Proposed Sheetz – Elizabethtown (Veterans Drive) Transportation Impact Study

Mount Joy Township, Lancaster County

SEPTEMBER 2024

TRG
TRANSPORTATION RESOURCE GROUP, INC.

Transportation Impact Study

for the

Proposed Sheetz – Elizabethtown (Veterans Drive)

Mount Joy Township
Lancaster County, Pennsylvania

prepared for

Sheetz, Inc.

prepared by

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EXECUTIVE SUMMARY

A summary of key findings is presented below followed by the recommendations.

1. The proposed Sheetz will consist of a 6,132 square foot convenience store with 12 fueling positions. Access to the proposed development will be provided by the two existing driveways intersecting Veterans Drive and Old Hershey Road.

2. The following intersections were selected for detailed analysis as determined by Mount Joy Township:
   - Hershey Road (SR 0743) / Veterans Drive
   - Old Hershey Road/Veterans Drive
   - Hershey Road (SR 0743)/Mt. Gretna Road (SR 0241)/Holly Street

3. Currently, the study intersections operate at acceptable overall levels of service during the weekday AM, PM and Saturday peak hours.

4. The growth factor for Lancaster County is 0.50 (Urban) as obtained from PennDOT's Growth Factors for August 2024 to July 2025.

5. In the year 2025 (Opening Year) without the proposed development, the study intersections will continue to operate with acceptable overall levels of service during the peak hours.

6. In the year 2030 (Horizon Year) without the proposed development, the study intersections will operate with acceptable overall levels of service during the peak hours.

7. The proposed Sheetz is anticipated to generate the following peak hour trips:
   - AM Peak Hour: 379 total, 288 pass-by and 91 new
   - PM Peak Hour: 334 total, 250 pass-by, and 84 new
   - Saturday Peak Hour 393 total, 255 pass-by and 138 new

8. In the year 2025 (Opening Year) with the proposed Sheetz Store, the study intersections will operate with acceptable overall levels of service during the peak hours.

9. In the year 2030 (Horizon Year) with the proposed Sheetz, the study intersections will continue to operate with acceptable overall levels of service during the peak hours.

10. A turn lane analysis was conducted at the proposed Sheetz driveways. The turn lane analysis found that left and right turn lanes are not warranted at the proposed site driveways.

11. A turn lane analysis showed that a 175' northbound left turn lane and a 225' southbound right turn lane is warranted on Hershey Road (SR 0743) at the Hershey Road (SR 0743)/Veterans Drive intersection. Due to environmental impacts and right-of-way concerns, a southbound right turn

lane is not proposed. The intersection will operate at acceptable levels of service without the southbound right turn lane.

12. A queue analysis was conducted at the study intersections to determine if the proposed development will impact the queues. The queue analysis found that the proposed development site traffic will not adversely affect the queues. The queue analysis found that all the available/proposed storage areas are sufficient to accommodate future queues with the proposed roadway improvements.

13. With the proposed recommendations, safe and efficient site access can be obtained.

RECOMMENDATIONS

A summary of the recommendations to ensure safe and efficient traffic movements is presented below. All recommended improvements will be constructed to be ADA compliant unless otherwise directed or approved by the Township.

1. Sheetz will construct the two proposed driveways in accordance with Mount Joy Township guidelines. Stop signs will be installed on the driveways

2. Sheetz will construct improvements at the Hershey Road (SR 0743)/Veterans Drive intersection to include:
    - 175’ northbound left turn lane on Hershey Road (SR 0743)
    - Add a northbound protected/permitted left turn phase
    - Optimization of signal timings/cycle length

1. INTRODUCTION

This report describes the transportation impact analysis for the proposed Sheetz store to be located on the existing PizzAtown restaurant site. The site is located south of Veterans Drive and west of Hershey Road (SR 0743) in Mount Joy Township, Lancaster County, Pennsylvania. See Figure 1 in the Appendices for the site location.

It is proposed to develop a 6,132 square foot convenience store with 12 fueling positions. Access to the site is proposed by two (2) full movement driveways on Veterans Drive and Old Hershey Road.

The purpose of this study is to identify any significant traffic problems associated with the ability of the existing roadways to accommodate the volume of traffic anticipated from the development and to assure safe and efficient site access. If necessary, improvements will be recommended to mitigate the impact of development traffic on the surrounding roadway network. This study is prepared in accordance with Mount Joy Township guidelines on traffic impact studies.

2. DATA COLLECTION

This section summarizes the data collected for the study as well as the methodology used to obtain the data. Based on the characteristics of the proposed development, the weekday AM and PM peak hours as well as the Saturday peak hour will be analyzed. Manual turning movement counts were conducted at the study intersections by Tri-State Traffic Data during a typical weekday in May 2024 and on a Saturday in June 2024. The counts were conducted during the typical weekday morning hours from 6:00 AM to 9:00 AM and during the typical weekday evening hours from 3:00 PM to 6:00 PM. The Saturday traffic counts were conducted from 11:00 AM to 2:00 PM for the study intersections. Counts were recorded in 15-minute intervals, with the peak hour being selected from the four highest consecutive 15-minute periods. The TMC counts are found in the Appendices. The following AM, PM and Saturday peak hours occurred at the study intersections:

Intersection	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
Hershey Road (SR 0743)/ Veterans Drive	7:00 – 8:00 AM	4:00 – 5:00 PM	11:15 AM – 12:15 PM
Old Hershey Road/ Veterans Drive	7:00 – 8:00 AM	4:00 – 5:00 PM	12:00 – 1:00 PM
Hershey Road (SR 0743)/ Mt. Gretna Road (SR 0241)/Holly Street	7:00 – 8:00 AM	5:00 – 6:00 PM	12:15 – 1:15 PM
Veterans Drive/ Proposed Driveway	7:00 – 8:00 AM	4:45 – 5:45 PM	12:00 – 1:00 PM

In addition to the manual turning movement counts, automatic traffic recorder counts (ATR) were also conducted within the study area. Counts were conducted over a three day period in May 2024 at the following locations:

- Old Hershey Road south of Veterans Drive
- Hershey Road (SR 0743) south of Veterans Drive
- Veterans Drive west of Hershey Road (SR 0743)

Details of the TMC and ATR counts can be found in the Appendices.

3. EXISTING STUDY AREA CONDITIONS

This section discusses the existing traffic conditions, land use context, roadway type and traffic controls in the study area. A description of the study area including the roadway network is also included in this section.

Study Area

The study area was selected based on those intersections that will be impacted the greatest by the proposed development. The following intersections, along with the site access driveways were selected for further detailed analysis as determined by PennDOT and Mount Joy Township:

- Hershey Road (SR 0743)/Veterans Drive
- Old Hershey Road/Veterans Drive
- Hershey Road (SR 0743)/Mt. Gretna Road (SR 0241)/Holly Street

Surrounding Land Uses/Land Use Context

The proposed Sheetz store is located within a mix of residential uses and small businesses. The Country Meadows Restaurant is located on the property just south of the proposed Sheetz Store. A small chapel is located east of the site along Hershey Road (SR 0743), just opposite Veterans Drive. Several businesses are also located east of the site. Residential townhomes are located west of the site, along Old Hershey Road. The land use context for the study area most clearly resembles a Suburban Corridor in accordance with PennDOT Design Manual Part 1X, Appendix B.

Existing Transportation System

The major roadway system in the study area is comprised of state and local roadways. The following is a summary of the traffic control of the existing study area intersection:

Hershey Road (SR 0743)/Veterans Drive

This four-legged intersection is controlled by a traffic signal. The east leg of this intersection is a driveway to the Trinity Full Gospel Chapel. A separate left turn lane is provided on Veterans Drive with no turn lanes provided on any other approaches to the intersection. Guiderail is provided on the southeast and southwest sides of the intersection. Pedestrians are prohibited from crossing at this intersection. The speed limit on Hershey Road S(R 0743) is 45 mph and the speed limit on Veterans Drive is 25 mph.

Old Hershey Road/Veterans Drive – Rockwood Drive

This four-legged intersection is controlled by an all-way stop. Veterans Drive is the east leg of the intersection and Rockwood Drive is the west leg. Single travel lanes in each direction are provided for each roadway. Sidewalks are provided on the west side of Old Hershey Road and on both sides of Rockwood Drive. A 25 mph speed limit is posted on all roadways.

Hershey Road (SR 0743)/Mt. Gretna Road (SR 0241)/Holly Street

This five-legged intersection is controlled by a traffic signal. Hershey Road (SR 0743) is the north-south roadway and provides both a northbound left and a southbound left turn lane. The speed limit on this section of Hershey Road (SR 0743) is 35 mph. Mt. Gretna Road (SR 0241) serves as the northeast leg of the intersection and Holly Street (T-610) creates the southeast leg. The west leg of the intersection serves as the driveway to a Turkey Hill store. The speed limit on Mt. Gretna Road (SR 0241) is 35 mph and the speed limit on Holly Street is posted at 25 mph. Man/hand signals and crosswalks are provided on Holly Street, the south leg of Hershey Road (SR 0743) and the Turkey Hill driveway with pedestrians prohibited on the other two legs.

Table 1 lists the roadway system characteristics for the study area road network.

Table 1: Roadway System Characteristics

Road Name	Ownership (State or Twp)	Orientation	Number of Lanes	Roadway Material	Speed Limit	ADT	Functional Class
Hershey Road	SR 0743	NB/SB	2	Asphalt	45 mph	14,600	Minor Arterial
Mt. Gretna Road	SR 0241	Northeast/ Southwest	2	Asphalt	35 mph	2,900	Major Collector
Veterans Drive – Rockwood Drive	Twp (T-301)	EB/WB	2	Asphalt	25 mph	2,800	Local
Old Hershey Road	Twp (T-749)	NB/SB	2	Asphalt	25 mph	650	Local
Holly Street	Twp (T-610)	Southeast Northwest	2	Asphalt	25 mph	1,200	Local

The ADT volumes, as applicable were obtained from the ATR counts conducted for the project. The other volumes were obtained from PennDOT's TIRe site or used the PM traffic volumes and a "k" factor of 10.

Based on traffic characteristics of the development, weekday AM, PM and Saturday peak hours were selected as the peak hours of operation. Existing peak hour traffic volumes were obtained from TMC counts

as discussed in the Data Collection section. Figure 3 in the Appendices shows the existing typical weekday AM, PM and Saturday peak hour traffic volumes at the study area intersections.

Level of Service/Capacity Analysis

This section discusses the existing levels of service and capacity analysis at the study intersections. The Synchro software was used to determine level of service (LOS) and capacity for intersections. Unsignalized intersections are rarely at capacity from an overall standpoint. Traffic movements from minor crossroads and major road left turns are largely affected by the distribution of gaps in the major street traffic stream, and motorist judgment in choosing gaps through which to execute their maneuvers. Gaps in the traffic stream depend on several factors, including the type of maneuvers being executed, type of minor street control, the average speed of the major street and geometric and environmental conditions. LOS criteria for unsignalized and signalized intersections are based on control delay (in seconds per vehicle) to motorists. Various factors affect delay, including traffic volumes, lane configurations and widths, traffic signal phasing and cycle lengths, trucks percentages, etc.

LOS ranges from "A" to "F" with "A" having the most favorable performance. PennDOT's "Policy and Procedures for Transportation Impact Studies" suggests new intersections must be designed to at least operate at an LOS C or better for rural conditions and an LOS D or better for urban conditions. Also, the overall intersection LOS for "With Development" scenarios should be no worse than "Without Development" scenarios per PennDOT's guidelines. Level of service ranges for unsignalized and signalized intersections can be found in Table 2.

Table 2: Level of Service Ranges – Unsignalized and Signalized Intersections

Level of Service	Expected Traffic Delay	Average Control Delay [(1)]	Control Delay [(2)]
A	Little or No Delay	<10	<10
B	Short Traffic Delays	>10 and ≤15	>10 and ≤ 20
C	Average Traffic Delays	>15 and ≤ 25	>20 and ≤ 35
D	Long Traffic Delays	>25 and ≤ 35	>35 and ≤ 55
E	Very Long Traffic Delays	>35 and ≤ 50	>55 and ≤ 80
F	Failure, Extreme Congestion	>50	>80

[(1)] UNSIGNALIZED – SEC/VEH
[(2)] SIGNALIZED – SEC/VEH

Synchro Version 11 was used to determine the level of service/queue results.

Table A in the Appendices shows the results of the existing level of service analysis. Figure 4 in the Appendices shows the existing level of service results at the study area intersections. As the table and figure shows, the study intersections operate with acceptable overall LOS during the peak hours studied. Details of the level of service analysis can be found in the Appendices.

4. OPENING YEAR (2025) TRAFFIC CONDITIONS WITHOUT DEVELOPMENT

This section discusses the opening year 2025 traffic conditions without the proposed development. This section includes traffic volumes and level of service analysis at the study intersections.

Traffic Volumes

Some level of external traffic growth on the roadway system can be expected even without the proposed development. This growth can be attributed to a nominal increase in through traffic and traffic generated by developments outside the study area. A 0.50 percent average annual growth rate was used to factor the 2024 traffic counts to the year 2025 as recommended by PennDOT Bureau of Planning and Research's Table "Growth Factors for August 2024 to July 2025." The Township confirmed there were no background developments or planned roadway improvements to include in the future analysis. Figure 5 in the Appendices shows the weekday AM,PM and Saturday opening year (2023) without development traffic volumes at the study intersections.

Level of Service/Capacity Analysis

A level of service analysis was conducted at the study area intersection for the opening year (2025) without development scenario to determine the level of service without the proposed development. Table A in the Appendices shows the results of the level of service analysis.

As shown in the analysis, the study intersections operate at acceptable overall levels of service in the year 2025 without development. Figure 6 in the Appendices shows the level of service results for the opening year (2025) without development during the typical weekday AM, PM and Saturday peak hours at the study intersections. Details of the level of service analysis can be found in the Appendices.

5. HORIZON YEAR (2030) TRAFFIC CONDITIONS WITHOUT DEVELOPMENT

This section discusses the horizon year 2030 traffic conditions without the proposed development. This section includes traffic volumes and level of service analysis at the study intersections.

Traffic Volumes

Some level of external traffic growth on the roadway system can be expected even without the proposed development. This growth can be attributed to a nominal increase in through traffic and traffic generated by developments outside the study area. A 0.50 percent average annual growth rate was used to factor the 2024 traffic counts to the year 2030 as recommended by PennDOT Bureau of Planning and Research's Table "Growth Factors for August 2024 to July 2025." The Township confirmed there were no background developments or planned roadway improvements to include in the future analysis. Figure 7 in the Appendices shows the weekday AM, PM and Saturday horizon year (2030) without development traffic volumes at the study intersections.

Level of Service/Capacity Analysis

A level of service analysis was conducted at the study area intersections for the horizon year (2030) without development scenario to determine the level of service without the proposed development. Table A in the Appendices shows the results of the level of service analysis.

As shown in the analysis, the study intersections operate at acceptable overall levels of service in the horizon year 2030 without development. Figure 8 in the Appendices shows the level of service results for the horizon year (2030) without development during the typical weekday AM,PM and Saturday peak hours at the study intersections. Details of the level of service analysis can be found in the Appendices.

6. DEVELOPMENT DESCRIPTION

Proposed Development

The proposed Sheetz is to be located on the existing PizzAtown restaurant site to the south of Veterans Drive, west of Hershey Road (SR 0743) in Mount Joy Township, Lancaster County.

The proposed Sheetz will consist of a 6,132 square foot convenience store with 12 fueling positions. Access to the proposed development will be provided by the two existing driveways intersecting Veterans Drive and Old Hershey Road.

Sight Distance Analysis

Intersection sight distance was field measured at the proposed access driveways intersecting Veterans Drive and Old Hershey Road to determine if the available sight distance would exceed the PennDOT minimum intersection sight distance. The available sight distance for the proposed driveways exceed the required minimum sight distance. Details of the sight distance analysis can be found in the Appendices.

Site Trip Generation

The level of traffic likely to be generated by the proposed development has been estimated using procedures in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed.) to determine the potential traffic impact on the study intersections. Land use code 945 (Convenience Store/Gas Station), was utilized to determine the ADT and the peak hour site trips for the proposed Sheetz. Generators such as restaurants, grocery stores, convenience markets, and banks attract a portion of their trips from passing traffic on the street enroute to their destination. In order to account for "pass-by" trips, the site trip generation in table 3 was adjusted. Pass-by trip percentages were also obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed.). Pass-by trips were assumed to account for 76% of the AM, and 75% of the PM peak hour site trips for the proposed Sheetz. Since data was not provided for the Saturday peak hour, it was assumed the Saturday pass-by rate would be 10% less than the PM rate, or 65%. Details of this trip generation analysis can be found in the Appendices.

Table 3 summarizes the estimated site trip generation for the proposed development during the typical weekday AM, PM, and Saturday peak hours.

Table 3: Estimated Trip Generation

Land Use (Code)	Type	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			ADT
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	
Convenience Store/Gas Station 6,132 SF (945)	Total	190	189	379	167	167	334	197	196	393	3,987
	Pass-By[1]	144	144	288	125	125	250	128	127	255	
	New	46	45	91	42	42	84	69	69	138	

[1]Pass-by based on ITE Trip Generation Manual, 11th Edition

AM Peak Hour 76%

PM Peak Hour 75%

Saturday Peak Hour 65% (Assumes 10% less than the PM peak hour)

Modal Split

Because there is not sufficient pedestrian and transit facilities provided within the study area, a trip reduction due to modal split is not applicable and was not assumed for this study.

Site Trip Distribution and Assignment

Figures 9 in the Appendices show the new trip distribution percentages for the site traffic on the major roadway system. Figures 10 shows the pass-by trip distribution percentages for the site trips. The new and pass-by site trip distributions were conducted for both the AM, PM and Saturday peak hours. Figure 11 in the Appendices shows the total site trips of the proposed development on the major roadway system at full buildout of the proposed development. Site trip distribution was based on existing traffic patterns and engineering judgment and was approved by the Mount Joy Township Traffic Engineer The following trip distribution was assumed for the new site trips and pass-by trips generated by the proposed development:

New Site Trips

- 45% oriented to/from the north on SR 0743
- 45% oriented to/from the south on SR 0743
- 10% oriented to/from the west on Veterans Drive

Pass-by from SR 0743

- AM Peak: NB 16% / SB 9%
- PM Peak: NB 11% / SB 14%
- Sat Peak: NB 14% / SB 11%

Pass-by from SR 0283

- AM Peak: 75% to/from the north
- PM Peak: 75% to/from the north
- Sat Peak: 75% to/from the north

Figure 12 shows the new site trips for the proposed development and Figure 13 shows the pass-by trips for the proposed development during the peak hours. Details of the site trip distribution and assignment are included in the Appendices.

7. OPENING YEAR (2025) TRAFFIC CONDITIONS WITH DEVELOPMENT

Traffic Volumes

The opening year (2025) with development peak hour volumes were derived by combining existing traffic, growth in background and through traffic, and the site trips generated by the proposed development. Figure 14 in the Appendices shows the typical weekday AM, PM and Saturday opening year (2025) with development traffic volumes at the study intersections.

Level of Service/Capacity Analysis

A level of service analysis was conducted at the study area intersections for the opening year (2025) with development scenario to determine the level of service with the proposed development. Table A in the Appendices shows the results of the level of service analysis.

As shown in the analysis, the study intersections operate at acceptable overall levels of service in the year 2025 with development. Figure 15 in the Appendices shows the level of service results for the opening year (2025) with development during the typical weekday AM, PM and Saturday peak hours at the study intersections. Details of the level of service analysis can be found in the Appendices.

Queue Analysis

A queue analysis was conducted at the study intersections to determine if the proposed development site traffic will impact the queues. The queue analysis was conducted using the HCM 6th Edition and Synchro methodology. The queue analysis found that the proposed development site traffic will not adversely affect the queues. The queue analysis found that the available storage areas are sufficient to accommodate the future queues.

Details of the queue analysis can be found in the Appendices.

8. HORIZON YEAR (2030) TRAFFIC CONDITIONS WITH DEVELOPMENT

Traffic Volumes

The horizon year (2030) with development peak hour volumes were derived by combining existing traffic, growth in background and through traffic, and the site trips generated by the proposed development. Figures 16 in the Appendices shows the typical weekday AM, PM and Saturday horizon year (2030) with development traffic volumes at the study intersections.

Level of Service/Capacity Analysis

A level of service analysis was conducted at the study area intersections for the horizon year (2030) with development scenario to determine the level of service with the proposed development. Table A in the Appendices shows the results of the level of service analysis.

As shown in the analysis, the study intersections operate at acceptable overall levels of service in the year 2030 with development. Figure 17 in the Appendices shows the level of service results for the horizon year (2030) with development during the typical weekday AM, PM and Saturday peak hours at the study intersections. Details of the level of service analysis can be found in the Appendices.

Turn Lane Analysis

The need for turn lanes at the site access driveways was analyzed with horizon year (2030) with development traffic volumes utilizing PennDOT guidelines outlined in Publication 46 Chapter 11.17. The turn lane analysis found that turn lane warrants are not met at either proposed driveway. The turn lane analysis was also conducted at the Hershey Road (SR 0743)/Veterans Drive intersection and found that a 175' northbound left turn and 225' southbound right turn lane are warranted on Hershey Road (SR 0743). However, based on the environmental impacts and impacts to right-of-way, the southbound right turn lane is not proposed. The intersection will operate at acceptable levels of service without the southbound right turn lane. Details of the turn lane analysis can be found in the Appendices.

Queue Analysis

A queue analysis was conducted at the study intersections to determine if the proposed development site traffic will impact the queues. The queue analysis was conducted using the HCM 6th Edition and Synchro methodology. The queue analysis found that the proposed development site traffic will not adversely affect the queues. The queue analysis found that the available storage areas are sufficient to accommodate the future queues.

Details of the queue analysis can be found in the Appendices.

Left Turn Phasing Analysis

A left turn phasing analysis was completed for the signalized intersection of Hershey Road (SR 0743)/Veterans Drive. The analysis was based on the 2030 traffic volumes with full buildout of the development using PennDOT turn phasing guidelines. The analysis shows that a protected/permitted northbound left turn phase is warranted at this intersection with the proposed development. The northbound left turn phase is included in the improvement analysis. A summary of the left turn phasing analysis can be found in the Appendices.

9. RECOMMENDATIONS

A summary of the recommendations to ensure safe and efficient traffic movements is presented below. All recommended improvements will be constructed to be ADA compliant unless otherwise directed or approved by the Township.

1. Sheetz will construct the two proposed driveways in accordance with Mount Joy Township guidelines. Stop signs will be installed on the driveways

2. Sheetz will construct improvements at the Hershey Road (SR 0743)/Veterans Drive intersection to include:
    - 175’ northbound left turn lane on Hershey Road (SR 0743)
    - Add a northbound left protected/permitted left turn phase
    - Optimization of signal timings/cycle length

APPENDICES

LEVEL OF SERVICE/QUEUE TABLES

Table A

Future Intersection Level of Service Results

Intersection	Approach (Movement)	Existing Traffic Volumes			2025 Traffic Volumes without Development			2025 Traffic Volumes with Development			2025 Traffic Volumes with Development and Improvements			2030 Traffic Volumes without Development			2030 Traffic Volumes with Development			2030 Traffic Volumes with Development and Improvements		
		AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
Hershey Road (SR 0743) / Veterans Drive	EB	C	C	C	C	C	C	C	C	C	C	D	D	C	C	C	C	C	C	C	D	D
	EBL	C	C	C	C	C	C	C	C	C	C	D	D	C	C	C	C	C	C	C	D	D
	EBTR	C	D	C	C	D	C	C	C	C	C	D	D	C	C	C	C	C	C	C	D	D
	WB	C	A	C	C	A	C	B	B	B	C	A	C	C	A	B	B	A	B	C	A	C
	NB	A	A	A	A	A	A	C	B	B	B	A	A	A	A	A	C	B	B	B	A	A
	NBL	--	--	--	--	--	--	--	--	--	B	B	A	--	--	--	--	--	--	B	B	A
	NBTR	--	--	--	--	--	--	--	--	--	B	A	A	--	--	--	--	--	--	B	A	A
	SB	A	A	A	A	A	A	B	B	A	C	C	B	A	A	A	B	B	A	C	C	B
	OVERALL	A (5.3)	A	A (5.9)	A (5.3)	A (5.6)	A (5.9)	B (19.8)	B (14.2)	B (13.3)	C (20.9)	B (18.6)	B (15.1)	A (5.3)	A (5.7)	A (9.3)	C (23.1)	B (16.2)	B (13.5)	C (21.8)	B (19.4)	B (15.1)
Old Hershey Road / Veterans Drive	EB	A	A	A	A	A	A	A	A	A	--	--	--	A	A	A	A	A	A	--	--	--
	WB	A	A	A	A	A	A	A	A	A	--	--	--	A	A	A	A	A	A	--	--	--
	NB	A	A	A	A	A	A	A	A	A	--	--	--	A	A	A	A	A	A	--	--	--
	SB	A	A	A	A	A	A	A	A	A	--	--	--	A	A	A	A	A	A	--	--	--
	OVERALL	A (8.0)	A (7.7)	A (7.4)	A (8.0)	A (7.7)	A (7.4)	A (8.0)	A (7.7)	A (7.4)	--	--	--	A (8.0)	A (7.8)	A (7.4)	A (8.0)	A (7.8)	A (7.4)	--	--	--
Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) / Holly Street	EB	C	D	C	C	D	C	C	D	C	--	--	--	C	D	C	C	D	C	--	--	--
	WB	E	E	D	E	E	D	E	E	D	--	--	--	E	E	D	E	E	D	--	--	--
	NB	D	D	C	D	D	C	D	D	C	--	--	--	D	D	C	D	D	C	--	--	--
	NBL	C	C	B	C	C	B	C	C	C	--	--	--	C	C	C	C	C	C	--	--	--
	NBTR	D	D	C	D	D	C	D	D	C	--	--	--	D	D	C	D	D	C	--	--	--
	SB	C	C	C	C	C	C	C	C	C	--	--	--	C	C	C	C	C	C	--	--	--
	SBL	E	E	D	E	E	D	E	E	D	--	--	--	E	E	D	E	E	D	--	--	--
	SBTR	B	B	B	B	B	B	B	B	B	--	--	--	B	B	B	B	B	B	--	--	--
	SWB	D	C	A	D	C	A	D	C	A	--	--	--	D	C	A	D	C	A	--	--	--
	OVERALL	D (43.3)	C (34.6)	C (24.3)	D (43.4)	C (34.7)	C (24.3)	D (44.5)	C (34.7)	C (25.2)	--	--	--	D (44.8)	D (35.6)	C (24.6)	D (46.2)	D (34.6)	C (24.6)	--	--	--
Veterans Drive / Proposed Access	WBL	--	--	--	--	--	--	A	A	A	--	--	--	--	--	--	A	A	A	--	--	--
	NB	--	--	--	--	--	--	A	A	A	--	--	--	--	--	--	A	A	A	--	--	--
	OVERALL	--	--	--	--	--	--	A (6.4)	A (5.3)	A (6.3)	--	--	--	--	--	--	A (6.4)	A (5.3)	A (6.3)	--	--	--
Old Hershey Road / Proposed Access	WB	--	--	--	--	--	--	A	A	A	--	--	--	--	--	--	A	A	A	--	--	--
	SBL	--	--	--	--	--	--	A	A	A	--	--	--	--	--	--	A	A	A	--	--	--
	OVERALL	--	--	--	--	--	--	A (0.1)	A (0.1)	A (4.4)	--	--	--	--	--	--	A (0.1)	A (0.1)	A (4.4)	--	--	--

Synchro 11 LOS was used at the Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) / Holly Street intersection due to the five-legged lane configuration.

Table B
Queue Analysis (In Feet) - HCM 6th Edition

Intersection	Lanes	Existing Storage / Proposed Storage (in feet)	Existing Traffic Volumes			2025 Traffic Volumes without Development			2025 Traffic Volumes with Development			2025 Traffic Volumes with Development and Improvements		
			AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak
			95th	95th	95th	95th	95th	95th	95th	95th	95th	95th	95th	95th
Hershey Road (SR 0743) / Veterans Drive	EBL	225	43	23	23	43	23	23	163	103	108	180	165	215
	EBTR	275	60	55	35	60	55	35	68	68	53	78	108	110
	WBLTR	50	0	0	0	0	0	0	0	0	0	0	0	0
	NBL	175	25	15	33	25	15	33	278	83	260	20	48	33
	NBTR	1150							-	-	-	228	105	8
	SBTR	1050	48	75	25	50	78	28	190	218	93	395	470	298
Old Hershey Road / Veterans Drive	EB	1000+	5	3	3	5	3	3	5	3	3	-	-	-
	WB	200	3	3	3	3	3	3	5	3	3	-	-	-
	NB	125	5	13	10	5	13	10	5	15	10	-	-	-
	SB	540	10	8	5	10	8	5	10	8	5	-	-	-
Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) / Holly Street*	EB	50	64	81	54	64	82	54	64	82	54	-	-	-
	WB	925	324	155	115	324	156	115	32	160	120	-	-	-
	NBL	200	28	29	17	28	29	17	28	29	18	-	-	-
	NBTR	1200	669	627	353	672	633	355	697	656	413	-	-	-
	SBL	150	168	245	132	168	246	132	173	230	138	-	-	-
	SBTR	1150	223	293	164	224	292	164	249	302	174	-	-	-
	SWB	1000+	144	120	16	146	120	16	151	124	21	-	-	-
Veterans Drive / Proposed Access	WBL	250	-	-	-	-	-	-	18	15	18	-	-	-
	NB	50	-	-	-	-	-	-	20	18	20	-	-	-
Old Hershey Road / Proposed Access	WB	50	-	-	-	-	-	-	0	0	0	-	-	-
	SBL	125	-	-	-	-	-	-	0	0	3	-	-	-

* Queues calculated using Synchro 11

Table B (cont.)
Queue Analysis (In Feet) - HCM 6th Edition

Intersection	Lanes	Existing Storage / Proposed Storage (in feet)	Existing Traffic Volumes			2030 Traffic Volumes without Development			2030 Traffic Volumes with Development			2030 Traffic Volumes with Development and Improvements		
			AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak	AM Peak	PM Peak	SAT Peak
			95th	95th	95th	95th	95th	95th	95th	95th	95th	95th	95th	95th
Hershey Road (SR 0743) / Veterans Drive	EBL	225	43	23	23	45	25	23	165	103	108	183	168	218
	EBTR	275	60	55	35	63	55	70	70	70	53	80	110	113
	WBLTR	50	0	0	0	0	0	0	0	0	0	0	0	0
	NBL	175	25	15	33	25	15	98	320	120	270	20	53	35
	NBTR	1150							-	-	-	233	110	10
	SBTR	1050	48	75	25	53	83	40	195	230	95	418	498	305
Old Hershey Road / Veterans Drive	EB	1000+	5	3	3	5	3	3	5	3	3	-	-	-
	WB	200	3	3	3	5	3	3	5	3	3	-	-	-
	NB	125	5	13	10	5	15	10	5	15	10	-	-	-
	SB	540	10	8	5	10	8	5	10	8	5	-	-	-
Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) / Holly Street*	EB	50	64	81	54	65	83	55	66	83	55	-	-	-
	WB	925	324	155	115	336	159	118	344	159	118	-	-	-
	NBL	200	28	29	17	28	29	18	28	29	18	-	-	-
	NBTR	1200	669	627	353	696	656	372	721	656	372	-	-	-
	SBL	150	168	245	132	171	254	131	176	223	134	-	-	-
	SBTR	1150	223	293	164	230	300	168	261	296	168	-	-	-
	SWB	1000+	144	120	16	151	126	18	156	126	18	-	-	-
Veterans Drive / Proposed Access	WBL	250	-	-	-	-	-	-	18	15	18	-	-	-
	NB	50	-	-	-	-	-	-	20	18	20	-	-	-
Old Hershey Road / Proposed Access	WB	50	-	-	-	-	-	-	0	0	0	-	-	-
	SBL	125	-	-	-	-	-	-	0	0	3	-	-	-

* Queues calculated using Synchro 11

FIGURES

TRG
TRANSPORTATION RESOURCE GROUP, INC.

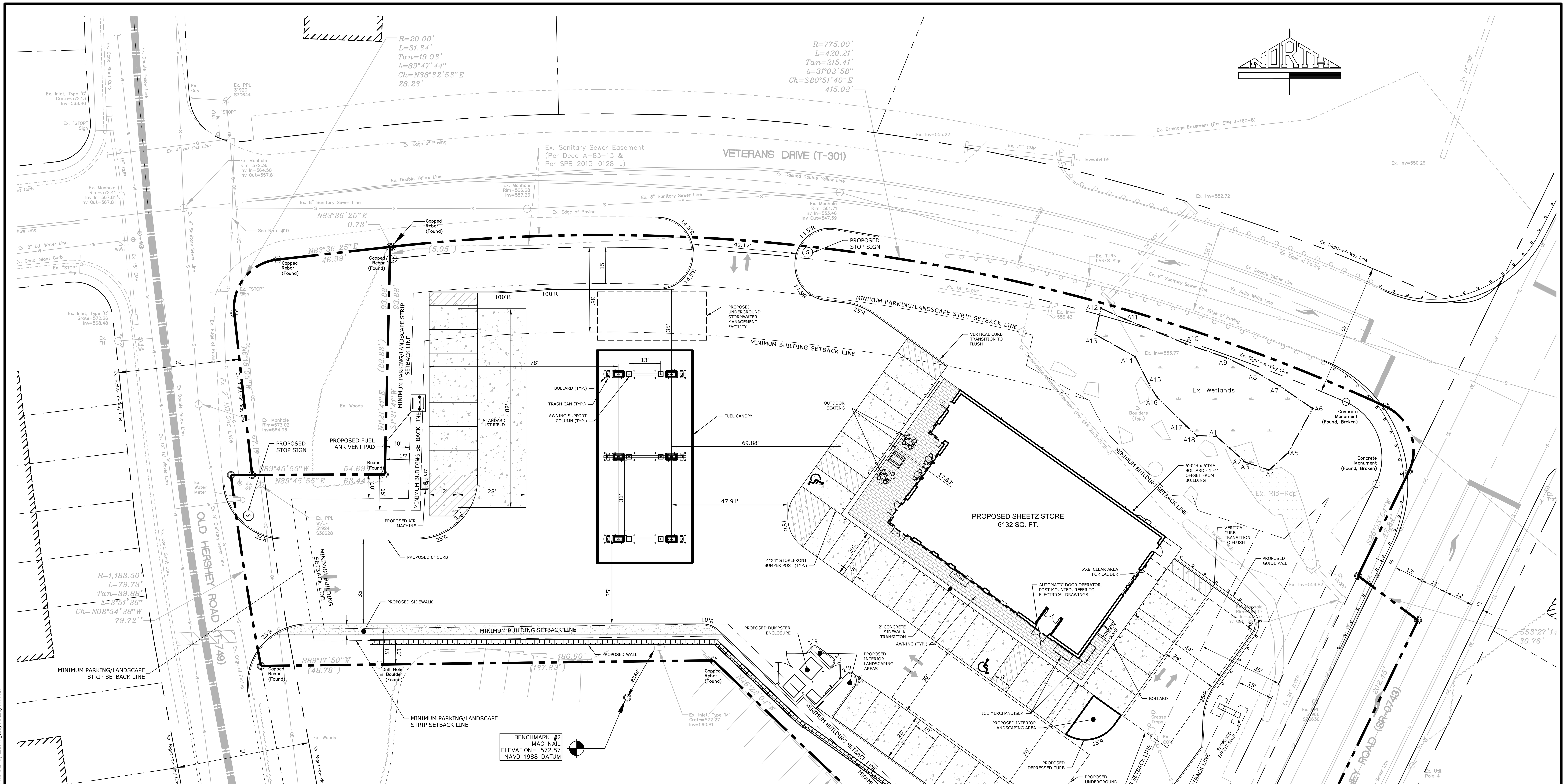
FIGURE 1

SITE LOCATION

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



SITE / ZONING DATA

TOTAL SITE ACREAGE	2.171 AC.		
EXISTING LAND USE: PROPOSED LAND USE:	RESTAURANT CONVENIENCE STORE/RETAIL WITH FUELING STATION		
SEWER:	PUBLIC - ELIZABETHTOWN REGIONAL SEWER AUTHORITY		
WATER:	PUBLIC - ELIZABETHTOWN AREA WATER AUTHORITY		
ZONING: SPECIAL EXCEPTIONS:	MIXED-USE (MU) FUELING STATION ACCESSORY TO CONVENIENCE STORE (SECTION 135-268)		
	REQUIRED	PROPOSED	
LOT AREA:	0.50 AC. MIN. (PER 13-268)	> 0.50 AC.	
LOT WIDTH:	125 FT. MIN. (PER 135-268)	> 125 FT.	
LOT DEPTH:	125 FT. MIN. (PER 135-145)	> 125 FT.	
FRONT YARD:	STORE: 35 FT. MIN. PARKING: 15 FT. MIN. DUMPSTER: NOT ALLOWED	35 FT. 15 FT. N/A	
REAR YARD:	STORE: 25 FT. MIN. PARKING: 15 FT. MIN. DUMPSTER: 10 FT. MN.	25 FT. 15 FT. 10 FT.	
SIDE YARD:	STORE: 15 FT. MIN. PARKING: 10 FT. MIN. DUMPSTER: 10 FT. MIN.	15 FT. 10 FT. 10 FT.	
BUILDING HEIGHT:	PRINCIPAL: 20 FT. MIN. 40 FT. MAX. ACCESSORY: 20 FT. MAX.	< 40 FT.	
	REQUIRED	EXISTING	PROPOSED
BUILDING COVERAGE:	50% MAX.	6.3% (5,995 SF)	6.5% (6,132 SF)
IMPERVIOUS COVERAGE:	65% MAX.	55.3% (52,285 SF)	60.7% (57,372 SF)
PARKING:	ONE PARKING SPACE PER 200 SF OF GROSS FLOOR AREA PLUS ONE SPACE FOR EACH EMPLOYEE ON LARGEST SHIFT 7 EMPLOYEES TOTAL SPACES REQUIRED = ±38 SPACES		TOTAL SPACES PROVIDED = ±43 FUELING STATION: 12 SPACES

NOTES FROM MOUNT JOY TOWNSHIP ZONING ORDINANCE

SECTION 135-143: SPECIAL EXCEPTION USES:

1. VEHICULAR FUELING STATIONS, INCLUDING THOSE FUELING STATIONS THAT ARE PROVIDED AS AN ACCESSORY TO A RETAIL ESTABLISHMENT OR CONVENIENCE STORE, IN ACCORDANCE WITH SECTION 135-268.

SECTION 135-268: VEHICULAR FUELING STATIONS:

1. FUEL PUMPS AND CANOPIES SHOULD BE LOCATED AT LEAST 20 FEET FROM THE STREET RIGHT-OF-WAY LINE.
2. ALL APPLICABLE PERMITS SHALL BE OBTAINED FOR UNDERGROUND STORAGE OF FUEL.
3. THE SITE MUST FRONT UPON AND GAIN ACCESS FROM A COLLECTOR OR ARTERIAL ROAD AS DESIGNATED IN SECTION 135-301 HEREIN.

SCRIPT: ####

NO	DATE	REVISION
####	####	####

SEAL

SEAL

CLIENT: SHEETZ
351 SHEETZ WAY
CLAYSBURG, PA 16625
(814) 239-6013

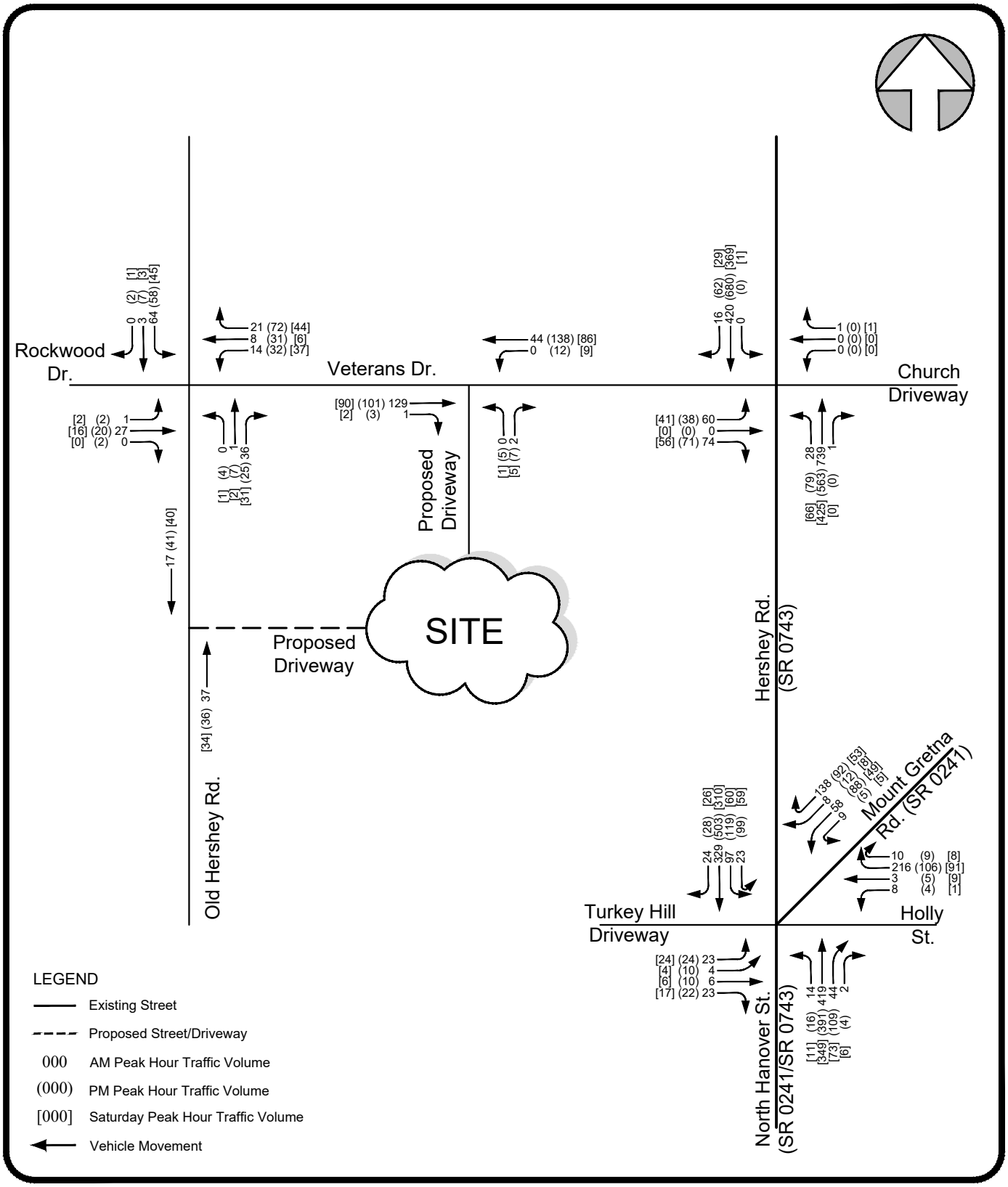
1" = 20'

SHEETZ
ELIZABETHTOWN, PA - VETERANS DRIVE
SITE LAYOUT EXHIBIT

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

RGS ASSOCIATES
Land Planning
Landscape Architecture
Civil Engineering

DATE:	SEPTEMBER 10, 2024
PROJECT NO.:	2024A84-019
MANAGER:	CHRIS VENARCHICK
SHEET NO.:	2 OF 2



TRG
TRANSPORTATION RESOURCE GROUP, INC.

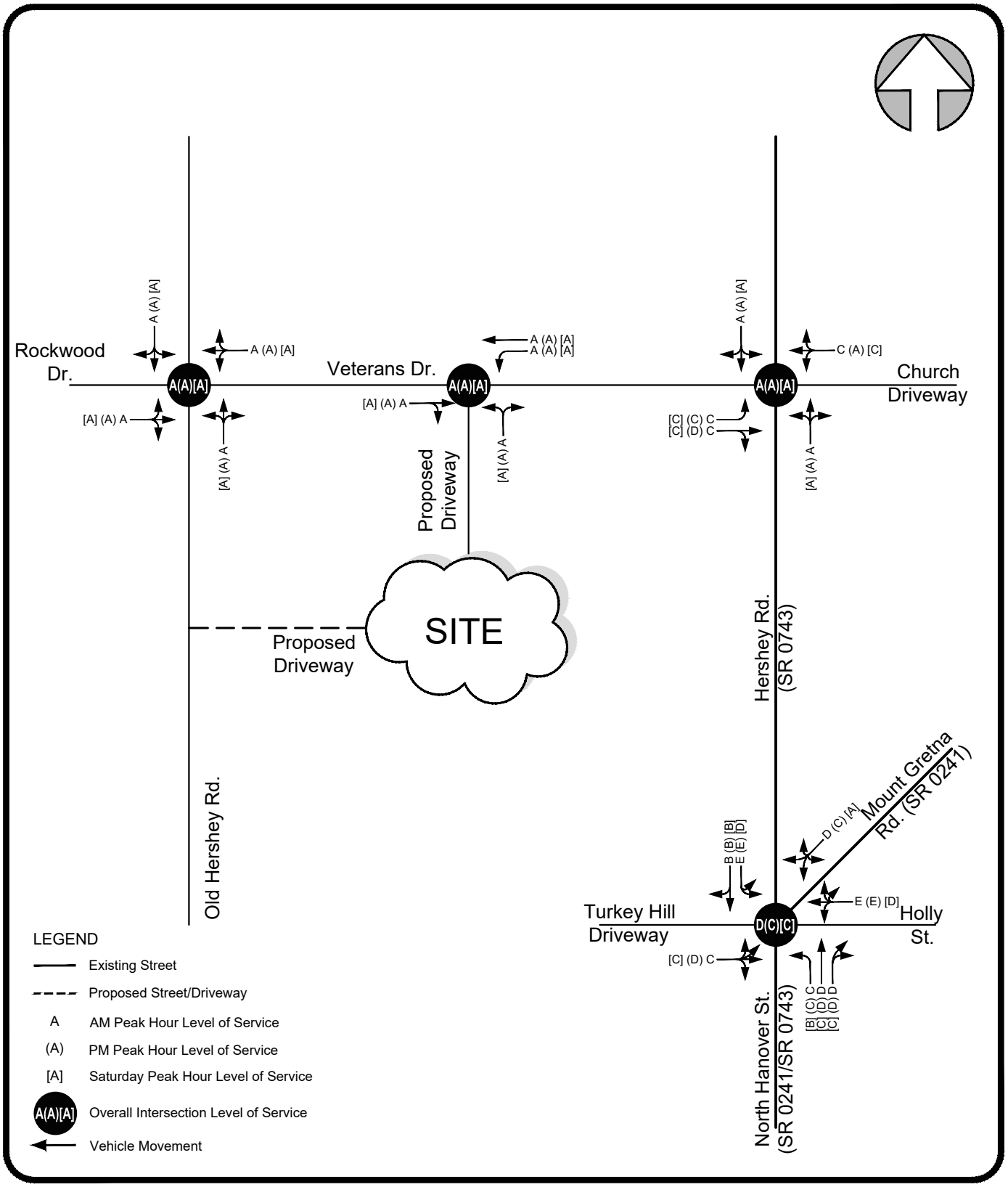
FIGURE 3

EXISTING TRAFFIC VOLUMES
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



TRG
TRANSPORTATION RESOURCE GROUP, INC.

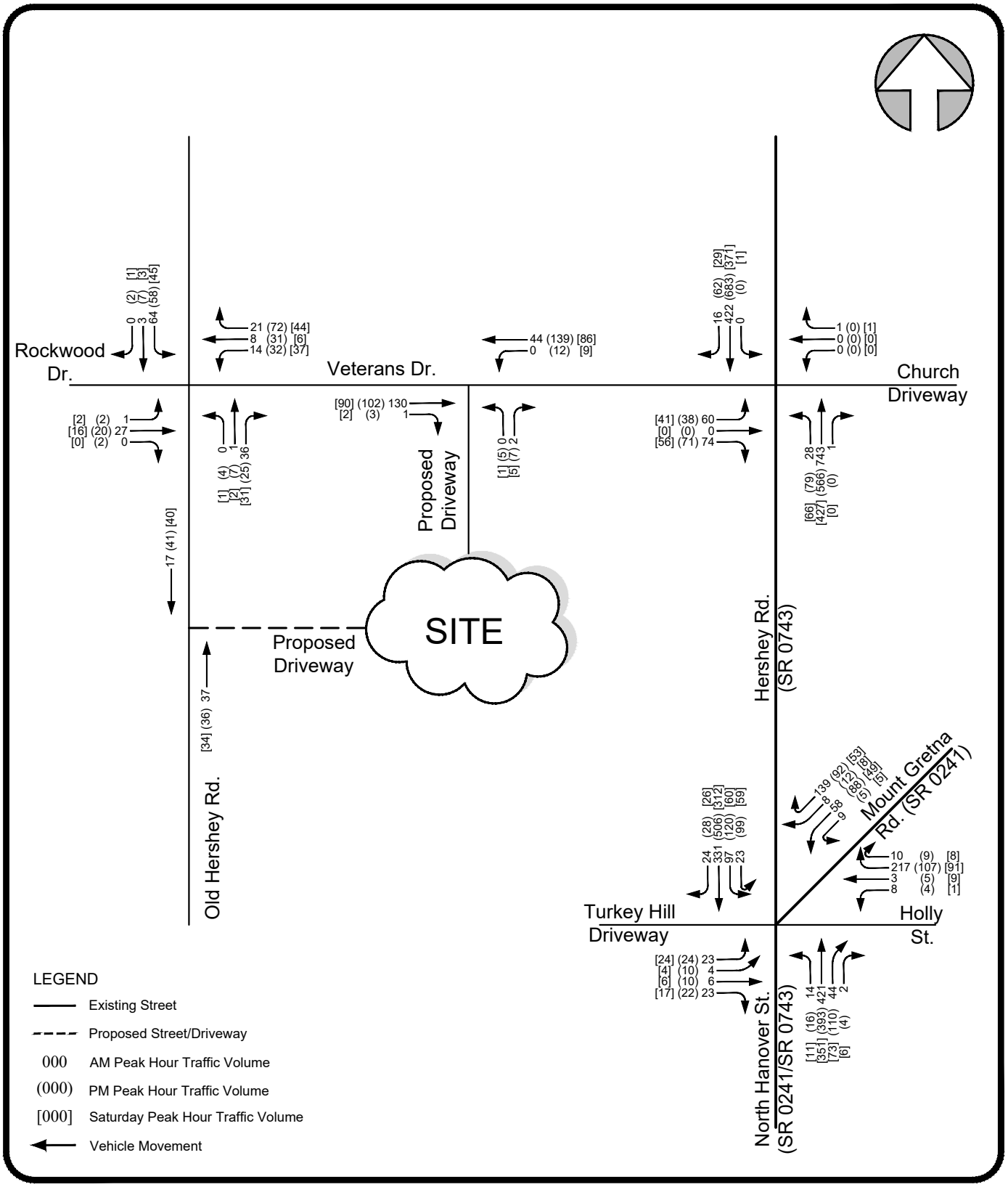
FIGURE 4

EXISTING LEVEL OF SERVICE
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



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TRANSPORTATION RESOURCE GROUP, INC.

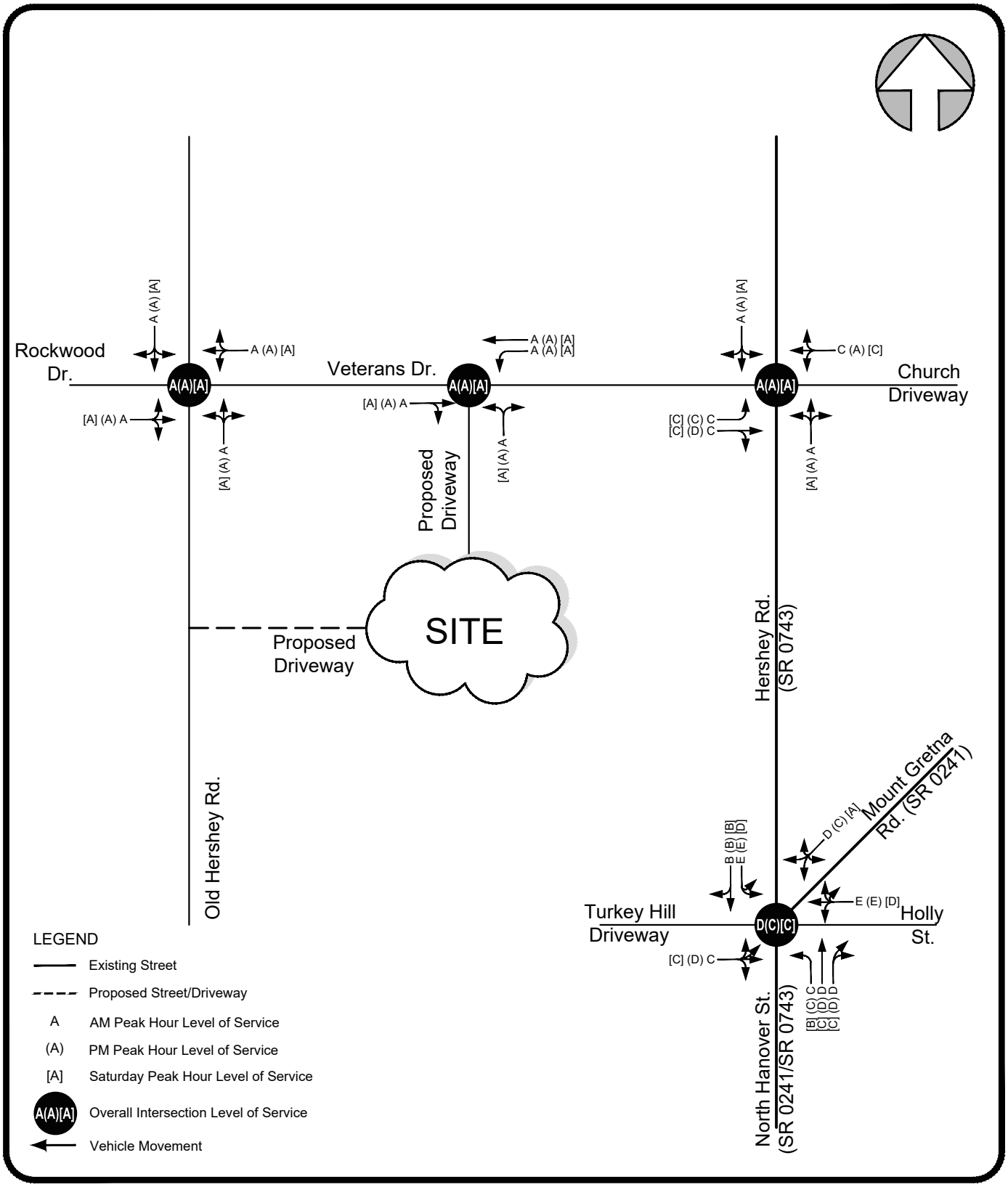
FIGURE 5

OPENING YEAR (2025)
TRAFFIC VOLUMES
WITHOUT DEVELOPMENT
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



TRG
TRANSPORTATION RESOURCE GROUP, INC.

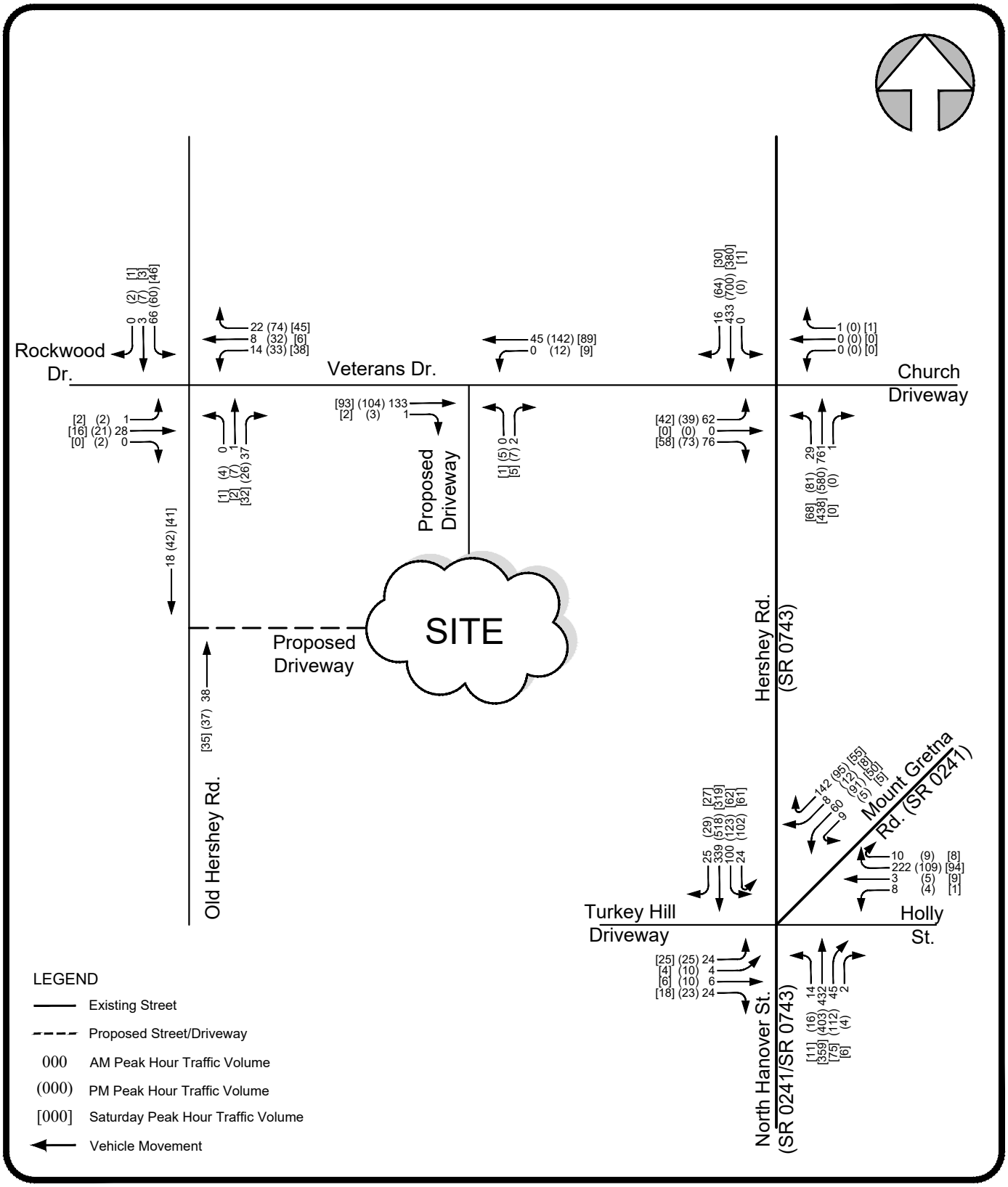
FIGURE 6

OPENING YEAR (2025)
LEVEL OF SERVICE
WITHOUT DEVELOPMENT
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



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TRANSPORTATION RESOURCE GROUP, INC.

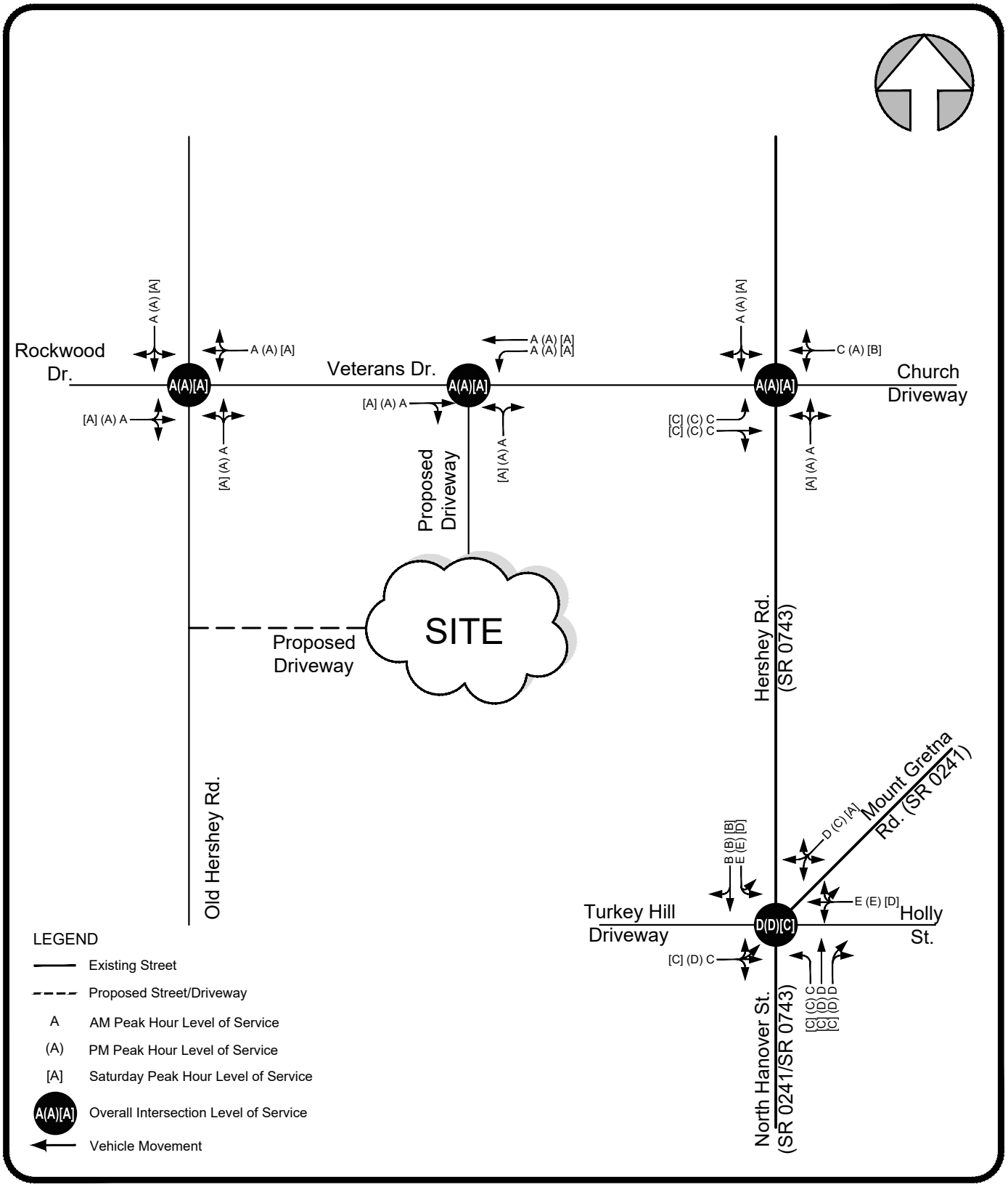
FIGURE 7

HORIZON YEAR (2030)
TRAFFIC VOLUMES
WITHOUT DEVELOPMENT
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



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TRANSPORTATION RESOURCE GROUP, INC.

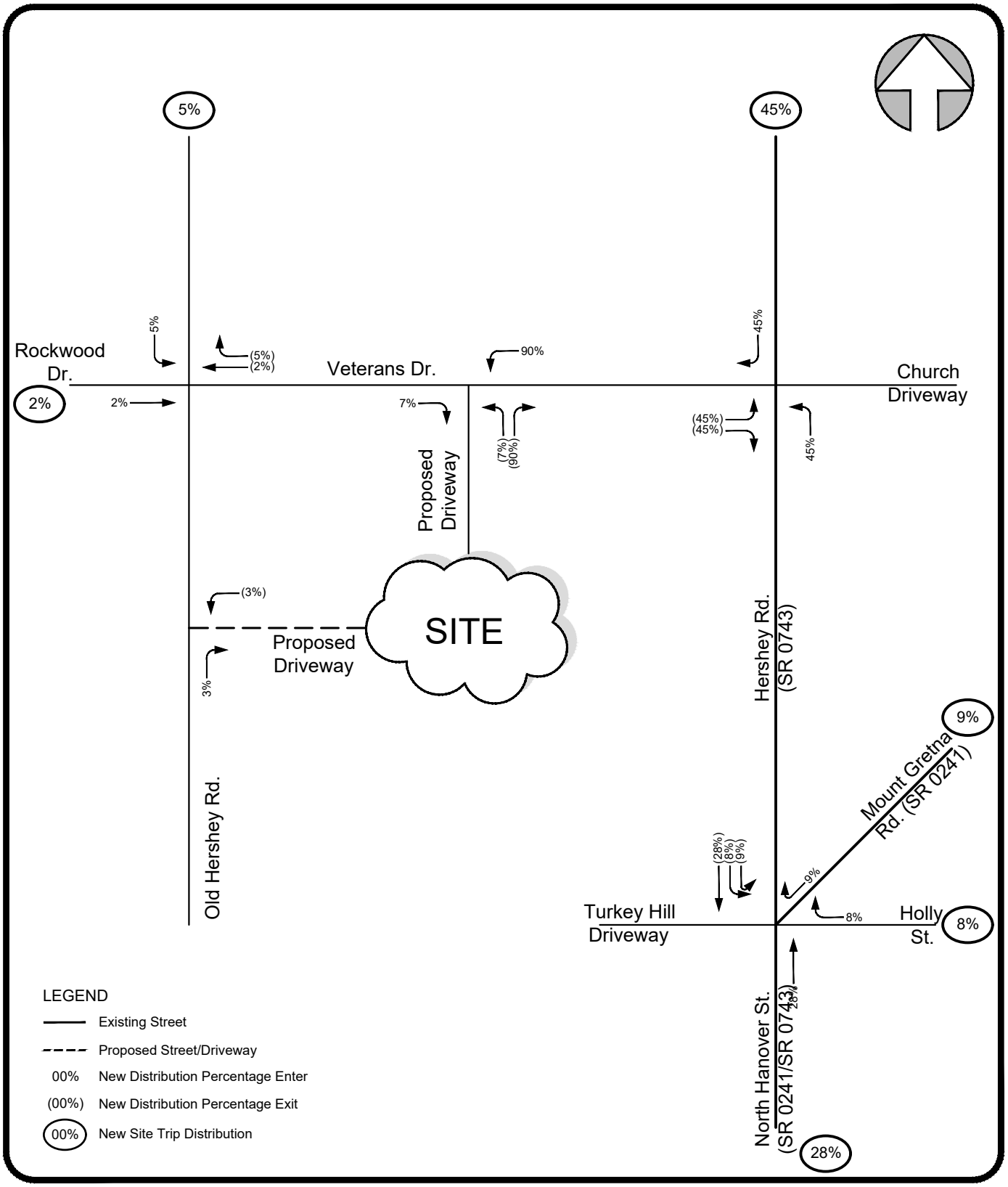
FIGURE 8

HORIZON YEAR (2030)
LEVEL OF SERVICE
WITHOUT DEVELOPMENT
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



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TRANSPORTATION RESOURCE GROUP, INC.

