	12.5	13.0	9.7	10.5	16.2	0.0
Incr Delay (d2), s/veh	17.8	0.0	0.6	1.5	0.0	0.0	0.3	1.2	0.0	0.0	2.5	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	12.6	0.0	3.5	1.1	0.0	0.0	0.9	6.9	0.1	0.2	11.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.8	0.0	38.4	56.8	0.0	0.0	12.8	14.2	9.7	10.5	18.7	0.0
LnGrp LOS	E	A	D	E	A	A	B	B	A	B	B	
Approach Vol, veh/h		506			37			584			677	
Approach Delay, s/veh		57.4			56.8			13.9			18.4	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	75.3		34.5	8.1	77.4	23.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	53.0		41.0	9.5	53.0	17.5	18.0				
Max Q Clear Time (g_c+I1), s	4.4	29.1		10.8	2.6	18.8	19.5	4.5				
Green Ext Time (p_c), s	0.1	8.3		0.8	0.0	6.5	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	28.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

**FUTURE 2029 PHASE 1 "BUILD"  
INTERSECTION ANALYSIS**



Timings

1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗	↗	↕↗	↗
Traffic Volume (vph)	8	0	12	14	0	43	9	897	109	1472	30
Future Volume (vph)	8	0	12	14	0	43	9	897	109	1472	30
Lane Group Flow (vph)	0	10	15	0	18	54	11	1194	138	1863	38
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	76.0	76.0	76.0	76.0	76.0
Total Split (%)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.09	0.10		0.16	0.30	0.08	0.43	0.42	0.67	0.03
Control Delay		39.4	9.4		41.1	16.0	3.7	3.4	7.5	5.5	1.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		39.4	9.4		41.1	16.0	3.7	3.4	7.5	5.5	1.1
Queue Length 50th (ft)		5	0		10	0	1	74	17	166	1
Queue Length 95th (ft)		18	9		27	27	4	93	39	189	5
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		308	372		310	393	142	2940	346	2959	1328
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.03	0.04		0.06	0.14	0.08	0.41	0.40	0.63	0.03

Intersection Summary

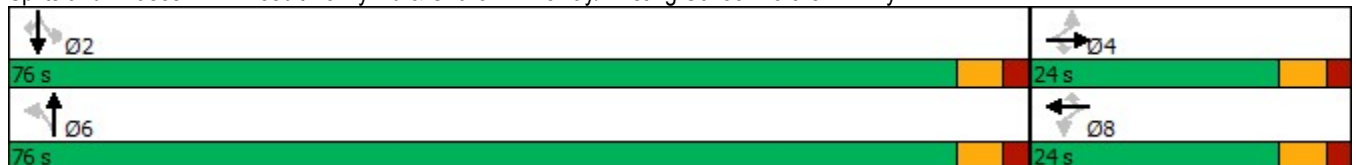
Cycle Length: 100

Actuated Cycle Length: 84.4

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy

5a.Build 2029 AM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Volume (veh/h)	8	0	12	14	0	43	9	897	47	109	1472	30
Future Volume (veh/h)	8	0	12	14	0	43	9	897	47	109	1472	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	0	15	18	0	54	11	1135	59	138	1863	38
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	0	304	82	0	304	161	2382	124	330	2463	1099
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	27	0	1585	34	0	1585	237	3437	179	469	3554	1585
Grp Volume(v), veh/h	10	0	15	18	0	54	11	587	607	138	1863	38
Grp Sat Flow(s),veh/h/ln	27	0	1585	34	0	1585	237	1777	1838	469	1777	1585
Q Serve(g_s), s	0.4	0.0	0.7	0.4	0.0	2.7	3.0	14.5	14.5	18.2	32.3	0.7
Cycle Q Clear(g_c), s	18.3	0.0	0.7	18.3	0.0	2.7	34.6	14.5	14.5	32.5	32.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	81	0	304	82	0	304	161	1232	1274	330	2463	1099
V/C Ratio(X)	0.12	0.00	0.05	0.22	0.00	0.18	0.07	0.48	0.48	0.42	0.76	0.03
Avail Cap(c_a), veh/h	83	0	307	84	0	307	172	1311	1356	351	2621	1169
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	0.0	31.5	47.7	0.0	32.3	20.4	6.7	6.7	14.1	9.5	4.6
Incr Delay (d2), s/veh	0.7	0.0	0.1	1.3	0.0	0.3	0.4	0.6	0.6	1.8	1.5	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	0.3	0.0	0.3	0.5	0.0	1.1	0.2	4.4	4.6	1.9	10.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.4	0.0	31.6	49.0	0.0	32.6	20.8	7.3	7.3	15.9	11.0	4.6
LnGrp LOS	D	A	C	D	A	C	C	A	A	B	B	A
Approach Vol, veh/h		25			72			1205			2039	
Approach Delay, s/veh		38.3			36.7			7.4			11.2	
Approach LOS		D			D			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.8		23.9		71.8		23.9				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		70.5		18.5		70.5		18.5				
Max Q Clear Time (g_c+I1), s		34.5		20.3		36.6		20.3				
Green Ext Time (p_c), s		32.0		0.0		18.5		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.6								
HCM 6th LOS				B								

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

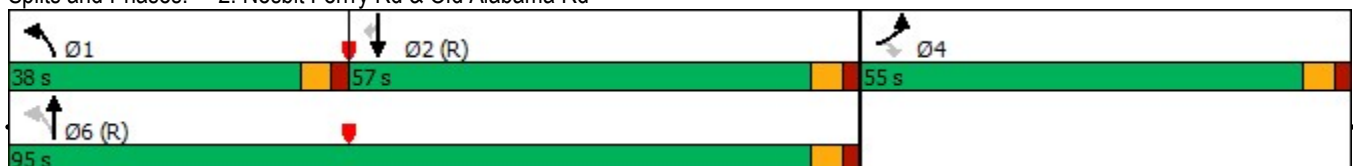


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	628	582	466	326	751	747
Future Volume (vph)	628	582	466	326	751	747
Lane Group Flow (vph)	675	626	501	351	808	803
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	55.0	55.0	38.0	95.0	57.0	57.0
Total Split (%)	36.7%	36.7%	25.3%	63.3%	38.0%	38.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.78	0.85	0.88	0.28	1.26	1.00
Control Delay	58.1	25.6	62.4	13.5	171.9	55.3
Queue Delay	0.0	0.4	0.0	0.0	1.0	0.0
Total Delay	58.1	26.0	62.4	13.5	172.9	55.3
Queue Length 50th (ft)	320	184	472	115	~990	492
Queue Length 95th (ft)	350	330	#774	279	#1244	#795
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1132	823	568	1254	639	806
Starvation Cap Reductn	0	0	0	0	20	0
Spillback Cap Reductn	0	26	0	0	85	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.79	0.88	0.28	1.46	1.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

5a.Build 2029 AM  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔	↔	↑	↑	↔
Traffic Volume (veh/h)	628	582	466	326	751	747
Future Volume (veh/h)	628	582	466	326	751	747
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	675	626	501	351	808	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1140	523	434	1116	642	
Arrive On Green	0.33	0.33	0.22	0.60	0.34	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	675	626	501	351	808	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	24.4	49.5	32.5	14.0	51.5	0.0
Cycle Q Clear(g_c), s	24.4	49.5	32.5	14.0	51.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1140	523	434	1116	642	
V/C Ratio(X)	0.59	1.20	1.15	0.31	1.26	
Avail Cap(c_a), veh/h	1140	523	434	1116	642	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.69	0.00
Uniform Delay (d), s/veh	41.8	50.3	49.9	15.0	49.3	0.0
Incr Delay (d2), s/veh	0.8	106.0	92.8	0.7	125.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	34.4	26.7	6.0	45.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.7	156.3	142.6	15.8	174.2	0.0
LnGrp LOS	D	F	F	B	F	
Approach Vol, veh/h	1301			852	808	
Approach Delay, s/veh	97.3			90.4	174.2	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	38.0	57.0		55.0		95.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	32.5	51.5		49.5		89.5
Max Q Clear Time (g_c+I1), s	34.5	53.5		51.5		16.0
Green Ext Time (p_c), s	0.0	0.0		0.0		4.7

Intersection Summary

HCM 6th Ctrl Delay	116.3
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

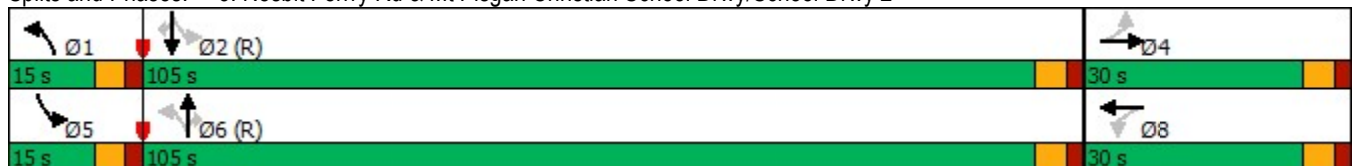


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	85	55	39	14	53	837	47	56	1139	3
Future Volume (vph)	85	55	39	14	53	837	47	56	1139	3
Lane Group Flow (vph)	101	103	46	53	63	996	56	67	1356	4
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.69	0.50	0.39	0.25	0.46	0.71	0.05	0.20	0.98	0.00
Control Delay	86.1	59.1	69.5	27.6	28.5	15.6	1.7	2.1	20.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	21.1	0.0
Total Delay	86.1	59.1	69.5	27.6	28.5	17.9	1.7	2.1	41.5	0.0
Queue Length 50th (ft)	97	80	43	15	10	498	0	4	560	0
Queue Length 95th (ft)	145	126	77	50	55	700	12	m10	m1126	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	219	301	177	303	163	1398	1202	369	1388	1194
Starvation Cap Reductn	0	0	0	0	0	268	0	0	99	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.34	0.26	0.17	0.39	0.88	0.05	0.18	1.05	0.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

5a.Build 2029 AM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	55	32	39	14	30	53	837	47	56	1139	3
Future Volume (veh/h)	85	55	32	39	14	30	53	837	47	56	1139	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	65	38	46	17	36	63	996	56	67	1356	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	132	77	131	64	135	125	1384	1173	342	1384	1173
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.03	0.74	0.74	0.03	0.74	0.74
Sat Flow, veh/h	1351	1107	647	1291	535	1132	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	101	0	103	46	0	53	63	996	56	67	1356	4
Grp Sat Flow(s),veh/h/ln	1351	0	1754	1291	0	1667	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	11.0	0.0	8.2	5.2	0.0	4.3	1.3	44.5	1.4	1.3	102.7	0.1
Cycle Q Clear(g_c), s	15.4	0.0	8.2	13.4	0.0	4.3	1.3	44.5	1.4	1.3	102.7	0.1
Prop In Lane	1.00		0.37	1.00		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	0	209	131	0	198	125	1384	1173	342	1384	1173
V/C Ratio(X)	0.60	0.00	0.49	0.35	0.00	0.27	0.50	0.72	0.05	0.20	0.98	0.00
Avail Cap(c_a), veh/h	230	0	286	188	0	272	183	1384	1173	399	1384	1173
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.1	0.0	61.9	68.1	0.0	60.1	43.7	10.9	5.3	11.6	18.4	5.1
Incr Delay (d2), s/veh	3.3	0.0	1.8	1.6	0.0	0.7	3.1	3.3	0.1	0.3	19.8	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	4.0	0.0	3.8	1.8	0.0	1.9	1.8	17.3	0.5	0.7	44.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.5	0.0	63.7	69.8	0.0	60.9	46.8	14.1	5.3	11.9	38.2	5.1
LnGrp LOS	E	A	E	E	A	E	D	B	A	B	D	A
Approach Vol, veh/h		204			99			1115			1427	
Approach Delay, s/veh		67.0			65.0			15.5			36.8	
Approach LOS		E			E			B			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	116.5		23.3	10.2	116.5		23.3				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	3.3	104.7		17.4	3.3	46.5		15.4				
Green Ext Time (p_c), s	0.0	0.0		0.5	0.1	23.4		0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				31.6								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	13.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	58	45	15	888	1183	19
Future Vol, veh/h	58	45	15	888	1183	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	49	16	976	1300	21

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2308	-	1300	0	-
Stage 1	1300	-	-	-	-
Stage 2	1008	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	~ 42	0	533	-	-
Stage 1	255	0	-	-	-
Stage 2	353	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 41	-	533	-	-
Mov Cap-2 Maneuver	~ 41	-	-	-	-
Stage 1	247	-	-	-	-
Stage 2	353	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	495.1	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	533	-	41	-	-	-
HCM Lane V/C Ratio	0.031	-	1.555	-	-	-
HCM Control Delay (s)	12	-	495.1	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	6.5	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

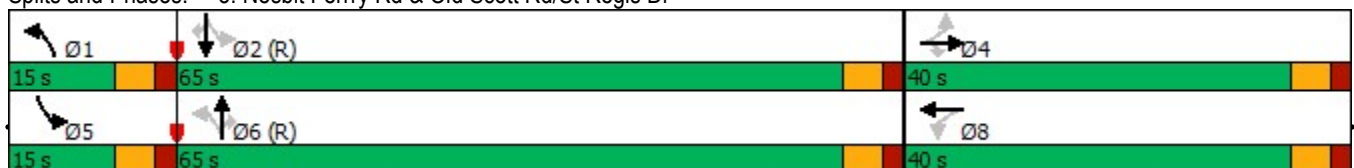


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	279	2	92	7	3	210	655	3	13	892	449
Future Volume (vph)	279	2	92	7	3	210	655	3	13	892	449
Lane Group Flow (vph)	0	299	98	0	26	223	697	3	14	949	478
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	15.0	65.0	65.0	15.0	65.0	65.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	12.5%	54.2%	54.2%	12.5%	54.2%	54.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.89	0.21		0.06	0.86	0.61	0.00	0.04	1.03	0.50
Control Delay		70.1	12.4		18.4	62.0	19.5	0.0	9.2	67.7	7.7
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		70.1	12.4		18.4	62.0	19.5	0.0	9.2	67.7	7.7
Queue Length 50th (ft)		218	14		6	123	295	0	4	~785	62
Queue Length 95th (ft)		#355	56		28	#311	550	0	12	#1035	149
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		379	507		458	258	1142	999	415	923	951
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.79	0.19		0.06	0.86	0.61	0.00	0.03	1.03	0.50

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr





HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

5a.Build 2029 AM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↑	↗	↖	↑	↗
Traffic Volume (veh/h)	279	2	92	7	3	15	210	655	3	13	892	449
Future Volume (veh/h)	279	2	92	7	3	15	210	655	3	13	892	449
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	297	2	98	7	3	16	223	697	3	14	949	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	1	456	38	29	47	201	1046	887	310	927	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.08	0.56	0.56	0.02	0.50	0.00
Sat Flow, veh/h	529	4	1585	0	101	162	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	299	0	98	26	0	0	223	697	3	14	949	0
Grp Sat Flow(s),veh/h/ln	532	0	1585	264	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	5.6	0.0	0.0	0.0	9.5	31.4	0.1	0.5	59.5	0.0
Cycle Q Clear(g_c), s	34.5	0.0	5.6	34.5	0.0	0.0	9.5	31.4	0.1	0.5	59.5	0.0
Prop In Lane	0.99		1.00	0.27		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	0	456	114	0	0	201	1046	887	310	927	
V/C Ratio(X)	1.40	0.00	0.22	0.23	0.00	0.00	1.11	0.67	0.00	0.05	1.02	
Avail Cap(c_a), veh/h	213	0	456	114	0	0	201	1046	887	423	927	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.6	0.0	32.5	34.5	0.0	0.0	39.2	18.6	11.7	16.8	30.2	0.0
Incr Delay (d2), s/veh	207.9	0.0	0.2	1.0	0.0	0.0	95.8	3.4	0.0	0.1	35.6	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	18.7	0.0	2.2	0.6	0.0	0.0	11.3	13.6	0.0	0.2	33.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	255.5	0.0	32.7	35.5	0.0	0.0	135.1	21.9	11.7	16.9	65.8	0.0
LnGrp LOS	F	A	C	D	A	A	F	C	B	B	F	
Approach Vol, veh/h		397			26			923			963	
Approach Delay, s/veh		200.5			35.5			49.2			65.1	
Approach LOS		F			D			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	65.0		40.0	7.4	72.6		40.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	59.5		34.5	9.5	59.5		34.5				
Max Q Clear Time (g_c+I1), s	11.5	61.5		36.5	2.5	33.4		36.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	81.7
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
6: Nesbit Ferry Rd & New Site Drwy

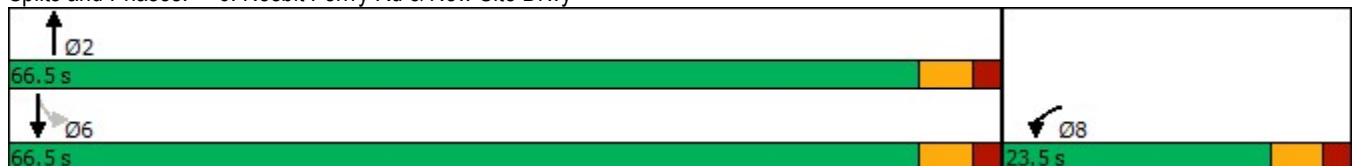


Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	W	T		T
Traffic Volume (vph)	13	923	20	1189
Future Volume (vph)	13	923	20	1189
Lane Group Flow (vph)	27	1027	0	1314
Turn Type	Prot	NA	Perm	NA
Protected Phases	8	2		6
Permitted Phases			6	
Detector Phase	8	2	6	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	23.5	23.5
Total Split (s)	23.5	66.5	66.5	66.5
Total Split (%)	26.1%	73.9%	73.9%	73.9%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	5.5	5.5		5.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Max	Max	Max
v/c Ratio	0.19	0.60		0.78
Control Delay	30.2	4.1		9.1
Queue Delay	0.0	0.0		0.1
Total Delay	30.2	4.1		9.1
Queue Length 50th (ft)	7	0		0
Queue Length 95th (ft)	34	330		#1002
Internal Link Dist (ft)	155	338		504
Turn Bay Length (ft)				
Base Capacity (vph)	364	1710		1675
Starvation Cap Reductn	0	0		13
Spillback Cap Reductn	0	0		0
Storage Cap Reductn	0	0		0
Reduced v/c Ratio	0.07	0.60		0.79

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 86.8  
 Natural Cycle: 100  
 Control Type: Actuated-Uncoordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Nesbit Ferry Rd & New Site Drwy



HCM 6th Signalized Intersection Summary  
 6: Nesbit Ferry Rd & New Site Drwy

5a.Build 2029 AM  
 05/29/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	12	923	22	20	1189
Future Volume (veh/h)	13	12	923	22	20	1189
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	13	1003	24	22	1292
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	25	23	1496	36	60	1501
Arrive On Green	0.03	0.03	0.82	0.82	0.82	0.82
Sat Flow, veh/h	844	783	1819	44	13	1825
Grp Volume(v), veh/h	28	0	0	1027	1314	0
Grp Sat Flow(s),veh/h/ln	1687	0	0	1863	1838	0
Q Serve(g_s), s	1.2	0.0	0.0	16.2	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	0.0	16.2	31.2	0.0
Prop In Lane	0.50	0.46		0.02	0.02	
Lane Grp Cap(c), veh/h	50	0	0	1531	1561	0
V/C Ratio(X)	0.56	0.00	0.00	0.67	0.84	0.00
Avail Cap(c_a), veh/h	409	0	0	1531	1561	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.5	0.0	0.0	2.6	3.9	0.0
Incr Delay (d2), s/veh	9.5	0.0	0.0	2.4	5.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	1.7	3.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.1	0.0	0.0	5.0	9.6	0.0
LnGrp LOS	D	A	A	A	A	A
Approach Vol, veh/h	28		1027		1314	
Approach Delay, s/veh	45.1		5.0		9.6	
Approach LOS	D		A		A	
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		66.5			66.5	7.7
Change Period (Y+Rc), s		5.5			5.5	5.5
Max Green Setting (Gmax), s		61.0			61.0	18.0
Max Q Clear Time (g_c+I1), s		18.2			33.2	3.2
Green Ext Time (p_c), s		10.5			15.5	0.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			8.0			
HCM 6th LOS			A			
<b>Notes</b>						
User approved volume balancing among the lanes for turning movement.						

Intersection												
Int Delay, s/veh	11.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↗	↗
Traffic Vol, veh/h	42	0	34	1	0	14	29	1328	6	25	1339	63
Future Vol, veh/h	42	0	34	1	0	14	29	1328	6	25	1339	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	75	-	-	75	70	-	-	50	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	0	35	1	0	14	30	1369	6	26	1380	65

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2177	2867	690	2174	2929	688	1445	0	0	1375	0	0
Stage 1	1432	1432	-	1432	1432	-	-	-	-	-	-	-
Stage 2	745	1435	-	742	1497	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 26	16	388	26	15	389	465	-	-	495	-	-
Stage 1	141	198	-	141	198	-	-	-	-	-	-	-
Stage 2	372	197	-	374	184	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 23	14	388	22	13	389	465	-	-	495	-	-
Mov Cap-2 Maneuver	~ 23	14	-	22	13	-	-	-	-	-	-	-
Stage 1	132	188	-	132	185	-	-	-	-	-	-	-
Stage 2	335	184	-	322	174	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 435	25.4	0.3	0.2
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	465	-	-	23	388	22	389	495	-	-
HCM Lane V/C Ratio	0.064	-	-	1.883	0.09	0.047	0.037	0.052	-	-
HCM Control Delay (s)	13.3	-	-	\$ 774.9	15.2	176.5	14.6	12.7	-	-
HCM Lane LOS	B	-	-	F	C	F	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	5.5	0.3	0.1	0.1	0.2	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

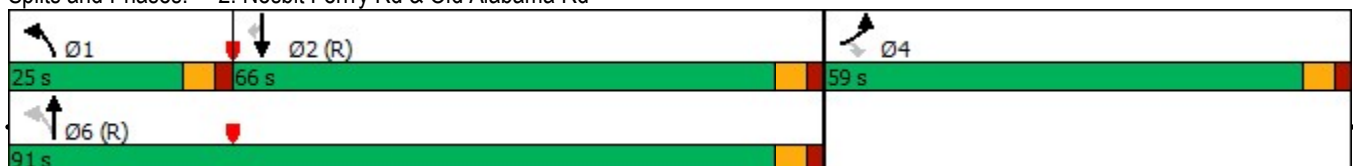


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	801	611	308	516	841	566
Future Volume (vph)	801	611	308	516	841	566
Lane Group Flow (vph)	834	636	321	538	876	590
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	59.0	59.0	25.0	91.0	66.0	66.0
Total Split (%)	39.3%	39.3%	16.7%	60.7%	44.0%	44.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.79	0.90	0.88	0.47	1.17	0.72
Control Delay	52.7	41.7	72.5	15.8	129.1	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	41.7	72.5	15.8	129.1	23.5
Queue Length 50th (ft)	382	344	247	220	~1015	251
Queue Length 95th (ft)	431	509	#526	269	#1274	406
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1224	764	365	1151	751	816
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.83	0.88	0.47	1.17	0.72

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
2: Nesbit Ferry Rd & Old Alabama Rd

5b.Build 2029 PM  
05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔	↔	↑	↓	↔
Traffic Volume (veh/h)	801	611	308	516	841	566
Future Volume (veh/h)	801	611	308	516	841	566
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	834	636	321	538	876	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1233	565	280	1066	754	
Arrive On Green	0.36	0.36	0.13	0.57	0.40	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	834	636	321	538	876	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	30.7	53.5	19.5	26.0	60.5	0.0
Cycle Q Clear(g_c), s	30.7	53.5	19.5	26.0	60.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1233	565	280	1066	754	
V/C Ratio(X)	0.68	1.12	1.15	0.50	1.16	
Avail Cap(c_a), veh/h	1233	565	280	1066	754	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	40.9	48.2	51.9	19.5	44.7	0.0
Incr Delay (d2), s/veh	1.5	77.1	100.0	1.7	86.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	32.5	13.9	11.5	45.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.4	125.4	151.9	21.2	131.6	0.0
LnGrp LOS	D	F	F	C	F	
Approach Vol, veh/h	1470			859	876	
Approach Delay, s/veh	78.3			70.0	131.6	
Approach LOS	E			E	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	66.0		59.0		91.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	19.5	60.5		53.5		85.5
Max Q Clear Time (g_c+I1), s	21.5	62.5		55.5		28.0
Green Ext Time (p_c), s	0.0	0.0		0.0		8.1

Intersection Summary

HCM 6th Ctrl Delay	90.7
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
 3: Nesbit Ferry Rd & Existing School Southern Drwy

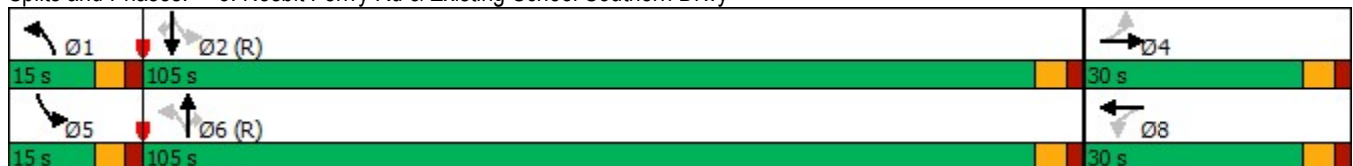


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↖	↖	↗	↖
Traffic Volume (vph)	14	0	6	1	11	928	9	16	1301	3
Future Volume (vph)	14	0	6	1	11	928	9	16	1301	3
Lane Group Flow (vph)	15	10	6	12	12	998	10	17	1399	3
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.20	0.04	0.08	0.13	0.06	0.60	0.01	0.04	0.84	0.00
Control Delay	74.1	0.3	69.3	35.6	2.0	6.0	0.0	1.2	12.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
Total Delay	74.1	0.3	69.3	35.6	2.0	6.0	0.0	1.2	13.4	0.0
Queue Length 50th (ft)	14	0	6	1	1	179	0	2	367	0
Queue Length 95th (ft)	39	0	22	24	4	519	0	m2	m332	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	248	388	248	271	237	1663	1419	494	1663	1419
Starvation Cap Reductn	0	0	0	0	0	0	0	0	101	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.03	0.02	0.04	0.05	0.60	0.01	0.03	0.90	0.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Existing School Southern Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Existing School Southern Drwy

5b.Build 2029 PM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	9	6	1	10	11	928	9	16	1301	3
Future Volume (veh/h)	14	0	9	6	1	10	11	928	9	16	1301	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	0	10	6	1	11	12	998	10	17	1399	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	0	53	86	4	49	217	1571	1331	445	1578	1337
Arrive On Green	0.03	0.00	0.03	0.03	0.03	0.03	0.01	0.84	0.84	0.02	0.84	0.84
Sat Flow, veh/h	1402	0	1585	1405	134	1472	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	0	10	6	0	12	12	998	10	17	1399	3
Grp Sat Flow(s),veh/h/ln	1402	0	1585	1405	0	1605	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.6	0.0	0.9	0.6	0.0	1.1	0.1	27.5	0.2	0.2	69.7	0.0
Cycle Q Clear(g_c), s	2.7	0.0	0.9	1.5	0.0	1.1	0.1	27.5	0.2	0.2	69.7	0.0
Prop In Lane	1.00		1.00	1.00		0.92	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	0	53	86	0	54	217	1571	1331	445	1578	1337
V/C Ratio(X)	0.18	0.00	0.19	0.07	0.00	0.22	0.06	0.64	0.01	0.04	0.89	0.00
Avail Cap(c_a), veh/h	267	0	259	269	0	262	307	1571	1331	528	1578	1337
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.9	0.0	70.5	71.3	0.0	70.6	18.1	4.1	1.9	4.2	7.3	1.8
Incr Delay (d2), s/veh	1.0	0.0	1.7	0.3	0.0	2.1	0.1	2.0	0.0	0.0	7.8	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	0.6	0.0	0.4	0.2	0.0	0.5	0.2	8.0	0.0	0.1	21.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	0.0	72.2	71.6	0.0	72.7	18.2	6.1	1.9	4.2	15.0	1.8
LnGrp LOS	E	A	E	E	A	E	B	A	A	A	B	A
Approach Vol, veh/h		25			18			1020			1419	
Approach Delay, s/veh		72.6			72.3			6.2			14.9	
Approach LOS		E			E			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	132.0		10.5	8.0	131.5		10.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.1	71.7		4.7	2.2	29.5		3.5				
Green Ext Time (p_c), s	0.0	24.4		0.0	0.0	25.2		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				12.3								
HCM 6th LOS				B								



Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	23	16	56	924	1251	66
Future Vol, veh/h	23	16	56	924	1251	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	17	59	973	1317	69

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2408	-	1317	0	-	0
Stage 1	1317	-	-	-	-	-
Stage 2	1091	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	36	0	525	-	-	-
Stage 1	250	0	-	-	-	-
Stage 2	322	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	32	-	525	-	-	-
Mov Cap-2 Maneuver	32	-	-	-	-	-
Stage 1	222	-	-	-	-	-
Stage 2	322	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	266	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	525	-	32	-	-	-
HCM Lane V/C Ratio	0.112	-	0.757	-	-	-
HCM Control Delay (s)	12.7	-	266	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.4	-	2.6	-	-	-

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

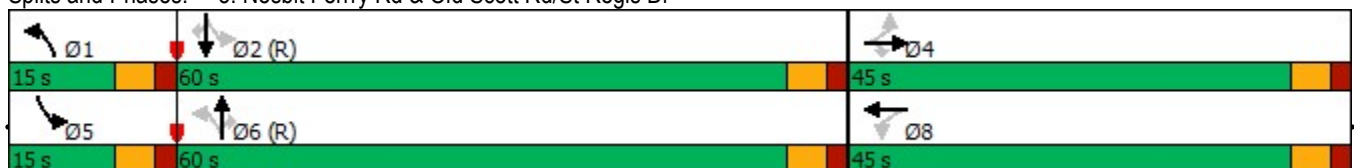


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	366	3	128	7	5	108	630	8	14	863	362
Future Volume (vph)	366	3	128	7	5	108	630	8	14	863	362
Lane Group Flow (vph)	0	380	132	0	23	111	649	8	14	890	373
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	45.0	45.0	45.0	45.0	45.0	15.0	60.0	60.0	15.0	60.0	60.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.93	0.24		0.05	0.60	0.62	0.01	0.04	0.99	0.42
Control Delay		70.5	15.1		18.6	33.1	23.2	0.0	11.3	59.1	8.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		70.5	15.1		18.6	33.1	23.2	0.0	11.3	59.1	8.2
Queue Length 50th (ft)		276	32		6	37	308	0	4	~744	53
Queue Length 95th (ft)		#455	80		26	98	540	0	14	#999	128
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		435	570		519	200	1043	918	384	901	896
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.87	0.23		0.04	0.56	0.62	0.01	0.04	0.99	0.42

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

5b.Build 2029 PM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	366	3	128	7	5	11	108	630	8	14	863	362
Future Volume (veh/h)	366	3	128	7	5	11	108	630	8	14	863	362
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	377	3	132	7	5	11	111	649	8	14	890	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	2	522	39	34	31	156	968	821	291	910	
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.05	0.52	0.52	0.02	0.49	0.00
Sat Flow, veh/h	579	5	1585	0	104	95	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	380	0	132	23	0	0	111	649	8	14	890	0
Grp Sat Flow(s),veh/h/ln	583	0	1585	199	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	7.3	0.0	0.0	0.0	3.7	30.7	0.3	0.5	56.0	0.0
Cycle Q Clear(g_c), s	39.5	0.0	7.3	39.5	0.0	0.0	3.7	30.7	0.3	0.5	56.0	0.0
Prop In Lane	0.99		1.00	0.30		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	0	522	105	0	0	156	968	821	291	910	
V/C Ratio(X)	1.51	0.00	0.25	0.22	0.00	0.00	0.71	0.67	0.01	0.05	0.98	
Avail Cap(c_a), veh/h	252	0	522	105	0	0	214	968	821	404	910	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.9	0.0	29.5	32.5	0.0	0.0	28.0	21.4	14.0	18.1	30.2	0.0
Incr Delay (d2), s/veh	248.8	0.0	0.3	1.0	0.0	0.0	6.7	3.7	0.0	0.1	25.0	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	24.9	0.0	2.9	0.5	0.0	0.0	1.7	13.6	0.1	0.2	29.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	293.7	0.0	29.7	33.5	0.0	0.0	34.6	25.0	14.0	18.2	55.2	0.0
LnGrp LOS	F	A	C	C	A	A	C	C	B	B	E	
Approach Vol, veh/h		512			23			768			904	
Approach Delay, s/veh		225.7			33.5			26.3			54.7	
Approach LOS		F			C			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	63.9		45.0	7.4	67.6		45.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5		39.5				
Max Q Clear Time (g_c+I1), s	5.7	58.0		41.5	2.5	32.7		41.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	7.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay				84.3								
HCM 6th LOS				F								

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	4	4	943	3	3	1313
Future Vol, veh/h	4	4	943	3	3	1313
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	4	1025	3	3	1427

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2460	1027	0	0	1028
Stage 1	1027	-	-	-	-
Stage 2	1433	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	34	285	-	-	676
Stage 1	345	-	-	-	-
Stage 2	220	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	33	285	-	-	676
Mov Cap-2 Maneuver	33	-	-	-	-
Stage 1	345	-	-	-	-
Stage 2	215	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	76.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	59	676
HCM Lane V/C Ratio	-	-	0.147	0.005
HCM Control Delay (s)	-	-	76.3	10.4
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	0.5	0

Timings

1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↖	↗	↖	↕	↖	↕	↗
Traffic Volume (vph)	11	1	9	85	1	245	11	1165	46	1071	11
Future Volume (vph)	11	1	9	85	1	245	11	1165	46	1071	11
Lane Group Flow (vph)	0	14	11	0	101	288	13	1420	54	1260	13
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	65.0	65.0	65.0	65.0	65.0
Total Split (%)	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	65.0%	65.0%	65.0%	65.0%	65.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.04	0.03		0.32	0.70	0.07	0.66	0.37	0.58	0.01
Control Delay		25.9	3.7		29.8	33.8	8.7	12.0	18.1	10.8	1.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		25.9	3.7		29.8	33.8	8.7	12.0	18.1	10.8	1.5
Queue Length 50th (ft)		5	0		42	110	2	203	11	168	0
Queue Length 95th (ft)		20	5		87	198	12	337	47	282	4
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		597	653		538	666	241	2737	184	2748	1235
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.02	0.02		0.19	0.43	0.05	0.52	0.29	0.46	0.01

Intersection Summary

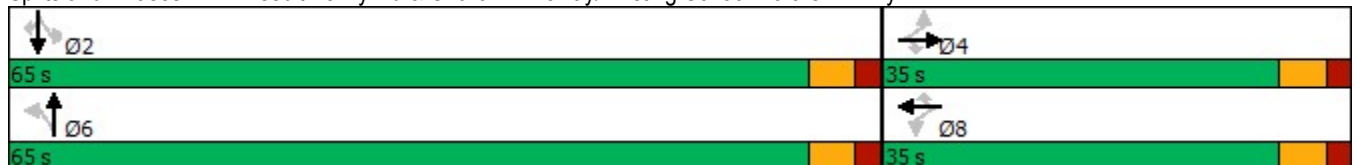
Cycle Length: 100

Actuated Cycle Length: 77.9

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy

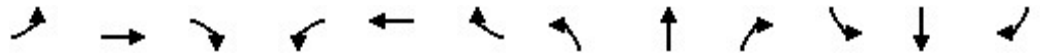


HCM 6th Signalized Intersection Summary

5c.Build 2029 Dismissal

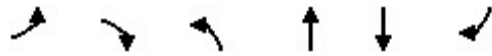
1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy

05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↗	↖	↗	↖	↗
Traffic Volume (veh/h)	11	1	9	85	1	245	11	1165	42	46	1071	11
Future Volume (veh/h)	11	1	9	85	1	245	11	1165	42	46	1071	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	1	11	100	1	288	13	1371	49	54	1260	13
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	3	495	76	0	495	222	2001	71	188	2031	906
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	0	10	1585	0	1	1585	435	3500	125	378	3554	1585
Grp Volume(v), veh/h	14	0	11	101	0	288	13	695	725	54	1260	13
Grp Sat Flow(s),veh/h/ln	10	0	1585	1	0	1585	435	1777	1848	378	1777	1585
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	14.4	1.9	26.0	26.1	11.1	22.2	0.3
Cycle Q Clear(g_c), s	29.5	0.0	0.5	29.5	0.0	14.4	24.2	26.0	26.1	37.2	22.2	0.3
Prop In Lane	0.93		1.00	0.99		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	76	0	495	76	0	495	222	1016	1056	188	2031	906
V/C Ratio(X)	0.18	0.00	0.02	1.33	0.00	0.58	0.06	0.68	0.69	0.29	0.62	0.01
Avail Cap(c_a), veh/h	76	0	495	76	0	495	248	1118	1163	209	2236	998
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	22.5	47.1	0.0	27.3	21.5	14.2	14.3	27.4	13.4	8.7
Incr Delay (d2), s/veh	1.1	0.0	0.0	212.9	0.0	1.7	0.2	2.2	2.2	1.8	0.8	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	0.4	0.0	0.2	6.3	0.0	5.7	0.2	9.7	10.0	1.0	7.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.0	0.0	22.5	260.0	0.0	29.1	21.7	16.5	16.5	29.2	14.2	8.8
LnGrp LOS	D	A	C	F	A	C	C	B	B	C	B	A
Approach Vol, veh/h		25			389			1433			1327	
Approach Delay, s/veh		33.4			89.0			16.5			14.8	
Approach LOS		C			F			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		59.5		35.0		59.5		35.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		59.5		29.5		59.5		29.5				
Max Q Clear Time (g_c+I1), s		39.2		31.5		28.1		31.5				
Green Ext Time (p_c), s		14.8		0.0		21.3		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				24.8								
HCM 6th LOS				C								

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

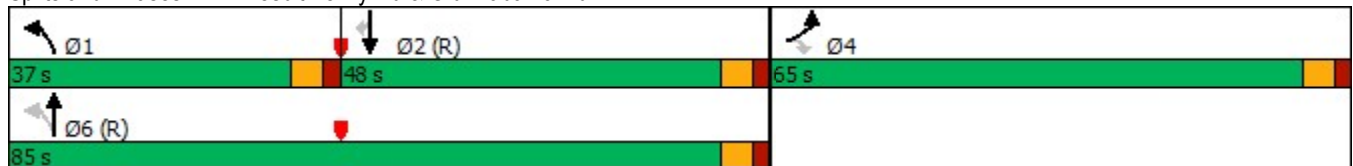


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (vph)	796	441	295	422	674	491
Future Volume (vph)	796	441	295	422	674	491
Lane Group Flow (vph)	847	469	314	449	717	522
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	65.0	65.0	37.0	85.0	48.0	48.0
Total Split (%)	43.3%	43.3%	24.7%	56.7%	32.0%	32.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.82	0.65	0.89	0.39	0.92	0.64
Control Delay	55.4	14.9	67.9	17.5	60.4	22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	55.4	14.9	67.9	17.5	60.4	22.5
Queue Length 50th (ft)	395	95	262	182	663	199
Queue Length 95th (ft)	439	205	374	372	#1155	409
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1361	839	427	1165	777	816
Starvation Cap Reductn	0	0	0	0	0	24
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.56	0.74	0.39	0.92	0.66

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	796	441	295	422	674	491
Future Volume (veh/h)	796	441	295	422	674	491
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	847	469	314	449	717	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1129	518	341	1122	804	
Arrive On Green	0.33	0.33	0.13	0.60	0.43	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	847	469	314	449	717	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	32.8	42.4	17.2	19.0	53.2	0.0
Cycle Q Clear(g_c), s	32.8	42.4	17.2	19.0	53.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1129	518	341	1122	804	
V/C Ratio(X)	0.75	0.91	0.92	0.40	0.89	
Avail Cap(c_a), veh/h	1371	629	477	1122	804	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.79	0.00
Uniform Delay (d), s/veh	45.0	48.3	39.1	15.8	39.5	0.0
Incr Delay (d2), s/veh	1.9	14.8	18.7	1.1	11.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.0	18.4	13.4	8.2	26.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.9	63.1	57.8	16.9	51.3	0.0
LnGrp LOS	D	E	E	B	D	
Approach Vol, veh/h	1316			763	717	
Approach Delay, s/veh	52.7			33.7	51.3	
Approach LOS	D			C	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.5	70.0		54.5		95.5
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	42.5		59.5		79.5
Max Q Clear Time (g_c+I1), s	19.2	55.2		44.4		21.0
Green Ext Time (p_c), s	0.7	0.0		4.6		6.3

Intersection Summary

HCM 6th Ctrl Delay			47.1			
HCM 6th LOS			D			

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

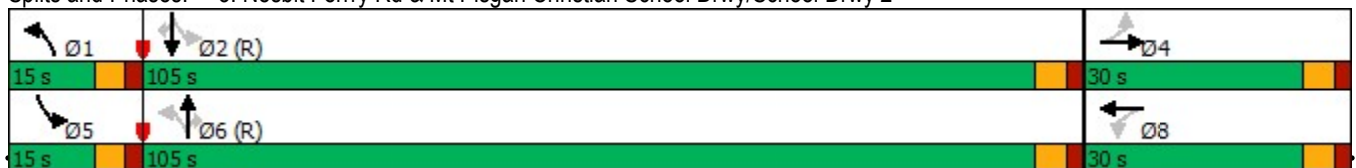


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	83	9	35	11	29	725	22	69	904	20
Future Volume (vph)	83	9	35	11	29	725	22	69	904	20
Lane Group Flow (vph)	91	54	38	133	32	797	24	76	993	22
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.84	0.23	0.24	0.44	0.09	0.59	0.02	0.17	0.70	0.02
Control Delay	115.2	21.7	60.8	16.3	4.4	13.2	0.0	1.8	7.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.5	0.0
Total Delay	115.2	21.7	60.8	16.3	4.4	14.4	0.0	1.8	7.5	0.0
Queue Length 50th (ft)	88	9	34	11	5	348	0	4	97	0
Queue Length 95th (ft)	#157	50	70	72	15	551	0	m7	m310	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	147	303	219	364	373	1348	1161	474	1411	1213
Starvation Cap Reductn	0	0	0	0	0	321	0	0	116	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.18	0.17	0.37	0.09	0.78	0.02	0.16	0.77	0.02

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

5c.Build 2029 Dismissal  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	9	40	35	11	110	29	725	22	69	904	20
Future Volume (veh/h)	83	9	40	35	11	110	29	725	22	69	904	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	10	44	38	12	121	32	797	24	76	993	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	49	214	226	23	235	298	1304	1105	420	1318	1117
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.70	0.70	0.03	0.70	0.70
Sat Flow, veh/h	1257	302	1329	1350	145	1462	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	91	0	54	38	0	133	32	797	24	76	993	22
Grp Sat Flow(s),veh/h/ln	1257	0	1631	1350	0	1607	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.7	0.0	4.3	3.8	0.0	11.4	0.8	33.7	0.7	1.8	50.1	0.6
Cycle Q Clear(g_c), s	22.1	0.0	4.3	8.1	0.0	11.4	0.8	33.7	0.7	1.8	50.1	0.6
Prop In Lane	1.00		0.81	1.00		0.91	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	0	262	226	0	258	298	1304	1105	420	1318	1117
V/C Ratio(X)	0.59	0.00	0.21	0.17	0.00	0.52	0.11	0.61	0.02	0.18	0.75	0.02
Avail Cap(c_a), veh/h	158	0	266	230	0	263	367	1304	1105	476	1318	1117
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	0.0	54.6	58.2	0.0	57.6	14.4	12.0	7.0	10.0	13.9	6.6
Incr Delay (d2), s/veh	5.4	0.0	0.4	0.3	0.0	1.7	0.2	2.1	0.0	0.2	4.0	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	3.7	0.0	1.8	1.3	0.0	4.8	0.4	13.6	0.2	0.7	20.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	0.0	55.0	58.5	0.0	59.3	14.6	14.1	7.0	10.2	18.0	6.7
LnGrp LOS	E	A	E	E	A	E	B	B	A	B	B	A
Approach Vol, veh/h		145			171			853			1091	
Approach Delay, s/veh		66.4			59.1			13.9			17.2	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	111.2		29.6	10.3	110.1		29.6				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.8	52.1		24.1	3.8	35.7		13.4				
Green Ext Time (p_c), s	0.0	21.7		0.0	0.1	15.8		0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				22.3								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	33	16	28	764	970	23
Future Vol, veh/h	33	16	28	764	970	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	18	31	840	1066	25

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	1968	-	1066	0	-
Stage 1	1066	-	-	-	-
Stage 2	902	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	69	0	654	-	-
Stage 1	331	0	-	-	-
Stage 2	396	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	66	-	654	-	-
Mov Cap-2 Maneuver	66	-	-	-	-
Stage 1	315	-	-	-	-
Stage 2	396	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	112.3	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	654	-	66	-	-	-
HCM Lane V/C Ratio	0.047	-	0.549	-	-	-
HCM Control Delay (s)	10.8	-	112.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	2.3	-	-	-

Timings

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

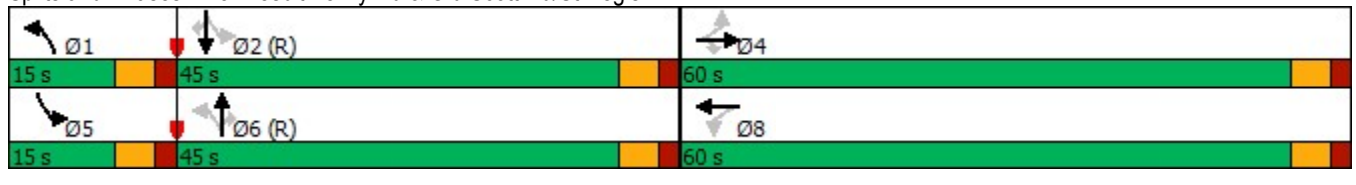


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	341	12	119	8	12	84	456	7	20	617	290
Future Volume (vph)	341	12	119	8	12	84	456	7	20	617	290
Lane Group Flow (vph)	0	384	129	0	37	91	496	8	22	671	315
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.84	0.22		0.07	0.37	0.53	0.01	0.06	0.81	0.38
Control Delay		51.5	11.6		15.0	19.3	27.1	0.0	15.8	40.5	9.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		51.5	11.6		15.0	19.3	27.1	0.0	15.8	40.5	9.1
Queue Length 50th (ft)		271	29		11	31	276	0	7	444	38
Queue Length 95th (ft)		344	62		30	71	471	0	24	#818	127
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		597	758		732	261	928	825	435	828	832
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.64	0.17		0.05	0.35	0.53	0.01	0.05	0.81	0.38

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

5c.Build 2029 Dismissal  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	341	12	119	8	12	14	84	456	7	20	617	290
Future Volume (veh/h)	341	12	119	8	12	14	84	456	7	20	617	290
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	371	13	129	9	13	15	91	496	8	22	671	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	7	720	37	54	37	147	723	613	247	677	
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.05	0.39	0.39	0.02	0.36	0.00
Sat Flow, veh/h	458	16	1585	0	118	81	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	384	0	129	37	0	0	91	496	8	22	671	0
Grp Sat Flow(s),veh/h/ln	474	0	1585	199	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	5.8	0.0	0.0	0.0	3.8	26.6	0.4	0.9	42.9	0.0
Cycle Q Clear(g_c), s	54.5	0.0	5.8	54.5	0.0	0.0	3.8	26.6	0.4	0.9	42.9	0.0
Prop In Lane	0.97		1.00	0.24		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	0	720	128	0	0	147	723	613	247	677	
V/C Ratio(X)	1.40	0.00	0.18	0.29	0.00	0.00	0.62	0.69	0.01	0.09	0.99	
Avail Cap(c_a), veh/h	274	0	720	128	0	0	205	723	613	349	677	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.6	0.0	19.5	28.0	0.0	0.0	30.0	30.7	22.7	25.5	38.1	0.0
Incr Delay (d2), s/veh	200.8	0.0	0.1	1.2	0.0	0.0	4.2	5.2	0.0	0.2	32.7	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	23.5	0.0	2.2	0.6	0.0	0.0	1.7	12.6	0.1	0.4	24.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	239.5	0.0	19.6	29.2	0.0	0.0	34.2	36.0	22.7	25.6	70.8	0.0
LnGrp LOS	F	A	B	C	A	A	C	D	C	C	E	
Approach Vol, veh/h		513			37			595			693	
Approach Delay, s/veh		184.2			29.2			35.5			69.3	
Approach LOS		F			C			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	48.9		60.0	8.1	51.9		60.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	39.5		54.5	9.5	39.5		54.5				
Max Q Clear Time (g_c+I1), s	5.8	44.9		56.5	2.9	28.6		56.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	3.8		0.0				

Intersection Summary

HCM 6th Ctrl Delay	89.6
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
6: Nesbit Ferry Rd & New Site Drwy

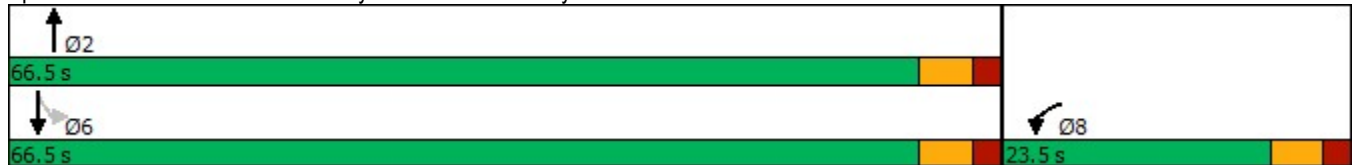


Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	13	764	9	980
Future Volume (vph)	13	764	9	980
Lane Group Flow (vph)	27	841	0	1075
Turn Type	Prot	NA	Perm	NA
Protected Phases	8	2		6
Permitted Phases			6	
Detector Phase	8	2	6	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	23.5	23.5
Total Split (s)	23.5	66.5	66.5	66.5
Total Split (%)	26.1%	73.9%	73.9%	73.9%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	5.5	5.5		5.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Max	Max	Max
v/c Ratio	0.19	0.49		0.63
Control Delay	30.2	3.0		4.6
Queue Delay	0.0	0.0		0.0
Total Delay	30.2	3.0		4.7
Queue Length 50th (ft)	7	0		0
Queue Length 95th (ft)	34	213		377
Internal Link Dist (ft)	155	338		504
Turn Bay Length (ft)				
Base Capacity (vph)	364	1711		1701
Starvation Cap Reductn	0	0		31
Spillback Cap Reductn	0	0		0
Storage Cap Reductn	0	0		0
Reduced v/c Ratio	0.07	0.49		0.64

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 86.8  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 6: Nesbit Ferry Rd & New Site Drwy



HCM 6th Signalized Intersection Summary  
6: Nesbit Ferry Rd & New Site Drwy



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	12	764	10	9	980
Future Volume (veh/h)	13	12	764	10	9	980
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	13	830	11	10	1065
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	25	23	1514	20	53	1526
Arrive On Green	0.03	0.03	0.82	0.82	0.82	0.82
Sat Flow, veh/h	844	783	1842	24	5	1855
Grp Volume(v), veh/h	28	0	0	841	1075	0
Grp Sat Flow(s),veh/h/ln	1687	0	0	1866	1861	0
Q Serve(g_s), s	1.2	0.0	0.0	10.8	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	0.0	10.8	17.8	0.0
Prop In Lane	0.50	0.46		0.01	0.01	
Lane Grp Cap(c), veh/h	50	0	0	1534	1579	0
V/C Ratio(X)	0.56	0.00	0.00	0.55	0.68	0.00
Avail Cap(c_a), veh/h	409	0	0	1534	1579	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.5	0.0	0.0	2.1	2.8	0.0
Incr Delay (d2), s/veh	9.5	0.0	0.0	1.4	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	1.1	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.1	0.0	0.0	3.5	5.2	0.0
LnGrp LOS	D	A	A	A	A	A
Approach Vol, veh/h			841			1075
Approach Delay, s/veh			3.5			5.2
Approach LOS			A			A
Timer - Assigned Phs		2				6
Phs Duration (G+Y+Rc), s		66.5				66.5
Change Period (Y+Rc), s		5.5				5.5
Max Green Setting (Gmax), s		61.0				61.0
Max Q Clear Time (g_c+I1), s		12.8				19.8
Green Ext Time (p_c), s		7.2				11.6

Intersection Summary

HCM 6th Ctrl Delay			5.0			
HCM 6th LOS			A			

Notes

User approved volume balancing among the lanes for turning movement.

