

**TEXANS CAN ACADEMY  
DALLAS NORTH CAMPUS  
TRAFFIC MANAGEMENT PLAN**

LJA Project No. 2692-2301

Scott Booth, PE, PTOE  
LJA Engineering, Inc.

**LJA Engineering, Inc.**



6060 N Central Expressway, Suite 440  
Dallas, Texas 75206  
Phone: 469.621.0710  
[www.ljaengineering.com](http://www.ljaengineering.com)  
TBPE Firm F-3186

December 2023

**TEXANS CAN ACADEMY  
DALLAS NORTH CAMPUS  
TRAFFIC MANAGEMENT PLAN**



December 2023

LJA Project No. 2692-2301

**LJA Engineering, Inc.** 

6060 N Central Expressway, Suite 440  
Dallas, Texas 75206  
Phone: 469.621.0710  
[www.ljaengineering.com](http://www.ljaengineering.com)  
TBPE Firm F-3186

---

# TABLE OF CONTENTS

I.	INTRODUCTION.....	1
1.1	Existing Area Conditions.....	1
II.	TRAFFIC MANAGEMENT PLAN .....	3
2.1	Operational Characteristics.....	3
2.1.1	Projected Campus Trip Generation.....	5
2.1.2	School Operations .....	4
2.1.3	On-Street Pick-Up/Drop-Off .....	6
2.1.4	Site Queues and Projected Queue Lengths .....	6
III.	SUMMARY AND RECOMMENDATIONS.....	7

## I. INTRODUCTION

LJA Engineering, Inc. (LJA) was retained by Texans Can Academy (Client) to review the traffic operations at the Dallas North Campus located in Dallas, Texas. The purpose of this review, and the following summary report, is a revision to the Traffic Management Plan (TMP) prepared for the site in October of 2019 to account for student enrollment totals and changes to the pick-up and drop-off location. Figure 1 below is a map detailing the site location.



\* Trafficware Synchro 10 screenshot reprinted with permission from Microsoft Bing Maps

**Figure 1 – Dallas North Campus Site Location**

The school is located in existing buildings that are part of an office/light industrial type development, located south of the intersection of Forest Lane and Skillman Street. In the figure above, buildings A, C, and D (approximately 38,000 square feet in total). Building B is currently occupied and is not part of the school. The school currently has 252 students enrolled (split between four different schedule options) with approximately 25 staff members.

### 1.1 Existing Area Conditions

The Dallas North Campus is bordered by Skillman Street on the north edge of the site, Wendell Road along the southern edge, and access driveways on both the east and east sides of the site. Skillman Street is a major six-lane divided thoroughfare. Wendell Road is a 40-foot wide roadway with no lane striping; therefore, it functions as a two-lane roadway. The driveways on either side of the buildings are standard width drive aisles that are approximately 24 feet wide and are striped as fire lanes. There are no known proposed/planned improvements to existing roadways surrounding the site.

### 1.1.1 Site Ingress and Egress

This development area is served by four driveways on Skillman Street, two driveways on Pagemill Road, and three driveways on Wendell Road (numbered in the above figure). All of the driveways on Pagemill Road and Wendell Road are full access allowing left-turns in and out. On Skillman, only the east most drive is full access. The other three driveways are right-in/right-out only. Given there is cross access throughout the development, there are no dedicated access points that serve just the Dallas North Campus and it was noted that not all driveways were used for school related traffic.

## 1.2 Changes Since Previous Traffic Management Plan Submittal

With this submittal, the following changes from the previous TMP submittal are noted:

- Student entrance moved from the south side of Building D to the west side of Building C
- Additional schedule options for students have been added

This TMP replaces the previous plan for the site.

## II. TRAFFIC MANAGEMENT PLAN

The purpose of the Traffic Management Plan (TMP) is to establish procedures for traffic flow and circulation around the charter school and daycare facility related to student drop-off and pick-up operations. Use of a TMP helps improve traffic/student safety and helps maximize the efficiency of drop-off and pick-up operations. The analysis summarized in this report identifies critical elements of the TMP such as available queuing space that is both on and off site, circulation patterns for the charter school and day care facilities, and the projected trip generation (and estimated queuing) during the morning and afternoon peaks.