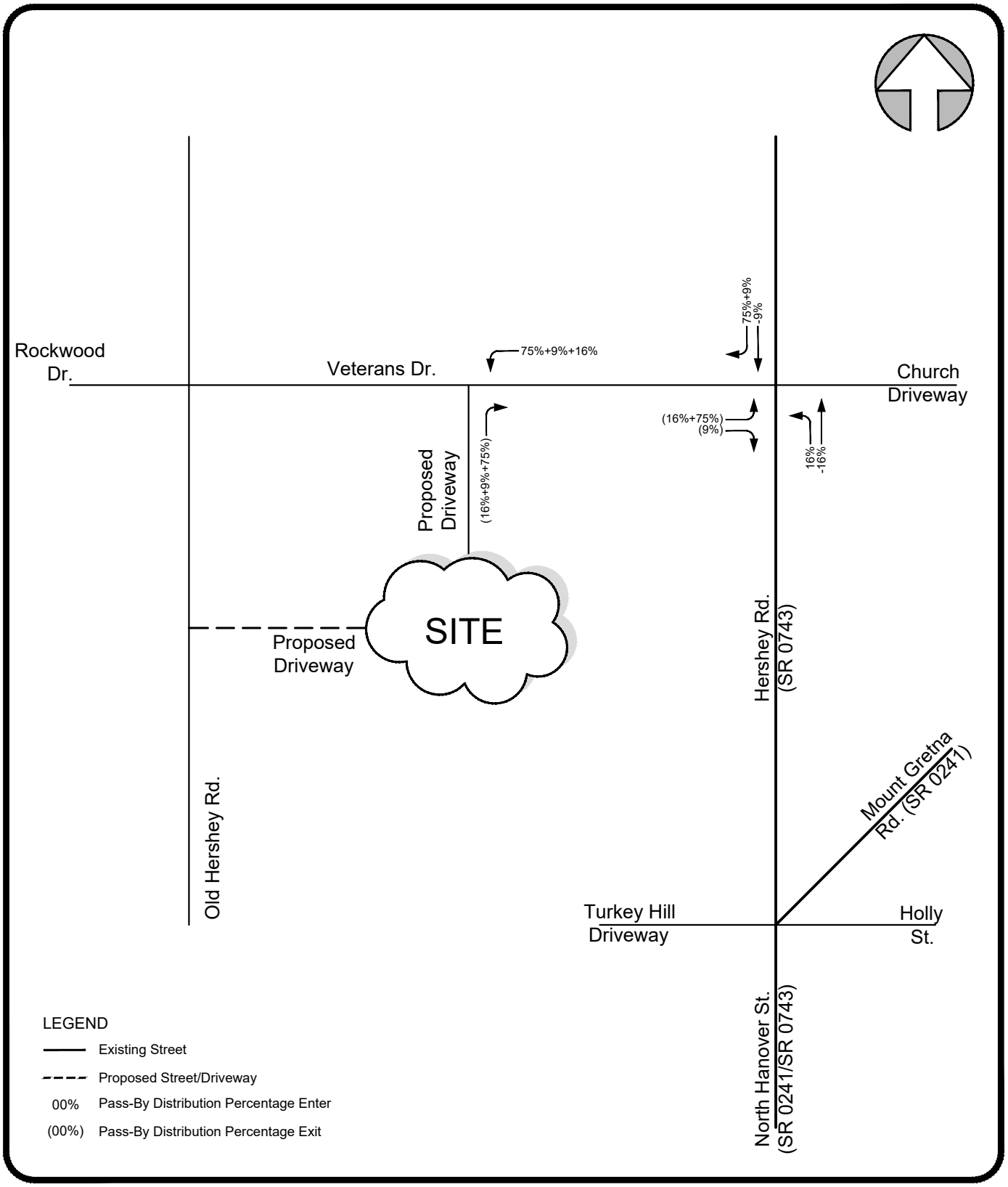
FIGURE 9

NEW SITE TRIP DISTRIBUTION
AND ASSIGNMENT PERCENTAGES

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



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TRANSPORTATION RESOURCE GROUP, INC.

FIGURE 10A

PASS-BY TRIP DISTRIBUTION
AND ASSIGNMENT PERCENTAGES
AM PEAK HOUR

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

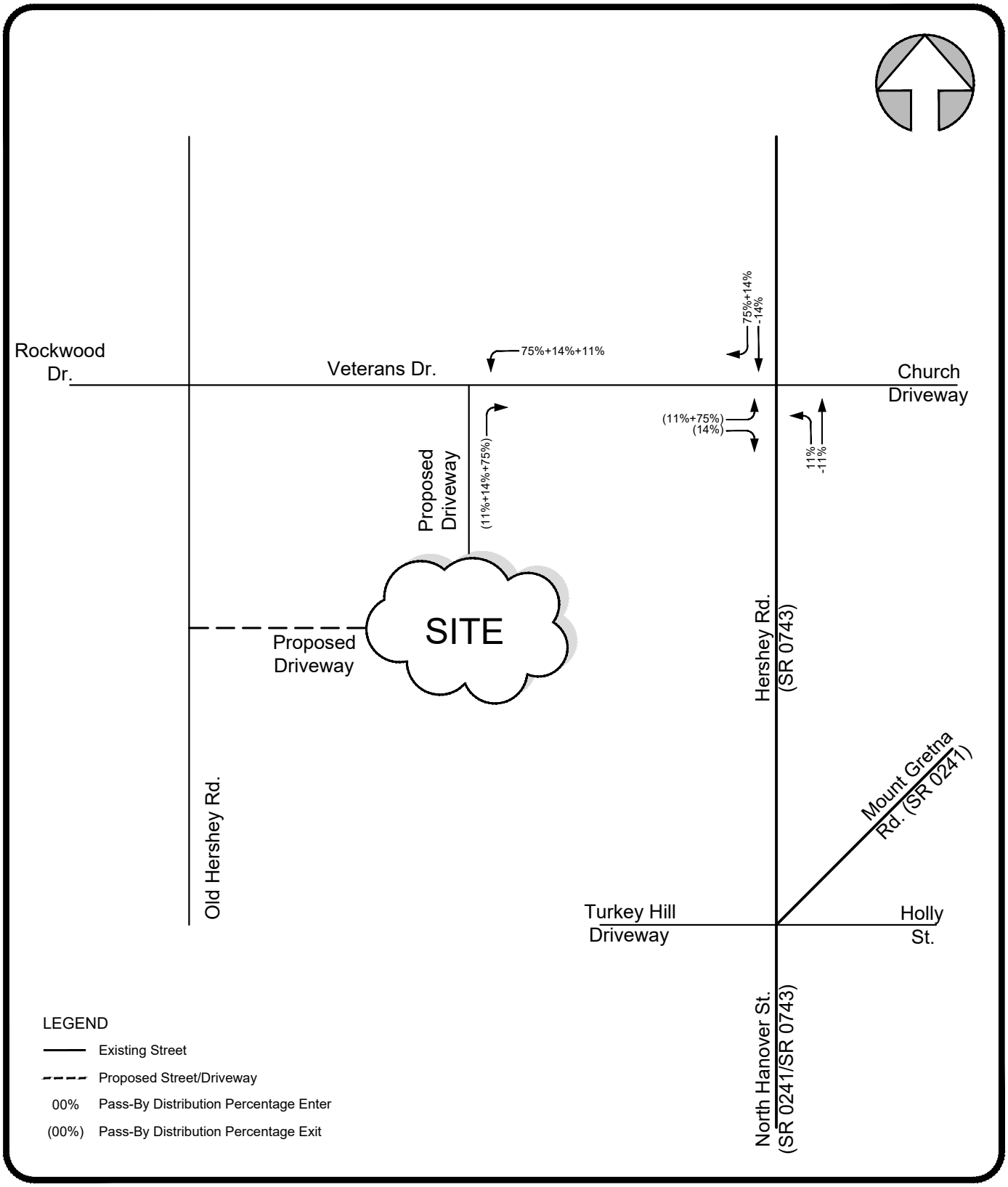

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FIGURE 10B

PASS-BY TRIP DISTRIBUTION
AND ASSIGNMENT PERCENTAGES
PM PEAK HOUR

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

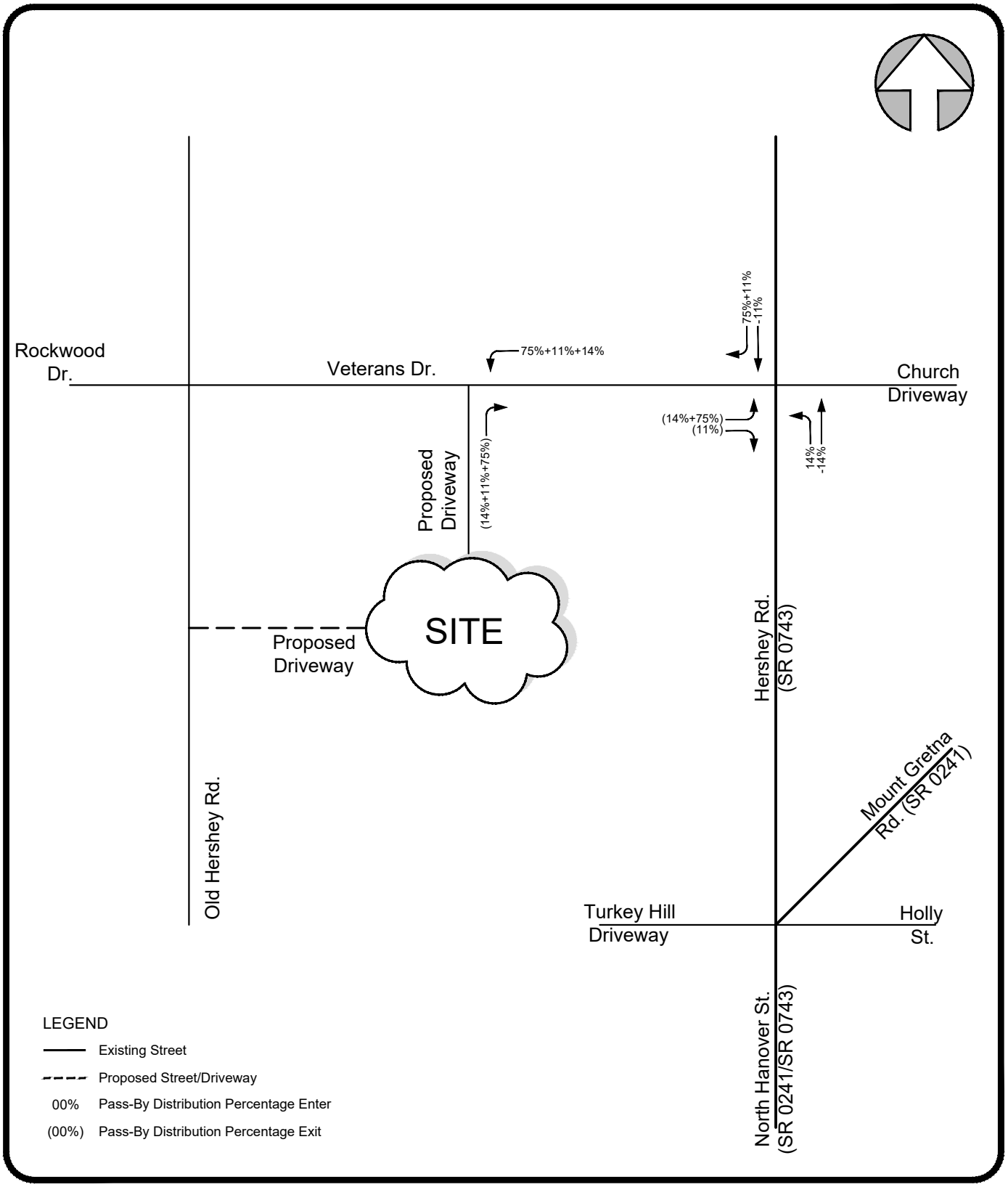

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FIGURE 10C

PASS-BY TRIP DISTRIBUTION
AND ASSIGNMENT PERCENTAGES
SATURDAY PEAK HOUR

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

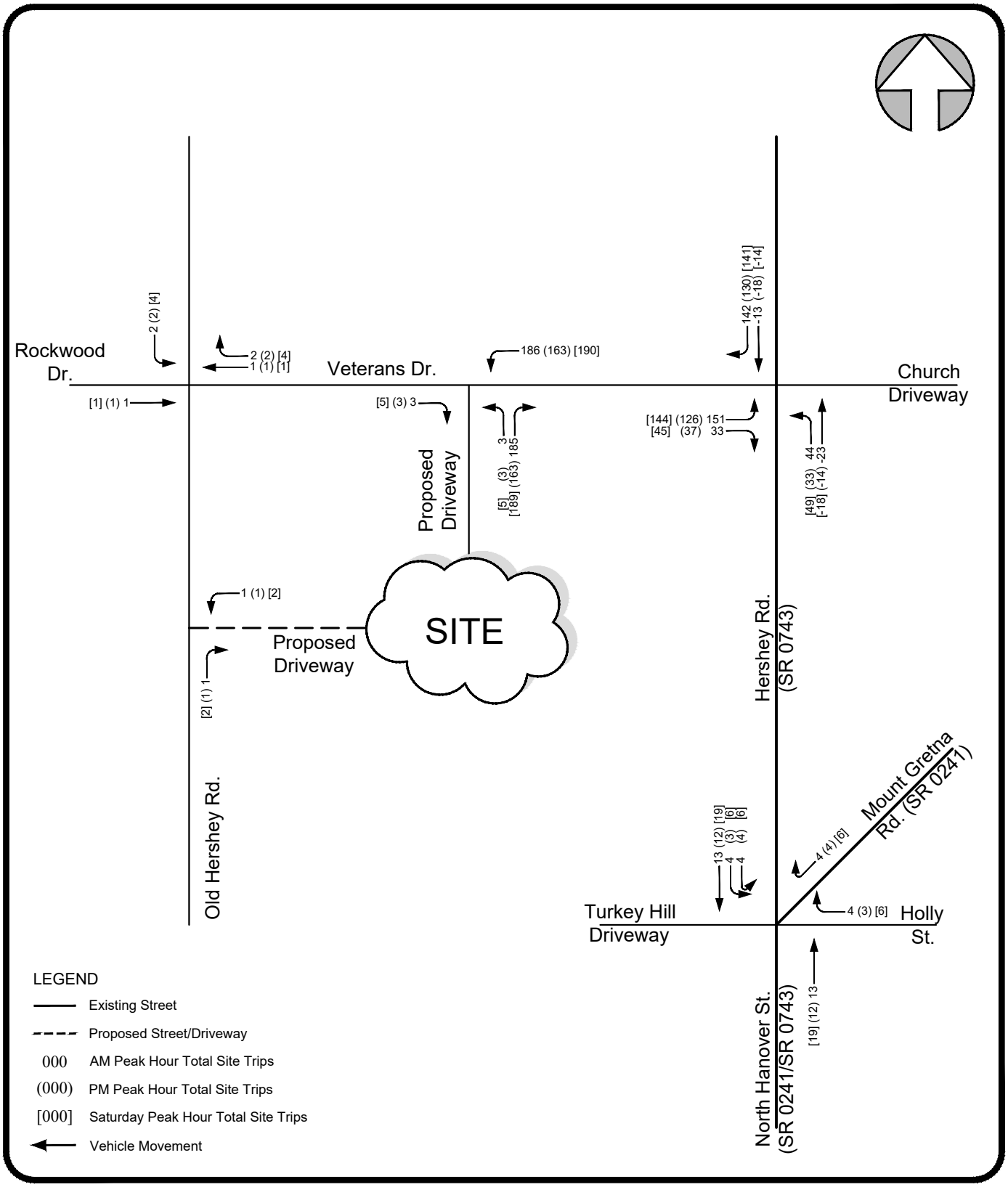

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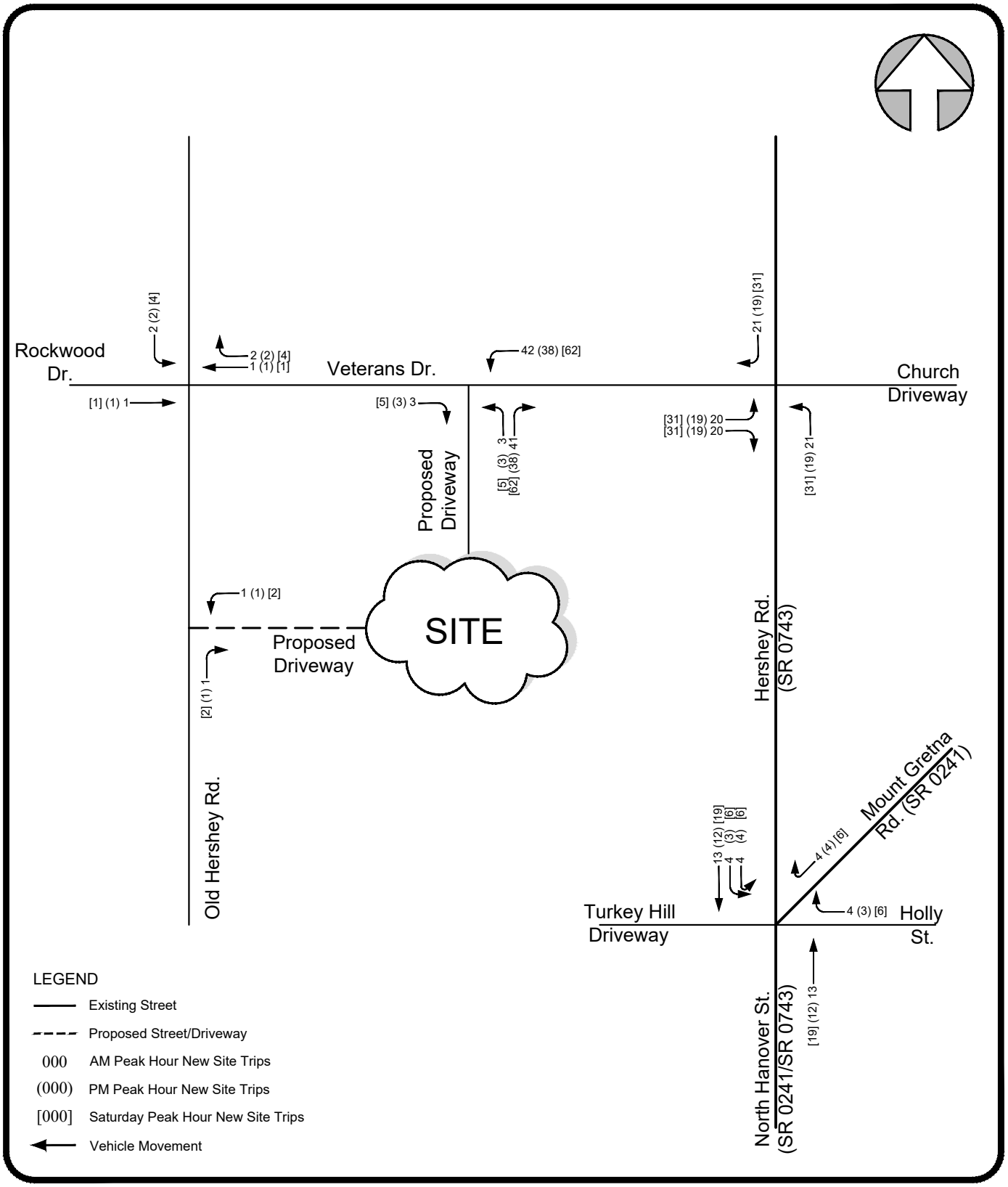
FIGURE 11

TOTAL SITE TRIPS
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



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TRANSPORTATION RESOURCE GROUP, INC.

FIGURE 12

NEW SITE TRIPS
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

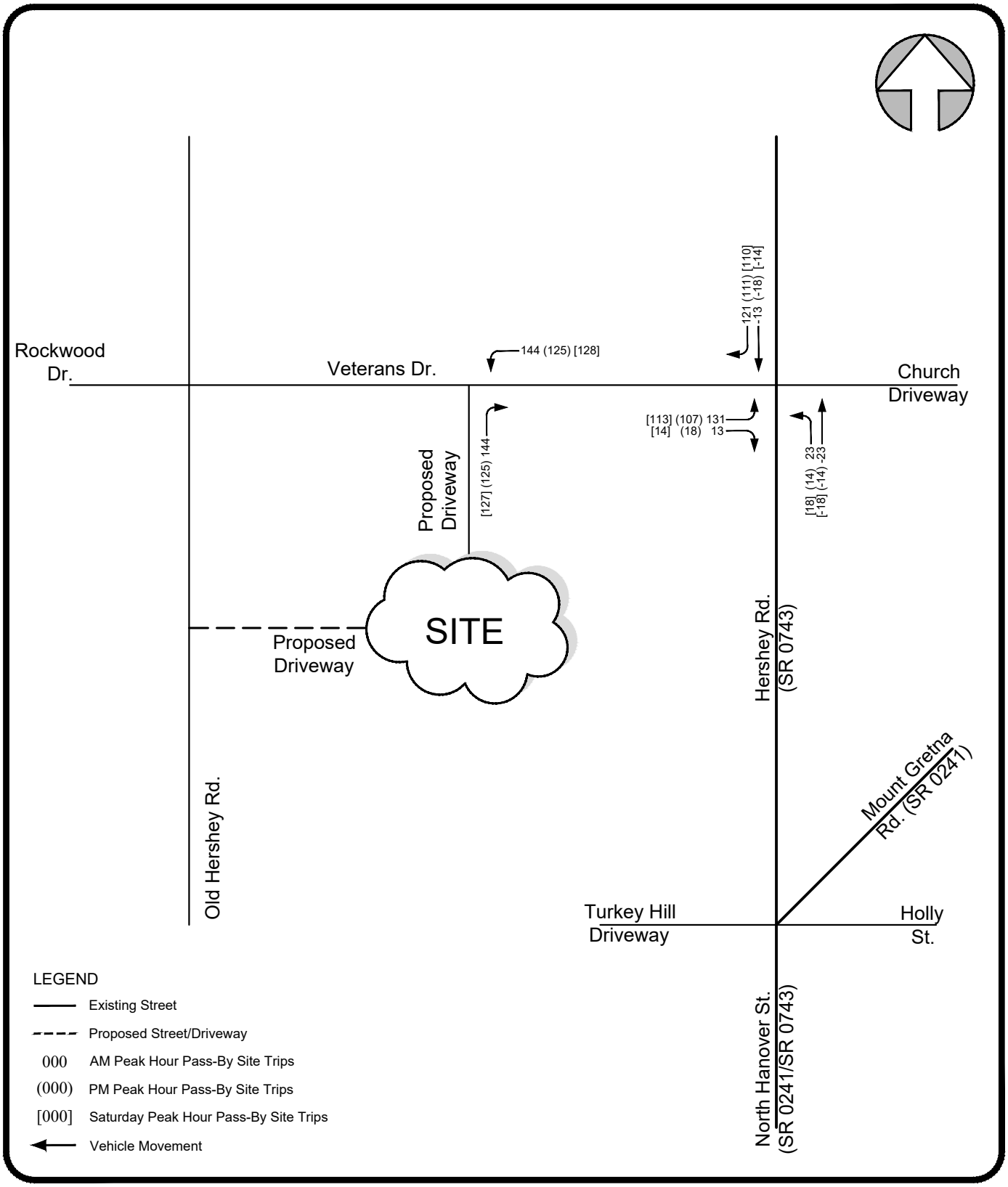

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FIGURE 13

PASS-BY SITE TRIPS
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

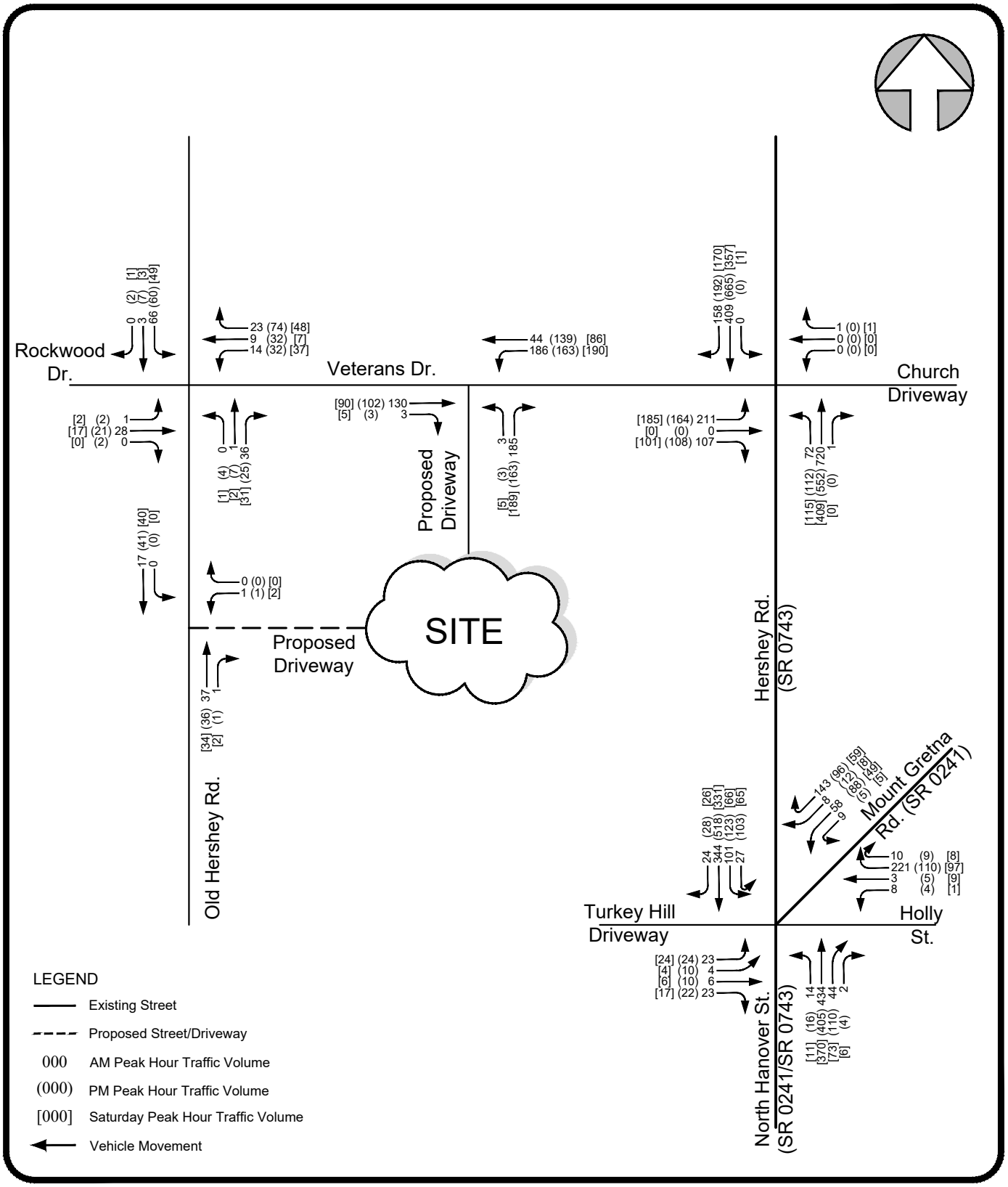

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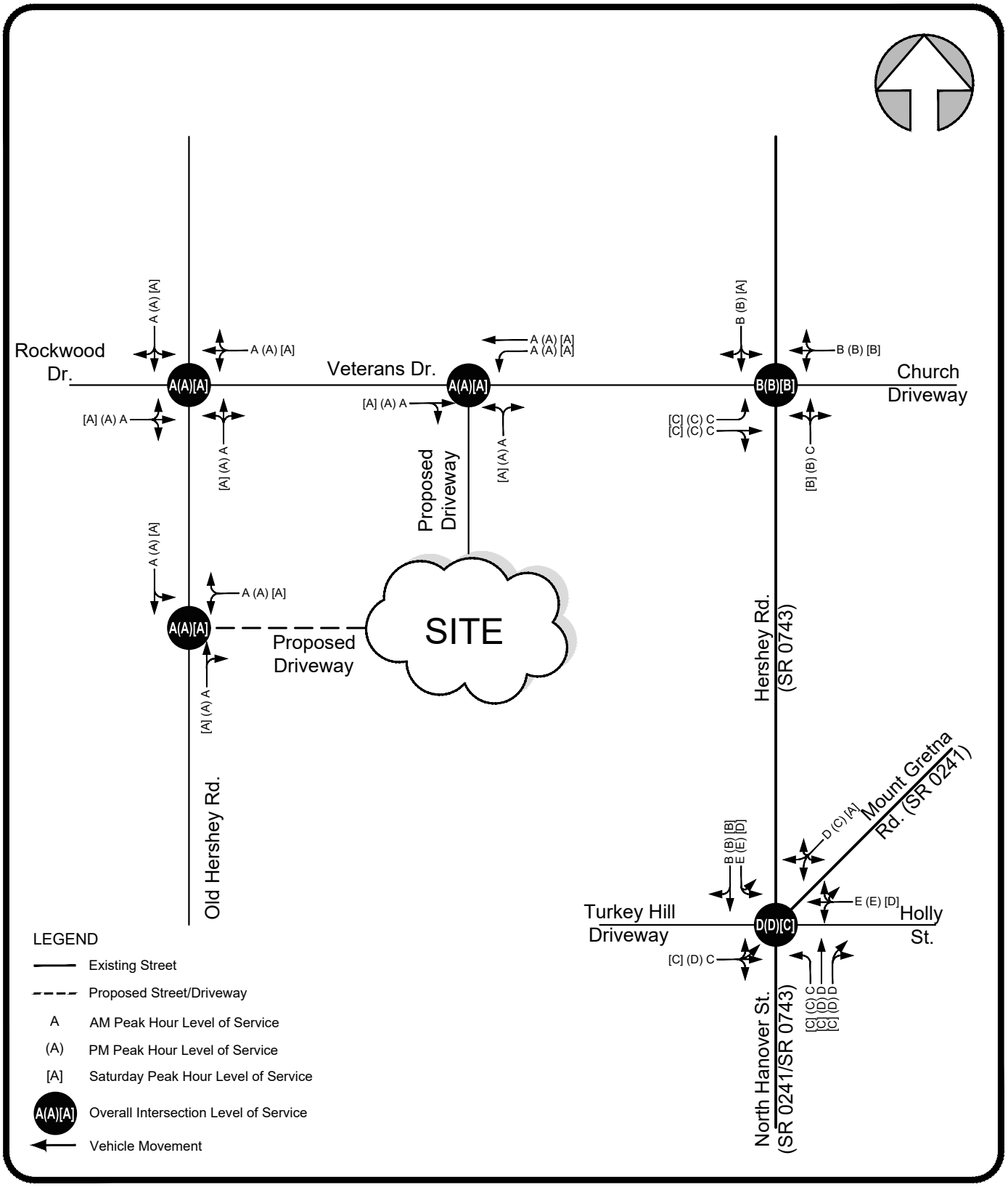
FIGURE 14

OPENING YEAR (2025)
TRAFFIC VOLUMES
WITH DEVELOPMENT
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



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TRANSPORTATION RESOURCE GROUP, INC.

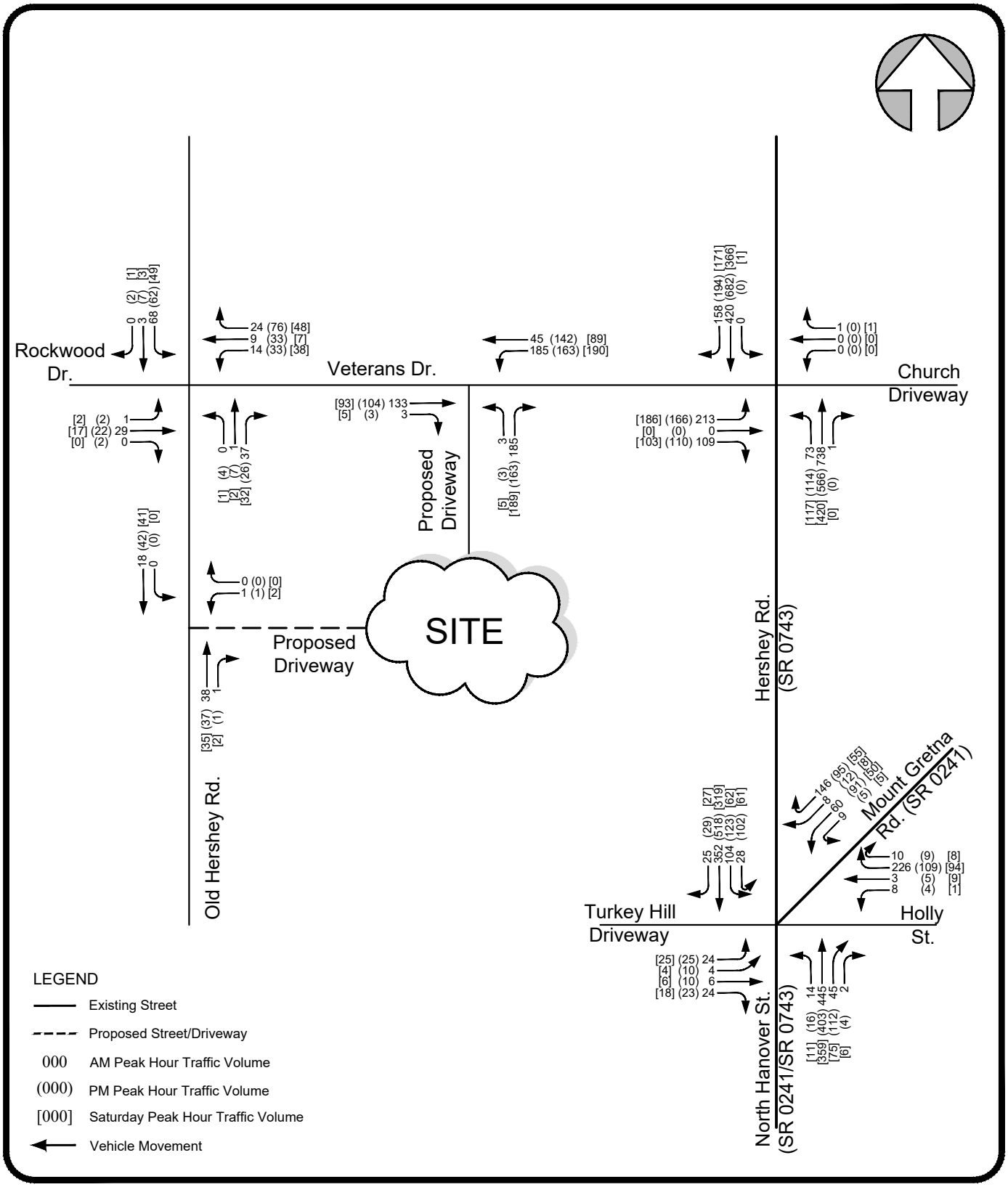
FIGURE 15

OPENING YEAR (2025)
LEVEL OF SERVICE
WITH DEVELOPMENT
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA



TRG
TRANSPORTATION RESOURCE GROUP, INC.

FIGURE 16

HORIZON YEAR (2030)
TRAFFIC VOLUMES
WITH DEVELOPMENT
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

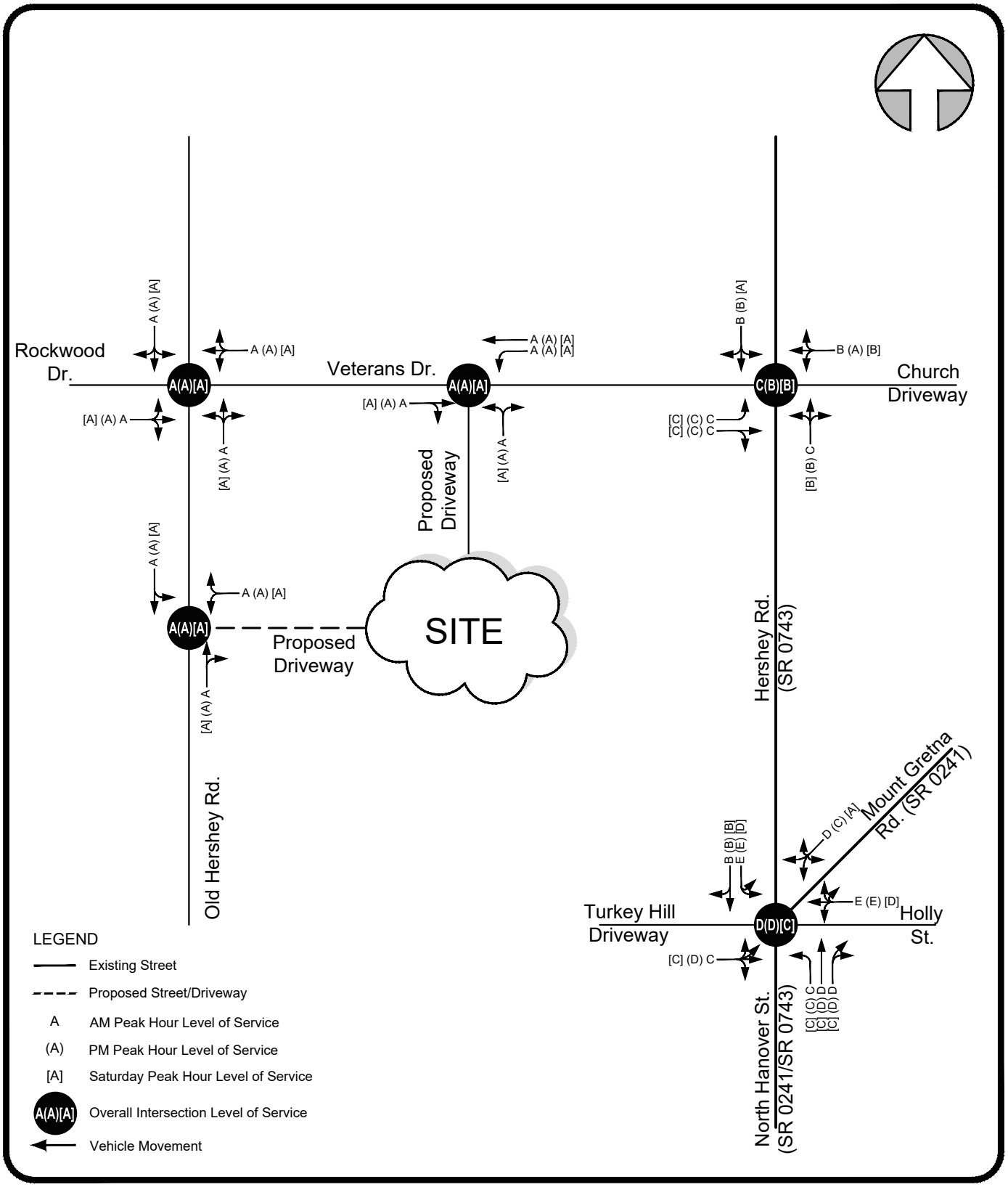


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FIGURE 17

HORIZON YEAR (2030)
LEVEL OF SERVICE
WITH DEVELOPMENT
AM, PM, & SATURDAY PEAK HOURS

TRANSPORTATION IMPACT STUDY

SHEETZ - ELIZABETHTOWN

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

CORRESPONDENCE

Driven by Success
TRG
TRANSPORTATION RESOURCE GROUP, INC.

PA Office
2 East Market Street
Suite 2
York, PA 17401-1206
T: (717) 846-4660

Consulting Engineers and Planners
www.consulttrg.com

MD Office
901 Dulaney Valley Road
Suite 805
Towson, MD 21204-2624
T: (443) 275-2344

April 30, 2024

Mr. Justin Evans
Community Development Director/Zoning Officer
Mount Joy Township
8853 Elizabethtown Road
Elizabethtown, PA 17022

RE: Sheetz – Elizabethtown, PA (Veterans Drive)
Traffic Scoping Application
Mount Joy Township, Lancaster County
TRG Project No. 228.032.24

Dear Mr. Evans:

Transportation Resource Group, Inc., (TRG) has completed the scoping application for the proposed Sheetz located on the existing PizzAtown restaurant site to the south of Veterans Drive, west of Hershey Road (SR 0743) in Mount Joy Township. This scoping letter proposes the study area and details of the traffic impact to be completed for this development. The proposed TIS scope is presented below.

1. The proposed Sheetz is proposed to consist of a 6,132 square foot convenience store with 12 fueling positions. Access to the proposed development will be provided by the two existing driveways intersecting Veterans Drive and Old Hershey Road. The preliminary site plan for this development is attached.

2. The proposed Sheetz is anticipated to generate the following peak hour trips:

AM Peak Hour:	379 total, 288 pass-by and 91 new
PM Peak Hour:	334 total, 250 pass-by, and 84 new
Saturday Peak Hour:	393 total, 255 pass-by and 138 new

Details of the trip generation are attached.

3. In addition to the proposed site access intersections, the following intersections are proposed as study intersections for the TIS.

    a. Hershey Road (SR 0743) / Veterans Drive
    b. Old Hershey Road / Veterans Drive
    c. Hershey Road (SR 0743)/Mt. Gretna Road (SR 0241)/Holly Street

    Upon approval of the study intersections, weekday turning movement counts will be conducted on a typical weekday from 6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM, and on a typical Saturday from 11:00 AM to 2:00 PM.

    *If counts are conducted when Elizabethtown College is not in session, supplemental traffic counts may be required to confirm recommendations of the TIS.

4. Automatic traffic recorded (ATR counts) will be conducted for weekday, Saturday, and Sunday time periods on Hershey Road (SR 0743), Veterans Drive, and Old Hershey Road.

5. It is proposed that the existing 2024, 2025 opening and 2030 horizon years be studied with and without the proposed development traffic volumes.

6. In accordance with PennDOT's Growth Factors for September 2023 to July 2024, a 0.54% per year growth rate is proposed to use in the study.

7. The trip distribution will be based on the existing travel patterns within the study area.

8. Capacity analysis will be completed in accordance with HCM 6th Methodology.

9. We are requesting site trip information for any area developments to be included as background development traffic in the TIS.

10. A turn lane analysis will be conducted at the site access driveway intersections on Veterans Drive and Old Hershey Road.

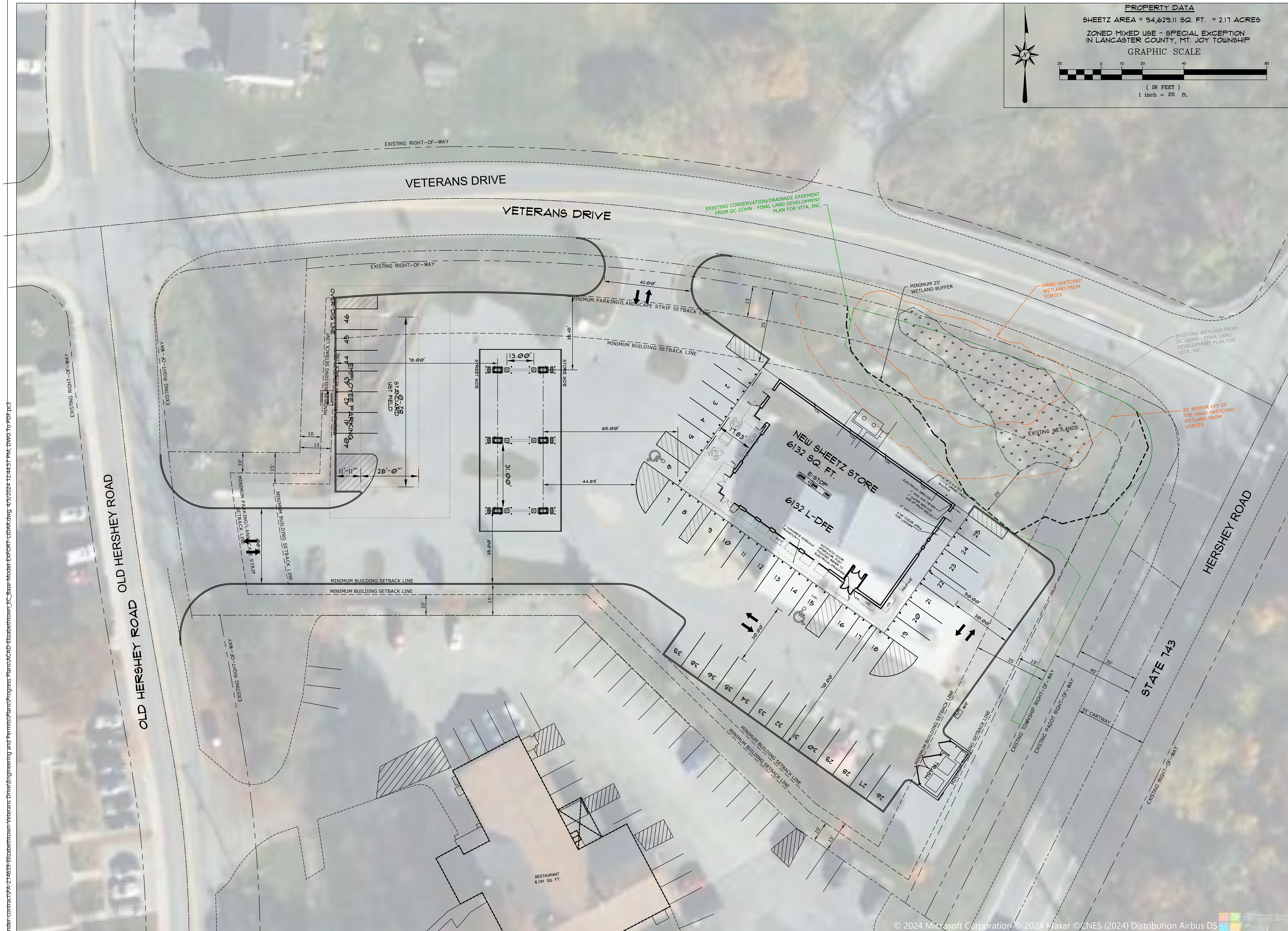
11. A crash analysis will be completed at the study intersections.

Please let me know if the scope is acceptable to the Township. If you have any questions or need additional information, please feel free to give me a call.

Very truly yours,
Transportation Resource Group, Inc.

Christopher E. Schwab, P.E.
Senior Associate

Attachments
cc: Ben Craddock, P.E., Lancaster Civil
Christopher C. Lincoln, P.E., Traffic Planning and Design
Jessica Urbas, P.E., Sheetz, Inc.
Chris Venarchick, RLA, RGS Associates


PROPERTY DATA
SHEETZ AREA = 94,629.11 SQ. FT. = 2.17 ACRES
ZONED MIXED USE - SPECIAL EXCEPTION
IN LANCASTER COUNTY, MT. JOY TOWNSHIP
GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.
VETERANS DRIVE
VETERANS DRIVE
EXISTING RIGHT-OF-WAY
OLD HERSHEY ROAD
OLD HERSHEY ROAD
HERSHEY ROAD
STATE 743
NEW SHEETZ STORE
6132 SQ. FT.
6132 L-DFE
EMPLOYEE PARKING
EXISTING CONSERVATION/DRAINAGE EASEMENT FROM DC GOHN - FINAL LAND DEVELOPMENT PLAN FOR VITA, INC.
MINIMUM 25' WETLAND BUFFER
HAND-SKETCHED WETLAND FROM VORTEX
EXISTING WETLAND FROM DC GOHN - FINAL LAND DEVELOPMENT PLAN FOR VITA, INC.
25' BUFFER OFF OF THE HAND-SKETCHED WETLAND FROM VORTEX
EXISTING WETLANDS
MINIMUM PARKING/LANDSCAPE STRIP SETBACK LINE
MINIMUM BUILDING SETBACK LINE
EXISTING TOWNSHIP RIGHT-OF-WAY
EXISTING PADOT RIGHT-OF-WAY
35' CARTWAY
RESTAURANT
6,191 SQ. FT.
TRASH
© 2024 Microsoft Corporation © 2024 Maxar ©CNES (2024) Distribution Airbus DS

Convenience Architecture and Design, P.C.
351 Sheetz Way, Claysburg, PA 16625
phone (814) 239-6013
email tcolumbu@sheetz.com
web site www.sheetz.com

PROJECT NAME:
NEW SHEETZ SITE

ELIZABETH TOWN

INT. OF VETERANS DRIVE
AND STATE 743
ELIZABETHTOWN
PENNSYLVANIA

OWNER:
SHEETZ, INC.

5700 SIXTH AVE.
ALTOONA, PA 16602

MARK	DATE	DESCRIPTION

ISSUE: 04/04/2024
PROJECT NO:
AUTHOR BY: MLC
REVIEW BY:
SHEET TITLE

PRELIMINARY SITE PLAN

5

Table 1
Estimated Trip Generation
Proposed Sheetz - Elizabethtown

Land Use (Code)	Type	AM Peak Hour			PM Peak Hour			Sat Peak Hour			ADT
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	
Convenience Store/Gas Station 6,132 SF (945)	Total	190	189	379	167	167	334	197	196	393	3,987
	Pass-By[1]	144	144	288	125	125	250	128	127	255	
	New	46	45	91	42	42	84	69	69	138	

[1] Pass-by based on ITE Trip Generation Manual, 11th Edition

AM Peak Hour: 76%

PM Peak Hour 75%

Saturday Peak Hour: 65% (Assumes 10% less than the PM peak hour)

Convenience Store/Gas Station - VFP (9-15)
(945)

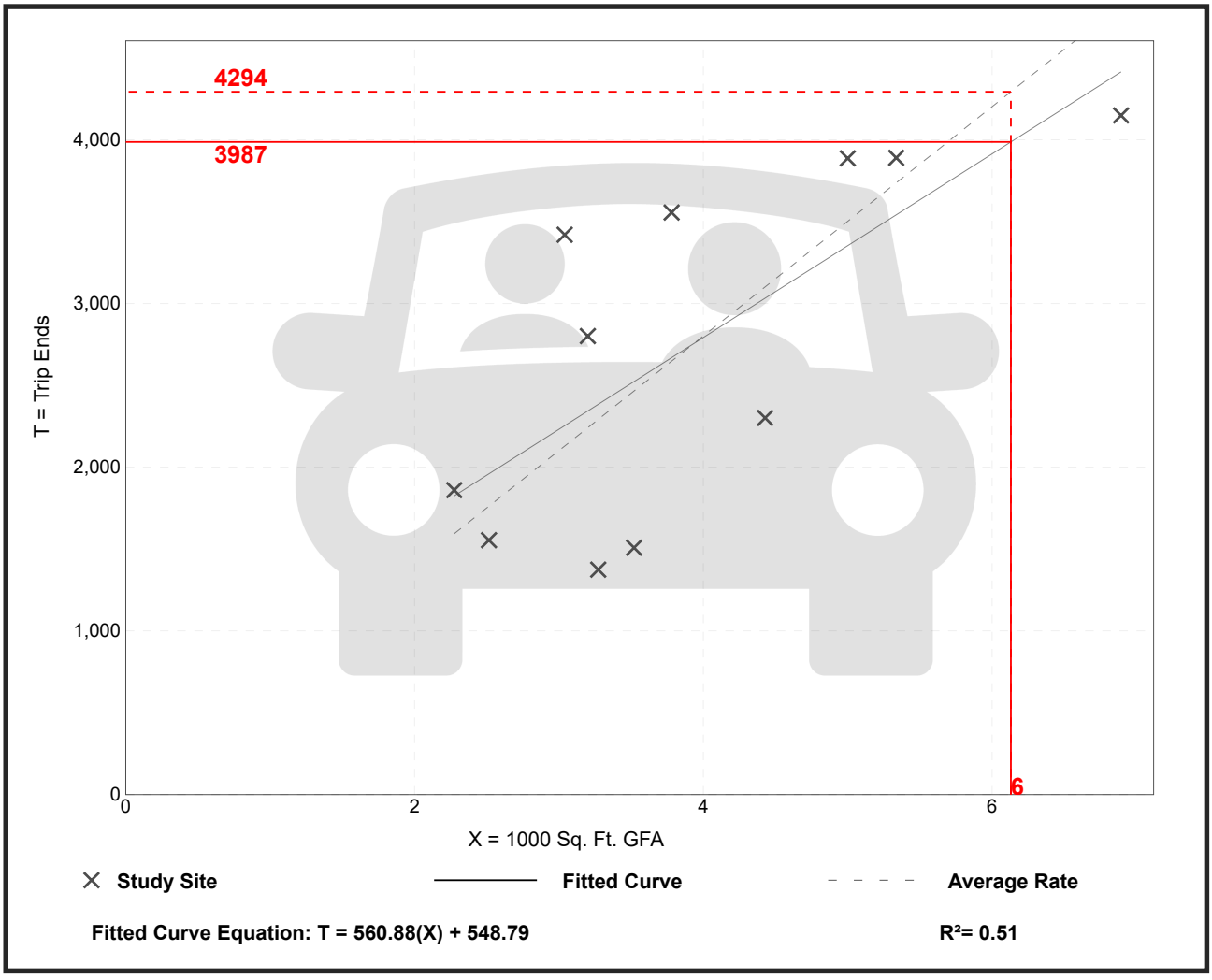
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
700.43	419.93 - 1125.00	206.44

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

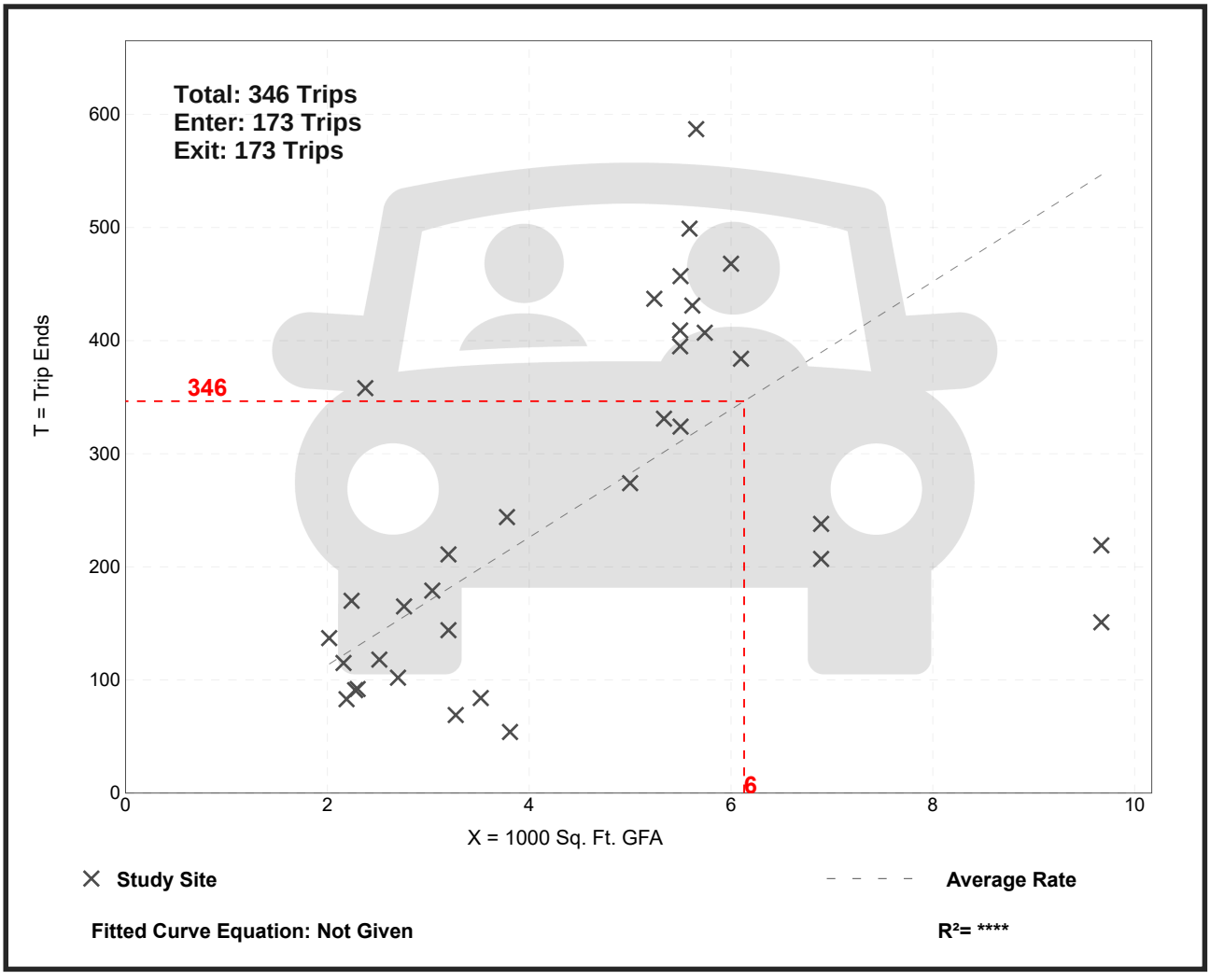
Convenience Store/Gas Station - VFP (9-15)
(945)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 34
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
56.52	14.17 - 150.67	27.56

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

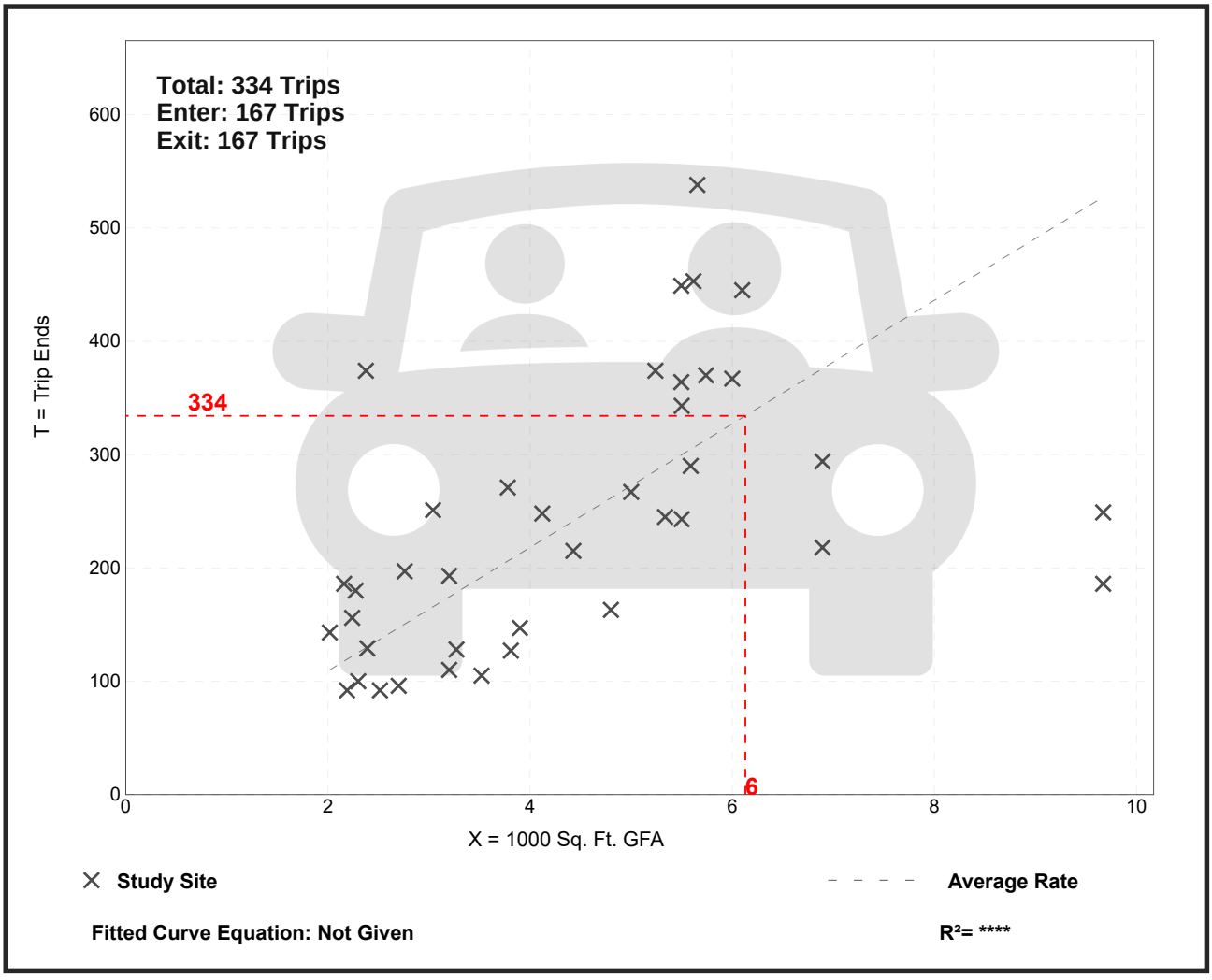
Convenience Store/Gas Station - VFP (9-15)
(945)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
54.52	19.23 - 157.41	23.69

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Convenience Store/Gas Station - VFP (9-15)
(945)

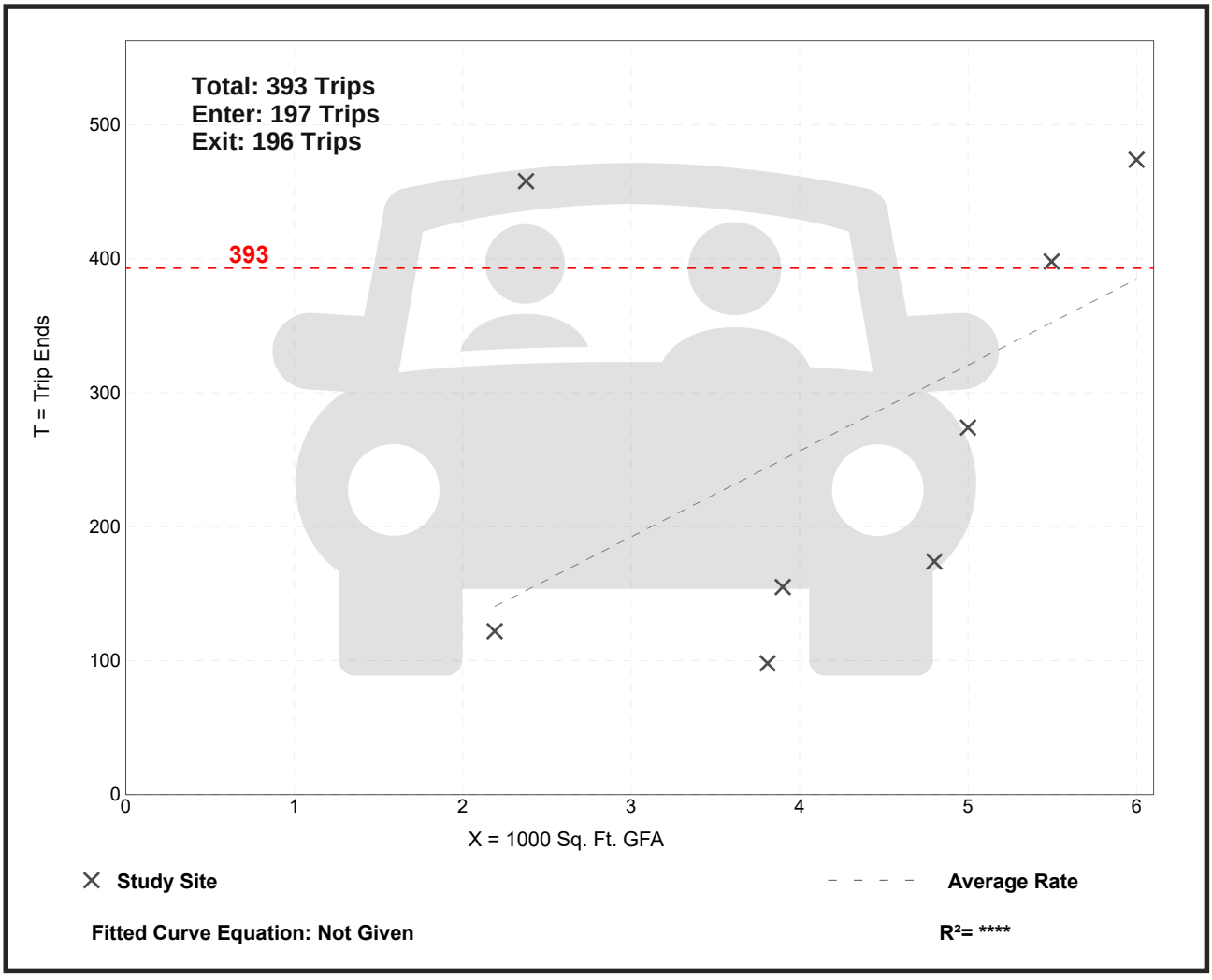
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 8
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
64.13	25.72 - 192.76	42.59

Data Plot and Equation



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Convenience Store/Gas Station - GFA (5.5-10k)
(945)

Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Weekday

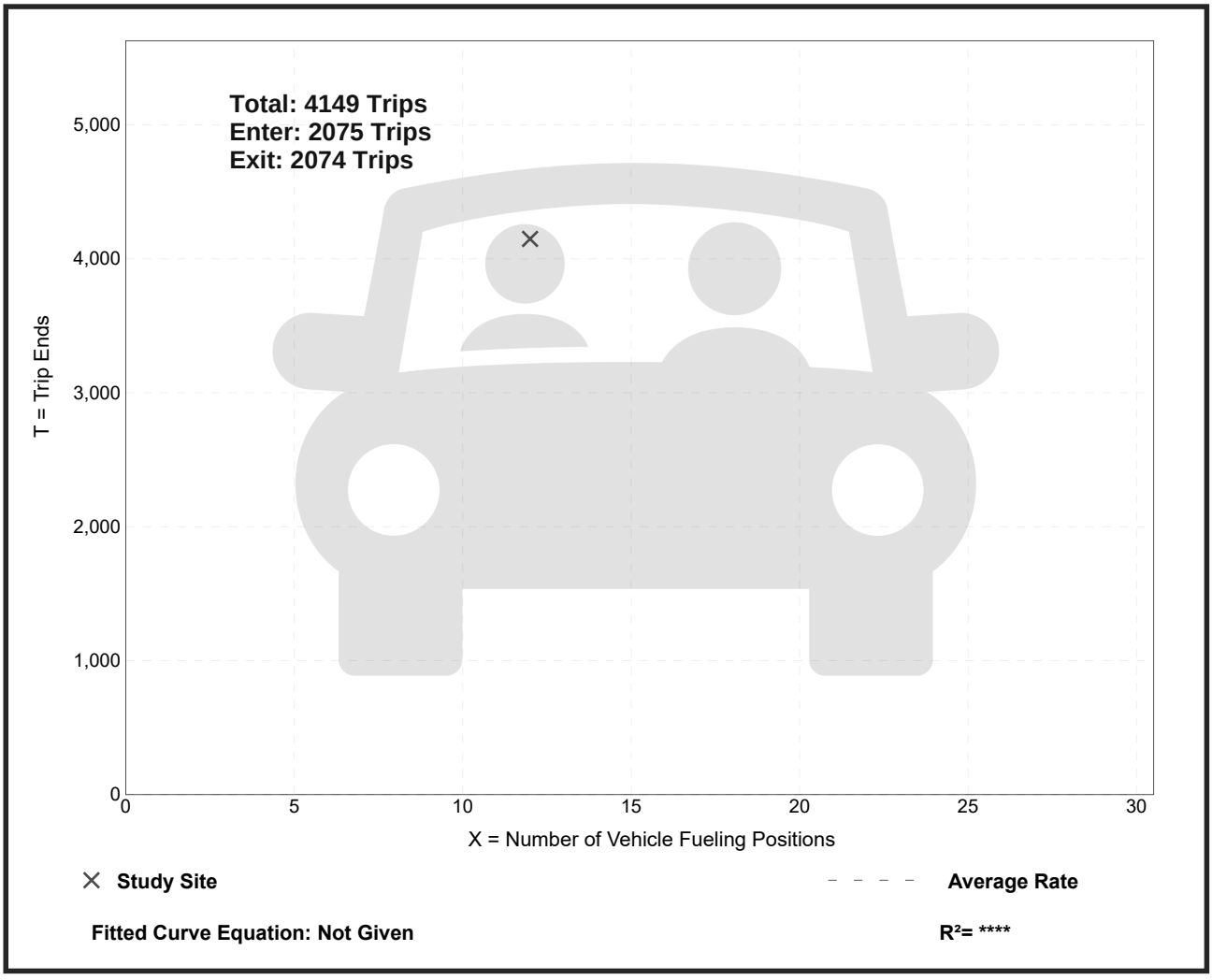
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Vehicle Fueling Positions: 12
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
345.75	345.75 - 345.75	*