**FUTURE 2029 PHASE 1 "BUILD" IMPROVED**



Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

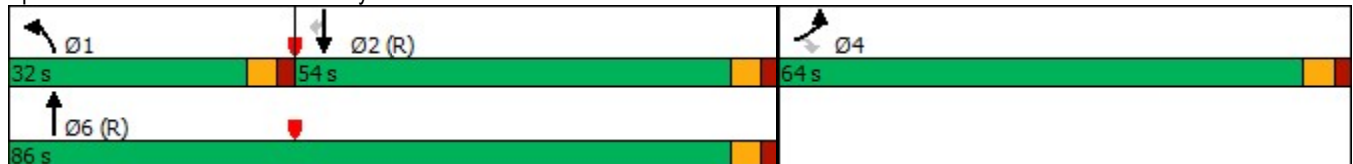


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	628	582	466	326	751	747
Future Volume (vph)	628	582	466	326	751	747
Lane Group Flow (vph)	675	626	501	351	808	803
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	64.0	64.0	32.0	86.0	54.0	54.0
Total Split (%)	42.7%	42.7%	21.3%	57.3%	36.0%	36.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.73	0.86	0.83	0.29	0.51	0.71
Control Delay	54.1	29.5	68.0	15.6	33.8	7.7
Queue Delay	0.0	0.8	0.0	0.0	0.8	0.2
Total Delay	54.1	30.2	68.0	15.6	34.6	7.9
Queue Length 50th (ft)	318	235	254	124	290	24
Queue Length 95th (ft)	327	356	319	305	442	196
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1338	867	637	1225	1572	1124
Starvation Cap Reductn	0	0	0	0	0	39
Spillback Cap Reductn	0	66	0	0	434	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.78	0.79	0.29	0.71	0.74

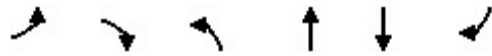
Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	628	582	466	326	751	747
Future Volume (veh/h)	628	582	466	326	751	747
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	675	626	501	351	808	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1348	618	553	1004	1209	
Arrive On Green	0.39	0.39	0.16	0.54	0.34	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	675	626	501	351	808	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	22.2	58.5	21.4	16.1	29.1	0.0
Cycle Q Clear(g_c), s	22.2	58.5	21.4	16.1	29.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1348	618	553	1004	1209	
V/C Ratio(X)	0.50	1.01	0.91	0.35	0.67	
Avail Cap(c_a), veh/h	1348	618	611	1004	1209	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.69	0.00
Uniform Delay (d), s/veh	34.7	45.8	61.9	19.8	42.3	0.0
Incr Delay (d2), s/veh	0.3	39.4	16.4	1.0	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	28.9	10.5	7.2	13.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.0	85.1	78.3	20.8	44.3	0.0
LnGrp LOS	C	F	E	C	D	
Approach Vol, veh/h	1301			852	808	
Approach Delay, s/veh	59.1			54.6	44.3	
Approach LOS	E			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	29.5	56.5		64.0		86.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	26.5	48.5		58.5		80.5
Max Q Clear Time (g_c+I1), s	23.4	31.1		60.5		18.1
Green Ext Time (p_c), s	0.6	8.3		0.0		4.6

Intersection Summary

HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

Notes

- User approved pedestrian interval to be less than phase max green.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

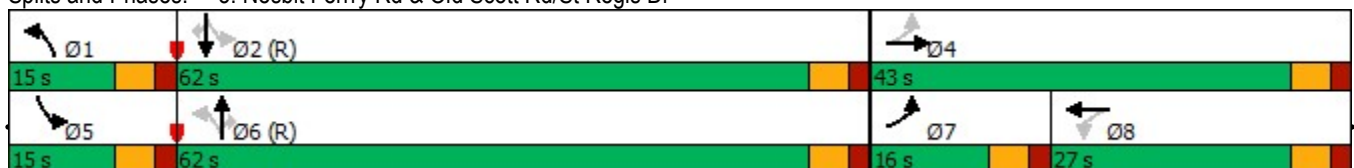


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	279	2	7	3	210	655	3	13	892	449
Future Volume (vph)	279	2	7	3	210	655	3	13	892	449
Lane Group Flow (vph)	297	100	0	26	223	697	3	14	949	478
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	16.0	43.0	27.0	27.0	15.0	62.0	62.0	15.0	62.0	62.0
Total Split (%)	13.3%	35.8%	22.5%	22.5%	12.5%	51.7%	51.7%	12.5%	51.7%	51.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.32	0.31		0.26	0.60	0.52	0.00	0.03	0.95	0.48
Control Delay	210.3	10.8		37.1	32.8	11.7	0.0	7.0	47.3	8.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	210.3	10.8		37.1	32.8	11.7	0.0	7.0	47.3	8.0
Queue Length 50th (ft)	~261	1		8	108	211	0	3	710	68
Queue Length 95th (ft)	#425	47		37	193	445	0	9	#1073	170
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	225	563		280	372	1336	1170	534	997	993
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.32	0.18		0.09	0.60	0.52	0.00	0.03	0.95	0.48

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

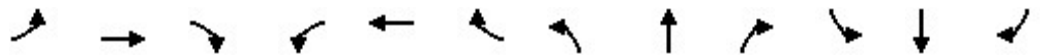
Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

5d.Build 2029 AM - System Improvements

05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	279	2	92	7	3	15	210	655	3	13	892	449
Future Volume (veh/h)	279	2	92	7	3	15	210	655	3	13	892	449
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	297	2	98	7	3	16	223	697	3	14	949	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	6	284	51	17	48	303	1243	1053	435	1157	
Arrive On Green	0.09	0.18	0.18	0.05	0.05	0.05	0.06	0.66	0.66	0.02	0.62	0.00
Sat Flow, veh/h	1781	32	1558	258	350	973	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	297	0	100	26	0	0	223	697	3	14	949	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1581	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.5	0.0	6.6	0.0	0.0	0.0	5.2	23.9	0.1	0.3	47.1	0.0
Cycle Q Clear(g_c), s	10.5	0.0	6.6	1.8	0.0	0.0	5.2	23.9	0.1	0.3	47.1	0.0
Prop In Lane	1.00		0.98	0.27		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	320	0	290	116	0	0	303	1243	1053	435	1157	
V/C Ratio(X)	0.93	0.00	0.34	0.22	0.00	0.00	0.74	0.56	0.00	0.03	0.82	
Avail Cap(c_a), veh/h	320	0	497	313	0	0	335	1243	1053	548	1157	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.6	0.0	42.8	55.1	0.0	0.0	22.4	10.8	6.8	9.5	17.7	0.0
Incr Delay (d2), s/veh	32.3	0.0	0.7	1.0	0.0	0.0	7.5	1.8	0.0	0.0	6.6	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	6.6	0.0	2.6	0.8	0.0	0.0	4.3	9.4	0.0	0.1	20.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.9	0.0	43.5	56.1	0.0	0.0	29.9	12.6	6.8	9.6	24.3	0.0
LnGrp LOS	F	A	D	E	A	A	C	B	A	A	C	
Approach Vol, veh/h		397			26			923			963	
Approach Delay, s/veh		73.7			56.1			16.8			24.1	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.8	79.7		27.4	7.4	85.2	16.0	11.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	56.5		37.5	9.5	56.5	10.5	21.5				
Max Q Clear Time (g_c+I1), s	7.2	49.1		8.6	2.3	25.9	12.5	3.8				
Green Ext Time (p_c), s	0.1	5.4		0.5	0.0	10.1	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	30.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

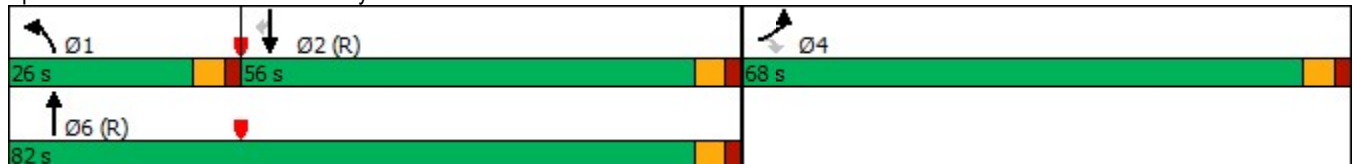


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	801	611	308	516	841	566
Future Volume (vph)	801	611	308	516	841	566
Lane Group Flow (vph)	834	636	321	538	876	590
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	68.0	68.0	26.0	82.0	56.0	56.0
Total Split (%)	45.3%	45.3%	17.3%	54.7%	37.3%	37.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.76	0.87	0.76	0.48	0.55	0.57
Control Delay	50.1	33.9	80.8	18.3	34.3	4.9
Queue Delay	0.0	0.8	0.0	0.0	0.0	0.1
Total Delay	50.1	34.7	80.8	18.3	34.3	5.1
Queue Length 50th (ft)	388	318	165	248	319	0
Queue Length 95th (ft)	388	425	224	331	479	93
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1430	856	472	1130	1581	1033
Starvation Cap Reductn	0	0	0	0	0	52
Spillback Cap Reductn	0	60	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.80	0.68	0.48	0.55	0.60

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	801	611	308	516	841	566
Future Volume (veh/h)	801	611	308	516	841	566
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	834	636	321	538	876	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1427	655	373	961	1311	
Arrive On Green	0.41	0.41	0.11	0.51	0.37	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	834	636	321	538	876	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	28.0	59.0	13.7	29.5	31.0	0.0
Cycle Q Clear(g_c), s	28.0	59.0	13.7	29.5	31.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1427	655	373	961	1311	
V/C Ratio(X)	0.58	0.97	0.86	0.56	0.67	
Avail Cap(c_a), veh/h	1440	660	472	961	1311	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.82	0.00
Uniform Delay (d), s/veh	34.1	43.2	65.8	24.9	39.6	0.0
Incr Delay (d2), s/veh	0.6	27.8	12.4	2.4	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	27.3	6.6	13.4	13.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.7	71.0	78.2	27.3	41.9	0.0
LnGrp LOS	C	E	E	C	D	
Approach Vol, veh/h	1470			859	876	
Approach Delay, s/veh	50.4			46.3	41.9	
Approach LOS	D			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.7	60.9		67.5		82.5
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	20.5	50.5		62.5		76.5
Max Q Clear Time (g_c+I1), s	15.7	33.0		61.0		31.5
Green Ext Time (p_c), s	0.5	9.0		1.0		7.8

Intersection Summary

HCM 6th Ctrl Delay	47.0
HCM 6th LOS	D

Notes

- User approved pedestrian interval to be less than phase max green.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

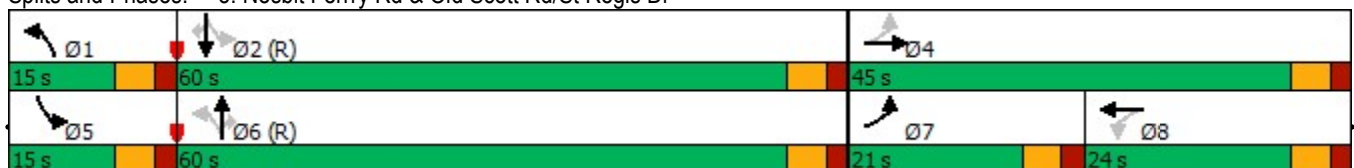


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	366	3	7	5	108	630	8	14	863	362
Future Volume (vph)	366	3	7	5	108	630	8	14	863	362
Lane Group Flow (vph)	377	135	0	23	111	649	8	14	890	373
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	21.0	45.0	24.0	24.0	15.0	60.0	60.0	15.0	60.0	60.0
Total Split (%)	17.5%	37.5%	20.0%	20.0%	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.25	0.33		0.24	0.42	0.52	0.01	0.03	0.81	0.36
Control Delay	177.7	8.7		41.6	11.2	14.0	0.0	7.3	28.5	5.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	1.5	0.0
Total Delay	177.7	8.7		41.6	11.2	14.0	0.0	7.3	30.0	5.9
Queue Length 50th (ft)	~327	2		9	27	223	0	3	550	42
Queue Length 95th (ft)	#509	52		36	50	447	0	11	#928	114
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	301	611		237	282	1257	1108	514	1104	1041
Starvation Cap Reductn	0	0		0	0	0	0	0	85	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.22		0.10	0.39	0.52	0.01	0.03	0.87	0.36

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 105  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

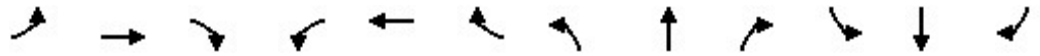
Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

5e.Build 2029 PM - System Improvements

05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗			↔		↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	366	3	128	7	5	11	108	630	8	14	863	362
Future Volume (veh/h)	366	3	128	7	5	11	108	630	8	14	863	362
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	377	3	132	7	5	11	111	649	8	14	890	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	394	8	349	53	27	38	277	1164	986	415	1117	
Arrive On Green	0.13	0.22	0.22	0.05	0.05	0.05	0.04	0.62	0.62	0.02	0.60	0.00
Sat Flow, veh/h	1781	35	1555	289	542	761	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	377	0	135	23	0	0	111	649	8	14	890	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1592	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	15.5	0.0	8.6	0.0	0.0	0.0	2.9	24.1	0.2	0.4	43.9	0.0
Cycle Q Clear(g_c), s	15.5	0.0	8.6	1.5	0.0	0.0	2.9	24.1	0.2	0.4	43.9	0.0
Prop In Lane	1.00		0.98	0.30		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	394	0	357	118	0	0	277	1164	986	415	1117	
V/C Ratio(X)	0.96	0.00	0.38	0.19	0.00	0.00	0.40	0.56	0.01	0.03	0.80	
Avail Cap(c_a), veh/h	394	0	524	276	0	0	346	1164	986	528	1117	
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	0.00	1.00	1.00	1.00	0.52	0.52	0.00
Uniform Delay (d), s/veh	49.2	0.0	39.4	54.9	0.0	0.0	18.2	13.1	8.6	11.0	18.6	0.0
Incr Delay (d2), s/veh	34.1	0.0	0.7	0.8	0.0	0.0	0.9	1.9	0.0	0.0	3.2	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	7.4	0.0	3.4	0.7	0.0	0.0	1.3	9.8	0.1	0.1	18.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.3	0.0	40.1	55.7	0.0	0.0	19.1	15.0	8.6	11.0	21.8	0.0
LnGrp LOS	F	A	D	E	A	A	B	B	A	B	C	
Approach Vol, veh/h		512			23			768			904	
Approach Delay, s/veh		71.9			55.7			15.6			21.6	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.4	77.2		32.5	7.4	80.2	21.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5	15.5	18.5				
Max Q Clear Time (g_c+I1), s	4.9	45.9		10.6	2.4	26.1	17.5	3.5				
Green Ext Time (p_c), s	0.1	5.8		0.8	0.0	8.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

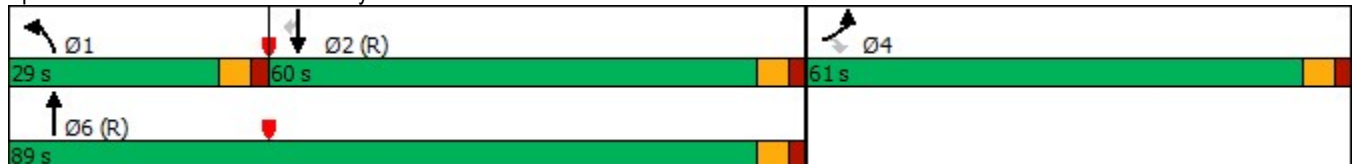


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖ ↗	↗	↖ ↗	↑	↑ ↑	↗
Traffic Volume (vph)	796	441	295	422	674	491
Future Volume (vph)	796	441	295	422	674	491
Lane Group Flow (vph)	847	469	314	449	717	522
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	61.0	61.0	29.0	89.0	60.0	60.0
Total Split (%)	40.7%	40.7%	19.3%	59.3%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.83	0.66	0.73	0.38	0.44	0.51
Control Delay	56.2	16.5	72.5	14.9	29.5	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	56.2	16.5	72.5	14.9	29.5	4.4
Queue Length 50th (ft)	397	111	159	178	245	0
Queue Length 95th (ft)	443	222	206	320	350	78
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1270	796	538	1170	1646	1015
Starvation Cap Reductn	0	0	0	0	0	58
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.59	0.58	0.38	0.44	0.55

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

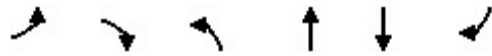
Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
2: Nesbit Ferry Rd & Old Alabama Rd

5f.Build 2029 Dismissal - System Improvements

05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	796	441	295	422	674	491
Future Volume (veh/h)	796	441	295	422	674	491
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	847	469	314	449	717	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1119	513	370	1127	1631	
Arrive On Green	0.32	0.32	0.11	0.60	0.46	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	847	469	314	449	717	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	32.9	42.6	13.4	18.8	20.5	0.0
Cycle Q Clear(g_c), s	32.9	42.6	13.4	18.8	20.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1119	513	370	1127	1631	
V/C Ratio(X)	0.76	0.91	0.85	0.40	0.44	
Avail Cap(c_a), veh/h	1279	586	541	1127	1631	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.79	0.00
Uniform Delay (d), s/veh	45.4	48.7	65.8	15.6	27.5	0.0
Incr Delay (d2), s/veh	2.3	17.5	8.3	1.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	18.9	6.3	8.1	8.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.7	66.2	74.1	16.6	28.2	0.0
LnGrp LOS	D	E	E	B	C	
Approach Vol, veh/h	1316			763	717	
Approach Delay, s/veh	54.3			40.3	28.2	
Approach LOS	D			D	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.6	74.4		54.1		95.9
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	23.5	54.5		55.5		83.5
Max Q Clear Time (g_c+I1), s	15.4	22.5		44.6		20.8
Green Ext Time (p_c), s	0.7	9.9		4.0		6.3

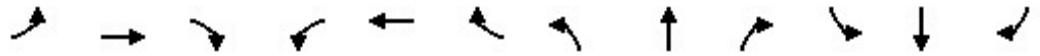
Intersection Summary

HCM 6th Ctrl Delay	43.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary 5f.Build 2029 Dismissal - System Improvements  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	12	119	8	12	14	84	456	7	20	617	290
Future Volume (veh/h)	341	12	119	8	12	14	84	456	7	20	617	290
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	371	13	129	9	13	15	91	496	8	22	671	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	418	36	353	50	36	33	397	1121	950	505	1087	
Arrive On Green	0.15	0.24	0.24	0.05	0.05	0.05	0.04	0.60	0.60	0.02	0.58	0.00
Sat Flow, veh/h	1781	147	1460	254	712	659	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	371	0	142	37	0	0	91	496	8	22	671	0
Grp Sat Flow(s),veh/h/ln	1781	0	1607	1625	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	17.5	0.0	8.8	0.5	0.0	0.0	2.4	17.4	0.2	0.6	28.1	0.0
Cycle Q Clear(g_c), s	17.5	0.0	8.8	2.5	0.0	0.0	2.4	17.4	0.2	0.6	28.1	0.0
Prop In Lane	1.00		0.91	0.24		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	418	0	388	118	0	0	397	1121	950	505	1087	
V/C Ratio(X)	0.89	0.00	0.37	0.31	0.00	0.00	0.23	0.44	0.01	0.04	0.62	
Avail Cap(c_a), veh/h	418	0	549	275	0	0	467	1121	950	608	1087	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.2	0.0	37.9	55.3	0.0	0.0	12.8	13.1	9.7	10.6	16.4	0.0
Incr Delay (d2), s/veh	20.2	0.0	0.6	1.5	0.0	0.0	0.3	1.3	0.0	0.0	2.6	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	13.2	0.0	3.5	1.1	0.0	0.0	0.9	7.1	0.1	0.2	11.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	0.0	38.4	56.8	0.0	0.0	13.1	14.4	9.7	10.6	19.0	0.0
LnGrp LOS	E	A	D	E	A	A	B	B	A	B	B	
Approach Vol, veh/h		513			37			595			693	
Approach Delay, s/veh		59.4			56.8			14.1			18.8	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	75.3		34.5	8.1	77.4	23.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	53.0		41.0	9.5	53.0	17.5	18.0				
Max Q Clear Time (g_c+I1), s	4.4	30.1		10.8	2.6	19.4	19.5	4.5				
Green Ext Time (p_c), s	0.1	8.4		0.8	0.0	6.6	0.0	0.1				

Intersection Summary												
HCM 6th Ctrl Delay											29.4	
HCM 6th LOS											C	

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
6: Nesbit Ferry Rd & New Site Drwy

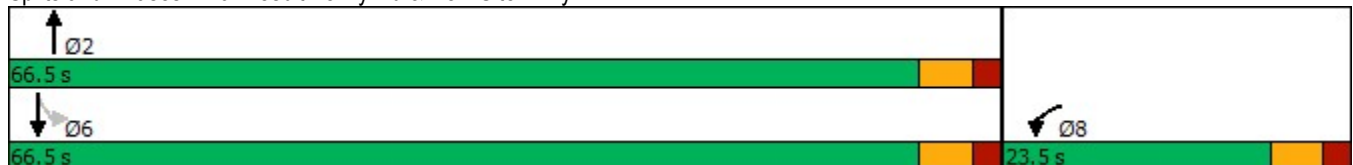


Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	W	T		T
Traffic Volume (vph)	13	764	9	980
Future Volume (vph)	13	764	9	980
Lane Group Flow (vph)	27	841	0	1075
Turn Type	Prot	NA	Perm	NA
Protected Phases	8	2		6
Permitted Phases			6	
Detector Phase	8	2	6	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	23.5	23.5
Total Split (s)	23.5	66.5	66.5	66.5
Total Split (%)	26.1%	73.9%	73.9%	73.9%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	5.5	5.5		5.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Max	Max	Max
v/c Ratio	0.19	0.49		0.63
Control Delay	30.2	3.0		4.6
Queue Delay	0.0	0.0		0.0
Total Delay	30.2	3.0		4.7
Queue Length 50th (ft)	7	0		0
Queue Length 95th (ft)	34	213		377
Internal Link Dist (ft)	155	338		504
Turn Bay Length (ft)				
Base Capacity (vph)	364	1711		1701
Starvation Cap Reductn	0	0		31
Spillback Cap Reductn	0	0		0
Storage Cap Reductn	0	0		0
Reduced v/c Ratio	0.07	0.49		0.64

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 86.8  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 6: Nesbit Ferry Rd & New Site Drwy



**FUTURE 2034 "NO-BUILD" INTERSECTION  
ANALYSIS**

Timings

1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↔	↗	↕↕	↗
Traffic Volume (vph)	9	0	12	12	0	36	10	932	99	1528	32
Future Volume (vph)	9	0	12	12	0	36	10	932	99	1528	32
Lane Group Flow (vph)	0	11	15	0	15	46	13	1237	125	1934	41
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	76.0	76.0	76.0	76.0	76.0
Total Split (%)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.10	0.10		0.14	0.27	0.11	0.44	0.40	0.69	0.03
Control Delay		39.8	9.6		40.8	16.5	4.3	3.4	7.2	5.7	1.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		39.8	9.6		40.8	16.5	4.3	3.4	7.2	5.7	1.1
Queue Length 50th (ft)		6	0		8	0	1	78	15	177	1
Queue Length 95th (ft)		19	9		23	25	5	95	34	199	6
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		304	366		305	381	127	2925	327	2944	1321
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.04		0.05	0.12	0.10	0.42	0.38	0.66	0.03

Intersection Summary

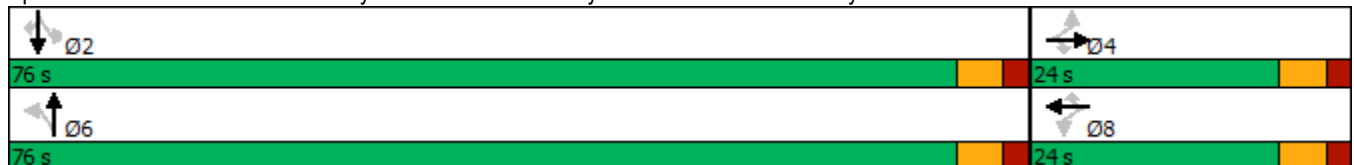
Cycle Length: 100

Actuated Cycle Length: 85.3

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

3a.No Build 2034 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Volume (veh/h)	9	0	12	12	0	36	10	932	45	99	1528	32
Future Volume (veh/h)	9	0	12	12	0	36	10	932	45	99	1528	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	0	15	15	0	46	13	1180	57	125	1934	41
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	0	297	89	0	297	153	2408	116	321	2480	1106
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	62	0	1585	74	0	1585	221	3451	167	450	3554	1585
Grp Volume(v), veh/h	11	0	15	15	0	46	13	607	630	125	1934	41
Grp Sat Flow(s),veh/h/ln	62	0	1585	74	0	1585	221	1777	1840	450	1777	1585
Q Serve(g_s), s	0.8	0.0	0.7	1.0	0.0	2.3	3.9	15.1	15.1	16.8	34.7	0.8
Cycle Q Clear(g_c), s	18.0	0.0	0.7	18.0	0.0	2.3	37.1	15.1	15.1	31.4	34.7	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	87	0	297	89	0	297	153	1240	1285	321	2480	1106
V/C Ratio(X)	0.13	0.00	0.05	0.17	0.00	0.15	0.09	0.49	0.49	0.39	0.78	0.04
Avail Cap(c_a), veh/h	93	0	305	96	0	305	160	1304	1350	337	2608	1163
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	0.0	32.0	47.6	0.0	32.7	21.4	6.7	6.7	13.7	9.6	4.5
Incr Delay (d2), s/veh	0.7	0.0	0.1	0.9	0.0	0.2	0.5	0.6	0.6	1.6	1.8	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	0.3	0.0	0.3	0.4	0.0	0.9	0.2	4.6	4.7	1.7	10.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	0.0	32.1	48.5	0.0	32.9	21.9	7.3	7.3	15.3	11.4	4.5
LnGrp LOS	D	A	C	D	A	C	C	A	A	B	B	A
Approach Vol, veh/h		26			61			1250			2100	
Approach Delay, s/veh		38.9			36.7			7.4			11.5	
Approach LOS		D			D			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		72.7		23.8		72.7		23.8				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		70.5		18.5		70.5		18.5				
Max Q Clear Time (g_c+I1), s		36.7		20.0		39.1		20.0				
Green Ext Time (p_c), s		30.7		0.0		18.6		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.7								
HCM 6th LOS				B								

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↖	↖	↖
Traffic Volume (vph)	658	582	472	329	770	782
Future Volume (vph)	658	582	472	329	770	782
Lane Group Flow (vph)	708	626	508	354	828	841
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	54.0	54.0	38.0	96.0	58.0	58.0
Total Split (%)	36.0%	36.0%	25.3%	64.0%	38.7%	38.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.80	0.85	0.93	0.28	1.27	1.02
Control Delay	58.6	25.7	68.9	13.8	173.5	61.7
Queue Delay	0.0	0.4	0.0	0.0	1.1	0.0
Total Delay	58.6	26.1	68.9	13.8	174.7	61.7
Queue Length 50th (ft)	336	188	487	124	~1018	~593
Queue Length 95th (ft)	374	341	#788	280	#1274	#854
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1110	812	547	1243	652	822
Starvation Cap Reductn	0	0	0	0	27	0
Spillback Cap Reductn	0	26	0	0	93	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.80	0.93	0.28	1.48	1.02

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd





HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

3a.No Build 2034 AM  
 05/17/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (veh/h)	658	582	472	329	770	782
Future Volume (veh/h)	658	582	472	329	770	782
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	708	626	508	354	828	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1117	512	434	1128	655	
Arrive On Green	0.32	0.32	0.22	0.60	0.35	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	708	626	508	354	828	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	26.2	48.5	32.5	13.9	52.5	0.0
Cycle Q Clear(g_c), s	26.2	48.5	32.5	13.9	52.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1117	512	434	1128	655	
V/C Ratio(X)	0.63	1.22	1.17	0.31	1.26	
Avail Cap(c_a), veh/h	1117	512	434	1128	655	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.67	0.00
Uniform Delay (d), s/veh	43.2	50.8	50.0	14.6	48.8	0.0
Incr Delay (d2), s/veh	1.2	116.3	98.9	0.7	127.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	35.2	27.4	6.0	47.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.4	167.0	148.9	15.3	176.2	0.0
LnGrp LOS	D	F	F	B	F	
Approach Vol, veh/h	1334			862	828	
Approach Delay, s/veh	101.9			94.0	176.2	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	38.0	58.0		54.0		96.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	32.5	52.5		48.5		90.5
Max Q Clear Time (g_c+I1), s	34.5	54.5		50.5		15.9
Green Ext Time (p_c), s	0.0	0.0		0.0		4.7

Intersection Summary

HCM 6th Ctrl Delay	120.0
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	89	57	34	14	55	860	37	37	1170	3
Future Volume (vph)	89	57	34	14	55	860	37	37	1170	3
Lane Group Flow (vph)	106	107	40	40	65	1024	44	44	1393	4
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.69	0.50	0.34	0.19	0.48	0.73	0.04	0.14	1.01	0.00
Control Delay	85.7	60.1	66.9	32.5	30.1	16.3	1.1	2.3	26.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.8	0.0
Total Delay	85.7	60.1	66.9	32.5	30.1	16.3	1.1	2.3	53.5	0.0
Queue Length 50th (ft)	101	85	37	15	11	532	0	3	~642	0
Queue Length 95th (ft)	150	131	68	46	57	738	7	m6	m#1195	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	222	300	173	297	162	1397	1202	353	1384	1190
Starvation Cap Reductn	0	0	0	0	0	0	0	0	96	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.36	0.23	0.13	0.40	0.73	0.04	0.12	1.08	0.00

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.

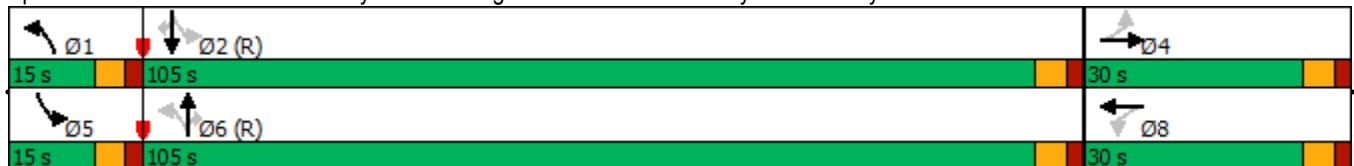
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

3a.No Build 2034 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	57	33	34	14	19	55	860	37	37	1170	3
Future Volume (veh/h)	89	57	33	34	14	19	55	860	37	37	1170	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	106	68	39	40	17	23	65	1024	44	44	1393	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	128	73	121	82	112	103	1398	1185	331	1392	1180
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.03	0.75	0.75	0.03	0.74	0.74
Sat Flow, veh/h	1367	1115	640	1287	720	975	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	106	0	107	40	0	40	65	1024	44	44	1393	4
Grp Sat Flow(s),veh/h/ln	1367	0	1755	1287	0	1695	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	11.4	0.0	8.6	4.5	0.0	3.2	1.3	45.8	1.1	0.9	111.7	0.1
Cycle Q Clear(g_c), s	14.6	0.0	8.6	13.2	0.0	3.2	1.3	45.8	1.1	0.9	111.7	0.1
Prop In Lane	1.00		0.36	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	0	201	121	0	194	103	1398	1185	331	1392	1180
V/C Ratio(X)	0.60	0.00	0.53	0.33	0.00	0.21	0.63	0.73	0.04	0.13	1.00	0.00
Avail Cap(c_a), veh/h	242	0	287	184	0	277	161	1398	1185	394	1392	1180
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.9	0.0	62.6	68.8	0.0	60.2	45.7	10.6	4.9	11.5	19.2	4.9
Incr Delay (d2), s/veh	3.3	0.0	2.2	1.6	0.0	0.5	6.1	3.4	0.1	0.2	24.2	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	4.2	0.0	4.0	1.6	0.0	1.4	2.0	17.6	0.3	0.5	49.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.2	0.0	64.8	70.4	0.0	60.8	51.8	14.0	5.0	11.6	43.4	4.9
LnGrp LOS	E	A	E	E	A	E	D	B	A	B	F	A
Approach Vol, veh/h		213			80			1133			1441	
Approach Delay, s/veh		67.5			65.6			15.8			42.3	
Approach LOS		E			E			B			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	117.2		22.7	9.7	117.6		22.7				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	3.3	113.7		16.6	2.9	47.8		15.2				
Green Ext Time (p_c), s	0.0	0.0		0.5	0.0	24.2		0.2				

Intersection Summary												
HCM 6th Ctrl Delay				34.4								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	15.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↗	↗	↘
Traffic Vol, veh/h	61	47	15	892	1218	20
Future Vol, veh/h	61	47	15	892	1218	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	52	16	980	1338	22

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2350	-	1338	0	-
Stage 1	1338	-	-	-	-
Stage 2	1012	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	~ 40	0	515	-	-
Stage 1	245	0	-	-	-
Stage 2	351	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 39	-	515	-	-
Mov Cap-2 Maneuver	~ 39	-	-	-	-
Stage 1	237	-	-	-	-
Stage 2	351	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	571.4	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	515	-	39	-	-	-
HCM Lane V/C Ratio	0.032	-	1.719	-	-	-
HCM Control Delay (s)	12.2	-	571.4	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	7.1	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	277	2	97	8	3	220	662	3	13	921	462
Future Volume (vph)	277	2	97	8	3	220	662	3	13	921	462
Lane Group Flow (vph)	0	297	103	0	28	234	704	3	14	980	491
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	16.0	65.0	65.0	15.0	64.0	64.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	13.3%	54.2%	54.2%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.89	0.23		0.07	0.86	0.62	0.00	0.04	1.08	0.52
Control Delay		70.3	13.1		18.8	61.5	19.6	0.0	9.2	83.0	8.7
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		70.3	13.1		18.8	61.5	19.6	0.0	9.2	83.0	8.7
Queue Length 50th (ft)		216	17		7	132	298	0	4	~848	75
Queue Length 95th (ft)		#351	60		30	#320	558	0	12	#1099	168
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		378	507		450	271	1144	1000	411	911	939
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.79	0.20		0.06	0.86	0.62	0.00	0.03	1.08	0.52

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3a.No Build 2034 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↑	↘	↖	↗	↘
Traffic Volume (veh/h)	277	2	97	8	3	15	220	662	3	13	921	462
Future Volume (veh/h)	277	2	97	8	3	15	220	662	3	13	921	462
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	2	103	9	3	16	234	704	3	14	980	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1	456	40	26	34	216	1046	887	305	912	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.09	0.56	0.56	0.02	0.49	0.00
Sat Flow, veh/h	615	4	1585	0	89	118	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	297	0	103	28	0	0	234	704	3	14	980	0
Grp Sat Flow(s),veh/h/ln	619	0	1585	207	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	5.9	0.0	0.0	0.0	10.5	31.9	0.1	0.5	58.5	0.0
Cycle Q Clear(g_c), s	34.5	0.0	5.9	34.5	0.0	0.0	10.5	31.9	0.1	0.5	58.5	0.0
Prop In Lane	0.99		1.00	0.32		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	456	99	0	0	216	1046	887	305	912	
V/C Ratio(X)	1.25	0.00	0.23	0.28	0.00	0.00	1.08	0.67	0.00	0.05	1.07	
Avail Cap(c_a), veh/h	238	0	456	99	0	0	216	1046	887	419	912	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.1	0.0	32.6	34.8	0.0	0.0	39.7	18.7	11.7	17.2	30.7	0.0
Incr Delay (d2), s/veh	142.1	0.0	0.2	1.5	0.0	0.0	85.4	3.5	0.0	0.1	52.0	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	16.5	0.0	2.4	0.6	0.0	0.0	11.5	13.8	0.0	0.2	37.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	189.2	0.0	32.8	36.3	0.0	0.0	125.1	22.1	11.7	17.3	82.8	0.0
LnGrp LOS	F	A	C	D	A	A	F	C	B	B	F	
Approach Vol, veh/h		400			28			941			994	
Approach Delay, s/veh		148.9			36.3			47.7			81.8	
Approach LOS		F			D			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	64.0		40.0	7.4	72.6		40.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	10.5	58.5		34.5	9.5	59.5		34.5				
Max Q Clear Time (g_c+I1), s	12.5	60.5		36.5	2.5	33.9		36.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay	79.1
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection												
Int Delay, s/veh	15.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Vol, veh/h	44	0	35	0	0	11	31	1388	6	24	1400	66
Future Vol, veh/h	44	0	35	0	0	11	31	1388	6	24	1400	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	75	-	-	75	70	-	-	50	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	0	36	0	0	11	32	1431	6	25	1443	68

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2273	2994	722	2270	3059	719	1511	0	0	1437	0	0
Stage 1	1493	1493	-	1498	1498	-	-	-	-	-	-	-
Stage 2	780	1501	-	772	1561	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 22	13	369	22	12	371	439	-	-	468	-	-
Stage 1	129	185	-	128	184	-	-	-	-	-	-	-
Stage 2	354	183	-	358	171	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 19	11	369	18	11	371	439	-	-	468	-	-
Mov Cap-2 Maneuver	~ 19	11	-	18	11	-	-	-	-	-	-	-
Stage 1	120	175	-	119	171	-	-	-	-	-	-	-
Stage 2	318	170	-	306	162	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	594.8	15	0.3	0.2
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	439	-	-	19	369	-	371	468	-	-
HCM Lane V/C Ratio	0.073	-	-	2.387	0.098	-	0.031	0.053	-	-
HCM Control Delay (s)	13.8	-	-	1055.3	15.8	0	15	13.1	-	-
HCM Lane LOS	B	-	-	F	C	A	C	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	6.1	0.3	-	0.1	0.2	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

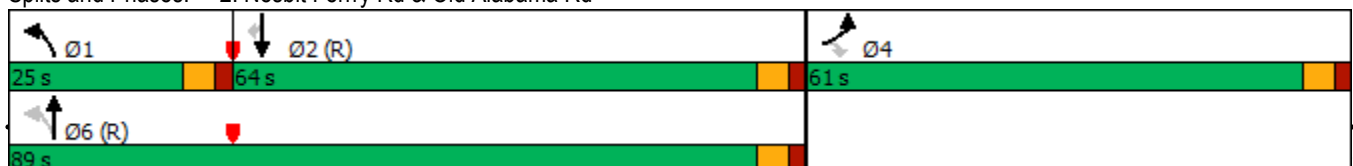


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	839	636	318	538	878	593
Future Volume (vph)	839	636	318	538	878	593
Lane Group Flow (vph)	874	663	331	560	915	618
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	61.0	61.0	25.0	89.0	64.0	64.0
Total Split (%)	40.7%	40.7%	16.7%	59.3%	42.7%	42.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.78	0.92	0.92	0.50	1.26	0.78
Control Delay	50.9	43.8	79.0	17.8	166.7	28.0
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0
Total Delay	50.9	43.9	79.0	17.8	166.7	28.0
Queue Length 50th (ft)	389	371	~262	236	~1119	298
Queue Length 95th (ft)	447	#564	#554	298	#1379	470
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1270	779	359	1121	726	795
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	3	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.85	0.92	0.50	1.26	0.78

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd





HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

3b.No Build 2034 PM  
 05/17/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	839	636	318	538	878	593
Future Volume (veh/h)	839	636	318	538	878	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	874	662	331	560	915	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1279	586	280	1041	729	
Arrive On Green	0.37	0.37	0.13	0.56	0.39	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	874	662	331	560	915	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	32.0	55.5	19.5	28.4	58.5	0.0
Cycle Q Clear(g_c), s	32.0	55.5	19.5	28.4	58.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1279	586	280	1041	729	
V/C Ratio(X)	0.68	1.13	1.18	0.54	1.25	
Avail Cap(c_a), veh/h	1279	586	280	1041	729	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	39.8	47.3	51.6	21.0	45.7	0.0
Incr Delay (d2), s/veh	1.5	78.0	113.1	2.0	125.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	33.8	14.9	12.7	51.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.4	125.2	164.7	23.0	171.3	0.0
LnGrp LOS	D	F	F	C	F	
Approach Vol, veh/h	1536			891	915	
Approach Delay, s/veh	77.5			75.7	171.3	
Approach LOS	E			E	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	64.0		61.0		89.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	19.5	58.5		55.5		83.5
Max Q Clear Time (g_c+I1), s	21.5	60.5		57.5		30.4
Green Ext Time (p_c), s	0.0	0.0		0.0		8.5