### 2.1 Operational Characteristics

Based on information from the client, the school currently has:

- 252 students (split between four different schedule options)
- Approximately 25 staff members for high school

#### 2.1.1 Drop-off and Pick-up Hours

The high school is open from 8:00 AM until 5:00 PM. Classes are split between four different sessions (red, blue, yellow or green) as shown in Figure 2 below. Most of the students are on either the Red (9:00 AM to 1:42 PM) or Green Schedule (9:00 AM to 3:48 PM). The actual start and end times for the class sessions could be slightly different from those listed below and are structured around the DART bus schedule to accommodate students that utilize transit.

1st Period	2nd Period	3rd Period	4th Period	5th Period	6th Period	7th Period
9:00a-10:00a	10:03a-11:03a	11:06a-12:06p	A Lunch/Advisory 12:09p-12:39p	12:42-1:42p		
			12:09p-1:09p	B Lunch/Advisory 1:12p-1:42p		
	10:03a-11:03a	11:06a-12:06p	A Lunch/Advisory 12:09p-12:39p	12:42-1:42p	1:45p-2:45p	
			12:09p-1:09p	B Lunch/Advisory 1:12p-1:42p		
		11:06a-12:06p	A Lunch/Advisory 12:09p-12:39p	12:42-1:42p	1:45p-2:45p	2:48p-3:48p
			12:09p-1:09p	B Lunch/Advisory 1:12p-1:42p		
9:00a-10:00a	10:03a-11:03a	11:06a-12:06p	A Lunch/Advisory 12:09p-12:39p	12:42-1:42p	1:45p-2:45p	2:48p-3:48p
			12:09p-1:09p	B Lunch/Advisory 1:12p-1:42p		

Figure 2: Current Schedule Options

For schools, the peak times of traffic flow are concentrated around the start and end of classes and are shorter than an hour (typically 30 minutes). As was stated above, there are four sessions of school for students. Students are generally enrolled in either the Red or Green session. The start and end times for the class sessions are structured around the DART bus schedule and may vary slightly as the bus schedule changes.

Based on the estimated class times and observations conducted at existing Texans Can Campuses in the Dallas area, the morning peak hour is between 8:45 AM and 9:45 AM and is the busiest time of day. The midday peak hour is from 1:15 PM to 2:30 PM and is the least busy time of day. The afternoon peak is from 3:15 PM to 4:15 PM.

### *2.1.2 Drop-off and Pick-up Locations*

Students enter/exit through a location on the west side of Building C (See attached Exhibit 1) and this is where the drop-off/pick-up area is located adjacent to this entrance.

### *2.1.3 Campus Personnel Assisting Students*

This campus serves only high school students who require minimal assistance during drop-off/pick-up operations. There is one security officer at the student entry who can assist students and/or parents if needed.

### *2.1.4 School Operations and Circulation*

Students enter and exit the campus through the cafeteria which is located in Building C. (Refer to the attached TMP exhibit). It is the main entrance to the cafeteria and on the west side of the building. Students that use transit access the site from drives along Skillman Street as well as the drive on Pagemill Road. Based on observations, approximately 40 (15.8%) of the current students use transit.

Students that are dropped off or picked up by parents do so in the parking/drive isle area that is adjacent to the cafeteria (building C). For parents/students coming from the north or east, access to the site will be via making a left turn on to Pagemill Road, which is signalized, and then accessing the campus from the south entrances on Wendell Road. When exiting the site, these parents/students will depart the campus at the north end by making a right-turn onto Skillman Street/Forest Lane. For those coming from the south and west, they will access the site from the north entry at Skillman Street and exit the south end to Wendell Road and Pagemill Road, which will provide signalized access back to the west on Skillman Street.

Students, who drive their own vehicle, park in the designated lot located on the southeast corner of Pagemill Road and Wendell Road (the lot has 171 spaces), which will require students to cross Wendell Road. At this location, Wendell Road is 40-foot wide roadway for local access, and it is not anticipated that the road will carry significant traffic volumes that warrant special treatment for pedestrians. Students will be advised to cross at designated locations with sidewalks. These students will access the campus through the cafeteria in the same manner as that described for the pickup and drop-off operations above.

It was noted that there are semi-tractor trucks with trailers that park along Wendell Road and make it difficult for both vehicles and pedestrians to see each other. It is recommended that the city prohibit truck parking along Wendell Road that is adjacent to the student parking lot area.