Data Plot and Equation

Caution – Small Sample Size



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

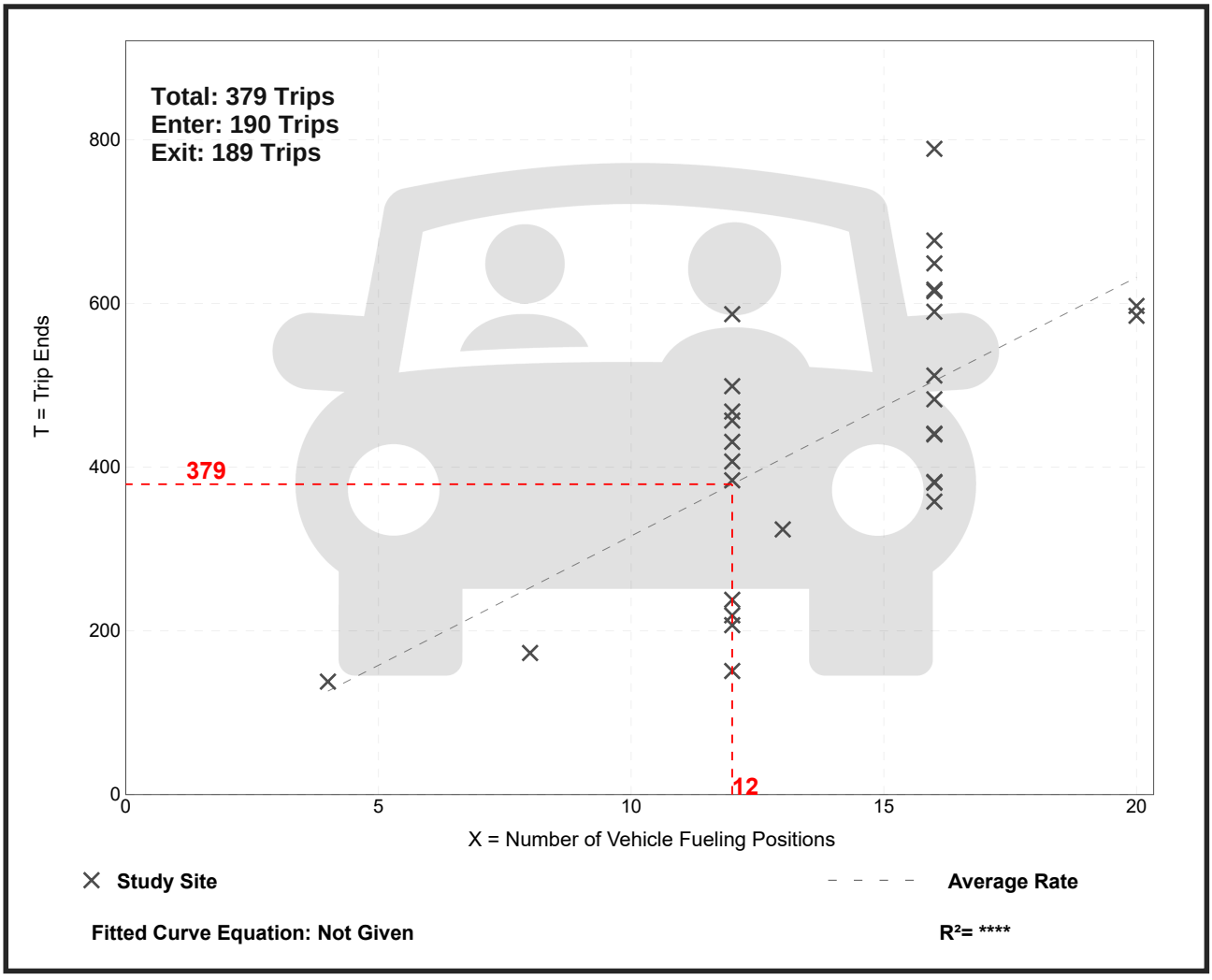
Convenience Store/Gas Station - GFA (5.5-10k)
(945)

Vehicle Trip Ends vs:	**Vehicle Fueling Positions**
On a:	**Weekday,** **Peak Hour of Adjacent Street Traffic,** **One Hour Between 7 and 9 a.m.**
Setting/Location:	**General Urban/Suburban**
Number of Studies:	29
Avg. Num. of Vehicle Fueling Positions:	14
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
31.60	12.58 - 49.31	9.10

Data Plot and Equation



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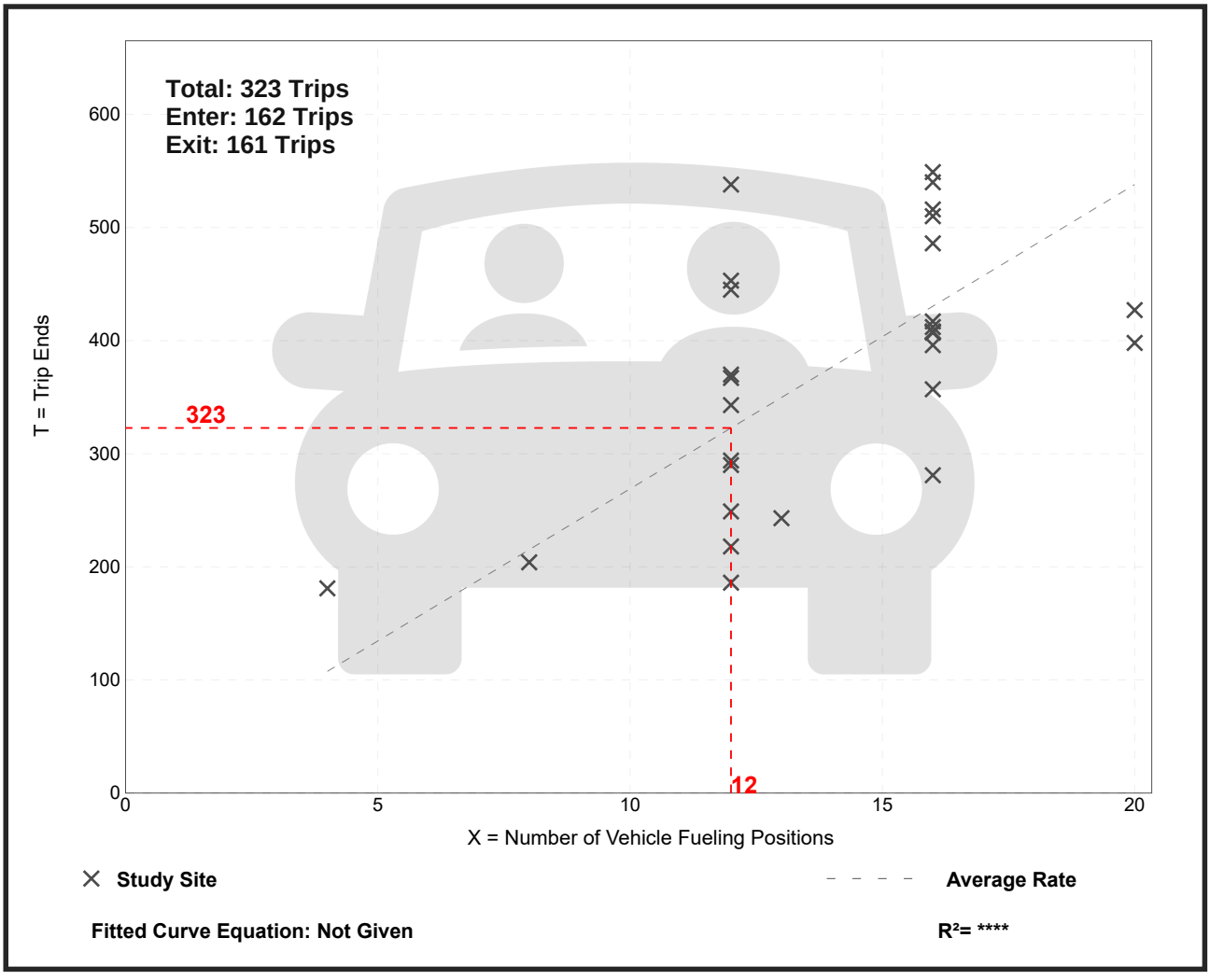
Convenience Store/Gas Station - GFA (5.5-10k)
(945)

Vehicle Trip Ends vs: **Vehicle Fueling Positions**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 29
Avg. Num. of Vehicle Fueling Positions: 14
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
26.90	15.50 - 45.25	6.87

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Convenience Store/Gas Station - GFA (5.5-10k)
(945)

Vehicle Trip Ends vs: Vehicle Fueling Positions
On a: Saturday, Peak Hour of Generator

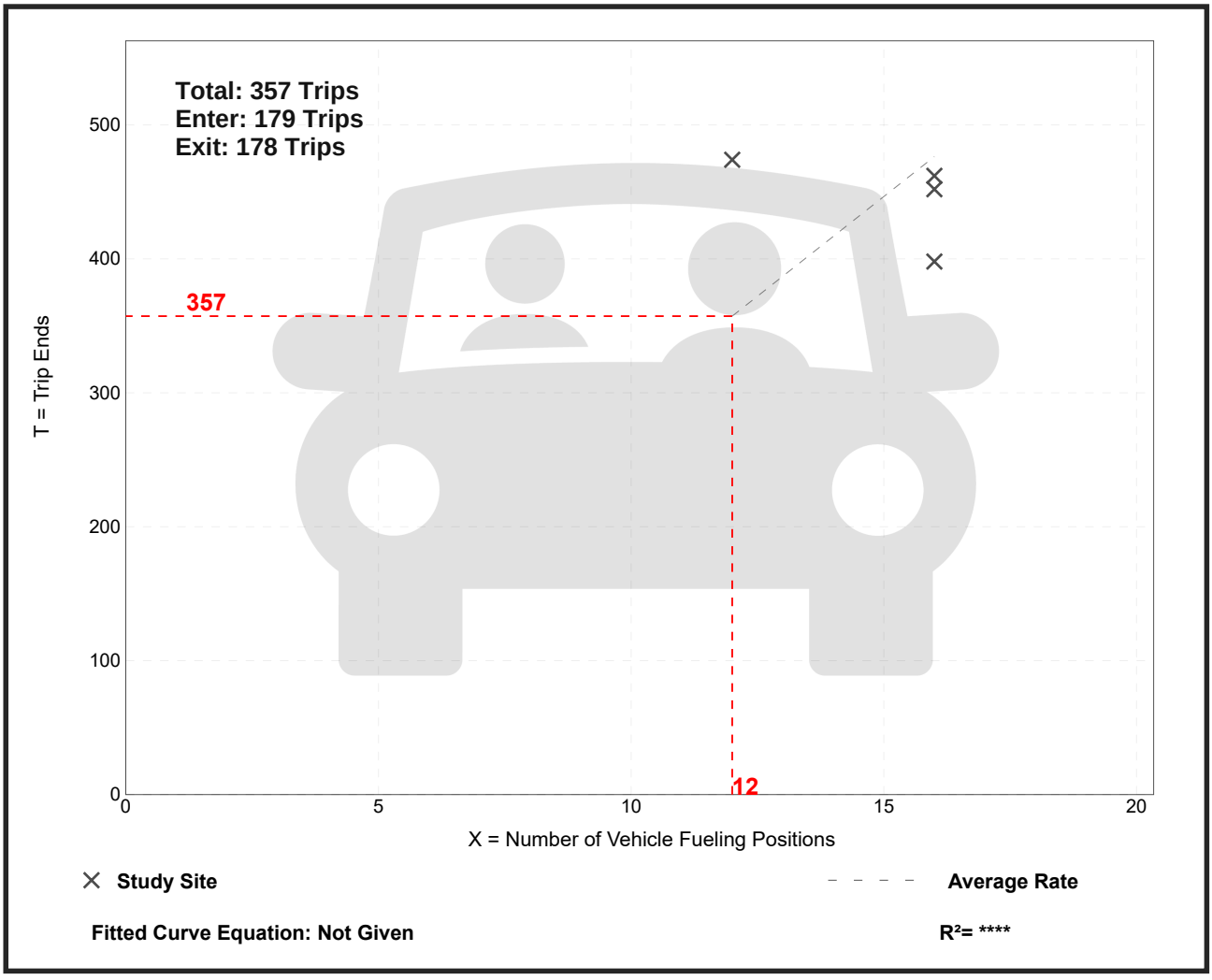
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. Num. of Vehicle Fueling Positions: 15
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
29.77	24.88 - 39.50	5.91

Data Plot and Equation

Caution – Small Sample Size



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday AM Peak Period									
# Data Sites	16 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	60% for Sites with between 2 and 8 VFP					76% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
			Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2	8	Maryland	1992	46	87	13	0	13	2235	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.2	8	Maryland	1992	31	47	34	19	53	1785	25
2.2	< 8	Indiana	1993	79	56	6	38	44	635	2
2.2	8	Maryland	1992	35	78	9	13	22	7080	25
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.3	< 8	Kentucky	1993	58	64	5	31	36	1255	2
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.4	< 8	Kentucky	1993	—	48	17	35	52	1210	2
2.6	< 8	Kentucky	1993	—	72	15	13	28	940	2
2.8	< 8	Kentucky	1993	—	54	11	35	46	1240	2
3	< 8	Indiana	1993	62	74	10	16	26	790	2
3.6	< 8	Kentucky	1993	49	67	4	29	33	1985	2
3.7	< 8	Kentucky	1993	49	66	16	18	34	990	2
4.694	12	Maryland	2000	—	72	—	—	28	2440	30
4.694	12	Maryland	2000	—	78	—	—	22	1561	30
4.694	12	Maryland	2000	—	79	—	—	21	2764	30
4.848	12	Virginia	2000	—	55	—	—	45	1398	30
5.06	12	Pennsylvania	2000	—	84	—	—	16	3219	30
5.242	12	Virginia	2000	—	74	—	—	26	1160	30
5.242	12	Virginia	2000	—	71	—	—	29	548	30
5.488	12	Delaware	2000	—	80	—	—	20	—	30
5.5	12	Pennsylvania	2000	—	85	—	—	15	2975	30
4.2	< 8	Kentucky	1993	47	62	19	19	38	1705	2
4.694	16	Maryland	2000	—	90	—	—	10	2278	30
4.694	16	Delaware	2000	—	74	—	—	26	2185	30
4.694	16	Delaware	2000	—	58	—	—	42	962	30
4.694	16	Delaware	2000	—	84	—	—	16	2956	30
4.694	16	New Jersey	2000	—	79	—	—	21	1859	30
4.694	20	Delaware	2000	—	84	—	—	16	3864	30
4.848	16	Virginia	2000	—	68	—	—	32	2106	30
4.848	16	Virginia	2000	—	85	—	—	15	2676	30
4.848	16	Virginia	2000	—	75	—	—	25	3244	30
4.848	16	Virginia	2000	—	71	—	—	29	1663	30
4.993	16	Pennsylvania	2000	—	75	—	—	25	1991	30
5.094	16	New Jersey	2000	—	86	—	—	14	1260	30
5.5	16	Pennsylvania	2000	—	82	—	—	18	1570	30
5.543	16	Pennsylvania	2000	—	84	—	—	16	1933	30
5.565	16	Pennsylvania	2000	—	77	—	—	23	2262	30
5.565	16	Pennsylvania	2000	—	68	—	—	32	2854	30
5.565	16	New Jersey	2000	—	58	—	—	42	1253	30
5.565	16	New Jersey	2000	—	79	—	—	21	1928	30
5.565	16	New Jersey	2000	---	84	---	---	16	1953	30

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday PM Peak Period									
# Data Sites	12 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	56% for Sites with between 2 and 8 VFP					75% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
			Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2.1	8	Maryland	1992	31	52	13	35	48	1785	25
2.1	6	Maryland	1992	30	53	20	27	47	1060	25
2.2	< 8	Indiana	1993	115	48	16	36	52	820	2
2.3	< 8	Kentucky	1993	67	57	16	27	43	1954	2
2.3	6	Maryland	1992	55	40	11	49	60	2760	25
2.4	< 8	Kentucky	1993	—	58	13	29	42	2655	2
2.6	< 8	Kentucky	1993	68	67	15	18	33	950	2
2.8	< 8	Kentucky	1993	—	62	11	27	38	2875	2
3	< 8	Indiana	1993	80	65	15	20	35	1165	2
3.6	< 8	Kentucky	1993	60	56	17	27	44	2505	2
3.7	< 8	Kentucky	1993	70	61	16	23	39	2175	2
4.2	< 8	Kentucky	1993	61	58	26	16	42	2300	2
4.694	12	Maryland	2000	—	78	—	—	22	3549	30
4.694	12	Maryland	2000	—	67	—	—	33	2272	30
4.694	12	Maryland	2000	—	66	—	—	34	3514	30
4.848	12	Virginia	2000	—	71	—	—	29	2350	30
5.06	12	Pennsylvania	2000	—	91	—	—	9	4181	30
5.242	12	Virginia	2000	—	70	—	—	30	2445	30
5.242	12	Virginia	2000	—	56	—	—	44	950	30
5.488	12	Delaware	2000	—	73	—	—	27	—	30
5.5	12	Pennsylvania	2000	—	84	—	—	16	4025	30
4.694	16	Maryland	2000	—	89	—	—	11	2755	30
4.694	16	Delaware	2000	—	73	—	—	27	1858	30
4.694	16	Delaware	2000	—	59	—	—	41	1344	30
4.694	16	Delaware	2000	—	72	—	—	28	3434	30
4.694	16	New Jersey	2000	—	81	—	—	19	1734	30
4.694	20	Delaware	2000	—	76	—	—	24	1616	30
4.848	16	Virginia	2000	—	67	—	—	33	2.954	30
4.848	16	Virginia	2000	—	78	—	—	22	3086	30
4.848	16	Virginia	2000	—	83	—	—	17	4143	30
4.848	16	Virginia	2000	—	73	—	—	27	2534	30
4.993	16	Pennsylvania	2000	—	72	—	—	28	2917	30
5.094	16	New Jersey	2000	—	86	—	—	14	1730	30
5.5	16	Pennsylvania	2000	—	90	—	—	10	2616	30
5.543	16	Pennsylvania	2000	—	87	—	—	13	2363	30
5.565	16	Pennsylvania	2000	—	81	—	—	19	2770	30
5.565	16	Pennsylvania	2000	—	76	—	—	24	3362	30
5.565	16	New Jersey	2000	—	61	—	—	39	1713	30
5.565	16	New Jersey	2000	—	86	—	—	14	1721	30
5.565	16	New Jersey	2000	---	81	---	---	19	2227	30

TRAFFIC PLANNING AND DESIGN, INC.

WWW.TRAFFICPD.COM

June 19, 2024

Mr. Benjamin Craddock, P.E.

Lancaster Civil Engineering
P.O. Box 8972
Lancaster, PA 17604-8972

RE: Sheetz (Veterans Drive)

Traffic Impact Study Scope Review
Mount Joy Township, Lancaster County, PA
TPD No. MJTO.00079

Dear Mr. Craddock:

As requested, Traffic Planning and Design, Inc. (TPD) has completed a review of the following information related to the above referenced project:

- Traffic Scoping Application prepared by Transportation Resource Group, Inc. dated April 30, 2024.

Based on our review, we offer the following comments:

1. Unless a waiver is requested and approved by the Township, the study area needs to include the Hershey Road (Rt. 743) intersections with the Route 283 interchange ramps (§119-32.C.(5)(a)).
2. If traffic counts are conducted while Elizabethtown College and Elizabethtown Area School District are not in session, supplemental counts and analysis will need to be provided to verify the results of the traffic impact study.
3. Trip distribution and assignment information should be developed to account for potential diverted link traffic to/from Route 283. It is suggested the trip distribution and assignment data be provided to the Township for review prior to completion of the traffic impact study.
4. TPD is not aware of any nearby developments that would impact the proposed study area.

If you have any questions, please call me at your earliest convenience.

Sincerely,
TRAFFIC PLANNING AND DESIGN, INC.

Christopher C. Lincoln, P.E.
Senior Project Manager
CLincoln@TrafficPD.com

2500 East High Street, Suite 650
Pottstown, PA 19464

610.326.3100
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T: (443) 275-2344

September 10, 2024

Mr. Benjamin Craddock, P.E.
Lancaster Civil Engineering
P.O. Box 8972
Lancaster, PA 17604-8972

RE: Sheetz – Elizabethtown, PA (Veterans Drive)
Response to Traffic Impact Study Scope Comments
Mount Joy Township, Lancaster County
TRG Project No. 228.032.24

Dear Mr. Craddock:

This letter addresses the comments outlined in the review letter dated June 19, 2024, prepared by Traffic Planning and Design for the scoping application for the proposed Sheetz located on the existing PizzAtown restaurant site to the south of Veterans Drive, west of Hershey Road (SR 0743) in Mount Joy Township. The following numbered paragraphs correspond to the numbered comments in the review letter.

1. *Unless a waiver is requested and approved by the Township, the study area needs to include the Hershey Road (Rt 743) intersections with the Route 283 interchange ramps.*

   The applicant will request a waiver for the exclusion of the Hershey Road / Route 283 Ramp intersections in the traffic impact study. According to ITE Trip Generation, 76% of AM, 75%, of PM and 65% of Saturday peak hour traffic is considered pass-by traffic. Route 743 has an ADT of approximately 14,600 vehicles per day which is a significant amount to draw pass by traffic. Additionally, according to PennDOT traffic volumes, the ADT for the Route 283 ramps at this interchange is over 20,000 vehicles per day which illustrates that much of the traffic that will be diverted from Route 283 may already be using the interchange. Therefore, the study does not propose to include the ramps as study intersections.

2. *If traffic counts are conducted while Elizabethtown College and Elizabethtown Are School District are not in session, supplemental counts and analysis will need to be provided to verify the results of the traffic impact study.*

   Noted. Traffic counts were conducted in May 2024 when Elizabethtown College was not in session. Traffic counts do include traffic volumes from Elizabethtown Area School District. Supplemental traffic counts will be conducted if needed to determine if there are changes to the conclusions of the study.

3. *Trip distribution and assignment information should be developed to account for potential diverted link traffic to/from Route 283. It is suggested the trip distribution and assignment data be provided to the Township prior to completion of the traffic impact study.*

   The trip distribution and assignment included with this letter was submitted and approved by Chris Lincoln, P.E., Township Traffic Engineer. The trip distribution and assignment is based on the existing ADT volumes of Route 283 and Route 743. Since the ADT of Route 283 was approximately 44,300 and the ADT of Route 743 was approximately 14,600, it was assumed that 75% of the total peak hour pass-by traffic would be diverted from Route 283 while 25% of the peak hour pass-by traffic would already be on Route 743.

   New trips were calculated using the Cordon Line methodology and showed 45% of the new site trips would be oriented to/from the north on Route 743 and 45% of the new trips would be oriented to/from the south on Route 743. The remaining 10% of the traffic would be oriented to/from the west on Old Hershey Road.

   Details of the trip distribution and assignment and correspondence are attached.,

4. *TPD is not aware of any nearby developments that would impact the proposed study area.*

   Noted. No additional site traffic from nearby development was added to the traffic impact study.

   If you have any questions or need additional information, please feel free to give me a call.

Very truly yours,
Transportation Resource Group, Inc.

Christopher E. Schwab

Christopher E. Schwab, P.E.
Senior Associate

cc: Justin Evans, Mount Joy Township
Christopher C. Lincoln, P.E., Traffic Planning and Design
Jessica Strittmatter, P.E., Sheetz, Inc.
Chris Venarchick, RLA, RGS Associates

Chris Schwab

From: Lincoln, Chris <clincoln@trafficpd.com>
Sent: Thursday, August 8, 2024 6:13 PM
To: Chris Schwab
Cc: Ben Craddock - Lancaster Civil (bencraddock@lancastercivil.com)
Subject: RE: Sheetz TIS Scope Review - Veterans Drive

Hi Chris,

I've reviewed your proposed trip distribution and concur with your methodology for the proposed Sheetz.

If you have any questions, please let me know.

Thanks,
-Chris

Christopher Lincoln, P.E., *Senior Project Manager*

O: 610.326.3100 | www.TPDinc.com

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From: Chris Schwab <cschwab@consulttrg.com>
Sent: Wednesday, July 31, 2024 10:27 AM
To: Lincoln, Chris <clincoln@trafficpd.com>
Cc: Ben Craddock - Lancaster Civil (bencraddock@lancastercivil.com) <bencraddock@lancastercivil.com>
Subject: RE: Sheetz TIS Scope Review - Veterans Drive

Chris,

We are working on the TIS for Sheetz – Veterans Drive and wanted to share the trip distribution for new and pass-by trips. Details are as follows with the percentages shown on the attached figures.

As recommended in your letter, we assumed diverted link traffic from 283 to be considered as pass-by traffic as follows:

From PennDOT TIRe
ADT Route 283: 44,300
ADT of 743:14,600

Percent of total ADT
Route 283: 75% → 44,300 / (44,300+14,600)

Route 743: 25% → 14,600 / (44,300+14,600)

Assume 75% of peak hour pass by from 283.
Assume 25% of peak hour pass-by from 743.

Existing Directional Split on 743 at Veterans Drive

AM Peak: NB 64% / SB 36%
PM Peak: NB 45% / SB 55%
Sat Peak: NB 54% / SB 46%

Total Percentage of Pass-by on 743
AM Peak: NB 16% / SB 9%
PM Peak: NB 11% / SB 14%
Sat Peak: NB 14% / SB 11%

Total Pass-by percentage and directional split from 283
AM Peak: 75% to/from north
PM Peak: 75% to/from north
Sat Peak: 75% to/from north

New Site trips were based on Cordon Line based on existing traffic volumes as follows:

45% oriented to/from the north on 743
45% oriented to/from the south on 743
10% oriented to from the west on Veterans Drive

The new site trip percentages are further broken down on the attached figures based on the exiting turning movement counts. Please let me know if you have any comments on the above trip distribution assumptions. Give me a call if you have any questions. Thanks.

Chris

Christopher E. Schwab, PE,
TRG, Senior Associate
Email: cschwab@consulttrg.com
PA Office: (717) 846-4660 MD Office: (443) 275-2344
Cell: (717) 683-6388
www.consulttrg.com

From: Lincoln, Chris <clincoln@trafficpd.com>
Sent: Wednesday, June 19, 2024 5:48 PM
To: Ben Craddock - Lancaster Civil (bencraddock@lancastercivil.com) <bencraddock@lancastercivil.com>
Cc: Justin Evans <Justin@mtjoytwp.org>; Chris Schwab <cschwab@consulttrg.com>
Subject: Sheetz TIS Scope Review - Veterans Drive

Ben,
Attached is our review of the scoping application for the proposed Sheetz on Veterans Drive.

If you have any questions, please let me know.

Thanks,

-
Chris

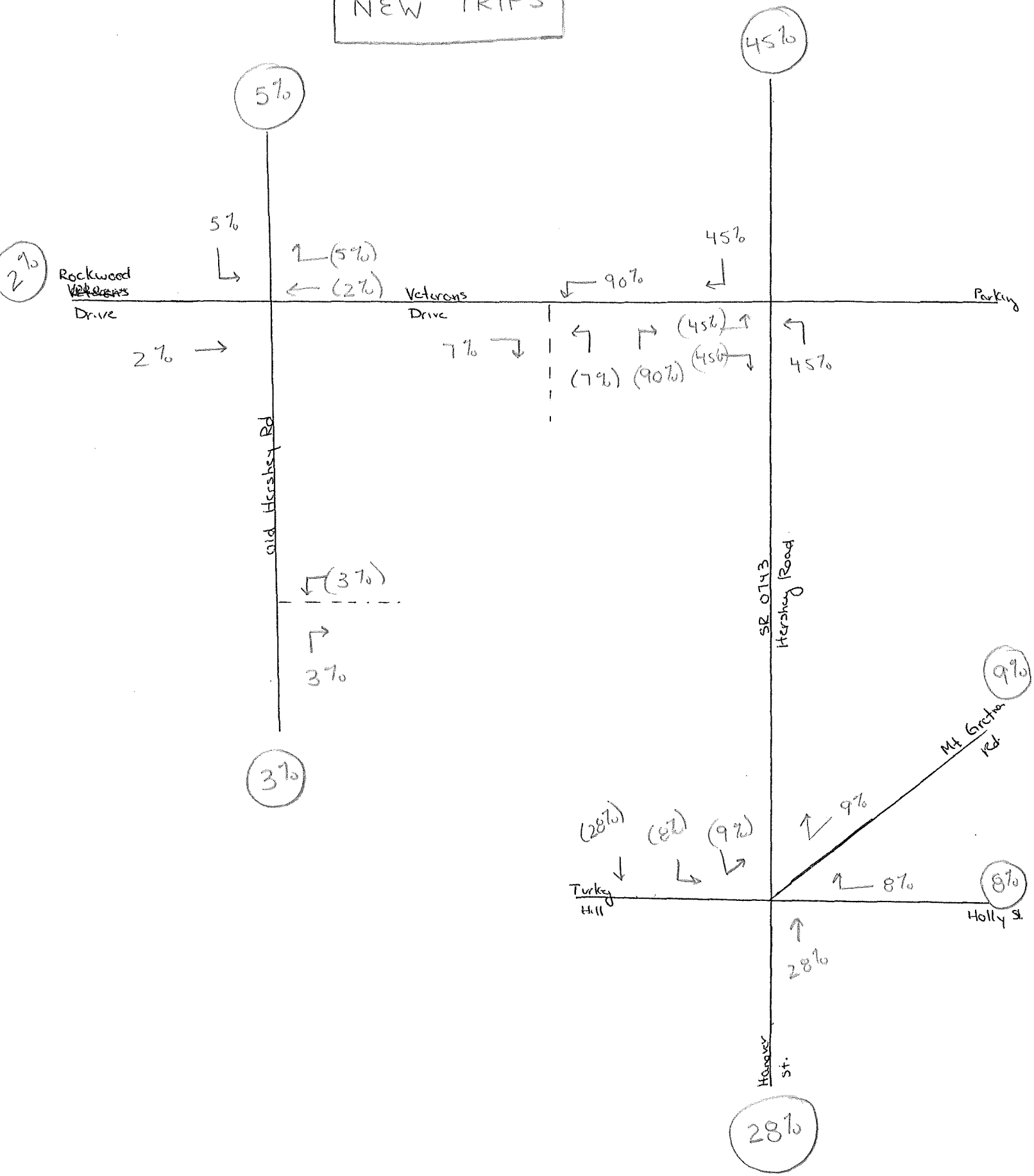
Christopher Lincoln, P.E., *Senior Project Manager*

O: 610.326.3100 | www.TrafficPD.com

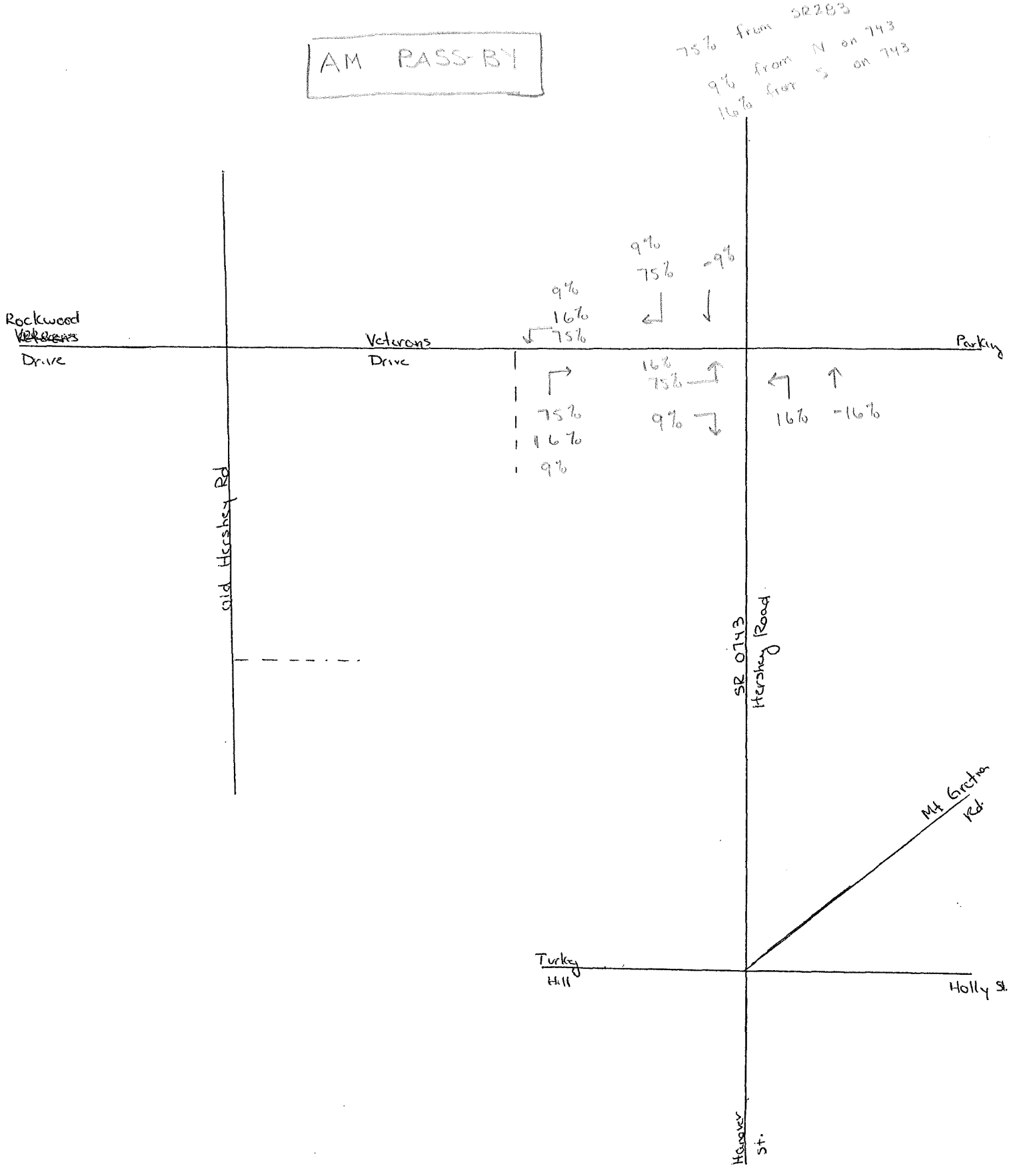
MOVING *FORWARD* **TOGETHER** ®

An ENR 500 Top Design Firm

NEW TRIPS

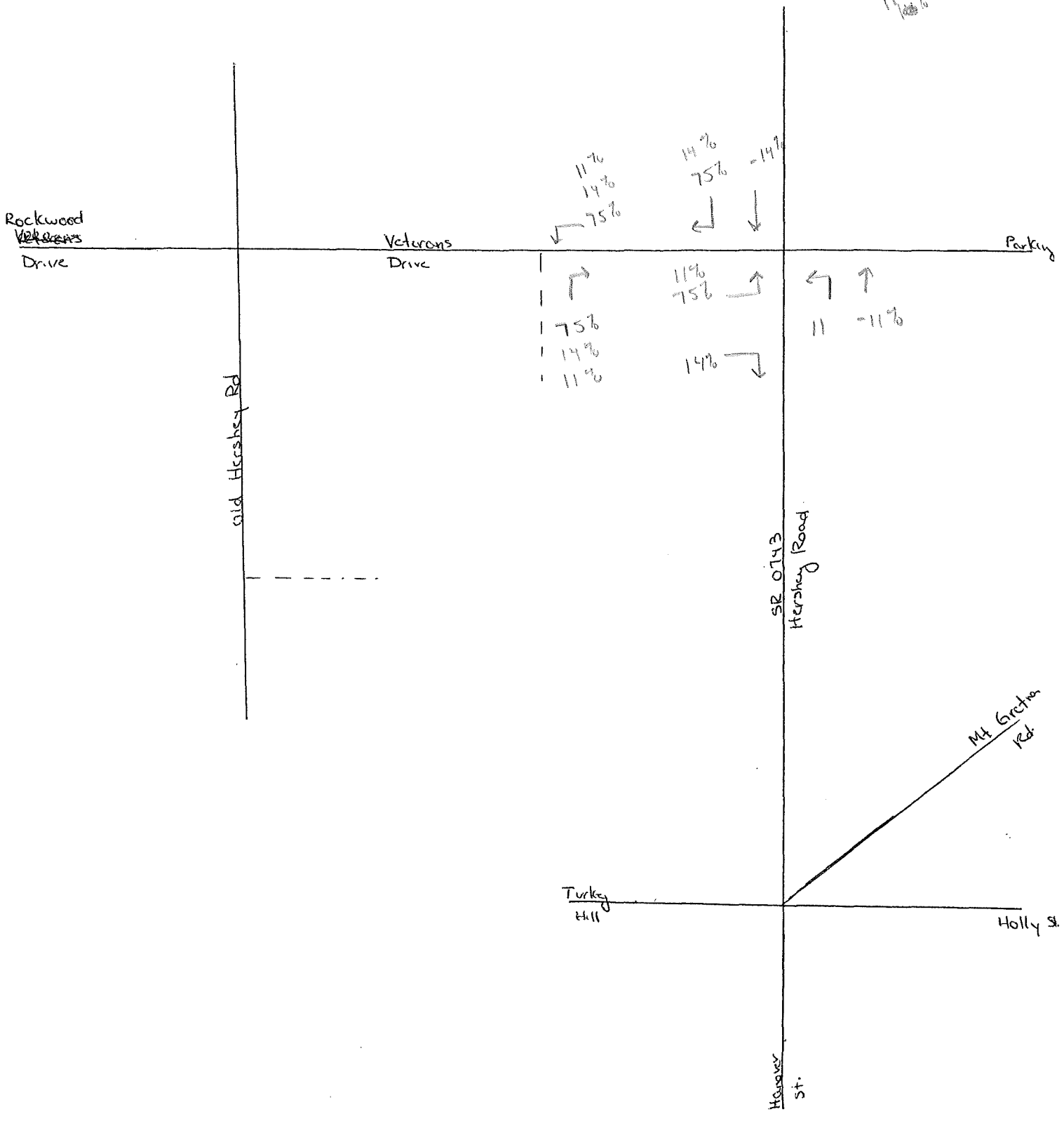

5%
45%
2%
Rockwood Drive
Veterans Drive
Parking
5%
(5%)
(2%)
90%
45%
2%
7%
(45%)
(45%)
(7%)
(90%)
45%
old Hershey Rd
(3%)
3%
3%
SR 0743
Hershey Road
9%
Mt Gretna Rd.
(28%)
(8%)
(9%)
9%
8%
8%
Turkey Hill
Holly St.
28%
Hoover St.
28%

AM PASS-BY


75% from SR283
9% from N on 743
16% from S on 743
Rockwood Drive
Veterans Drive
Parking
Old Hershey Rd
SR 0743 Hershey Road
Mt Gretna Rd.
Turkey Hill
Holly St.
Hanover St.
9%
16%
75%
-9%
-16%

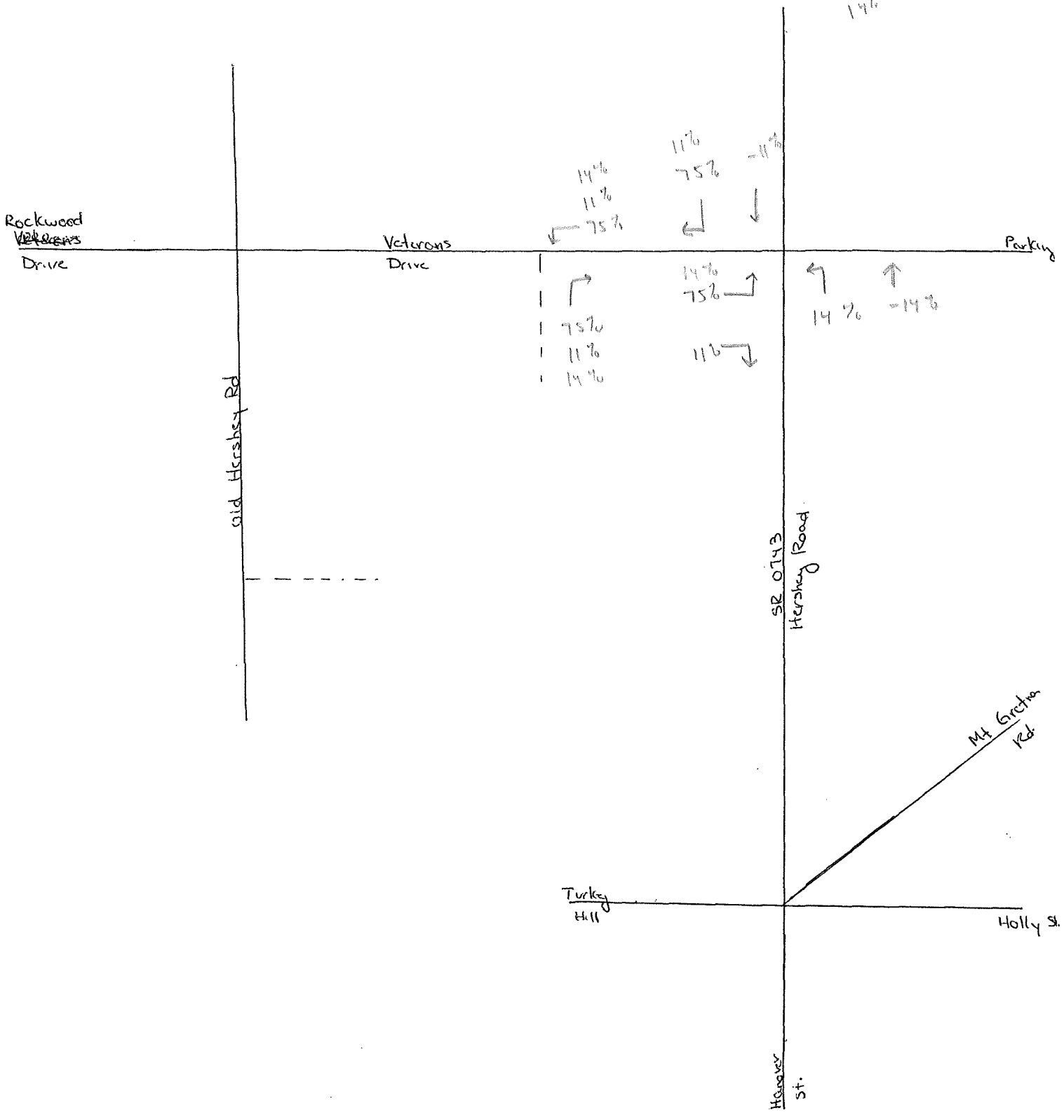
PM PASS-BY

75% from 283
14% from N 743
11% from S 743



SAT PASS-BY

75% from SR 283
11% from N on 743
14% from S on 743



EXISTING CONDITIONS (SKETCHES, SIGNAL PLANS)

TE-964 (2-14)

pennsylvania
DEPARTMENT OF TRANSPORTATION
www.dot.state.pa.us

TRAFFIC SIGNAL PERMIT

Permit No. 87-298

Sheet 1 of 2

In accordance with the Vehicle Code, the Secretary of Transportation hereby approves the installation and operation of a traffic signal at the intersection of Hershey Rd. (SR 0743) & Veterans Dr. (T-301)

in the Township of Mt. Joy , County of Lancaster .

This permit is issued to, and accepted by the Township of Mt. Joy

hereinafter known as the Permittee, as follows:

This installation shall be in accordance with the Vehicle Code and the Regulations for traffic signs, signals, and markings of the Department of Transportation, and shall conform to the following requirements and those contained on the attached sheets.

Type of Controller

Fully Actuated

Type of Signal Mounting

Post Mounted & Overhead

Hours of Operation as "Stop" and "Go"

Continuously

Hours of Operation as "FLASHING"

Equipped for Emergency Flashing

Controller Operation

Controller to provide the phasing, timing, and signal display indicated on the attached diagram. Preemption for emergency vehicles to provide the operation indicated on the attached diagram. Controller to be interconnected with adjacent controllers along Hershey Rd. (SR 0743) to provide progressive movement of traffic. Supervised by master controller located at Hershey Rd. (SR 0743) & Mt. Gretna Rd./Holly St.

All work performed by the Permittee in the erection of the traffic signal shall be under and subject to the direction of the Secretary of Transportation or his authorized representatives. The said Permittee shall use due diligence in the execution of the work authorized under this permit and shall not obstruct or endanger travel along the said road. All operations must be conducted so as to permit safe and reasonable free travel at all times over the road within the limits of the work herein permitted.

The Permittee covenants and agrees to fully indemnify and save harmless the Department of Transportation and assume all liability for damages or injury, occurring to any person, persons or property through or in consequence of any act or omission of anyone working on the construction, or from faulty maintenance or operation of such traffic signal.

The Secretary of Transportation, by law, reserves the right to revoke and annul this permit if the Permittee shall at any time willfully or negligently fail to comply with the conditions contained in this permit, or, upon changes in traffic conditions, fail to make any changes in the construction or operation of this signal, or to remove it, when so ordered by the Secretary of Transportation; of if this installation is not in operation within twenty-four (24) months of the receipt of this permit. The Permittee shall maintain the signal in a safe condition at all times. The Permittee shall not make any change in the construction or operation of this traffic signal without prior written approval of the Secretary of Transportation.

This permit cancels and supersedes all previous permits issued for this location upon completion of the installation specified herein.

INITIAL DATE March 24, 2015 APPROVED Leslie S. Richards

REVISION DATE May 27, 2016 BY _____

(District Executive)

T-300

PERMIT NUMBER: 87-298 SHEET 2 OF 2

DATE ISSUED: 03-24-15 DATE REVISED: 5-27-16

MOVEMENT, SEQUENCE, AND TIMING DIAGRAM

PHASE	2+6			4+8			PRE-EMP 2				PRE-EMP 6				PRE-EMP 4				EMERGENCY FLASHING
SIGNAL \ INTERVAL	1	2	3	1	2	3	SELECTIVE CLEARANCES	1	2	3	SELECTIVE CLEARANCES	1	2	3	SELECTIVE CLEARANCES	1	2	3	
1,2	G	Y	R	R	R	R		G	Y①	R①		R	R	R		R	R	R	Y
3,4	G	Y	R	R	R	R		R	R	R		G	Y①	R①		R	R	R	Y
5,6,9	R	R	R	G	Y	R		R	R	R		R	R	R		G	Y	R	R
7,8	R	R	R	G	Y	R		R	R	R		R	R	R		R	R	R	R
FAIL-SAFE LAMP A							OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
FAIL-SAFE LAMP B							OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	
FAIL-SAFE LAMP C							OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	

FIXED		4	2		3	2		▲	4	2		▲	4	2		▲	3	2	
MINIMUM	13			3															
PASSAGE	2			3															
MAXIMUM 1	60			20															
MEMORY	MIN			NL															

▲ FOR DURATION OF PRE-EMPTION

① G IF FOLLOWED BY 2+6

REFER TO SYSTEM PERMIT I-0026 FOR SYSTEM TIMINGS.

DETECTOR NOTES

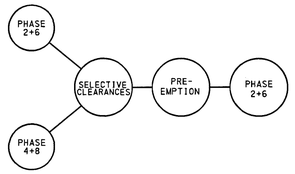
DETECTION ZONE 4 CALLS AND EXTENDS PHASE 4 - PRESENCE (10 SEC. DELAY)
DETECTION ZONE 7 CALLS AND EXTENDS PHASE 4 - PRESENCE
DETECTION ZONE 8 CALLS AND EXTENDS PHASE 8 - PRESENCE (5 SEC. DELAY)

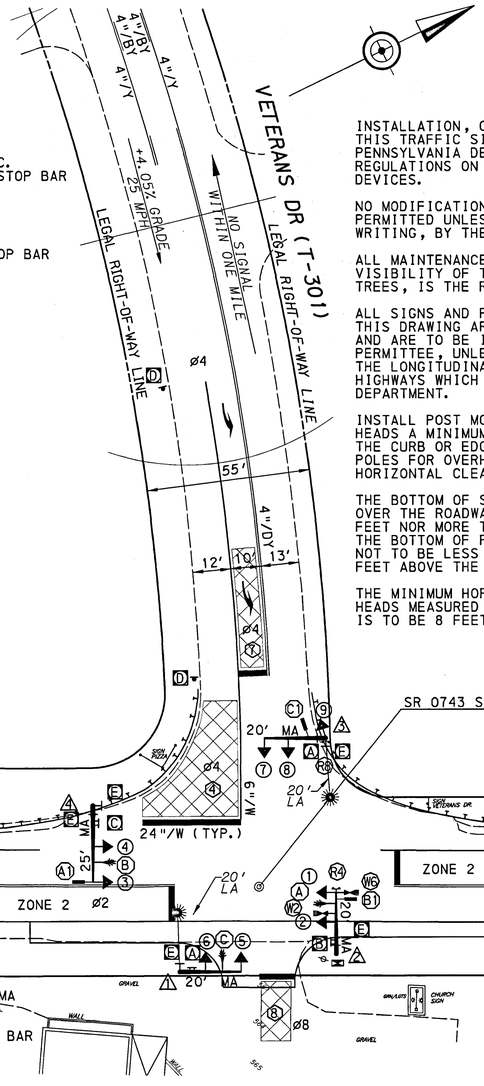
ADVANCE DILEMMA ZONE NOTES (ZONE 1):

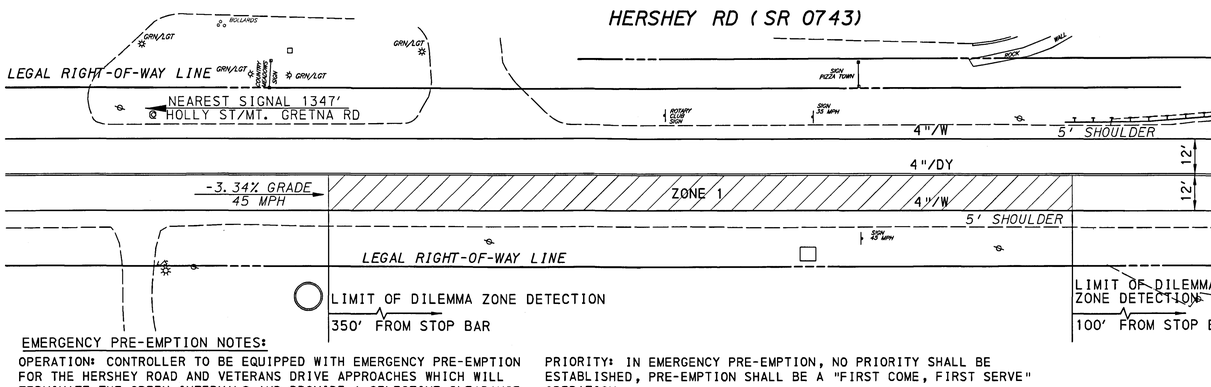
ESTIMATED TIME OF ARRIVAL: MIN 2.5 - MAX 5.5 SEC.
RANGE OF DETECTION: MIN 100 - MAX 350 FT. FROM STOP BAR
MINIMUM SPEED BOUNDARY 25 MPH
ZONE MAY BE ADJUSTED IN FIELD.

DENSITY ZONE NOTES (ZONE 2):

RANGE OF DETECTION: MIN 0 - MAX 100 FT. FROM STOP BAR
MINIMUM SPEED BOUNDARY 1 MPH
ZONE MAY BE ADJUSTED IN FIELD.







EMERGENCY PRE-EMPTION NOTES:

OPERATION: CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE HERSHEY ROAD AND VETERANS DRIVE APPROACHES WHICH WILL TERMINATE THE GREEN INTERVALS AND PROVIDE A SELECTIVE CLEARANCE (YELLOW & ALL RED) WHEN ACTIVATED BY EMERGENCY TRANSMISSION.

CLEARANCE: IF PRE-EMPTION OCCURS DURING A PHASE CLEARANCE INTERVAL, THAT INTERVAL WILL CONTINUE TO TIME OUT FOLLOWED BY PRE-EMPTED PHASE.

GREEN PHASE: IF PRE-EMPTION OCCURS DURING GREEN PHASE THE CONTROLLER WILL REMAIN IN THAT PHASE FOR DURATION OF PRE-EMPTION.

FLASHING: IF PRE-EMPTION OCCURS DURING FLASHING OPERATION SIGNALS REMAIN IN FLASH.

PEDESTRIAN: IF PRE-EMPTION OCCURS DURING PEDESTRIAN PHASE, THE WALK/MAN INDICATIONS WILL TERMINATE IMMEDIATELY FOLLOWED BY THE PEDESTRIAN CLEARANCE PHASE. IF PREEMPTION OCCURS DURING THE PEDESTRIAN CLEARANCE PHASE "FLASHING HAND" CONTINUES IN ITS ENTIRETY THAN THE PREEMPTIVE PHASE.

PRIORITY: IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVE" OPERATION.

RETURN: UPON COMPLETION OF PRE-EMPTION, OPERATION RESUMES IN PHASE 2+6

FAIL SAFE: FAIL SAFE LIGHT WILL CONSIST OF A WHITE LIGHT FOR EACH APPROACH WHICH WILL FLASH WHEN EMERGENCY TRANSMISSION HAS CONTROL OF PRE-EMPTED APPROACH.

EQUIPMENT LOCATION: LOCATION OF EMERGENCY VEHICLE DETECTORS ARE TO BE FIELD ADJUSTED TO ACHIEVE MAXIMUM OPERATION.

ENCODING: IF THE PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" POSITION ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PREEMPTION.

SIGN TABULATION			
PLAN SYMBOL	SERIES	SIZE	MESSAGE
A	D3-4	78"x16"	STREET SIGN "Hershey Rd"
B	D3-4	96"X16"	STREET SIGN "← Veterans Dr"
C	D3-4	96"X16"	STREET SIGN "Veterans Dr →"
D	R3-8A(L-SR)	30"X30"	LANE USE CONTROL SIGN
E	R9-3A	18"X18"	NO PEDESTRIAN CROSSING SIGN

12" LENS

R
Y
G

1,2,3,4
5,6,7,8,9

SIGNALS 1 THROUGH 9 TO HAVE BACKPLATES.

ALL VEHICULAR SIGNAL HEADS SHALL HAVE RED, YELLOW, AND GREEN LEDS.

0 25 50 FEET

GENERAL NOTES

INSTALLATION, OPERATION, AND MAINTENANCE OF THIS TRAFFIC SIGNAL TO BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS ON OFFICIAL TRAFFIC CONTROL DEVICES.

NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE DEPARTMENT.

ALL MAINTENANCE NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS, INCLUDING TRIMMING TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.

ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND ARE TO BE INSTALLED AND MAINTAINED BY THE PERMITTEE, UNLESS OTHERWISE INDICATED. EXCEPT THE LONGITUDINAL PAVEMENT MARKINGS ON STATE HIGHWAYS WHICH WILL BE MAINTAINED BY THE DEPARTMENT.

INSTALL POST MOUNTED SIGNALS WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF THE CURB OR EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS WILL HAVE A MINIMUM HORIZONTAL CLEARANCE OF 2 FEET.

THE BOTTOM OF SIGNAL HEADS AND SIGNS ERECTED OVER THE ROADWAY ARE NOT TO BE LESS THAN 15 FEET NOR MORE THAN 19 FEET ABOVE THE ROADWAY. THE BOTTOM OF POST MOUNTED SIGNAL HEADS ARE NOT TO BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK OR PAVEMENT GRADE.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL HEADS MEASURED AT RIGHT ANGLES TO THE APPROACH IS TO BE 8 FEET.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR EMBANKMENT REMOVAL, CURBING AND/OR SIDEWALK, DRAINAGE STRUCTURES, CHANGES IN HIGHWAY GEOMETRY, PAVEMENT WIDENING, OR INSTALLATION OF ADDITIONAL LANES.

CONDUIT INSTALLED IN BITUMINOUS ROADWAYS LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-8800 SERIES.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST AMENDMENT TO ACT 187, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING HANDBOOK.

PERMITTEE IS RESPONSIBLE FOR OBTAINING APPROVAL FOR INSTALLATION OF TRAFFIC SIGNAL DEVICES LOCATED OUTSIDE HIGHWAY RIGHT-OF-WAY.

TRAFFIC SIGNALS INSTALLED USING LIQUID FUELS TAX FUNDS MUST CONFORM TO DEPARTMENT SPECIFICATIONS AS SET FORTH IN CURRENT PUBLICATION 408, SUPPLEMENTS AND STANDARD DRAWINGS.

LEGEND

- CONTROLLER CABINET
- POLE NUMBER
- SIGNAL HEAD/ IDENTIFYING NUMBER
- SIGN/ IDENTIFYING LETTER
- EMERGENCY PRE-EMPTION DETECTOR
- EMERGENCY PRE-EMPTION FLASHING BEACON
- RADAR STOP BAR DETECTOR
- PRESENCE DETECTION ZONE
- 4"/DY 4" WIDTH / DOUBLE YELLOW LINE
- 4"/Y 4" WIDTH / SOLID YELLOW LINE
- 4"/W 4" WIDTH / SOLID WHITE LINE
- 6"/W 6" WIDTH / SOLID WHITE LINE
- 24"/W 24" WIDTH / SOLID WHITE LINE
- Ø4 PHASE NUMBER
- UTILITY POLE
- LUMINAIRE
- GUIDE RAIL
- ADVANCE DILEMMA/DENSITY ZONE DETECTOR
- ZONE 1 DETECTION ZONE

COUNTY: LANCASTER

MUNICIPALITY: MOUNT JOY TOWNSHIP

INTERSECTION: HERSHEY RD (SR 0743) & VETERANS DR (T-301)

REVIEWED:
Patricia A. Bailey, Secretary 5/23/2016
MUNICIPAL OFFICIAL DATE

RECOMMENDED:
Jason C. Bentz 05/27/2016
DIST TRAFFIC ENGR DATE

G:\Road Projects\Veterans Dr\CAD\Signal as-built\Bpermit-Alt C.dgn
4/22/2016 5:45:19 PM Steve

MOVEMENT, SEQUENCE, AND TIMING DIAGRAM

PHASE	1+6				2+6				3				4				EMERGENCY FLASHING
INTERVAL / SIGNAL	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
19	~~G~~	~~Y~~	R	R	R	R	R	R	R	R	R	R	R	R	R	R	OFF
1-2	G	Y②	R②	R②	G	Y	R	R	R	R	R	R	R	R	R	R	Y
3-4	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	Y
5-6	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R
7-8-9-10	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R
11-12	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R
13-14	H	H	H	H	H	H	H	H	H	H	H	H	M	FH	H	H	OFF
15-16	H	H	H	H	H	H	H	H	M	FH	H	H	H	H	H	H	OFF
17-18	M	FH	H	H	M	FH	H	H	H	H	H	H	H	H	H	H	OFF

FIXED		3.7	2.8		3.7	2.8		3.6	2.4		3.0	3.3
MINIMUM	3			10			3			3		
SEC / ACT	-			3			-			-		
MAXIMUM INITAL	-			28			-			-		
PASSAGE	3			7			3			3		
TBR	-			**28**			-			-		
TTR	-			**14**			-			-		
MINIMUM GAP	-			3			-			-		
MAXIMUM 1	25			40			24			30		
MAXIMUM 2	25			45			30			30		
PEDESTRIAN ①	③			7 | 14			7 | 10			7 | 22		
MEMORY	NON-LOCK			MIN-RECALL			NON-LOCK			NON-LOCK		

OPERATION NOTES

① UPON PEDESTRIAN ACTUATION ONLY
② G IF FOLLOWED BY 2+6
③ TIMING WILL BE SHOWN ON 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6
MAX II: 7-9 AM AND 3-6 PM MONDAY THROUGH FRIDAY
MAX I: TO OPERATE AT ALL OTHER TIMES

DETECTOR NOTES:

DETECTION ZONES 1A AND 1B CALL AND EXTEND PHASE 1 - PRESENCE
DETECTION ZONE 2 CALLS AND EXTENDS PHASE 2 - PRESENCE
DETECTION ZONE 3 CALLS AND EXTENDS PHASE 3 - PRESENCE
DETECTION ZONE 4 CALLS AND EXTENDS PHASE 4 - PRESENCE
DETECTION ZONE 6 CALLS AND EXTENDS PHASE 6 - PRESENCE
DETECTION ZONE 8 CALLS AND EXTENDS PHASE 4 - PRESENCE

T-132

PERMIT NUMBER: 87-104 SHEET 2 OF 2

DATE ISSUED: 8-15-95 DATE REVISED: 3-1-12

GENERAL NOTES

INSTALLATION, OPERATION, AND MAINTENANCE OF THIS TRAFFIC SIGNAL TO BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS ON OFFICIAL TRAFFIC CONTROL DEVICES.

NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE DEPARTMENT.

ALL MAINTENANCE NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS, INCLUDING TRIMMING TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.

ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND ARE TO BE INSTALLED AND MAINTAINED BY THE PERMITTEE, UNLESS OTHERWISE INDICATED. EXCEPT THE LONGITUDINAL PAVEMENT MARKINGS ON STATE HIGHWAYS WHICH WILL BE MAINTAINED BY THE DEPARTMENT.

INSTALL POST MOUNTED SIGNALS WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF THE CURB OR EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS WILL HAVE A MINIMUM HORIZONTAL CLEARANCE OF 2 FEET.

THE BOTTOM OF SIGNAL HEADS AND SIGNS ERECTED OVER THE ROADWAY ARE NOT TO BE LESS THAN 15 FEET NOR MORE THAN 19 FEET ABOVE THE ROADWAY. THE BOTTOM OF POST MOUNTED SIGNAL HEADS ARE NOT TO BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK OR PAVEMENT GRADE.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL HEADS MEASURED AT RIGHT ANGLES TO THE APPROACH IS TO BE 8 FEET.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR EMBANKMENT REMOVAL, CURBING AND/OR SIDEWALK, DRAINAGE STRUCTURES, CHANGES IN HIGHWAY GEOMETRY, PAVEMENT WIDENING, OR INSTALLATION OF ADDITIONAL LANES.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

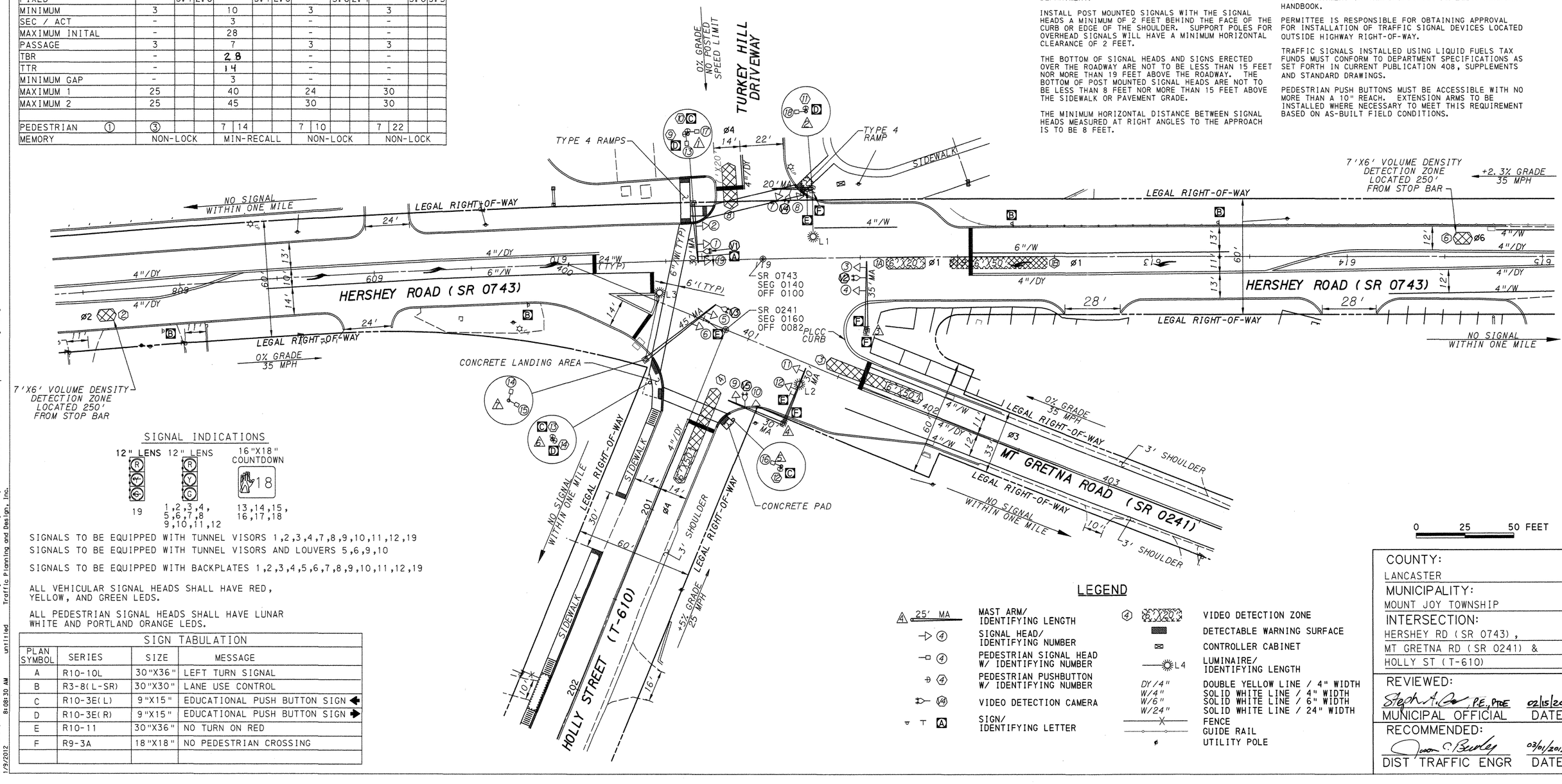
THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF ACT 287 OF 1974 AMENDED BY ACT 121 OF 2008, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES.

PAVEMENT MARKINGS WILL BE PLACED IN ACCORDANCE WITH THE DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING HANDBOOK.

PERMITTEE IS RESPONSIBLE FOR OBTAINING APPROVAL FOR INSTALLATION OF TRAFFIC SIGNAL DEVICES LOCATED OUTSIDE HIGHWAY RIGHT-OF-WAY.

TRAFFIC SIGNALS INSTALLED USING LIQUID FUELS TAX FUNDS MUST CONFORM TO DEPARTMENT SPECIFICATIONS AS SET FORTH IN CURRENT PUBLICATION 408, SUPPLEMENTS AND STANDARD DRAWINGS.

PEDESTRIAN PUSH BUTTONS MUST BE ACCESSIBLE WITH NO MORE THAN A 10" REACH. EXTENSION ARMS TO BE INSTALLED WHERE NECESSARY TO MEET THIS REQUIREMENT BASED ON AS-BUILT FIELD CONDITIONS.



SIGNAL INDICATIONS

12" LENS	12" LENS	16"X18" COUNTDOWN
19	1,2,3,4, 5,6,7,8 9,10,11,12	13,14,15, 16,17,18

SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS 1,2,3,4,7,8,9,10,11,12,19
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS AND LOUVERS 5,6,9,10

SIGNALS TO BE EQUIPPED WITH BACKPLATES 1,2,3,4,5,6,7,8,9,10,11,12,19

ALL VEHICULAR SIGNAL HEADS SHALL HAVE RED, YELLOW, AND GREEN LEDS.

ALL PEDESTRIAN SIGNAL HEADS SHALL HAVE LUNAR WHITE AND PORTLAND ORANGE LEDS.

SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	MESSAGE
A	R10-10L	30"X36"	LEFT TURN SIGNAL
B	R3-8(L-SR)	30"X30"	LANE USE CONTROL
C	R10-3E(L)	9"X15"	EDUCATIONAL PUSH BUTTON SIGN ←
D	R10-3E(R)	9"X15"	EDUCATIONAL PUSH BUTTON SIGN →
E	R10-11	30"X36"	NO TURN ON RED
F	R9-3A	18"X18"	NO PEDESTRIAN CROSSING

LEGEND

- 25' MA — MAST ARM/ IDENTIFYING LENGTH
- ④ — SIGNAL HEAD/ IDENTIFYING NUMBER
- ④ — PEDESTRIAN SIGNAL HEAD W/ IDENTIFYING NUMBER
- ④ — PEDESTRIAN PUSHBUTTON W/ IDENTIFYING NUMBER
- ⑭ — VIDEO DETECTION CAMERA
- A — SIGN/ IDENTIFYING LETTER
- ④ 6'X20' — VIDEO DETECTION ZONE
- DETECTABLE WARNING SURFACE
- CONTROLLER CABINET
- L4 — LUMINAIRE/ IDENTIFYING LENGTH
- DY/4" — DOUBLE YELLOW LINE / 4" WIDTH
- W/4" — SOLID WHITE LINE / 4" WIDTH
- W/6" — SOLID WHITE LINE / 6" WIDTH
- W/24" — SOLID WHITE LINE / 24" WIDTH
- FENCE
- GUIDE RAIL
- UTILITY POLE

COUNTY:
LANCASTER

MUNICIPALITY:
MOUNT JOY TOWNSHIP

INTERSECTION:
HERSHEY RD (SR 0743),
MT GRETNA RD (SR 0241) &
HOLLY ST (T-610)

REVIEWED:
Steph A. Cox, P.E., PTOE — 02/15/2012
MUNICIPAL OFFICIAL — DATE

RECOMMENDED:
Jason C. Burkey — 03/01/2012
DIST TRAFFIC ENGR — DATE

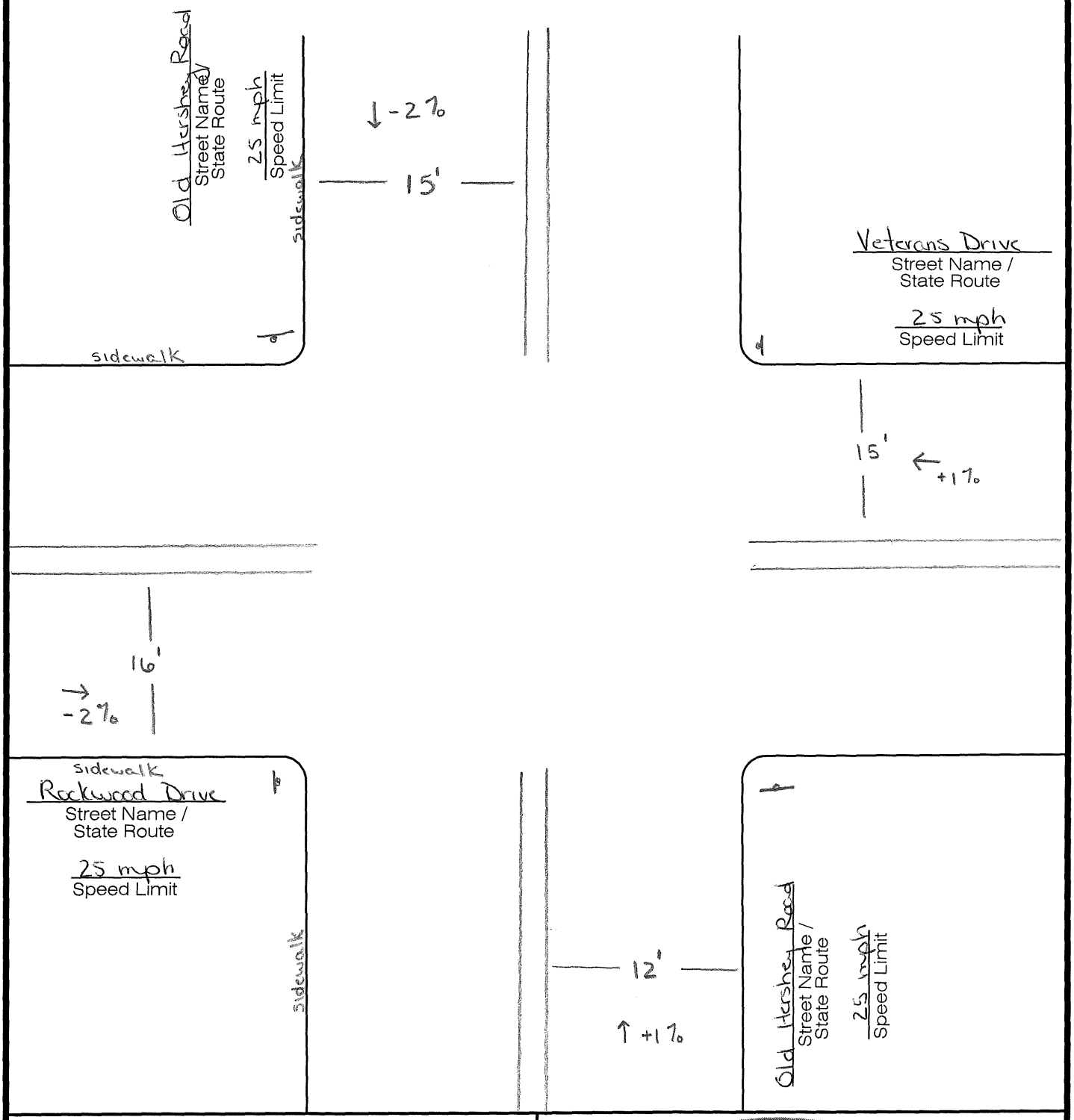
G:\Traffic Signal Permits\Intersections\T-132 Hershey Rd-Mt Grenna-Holly-Turkey Hill\CADD\2012-01 As-built\8-permit Hershey Rd.dgn
1/9/2012 8:08:30 AM unified
Traffic Planning and Design, Inc.

SITE INVENTORY - FIELD SHEET

Intersection: Old Hershey Road / Veterans Drive - Rockwood Drive

Project Name: Proposed Sheetz - Elizabethtown Municipality: Mt. Joy Township

Project Number: 228.032.24 Recorder(s): CES Date: 8/21/24



1. Identify lane configuration and lane widths
2. Note shoulder widths / type and / or curb
3. Note any medians, islands, or channelization
4. Note grade of approaches
5. Note sight distance and restrictions
6. Identify segment / offset if state road
7. Note surrounding land uses
8. Note signs, traffic control, pavement markings, bus stops, and parking locations
9. Take pictures in ALL four directions

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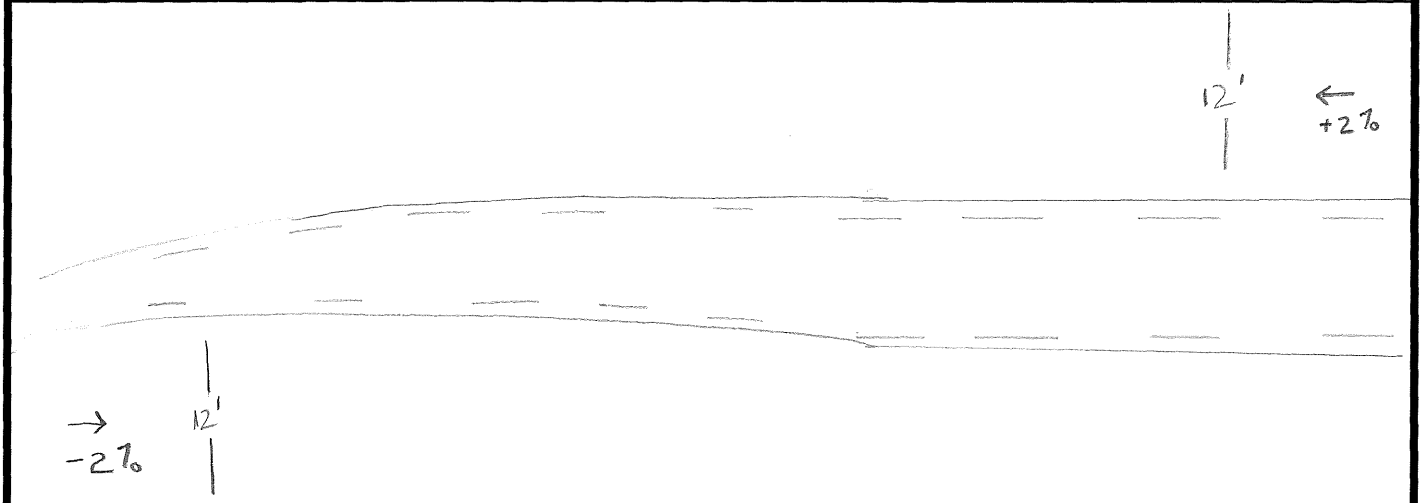
TRANSPORTATION RESOURCE GROUP, INC.

SITE INVENTORY - FIELD SHEET

Intersection: Veterans Drive / Proposed Driveway

Project Name: Proposed Sheetz - Elizabethtown Municipality: Mt. Joy Township

Project Number: 228.032.24 Recorder(s): CES Date: 8/21/24



Veterans Drive
Street Name / State Route

25 mph
Speed Limit

42'

-3%

Proposed Driveway
Street Name / State Route

-NA-
Speed Limit

1. Identify lane configuration and lane widths
2. Note shoulder widths / type and / or curb
3. Note any medians, islands, or channelization
4. Note grade of approaches
5. Note sight distance and restrictions
6. Identify segment / offset if state road
7. Note surrounding land uses
8. Note signs, traffic control, pavement markings, bus stops, and parking locations
9. Take pictures in ALL four directions

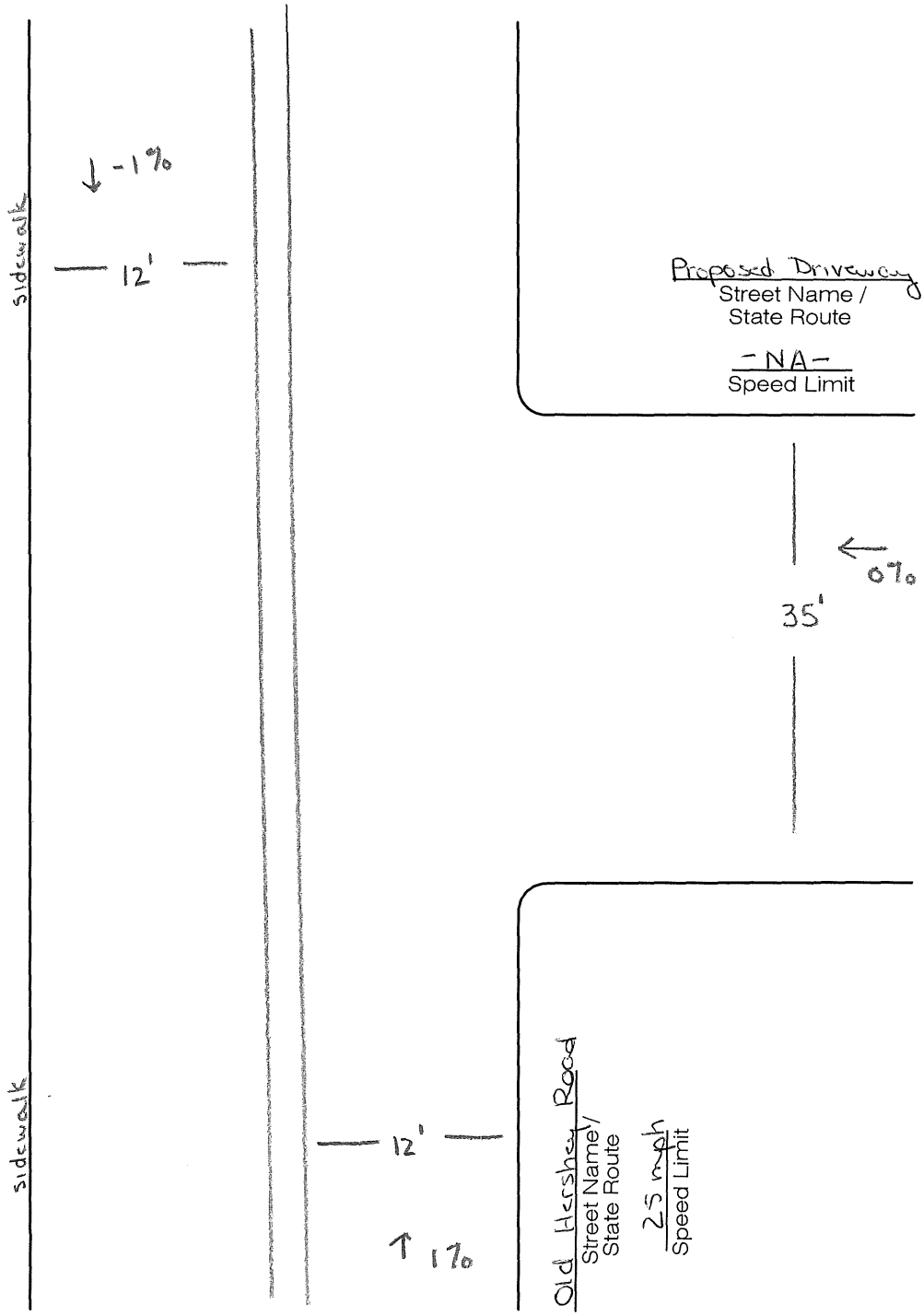
Driven by Success
TRG
TRANSPORTATION RESOURCE GROUP, INC.

SITE INVENTORY - FIELD SHEET

Intersection: Old Hershey Road / Proposed Driveway

Project Name: Proposed Sheetz - Elizabethtown Municipality: Mt. Joy Township

Project Number: 228.032.24 Recorder(s): CES Date: 8/21/24



1. Identify lane configuration and lane widths	6. Identify segment / offset if state road
2. Note shoulder widths / type and / or curb	7. Note surrounding land uses
3. Note any medians, islands, or channelization	8. Note signs, traffic control, pavement markings, bus stops, and parking locations
4. Note grade of approaches	9. Take pictures in ALL four directions
5. Note sight distance and restrictions	

Driven by Success
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TURNING MOVEMENT COUNTS/24-HOUR VOLUMES

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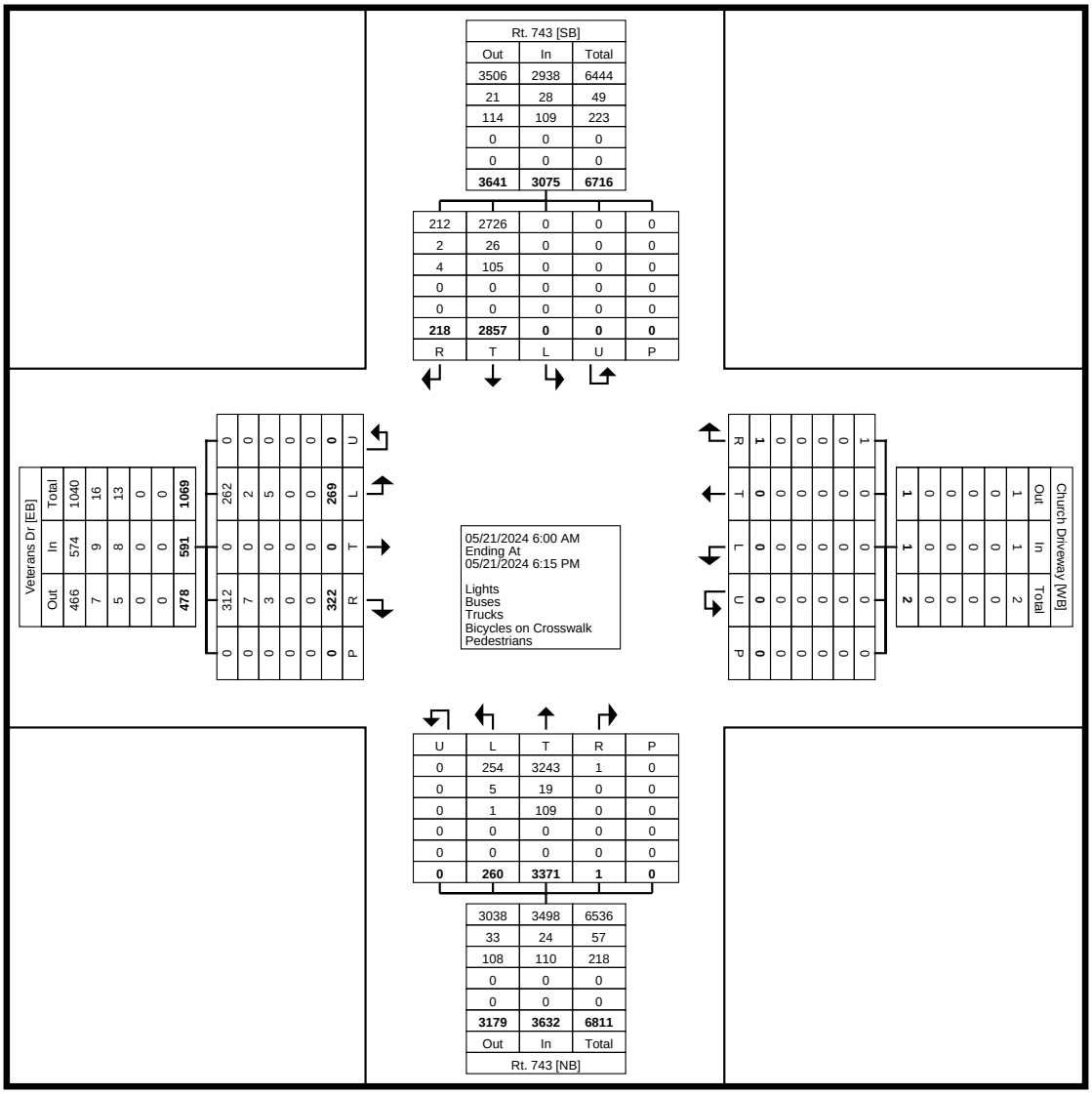
Lancaster County, PA
Route 743 & Veterans Dr
Tuesday, May 21, 2024
Location: 40.168461, -76.605914

Count Name: Rt. 743 & Veterans Dr
Site Code:
Start Date: 05/21/2024
Page No: 1

Turning Movement Data

Start Time	Veterans Dr Eastbound							Church Driveway Westbound							Rt. 743 Northbound							Rt. 743 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
6:00 AM	6	0	1	6	0	0	13	0	0	0	0	0	0	0	1	120	0	0	0	0	121	0	28	0	0	0	0	28	162
6:15 AM	18	0	3	6	0	0	27	0	0	0	0	0	0	0	7	147	0	0	0	0	154	0	65	2	2	0	0	69	250
6:30 AM	22	0	2	3	0	0	27	0	0	0	0	0	0	0	1	172	0	0	0	0	173	0	60	1	0	0	0	61	261
6:45 AM	16	0	1	7	0	0	24	0	0	0	0	0	0	0	3	145	0	0	0	0	148	0	74	2	0	0	0	76	248
Hourly Total	62	0	7	22	0	0	91	0	0	0	0	0	0	0	12	584	0	0	0	0	596	0	227	5	2	0	0	234	921
7:00 AM	14	0	8	12	0	0	34	0	0	0	0	0	0	0	3	178	0	0	0	0	181	0	83	3	0	0	0	86	301
7:15 AM	20	0	10	17	0	0	47	0	0	0	0	0	0	0	11	185	0	0	0	0	196	0	90	3	1	0	0	94	337
7:30 AM	13	0	7	10	0	0	30	0	0	1	0	0	0	1	7	209	0	1	0	0	217	0	132	3	0	0	0	135	383
7:45 AM	13	0	6	4	0	0	23	0	0	0	0	0	0	0	7	167	0	0	0	0	174	0	115	4	2	0	0	121	318
Hourly Total	60	0	31	43	0	0	134	0	0	1	0	0	0	1	28	739	0	1	0	0	768	0	420	13	3	0	0	436	1339
8:00 AM	11	0	2	3	0	0	16	0	0	0	0	0	0	0	6	142	0	0	0	0	148	0	91	1	0	0	0	92	256
8:15 AM	12	0	5	5	0	0	22	0	0	0	0	0	0	0	5	105	0	0	0	0	110	0	76	3	0	0	0	79	211
8:30 AM	13	0	2	6	0	0	21	0	0	0	0	0	0	0	5	135	0	0	0	0	140	0	77	4	1	0	0	82	243
8:45 AM	3	0	6	2	0	0	11	0	0	0	0	0	0	0	8	109	0	0	0	0	117	0	89	2	0	0	0	91	219
Hourly Total	39	0	15	16	0	0	70	0	0	0	0	0	0	0	24	491	0	0	0	0	515	0	333	10	1	0	0	344	929
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	8	0	3	9	0	0	20	0	0	0	0	0	0	0	11	120	0	0	0	0	131	0	122	10	0	0	0	132	283
3:15 PM	9	0	7	7	0	0	23	0	0	0	0	0	0	0	12	139	0	0	0	0	151	0	168	14	1	0	0	183	357
3:30 PM	9	0	4	5	0	0	18	0	0	0	0	0	0	0	16	137	0	0	0	0	153	0	169	8	0	0	0	177	348
3:45 PM	8	0	7	4	0	0	19	0	0	0	0	0	0	0	11	134	0	0	0	0	145	0	146	17	1	0	0	164	328
Hourly Total	34	0	21	25	0	0	80	0	0	0	0	0	0	0	50	530	0	0	0	0	580	0	605	49	2	0	0	656	1316
4:00 PM	6	0	9	5	0	0	20	0	0	0	0	0	0	0	21	146	0	0	0	0	167	0	170	19	0	0	0	189	376
4:15 PM	7	0	9	9	0	0	25	0	0	0	0	0	0	0	19	150	0	0	0	0	169	0	163	12	1	0	0	176	370
4:30 PM	17	0	16	3	0	0	36	0	0	0	0	0	0	0	15	138	0	0	0	0	153	0	167	12	0	0	0	179	368
4:45 PM	8	0	14	6	0	0	28	0	0	0	0	0	0	0	24	129	0	0	0	0	153	0	180	14	4	0	0	198	379
Hourly Total	38	0	48	23	0	0	109	0	0	0	0	0	0	0	79	563	0	0	0	0	642	0	680	57	5	0	0	742	1493
5:00 PM	10	0	11	2	0	0	23	0	0	0	0	0	0	0	23	118	0	0	0	0	141	0	157	14	1	0	0	172	336
5:15 PM	10	0	17	7	0	0	34	0	0	0	0	0	0	0	15	122	0	0	0	0	137	0	147	16	2	0	0	165	336
5:30 PM	9	0	11	3	0	0	23	0	0	0	0	0	0	0	14	126	0	0	0	0	140	0	151	24	2	0	0	177	340
5:45 PM	7	0	9	11	0	0	27	0	0	0	0	0	0	0	15	98	0	0	0	0	113	0	137	11	1	0	0	149	289
Hourly Total	36	0	48	23	0	0	107	0	0	0	0	0	0	0	67	464	0	0	0	0	531	0	592	65	6	0	0	663	1301
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	269	0	170	152	0	0	591	0	0	1	0	0	0	1	260	3371	0	1	0	0	3632	0	2857	199	19	0	0	3075	7299
Approach %	45.5	0.0	28.8	25.7	0.0	-	-	0.0	0.0	100.0	0.0	0.0	-	-	7.2	92.8	0.0	0.0	0.0	-	-	0.0	92.9	6.5	0.6	0.0	-	-	-
Total %	3.7	0.0	2.3	2.1	0.0	-	8.1	0.0	0.0	0.0	0.0	0.0	-	0.0	3.6	46.2	0.0	0.0	0.0	-	49.8	0.0	39.1	2.7	0.3	0.0	-	42.1	-
Lights	262	0	162	150	0	-	574	0	0	1	0	0	-	1	254	3243	0	1	0	-	3498	0	2726	193	19	0	-	2938	7011
% Lights	97.4	-	95.3	98.7	-	-	97.1	-	-	100.0	-	-	-	100.0	97.7	96.2	-	100.0	-	-	96.3	-	95.4	97.0	100.0	-	-	95.5	96.1
Buses	2	0	7	0	0	-	9	0	0	0	0	0	-	0	5	19	0	0	0	-	24	0	26	2	0	0	-	28	61
% Buses	0.7	-	4.1	0.0	-	-	1.5	-	-	0.0	-	-	-	0.0	1.9	0.6	-	0.0	-	-	0.7	-	0.9	1.0	0.0	-	-	0.9	0.8
Trucks	5	0	1	2	0	-	8	0	0	0	0	0	-	0	1	109	0	0	0	-	110	0	105	4	0	0	-	109	227
% Trucks	1.9	-	0.6	1.3	-	-	1.4	-	-	0.0	-	-	-	0.0	0.4	3.2	-	0.0	-	-	3.0	-	3.7	2.0	0.0	-	-	3.5	3.1
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



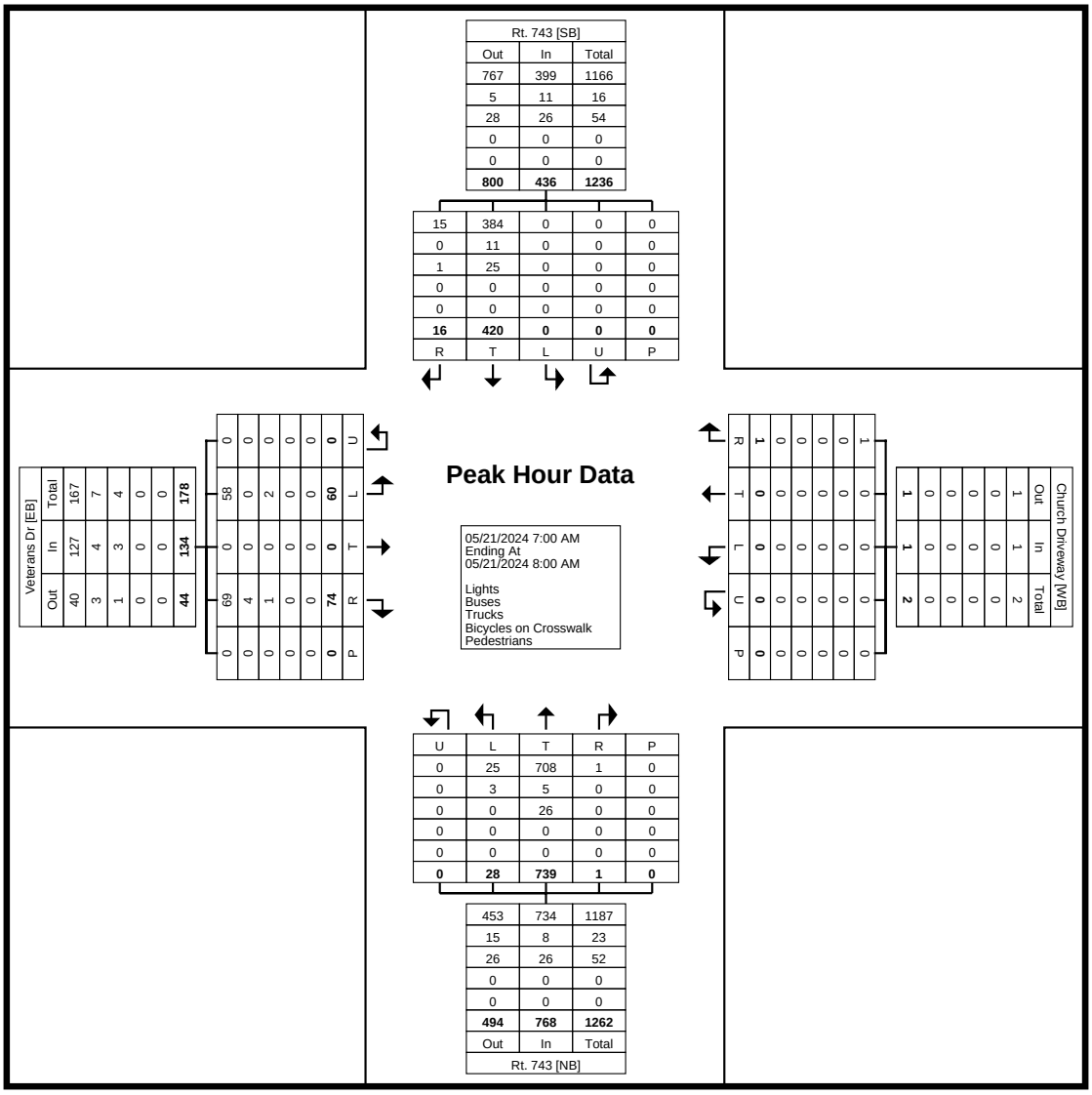
Turning Movement Data Plot

Lancaster County, PA
Route 743 & Veterans Dr
Tuesday, May 21, 2024
Location: 40.168461, -76.605914

Count Name: Rt. 743 & Veterans Dr
Site Code:
Start Date: 05/21/2024

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Veterans Dr Eastbound							Church Driveway Westbound							Rt. 743 Northbound							Rt. 743 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
7:00 AM	14	0	8	12	0	0	34	0	0	0	0	0	0	0	3	178	0	0	0	0	181	0	83	3	0	0	0	86	301
7:15 AM	20	0	10	17	0	0	47	0	0	0	0	0	0	0	11	185	0	0	0	0	196	0	90	3	1	0	0	94	337
7:30 AM	13	0	7	10	0	0	30	0	0	1	0	0	0	1	7	209	0	1	0	0	217	0	132	3	0	0	0	135	383
7:45 AM	13	0	6	4	0	0	23	0	0	0	0	0	0	0	7	167	0	0	0	0	174	0	115	4	2	0	0	121	318
Total	60	0	31	43	0	0	134	0	0	1	0	0	0	1	28	739	0	1	0	0	768	0	420	13	3	0	0	436	1339
Approach %	44.8	0.0	23.1	32.1	0.0	-	-	0.0	0.0	100.0	0.0	0.0	-	-	3.6	96.2	0.0	0.1	0.0	-	-	0.0	96.3	3.0	0.7	0.0	-	-	-
Total %	4.5	0.0	2.3	3.2	0.0	-	10.0	0.0	0.0	0.1	0.0	0.0	-	0.1	2.1	55.2	0.0	0.1	0.0	-	57.4	0.0	31.4	1.0	0.2	0.0	-	32.6	-
PHF	0.750	0.000	0.775	0.632	0.000	-	0.713	0.000	0.000	0.250	0.000	0.000	-	0.250	0.636	0.884	0.000	0.250	0.000	-	0.885	0.000	0.795	0.813	0.375	0.000	-	0.807	0.874
Lights	58	0	27	42	0	-	127	0	0	1	0	0	-	1	25	708	0	1	0	-	734	0	384	12	3	0	-	399	1261
% Lights	96.7	-	87.1	97.7	-	-	94.8	-	-	100.0	-	-	-	100.0	89.3	95.8	-	100.0	-	-	95.6	-	91.4	92.3	100.0	-	-	91.5	94.2
Buses	0	0	4	0	0	-	4	0	0	0	0	0	-	0	3	5	0	0	0	-	8	0	11	0	0	0	-	11	23
% Buses	0.0	-	12.9	0.0	-	-	3.0	-	-	0.0	-	-	-	0.0	10.7	0.7	-	0.0	-	-	1.0	-	2.6	0.0	0.0	-	-	2.5	1.7
Trucks	2	0	0	1	0	-	3	0	0	0	0	0	-	0	0	26	0	0	0	-	26	0	25	1	0	0	-	26	55
% Trucks	3.3	-	0.0	2.3	-	-	2.2	-	-	0.0	-	-	-	0.0	0.0	3.5	-	0.0	-	-	3.4	-	6.0	7.7	0.0	-	-	6.0	4.1
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



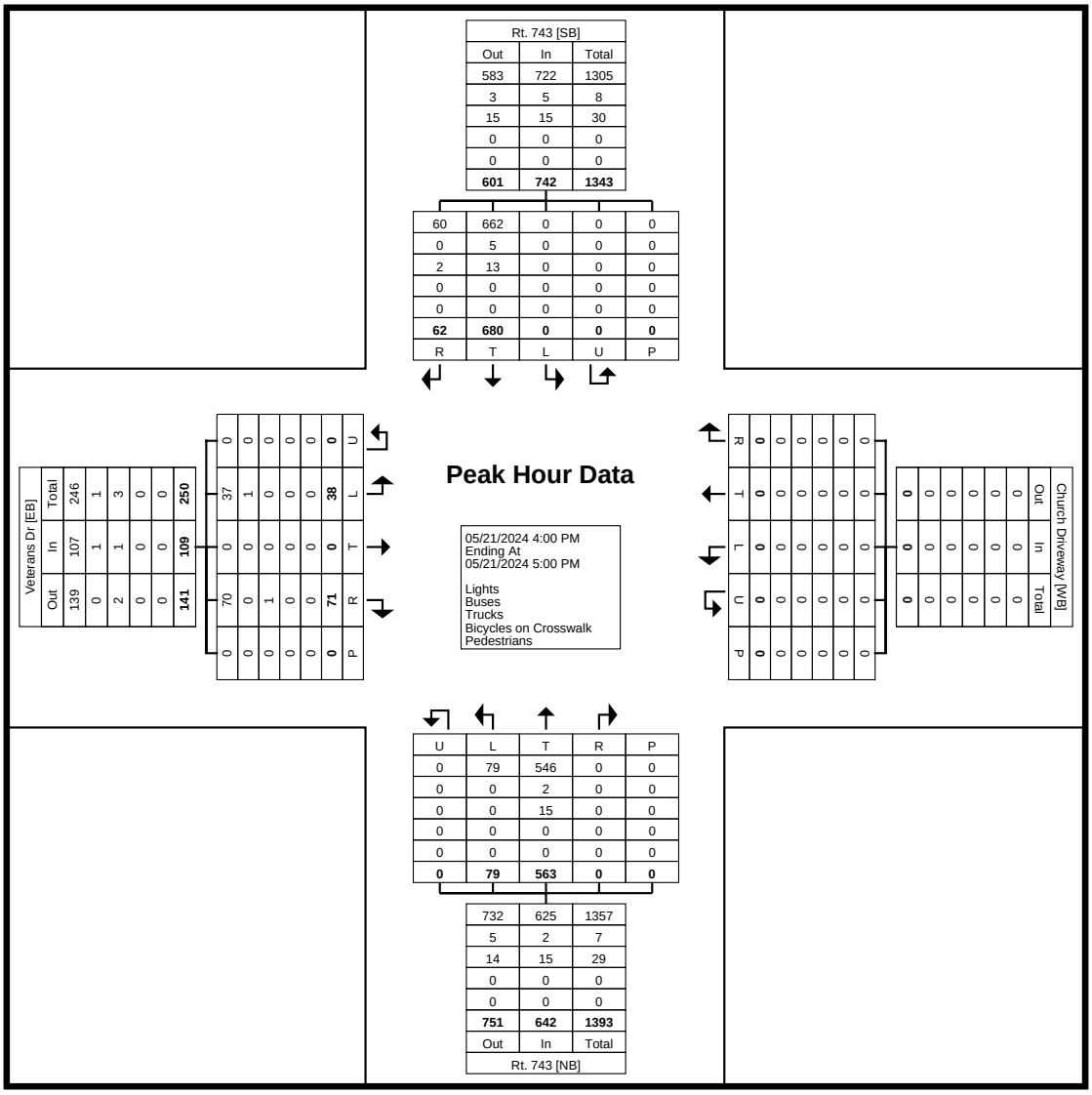
Turning Movement Peak Hour Data Plot (7:00 AM)

Lancaster County, PA
Route 743 & Veterans Dr
Tuesday, May 21, 2024
Location: 40.168461, -76.605914

Count Name: Rt. 743 & Veterans Dr
Site Code:
Start Date: 05/21/2024

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Veterans Dr Eastbound							Church Driveway Westbound							Rt. 743 Northbound							Rt. 743 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
4:00 PM	6	0	9	5	0	0	20	0	0	0	0	0	0	0	21	146	0	0	0	0	167	0	170	19	0	0	0	189	376
4:15 PM	7	0	9	9	0	0	25	0	0	0	0	0	0	0	19	150	0	0	0	0	169	0	163	12	1	0	0	176	370
4:30 PM	17	0	16	3	0	0	36	0	0	0	0	0	0	0	15	138	0	0	0	0	153	0	167	12	0	0	0	179	368
4:45 PM	8	0	14	6	0	0	28	0	0	0	0	0	0	0	24	129	0	0	0	0	153	0	180	14	4	0	0	198	379
Total	38	0	48	23	0	0	109	0	0	0	0	0	0	0	79	563	0	0	0	0	642	0	680	57	5	0	0	742	1493
Approach %	34.9	0.0	44.0	21.1	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	12.3	87.7	0.0	0.0	0.0	-	-	0.0	91.6	7.7	0.7	0.0	-	-	-
Total %	2.5	0.0	3.2	1.5	0.0	-	7.3	0.0	0.0	0.0	0.0	0.0	-	0.0	5.3	37.7	0.0	0.0	0.0	-	43.0	0.0	45.5	3.8	0.3	0.0	-	49.7	-
PHF	0.559	0.000	0.750	0.639	0.000	-	0.757	0.000	0.000	0.000	0.000	0.000	-	0.000	0.823	0.938	0.000	0.000	0.000	-	0.950	0.000	0.944	0.750	0.313	0.000	-	0.937	0.985
Lights	37	0	47	23	0	-	107	0	0	0	0	0	-	0	79	546	0	0	0	-	625	0	662	55	5	0	-	722	1454
% Lights	97.4	-	97.9	100.0	-	-	98.2	-	-	-	-	-	-	-	100.0	97.0	-	-	-	-	97.4	-	97.4	96.5	100.0	-	-	97.3	97.4
Buses	1	0	0	0	0	-	1	0	0	0	0	0	-	0	0	2	0	0	0	-	2	0	5	0	0	0	-	5	8
% Buses	2.6	-	0.0	0.0	-	-	0.9	-	-	-	-	-	-	-	0.0	0.4	-	-	-	-	0.3	-	0.7	0.0	0.0	-	-	0.7	0.5
Trucks	0	0	1	0	0	-	1	0	0	0	0	0	-	0	0	15	0	0	0	-	15	0	13	2	0	0	-	15	31
% Trucks	0.0	-	2.1	0.0	-	-	0.9	-	-	-	-	-	-	-	0.0	2.7	-	-	-	-	2.3	-	1.9	3.5	0.0	-	-	2.0	2.1
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (4:00 PM)

www.TSTData.com
Tri-State Traffic Data, Inc

Coatesville, PA, Pennsylvania, United States 19320
610-466-1469
Serving Transportation Professionals Since 1995

Lancaster County, PA
Route 743 & Veterans Dr
Saturday, June 1, 2024
Location: 40.168461, -76.605914

Count Name: Rt. 743 & Veterans Dr/Church Driveway
Sat
Site Code:
Start Date: 06/01/2024

Turning Movement Data

Start Time	Veterans Dr Eastbound							Church Driveway Westbound							Rt. 743 Northbound							Rt. 743 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
11:00 AM	14	0	7	8	0	0	29	0	0	0	0	0	0	0	10	95	0	0	0	0	105	0	84	6	0	0	0	90	224
11:15 AM	13	0	8	8	0	0	29	0	0	0	0	0	0	0	15	122	0	0	0	0	137	0	86	4	2	0	0	92	258
11:30 AM	7	0	7	9	0	0	23	0	0	0	0	0	1	0	19	121	0	0	0	0	140	0	93	10	2	0	0	105	268
11:45 AM	13	0	3	8	0	0	24	0	0	0	0	0	0	0	12	96	0	0	0	0	108	0	93	4	0	0	0	97	229
Hourly Total	47	0	25	33	0	0	105	0	0	0	0	0	1	0	56	434	0	0	0	0	490	0	356	24	4	0	0	384	979
12:00 PM	8	0	6	7	0	0	21	0	0	1	0	0	0	1	20	86	0	0	0	0	106	1	97	7	0	0	0	105	233
12:15 PM	11	0	6	9	0	0	26	0	0	0	0	0	0	0	15	101	0	0	0	0	116	0	101	3	1	0	0	105	247
12:30 PM	15	0	3	9	0	0	27	0	0	0	0	0	0	0	17	113	0	0	0	0	130	0	80	8	0	0	0	88	245
12:45 PM	4	0	4	12	0	0	20	0	0	0	0	0	0	0	14	92	0	0	0	0	106	0	108	7	1	0	0	116	242
Hourly Total	38	0	19	37	0	0	94	0	0	1	0	0	0	1	66	392	0	0	0	0	458	1	386	25	2	0	0	414	967
1:00 PM	6	0	7	7	0	0	20	0	0	0	0	0	0	0	13	119	0	0	0	0	132	0	91	5	0	0	0	96	248
1:15 PM	6	0	5	8	0	0	19	0	0	0	0	0	0	0	12	108	0	0	0	0	120	0	79	9	0	0	0	88	227
1:30 PM	16	0	6	3	0	0	25	0	0	0	0	0	0	0	14	77	0	0	0	0	91	0	83	10	0	0	0	93	209
1:45 PM	9	0	9	11	0	0	29	0	0	0	0	0	0	0	12	104	0	0	0	0	116	0	99	5	0	0	0	104	249
Hourly Total	37	0	27	29	0	0	93	0	0	0	0	0	0	0	51	408	0	0	0	0	459	0	352	29	0	0	0	381	933
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	122	0	71	99	0	0	292	0	0	1	0	0	1	1	173	1234	0	0	0	0	1407	1	1094	78	6	0	0	1179	2879
Approach %	41.8	0.0	24.3	33.9	0.0	-	-	0.0	0.0	100.0	0.0	0.0	-	-	12.3	87.7	0.0	0.0	0.0	-	-	0.1	92.8	6.6	0.5	0.0	-	-	-
Total %	4.2	0.0	2.5	3.4	0.0	-	10.1	0.0	0.0	0.0	0.0	0.0	-	0.0	6.0	42.9	0.0	0.0	0.0	-	48.9	0.0	38.0	2.7	0.2	0.0	-	41.0	-
Lights	121	0	69	99	0	-	289	0	0	1	0	0	-	1	172	1211	0	0	0	-	1383	1	1078	78	6	0	-	1163	2836
% Lights	99.2	-	97.2	100.0	-	-	99.0	-	-	100.0	-	-	-	100.0	99.4	98.1	-	-	-	-	98.3	100.0	98.5	100.0	100.0	-	-	98.6	98.5
Buses	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	3	0	0	0	-	3	0	2	0	0	0	-	2	5
% Buses	0.0	-	0.0	0.0	-	-	0.0	-	-	0.0	-	-	-	0.0	0.0	0.2	-	-	-	-	0.2	0.0	0.2	0.0	0.0	-	-	0.2	0.2
Trucks	1	0	2	0	0	-	3	0	0	0	0	0	-	0	1	20	0	0	0	-	21	0	14	0	0	0	-	14	38
% Trucks	0.8	-	2.8	0.0	-	-	1.0	-	-	0.0	-	-	-	0.0	0.6	1.6	-	-	-	-	1.5	0.0	1.3	0.0	0.0	-	-	1.2	1.3
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	1	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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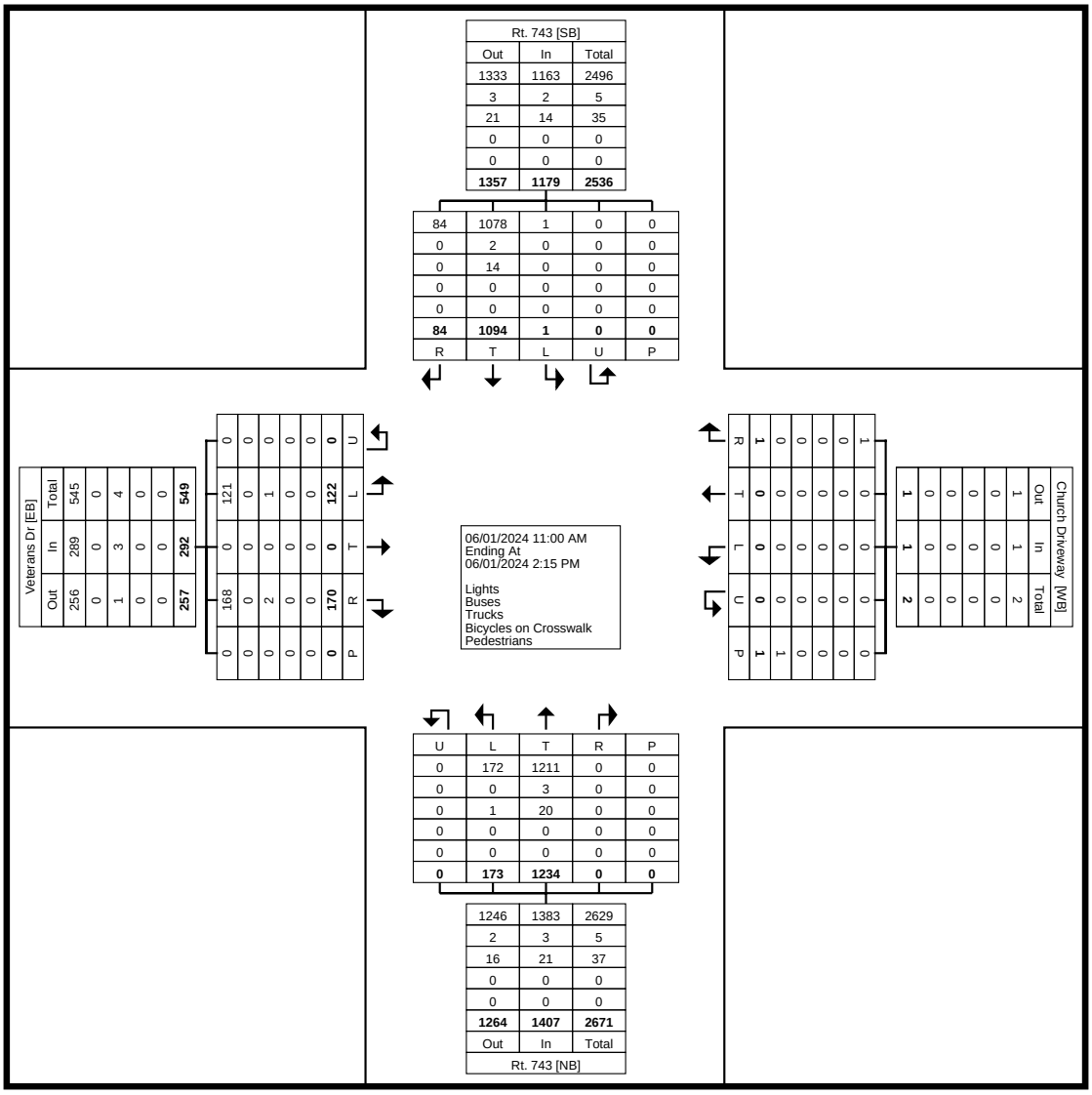


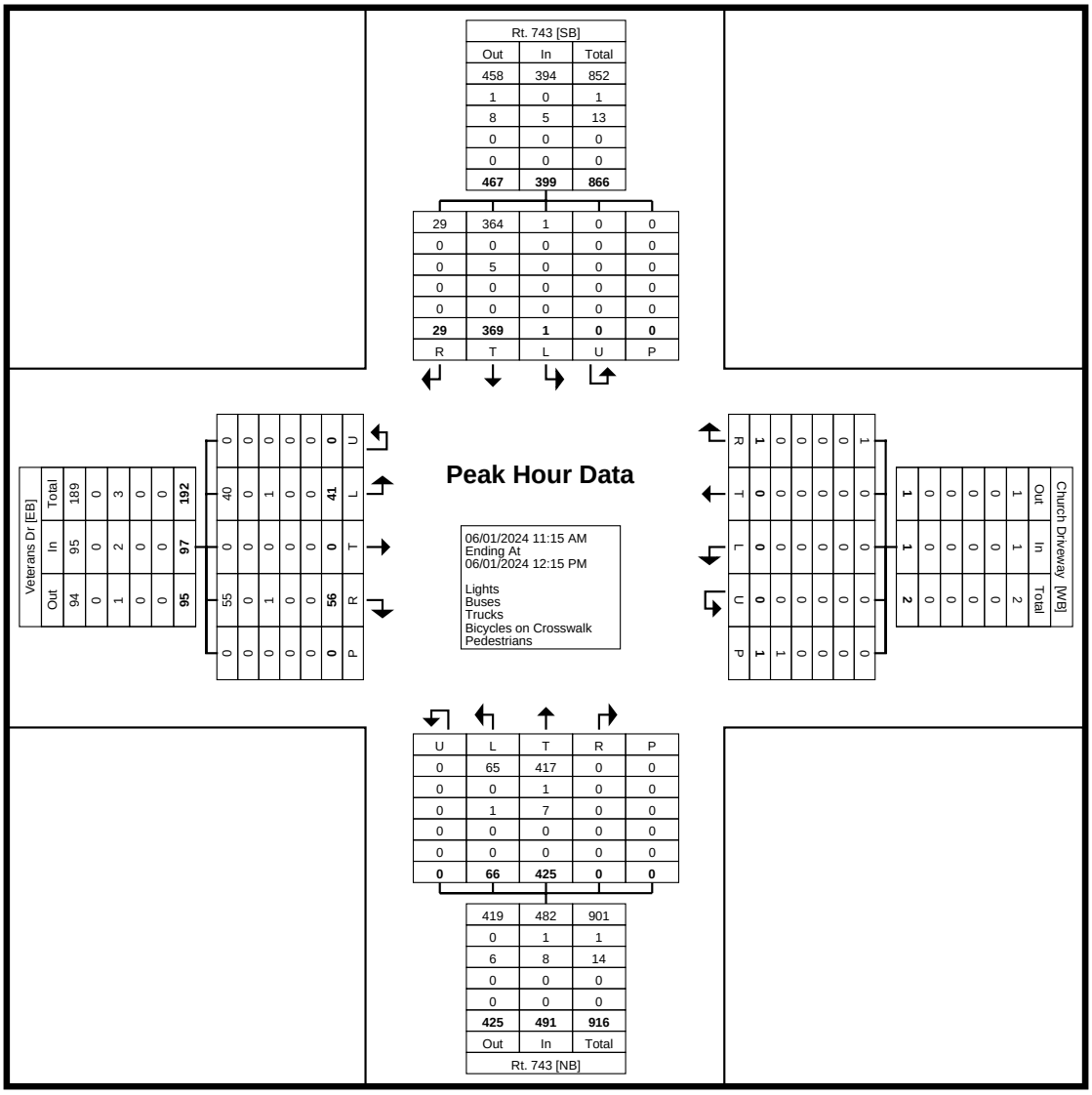
Turning Movement Data Plot

Turning Movement Peak Hour Data (11:15 AM)

Start Time	Veterans Dr Eastbound							Church Driveway Westbound							Rt. 743 Northbound							Rt. 743 Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
11:15 AM	13	0	8	8	0	0	29	0	0	0	0	0	0	0	15	122	0	0	0	0	137	0	86	4	2	0	0	92	258
11:30 AM	7	0	7	9	0	0	23	0	0	0	0	0	1	0	19	121	0	0	0	0	140	0	93	10	2	0	0	105	268
11:45 AM	13	0	3	8	0	0	24	0	0	0	0	0	0	0	12	96	0	0	0	0	108	0	93	4	0	0	0	97	229
12:00 PM	8	0	6	7	0	0	21	0	0	1	0	0	0	1	20	86	0	0	0	0	106	1	97	7	0	0	0	105	233
Total	41	0	24	32	0	0	97	0	0	1	0	0	1	1	66	425	0	0	0	0	491	1	369	25	4	0	0	399	988
Approach %	42.3	0.0	24.7	33.0	0.0	-	-	0.0	0.0	100.0	0.0	0.0	-	-	13.4	86.6	0.0	0.0	0.0	-	-	0.3	92.5	6.3	1.0	0.0	-	-	-
Total %	4.1	0.0	2.4	3.2	0.0	-	9.8	0.0	0.0	0.1	0.0	0.0	-	0.1	6.7	43.0	0.0	0.0	0.0	-	49.7	0.1	37.3	2.5	0.4	0.0	-	40.4	-
PHF	0.788	0.000	0.750	0.889	0.000	-	0.836	0.000	0.000	0.250	0.000	0.000	-	0.250	0.825	0.871	0.000	0.000	0.000	-	0.877	0.250	0.951	0.625	0.500	0.000	-	0.950	0.922
Lights	40	0	23	32	0	-	95	0	0	1	0	0	-	1	65	417	0	0	0	-	482	1	364	25	4	0	-	394	972
% Lights	97.6	-	95.8	100.0	-	-	97.9	-	-	100.0	-	-	-	100.0	98.5	98.1	-	-	-	-	98.2	100.0	98.6	100.0	100.0	-	-	98.7	98.4
Buses	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	1	0	0	0	-	1	0	0	0	0	0	-	0	1
% Buses	0.0	-	0.0	0.0	-	-	0.0	-	-	0.0	-	-	-	0.0	0.0	0.2	-	-	-	-	0.2	0.0	0.0	0.0	0.0	-	-	0.0	0.1
Trucks	1	0	1	0	0	-	2	0	0	0	0	0	-	0	1	7	0	0	0	-	8	0	5	0	0	0	-	5	15
% Trucks	2.4	-	4.2	0.0	-	-	2.1	-	-	0.0	-	-	-	0.0	1.5	1.6	-	-	-	-	1.6	0.0	1.4	0.0	0.0	-	-	1.3	1.5
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	1	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lancaster County, PA
Route 743 & Veterans Dr
Saturday, June 1, 2024
Location: 40.168461, -76.605914

Count Name: Rt. 743 & Veterans Dr/Church Driveway Sat
Site Code:
Start Date: 06/01/2024



Turning Movement Peak Hour Data Plot (11:15 AM)

Lancaster County, PA
Old Hershey Rd & Veterans Dr/Rockwood Dr
Tuesday, May 21, 2024
Location: 40.168667, -76.607913

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Count Name: Old Hershey Rd & Veterans Dr/Rockwood Dr
Site Code:
Start Date: 05/21/2024

Turning Movement Data

Start Time	Rockwood Dr Eastbound						Veterans Dr Westbound						Old Hershey Rd Northbound						Old Hershey Rd Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	0	4	0	0	0	4	0	1	0	0	1	1	0	0	5	0	0	5	5	0	0	0	0	5	15
6:15 AM	1	6	0	0	1	7	4	1	2	0	0	7	1	0	7	0	0	8	12	0	0	0	0	12	34
6:30 AM	0	4	0	0	1	4	0	0	1	0	0	1	0	0	7	0	0	7	17	0	0	0	0	17	29
6:45 AM	0	7	0	0	2	7	3	1	2	0	0	6	0	0	8	0	0	8	12	0	0	0	0	12	33
Hourly Total	1	21	0	0	4	22	7	3	5	0	1	15	1	0	27	0	0	28	46	0	0	0	0	46	111
7:00 AM	1	9	0	0	3	10	3	1	1	0	0	5	0	1	10	0	0	11	15	1	0	0	0	16	42
7:15 AM	0	10	0	0	3	10	5	4	6	0	0	15	0	0	11	0	0	11	23	1	0	1	0	25	61
7:30 AM	0	5	0	0	1	5	1	2	7	0	0	10	0	0	8	0	0	8	13	1	0	0	0	14	37
7:45 AM	0	3	0	0	2	3	5	1	7	0	0	13	0	0	7	0	1	7	12	0	0	0	0	12	35
Hourly Total	1	27	0	0	9	28	14	8	21	0	0	43	0	1	36	0	1	37	63	3	0	1	0	67	175
8:00 AM	1	6	4	0	8	11	2	0	5	0	0	7	2	2	5	0	0	9	6	1	1	0	0	8	35
8:15 AM	0	8	1	0	0	9	1	0	5	0	0	6	0	0	4	0	0	4	6	2	0	0	0	8	27
8:30 AM	0	4	0	0	0	4	3	1	5	0	0	9	0	0	5	0	0	5	14	0	0	0	0	14	32
8:45 AM	0	0	0	0	0	0	1	1	7	0	0	9	0	0	2	0	0	2	6	0	0	0	0	6	17
Hourly Total	1	18	5	0	8	24	7	2	22	0	0	31	2	2	16	0	0	20	32	3	1	0	0	36	111
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	3	0	0	0	3	4	4	12	0	0	20	0	2	4	0	0	6	13	0	0	0	0	13	42
3:15 PM	0	2	0	0	0	2	10	3	12	0	0	25	0	1	5	0	0	6	10	1	1	0	0	12	45
3:30 PM	0	3	0	0	0	3	2	6	12	0	0	20	0	1	2	0	0	3	10	1	0	0	0	11	37
3:45 PM	0	5	0	0	1	5	8	5	12	0	0	25	0	0	3	0	0	3	8	0	0	0	0	8	41
Hourly Total	0	13	0	0	1	13	24	18	48	0	0	90	0	4	14	0	0	18	41	2	1	0	0	44	165
4:00 PM	2	6	2	0	7	10	9	9	22	0	0	40	2	2	5	0	0	9	9	1	1	0	0	11	70
4:15 PM	0	5	0	0	1	5	7	7	13	0	0	27	0	1	6	0	0	7	12	2	1	0	0	15	54
4:30 PM	0	7	0	0	0	7	9	5	12	0	1	26	2	4	7	0	1	13	19	3	0	0	0	22	68
4:45 PM	0	2	0	0	0	2	7	10	25	0	0	42	0	0	7	0	0	7	18	1	0	0	0	19	70
Hourly Total	2	20	2	0	8	24	32	31	72	0	1	135	4	7	25	0	1	36	58	7	2	0	0	67	262
5:00 PM	0	10	1	0	1	11	9	9	13	0	0	31	0	1	5	0	1	6	8	0	0	0	0	8	56
5:15 PM	0	5	0	0	6	5	11	6	17	0	0	34	0	1	10	0	0	11	14	0	1	0	0	15	65
5:30 PM	0	4	0	0	1	4	14	9	14	0	0	37	1	0	4	0	0	5	17	1	0	0	0	18	64
5:45 PM	0	4	1	0	1	5	4	9	10	0	0	23	0	0	8	0	0	8	14	1	0	0	0	15	51
Hourly Total	0	23	2	0	9	25	38	33	54	0	0	125	1	2	27	0	1	30	53	2	1	0	0	56	236
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	5	122	9	0	39	136	122	95	222	0	2	439	8	16	145	0	3	169	293	17	5	1	0	316	1060
Approach %	3.7	89.7	6.6	0.0	-	-	27.8	21.6	50.6	0.0	-	-	4.7	9.5	85.8	0.0	-	-	92.7	5.4	1.6	0.3	-	-	-
Total %	0.5	11.5	0.8	0.0	-	12.8	11.5	9.0	20.9	0.0	-	41.4	0.8	1.5	13.7	0.0	-	15.9	27.6	1.6	0.5	0.1	-	29.8	-
Lights	3	122	7	0	-	132	121	94	213	0	-	428	8	13	144	0	-	165	284	15	3	1	-	303	1028
% Lights	60.0	100.0	77.8	-	-	97.1	99.2	98.9	95.9	-	-	97.5	100.0	81.3	99.3	-	-	97.6	96.9	88.2	60.0	100.0	-	95.9	97.0
Buses	2	0	2	0	-	4	1	1	5	0	-	7	0	3	1	0	-	4	7	1	2	0	-	10	25
% Buses	40.0	0.0	22.2	-	-	2.9	0.8	1.1	2.3	-	-	1.6	0.0	18.8	0.7	-	-	2.4	2.4	5.9	40.0	0.0	-	3.2	2.4
Trucks	0	0	0	0	-	0	0	0	4	0	-	4	0	0	0	0	-	0	2	1	0	0	-	3	7
% Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	1.8	-	-	0.9	0.0	0.0	0.0	-	-	0.0	0.7	5.9	0.0	0.0	-	0.9	0.7
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	39	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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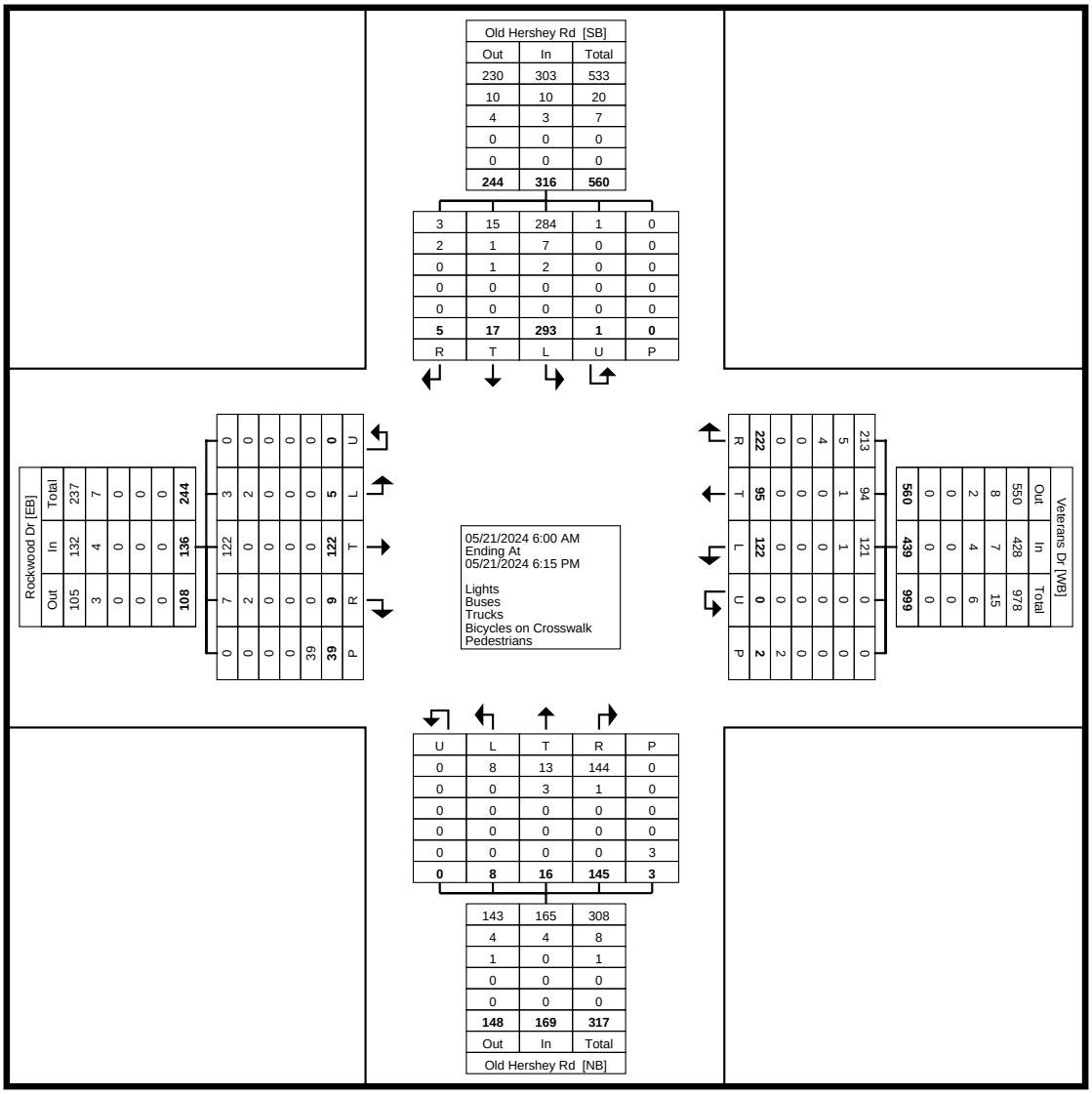

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Turning Movement Peak Hour Data (7:00 AM)

Start Time	Rockwood Dr Eastbound						Veterans Dr Westbound						Old Hershey Rd Northbound						Old Hershey Rd Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	1	9	0	0	3	10	3	1	1	0	0	5	0	1	10	0	0	11	15	1	0	0	0	16	42
7:15 AM	0	10	0	0	3	10	5	4	6	0	0	15	0	0	11	0	0	11	23	1	0	1	0	25	61
7:30 AM	0	5	0	0	1	5	1	2	7	0	0	10	0	0	8	0	0	8	13	1	0	0	0	14	37
7:45 AM	0	3	0	0	2	3	5	1	7	0	0	13	0	0	7	0	1	7	12	0	0	0	0	12	35
Total	1	27	0	0	9	28	14	8	21	0	0	43	0	1	36	0	1	37	63	3	0	1	0	67	175
Approach %	3.6	96.4	0.0	0.0	-	-	32.6	18.6	48.8	0.0	-	-	0.0	2.7	97.3	0.0	-	-	94.0	4.5	0.0	1.5	-	-	-
Total %	0.6	15.4	0.0	0.0	-	16.0	8.0	4.6	12.0	0.0	-	24.6	0.0	0.6	20.6	0.0	-	21.1	36.0	1.7	0.0	0.6	-	38.3	-
PHF	0.250	0.675	0.000	0.000	-	0.700	0.700	0.500	0.750	0.000	-	0.717	0.000	0.250	0.818	0.000	-	0.841	0.685	0.750	0.000	0.250	-	0.670	0.717
Lights	1	27	0	0	-	28	13	7	19	0	-	39	0	0	35	0	-	35	59	1	0	1	-	61	163
% Lights	100.0	100.0	-	-	-	100.0	92.9	87.5	90.5	-	-	90.7	-	0.0	97.2	-	-	94.6	93.7	33.3	-	100.0	-	91.0	93.1
Buses	0	0	0	0	-	0	1	1	1	0	-	3	0	1	1	0	-	2	3	1	0	0	-	4	9
% Buses	0.0	0.0	-	-	-	0.0	7.1	12.5	4.8	-	-	7.0	-	100.0	2.8	-	-	5.4	4.8	33.3	-	0.0	-	6.0	5.1
Trucks	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1	1	0	0	-	2	3
% Trucks	0.0	0.0	-	-	-	0.0	0.0	0.0	4.8	-	-	2.3	-	0.0	0.0	-	-	0.0	1.6	33.3	-	0.0	-	3.0	1.7
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	9	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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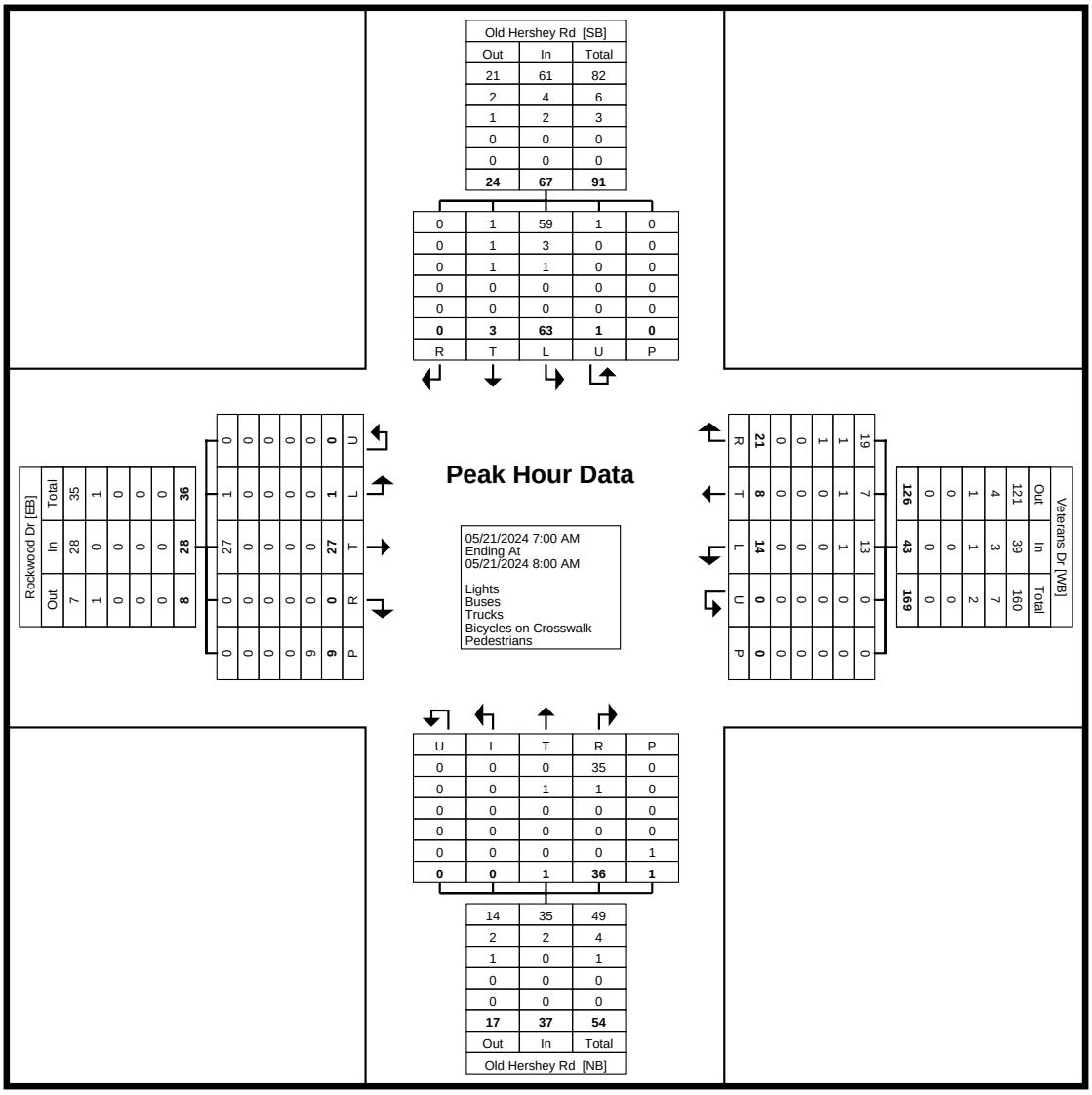

Turning Movement Peak Hour Data Plot (7:00 AM)

Lancaster County, PA
Old Hershey Rd & Veterans Dr/Rockwood Dr
Tuesday, May 21, 2024
Location: 40.168667, -76.607913

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Turning Movement Peak Hour Data (4:00 PM)