Intersection Summary

HCM 6th Ctrl Delay	102.7
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

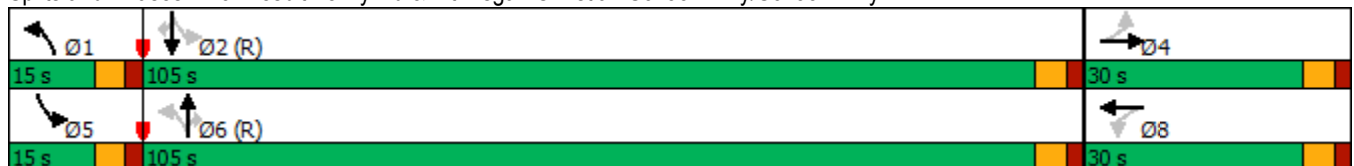


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↖	↖	↗	↖
Traffic Volume (vph)	14	0	4	1	11	967	8	13	1359	3
Future Volume (vph)	14	0	4	1	11	967	8	13	1359	3
Lane Group Flow (vph)	15	11	4	9	12	1040	9	14	1461	3
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.20	0.05	0.05	0.10	0.09	0.63	0.01	0.03	0.88	0.00
Control Delay	74.1	0.4	68.2	38.9	2.6	6.4	0.0	1.2	14.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0
Total Delay	74.1	0.4	68.2	38.9	2.6	6.4	0.0	1.2	17.0	0.0
Queue Length 50th (ft)	14	0	4	1	1	197	0	1	642	0
Queue Length 95th (ft)	39	0	17	21	4	569	0	m1	m325	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	248	381	248	270	184	1663	1419	469	1663	1419
Starvation Cap Reductn	0	0	0	0	0	0	0	0	107	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.03	0.02	0.03	0.07	0.63	0.01	0.03	0.94	0.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

3b.No Build 2034 PM

05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↑	↗
Traffic Volume (veh/h)	14	0	10	4	1	7	11	967	8	13	1359	3
Future Volume (veh/h)	14	0	10	4	1	7	11	967	8	13	1359	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	0	11	4	1	8	12	1040	9	14	1461	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	0	51	84	6	46	177	1577	1336	422	1580	1339
Arrive On Green	0.03	0.00	0.03	0.03	0.03	0.03	0.01	0.84	0.84	0.01	0.84	0.84
Sat Flow, veh/h	1406	0	1585	1404	179	1433	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	0	11	4	0	9	12	1040	9	14	1461	3
Grp Sat Flow(s),veh/h/ln	1406	0	1585	1404	0	1612	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.6	0.0	1.0	0.4	0.0	0.8	0.1	29.5	0.1	0.2	83.1	0.0
Cycle Q Clear(g_c), s	2.4	0.0	1.0	1.4	0.0	0.8	0.1	29.5	0.1	0.2	83.1	0.0
Prop In Lane	1.00		1.00	1.00		0.89	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	0	51	84	0	52	177	1577	1336	422	1580	1339
V/C Ratio(X)	0.18	0.00	0.22	0.05	0.00	0.17	0.07	0.66	0.01	0.03	0.92	0.00
Avail Cap(c_a), veh/h	270	0	259	268	0	263	266	1577	1336	509	1580	1339
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.8	0.0	70.8	71.4	0.0	70.7	25.2	4.2	1.9	4.5	8.3	1.8
Incr Delay (d2), s/veh	1.0	0.0	2.1	0.2	0.0	1.6	0.2	2.2	0.0	0.0	10.6	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	0.6	0.0	0.4	0.2	0.0	0.4	0.3	8.5	0.0	0.1	25.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.8	0.0	72.8	71.7	0.0	72.2	25.4	6.3	1.9	4.5	18.9	1.8
LnGrp LOS	E	A	E	E	A	E	C	A	A	A	B	A
Approach Vol, veh/h		26			13			1061			1478	
Approach Delay, s/veh		72.8			72.1			6.5			18.7	
Approach LOS		E			E			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	132.2		10.3	7.7	132.0		10.3				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.1	85.1		4.4	2.2	31.5		3.4				
Green Ext Time (p_c), s	0.0	13.6		0.0	0.0	27.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	24	17	58	961	1304	69
Future Vol, veh/h	24	17	58	961	1304	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	18	61	1012	1373	73

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2507	-	1373	0	-	0
Stage 1	1373	-	-	-	-	-
Stage 2	1134	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	31	0	500	-	-	-
Stage 1	235	0	-	-	-	-
Stage 2	307	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	27	-	500	-	-	-
Mov Cap-2 Maneuver	27	-	-	-	-	-
Stage 1	206	-	-	-	-	-
Stage 2	307	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	361.2	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	500	-	27	-	-	-
HCM Lane V/C Ratio	0.122	-	0.936	-	-	-
HCM Control Delay (s)	13.2	-	361.2	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.4	-	3	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3b.No Build 2034 PM

05/17/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	382	3	134	8	6	113	656	9	14	899	376
Future Volume (vph)	382	3	134	8	6	113	656	9	14	899	376
Lane Group Flow (vph)	0	397	138	0	25	116	676	9	14	927	388
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	41.0	41.0	41.0	41.0	41.0	15.0	64.0	64.0	15.0	64.0	64.0
Total Split (%)	34.2%	34.2%	34.2%	34.2%	34.2%	12.5%	53.3%	53.3%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		1.02	0.27		0.05	0.63	0.63	0.01	0.04	1.00	0.42
Control Delay		91.9	17.1		20.8	34.6	21.8	0.0	9.7	61.3	7.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		91.9	17.1		20.8	34.6	21.8	0.0	9.7	61.3	7.2
Queue Length 50th (ft)		~316	37		8	36	298	0	4	~719	49
Queue Length 95th (ft)		#521	90		29	102	533	0	12	#1010	119
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		391	519		464	199	1067	938	382	924	921
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		1.02	0.27		0.05	0.58	0.63	0.01	0.04	1.00	0.42

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3b.No Build 2034 PM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↑	↘	↖	↗	↘
Traffic Volume (veh/h)	382	3	134	8	6	11	113	656	9	14	899	376
Future Volume (veh/h)	382	3	134	8	6	11	113	656	9	14	899	376
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	394	3	138	8	6	11	116	676	9	14	927	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	1	469	40	34	27	172	1031	874	312	973	
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	0.55	0.55	0.02	0.52	0.00
Sat Flow, veh/h	611	5	1585	0	116	91	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	397	0	138	25	0	0	116	676	9	14	927	0
Grp Sat Flow(s),veh/h/ln	615	0	1585	207	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	8.1	0.0	0.0	0.0	3.6	30.5	0.3	0.4	56.6	0.0
Cycle Q Clear(g_c), s	35.5	0.0	8.1	35.5	0.0	0.0	3.6	30.5	0.3	0.4	56.6	0.0
Prop In Lane	0.99		1.00	0.32		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	0	469	101	0	0	172	1031	874	312	973	
V/C Ratio(X)	1.64	0.00	0.29	0.25	0.00	0.00	0.67	0.66	0.01	0.04	0.95	
Avail Cap(c_a), veh/h	242	0	469	101	0	0	230	1031	874	426	973	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.6	0.0	32.6	34.3	0.0	0.0	27.6	18.9	12.2	16.1	27.4	0.0
Incr Delay (d2), s/veh	306.8	0.0	0.3	1.3	0.0	0.0	4.6	3.3	0.0	0.1	19.5	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	27.9	0.0	3.2	0.6	0.0	0.0	1.9	13.3	0.1	0.2	28.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	353.4	0.0	32.9	35.5	0.0	0.0	32.2	22.2	12.2	16.1	46.8	0.0
LnGrp LOS	F	A	C	D	A	A	C	C	B	B	D	
Approach Vol, veh/h		535			25			801			941	
Approach Delay, s/veh		270.7			35.5			23.5			46.4	
Approach LOS		F			D			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	67.9		41.0	7.4	71.6		41.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	58.5		35.5	9.5	58.5		35.5				
Max Q Clear Time (g_c+I1), s	5.6	58.6		37.5	2.4	32.5		37.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	9.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	90.5
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕↗	↖	↕↗	↗
Traffic Volume (vph)	11	1	10	87	1	249	11	1212	42	1115	11
Future Volume (vph)	11	1	10	87	1	249	11	1212	42	1115	11
Lane Group Flow (vph)	0	14	12	0	103	293	13	1475	49	1312	13
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	70.0	70.0	70.0	70.0	70.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.04	0.03		0.35	0.75	0.07	0.66	0.34	0.58	0.01
Control Delay		28.9	4.8		33.5	38.7	7.5	11.1	15.6	10.0	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		28.9	4.8		33.5	38.7	7.5	11.1	15.6	10.0	1.2
Queue Length 50th (ft)		6	0		47	119	2	218	10	180	0
Queue Length 95th (ft)		21	6		96	213	10	306	37	256	3
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		471	526		429	546	237	2809	181	2821	1267
Starvation Cap Reductn		0	0		0	0	0	145	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.03	0.02		0.24	0.54	0.05	0.55	0.27	0.47	0.01

Intersection Summary

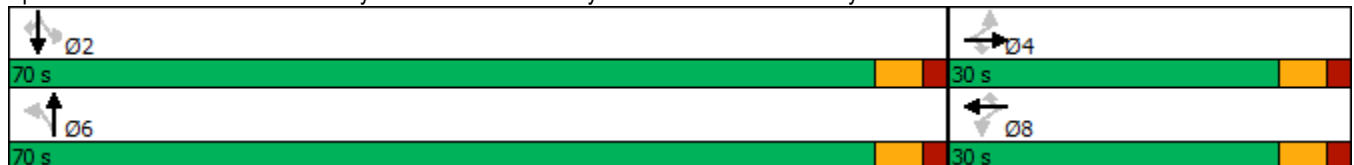
Cycle Length: 100

Actuated Cycle Length: 81.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

3c.No Build 2034 Dismissal  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Volume (veh/h)	11	1	10	87	1	249	11	1212	42	42	1115	11
Future Volume (veh/h)	11	1	10	87	1	249	11	1212	42	42	1115	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	1	12	102	1	293	13	1426	49	49	1312	13
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	3	426	79	0	426	237	2141	73	202	2170	968
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	0	12	1585	0	1	1585	414	3505	120	358	3554	1585
Grp Volume(v), veh/h	14	0	12	103	0	293	13	722	753	49	1312	13
Grp Sat Flow(s),veh/h/ln	12	0	1585	1	0	1585	414	1777	1849	358	1777	1585
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	15.1	1.8	24.3	24.4	9.5	20.8	0.3
Cycle Q Clear(g_c), s	24.5	0.0	0.5	24.5	0.0	15.1	22.6	24.3	24.4	33.9	20.8	0.3
Prop In Lane	0.93		1.00	0.99		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	79	0	426	79	0	426	237	1085	1129	202	2170	968
V/C Ratio(X)	0.18	0.00	0.03	1.30	0.00	0.69	0.05	0.67	0.67	0.24	0.60	0.01
Avail Cap(c_a), veh/h	79	0	426	79	0	426	277	1257	1307	236	2513	1121
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	24.6	45.5	0.0	29.9	17.9	11.6	11.7	22.8	11.0	7.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	202.9	0.0	4.6	0.2	1.8	1.7	1.3	0.6	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	0.3	0.0	0.2	6.2	0.0	6.3	0.2	8.5	8.8	0.8	7.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	0.0	24.6	248.4	0.0	34.5	18.1	13.4	13.4	24.1	11.6	7.0
LnGrp LOS	D	A	C	F	A	C	B	B	B	C	B	A
Approach Vol, veh/h		26			396			1488			1374	
Approach Delay, s/veh		33.5			90.2			13.4			12.0	
Approach LOS		C			F			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		61.2		30.0		61.2		30.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		64.5		24.5		64.5		24.5				
Max Q Clear Time (g_c+I1), s		35.9		26.5		26.4		26.5				
Green Ext Time (p_c), s		19.8		0.0		25.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖ ↗	↖	↖	↖	↖	↖
Traffic Volume (vph)	834	450	292	431	697	515
Future Volume (vph)	834	450	292	431	697	515
Lane Group Flow (vph)	887	479	311	459	741	548
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	60.0	60.0	37.0	90.0	53.0	53.0
Total Split (%)	40.0%	40.0%	24.7%	60.0%	35.3%	35.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.84	0.67	0.90	0.40	0.96	0.67
Control Delay	55.9	18.1	73.0	17.4	66.8	22.5
Queue Delay	0.0	0.0	0.0	0.0	20.6	0.1
Total Delay	55.9	18.1	73.0	17.4	87.4	22.7
Queue Length 50th (ft)	416	131	253	190	711	213
Queue Length 95th (ft)	461	242	380	367	#1154	415
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1247	781	416	1151	772	824
Starvation Cap Reductn	0	0	0	0	62	18
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.61	0.75	0.40	1.04	0.68

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (veh/h)	834	450	292	431	697	515
Future Volume (veh/h)	834	450	292	431	697	515
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	887	479	311	459	741	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1136	521	337	1118	759	
Arrive On Green	0.33	0.33	0.16	0.60	0.41	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	887	479	311	459	741	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	34.8	43.6	20.7	19.6	58.5	0.0
Cycle Q Clear(g_c), s	34.8	43.6	20.7	19.6	58.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1136	521	337	1118	759	
V/C Ratio(X)	0.78	0.92	0.92	0.41	0.98	
Avail Cap(c_a), veh/h	1256	576	434	1118	759	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.79	0.00
Uniform Delay (d), s/veh	45.5	48.4	48.0	16.1	43.9	0.0
Incr Delay (d2), s/veh	3.0	19.0	22.0	1.1	23.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.0	19.5	13.5	8.5	31.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.4	67.5	70.0	17.2	67.7	0.0
LnGrp LOS	D	E	E	B	E	
Approach Vol, veh/h	1366			770	741	
Approach Delay, s/veh	55.1			38.5	67.7	
Approach LOS	E			D	E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	28.8	66.4		54.8		95.2
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	47.5		54.5		84.5
Max Q Clear Time (g_c+I1), s	22.7	60.5		45.6		21.6
Green Ext Time (p_c), s	0.6	0.0		3.7		6.5

Intersection Summary

HCM 6th Ctrl Delay	53.9
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	87	10	30	11	31	745	18	63	935	21
Future Volume (vph)	87	10	30	11	31	745	18	63	935	21
Lane Group Flow (vph)	96	57	33	124	34	819	20	69	1027	23
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.82	0.24	0.20	0.42	0.11	0.60	0.02	0.16	0.74	0.02
Control Delay	109.2	21.5	59.8	16.6	4.6	13.0	0.0	1.8	7.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
Total Delay	109.2	21.5	59.8	16.6	4.6	13.0	0.0	1.8	8.8	0.0
Queue Length 50th (ft)	93	10	30	11	6	365	0	4	99	0
Queue Length 95th (ft)	#157	52	62	71	16	575	0	m7	m203	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	157	305	219	356	337	1375	1184	471	1380	1188
Starvation Cap Reductn	0	0	0	0	0	0	0	0	136	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.19	0.15	0.35	0.10	0.60	0.02	0.15	0.83	0.02

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 100

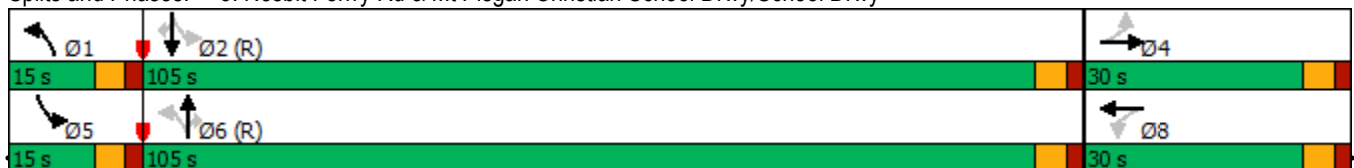
Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

3c.No Build 2034 Dismissal

05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	10	42	30	11	102	31	745	18	63	935	21
Future Volume (veh/h)	87	10	42	30	11	102	31	745	18	63	935	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	11	46	33	12	112	34	819	20	69	1027	23
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	50	209	221	25	230	280	1309	1109	410	1321	1119
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.70	0.70	0.03	0.71	0.71
Sat Flow, veh/h	1267	315	1318	1346	156	1453	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	96	0	57	33	0	124	34	819	20	69	1027	23
Grp Sat Flow(s),veh/h/ln	1267	0	1633	1346	0	1609	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	11.2	0.0	4.6	3.3	0.0	10.5	0.8	35.1	0.6	1.6	53.7	0.6
Cycle Q Clear(g_c), s	21.8	0.0	4.6	7.9	0.0	10.5	0.8	35.1	0.6	1.6	53.7	0.6
Prop In Lane	1.00		0.81	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	259	221	0	255	280	1309	1109	410	1321	1119
V/C Ratio(X)	0.60	0.00	0.22	0.15	0.00	0.49	0.12	0.63	0.02	0.17	0.78	0.02
Avail Cap(c_a), veh/h	166	0	267	227	0	263	348	1309	1109	466	1321	1119
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.4	0.0	55.0	58.4	0.0	57.5	15.7	12.0	6.8	10.2	14.4	6.6
Incr Delay (d2), s/veh	5.6	0.0	0.4	0.3	0.0	1.4	0.2	2.3	0.0	0.2	4.6	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	3.9	0.0	1.9	1.2	0.0	4.5	0.4	14.2	0.2	0.6	21.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.0	0.0	55.4	58.7	0.0	59.0	15.9	14.3	6.9	10.4	18.9	6.6
LnGrp LOS	E	A	E	E	A	E	B	B	A	B	B	A
Approach Vol, veh/h		153			157			873				1119
Approach Delay, s/veh		66.5			58.9			14.2				18.1
Approach LOS		E			E			B				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	111.4		29.3	10.2	110.5		29.3				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.8	55.7		23.8	3.6	37.1		12.5				
Green Ext Time (p_c), s	0.0	22.2		0.0	0.1	16.5		0.6				

Intersection Summary

HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↗	↗	↗
Traffic Vol, veh/h	34	17	30	783	993	24
Future Vol, veh/h	34	17	30	783	993	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	19	33	860	1091	26

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2017	-	1091	0	-	0
Stage 1	1091	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	64	0	640	-	-	-
Stage 1	322	0	-	-	-	-
Stage 2	386	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	61	-	640	-	-	-
Mov Cap-2 Maneuver	61	-	-	-	-	-
Stage 1	305	-	-	-	-	-
Stage 2	386	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	131.3	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	640	-	61	-	-	-
HCM Lane V/C Ratio	0.052	-	0.613	-	-	-
HCM Control Delay (s)	10.9	-	131.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	2.5	-	-	-

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

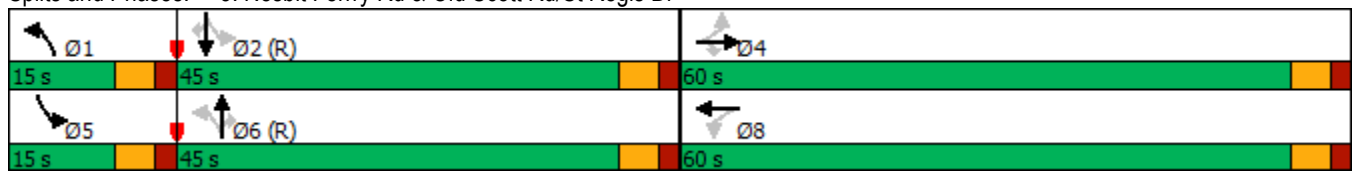


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	351	12	124	9	12	88	468	8	21	631	296
Future Volume (vph)	351	12	124	9	12	88	468	8	21	631	296
Lane Group Flow (vph)	0	395	135	0	38	96	509	9	23	686	322
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.84	0.22		0.07	0.43	0.56	0.01	0.06	0.85	0.39
Control Delay		51.1	11.8		14.7	21.5	28.5	0.0	16.4	43.7	9.7
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		51.1	11.8		14.7	21.5	28.5	0.0	16.4	43.7	9.7
Queue Length 50th (ft)		276	32		11	34	294	0	8	474	42
Queue Length 95th (ft)		353	65		30	76	492	0	25	#844	133
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		596	758		725	239	911	811	413	811	819
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.66	0.18		0.05	0.40	0.56	0.01	0.06	0.85	0.39

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3c.No Build 2034 Dismissal  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↑	↘	↖	↗	↘
Traffic Volume (veh/h)	351	12	124	9	12	14	88	468	8	21	631	296
Future Volume (veh/h)	351	12	124	9	12	14	88	468	8	21	631	296
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	382	13	135	10	13	15	96	509	9	23	686	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	8	720	38	49	32	147	722	612	238	673	
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.05	0.39	0.39	0.02	0.36	0.00
Sat Flow, veh/h	493	17	1585	0	109	71	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	395	0	135	38	0	0	96	509	9	23	686	0
Grp Sat Flow(s),veh/h/ln	509	0	1585	179	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	6.1	0.0	0.0	0.0	4.0	27.5	0.4	1.0	43.1	0.0
Cycle Q Clear(g_c), s	54.5	0.0	6.1	54.5	0.0	0.0	4.0	27.5	0.4	1.0	43.1	0.0
Prop In Lane	0.97		1.00	0.26		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	0	720	119	0	0	147	722	612	238	673	
V/C Ratio(X)	1.36	0.00	0.19	0.32	0.00	0.00	0.65	0.70	0.01	0.10	1.02	
Avail Cap(c_a), veh/h	290	0	720	119	0	0	201	722	612	339	673	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.3	0.0	19.5	28.2	0.0	0.0	30.0	31.1	22.7	25.8	38.4	0.0
Incr Delay (d2), s/veh	182.9	0.0	0.1	1.5	0.0	0.0	4.8	5.7	0.0	0.2	39.8	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	23.5	0.0	2.3	0.7	0.0	0.0	1.9	13.1	0.2	0.4	26.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	221.2	0.0	19.7	29.8	0.0	0.0	34.8	36.8	22.8	25.9	78.3	0.0
LnGrp LOS	F	A	B	C	A	A	C	D	C	C	F	
Approach Vol, veh/h		530			38			614			709	
Approach Delay, s/veh		169.9			29.8			36.3			76.6	
Approach LOS		F			C			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	48.6		60.0	8.2	51.8		60.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	39.5		54.5	9.5	39.5		54.5				
Max Q Clear Time (g_c+I1), s	6.0	45.1		56.5	3.0	29.5		56.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	3.7		0.0				

Intersection Summary

HCM 6th Ctrl Delay	88.7
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

**FUTURE 2034 "NO-BUILD" IMPROVED**



Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

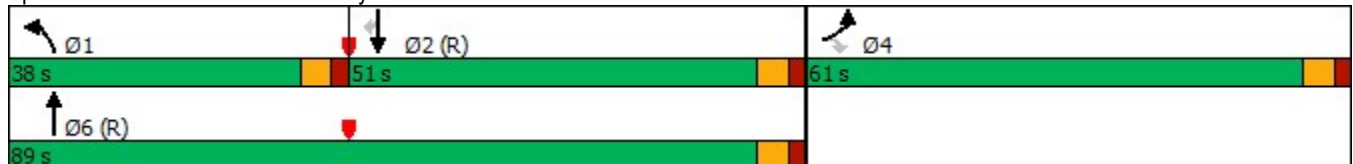


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↖	↖	↖↖	↑	↑↑	↖
Traffic Volume (vph)	658	582	472	329	770	782
Future Volume (vph)	658	582	472	329	770	782
Lane Group Flow (vph)	708	626	508	354	828	841
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	61.0	61.0	38.0	89.0	51.0	51.0
Total Split (%)	40.7%	40.7%	25.3%	59.3%	34.0%	34.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.78	0.82	0.81	0.29	0.53	0.77
Control Delay	57.2	21.3	65.0	15.2	33.9	12.0
Queue Delay	0.0	1.3	0.0	0.0	2.2	0.3
Total Delay	57.2	22.6	65.0	15.2	36.1	12.3
Queue Length 50th (ft)	334	155	0	140	305	94
Queue Length 95th (ft)	365	300	308	297	450	368
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1270	881	746	1234	1570	1094
Starvation Cap Reductn	0	0	0	0	0	32
Spillback Cap Reductn	0	105	0	0	573	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.81	0.68	0.29	0.83	0.79

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

3d.No Build 2034 AM - Improved  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶↶	↶	↶↶	↷
Traffic Volume (veh/h)	658	582	472	329	770	782
Future Volume (veh/h)	658	582	472	329	770	782
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	708	626	508	354	828	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1279	586	573	1041	1259	
Arrive On Green	0.37	0.37	0.17	0.56	0.35	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	708	626	508	354	828	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	24.3	55.5	21.6	15.5	29.4	0.0
Cycle Q Clear(g_c), s	24.3	55.5	21.6	15.5	29.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1279	586	573	1041	1259	
V/C Ratio(X)	0.55	1.07	0.89	0.34	0.66	
Avail Cap(c_a), veh/h	1279	586	749	1041	1259	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.67	0.00
Uniform Delay (d), s/veh	37.4	47.3	61.2	18.2	40.8	0.0
Incr Delay (d2), s/veh	0.5	56.4	10.2	0.9	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	30.3	10.2	6.9	13.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.0	103.7	71.4	19.1	42.6	0.0
LnGrp LOS	D	F	E	B	D	
Approach Vol, veh/h	1334			862	828	
Approach Delay, s/veh	68.8			49.9	42.6	
Approach LOS	E			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	30.4	58.6		61.0		89.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	32.5	45.5		55.5		83.5
Max Q Clear Time (g_c+I1), s	23.6	31.4		57.5		17.5
Green Ext Time (p_c), s	1.3	7.4		0.0		4.7

Intersection Summary

HCM 6th Ctrl Delay	56.2
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3d.No Build 2034 AM - Improved

05/29/2024

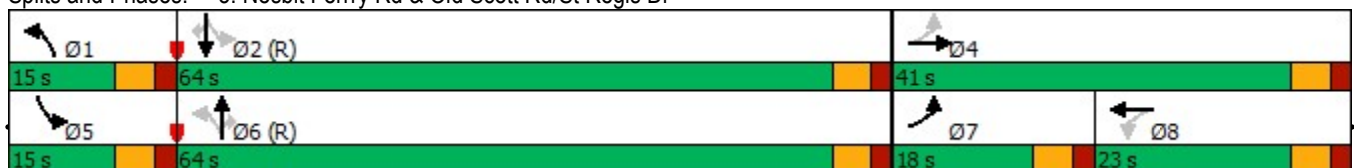


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↕	↖	↗	↖	↗	↗	↖
Traffic Volume (vph)	277	2	8	3	220	662	3	13	921	462
Future Volume (vph)	277	2	8	3	220	662	3	13	921	462
Lane Group Flow (vph)	295	105	0	28	234	704	3	14	980	491
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	18.0	41.0	23.0	23.0	15.0	64.0	64.0	15.0	64.0	64.0
Total Split (%)	15.0%	34.2%	19.2%	19.2%	12.5%	53.3%	53.3%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.14	0.30		0.28	0.62	0.54	0.00	0.03	1.02	0.50
Control Delay	143.6	9.8		38.3	35.1	13.1	0.0	7.3	63.7	8.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	143.6	9.8		38.3	35.1	13.1	0.0	7.3	63.7	8.3
Queue Length 50th (ft)	220	1		9	116	232	0	3	~848	75
Queue Length 95th (ft)	#393	47		39	#229	477	0	10	#1099	168
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	258	542		227	375	1302	1144	506	962	974
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.14	0.19		0.12	0.62	0.54	0.00	0.03	1.02	0.50

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 125  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3d.No Build 2034 AM - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	2	97	8	3	15	220	662	3	13	921	462
Future Volume (veh/h)	277	2	97	8	3	15	220	662	3	13	921	462
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	2	103	9	3	16	234	704	3	14	980	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	6	311	56	17	44	266	1211	1026	410	1117	
Arrive On Green	0.10	0.20	0.20	0.05	0.05	0.05	0.07	0.65	0.65	0.02	0.60	0.00
Sat Flow, veh/h	1781	30	1559	322	348	894	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	295	0	105	28	0	0	234	704	3	14	980	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1564	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	12.5	0.0	6.8	0.0	0.0	0.0	5.8	25.5	0.1	0.4	53.2	0.0
Cycle Q Clear(g_c), s	12.5	0.0	6.8	1.9	0.0	0.0	5.8	25.5	0.1	0.4	53.2	0.0
Prop In Lane	1.00		0.98	0.32		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	349	0	317	117	0	0	266	1211	1026	410	1117	
V/C Ratio(X)	0.84	0.00	0.33	0.24	0.00	0.00	0.88	0.58	0.00	0.03	0.88	
Avail Cap(c_a), veh/h	349	0	470	261	0	0	289	1211	1026	523	1117	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.6	0.0	41.2	55.1	0.0	0.0	26.2	12.0	7.5	10.7	20.5	0.0
Incr Delay (d2), s/veh	17.1	0.0	0.6	1.0	0.0	0.0	24.1	2.0	0.0	0.0	9.8	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	10.3	0.0	2.7	0.9	0.0	0.0	5.8	10.2	0.0	0.1	23.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.7	0.0	41.8	56.2	0.0	0.0	50.3	14.0	7.5	10.7	30.3	0.0
LnGrp LOS	E	A	D	E	A	A	D	B	A	B	C	
Approach Vol, veh/h		400			28			941			994	
Approach Delay, s/veh		60.1			56.2			23.0			30.0	
Approach LOS		E			E			C			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.4	77.1		29.4	7.4	83.2	18.0	11.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	58.5		35.5	9.5	58.5	12.5	17.5				
Max Q Clear Time (g_c+I1), s	7.8	55.2		8.8	2.4	27.5	14.5	3.9				
Green Ext Time (p_c), s	0.1	2.6		0.5	0.0	10.3	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	32.6
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶↶	↶	↶↶	↷
Traffic Volume (veh/h)	839	636	318	538	878	593
Future Volume (veh/h)	839	636	318	538	878	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	874	662	331	560	915	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1417	650	381	966	1314	
Arrive On Green	0.41	0.41	0.11	0.52	0.37	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	874	662	331	560	915	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	30.0	61.5	14.1	31.0	32.8	0.0
Cycle Q Clear(g_c), s	30.0	61.5	14.1	31.0	32.8	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1417	650	381	966	1314	
V/C Ratio(X)	0.62	1.02	0.87	0.58	0.70	
Avail Cap(c_a), veh/h	1417	650	449	966	1314	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	34.9	44.2	65.7	25.0	40.1	0.0
Incr Delay (d2), s/veh	0.8	40.1	14.8	2.5	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	30.4	7.0	14.1	14.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.8	84.3	80.5	27.5	43.2	0.0
LnGrp LOS	D	F	F	C	D	
Approach Vol, veh/h	1536			891	915	
Approach Delay, s/veh	56.7			47.2	43.2	
Approach LOS	E			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.0	61.0		67.0		83.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	19.5	52.5		61.5		77.5
Max Q Clear Time (g_c+I1), s	16.1	34.8		63.5		33.0
Green Ext Time (p_c), s	0.4	9.5		0.0		8.2

Intersection Summary

HCM 6th Ctrl Delay	50.5
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
3: Nesbit Ferry Rd & Existing School Southern Drwy

3e.No Build 2034 PM - Improved

05/29/2024

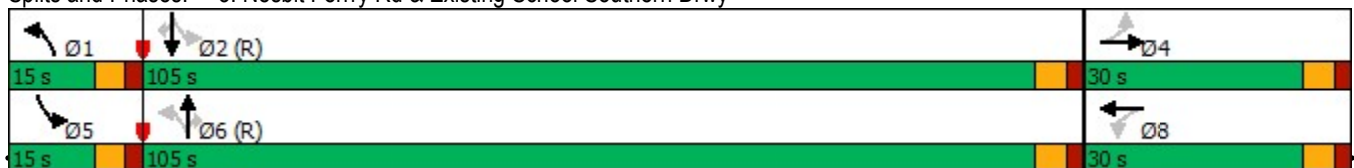


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↖	↖	↗	↖
Traffic Volume (vph)	14	0	4	1	11	967	8	13	1359	3
Future Volume (vph)	14	0	4	1	11	967	8	13	1359	3
Lane Group Flow (vph)	15	11	4	9	12	1040	9	14	1461	3
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.20	0.05	0.05	0.10	0.09	0.63	0.01	0.03	0.88	0.00
Control Delay	74.1	0.4	68.2	38.9	2.6	6.4	0.0	1.3	22.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Total Delay	74.1	0.4	68.2	38.9	2.6	6.4	0.0	1.3	25.0	0.0
Queue Length 50th (ft)	14	0	4	1	1	197	0	1	837	0
Queue Length 95th (ft)	39	0	17	21	4	569	0	m2	#1762	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	248	381	248	270	184	1663	1419	469	1663	1419
Starvation Cap Reductn	0	0	0	0	0	0	0	0	123	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.03	0.02	0.03	0.07	0.63	0.01	0.03	0.95	0.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Existing School Southern Drwy



Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

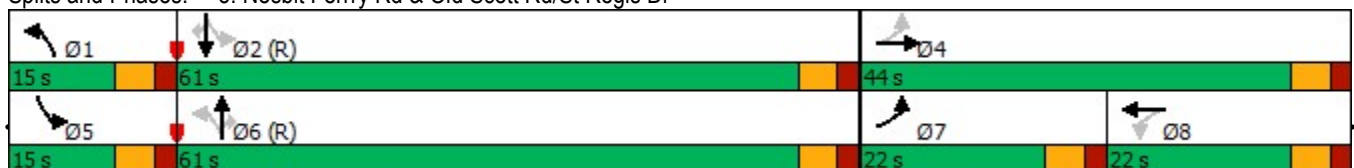


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↕	↖	↗	↗	↖	↗	↖
Traffic Volume (vph)	382	3	8	6	113	656	9	14	899	376
Future Volume (vph)	382	3	8	6	113	656	9	14	899	376
Lane Group Flow (vph)	394	141	0	25	116	676	9	14	927	388
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	22.0	44.0	22.0	22.0	15.0	61.0	61.0	15.0	61.0	61.0
Total Split (%)	18.3%	36.7%	18.3%	18.3%	12.5%	50.8%	50.8%	12.5%	50.8%	50.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.24	0.33		0.26	0.51	0.55	0.01	0.03	0.86	0.38
Control Delay	171.8	8.2		42.4	19.0	15.1	0.0	7.8	32.9	6.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	171.8	8.2		42.4	19.0	15.1	0.0	7.8	32.9	6.5
Queue Length 50th (ft)	~340	2		11	29	247	0	3	614	48
Queue Length 95th (ft)	#525	52		39	79	488	0	11	#1010	128
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	317	603		211	244	1240	1095	482	1082	1027
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.23		0.12	0.48	0.55	0.01	0.03	0.86	0.38

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3e.No Build 2034 PM - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	3	134	8	6	11	113	656	9	14	899	376
Future Volume (veh/h)	382	3	134	8	6	11	113	656	9	14	899	376
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	394	3	138	8	6	11	116	676	9	14	927	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	409	8	363	55	29	35	245	1148	973	387	1098	
Arrive On Green	0.14	0.23	0.23	0.05	0.05	0.05	0.04	0.61	0.61	0.02	0.59	0.00
Sat Flow, veh/h	1781	34	1556	313	577	699	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	394	0	141	25	0	0	116	676	9	14	927	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1589	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	16.5	0.0	9.0	0.0	0.0	0.0	3.1	26.2	0.3	0.4	48.7	0.0
Cycle Q Clear(g_c), s	16.5	0.0	9.0	1.7	0.0	0.0	3.1	26.2	0.3	0.4	48.7	0.0
Prop In Lane	1.00		0.98	0.32		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	409	0	371	119	0	0	245	1148	973	387	1098	
V/C Ratio(X)	0.96	0.00	0.38	0.21	0.00	0.00	0.47	0.59	0.01	0.04	0.84	
Avail Cap(c_a), veh/h	409	0	510	251	0	0	310	1148	973	500	1098	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.8	0.0	38.7	55.0	0.0	0.0	21.0	14.0	9.0	11.8	20.3	0.0
Incr Delay (d2), s/veh	34.6	0.0	0.6	0.9	0.0	0.0	1.4	2.2	0.0	0.0	8.0	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	7.6	0.0	3.5	0.8	0.0	0.0	1.6	10.8	0.1	0.1	21.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.4	0.0	39.4	55.8	0.0	0.0	22.5	16.2	9.0	11.8	28.3	0.0
LnGrp LOS	F	A	D	E	A	A	C	B	A	B	C	
Approach Vol, veh/h		535			25			801			941	
Approach Delay, s/veh		71.8			55.8			17.1			28.0	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	75.9		33.5	7.4	79.2	22.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	55.5		38.5	9.5	55.5	16.5	16.5				
Max Q Clear Time (g_c+I1), s	5.1	50.7		11.0	2.4	28.2	18.5	3.7				
Green Ext Time (p_c), s	0.1	3.6		0.8	0.0	9.3	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	34.7
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

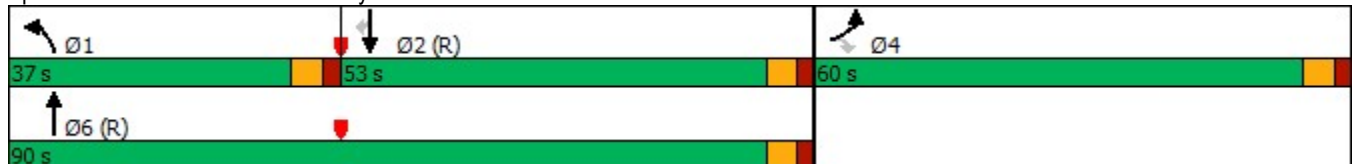


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↖	↗	↖↖	↑	↑↑	↗
Traffic Volume (vph)	834	450	292	431	697	515
Future Volume (vph)	834	450	292	431	697	515
Lane Group Flow (vph)	887	479	311	459	741	548
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	60.0	60.0	37.0	90.0	53.0	53.0
Total Split (%)	40.0%	40.0%	24.7%	60.0%	35.3%	35.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.84	0.67	0.72	0.40	0.46	0.54
Control Delay	55.9	18.1	71.2	17.4	30.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	55.9	18.1	71.2	17.4	30.9	4.6
Queue Length 50th (ft)	416	131	158	190	260	0
Queue Length 95th (ft)	461	242	197	367	370	83
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1247	781	720	1151	1612	1019
Starvation Cap Reductn	0	0	0	0	0	50
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.61	0.43	0.40	0.46	0.57

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (veh/h)	834	450	292	431	697	515
Future Volume (veh/h)	834	450	292	431	697	515
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	887	479	311	459	741	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1136	521	372	1118	1612	
Arrive On Green	0.33	0.33	0.11	0.60	0.45	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	887	479	311	459	741	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	34.8	43.6	13.2	19.6	21.6	0.0
Cycle Q Clear(g_c), s	34.8	43.6	13.2	19.6	21.6	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1136	521	372	1118	1612	
V/C Ratio(X)	0.78	0.92	0.83	0.41	0.46	
Avail Cap(c_a), veh/h	1256	576	726	1118	1612	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.79	0.00
Uniform Delay (d), s/veh	45.5	48.4	65.6	16.1	28.3	0.0
Incr Delay (d2), s/veh	3.0	19.0	5.0	1.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.0	19.5	6.0	8.5	9.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.4	67.5	70.6	17.2	29.0	0.0
LnGrp LOS	D	E	E	B	C	
Approach Vol, veh/h	1366			770	741	
Approach Delay, s/veh	55.1			38.7	29.0	
Approach LOS	E			D	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.7	73.5		54.8		95.2
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	47.5		54.5		84.5
Max Q Clear Time (g_c+I1), s	15.2	23.6		45.6		21.6
Green Ext Time (p_c), s	0.9	9.1		3.7		6.5

Intersection Summary

HCM 6th Ctrl Delay	44.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3f.No Build 2034 Dismissal - Improved

05/29/2024

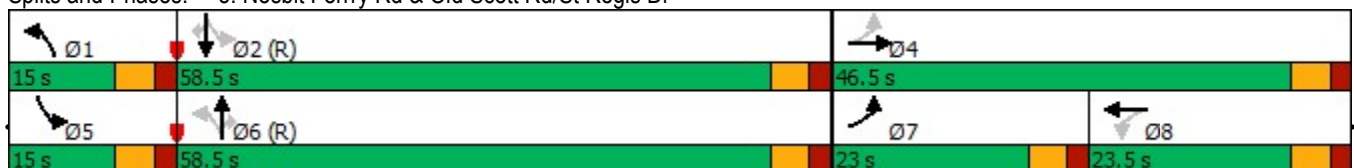


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	351	12	9	12	88	468	8	21	631	296
Future Volume (vph)	351	12	9	12	88	468	8	21	631	296
Lane Group Flow (vph)	382	148	0	38	96	509	9	23	686	322
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	23.0	46.5	23.5	23.5	15.0	58.5	58.5	15.0	58.5	58.5
Total Split (%)	19.2%	38.8%	19.6%	19.6%	12.5%	48.8%	48.8%	12.5%	48.8%	48.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.14	0.33		0.35	0.26	0.43	0.01	0.04	0.64	0.31
Control Delay	134.2	9.1		45.1	9.0	15.2	0.0	8.0	22.1	3.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	134.2	9.1		45.1	9.0	15.2	0.0	8.0	22.1	3.8
Queue Length 50th (ft)	~293	8		17	25	227	0	6	367	16
Queue Length 95th (ft)	#485	58		53	49	344	0	16	560	66
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	335	638		240	395	1177	1046	581	1078	1032
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.14	0.23		0.16	0.24	0.43	0.01	0.04	0.64	0.31

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 85  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

3f.No Build 2034 Dismissal - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↘			↔		↗	↖	↗	↘	↖	↗
Traffic Volume (veh/h)	351	12	124	9	12	14	88	468	8	21	631	296
Future Volume (veh/h)	351	12	124	9	12	14	88	468	8	21	631	296
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	382	13	135	10	13	15	96	509	9	23	686	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	417	34	354	52	35	32	387	1120	949	496	1087	
Arrive On Green	0.15	0.24	0.24	0.05	0.05	0.05	0.04	0.60	0.60	0.02	0.58	0.00
Sat Flow, veh/h	1781	141	1465	279	697	637	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	382	0	148	38	0	0	96	509	9	23	686	0
Grp Sat Flow(s),veh/h/ln	1781	0	1607	1614	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	17.5	0.0	9.2	0.7	0.0	0.0	2.6	18.0	0.3	0.6	29.1	0.0
Cycle Q Clear(g_c), s	17.5	0.0	9.2	2.6	0.0	0.0	2.6	18.0	0.3	0.6	29.1	0.0
Prop In Lane	1.00		0.91	0.26		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	417	0	388	118	0	0	387	1120	949	496	1087	
V/C Ratio(X)	0.92	0.00	0.38	0.32	0.00	0.00	0.25	0.45	0.01	0.05	0.63	
Avail Cap(c_a), veh/h	417	0	549	274	0	0	457	1120	949	597	1087	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.6	0.0	38.0	55.4	0.0	0.0	13.2	13.3	9.7	10.6	16.6	0.0
Incr Delay (d2), s/veh	24.7	0.0	0.6	1.5	0.0	0.0	0.3	1.3	0.0	0.0	2.8	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	5.5	0.0	3.6	1.2	0.0	0.0	1.0	7.4	0.1	0.2	12.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.3	0.0	38.6	56.9	0.0	0.0	13.5	14.6	9.7	10.7	19.4	0.0
LnGrp LOS	E	A	D	E	A	A	B	B	A	B	B	
Approach Vol, veh/h		530			38			614			709	
Approach Delay, s/veh		62.9			56.9			14.4			19.1	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	75.2		34.5	8.2	77.3	23.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	53.0		41.0	9.5	53.0	17.5	18.0				
Max Q Clear Time (g_c+I1), s	4.6	31.1		11.2	2.6	20.0	19.5	4.6				
Green Ext Time (p_c), s	0.1	8.4		0.8	0.0	6.8	0.0	0.1				

Intersection Summary												
HCM 6th Ctrl Delay				30.6								
HCM 6th LOS				C								

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

**FUTURE 2034 PHASE 2 "BUILD"  
INTERSECTION ANALYSIS**

Timings

1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗	↗	↕↕	↗
Traffic Volume (vph)	9	0	12	17	0	54	10	950	127	1556	32
Future Volume (vph)	9	0	12	17	0	54	10	950	127	1556	32
Lane Group Flow (vph)	0	11	15	0	22	68	13	1270	161	1970	41
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	76.0	76.0	76.0	76.0	76.0
Total Split (%)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.10	0.10		0.19	0.35	0.12	0.46	0.54	0.70	0.03
Control Delay		39.4	9.4		42.0	15.8	4.8	3.6	11.6	6.1	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		39.4	9.4		42.0	15.8	4.8	3.6	11.6	6.1	1.2
Queue Length 50th (ft)		6	0		12	0	1	84	23	192	1
Queue Length 95th (ft)		19	9		31	29	5	104	59	216	6
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		296	360		299	393	117	2872	307	2892	1298
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.04		0.07	0.17	0.11	0.44	0.52	0.68	0.03