### 2.1.5 Campus Trip Generation

Trip generation for the school was based on observations conducted at existing Texans Can campuses in the Dallas area. Given the school schedules, five total observations were completed per the following schedule:

- May 9, 2023 from 8:45 AM to 9:45 AM
- May 9, 2023 from 3:15 PM to 4:15 PM
- May 16, 2023 from 8:45 AM to 9:45 AM
- May 16, 2023 from 1:30 PM to 2:30 PM
- May 16, 2023 from 3:15 PM to 4:15 PM

Given that this campus is shared with other uses in the development, only those vehicles that accessed campus parking areas or had students were counted. The observed trip generation for the Dallas North Campus is based on the highest observed trip counts and is summarized in Table 1 below. Raw count data for each of the observations is attached in Exhibit 2.

**Table 1 – Observation Summary for Vehicle Trips**

Land Use	Independent Variable	Units	AM-Peak Hour			Midday-Peak Hour			PM-Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
High School	Students	252	88	61	149	39	49	88	47	87	134
<b>Total Trips</b>			<b>88</b>	<b>61</b>	<b>149</b>	<b>39</b>	<b>49</b>	<b>88</b>	<b>47</b>	<b>87</b>	<b>134</b>

The above table shows that the most vehicular traffic occurs in the morning peak hour with a total of 149 trips. Much of this is due to the arrival of both students and staff for morning classes. From the observations at the campus, it was also observed that the arrival of vehicles in the AM peak was spread out more evenly over the peak hour. This is due to many of the students arriving late (within 30 minutes) for the first period, but staff arriving earlier before school.

The midday peak hour has fewer overall trips (88 total) when compared the AM and PM peak but has two of the schedules having pick up occur on site. It is also more concentrated into a peak 30-minute period between 1:15 PM and 1:45 PM. Most of the students that leave during this peak are students that drive themselves or take transit.

The PM Peak has two schedules where students are picked up. It is also more concentrated into a peak 30-minute period between 3:30 PM and 4:00 PM. This is due to parents getting there right before the classes end and the school not offering activities after classes end for the day.



### *2.1.6 On-Street Pick-Up/Drop-Off*

For the Dallas North Campus, there was no on-street pickup/drop-off observed. All pickup/drop-off activity occurred on site. It was noted during the observations that some students walk to other areas of the parking lot to be picked-up, but there is no on-street pick-up. Drop-off is focused on the area adjacent to the entry on the west side of Building C.

### *2.1.7 Site Queues and Projected Queue Lengths*

With two entry points to the campus for parents picking up and dropping off students, there is approximately 600 feet (approximately 24 vehicles) of space for the queuing of vehicles (see attached TMP in Exhibit 1). Based on observations the longest vehicle queue seen was 3 vehicles in the AM peak hour. Most people pulled into parking spots to let their student out.

During the midday peak, vehicle queues of parents waiting to pick students up at the Grant East Campus did not exceed two (2) vehicles at any given time. These short queues are due to the presence of open parking spots that are utilized as spots to wait for the students.

Students that are dropped off or picked up by parents do so in the parking area just west of the cafetorium. Some parents enter the driveway on the north side of the site, pick up/drop off a student(s) and then exit the east or south driveway. Others turn around on the site and depart the north driveway. Still others enter from the east or south driveways, pick up/drop off a student(s) and then exit the north driveway.