Start Time	Rockwood Dr Eastbound						Veterans Dr Westbound						Old Hershey Rd Northbound						Old Hershey Rd Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:00 PM	2	6	2	0	7	10	9	9	22	0	0	40	2	2	5	0	0	9	9	1	1	0	0	11	70
4:15 PM	0	5	0	0	1	5	7	7	13	0	0	27	0	1	6	0	0	7	12	2	1	0	0	15	54
4:30 PM	0	7	0	0	0	7	9	5	12	0	1	26	2	4	7	0	1	13	19	3	0	0	0	22	68
4:45 PM	0	2	0	0	0	2	7	10	25	0	0	42	0	0	7	0	0	7	18	1	0	0	0	19	70
Total	2	20	2	0	8	24	32	31	72	0	1	135	4	7	25	0	1	36	58	7	2	0	0	67	262
Approach %	8.3	83.3	8.3	0.0	-	-	23.7	23.0	53.3	0.0	-	-	11.1	19.4	69.4	0.0	-	-	86.6	10.4	3.0	0.0	-	-	-
Total %	0.8	7.6	0.8	0.0	-	9.2	12.2	11.8	27.5	0.0	-	51.5	1.5	2.7	9.5	0.0	-	13.7	22.1	2.7	0.8	0.0	-	25.6	-
PHF	0.250	0.714	0.250	0.000	-	0.600	0.889	0.775	0.720	0.000	-	0.804	0.500	0.438	0.893	0.000	-	0.692	0.763	0.583	0.500	0.000	-	0.761	0.936
Lights	1	20	1	0	-	22	32	31	71	0	-	134	4	6	25	0	-	35	57	7	1	0	-	65	256
% Lights	50.0	100.0	50.0	-	-	91.7	100.0	100.0	98.6	-	-	99.3	100.0	85.7	100.0	-	-	97.2	98.3	100.0	50.0	-	-	97.0	97.7
Buses	1	0	1	0	-	2	0	0	0	0	-	0	0	1	0	0	-	1	1	0	1	0	-	2	5
% Buses	50.0	0.0	50.0	-	-	8.3	0.0	0.0	0.0	-	-	0.0	0.0	14.3	0.0	-	-	2.8	1.7	0.0	50.0	-	-	3.0	1.9
Trucks	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	1.4	-	-	0.7	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	8	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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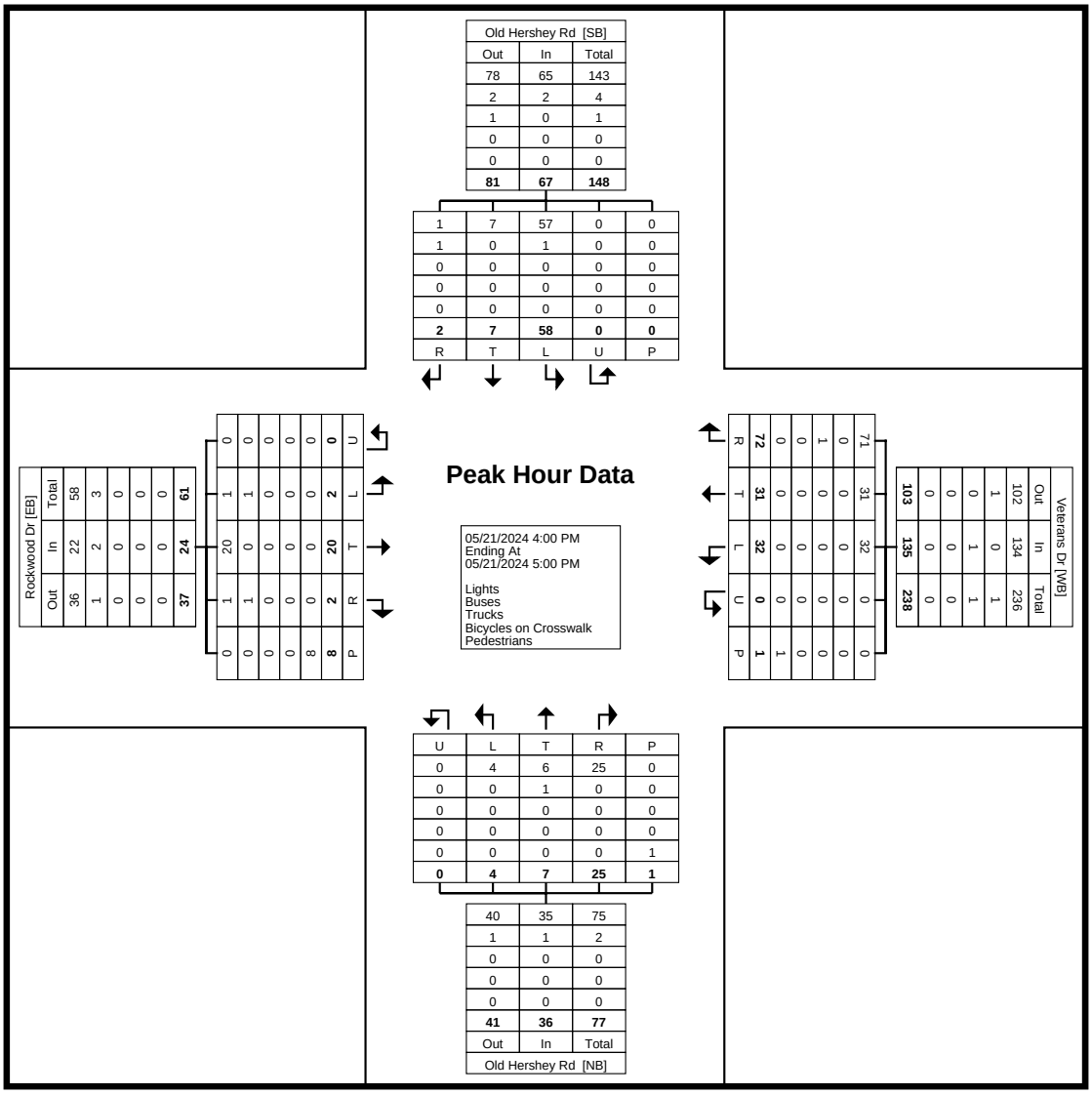

Turning Movement Peak Hour Data Plot (4:00 PM)

Lancaster County, PA
Old Hershey Rd & Veterans Dr/Rockwood Dr
Saturday, June 1, 2024
Location: 40.168667, -76.607913

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Count Name: Old Hershey Rd & Veterans Dr/Rockwood Dr Sat
Site Code:
Start Date: 06/01/2024
Page No: 1

Turning Movement Data

Start Time	Rockwood Dr Eastbound						Veterans Dr Westbound						Old Hershey Rd Northbound						Old Hershey Rd Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
11:00 AM	0	6	0	0	0	6	5	4	6	0	0	15	1	2	3	0	0	6	20	2	0	0	0	22	49
11:15 AM	0	3	0	0	0	3	5	2	12	0	0	19	0	2	13	0	2	15	12	1	0	0	0	13	50
11:30 AM	0	1	0	0	0	1	7	5	14	0	0	26	0	1	8	0	0	9	10	0	0	0	0	10	46
11:45 AM	1	7	0	0	1	8	3	5	8	0	0	16	0	1	4	0	0	5	12	0	0	0	0	12	41
Hourly Total	1	17	0	0	1	18	20	16	40	0	0	76	1	6	28	0	2	35	54	3	0	0	0	57	186
12:00 PM	0	5	0	0	1	5	7	4	13	0	0	24	1	0	9	0	0	10	7	0	0	0	0	7	46
12:15 PM	0	4	0	0	1	4	9	0	8	0	0	17	0	0	8	0	0	8	14	1	0	0	0	15	44
12:30 PM	1	6	0	0	1	7	13	1	12	0	0	26	0	1	9	0	0	10	9	2	0	0	0	11	54
12:45 PM	1	1	0	0	0	2	8	1	11	0	0	20	0	1	5	0	0	6	15	0	1	0	0	16	44
Hourly Total	2	16	0	0	3	18	37	6	44	0	0	87	1	2	31	0	0	34	45	3	1	0	0	49	188
1:00 PM	0	1	0	0	1	1	5	3	12	0	0	20	0	0	3	0	0	3	13	1	0	0	0	14	38
1:15 PM	0	7	0	0	0	7	5	2	15	0	0	22	0	0	4	0	0	4	11	1	0	0	0	12	45
1:30 PM	0	2	0	1	0	3	6	4	11	0	0	21	0	1	7	0	0	8	11	0	0	0	0	11	43
1:45 PM	0	7	0	0	0	7	4	5	4	1	0	14	0	0	8	0	0	8	12	2	0	0	0	14	43
Hourly Total	0	17	0	1	1	18	20	14	42	1	0	77	0	1	22	0	0	23	47	4	0	0	0	51	169
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	3	50	0	1	5	54	77	36	126	1	0	240	2	9	81	0	2	92	146	10	1	0	0	157	543
Approach %	5.6	92.6	0.0	1.9	-	-	32.1	15.0	52.5	0.4	-	-	2.2	9.8	88.0	0.0	-	-	93.0	6.4	0.6	0.0	-	-	-
Total %	0.6	9.2	0.0	0.2	-	9.9	14.2	6.6	23.2	0.2	-	44.2	0.4	1.7	14.9	0.0	-	16.9	26.9	1.8	0.2	0.0	-	28.9	-
Lights	3	50	0	1	-	54	77	36	125	1	-	239	1	9	81	0	-	91	143	9	1	0	-	153	537
% Lights	100.0	100.0	-	100.0	-	100.0	100.0	100.0	99.2	100.0	-	99.6	50.0	100.0	100.0	-	-	98.9	97.9	90.0	100.0	-	-	97.5	98.9
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	0	0	0	-	0	0	0	1	0	-	1	1	0	0	0	-	1	3	1	0	0	-	4	6
% Trucks	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.8	0.0	-	0.4	50.0	0.0	0.0	-	-	1.1	2.1	10.0	0.0	-	-	2.5	1.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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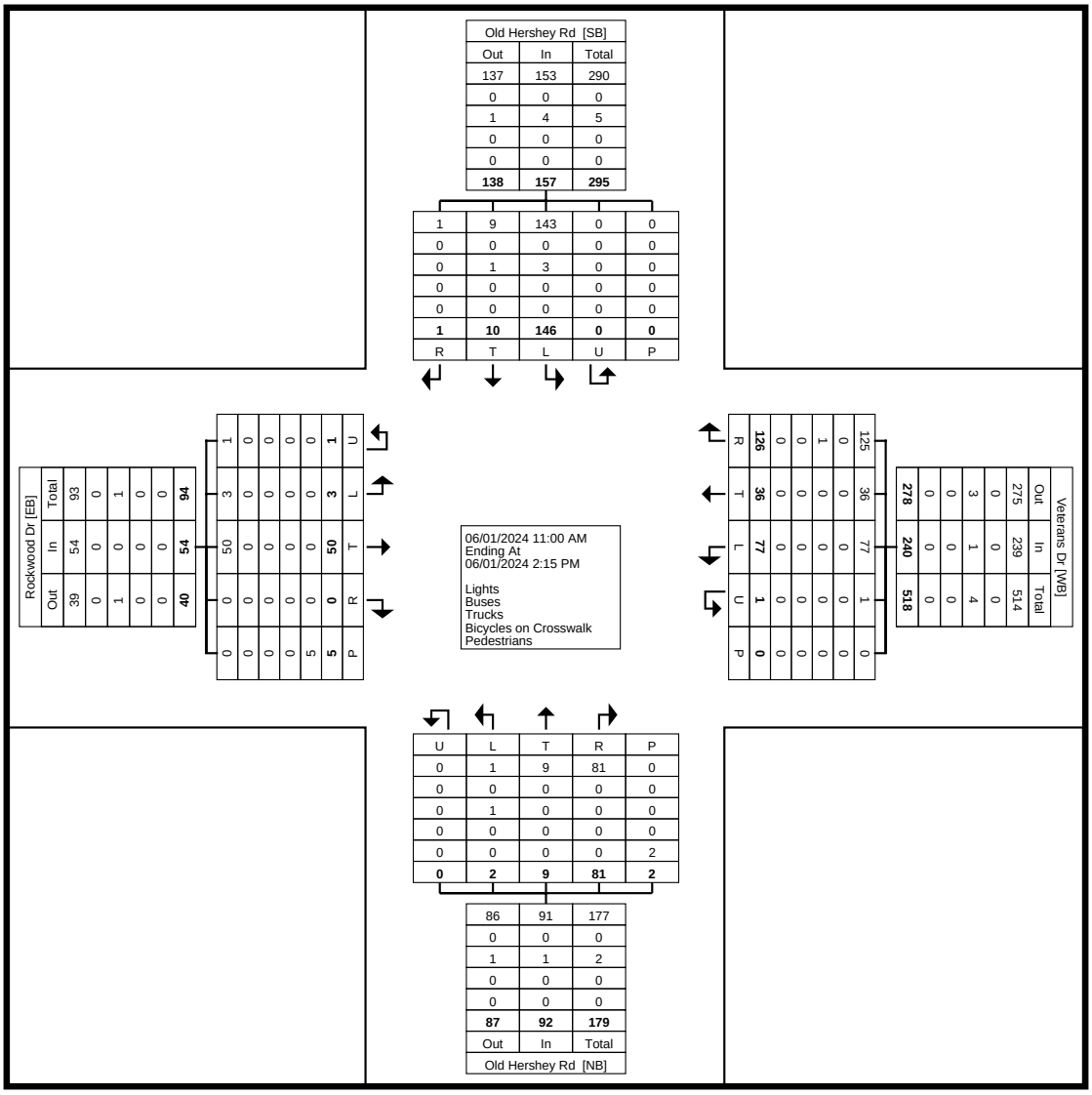

Turning Movement Data Plot

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Turning Movement Peak Hour Data (12:00 PM)

Start Time	Rockwood Dr Eastbound						Veterans Dr Westbound						Old Hershey Rd Northbound						Old Hershey Rd Southbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
12:00 PM	0	5	0	0	1	5	7	4	13	0	0	24	1	0	9	0	0	10	7	0	0	0	0	7	46
12:15 PM	0	4	0	0	1	4	9	0	8	0	0	17	0	0	8	0	0	8	14	1	0	0	0	15	44
12:30 PM	1	6	0	0	1	7	13	1	12	0	0	26	0	1	9	0	0	10	9	2	0	0	0	11	54
12:45 PM	1	1	0	0	0	2	8	1	11	0	0	20	0	1	5	0	0	6	15	0	1	0	0	16	44
Total	2	16	0	0	3	18	37	6	44	0	0	87	1	2	31	0	0	34	45	3	1	0	0	49	188
Approach %	11.1	88.9	0.0	0.0	-	-	42.5	6.9	50.6	0.0	-	-	2.9	5.9	91.2	0.0	-	-	91.8	6.1	2.0	0.0	-	-	-
Total %	1.1	8.5	0.0	0.0	-	9.6	19.7	3.2	23.4	0.0	-	46.3	0.5	1.1	16.5	0.0	-	18.1	23.9	1.6	0.5	0.0	-	26.1	-
PHF	0.500	0.667	0.000	0.000	-	0.643	0.712	0.375	0.846	0.000	-	0.837	0.250	0.500	0.861	0.000	-	0.850	0.750	0.375	0.250	0.000	-	0.766	0.870
Lights	2	16	0	0	-	18	37	6	44	0	-	87	1	2	31	0	-	34	45	3	1	0	-	49	188
% Lights	100.0	100.0	-	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Trucks	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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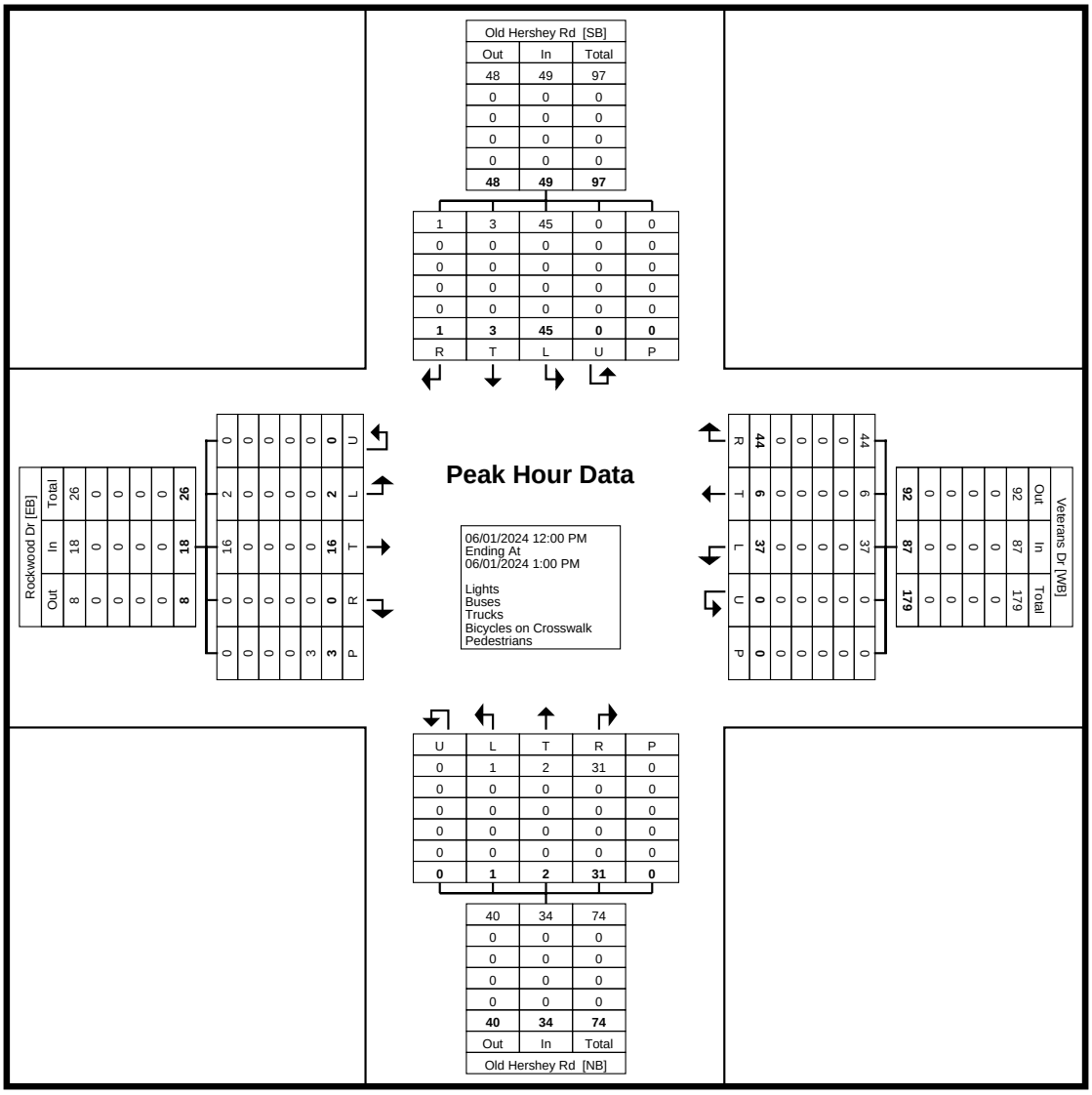


Turning Movement Peak Hour Data Plot (12:00 PM)

Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
Full Length (6 AM-9 AM, 3 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Rt. 743								Mt. Gretna Rd								Holly St							
Direction	Southbound								Southwestbound								Westbound							
Time	R	T	L	HL	U	RR	**App**	Ped*	HR	BR	BL	HL	U	HRR	**App**	Ped*	HR	R	T	L	U	HRR	**App**	Ped*
2024-05-30 6:00AM	3	30	0	1	0	0	**34**	0	15	0	8	0	0	0	**23**	0	0	30	1	0	0	0	**31**	0
6:15AM	1	55	9	6	0	0	**71**	0	19	7	6	1	0	0	**33**	0	1	38	0	0	0	0	**39**	0
6:30AM	5	45	9	0	0	1	**60**	0	37	7	12	0	0	0	**56**	0	0	42	2	0	0	1	**45**	0
6:45AM	2	80	12	8	0	1	**103**	0	24	6	13	0	0	0	**43**	0	0	35	2	0	0	0	**37**	0
Hourly Total	11	210	30	15	0	2	**268**	0	95	20	39	1	0	0	**155**	0	1	145	5	0	0	1	**152**	0
7:00AM	5	73	16	4	0	0	**98**	0	44	3	14	2	0	0	**63**	0	0	50	0	0	0	0	**50**	0
7:15AM	5	72	20	8	0	4	**109**	0	26	4	9	3	0	0	**42**	0	1	48	1	0	0	0	**50**	0
7:30AM	4	64	24	8	0	0	**100**	0	49	1	14	3	0	0	**67**	0	4	60	2	3	0	0	**69**	0
7:45AM	6	120	37	3	0	0	**166**	1	19	0	21	1	0	0	**41**	0	5	58	0	5	0	0	**68**	0
Hourly Total	20	329	97	23	0	4	**473**	1	138	8	58	9	0	0	**213**	0	10	216	3	8	0	0	**237**	0
8:00AM	6	56	20	9	0	1	**92**	0	31	3	7	0	0	0	**41**	0	1	30	0	0	0	0	**31**	0
8:15AM	5	66	12	10	0	1	**94**	0	20	2	10	3	0	0	**35**	0	2	25	1	1	0	0	**29**	0
8:30AM	5	60	23	5	0	2	**95**	0	25	1	13	1	0	0	**40**	0	0	31	0	0	0	0	**31**	0
8:45AM	0	95	16	6	0	1	**118**	0	12	4	15	1	0	0	**32**	0	0	25	2	2	0	0	**29**	0
Hourly Total	16	277	71	30	0	5	**399**	0	88	10	45	5	0	0	**148**	0	3	111	3	3	0	0	**120**	0
9:00AM	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0
3:00PM	5	93	21	17	0	1	**137**	0	17	0	13	0	0	0	**30**	1	0	28	3	2	0	0	**33**	0
3:15PM	6	132	17	26	0	0	**181**	0	8	2	9	0	0	0	**19**	1	5	35	3	2	0	0	**45**	0
3:30PM	8	111	28	23	0	2	**172**	0	12	2	20	0	0	0	**34**	0	6	41	1	1	0	0	**49**	0
3:45PM	2	112	35	32	0	1	**182**	0	12	0	21	2	0	0	**35**	0	2	49	1	1	0	0	**53**	0
Hourly Total	21	448	101	98	0	4	**672**	0	49	4	63	2	0	0	**118**	2	13	153	8	6	0	0	**180**	0
4:00PM	5	110	31	18	0	0	**164**	0	15	1	18	3	0	0	**37**	0	3	44	1	1	0	0	**49**	0
4:15PM	13	122	30	28	0	2	**195**	0	16	1	18	1	0	0	**36**	0	1	30	0	1	0	0	**32**	0
4:30PM	8	112	26	29	0	0	**175**	0	16	1	12	2	0	0	**31**	0	4	31	1	4	0	0	**40**	0
4:45PM	8	134	23	28	0	0	**193**	0	10	1	11	1	0	0	**23**	1	0	43	2	1	0	0	**46**	0
Hourly Total	34	478	110	103	0	2	**727**	0	57	4	59	7	0	0	**127**	1	8	148	4	7	0	0	**167**	0
5:00PM	9	140	27	25	0	1	**202**	0	26	3	26	1	0	0	**56**	0	2	20	2	0	0	2	**26**	1
5:15PM	5	127	33	24	0	1	**190**	0	17	2	20	1	0	0	**40**	0	1	29	2	1	0	0	**33**	0
5:30PM	4	121	29	23	0	2	**179**	0	23	6	20	1	0	0	**50**	0	0	22	1	2	0	0	**25**	0
5:45PM	5	115	30	27	0	1	**178**	0	26	1	22	2	0	0	**51**	0	4	35	0	1	0	0	**40**	0
Hourly Total	23	503	119	99	0	5	**749**	0	92	12	88	5	0	0	**197**	0	7	106	5	4	0	2	**124**	1
6:00PM	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0
Total	125	2245	528	368	0	22	**3288**	1	519	58	352	29	0	0	**958**	3	42	879	28	28	0	3	**980**	1
% Approach	3.8%	68.3%	16.1%	11.2%	0%	0.7%	**-**	-	54.2%	6.1%	36.7%	3.0%	0%	0%	**-**	-	4.3%	89.7%	2.9%	2.9%	0%	0.3%	**-**	-
% Total	1.5%	27.0%	6.4%	4.4%	0%	0.3%	**39.6%**	-	6.2%	0.7%	4.2%	0.3%	0%	0%	**11.5%**	-	0.5%	10.6%	0.3%	0.3%	0%	0%	**11.8%**	-
Lights	123	2116	510	354	0	22	**3125**	-	502	58	343	25	0	0	**928**	-	37	863	28	25	0	3	**956**	-
% Lights	98.4%	94.3%	96.6%	96.2%	0%	100%	**95.0%**	-	96.7%	100%	97.4%	86.2%	0%	0%	**96.9%**	-	88.1%	98.2%	100%	89.3%	0%	100%	**97.6%**	-
Articulated Trucks and Single-Unit Trucks	2	118	4	9	0	0	**133**	-	14	0	8	3	0	0	**25**	-	2	7	0	0	0	0	**9**	-
% Articulated Trucks and Single-Unit Trucks	1.6%	5.3%	0.8%	2.4%	0%	0%	**4.0%**	-	2.7%	0%	2.3%	10.3%	0%	0%	**2.6%**	-	4.8%	0.8%	0%	0%	0%	0%	**0.9%**	-
Buses	0	11	14	5	0	0	**30**	-	3	0	1	1	0	0	**5**	-	3	9	0	3	0	0	**15**	-
% Buses	0%	0.5%	2.7%	1.4%	0%	0%	**0.9%**	-	0.6%	0%	0.3%	3.4%	0%	0%	**0.5%**	-	7.1%	1.0%	0%	10.7%	0%	0%	**1.5%**	-
Pedestrians	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	0%
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	100%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
Full Length (6 AM-9 AM, 3 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

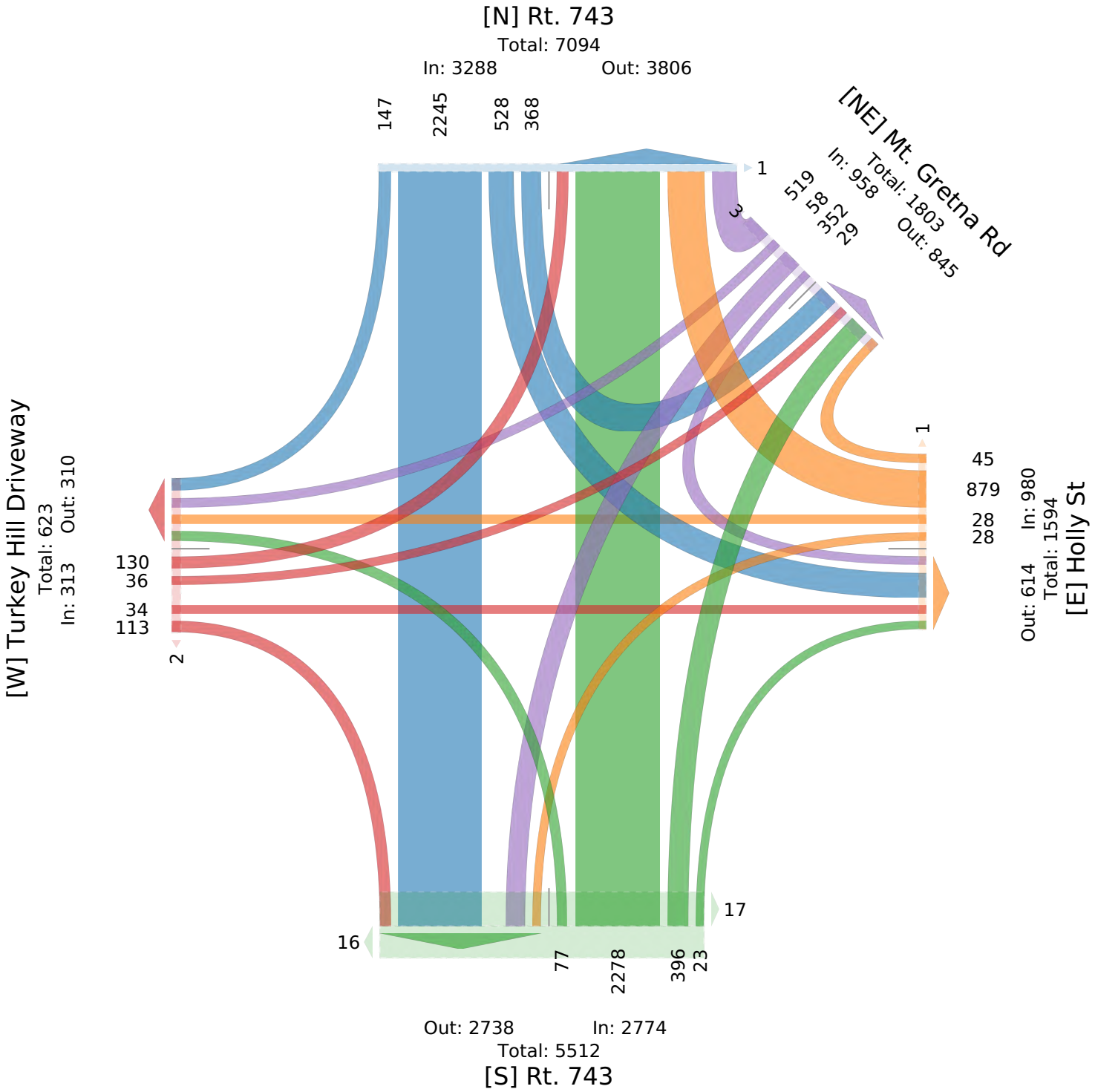
Leg	Rt. 743								Turkey Hill Driveway								
Direction	Northbound								Eastbound								
Time	R	BR	T	L	U	RR	App	Ped*	R	T	BL	L	U	RR	App	Ped*	Int
2024-05-30 6:00AM	0	5	69	5	0	0	**79**	0	0	1	0	4	0	1	**6**	0	**173**
6:15AM	1	7	87	4	0	0	**99**	0	1	1	1	4	0	4	**11**	0	**253**
6:30AM	0	13	83	3	0	0	**99**	0	3	1	1	7	0	1	**13**	0	**273**
6:45AM	1	12	108	1	0	0	**122**	0	3	3	1	5	0	3	**15**	0	**320**
Hourly Total	2	37	347	13	0	0	**399**	0	7	6	3	20	0	9	**45**	0	**1019**
7:00AM	0	11	95	1	0	0	**107**	0	5	3	2	4	0	2	**16**	0	**334**
7:15AM	0	13	115	7	0	0	**135**	0	4	2	1	11	0	1	**19**	0	**355**
7:30AM	1	9	101	3	0	0	**114**	0	3	0	1	5	0	2	**11**	0	**361**
7:45AM	1	11	108	3	0	0	**123**	0	2	1	0	3	0	4	**10**	0	**408**
Hourly Total	2	44	419	14	0	0	**479**	0	14	6	4	23	0	9	**56**	0	**1458**
8:00AM	1	10	73	0	0	0	**84**	0	4	1	1	4	0	0	**10**	0	**258**
8:15AM	0	10	85	6	0	0	**101**	0	3	1	1	3	0	2	**10**	0	**269**
8:30AM	1	11	64	4	0	0	**80**	0	3	1	2	7	0	1	**14**	0	**260**
8:45AM	1	12	62	1	0	0	**76**	0	0	0	1	3	0	2	**6**	0	**261**
Hourly Total	3	43	284	11	0	0	**341**	0	10	3	5	17	0	5	**40**	0	**1048**
9:00AM	0	0	0	1	0	0	**1**	0	0	0	0	0	0	0	**0**	0	**1**
Hourly Total	0	0	0	1	0	0	**1**	0	0	0	0	0	0	0	**0**	0	**1**
3:00PM	3	20	106	4	0	0	**133**	5	3	3	1	9	0	2	**18**	0	**351**
3:15PM	2	25	91	2	0	0	**120**	4	3	0	3	6	0	2	**14**	0	**379**
3:30PM	1	22	105	2	0	0	**130**	0	4	1	0	6	0	3	**14**	0	**399**
3:45PM	2	20	104	0	0	0	**126**	0	2	1	0	2	0	1	**6**	0	**402**
Hourly Total	8	87	406	8	0	0	**509**	9	12	5	4	23	0	8	**52**	0	**1531**
4:00PM	0	23	107	3	0	0	**133**	0	3	1	0	5	0	1	**10**	1	**393**
4:15PM	0	17	127	5	0	0	**149**	22	3	2	7	8	0	0	**20**	0	**432**
4:30PM	1	23	108	2	0	0	**134**	1	3	0	2	5	0	3	**13**	0	**393**
4:45PM	3	13	88	4	0	0	**108**	0	2	1	1	5	0	2	**11**	0	**381**
Hourly Total	4	76	430	14	0	0	**524**	23	11	4	10	23	0	6	**54**	1	**1599**
5:00PM	2	15	90	3	0	0	**110**	0	4	3	3	6	0	1	**17**	0	**411**
5:15PM	0	25	102	5	0	0	**132**	0	4	3	2	6	0	0	**15**	1	**410**
5:30PM	0	29	97	5	0	0	**131**	0	4	2	3	6	0	4	**19**	0	**404**
5:45PM	2	40	102	3	0	0	**147**	1	4	2	2	6	0	1	**15**	0	**431**
Hourly Total	4	109	391	16	0	0	**520**	1	16	10	10	24	0	6	**66**	1	**1656**
6:00PM	0	0	1	0	0	0	**1**	0	0	0	0	0	0	0	**0**	0	**1**
Hourly Total	0	0	1	0	0	0	**1**	0	0	0	0	0	0	0	**0**	0	**1**
Total	23	396	2278	77	0	0	**2774**	33	70	34	36	130	0	43	**313**	2	**8313**
% Approach	0.8%	14.3%	82.1%	2.8%	0%	0%	**-**	-	22.4%	10.9%	11.5%	41.5%	0%	13.7%	**-**	-	-
% Total	0.3%	4.8%	27.4%	0.9%	0%	0%	**33.4%**	-	0.8%	0.4%	0.4%	1.6%	0%	0.5%	**3.8%**	-	-
Lights	23	376	2167	77	0	0	**2643**	-	68	34	36	129	0	43	**310**	-	7962
% Lights	100%	94.9%	95.1%	100%	0%	0%	**95.3%**	-	97.1%	100%	100%	99.2%	0%	100%	**99.0%**	-	95.8%
Articulated Trucks and Single-Unit Trucks	0	18	107	0	0	0	**125**	-	2	0	0	1	0	0	**3**	-	295
% Articulated Trucks and Single-Unit Trucks	0%	4.5%	4.7%	0%	0%	0%	**4.5%**	-	2.9%	0%	0%	0.8%	0%	0%	**1.0%**	-	3.5%
Buses	0	2	4	0	0	0	**6**	-	0	0	0	0	0	0	**0**	-	56
% Buses	0%	0.5%	0.2%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0.7%
Pedestrians	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	93.9%	-	-	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	6.1%	-	-	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
Full Length (6 AM-9 AM, 3 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Rt. 743								Mt. Gretna Rd								Holly St							
Direction	Southbound								Southwestbound								Westbound							
Time	R	T	L	HL	U	RR	**App**	Ped*	HR	BR	BL	HL	U	HRR	**App**	Ped*	HR	R	T	L	U	HRR	**App**	Ped*
2024-05-30 7:00AM	5	73	16	4	0	0	**98**	0	44	3	14	2	0	0	**63**	0	0	50	0	0	0	0	**50**	0
7:15AM	5	72	20	8	0	4	**109**	0	26	4	9	3	0	0	**42**	0	1	48	1	0	0	0	**50**	0
7:30AM	4	64	24	8	0	0	**100**	0	49	1	14	3	0	0	**67**	0	4	60	2	3	0	0	**69**	0
7:45AM	6	120	37	3	0	0	**166**	1	19	0	21	1	0	0	**41**	0	5	58	0	5	0	0	**68**	0
Total	20	329	97	23	0	4	**473**	1	138	8	58	9	0	0	**213**	0	10	216	3	8	0	0	**237**	0
% Approach	4.2%	69.6%	20.5%	4.9%	0%	0.8%	**-**	-	64.8%	3.8%	27.2%	4.2%	0%	0%	**-**	-	4.2%	91.1%	1.3%	3.4%	0%	0%	**-**	-
% Total	1.4%	22.6%	6.7%	1.6%	0%	0.3%	**32.4%**	-	9.5%	0.5%	4.0%	0.6%	0%	0%	**14.6%**	-	0.7%	14.8%	0.2%	0.5%	0%	0%	**16.3%**	-
PHF	0.833	0.685	0.655	0.719		- 0.250	**0.712**	-	0.704	0.500	0.690	0.750	-	-	**0.795**	-	0.500	0.900	0.375	0.400	-	-	**0.859**	-
Lights	19	286	87	20	0	4	**416**	-	133	8	56	7	0	0	**204**	-	7	212	3	5	0	0	**227**	-
% Lights	95.0%	86.9%	89.7%	87.0%	0%	100%	**87.9%**	-	96.4%	100%	96.6%	77.8%	0%	0%	**95.8%**	-	70.0%	98.1%	100%	62.5%	0%	0%	**95.8%**	-
Articulated Trucks and Single-Unit Trucks	1	40	3	1	0	0	**45**	-	5	0	2	1	0	0	**8**	-	1	0	0	0	0	0	**1**	-
% Articulated Trucks and Single-Unit Trucks	5.0%	12.2%	3.1%	4.3%	0%	0%	**9.5%**	-	3.6%	0%	3.4%	11.1%	0%	0%	**3.8%**	-	10.0%	0%	0%	0%	0%	0%	**0.4%**	-
Buses	0	3	7	2	0	0	**12**	-	0	0	0	1	0	0	**1**	-	2	4	0	3	0	0	**9**	-
% Buses	0%	0.9%	7.2%	8.7%	0%	0%	**2.5%**	-	0%	0%	0%	11.1%	0%	0%	**0.5%**	-	20.0%	1.9%	0%	37.5%	0%	0%	**3.8%**	-
Pedestrians	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

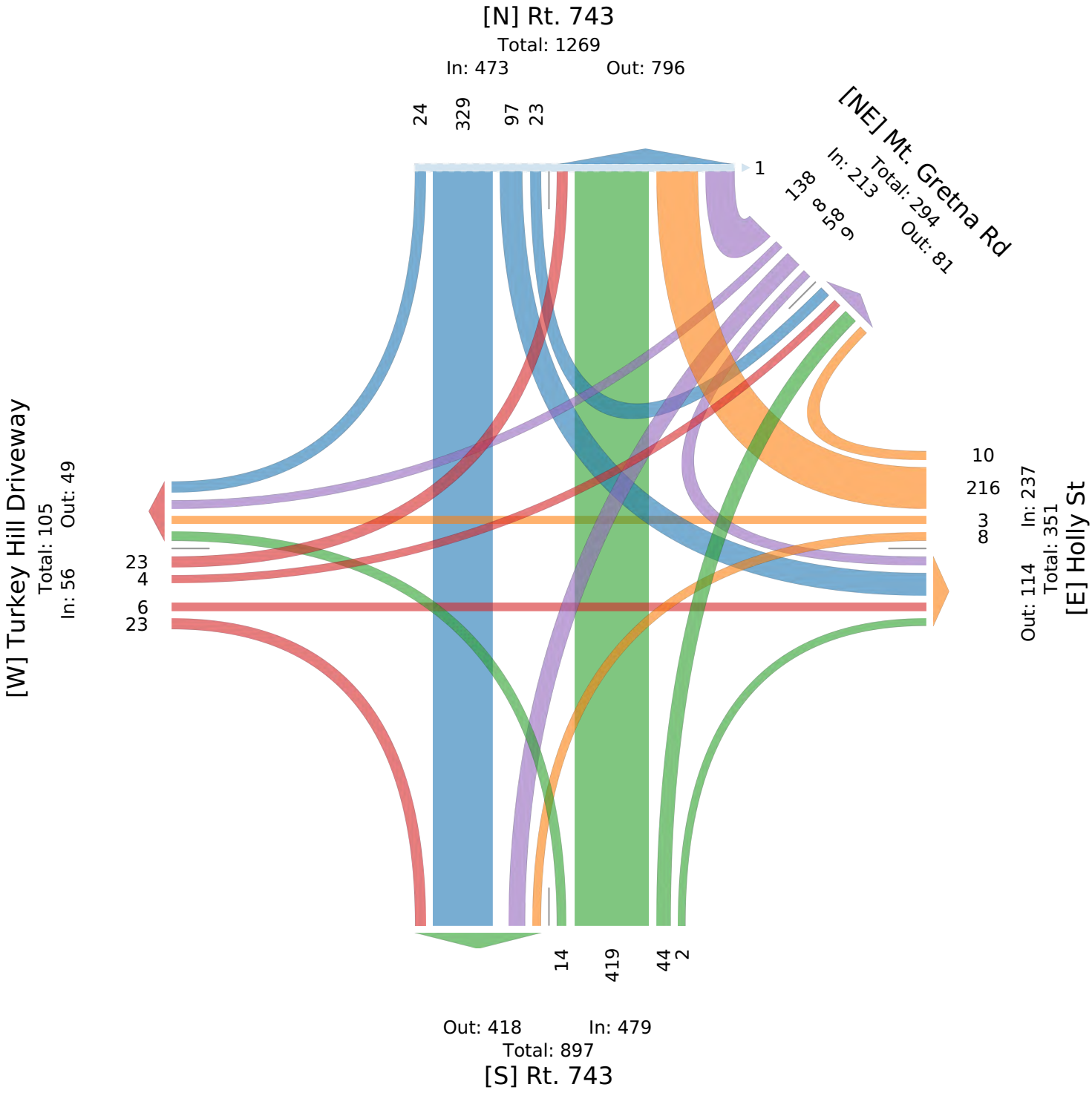
Leg	Rt. 743								Turkey Hill Driveway								
Direction	Northbound								Eastbound								
Time	R	BR	T	L	U	RR	**App**	Ped*	R	T	BL	L	U	RR	**App**	Ped*	**Int**
2024-05-30 7:00AM	0	11	95	1	0	0	**107**	0	5	3	2	4	0	2	**16**	0	**334**
7:15AM	0	13	115	7	0	0	**135**	0	4	2	1	11	0	1	**19**	0	**355**
7:30AM	1	9	101	3	0	0	**114**	0	3	0	1	5	0	2	**11**	0	**361**
7:45AM	1	11	108	3	0	0	**123**	0	2	1	0	3	0	4	**10**	0	**408**
Total	2	44	419	14	0	0	**479**	0	14	6	4	23	0	9	**56**	0	**1458**
% Approach	0.4%	9.2%	87.5%	2.9%	0%	0%	**-**	-	25.0%	10.7%	7.1%	41.1%	0%	16.1%	**-**	-	-
% Total	0.1%	3.0%	28.7%	1.0%	0%	0%	**32.9%**	-	1.0%	0.4%	0.3%	1.6%	0%	0.6%	**3.8%**	-	-
PHF	0.500	0.846	0.911	0.500	-	-	**0.887**	-	0.700	0.500	0.500	0.523	-	0.563	**0.737**	-	0.893
Lights	2	39	393	14	0	0	**448**	-	13	6	4	23	0	9	**55**	-	1350
% Lights	100%	88.6%	93.8%	100%	0%	0%	**93.5%**	-	92.9%	100%	100%	100%	0%	100%	**98.2%**	-	92.6%
Articulated Trucks and Single-Unit Trucks	0	5	23	0	0	0	**28**	-	1	0	0	0	0	0	**1**	-	83
% Articulated Trucks and Single-Unit Trucks	0%	11.4%	5.5%	0%	0%	0%	**5.8%**	-	7.1%	0%	0%	0%	0%	0%	**1.8%**	-	5.7%
Buses	0	0	3	0	0	0	**3**	-	0	0	0	0	0	0	**0**	-	25
% Buses	0%	0%	0.7%	0%	0%	0%	**0.6%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	1.7%
Pedestrians	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Rt. 743								Mt. Gretna Rd								Holly St							
Direction	Southbound								Southwestbound								Westbound							
Time	R	T	L	HL	U	RR	**App**	Ped*	HR	BR	BL	HL	U	HRR	**App**	Ped*	HR	R	T	L	U	HRR	**App**	Ped*
2024-05-30 5:00PM	9	140	27	25	0	1	**202**	0	26	3	26	1	0	0	**56**	0	2	20	2	0	0	2	**26**	1
5:15PM	5	127	33	24	0	1	**190**	0	17	2	20	1	0	0	**40**	0	1	29	2	1	0	0	**33**	0
5:30PM	4	121	29	23	0	2	**179**	0	23	6	20	1	0	0	**50**	0	0	22	1	2	0	0	**25**	0
5:45PM	5	115	30	27	0	1	**178**	0	26	1	22	2	0	0	**51**	0	4	35	0	1	0	0	**40**	0
Total	23	503	119	99	0	5	**749**	0	92	12	88	5	0	0	**197**	0	7	106	5	4	0	2	**124**	1
% Approach	3.1%	67.2%	15.9%	13.2%	0%	0.7%	**-**	-	46.7%	6.1%	44.7%	2.5%	0%	0%	**-**	-	5.6%	85.5%	4.0%	3.2%	0%	1.6%	**-**	-
% Total	1.4%	30.4%	7.2%	6.0%	0%	0.3%	**45.2%**	-	5.6%	0.7%	5.3%	0.3%	0%	0%	**11.9%**	-	0.4%	6.4%	0.3%	0.2%	0%	0.1%	**7.5%**	-
PHF	0.639	0.898	0.902	0.917		- 0.625	**0.927**	-	0.885	0.500	0.846	0.625		-	**0.879**	-	0.438	0.757	0.625	0.500		- 0.250	**0.775**	-
Lights	23	491	117	98	0	5	**734**	-	92	12	88	5	0	0	**197**	-	7	105	5	4	0	2	**123**	-
% Lights	100%	97.6%	98.3%	99.0%	0%	100%	**98.0%**	-	100%	100%	100%	100%	0%	0%	**100%**	-	100%	99.1%	100%	100%	0%	100%	**99.2%**	-
Articulated Trucks and Single-Unit Trucks	0	12	0	0	0	0	**12**	-	0	0	0	0	0	0	**0**	-	0	1	0	0	0	0	**1**	-
% Articulated Trucks and Single-Unit Trucks	0%	2.4%	0%	0%	0%	0%	**1.6%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0%	0.9%	0%	0%	0%	0%	**0.8%**	-
Buses	0	0	2	1	0	0	**3**	-	0	0	0	0	0	0	**0**	-	0	0	0	0	0	0	**0**	-
% Buses	0%	0%	1.7%	1.0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	0%	**0%**	-
Pedestrians	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 100%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

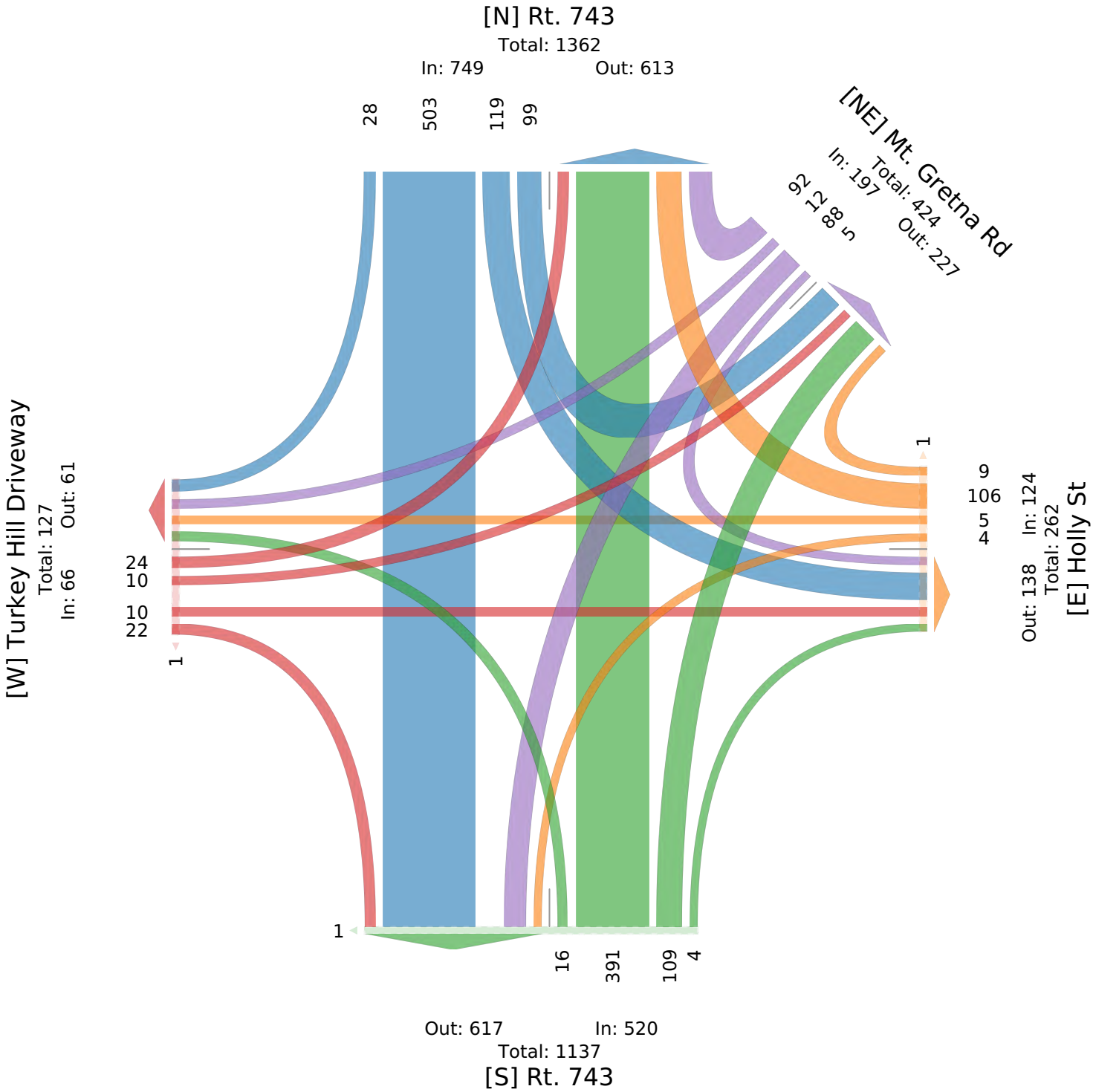
Leg	Rt. 743								Turkey Hill Driveway								
Direction	Northbound								Eastbound								
Time	R	BR	T	L	U	RR	App	Ped*	R	T	BL	L	U	RR	App	Ped*	Int
2024-05-30 5:00PM	2	15	90	3	0	0	**110**	0	4	3	3	6	0	1	**17**	0	**411**
5:15PM	0	25	102	5	0	0	**132**	0	4	3	2	6	0	0	**15**	1	**410**
5:30PM	0	29	97	5	0	0	**131**	0	4	2	3	6	0	4	**19**	0	**404**
5:45PM	2	40	102	3	0	0	**147**	1	4	2	2	6	0	1	**15**	0	**431**
Total	4	109	391	16	0	0	**520**	1	16	10	10	24	0	6	**66**	1	**1656**
% Approach	0.8%	21.0%	75.2%	3.1%	0%	0%	**-**	-	24.2%	15.2%	15.2%	36.4%	0%	9.1%	**-**	-	-
% Total	0.2%	6.6%	23.6%	1.0%	0%	0%	**31.4%**	-	1.0%	0.6%	0.6%	1.4%	0%	0.4%	**4.0%**	-	-
PHF	0.500	0.681	0.958	0.800	-	-	**0.884**	-	1.000	0.833	0.833	1.000	-	0.375	**0.868**	-	0.961
Lights	4	107	384	16	0	0	**511**	-	16	10	10	24	0	6	**66**	-	1631
% Lights	100%	98.2%	98.2%	100%	0%	0%	**98.3%**	-	100%	100%	100%	100%	0%	100%	**100%**	-	98.5%
Articulated Trucks and Single-Unit Trucks	0	1	7	0	0	0	**8**	-	0	0	0	0	0	0	**0**	-	21
% Articulated Trucks and Single-Unit Trucks	0%	0.9%	1.8%	0%	0%	0%	**1.5%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	1.3%
Buses	0	1	0	0	0	0	**1**	-	0	0	0	0	0	0	**0**	-	4
% Buses	0%	0.9%	0%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0.2%
Pedestrians	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St - TMC

Thu May 30, 2024
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193610, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Rt. 743								Mt. Gretna Rd								Holly St							
Direction	Southbound								Southwestbound								Westbound							
Time	R	T	L	HL	U	RR	**App**	Ped*	HR	BR	BL	HL	U	HRR	**App**	Ped*	HR	R	T	L	U	HRR	**App**	Ped*
2024-06-01 11:00AM	12	67	12	12	0	0	**103**	0	10	1	8	1	0	1	**21**	0	4	17	0	0	0	0	**21**	0
11:15AM	4	72	15	14	0	1	**106**	0	16	3	10	1	0	0	**30**	0	5	20	3	1	0	0	**29**	0
11:30AM	6	73	18	13	0	1	**111**	0	16	0	14	1	0	0	**31**	0	4	22	1	1	0	0	**28**	0
11:45AM	8	74	11	13	0	1	**107**	0	13	1	12	2	0	0	**28**	0	4	25	3	1	0	0	**33**	0
Hourly Total	30	286	56	52	0	3	**427**	0	55	5	44	5	0	1	**110**	0	17	84	7	3	0	0	**111**	0
12:00PM	6	76	19	18	0	1	**120**	0	8	5	10	1	0	0	**24**	0	2	17	0	0	0	2	**21**	0
12:15PM	5	88	14	16	0	1	**124**	0	11	3	12	3	0	0	**29**	0	0	22	2	1	0	0	**25**	0
12:30PM	4	71	18	10	0	0	**103**	0	12	1	11	1	0	0	**25**	0	3	22	1	0	0	0	**26**	0
12:45PM	7	82	16	24	0	0	**129**	0	13	3	12	1	0	0	**29**	0	4	22	2	0	0	0	**28**	0
Hourly Total	22	317	67	68	0	2	**476**	0	44	12	45	6	0	0	**107**	0	9	83	5	1	0	2	**100**	0
1:00PM	7	69	12	9	0	2	**99**	0	16	1	14	0	0	1	**32**	0	1	25	4	0	0	0	**30**	0
1:15PM	4	59	14	19	0	0	**96**	0	18	2	16	0	0	0	**36**	0	1	19	1	1	0	0	**22**	0
1:30PM	2	66	8	16	0	0	**92**	0	12	2	15	1	0	0	**30**	0	1	19	2	3	0	0	**25**	0
1:45PM	8	73	20	21	0	1	**123**	0	16	4	13	0	0	0	**33**	0	0	22	2	0	0	0	**24**	0
Hourly Total	21	267	54	65	0	3	**410**	0	62	9	58	1	0	1	**131**	0	3	85	9	4	0	0	**101**	0
2:00PM	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0
Hourly Total	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0
Total	73	870	177	185	0	8	**1313**	0	161	26	147	12	0	2	**348**	0	29	252	21	8	0	2	**312**	0
% Approach	5.6%	66.3%	13.5%	14.1%	0%	0.6%	**-**	-	46.3%	7.5%	42.2%	3.4%	0%	0.6%	**-**	-	9.3%	80.8%	6.7%	2.6%	0%	0.6%	**-**	-
% Total	2.2%	26.2%	5.3%	5.6%	0%	0.2%	**39.5%**	-	4.8%	0.8%	4.4%	0.4%	0%	0.1%	**10.5%**	-	0.9%	7.6%	0.6%	0.2%	0%	0.1%	**9.4%**	-
Lights	73	856	175	185	0	8	**1297**	-	157	26	145	12	0	2	**342**	-	29	250	20	8	0	2	**309**	-
% Lights	100%	98.4%	98.9%	100%	0%	100%	**98.8%**	-	97.5%	100%	98.6%	100%	0%	100%	**98.3%**	-	100%	99.2%	95.2%	100%	0%	100%	**99.0%**	-
Articulated Trucks and Single-Unit Trucks	0	13	0	0	0	0	**13**	-	4	0	2	0	0	0	**6**	-	0	0	1	0	0	0	**1**	-
% Articulated Trucks and Single-Unit Trucks	0%	1.5%	0%	0%	0%	0%	**1.0%**	-	2.5%	0%	1.4%	0%	0%	0%	**1.7%**	-	0%	0%	4.8%	0%	0%	0%	**0.3%**	-
Buses	0	1	2	0	0	0	**3**	-	0	0	0	0	0	0	**0**	-	0	2	0	0	0	0	**2**	-
% Buses	0%	0.1%	1.1%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0%	0.8%	0%	0%	0%	0%	**0.6%**	-
Pedestrians	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

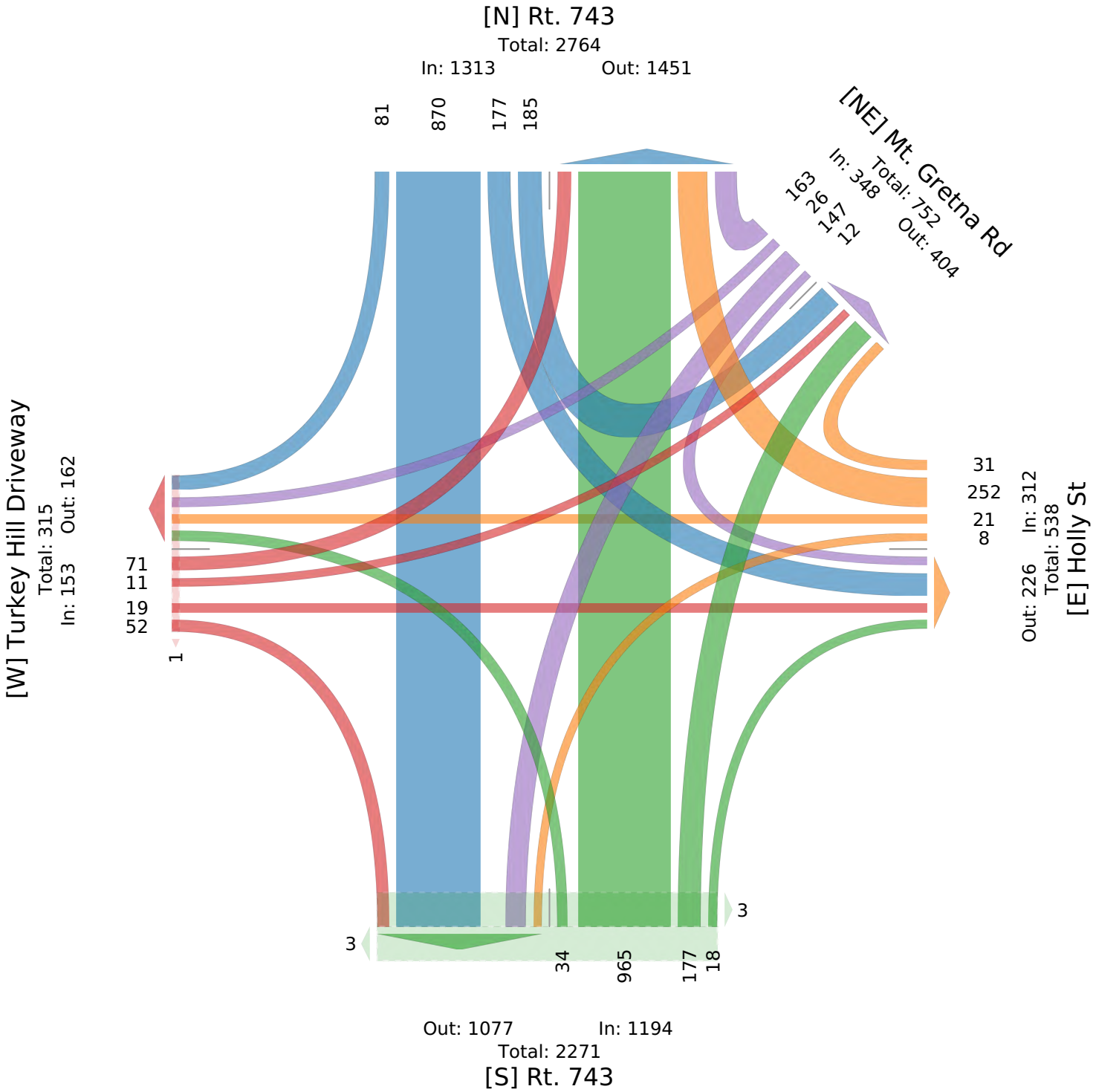
Leg	Rt. 743								Turkey Hill Driveway								
Direction	Northbound								Eastbound								
Time	R	BR	T	L	U	RR	**App**	Ped*	R	T	BL	L	U	RR	**App**	Ped*	**Int**
2024-06-01 11:00AM	0	15	82	4	0	0	**101**	2	4	1	3	5	0	0	**13**	0	**259**
11:15AM	1	13	95	2	0	0	**111**	0	5	2	0	7	0	3	**17**	0	**293**
11:30AM	1	16	96	1	0	0	**114**	0	2	1	0	7	0	2	**12**	0	**296**
11:45AM	4	15	65	5	0	0	**89**	1	5	0	4	5	0	0	**14**	0	**271**
Hourly Total	6	59	338	12	0	0	**415**	3	16	4	7	24	0	5	**56**	0	**1119**
12:00PM	0	13	78	4	0	1	**96**	0	2	5	0	9	0	3	**19**	0	**280**
12:15PM	1	16	93	2	0	0	**112**	1	4	1	0	6	0	1	**12**	1	**302**
12:30PM	1	18	98	4	0	0	**121**	0	1	1	0	5	0	3	**10**	0	**285**
12:45PM	2	18	73	2	0	0	**95**	0	5	2	1	8	0	0	**16**	0	**297**
Hourly Total	4	65	342	12	0	1	**424**	1	12	9	1	28	0	7	**57**	1	**1164**
1:00PM	2	21	85	3	0	0	**111**	0	2	2	3	5	0	1	**13**	0	**285**
1:15PM	1	10	71	5	0	0	**87**	1	1	0	0	6	0	0	**7**	0	**248**
1:30PM	3	11	52	0	0	0	**66**	1	2	2	0	5	0	0	**9**	0	**222**
1:45PM	1	11	77	2	0	0	**91**	0	2	2	0	3	0	4	**11**	0	**282**
Hourly Total	7	53	285	10	0	0	**355**	2	7	6	3	19	0	5	**40**	0	**1037**
2:00PM	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	**0**
Total	17	177	965	34	0	1	**1194**	6	35	19	11	71	0	17	**153**	1	**3320**
% Approach	1.4%	14.8%	80.8%	2.8%	0%	0.1%	**-**	-	22.9%	12.4%	7.2%	46.4%	0%	11.1%	**-**	-	-
% Total	0.5%	5.3%	29.1%	1.0%	0%	0%	**36.0%**	-	1.1%	0.6%	0.3%	2.1%	0%	0.5%	**4.6%**	-	-
Lights	17	172	947	34	0	1	**1171**	-	35	19	11	71	0	17	**153**	-	3272
% Lights	100%	97.2%	98.1%	100%	0%	100%	**98.1%**	-	100%	100%	100%	100%	0%	100%	**100%**	-	98.6%
Articulated Trucks and Single-Unit Trucks	0	4	16	0	0	0	**20**	-	0	0	0	0	0	0	**0**	-	40
% Articulated Trucks and Single-Unit Trucks	0%	2.3%	1.7%	0%	0%	0%	**1.7%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	1.2%
Buses	0	1	2	0	0	0	**3**	-	0	0	0	0	0	0	**0**	-	8
% Buses	0%	0.6%	0.2%	0%	0%	0%	**0.3%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0.2%
Pedestrians	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
Full Length (11 AM-2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
Midday Peak (WKND) (12:15 PM - 1:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Rt. 743								Mt. Gretna Rd								Holly St							
Direction	Southbound								Southwestbound								Westbound							
Time	R	T	L	HL	U	RR	**App**	Ped*	HR	BR	BL	HL	U	HRR	**App**	Ped*	HR	R	T	L	U	HRR	**App**	Ped*
2024-06-01 12:15PM	5	88	14	16	0	1	**124**	0	11	3	12	3	0	0	**29**	0	0	22	2	1	0	0	**25**	0
12:30PM	4	71	18	10	0	0	**103**	0	12	1	11	1	0	0	**25**	0	3	22	1	0	0	0	**26**	0
12:45PM	7	82	16	24	0	0	**129**	0	13	3	12	1	0	0	**29**	0	4	22	2	0	0	0	**28**	0
1:00PM	7	69	12	9	0	2	**99**	0	16	1	14	0	0	1	**32**	0	1	25	4	0	0	0	**30**	0
Total	23	310	60	59	0	3	**455**	0	52	8	49	5	0	1	**115**	0	8	91	9	1	0	0	**109**	0
% Approach	5.1%	68.1%	13.2%	13.0%	0%	0.7%	**-**	-	45.2%	7.0%	42.6%	4.3%	0%	0.9%	**-**	-	7.3%	83.5%	8.3%	0.9%	0%	0%	**-**	-
% Total	2.0%	26.5%	5.1%	5.0%	0%	0.3%	**38.9%**	-	4.4%	0.7%	4.2%	0.4%	0%	0.1%	**9.8%**	-	0.7%	7.8%	0.8%	0.1%	0%	0%	**9.3%**	-
PHF	0.821	0.881	0.833	0.615		- 0.375	**0.882**	-	0.813	0.667	0.875	0.417		- 0.250	**0.898**	-	0.500	0.910	0.563	0.250	-	-	**0.908**	-
Lights	23	304	59	59	0	3	**448**	-	52	8	47	5	0	1	**113**	-	8	90	8	1	0	0	**107**	-
% Lights	100%	98.1%	98.3%	100%	0%	100%	**98.5%**	-	100%	100%	95.9%	100%	0%	100%	**98.3%**	-	100%	98.9%	88.9%	100%	0%	0%	**98.2%**	-
Articulated Trucks and Single-Unit Trucks	0	5	0	0	0	0	**5**	-	0	0	2	0	0	0	**2**	-	0	0	1	0	0	0	**1**	-
% Articulated Trucks and Single-Unit Trucks	0%	1.6%	0%	0%	0%	0%	**1.1%**	-	0%	0%	4.1%	0%	0%	0%	**1.7%**	-	0%	0%	11.1%	0%	0%	0%	**0.9%**	-
Buses	0	1	1	0	0	0	**2**	-	0	0	0	0	0	0	**0**	-	0	1	0	0	0	0	**1**	-
% Buses	0%	0.3%	1.7%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0%	1.1%	0%	0%	0%	0%	**0.9%**	-
Pedestrians	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
Midday Peak (WKND) (12:15 PM - 1:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