Intersection Summary

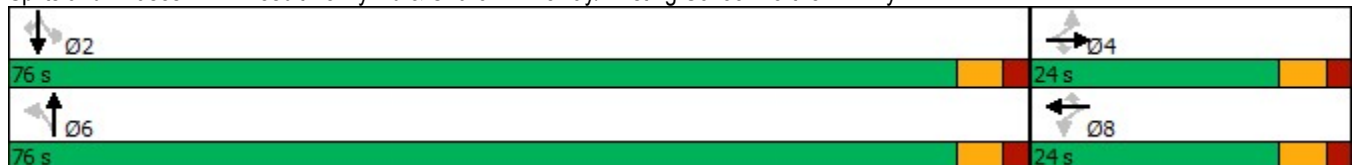
Cycle Length: 100

Actuated Cycle Length: 86.5

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy

6a.Build 2034 AM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Volume (veh/h)	9	0	12	17	0	54	10	950	53	127	1556	32
Future Volume (veh/h)	9	0	12	17	0	54	10	950	53	127	1556	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	0	15	22	0	68	13	1203	67	161	1970	41
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	0	298	74	0	298	143	2396	133	308	2488	1110
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	3	0	1585	3	0	1585	213	3422	190	436	3554	1585
Grp Volume(v), veh/h	11	0	15	22	0	68	13	624	646	161	1970	41
Grp Sat Flow(s),veh/h/ln	3	0	1585	3	0	1585	213	1777	1836	436	1777	1585
Q Serve(g_s), s	0.0	0.0	0.8	0.0	0.0	3.6	4.3	16.0	16.0	26.6	36.7	0.8
Cycle Q Clear(g_c), s	18.5	0.0	0.8	18.5	0.0	3.6	40.9	16.0	16.0	42.6	36.7	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	74	0	298	74	0	298	143	1244	1285	308	2488	1110
V/C Ratio(X)	0.15	0.00	0.05	0.30	0.00	0.23	0.09	0.50	0.50	0.52	0.79	0.04
Avail Cap(c_a), veh/h	74	0	298	74	0	298	147	1274	1316	315	2548	1136
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	0.0	32.7	49.2	0.0	33.9	23.7	6.8	6.8	16.7	9.9	4.5
Incr Delay (d2), s/veh	0.9	0.0	0.1	2.2	0.0	0.4	0.6	0.7	0.7	3.0	2.0	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	0.3	0.0	0.3	0.6	0.0	1.4	0.2	4.9	5.0	2.6	11.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	0.0	32.8	51.4	0.0	34.3	24.2	7.5	7.5	19.7	12.0	4.6
LnGrp LOS	D	A	C	D	A	C	C	A	A	B	B	A
Approach Vol, veh/h		26			90			1283			2172	
Approach Delay, s/veh		40.1			38.4			7.6			12.4	
Approach LOS		D			D			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		74.4		24.0		74.4		24.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		70.5		18.5		70.5		18.5				
Max Q Clear Time (g_c+I1), s		44.6		20.5		42.9		20.5				
Green Ext Time (p_c), s		24.3		0.0		17.6		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				11.5								
HCM 6th LOS				B								

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

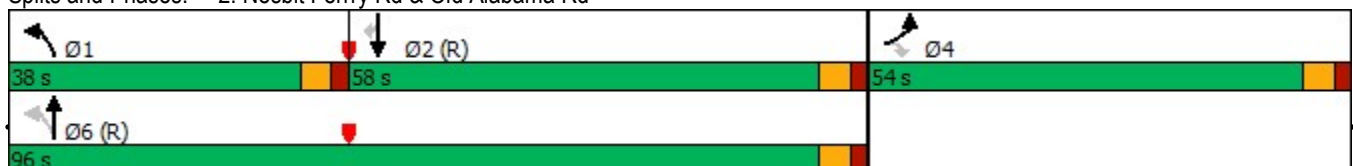


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖ ↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	658	638	507	354	803	782
Future Volume (vph)	658	638	507	354	803	782
Lane Group Flow (vph)	708	686	545	381	863	841
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	54.0	54.0	38.0	96.0	58.0	58.0
Total Split (%)	36.0%	36.0%	25.3%	64.0%	38.7%	38.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.76	0.91	1.04	0.31	1.32	1.04
Control Delay	55.1	35.3	93.1	15.8	195.0	66.6
Queue Delay	0.0	1.0	0.0	0.0	1.2	0.0
Total Delay	55.1	36.3	93.1	15.8	196.3	66.6
Queue Length 50th (ft)	327	276	~545	158	~1089	~616
Queue Length 95th (ft)	374	458	#868	318	#1347	#877
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1110	810	523	1218	652	811
Starvation Cap Reductn	0	0	0	0	26	0
Spillback Cap Reductn	0	28	0	0	102	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.88	1.04	0.31	1.57	1.04

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd





HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

6a.Build 2034 AM  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶	↷	↷	↷
Traffic Volume (veh/h)	658	638	507	354	803	782
Future Volume (veh/h)	658	638	507	354	803	782
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	708	686	545	381	863	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1117	512	434	1128	655	
Arrive On Green	0.32	0.32	0.22	0.60	0.35	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	708	686	545	381	863	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	26.2	48.5	32.5	15.2	52.5	0.0
Cycle Q Clear(g_c), s	26.2	48.5	32.5	15.2	52.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1117	512	434	1128	655	
V/C Ratio(X)	0.63	1.34	1.26	0.34	1.32	
Avail Cap(c_a), veh/h	1117	512	434	1128	655	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.65	0.00
Uniform Delay (d), s/veh	43.2	50.8	50.0	14.8	48.8	0.0
Incr Delay (d2), s/veh	1.2	165.2	132.8	0.8	150.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	42.2	31.5	6.6	51.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.4	215.9	182.8	15.6	199.0	0.0
LnGrp LOS	D	F	F	B	F	
Approach Vol, veh/h	1394			926	863	
Approach Delay, s/veh	128.8			114.0	199.0	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	38.0	58.0		54.0		96.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	32.5	52.5		48.5		90.5
Max Q Clear Time (g_c+I1), s	34.5	54.5		50.5		17.2
Green Ext Time (p_c), s	0.0	0.0		0.0		5.2

Intersection Summary

HCM 6th Ctrl Delay	143.5
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	89	57	48	14	55	894	60	79	1217	3
Future Volume (vph)	89	57	48	14	55	894	60	79	1217	3
Lane Group Flow (vph)	106	107	57	71	65	1064	71	94	1449	4
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.70	0.50	0.47	0.30	0.48	0.79	0.06	0.34	1.05	0.00
Control Delay	86.1	59.4	72.8	23.2	30.2	19.9	2.6	3.1	42.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	20.6	0.0
Total Delay	86.1	59.4	72.8	23.2	30.2	25.7	2.6	3.1	63.4	0.0
Queue Length 50th (ft)	101	85	53	15	11	600	3	9	~806	0
Queue Length 95th (ft)	150	131	91	54	57	844	19	m14	m#1316	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	216	300	174	314	162	1354	1166	305	1381	1188
Starvation Cap Reductn	0	0	0	0	0	237	0	0	102	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.36	0.33	0.23	0.40	0.95	0.06	0.31	1.13	0.00

Intersection Summary

- Cycle Length: 150
- Actuated Cycle Length: 150
- Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
- Natural Cycle: 150
- Control Type: Actuated-Coordinated
- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

6a.Build 2034 AM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	57	33	48	14	45	55	894	60	79	1217	3
Future Volume (veh/h)	89	57	33	48	14	45	55	894	60	79	1217	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	106	68	39	57	17	54	65	1064	71	94	1449	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	149	85	147	53	167	103	1354	1148	285	1357	1150
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.03	0.72	0.72	0.03	0.73	0.73
Sat Flow, veh/h	1329	1115	640	1287	394	1251	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	106	0	107	57	0	71	65	1064	71	94	1449	4
Grp Sat Flow(s),veh/h/ln	1329	0	1755	1287	0	1645	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	11.8	0.0	8.4	6.4	0.0	5.9	1.4	54.6	1.9	2.0	108.8	0.1
Cycle Q Clear(g_c), s	17.6	0.0	8.4	14.9	0.0	5.9	1.4	54.6	1.9	2.0	108.8	0.1
Prop In Lane	1.00		0.36	1.00		0.76	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	0	234	147	0	219	103	1354	1148	285	1357	1150
V/C Ratio(X)	0.61	0.00	0.46	0.39	0.00	0.32	0.63	0.79	0.06	0.33	1.07	0.00
Avail Cap(c_a), veh/h	213	0	287	186	0	269	161	1354	1148	339	1357	1150
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.9	0.0	60.0	66.8	0.0	58.9	44.0	13.3	6.0	17.0	20.6	5.7
Incr Delay (d2), s/veh	3.5	0.0	1.4	1.7	0.0	0.8	6.1	4.7	0.1	0.7	44.8	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	4.2	0.0	3.9	2.2	0.0	2.5	1.9	22.0	0.6	1.4	56.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	0.0	61.4	68.5	0.0	59.7	50.1	17.9	6.1	17.6	65.3	5.7
LnGrp LOS	E	A	E	E	A	E	D	B	A	B	F	A
Approach Vol, veh/h		213			128			1200			1547	
Approach Delay, s/veh		65.8			63.6			19.0			62.3	
Approach LOS		E			E			B			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	114.3		25.5	10.4	114.1		25.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	3.4	110.8		19.6	4.0	56.6		16.9				
Green Ext Time (p_c), s	0.0	0.0		0.4	0.1	23.9		0.3				

Intersection Summary

HCM 6th Ctrl Delay	45.7
HCM 6th LOS	D

Intersection						
Int Delay, s/veh	21.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	61	47	15	967	1265	20
Future Vol, veh/h	61	47	15	967	1265	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	52	16	1063	1390	22

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2485	-	1390	0	-
Stage 1	1390	-	-	-	-
Stage 2	1095	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	~ 32	0	492	-	-
Stage 1	231	0	-	-	-
Stage 2	321	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 31	-	492	-	-
Mov Cap-2 Maneuver	~ 31	-	-	-	-
Stage 1	223	-	-	-	-
Stage 2	321	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	\$ 808.6	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	492	-	31	-	-	-
HCM Lane V/C Ratio	0.034	-	2.162	-	-	-
HCM Control Delay (s)	12.6	-	\$ 808.6	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	7.7	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

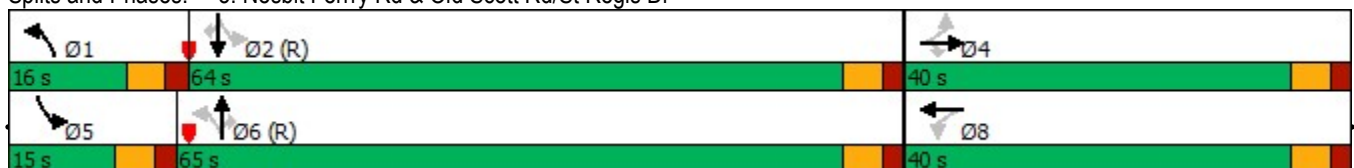


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	305	2	97	8	3	220	709	3	13	950	480
Future Volume (vph)	305	2	97	8	3	220	709	3	13	950	480
Lane Group Flow (vph)	0	326	103	0	28	234	754	3	14	1011	511
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	16.0	65.0	65.0	15.0	64.0	64.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	13.3%	54.2%	54.2%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.92	0.22		0.07	0.94	0.68	0.00	0.05	1.11	0.54
Control Delay		74.2	12.9		18.7	77.8	22.0	0.0	9.5	96.5	9.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		74.2	12.9		18.7	77.8	22.0	0.0	9.5	96.5	9.5
Queue Length 50th (ft)		239	17		7	~152	348	0	4	~898	86
Queue Length 95th (ft)		#404	60		30	#320	624	0	12	#1149	184
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		378	507		448	248	1117	978	359	908	938
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.86	0.20		0.06	0.94	0.68	0.00	0.04	1.11	0.54

Intersection Summary






















Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

6a.Build 2034 AM  
 05/29/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	2	97	8	3	15	220	709	3	13	950	480
Future Volume (veh/h)	305	2	97	8	3	15	220	709	3	13	950	480
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	2	103	9	3	16	234	754	3	14	1011	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1	456	40	26	34	216	1046	887	273	912	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.09	0.56	0.56	0.02	0.49	0.00
Sat Flow, veh/h	615	4	1585	0	89	118	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	326	0	103	28	0	0	234	754	3	14	1011	0
Grp Sat Flow(s),veh/h/ln	619	0	1585	207	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	5.9	0.0	0.0	0.0	10.5	35.7	0.1	0.5	58.5	0.0
Cycle Q Clear(g_c), s	34.5	0.0	5.9	34.5	0.0	0.0	10.5	35.7	0.1	0.5	58.5	0.0
Prop In Lane	0.99		1.00	0.32		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	456	99	0	0	216	1046	887	273	912	
V/C Ratio(X)	1.37	0.00	0.23	0.28	0.00	0.00	1.08	0.72	0.00	0.05	1.11	
Avail Cap(c_a), veh/h	238	0	456	99	0	0	216	1046	887	386	912	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.1	0.0	32.6	34.8	0.0	0.0	39.7	19.5	11.7	18.1	30.7	0.0
Incr Delay (d2), s/veh	191.6	0.0	0.2	1.5	0.0	0.0	85.4	4.3	0.0	0.1	64.3	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	19.8	0.0	2.4	0.6	0.0	0.0	11.5	15.6	0.0	0.2	40.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	238.7	0.0	32.8	36.3	0.0	0.0	125.1	23.8	11.7	18.1	95.0	0.0
LnGrp LOS	F	A	C	D	A	A	F	C	B	B	F	
Approach Vol, veh/h		429			28			991			1025	
Approach Delay, s/veh		189.2			36.3			47.7			94.0	
Approach LOS		F			D			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	64.0		40.0	7.4	72.6		40.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	10.5	58.5		34.5	9.5	59.5		34.5				
Max Q Clear Time (g_c+I1), s	12.5	60.5		36.5	2.5	37.7		36.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.5		0.0				

Intersection Summary												
HCM 6th Ctrl Delay				91.3								
HCM 6th LOS				F								

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
6: Nesbit Ferry Rd & New Site Drwy

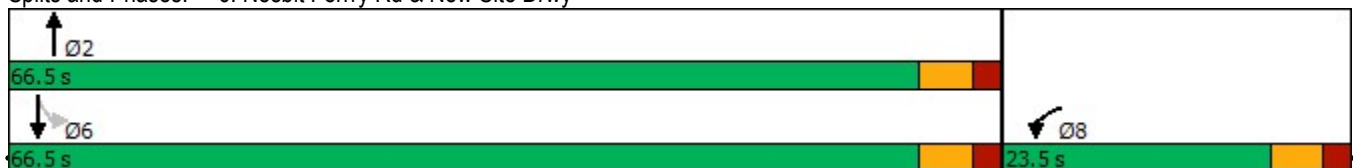


Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	28	983	42	1257
Future Volume (vph)	28	983	42	1257
Lane Group Flow (vph)	58	1117	0	1412
Turn Type	Prot	NA	Perm	NA
Protected Phases	8	2		6
Permitted Phases			6	
Detector Phase	8	2	6	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	23.5	23.5
Total Split (s)	23.5	66.5	66.5	66.5
Total Split (%)	26.1%	73.9%	73.9%	73.9%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	5.5	5.5		5.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Max	Max	Max
v/c Ratio	0.36	0.72		0.97
Control Delay	30.2	8.1		28.3
Queue Delay	0.0	0.0		3.7
Total Delay	30.2	8.1		31.9
Queue Length 50th (ft)	17	235		~635
Queue Length 95th (ft)	52	482		#1142
Internal Link Dist (ft)	155	338		504
Turn Bay Length (ft)				
Base Capacity (vph)	360	1552		1460
Starvation Cap Reductn	0	0		34
Spillback Cap Reductn	0	0		0
Storage Cap Reductn	0	0		0
Reduced v/c Ratio	0.16	0.72		0.99

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 90.7  
 Natural Cycle: 150  
 Control Type: Actuated-Uncoordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Nesbit Ferry Rd & New Site Drwy



HCM 6th Signalized Intersection Summary  
 6: Nesbit Ferry Rd & New Site Drwy

6a.Build 2034 AM  
 05/29/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	28	26	983	45	42	1257
Future Volume (veh/h)	28	26	983	45	42	1257
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	28	1068	49	46	1366
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	40	38	1433	66	76	1409
Arrive On Green	0.05	0.05	0.81	0.81	0.81	0.81
Sat Flow, veh/h	856	799	1774	81	34	1745
Grp Volume(v), veh/h	59	0	0	1117	1412	0
Grp Sat Flow(s),veh/h/ln	1684	0	0	1856	1779	0
Q Serve(g_s), s	2.6	0.0	0.0	22.0	30.7	0.0
Cycle Q Clear(g_c), s	2.6	0.0	0.0	22.0	55.0	0.0
Prop In Lane	0.51	0.47		0.04	0.03	
Lane Grp Cap(c), veh/h	79	0	0	1498	1486	0
V/C Ratio(X)	0.75	0.00	0.00	0.75	0.95	0.00
Avail Cap(c_a), veh/h	401	0	0	1498	1486	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.6	0.0	0.0	3.5	6.2	0.0
Incr Delay (d2), s/veh	12.9	0.0	0.0	3.4	14.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	3.4	10.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.5	0.0	0.0	6.9	20.4	0.0
LnGrp LOS	D	A	A	A	C	A
Approach Vol, veh/h	59		1117			1412
Approach Delay, s/veh	48.5		6.9			20.4
Approach LOS	D		A			C
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		66.5			66.5	9.1
Change Period (Y+Rc), s		5.5			5.5	5.5
Max Green Setting (Gmax), s		61.0			61.0	18.0
Max Q Clear Time (g_c+I1), s		24.0			57.0	4.6
Green Ext Time (p_c), s		12.2			3.5	0.1

Intersection Summary

HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Intersection												
Int Delay, s/veh	17.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Vol, veh/h	44	0	35	3	0	22	31	1399	8	33	1409	66
Future Vol, veh/h	44	0	35	3	0	22	31	1399	8	33	1409	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	75	-	-	75	70	-	-	50	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	0	36	3	0	23	32	1442	8	34	1453	68

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2306	3035	727	2305	3099	725	1521	0	0	1450	0	0
Stage 1	1521	1521	-	1510	1510	-	-	-	-	-	-	-
Stage 2	785	1514	-	795	1589	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 21	13	366	21	11	368	435	-	-	463	-	-
Stage 1	124	179	-	126	181	-	-	-	-	-	-	-
Stage 2	352	181	-	347	166	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 18	11	366	17	9	368	435	-	-	463	-	-
Mov Cap-2 Maneuver	~ 18	11	-	17	9	-	-	-	-	-	-	-
Stage 1	115	166	-	117	168	-	-	-	-	-	-	-
Stage 2	306	168	-	290	154	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	638.2	44.6	0.3	0.3
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	435	-	-	18	366	17	368	463	-	-
HCM Lane V/C Ratio	0.073	-	-	2.52	0.099	0.182	0.062	0.073	-	-
HCM Control Delay (s)	13.9	-	-	\$ 1133.3	15.9	259	15.4	13.4	-	-
HCM Lane LOS	B	-	-	F	C	F	C	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	6.2	0.3	0.5	0.2	0.2	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

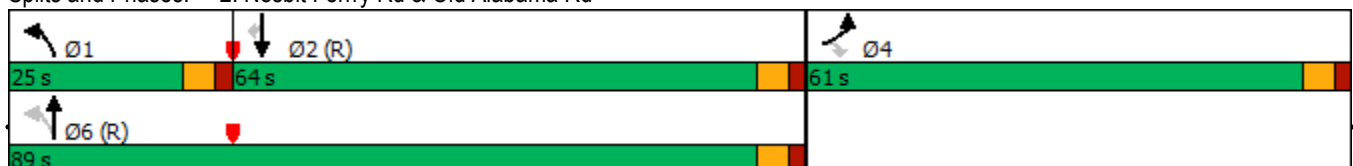


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	839	654	340	551	890	593
Future Volume (vph)	839	654	340	551	890	593
Lane Group Flow (vph)	874	681	354	574	927	618
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	61.0	61.0	25.0	89.0	64.0	64.0
Total Split (%)	40.7%	40.7%	16.7%	59.3%	42.7%	42.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.77	0.93	1.02	0.52	1.28	0.78
Control Delay	49.5	46.5	102.2	18.4	173.4	28.3
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	49.5	46.9	102.2	18.4	173.4	28.3
Queue Length 50th (ft)	378	390	~374	244	~1144	301
Queue Length 95th (ft)	447	#637	#605	318	#1403	473
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1270	778	347	1108	726	793
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	9	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.89	1.02	0.52	1.28	0.78

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

6b.Build 2034 PM  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶	↶	↶	↷
Traffic Volume (veh/h)	839	654	340	551	890	593
Future Volume (veh/h)	839	654	340	551	890	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	874	681	354	574	927	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1279	586	280	1041	729	
Arrive On Green	0.37	0.37	0.13	0.56	0.39	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	874	681	354	574	927	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	32.0	55.5	19.5	29.4	58.5	0.0
Cycle Q Clear(g_c), s	32.0	55.5	19.5	29.4	58.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1279	586	280	1041	729	
V/C Ratio(X)	0.68	1.16	1.27	0.55	1.27	
Avail Cap(c_a), veh/h	1279	586	280	1041	729	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	39.8	47.3	51.6	21.3	45.7	0.0
Incr Delay (d2), s/veh	1.5	90.3	145.1	2.1	132.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	35.8	17.4	13.1	53.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.4	137.5	196.6	23.4	178.3	0.0
LnGrp LOS	D	F	F	C	F	
Approach Vol, veh/h	1555			928	927	
Approach Delay, s/veh	83.5			89.5	178.3	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	64.0		61.0		89.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	19.5	58.5		55.5		83.5
Max Q Clear Time (g_c+I1), s	21.5	60.5		57.5		31.4
Green Ext Time (p_c), s	0.0	0.0		0.0		8.7

Intersection Summary

HCM 6th Ctrl Delay	110.9
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
3: Nesbit Ferry Rd & Existing School Southern Drwy

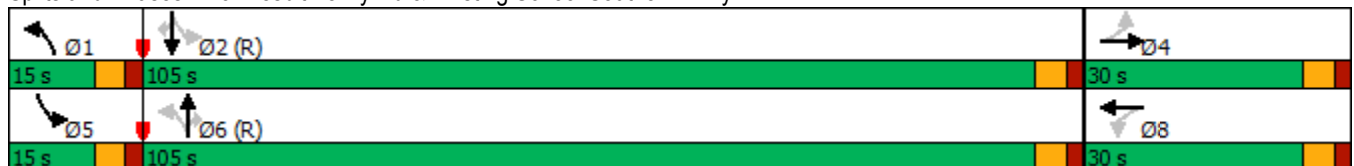


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	14	0	13	1	11	986	15	26	1375	3
Future Volume (vph)	14	0	13	1	11	986	15	26	1375	3
Lane Group Flow (vph)	15	11	14	26	12	1060	16	28	1478	3
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.22	0.05	0.21	0.26	0.10	0.67	0.01	0.07	0.91	0.00
Control Delay	75.6	0.5	74.8	29.8	3.3	8.2	0.0	1.3	15.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	0.0
Total Delay	75.6	0.5	74.8	29.8	3.3	8.2	0.0	1.3	21.0	0.0
Queue Length 50th (ft)	14	0	13	1	1	399	0	2	646	0
Queue Length 95th (ft)	39	0	38	33	4	603	0	m2	m330	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	225	379	228	281	161	1592	1361	431	1621	1384
Starvation Cap Reductn	0	0	0	0	0	0	0	0	108	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.03	0.06	0.09	0.07	0.67	0.01	0.06	0.98	0.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Existing School Southern Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Existing School Southern Drwy

6b.Build 2034 PM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	10	13	1	23	11	986	15	26	1375	3
Future Volume (veh/h)	14	0	10	13	1	23	11	986	15	26	1375	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	0	11	14	1	25	12	1060	16	28	1478	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	0	60	92	2	58	155	1551	1315	407	1570	1330
Arrive On Green	0.04	0.00	0.04	0.04	0.04	0.04	0.01	0.83	0.83	0.02	0.84	0.84
Sat Flow, veh/h	1385	0	1585	1404	61	1533	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	0	11	14	0	26	12	1060	16	28	1478	3
Grp Sat Flow(s),veh/h/ln	1385	0	1585	1404	0	1594	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.6	0.0	1.0	1.5	0.0	2.4	0.2	33.5	0.3	0.4	90.9	0.0
Cycle Q Clear(g_c), s	4.0	0.0	1.0	2.5	0.0	2.4	0.2	33.5	0.3	0.4	90.9	0.0
Prop In Lane	1.00		1.00	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	0	60	92	0	60	155	1551	1315	407	1570	1330
V/C Ratio(X)	0.19	0.00	0.18	0.15	0.00	0.43	0.08	0.68	0.01	0.07	0.94	0.00
Avail Cap(c_a), veh/h	252	0	259	268	0	260	244	1551	1315	479	1570	1330
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.6	0.0	69.9	71.1	0.0	70.6	29.4	5.0	2.2	5.6	9.2	1.9
Incr Delay (d2), s/veh	1.2	0.0	1.5	0.8	0.0	4.8	0.2	2.5	0.0	0.1	12.5	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	0.6	0.0	0.4	0.6	0.0	1.1	0.3	10.4	0.1	0.2	29.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.7	0.0	71.4	71.9	0.0	75.4	29.7	7.5	2.2	5.7	21.8	1.9
LnGrp LOS	E	A	E	E	A	E	C	A	A	A	C	A
Approach Vol, veh/h		26			40			1088			1509	
Approach Delay, s/veh		72.7			74.2			7.7			21.4	
Approach LOS		E			E			A			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	131.4		11.2	8.9	129.9		11.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.2	92.9		6.0	2.4	35.5		4.5				
Green Ext Time (p_c), s	0.0	6.4		0.0	0.0	28.0		0.1				

Intersection Summary												
HCM 6th Ctrl Delay				17.1								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	24	17	58	985	1333	69
Future Vol, veh/h	24	17	58	985	1333	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	18	61	1037	1403	73

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2562	-	1403	0	-
Stage 1	1403	-	-	-	-
Stage 2	1159	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	29	0	487	-	-
Stage 1	227	0	-	-	-
Stage 2	299	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 25	-	487	-	-
Mov Cap-2 Maneuver	~ 25	-	-	-	-
Stage 1	199	-	-	-	-
Stage 2	299	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	407.3	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	487	-	25	-	-	-
HCM Lane V/C Ratio	0.125	-	1.011	-	-	-
HCM Control Delay (s)	13.4	-	407.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.4	-	3.1	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	391	3	134	8	6	113	671	9	14	917	387
Future Volume (vph)	391	3	134	8	6	113	671	9	14	917	387
Lane Group Flow (vph)	0	406	138	0	25	116	692	9	14	945	399
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	41.0	41.0	41.0	41.0	41.0	15.0	64.0	64.0	15.0	64.0	64.0
Total Split (%)	34.2%	34.2%	34.2%	34.2%	34.2%	12.5%	53.3%	53.3%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		1.04	0.27		0.05	0.63	0.65	0.01	0.04	1.02	0.43
Control Delay		98.3	17.1		20.8	34.6	22.3	0.0	9.7	66.2	7.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		98.3	17.1		20.8	34.6	22.3	0.0	9.7	66.2	7.5
Queue Length 50th (ft)		~339	37		8	36	310	0	4	~784	53
Queue Length 95th (ft)		#538	90		29	102	554	0	12	#1041	126
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		390	519		461	199	1067	938	370	924	922
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		1.04	0.27		0.05	0.58	0.65	0.01	0.04	1.02	0.43

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

6b.Build 2034 PM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	391	3	134	8	6	11	113	671	9	14	917	387
Future Volume (veh/h)	391	3	134	8	6	11	113	671	9	14	917	387
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	403	3	138	8	6	11	116	692	9	14	945	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	1	469	40	34	27	161	1031	874	302	973	
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	0.55	0.55	0.02	0.52	0.00
Sat Flow, veh/h	611	5	1585	0	116	91	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	406	0	138	25	0	0	116	692	9	14	945	0
Grp Sat Flow(s),veh/h/ln	615	0	1585	207	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	8.1	0.0	0.0	0.0	3.6	31.6	0.3	0.4	58.8	0.0
Cycle Q Clear(g_c), s	35.5	0.0	8.1	35.5	0.0	0.0	3.6	31.6	0.3	0.4	58.8	0.0
Prop In Lane	0.99		1.00	0.32		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	0	469	101	0	0	161	1031	874	302	973	
V/C Ratio(X)	1.68	0.00	0.29	0.25	0.00	0.00	0.72	0.67	0.01	0.05	0.97	
Avail Cap(c_a), veh/h	242	0	469	101	0	0	219	1031	874	415	973	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.6	0.0	32.6	34.3	0.0	0.0	28.0	19.2	12.2	16.3	27.9	0.0
Incr Delay (d2), s/veh	323.1	0.0	0.3	1.3	0.0	0.0	7.2	3.5	0.0	0.1	22.7	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	28.9	0.0	3.2	0.6	0.0	0.0	2.0	13.8	0.1	0.2	30.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	369.7	0.0	32.9	35.5	0.0	0.0	35.2	22.7	12.2	16.4	50.6	0.0
LnGrp LOS	F	A	C	D	A	A	D	C	B	B	D	
Approach Vol, veh/h		544			25			817			959	
Approach Delay, s/veh		284.3			35.5			24.3			50.1	
Approach LOS		F			D			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	67.9		41.0	7.4	71.6		41.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	58.5		35.5	9.5	58.5		35.5				
Max Q Clear Time (g_c+I1), s	5.6	60.8		37.5	2.4	33.6		37.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	9.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	95.3
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Intersection						
Int Delay, s/veh	3.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↗↘	↘↗	↑
Traffic Vol, veh/h	18	16	995	14	13	1385
Future Vol, veh/h	18	16	995	14	13	1385
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	17	1082	15	14	1505

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2615	1082	0	0	1097
Stage 1	1082	-	-	-	-
Stage 2	1533	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	27	264	-	-	636
Stage 1	325	-	-	-	-
Stage 2	196	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	26	264	-	-	636
Mov Cap-2 Maneuver	26	-	-	-	-
Stage 1	325	-	-	-	-
Stage 2	192	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	221.4	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	45	636
HCM Lane V/C Ratio	-	-	0.821	0.022
HCM Control Delay (s)	-	-	221.4	10.8
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	3.3	0.1

Timings

1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕↗	↖	↕↕	↗
Traffic Volume (vph)	11	1	10	92	1	268	11	1231	60	1133	11
Future Volume (vph)	11	1	10	92	1	268	11	1231	60	1133	11
Lane Group Flow (vph)	0	14	12	0	109	315	13	1503	71	1333	13
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	66.0	66.0	66.0	66.0	66.0
Total Split (%)	34.0%	34.0%	34.0%	34.0%	34.0%	34.0%	66.0%	66.0%	66.0%	66.0%	66.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.04	0.03		0.34	0.76	0.08	0.69	0.56	0.61	0.01
Control Delay		26.7	4.3		31.3	39.1	9.1	13.0	32.4	11.6	1.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay		26.7	4.3		31.3	39.1	9.1	13.1	32.4	11.6	1.5
Queue Length 50th (ft)		6	0		52	146	2	251	20	205	0
Queue Length 95th (ft)		20	6		95	228	12	358	#92	296	4
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		531	584		478	594	204	2617	152	2628	1182
Starvation Cap Reductn		0	0		0	0	0	159	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.03	0.02		0.23	0.53	0.06	0.61	0.47	0.51	0.01

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 83.5

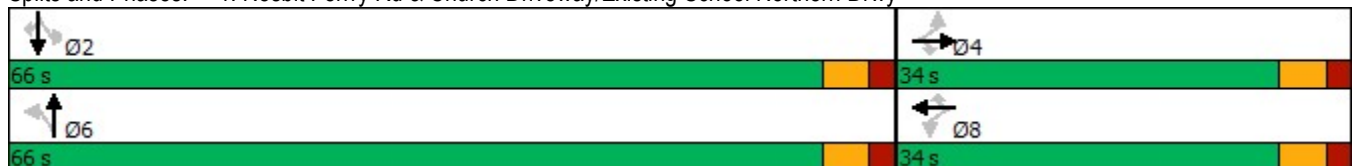
Natural Cycle: 60

Control Type: Actuated-Uncoordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy

6c.Build 2034 Dismissal  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↗	↖	↗	↖	↗
Traffic Volume (veh/h)	11	1	10	92	1	268	11	1231	47	60	1133	11
Future Volume (veh/h)	11	1	10	92	1	268	11	1231	47	60	1133	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	1	12	108	1	315	13	1448	55	71	1333	13
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	3	462	73	0	462	217	2079	79	181	2117	944
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	0	10	1585	0	1	1585	406	3491	132	349	3554	1585
Grp Volume(v), veh/h	14	0	12	109	0	315	13	736	767	71	1333	13
Grp Sat Flow(s),veh/h/ln	10	0	1585	1	0	1585	406	1777	1847	349	1777	1585
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	17.2	2.1	27.9	28.1	17.3	23.7	0.3
Cycle Q Clear(g_c), s	28.5	0.0	0.5	28.5	0.0	17.2	25.8	27.9	28.1	45.4	23.7	0.3
Prop In Lane	0.93		1.00	0.99		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	74	0	462	74	0	462	217	1058	1100	181	2117	944
V/C Ratio(X)	0.19	0.00	0.03	1.48	0.00	0.68	0.06	0.70	0.70	0.39	0.63	0.01
Avail Cap(c_a), veh/h	74	0	462	74	0	462	226	1100	1144	189	2201	982
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	24.7	48.7	0.0	30.6	21.1	13.6	13.7	29.4	12.8	8.1
Incr Delay (d2), s/veh	1.2	0.0	0.0	274.5	0.0	4.0	0.2	2.5	2.4	2.9	0.8	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	0.4	0.0	0.2	7.4	0.0	7.0	0.2	10.3	10.7	1.5	8.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	0.0	24.7	323.2	0.0	34.6	21.4	16.1	16.1	32.3	13.6	8.1
LnGrp LOS	D	A	C	F	A	C	C	B	B	C	B	A
Approach Vol, veh/h		26			424			1516			1417	
Approach Delay, s/veh		35.1			108.8			16.1			14.5	
Approach LOS		D			F			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		63.7		34.0		63.7		34.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		60.5		28.5		60.5		28.5				
Max Q Clear Time (g_c+I1), s		47.4		30.5		30.1		30.5				
Green Ext Time (p_c), s		10.8		0.0		22.1		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				27.2								
HCM 6th LOS				C								

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

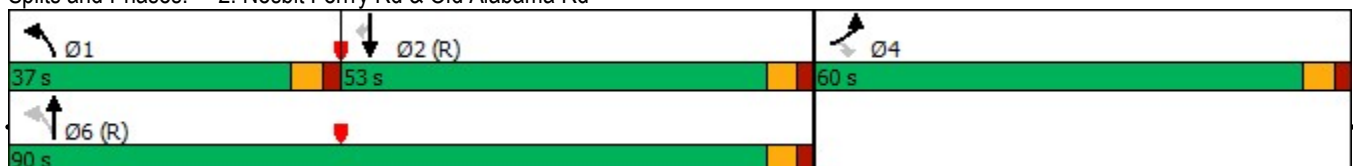


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (vph)	834	486	330	455	720	515
Future Volume (vph)	834	486	330	455	720	515
Lane Group Flow (vph)	887	517	351	484	766	548
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	60.0	60.0	37.0	90.0	53.0	53.0
Total Split (%)	40.0%	40.0%	24.7%	60.0%	35.3%	35.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.83	0.71	0.91	0.42	1.06	0.70
Control Delay	55.3	18.9	70.7	19.3	92.5	25.4
Queue Delay	0.0	0.0	0.0	0.0	17.5	0.0
Total Delay	55.3	18.9	70.7	19.3	110.0	25.4
Queue Length 50th (ft)	416	146	291	223	~846	236
Queue Length 95th (ft)	461	265	#463	406	#1207	427
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1247	797	426	1148	726	785
Starvation Cap Reductn	0	0	0	0	38	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.65	0.82	0.42	1.11	0.70

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	834	486	330	455	720	515
Future Volume (veh/h)	834	486	330	455	720	515
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	887	517	351	484	766	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1198	550	374	1085	673	
Arrive On Green	0.35	0.35	0.18	0.58	0.36	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	887	517	351	484	766	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	33.8	47.4	25.0	22.0	54.0	0.0
Cycle Q Clear(g_c), s	33.8	47.4	25.0	22.0	54.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1198	550	374	1085	673	
V/C Ratio(X)	0.74	0.94	0.94	0.45	1.14	
Avail Cap(c_a), veh/h	1256	576	422	1085	673	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.77	0.00
Uniform Delay (d), s/veh	43.1	47.5	49.4	17.9	48.0	0.0
Incr Delay (d2), s/veh	2.3	23.3	27.0	1.3	75.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	21.7	15.7	9.7	38.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.3	70.8	76.5	19.2	123.9	0.0
LnGrp LOS	D	E	E	B	F	
Approach Vol, veh/h	1404			835	766	
Approach Delay, s/veh	54.7			43.3	123.9	
Approach LOS	D			D	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	33.0	59.5		57.5		92.5
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	47.5		54.5		84.5
Max Q Clear Time (g_c+I1), s	27.0	56.0		49.4		24.0
Green Ext Time (p_c), s	0.5	0.0		2.6		7.0

Intersection Summary

HCM 6th Ctrl Delay	69.2
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

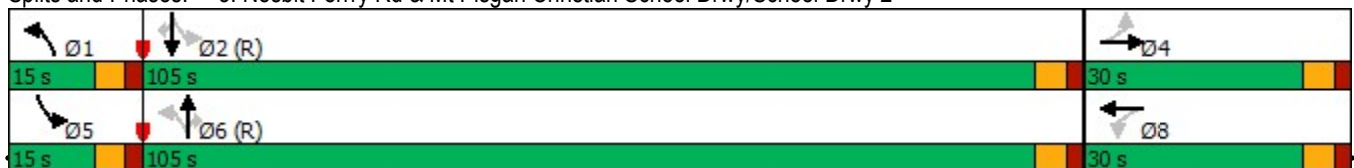


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	87	10	45	11	31	779	33	90	967	21
Future Volume (vph)	87	10	45	11	31	779	33	90	967	21
Lane Group Flow (vph)	96	57	49	156	34	856	36	99	1063	23
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.91	0.22	0.28	0.46	0.13	0.65	0.03	0.25	0.78	0.02
Control Delay	126.9	20.8	60.6	14.9	5.3	15.8	0.8	2.3	9.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.1	0.0
Total Delay	126.9	20.8	60.6	14.9	5.3	17.5	0.8	2.3	10.6	0.0
Queue Length 50th (ft)	93	9	43	10	6	435	0	7	113	0
Queue Length 95th (ft)	#187	52	85	77	16	636	6	m11	m144	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	131	305	219	382	301	1318	1137	418	1359	1171
Starvation Cap Reductn	0	0	0	0	0	284	0	0	119	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.19	0.22	0.41	0.11	0.83	0.03	0.24	0.86	0.02

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

6c.Build 2034 Dismissal  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	10	42	45	11	131	31	779	33	90	967	21
Future Volume (veh/h)	87	10	42	45	11	131	31	779	33	90	967	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	11	46	49	12	144	34	856	36	99	1063	23
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	51	215	227	20	242	253	1298	1100	378	1312	1112
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.69	0.69	0.03	0.70	0.70
Sat Flow, veh/h	1231	315	1318	1346	123	1480	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	96	0	57	49	0	156	34	856	36	99	1063	23
Grp Sat Flow(s),veh/h/ln	1231	0	1633	1346	0	1604	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	11.0	0.0	4.5	4.9	0.0	13.5	0.8	38.8	1.1	2.4	59.0	0.7
Cycle Q Clear(g_c), s	24.5	0.0	4.5	9.5	0.0	13.5	0.8	38.8	1.1	2.4	59.0	0.7
Prop In Lane	1.00		0.81	1.00		0.92	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	267	227	0	262	253	1298	1100	378	1312	1112
V/C Ratio(X)	0.70	0.00	0.21	0.22	0.00	0.60	0.13	0.66	0.03	0.26	0.81	0.02
Avail Cap(c_a), veh/h	138	0	267	227	0	262	321	1298	1100	432	1312	1112
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(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.8	0.0	54.4	58.5	0.0	58.2	18.0	13.0	7.2	11.9	15.5	6.8
Incr Delay (d2), s/veh	14.1	0.0	0.4	0.5	0.0	3.6	0.2	2.6	0.1	0.4	5.5	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	4.3	0.0	1.9	1.7	0.0	5.8	0.5	15.8	0.4	0.9	24.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.9	0.0	54.8	59.0	0.0	61.8	18.2	15.6	7.2	12.2	21.0	6.8
LnGrp LOS	F	A	D	E	A	E	B	B	A	B	C	A
Approach Vol, veh/h		153			205			926			1185	
Approach Delay, s/veh		73.1			61.1			15.4			20.0	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	110.7		30.0	10.4	109.6		30.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.8	61.0		26.5	4.4	40.8		15.5				
Green Ext Time (p_c), s	0.0	21.9		0.0	0.1	17.9		0.7				

Intersection Summary												
HCM 6th Ctrl Delay				25.0								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	34	17	30	831	1044	24
Future Vol, veh/h	34	17	30	831	1044	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	19	33	913	1147	26

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2126	-	1147	0	-	0
Stage 1	1147	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	55	0	609	-	-	-
Stage 1	303	0	-	-	-	-
Stage 2	364	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	52	-	609	-	-	-
Mov Cap-2 Maneuver	52	-	-	-	-	-
Stage 1	287	-	-	-	-	-
Stage 2	364	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	173.4	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	609	-	52	-	-	-
HCM Lane V/C Ratio	0.054	-	0.719	-	-	-
HCM Control Delay (s)	11.2	-	173.4	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	2.9	-	-	-



Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

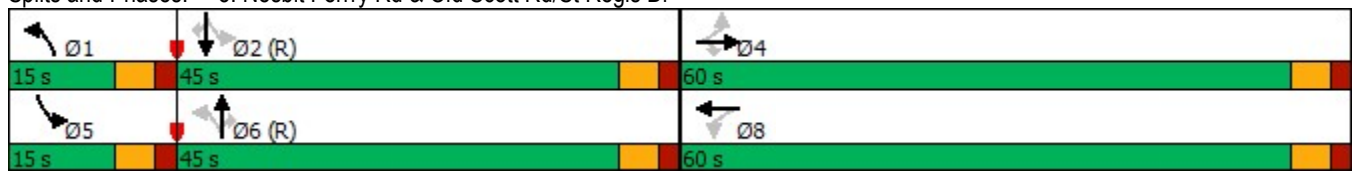


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	369	12	124	9	12	88	498	8	21	663	315
Future Volume (vph)	369	12	124	9	12	88	498	8	21	663	315
Lane Group Flow (vph)	0	414	135	0	38	96	541	9	23	721	342
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.86	0.21		0.06	0.52	0.61	0.01	0.07	0.91	0.42
Control Delay		51.6	11.4		14.3	29.5	30.6	0.0	17.0	51.6	10.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		51.6	11.4		14.3	29.5	30.6	0.0	17.0	51.6	10.9
Queue Length 50th (ft)		288	31		11	36	330	0	8	529	53
Queue Length 95th (ft)		376	65		30	90	#572	0	25	#903	150
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		596	758		723	201	890	794	375	790	805
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.69	0.18		0.05	0.48	0.61	0.01	0.06	0.91	0.42

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

6c.Build 2034 Dismissal  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↗	↗	↖	↗	↖
Traffic Volume (veh/h)	369	12	124	9	12	14	88	498	8	21	663	315
Future Volume (veh/h)	369	12	124	9	12	14	88	498	8	21	663	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	401	13	135	10	13	15	96	541	9	23	721	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	7	720	38	49	32	147	722	612	217	673	
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.05	0.39	0.39	0.02	0.36	0.00
Sat Flow, veh/h	493	16	1585	0	109	71	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	414	0	135	38	0	0	96	541	9	23	721	0
Grp Sat Flow(s),veh/h/ln	509	0	1585	179	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	6.1	0.0	0.0	0.0	4.0	30.0	0.4	1.0	43.1	0.0
Cycle Q Clear(g_c), s	54.5	0.0	6.1	54.5	0.0	0.0	4.0	30.0	0.4	1.0	43.1	0.0
Prop In Lane	0.97		1.00	0.26		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	0	720	119	0	0	147	722	612	217	673	
V/C Ratio(X)	1.43	0.00	0.19	0.32	0.00	0.00	0.65	0.75	0.01	0.11	1.07	
Avail Cap(c_a), veh/h	290	0	720	119	0	0	201	722	612	318	673	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.3	0.0	19.5	28.2	0.0	0.0	30.0	31.8	22.7	26.3	38.4	0.0
Incr Delay (d2), s/veh	211.0	0.0	0.1	1.5	0.0	0.0	4.8	7.0	0.0	0.2	55.6	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	25.7	0.0	2.3	0.7	0.0	0.0	1.9	14.5	0.2	0.4	29.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	249.3	0.0	19.7	29.8	0.0	0.0	34.8	38.8	22.8	26.5	94.1	0.0
LnGrp LOS	F	A	B	C	A	A	C	D	C	C	F	
Approach Vol, veh/h		549			38			646			744	
Approach Delay, s/veh		192.8			29.8			38.0			92.0	
Approach LOS		F			C			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	48.6		60.0	8.2	51.8		60.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	39.5		54.5	9.5	39.5		54.5				
Max Q Clear Time (g_c+I1), s	6.0	45.1		56.5	3.0	32.0		56.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	3.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	101.1
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
6: Nesbit Ferry Rd & New Site Drwy

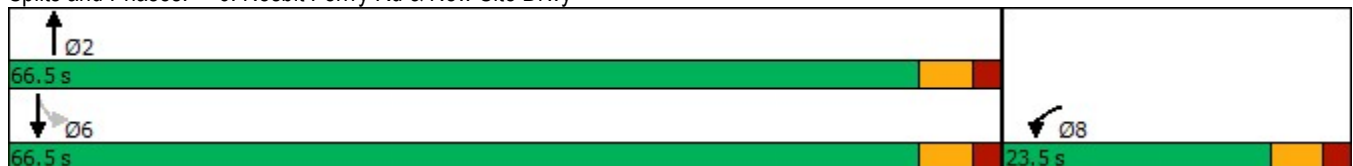


Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	W	T		T
Traffic Volume (vph)	31	812	27	1038
Future Volume (vph)	31	812	27	1038
Lane Group Flow (vph)	66	915	0	1157
Turn Type	Prot	NA	Perm	NA
Protected Phases	8	2		6
Permitted Phases			6	
Detector Phase	8	2	6	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	23.5	23.5
Total Split (s)	23.5	66.5	66.5	66.5
Total Split (%)	26.1%	73.9%	73.9%	73.9%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0
Total Lost Time (s)	5.5	5.5		5.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Max	Max	Max
v/c Ratio	0.38	0.59		0.77
Control Delay	29.9	5.6		10.4
Queue Delay	0.0	0.0		0.5
Total Delay	29.9	5.6		10.9
Queue Length 50th (ft)	20	154		278
Queue Length 95th (ft)	55	300		#619
Internal Link Dist (ft)	155	338		504
Turn Bay Length (ft)				
Base Capacity (vph)	365	1546		1500
Starvation Cap Reductn	0	0		82
Spillback Cap Reductn	0	0		0
Storage Cap Reductn	0	0		0
Reduced v/c Ratio	0.18	0.59		0.82

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 90.3  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Nesbit Ferry Rd & New Site Drwy