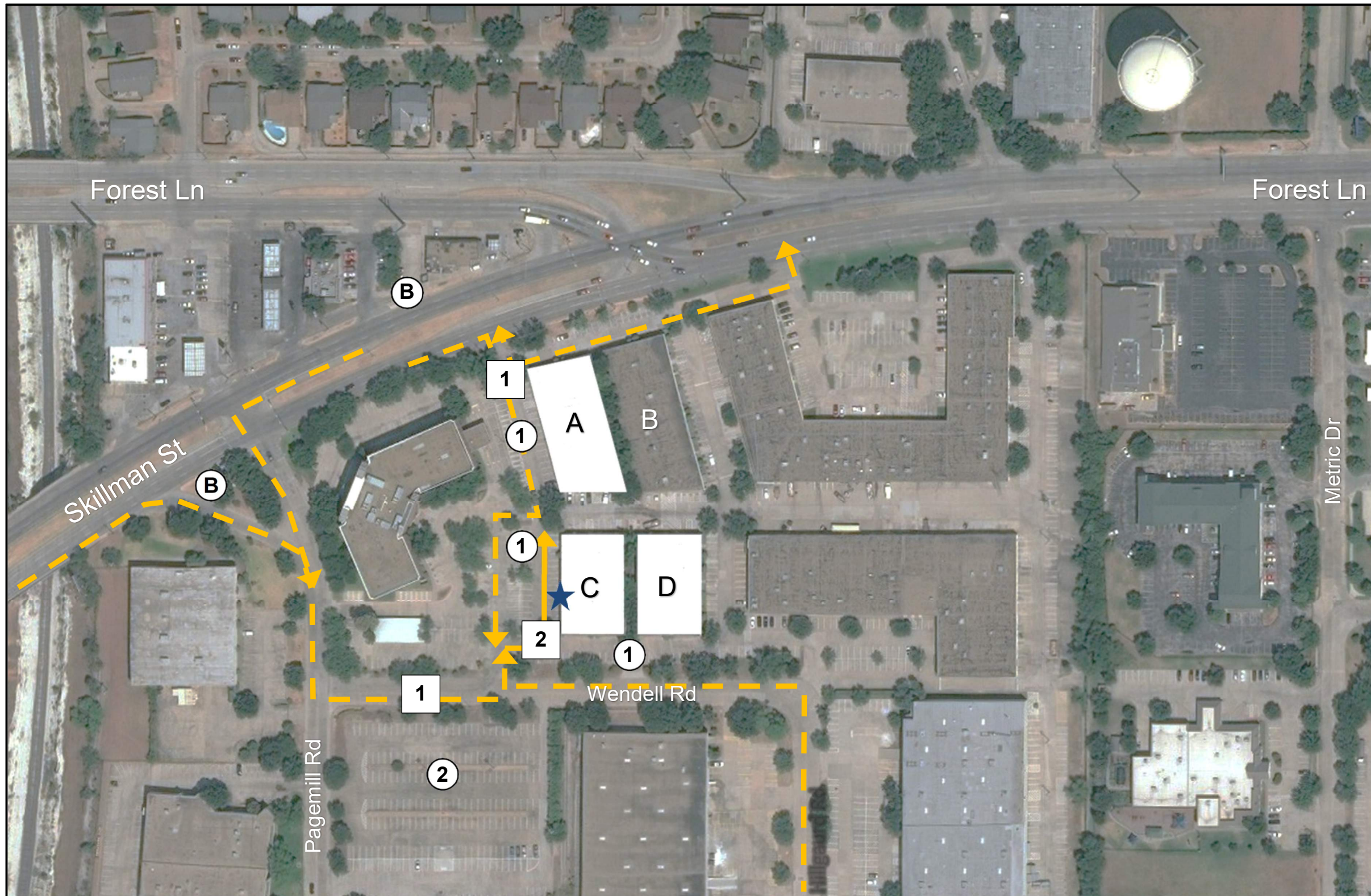
Students who drive their own vehicle, park in the designated lot located on the southeast corner of Pagemill Road and Wendell Road. This keeps students driving their own vehicle away from the area where parents are dropping off or picking up students.

### **III. SUMMARY AND RECOMMENDATIONS**

Based upon the site layout for the Dallas North Campus, the student enrollment, and observations from the campus; it is not anticipated that the existing school campus will have a significant impact on the traffic operations of the adjacent roadways. Overall access to the site is good and there is sufficient on-site storage for the projected queues related to the operations of the school.

The only recommendation is for the city to restrict truck parking along Wendell Road in sections adjacent to the parking areas.

## **Appendix – Traffic Management Plan**



**LEGEND**

- Student Pick-up/Drop-off Path
- Student Pick-up Queue (On-Site)
- Pick-up Queue/Travel Path
- Drop-off/Pick-up Area
- Staff Assistant
- DART Bus Stop
- Staff Parking
- Student Parking

**Campus Information**

Enrollment:	252 Students
Academic:	Grades 9 -12
Red Sched:	9:00 AM – 11:42 PM
Blue Sched:	10:03 AM – 2:45 PM
Yellow Sched:	11:06 AM – 3:48 PM
Green Sched:	9:00 AM – 3:48 PM

**Queuing (Passenger Vehicles)**

Demand:	75 ft (3 veh.)
Available Capacity:	On-site – 300 ft (12 veh.)
NET Surplus:	225 ft (9 veh.)