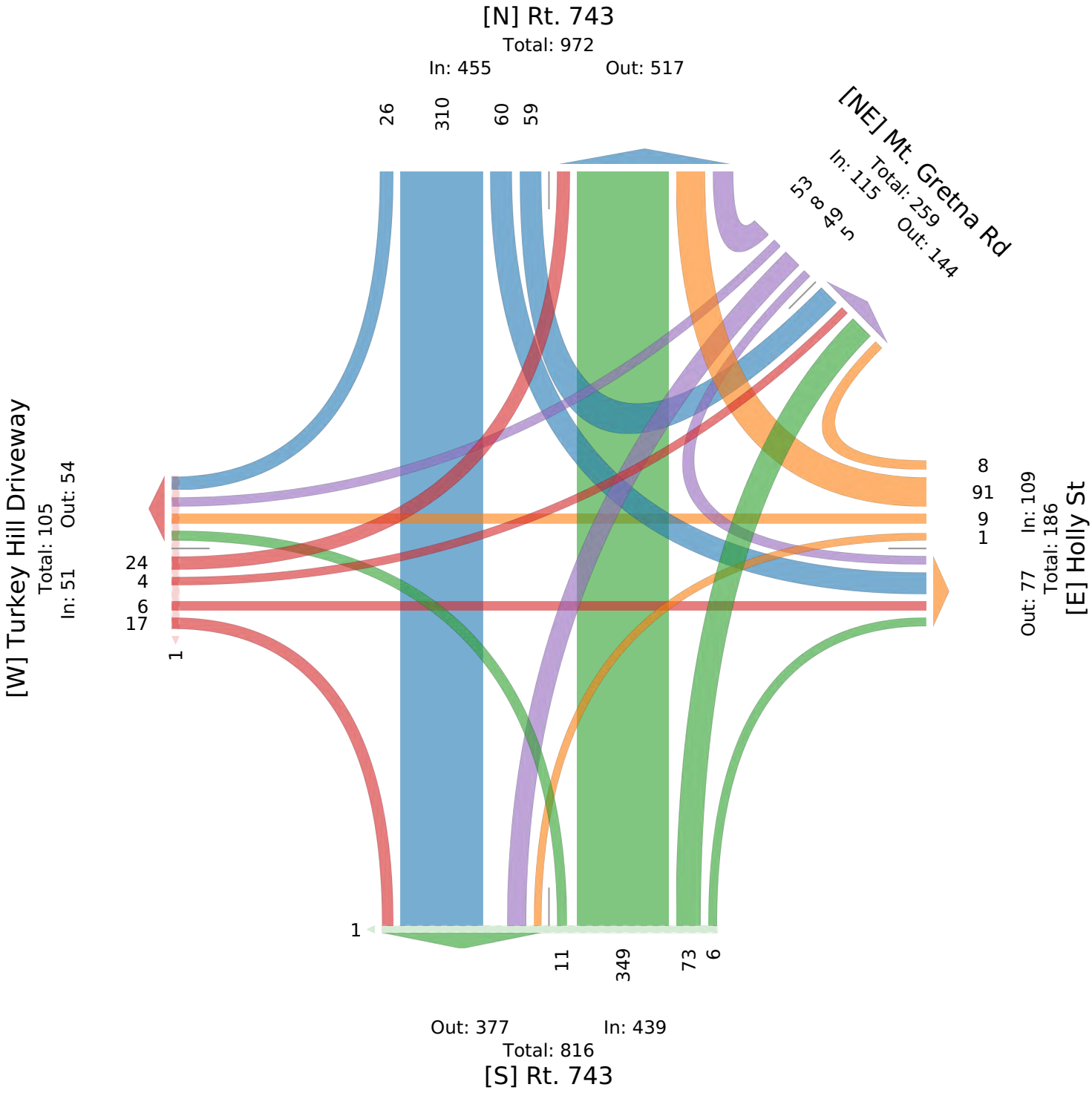
Leg	Rt. 743								Turkey Hill Driveway								
Direction	Northbound								Eastbound								
Time	R	BR	T	L	U	RR	App	Ped*	R	T	BL	L	U	RR	App	Ped*	Int
2024-06-01 12:15PM	1	16	93	2	0	0	**112**	1	4	1	0	6	0	1	**12**	1	**302**
12:30PM	1	18	98	4	0	0	**121**	0	1	1	0	5	0	3	**10**	0	**285**
12:45PM	2	18	73	2	0	0	**95**	0	5	2	1	8	0	0	**16**	0	**297**
1:00PM	2	21	85	3	0	0	**111**	0	2	2	3	5	0	1	**13**	0	**285**
Total	6	73	349	11	0	0	**439**	1	12	6	4	24	0	5	**51**	1	**1169**
% Approach	1.4%	16.6%	79.5%	2.5%	0%	0%	**-**	-	23.5%	11.8%	7.8%	47.1%	0%	9.8%	**-**	-	-
% Total	0.5%	6.2%	29.9%	0.9%	0%	0%	**37.6%**	-	1.0%	0.5%	0.3%	2.1%	0%	0.4%	**4.4%**	-	-
PHF	0.750	0.869	0.890	0.688	-	-	**0.907**	-	0.600	0.750	0.333	0.750	-	0.417	**0.797**	-	0.968
Lights	6	70	341	11	0	0	**428**	-	12	6	4	24	0	5	**51**	-	1147
% Lights	100%	95.9%	97.7%	100%	0%	0%	**97.5%**	-	100%	100%	100%	100%	0%	100%	**100%**	-	98.1%
Articulated Trucks and Single-Unit Trucks	0	3	7	0	0	0	**10**	-	0	0	0	0	0	0	**0**	-	18
% Articulated Trucks and Single-Unit Trucks	0%	4.1%	2.0%	0%	0%	0%	**2.3%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	1.5%
Buses	0	0	1	0	0	0	**1**	-	0	0	0	0	0	0	**0**	-	4
% Buses	0%	0%	0.3%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0.3%
Pedestrians	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
Midday Peak (WKND) (12:15 PM - 1:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
PM Peak (WKND) (1 PM - 2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

Leg	Rt. 743								Mt. Gretna Rd								Holly St							
Direction	Southbound								Southwestbound								Westbound							
Time	R	T	L	HL	U	RR	**App**	Ped*	HR	BR	BL	HL	U	HRR	**App**	Ped*	HR	R	T	L	U	HRR	**App**	Ped*
2024-06-01 1:00PM	7	69	12	9	0	2	**99**	0	16	1	14	0	0	1	**32**	0	1	25	4	0	0	0	**30**	0
1:15PM	4	59	14	19	0	0	**96**	0	18	2	16	0	0	0	**36**	0	1	19	1	1	0	0	**22**	0
1:30PM	2	66	8	16	0	0	**92**	0	12	2	15	1	0	0	**30**	0	1	19	2	3	0	0	**25**	0
1:45PM	8	73	20	21	0	1	**123**	0	16	4	13	0	0	0	**33**	0	0	22	2	0	0	0	**24**	0
Total	21	267	54	65	0	3	**410**	0	62	9	58	1	0	1	**131**	0	3	85	9	4	0	0	**101**	0
% Approach	5.1%	65.1%	13.2%	15.9%	0%	0.7%	**-**	-	47.3%	6.9%	44.3%	0.8%	0%	0.8%	**-**	-	3.0%	84.2%	8.9%	4.0%	0%	0%	**-**	-
% Total	2.0%	25.7%	5.2%	6.3%	0%	0.3%	**39.5%**	-	6.0%	0.9%	5.6%	0.1%	0%	0.1%	**12.6%**	-	0.3%	8.2%	0.9%	0.4%	0%	0%	**9.7%**	-
PHF	0.656	0.914	0.675	0.774	-	0.375	**0.833**	-	0.861	0.563	0.906	0.250	-	0.250	**0.910**	-	0.750	0.850	0.563	0.333	-	-	**0.842**	-
Lights	21	261	54	65	0	3	**404**	-	62	9	57	1	0	1	**130**	-	3	84	9	4	0	0	**100**	-
% Lights	100%	97.8%	100%	100%	0%	100%	**98.5%**	-	100%	100%	98.3%	100%	0%	100%	**99.2%**	-	100%	98.8%	100%	100%	0%	0%	**99.0%**	-
Articulated Trucks and Single-Unit Trucks	0	5	0	0	0	0	**5**	-	0	0	1	0	0	0	**1**	-	0	0	0	0	0	0	**0**	-
% Articulated Trucks and Single-Unit Trucks	0%	1.9%	0%	0%	0%	0%	**1.2%**	-	0%	0%	1.7%	0%	0%	0%	**0.8%**	-	0%	0%	0%	0%	0%	0%	**0%**	-
Buses	0	1	0	0	0	0	**1**	-	0	0	0	0	0	0	**0**	-	0	1	0	0	0	0	**1**	-
% Buses	0%	0.4%	0%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0%	1.2%	0%	0%	0%	0%	**1.0%**	-
Pedestrians	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
PM Peak (WKND) (1 PM - 2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US

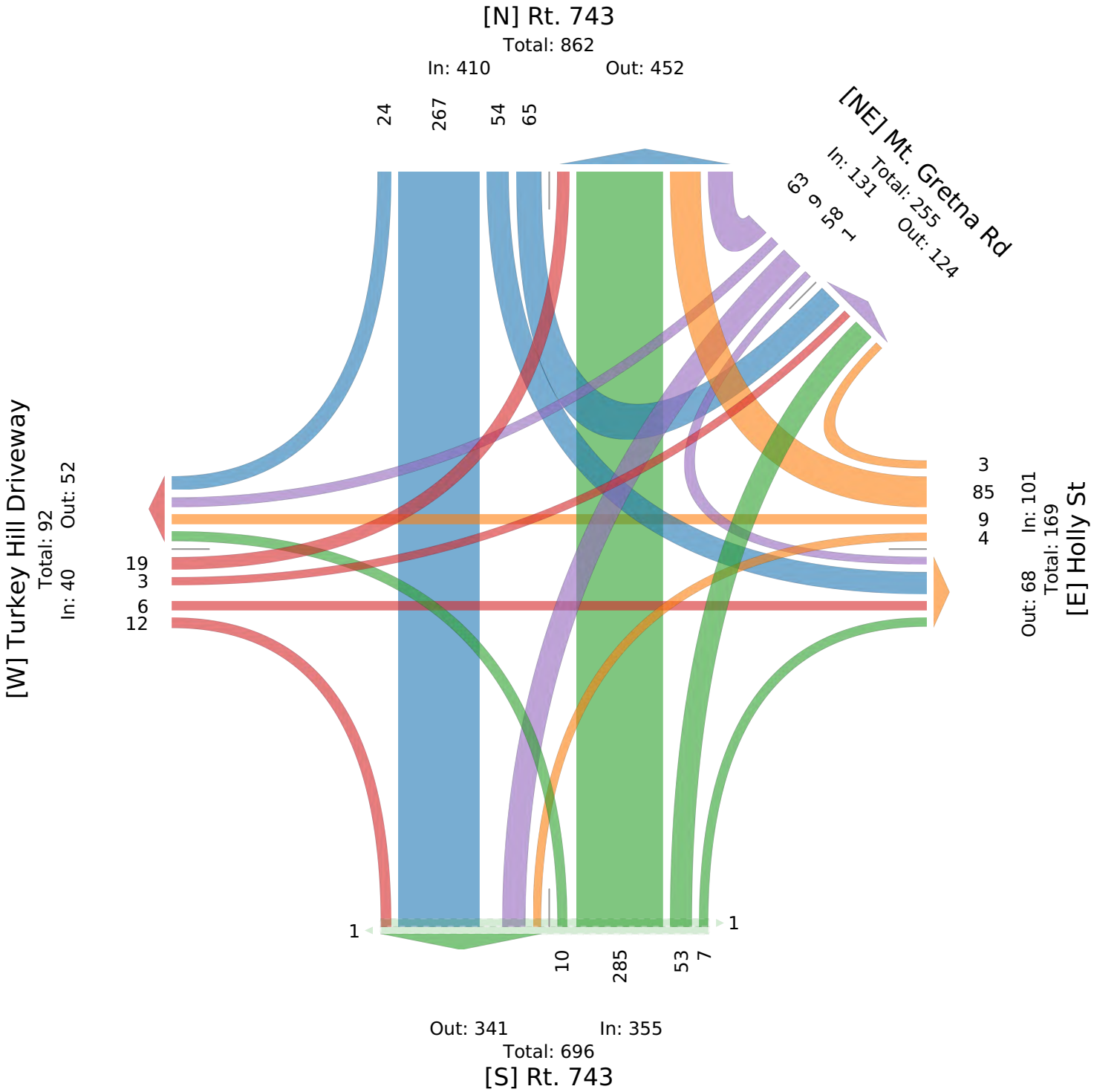
Leg	Rt. 743								Turkey Hill Driveway								
Direction	Northbound								Eastbound								
Time	R	BR	T	L	U	RR	App	Ped*	R	T	BL	L	U	RR	App	Ped*	Int
2024-06-01 1:00PM	2	21	85	3	0	0	**111**	0	2	2	3	5	0	1	**13**	0	**285**
1:15PM	1	10	71	5	0	0	**87**	1	1	0	0	6	0	0	**7**	0	**248**
1:30PM	3	11	52	0	0	0	**66**	1	2	2	0	5	0	0	**9**	0	**222**
1:45PM	1	11	77	2	0	0	**91**	0	2	2	0	3	0	4	**11**	0	**282**
Total	7	53	285	10	0	0	**355**	2	7	6	3	19	0	5	**40**	0	**1037**
% Approach	2.0%	14.9%	80.3%	2.8%	0%	0%	**-**	-	17.5%	15.0%	7.5%	47.5%	0%	12.5%	**-**	-	-
% Total	0.7%	5.1%	27.5%	1.0%	0%	0%	**34.2%**	-	0.7%	0.6%	0.3%	1.8%	0%	0.5%	**3.9%**	-	-
PHF	0.583	0.631	0.838	0.500	-	-	**0.800**	-	0.875	0.750	0.250	0.792	-	0.313	**0.769**	-	0.910
Lights	7	51	280	10	0	0	**348**	-	7	6	3	19	0	5	**40**	-	1022
% Lights	100%	96.2%	98.2%	100%	0%	0%	**98.0%**	-	100%	100%	100%	100%	0%	100%	**100%**	-	98.6%
Articulated Trucks and Single-Unit Trucks	0	1	4	0	0	0	**5**	-	0	0	0	0	0	0	**0**	-	11
% Articulated Trucks and Single-Unit Trucks	0%	1.9%	1.4%	0%	0%	0%	**1.4%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	1.1%
Buses	0	1	1	0	0	0	**2**	-	0	0	0	0	0	0	**0**	-	4
% Buses	0%	1.9%	0.4%	0%	0%	0%	**0.6%**	-	0%	0%	0%	0%	0%	0%	**0%**	-	0.4%
Pedestrians	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, HRR: Hard right on red, L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Rt. 743 & Mt. Gretna Rd/Holly St Sat - TMC

Sat Jun 1, 2024
PM Peak (WKND) (1 PM - 2 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1193611, Location: 40.165384, -76.607835

Provided by: Tri-State Traffic Data, Inc.
184 Baker Road,
Coatesville, PA, 19320, US



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Lancaster County, PA
Veterans Dr & Site Driveway
Tuesday, May 21, 2024
Location: 40.168648, -76.60695

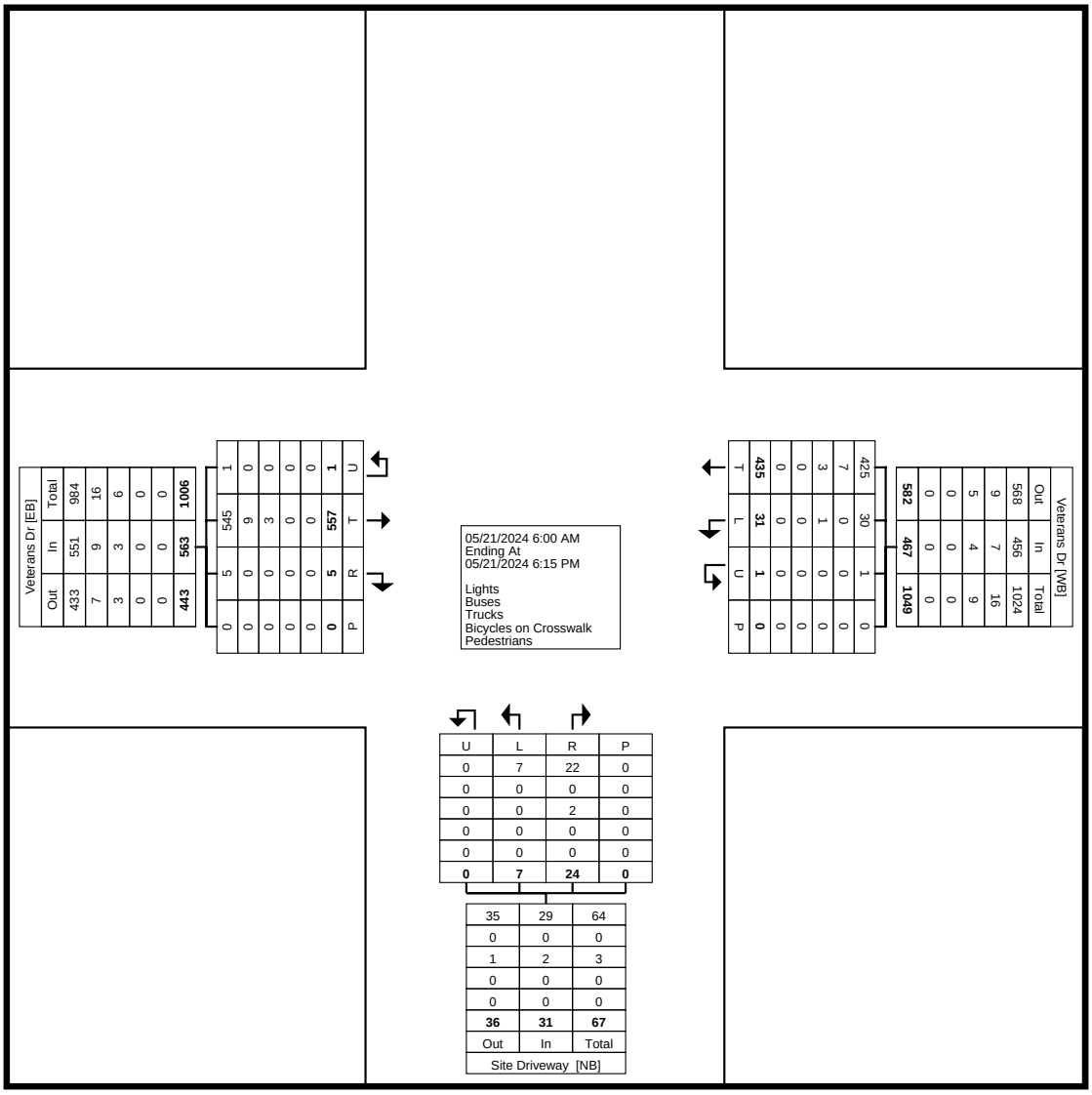
Count Name: Veterans Dr & Site Driveway
Site Code:
Start Date: 05/21/2024

Turning Movement Data

Start Time	Veterans Dr Eastbound					Veterans Dr Westbound					Site Driveway Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	13	0	0	0	13	0	1	0	0	1	0	0	0	0	0	14
6:15 AM	26	0	0	0	26	1	7	0	0	8	0	0	0	0	0	34
6:30 AM	27	0	0	0	27	0	1	0	0	1	0	0	0	0	0	28
6:45 AM	24	0	0	0	24	0	5	0	0	5	0	0	0	0	0	29
Hourly Total	90	0	0	0	90	1	14	0	0	15	0	0	0	0	0	105
7:00 AM	35	0	0	0	35	0	6	0	0	6	0	1	0	0	1	42
7:15 AM	45	1	0	0	46	0	15	0	0	15	0	1	0	0	1	62
7:30 AM	27	0	0	0	27	0	10	0	0	10	0	0	0	0	0	37
7:45 AM	22	0	0	0	22	0	13	0	0	13	0	0	0	0	0	35
Hourly Total	129	1	0	0	130	0	44	0	0	44	0	2	0	0	2	176
8:00 AM	16	0	0	0	16	0	7	0	0	7	0	0	0	0	0	23
8:15 AM	20	0	0	0	20	1	6	0	0	7	0	3	0	0	3	30
8:30 AM	20	0	0	0	20	0	8	0	0	8	0	0	0	0	0	28
8:45 AM	11	0	0	0	11	0	9	0	0	9	0	0	0	0	0	20
Hourly Total	67	0	0	0	67	1	30	0	0	31	0	3	0	0	3	101
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	20	0	0	0	20	0	22	0	0	22	0	1	0	0	1	43
3:15 PM	18	0	0	0	18	2	25	0	0	27	0	2	0	0	2	47
3:30 PM	15	0	0	0	15	3	20	1	0	24	0	2	0	0	2	41
3:45 PM	16	0	0	0	16	2	26	0	0	28	0	2	0	0	2	46
Hourly Total	69	0	0	0	69	7	93	1	0	101	0	7	0	0	7	177
4:00 PM	18	0	1	0	19	2	38	0	0	40	0	1	0	0	1	60
4:15 PM	21	0	0	0	21	2	29	0	0	31	0	2	0	0	2	54
4:30 PM	35	1	0	0	36	2	25	0	0	27	0	1	0	0	1	64
4:45 PM	26	0	0	0	26	1	41	0	0	42	1	1	0	0	2	70
Hourly Total	100	1	1	0	102	7	133	0	0	140	1	5	0	0	6	248
5:00 PM	23	0	0	0	23	5	33	0	0	38	0	2	0	0	2	63
5:15 PM	30	1	0	0	31	3	29	0	0	32	2	3	0	0	5	68
5:30 PM	22	2	0	0	24	3	35	0	0	38	2	1	0	0	3	65
5:45 PM	27	0	0	0	27	4	24	0	0	28	2	1	0	0	3	58
Hourly Total	102	3	0	0	105	15	121	0	0	136	6	7	0	0	13	254
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	557	5	1	0	563	31	435	1	0	467	7	24	0	0	31	1061
Approach %	98.9	0.9	0.2	-	-	6.6	93.1	0.2	-	-	22.6	77.4	0.0	-	-	-
Total %	52.5	0.5	0.1	-	53.1	2.9	41.0	0.1	-	44.0	0.7	2.3	0.0	-	2.9	-
Lights	545	5	1	-	551	30	425	1	-	456	7	22	0	-	29	1036
% Lights	97.8	100.0	100.0	-	97.9	96.8	97.7	100.0	-	97.6	100.0	91.7	-	-	93.5	97.6
Buses	9	0	0	-	9	0	7	0	-	7	0	0	0	-	0	16
% Buses	1.6	0.0	0.0	-	1.6	0.0	1.6	0.0	-	1.5	0.0	0.0	-	-	0.0	1.5
Trucks	3	0	0	-	3	1	3	0	-	4	0	2	0	-	2	9
% Trucks	0.5	0.0	0.0	-	0.5	3.2	0.7	0.0	-	0.9	0.0	8.3	-	-	6.5	0.8
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lancaster County, PA
Veterans Dr & Site Driveway
Tuesday, May 21, 2024
Location: 40.168648, -76.60695

Count Name: Veterans Dr & Site Driveway
Site Code:
Start Date: 05/21/2024



Turning Movement Data Plot

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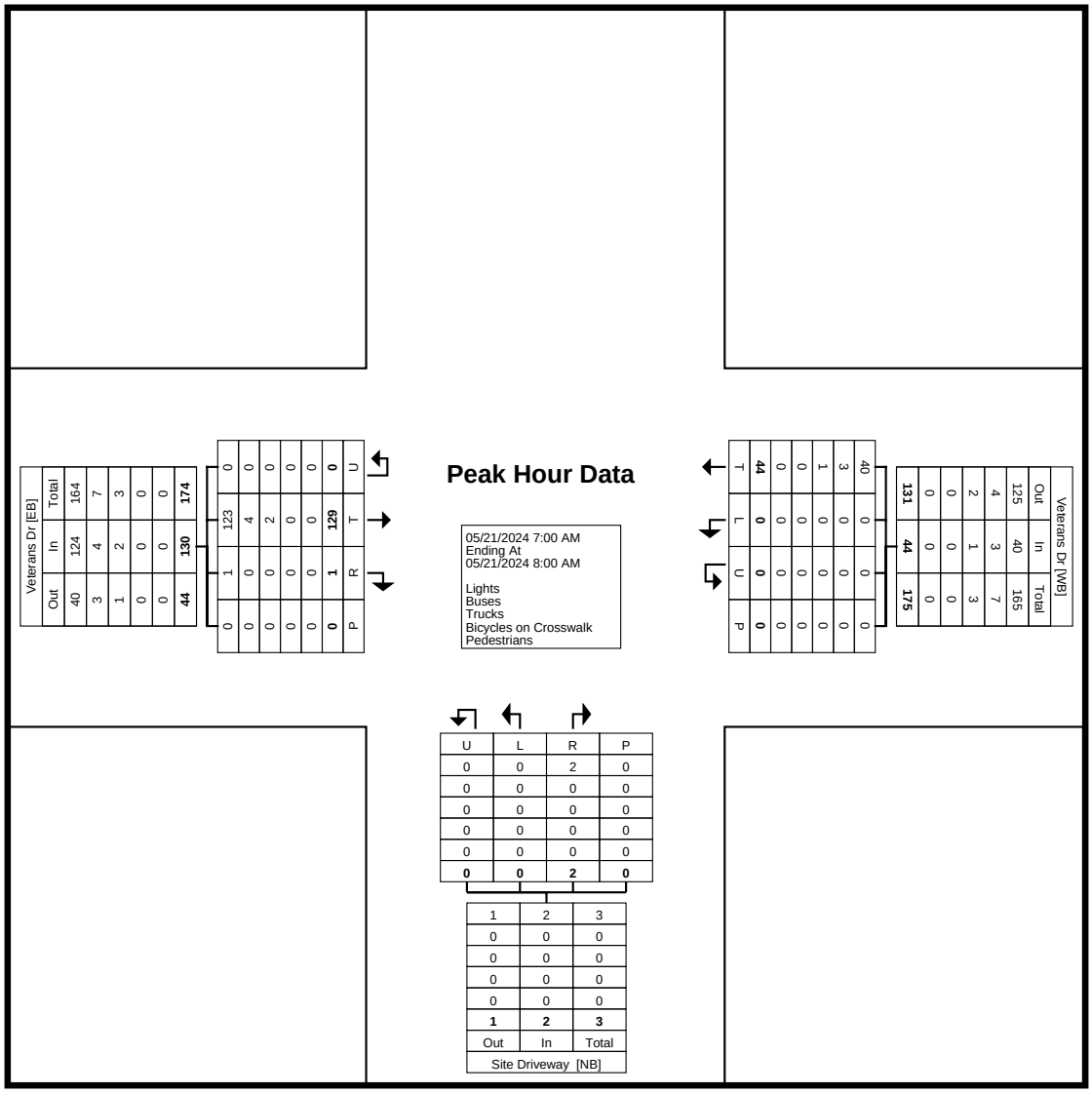
Lancaster County, PA
Veterans Dr & Site Driveway
Tuesday, May 21, 2024
Location: 40.168648, -76.60695

Count Name: Veterans Dr & Site Driveway
Site Code:
Start Date: 05/21/2024

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Veterans Dr Eastbound					Veterans Dr Westbound					Site Driveway Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
7:00 AM	35	0	0	0	35	0	6	0	0	6	0	1	0	0	1	42
7:15 AM	45	1	0	0	46	0	15	0	0	15	0	1	0	0	1	62
7:30 AM	27	0	0	0	27	0	10	0	0	10	0	0	0	0	0	37
7:45 AM	22	0	0	0	22	0	13	0	0	13	0	0	0	0	0	35
Total	129	1	0	0	130	0	44	0	0	44	0	2	0	0	2	176
Approach %	99.2	0.8	0.0	-	-	0.0	100.0	0.0	-	-	0.0	100.0	0.0	-	-	-
Total %	73.3	0.6	0.0	-	73.9	0.0	25.0	0.0	-	25.0	0.0	1.1	0.0	-	1.1	-
PHF	0.717	0.250	0.000	-	0.707	0.000	0.733	0.000	-	0.733	0.000	0.500	0.000	-	0.500	0.710
Lights	123	1	0	-	124	0	40	0	-	40	0	2	0	-	2	166
% Lights	95.3	100.0	-	-	95.4	-	90.9	-	-	90.9	-	100.0	-	-	100.0	94.3
Buses	4	0	0	-	4	0	3	0	-	3	0	0	0	-	0	7
% Buses	3.1	0.0	-	-	3.1	-	6.8	-	-	6.8	-	0.0	-	-	0.0	4.0
Trucks	2	0	0	-	2	0	1	0	-	1	0	0	0	-	0	3
% Trucks	1.6	0.0	-	-	1.5	-	2.3	-	-	2.3	-	0.0	-	-	0.0	1.7
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (7:00 AM)

www.TSTData.com
Tri-State Traffic Data, Inc

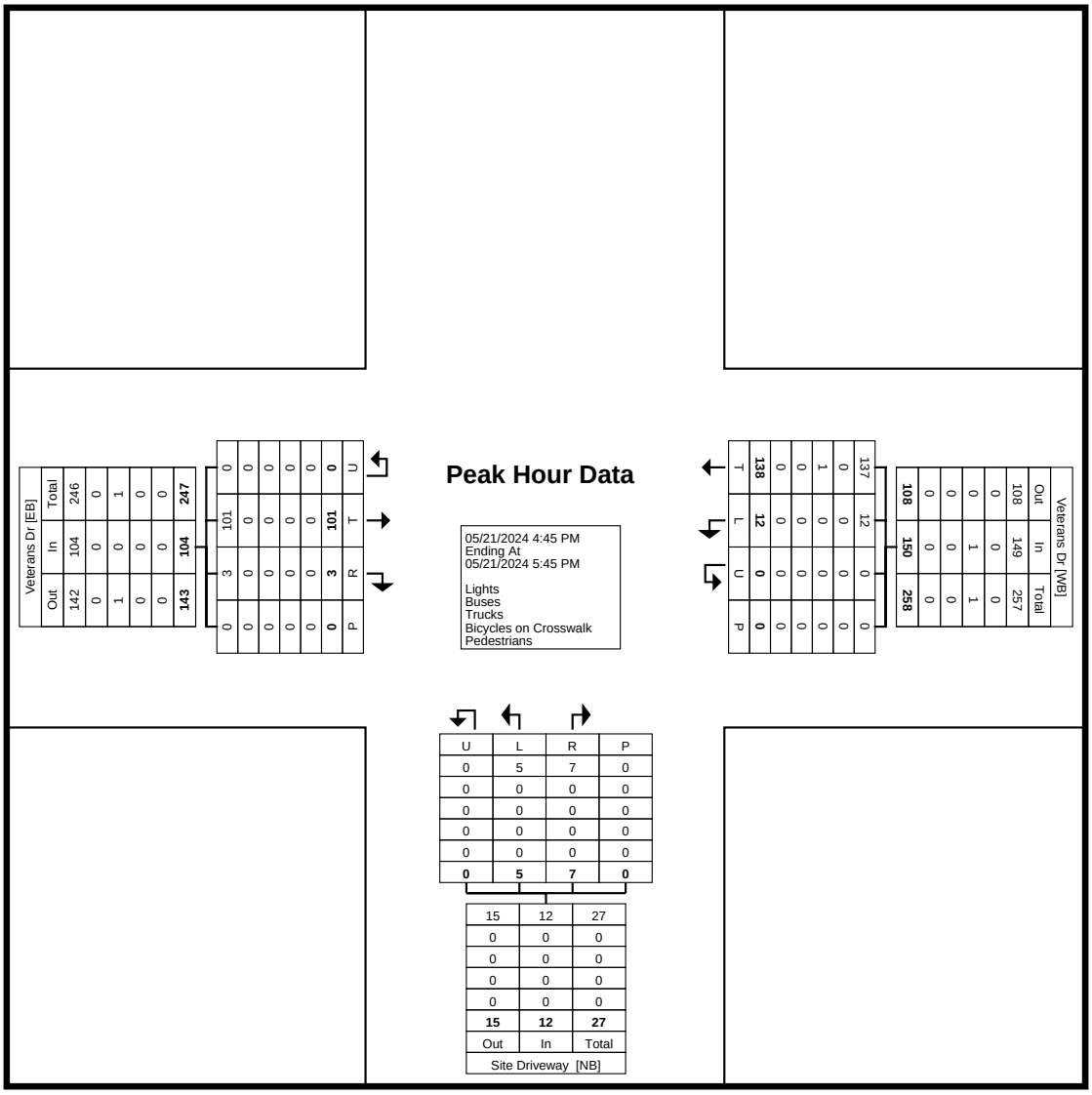
Coatesville, PA, Pennsylvania, United States 19320
610-466-1469
Serving Transportiation Professionals Since 1995

Lancaster County, PA
Veterans Dr & Site Driveway
Tuesday, May 21, 2024
Location: 40.168648, -76.60695

Count Name: Veterans Dr & Site Driveway
Site Code:
Start Date: 05/21/2024

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Veterans Dr Eastbound					Veterans Dr Westbound					Site Driveway Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
4:45 PM	26	0	0	0	26	1	41	0	0	42	1	1	0	0	2	70
5:00 PM	23	0	0	0	23	5	33	0	0	38	0	2	0	0	2	63
5:15 PM	30	1	0	0	31	3	29	0	0	32	2	3	0	0	5	68
5:30 PM	22	2	0	0	24	3	35	0	0	38	2	1	0	0	3	65
Total	101	3	0	0	104	12	138	0	0	150	5	7	0	0	12	266
Approach %	97.1	2.9	0.0	-	-	8.0	92.0	0.0	-	-	41.7	58.3	0.0	-	-	-
Total %	38.0	1.1	0.0	-	39.1	4.5	51.9	0.0	-	56.4	1.9	2.6	0.0	-	4.5	-
PHF	0.842	0.375	0.000	-	0.839	0.600	0.841	0.000	-	0.893	0.625	0.583	0.000	-	0.600	0.950
Lights	101	3	0	-	104	12	137	0	-	149	5	7	0	-	12	265
% Lights	100.0	100.0	-	-	100.0	100.0	99.3	-	-	99.3	100.0	100.0	-	-	100.0	99.6
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	0	0	-	0	0	1	0	-	1	0	0	0	-	0	1
% Trucks	0.0	0.0	-	-	0.0	0.0	0.7	-	-	0.7	0.0	0.0	-	-	0.0	0.4
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Turning Movement Peak Hour Data Plot (4:45 PM)

www.TSTData.com
Tri-State Traffic Data, Inc

Coatesville, PA, Pennsylvania, United States 19320
610-466-1469
Serving Transportiation Professionals Since 1995

Lancaster County, PA
Veterans Dr & Site Driveway
Saturday, June 1, 2024
Location: 40.168648, -76.60695

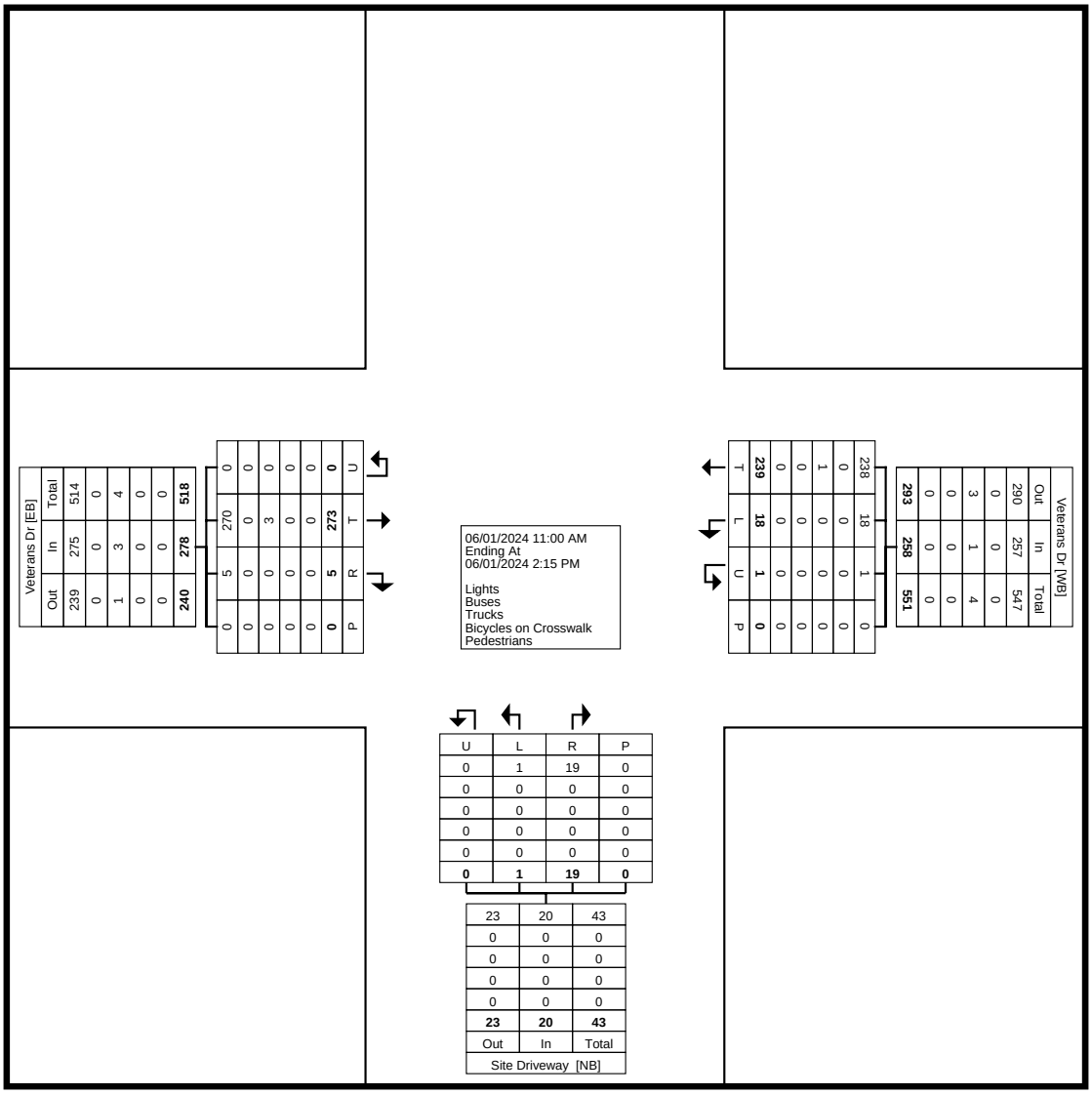
Count Name: Veterans Dr & Site Driveway Sat
Site Code:
Start Date: 06/01/2024

Turning Movement Data

Start Time	Veterans Dr Eastbound					Veterans Dr Westbound					Site Driveway Northbound					Int. Total
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	
11:00 AM	29	1	0	0	30	0	15	0	0	15	0	1	0	0	1	46
11:15 AM	27	0	0	0	27	2	20	0	0	22	0	1	0	0	1	50
11:30 AM	18	1	0	0	19	2	25	1	0	28	0	4	0	0	4	51
11:45 AM	23	0	0	0	23	2	16	0	0	18	0	1	0	0	1	42
Hourly Total	97	2	0	0	99	6	76	1	0	83	0	7	0	0	7	189
12:00 PM	21	0	0	0	21	2	26	0	0	28	0	0	0	0	0	49
12:15 PM	25	1	0	0	26	4	15	0	0	19	0	2	0	0	2	47
12:30 PM	23	1	0	0	24	0	25	0	0	25	1	3	0	0	4	53
12:45 PM	21	0	0	0	21	3	20	0	0	23	0	0	0	0	0	44
Hourly Total	90	2	0	0	92	9	86	0	0	95	1	5	0	0	6	193
1:00 PM	17	0	0	0	17	0	20	0	0	20	0	2	0	0	2	39
1:15 PM	21	1	0	0	22	0	22	0	0	22	0	0	0	0	0	44
1:30 PM	20	0	0	0	20	2	21	0	0	23	0	4	0	0	4	47
1:45 PM	28	0	0	0	28	1	14	0	0	15	0	1	0	0	1	44
Hourly Total	86	1	0	0	87	3	77	0	0	80	0	7	0	0	7	174
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	273	5	0	0	278	18	239	1	0	258	1	19	0	0	20	556
Approach %	98.2	1.8	0.0	-	-	7.0	92.6	0.4	-	-	5.0	95.0	0.0	-	-	-
Total %	49.1	0.9	0.0	-	50.0	3.2	43.0	0.2	-	46.4	0.2	3.4	0.0	-	3.6	-
Lights	270	5	0	-	275	18	238	1	-	257	1	19	0	-	20	552
% Lights	98.9	100.0	-	-	98.9	100.0	99.6	100.0	-	99.6	100.0	100.0	-	-	100.0	99.3
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	3	0	0	-	3	0	1	0	-	1	0	0	0	-	0	4
% Trucks	1.1	0.0	-	-	1.1	0.0	0.4	0.0	-	0.4	0.0	0.0	-	-	0.0	0.7
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lancaster County, PA
Veterans Dr & Site Driveway
Saturday, June 1, 2024
Location: 40.168648, -76.60695

Count Name: Veterans Dr & Site Driveway Sat
Site Code:
Start Date: 06/01/2024



Turning Movement Data Plot

www.TSTData.com
Tri-State Traffic Data, Inc

Coatesville, PA, Pennsylvania, United States 19320
610-466-1469
Serving Transportiation Professionals Since 1995

Lancaster County, PA
Veterans Dr & Site Driveway
Saturday, June 1, 2024
Location: 40.168648, -76.60695

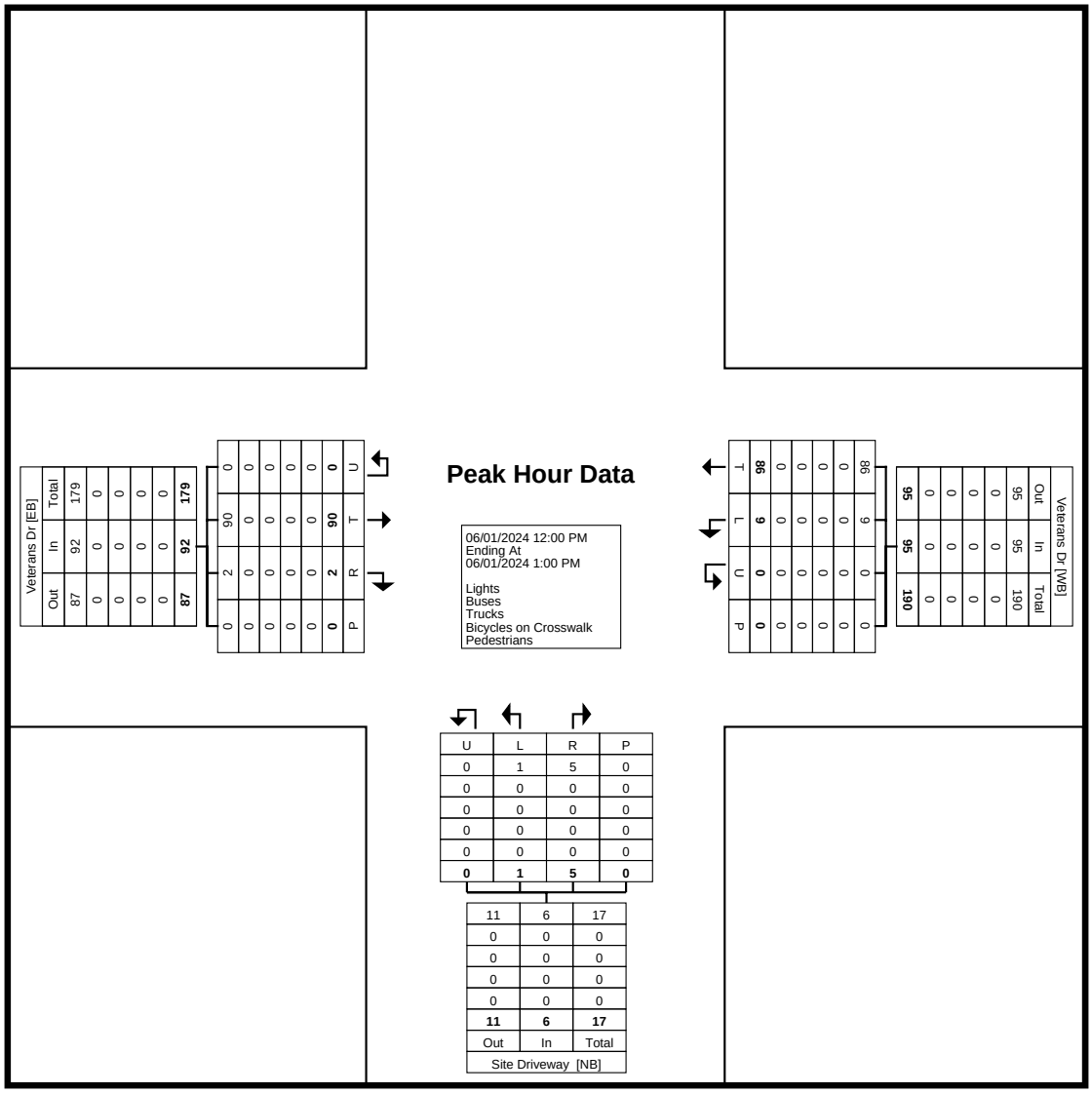
Count Name: Veterans Dr & Site Driveway Sat
Site Code:
Start Date: 06/01/2024

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Veterans Dr Eastbound					Veterans Dr Westbound					Site Driveway Northbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
12:00 PM	21	0	0	0	21	2	26	0	0	28	0	0	0	0	0	49
12:15 PM	25	1	0	0	26	4	15	0	0	19	0	2	0	0	2	47
12:30 PM	23	1	0	0	24	0	25	0	0	25	1	3	0	0	4	53
12:45 PM	21	0	0	0	21	3	20	0	0	23	0	0	0	0	0	44
Total	90	2	0	0	92	9	86	0	0	95	1	5	0	0	6	193
Approach %	97.8	2.2	0.0	-	-	9.5	90.5	0.0	-	-	16.7	83.3	0.0	-	-	-
Total %	46.6	1.0	0.0	-	47.7	4.7	44.6	0.0	-	49.2	0.5	2.6	0.0	-	3.1	-
PHF	0.900	0.500	0.000	-	0.885	0.563	0.827	0.000	-	0.848	0.250	0.417	0.000	-	0.375	0.910
Lights	90	2	0	-	92	9	86	0	-	95	1	5	0	-	6	193
% Lights	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Buses	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Trucks	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lancaster County, PA
Veterans Dr & Site Driveway
Saturday, June 1, 2024
Location: 40.168648, -76.60695

Count Name: Veterans Dr & Site Driveway Sat
Site Code:
Start Date: 06/01/2024



Turning Movement Peak Hour Data Plot (12:00 PM)

Tri-State Traffic Data, Inc.

610-466-1469
TSTData.com

Road: Old Hershey Rd
Location: 315 ft S of Veterans Dr
Counter: 35146

Site Code: 2
Station ID:
A to B NB

Latitude: 40' 16779.0000 North
Longitude: 76' 60780.0000 West

Start	Monday, May 20, 2024		Tuesday, May 21, 2024		Wednesday, May 22, 2024		Thursday, May 23, 2024		Friday, May 24, 2024		Saturday, May 25, 2024		Sunday, May 26, 2024		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	0	0	0	1	0	0	1	0	*	*	*	*	0	0
01:00	*	*	0	1	0	1	0	1	1	1	*	*	*	*	0	1
02:00	*	*	1	1	1	0	0	1	2	0	*	*	*	*	1	0
03:00	*	*	1	1	1	2	1	0	2	3	*	*	*	*	1	2
04:00	*	*	5	0	4	0	4	0	2	1	*	*	*	*	4	0
05:00	*	*	9	0	10	1	6	0	9	0	*	*	*	*	8	0
06:00	*	*	24	6	33	9	29	4	**23**	6	*	*	*	*	27	6
07:00	*	*	**37**	14	**37**	12	**37**	10	23	**8**	*	*	*	*	**34**	11
08:00	*	*	20	10	20	**16**	18	**13**	*	*	*	*	*	*	19	13
09:00	*	*	21	13	12	9	20	8	*	*	*	*	*	*	18	10
10:00	*	*	22	12	16	16	15	13	*	*	*	*	*	*	18	14
11:00	*	*	24	**22**	11	13	11	12	*	*	*	*	*	*	15	**16**
12:00 PM	*	*	15	15	16	20	21	27	*	*	*	*	*	*	17	21
01:00	*	*	11	15	17	13	13	12	*	*	*	*	*	*	14	13
02:00	*	*	18	21	22	19	18	18	*	*	*	*	*	*	19	19
03:00	*	*	12	23	20	25	17	24	*	*	*	*	*	*	16	24
04:00	*	*	**31**	**39**	**24**	**35**	17	38	*	*	*	*	*	*	24	37
05:00	**31**	**40**	30	39	20	34	18	**40**	*	*	*	*	*	*	**25**	**38**
06:00	28	32	27	30	18	29	**28**	24	*	*	*	*	*	*	25	29
07:00	11	25	18	22	14	17	21	32	*	*	*	*	*	*	16	24
08:00	4	19	12	26	9	17	12	28	*	*	*	*	*	*	9	22
09:00	5	7	7	20	15	19	18	12	*	*	*	*	*	*	11	14
10:00	6	5	8	4	1	4	6	10	*	*	*	*	*	*	5	6
11:00	1	1	2	6	1	5	0	1	*	*	*	*	*	*	1	3
Total	86	129	355	340	322	317	330	328	63	19	0	0	0	0	327	323
Day	215		695		639		658		82		0		0		650	
AM Peak	-	-	07:00	11:00	07:00	08:00	07:00	08:00	06:00	07:00	-	-	-	-	07:00	11:00
Vol.	-	-	37	22	37	16	37	13	23	8	-	-	-	-	34	16
PM Peak	17:00	17:00	16:00	16:00	16:00	16:00	18:00	17:00	-	-	-	-	-	-	17:00	17:00
Vol.	31	40	31	39	24	35	28	40	-	-	-	-	-	-	25	38

Comb. Total	215	695	639	658	82	0	0	650

ADT ADT 655 AADT 655

Tri-State Traffic Data, Inc.

610-466-1469
TSTData.com

Road: Rt. 743 Hershey Rd
Location: 260 ft S of Veterans Dr
Counter: 26602

Site Code: 1
Station ID:
A to B NB

Latitude: 40' 16778.0000 North
Longitude: 76' 60634.0000 West

Start	Monday, May 20, 2024		Tuesday, May 21, 2024		Wednesday, May 22, 2024		Thursday, May 23, 2024		Friday, May 24, 2024		Saturday, May 25, 2024		Sunday, May 26, 2024		Week Average	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	25	31	23	39	29	42	28	37	*	*	*	*	26	37
01:00	*	*	13	16	17	26	17	23	20	21	*	*	*	*	17	22
02:00	*	*	22	43	64	48	63	46	66	47	*	*	*	*	54	46
03:00	*	*	39	30	46	37	49	31	45	44	*	*	*	*	45	36
04:00	*	*	112	61	116	61	108	62	96	58	*	*	*	*	108	60
05:00	*	*	267	235	265	218	277	228	231	190	*	*	*	*	260	218
06:00	*	*	603	245	548	237	533	255	497	218	*	*	*	*	545	239
07:00	*	*	**686**	**415**	**599**	**385**	**639**	**386**	**618**	**333**	*	*	*	*	**636**	**380**
08:00	*	*	484	336	519	339	505	342	*	*	*	*	*	*	503	339
09:00	*	*	423	323	425	299	444	303	*	*	*	*	*	*	431	308
10:00	*	*	374	362	360	341	342	316	*	*	*	*	*	*	359	340
11:00	*	*	387	333	383	352	369	321	*	*	*	*	*	*	380	335
12:00 PM	*	*	362	402	459	377	394	393	*	*	*	*	*	*	405	391
01:00	*	*	385	359	384	386	434	380	*	*	*	*	*	*	401	375
02:00	*	*	515	441	**537**	480	495	500	*	*	*	*	*	*	516	474
03:00	*	*	**555**	590	508	479	**526**	547	*	*	*	*	*	*	**530**	539
04:00	451	609	528	614	471	603	504	**651**	*	*	*	*	*	*	488	619
05:00	**457**	**663**	487	**621**	481	**655**	461	610	*	*	*	*	*	*	472	**637**
06:00	417	429	362	503	417	451	402	454	*	*	*	*	*	*	400	459
07:00	301	320	272	354	266	371	325	372	*	*	*	*	*	*	291	354
08:00	197	300	305	312	268	300	256	380	*	*	*	*	*	*	256	323
09:00	122	158	165	234	179	224	200	237	*	*	*	*	*	*	166	213
10:00	85	98	76	154	91	113	113	126	*	*	*	*	*	*	91	123
11:00	49	60	54	81	40	61	60	68	*	*	*	*	*	*	51	68
Total	2079	2637	7501	7095	7466	6882	7545	7073	1601	948	0	0	0	0	7431	6935
Day	4716		14596		14348		14618		2549		0		0		14366	
AM Peak	-	-	07:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	-	-	-	-	07:00	07:00
Vol.	-	-	686	415	599	385	639	386	618	333	-	-	-	-	636	380
PM Peak	17:00	17:00	15:00	17:00	14:00	17:00	15:00	16:00	-	-	-	-	-	-	15:00	17:00
Vol.	457	663	555	621	537	655	526	651	-	-	-	-	-	-	530	637

Comb. Total	4716		14596		14348		14618		2549		0		0		14366	

ADT ADT 14,350 AADT 14,350

Tri-State Traffic Data, Inc.

610-466-1469
TSTData.com

Road: Veterans Dr
Location: 175 ft W of Rt. 743
Counter: 32220

Site Code: 3
Station ID:
A to B EB

Latitude: 40' 16867.0000 North
Longitude: 76' 60658.0000 West

Start	Monday, May 20, 2024		Tuesday, May 21, 2024		Wednesday, May 22, 2024		Thursday, May 23, 2024		Friday, May 24, 2024		Saturday, May 25, 2024		Sunday, May 26, 2024		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	2	6	2	10	1	1	5	8	*	*	*	*	2	6
01:00	*	*	1	3	2	2	1	6	3	5	*	*	*	*	2	4
02:00	*	*	2	4	6	5	2	3	5	6	*	*	*	*	4	4
03:00	*	*	5	2	8	4	6	4	7	5	*	*	*	*	6	4
04:00	*	*	15	3	16	4	16	2	10	4	*	*	*	*	14	3
05:00	*	*	51	4	45	6	41	7	36	6	*	*	*	*	43	6
06:00	*	*	102	22	105	29	102	28	88	19	*	*	*	*	99	24
07:00	*	*	**152**	46	**158**	44	**138**	46	**115**	40	*	*	*	*	**141**	44
08:00	*	*	72	37	91	42	91	48	90	**43**	*	*	*	*	86	42
09:00	*	*	64	48	48	39	73	43	*	*	*	*	*	*	62	43
10:00	*	*	74	49	69	53	79	56	*	*	*	*	*	*	74	53
11:00	*	*	68	**60**	62	**71**	77	**62**	*	*	*	*	*	*	69	**64**
12:00 PM	*	*	62	69	73	73	73	86	*	*	*	*	*	*	69	76
01:00	*	*	54	65	79	64	75	70	*	*	*	*	*	*	69	66
02:00	*	*	78	78	90	81	84	99	*	*	*	*	*	*	84	86
03:00	*	*	84	104	**129**	111	84	105	*	*	*	*	*	*	99	107
04:00	*	*	**115**	**147**	104	139	110	**144**	*	*	*	*	*	*	**110**	**143**
05:00	**108**	**115**	110	137	103	**142**	108	141	*	*	*	*	*	*	107	134
06:00	93	87	89	110	94	109	**122**	88	*	*	*	*	*	*	100	98
07:00	42	82	70	78	55	78	59	101	*	*	*	*	*	*	56	85
08:00	30	70	42	76	44	70	79	101	*	*	*	*	*	*	49	79
09:00	28	36	24	56	42	54	44	59	*	*	*	*	*	*	34	51
10:00	14	20	23	22	12	18	18	29	*	*	*	*	*	*	17	22
11:00	5	8	8	17	7	19	4	13	*	*	*	*	*	*	6	14
Total	320	418	1367	1243	1444	1267	1487	1342	359	136	0	0	0	0	1402	1258
Day	738		2610		2711		2829		495		0		0		2660	
AM Peak	-	-	07:00	11:00	07:00	11:00	07:00	11:00	07:00	08:00	-	-	-	-	07:00	11:00
Vol.	-	-	152	60	158	71	138	62	115	43	-	-	-	-	141	64
PM Peak	17:00	17:00	16:00	16:00	15:00	17:00	18:00	16:00	-	-	-	-	-	-	16:00	16:00
Vol.	108	115	115	147	129	142	122	144	-	-	-	-	-	-	110	143

Comb. Total	738	2610	2711	2829	495	0	0	2660

ADT ADT 2,662 AADT 2,662

GROWTH RATE INFORMATION

Growth Factors for August 2024 to July 2025				
County	**Urban Interstate**	**Rural Interstate**	**Urban Non-Interstate**	**Rural Non-Interstate**
ADAMS	*	*	0.41	0.58
ALLEGHENY	0.91	*	0.00	0.42
ARMSTRONG	0.75	*	0.00	0.36
BEAVER	0.57	2.04	0.00	0.28
BEDFORD	*	2.20	0.00	0.37
BERKS	1.28	2.53	0.22	0.56
BLAIR	0.79	2.34	0.00	0.38
BRADFORD	1.00	*	0.00	0.46
BUCKS	1.28	2.63	0.12	0.56
BUTLER	1.59	2.90	0.19	0.70
CAMBRIA	0.28	*	0.00	0.17
CAMERON	*	*	0.00	0.11
CARBON	1.36	2.68	0.20	0.59
CENTRE	1.69	2.76	0.61	0.72
CHESTER	1.68	2.91	0.44	0.75
CLARION	0.73	2.24	0.00	0.36
CLEARFIELD	0.54	1.93	0.00	0.29
CLINTON	1.05	2.36	0.00	0.47
COLUMBIA	1.05	2.33	0.00	0.47
CRAWFORD	0.67	2.12	0.00	0.34
CUMBERLAND	1.55	2.80	0.50	0.67
DAUPHIN	1.45	*	0.25	0.64
DELAWARE	1.19	*	0.00	0.00
ELK	*	*	0.00	0.29
ERIE	0.89	2.30	0.00	0.41
FAYETTE	0.79	*	0.00	0.37
FOREST	*	*	*	0.96
FRANKLIN	1.64	2.81	0.65	0.71
FULTON	*	2.33	*	0.48
GREENE	0.68	2.29	0.00	0.34
HUNTINGDON	*	2.50	0.00	0.48
INDIANA	0.89	*	0.00	0.42
JEFFERSON	*	2.33	0.00	0.45
JUNIATA	*	*	*	0.52
LACKAWANNA	0.91	2.35	0.00	0.42
LANCASTER	1.58	2.84	0.50	0.68
LAWRENCE	0.62	2.17	0.00	0.31
LEBANON	*	2.56	0.38	0.60
LEHIGH	1.68	3.10	0.45	0.73
LUZERNE	0.97	2.41	0.00	0.45
LYCOMING	0.92	2.36	0.00	0.42
MCKEAN	0.55	*	0.00	0.29
MERCER	0.87	2.52	0.00	0.42
MIFFLIN	1.10	*	0.00	0.49
MONROE	1.70	2.89	0.71	0.74
MONTGOMERY	1.21	*	0.17	0.53
MONTOUR	1.24	2.69	0.00	0.56
NORTHAMPTON	1.73	3.18	0.39	0.77
NORTHUMBERLAND	0.95	2.28	0.00	0.42
PERRY	*	*	0.17	0.52
PHILADELPHIA	1.11	*	0.00	*
PIKE	1.63	2.71	0.78	0.71
POTTER	*	*	*	0.34
SCHUYLKILL	0.96	2.46	0.00	0.44
SNYDER	1.18	*	0.14	0.52
SOMERSET	0.53	2.06	0.00	0.32
SULLIVAN	*	*	*	0.35
SUSQUEHANNA	1.03	2.43	0.00	0.46
TIOGA	*	*	0.00	0.41
UNION	1.46	2.69	0.36	0.62
VENANGO	*	1.91	0.00	0.25
WARREN	*	*	0.00	0.34
WASHINGTON	1.15	2.74	0.00	0.53
WAYNE	*	2.54	0.25	0.57
WESTMORELAND	0.82	2.17	0.00	0.38
WYOMING	*	*	0.00	0.43
YORK	1.49	2.90	0.37	0.68

* = Functional Class Doesn't Exist in County

Questions? Please contact Andrew O'Neill at the Bureau of Planning and Research, 717-346-3250 or andoneill@pa.gov

NOTE: The projected growth factors are derived using historical VMT (Vehicle Miles Traveled) data (1994 to 2023), as well as Woods and Poole demographic and economic data. The factors should be compounded when calculating future values. The factors should not be used to project traffic beyond a 20-year period. Please be aware that these factors are estimates, and unforeseen events (opening of shopping centers, fast food franchises, gas stations, etc) could cause growth to change over time.

pennsylvania
DEPARTMENT OF TRANSPORTATION

INTERSECTION/ROADWAY TRAFFIC VOLUME SPREADSHEETS

SITE IMPACT TRAFFIC EVALUATION

---------- GENERAL INFORMATION FOR SITETRIP WORKSHEET ----------

Title: Sheetz - Elizabethtown, PA
TRANSPORTATION IMPACT STUDY
Location: Mount Joy Township, Lancaster County
Performed By: LJS Date: 07/26/24

Intersection 1:	Hershey Road (SR 0743) / Veterans Drive	Site A:	Sheetz
Intersection 2:	Old Hershey Road / Veterans Drive - Rockwood Drive	Site B:	(Site)
Intersection 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site C:	(Site)
Intersection 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site D:	(Site)
Intersection 5:	Veterans Drive / Proposed Driveway	Site E:	(Site)
Intersection 6:	Old Hershey Road / Proposed Driveway	Site F:	(Site)
Intersection 7:	(STREET NAMES)	Design Hour:	AM Peak
Intersection 8:	(STREET NAMES)	Design Year:	2025
Intersection 9:	(STREET NAMES)	Background Factor:	1.01
Intersection 10:	(STREET NAMES)	Background Growth Rate	0.50
Intersection 11:	(STREET NAMES)		
Intersection 12:	(STREET NAMES)		

--------- EXISTING AND FUTURE TRAFFIC WITHOUT DEVELOPMENT ---------

APPROACH	EXISTING TRAFFIC	FUTURE TRAFFIC W/O COM DEV W/O PRO DEV	FUTURE TRAFFIC W/ COM DEV W/O PRO DEV	Committed Developments			PHF	RTOR	Trucks	Truck Percentage
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive									
EB LEFT	60	60	60						2	3%
THROUGH	0	0	0						0	0%
RIGHT	74	74	74					43	5	7%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	1	1	1					0	0	0%
NB LEFT	28	28	28						3	11%
THROUGH	739	743	743						31	4%
RIGHT	1	1	1					1	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	420	422	422						36	9%
RIGHT	16	16	16					3	1	6%
TOTAL	1339	1345	1345				0.87		78	
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive									
EB LEFT	1	1	1						0	0%
THROUGH	27	27	27						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	14	14	14						1	7%
THROUGH	8	8	8						1	13%
RIGHT	21	21	21					0	2	10%
NB LEFT	0	0	0						0	0%
THROUGH	1	1	1						1	100%
RIGHT	36	36	36					0	1	3%
SB LEFT	64	64	64						4	6%
THROUGH	3	3	3						2	67%
RIGHT	0	0	0					0	0	0%
TOTAL	175	175	175				0.72		12	
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
EB LEFT	23	23	23						0	0%
BEAR LEFT	4	4	4						0	0%
THROUGH	6	6	6						0	0%
RIGHT	23	23	23					9	1	4%
WB LEFT	8	8	8						3	38%
THROUGH	3	3	3						0	0%
RIGHT	216	217	217						4	2%
HARD RIGHT	10	10	10					0	3	30%
NB LEFT	14	14	14						0	0%
THROUGH	419	421	421						26	6%
BEAR RIGHT	44	44	44						5	11%
RIGHT	2	2	2					0	0	0%
TOTAL							0.89			
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
SB HARD LEFT	23	23	23						3	13%
LEFT	97	97	97						10	10%
THROUGH	329	331	331						43	13%
RIGHT	24	24	24					4	1	4%
SWB HARD LEFT	9	9	9						2	22%
BEAR LEFT	58	58	58						2	3%
BEAR RIGHT	8	8	8						0	0%
HARD RIGHT	138	139	139					0	5	4%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
TOTAL	1458	1464	1464				0.89		108	
INTERSECTION 5:	Veterans Drive / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	129	130	130						6	5%
RIGHT	1	1	1					0	0	0%
WB LEFT	0	0	0						0	0%
THROUGH	44	44	44						4	9%
RIGHT	0	0	0					0	0	0%
NB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	2	2	2					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
TOTAL	176	177	177				0.71		10	
INTERSECTION 6:	Old Hershey Road / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	0	0	0						0	0%
THROUGH	37	37	37						2	5%
RIGHT	0	0	0					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	17	17	17						3	18%
RIGHT	0	0	0					0	0	0%
TOTAL	54	54	54				0.00			

---------- DATA INPUT/RESULTS FOR TRIP GENERATION ----------

SITE A ..... Sheetz
DESIGN HOUR .... AM Peak

						TOTAL
Land Use Type	(945)	(type)	(type)	(type)	(type)	(type)	
Trips Per Unit:							
Inbound	0.00	0.00	0.00	0.00	0.00	0.00	
Outbound	0.00	0.00	0.00	0.00	0.00	0.00	
Number of Units	6.13	0.00	0.00	0.00	0.00	0.00	
Buildout	100%	0%	0%	0%	0%	0%	
Pass-By Trips	0%	0%	0%	0%	0%	0%	
New Site Trips:							
Inbound	46	0	0	0	0	0	46
Outbound	45	0	0	0	0	0	45
Pass-By Trips:							
Inbound	144	0	0	0	0	0	144
Outbound	144	0	0	0	0	0	144
Total Site Trips:							
Inbound	190	0	0	0	0	0	190
Outbound	189	0	0	0	0	0	189
Total	379	0	0	0	0	0	379

---------- SINGLE SITE TRAFFIC ASSIGNMENT ----------

SITE A ..... Sheetz
DESIGN HOUR .... AM Peak

APPROACH	FUTURE TRAFFIC W/O COM DEV W/O	FUTURE TRAFFIC W/ COM DEV W/O PRO	% NEW SITE TRIPS INBOUND	% NEW SITE TRIPS OUTBOUND	% PASS-BY TRIPS INBOUND	% PASS-BY TRIPS OUTBOUND	NEW SITE TRIPS	PASS-BY	PASS-BY ADJUSTMENT	TOTAL SITE TRIPS	FUTURE TRAFFIC W/O COM DEV W/ PRO	FUTURE TRAFFC W/ COM DEV W/ PRO DEV
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive											
EB LEFT	60	60	0%	45%	0%	91%	20	131		151	211	211
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	74	74	0%	45%	0%	9%	20	13		33	107	107
WB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	1	1	0%	0%	0%	0%	0	0		0	1	1
NB LEFT	28	28	45%	0%	16%	0%	21	23		44	72	72
THROUGH	743	743	0%	0%	0%	0%	0	0	23	-23	720	720
RIGHT	1	1	0%	0%	0%	0%	0	0		0	1	1
SB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	422	422	0%	0%	0%	0%	0	0	13	-13	409	409
RIGHT	16	16	45%	0%	84%	0%	21	121		142	158	158
TOTAL	1345	1345	90%	90%	100%	100%	82	288	36	334	1679	1679
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive											
EB LEFT	1	1	0%	0%	0%	0%	0	0		0	1	1
THROUGH	27	27	2%	0%	0%	0%	1	0		1	28	28
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
WB LEFT	14	14	0%	0%	0%	0%	0	0		0	14	14
THROUGH	8	8	0%	2%	0%	0%	1	0		1	9	9
RIGHT	21	21	0%	5%	0%	0%	2	0		2	23	23
NB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	1	1	0%	0%	0%	0%	0	0		0	1	1
RIGHT	36	36	0%	0%	0%	0%	0	0		0	36	36
SB LEFT	64	64	5%	0%	0%	0%	2	0		2	66	66
THROUGH	3	3	0%	0%	0%	0%	0	0		0	3	3
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	175	175	7%	7%	0%	0%	6	0	0	6	181	181
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
EB LEFT	23	23	0%	0%	0%	0%	0	0		0	23	23
BEAR LEFT	4	4	0%	0%	0%	0%	0	0		0	4	4
THROUGH	6	6	0%	0%	0%	0%	0	0		0	6	6
RIGHT	23	23	0%	0%	0%	0%	0	0		0	23	23
WB LEFT	8	8	0%	0%	0%	0%	0	0		0	8	8
THROUGH	3	3	0%	0%	0%	0%	0	0		0	3	3
RIGHT	217	217	8%	0%	0%	0%	4	0		4	221	221
HARD RIGHT	10	10	0%	0%	0%	0%	0	0		0	10	10
NB LEFT	14	14	0%	0%	0%	0%	0	0		0	14	14
THROUGH	421	421	28%	0%	0%	0%	13	0		13	434	434
BEAR RIGHT	44	44	0%	0%	0%	0%	0	0		0	44	44
RIGHT	2	2	0%	0%	0%	0%	0	0		0	2	2
TOTAL			36%	0%	0%	0%	17	0	0	17		
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
SB HARD LEFT	23	23	0%	9%	0%	0%	4	0		4	27	27
LEFT	97	97	0%	8%	0%	0%	4	0		4	101	101
THROUGH	331	331	0%	28%	0%	0%	13	0		13	344	344
RIGHT	24	24	0%	0%	0%	0%	0	0		0	24	24
SWB HARD LEFT	9	9	0%	0%	0%	0%	0	0		0	9	9
BEAR LEFT	58	58	0%	0%	0%	0%	0	0		0	58	58
BEAR RIGHT	8	8	0%	0%	0%	0%	0	0		0	8	8
HARD RIGHT	139	139	9%	0%	0%	0%	4	0		4	143	143
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	1464	1464	9%	45%	0%	0%	25	0	0	25	1506	1506
INTERSECTION 5:	Veterans Drive / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	130	130	0%	0%	0%	0%	0	0		0	130	130
RIGHT	0	0	7%	0%	0%	0%	3	0		3	3	3
WB LEFT	0	0	90%	0%	100%	0%	42	144		186	186	186
THROUGH	44	44	0%	0%	0%	0%	0	0		0	44	44
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
NB LEFT	0	0	0%	7%	0%	0%	3	0		3	3	3
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	90%	0%	100%	41	144		185	185	185
SB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	174	174	97%	97%	100%	100%	89	288	0	377	551	551
INTERSECTION 6:	Old Hershey Road / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
WB LEFT	0	0	0%	3%	0%	0%	1	0		1	1	1
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
NB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	37	37	0%	0%	0%	0%	0	0		0	37	37
RIGHT	0	0	3%	0%	0%	0%	1	0		1	1	1
SB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	17	17	0%	0%	0%	0%	0	0		0	17	17
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	54	54	3%	3%	0%	0%	2	0	0	2	56	56