HCM 6th Signalized Intersection Summary  
6: Nesbit Ferry Rd & New Site Drwy

6c.Build 2034 Dismissal  
05/29/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	31	29	812	29	27	1038
Future Volume (veh/h)	31	29	812	29	27	1038
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	32	883	32	29	1128
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	43	41	1443	52	67	1449
Arrive On Green	0.05	0.05	0.80	0.80	0.80	0.80
Sat Flow, veh/h	854	804	1794	65	22	1802
Grp Volume(v), veh/h	67	0	0	915	1157	0
Grp Sat Flow(s),veh/h/ln	1683	0	0	1859	1824	0
Q Serve(g_s), s	3.0	0.0	0.0	14.4	0.0	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	14.4	24.1	0.0
Prop In Lane	0.51	0.48		0.03	0.03	
Lane Grp Cap(c), veh/h	85	0	0	1495	1516	0
V/C Ratio(X)	0.78	0.00	0.00	0.61	0.76	0.00
Avail Cap(c_a), veh/h	399	0	0	1495	1516	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.6	0.0	0.0	2.9	3.8	0.0
Incr Delay (d2), s/veh	14.4	0.0	0.0	1.9	3.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	2.2	4.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.0	0.0	0.0	4.7	7.5	0.0
LnGrp LOS	D	A	A	A	A	A
Approach Vol, veh/h	67		915			1157
Approach Delay, s/veh	50.0		4.7			7.5
Approach LOS	D		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		66.5			66.5	9.3
Change Period (Y+Rc), s		5.5			5.5	5.5
Max Green Setting (Gmax), s		61.0			61.0	18.0
Max Q Clear Time (g_c+I1), s		16.4			26.1	5.0
Green Ext Time (p_c), s		8.4			13.3	0.1

Intersection Summary

HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

**FUTURE 2034 PHASE 2 "BUILD" IMPROVED**

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

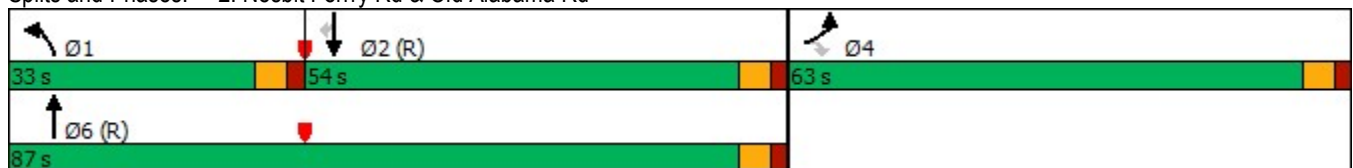


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	658	638	507	354	803	782
Future Volume (vph)	658	638	507	354	803	782
Lane Group Flow (vph)	708	686	545	381	863	841
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	63.0	63.0	33.0	87.0	54.0	54.0
Total Split (%)	42.0%	42.0%	22.0%	58.0%	36.0%	36.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.70	0.91	0.86	0.32	0.59	0.77
Control Delay	50.4	35.5	67.4	18.7	38.8	11.2
Queue Delay	0.0	2.6	0.0	0.0	25.9	0.1
Total Delay	50.4	38.1	67.4	18.7	64.7	11.3
Queue Length 50th (ft)	321	306	270	173	347	60
Queue Length 95th (ft)	338	447	#369	355	480	303
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1315	862	658	1180	1456	1089
Starvation Cap Reductn	0	0	0	0	0	12
Spillback Cap Reductn	0	88	0	0	621	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.89	0.83	0.32	1.03	0.78

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
2: Nesbit Ferry Rd & Old Alabama Rd

6d.Build 2034 AM - System Improvements

05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶↶	↶	↶↶	↷
Traffic Volume (veh/h)	658	638	507	354	803	782
Future Volume (veh/h)	658	638	507	354	803	782
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	708	686	545	381	863	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1325	608	594	1016	1190	
Arrive On Green	0.38	0.38	0.17	0.54	0.33	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	708	686	545	381	863	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	23.8	57.5	23.3	17.5	32.0	0.0
Cycle Q Clear(g_c), s	23.8	57.5	23.3	17.5	32.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1325	608	594	1016	1190	
V/C Ratio(X)	0.53	1.13	0.92	0.37	0.73	
Avail Cap(c_a), veh/h	1325	608	634	1016	1190	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.65	0.00
Uniform Delay (d), s/veh	35.9	46.2	61.1	19.6	43.8	0.0
Incr Delay (d2), s/veh	0.4	77.5	17.8	1.1	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	34.9	11.6	7.8	14.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.3	123.7	78.9	20.7	46.4	0.0
LnGrp LOS	D	F	E	C	D	
Approach Vol, veh/h	1394			926	863	
Approach Delay, s/veh	79.3			55.0	46.4	
Approach LOS	E			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	31.3	55.7		63.0		87.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	27.5	48.5		57.5		81.5
Max Q Clear Time (g_c+I1), s	25.3	34.0		59.5		19.5
Green Ext Time (p_c), s	0.5	7.8		0.0		5.1

Intersection Summary

HCM 6th Ctrl Delay	63.3
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

05/29/2024

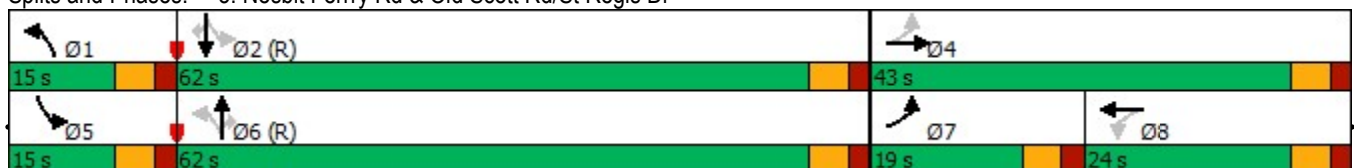


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	305	2	8	3	220	709	3	13	950	480
Future Volume (vph)	305	2	8	3	220	709	3	13	950	480
Lane Group Flow (vph)	324	105	0	28	234	754	3	14	1011	511
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	19.0	43.0	24.0	24.0	15.0	62.0	62.0	15.0	62.0	62.0
Total Split (%)	15.8%	35.8%	20.0%	20.0%	12.5%	51.7%	51.7%	12.5%	51.7%	51.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.19	0.29		0.28	0.61	0.59	0.00	0.03	1.08	0.54
Control Delay	156.7	9.5		38.3	33.7	14.6	0.0	7.8	83.0	9.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	156.7	9.5		38.3	33.7	14.6	0.0	7.8	83.0	9.9
Queue Length 50th (ft)	~257	1		9	115	268	0	3	~921	96
Queue Length 95th (ft)	#433	46		39	211	547	0	10	#1174	199
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	273	567		239	383	1286	1131	458	938	953
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.19	0.19		0.12	0.61	0.59	0.00	0.03	1.08	0.54

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 145  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr





HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

6d.Build 2034 AM - System Improvements

05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	2	97	8	3	15	220	709	3	13	950	480
Future Volume (veh/h)	305	2	97	8	3	15	220	709	3	13	950	480
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	2	103	9	3	16	234	754	3	14	1011	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	6	324	56	17	44	244	1196	1013	368	1077	
Arrive On Green	0.11	0.21	0.21	0.05	0.05	0.05	0.08	0.64	0.64	0.02	0.58	0.00
Sat Flow, veh/h	1781	30	1559	322	348	894	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	324	0	105	28	0	0	234	754	3	14	1011	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1564	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	13.5	0.0	6.7	0.0	0.0	0.0	8.8	29.2	0.1	0.4	59.9	0.0
Cycle Q Clear(g_c), s	13.5	0.0	6.7	1.9	0.0	0.0	8.8	29.2	0.1	0.4	59.9	0.0
Prop In Lane	1.00		0.98	0.32		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	0	330	117	0	0	244	1196	1013	368	1077	
V/C Ratio(X)	0.89	0.00	0.32	0.24	0.00	0.00	0.96	0.63	0.00	0.04	0.94	
Avail Cap(c_a), veh/h	364	0	497	274	0	0	244	1196	1013	481	1077	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.6	0.0	40.3	55.1	0.0	0.0	34.9	13.1	7.8	12.1	23.5	0.0
Incr Delay (d2), s/veh	22.7	0.0	0.5	1.0	0.0	0.0	46.6	2.5	0.0	0.0	16.2	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	5.2	0.0	2.6	0.9	0.0	0.0	10.0	11.8	0.0	0.1	28.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.3	0.0	40.9	56.2	0.0	0.0	81.5	15.6	7.8	12.1	39.7	0.0
LnGrp LOS	E	A	D	E	A	A	F	B	A	B	D	
Approach Vol, veh/h		429			28			991			1025	
Approach Delay, s/veh		64.6			56.2			31.2			39.3	
Approach LOS		E			E			C			D	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	74.6		30.4	7.4	82.2	19.0	11.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	56.5		37.5	9.5	56.5	13.5	18.5				
Max Q Clear Time (g_c+I1), s	10.8	61.9		8.7	2.4	31.2	15.5	3.9				
Green Ext Time (p_c), s	0.0	0.0		0.6	0.0	10.3	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	40.6
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

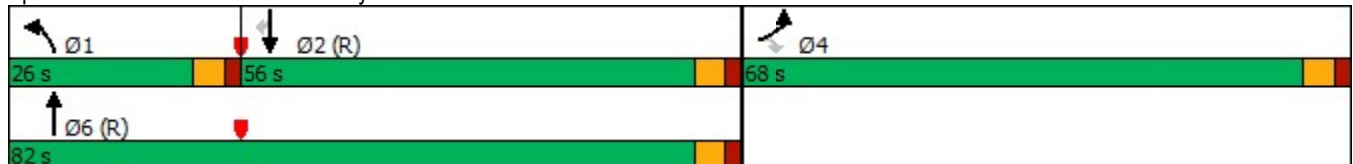


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	839	654	340	551	890	593
Future Volume (vph)	839	654	340	551	890	593
Lane Group Flow (vph)	874	681	354	574	927	618
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	68.0	68.0	26.0	82.0	56.0	56.0
Total Split (%)	45.3%	45.3%	17.3%	54.7%	37.3%	37.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.75	0.90	0.79	0.52	0.62	0.61
Control Delay	47.7	38.5	82.7	20.8	38.6	6.2
Queue Delay	0.0	3.4	0.0	0.0	0.0	0.1
Total Delay	47.7	41.9	82.7	20.8	38.6	6.3
Queue Length 50th (ft)	389	368	187	274	377	13
Queue Length 95th (ft)	412	509	244	374	513	124
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1430	854	479	1094	1486	1010
Starvation Cap Reductn	0	0	0	0	0	20
Spillback Cap Reductn	0	99	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.90	0.74	0.52	0.62	0.62

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

6e.Build 2034 PM - System Improvements

05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	839	654	340	551	890	593
Future Volume (veh/h)	839	654	340	551	890	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	874	681	354	574	927	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1440	660	404	954	1267	
Arrive On Green	0.42	0.42	0.12	0.51	0.36	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	874	681	354	574	927	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	29.6	62.5	15.1	32.5	34.1	0.0
Cycle Q Clear(g_c), s	29.6	62.5	15.1	32.5	34.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1440	660	404	954	1267	
V/C Ratio(X)	0.61	1.03	0.88	0.60	0.73	
Avail Cap(c_a), veh/h	1440	660	472	954	1267	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.80	0.00
Uniform Delay (d), s/veh	34.2	43.8	65.2	26.0	42.0	0.0
Incr Delay (d2), s/veh	0.7	43.3	15.1	2.8	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	31.4	7.4	14.9	15.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.9	87.0	80.2	28.8	45.1	0.0
LnGrp LOS	C	F	F	C	D	
Approach Vol, veh/h	1555			928	927	
Approach Delay, s/veh	57.7			48.4	45.1	
Approach LOS	E			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.0	59.0		68.0		82.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	20.5	50.5		62.5		76.5
Max Q Clear Time (g_c+I1), s	17.1	36.1		64.5		34.5
Green Ext Time (p_c), s	0.4	8.3		0.0		8.4

Intersection Summary

HCM 6th Ctrl Delay	51.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

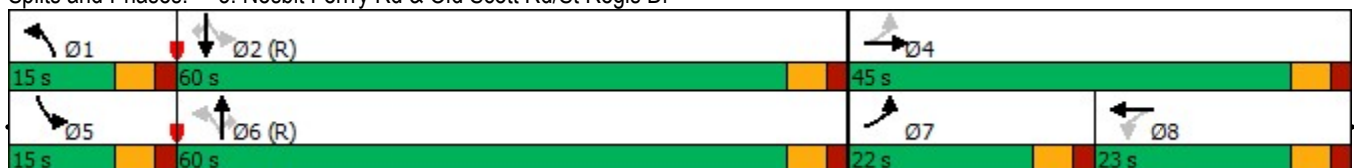


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↕	↖	↗	↗	↖	↗	↖
Traffic Volume (vph)	391	3	8	6	113	671	9	14	917	387
Future Volume (vph)	391	3	8	6	113	671	9	14	917	387
Lane Group Flow (vph)	403	141	0	25	116	692	9	14	945	399
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	22.0	45.0	23.0	23.0	15.0	60.0	60.0	15.0	60.0	60.0
Total Split (%)	18.3%	37.5%	19.2%	19.2%	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.27	0.33		0.26	0.54	0.56	0.01	0.03	0.87	0.39
Control Delay	182.8	8.3		42.5	23.7	15.4	0.0	7.7	34.3	6.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	3.0	0.0
Total Delay	182.8	8.3		42.5	23.7	15.4	0.0	7.7	37.2	6.9
Queue Length 50th (ft)	~363	2		11	29	256	0	3	638	53
Queue Length 95th (ft)	#541	52		39	90	506	0	11	#1041	137
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	317	615		224	231	1240	1095	471	1082	1026
Starvation Cap Reductn	0	0		0	0	0	0	0	70	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.27	0.23		0.11	0.50	0.56	0.01	0.03	0.93	0.39

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 125  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

6e.Build 2034 PM - System Improvements

05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	391	3	134	8	6	11	113	671	9	14	917	387
Future Volume (veh/h)	391	3	134	8	6	11	113	671	9	14	917	387
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	403	3	138	8	6	11	116	692	9	14	945	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	409	8	363	55	29	35	233	1148	973	376	1098	
Arrive On Green	0.14	0.23	0.23	0.05	0.05	0.05	0.04	0.61	0.61	0.02	0.59	0.00
Sat Flow, veh/h	1781	34	1556	313	577	699	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	403	0	141	25	0	0	116	692	9	14	945	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1589	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	16.5	0.0	9.0	0.0	0.0	0.0	3.1	27.2	0.3	0.4	50.6	0.0
Cycle Q Clear(g_c), s	16.5	0.0	9.0	1.7	0.0	0.0	3.1	27.2	0.3	0.4	50.6	0.0
Prop In Lane	1.00		0.98	0.32		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	409	0	371	119	0	0	233	1148	973	376	1098	
V/C Ratio(X)	0.98	0.00	0.38	0.21	0.00	0.00	0.50	0.60	0.01	0.04	0.86	
Avail Cap(c_a), veh/h	409	0	523	264	0	0	299	1148	973	490	1098	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.43	0.43	0.00
Uniform Delay (d), s/veh	49.0	0.0	38.7	55.0	0.0	0.0	22.1	14.2	9.0	12.0	20.7	0.0
Incr Delay (d2), s/veh	40.1	0.0	0.6	0.9	0.0	0.0	1.6	2.3	0.0	0.0	4.1	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	8.5	0.0	3.5	0.8	0.0	0.0	1.7	11.2	0.1	0.1	21.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.2	0.0	39.4	55.8	0.0	0.0	23.7	16.6	9.0	12.0	24.8	0.0
LnGrp LOS	F	A	D	E	A	A	C	B	A	B	C	
Approach Vol, veh/h		544			25			817			959	
Approach Delay, s/veh		76.3			55.8			17.5			24.6	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	75.9		33.5	7.4	79.2	22.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5	16.5	17.5				
Max Q Clear Time (g_c+I1), s	5.1	52.6		11.0	2.4	29.2	18.5	3.7				
Green Ext Time (p_c), s	0.1	1.5		0.8	0.0	9.3	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	34.4
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

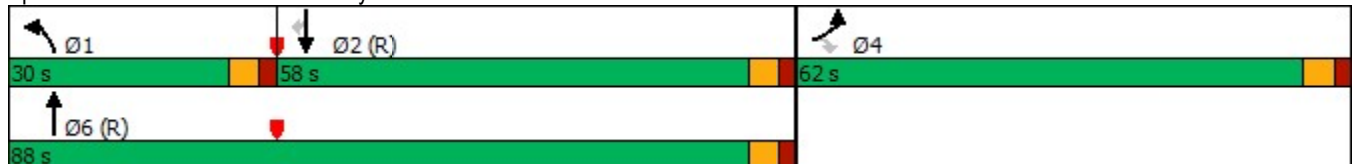


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	834	486	330	455	720	515
Future Volume (vph)	834	486	330	455	720	515
Lane Group Flow (vph)	887	517	351	484	766	548
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	62.0	62.0	30.0	88.0	58.0	58.0
Total Split (%)	41.3%	41.3%	20.0%	58.7%	38.7%	38.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.83	0.70	0.75	0.42	0.49	0.55
Control Delay	54.7	17.9	70.6	18.2	33.0	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	54.7	17.9	70.6	18.2	33.0	4.8
Queue Length 50th (ft)	414	138	177	199	278	0
Queue Length 95th (ft)	457	255	228	387	396	86
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1293	818	565	1144	1560	1004
Starvation Cap Reductn	0	0	0	0	0	41
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.63	0.62	0.42	0.49	0.57

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

6f.Build 2034 Dismissal - System Improvements

05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (veh/h)	834	486	330	455	720	515
Future Volume (veh/h)	834	486	330	455	720	515
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	887	517	351	484	766	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1210	555	408	1078	1499	
Arrive On Green	0.35	0.35	0.12	0.58	0.42	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	887	517	351	484	766	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	33.7	47.2	15.0	22.2	23.8	0.0
Cycle Q Clear(g_c), s	33.7	47.2	15.0	22.2	23.8	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1210	555	408	1078	1499	
V/C Ratio(X)	0.73	0.93	0.86	0.45	0.51	
Avail Cap(c_a), veh/h	1302	597	564	1078	1499	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.77	0.00
Uniform Delay (d), s/veh	42.6	47.0	64.9	18.2	32.0	0.0
Incr Delay (d2), s/veh	2.0	20.8	9.6	1.4	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	21.2	7.1	9.8	10.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.6	67.7	74.6	19.5	32.9	0.0
LnGrp LOS	D	E	E	B	C	
Approach Vol, veh/h	1404			835	766	
Approach Delay, s/veh	53.1			42.7	32.9	
Approach LOS	D			D	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.2	68.8		58.0		92.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	24.5	52.5		56.5		82.5
Max Q Clear Time (g_c+I1), s	17.0	25.8		49.2		24.2
Green Ext Time (p_c), s	0.7	9.9		3.4		7.0

Intersection Summary

HCM 6th Ctrl Delay	45.1
HCM 6th LOS	D

Notes

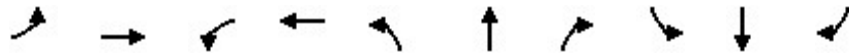
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

6f.Build 2034 Dismissal - System Improvements

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

05/29/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	369	12	9	12	88	498	8	21	663	315
Future Volume (vph)	369	12	9	12	88	498	8	21	663	315
Lane Group Flow (vph)	401	148	0	38	96	541	9	23	721	342
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	22.0	45.5	23.5	23.5	15.0	59.5	59.5	15.0	59.5	59.5
Total Split (%)	18.3%	37.9%	19.6%	19.6%	12.5%	49.6%	49.6%	12.5%	49.6%	49.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.25	0.34		0.35	0.27	0.45	0.01	0.04	0.66	0.33
Control Delay	175.4	9.4		45.1	8.8	15.0	0.0	7.7	22.2	4.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	175.4	9.4		45.1	8.8	15.0	0.0	7.7	22.2	4.0
Queue Length 50th (ft)	~349	8		17	24	242	0	6	387	19
Queue Length 95th (ft)	#531	59		53	47	366	0	16	595	73
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	320	626		240	382	1193	1058	566	1094	1047
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.24		0.16	0.25	0.45	0.01	0.04	0.66	0.33

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

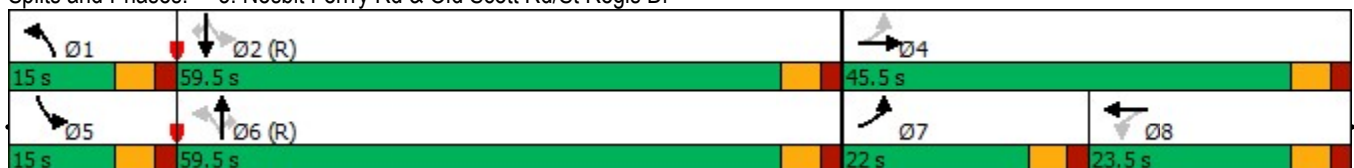
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr





HCM 6th Signalized Intersection Summary 6f.Build 2034 Dismissal - System Improvements  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	12	124	9	12	14	88	498	8	21	663	315
Future Volume (veh/h)	369	12	124	9	12	14	88	498	8	21	663	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	401	13	135	10	13	15	96	541	9	23	721	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	33	342	52	35	32	374	1135	962	483	1102	
Arrive On Green	0.14	0.23	0.23	0.05	0.05	0.05	0.04	0.61	0.61	0.02	0.59	0.00
Sat Flow, veh/h	1781	141	1465	279	697	637	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	401	0	148	38	0	0	96	541	9	23	721	0
Grp Sat Flow(s),veh/h/ln	1781	0	1607	1614	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	16.5	0.0	9.3	0.7	0.0	0.0	2.5	19.2	0.3	0.6	30.9	0.0
Cycle Q Clear(g_c), s	16.5	0.0	9.3	2.6	0.0	0.0	2.5	19.2	0.3	0.6	30.9	0.0
Prop In Lane	1.00		0.91	0.26		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	0	375	118	0	0	374	1135	962	483	1102	
V/C Ratio(X)	1.00	0.00	0.39	0.32	0.00	0.00	0.26	0.48	0.01	0.05	0.65	
Avail Cap(c_a), veh/h	402	0	536	274	0	0	444	1135	962	584	1102	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.1	0.0	38.9	55.4	0.0	0.0	13.3	13.0	9.3	10.4	16.5	0.0
Incr Delay (d2), s/veh	44.1	0.0	0.7	1.5	0.0	0.0	0.4	1.4	0.0	0.0	3.0	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	8.8	0.0	3.7	1.2	0.0	0.0	0.9	7.9	0.1	0.2	13.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.1	0.0	39.5	56.9	0.0	0.0	13.7	14.5	9.3	10.5	19.5	0.0
LnGrp LOS	F	A	D	E	A	A	B	B	A	B	B	
Approach Vol, veh/h		549			38			646			744	
Approach Delay, s/veh		78.7			56.9			14.3			19.2	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	76.2		33.5	8.2	78.3	22.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	54.0		40.0	9.5	54.0	16.5	18.0				
Max Q Clear Time (g_c+I1), s	4.5	32.9		11.3	2.6	21.2	18.5	4.6				
Green Ext Time (p_c), s	0.1	8.8		0.8	0.0	7.4	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

**FUTURE 2039 "NO-BUILD" INTERSECTION  
ANALYSIS**

Timings

1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↔	↗	↕↕	↗
Traffic Volume (vph)	9	0	13	13	0	38	10	974	104	1597	33
Future Volume (vph)	9	0	13	13	0	38	10	974	104	1597	33
Lane Group Flow (vph)	0	11	16	0	16	48	13	1292	132	2022	42
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	76.0	76.0	76.0	76.0	76.0
Total Split (%)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.10	0.11		0.15	0.29	0.12	0.46	0.45	0.72	0.03
Control Delay		39.8	10.4		41.0	16.4	5.0	3.5	8.7	6.2	1.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		39.8	10.4		41.0	16.4	5.0	3.5	8.7	6.2	1.2
Queue Length 50th (ft)		6	0		9	0	1	84	16	196	1
Queue Length 95th (ft)		19	10		25	25	5	102	41	218	6
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		296	358		298	375	108	2860	300	2878	1292
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.04		0.05	0.13	0.12	0.45	0.44	0.70	0.03

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 86.8

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

4a.No Build 2039 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Volume (veh/h)	9	0	13	13	0	38	10	974	47	104	1597	33
Future Volume (veh/h)	9	0	13	13	0	38	10	974	47	104	1597	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	0	16	16	0	48	13	1233	59	132	2022	42
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	0	297	80	0	297	137	2416	116	303	2487	1109
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	29	0	1585	34	0	1585	202	3452	165	427	3554	1585
Grp Volume(v), veh/h	11	0	16	16	0	48	13	634	658	132	2022	42
Grp Sat Flow(s),veh/h/ln	29	0	1585	34	0	1585	202	1777	1841	427	1777	1585
Q Serve(g_s), s	0.4	0.0	0.8	0.4	0.0	2.5	4.6	16.3	16.3	20.3	38.7	0.8
Cycle Q Clear(g_c), s	18.3	0.0	0.8	18.3	0.0	2.5	42.4	16.3	16.3	36.3	38.7	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	79	0	297	80	0	297	137	1244	1288	303	2487	1109
V/C Ratio(X)	0.14	0.00	0.05	0.20	0.00	0.16	0.09	0.51	0.51	0.44	0.81	0.04
Avail Cap(c_a), veh/h	82	0	300	83	0	300	141	1282	1328	312	2564	1144
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	0.0	32.6	48.8	0.0	33.3	24.7	6.8	6.8	15.2	10.2	4.5
Incr Delay (d2), s/veh	0.8	0.0	0.1	1.2	0.0	0.3	0.6	0.7	0.7	2.1	2.4	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	0.3	0.0	0.3	0.4	0.0	1.0	0.2	5.0	5.2	1.9	12.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.6	0.0	32.7	50.0	0.0	33.5	25.3	7.5	7.5	17.3	12.6	4.5
LnGrp LOS	D	A	C	D	A	C	C	A	A	B	B	A
Approach Vol, veh/h		27			64			1305			2196	
Approach Delay, s/veh		39.5			37.6			7.7			12.7	
Approach LOS		D			D			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		74.0		23.9		74.0		23.9				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		70.5		18.5		70.5		18.5				
Max Q Clear Time (g_c+I1), s		40.7		20.3		44.4		20.3				
Green Ext Time (p_c), s		27.8		0.0		17.2		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				11.5								
HCM 6th LOS				B								

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	688	608	493	344	805	818
Future Volume (vph)	688	608	493	344	805	818
Lane Group Flow (vph)	740	654	530	370	866	880
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	54.0	54.0	37.0	96.0	59.0	59.0
Total Split (%)	36.0%	36.0%	24.7%	64.0%	39.3%	39.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.79	0.88	1.03	0.30	1.30	1.06
Control Delay	57.2	31.2	90.9	15.1	186.7	72.0
Queue Delay	0.0	0.7	0.0	0.0	1.3	0.0
Total Delay	57.2	32.0	90.9	15.1	188.0	72.0
Queue Length 50th (ft)	350	245	~523	145	~1083	~662
Queue Length 95th (ft)	393	412	#846	301	#1340	#923
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1110	802	513	1221	664	832
Starvation Cap Reductn	0	0	0	0	32	0
Spillback Cap Reductn	0	28	0	0	107	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.84	1.03	0.30	1.55	1.06

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

4a.No Build 2039 AM  
 05/17/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔	↔	↑	↓	↔
Traffic Volume (veh/h)	688	608	493	344	805	818
Future Volume (veh/h)	688	608	493	344	805	818
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	740	654	530	370	866	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1117	512	422	1128	667	
Arrive On Green	0.32	0.32	0.21	0.60	0.36	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	740	654	530	370	866	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	27.7	48.5	31.5	14.7	53.5	0.0
Cycle Q Clear(g_c), s	27.7	48.5	31.5	14.7	53.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1117	512	422	1128	667	
V/C Ratio(X)	0.66	1.28	1.26	0.33	1.30	
Avail Cap(c_a), veh/h	1117	512	422	1128	667	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.63	0.00
Uniform Delay (d), s/veh	43.7	50.8	50.3	14.7	48.3	0.0
Incr Delay (d2), s/veh	1.5	138.8	133.2	0.8	141.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	38.4	30.7	6.3	50.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.2	189.5	183.5	15.5	189.5	0.0
LnGrp LOS	D	F	F	B	F	
Approach Vol, veh/h	1394			900	866	
Approach Delay, s/veh	112.9			114.4	189.5	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	37.0	59.0		54.0		96.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	53.5		48.5		90.5
Max Q Clear Time (g_c+I1), s	33.5	55.5		50.5		16.7
Green Ext Time (p_c), s	0.0	0.0		0.0		5.0

Intersection Summary

HCM 6th Ctrl Delay	134.3
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	93	60	36	15	58	899	39	39	1224	3
Future Volume (vph)	93	60	36	15	58	899	39	39	1224	3
Lane Group Flow (vph)	111	113	43	42	69	1070	46	46	1457	4
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.70	0.52	0.36	0.19	0.50	0.77	0.04	0.16	1.06	0.00
Control Delay	85.8	59.9	67.6	32.1	33.1	18.3	1.3	2.7	46.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0
Total Delay	85.8	59.9	67.6	32.1	33.1	18.3	1.3	2.7	63.8	0.0
Queue Length 50th (ft)	106	89	39	16	15	598	0	4	~826	0
Queue Length 95th (ft)	156	137	73	47	63	828	8	m7	m#1342	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	222	301	167	298	161	1390	1195	316	1376	1185
Starvation Cap Reductn	0	0	0	0	0	0	0	0	97	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.38	0.26	0.14	0.43	0.77	0.04	0.15	1.14	0.00

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.

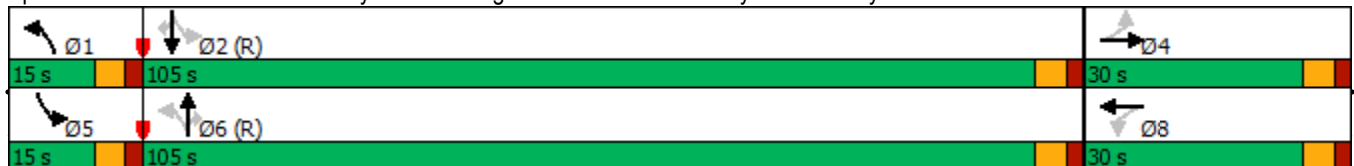
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

4a.No Build 2039 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	60	35	36	15	20	58	899	39	39	1224	3
Future Volume (veh/h)	93	60	35	36	15	20	58	899	39	39	1224	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	71	42	43	18	24	69	1070	46	46	1457	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	131	78	123	87	115	104	1389	1177	300	1383	1172
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.03	0.74	0.74	0.03	0.74	0.74
Sat Flow, veh/h	1365	1101	652	1280	727	969	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	111	0	113	43	0	42	69	1070	46	46	1457	4
Grp Sat Flow(s),veh/h/ln	1365	0	1753	1280	0	1696	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	12.0	0.0	9.1	4.9	0.0	3.4	1.6	51.7	1.2	0.9	110.9	0.1
Cycle Q Clear(g_c), s	15.4	0.0	9.1	14.0	0.0	3.4	1.6	51.7	1.2	0.9	110.9	0.1
Prop In Lane	1.00		0.37	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	0	209	123	0	202	104	1389	1177	300	1383	1172
V/C Ratio(X)	0.62	0.00	0.54	0.35	0.00	0.21	0.66	0.77	0.04	0.15	1.05	0.00
Avail Cap(c_a), veh/h	240	0	286	179	0	277	161	1389	1177	362	1383	1172
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.6	0.0	62.2	68.8	0.0	59.7	46.7	11.6	5.1	13.8	19.5	5.1
Incr Delay (d2), s/veh	3.4	0.0	2.2	1.7	0.0	0.5	7.0	4.2	0.1	0.2	39.7	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	4.4	0.0	4.2	1.7	0.0	1.5	2.1	20.1	0.4	0.6	55.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	0.0	64.4	70.5	0.0	60.2	53.7	15.8	5.2	14.0	59.2	5.1
LnGrp LOS	E	A	E	E	A	E	D	B	A	B	F	A
Approach Vol, veh/h		224			85			1185			1507	
Approach Delay, s/veh		67.2			65.4			17.6			57.7	
Approach LOS		E			E			B			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	116.4		23.4	9.8	116.9		23.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	3.6	112.9		17.4	2.9	53.7		16.0				
Green Ext Time (p_c), s	0.1	0.0		0.5	0.0	24.7		0.2				

Intersection Summary												
HCM 6th Ctrl Delay				42.8								
HCM 6th LOS				D								



Intersection						
Int Delay, s/veh	21					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↗	↗	↘
Traffic Vol, veh/h	63	49	16	933	1273	21
Future Vol, veh/h	63	49	16	933	1273	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	54	18	1025	1399	23

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2460	-	1399	0	-
Stage 1	1399	-	-	-	-
Stage 2	1061	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	~ 34	0	488	-	-
Stage 1	228	0	-	-	-
Stage 2	333	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 33	-	488	-	-
Mov Cap-2 Maneuver	~ 33	-	-	-	-
Stage 1	220	-	-	-	-
Stage 2	333	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	766.1	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	488	-	33	-	-	-
HCM Lane V/C Ratio	0.036	-	2.098	-	-	-
HCM Control Delay (s)	12.7	-	766.1	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	7.8	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	290	2	101	8	3	230	692	3	14	963	483
Future Volume (vph)	290	2	101	8	3	230	692	3	14	963	483
Lane Group Flow (vph)	0	311	107	0	29	245	736	3	15	1024	514
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	16.0	65.0	65.0	15.0	64.0	64.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	13.3%	54.2%	54.2%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.90	0.23		0.07	0.94	0.65	0.00	0.05	1.13	0.55
Control Delay		72.0	13.7		18.4	76.8	21.0	0.0	9.4	101.9	9.7
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		72.0	13.7		18.4	76.8	21.0	0.0	9.4	101.9	9.7
Queue Length 50th (ft)		225	19		7	~169	333	0	4	~919	89
Queue Length 95th (ft)		#377	63		30	#340	600	0	13	#1172	188
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		378	507		450	260	1130	989	379	908	937
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.82	0.21		0.06	0.94	0.65	0.00	0.04	1.13	0.55

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

4a.No Build 2039 AM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↑	↗	↖	↑	↗
Traffic Volume (veh/h)	290	2	101	8	3	16	230	692	3	14	963	483
Future Volume (veh/h)	290	2	101	8	3	16	230	692	3	14	963	483
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	309	2	107	9	3	17	245	736	3	15	1024	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	1	456	39	26	37	216	1045	885	285	912	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.09	0.56	0.56	0.02	0.49	0.00
Sat Flow, veh/h	596	4	1585	0	90	128	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	311	0	107	29	0	0	245	736	3	15	1024	0
Grp Sat Flow(s),veh/h/ln	600	0	1585	218	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	6.2	0.0	0.0	0.0	10.5	34.4	0.1	0.5	58.5	0.0
Cycle Q Clear(g_c), s	34.5	0.0	6.2	34.5	0.0	0.0	10.5	34.4	0.1	0.5	58.5	0.0
Prop In Lane	0.99		1.00	0.31		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	0	456	102	0	0	216	1045	885	285	912	
V/C Ratio(X)	1.34	0.00	0.23	0.28	0.00	0.00	1.13	0.70	0.00	0.05	1.12	
Avail Cap(c_a), veh/h	232	0	456	102	0	0	216	1045	885	397	912	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.2	0.0	32.7	34.8	0.0	0.0	39.7	19.3	11.7	17.7	30.7	0.0
Incr Delay (d2), s/veh	178.5	0.0	0.3	1.5	0.0	0.0	102.4	4.0	0.0	0.1	69.7	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	18.5	0.0	2.4	0.7	0.0	0.0	12.5	15.0	0.0	0.2	42.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	225.7	0.0	32.9	36.3	0.0	0.0	142.0	23.3	11.7	17.8	100.4	0.0
LnGrp LOS	F	A	C	D	A	A	F	C	B	B	F	
Approach Vol, veh/h		418			29			984			1039	
Approach Delay, s/veh		176.4			36.3			52.8			99.2	
Approach LOS		F			D			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	64.0		40.0	7.5	72.5		40.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	10.5	58.5		34.5	9.5	59.5		34.5				
Max Q Clear Time (g_c+I1), s	12.5	60.5		36.5	2.5	36.4		36.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay	93.1
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection												
Int Delay, s/veh	20.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Vol, veh/h	46	0	37	0	0	12	32	1451	6	25	1464	69
Future Vol, veh/h	46	0	37	0	0	12	32	1451	6	25	1464	69
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	75	-	-	75	70	-	-	50	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	0	38	0	0	12	33	1496	6	26	1509	71

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2375	3129	755	2372	3197	751	1580	0	0	1502	0	0
Stage 1	1561	1561	-	1565	1565	-	-	-	-	-	-	-
Stage 2	814	1568	-	807	1632	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 18	11	351	18	10	353	412	-	-	442	-	-
Stage 1	117	171	-	116	170	-	-	-	-	-	-	-
Stage 2	338	170	-	341	158	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 16	10	351	14	9	353	412	-	-	442	-	-
Mov Cap-2 Maneuver	~ 16	10	-	14	9	-	-	-	-	-	-	-
Stage 1	108	161	-	107	156	-	-	-	-	-	-	-
Stage 2	300	156	-	286	149	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	769.8	15.6	0.3	0.2
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	412	-	-	16	351	-	353	442	-	-
HCM Lane V/C Ratio	0.08	-	-	2.964	0.109	-	0.035	0.058	-	-
HCM Control Delay (s)	14.5	-	-	1375.7	16.5	0	15.6	13.6	-	-
HCM Lane LOS	B	-	-	F	C	A	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	6.6	0.4	-	0.1	0.2	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

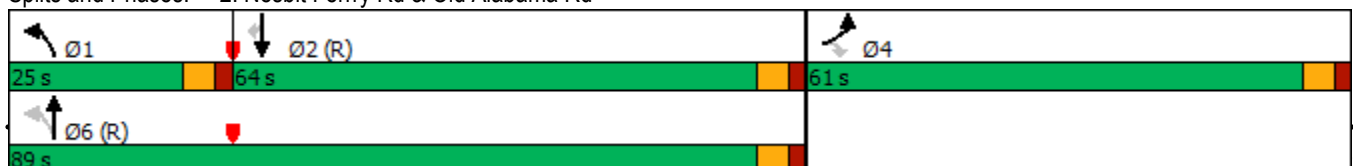


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	877	665	332	562	918	620
Future Volume (vph)	877	665	332	562	918	620
Lane Group Flow (vph)	914	693	346	585	956	646
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	61.0	61.0	25.0	89.0	64.0	64.0
Total Split (%)	40.7%	40.7%	16.7%	59.3%	42.7%	42.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.79	0.94	1.04	0.53	1.32	0.81
Control Delay	49.7	47.9	103.6	19.6	189.5	31.0
Queue Delay	0.0	2.1	0.0	0.0	0.0	0.0
Total Delay	49.7	50.0	103.6	19.6	189.5	31.0
Queue Length 50th (ft)	394	404	~363	280	~1202	335
Queue Length 95th (ft)	473	#668	#585	327	#1464	522
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1270	776	334	1095	726	795
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	27	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.93	1.04	0.53	1.32	0.81

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

4b.No Build 2039 PM  
 05/17/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	877	665	332	562	918	620
Future Volume (veh/h)	877	665	332	562	918	620
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	914	693	346	585	956	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1279	586	280	1041	729	
Arrive On Green	0.37	0.37	0.13	0.56	0.39	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	914	693	346	585	956	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	34.0	55.5	19.5	30.3	58.5	0.0
Cycle Q Clear(g_c), s	34.0	55.5	19.5	30.3	58.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1279	586	280	1041	729	
V/C Ratio(X)	0.71	1.18	1.24	0.56	1.31	
Avail Cap(c_a), veh/h	1279	586	280	1041	729	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	40.5	47.3	51.6	21.4	45.7	0.0
Incr Delay (d2), s/veh	1.9	98.3	133.7	2.2	149.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	37.1	16.5	13.5	56.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.4	145.6	185.3	23.6	195.3	0.0
LnGrp LOS	D	F	F	C	F	
Approach Vol, veh/h	1607			931	956	
Approach Delay, s/veh	86.9			83.7	195.3	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	64.0		61.0		89.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	19.5	58.5		55.5		83.5
Max Q Clear Time (g_c+I1), s	21.5	60.5		57.5		32.3
Green Ext Time (p_c), s	0.0	0.0		0.0		9.0

Intersection Summary

HCM 6th Ctrl Delay	115.7
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↖	↖	↗	↖
Traffic Volume (vph)	15	0	5	1	12	1011	8	14	1420	3
Future Volume (vph)	15	0	5	1	12	1011	8	14	1420	3
Lane Group Flow (vph)	16	11	5	9	13	1087	9	15	1527	3
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.22	0.05	0.07	0.10	0.11	0.65	0.01	0.04	0.92	0.00
Control Delay	74.7	0.5	68.8	38.8	3.3	7.0	0.0	1.2	16.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0
Total Delay	74.7	0.5	68.8	38.8	3.3	7.0	0.0	1.2	22.3	0.0
Queue Length 50th (ft)	15	0	5	1	1	220	0	1	729	0
Queue Length 95th (ft)	41	0	20	21	4	641	0	m1	m354	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	243	375	243	270	162	1662	1418	440	1662	1418
Starvation Cap Reductn	0	0	0	0	0	0	0	0	107	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.03	0.02	0.03	0.08	0.65	0.01	0.03	0.98	0.00

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

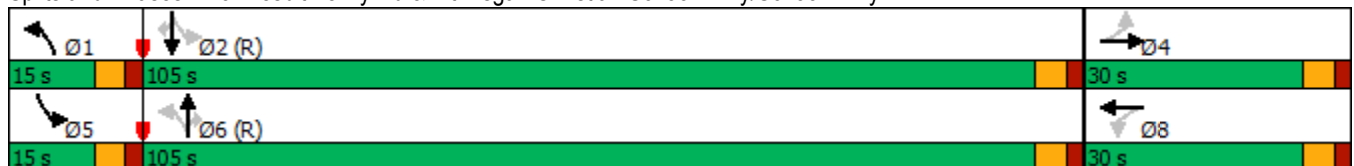
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

4b.No Build 2039 PM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↗	↖
Traffic Volume (veh/h)	15	0	10	5	1	7	12	1011	8	14	1420	3
Future Volume (veh/h)	15	0	10	5	1	7	12	1011	8	14	1420	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	0	11	5	1	8	13	1087	9	15	1527	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	0	52	84	6	47	123	1574	1334	396	1577	1337
Arrive On Green	0.03	0.00	0.03	0.03	0.03	0.03	0.01	0.84	0.84	0.02	0.84	0.84
Sat Flow, veh/h	1406	0	1585	1404	179	1433	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	16	0	11	5	0	9	13	1087	9	15	1527	3
Grp Sat Flow(s),veh/h/ln	1406	0	1585	1404	0	1612	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	0.0	1.0	0.5	0.0	0.8	0.2	32.9	0.1	0.2	104.5	0.0
Cycle Q Clear(g_c), s	2.5	0.0	1.0	1.5	0.0	0.8	0.2	32.9	0.1	0.2	104.5	0.0
Prop In Lane	1.00		1.00	1.00		0.89	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	0	52	84	0	53	123	1574	1334	396	1577	1337
V/C Ratio(X)	0.19	0.00	0.21	0.06	0.00	0.17	0.11	0.69	0.01	0.04	0.97	0.00
Avail Cap(c_a), veh/h	270	0	259	268	0	263	211	1574	1334	481	1577	1337
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.8	0.0	70.7	71.4	0.0	70.6	39.3	4.5	1.9	5.3	10.0	1.8
Incr Delay (d2), s/veh	1.0	0.0	2.0	0.3	0.0	1.5	0.4	2.5	0.0	0.0	16.2	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	0.6	0.0	0.4	0.2	0.0	0.4	0.4	9.5	0.0	0.1	33.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.8	0.0	72.7	71.7	0.0	72.1	39.6	7.0	1.9	5.3	26.3	1.8
LnGrp LOS	E	A	E	E	A	E	D	A	A	A	C	A
Approach Vol, veh/h		27			14			1109			1545	
Approach Delay, s/veh		72.7			71.9			7.3			26.0	
Approach LOS		E			E			A			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	132.0		10.4	7.8	131.8		10.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.2	106.5		4.5	2.2	34.9		3.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	29.6		0.0				

Intersection Summary												
HCM 6th Ctrl Delay				19.0								
HCM 6th LOS				B								



Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↗	↗	↗
Traffic Vol, veh/h	25	17	61	1005	1363	72
Future Vol, veh/h	25	17	61	1005	1363	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	18	64	1058	1435	76

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2621	-	1435	0	-	0
Stage 1	1435	-	-	-	-	-
Stage 2	1186	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	27	0	473	-	-	-
Stage 1	219	0	-	-	-	-
Stage 2	290	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 23	-	473	-	-	-
Mov Cap-2 Maneuver	~ 23	-	-	-	-	-
Stage 1	189	-	-	-	-	-
Stage 2	290	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	\$ 479.7	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	473	-	23	-	-	-
HCM Lane V/C Ratio	0.136	-	1.144	-	-	-
HCM Control Delay (s)	13.8	-	\$ 479.7	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.5	-	3.4	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

4b.No Build 2039 PM

05/17/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↑	↗	↗	↑	↗
Traffic Volume (vph)	399	3	140	8	6	118	685	9	15	940	393
Future Volume (vph)	399	3	140	8	6	118	685	9	15	940	393
Lane Group Flow (vph)	0	414	144	0	26	122	706	9	15	969	405
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	41.0	41.0	41.0	41.0	41.0	15.0	64.0	64.0	15.0	64.0	64.0
Total Split (%)	34.2%	34.2%	34.2%	34.2%	34.2%	12.5%	53.3%	53.3%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		1.06	0.28		0.06	0.65	0.66	0.01	0.05	1.05	0.44
Control Delay		103.9	17.8		20.5	36.8	22.7	0.0	9.8	74.4	7.8
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		103.9	17.8		20.5	36.8	22.7	0.0	9.8	74.4	7.8
Queue Length 50th (ft)		~352	41		8	40	320	0	4	~827	57
Queue Length 95th (ft)		#551	94		30	#109	572	0	13	#1080	132
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		390	519		455	200	1067	937	360	923	919
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		1.06	0.28		0.06	0.61	0.66	0.01	0.04	1.05	0.44