**NOTE:**  
*This Traffic Management Plan was developed to prevent the queuing of drop-off/pick-up related vehicles within the City right-of-way. The school administration should adhere to the TMP and any deficiency due to spill over of queuing into undesignated areas of the City right-of-way, including roadway travel lanes, should be corrected by the school immediately.*

05-31-23

## **Appendix – Observation Count Data**

Traffic Count 5/9/2023 AM Peak																				
Time Period Start	Wendell Road East Drive				Wendell Road West Drive				Pagemill Road South Drive				Skillman Street East Drive		Skillman Street Middle Drive		Skillman Street West Drive		Pedestrians	
	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT Out	RT In	RT Out	RT In	RT Out	In	Out
8:45	0	0	0	0	2	2	5	0	0	2	4	0	4	3	6	5	7	2	8	0
9:00	4	0	0	2	4	3	2	0	0	6	12	0	3	4	1	3	3	3	12	0
9:15	0	0	0	1	0	0	1	0	0	4	3	0	5	6	4	3	2	1	2	0
9:30	1	0	0	1	0	1	1	0	0	2	0	0	4	4	0	1	4	2	12	0
Total	5	0	0	4	6	6	9	0	0	14	19	0	16	17	11	12	16	8	34	0

Inbound	82
Outbound	61

Traffic Count 5/9/2023 PM Peak

Time Period Start	Wendell Road East Drive				Wendell Road West Drive				Pagemill Road South Drive				Skillman Street East Drive		Skillman Street Middle Drive		Skillman Street West Drive		Pedestrians	
	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT Out	RT In	RT Out	RT In	RT Out	In	Out
3:15	1	0	0	0	1	2	1	0	0	3	1	0	4	3	2	2	1	1	0	2
3:30	1	0	0	1	1	1	1	0	0	6	1	0	2	6	4	4	0	2	0	3
3:45	1	0	0	2	0	3	1	0	0	4	0	0	1	3	0	1	0	0	0	8
4:00	0	0	0	0	1	2	0	0	0	2	0	0	1	2	1	1	0	1	0	2
Total	3	0	0	3	3	8	3	0	0	15	2	0	8	14	7	8	1	4	0	15

Inbound	27
Outbound	52

Traffic Count 5/16/2023 AM Peak

Time Period Start	Wendell Road East Drive				Wendell Road West Drive				Pagemill Road South Drive				Skillman Street East Drive		Skillman Street Middle Drive		Skillman Street West Drive		Pedestrians	
	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT Out	RT In	RT Out	RT In	RT Out	In	Out
8:45	3	0	0	0	0	1	4	0	0	2	6	0	4	2	4	4	5	2	0	0
9:00	2	0	0	1	1	2	2	0	0	5	6	0	5	4	2	2	2	2	9	0
9:15	6	0	0	0	1	0	5	0	0	5	7	0	7	6	1	3	5	2	10	0
9:30	1	0	0	1	0	1	1	0	0	3	1	0	4	3	1	1	2	2	1	0
Total	12	0	0	2	2	4	12	0	0	15	20	0	20	15	8	10	14	8	20	0

Inbound	88
Outbound	54



Traffic Count 5/16/2023 Midday Peak

Time Period Start	Wendell Road East Drive				Wendell Road West Drive				Pagemill Road South Drive				Skillman Street East Drive		Skillman Street Middle Drive		Skillman Street West Drive		Pedestrians	
	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT Out	RT In	RT Out	RT In	RT Out	In	Out
1:30	0	0	0	0	0	1	0	0	0	0	2	0	9	4	1	3	3	2	0	8
1:45	1	0	0	2	0	0	1	0	0	1	0	0	2	6	1	2	2	1	0	5
2:00	1	0	0	2	0	1	0	0	0	3	0	0	2	4	1	4	1	3	0	3
2:15	0	0	0	0	0	1	0	0	0	2	0	0	9	3	1	2	2	2	0	1
Total	2	0	0	4	0	3	1	0	0	6	2	0	22	17	4	11	8	8	0	17

Inbound	39
Outbound	49

Traffic Count 5/16/2023 PM Peak

Time Period Start	Wendell Road East Drive				Wendell Road West Drive				Pagemill Road South Drive				Skillman Street East Drive		Skillman Street Middle Drive		Skillman Street West Drive		Pedestrians	
	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT out	LT in	LT Out	RT In	RT Out	RT In	RT Out	RT In	RT Out	In	Out
3:15	0	0	3	0	1	2	2	0	0	3	6	0	3	2	3	5	4	2	0	2
3:30	1	0	0	3	0	3	3	0	0	5	1	0	5	6	4	3	4	5	0	20
3:45	1	0	0	2	0	2	0	0	0	7	1	0	0	6	0	5	1	3	0	1
4:00	0	0	0	1	1	1	1	0	0	5	0	0	0	7	2	4	0	5	0	0
Total	2	0	3	6	2	8	6	0	0	20	8	0	8	21	9	17	9	15	0	23

Inbound	47
Outbound	87