SITE IMPACT TRAFFIC EVALUATION

---------- GENERAL INFORMATION FOR SITETRIP WORKSHEET ----------

Title:	Sheetz - Elizabethtown, PA TRANSPORTATION IMPACT STUDY		
Location:	Mount Joy Township, Lancaster County		
Performed By:	LJS	Date:	07/26/24
Intersection 1:	Hershey Road (SR 0743) / Veterans Drive	Site A:	Sheetz
Intersection 2:	Old Hershey Road / Veterans Drive - Rockwood Drive	Site B:	(Site)
Intersection 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site C:	(Site)
Intersection 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site D:	(Site)
Intersection 5:	Veterans Drive / Proposed Driveway	Site E:	(Site)
Intersection 6:	Old Hershey Road / Proposed Driveway	Site F:	(Site)
Intersection 7:	(STREET NAMES)	Design Hour:	PM Peak
Intersection 8:	(STREET NAMES)	Design Year:	2025
Intersection 9:	(STREET NAMES)	Background Factor:	1.01
Intersection 10:	(STREET NAMES)	Background Growth Rate	0.50
Intersection 11:	(STREET NAMES)		
Intersection 12:	(STREET NAMES)		

--------- EXISTING AND FUTURE TRAFFIC WITHOUT DEVELOPMENT ---------

APPROACH	EXISTING TRAFFIC	FUTURE TRAFFIC W/O COM DEV W/O PRO DEV	FUTURE TRAFFIC W/ COM DEV W/O PRO DEV	Committed Developments			PHF	RTOR	Trucks	Truck Percentage
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive									
EB LEFT	38	38	38						1	3%
THROUGH	0	0	0						0	0%
RIGHT	71	71	71					23	1	1%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	79	79	79						0	0%
THROUGH	563	566	566						17	3%
RIGHT	0	0	0					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	680	683	683						18	3%
RIGHT	62	62	62					5	2	3%
TOTAL	1493	1499	1499				0.99		39	
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive									
EB LEFT	2	2	2						1	50%
THROUGH	20	20	20						0	0%
RIGHT	2	2	2					0	1	50%
WB LEFT	32	32	32						0	0%
THROUGH	31	31	31						0	0%
RIGHT	72	72	72					0	1	1%
NB LEFT	4	4	4						0	0%
THROUGH	7	7	7						1	14%
RIGHT	25	25	25					0	0	0%
SB LEFT	58	58	58						1	2%
THROUGH	7	7	7						0	0%
RIGHT	2	2	2					0	1	50%
TOTAL	262	262	262				0.94		6	
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
EB LEFT	24	24	24						0	0%
BEAR LEFT	10	10	10						0	0%
THROUGH	10	10	10						0	0%
RIGHT	22	22	22					1	0	0%
WB LEFT	4	4	4						0	0%
THROUGH	5	5	5						0	0%
RIGHT	106	107	107						1	1%
HARD RIGHT	9	9	9					2	0	0%
NB LEFT	16	16	16						0	0%
THROUGH	391	393	393						7	2%
BEAR RIGHT	109	110	110						2	2%
RIGHT	4	4	4					0	0	0%
TOTAL							0.96			
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
SB HARD LEFT	99	99	99						1	1%
LEFT	119	120	120						2	2%
THROUGH	503	506	506						12	2%
RIGHT	28	28	28					5	0	0%
SWB HARD LEFT	5	5	5						0	0%
BEAR LEFT	88	88	88						0	0%
BEAR RIGHT	12	12	12						0	0%
HARD RIGHT	92	92	92					0	0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
TOTAL	1656	1664	1664				0.96		25	
INTERSECTION 5:	Veterans Drive / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	101	102	102						0	0%
RIGHT	3	3	3					0	0	0%
WB LEFT	12	12	12						0	0%
THROUGH	138	139	139						1	1%
RIGHT	0	0	0					0	0	0%
NB LEFT	5	5	5						0	0%
THROUGH	0	0	0						0	0%
RIGHT	7	7	7					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
TOTAL	266	268	268				0.95		1	
INTERSECTION 6:	Old Hershey Road / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	0	0	0						0	0%
THROUGH	36	36	36						1	3%
RIGHT	0	0	0					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	41	41	41						1	2%
RIGHT	0	0	0					0	0	0%
TOTAL	77	77	77				0.00			

---------- DATA INPUT/RESULTS FOR TRIP GENERATION ----------

SITE A ..... Sheetz
DESIGN HOUR .... PM Peak

Land Use Type	(945)	(type)	(type)	(type)	(type)	(type)	TOTAL
Trips Per Unit:							
Inbound	0.00	0.00	0.00	0.00	0.00	0.00	
Outbound	0.00	0.00	0.00	0.00	0.00	0.00	
Number of Units	6.13	0.00	0.00	0.00	0.00	0.00	
Buildout	100%	0%	0%	0%	0%	0%	
Pass-By Trips	0%	0%	0%	0%	0%	0%	
New Site Trips:							
Inbound	42	0	0	0	0	0	42
Outbound	42	0	0	0	0	0	42
Pass-By Trips:							
Inbound	125	0	0	0	0	0	125
Outbound	125	0	0	0	0	0	125
Total Site Trips:							
Inbound	167	0	0	0	0	0	167
Outbound	167	0	0	0	0	0	167
Total	334	0	0	0	0	0	334

---------- SINGLE SITE TRAFFIC ASSIGNMENT ----------

SITE A ..... Sheetz
DESIGN HOUR .... PM Peak

APPROACH	FUTURE TRAFFIC W/O COM DEV W/O	FUTURE TRAFFIC W/ COM DEV W/O PRO	% NEW SITE TRIPS INBOUND	% NEW SITE TRIPS OUTBOUND	% PASS-BY TRIPS INBOUND	% PASS-BY TRIPS OUTBOUND	NEW SITE TRIPS	PASS-BY	PASS-BY ADJUSTMENT	TOTAL SITE TRIPS	FUTURE TRAFFIC W/O COM DEV W/ PRO	FUTURE TRAFFC W/ COM DEV W/ PRO DEV
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive											
EB LEFT	38	38	0%	45%	0%	86%	19	107		126	164	164
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	71	71	0%	45%	0%	14%	19	18		37	108	108
WB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
NB LEFT	79	79	45%	0%	11%	0%	19	14		33	112	112
THROUGH	566	566	0%	0%	0%	0%	0	0	14	-14	552	552
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
SB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	683	683	0%	0%	0%	0%	0	0	18	-18	665	665
RIGHT	62	62	45%	0%	89%	0%	19	111		130	192	192
TOTAL	1499	1499	90%	90%	100%	100%	76	250	32	294	1793	1793
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive											
EB LEFT	2	2	0%	0%	0%	0%	0	0		0	2	2
THROUGH	20	20	2%	0%	0%	0%	1	0		1	21	21
RIGHT	2	2	0%	0%	0%	0%	0	0		0	2	2
WB LEFT	32	32	0%	0%	0%	0%	0	0		0	32	32
THROUGH	31	31	0%	2%	0%	0%	1	0		1	32	32
RIGHT	72	72	0%	5%	0%	0%	2	0		2	74	74
NB LEFT	4	4	0%	0%	0%	0%	0	0		0	4	4
THROUGH	7	7	0%	0%	0%	0%	0	0		0	7	7
RIGHT	25	25	0%	0%	0%	0%	0	0		0	25	25
SB LEFT	58	58	5%	0%	0%	0%	2	0		2	60	60
THROUGH	7	7	0%	0%	0%	0%	0	0		0	7	7
RIGHT	2	2	0%	0%	0%	0%	0	0		0	2	2
TOTAL	262	262	7%	7%	0%	0%	6	0	0	6	268	268
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
EB LEFT	24	24	0%	0%	0%	0%	0	0		0	24	24
BEAR LEFT	10	10	0%	0%	0%	0%	0	0		0	10	10
THROUGH	10	10	0%	0%	0%	0%	0	0		0	10	10
RIGHT	22	22	0%	0%	0%	0%	0	0		0	22	22
WB LEFT	4	4	0%	0%	0%	0%	0	0		0	4	4
THROUGH	5	5	0%	0%	0%	0%	0	0		0	5	5
RIGHT	107	107	8%	0%	0%	0%	3	0		3	110	110
HARD RIGHT	9	9	0%	0%	0%	0%	0	0		0	9	9
NB LEFT	16	16	0%	0%	0%	0%	0	0		0	16	16
THROUGH	393	393	28%	0%	0%	0%	12	0		12	405	405
BEAR RIGHT	110	110	0%	0%	0%	0%	0	0		0	110	110
RIGHT	4	4	0%	0%	0%	0%	0	0		0	4	4
TOTAL			36%	0%	0%	0%	15	0	0	15		
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
SB HARD LEFT	99	99	0%	9%	0%	0%	4	0		4	103	103
LEFT	120	120	0%	8%	0%	0%	3	0		3	123	123
THROUGH	506	506	0%	28%	0%	0%	12	0		12	518	518
RIGHT	28	28	0%	0%	0%	0%	0	0		0	28	28
SWB HARD LEFT	5	5	0%	0%	0%	0%	0	0		0	5	5
BEAR LEFT	88	88	0%	0%	0%	0%	0	0		0	88	88
BEAR RIGHT	12	12	0%	0%	0%	0%	0	0		0	12	12
HARD RIGHT	92	92	9%	0%	0%	0%	4	0		4	96	96
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	1664	1664	9%	45%	0%	0%	23	0	0	23	1702	1702
INTERSECTION 5:	Veterans Dri Veterans Drive / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	102	102	0%	0%	0%	0%	0	0		0	102	102
RIGHT	0	0	7%	0%	0%	0%	3	0		3	3	3
WB LEFT	0	0	90%	0%	100%	0%	38	125		163	163	163
THROUGH	139	139	0%	0%	0%	0%	0	0		0	139	139
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
NB LEFT	0	0	0%	7%	0%	0%	3	0		3	3	3
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	90%	0%	100%	38	125		163	163	163
SB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	241	241	97%	97%	100%	100%	82	250	0	332	573	573
INTERSECTION 6:	Old Hershey Road / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
WB LEFT	0	0	0%	3%	0%	0%	1	0		1	1	1
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
NB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	36	36	0%	0%	0%	0%	0	0		0	36	36
RIGHT	0	0	3%	0%	0%	0%	1	0		1	1	1
SB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	41	41	0%	0%	0%	0%	0	0		0	41	41
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	77	77	3%	3%	0%	0%	2	0	0	2	79	79

SITE IMPACT TRAFFIC EVALUATION

---------- GENERAL INFORMATION FOR SITETRIP WORKSHEET ----------

Title:	Sheetz - Elizabethtown, PA TRANSPORTATION IMPACT STUDY		
Location:	Mount Joy Township, Lancaster County		
Performed By:	LJS	Date:	07/26/24

Intersection 1:	Hershey Road (SR 0743) / Veterans Drive	Site A:	Sheetz
Intersection 2:	Old Hershey Road / Veterans Drive - Rockwood Drive	Site B:	(Site)
Intersection 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site C:	(Site)
Intersection 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site D:	(Site)
Intersection 5:	Veterans Drive / Proposed Driveway	Site E:	(Site)
Intersection 6:	Old Hershey Road / Proposed Driveway	Site F:	(Site)
Intersection 7:	(STREET NAMES)	Design Hour:	Sat Peak
Intersection 8:	(STREET NAMES)	Design Year:	2025
Intersection 9:	(STREET NAMES)	Background Factor:	1.01
Intersection 10:	(STREET NAMES)	Background Growth Rate	0.50
Intersection 11:	(STREET NAMES)		
Intersection 12:	(STREET NAMES)		

--------- EXISTING AND FUTURE TRAFFIC WITHOUT DEVELOPMENT ---------

APPROACH	EXISTING TRAFFIC	FUTURE TRAFFIC W/O COM DEV W/O PRO DEV	FUTURE TRAFFIC W/ COM DEV W/O PRO DEV	Committed Developments			PHF	RTOR	Trucks	Truck Percentage
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive									
EB LEFT	41	41	41						1	2%
THROUGH	0	0	0						0	0%
RIGHT	56	56	56					32	1	2%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	1	1	1					0	0	0%
NB LEFT	66	66	66						1	2%
THROUGH	425	427	427						8	2%
RIGHT	0	0	0					0	0	0%
SB LEFT	1	1	1						0	0%
THROUGH	369	371	371						5	1%
RIGHT	29	29	29					4	0	0%
TOTAL	988	992	992				0.92		16	
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive									
EB LEFT	2	2	2						0	0%
THROUGH	16	16	16						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	37	37	37						0	0%
THROUGH	6	6	6						0	0%
RIGHT	44	44	44					0	0	0%
NB LEFT	1	1	1						0	0%
THROUGH	2	2	2						0	0%
RIGHT	31	31	31					0	0	0%
SB LEFT	45	45	45						0	0%
THROUGH	3	3	3						0	0%
RIGHT	1	1	1					0	0	0%
TOTAL	188	188	188				0.87			
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
EB LEFT	24	24	24						0	0%
BEAR LEFT	4	4	4						0	0%
THROUGH	6	6	6						0	0%
RIGHT	17	17	17					5	0	0%
WB LEFT	1	1	1						0	0%
THROUGH	9	9	9						1	11%
RIGHT	91	91	91						1	1%
HARD RIGHT	8	8	8					0	0	0%
NB LEFT	11	11	11						0	0%
THROUGH	349	351	351						8	2%
BEAR RIGHT	73	73	73						3	4%
RIGHT	6	6	6					1	0	0%
TOTAL							0.97			
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
SB HARD LEFT	59	59	59						0	0%
LEFT	60	60	60						1	2%
THROUGH	310	312	312						6	2%
RIGHT	26	26	26					3	0	0%
SWB HARD LEFT	5	5	5						0	0%
BEAR LEFT	49	49	49						2	4%
BEAR RIGHT	8	8	8						0	0%
HARD RIGHT	53	53	53					1	0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
TOTAL	1169	1173	1173				0.97		22	
INTERSECTION 5:	Veterans Drive / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	90	90	90						0	0%
RIGHT	2	2	2					0	0	0%
WB LEFT	9	9	9						0	0%
THROUGH	86	86	86						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	1	1	1						0	0%
THROUGH	0	0	0						0	0%
RIGHT	5	5	5					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
TOTAL	193	193	193				0.91			
INTERSECTION 6:	Old Hershey Road / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	0	0	0						0	0%
THROUGH	34	34	34						0	0%
RIGHT	0	0	0					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	40	40	40						0	0%
RIGHT	0	0	0					0	0	0%
TOTAL	74	74	74				0.00			

---------- DATA INPUT/RESULTS FOR TRIP GENERATION ----------

SITE A ..... Sheetz
DESIGN HOUR .... Sat Peak

						TOTAL
Land Use Type	(945)	(type)	(type)	(type)	(type)	(type)	
Trips Per Unit:							
Inbound	0.00	0.00	0.00	0.00	0.00	0.00	
Outbound	0.00	0.00	0.00	0.00	0.00	0.00	
Number of Units	6.13	0.00	0.00	0.00	0.00	0.00	
Buildout	100%	0%	0%	0%	0%	0%	
Pass-By Trips	0%	26%	0%	0%	0%	0%	
New Site Trips:							
Inbound	69	0	0	0	0	0	69
Outbound	69	0	0	0	0	0	69
Pass-By Trips:							
Inbound	128	0	0	0	0	0	128
Outbound	127	0	0	0	0	0	127
Total Site Trips:							
Inbound	197	0	0	0	0	0	197
Outbound	196	0	0	0	0	0	196
Total	393	0	0	0	0	0	393

---------- SINGLE SITE TRAFFIC ASSIGNMENT ----------

SITE A ..... Sheetz
DESIGN HOUR .... Sat Peak

APPROACH	FUTURE TRAFFIC W/O COM DEV W/O	FUTURE TRAFFIC W/ COM DEV W/O PRO	% NEW SITE TRIPS INBOUND	% NEW SITE TRIPS OUTBOUND	% PASS-BY TRIPS INBOUND	% PASS-BY TRIPS OUTBOUND	NEW SITE TRIPS	PASS-BY	PASS-BY ADJUSTMENT	TOTAL SITE TRIPS	FUTURE TRAFFIC W/O COM DEV W/ PRO	FUTURE TRAFFC W/ COM DEV W/ PRO DEV
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive											
EB LEFT	41	41	0%	45%	0%	89%	31	113		144	185	185
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	56	56	0%	45%	0%	11%	31	14		45	101	101
WB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	1	1	0%	0%	0%	0%	0	0		0	1	1
NB LEFT	66	66	45%	0%	14%	0%	31	18		49	115	115
THROUGH	427	427	0%	0%	0%	0%	0	0	18	-18	409	409
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
SB LEFT	1	1	0%	0%	0%	0%	0	0		0	1	1
THROUGH	371	371	0%	0%	0%	0%	0	0	14	-14	357	357
RIGHT	29	29	45%	0%	86%	0%	31	110		141	170	170
TOTAL	992	992	90%	90%	100%	100%	124	255	32	347	1339	1339
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive											
EB LEFT	2	2	0%	0%	0%	0%	0	0		0	2	2
THROUGH	16	16	2%	0%	0%	0%	1	0		1	17	17
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
WB LEFT	37	37	0%	0%	0%	0%	0	0		0	37	37
THROUGH	6	6	0%	2%	0%	0%	1	0		1	7	7
RIGHT	44	44	0%	5%	0%	0%	4	0		4	48	48
NB LEFT	1	1	0%	0%	0%	0%	0	0		0	1	1
THROUGH	2	2	0%	0%	0%	0%	0	0		0	2	2
RIGHT	31	31	0%	0%	0%	0%	0	0		0	31	31
SB LEFT	45	45	5%	0%	0%	0%	4	0		4	49	49
THROUGH	3	3	0%	0%	0%	0%	0	0		0	3	3
RIGHT	1	1	0%	0%	0%	0%	0	0		0	1	1
TOTAL	188	188	7%	7%	0%	0%	10	0	0	10	198	198
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
EB LEFT	24	24	0%	0%	0%	0%	0	0		0	24	24
BEAR LEFT	4	4	0%	0%	0%	0%	0	0		0	4	4
THROUGH	6	6	0%	0%	0%	0%	0	0		0	6	6
RIGHT	17	17	0%	0%	0%	0%	0	0		0	17	17
WB LEFT	1	1	0%	0%	0%	0%	0	0		0	1	1
THROUGH	9	9	0%	0%	0%	0%	0	0		0	9	9
RIGHT	91	91	8%	0%	0%	0%	6	0		6	97	97
HARD RIGHT	8	8	0%	0%	0%	0%	0	0		0	8	8
NB LEFT	11	11	0%	0%	0%	0%	0	0		0	11	11
THROUGH	351	351	28%	0%	0%	0%	19	0		19	370	370
BEAR RIGHT	73	73	0%	0%	0%	0%	0	0		0	73	73
RIGHT	6	6	0%	0%	0%	0%	0	0		0	6	6
TOTAL			36%	0%	0%	0%	25	0	0	25		
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
SB HARD LEFT	59	59	0%	9%	0%	0%	6	0		6	65	65
LEFT	60	60	0%	8%	0%	0%	6	0		6	66	66
THROUGH	312	312	0%	28%	0%	0%	19	0		19	331	331
RIGHT	26	26	0%	0%	0%	0%	0	0		0	26	26
SWB HARD LEFT	5	5	0%	0%	0%	0%	0	0		0	5	5
BEAR LEFT	49	49	0%	0%	0%	0%	0	0		0	49	49
BEAR RIGHT	8	8	0%	0%	0%	0%	0	0		0	8	8
HARD RIGHT	53	53	9%	0%	0%	0%	6	0		6	59	59
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	1173	1173	9%	45%	0%	0%	37	0	0	37	1235	1235
INTERSECTION 5:	Veterans Drive / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	90	90	0%	0%	0%	0%	0	0		0	90	90
RIGHT	0	0	7%	0%	0%	0%	5	0		5	5	5
WB LEFT	0	0	90%	0%	100%	0%	62	128		190	190	190
THROUGH	86	86	0%	0%	0%	0%	0	0		0	86	86
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
NB LEFT	0	0	0%	7%	0%	0%	5	0		5	5	5
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	90%	0%	100%	62	127		189	189	189
SB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	176	176	97%	97%	100%	100%	134	255	0	389	565	565
INTERSECTION 6:	Old Hershey Road / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
WB LEFT	0	0	0%	3%	0%	0%	2	0		2	2	2
THROUGH	0	0	0%	0%	0%	0%	0	0		0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
NB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	34	34	0%	0%	0%	0%	0	0		0	34	34
RIGHT	0	0	3%	0%	0%	0%	2	0		2	2	2
SB LEFT	0	0	0%	0%	0%	0%	0	0		0	0	0
THROUGH	40	40	0%	0%	0%	0%	0	0		0	40	40
RIGHT	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	74	74	3%	3%	0%	0%	4	0	0	4	78	78

SITE IMPACT TRAFFIC EVALUATION

---------- GENERAL INFORMATION FOR SITETRIP WORKSHEET ----------

Title:	Sheetz - Elizabethtown, PA TRANSPORTATION IMPACT STUDY		
Location:	Mount Joy Township, Lancaster County		
Performed By:	LJS	Date:	07/26/24
Intersection 1:	Hershey Road (SR 0743) / Veterans Drive	Site A:	Sheetz
Intersection 2:	Old Hershey Road / Veterans Drive - Rockwood Drive	Site B:	(Site)
Intersection 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site C:	(Site)
Intersection 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site D:	(Site)
Intersection 5:	Veterans Drive / Proposed Driveway	Site E:	(Site)
Intersection 6:	Old Hershey Road / Proposed Driveway	Site F:	(Site)
Intersection 7:	(STREET NAMES)	Design Hour:	AM Peak
Intersection 8:	(STREET NAMES)	Design Year:	2030
Intersection 9:	(STREET NAMES)	Background Factor:	1.03
Intersection 10:	(STREET NAMES)	Background Growth Rate	0.50
Intersection 11:	(STREET NAMES)		
Intersection 12:	(STREET NAMES)		

--------- EXISTING AND FUTURE TRAFFIC WITHOUT DEVELOPMENT ---------

APPROACH	EXISTING TRAFFIC	FUTURE TRAFFIC W/O COM DEV W/O PRO DEV	FUTURE TRAFFIC W/ COM DEV W/O PRO DEV	Committed Developments			PHF	RTOR	Trucks	Truck Percentage
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive									
EB LEFT	60	62	62						2	3%
THROUGH	0	0	0						0	0%
RIGHT	74	76	76					43	5	7%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	1	1	1					0	0	0%
NB LEFT	28	29	29						3	11%
THROUGH	739	761	761						31	4%
RIGHT	1	1	1					1	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	420	433	433						36	9%
RIGHT	16	16	16					3	1	6%
TOTAL	1339	1379	1379				0.87			
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive									
EB LEFT	1	1	1						0	0%
THROUGH	27	28	28						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	14	14	14						1	7%
THROUGH	8	8	8						1	13%
RIGHT	21	22	22					0	2	10%
NB LEFT	0	0	0						0	0%
THROUGH	1	1	1						1	100%
RIGHT	36	37	37					0	1	3%
SB LEFT	64	66	66						4	6%
THROUGH	3	3	3						2	67%
RIGHT	0	0	0					0	0	0%
TOTAL	175	180	180				0.72			
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
EB LEFT	23	24	24						0	0%
BEAR LEFT	4	4	4						0	0%
THROUGH	6	6	6						0	0%
RIGHT	23	24	24					9	1	4%
WB LEFT	8	8	8						3	38%
THROUGH	3	3	3						0	0%
RIGHT	216	222	222						4	2%
HARD RIGHT	10	10	10					0	3	30%
NB LEFT	14	14	14						0	0%
THROUGH	419	432	432						26	6%
BEAR RIGHT	44	45	45						5	11%
RIGHT	2	2	2					0	0	0%
TOTAL							0.89			
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
SB HARD LEFT	23	24	24						3	13%
LEFT	97	100	100						10	10%
THROUGH	329	339	339						43	13%
RIGHT	24	25	25					4	1	4%
SWB HARD LEFT	9	9	9						2	22%
BEAR LEFT	58	60	60						2	3%
BEAR RIGHT	8	8	8						0	0%
HARD RIGHT	138	142	142					0	5	4%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
TOTAL	1458	1501	1501				0.89		108	
INTERSECTION 5:	Veterans Drive / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	129	133	133						6	5%
RIGHT	1	1	1					0	0	0%
WB LEFT	0	0	0						0	0%
THROUGH	44	45	45						4	9%
RIGHT	0	0	0					0	0	0%
NB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	2	2	2					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
TOTAL	176	181	181				0.71			
INTERSECTION 6:	Old Hershey Road / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	0	0	0						0	0%
THROUGH	37	38	38						2	5%
RIGHT	0	0	0					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	17	18	18						3	18%
RIGHT	0	0	0					0	0	0%
TOTAL	54	56	56				0.00			

---------- DATA INPUT/RESULTS FOR TRIP GENERATION ----------

SITE A ..... Sheetz
DESIGN HOUR .... AM Peak

Land Use Type	(945)	(type)	(type)	(type)	(type)	(type)	TOTAL
Trips Per Unit:							
Inbound	0.00	0.00	0.00	0.00	0.00	0.00	
Outbound	0.00	0.00	0.00	0.00	0.00	0.00	
Number of Units	6.13	0.00	0.00	0.00	0.00	0.00	
Buildout	100%	0%	0%	0%	0%	0%	
Pass-By Trips	0%	0%	0%	0%	0%	0%	
New Site Trips:							
Inbound	46	0	0	0	0	0	46
Outbound	45	0	0	0	0	0	45
Pass-By Trips:							
Inbound	144	0	0	0	0	0	144
Outbound	144	0	0	0	0	0	144
Total Site Trips:							
Inbound	190	0	0	0	0	0	190
Outbound	189	0	0	0	0	0	189
Total	379	0	0	0	0	0	379

---------- SINGLE SITE TRAFFIC ASSIGNMENT ----------

SITE A ..... Sheetz
DESIGN HOUR .... AM Peak

APPROACH	FUTURE TRAFFIC W/O COM DEV W/O	FUTURE TRAFFIC W/ COM DEV W/O PRO	% NEW SITE TRIPS INBOUND	% NEW SITE TRIPS OUTBOUND	% PASS-BY TRIPS INBOUND	% PASS-BY TRIPS OUTBOUND	NEW SITE TRIPS	PASS-BY	PASS-BY ADJUSTMENT	TOTAL SITE TRIPS	FUTURE TRAFFIC W/O COM DEV W/ PRO	FUTURE TRAFFC W/ COM DEV W/ PRO DEV
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive											
EB LEFT	62	62	0%	45%	0%	91%	20	131	0	151	213	213
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	76	76	0%	45%	0%	9%	20	13	0	33	109	109
WB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	1	1	0%	0%	0%	0%	0	0	0	0	1	1
NB LEFT	29	29	45%	0%	16%	0%	21	23	0	44	73	73
THROUGH	761	761	0%	0%	0%	0%	0	0	23	-23	738	738
RIGHT	1	1	0%	0%	0%	0%	0	0	0	0	1	1
SB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	433	433	0%	0%	0%	0%	0	0	13	-13	420	420
RIGHT	16	16	45%	0%	84%	0%	21	121	0	142	158	158
TOTAL	1379	1379	90%	90%	100%	100%	82	288	36	334	1713	1713
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive											
EB LEFT	1	1	0%	0%	0%	0%	0	0	0	0	1	1
THROUGH	28	28	2%	0%	0%	0%	1	0	0	1	29	29
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
WB LEFT	14	14	0%	0%	0%	0%	0	0	0	0	14	14
THROUGH	8	8	0%	2%	0%	0%	1	0	0	1	9	9
RIGHT	22	22	0%	5%	0%	0%	2	0	0	2	24	24
NB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	1	1	0%	0%	0%	0%	0	0	0	0	1	1
RIGHT	37	37	0%	0%	0%	0%	0	0	0	0	37	37
SB LEFT	66	66	5%	0%	0%	0%	2	0	0	2	68	68
THROUGH	3	3	0%	0%	0%	0%	0	0	0	0	3	3
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
TOTAL	180	180	7%	7%	0%	0%	6	0	0	6	186	186
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
EB LEFT	24	24	0%	0%	0%	0%	0	0	0	0	24	24
BEAR LEFT	4	4	0%	0%	0%	0%	0	0	0	0	4	4
THROUGH	6	6	0%	0%	0%	0%	0	0	0	0	6	6
RIGHT	24	24	0%	0%	0%	0%	0	0	0	0	24	24
WB LEFT	8	8	0%	0%	0%	0%	0	0	0	0	8	8
THROUGH	3	3	0%	0%	0%	0%	0	0	0	0	3	3
RIGHT	222	222	8%	0%	0%	0%	4	0	0	4	226	226
HARD RIGHT	10	10	0%	0%	0%	0%	0	0	0	0	10	10
NB LEFT	14	14	0%	0%	0%	0%	0	0	0	0	14	14
THROUGH	432	432	28%	0%	0%	0%	13	0	0	13	445	445
BEAR RIGHT	45	45	0%	0%	0%	0%	0	0	0	0	45	45
RIGHT	2	2	0%	0%	0%	0%	0	0	0	0	2	2
TOTAL			36%	0%	0%	0%	17	0	0	17		
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
SB HARD LEFT	24	24	0%	9%	0%	0%	4	0	0	4	28	28
LEFT	100	100	0%	8%	0%	0%	4	0	0	4	104	104
THROUGH	339	339	0%	28%	0%	0%	13	0	0	13	352	352
RIGHT	25	25	0%	0%	0%	0%	0	0	0	0	25	25
SWB HARD LEFT	9	9	0%	0%	0%	0%	0	0	0	0	9	9
BEAR LEFT	60	60	0%	0%	0%	0%	0	0	0	0	60	60
BEAR RIGHT	8	8	0%	0%	0%	0%	0	0	0	0	8	8
HARD RIGHT	142	142	9%	0%	0%	0%	4	0	0	4	146	146
	0	0	0%	0%	0%	0%	0	0	0	0	0	0
	0	0	0%	0%	0%	0%	0	0	0	0	0	0
	0	0	0%	0%	0%	0%	0	0	0	0	0	0
	0	0	0%	0%	0%	0%	0	0	0	0	0	0
TOTAL	1501	1501	9%	45%	0%	0%	25	0	0	25	1543	1543
INTERSECTION 5:	Veterans Drive / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	133	133	0%	0%	0%	0%	0	0	0	0	133	133
RIGHT	0	0	7%	0%	0%	0%	3	0	0	3	3	3
WB LEFT	0	0	90%	0%	100%	0%	41	144	0	185	185	185
THROUGH	45	45	0%	0%	0%	0%	0	0	0	0	45	45
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
NB LEFT	0	0	0%	7%	0%	0%	3	0	0	3	3	3
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	90%	0%	100%	41	144	0	185	185	185
SB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
TOTAL	178	178	97%	97%	100%	100%	88	288	0	376	554	554
INTERSECTION 6:	Old Hershey Road / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
WB LEFT	0	0	0%	3%	0%	0%	1	0	0	1	1	1
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
NB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	38	38	0%	0%	0%	0%	0	0	0	0	38	38
RIGHT	0	0	3%	0%	0%	0%	1	0	0	1	1	1
SB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	18	18	0%	0%	0%	0%	0	0	0	0	18	18
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
TOTAL	56	56	3%	3%	0%	0%	2	0	0	2	58	58

SITE IMPACT TRAFFIC EVALUATION

---------- GENERAL INFORMATION FOR SITETRIP WORKSHEET ----------

Title:	Sheetz - Elizabethtown, PA TRANSPORTATION IMPACT STUDY		
Location:	Mount Joy Township, Lancaster County		
Performed By:	LJS	Date:	07/26/24
Intersection 1:	Hershey Road (SR 0743) / Veterans Drive	Site A:	Sheetz
Intersection 2:	Old Hershey Road / Veterans Drive - Rockwood Drive	Site B:	(Site)
Intersection 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site C:	(Site)
Intersection 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site D:	(Site)
Intersection 5:	Veterans Drive / Proposed Driveway	Site E:	(Site)
Intersection 6:	Old Hershey Road / Proposed Driveway	Site F:	(Site)
Intersection 7:	(STREET NAMES)	Design Hour:	PM Peak
Intersection 8:	(STREET NAMES)	Design Year:	2030
Intersection 9:	(STREET NAMES)	Background Factor:	1.03
Intersection 10:	(STREET NAMES)	Background Growth Rate	0.50
Intersection 11:	(STREET NAMES)		
Intersection 12:	(STREET NAMES)		

--------- EXISTING AND FUTURE TRAFFIC WITHOUT DEVELOPMENT ---------

APPROACH	EXISTING TRAFFIC	FUTURE TRAFFIC W/O COM DEV W/O PRO DEV	FUTURE TRAFFIC W/ COM DEV W/O PRO DEV	Committed Developments			PHF	RTOR	Trucks	Truck Percentage
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive									
EB LEFT	38	39	39						1	3%
THROUGH	0	0	0						0	0%
RIGHT	71	73	73					23	1	1%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	79	81	81						0	0%
THROUGH	563	580	580						17	3%
RIGHT	0	0	0					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	680	700	700						18	3%
RIGHT	62	64	64					5	2	3%
TOTAL	1493	1537	1537				0.99			
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive									
EB LEFT	2	2	2						1	50%
THROUGH	20	21	21						0	0%
RIGHT	2	2	2					0	1	50%
WB LEFT	32	33	33						0	0%
THROUGH	31	32	32						0	0%
RIGHT	72	74	74					0	1	1%
NB LEFT	4	4	4						0	0%
THROUGH	7	7	7						1	14%
RIGHT	25	26	26					0	0	0%
SB LEFT	58	60	60						1	2%
THROUGH	7	7	7						0	0%
RIGHT	2	2	2					0	1	50%
TOTAL	262	270	270				0.94			
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
EB LEFT	24	25	25						0	0%
BEAR LEFT	10	10	10						0	0%
THROUGH	10	10	10						0	0%
RIGHT	22	23	23					1	0	0%
WB LEFT	4	4	4						0	0%
THROUGH	5	5	5						0	0%
RIGHT	106	109	109						1	1%
HARD RIGHT	9	9	9					2	0	0%
NB LEFT	16	16	16						0	0%
THROUGH	391	403	403						7	2%
BEAR RIGHT	109	112	112						2	2%
RIGHT	4	4	4					0	0	0%
TOTAL							0.96			
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
SB HARD LEFT	99	102	102						1	1%
LEFT	119	123	123						2	2%
THROUGH	503	518	518						12	2%
RIGHT	28	29	29					5	0	0%
SWB HARD LEFT	5	5	5						0	0%
BEAR LEFT	88	91	91						0	0%
BEAR RIGHT	12	12	12						0	0%
HARD RIGHT	92	95	95					0	0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
TOTAL	1656	1705	1705				0.96			
INTERSECTION 5:	Veterans Drive / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	101	104	104						0	0%
RIGHT	3	3	3					0	0	0%
WB LEFT	12	12	12						0	0%
THROUGH	138	142	142						1	1%
RIGHT	0	0	0					0	0	0%
NB LEFT	5	5	5						0	0%
THROUGH	0	0	0						0	0%
RIGHT	7	7	7					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
TOTAL	266	273	273				0.95			
INTERSECTION 6:	Old Hershey Road / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	0	0	0						0	0%
THROUGH	36	37	37						1	3%
RIGHT	0	0	0					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	41	42	42						1	2%
RIGHT	0	0	0					0	0	0%
TOTAL	77	79	79				0.00			

---------- DATA INPUT/RESULTS FOR TRIP GENERATION ----------

SITE A ..... Sheetz
DESIGN HOUR .... PM Peak

Land Use Type	(945)	(type)	(type)	(type)	(type)	(type)	TOTAL
Trips Per Unit:							
Inbound	0.00	0.00	0.00	0.00	0.00	0.00	
Outbound	0.00	0.00	0.00	0.00	0.00	0.00	
Number of Units	6.13	0.00	0.00	0.00	0.00	0.00	
Buildout	100%	0%	0%	0%	0%	0%	
Pass-By Trips	0%	0%	0%	0%	0%	0%	
New Site Trips:							
Inbound	42	0	0	0	0	0	42
Outbound	42	0	0	0	0	0	42
Pass-By Trips:							
Inbound	125	0	0	0	0	0	125
Outbound	125	0	0	0	0	0	125
Total Site Trips:							
Inbound	167	0	0	0	0	0	167
Outbound	167	0	0	0	0	0	167
Total	334	0	0	0	0	0	334

---------- SINGLE SITE TRAFFIC ASSIGNMENT ----------

SITE A ..... Sheetz
DESIGN HOUR .... PM Peak

APPROACH	FUTURE TRAFFIC W/O COM DEV W/O	FUTURE TRAFFIC W/ COM DEV W/O PRO	% NEW SITE TRIPS INBOUND	% NEW SITE TRIPS OUTBOUND	% PASS-BY TRIPS INBOUND	% PASS-BY TRIPS OUTBOUND	NEW SITE TRIPS	PASS-BY	PASS-BY ADJUSTMENT	TOTAL SITE TRIPS	FUTURE TRAFFIC W/O COM DEV W/ PRO	FUTURE TRAFFC W/ COM DEV W/ PRO DEV
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive											
EB LEFT	39	39	0%	45%	0%	86%	19	108	0	127	166	166
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	73	73	0%	45%	0%	14%	19	18	0	37	110	110
WB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
NB LEFT	81	81	45%	0%	11%	0%	19	14	0	33	114	114
THROUGH	580	580	0%	0%	0%	0%	0	0	14	-14	566	566
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
SB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	700	700	0%	0%	0%	0%	0	0	18	-18	682	682
RIGHT	64	64	45%	0%	89%	0%	19	111	0	130	194	194
TOTAL	1537	1537	90%	90%	100%	100%	76	251	32	295	1832	1832
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive											
EB LEFT	2	2	0%	0%	0%	0%	0	0	0	0	2	2
THROUGH	21	21	2%	0%	0%	0%	1	0	0	1	22	22
RIGHT	2	2	0%	0%	0%	0%	0	0	0	0	2	2
WB LEFT	33	33	0%	0%	0%	0%	0	0	0	0	33	33
THROUGH	32	32	0%	2%	0%	0%	1	0	0	1	33	33
RIGHT	74	74	0%	5%	0%	0%	2	0	0	2	76	76
NB LEFT	4	4	0%	0%	0%	0%	0	0	0	0	4	4
THROUGH	7	7	0%	0%	0%	0%	0	0	0	0	7	7
RIGHT	26	26	0%	0%	0%	0%	0	0	0	0	26	26
SB LEFT	60	60	5%	0%	0%	0%	2	0	0	2	62	62
THROUGH	7	7	0%	0%	0%	0%	0	0	0	0	7	7
RIGHT	2	2	0%	0%	0%	0%	0	0	0	0	2	2
TOTAL	270	270	7%	7%	0%	0%	6	0	0	6	276	276
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
EB LEFT	25	25	0%	0%	0%	0%	0	0		0	25	25
BEAR LEFT	10	10	0%	0%	0%	0%	0	0		0	10	10
THROUGH	10	10	0%	0%	0%	0%	0	0		0	10	10
RIGHT	23	23	0%	0%	0%	0%	0	0		0	23	23
WB LEFT	4	4	0%	0%	0%	0%	0	0		0	4	4
THROUGH	5	5	0%	0%	0%	0%	0	0		0	5	5
RIGHT	109	109	0%	0%	0%	0%	0	0		0	109	109
HARD RIGHT	9	9	0%	0%	0%	0%	0	0		0	9	9
NB LEFT	16	16	0%	0%	0%	0%	0	0		0	16	16
THROUGH	403	403	0%	0%	0%	0%	0	0		0	403	403
BEAR RIGHT	112	112	0%	0%	0%	0%	0	0		0	112	112
RIGHT	4	4	0%	0%	0%	0%	0	0		0	4	4
TOTAL			0%	0%	0%	0%	0	0	0	0		
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
SB HARD LEFT	102	102	0%	0%	0%	0%	0	0		0	102	102
LEFT	123	123	0%	0%	0%	0%	0	0		0	123	123
THROUGH	518	518	0%	0%	0%	0%	0	0		0	518	518
RIGHT	29	29	0%	0%	0%	0%	0	0		0	29	29
SWB HARD LEFT	5	5	0%	0%	0%	0%	0	0		0	5	5
BEAR LEFT	91	91	0%	0%	0%	0%	0	0		0	91	91
BEAR RIGHT	12	12	0%	0%	0%	0%	0	0		0	12	12
HARD RIGHT	95	95	0%	0%	0%	0%	0	0		0	95	95
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	1705	1705	0%	0%	0%	0%	0	0	0	0	1705	1705
INTERSECTION 5:	Veterans Drive / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	104	104	0%	0%	0%	0%	0	0	0	0	104	104
RIGHT	0	0	7%	0%	0%	0%	3	0	0	3	3	3
WB LEFT	0	0	90%	0%	100%	0%	38	125	0	163	163	163
THROUGH	142	142	0%	0%	0%	0%	0	0	0	0	142	142
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
NB LEFT	0	0	0%	7%	0%	0%	3	0	0	3	3	3
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	90%	0%	100%	38	125	0	163	163	163
SB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
TOTAL	246	246	97%	97%	100%	100%	82	250	0	332	578	578
INTERSECTION 6:	Old Hershey Road / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
WB LEFT	0	0	0%	3%	0%	0%	1	0	0	1	1	1
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
NB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	37	37	0%	0%	0%	0%	0	0	0	0	37	37
RIGHT	0	0	3%	0%	0%	0%	1	0	0	1	1	1
SB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	42	42	0%	0%	0%	0%	0	0	0	0	42	42
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
TOTAL	79	79	3%	3%	0%	0%	2	0	0	2	81	81

SITE IMPACT TRAFFIC EVALUATION

---------- GENERAL INFORMATION FOR SITETRIP WORKSHEET ----------

Title:	Sheetz - Elizabethtown, PA TRANSPORTATION IMPACT STUDY		
Location:	Mount Joy Township, Lancaster County		
Performed By:	LJS	Date:	07/26/24
Intersection 1:	Hershey Road (SR 0743) / Veterans Drive	Site A:	Sheetz
Intersection 2:	Old Hershey Road / Veterans Drive - Rockwood Drive	Site B:	(Site)
Intersection 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site C:	(Site)
Intersection 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241)	Site D:	(Site)
Intersection 5:	Veterans Drive / Proposed Driveway	Site E:	(Site)
Intersection 6:	Old Hershey Road / Proposed Driveway	Site F:	(Site)
Intersection 7:	(STREET NAMES)	Design Hour:	Sat Peak
Intersection 8:	(STREET NAMES)	Design Year:	2030
Intersection 9:	(STREET NAMES)	Background Factor:	1.03
Intersection 10:	(STREET NAMES)	Background Growth Rate:	0.50
Intersection 11:	(STREET NAMES)		
Intersection 12:	(STREET NAMES)		

--------- EXISTING AND FUTURE TRAFFIC WITHOUT DEVELOPMENT ---------

APPROACH	EXISTING TRAFFIC	FUTURE TRAFFIC W/O COM DEV W/O PRO DEV	FUTURE TRAFFIC W/ COM DEV W/O PRO DEV	Committed Developments			PHF	RTOR	Trucks	Truck Percentage
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive									
EB LEFT	41	42	42						1	2%
THROUGH	0	0	0						0	0%
RIGHT	56	58	58					32	1	2%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	1	1	1					0	0	0%
NB LEFT	66	68	68						1	2%
THROUGH	425	438	438						8	2%
RIGHT	0	0	0					0	0	0%
SB LEFT	1	1	1						0	0%
THROUGH	369	380	380						5	1%
RIGHT	29	30	30					4	0	0%
TOTAL	988	1018	1018				0.92			
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive									
EB LEFT	2	2	2						0	0%
THROUGH	16	16	16						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	37	38	38						0	0%
THROUGH	6	6	6						0	0%
RIGHT	44	45	45					0	0	0%
NB LEFT	1	1	1						0	0%
THROUGH	2	2	2						0	0%
RIGHT	31	32	32					0	0	0%
SB LEFT	45	46	46						0	0%
THROUGH	3	3	3						0	0%
RIGHT	1	1	1					0	0	0%
TOTAL	188	192	192				0.87			
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
EB LEFT	24	25	25						0	0%
BEAR LEFT	4	4	4						0	0%
THROUGH	6	6	6						0	0%
RIGHT	17	18	18					5	0	0%
WB LEFT	1	1	1						0	0%
THROUGH	9	9	9						1	11%
RIGHT	91	94	94						1	1%
HARD RIGHT	8	8	8					0	0	0%
NB LEFT	11	11	11						0	0%
THROUGH	349	359	359						8	2%
BEAR RIGHT	73	75	75						3	4%
RIGHT	6	6	6					1	0	0%
TOTAL							0.97			
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street									
SB HARD LEFT	59	61	61						0	0%
LEFT	60	62	62						1	2%
THROUGH	310	319	319						6	2%
RIGHT	26	27	27					3	0	0%
SWB HARD LEFT	5	5	5						0	0%
BEAR LEFT	49	50	50						2	4%
BEAR RIGHT	8	8	8						0	0%
HARD RIGHT	53	55	55					1	0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
	0	0	0						0	0%
TOTAL	1169	1203	1203				0.97		22	
INTERSECTION 5:	Veterans Drive / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	90	93	93						0	0%
RIGHT	2	2	2					0	0	0%
WB LEFT	9	9	9						0	0%
THROUGH	86	89	89						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	1	1	1						0	0%
THROUGH	0	0	0						0	0%
RIGHT	5	5	5					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
TOTAL	193	199	199				0.91			
INTERSECTION 6:	Old Hershey Road / Proposed Driveway									
EB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
WB LEFT	0	0	0						0	0%
THROUGH	0	0	0						0	0%
RIGHT	0	0	0					0	0	0%
NB LEFT	0	0	0						0	0%
THROUGH	34	35	35						0	0%
RIGHT	0	0	0					0	0	0%
SB LEFT	0	0	0						0	0%
THROUGH	40	41	41						0	0%
RIGHT	0	0	0					0	0	0%
TOTAL	74	76	76				0.00			

---------- DATA INPUT/RESULTS FOR TRIP GENERATION ----------

SITE A ..... Sheetz
DESIGN HOUR .... Sat Peak

Land Use Type	(945)	(type)	(type)	(type)	(type)	(type)	TOTAL
Trips Per Unit:							
Inbound	0.00	0.00	0.00	0.00	0.00	0.00	
Outbound	0.00	0.00	0.00	0.00	0.00	0.00	
Number of Units	6.13	0.00	0.00	0.00	0.00	0.00	
Buildout	100%	0%	0%	0%	0%	0%	
Pass-By Trips	0%	26%	0%	0%	0%	0%	
New Site Trips:							
Inbound	69	0	0	0	0	0	69
Outbound	69	0	0	0	0	0	69
Pass-By Trips:							
Inbound	128	0	0	0	0	0	128
Outbound	127	0	0	0	0	0	127
Total Site Trips:							
Inbound	197	0	0	0	0	0	197
Outbound	196	0	0	0	0	0	196
Total	393	0	0	0	0	0	393

---------- SINGLE SITE TRAFFIC ASSIGNMENT ----------

SITE A ..... Sheetz
DESIGN HOUR .... Sat Peak

APPROACH	FUTURE TRAFFIC W/O COM DEV W/O	FUTURE TRAFFIC W/ COM DEV W/O PRO	% NEW SITE TRIPS INBOUND	% NEW SITE TRIPS OUTBOUND	% PASS-BY TRIPS INBOUND	% PASS-BY TRIPS OUTBOUND	NEW SITE TRIPS	PASS-BY	PASS-BY ADJUSTMENT	TOTAL SITE TRIPS	FUTURE TRAFFIC W/O COM DEV W/ PRO	FUTURE TRAFFC W/ COM DEV W/ PRO DEV
INTERSECTION 1:	Hershey Road (SR 0743) / Veterans Drive											
EB LEFT	42	42	0%	45%	0%	89%	31	113	0	144	186	186
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	58	58	0%	45%	0%	11%	31	14	0	45	103	103
WB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	1	1	0%	0%	0%	0%	0	0	0	0	1	1
NB LEFT	68	68	45%	0%	14%	0%	31	18	0	49	117	117
THROUGH	438	438	0%	0%	0%	0%	0	0	18	-18	420	420
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
SB LEFT	1	1	0%	0%	0%	0%	0	0	0	0	1	1
THROUGH	380	380	0%	0%	0%	0%	0	0	14	-14	366	366
RIGHT	30	30	45%	0%	86%	0%	31	110	0	141	171	171
TOTAL	1018	1018	90%	90%	100%	100%	124	255	32	347	1365	1365
INTERSECTION 2:	Old Hershey Road / Veterans Drive - Rockwood Drive											
EB LEFT	2	2	0%	0%	0%	0%	0	0	0	0	2	2
THROUGH	16	16	2%	0%	0%	0%	1	0	0	1	17	17
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
WB LEFT	38	38	0%	0%	0%	0%	0	0	0	0	38	38
THROUGH	6	6	0%	2%	0%	0%	1	0	0	1	7	7
RIGHT	45	45	0%	5%	0%	0%	3	0	0	3	48	48
NB LEFT	1	1	0%	0%	0%	0%	0	0	0	0	1	1
THROUGH	2	2	0%	0%	0%	0%	0	0	0	0	2	2
RIGHT	32	32	0%	0%	0%	0%	0	0	0	0	32	32
SB LEFT	46	46	5%	0%	0%	0%	3	0	0	3	49	49
THROUGH	3	3	0%	0%	0%	0%	0	0	0	0	3	3
RIGHT	1	1	0%	0%	0%	0%	0	0	0	0	1	1
TOTAL	192	192	7%	7%	0%	0%	8	0	0	8	200	200
INTERSECTION 3:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
EB LEFT	25	25	0%	0%	0%	0%	0	0		0	25	25
BEAR LEFT	4	4	0%	0%	0%	0%	0	0		0	4	4
THROUGH	6	6	0%	0%	0%	0%	0	0		0	6	6
RIGHT	18	18	0%	0%	0%	0%	0	0		0	18	18
WB LEFT	1	1	0%	0%	0%	0%	0	0		0	1	1
THROUGH	9	9	0%	0%	0%	0%	0	0		0	9	9
RIGHT	94	94	0%	0%	0%	0%	0	0		0	94	94
HARD RIGHT	8	8	0%	0%	0%	0%	0	0		0	8	8
NB LEFT	11	11	0%	0%	0%	0%	0	0		0	11	11
THROUGH	359	359	0%	0%	0%	0%	0	0		0	359	359
BEAR RIGHT	75	75	0%	0%	0%	0%	0	0		0	75	75
RIGHT	6	6	0%	0%	0%	0%	0	0		0	6	6
TOTAL			0%	0%	0%	0%	0	0	0	0		
INTERSECTION 4:	Hershey Road (SR 0743) / Mt. Gretna Road (SR 0241) - Holly Street											
SB HARD LEFT	61	61	0%	0%	0%	0%	0	0		0	61	61
LEFT	62	62	0%	0%	0%	0%	0	0		0	62	62
THROUGH	319	319	0%	0%	0%	0%	0	0		0	319	319
RIGHT	27	27	0%	0%	0%	0%	0	0		0	27	27
SWB HARD LEFT	5	5	0%	0%	0%	0%	0	0		0	5	5
BEAR LEFT	50	50	0%	0%	0%	0%	0	0		0	50	50
BEAR RIGHT	8	8	0%	0%	0%	0%	0	0		0	8	8
HARD RIGHT	55	55	0%	0%	0%	0%	0	0		0	55	55
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
	0	0	0%	0%	0%	0%	0	0		0	0	0
TOTAL	1203	1203	0%	0%	0%	0%	0	0	0	0	1203	1203
INTERSECTION 5:	Veterans Drive / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	93	93	0%	0%	0%	0%	0	0	0	0	93	93
RIGHT	0	0	7%	0%	0%	0%	5	0	0	5	5	5
WB LEFT	0	0	90%	0%	100%	0%	62	128	0	190	190	190
THROUGH	89	89	0%	0%	0%	0%	0	0	0	0	89	89
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
NB LEFT	0	0	0%	7%	0%	0%	5	0	0	5	5	5
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	90%	0%	100%	62	127	0	189	189	189
SB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
TOTAL	182	182	97%	97%	100%	100%	134	255	0	389	571	571
INTERSECTION 6:	Old Hershey Road / Proposed Driveway											
EB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
WB LEFT	0	0	0%	3%	0%	0%	2	0	0	2	2	2
THROUGH	0	0	0%	0%	0%	0%	0	0	0	0	0	0
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
NB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	35	35	0%	0%	0%	0%	0	0	0	0	35	35
RIGHT	0	0	3%	0%	0%	0%	2	0	0	2	2	2
SB LEFT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
THROUGH	41	41	0%	0%	0%	0%	0	0	0	0	41	41
RIGHT	0	0	0%	0%	0%	0%	0	0	0	0	0	0
TOTAL	76	76	3%	3%	0%	0%	4	0	0	4	80	80

TRIP GENERATION WORKSHEETS

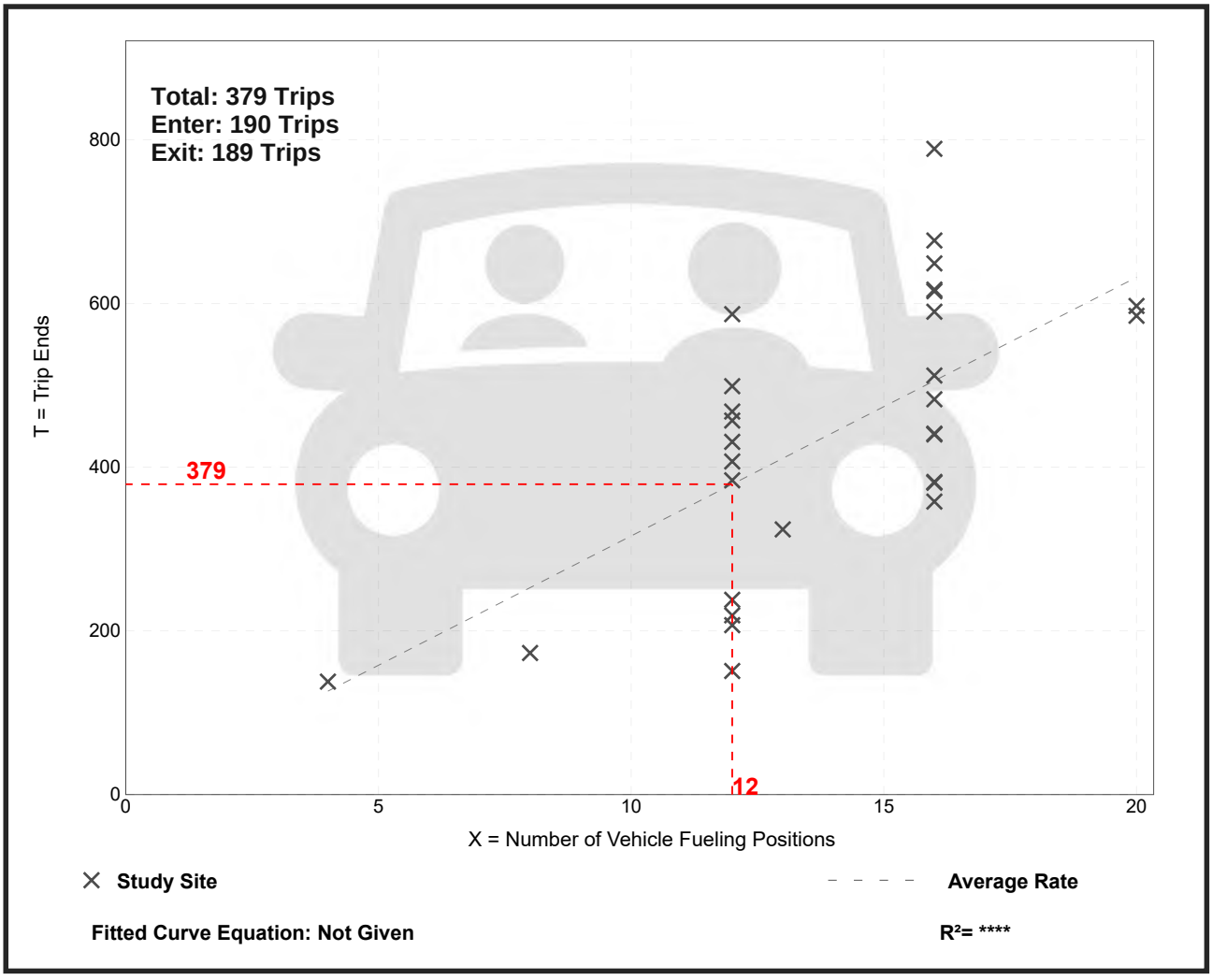
Convenience Store/Gas Station - GFA (5.5-10k)
(945)

Vehicle Trip Ends vs:	**Vehicle Fueling Positions**
On a:	**Weekday,** **Peak Hour of Adjacent Street Traffic,** **One Hour Between 7 and 9 a.m.**
Setting/Location:	**General Urban/Suburban**
Number of Studies:	29
Avg. Num. of Vehicle Fueling Positions:	14
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
31.60	12.58 - 49.31	9.10

Data Plot and Equation



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Convenience Store/Gas Station - VFP (9-15)
(945)

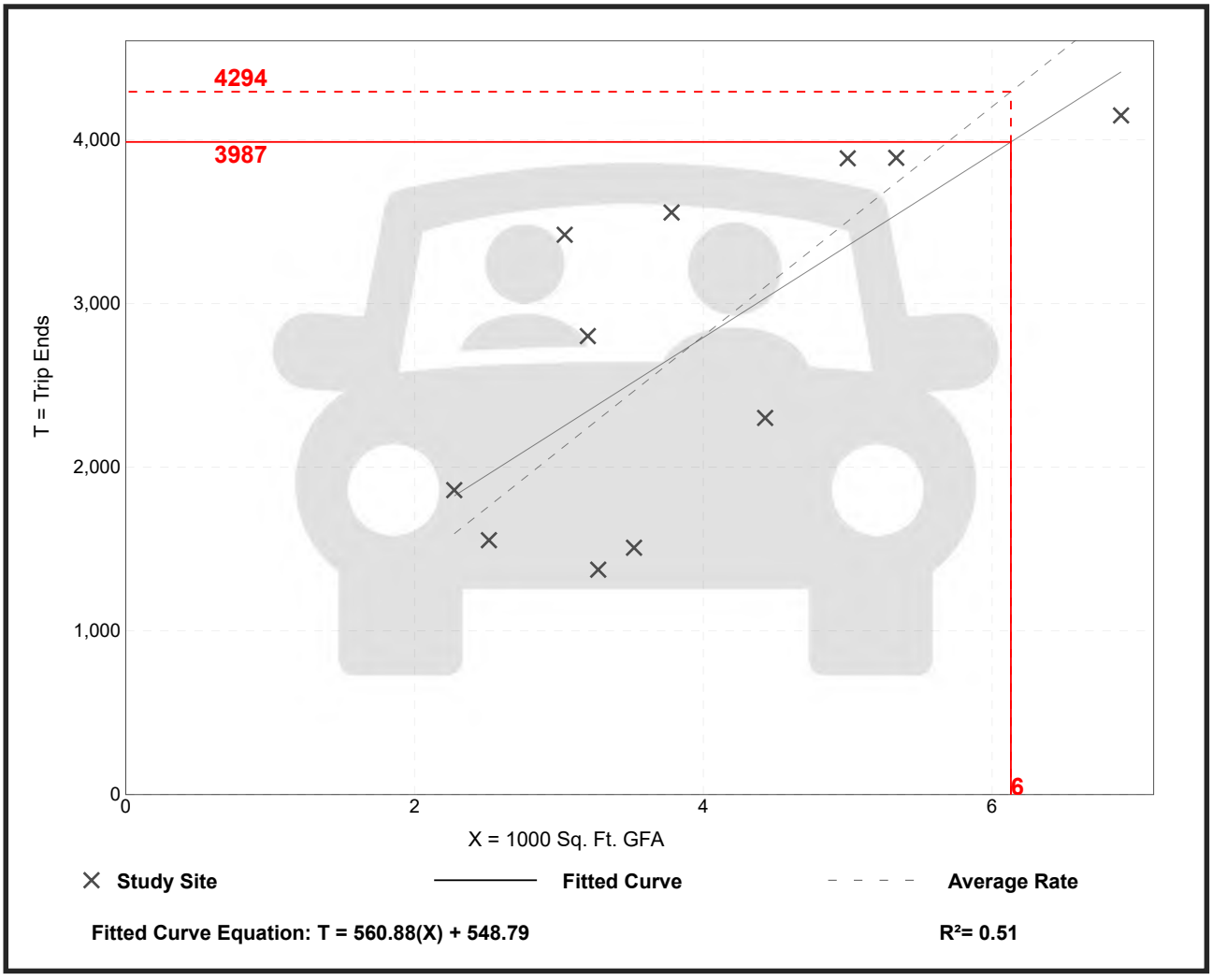
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
700.43	419.93 - 1125.00	206.44

Data Plot and Equation



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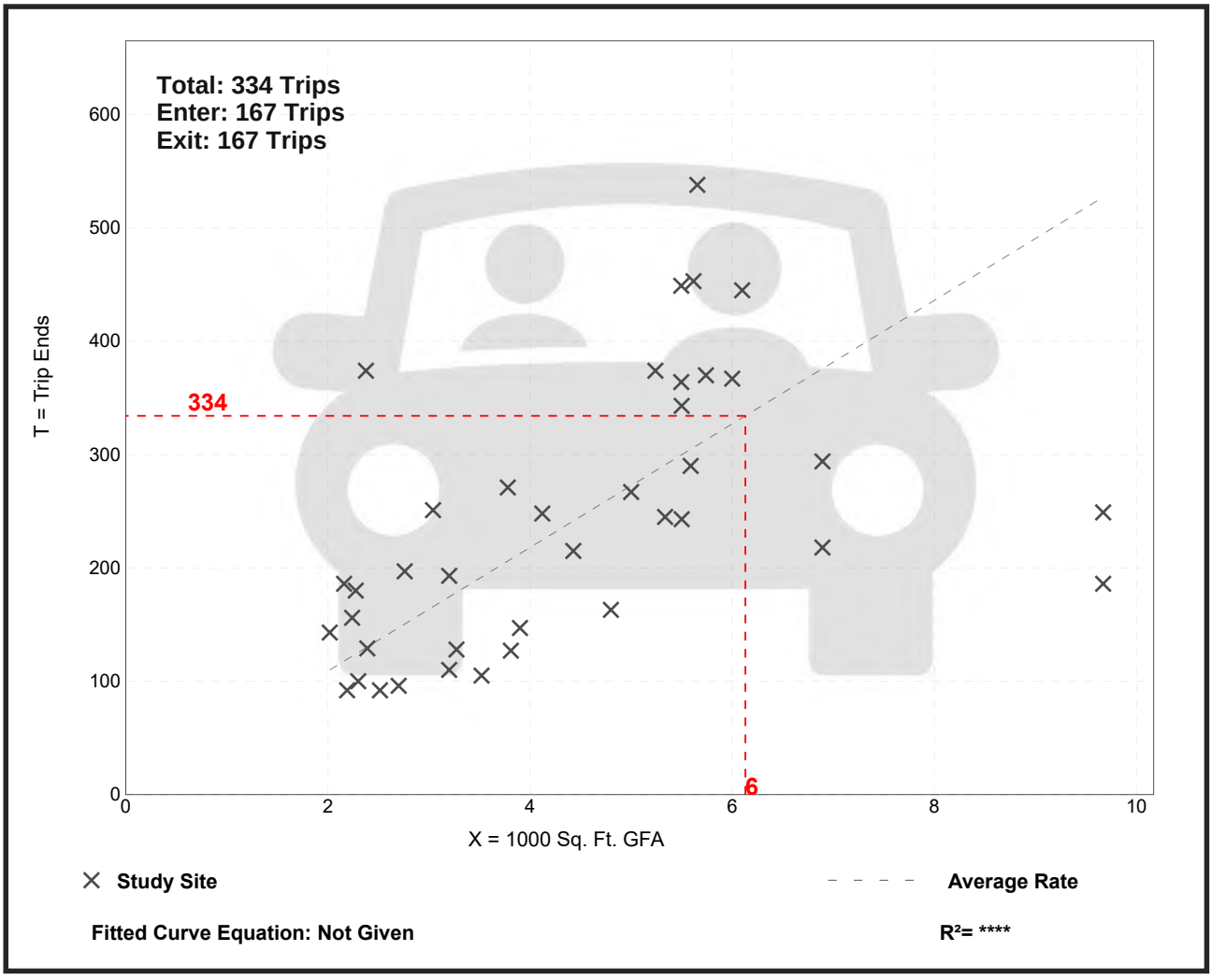
Convenience Store/Gas Station - VFP (9-15)
(945)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
54.52	19.23 - 157.41	23.69

Data Plot and Equation



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Convenience Store/Gas Station - VFP (9-15)
(945)