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

4b.No Build 2039 PM  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↑	↘	↖	↗	↖
Traffic Volume (veh/h)	399	3	140	8	6	12	118	685	9	15	940	393
Future Volume (veh/h)	399	3	140	8	6	12	118	685	9	15	940	393
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	3	144	8	6	12	122	706	9	15	969	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	1	469	39	35	30	149	1029	872	293	966	
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	0.55	0.55	0.02	0.52	0.00
Sat Flow, veh/h	590	4	1585	0	118	101	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	414	0	144	26	0	0	122	706	9	15	969	0
Grp Sat Flow(s),veh/h/ln	594	0	1585	219	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	0.0	4.0	32.7	0.3	0.5	62.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	8.4	35.5	0.0	0.0	4.0	32.7	0.3	0.5	62.0	0.0
Prop In Lane	0.99		1.00	0.31		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	0	469	104	0	0	149	1029	872	293	966	
V/C Ratio(X)	1.76	0.00	0.31	0.25	0.00	0.00	0.82	0.69	0.01	0.05	1.00	
Avail Cap(c_a), veh/h	236	0	469	104	0	0	201	1029	872	405	966	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.8	0.0	32.7	34.2	0.0	0.0	29.8	19.5	12.2	16.7	29.0	0.0
Incr Delay (d2), s/veh	357.8	0.0	0.4	1.2	0.0	0.0	17.1	3.7	0.0	0.1	29.7	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	30.5	0.0	3.3	0.6	0.0	0.0	2.4	14.3	0.1	0.2	33.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	404.5	0.0	33.1	35.5	0.0	0.0	46.9	23.2	12.2	16.8	58.7	0.0
LnGrp LOS	F	A	C	D	A	A	D	C	B	B	F	
Approach Vol, veh/h		558			26			837			984	
Approach Delay, s/veh		308.7			35.5			26.5			58.1	
Approach LOS		F			D			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	67.5		41.0	7.5	71.5		41.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	58.5		35.5	9.5	58.5		35.5				
Max Q Clear Time (g_c+I1), s	6.0	64.0		37.5	2.5	34.7		37.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	9.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	105.0
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕↗	↖	↕↗	↗
Traffic Volume (vph)	12	1	10	91	1	260	12	1267	44	1166	12
Future Volume (vph)	12	1	10	91	1	260	12	1267	44	1166	12
Lane Group Flow (vph)	0	15	12	0	108	306	14	1543	52	1372	14
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	33.0	33.0	33.0	33.0	33.0	33.0	67.0	67.0	67.0	67.0	67.0
Total Split (%)	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	67.0%	67.0%	67.0%	67.0%	67.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.04	0.03		0.35	0.76	0.08	0.69	0.42	0.61	0.01
Control Delay		27.5	4.4		32.5	40.6	8.9	12.8	22.3	11.4	1.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay		27.5	4.4		32.5	40.6	8.9	12.9	22.3	11.4	1.4
Queue Length 50th (ft)		7	0		54	148	3	259	13	213	0
Queue Length 95th (ft)		21	6		96	225	12	363	51	301	4
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		497	553		451	562	196	2610	145	2621	1179
Starvation Cap Reductn		0	0		0	0	0	200	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.03	0.02		0.24	0.54	0.07	0.64	0.36	0.52	0.01

Intersection Summary

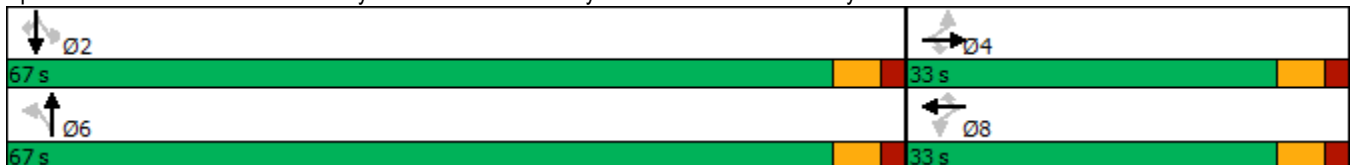
Cycle Length: 100

Actuated Cycle Length: 85.1

Natural Cycle: 60























Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Northern School Driveway

4c.No Build 2039 Dismissal  
 05/17/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	1	10	91	1	260	12	1267	44	44	1166	12
Future Volume (veh/h)	12	1	10	91	1	260	12	1267	44	44	1166	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1	12	107	1	306	14	1491	52	52	1372	14
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	3	454	75	0	454	211	2100	73	176	2130	950
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	0	10	1585	0	1	1585	390	3503	122	336	3554	1585
Grp Volume(v), veh/h	15	0	12	108	0	306	14	755	788	52	1372	14
Grp Sat Flow(s),veh/h/ln	10	0	1585	1	0	1585	390	1777	1848	336	1777	1585
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	16.4	2.3	28.4	28.6	12.3	24.2	0.3
Cycle Q Clear(g_c), s	27.5	0.0	0.5	27.5	0.0	16.4	26.5	28.4	28.6	40.9	24.2	0.3
Prop In Lane	0.93		1.00	0.99		1.00	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	454	75	0	454	211	1065	1108	176	2130	950
V/C Ratio(X)	0.20	0.00	0.03	1.44	0.00	0.67	0.07	0.71	0.71	0.30	0.64	0.01
Avail Cap(c_a), veh/h	75	0	454	75	0	454	226	1137	1183	190	2275	1015
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	0.0	24.7	47.9	0.0	30.3	21.2	13.4	13.4	27.7	12.6	7.8
Incr Delay (d2), s/veh	1.3	0.0	0.0	258.6	0.0	3.9	0.3	2.6	2.5	2.0	0.9	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	0.4	0.0	0.2	7.2	0.0	6.7	0.2	10.4	10.9	1.0	8.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	0.0	24.7	306.5	0.0	34.3	21.5	16.0	16.0	29.7	13.4	7.8
LnGrp LOS	D	A	C	F	A	C	C	B	B	C	B	A
Approach Vol, veh/h		27			414			1557			1438	
Approach Delay, s/veh		35.5			105.3			16.0			14.0	
Approach LOS		D			F			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		63.1		33.0		63.1		33.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		61.5		27.5		61.5		27.5				
Max Q Clear Time (g_c+I1), s		42.9		29.5		30.6		29.5				
Green Ext Time (p_c), s		14.7		0.0		23.0		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				26.1								
HCM 6th LOS				C								

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (vph)	872	470	305	451	729	538
Future Volume (vph)	872	470	305	451	729	538
Lane Group Flow (vph)	928	500	324	480	776	572
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	56.0	56.0	27.0	94.0	67.0	67.0
Total Split (%)	37.3%	37.3%	18.0%	62.7%	44.7%	44.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.87	0.71	0.92	0.42	1.02	0.68
Control Delay	58.7	22.1	80.2	15.5	80.2	18.8
Queue Delay	0.0	0.0	0.0	0.0	30.3	0.2
Total Delay	58.7	22.1	80.2	15.5	110.6	19.0
Queue Length 50th (ft)	438	167	291	195	~799	196
Queue Length 95th (ft)	510	299	#502	322	#1051	341
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1155	738	351	1149	763	843
Starvation Cap Reductn	0	0	0	0	90	29
Spillback Cap Reductn	0	5	0	0	34	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.68	0.92	0.42	1.15	0.70

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔	↔	↑	↓	↔
Traffic Volume (veh/h)	872	470	305	451	729	538
Future Volume (veh/h)	872	470	305	451	729	538
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	928	500	324	480	776	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1143	524	305	1115	778	
Arrive On Green	0.33	0.33	0.14	0.60	0.42	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	928	500	324	480	776	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	36.9	46.3	21.5	20.9	62.1	0.0
Cycle Q Clear(g_c), s	36.9	46.3	21.5	20.9	62.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1143	524	305	1115	778	
V/C Ratio(X)	0.81	0.95	1.06	0.43	1.00	
Avail Cap(c_a), veh/h	1163	534	305	1115	778	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.76	0.00
Uniform Delay (d), s/veh	45.9	49.1	52.1	16.5	43.7	0.0
Incr Delay (d2), s/veh	4.4	27.5	69.4	1.2	27.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	21.8	17.3	9.1	33.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.4	76.6	121.5	17.7	71.2	0.0
LnGrp LOS	D	E	F	B	E	
Approach Vol, veh/h	1428			804	776	
Approach Delay, s/veh	59.6			59.5	71.2	
Approach LOS	E			E	E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.0	67.9		55.1		94.9
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	21.5	61.5		50.5		88.5
Max Q Clear Time (g_c+I1), s	23.5	64.1		48.3		22.9
Green Ext Time (p_c), s	0.0	0.0		1.3		6.9

Intersection Summary

HCM 6th Ctrl Delay	62.6
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

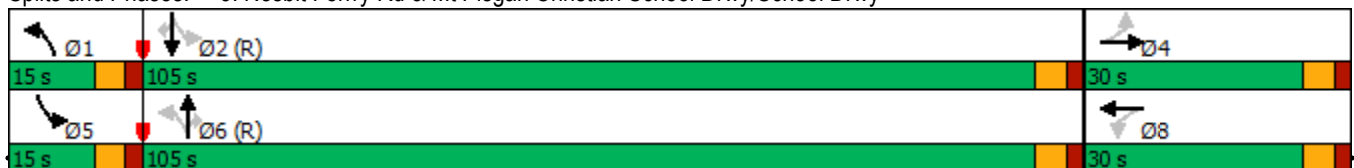


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	91	10	31	12	32	779	18	66	978	22
Future Volume (vph)	91	10	31	12	32	779	18	66	978	22
Lane Group Flow (vph)	100	59	34	131	35	856	20	73	1075	24
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.85	0.24	0.20	0.43	0.13	0.64	0.02	0.18	0.78	0.02
Control Delay	113.4	21.0	59.2	16.2	5.0	14.8	0.0	3.1	8.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Total Delay	113.4	21.0	59.2	16.2	5.0	14.8	0.0	3.1	9.1	0.0
Queue Length 50th (ft)	97	10	30	11	6	409	0	7	149	0
Queue Length 95th (ft)	#175	53	64	73	16	624	0	m14	m238	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	153	307	218	361	303	1338	1153	430	1372	1181
Starvation Cap Reductn	0	0	0	0	0	0	0	0	115	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.19	0.16	0.36	0.12	0.64	0.02	0.17	0.86	0.02

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy



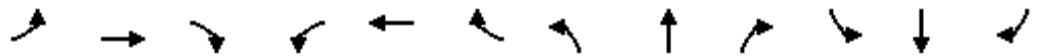


HCM 6th Signalized Intersection Summary

4c.No Build 2039 Dismissal

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy

05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	10	44	31	12	107	32	779	18	66	978	22
Future Volume (veh/h)	91	10	44	31	12	107	32	779	18	66	978	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	11	48	34	13	118	35	856	20	73	1075	24
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	50	217	225	26	237	246	1300	1101	381	1311	1111
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.69	0.69	0.03	0.70	0.70
Sat Flow, veh/h	1259	304	1327	1344	160	1450	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	100	0	59	34	0	131	35	856	20	73	1075	24
Grp Sat Flow(s),veh/h/ln	1259	0	1631	1344	0	1609	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	11.8	0.0	4.7	3.4	0.0	11.1	0.8	38.6	0.6	1.8	60.6	0.7
Cycle Q Clear(g_c), s	22.9	0.0	4.7	8.1	0.0	11.1	0.8	38.6	0.6	1.8	60.6	0.7
Prop In Lane	1.00		0.81	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	266	225	0	263	246	1300	1101	381	1311	1111
V/C Ratio(X)	0.62	0.00	0.22	0.15	0.00	0.50	0.14	0.66	0.02	0.19	0.82	0.02
Avail Cap(c_a), veh/h	160	0	266	225	0	263	313	1300	1101	438	1311	1111
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.6	0.0	54.5	58.0	0.0	57.2	18.7	12.9	7.1	11.5	15.8	6.8
Incr Delay (d2), s/veh	7.3	0.0	0.4	0.3	0.0	1.5	0.3	2.6	0.0	0.2	5.8	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	4.2	0.0	2.0	1.2	0.0	4.7	0.5	15.7	0.2	0.6	25.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.9	0.0	54.9	58.3	0.0	58.6	19.0	15.5	7.1	11.7	21.6	6.8
LnGrp LOS	E	A	D	E	A	E	B	B	A	B	C	A
Approach Vol, veh/h		159			165			911				1172
Approach Delay, s/veh		67.5			58.5			15.4				20.7
Approach LOS		E			E			B				C
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	110.7		30.0	10.3	109.7		30.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.8	62.6		24.9	3.8	40.6		13.1				
Green Ext Time (p_c), s	0.0	21.7		0.0	0.1	17.7		0.6				

Intersection Summary

HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↗	↗	↗
Traffic Vol, veh/h	36	17	31	819	1038	25
Future Vol, veh/h	36	17	31	819	1038	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	40	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	19	34	900	1141	27

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2109	-	1141	0	-	0
Stage 1	1141	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	56	0	612	-	-	-
Stage 1	305	0	-	-	-	-
Stage 2	368	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	53	-	612	-	-	-
Mov Cap-2 Maneuver	53	-	-	-	-	-
Stage 1	288	-	-	-	-	-
Stage 2	368	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	177.3	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	612	-	53	-	-	-
HCM Lane V/C Ratio	0.056	-	0.746	-	-	-
HCM Control Delay (s)	11.2	-	177.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	3.1	-	-	-

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

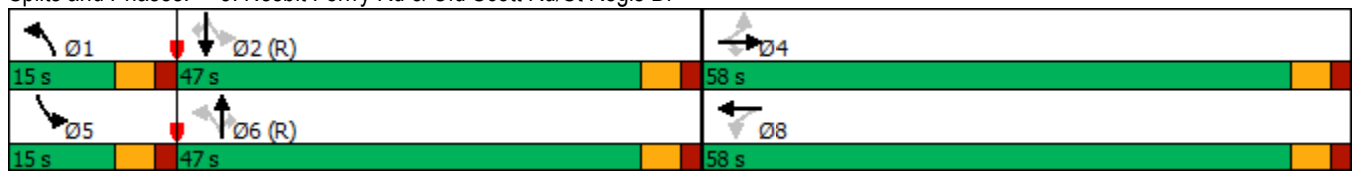


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↑	↗	↗	↑	↗
Traffic Volume (vph)	367	13	130	9	13	92	489	8	22	660	309
Future Volume (vph)	367	13	130	9	13	92	489	8	22	660	309
Lane Group Flow (vph)	0	413	141	0	40	100	532	9	24	717	336
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	58.0	58.0	58.0	58.0	58.0	15.0	47.0	47.0	15.0	47.0	47.0
Total Split (%)	48.3%	48.3%	48.3%	48.3%	48.3%	12.5%	39.2%	39.2%	12.5%	39.2%	39.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.87	0.23		0.07	0.51	0.59	0.01	0.07	0.90	0.41
Control Delay		54.1	12.3		14.8	27.0	29.4	0.0	16.2	49.1	10.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		54.1	12.3		14.8	27.0	29.4	0.0	16.2	49.1	10.0
Queue Length 50th (ft)		289	34		12	37	319	0	8	521	48
Queue Length 95th (ft)		387	71		32	86	509	0	25	#870	138
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		573	733		700	211	901	804	389	800	814
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.72	0.19		0.06	0.47	0.59	0.01	0.06	0.90	0.41

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

4c.No Build 2039 Dismissal  
 05/17/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↑	↘	↖	↗	↖
Traffic Volume (veh/h)	367	13	130	9	13	15	92	489	8	22	660	309
Future Volume (veh/h)	367	13	130	9	13	15	92	489	8	22	660	309
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	399	14	141	10	14	16	100	532	9	24	717	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	7	693	38	52	35	148	752	637	243	702	
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.05	0.40	0.40	0.02	0.38	0.00
Sat Flow, veh/h	471	17	1585	0	120	80	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	413	0	141	40	0	0	100	532	9	24	717	0
Grp Sat Flow(s),veh/h/ln	487	0	1585	199	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	6.6	0.0	0.0	0.0	4.1	28.5	0.4	1.0	45.1	0.0
Cycle Q Clear(g_c), s	52.5	0.0	6.6	52.5	0.0	0.0	4.1	28.5	0.4	1.0	45.1	0.0
Prop In Lane	0.97		1.00	0.25		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	0	693	125	0	0	148	752	637	243	702	
V/C Ratio(X)	1.52	0.00	0.20	0.32	0.00	0.00	0.67	0.71	0.01	0.10	1.02	
Avail Cap(c_a), veh/h	272	0	693	125	0	0	201	752	637	343	702	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.4	0.0	20.8	28.4	0.0	0.0	29.5	30.0	21.6	24.8	37.5	0.0
Incr Delay (d2), s/veh	251.1	0.0	0.1	1.5	0.0	0.0	5.3	5.6	0.0	0.2	39.4	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	27.1	0.0	2.5	0.7	0.0	0.0	1.9	13.5	0.2	0.4	27.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	290.5	0.0	21.0	29.9	0.0	0.0	34.7	35.5	21.6	24.9	76.8	0.0
LnGrp LOS	F	A	C	C	A	A	C	D	C	C	F	
Approach Vol, veh/h		554			40			641			741	
Approach Delay, s/veh		221.9			29.9			35.2			75.1	
Approach LOS		F			C			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	50.6		58.0	8.3	53.7		58.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	41.5		52.5	9.5	41.5		52.5				
Max Q Clear Time (g_c+I1), s	6.1	47.1		54.5	3.0	30.5		54.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	4.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	102.4
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

**FUTURE 2039 "NO-BUILD" IMPROVED**

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

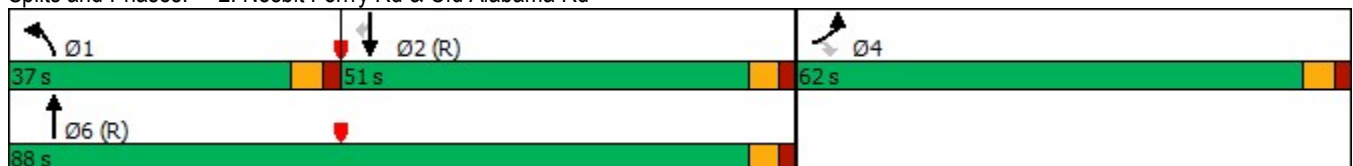


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	688	608	493	344	805	818
Future Volume (vph)	688	608	493	344	805	818
Lane Group Flow (vph)	740	654	530	370	866	880
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	62.0	62.0	37.0	88.0	51.0	51.0
Total Split (%)	41.3%	41.3%	24.7%	58.7%	34.0%	34.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.77	0.84	0.83	0.31	0.58	0.81
Control Delay	54.7	24.6	65.2	17.3	37.2	14.9
Queue Delay	0.0	1.9	0.0	0.0	10.5	0.3
Total Delay	54.7	26.6	65.2	17.3	47.6	15.2
Queue Length 50th (ft)	348	205	269	163	333	142
Queue Length 95th (ft)	364	340	330	340	496	#535
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1293	882	724	1203	1499	1081
Starvation Cap Reductn	0	0	0	0	0	24
Spillback Cap Reductn	0	109	0	0	607	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.85	0.73	0.31	0.97	0.83

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

4d.No Build 2039 AM - Improved  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶↶	↶	↶↶	↷
Traffic Volume (veh/h)	688	608	493	344	805	818
Future Volume (veh/h)	688	608	493	344	805	818
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	740	654	530	370	866	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1302	597	592	1029	1215	
Arrive On Green	0.38	0.38	0.17	0.55	0.34	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	740	654	530	370	866	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	25.5	56.5	22.5	16.6	31.8	0.0
Cycle Q Clear(g_c), s	25.5	56.5	22.5	16.6	31.8	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1302	597	592	1029	1215	
V/C Ratio(X)	0.57	1.10	0.90	0.36	0.71	
Avail Cap(c_a), veh/h	1302	597	726	1029	1215	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.63	0.00
Uniform Delay (d), s/veh	37.1	46.8	60.8	18.9	42.9	0.0
Incr Delay (d2), s/veh	0.6	65.6	12.0	1.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	32.3	10.8	7.4	14.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.7	112.3	72.8	19.9	45.2	0.0
LnGrp LOS	D	F	E	B	D	
Approach Vol, veh/h	1394			900	866	
Approach Delay, s/veh	72.7			51.1	45.2	
Approach LOS	E			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	31.2	56.8		62.0		88.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	45.5		56.5		82.5
Max Q Clear Time (g_c+I1), s	24.5	33.8		58.5		18.6
Green Ext Time (p_c), s	1.2	6.7		0.0		4.9

Intersection Summary

HCM 6th Ctrl Delay	59.0
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

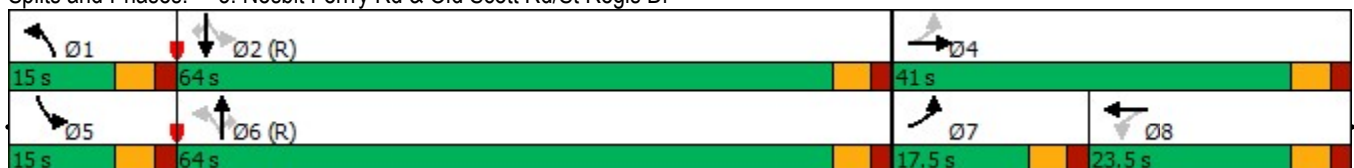


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↕	↖	↗	↗	↖	↗	↖
Traffic Volume (vph)	290	2	8	3	230	692	3	14	963	483
Future Volume (vph)	290	2	8	3	230	692	3	14	963	483
Lane Group Flow (vph)	309	109	0	29	245	736	3	15	1024	514
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	17.5	41.0	23.5	23.5	15.0	64.0	64.0	15.0	64.0	64.0
Total Split (%)	14.6%	34.2%	19.6%	19.6%	12.5%	53.3%	53.3%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.23	0.31		0.28	0.62	0.56	0.00	0.03	1.08	0.53
Control Delay	175.4	9.9		37.7	35.0	13.3	0.0	7.3	83.1	9.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	175.4	9.9		37.7	35.0	13.3	0.0	7.3	83.1	9.2
Queue Length 50th (ft)	~254	1		9	124	244	0	3	~919	89
Queue Length 95th (ft)	#423	48		40	#243	508	0	10	#1172	188
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	251	545		234	395	1309	1149	488	948	964
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.23	0.20		0.12	0.62	0.56	0.00	0.03	1.08	0.53

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 145  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr





HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

4d.No Build 2039 AM - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	2	101	8	3	16	230	692	3	14	963	483
Future Volume (veh/h)	290	2	101	8	3	16	230	692	3	14	963	483
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	309	2	107	9	3	17	245	736	3	15	1024	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	6	305	55	17	45	250	1217	1032	394	1100	
Arrive On Green	0.10	0.20	0.20	0.05	0.05	0.05	0.08	0.65	0.65	0.02	0.59	0.00
Sat Flow, veh/h	1781	29	1560	311	336	916	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	309	0	109	29	0	0	245	736	3	15	1024	0
Grp Sat Flow(s),veh/h/ln	1781	0	1589	1563	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	12.0	0.0	7.1	0.0	0.0	0.0	9.1	27.2	0.1	0.4	59.8	0.0
Cycle Q Clear(g_c), s	12.0	0.0	7.1	2.0	0.0	0.0	9.1	27.2	0.1	0.4	59.8	0.0
Prop In Lane	1.00		0.98	0.31		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	0	310	117	0	0	250	1217	1032	394	1100	
V/C Ratio(X)	0.91	0.00	0.35	0.25	0.00	0.00	0.98	0.60	0.00	0.04	0.93	
Avail Cap(c_a), veh/h	341	0	470	267	0	0	250	1217	1032	506	1100	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.6	0.0	41.7	55.2	0.0	0.0	35.0	12.1	7.3	11.1	22.5	0.0
Incr Delay (d2), s/veh	26.6	0.0	0.7	1.1	0.0	0.0	50.7	2.2	0.0	0.0	14.9	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	5.8	0.0	2.8	0.9	0.0	0.0	10.7	10.9	0.0	0.2	28.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	0.0	42.4	56.3	0.0	0.0	85.8	14.3	7.3	11.2	37.4	0.0
LnGrp LOS	E	A	D	E	A	A	F	B	A	B	D	
Approach Vol, veh/h		418			29			984			1039	
Approach Delay, s/veh		68.1			56.3			32.1			37.1	
Approach LOS		E			E			C			D	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	76.1		28.9	7.5	83.6	17.5	11.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	58.5		35.5	9.5	58.5	12.0	18.0				
Max Q Clear Time (g_c+I1), s	11.1	61.8		9.1	2.4	29.2	14.0	4.0				
Green Ext Time (p_c), s	0.0	0.0		0.6	0.0	10.7	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	40.5
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

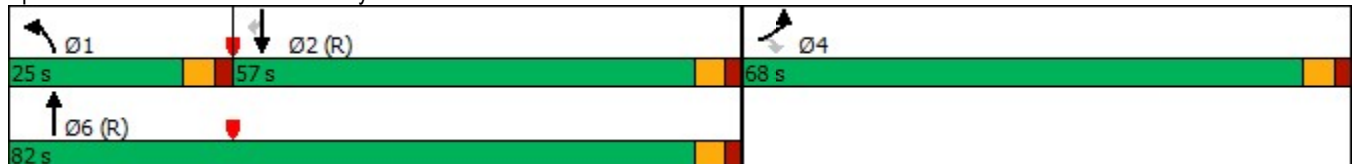


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙↘	↗	↙↘	↑	↑↑	↗
Traffic Volume (vph)	877	665	332	562	918	620
Future Volume (vph)	877	665	332	562	918	620
Lane Group Flow (vph)	914	693	346	585	956	646
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	68.0	68.0	25.0	82.0	57.0	57.0
Total Split (%)	45.3%	45.3%	16.7%	54.7%	38.0%	38.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.76	0.91	0.80	0.55	0.65	0.64
Control Delay	46.9	40.8	85.0	22.0	40.1	7.0
Queue Delay	0.0	12.7	0.0	0.0	0.0	0.0
Total Delay	46.9	53.5	85.0	22.0	40.1	7.0
Queue Length 50th (ft)	400	393	183	275	406	22
Queue Length 95th (ft)	436	553	239	376	529	145
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1430	845	456	1072	1461	1011
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	142	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.99	0.76	0.55	0.65	0.64

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

4e.No Build 2039 PM - Improved  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔	↔↔	↑	↓↓	↔
Traffic Volume (veh/h)	877	665	332	562	918	620
Future Volume (veh/h)	877	665	332	562	918	620
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	914	693	346	585	956	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1440	660	395	954	1276	
Arrive On Green	0.42	0.42	0.11	0.51	0.36	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	914	693	346	585	956	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	31.5	62.5	14.8	33.5	35.4	0.0
Cycle Q Clear(g_c), s	31.5	62.5	14.8	33.5	35.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1440	660	395	954	1276	
V/C Ratio(X)	0.63	1.05	0.88	0.61	0.75	
Avail Cap(c_a), veh/h	1440	660	449	954	1276	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	34.7	43.8	65.4	26.2	42.1	0.0
Incr Delay (d2), s/veh	0.9	48.6	16.1	2.9	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	32.4	7.3	15.3	16.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.6	92.4	81.5	29.1	46.2	0.0
LnGrp LOS	D	F	F	C	D	
Approach Vol, veh/h	1607			931	956	
Approach Delay, s/veh	60.1			48.6	46.2	
Approach LOS	E			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.6	59.4		68.0		82.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	19.5	51.5		62.5		76.5
Max Q Clear Time (g_c+I1), s	16.8	37.4		64.5		35.5
Green Ext Time (p_c), s	0.3	8.4		0.0		8.6

Intersection Summary

HCM 6th Ctrl Delay	53.2
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

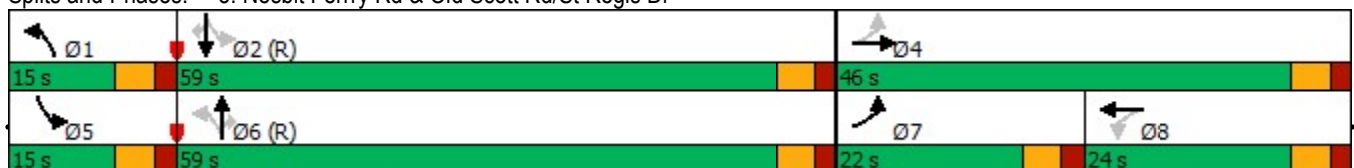


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↕	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	399	3	8	6	118	685	9	15	940	393
Future Volume (vph)	399	3	8	6	118	685	9	15	940	393
Lane Group Flow (vph)	411	147	0	26	122	706	9	15	969	405
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	22.0	46.0	24.0	24.0	15.0	59.0	59.0	15.0	59.0	59.0
Total Split (%)	18.3%	38.3%	20.0%	20.0%	12.5%	49.2%	49.2%	12.5%	49.2%	49.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.30	0.34		0.27	0.59	0.57	0.01	0.04	0.90	0.40
Control Delay	192.4	8.2		42.0	31.0	15.8	0.0	7.8	37.3	7.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	192.4	8.2		42.0	31.0	15.8	0.0	7.8	37.3	7.4
Queue Length 50th (ft)	~376	2		11	41	265	0	4	678	58
Queue Length 95th (ft)	#556	52		40	105	525	0	12	#1087	147
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	317	631		237	222	1239	1094	459	1076	1019
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.30	0.23		0.11	0.55	0.57	0.01	0.03	0.90	0.40

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 135  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

4e.No Build 2039 PM - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	399	3	140	8	6	12	118	685	9	15	940	393
Future Volume (veh/h)	399	3	140	8	6	12	118	685	9	15	940	393
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	3	144	8	6	12	122	706	9	15	969	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	410	8	363	54	28	36	219	1146	972	368	1095	
Arrive On Green	0.14	0.23	0.23	0.05	0.05	0.05	0.04	0.61	0.61	0.02	0.59	0.00
Sat Flow, veh/h	1781	32	1558	300	554	732	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	411	0	147	26	0	0	122	706	9	15	969	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1586	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	16.5	0.0	9.4	0.0	0.0	0.0	3.3	28.2	0.3	0.4	53.5	0.0
Cycle Q Clear(g_c), s	16.5	0.0	9.4	1.7	0.0	0.0	3.3	28.2	0.3	0.4	53.5	0.0
Prop In Lane	1.00		0.98	0.31		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	410	0	371	118	0	0	219	1146	972	368	1095	
V/C Ratio(X)	1.00	0.00	0.40	0.22	0.00	0.00	0.56	0.62	0.01	0.04	0.89	
Avail Cap(c_a), veh/h	410	0	537	276	0	0	282	1146	972	479	1095	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.2	0.0	38.9	55.0	0.0	0.0	23.9	14.4	9.0	12.2	21.4	0.0
Incr Delay (d2), s/veh	45.2	0.0	0.7	0.9	0.0	0.0	2.2	2.5	0.0	0.0	10.5	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	9.3	0.0	3.7	0.8	0.0	0.0	1.9	11.7	0.1	0.2	24.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	94.4	0.0	39.6	55.9	0.0	0.0	26.1	16.9	9.1	12.3	31.9	0.0
LnGrp LOS	F	A	D	E	A	A	C	B	A	B	C	
Approach Vol, veh/h		558			26			837			984	
Approach Delay, s/veh		80.0			55.9			18.2			31.6	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	75.7		33.5	7.5	79.1	22.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	53.5		40.5	9.5	53.5	16.5	18.5				
Max Q Clear Time (g_c+I1), s	5.3	55.5		11.4	2.4	30.2	18.5	3.7				
Green Ext Time (p_c), s	0.1	0.0		0.8	0.0	9.1	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	38.4
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

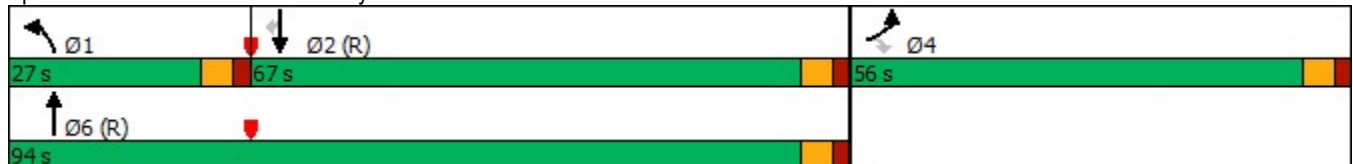


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	872	470	305	451	729	538
Future Volume (vph)	872	470	305	451	729	538
Lane Group Flow (vph)	928	500	324	480	776	572
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	56.0	56.0	27.0	94.0	67.0	67.0
Total Split (%)	37.3%	37.3%	18.0%	62.7%	44.7%	44.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.87	0.71	0.75	0.42	0.48	0.55
Control Delay	58.7	22.1	73.7	15.5	30.9	4.4
Queue Delay	0.0	0.1	0.0	0.0	0.1	0.1
Total Delay	58.7	22.2	73.7	15.5	31.1	4.5
Queue Length 50th (ft)	438	167	160	195	282	0
Queue Length 95th (ft)	510	299	215	322	364	77
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1155	738	492	1149	1608	1031
Starvation Cap Reductn	0	0	0	0	0	51
Spillback Cap Reductn	0	15	0	0	181	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.69	0.66	0.42	0.54	0.58

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

4f.No Build 2039 Dismissal - Improved  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	872	470	305	451	729	538
Future Volume (veh/h)	872	470	305	451	729	538
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	928	500	324	480	776	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1143	524	377	1115	1600	
Arrive On Green	0.33	0.33	0.11	0.60	0.45	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	928	500	324	480	776	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	36.9	46.3	13.8	20.9	23.0	0.0
Cycle Q Clear(g_c), s	36.9	46.3	13.8	20.9	23.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1143	524	377	1115	1600	
V/C Ratio(X)	0.81	0.95	0.86	0.43	0.49	
Avail Cap(c_a), veh/h	1163	534	495	1115	1600	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.76	0.00
Uniform Delay (d), s/veh	45.9	49.1	65.7	16.5	29.0	0.0
Incr Delay (d2), s/veh	4.4	27.5	11.3	1.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	21.8	6.6	9.1	9.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.4	76.6	76.9	17.7	29.8	0.0
LnGrp LOS	D	E	E	B	C	
Approach Vol, veh/h	1428			804	776	
Approach Delay, s/veh	59.6			41.6	29.8	
Approach LOS	E			D	C	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	21.9	73.0		55.1		94.9
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	21.5	61.5		50.5		88.5
Max Q Clear Time (g_c+I1), s	15.8	25.0		48.3		22.9
Green Ext Time (p_c), s	0.6	11.4		1.3		6.9

Intersection Summary

HCM 6th Ctrl Delay	47.1
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

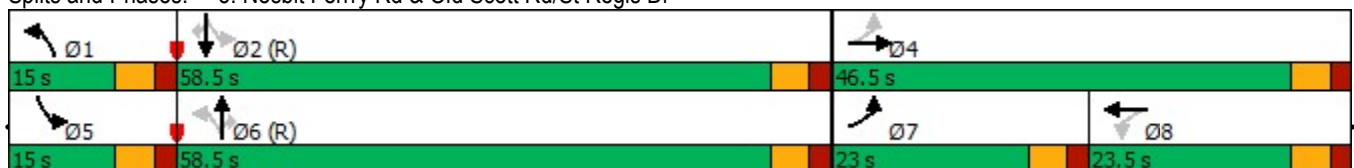


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	367	13	9	13	92	489	8	22	660	309
Future Volume (vph)	367	13	9	13	92	489	8	22	660	309
Lane Group Flow (vph)	399	155	0	40	100	532	9	24	717	336
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	23.0	46.5	23.5	23.5	15.0	58.5	58.5	15.0	58.5	58.5
Total Split (%)	19.2%	38.8%	19.6%	19.6%	12.5%	48.8%	48.8%	12.5%	48.8%	48.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.12	0.32		0.36	0.29	0.47	0.01	0.05	0.69	0.33
Control Delay	124.2	8.9		45.1	10.1	16.5	0.0	8.4	25.2	4.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	124.2	8.9		45.1	10.1	16.5	0.0	8.4	25.2	4.4
Queue Length 50th (ft)	~324	8		18	26	241	0	6	394	21
Queue Length 95th (ft)	#514	59		54	51	367	0	17	610	76
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	357	642		242	358	1140	1017	542	1038	1004
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.24		0.17	0.28	0.47	0.01	0.04	0.69	0.33

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 95  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr





HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

4f.No Build 2039 Dismissal - Improved  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	13	130	9	13	15	92	489	8	22	660	309
Future Volume (veh/h)	367	13	130	9	13	15	92	489	8	22	660	309
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	399	14	141	10	14	16	100	532	9	24	717	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	415	35	353	51	35	32	367	1118	948	480	1086	
Arrive On Green	0.15	0.24	0.24	0.05	0.05	0.05	0.04	0.60	0.60	0.02	0.58	0.00
Sat Flow, veh/h	1781	145	1462	266	703	646	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	399	0	155	40	0	0	100	532	9	24	717	0
Grp Sat Flow(s),veh/h/ln	1781	0	1607	1616	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	17.5	0.0	9.7	0.9	0.0	0.0	2.7	19.2	0.3	0.6	31.3	0.0
Cycle Q Clear(g_c), s	17.5	0.0	9.7	2.8	0.0	0.0	2.7	19.2	0.3	0.6	31.3	0.0
Prop In Lane	1.00		0.91	0.25		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	0	388	118	0	0	367	1118	948	480	1086	
V/C Ratio(X)	0.96	0.00	0.40	0.34	0.00	0.00	0.27	0.48	0.01	0.05	0.66	
Avail Cap(c_a), veh/h	415	0	549	274	0	0	436	1118	948	580	1086	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.1	0.0	38.2	55.4	0.0	0.0	13.9	13.6	9.8	10.8	17.1	0.0
Incr Delay (d2), s/veh	33.9	0.0	0.7	1.7	0.0	0.0	0.4	1.5	0.0	0.0	3.2	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	7.2	0.0	3.8	1.2	0.0	0.0	1.0	7.9	0.1	0.2	13.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.1	0.0	38.9	57.1	0.0	0.0	14.3	15.0	9.8	10.9	20.3	0.0
LnGrp LOS	F	A	D	E	A	A	B	B	A	B	C	
Approach Vol, veh/h		554			40			641			741	
Approach Delay, s/veh		70.0			57.1			14.8			20.0	
Approach LOS		E			E			B			B	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	75.2		34.5	8.3	77.3	23.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	53.0		41.0	9.5	53.0	17.5	18.0				
Max Q Clear Time (g_c+I1), s	4.7	33.3		11.7	2.6	21.2	19.5	4.8				
Green Ext Time (p_c), s	0.1	8.4		0.9	0.0	7.1	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

**FUTURE 2039 PHASE 2 "BUILD"  
INTERSECTION ANALYSIS**

Timings

1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↔	↗	↕↕	↗
Traffic Volume (vph)	9	0	13	21	0	67	10	1003	151	1644	33
Future Volume (vph)	9	0	13	21	0	67	10	1003	151	1644	33
Lane Group Flow (vph)	0	11	16	0	27	85	13	1345	191	2081	42
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	76.0	76.0	76.0	76.0	76.0
Total Split (%)	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	76.0%	76.0%	76.0%	76.0%	76.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	Min	Min	Min
v/c Ratio		0.10	0.10		0.23	0.41	0.14	0.48	0.70	0.74	0.03
Control Delay		39.2	10.2		43.0	15.3	6.1	3.8	22.5	6.9	1.3
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		39.2	10.2		43.0	15.3	6.1	3.8	22.5	6.9	1.3
Queue Length 50th (ft)		6	0		14	0	1	95	36	224	1
Queue Length 95th (ft)		19	10		35	31	6	118	117	252	6
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		286	350		290	396	94	2787	272	2807	1261
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.05		0.09	0.21	0.14	0.48	0.70	0.74	0.03

Intersection Summary

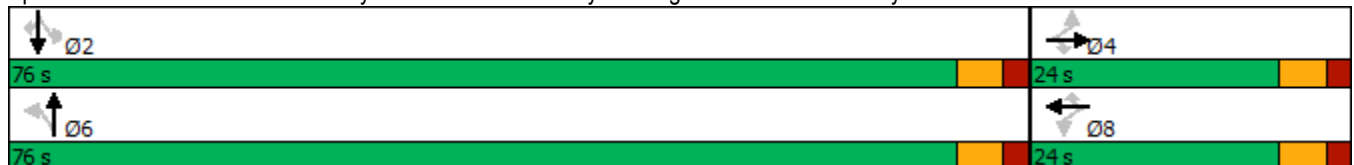
Cycle Length: 100

Actuated Cycle Length: 88.9

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



HCM 6th Signalized Intersection Summary  
 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy

7a.Build 2039 AM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↕↔		↔	↕↕	↔
Traffic Volume (veh/h)	9	0	13	21	0	67	10	1003	59	151	1644	33
Future Volume (veh/h)	9	0	13	21	0	67	10	1003	59	151	1644	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	0	16	27	0	85	13	1270	75	191	2081	42
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	0	294	72	0	294	127	2402	142	287	2503	1117
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1	0	1585	1	0	1585	191	3410	201	406	3554	1585
Grp Volume(v), veh/h	11	0	16	27	0	85	13	661	684	191	2081	42
Grp Sat Flow(s),veh/h/ln	1	0	1585	1	0	1585	191	1777	1834	406	1777	1585
Q Serve(g_s), s	0.0	0.0	0.8	0.0	0.0	4.6	5.2	17.5	17.5	41.8	41.7	0.8
Cycle Q Clear(g_c), s	18.5	0.0	0.8	18.5	0.0	4.6	46.9	17.5	17.5	59.3	41.7	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	72	0	294	72	0	294	127	1252	1292	287	2503	1117
V/C Ratio(X)	0.15	0.00	0.05	0.37	0.00	0.29	0.10	0.53	0.53	0.67	0.83	0.04
Avail Cap(c_a), veh/h	72	0	294	72	0	294	127	1255	1295	288	2510	1120
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	0.0	33.5	49.9	0.0	35.0	27.2	6.9	7.0	20.9	10.5	4.5
Incr Delay (d2), s/veh	1.0	0.0	0.1	3.2	0.0	0.5	0.7	0.8	0.8	7.6	2.8	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	0.3	0.0	0.3	0.7	0.0	1.8	0.3	5.4	5.6	4.1	13.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.9	0.0	33.5	53.1	0.0	35.5	28.0	7.7	7.7	28.5	13.3	4.5
LnGrp LOS	D	A	C	D	A	D	C	A	A	C	B	A
Approach Vol, veh/h		27			112			1358			2314	
Approach Delay, s/veh		40.6			39.8			7.9			14.4	
Approach LOS		D			D			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		75.8		24.0		75.8		24.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		70.5		18.5		70.5		18.5				
Max Q Clear Time (g_c+I1), s		61.3		20.5		48.9		20.5				
Green Ext Time (p_c), s		9.0		0.0		15.6		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			B									

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	688	701	551	385	859	818
Future Volume (vph)	688	701	551	385	859	818
Lane Group Flow (vph)	740	754	592	414	924	880
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	54.0	54.0	37.0	96.0	59.0	59.0
Total Split (%)	36.0%	36.0%	24.7%	64.0%	39.3%	39.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.71	0.97	1.30	0.36	1.39	1.08
Control Delay	50.3	48.0	184.2	19.4	222.4	80.3
Queue Delay	0.0	5.3	0.0	0.0	1.4	0.0
Total Delay	50.3	53.3	184.2	19.4	223.8	80.3
Queue Length 50th (ft)	322	383	~742	229	~1200	~697
Queue Length 95th (ft)	393	#673	m#926	m315	#1460	#958
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1110	799	456	1161	664	816
Starvation Cap Reductn	0	0	0	0	30	0
Spillback Cap Reductn	0	30	0	0	118	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.98	1.30	0.36	1.69	1.08

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

7a.Build 2039 AM  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	688	701	551	385	859	818
Future Volume (veh/h)	688	701	551	385	859	818
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	740	754	592	414	924	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1117	512	422	1128	667	
Arrive On Green	0.32	0.32	0.21	0.60	0.36	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	740	754	592	414	924	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	27.7	48.5	31.5	16.9	53.5	0.0
Cycle Q Clear(g_c), s	27.7	48.5	31.5	16.9	53.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1117	512	422	1128	667	
V/C Ratio(X)	0.66	1.47	1.40	0.37	1.39	
Avail Cap(c_a), veh/h	1117	512	422	1128	667	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.60	0.00
Uniform Delay (d), s/veh	43.7	50.8	50.3	15.2	48.3	0.0
Incr Delay (d2), s/veh	1.5	222.5	195.0	0.9	178.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	50.3	38.0	7.3	57.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.2	273.2	245.3	16.1	227.2	0.0
LnGrp LOS	D	F	F	B	F	
Approach Vol, veh/h	1494			1006	924	
Approach Delay, s/veh	160.3			151.0	227.2	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	37.0	59.0		54.0		96.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	31.5	53.5		48.5		90.5
Max Q Clear Time (g_c+I1), s	33.5	55.5		50.5		18.9
Green Ext Time (p_c), s	0.0	0.0		0.0		5.7

Intersection Summary

HCM 6th Ctrl Delay	175.6
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

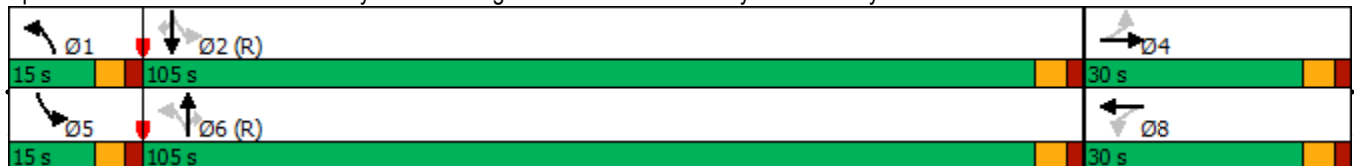


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	93	60	59	15	58	955	76	109	1302	3
Future Volume (vph)	93	60	59	15	58	955	76	109	1302	3
Lane Group Flow (vph)	111	113	70	93	69	1137	90	130	1550	4
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.77	0.49	0.55	0.35	0.50	0.87	0.08	0.58	1.14	0.00
Control Delay	95.0	58.2	76.8	20.4	33.5	27.3	3.7	23.9	80.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	16.8	0.0	0.0	0.3	0.0
Total Delay	95.0	58.2	76.8	20.4	33.5	44.2	3.7	23.9	81.0	0.0
Queue Length 50th (ft)	107	88	65	16	15	823	9	37	~1800	0
Queue Length 95th (ft)	159	137	107	60	61	1005	26	m23	m#1431	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	192	301	170	330	162	1310	1130	234	1365	1175
Starvation Cap Reductn	0	0	0	0	0	193	0	0	105	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.38	0.41	0.28	0.43	1.02	0.08	0.56	1.23	0.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

7a.Build 2039 AM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↑	↗
Traffic Volume (veh/h)	93	60	35	59	15	63	58	955	76	109	1302	3
Future Volume (veh/h)	93	60	35	59	15	63	58	955	76	109	1302	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	71	42	70	18	75	69	1137	90	130	1550	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	165	98	165	47	198	104	1320	1119	223	1325	1123
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.03	0.71	0.71	0.03	0.71	0.71
Sat Flow, veh/h	1303	1101	652	1280	316	1317	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	111	0	113	70	0	93	69	1137	90	130	1550	4
Grp Sat Flow(s),veh/h/ln	1303	0	1753	1280	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	12.6	0.0	8.8	7.9	0.0	7.7	1.6	68.4	2.7	3.1	106.3	0.1
Cycle Q Clear(g_c), s	20.3	0.0	8.8	16.7	0.0	7.7	1.6	68.4	2.7	3.1	106.3	0.1
Prop In Lane	1.00		0.37	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	0	263	165	0	245	104	1320	1119	223	1325	1123
V/C Ratio(X)	0.63	0.00	0.43	0.42	0.00	0.38	0.66	0.86	0.08	0.58	1.17	0.00
Avail Cap(c_a), veh/h	194	0	286	182	0	267	161	1320	1119	274	1325	1123
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.6	0.0	57.9	65.5	0.0	57.5	43.2	16.6	6.9	27.3	21.9	6.4
Incr Delay (d2), s/veh	5.5	0.0	1.1	1.7	0.0	1.0	7.0	7.6	0.1	2.4	84.7	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	4.5	0.0	4.0	2.7	0.0	3.3	2.0	28.7	0.9	3.0	71.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	0.0	59.0	67.2	0.0	58.4	50.2	24.1	7.0	29.8	106.6	6.4
LnGrp LOS	E	A	E	E	A	E	D	C	A	C	F	A
Approach Vol, veh/h		224			163			1296			1684	
Approach Delay, s/veh		65.5			62.2			24.3			100.4	
Approach LOS		E			E			C			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	111.8		28.0	10.7	111.4		28.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	3.6	108.3		22.3	5.1	70.4		18.7				
Green Ext Time (p_c), s	0.1	0.0		0.2	0.1	20.5		0.3				

Intersection Summary

HCM 6th Ctrl Delay	67.0
HCM 6th LOS	E



Intersection						
Int Delay, s/veh	31.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	63	49	16	1057	1350	21
Future Vol, veh/h	63	49	16	1057	1350	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	54	18	1162	1484	23

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2682	-	1484	0	-
Stage 1	1484	-	-	-	-
Stage 2	1198	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	~ 24	0	453	-	-
Stage 1	208	0	-	-	-
Stage 2	286	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 23	-	453	-	-
Mov Cap-2 Maneuver	~ 23	-	-	-	-
Stage 1	200	-	-	-	-
Stage 2	286	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, \$	1259.2	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	453	-	23	-	-	-
HCM Lane V/C Ratio	0.039	-	3.01	-	-	-
HCM Control Delay (s)	13.3	\$	1259.2	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	8.7	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	337	2	101	8	3	230	770	3	14	1011	512
Future Volume (vph)	337	2	101	8	3	230	770	3	14	1011	512
Lane Group Flow (vph)	0	361	107	0	29	245	819	3	15	1076	545
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	40.0	40.0	40.0	40.0	40.0	16.0	65.0	65.0	15.0	64.0	64.0
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%	13.3%	54.2%	54.2%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.97	0.21		0.07	1.10	0.75	0.00	0.06	1.19	0.58
Control Delay		82.5	13.5		18.3	121.9	25.5	0.0	9.7	124.3	10.8
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		82.5	13.5		18.3	121.9	25.5	0.0	9.7	124.3	10.8
Queue Length 50th (ft)		275	19		7	~170	401	0	4	~1002	108
Queue Length 95th (ft)		#467	63		30	#340	#725	0	13	#1259	216
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		378	507		447	222	1090	956	296	908	938
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.96	0.21		0.06	1.10	0.75	0.00	0.05	1.19	0.58

Intersection Summary






















Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

7a.Build 2039 AM  
 05/29/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	2	101	8	3	16	230	770	3	14	1011	512
Future Volume (veh/h)	337	2	101	8	3	16	230	770	3	14	1011	512
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	359	2	107	9	3	17	245	819	3	15	1076	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	1	456	39	26	37	216	1045	885	232	912	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.09	0.56	0.56	0.02	0.49	0.00
Sat Flow, veh/h	596	3	1585	0	90	128	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	361	0	107	29	0	0	245	819	3	15	1076	0
Grp Sat Flow(s),veh/h/ln	600	0	1585	218	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	6.2	0.0	0.0	0.0	10.5	41.3	0.1	0.5	58.5	0.0
Cycle Q Clear(g_c), s	34.5	0.0	6.2	34.5	0.0	0.0	10.5	41.3	0.1	0.5	58.5	0.0
Prop In Lane	0.99		1.00	0.31		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	0	456	102	0	0	216	1045	885	232	912	
V/C Ratio(X)	1.55	0.00	0.23	0.28	0.00	0.00	1.13	0.78	0.00	0.06	1.18	
Avail Cap(c_a), veh/h	232	0	456	102	0	0	216	1045	885	344	912	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.2	0.0	32.7	34.8	0.0	0.0	39.7	20.8	11.7	19.5	30.7	0.0
Incr Delay (d2), s/veh	269.6	0.0	0.3	1.5	0.0	0.0	102.4	5.9	0.0	0.1	92.4	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	24.3	0.0	2.4	0.7	0.0	0.0	12.5	18.3	0.0	0.2	47.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	316.8	0.0	32.9	36.3	0.0	0.0	142.0	26.7	11.7	19.6	123.1	0.0
LnGrp LOS	F	A	C	D	A	A	F	C	B	B	F	
Approach Vol, veh/h		468			29			1067			1091	
Approach Delay, s/veh		251.9			36.3			53.1			121.7	
Approach LOS		F			D			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	64.0		40.0	7.5	72.5		40.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	10.5	58.5		34.5	9.5	59.5		34.5				
Max Q Clear Time (g_c+1), s	12.5	60.5		36.5	2.5	43.3		36.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	8.8		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		116.2
HCM 6th LOS		F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

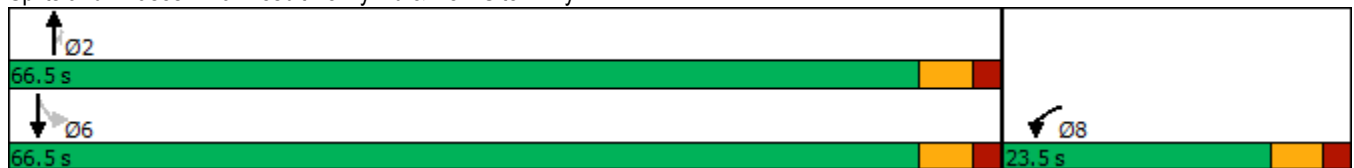
Timings  
6: Nesbit Ferry Rd & New Site Drwy

	↙	↑	↘	↙	↓
Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Configurations	↘	↑	↘	↘	↑
Traffic Volume (vph)	46	1046	75	70	1325
Future Volume (vph)	46	1046	75	70	1325
Lane Group Flow (vph)	97	1137	82	76	1440
Turn Type	Prot	NA	Perm	Perm	NA
Protected Phases	8	2			6
Permitted Phases			2	6	
Detector Phase	8	2	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5
Total Split (s)	23.5	66.5	66.5	66.5	66.5
Total Split (%)	26.1%	73.9%	73.9%	73.9%	73.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	Max	Max	Max	Max
v/c Ratio	0.48	0.74	0.06	0.29	0.94
Control Delay	29.0	10.0	0.9	7.0	24.4
Queue Delay	0.0	0.0	0.0	0.0	3.2
Total Delay	29.0	10.0	0.9	7.0	27.6
Queue Length 50th (ft)	28	268	0	9	582
Queue Length 95th (ft)	68	573	10	35	#1103
Internal Link Dist (ft)	155	338			504
Turn Bay Length (ft)			200	250	
Base Capacity (vph)	385	1528	1313	258	1528
Starvation Cap Reductn	0	0	0	0	49
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.74	0.06	0.29	0.97

Intersection Summary












Cycle Length: 90  
 Actuated Cycle Length: 88.1  
 Natural Cycle: 130  
 Control Type: Actuated-Uncoordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Nesbit Ferry Rd & New Site Drwy



HCM 6th Signalized Intersection Summary  
6: Nesbit Ferry Rd & New Site Drwy

7a.Build 2039 AM  
05/29/2024

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	46	43	1046	75	70	1325
Future Volume (veh/h)	46	43	1046	75	70	1325
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	47	1137	82	76	1440
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	64	60	1466	1242	298	1466
Arrive On Green	0.07	0.07	0.78	0.78	0.78	0.78
Sat Flow, veh/h	858	807	1870	1585	458	1870
Grp Volume(v), veh/h	98	0	1137	82	76	1440
Grp Sat Flow(s),veh/h/ln	1682	0	1870	1585	458	1870
Q Serve(g_s), s	4.5	0.0	26.1	0.9	8.5	56.3
Cycle Q Clear(g_c), s	4.5	0.0	26.1	0.9	34.6	56.3
Prop In Lane	0.51	0.48		1.00	1.00	
Lane Grp Cap(c), veh/h	126	0	1466	1242	298	1466
V/C Ratio(X)	0.78	0.00	0.78	0.07	0.26	0.98
Avail Cap(c_a), veh/h	389	0	1466	1242	298	1466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	0.0	4.6	1.9	14.2	7.9
Incr Delay (d2), s/veh	9.9	0.0	4.1	0.1	2.1	19.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	5.5	0.1	1.0	16.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.2	0.0	8.7	2.0	16.2	27.5
LnGrp LOS	D	A	A	A	B	C
Approach Vol, veh/h	98		1219			1516
Approach Delay, s/veh	45.2		8.3			27.0
Approach LOS	D		A			C
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		66.5			66.5	11.3
Change Period (Y+Rc), s		5.5			5.5	5.5
Max Green Setting (Gmax), s		61.0			61.0	18.0
Max Q Clear Time (g_c+I1), s		28.1			58.3	6.5
Green Ext Time (p_c), s		12.4			2.4	0.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			19.6			
HCM 6th LOS			B			

Intersection												
Int Delay, s/veh	32.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↕	↗
Traffic Vol, veh/h	46	0	37	6	0	36	32	1475	14	54	1493	69
Future Vol, veh/h	46	0	37	6	0	36	32	1475	14	54	1493	69
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	75	-	-	75	70	-	-	50	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	0	38	6	0	37	33	1521	14	56	1539	71

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2478	3252	770	2476	3316	768	1610	0	0	1535	0	0
Stage 1	1651	1651	-	1594	1594	-	-	-	-	-	-	-
Stage 2	827	1601	-	882	1722	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 15	9	343	15	8	344	402	-	-	429	-	-
Stage 1	103	155	-	112	165	-	-	-	-	-	-	-
Stage 2	332	164	-	307	142	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 11	7	343	11	6	344	402	-	-	429	-	-
Mov Cap-2 Maneuver	~ 11	7	-	11	6	-	-	-	-	-	-	-
Stage 1	95	135	-	103	151	-	-	-	-	-	-	-
Stage 2	272	151	-	237	123	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, \$	1209.1	91.2	0.3	0.5
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	402	-	-	11	343	11	344	429	-	-
HCM Lane V/C Ratio	0.082	-	-	4.311	0.111	0.562	0.108	0.13	-	-
HCM Control Delay (s)	14.8	-	-	\$ 2168.1	16.8	\$ 538	16.7	14.6	-	-
HCM Lane LOS	B	-	-	F	C	F	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	7.1	0.4	1.3	0.4	0.4	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

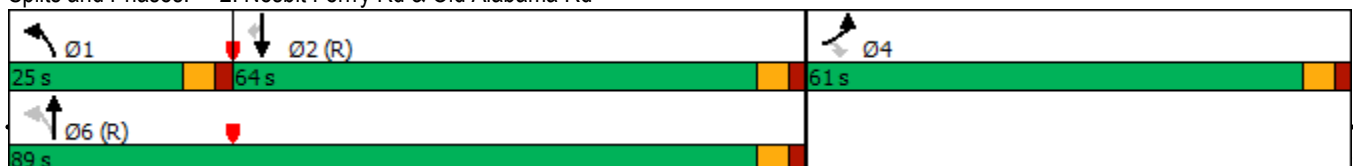


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	877	722	380	594	953	620
Future Volume (vph)	877	722	380	594	953	620
Lane Group Flow (vph)	914	752	396	619	993	646
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	61.0	61.0	25.0	89.0	64.0	64.0
Total Split (%)	40.7%	40.7%	16.7%	59.3%	42.7%	42.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.73	0.98	1.37	0.59	1.37	0.82
Control Delay	45.4	56.6	222.2	22.4	210.5	32.1
Queue Delay	0.0	2.6	0.0	0.0	0.7	0.0
Total Delay	45.4	59.1	222.2	22.4	211.2	32.1
Queue Length 50th (ft)	394	507	~483	264	~1277	345
Queue Length 95th (ft)	473	#798	#700	398	#1539	534
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1270	774	290	1049	726	789
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	11	0	0	71	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.99	1.37	0.59	1.52	0.82

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

7b.Build 2039 PM  
 05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	877	722	380	594	953	620
Future Volume (veh/h)	877	722	380	594	953	620
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	914	752	396	619	993	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1279	586	280	1041	729	
Arrive On Green	0.37	0.37	0.13	0.56	0.39	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	914	752	396	619	993	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	34.0	55.5	19.5	32.9	58.5	0.0
Cycle Q Clear(g_c), s	34.0	55.5	19.5	32.9	58.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1279	586	280	1041	729	
V/C Ratio(X)	0.71	1.28	1.42	0.59	1.36	
Avail Cap(c_a), veh/h	1279	586	280	1041	729	
HCM Platoon Ratio	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	0.00
Uniform Delay (d), s/veh	40.5	47.3	51.6	22.0	45.7	0.0
Incr Delay (d2), s/veh	1.9	139.7	207.2	2.5	171.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	43.9	22.3	14.7	61.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.4	186.9	258.8	24.5	217.2	0.0
LnGrp LOS	D	F	F	C	F	
Approach Vol, veh/h	1666			1015	993	
Approach Delay, s/veh	107.6			115.9	217.2	
Approach LOS	F			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.0	64.0		61.0		89.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	19.5	58.5		55.5		83.5
Max Q Clear Time (g_c+I1), s	21.5	60.5		57.5		34.9
Green Ext Time (p_c), s	0.0	0.0		0.0		9.7

Intersection Summary

HCM 6th Ctrl Delay	139.5
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Timings  
3: Nesbit Ferry Rd & Existing School Southern Drwy

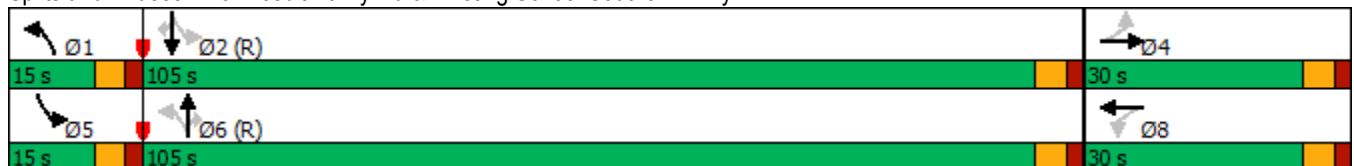


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↗	↖	↗	↗
Traffic Volume (vph)	15	0	24	1	12	1055	31	57	1469	3
Future Volume (vph)	15	0	24	1	12	1055	31	57	1469	3
Lane Group Flow (vph)	16	11	26	47	13	1134	33	61	1580	3
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.21	0.05	0.33	0.36	0.11	0.74	0.03	0.18	0.98	0.00
Control Delay	73.0	0.4	78.5	25.3	3.8	11.9	0.3	1.4	21.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	0.0
Total Delay	73.0	0.4	78.5	25.3	3.8	11.9	0.3	1.4	42.8	0.0
Queue Length 50th (ft)	15	0	25	1	1	501	0	5	813	0
Queue Length 95th (ft)	41	0	58	44	5	833	3	m5	m344	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	220	372	228	298	161	1542	1320	363	1607	1374
Starvation Cap Reductn	0	0	0	0	0	0	0	0	111	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.03	0.11	0.16	0.08	0.74	0.03	0.17	1.06	0.00

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Nesbit Ferry Rd & Existing School Southern Drwy



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Existing School Southern Drwy

7b.Build 2039 PM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑	↗	↖	↑	↗
Traffic Volume (veh/h)	15	0	10	24	1	43	12	1055	31	57	1469	3
Future Volume (veh/h)	15	0	10	24	1	43	12	1055	31	57	1469	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	0	11	26	1	46	13	1134	33	61	1580	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	0	84	113	2	83	73	1508	1278	347	1539	1304
Arrive On Green	0.05	0.00	0.05	0.05	0.05	0.05	0.01	0.81	0.81	0.03	0.82	0.82
Sat Flow, veh/h	1359	0	1585	1404	34	1556	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	16	0	11	26	0	47	13	1134	33	61	1580	3
Grp Sat Flow(s),veh/h/ln	1359	0	1585	1404	0	1590	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	0.0	1.0	2.7	0.0	4.3	0.2	44.8	0.6	0.9	123.4	0.1
Cycle Q Clear(g_c), s	6.1	0.0	1.0	3.7	0.0	4.3	0.2	44.8	0.6	0.9	123.4	0.1
Prop In Lane	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	81	0	84	113	0	85	73	1508	1278	347	1539	1304
V/C Ratio(X)	0.20	0.00	0.13	0.23	0.00	0.56	0.18	0.75	0.03	0.18	1.03	0.00
Avail Cap(c_a), veh/h	231	0	259	268	0	260	161	1508	1278	405	1539	1304
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.2	0.0	67.7	69.5	0.0	69.3	51.2	7.2	2.9	9.7	13.3	2.4
Incr Delay (d2), s/veh	1.2	0.0	0.7	1.0	0.0	5.6	1.2	3.5	0.0	0.2	30.0	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	0.6	0.0	0.4	1.0	0.0	1.9	0.4	15.1	0.2	0.7	48.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	0.0	68.4	70.5	0.0	74.8	52.3	10.7	2.9	10.0	43.3	2.4
LnGrp LOS	E	A	E	E	A	E	D	B	A	A	F	A
Approach Vol, veh/h		27			73			1180			1644	
Approach Delay, s/veh		71.4			73.3			10.9			42.0	
Approach LOS		E			E			B			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	128.9		13.5	10.1	126.4		13.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.2	125.4		8.1	2.9	46.8		6.3				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	29.6		0.2				

Intersection Summary

HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Intersection						
Int Delay, s/veh	6.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘	↗	↘	↗	↗	↗
Traffic Vol, veh/h	25	17	61	1081	1427	72
Future Vol, veh/h	25	17	61	1081	1427	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	18	64	1138	1502	76

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	2768	-	1502	0	0
Stage 1	1502	-	-	-	-
Stage 2	1266	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-
Pot Cap-1 Maneuver	~ 21	0	446	-	-
Stage 1	203	0	-	-	-
Stage 2	265	0	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	~ 18	-	446	-	-
Mov Cap-2 Maneuver	~ 18	-	-	-	-
Stage 1	174	-	-	-	-
Stage 2	265	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	686.3	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	446	-	18	-	-	-
HCM Lane V/C Ratio	0.144	-	1.462	-	-	-
HCM Control Delay (s)	14.4	-	686.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.5	-	3.7	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	428	3	140	8	6	118	733	9	15	980	417
Future Volume (vph)	428	3	140	8	6	118	733	9	15	980	417
Lane Group Flow (vph)	0	444	144	0	26	122	756	9	15	1010	430
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	41.0	41.0	41.0	41.0	41.0	15.0	64.0	64.0	15.0	64.0	64.0
Total Split (%)	34.2%	34.2%	34.2%	34.2%	34.2%	12.5%	53.3%	53.3%	12.5%	53.3%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		1.14	0.28		0.06	0.65	0.71	0.01	0.06	1.09	0.47
Control Delay		128.1	17.8		20.6	36.8	24.4	0.0	9.9	89.2	8.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		128.1	17.8		20.6	36.8	24.4	0.0	9.9	89.2	8.5
Queue Length 50th (ft)		~401	41		8	40	358	0	4	~894	67
Queue Length 95th (ft)		#605	94		30	#109	642	0	13	#1147	150
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		390	519		426	200	1067	937	325	923	922
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		1.14	0.28		0.06	0.61	0.71	0.01	0.05	1.09	0.47

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 150  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

7b.Build 2039 PM  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↑	↘	↖	↗	↖
Traffic Volume (veh/h)	428	3	140	8	6	12	118	733	9	15	980	417
Future Volume (veh/h)	428	3	140	8	6	12	118	733	9	15	980	417
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	441	3	144	8	6	12	122	756	9	15	1010	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	1	469	39	35	30	149	1029	872	261	966	
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	0.55	0.55	0.02	0.52	0.00
Sat Flow, veh/h	590	4	1585	0	118	101	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	444	0	144	26	0	0	122	756	9	15	1010	0
Grp Sat Flow(s),veh/h/ln	594	0	1585	219	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	0.0	4.0	36.6	0.3	0.5	62.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	8.4	35.5	0.0	0.0	4.0	36.6	0.3	0.5	62.0	0.0
Prop In Lane	0.99		1.00	0.31		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	0	469	104	0	0	149	1029	872	261	966	
V/C Ratio(X)	1.89	0.00	0.31	0.25	0.00	0.00	0.82	0.73	0.01	0.06	1.05	
Avail Cap(c_a), veh/h	236	0	469	104	0	0	201	1029	872	373	966	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.8	0.0	32.7	34.2	0.0	0.0	29.8	20.4	12.2	17.7	29.0	0.0
Incr Delay (d2), s/veh	414.0	0.0	0.4	1.2	0.0	0.0	17.1	4.7	0.0	0.1	41.6	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	34.1	0.0	3.3	0.6	0.0	0.0	2.4	16.1	0.1	0.2	36.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	460.8	0.0	33.1	35.5	0.0	0.0	46.9	25.0	12.2	17.8	70.6	0.0
LnGrp LOS	F	A	C	D	A	A	D	C	B	B	F	
Approach Vol, veh/h		588			26			887			1025	
Approach Delay, s/veh		356.0			35.5			27.9			69.8	
Approach LOS		F			D			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	67.5		41.0	7.5	71.5		41.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	58.5		35.5	9.5	58.5		35.5				
Max Q Clear Time (g_c+I1), s	6.0	64.0		37.5	2.5	38.6		37.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	9.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	121.4
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	28.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑	↑	↑
Traffic Vol, veh/h	39	36	1061	46	43	1461
Future Vol, veh/h	39	36	1061	46	43	1461
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	200	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	39	1153	50	47	1588

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2835	1153	0	0	1203
Stage 1	1153	-	-	-	-
Stage 2	1682	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 19	240	-	-	580
Stage 1	301	-	-	-	-
Stage 2	166	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 17	240	-	-	580
Mov Cap-2 Maneuver	~ 17	-	-	-	-
Stage 1	301	-	-	-	-
Stage 2	153	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, \$	1009.2	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	31	580
HCM Lane V/C Ratio	-	-	2.63	0.081
HCM Control Delay (s)	-	\$ 1009.2	11.8	-
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	9.5	0.3

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings

1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		↕	↗		↖	↗	↖	↕	↖	↕	↗
Traffic Volume (vph)	12	1	10	101	1	296	12	1303	85	1207	12
Future Volume (vph)	12	1	10	101	1	296	12	1303	85	1207	12
Lane Group Flow (vph)	0	15	12	0	120	348	14	1598	100	1420	14
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4			8			6		2	
Permitted Phases	4		4	8		8	6		2		2
Detector Phase	4	4	4	8	8	8	6	6	2	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	68.0	68.0	68.0	68.0	68.0
Total Split (%)	32.0%	32.0%	32.0%	32.0%	32.0%	32.0%	68.0%	68.0%	68.0%	68.0%	68.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	None	None	None	None	None	None	None	None
v/c Ratio		0.04	0.03		0.38	0.86	0.09	0.70	0.87	0.62	0.01
Control Delay		27.9	4.5		34.3	52.0	9.2	13.6	76.9	12.0	1.3
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay		27.9	4.5		34.3	52.0	9.2	13.9	76.9	12.0	1.3
Queue Length 50th (ft)		7	0		62	183	3	333	49	271	0
Queue Length 95th (ft)		22	6		106	#271	11	374	#151	307	4
Internal Link Dist (ft)		100			101			646		221	
Turn Bay Length (ft)			75			75	70		50		80
Base Capacity (vph)		404	454		367	464	159	2283	115	2294	1036
Starvation Cap Reductn		0	0		0	0	0	206	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.04	0.03		0.33	0.75	0.09	0.77	0.87	0.62	0.01

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 96.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy



HCM 6th Signalized Intersection Summary

7c.Build 2039 Dismissal

1: Nesbit Ferry Rd & Church Driveway/Existing School Northern Drwy

05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	12	1	10	101	1	296	12	1303	55	85	1207	12
Future Volume (veh/h)	12	1	10	101	1	296	12	1303	55	85	1207	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1	12	119	1	348	14	1533	65	100	1420	14
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	3	420	72	0	420	212	2171	92	176	2221	991
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	0	10	1585	0	1	1585	373	3474	147	318	3554	1585
Grp Volume(v), veh/h	15	0	12	120	0	348	14	782	816	100	1420	14
Grp Sat Flow(s),veh/h/ln	10	0	1585	1	0	1585	373	1777	1844	318	1777	1585
Q Serve(g_s), s	0.0	0.0	0.6	0.0	0.0	20.7	2.4	29.5	29.8	30.8	25.0	0.3
Cycle Q Clear(g_c), s	26.5	0.0	0.6	26.5	0.0	20.7	27.4	29.5	29.8	60.6	25.0	0.3
Prop In Lane	0.93		1.00	0.99		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	72	0	420	72	0	420	212	1111	1152	176	2221	991
V/C Ratio(X)	0.21	0.00	0.03	1.67	0.00	0.83	0.07	0.70	0.71	0.57	0.64	0.01
Avail Cap(c_a), veh/h	72	0	420	72	0	420	212	1111	1152	176	2221	991
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	0.0	27.2	49.9	0.0	34.6	20.3	12.6	12.6	33.0	11.7	7.1
Incr Delay (d2), s/veh	1.4	0.0	0.0	353.0	0.0	13.0	0.3	2.6	2.6	6.9	0.9	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	0.4	0.0	0.2	8.9	0.0	9.4	0.2	10.7	11.2	2.6	8.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.7	0.0	27.2	402.8	0.0	47.6	20.5	15.1	15.2	39.9	12.6	7.1
LnGrp LOS	D	A	C	F	A	D	C	B	B	D	B	A
Approach Vol, veh/h		27			468			1612			1534	
Approach Delay, s/veh		38.1			138.7			15.2			14.3	
Approach LOS		D			F			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		68.0		32.0		68.0		32.0				
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5				
Max Green Setting (Gmax), s		62.5		26.5		62.5		26.5				
Max Q Clear Time (g_c+I1), s		62.6		28.5		31.8		28.5				
Green Ext Time (p_c), s		0.0		0.0		23.7		0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				30.9								
HCM 6th LOS				C								



Timings  
2: Nesbit Ferry Rd & Old Alabama Rd



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖	↑	↑	↗
Traffic Volume (vph)	872	553	377	498	780	538
Future Volume (vph)	872	553	377	498	780	538
Lane Group Flow (vph)	928	588	401	530	830	572
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4	6			2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	56.0	56.0	27.0	94.0	67.0	67.0
Total Split (%)	37.3%	37.3%	18.0%	62.7%	44.7%	44.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.87	0.81	1.16	0.46	1.09	0.69
Control Delay	58.0	28.9	136.7	18.2	100.6	20.6
Queue Delay	0.0	0.2	0.0	0.0	5.6	0.2
Total Delay	58.0	29.1	136.7	18.2	106.3	20.8
Queue Length 50th (ft)	435	243	~435	236	~909	217
Queue Length 95th (ft)	510	406	m#667	m393	#1165	365
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	360			
Base Capacity (vph)	1155	756	347	1145	763	830
Starvation Cap Reductn	0	0	0	0	85	29
Spillback Cap Reductn	0	10	0	0	58	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.79	1.16	0.46	1.22	0.71

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖	↑	↑	↖
Traffic Volume (veh/h)	872	553	377	498	780	538
Future Volume (veh/h)	872	553	377	498	780	538
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	928	588	401	530	830	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1163	534	303	1104	767	
Arrive On Green	0.34	0.34	0.14	0.59	0.41	0.00
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	928	588	401	530	830	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	36.5	50.5	21.5	24.3	61.5	0.0
Cycle Q Clear(g_c), s	36.5	50.5	21.5	24.3	61.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1163	534	303	1104	767	
V/C Ratio(X)	0.80	1.10	1.32	0.48	1.08	
Avail Cap(c_a), veh/h	1163	534	303	1104	767	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.75	0.00
Uniform Delay (d), s/veh	45.1	49.8	52.3	17.6	44.2	0.0
Incr Delay (d2), s/veh	4.0	69.8	166.2	1.5	53.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.9	29.7	25.0	10.6	38.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.1	119.6	218.4	19.1	97.4	0.0
LnGrp LOS	D	F	F	B	F	
Approach Vol, veh/h	1516			931	830	
Approach Delay, s/veh	76.4			104.9	97.4	
Approach LOS	E			F	F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.0	67.0		56.0		94.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	21.5	61.5		50.5		88.5
Max Q Clear Time (g_c+I1), s	23.5	63.5		52.5		26.3
Green Ext Time (p_c), s	0.0	0.0		0.0		7.9

Intersection Summary

HCM 6th Ctrl Delay	89.9
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	91	10	60	12	32	844	51	128	1050	22
Future Volume (vph)	91	10	60	12	32	844	51	128	1050	22
Lane Group Flow (vph)	100	59	66	190	35	927	56	141	1154	24
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	4	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	23.5	23.5	15.0	26.5	26.5	15.0	25.5	25.5
Total Split (s)	30.0	30.0	30.0	30.0	15.0	105.0	105.0	15.0	105.0	105.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	10.0%	70.0%	70.0%	10.0%	70.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag					Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	0.97	0.21	0.33	0.49	0.20	0.73	0.05	0.43	0.87	0.02
Control Delay	141.6	20.1	60.8	13.7	7.1	19.9	2.0	5.1	11.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	4.6	0.0
Total Delay	141.6	20.1	60.8	13.7	7.1	23.2	2.0	5.1	16.5	0.0
Queue Length 50th (ft)	97	9	58	11	7	558	0	21	225	0
Queue Length 95th (ft)	#217	53	107	85	16	752	15	m30	m290	m0
Internal Link Dist (ft)		45		31		171			296	
Turn Bay Length (ft)					65		65	110		60
Base Capacity (vph)	112	307	218	409	215	1273	1100	341	1326	1143
Starvation Cap Reductn	0	0	0	0	0	245	0	0	120	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.19	0.30	0.46	0.16	0.90	0.05	0.41	0.96	0.02

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 120

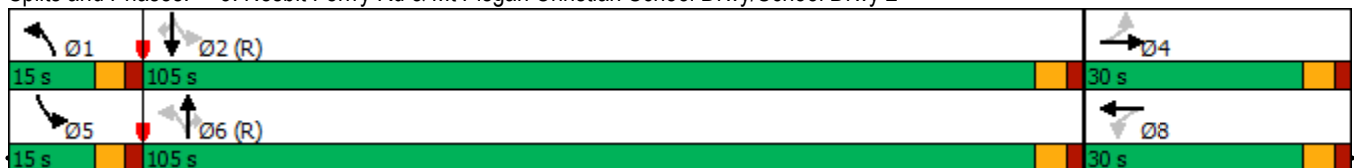
Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2



HCM 6th Signalized Intersection Summary  
 3: Nesbit Ferry Rd & Mt Pisgah Christian School Drwy/School Drwy 2

7c.Build 2039 Dismissal  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	10	44	60	12	161	32	844	51	128	1050	22
Future Volume (veh/h)	91	10	44	60	12	161	32	844	51	128	1050	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	11	48	66	13	177	35	927	56	141	1154	24
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	50	217	225	18	244	198	1289	1092	334	1311	1111
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.69	0.69	0.04	0.70	0.70
Sat Flow, veh/h	1193	304	1327	1344	110	1492	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	100	0	59	66	0	190	35	927	56	141	1154	24
Grp Sat Flow(s),veh/h/ln	1193	0	1631	1344	0	1602	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	7.6	0.0	4.7	6.7	0.0	16.9	0.9	45.8	1.7	3.5	72.2	0.7
Cycle Q Clear(g_c), s	24.5	0.0	4.7	11.4	0.0	16.9	0.9	45.8	1.7	3.5	72.2	0.7
Prop In Lane	1.00		0.81	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	0	266	225	0	262	198	1289	1092	334	1311	1111
V/C Ratio(X)	0.92	0.00	0.22	0.29	0.00	0.73	0.18	0.72	0.05	0.42	0.88	0.02
Avail Cap(c_a), veh/h	109	0	266	225	0	262	265	1289	1092	380	1311	1111
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.7	0.0	54.5	59.4	0.0	59.6	24.1	14.4	7.5	15.4	17.5	6.8
Incr Delay (d2), s/veh	61.9	0.0	0.4	0.7	0.0	9.7	0.4	3.5	0.1	0.8	8.7	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	5.8	0.0	2.0	2.4	0.0	7.6	0.6	18.9	0.6	1.8	30.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	134.6	0.0	54.9	60.1	0.0	69.2	24.5	17.8	7.6	16.2	26.2	6.8
LnGrp LOS	F	A	D	E	A	E	C	B	A	B	C	A
Approach Vol, veh/h		159			256			1018			1319	
Approach Delay, s/veh		105.0			66.9			17.5			24.8	
Approach LOS		F			E			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	110.7		30.0	11.1	108.9		30.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	99.5		24.5	9.5	99.5		24.5				
Max Q Clear Time (g_c+I1), s	2.9	74.2		26.5	5.5	47.8		18.9				
Green Ext Time (p_c), s	0.0	18.4		0.0	0.1	20.2		0.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				30.6								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	5.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↗	↗	↗
Traffic Vol, veh/h	36	17	31	929	1134	25
Future Vol, veh/h	36	17	31	929	1134	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Yield
Storage Length	0	60	85	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	19	34	1021	1246	27

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2335	-	1246	0	-	0
Stage 1	1246	-	-	-	-	-
Stage 2	1089	-	-	-	-	-
Critical Hdwy	6.42	-	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	-	2.218	-	-	-
Pot Cap-1 Maneuver	40	0	559	-	-	-
Stage 1	271	0	-	-	-	-
Stage 2	323	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 38	-	559	-	-	-
Mov Cap-2 Maneuver	~ 38	-	-	-	-	-
Stage 1	254	-	-	-	-	-
Stage 2	323	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	319.9	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	559	-	38	-	-	-
HCM Lane V/C Ratio	0.061	-	1.041	-	-	-
HCM Control Delay (s)	11.9	-	319.9	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	4	-	-	-

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

Timings  
5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

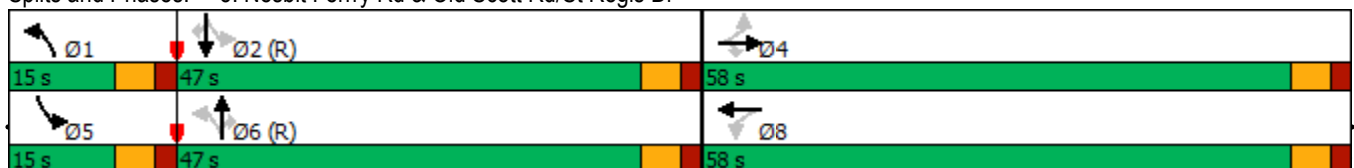


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↖	↑	↗	↖	↑	↗
Traffic Volume (vph)	408	13	130	9	13	92	558	8	22	720	345
Future Volume (vph)	408	13	130	9	13	92	558	8	22	720	345
Lane Group Flow (vph)	0	457	141	0	40	100	607	9	24	783	375
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		4			8	1	6		5	2	
Permitted Phases	4		4	8		6		6	2		2
Detector Phase	4	4	4	8	8	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	27.5	27.5	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	58.0	58.0	58.0	58.0	58.0	15.0	47.0	47.0	15.0	47.0	47.0
Total Split (%)	48.3%	48.3%	48.3%	48.3%	48.3%	12.5%	39.2%	39.2%	12.5%	39.2%	39.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio		0.90	0.21		0.06	0.54	0.71	0.01	0.09	1.04	0.48
Control Delay		55.4	11.5		14.0	30.6	35.2	0.0	17.5	80.5	12.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		55.4	11.5		14.0	30.6	35.2	0.0	17.5	80.5	12.4
Queue Length 50th (ft)		316	32		11	40	412	0	9	-694	70
Queue Length 95th (ft)		#481	71		32	90	#659	0	25	#983	170
Internal Link Dist (ft)		401			301		485			704	
Turn Bay Length (ft)			60			80		170	90		
Base Capacity (vph)		573	733		696	200	852	764	302	752	783
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0
Storage Cap Reductn		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio		0.80	0.19		0.06	0.50	0.71	0.01	0.08	1.04	0.48

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

7c.Build 2039 Dismissal  
 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↑	↗	↖	↑	↗
Traffic Volume (veh/h)	408	13	130	9	13	15	92	558	8	22	720	345
Future Volume (veh/h)	408	13	130	9	13	15	92	558	8	22	720	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	443	14	141	10	14	16	100	607	9	24	783	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	7	693	38	52	35	148	752	637	193	702	
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.05	0.40	0.40	0.02	0.38	0.00
Sat Flow, veh/h	471	15	1585	0	120	80	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	457	0	141	40	0	0	100	607	9	24	783	0
Grp Sat Flow(s),veh/h/ln	486	0	1585	199	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	6.6	0.0	0.0	0.0	4.1	34.5	0.4	1.0	45.1	0.0
Cycle Q Clear(g_c), s	52.5	0.0	6.6	52.5	0.0	0.0	4.1	34.5	0.4	1.0	45.1	0.0
Prop In Lane	0.97		1.00	0.25		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	0	693	125	0	0	148	752	637	193	702	
V/C Ratio(X)	1.68	0.00	0.20	0.32	0.00	0.00	0.67	0.81	0.01	0.12	1.11	
Avail Cap(c_a), veh/h	272	0	693	125	0	0	201	752	637	294	702	
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.5	0.0	20.8	28.4	0.0	0.0	29.5	31.8	21.6	26.2	37.5	0.0
Incr Delay (d2), s/veh	322.6	0.0	0.1	1.5	0.0	0.0	5.3	9.1	0.0	0.3	70.1	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	32.5	0.0	2.5	0.7	0.0	0.0	1.9	16.8	0.2	0.4	33.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	362.1	0.0	21.0	29.9	0.0	0.0	34.7	40.8	21.6	26.5	107.5	0.0
LnGrp LOS	F	A	C	C	A	A	C	D	C	C	F	
Approach Vol, veh/h		598			40			716			807	
Approach Delay, s/veh		281.7			29.9			39.7			105.1	
Approach LOS		F			C			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	50.6		58.0	8.3	53.7		58.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	41.5		52.5	9.5	41.5		52.5				
Max Q Clear Time (g_c+I1), s	6.1	47.1		54.5	3.0	36.5		54.5				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	2.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay	130.9
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
6: Nesbit Ferry Rd & New Site Drwy

	↙	↑	↘	↙	↓
Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Configurations	↘	↑	↘	↘	↑
Traffic Volume (vph)	58	873	66	62	1103
Future Volume (vph)	58	873	66	62	1103
Lane Group Flow (vph)	122	949	72	67	1199
Turn Type	Prot	NA	Perm	Perm	NA
Protected Phases	8	2			6
Permitted Phases			2	6	
Detector Phase	8	2	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	23.5	23.5	23.5
Total Split (s)	23.5	66.5	66.5	66.5	66.5
Total Split (%)	26.1%	73.9%	73.9%	73.9%	73.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	Max	Max	Max	Max
v/c Ratio	0.54	0.63	0.06	0.18	0.80
Control Delay	31.9	7.6	1.0	4.9	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.4
Total Delay	31.9	7.6	1.0	4.9	13.5
Queue Length 50th (ft)	40	193	0	8	336
Queue Length 95th (ft)	87	390	10	26	#849
Internal Link Dist (ft)	155	338			504
Turn Bay Length (ft)			200	250	
Base Capacity (vph)	388	1501	1289	365	1501
Starvation Cap Reductn	0	0	0	0	55
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.63	0.06	0.18	0.83

Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 87.2  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Nesbit Ferry Rd & New Site Drwy





HCM 6th Signalized Intersection Summary  
6: Nesbit Ferry Rd & New Site Drwy



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T	T	T	T
Traffic Volume (veh/h)	58	54	873	66	62	1103
Future Volume (veh/h)	58	54	873	66	62	1103
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	59	949	72	67	1199
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	80	75	1438	1218	404	1438
Arrive On Green	0.09	0.09	0.77	0.77	0.77	0.77
Sat Flow, veh/h	862	807	1870	1585	591	1870
Grp Volume(v), veh/h	123	0	949	72	67	1199
Grp Sat Flow(s),veh/h/ln	1682	0	1870	1585	591	1870
Q Serve(g_s), s	5.7	0.0	18.9	0.9	4.8	32.8
Cycle Q Clear(g_c), s	5.7	0.0	18.9	0.9	23.7	32.8
Prop In Lane	0.51	0.48		1.00	1.00	
Lane Grp Cap(c), veh/h	156	0	1438	1218	404	1438
V/C Ratio(X)	0.79	0.00	0.66	0.06	0.17	0.83
Avail Cap(c_a), veh/h	381	0	1438	1218	404	1438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	4.3	2.2	9.9	5.9
Incr Delay (d2), s/veh	8.5	0.0	2.4	0.1	0.9	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	4.3	0.2	0.6	8.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.7	0.0	6.7	2.3	10.8	11.8
LnGrp LOS	D	A	A	A	B	B
Approach Vol, veh/h	123		1021			1266
Approach Delay, s/veh	43.7		6.4			11.7
Approach LOS	D		A			B
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		66.5			66.5	12.9
Change Period (Y+Rc), s		5.5			5.5	5.5
Max Green Setting (Gmax), s		61.0			61.0	18.0
Max Q Clear Time (g_c+I1), s		20.9			34.8	7.7
Green Ext Time (p_c), s		9.1			13.0	0.2

Intersection Summary

HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

**FUTURE 2039 PHASE 2 "BUILD" IMPROVED**

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

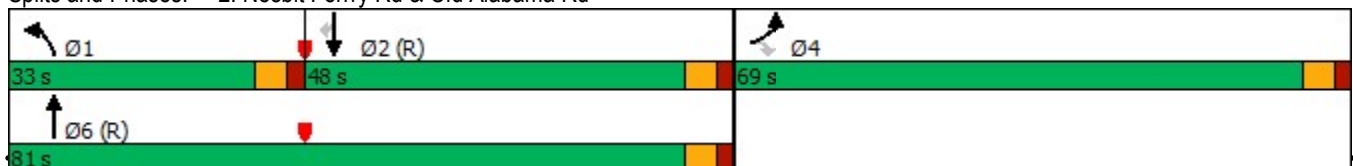


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	688	701	551	385	859	818
Future Volume (vph)	688	701	551	385	859	818
Lane Group Flow (vph)	740	754	592	414	924	880
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	69.0	69.0	33.0	81.0	48.0	48.0
Total Split (%)	46.0%	46.0%	22.0%	54.0%	32.0%	32.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.65	0.93	0.87	0.37	0.72	0.83
Control Delay	44.7	36.9	63.1	25.4	47.4	14.8
Queue Delay	0.0	18.2	0.0	0.0	1.2	0.0
Total Delay	44.7	55.1	63.1	25.4	48.6	14.8
Queue Length 50th (ft)	314	359	287	267	428	98
Queue Length 95th (ft)	332	514	m#392	m383	#587	#412
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1453	921	683	1110	1278	1060
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	175	0	0	164	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	1.01	0.87	0.37	0.83	0.83

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
2: Nesbit Ferry Rd & Old Alabama Rd

7d.Build 2039 AM - System Improvements

05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶↶	↶	↶↶	↷
Traffic Volume (veh/h)	688	701	551	385	859	818
Future Volume (veh/h)	688	701	551	385	859	818
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	740	754	592	414	924	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1463	671	631	941	1009	
Arrive On Green	0.42	0.42	0.18	0.50	0.28	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	740	754	592	414	924	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	23.6	63.5	25.3	21.2	37.7	0.0
Cycle Q Clear(g_c), s	23.6	63.5	25.3	21.2	37.7	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1463	671	631	941	1009	
V/C Ratio(X)	0.51	1.12	0.94	0.44	0.92	
Avail Cap(c_a), veh/h	1463	671	634	941	1009	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.60	0.00
Uniform Delay (d), s/veh	31.7	43.3	60.5	23.8	52.0	0.0
Incr Delay (d2), s/veh	0.3	74.0	21.8	1.5	9.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	37.6	12.9	9.6	17.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.0	117.2	82.2	25.3	61.2	0.0
LnGrp LOS	C	F	F	C	E	
Approach Vol, veh/h	1494			1006	924	
Approach Delay, s/veh	75.0			58.8	61.2	
Approach LOS	E			E	E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	32.9	48.1		69.0		81.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	27.5	42.5		63.5		75.5
Max Q Clear Time (g_c+I1), s	27.3	39.7		65.5		23.2
Green Ext Time (p_c), s	0.0	2.0		0.0		5.6

Intersection Summary

HCM 6th Ctrl Delay	66.5
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

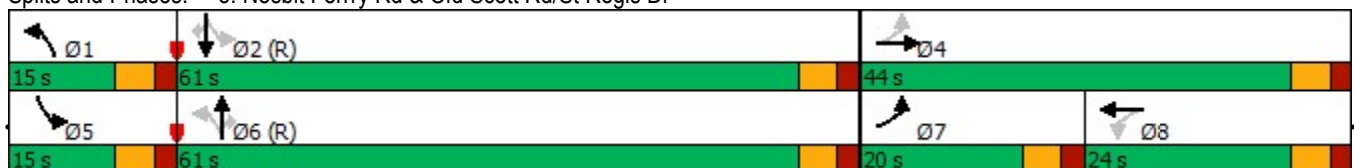


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↕	↖	↗	↗	↖	↗	↖
Traffic Volume (vph)	337	2	8	3	230	770	3	14	1011	512
Future Volume (vph)	337	2	8	3	230	770	3	14	1011	512
Lane Group Flow (vph)	359	109	0	29	245	819	3	15	1076	545
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	20.0	44.0	24.0	24.0	15.0	61.0	61.0	15.0	61.0	61.0
Total Split (%)	16.7%	36.7%	20.0%	20.0%	12.5%	50.8%	50.8%	12.5%	50.8%	50.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.25	0.28		0.28	0.61	0.64	0.00	0.04	1.19	0.59
Control Delay	178.0	9.1		37.7	34.0	16.7	0.0	8.2	126.3	12.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	178.0	9.1		37.7	34.0	16.7	0.0	8.2	126.3	12.0
Queue Length 50th (ft)	~308	1		9	123	319	0	3	~1040	125
Queue Length 95th (ft)	#485	47		40	#236	648	0	11	#1296	241
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	287	582		240	400	1271	1118	402	904	928
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.19		0.12	0.61	0.64	0.00	0.04	1.19	0.59

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 145  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

7d.Build 2039 AM - System Improvements

05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	2	101	8	3	16	230	770	3	14	1011	512
Future Volume (veh/h)	337	2	101	8	3	16	230	770	3	14	1011	512
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	359	2	107	9	3	17	245	819	3	15	1076	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	378	6	337	55	17	45	201	1178	998	317	1061	
Arrive On Green	0.12	0.22	0.22	0.05	0.05	0.05	0.08	0.63	0.63	0.02	0.57	0.00
Sat Flow, veh/h	1781	29	1560	311	336	916	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	359	0	109	29	0	0	245	819	3	15	1076	0
Grp Sat Flow(s),veh/h/ln	1781	0	1589	1563	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	14.5	0.0	6.9	0.0	0.0	0.0	9.5	34.6	0.1	0.4	68.1	0.0
Cycle Q Clear(g_c), s	14.5	0.0	6.9	2.0	0.0	0.0	9.5	34.6	0.1	0.4	68.1	0.0
Prop In Lane	1.00		0.98	0.31		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	0	344	117	0	0	201	1178	998	317	1061	
V/C Ratio(X)	0.95	0.00	0.32	0.25	0.00	0.00	1.22	0.70	0.00	0.05	1.01	
Avail Cap(c_a), veh/h	378	0	510	274	0	0	201	1178	998	429	1061	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.7	0.0	39.6	55.2	0.0	0.0	41.8	14.6	8.2	13.6	26.0	0.0
Incr Delay (d2), s/veh	33.3	0.0	0.5	1.1	0.0	0.0	134.9	3.4	0.0	0.1	31.2	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	7.1	0.0	2.7	0.9	0.0	0.0	13.5	14.3	0.0	0.2	36.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.0	0.0	40.1	56.3	0.0	0.0	176.6	18.0	8.2	13.7	57.2	0.0
LnGrp LOS	F	A	D	E	A	A	F	B	A	B	F	
Approach Vol, veh/h		468			29			1067			1091	
Approach Delay, s/veh		73.0			56.3			54.4			56.6	
Approach LOS		E			E			D			E	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	73.6		31.4	7.5	81.1	20.0	11.4				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	55.5		38.5	9.5	55.5	14.5	18.5				
Max Q Clear Time (g_c+I1), s	11.5	70.1		8.9	2.4	36.6	16.5	4.0				
Green Ext Time (p_c), s	0.0	0.0		0.6	0.0	9.7	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	58.6
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

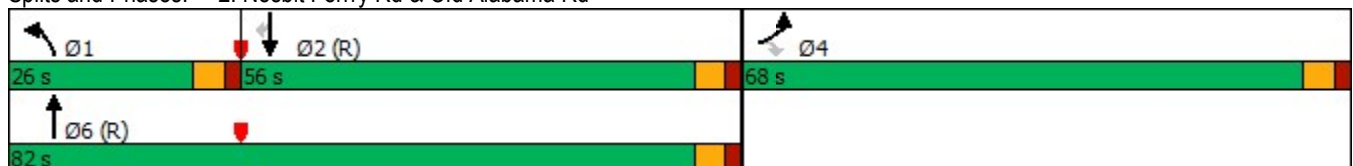


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖↗	↑	↑↑	↖
Traffic Volume (vph)	877	722	380	594	953	620
Future Volume (vph)	877	722	380	594	953	620
Lane Group Flow (vph)	914	752	396	619	993	646
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	68.0	68.0	26.0	82.0	56.0	56.0
Total Split (%)	45.3%	45.3%	17.3%	54.7%	37.3%	37.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.71	0.94	0.85	0.60	0.74	0.67
Control Delay	43.0	45.6	86.3	25.8	45.6	8.9
Queue Delay	0.0	48.2	0.0	0.0	0.0	0.0
Total Delay	43.0	93.8	86.3	25.8	45.6	8.9
Queue Length 50th (ft)	372	441	212	298	472	44
Queue Length 95th (ft)	436	#714	#285	453	561	186
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1430	851	479	1031	1348	963
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	188	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	1.13	0.83	0.60	0.74	0.67

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
2: Nesbit Ferry Rd & Old Alabama Rd

7e.Build 2039 PM - System Improvements

05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	877	722	380	594	953	620
Future Volume (veh/h)	877	722	380	594	953	620
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	914	752	396	619	993	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1440	660	442	954	1228	
Arrive On Green	0.42	0.42	0.13	0.51	0.35	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	914	752	396	619	993	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	31.5	62.5	16.9	36.4	38.1	0.0
Cycle Q Clear(g_c), s	31.5	62.5	16.9	36.4	38.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1440	660	442	954	1228	
V/C Ratio(X)	0.63	1.14	0.90	0.65	0.81	
Avail Cap(c_a), veh/h	1440	660	472	954	1228	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.77	0.00
Uniform Delay (d), s/veh	34.7	43.8	64.4	26.9	44.6	0.0
Incr Delay (d2), s/veh	0.9	79.9	18.7	3.4	4.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	38.1	8.5	16.7	17.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.6	123.6	83.2	30.3	49.1	0.0
LnGrp LOS	D	F	F	C	D	
Approach Vol, veh/h	1666			1015	993	
Approach Delay, s/veh	75.3			50.9	49.1	
Approach LOS	E			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.7	57.3		68.0		82.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	20.5	50.5		62.5		76.5
Max Q Clear Time (g_c+I1), s	18.9	40.1		64.5		38.4
Green Ext Time (p_c), s	0.3	6.9		0.0		9.2

Intersection Summary

HCM 6th Ctrl Delay		61.5				
HCM 6th LOS			E			

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Timings

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

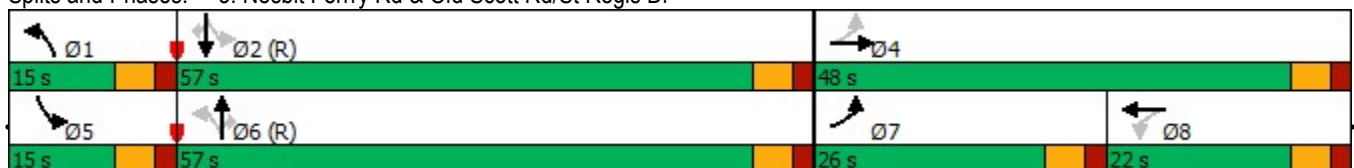


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	428	3	8	6	118	733	9	15	980	417
Future Volume (vph)	428	3	8	6	118	733	9	15	980	417
Lane Group Flow (vph)	441	147	0	26	122	756	9	15	1010	430
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	26.0	48.0	22.0	22.0	15.0	57.0	57.0	15.0	57.0	57.0
Total Split (%)	21.7%	40.0%	18.3%	18.3%	12.5%	47.5%	47.5%	12.5%	47.5%	47.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.17	0.30		0.27	0.59	0.64	0.01	0.05	1.00	0.44
Control Delay	141.8	7.2		42.0	30.6	19.9	0.0	9.3	56.7	9.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	141.8	7.2		42.0	30.6	19.9	0.0	9.3	56.7	9.4
Queue Length 50th (ft)	~360	2		11	41	332	0	4	~856	78
Queue Length 95th (ft)	#560	50		40	106	638	0	13	#1205	183
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	376	655		212	222	1176	1045	382	1013	973
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.22		0.12	0.55	0.64	0.01	0.04	1.00	0.44

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green  
 Natural Cycle: 145  
 Control Type: Actuated-Coordinated  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

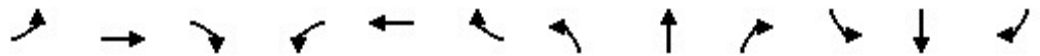
Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

7e.Build 2039 PM - System Improvements

05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	428	3	140	8	6	12	118	733	9	15	980	417
Future Volume (veh/h)	428	3	140	8	6	12	118	733	9	15	980	417
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	441	3	144	8	6	12	122	756	9	15	1010	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	469	9	415	54	28	36	154	1084	919	296	1028	
Arrive On Green	0.17	0.27	0.27	0.05	0.05	0.05	0.05	0.58	0.58	0.02	0.55	0.00
Sat Flow, veh/h	1781	32	1558	300	554	732	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	441	0	147	26	0	0	122	756	9	15	1010	0
Grp Sat Flow(s),veh/h/ln	1781	0	1590	1586	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	20.5	0.0	9.0	0.0	0.0	0.0	3.6	34.2	0.3	0.4	63.4	0.0
Cycle Q Clear(g_c), s	20.5	0.0	9.0	1.7	0.0	0.0	3.6	34.2	0.3	0.4	63.4	0.0
Prop In Lane	1.00		0.98	0.31		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	469	0	424	118	0	0	154	1084	919	296	1028	
V/C Ratio(X)	0.94	0.00	0.35	0.22	0.00	0.00	0.79	0.70	0.01	0.05	0.98	
Avail Cap(c_a), veh/h	469	0	563	251	0	0	213	1084	919	408	1028	
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	0.00	1.00	1.00	1.00	0.31	0.31	0.00
Uniform Delay (d), s/veh	46.4	0.0	35.6	55.0	0.0	0.0	28.5	17.8	10.7	15.4	26.4	0.0
Incr Delay (d2), s/veh	27.2	0.0	0.5	0.9	0.0	0.0	12.9	3.7	0.0	0.0	12.0	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	6.4	0.0	3.5	0.8	0.0	0.0	2.4	14.7	0.1	0.2	29.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.6	0.0	36.1	55.9	0.0	0.0	41.4	21.5	10.7	15.4	38.5	0.0
LnGrp LOS	E	A	D	E	A	A	D	C	B	B	D	
Approach Vol, veh/h		588			26			887			1025	
Approach Delay, s/veh		64.2			55.9			24.1			38.1	
Approach LOS		E			E			C			D	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	71.5		37.5	7.5	75.1	26.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	51.5		42.5	9.5	51.5	20.5	16.5				
Max Q Clear Time (g_c+I1), s	5.6	65.4		11.0	2.4	36.2	22.5	3.7				
Green Ext Time (p_c), s	0.1	0.0		0.9	0.0	7.7	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	39.5
HCM 6th LOS	D

Notes

- User approved pedestrian interval to be less than phase max green.
- Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings  
2: Nesbit Ferry Rd & Old Alabama Rd

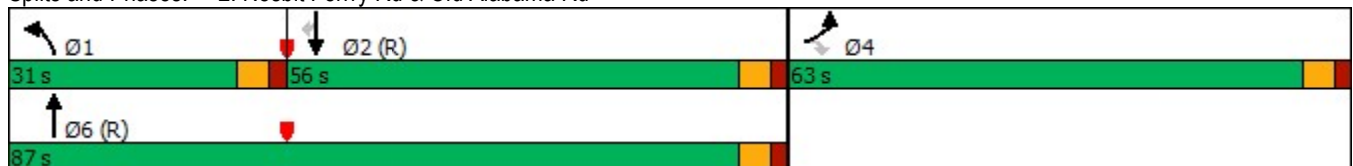


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↗	↖↗	↑	↑↑	↗
Traffic Volume (vph)	872	553	377	498	780	538
Future Volume (vph)	872	553	377	498	780	538
Lane Group Flow (vph)	928	588	401	530	830	572
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		1	6	2	
Permitted Phases		4				2
Detector Phase	4	4	1	6	2	2
Switch Phase						
Minimum Initial (s)	6.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	23.5
Total Split (s)	63.0	63.0	31.0	87.0	56.0	56.0
Total Split (%)	42.0%	42.0%	20.7%	58.0%	37.3%	37.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.83	0.75	0.79	0.47	0.56	0.58
Control Delay	53.3	20.2	68.8	22.7	37.0	5.2
Queue Delay	0.0	0.1	0.0	0.0	0.1	0.1
Total Delay	53.3	20.2	68.8	22.7	37.0	5.2
Queue Length 50th (ft)	430	179	202	288	327	0
Queue Length 95th (ft)	473	310	m256	m462	447	93
Internal Link Dist (ft)	605			394	646	
Turn Bay Length (ft)		180	200			300
Base Capacity (vph)	1315	848	583	1118	1470	992
Starvation Cap Reductn	0	0	0	0	0	20
Spillback Cap Reductn	0	10	0	0	45	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.70	0.69	0.47	0.58	0.59

Intersection Summary

Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Nesbit Ferry Rd & Old Alabama Rd



HCM 6th Signalized Intersection Summary  
 2: Nesbit Ferry Rd & Old Alabama Rd

7f.Build 2039 Dismissal - System Improvements

05/29/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷	↶↶	↶	↶↶	↷
Traffic Volume (veh/h)	872	553	377	498	780	538
Future Volume (veh/h)	872	553	377	498	780	538
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	928	588	401	530	830	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1319	605	458	1019	1336	
Arrive On Green	0.38	0.38	0.13	0.55	0.38	0.00
Sat Flow, veh/h	3456	1585	3456	1870	3647	1585
Grp Volume(v), veh/h	928	588	401	530	830	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1870	1777	1585
Q Serve(g_s), s	34.1	54.7	17.1	27.0	28.5	0.0
Cycle Q Clear(g_c), s	34.1	54.7	17.1	27.0	28.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1319	605	458	1019	1336	
V/C Ratio(X)	0.70	0.97	0.88	0.52	0.62	
Avail Cap(c_a), veh/h	1325	608	587	1019	1336	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.75	0.00
Uniform Delay (d), s/veh	39.2	45.6	63.9	21.7	38.1	0.0
Incr Delay (d2), s/veh	1.7	29.4	11.5	1.9	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	25.7	8.2	12.1	12.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.9	75.0	75.4	23.6	39.8	0.0
LnGrp LOS	D	E	E	C	D	
Approach Vol, veh/h	1516			931	830	
Approach Delay, s/veh	54.1			45.9	39.8	
Approach LOS	D			D	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.4	61.9		62.7		87.3
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	25.5	50.5		57.5		81.5
Max Q Clear Time (g_c+I1), s	19.1	30.5		56.7		29.0
Green Ext Time (p_c), s	0.8	9.3		0.5		7.8

Intersection Summary

HCM 6th Ctrl Delay	48.2
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Timings

7f.Build 2039 Dismissal - System Improvements

5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr

05/29/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	408	13	9	13	92	558	8	22	720	345
Future Volume (vph)	408	13	9	13	92	558	8	22	720	345
Lane Group Flow (vph)	443	155	0	40	100	607	9	24	783	375
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		8	1	6		5	2	
Permitted Phases	4		8		6		6	2		2
Detector Phase	7	4	8	8	1	6	6	5	2	2
Switch Phase										
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	15.0	27.5	23.5	23.5	15.0	29.5	29.5	15.0	23.5	23.5
Total Split (s)	26.0	45.0	19.0	19.0	15.0	60.0	60.0	15.0	60.0	60.0
Total Split (%)	21.7%	37.5%	15.8%	15.8%	12.5%	50.0%	50.0%	12.5%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
v/c Ratio	1.10	0.30		0.36	0.38	0.56	0.01	0.06	0.80	0.39
Control Delay	115.9	8.1		45.0	13.2	20.1	0.0	9.7	32.4	5.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.9	8.1		45.0	13.2	20.1	0.0	9.7	32.4	5.9
Queue Length 50th (ft)	~357	8		18	28	311	0	6	486	32
Queue Length 95th (ft)	#557	57		54	55	468	0	18	#820	105
Internal Link Dist (ft)		401		301		485			704	
Turn Bay Length (ft)	210				80		170	90		
Base Capacity (vph)	401	624		185	282	1092	979	453	983	972
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	1.10	0.25		0.22	0.35	0.56	0.01	0.05	0.80	0.39

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

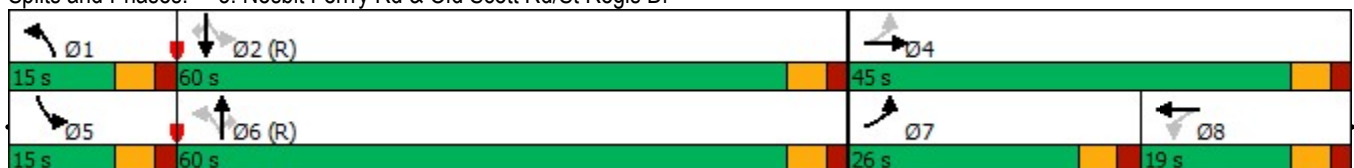
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

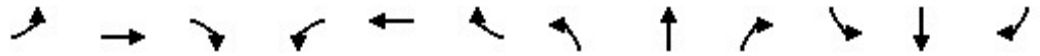
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr



HCM 6th Signalized Intersection Summary 7f.Build 2039 Dismissal - System Improvements  
 5: Nesbit Ferry Rd & Old Scott Rd/St Regis Dr 05/29/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	13	130	9	13	15	92	558	8	22	720	345
Future Volume (veh/h)	408	13	130	9	13	15	92	558	8	22	720	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	443	14	141	10	14	16	100	607	9	24	783	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	460	39	390	51	35	32	294	1072	908	398	1039	
Arrive On Green	0.17	0.27	0.27	0.05	0.05	0.05	0.04	0.57	0.57	0.02	0.56	0.00
Sat Flow, veh/h	1781	145	1462	266	703	646	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	443	0	155	40	0	0	100	607	9	24	783	0
Grp Sat Flow(s),veh/h/ln	1781	0	1607	1616	0	0	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	20.5	0.0	9.4	0.9	0.0	0.0	2.9	24.6	0.3	0.7	38.4	0.0
Cycle Q Clear(g_c), s	20.5	0.0	9.4	2.8	0.0	0.0	2.9	24.6	0.3	0.7	38.4	0.0
Prop In Lane	1.00		0.91	0.25		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	460	0	428	118	0	0	294	1072	908	398	1039	
V/C Ratio(X)	0.96	0.00	0.36	0.34	0.00	0.00	0.34	0.57	0.01	0.06	0.75	
Avail Cap(c_a), veh/h	460	0	529	216	0	0	364	1072	908	498	1039	
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(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.6	0.0	35.7	55.4	0.0	0.0	17.6	16.2	11.0	13.0	20.4	0.0
Incr Delay (d2), s/veh	32.5	0.0	0.5	1.7	0.0	0.0	0.7	2.2	0.0	0.1	5.1	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	7.3	0.0	3.7	1.2	0.0	0.0	1.1	10.4	0.1	0.3	16.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	0.0	36.2	57.1	0.0	0.0	18.2	18.4	11.0	13.0	25.4	0.0
LnGrp LOS	E	A	D	E	A	A	B	B	B	B	C	
Approach Vol, veh/h		598			40			716			807	
Approach Delay, s/veh		68.0			57.1			18.3			25.1	
Approach LOS		E			E			B			C	
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	72.2		37.5	8.3	74.3	26.0	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	54.5		39.5	9.5	54.5	20.5	13.5				
Max Q Clear Time (g_c+I1), s	4.9	40.4		11.4	2.7	26.6	22.5	4.8				
Green Ext Time (p_c), s	0.1	7.5		0.9	0.0	8.1	0.0	0.1				

Intersection Summary												
HCM 6th Ctrl Delay											35.3	
HCM 6th LOS											D	

**Notes**  
 User approved pedestrian interval to be less than phase max green.  
 Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

# **TRAFFIC VOLUME WORKSHEETS**

**24-043 - Proposed Mount Pisgah Christian School Expansion At 9725 Nesbit Ferry Road**  
**Traffic Volumes**

A&R Engineering  
 May 2024

I. Nesbit Ferry @ N. Drvy  
 A.M. Peak Hour

Condition	Old Alabama Road Northbound						Old Alabama Road Southbound						Mount Pisgah Church Driveway Eastbound						Mount Pisgah Christian School Existing Northern Driveway Westbound					
	L		R		Tot		L		R		Tot		L		R		Tot		L		R		Tot	
Existing 2024 Traffic Counts:	9	847	41	897	90	1389	29	1308	8	0	11	19	11	0	33	44								
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
No-Build 2029 Volumes:	9	889	43	941	95	1458	30	1383	8	0	12	20	12	0	35	47								
No-Build 2034 Volumes:	10	932	45	987	99	1528	32	1659	9	0	12	21	12	0	36	48								
No-Build 2039 Volumes:	10	974	47	1031	104	1597	33	1734	9	0	13	22	13	0	38	51								
Total New Trips - Phase - 1	0	8	4	12	14	14	0	28	0	0	0	0	2	0	8	10								
Total New Trips - Phase - 2	0	18	8	0	28	28	0	56	0	0	0	0	5	0	18	23								
Total New Trips - Phase - 3	0	29	12	41	47	47	0	94	0	0	0	0	8	0	29	37								
Future 2029 Traffic Volumes:	9	897	47	953	109	1472	30	1641	8	0	12	20	14	0	43	57								
Future 2034 Traffic Volumes:	10	950	53	1003	127	1556	32	1715	9	0	12	21	17	0	54	71								
Future 2039 Traffic Volumes:	10	1003	59	1072	151	1644	33	1828	9	0	13	22	21	0	67	88								

**P.M. Peak Hour**

Condition	Old Alabama Road Northbound						Old Alabama Road Southbound						Mount Pisgah Church Driveway Eastbound						Mount Pisgah Christian School Existing Northern Driveway Westbound					
	L		R		Tot		L		R		Tot		L		R		Tot		L		R		Tot	
Existing 2024 Traffic Counts:	28	1262	5	1295	22	1273	60	1355	40	0	32	72	0	0	10	10								
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
No-Build 2029 Volumes:	29	1325	5	1359	23	1337	63	1423	42	0	34	76	0	0	11	11								
No-Build 2034 Volumes:	31	1388	6	1425	24	1400	66	1490	44	0	35	79	0	0	11	11								
No-Build 2039 Volumes:	32	1451	6	1489	25	1464	69	1558	46	0	37	83	0	0	12	12								
Total New Trips - Phase - 1	0	3	1	4	2	2	0	4	0	0	0	0	1	0	3	4								
Total New Trips - Phase - 2	0	11	2	13	9	9	0	18	0	0	0	0	3	0	11	14								
Total New Trips - Phase - 3	0	24	8	32	29	29	0	58	0	0	0	0	6	0	24	30								
Future 2029 Traffic Volumes:	29	1328	6	1363	25	1339	63	1427	42	0	34	76	1	0	14	15								
Future 2034 Traffic Volumes:	31	1399	8	1438	33	1409	66	1508	44	0	35	79	3	0	22	25								
Future 2039 Traffic Volumes:	32	1475	14	1521	54	1493	69	1616	46	0	37	83	6	0	36	42								

**Dismissal Peak Hour**

Condition	Old Alabama Road Northbound						Old Alabama Road Southbound						Mount Pisgah Church Driveway Eastbound						Mount Pisgah Christian School Existing Northern Driveway Westbound					
	L		R		Tot		L		R		Tot		L		R		Tot		L		R		Tot	
Existing 2024 Traffic Counts:	10	1102	38	1150	38	1014	10	1062	10	1	9	20	79	1	226	306								
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								
No-Build 2029 Volumes:	11	1157	40	1208	40	1065	11	1116	11	1	9	21	83	1	237	321								
No-Build 2034 Volumes:	11	1212	42	1265	42	1115	11	1168	11	1	10	22	87	1	249	337								
No-Build 2039 Volumes:	12	1267	44	1323	44	1166	12	1222	12	1	10	23	91	1	260	352								
Total New Trips - Phase - 1	0	8	2	10	6	6	0	12	0	0	0	0	2	0	8	10								
Total New Trips - Phase - 2	0	19	5	24	18	18	0	36	0	0	0	0	5	0	19	24								
Total New Trips - Phase - 3	0	36	11	47	41	41	0	82	0	0	0	0	10	0	36	46								
Future 2029 Traffic Volumes:	11	1165	42	1218	46	1071	11	1128	11	1	9	21	85	1	245	321								
Future 2034 Traffic Volumes:	11	1231	47	1289	60	1133	11	1204	11	1	10	22	92	1	268	352								
Future 2039 Traffic Volumes:	12	1303	55	1370	85	1207	12	1304	12	1	10	23	101	1	296	398								



24-043 - Proposed Mount Pisgah Christian School Expansion At 9725 Nesbit Ferry Road  
Traffic Volumes

2. Nesbit Ferry @ Old Alabama  
A.M. Peak Hour

Condition	Nesbit Ferry Road Northbound				Old Alabama Road Southbound				Old Alabama Road Eastbound				Westbound			
	L		R		L		R		L		R		L		R	
	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R
Existing 2024 Traffic Counts:	429	299	0	728	0	700	711	1411	598	0	529	1127	0	0	0	0
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	450	314	0	764	0	735	747	1482	628	0	555	1183	0	0	0	0
No-Build 2034 Volumes:	472	329	0	801	0	770	782	1552	658	0	582	1240	0	0	0	0
No-Build 2039 Volumes:	493	344	0	837	0	805	818	1623	688	0	608	1296	0	0	0	0
Total New Trips - Phase - 1	16	12	0	28	0	16	0	16	0	0	27	27	0	0	0	0
Total New Trips - Phase - 2	35	25	0	0	0	33	0	33	0	0	56	56	0	0	0	0
Total New Trips - Phase - 3	58	41	0	99	0	54	0	54	0	0	93	93	0	0	0	0
Future 2029 Traffic Volumes:	466	326	0	792	0	751	747	1498	628	0	582	1210	0	0	0	0
Future 2034 Traffic Volumes:	507	354	0	861	0	803	782	1585	658	0	638	1296	0	0	0	0
Future 2039 Traffic Volumes:	551	385	0	936	0	859	818	1677	688	0	701	1389	0	0	0	0

P.M. Peak Hour

Condition	Nesbit Ferry Road Northbound				Old Alabama Road Southbound				Old Alabama Road Eastbound				Westbound			
	L		R		L		R		L		R		L		R	
	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R
Existing 2024 Traffic Counts:	289	489	0	778	0	798	539	1337	765	0	578	1341	0	0	0	0
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	303	513	0	816	0	838	566	1404	801	0	607	1408	0	0	0	0
No-Build 2034 Volumes:	318	538	0	856	0	878	593	1471	839	0	636	1475	0	0	0	0
No-Build 2039 Volumes:	332	562	0	894	0	918	620	1538	877	0	665	1542	0	0	0	0
Total New Trips - Phase - 1	5	3	0	8	0	3	0	3	0	0	4	4	0	0	0	0
Total New Trips - Phase - 2	22	13	0	35	0	12	0	12	0	0	18	18	0	0	0	0
Total New Trips - Phase - 3	48	32	0	80	0	35	0	35	0	0	57	57	0	0	0	0
Future 2029 Traffic Volumes:	308	516	0	824	0	841	566	1407	801	0	611	1412	0	0	0	0
Future 2034 Traffic Volumes:	340	551	0	891	0	890	593	1483	839	0	654	1493	0	0	0	0
Future 2039 Traffic Volumes:	380	594	0	974	0	953	620	1573	877	0	722	1599	0	0	0	0

Dismissal Peak Hour

Condition	Nesbit Ferry Road Northbound				Old Alabama Road Southbound				Old Alabama Road Eastbound				Westbound			
	L		R		L		R		L		R		L		R	
	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R
Existing 2024 Traffic Counts:	265	392	0	657	0	634	468	1102	758	0	409	1167	0	0	0	0
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	278	412	0	690	0	666	491	1157	796	0	429	1225	0	0	0	0
No-Build 2034 Volumes:	292	431	0	723	0	697	515	1212	834	0	430	1284	0	0	0	0
No-Build 2039 Volumes:	305	451	0	756	0	729	538	1267	872	0	470	1342	0	0	0	0
Total New Trips - Phase - 1	17	10	0	27	0	8	0	8	0	0	12	12	0	0	0	0
Total New Trips - Phase - 2	38	24	0	62	0	23	0	23	0	0	36	36	0	0	0	0
Total New Trips - Phase - 3	72	47	0	119	0	51	0	51	0	0	83	83	0	0	0	0
Future 2029 Traffic Volumes:	295	422	0	717	0	674	491	1165	796	0	441	1237	0	0	0	0
Future 2034 Traffic Volumes:	330	455	0	785	0	720	515	1235	834	0	486	1320	0	0	0	0
Future 2039 Traffic Volumes:	377	498	0	875	0	780	538	1318	872	0	553	1425	0	0	0	0

Condition	Nesbit Ferry Road Northbound						Nesbit Ferry Road Southbound						Mount Pisgah Christian School Southern Driveway Eastbound						Mount Pisgah Christian School Existing Southern Driveway Westbound						
	L		R		Tot		L		R		Tot		L		R		Tot		L		R		Tot		
Existing 2024 Traffic Counts:	50	782	34	866			34	1064	3	1101	81	52	30	163	31	13	17	61							
Growth Factor (%):	1	1	1	1			1	1	1	1	1	1	1	1	1	1	1	1							
No-Build 2029 Volumes	53	821	36	910			36	1117	3	1156	85	55	32	172	33	14	18	65							
No-Build 2034 Volumes	55	860	37	952			37	1170	3	1210	89	57	33	179	34	14	19	67							
No-Build 2039 Volumes	58	899	39	996			39	1224	3	1266	93	60	35	188	36	15	20	71							
Total New Trips - Phase - 1	0	16	11	27			20	22	0	42	0	0	0	0	6	0	12	18							
Total New Trips - Phase - 2	0	34	23	57			42	47	0	89	0	0	0	0	14	0	26	40							
Total New Trips - Phase - 3	0	56	37	93			70	78	0	148	0	0	0	0	23	0	43	66							
Future 2029 Traffic Volumes:	53	857	47	957			56	1139	3	1198	85	55	32	172	39	14	20	73							
Future 2034 Traffic Volumes:	55	894	60	1009			79	1217	3	1299	89	57	33	179	48	14	21	83							
Future 2039 Traffic Volumes:	58	955	76	1089			109	1302	3	1414	93	60	35	188	59	15	23	97							

P.M. Peak Hour

Condition	Nesbit Ferry Road Northbound						Nesbit Ferry Road Southbound						Mount Pisgah Christian School Southern Driveway Eastbound						Mount Pisgah Christian School Existing Southern Driveway Westbound						
	L		R		Tot		L		R		Tot		L		R		Tot		L		R		Tot		
Existing 2024 Traffic Counts:	10	879	7	896			12	1235	3	1250	13	0	9	22	4	1	6	11							
Growth Factor (%):	1	1	1	1			1	1	1	1	1	1	1	1	1	1	1	1							
No-Build 2029 Volumes	11	923	7	941			13	1297	3	1313	14	0	9	23	4	1	6	11							
No-Build 2034 Volumes	11	967	8	986			13	1359	3	1375	14	0	10	24	4	1	7	12							
No-Build 2039 Volumes	12	1011	8	1031			14	1420	3	1437	15	0	10	25	5	1	7	13							
Total New Trips - Phase - 1	0	5	2	7			3	4	0	7	0	0	0	0	2	0	4	6							
Total New Trips - Phase - 2	0	19	7	26			13	16	0	29	0	0	0	0	9	0	16	25							
Total New Trips - Phase - 3	0	44	23	67			43	49	0	92	0	0	0	0	19	0	36	55							
Future 2029 Traffic Volumes:	11	928	9	948			16	1301	3	1320	14	0	9	23	6	1	10	17							
Future 2034 Traffic Volumes:	11	986	15	1012			26	1375	3	1404	14	0	10	24	13	1	23	37							
Future 2039 Traffic Volumes:	12	1055	31	1098			57	1469	3	1529	15	0	10	25	24	1	43	68							

Dismissal Peak Hour

Condition	Nesbit Ferry Road Northbound						Nesbit Ferry Road Southbound						Mount Pisgah Christian School Southern Driveway Eastbound						Mount Pisgah Christian School Existing Southern Driveway Westbound						
	L		R		Tot		L		R		Tot		L		R		Tot		L		R		Tot		
Existing 2024 Traffic Counts:	28	677	16	721			57	850	19	926	79	9	38	126	27	10	35	72							
Growth Factor (%):	1	1	1	1			1	1	1	1	1	1	1	1	1	1	1	1							
No-Build 2029 Volumes	29	711	17	757			60	893	20	973	83	9	40	132	28	11	39	78							
No-Build 2034 Volumes	31	745	18	794			63	935	21	1019	87	10	42	139	30	11	41	82							
No-Build 2039 Volumes	32	779	18	829			66	978	22	1066	91	10	44	145	31	12	43	86							
Total New Trips - Phase - 1	0	14	5	19			9	11	0	20	0	0	0	0	7	0	12	19							
Total New Trips - Phase - 2	0	34	15	49			27	32	0	59	0	0	0	0	15	0	29	44							
Total New Trips - Phase - 3	0	65	33	98			62	72	0	134	0	0	0	0	29	0	54	83							
Future 2029 Traffic Volumes:	29	725	22	776			69	904	20	993	83	9	40	132	35	11	46	92							
Future 2034 Traffic Volumes:	31	779	33	843			90	967	21	1078	87	10	42	139	45	11	56	111							
Future 2039 Traffic Volumes:	32	844	51	927			128	1050	22	1200	91	10	44	145	60	12	72	144							

24-043 - Proposed Mount Pisgah Christian School Expansion At 9725 Nesbit Ferry Road  
Traffic Volumes

4. Nesbit Ferry @ Nesbit Lakes  
A.M. Peak Hour

Condition	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Nesbit Lakes Drive Eastbound				Nesbit Lakes Drive Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
	Existing 2024 Traffic Counts:	14	811	0	825	0	1107	18	1125	55	0	43	98	0	0	0
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	15	852	0	867	0	1162	19	1181	58	0	45	103	0	0	0	0
No-Build 2034 Volumes:	15	892	0	907	0	1218	20	1238	61	0	47	108	0	0	0	0
No-Build 2039 Volumes:	16	933	0	949	0	1273	21	1294	63	0	49	112	0	0	0	0
Total New Trips - Phase - 1	0	36	0	36	0	21	0	21	0	0	0	0	0	0	0	0
Total New Trips - Phase - 2	0	75	0	75	0	47	0	47	0	0	0	0	0	0	0	0
Total New Trips - Phase - 3	0	124	0	124	0	77	0	77	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	15	888	0	903	0	1183	19	1202	58	0	45	103	0	0	0	0
Future 2034 Traffic Volumes:	15	967	0	982	0	1265	20	1285	61	0	47	108	0	0	0	0
Future 2039 Traffic Volumes:	16	1057	0	1073	0	1350	21	1371	63	0	49	112	0	0	0	0

P.M. Peak Hour

Condition	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Nesbit Lakes Drive Eastbound				Nesbit Lakes Drive Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
	Existing 2024 Traffic Counts:	53	874	0	927	0	1185	63	1248	22	0	15	37	0	0	0
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	56	918	0	974	0	1244	66	1310	23	0	16	39	0	0	0	0
No-Build 2034 Volumes:	58	961	0	1019	0	1304	69	1373	24	0	17	41	0	0	0	0
No-Build 2039 Volumes:	61	1005	0	1066	0	1363	72	1435	25	0	17	42	0	0	0	0
Total New Trips - Phase - 1	0	6	0	6	0	7	0	7	0	0	0	0	0	0	0	0
Total New Trips - Phase - 2	0	24	0	24	0	29	0	29	0	0	0	0	0	0	0	0
Total New Trips - Phase - 3	0	76	0	76	0	64	0	64	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	56	924	0	980	0	1251	66	1317	23	0	16	39	0	0	0	0
Future 2034 Traffic Volumes:	58	985	0	1043	0	1333	69	1402	24	0	17	41	0	0	0	0
Future 2039 Traffic Volumes:	61	1081	0	1142	0	1427	72	1499	25	0	17	42	0	0	0	0

Dismissal Peak Hour

Condition	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Nesbit Lakes Drive Eastbound				Nesbit Lakes Drive Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
	Existing 2024 Traffic Counts:	27	712	0	739	0	903	22	925	31	0	15	46	0	0	0
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	28	748	0	776	0	948	23	971	33	0	16	49	0	0	0	0
No-Build 2034 Volumes:	30	783	0	813	0	993	24	1017	34	0	17	51	0	0	0	0
No-Build 2039 Volumes:	31	819	0	850	0	1058	25	1083	36	0	17	53	0	0	0	0
Total New Trips - Phase - 1	0	16	0	16	0	22	0	22	0	0	0	0	0	0	0	0
Total New Trips - Phase - 2	0	48	0	48	0	51	0	51	0	0	0	0	0	0	0	0
Total New Trips - Phase - 3	0	110	0	110	0	96	0	96	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	28	764	0	792	0	970	23	993	33	0	16	49	0	0	0	0
Future 2034 Traffic Volumes:	30	831	0	861	0	1044	24	1068	34	0	17	51	0	0	0	0
Future 2039 Traffic Volumes:	31	929	0	960	0	1134	25	1159	36	0	17	53	0	0	0	0

24-043 - Proposed Mount Pisgah Christian School Expansion At 9725 Nesbit Ferry Road  
Traffic Volumes

A&R Engineering  
May 2024

5. Nesbit Ferry @ Old Scott  
A.M. Peak Hour

Condition	Nesbit Ferry Road Northbound			Nesbit Ferry Road Southbound			Old Scott Road Eastbound			St. Regis Drive Westbound					
	L	T	Tot	L	T	Tot	L	T	Tot	L	T	Tot			
Existing 2024 Traffic Counts:	200	602	805	12	837	420	1269	252	2	88	342	7	3	14	24
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	210	632	845	13	879	441	1333	265	2	92	359	7	3	15	25
No-Build 2034 Volumes:	220	662	885	13	921	462	1396	277	2	97	376	8	3	15	26
No-Build 2039 Volumes:	230	692	925	14	963	483	1460	290	2	101	393	8	3	16	27
Total New Trips - Phase - 1	0	23	0	23	0	13	8	21	14	0	0	14	0	0	0
Total New Trips - Phase - 2	0	47	0	47	0	29	18	47	28	0	0	28	0	0	0
Total New Trips - Phase - 3	0	78	0	78	0	48	29	77	47	0	0	47	0	0	0
Future 2029 Traffic Volumes:	210	655	868	13	892	449	1354	279	2	92	373	7	3	15	25
Future 2034 Traffic Volumes:	220	709	929	13	950	480	1443	305	2	97	404	8	3	15	26
Future 2039 Traffic Volumes:	230	770	1003	14	1011	512	1537	337	2	101	440	8	3	16	27

P.M. Peak Hour

Condition	Nesbit Ferry Road Northbound			Nesbit Ferry Road Southbound			Old Scott Road Eastbound			St. Regis Drive Westbound					
	L	T	Tot	L	T	Tot	L	T	Tot	L	T	Tot			
Existing 2024 Traffic Counts:	103	596	805	13	817	342	1172	347	3	122	472	7	5	10	22
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	108	626	842	14	858	359	1231	364	3	128	495	7	5	11	23
No-Build 2034 Volumes:	113	656	978	14	899	376	1289	382	3	134	519	8	6	11	25
No-Build 2039 Volumes:	118	685	982	15	940	393	1348	399	3	140	542	8	6	12	26
Total New Trips - Phase - 1	0	4	0	4	0	5	3	8	2	0	0	2	0	0	0
Total New Trips - Phase - 2	0	15	0	15	0	18	11	29	9	0	0	9	0	0	0
Total New Trips - Phase - 3	0	48	0	48	0	40	24	64	29	0	0	29	0	0	0
Future 2029 Traffic Volumes:	108	630	874	14	863	362	1239	366	3	128	497	7	5	11	23
Future 2034 Traffic Volumes:	113	671	973	14	917	387	1318	391	3	134	528	8	6	11	25
Future 2039 Traffic Volumes:	118	733	960	15	980	417	1412	428	3	140	571	8	6	12	26

Dismissal Peak Hour

Condition	Nesbit Ferry Road Northbound			Nesbit Ferry Road Southbound			Old Scott Road Eastbound			St. Regis Drive Westbound					
	L	T	Tot	L	T	Tot	L	T	Tot	L	T	Tot			
Existing 2024 Traffic Counts:	80	425	752	19	574	269	862	319	11	113	443	8	11	13	32
Growth Factor (%):	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes:	84	446	757	20	605	282	905	335	12	119	466	8	12	14	34
No-Build 2034 Volumes:	88	468	864	21	631	296	948	351	12	124	487	9	12	14	35
No-Build 2039 Volumes:	92	489	889	22	660	309	991	367	13	130	510	9	13	15	37
Total New Trips - Phase - 1	0	10	0	10	0	14	8	22	6	0	0	6	0	0	0
Total New Trips - Phase - 2	0	30	0	30	0	32	19	51	18	0	0	18	0	0	0
Total New Trips - Phase - 3	0	69	0	69	0	60	36	96	41	0	0	41	0	0	0
Future 2029 Traffic Volumes:	84	456	757	20	617	290	927	341	12	119	472	8	12	14	34
Future 2034 Traffic Volumes:	88	498	859	21	663	315	999	369	12	124	505	9	12	14	35
Future 2039 Traffic Volumes:	92	558	868	22	720	345	1067	408	13	130	551	9	13	15	37

**24-043 - Proposed Mount Pisgah Christian School Expansion At 9725 Nesbit Ferry Road**  
**Traffic Volumes**

A&R Engineering  
 May 2024

6. Nesbit Ferry @ New Dwy  
 A.M. Peak Hour

Condition	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Eastbound				Westbound			
	L		R		L		R		L		R		L		R	
	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	
Existing 2024 Traffic Counts	0	866	0	866	0	1125	0	1125	0	0	0	0	0	0	0	0
Growth Factor (%)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes	0	909	0	909	0	1181	0	1181	0	0	0	0	0	0	0	0
No-Build 2034 Volumes	0	953	0	953	0	1238	0	1238	0	0	0	0	0	0	0	0
No-Build 2039 Volumes	0	996	0	996	0	1294	0	1294	0	0	0	0	0	0	0	0
Total New Trips - Phase - 1	0	14	22	36	20	8	0	28	0	0	0	0	13	0	12	25
Total New Trips - Phase - 2	0	30	45	75	42	19	0	61	0	0	0	0	28	0	26	54
Total New Trips - Phase - 3	0	50	75	125	70	31	0	101	0	0	0	0	46	0	43	89
Future 2029 Traffic Volumes:	0	923	22	945	20	1189	0	1209	0	0	0	0	13	0	12	25
Future 2034 Traffic Volumes:	0	983	45	1028	42	1257	0	1299	0	0	0	0	28	0	26	54
Future 2039 Traffic Volumes:	0	1046	75	1121	70	1325	0	1395	0	0	0	0	46	0	43	89

**P.M. Peak Hour**

Condition	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Eastbound				Westbound			
	L		R		L		R		L		R		L		R	
	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	
Existing 2024 Traffic Counts	0	896	0	896	0	1248	0	1248	0	0	0	0	0	0	0	0
Growth Factor (%)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes	0	941	0	941	0	1310	0	1310	0	0	0	0	0	0	0	0
No-Build 2034 Volumes	0	986	0	986	0	1373	0	1373	0	0	0	0	0	0	0	0
No-Build 2039 Volumes	0	1030	0	1030	0	1435	0	1435	0	0	0	0	0	0	0	0
Total New Trips - Phase - 1	0	2	3	5	3	3	0	6	0	0	0	0	4	0	4	8
Total New Trips - Phase - 2	0	9	14	23	13	12	0	25	0	0	0	0	18	0	16	34
Total New Trips - Phase - 3	0	31	46	77	43	26	0	69	0	0	0	0	39	0	36	75
Future 2029 Traffic Volumes:	0	943	3	946	3	1313	0	1316	0	0	0	0	4	0	4	8
Future 2034 Traffic Volumes:	0	995	14	1009	13	1385	0	1398	0	0	0	0	18	0	16	34
Future 2039 Traffic Volumes:	0	1061	46	1107	43	1461	0	1504	0	0	0	0	39	0	36	75

**Dismissal Peak Hour**

Condition	Nesbit Ferry Road Northbound				Nesbit Ferry Road Southbound				Eastbound				Westbound			
	L		R		L		R		L		R		L		R	
	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	Tot	
Existing 2024 Traffic Counts	0	721	0	721	0	925	0	925	0	0	0	0	0	0	0	0
Growth Factor (%)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
No-Build 2029 Volumes	0	757	0	757	0	971	0	971	0	0	0	0	0	0	0	0
No-Build 2034 Volumes	0	793	0	793	0	1018	0	1018	0	0	0	0	0	0	0	0
No-Build 2039 Volumes	0	829	0	829	0	1064	0	1064	0	0	0	0	0	0	0	0
Total New Trips - Phase - 1	0	7	10	17	9	9	0	18	0	0	0	0	13	0	12	25
Total New Trips - Phase - 2	0	19	29	48	27	20	0	47	0	0	0	0	31	0	29	60
Total New Trips - Phase - 3	0	44	66	110	62	39	0	101	0	0	0	0	58	0	54	112
Future 2029 Traffic Volumes:	0	764	10	774	9	980	0	989	0	0	0	0	13	0	12	25
Future 2034 Traffic Volumes:	0	812	29	841	27	1038	0	1065	0	0	0	0	31	0	29	60
Future 2039 Traffic Volumes:	0	873	66	939	62	1105	0	1165	0	0	0	0	58	0	54	112