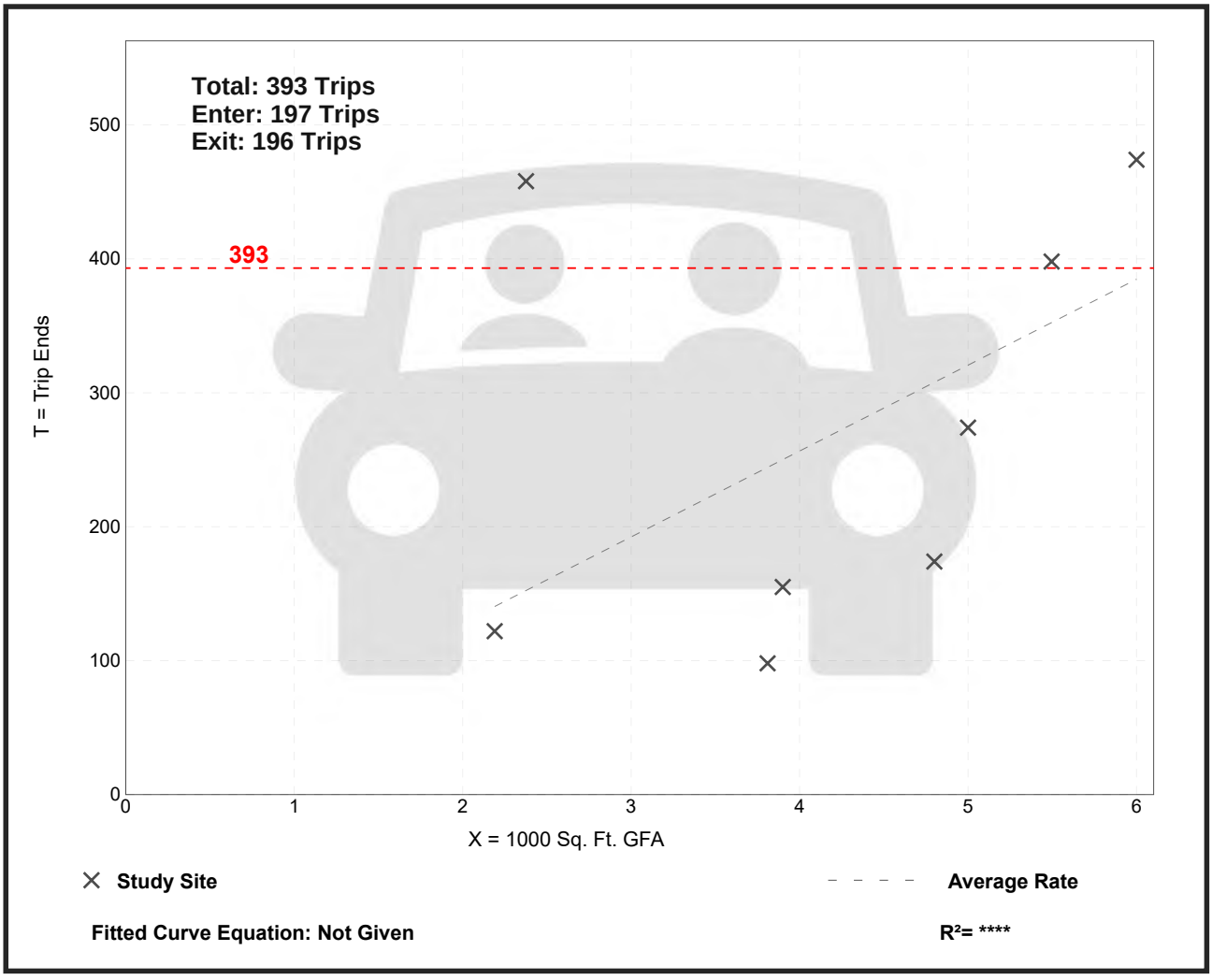
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 8
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
64.13	25.72 - 192.76	42.59

Data Plot and Equation



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Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday AM Peak Period									
# Data Sites	16 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	60% for Sites with between 2 and 8 VFP					76% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
			Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2	8	Maryland	1992	46	87	13	0	13	2235	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.2	8	Maryland	1992	31	47	34	19	53	1785	25
2.2	< 8	Indiana	1993	79	56	6	38	44	635	2
2.2	8	Maryland	1992	35	78	9	13	22	7080	25
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.3	< 8	Kentucky	1993	58	64	5	31	36	1255	2
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.4	< 8	Kentucky	1993	—	48	17	35	52	1210	2
2.6	< 8	Kentucky	1993	—	72	15	13	28	940	2
2.8	< 8	Kentucky	1993	—	54	11	35	46	1240	2
3	< 8	Indiana	1993	62	74	10	16	26	790	2
3.6	< 8	Kentucky	1993	49	67	4	29	33	1985	2
3.7	< 8	Kentucky	1993	49	66	16	18	34	990	2
4.694	12	Maryland	2000	—	72	—	—	28	2440	30
4.694	12	Maryland	2000	—	78	—	—	22	1561	30
4.694	12	Maryland	2000	—	79	—	—	21	2764	30
4.848	12	Virginia	2000	—	55	—	—	45	1398	30
5.06	12	Pennsylvania	2000	—	84	—	—	16	3219	30
5.242	12	Virginia	2000	—	74	—	—	26	1160	30
5.242	12	Virginia	2000	—	71	—	—	29	548	30
5.488	12	Delaware	2000	—	80	—	—	20	—	30
5.5	12	Pennsylvania	2000	—	85	—	—	15	2975	30
4.2	< 8	Kentucky	1993	47	62	19	19	38	1705	2
4.694	16	Maryland	2000	—	90	—	—	10	2278	30
4.694	16	Delaware	2000	—	74	—	—	26	2185	30
4.694	16	Delaware	2000	—	58	—	—	42	962	30
4.694	16	Delaware	2000	—	84	—	—	16	2956	30
4.694	16	New Jersey	2000	—	79	—	—	21	1859	30
4.694	20	Delaware	2000	—	84	—	—	16	3864	30
4.848	16	Virginia	2000	—	68	—	—	32	2106	30
4.848	16	Virginia	2000	—	85	—	—	15	2676	30
4.848	16	Virginia	2000	—	75	—	—	25	3244	30
4.848	16	Virginia	2000	—	71	—	—	29	1663	30
4.993	16	Pennsylvania	2000	—	75	—	—	25	1991	30
5.094	16	New Jersey	2000	—	86	—	—	14	1260	30
5.5	16	Pennsylvania	2000	—	82	—	—	18	1570	30
5.543	16	Pennsylvania	2000	—	84	—	—	16	1933	30
5.565	16	Pennsylvania	2000	—	77	—	—	23	2262	30
5.565	16	Pennsylvania	2000	—	68	—	—	32	2854	30
5.565	16	New Jersey	2000	—	58	—	—	42	1253	30
5.565	16	New Jersey	2000	—	79	—	—	21	1928	30
5.565	16	New Jersey	2000	---	84	---	---	16	1953	30

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday PM Peak Period									
# Data Sites	12 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	56% for Sites with between 2 and 8 VFP					75% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
			Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2.1	8	Maryland	1992	31	52	13	35	48	1785	25
2.1	6	Maryland	1992	30	53	20	27	47	1060	25
2.2	< 8	Indiana	1993	115	48	16	36	52	820	2
2.3	< 8	Kentucky	1993	67	57	16	27	43	1954	2
2.3	6	Maryland	1992	55	40	11	49	60	2760	25
2.4	< 8	Kentucky	1993	—	58	13	29	42	2655	2
2.6	< 8	Kentucky	1993	68	67	15	18	33	950	2
2.8	< 8	Kentucky	1993	—	62	11	27	38	2875	2
3	< 8	Indiana	1993	80	65	15	20	35	1165	2
3.6	< 8	Kentucky	1993	60	56	17	27	44	2505	2
3.7	< 8	Kentucky	1993	70	61	16	23	39	2175	2
4.2	< 8	Kentucky	1993	61	58	26	16	42	2300	2
4.694	12	Maryland	2000	—	78	—	—	22	3549	30
4.694	12	Maryland	2000	—	67	—	—	33	2272	30
4.694	12	Maryland	2000	—	66	—	—	34	3514	30
4.848	12	Virginia	2000	—	71	—	—	29	2350	30
5.06	12	Pennsylvania	2000	—	91	—	—	9	4181	30
5.242	12	Virginia	2000	—	70	—	—	30	2445	30
5.242	12	Virginia	2000	—	56	—	—	44	950	30
5.488	12	Delaware	2000	—	73	—	—	27	—	30
5.5	12	Pennsylvania	2000	—	84	—	—	16	4025	30
4.694	16	Maryland	2000	—	89	—	—	11	2755	30
4.694	16	Delaware	2000	—	73	—	—	27	1858	30
4.694	16	Delaware	2000	—	59	—	—	41	1344	30
4.694	16	Delaware	2000	—	72	—	—	28	3434	30
4.694	16	New Jersey	2000	—	81	—	—	19	1734	30
4.694	20	Delaware	2000	—	76	—	—	24	1616	30
4.848	16	Virginia	2000	—	67	—	—	33	2.954	30
4.848	16	Virginia	2000	—	78	—	—	22	3086	30
4.848	16	Virginia	2000	—	83	—	—	17	4143	30
4.848	16	Virginia	2000	—	73	—	—	27	2534	30
4.993	16	Pennsylvania	2000	—	72	—	—	28	2917	30
5.094	16	New Jersey	2000	—	86	—	—	14	1730	30
5.5	16	Pennsylvania	2000	—	90	—	—	10	2616	30
5.543	16	Pennsylvania	2000	—	87	—	—	13	2363	30
5.565	16	Pennsylvania	2000	—	81	—	—	19	2770	30
5.565	16	Pennsylvania	2000	—	76	—	—	24	3362	30
5.565	16	New Jersey	2000	—	61	—	—	39	1713	30
5.565	16	New Jersey	2000	—	86	—	—	14	1721	30
5.565	16	New Jersey	2000	---	81	---	---	19	2227	30

CAPACITY AND QUEUE ANALYSIS WORKSHEETS

Critical Headway and Follow-up Headway Calculations

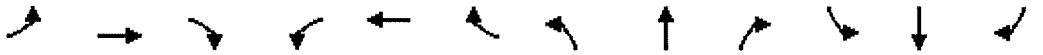
Equation 19-30 $t_{c,x} = t_{c,base} + t_{c,hv}P_{hv} + t_{c,g}G - t_{3,lt}$ from HCM 6th Ed Manual

Equation 19-31 $t_{f,x} = t_{f,base} + t_{f,hv}P_{hv}$

Old Hershey Road / Prop. Dwy		$t_{c,base}$	$t_{c,hv}$	P_{hv}	$t_{c,g}$	G	$t_{3,lt}$	**Critical Headway $t_{c,x}$**	$t_{f,base}$	$t_{f,hv}$	P_{hv}	**Follow-up Headway $t_{f,x}$**
AM Peak	WBL	7.1	1	0.02	0.2	0	0.7	**6.4**	3	0.9	0.02	**3.0**
	WBR	6.2	1	0.02	0.1	0	0	**6.2**	3.1	0.9	0.02	**3.1**
	SBL	4.3	1	0.02	0	-1	0	**4.3**	3	0.9	0.02	**3.0**
PM Peak	WBL	7.1	1	0.02	0.2	0	0.7	**6.4**	3	0.9	0.02	**3.0**
	WBR	6.2	1	0.02	0.1	0	0	**6.2**	3.1	0.9	0.02	**3.1**
	SBL	4.3	1	0.02	0	-1	0	**4.3**	3	0.9	0.02	**3.0**
Sat Peak	WBL	7.1	1	0.02	0.2	0	0.7	**6.4**	3	0.9	0.02	**3.0**
	WBR	6.2	1	0.02	0.1	0	0	**6.2**	3.1	0.9	0.02	**3.1**
	SBL	4.3	1	0.02	0	-1	0	**4.3**	3	0.9	0.02	**3.0**

Veterans Drive / Prop. Dwy		$t_{c,base}$	$t_{c,hv}$	P_{hv}	$t_{c,g}$	G	$t_{3,lt}$	**Critical Headway $t_{c,x}$**	$t_{f,base}$	$t_{f,hv}$	P_{hv}	**Follow-up Headway $t_{f,x}$**
AM Peak	NBL	7.1	1	0.02	0.2	-3	0.7	**5.8**	3	0.9	0.02	**3.0**
	NBR	6.2	1	0.02	0.1	-3	0	**5.9**	3.1	0.9	0.02	**3.1**
	EBL	4.3	1	0.02	0	2	0	**4.3**	3	0.9	0.02	**3.0**
PM Peak	NBL	7.1	1	0.02	0.2	-3	0.7	**5.8**	3	0.9	0.02	**3.0**
	NBR	6.2	1	0.02	0.1	-3	0	**5.9**	3.1	0.9	0.02	**3.1**
	EBL	4.3	1	0.02	0	2	0	**4.3**	3	0.9	0.02	**3.0**
Sat Peak	NBL	7.1	1	0.02	0.2	-3	0.7	**5.8**	3	0.9	0.02	**3.0**
	NBR	6.2	1	0.02	0.1	-3	0	**5.9**	3.1	0.9	0.02	**3.1**
	EBL	4.3	1	0.02	0	2	0	**4.3**	3	0.9	0.02	**3.0**

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	0	74	0	0	1	28	739	1	0	420	16
Future Volume (vph)	60	0	74	0	0	1	28	739	1	0	420	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.865						0.995	
Flt Protected	0.950							0.998				
Satd. Flow (prot)	1519	1401	0	0	1573	0	0	1749	0	0	1620	0
Flt Permitted	0.757							0.974				
Satd. Flow (perm)	1210	1401	0	0	1573	0	0	1707	0	0	1620	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		397			179						6	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	3%	0%	7%	0%	0%	0%	11%	4%	0%	0%	9%	6%
Adj. Flow (vph)	69	0	85	0	0	1	32	849	1	0	483	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	85	0	0	1	0	0	882	0	0	501	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



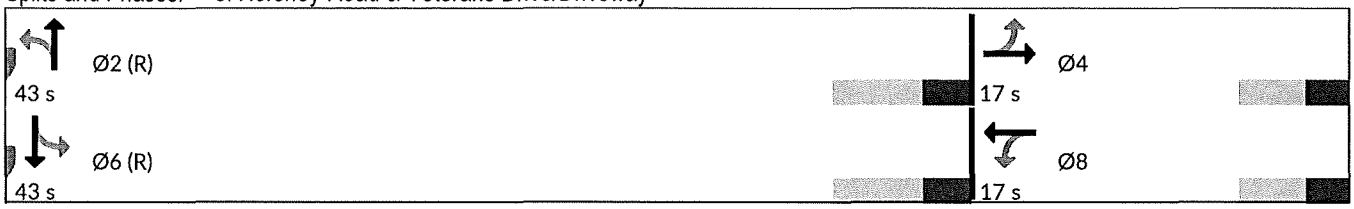
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA		Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	8.7	8.7			8.6			43.6			43.6	
Actuated g/C Ratio	0.15	0.15			0.14			0.73			0.73	
v/c Ratio	0.39	0.16			0.00			0.71			0.43	
Control Delay (s/veh)	29.1	0.6			0.0			18.3			6.3	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay (s/veh)	29.1	0.6			0.0			18.3			6.3	
LOS	C	A			A			B			A	
Approach Delay (s/veh)		13.4						18.3			6.3	
Approach LOS		B						B			A	
90th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
90th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	10.3	10.3		10.3	10.3		38.7	38.7		38.7	38.7	
70th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	8.7	8.7		8.7	8.7		40.3	40.3		40.3	40.3	
50th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	7.1	7.1		7.1	7.1		41.9	41.9		41.9	41.9	
30th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		54.0	54.0		54.0	54.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Coord	Coord		Coord	Coord	
Stops (vph)	54	0			0			760			184	
Fuel Used(gal)	1	0			0			18			9	
CO Emissions (g/hr)	53	17			1			1276			632	
NOx Emissions (g/hr)	10	3			0			248			123	
VOC Emissions (g/hr)	12	4			0			296			147	
Dilemma Vehicles (#)	0	0			0			60			32	
Queue Length 50th (ft)	23	0			0			425			68	
Queue Length 95th (ft)	51	0			0			728			138	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	597			457			1240			1178	
Starvation Cap Reductn	0	0			0			0			0	

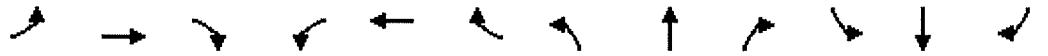
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.29	0.14			0.00			0.71			0.43	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay (s/veh): 13.9 Intersection LOS: B
Intersection Capacity Utilization 84.4% ICU Level of Service E
Analysis Period (min) 15

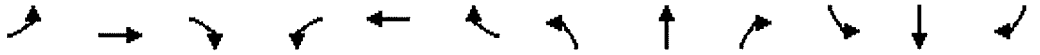
Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	0	74	0	0	1	28	739	1	0	420	16
Future Volume (veh/h)	60	0	74	0	0	1	28	739	1	0	420	16
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	1669	1711	1612	1875	1875	1875	1755	1855	1912	1750	1623	1666
Adj Flow Rate, veh/h	69	0	85	0	0	1	32	849	1	0	483	18
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	0	7	0	0	0	11	4	0	0	9	6
Cap, veh/h	231	0	128	0	0	140	85	1301	2	0	1132	42
Arrive On Green	0.09	0.00	0.09	0.00	0.00	0.09	0.97	0.97	0.97	0.00	0.73	0.73
Sat Flow, veh/h	1263	0	1450	0	0	1588	31	1787	2	0	1555	58
Grp Volume(v), veh/h	69	0	85	0	0	1	882	0	0	0	0	501
Grp Sat Flow(s),veh/h/ln	1263	0	1450	0	0	1589	1820	0	0	0	0	1613
Q Serve(g_s), s	3.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3
Cycle Q Clear(g_c), s	3.2	0.0	3.4	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	7.3
Prop In Lane	1.00		1.00	0.00		1.00	0.04		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	231	0	128	0	0	140	1388	0	0	0	0	1175
V/C Ratio(X)	0.30	0.00	0.66	0.00	0.00	0.01	0.64	0.00	0.00	0.00	0.00	0.43
Avail Cap(c_a), veh/h	372	0	290	0	0	318	1388	0	0	0	0	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	0.51	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	26.5	0.0	0.0	24.9	0.3	0.0	0.0	0.0	0.0	3.2
Incr Delay (d2), s/veh	0.7	0.0	5.8	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	2.4	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.1	0.0	32.2	0.0	0.0	25.0	1.4	0.0	0.0	0.0	0.0	4.3
LnGrp LOS	C		C			C	A					A
Approach Vol, veh/h		154			1			882			501	
Approach Delay, s/veh		29.9			25.0			1.4			4.3	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		49.7		10.3		49.7		10.3				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		37.0		12.0		37.0		12.0				
Max Q Clear Time (g_c+I1), s		4.4		5.4		9.3		2.0				
Green Ext Time (p_c), s		7.3		0.3		1.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			5.3									
HCM 6th LOS			A									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	0	74	0	0	1	28	743	1	0	422	16
Future Volume (vph)	60	0	74	0	0	1	28	743	1	0	422	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.865						0.995	
Flt Protected	0.950							0.998				
Satd. Flow (prot)	1519	1401	0	0	1573	0	0	1749	0	0	1620	0
Flt Permitted	0.757							0.974				
Satd. Flow (perm)	1210	1401	0	0	1573	0	0	1707	0	0	1620	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		395			177						6	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	3%	0%	7%	0%	0%	0%	11%	4%	0%	0%	9%	6%
Adj. Flow (vph)	69	0	85	0	0	1	32	854	1	0	485	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	85	0	0	1	0	0	887	0	0	503	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



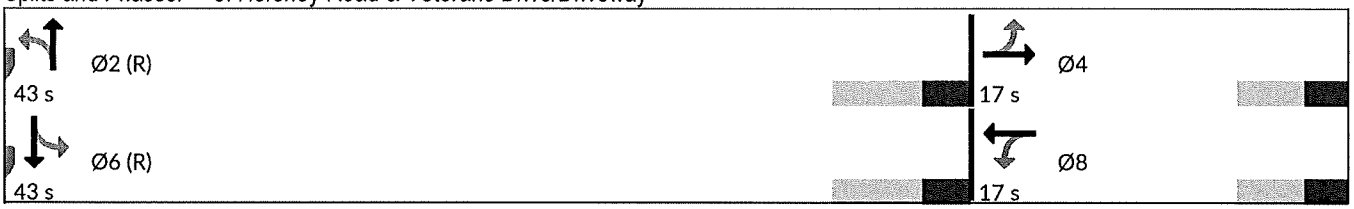
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA		Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	8.7	8.7			8.6			43.6			43.6	
Actuated g/C Ratio	0.15	0.15			0.14			0.73			0.73	
v/c Ratio	0.39	0.16			0.00			0.72			0.43	
Control Delay (s/veh)	29.1	0.6			0.0			18.4			6.3	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay (s/veh)	29.1	0.6			0.0			18.4			6.3	
LOS	C	A			A			B			A	
Approach Delay (s/veh)		13.4						18.4			6.3	
Approach LOS		B						B			A	
90th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
90th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	10.3	10.3		10.3	10.3		38.7	38.7		38.7	38.7	
70th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	8.7	8.7		8.7	8.7		40.3	40.3		40.3	40.3	
50th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	7.1	7.1		7.1	7.1		41.9	41.9		41.9	41.9	
30th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		54.0	54.0		54.0	54.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Coord	Coord		Coord	Coord	
Stops (vph)	54	0			0			765			184	
Fuel Used(gal)	1	0			0			18			9	
CO Emissions (g/hr)	53	17			1			1286			635	
NOx Emissions (g/hr)	10	3			0			250			123	
VOC Emissions (g/hr)	12	4			0			298			147	
Dilemma Vehicles (#)	0	0			0			60			32	
Queue Length 50th (ft)	23	0			0			489			68	
Queue Length 95th (ft)	51	0			0			731			139	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	596			456			1240			1178	
Starvation Cap Reductn	0	0			0			0			0	

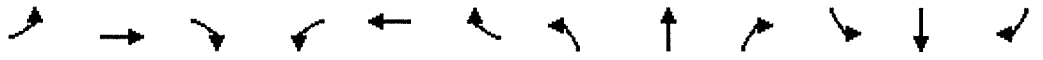
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.29	0.14			0.00			0.72			0.43	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay (s/veh): 13.9 Intersection LOS: B
Intersection Capacity Utilization 84.6% ICU Level of Service E
Analysis Period (min) 15

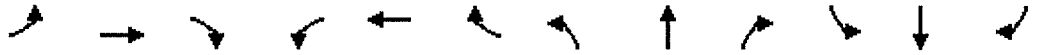
Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	0	74	0	0	1	28	743	1	0	422	16
Future Volume (veh/h)	60	0	74	0	0	1	28	743	1	0	422	16
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	1669	1711	1612	1875	1875	1875	1755	1855	1912	1750	1623	1666
Adj Flow Rate, veh/h	69	0	85	0	0	1	32	854	1	0	485	18
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	0	7	0	0	0	11	4	0	0	9	6
Cap, veh/h	231	0	128	0	0	140	85	1302	1	0	1133	42
Arrive On Green	0.09	0.00	0.09	0.00	0.00	0.09	0.97	0.97	0.97	0.00	0.73	0.73
Sat Flow, veh/h	1263	0	1450	0	0	1588	31	1787	2	0	1555	58
Grp Volume(v), veh/h	69	0	85	0	0	1	887	0	0	0	0	503
Grp Sat Flow(s),veh/h/ln	1263	0	1450	0	0	1589	1821	0	0	0	0	1613
Q Serve(g_s), s	3.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
Cycle Q Clear(g_c), s	3.2	0.0	3.4	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	7.4
Prop In Lane	1.00		1.00	0.00		1.00	0.04		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	231	0	128	0	0	140	1388	0	0	0	0	1175
V/C Ratio(X)	0.30	0.00	0.66	0.00	0.00	0.01	0.64	0.00	0.00	0.00	0.00	0.43
Avail Cap(c_a), veh/h	372	0	290	0	0	318	1388	0	0	0	0	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	0.51	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	26.5	0.0	0.0	24.9	0.3	0.0	0.0	0.0	0.0	3.2
Incr Delay (d2), s/veh	0.7	0.0	5.8	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	2.4	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.1	0.0	32.2	0.0	0.0	25.0	1.5	0.0	0.0	0.0	0.0	4.4
LnGrp LOS	C		C			C	A					A
Approach Vol, veh/h		154			1			887			503	
Approach Delay, s/veh		29.9			25.0			1.5			4.4	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		49.7		10.3		49.7		10.3				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		37.0		12.0		37.0		12.0				
Max Q Clear Time (g_c+I1), s		4.5		5.4		9.4		2.0				
Green Ext Time (p_c), s		7.3		0.3		1.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			5.3									
HCM 6th LOS			A									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	0	107	0	0	1	72	720	1	0	409	158
Future Volume (vph)	211	0	107	0	0	1	72	720	1	0	409	158
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.865						0.962	
Flt Protected	0.950							0.995				
Satd. Flow (prot)	1519	1401	0	0	1573	0	0	1737	0	0	1577	0
Flt Permitted	0.757							0.889				
Satd. Flow (perm)	1210	1401	0	0	1573	0	0	1552	0	0	1577	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		408			188						61	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	3%	0%	7%	0%	0%	0%	11%	4%	0%	0%	9%	6%
Adj. Flow (vph)	243	0	123	0	0	1	83	828	1	0	470	182
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	123	0	0	1	0	0	912	0	0	652	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



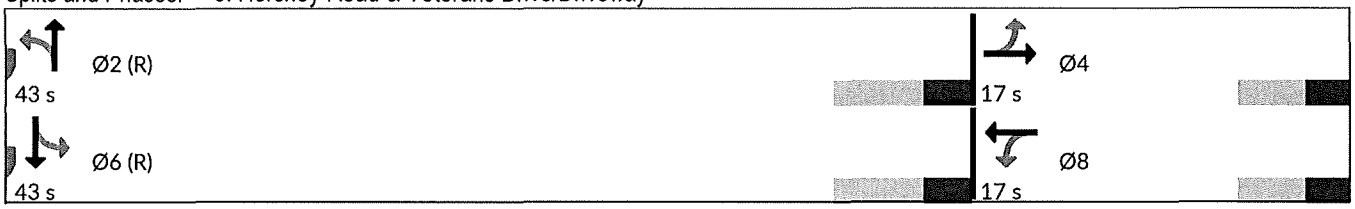
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA		Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	12.0	12.0			12.0			37.0			37.0	
Actuated g/C Ratio	0.20	0.20			0.20			0.62			0.62	
v/c Ratio	1.00	0.20			0.00			0.95			0.66	
Control Delay (s/veh)	88.9	0.8			0.0			38.1			10.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay (s/veh)	88.9	0.8			0.0			38.1			10.5	
LOS	F	A			A			D			B	
Approach Delay (s/veh)		59.3						38.1			10.5	
Approach LOS		E						D			B	
90th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
90th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
70th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
50th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
30th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
10th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
Stops (vph)	168	0			0			932			318	
Fuel Used(gal)	5	0			0			24			13	
CO Emissions (g/hr)	359	25			1			1670			925	
NOx Emissions (g/hr)	70	5			0			325			180	
VOC Emissions (g/hr)	83	6			0			387			214	
Dilemma Vehicles (#)	0	0			0			71			47	
Queue Length 50th (ft)	~89	0			0			678			115	
Queue Length 95th (ft)	#206	0			0			#910			197	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	606			465			957			995	
Starvation Cap Reductn	0	0			0			0			0	

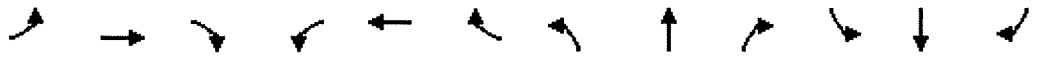
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	1.00	0.20			0.00			0.95			0.66	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay (s/veh): 32.8 Intersection LOS: C
Intersection Capacity Utilization 110.3% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway

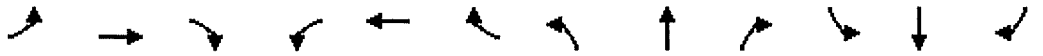




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	0	107	0	0	1	72	720	1	0	409	158
Future Volume (veh/h)	211	0	107	0	0	1	72	720	1	0	409	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	1669	1711	1612	1875	1875	1875	1755	1855	1912	1750	1623	1666
Adj Flow Rate, veh/h	243	0	123	0	0	1	83	828	1	0	470	182
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	0	7	0	0	0	11	4	0	0	9	6
Cap, veh/h	372	0	290	0	0	318	116	840	1	0	687	266
Arrive On Green	0.20	0.00	0.20	0.00	0.00	0.20	0.62	0.62	0.62	0.00	0.62	0.62
Sat Flow, veh/h	1263	0	1450	0	0	1588	82	1361	2	0	1114	431
Grp Volume(v), veh/h	243	0	123	0	0	1	912	0	0	0	0	652
Grp Sat Flow(s),veh/h/ln	1263	0	1450	0	0	1589	1445	0	0	0	0	1546
Q Serve(g_s), s	11.4	0.0	4.4	0.0	0.0	0.0	20.2	0.0	0.0	0.0	0.0	16.8
Cycle Q Clear(g_c), s	11.5	0.0	4.4	0.0	0.0	0.0	37.0	0.0	0.0	0.0	0.0	16.8
Prop In Lane	1.00		1.00	0.00		1.00	0.09		0.00	0.00		0.28
Lane Grp Cap(c), veh/h	372	0	290	0	0	318	956	0	0	0	0	953
V/C Ratio(X)	0.65	0.00	0.42	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.68
Avail Cap(c_a), veh/h	372	0	290	0	0	318	956	0	0	0	0	953
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	0.00	0.00	1.00	0.44	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	21.0	0.0	0.0	19.2	12.2	0.0	0.0	0.0	0.0	7.6
Incr Delay (d2), s/veh	4.0	0.0	1.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	4.0
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(95%),veh/ln	6.5	0.0	2.7	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.9	0.0	22.0	0.0	0.0	19.2	23.3	0.0	0.0	0.0	0.0	11.6
LnGrp LOS	C		C			B	C					B
Approach Vol, veh/h		366			1			912			652	
Approach Delay, s/veh		25.9			19.2			23.3			11.6	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	43.0	17.0	43.0	17.0
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	37.0	12.0	37.0	12.0
Max Q Clear Time (g_c+I1), s	39.0	13.5	18.8	2.0
Green Ext Time (p_c), s	0.0	0.0	2.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	19.8
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	0	107	0	0	1	72	720	1	0	409	158
Future Volume (vph)	211	0	107	0	0	1	72	720	1	0	409	158
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.865						0.962	
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1519	1401	0	0	1573	0	1564	1757	0	0	1577	0
Flt Permitted	0.757						0.159					
Satd. Flow (perm)	1210	1401	0	0	1573	0	262	1757	0	0	1577	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		401			163						32	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	3%	0%	7%	0%	0%	0%	11%	4%	0%	0%	9%	6%
Adj. Flow (vph)	243	0	123	0	0	1	83	828	1	0	470	182
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	123	0	0	1	0	83	829	0	0	652	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

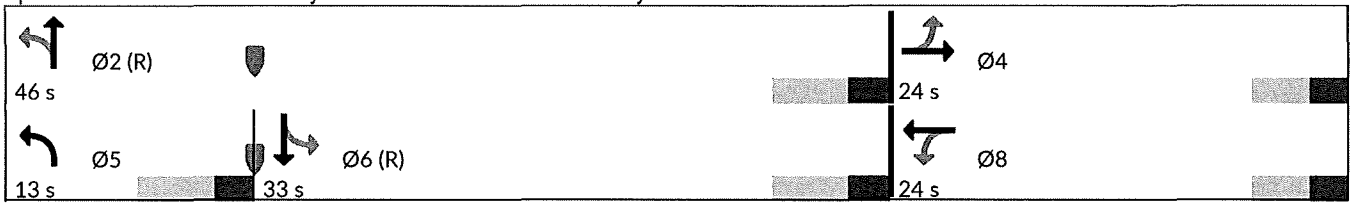
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA		pm+pt	NA			NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		13.0	46.0		33.0	33.0	
Total Split (%)	34.3%	34.3%		34.3%	34.3%		18.6%	65.7%		47.1%	47.1%	
Maximum Green (s)	19.0	19.0		19.0	19.0		7.0	40.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Act Effct Green (s)	17.1	17.1			17.1		41.9	41.9			31.6	
Actuated g/C Ratio	0.24	0.24			0.24		0.60	0.60			0.45	
v/c Ratio	0.82	0.19			0.00		0.30	0.79			0.89	
Control Delay (s/veh)	48.6	0.7			0.0		9.6	18.8			38.2	
Queue Delay	0.0	0.0			0.0		0.0	0.0			0.0	
Total Delay (s/veh)	48.6	0.7			0.0		9.6	18.8			38.2	
LOS	D	A			A		A	B			D	
Approach Delay (s/veh)		32.5						18.0			38.2	
Approach LOS		C						B			D	
90th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	40.0		27.0	27.0	
90th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
70th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	40.0		27.0	27.0	
70th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
50th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	40.0		27.0	27.0	
50th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
30th %ile Green (s)	16.6	16.6		16.6	16.6		6.3	42.4		30.1	30.1	
30th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord		Coord	Coord	
10th %ile Green (s)	11.9	11.9		11.9	11.9		0.0	47.1		47.1	47.1	
10th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Coord		Coord	Coord	
Stops (vph)	182	0			0		30	517			401	
Fuel Used(gal)	3	0			0		1	15			17	
CO Emissions (g/hr)	242	25			1		75	1034			1221	
NOx Emissions (g/hr)	47	5			0		15	201			237	
VOC Emissions (g/hr)	56	6			0		17	240			283	
Dilemma Vehicles (#)	0	0			0		0	50			36	
Queue Length 50th (ft)	95	0			0		15	262			~301	
Queue Length 95th (ft)	#190	0			0		31	#416			#468	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225						175					
Base Capacity (vph)	328	672			545		286	1052			730	
Starvation Cap Reductn	0	0			0		0	0			0	

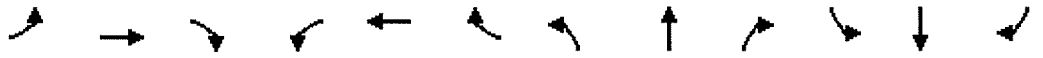
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0		0	0			0	
Storage Cap Reductn	0	0			0		0	0			0	
Reduced v/c Ratio	0.74	0.18			0.00		0.29	0.79			0.89	

Intersection Summary

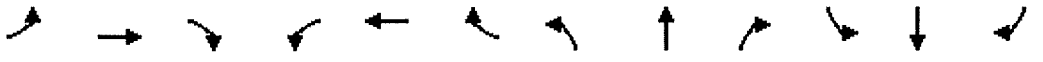
Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay (s/veh): 27.6 Intersection LOS: C
Intersection Capacity Utilization 91.3% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway

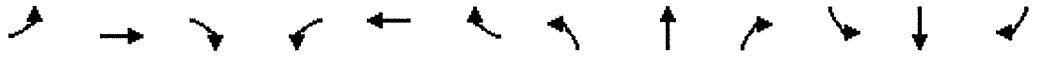




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	0	107	0	0	1	72	720	1	0	409	158
Future Volume (veh/h)	211	0	107	0	0	1	72	720	1	0	409	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	1669	1711	1612	1875	1875	1875	1755	1855	1912	1750	1623	1666
Adj Flow Rate, veh/h	243	0	123	0	0	1	83	828	1	0	470	182
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	0	7	0	0	0	11	4	0	0	9	6
Cap, veh/h	384	0	323	0	0	354	268	1148	1	0	531	206
Arrive On Green	0.22	0.00	0.22	0.00	0.00	0.22	0.06	0.62	0.62	0.00	0.48	0.48
Sat Flow, veh/h	1263	0	1450	0	0	1588	1672	1852	2	0	1114	431
Grp Volume(v), veh/h	243	0	123	0	0	1	83	0	829	0	0	652
Grp Sat Flow(s),veh/h/ln	1263	0	1450	0	0	1589	1672	0	1854	0	0	1546
Q Serve(g_s), s	13.0	0.0	5.0	0.0	0.0	0.0	1.6	0.0	21.5	0.0	0.0	26.7
Cycle Q Clear(g_c), s	13.0	0.0	5.0	0.0	0.0	0.0	1.6	0.0	21.5	0.0	0.0	26.7
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	0.00		0.28
Lane Grp Cap(c), veh/h	384	0	323	0	0	354	268	0	1150	0	0	737
V/C Ratio(X)	0.63	0.00	0.38	0.00	0.00	0.00	0.31	0.00	0.72	0.00	0.00	0.88
Avail Cap(c_a), veh/h	445	0	394	0	0	431	340	0	1150	0	0	737
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	0.00	0.00	1.00	0.46	0.00	0.46	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	23.1	0.0	0.0	21.1	13.7	0.0	9.1	0.0	0.0	16.6
Incr Delay (d2), s/veh	2.3	0.0	0.7	0.0	0.0	0.0	0.3	0.0	1.8	0.0	0.0	14.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	0.0	3.1	0.0	0.0	0.0	0.8	0.0	9.1	0.0	0.0	15.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	23.8	0.0	0.0	21.2	14.0	0.0	11.0	0.0	0.0	31.2
LnGrp LOS	C		C			C	B		B			C
Approach Vol, veh/h		366			1			912			652	
Approach Delay, s/veh		26.9			21.2			11.3			31.2	
Approach LOS		C			C			B			C	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		49.4		20.6	10.0	39.4		20.6				
Change Period (Y+Rc), s		6.0		5.0	6.0	6.0		5.0				
Max Green Setting (Gmax), s		40.0		19.0	7.0	27.0		19.0				
Max Q Clear Time (g_c+I1), s		23.5		15.0	3.6	28.7		2.0				
Green Ext Time (p_c), s		5.1		0.6	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			20.9									
HCM 6th LOS			C									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	0	76	0	0	1	29	761	1	0	433	16
Future Volume (vph)	62	0	76	0	0	1	29	761	1	0	433	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.865						0.995	
Flt Protected	0.950							0.998				
Satd. Flow (prot)	1519	1401	0	0	1573	0	0	1749	0	0	1620	0
Flt Permitted	0.757							0.973				
Satd. Flow (perm)	1210	1401	0	0	1573	0	0	1705	0	0	1620	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		384			169						6	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	3%	0%	7%	0%	0%	0%	11%	4%	0%	0%	9%	6%
Adj. Flow (vph)	71	0	87	0	0	1	33	875	1	0	498	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	87	0	0	1	0	0	909	0	0	516	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



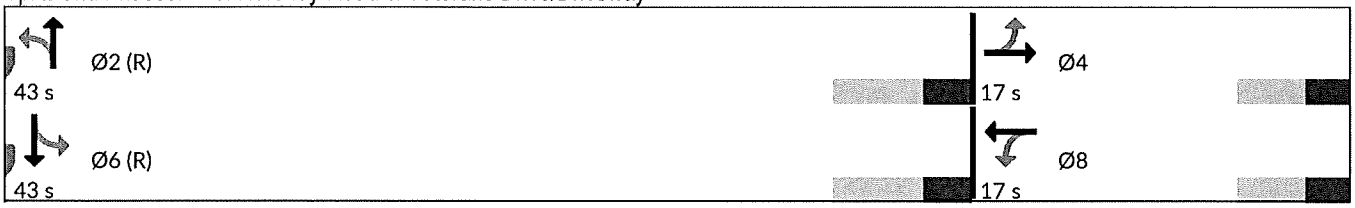
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA		Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	8.8	8.8			8.7			43.5			43.5	
Actuated g/C Ratio	0.15	0.15			0.15			0.73			0.73	
v/c Ratio	0.40	0.16			0.00			0.74			0.44	
Control Delay (s/veh)	29.2	0.7			0.0			19.1			6.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay (s/veh)	29.2	0.7			0.0			19.1			6.5	
LOS	C	A			A			B			A	
Approach Delay (s/veh)		13.5						19.1			6.5	
Approach LOS		B						B			A	
90th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
90th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	10.4	10.4		10.4	10.4		38.6	38.6		38.6	38.6	
70th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	8.8	8.8		8.8	8.8		40.2	40.2		40.2	40.2	
50th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	7.2	7.2		7.2	7.2		41.8	41.8		41.8	41.8	
30th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		54.0	54.0		54.0	54.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Coord	Coord		Coord	Coord	
Stops (vph)	55	0			0			795			192	
Fuel Used(gal)	1	0			0			19			9	
CO Emissions (g/hr)	54	18			1			1336			655	
NOx Emissions (g/hr)	11	3			0			260			127	
VOC Emissions (g/hr)	13	4			0			310			152	
Dilemma Vehicles (#)	0	0			0			59			33	
Queue Length 50th (ft)	24	0			0			606			71	
Queue Length 95th (ft)	52	0			0			747			144	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	587			449			1236			1176	
Starvation Cap Reductn	0	0			0			0			0	

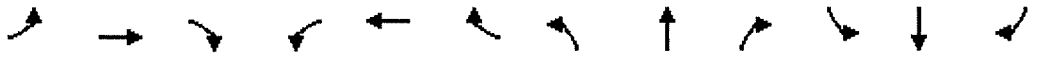
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.29	0.15			0.00			0.74			0.44	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay (s/veh): 14.4 Intersection LOS: B
Intersection Capacity Utilization 86.6% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway

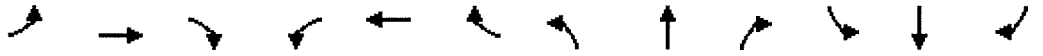




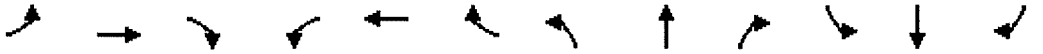
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	0	76	0	0	1	29	761	1	0	433	16
Future Volume (veh/h)	62	0	76	0	0	1	29	761	1	0	433	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1669	1711	1612	1875	1875	1875	1755	1855	1912	1750	1623	1666
Adj Flow Rate, veh/h	71	0	87	0	0	1	33	875	1	0	498	18
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	0	7	0	0	0	11	4	0	0	9	6
Cap, veh/h	233	0	131	0	0	143	85	1297	1	0	1131	41
Arrive On Green	0.09	0.00	0.09	0.00	0.00	0.09	0.97	0.97	0.97	0.00	0.73	0.73
Sat Flow, veh/h	1263	0	1450	0	0	1588	32	1785	2	0	1557	56
Grp Volume(v), veh/h	71	0	87	0	0	1	909	0	0	0	0	516
Grp Sat Flow(s),veh/h/ln	1263	0	1450	0	0	1589	1819	0	0	0	0	1613
Q Serve(g_s), s	3.3	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
Cycle Q Clear(g_c), s	3.3	0.0	3.5	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	7.7
Prop In Lane	1.00		1.00	0.00		1.00	0.04		0.00	0.00		0.03
Lane Grp Cap(c), veh/h	233	0	131	0	0	143	1384	0	0	0	0	1172
V/C Ratio(X)	0.30	0.00	0.67	0.00	0.00	0.01	0.66	0.00	0.00	0.00	0.00	0.44
Avail Cap(c_a), veh/h	372	0	290	0	0	318	1384	0	0	0	0	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	0.45	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	26.4	0.0	0.0	24.8	0.3	0.0	0.0	0.0	0.0	3.3
Incr Delay (d2), s/veh	0.7	0.0	5.7	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.0	2.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.1	0.0	32.1	0.0	0.0	24.9	1.4	0.0	0.0	0.0	0.0	4.5
LnGrp LOS	C		C			C	A					A
Approach Vol, veh/h		158			1			909			516	
Approach Delay, s/veh		29.8			24.9			1.4			4.5	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	49.6	10.4	49.6	10.4
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	37.0	12.0	37.0	12.0
Max Q Clear Time (g_c+I1), s	4.9	5.5	9.7	2.0
Green Ext Time (p_c), s	7.6	0.3	1.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	5.3
HCM 6th LOS	A



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	0	109	0	0	1	73	738	1	0	420	158
Future Volume (vph)	213	0	109	0	0	1	73	738	1	0	420	158
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.865						0.963	
Flt Protected	0.950							0.996				
Satd. Flow (prot)	1519	1401	0	0	1573	0	0	1739	0	0	1578	0
Flt Permitted	0.757							0.875				
Satd. Flow (perm)	1210	1401	0	0	1573	0	0	1528	0	0	1578	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		397			180						59	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	3%	0%	7%	0%	0%	0%	11%	4%	0%	0%	9%	6%
Adj. Flow (vph)	245	0	125	0	0	1	84	848	1	0	483	182
Shared Lane Traffic (%)												
Lane Group Flow (vph)	245	125	0	0	1	0	0	933	0	0	665	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



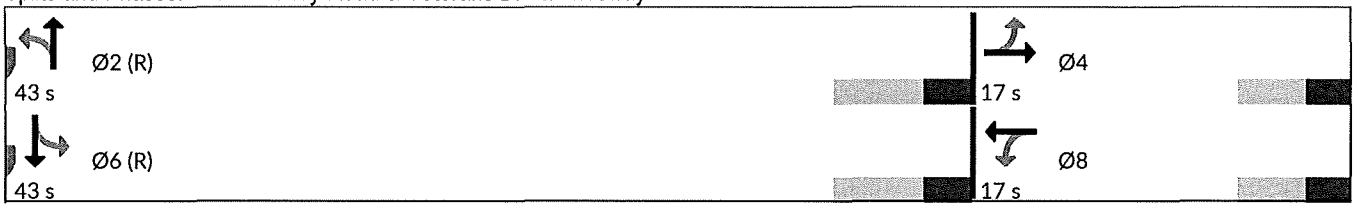
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA		Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	12.0	12.0			12.0			37.0			37.0	
Actuated g/C Ratio	0.20	0.20			0.20			0.62			0.62	
v/c Ratio	1.01	0.21			0.00			0.99			0.67	
Control Delay (s/veh)	90.9	0.8			0.0			45.6			10.9	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay (s/veh)	90.9	0.8			0.0			45.6			10.9	
LOS	F	A			A			D			B	
Approach Delay (s/veh)		60.5						45.6			10.9	
Approach LOS		E						D			B	
90th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
90th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
70th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
50th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
30th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
10th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
Stops (vph)	170	0			0			967			333	
Fuel Used(gal)	5	0			0			26			14	
CO Emissions (g/hr)	369	25			1			1808			955	
NOx Emissions (g/hr)	72	5			0			352			186	
VOC Emissions (g/hr)	85	6			0			419			221	
Dilemma Vehicles (#)	0	0			0			75			48	
Queue Length 50th (ft)	~91	0			0			720			120	
Queue Length 95th (ft)	#206	0			0			#964			206	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	597			458			942			995	
Starvation Cap Reductn	0	0			0			0			0	

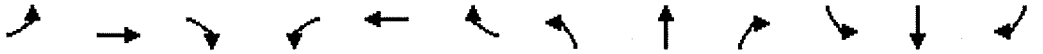
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	1.01	0.21			0.00			0.99			0.67	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.01
Intersection Signal Delay (s/veh): 36.7 Intersection LOS: D
Intersection Capacity Utilization 112.1% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway

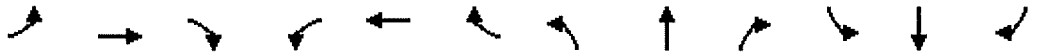




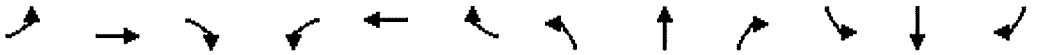
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	0	109	0	0	1	73	738	1	0	420	158
Future Volume (veh/h)	213	0	109	0	0	1	73	738	1	0	420	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	1669	1711	1612	1875	1875	1875	1755	1855	1912	1750	1623	1666
Adj Flow Rate, veh/h	245	0	125	0	0	1	84	848	1	0	483	182
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	0	7	0	0	0	11	4	0	0	9	6
Cap, veh/h	372	0	290	0	0	318	114	823	1	0	693	261
Arrive On Green	0.20	0.00	0.20	0.00	0.00	0.20	0.62	0.62	0.62	0.00	0.62	0.62
Sat Flow, veh/h	1263	0	1450	0	0	1588	79	1334	2	0	1124	423
Grp Volume(v), veh/h	245	0	125	0	0	1	933	0	0	0	0	665
Grp Sat Flow(s),veh/h/ln	1263	0	1450	0	0	1589	1414	0	0	0	0	1547
Q Serve(g_s), s	11.6	0.0	4.5	0.0	0.0	0.0	19.7	0.0	0.0	0.0	0.0	17.3
Cycle Q Clear(g_c), s	11.6	0.0	4.5	0.0	0.0	0.0	37.0	0.0	0.0	0.0	0.0	17.3
Prop In Lane	1.00		1.00	0.00		1.00	0.09		0.00	0.00		0.27
Lane Grp Cap(c), veh/h	372	0	290	0	0	318	937	0	0	0	0	954
V/C Ratio(X)	0.66	0.00	0.43	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.70
Avail Cap(c_a), veh/h	372	0	290	0	0	318	937	0	0	0	0	954
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	0.00	0.00	1.00	0.37	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	21.0	0.0	0.0	19.2	13.0	0.0	0.0	0.0	0.0	7.7
Incr Delay (d2), s/veh	4.2	0.0	1.0	0.0	0.0	0.0	16.8	0.0	0.0	0.0	0.0	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.6	0.0	2.8	0.0	0.0	0.0	12.8	0.0	0.0	0.0	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.1	0.0	22.0	0.0	0.0	19.2	29.9	0.0	0.0	0.0	0.0	11.9
LnGrp LOS	C		C			B	C					B
Approach Vol, veh/h		370			1			933			665	
Approach Delay, s/veh		26.0			19.2			29.9			11.9	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	43.0	17.0	43.0	17.0
Change Period (Y+Rc), s	6.0	5.0	6.0	5.0
Max Green Setting (Gmax), s	37.0	12.0	37.0	12.0
Max Q Clear Time (g_c+I1), s	39.0	13.6	19.3	2.0
Green Ext Time (p_c), s	0.0	0.0	2.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	23.1
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	0	109	0	0	1	73	738	1	0	420	158
Future Volume (vph)	213	0	109	0	0	1	73	738	1	0	420	158
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.865						0.963	
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1519	1401	0	0	1573	0	1564	1757	0	0	1578	0
Flt Permitted	0.757						0.149					
Satd. Flow (perm)	1210	1401	0	0	1573	0	245	1757	0	0	1578	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		393			155						32	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	3%	0%	7%	0%	0%	0%	11%	4%	0%	0%	9%	6%
Adj. Flow (vph)	245	0	125	0	0	1	84	848	1	0	483	182
Shared Lane Traffic (%)												
Lane Group Flow (vph)	245	125	0	0	1	0	84	849	0	0	665	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



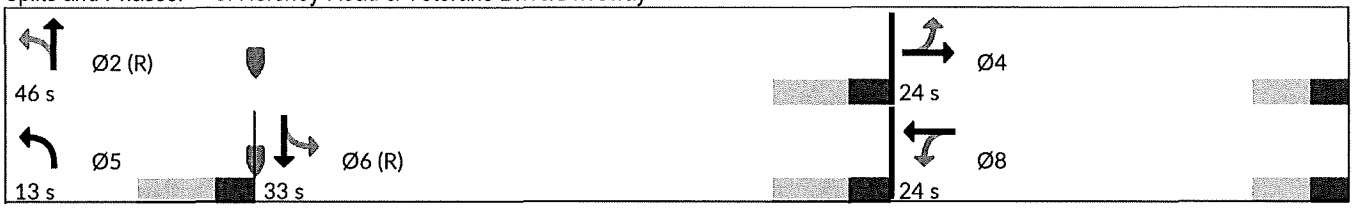
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA			NA		pm+pt	NA			NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		13.0	46.0		33.0	33.0	
Total Split (%)	34.3%	34.3%		34.3%	34.3%		18.6%	65.7%		47.1%	47.1%	
Maximum Green (s)	19.0	19.0		19.0	19.0		7.0	40.0		27.0	27.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Act Effct Green (s)	17.1	17.1			17.1		41.9	41.9			31.6	
Actuated g/C Ratio	0.24	0.24			0.24		0.60	0.60			0.45	
v/c Ratio	0.83	0.20			0.00		0.31	0.81			0.91	
Control Delay (s/veh)	49.1	0.7			0.0		9.9	19.9			40.6	
Queue Delay	0.0	0.0			0.0		0.0	0.0			0.0	
Total Delay (s/veh)	49.1	0.7			0.0		9.9	19.9			40.6	
LOS	D	A			A		A	B			D	
Approach Delay (s/veh)		32.7						19.0			40.6	
Approach LOS		C						B			D	
90th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	40.0		27.0	27.0	
90th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
70th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	40.0		27.0	27.0	
70th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
50th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	40.0		27.0	27.0	
50th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
30th %ile Green (s)	16.7	16.7		16.7	16.7		6.3	42.3		30.0	30.0	
30th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord		Coord	Coord	
10th %ile Green (s)	12.0	12.0		12.0	12.0		0.0	47.0		47.0	47.0	
10th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Coord		Coord	Coord	
Stops (vph)	185	0			0		31	536			407	
Fuel Used(gal)	4	0			0		1	15			18	
CO Emissions (g/hr)	246	25			1		77	1077			1264	
NOx Emissions (g/hr)	48	5			0		15	209			246	
VOC Emissions (g/hr)	57	6			0		18	250			293	
Dilemma Vehicles (#)	0	0			0		0	52			36	
Queue Length 50th (ft)	96	0			0		15	274			~313	
Queue Length 95th (ft)	#192	0			0		31	#492			#482	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225						175					
Base Capacity (vph)	328	666			539		278	1050			730	
Starvation Cap Reductn	0	0			0		0	0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0		0	0			0	
Storage Cap Reductn	0	0			0		0	0			0	
Reduced v/c Ratio	0.75	0.19			0.00		0.30	0.81			0.91	

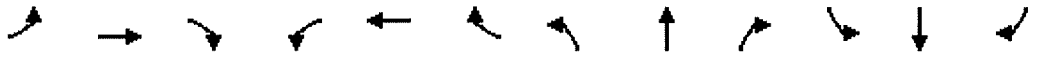
Intersection Summary

Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay (s/veh): 28.9 Intersection LOS: C
Intersection Capacity Utilization 92.3% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

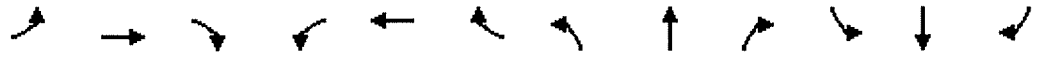
Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	0	109	0	0	1	73	738	1	0	420	158
Future Volume (veh/h)	213	0	109	0	0	1	73	738	1	0	420	158
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	1669	1711	1612	1875	1875	1875	1755	1855	1912	1750	1623	1666
Adj Flow Rate, veh/h	245	0	125	0	0	1	84	848	1	0	483	182
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	0	7	0	0	0	11	4	0	0	9	6
Cap, veh/h	386	0	325	0	0	357	257	1145	1	0	534	201
Arrive On Green	0.22	0.00	0.22	0.00	0.00	0.22	0.06	0.62	0.62	0.00	0.48	0.48
Sat Flow, veh/h	1263	0	1450	0	0	1588	1672	1852	2	0	1124	423
Grp Volume(v), veh/h	245	0	125	0	0	1	84	0	849	0	0	665
Grp Sat Flow(s),veh/h/ln	1263	0	1450	0	0	1589	1672	0	1855	0	0	1547
Q Serve(g_s), s	13.1	0.0	5.1	0.0	0.0	0.0	1.6	0.0	22.6	0.0	0.0	27.7
Cycle Q Clear(g_c), s	13.1	0.0	5.1	0.0	0.0	0.0	1.6	0.0	22.6	0.0	0.0	27.7
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	0.00		0.27
Lane Grp Cap(c), veh/h	386	0	325	0	0	357	257	0	1147	0	0	735
V/C Ratio(X)	0.63	0.00	0.38	0.00	0.00	0.00	0.33	0.00	0.74	0.00	0.00	0.90
Avail Cap(c_a), veh/h	445	0	394	0	0	431	328	0	1147	0	0	735
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	0.00	0.00	1.00	0.39	0.00	0.39	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	23.0	0.0	0.0	21.1	14.2	0.0	9.4	0.0	0.0	16.9
Incr Delay (d2), s/veh	2.4	0.0	0.7	0.0	0.0	0.0	0.3	0.0	1.7	0.0	0.0	16.7
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(95%),veh/ln	7.3	0.0	3.2	0.0	0.0	0.0	0.8	0.0	9.3	0.0	0.0	16.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	23.8	0.0	0.0	21.1	14.5	0.0	11.1	0.0	0.0	33.6
LnGrp LOS	C		C			C	B		B			C
Approach Vol, veh/h		370			1			933			665	
Approach Delay, s/veh		26.9			21.1			11.4			33.6	
Approach LOS		C			C			B			C	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		49.3		20.7	10.0	39.3		20.7				
Change Period (Y+Rc), s		6.0		5.0	6.0	6.0		5.0				
Max Green Setting (Gmax), s		40.0		19.0	7.0	27.0		19.0				
Max Q Clear Time (g_c+I1), s		24.6		15.1	3.6	29.7		2.0				
Green Ext Time (p_c), s		5.1		0.6	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			21.8									
HCM 6th LOS			C									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	0	71	0	0	0	79	563	0	0	680	62
Future Volume (vph)	38	0	71	0	0	0	79	563	0	0	680	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850									0.989	
Flt Protected	0.950							0.994				
Satd. Flow (prot)	1519	1485	0	0	1818	0	0	1769	0	0	1702	0
Flt Permitted	0.757							0.849				
Satd. Flow (perm)	1210	1485	0	0	1818	0	0	1511	0	0	1702	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		255									14	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	0%	1%	0%	0%	0%	0%	3%	0%	0%	3%	3%
Adj. Flow (vph)	38	0	72	0	0	0	80	569	0	0	687	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	72	0	0	0	0	0	649	0	0	750	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



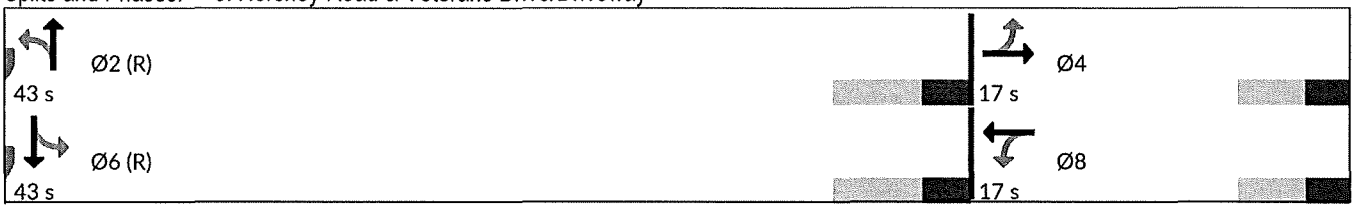
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	7.5	7.5						44.8			44.8	
Actuated g/C Ratio	0.13	0.13						0.75			0.75	
v/c Ratio	0.25	0.18						0.57			0.59	
Control Delay (s/veh)	27.2	0.9						13.1			7.5	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay (s/veh)	27.2	0.9						13.1			7.5	
LOS	C	A						B			A	
Approach Delay (s/veh)		10.0						13.1			7.5	
Approach LOS		B						B			A	
90th %ile Green (s)	10.1	10.1		10.1	10.1		38.9	38.9		38.9	38.9	
90th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	8.4	8.4		8.4	8.4		40.6	40.6		40.6	40.6	
70th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	7.2	7.2		7.2	7.2		41.8	41.8		41.8	41.8	
50th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	6.1	6.1		6.1	6.1		42.9	42.9		42.9	42.9	
30th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		54.0	54.0		54.0	54.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Coord	Coord		Coord	Coord	
Stops (vph)	37	0						549			358	
Fuel Used(gal)	0	0						14			16	
CO Emissions (g/hr)	33	17						946			1128	
NOx Emissions (g/hr)	6	3						184			219	
VOC Emissions (g/hr)	8	4						219			261	
Dilemma Vehicles (#)	0	0						74			54	
Queue Length 50th (ft)	13	0						356			111	
Queue Length 95th (ft)	35	0						556			244	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	501						1129			1275	
Starvation Cap Reductn	0	0						0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0						0			0	
Storage Cap Reductn	0	0						0			0	
Reduced v/c Ratio	0.16	0.14						0.57			0.59	

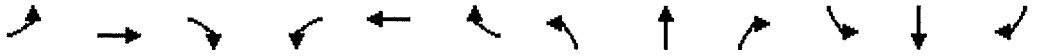
Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 26 (43%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59
Intersection Signal Delay (s/veh): 10.1 Intersection LOS: B
Intersection Capacity Utilization 96.4% ICU Level of Service F
Analysis Period (min) 15

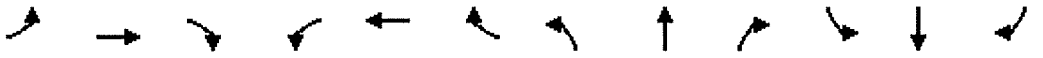
Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	0	71	0	0	0	79	563	0	0	680	62
Future Volume (veh/h)	38	0	71	0	0	0	79	563	0	0	680	62
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	1669	1711	1697	1875	1875	1875	1912	1869	1912	1750	1708	1708
Adj Flow Rate, veh/h	38	0	72	0	0	0	80	569	0	0	687	63
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	0	1	0	0	0	0	3	0	0	3	3
Cap, veh/h	234	0	104	0	135	0	167	1130	0	0	1148	105
Arrive On Green	0.07	0.00	0.07	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.74	0.74
Sat Flow, veh/h	1589	0	1450	0	1875	0	134	1517	0	0	1541	141
Grp Volume(v), veh/h	38	0	72	0	0	0	649	0	0	0	0	750
Grp Sat Flow(s),veh/h/ln	1589	0	1450	0	1875	0	1651	0	0	0	0	1682
Q Serve(g_s), s	1.4	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3
Cycle Q Clear(g_c), s	1.4	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3
Prop In Lane	1.00		1.00	0.00		0.00	0.12		0.00	0.00		0.08
Lane Grp Cap(c), veh/h	234	0	104	0	135	0	1297	0	0	0	0	1253
V/C Ratio(X)	0.16	0.00	0.69	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.60
Avail Cap(c_a), veh/h	438	0	290	0	375	0	1297	0	0	0	0	1253
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Incr Delay (d2), s/veh	0.3	0.0	7.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	2.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.8	0.0	35.1	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	5.6
LnGrp LOS	C		D				A					A
Approach Vol, veh/h		110			0			649			750	
Approach Delay, s/veh		32.2			0.0			0.9			5.6	
Approach LOS		C						A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.7		9.3		50.7		9.3				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		37.0		12.0		37.0		12.0				
Max Q Clear Time (g_c+I1), s		2.0		4.9		14.3		0.0				
Green Ext Time (p_c), s		5.1		0.2		3.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			5.6									
HCM 6th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	0	71	0	0	0	79	566	0	0	683	62
Future Volume (vph)	38	0	71	0	0	0	79	566	0	0	683	62
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850									0.989	
Flt Protected	0.950							0.994				
Satd. Flow (prot)	1519	1485	0	0	1818	0	0	1769	0	0	1702	0
Flt Permitted	0.757							0.849				
Satd. Flow (perm)	1210	1485	0	0	1818	0	0	1511	0	0	1702	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		254									14	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	0%	1%	0%	0%	0%	0%	3%	0%	0%	3%	3%
Adj. Flow (vph)	38	0	72	0	0	0	80	572	0	0	690	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	72	0	0	0	0	0	652	0	0	753	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

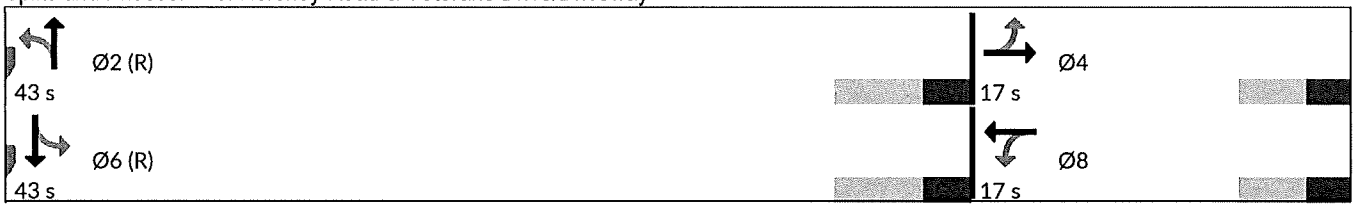


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	7.5	7.5						44.8			44.8	
Actuated g/C Ratio	0.13	0.13						0.75			0.75	
v/c Ratio	0.25	0.18						0.58			0.59	
Control Delay (s/veh)	27.2	0.9						13.1			7.5	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay (s/veh)	27.2	0.9						13.1			7.5	
LOS	C	A						B			A	
Approach Delay (s/veh)		10.0						13.1			7.5	
Approach LOS		B						B			A	
90th %ile Green (s)	10.1	10.1		10.1	10.1		38.9	38.9		38.9	38.9	
90th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	8.4	8.4		8.4	8.4		40.6	40.6		40.6	40.6	
70th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	7.2	7.2		7.2	7.2		41.8	41.8		41.8	41.8	
50th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	6.1	6.1		6.1	6.1		42.9	42.9		42.9	42.9	
30th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		54.0	54.0		54.0	54.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Coord	Coord		Coord	Coord	
Stops (vph)	37	0						553			360	
Fuel Used(gal)	0	0						14			16	
CO Emissions (g/hr)	33	17						951			1134	
NOx Emissions (g/hr)	6	3						185			221	
VOC Emissions (g/hr)	8	4						221			263	
Dilemma Vehicles (#)	0	0						74			54	
Queue Length 50th (ft)	13	0						358			112	
Queue Length 95th (ft)	35	0						563			246	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	500						1129			1275	
Starvation Cap Reductn	0	0						0			0	

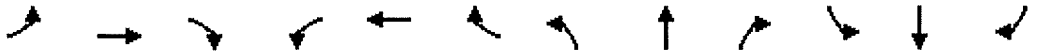
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0						0			0	
Storage Cap Reductn	0	0						0			0	
Reduced v/c Ratio	0.16	0.14						0.58			0.59	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 26 (43%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay (s/veh): 10.1		Intersection LOS: B	
Intersection Capacity Utilization 96.8%		ICU Level of Service F	
Analysis Period (min) 15			

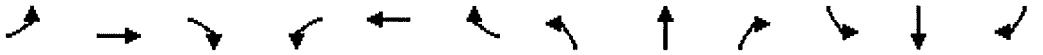
Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	0	71	0	0	0	79	566	0	0	683	62
Future Volume (veh/h)	38	0	71	0	0	0	79	566	0	0	683	62
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	1669	1711	1697	1875	1875	1875	1912	1869	1912	1750	1708	1708
Adj Flow Rate, veh/h	38	0	72	0	0	0	80	572	0	0	690	63
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	0	1	0	0	0	0	3	0	0	3	3
Cap, veh/h	234	0	104	0	135	0	167	1131	0	0	1148	105
Arrive On Green	0.07	0.00	0.07	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.74	0.74
Sat Flow, veh/h	1589	0	1450	0	1875	0	133	1518	0	0	1542	141
Grp Volume(v), veh/h	38	0	72	0	0	0	652	0	0	0	0	753
Grp Sat Flow(s),veh/h/ln	1589	0	1450	0	1875	0	1652	0	0	0	0	1682
Q Serve(g_s), s	1.4	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4
Cycle Q Clear(g_c), s	1.4	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4
Prop In Lane	1.00		1.00	0.00		0.00	0.12		0.00	0.00		0.08
Lane Grp Cap(c), veh/h	234	0	104	0	135	0	1297	0	0	0	0	1253
V/C Ratio(X)	0.16	0.00	0.69	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.60
Avail Cap(c_a), veh/h	438	0	290	0	375	0	1297	0	0	0	0	1253
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Incr Delay (d2), s/veh	0.3	0.0	7.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	2.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.8	0.0	35.1	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	5.7
LnGrp LOS	C		D				A					A
Approach Vol, veh/h		110			0			652			753	
Approach Delay, s/veh		32.2			0.0			0.9			5.7	
Approach LOS		C						A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.7		9.3		50.7		9.3				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		37.0		12.0		37.0		12.0				
Max Q Clear Time (g_c+I1), s		2.0		4.9		14.4		0.0				
Green Ext Time (p_c), s		5.1		0.2		3.1		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			5.6									
HCM 6th LOS			A									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	0	108	0	0	0	112	552	0	0	665	192
Future Volume (vph)	164	0	108	0	0	0	112	552	0	0	665	192
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850									0.970	
Flt Protected	0.950							0.992				
Satd. Flow (prot)	1519	1485	0	0	1818	0	0	1768	0	0	1670	0
Flt Permitted	0.757							0.566				
Satd. Flow (perm)	1210	1485	0	0	1818	0	0	1009	0	0	1670	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		264									45	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	0%	1%	0%	0%	0%	0%	3%	0%	0%	3%	3%
Adj. Flow (vph)	166	0	109	0	0	0	113	558	0	0	672	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	109	0	0	0	0	0	671	0	0	866	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



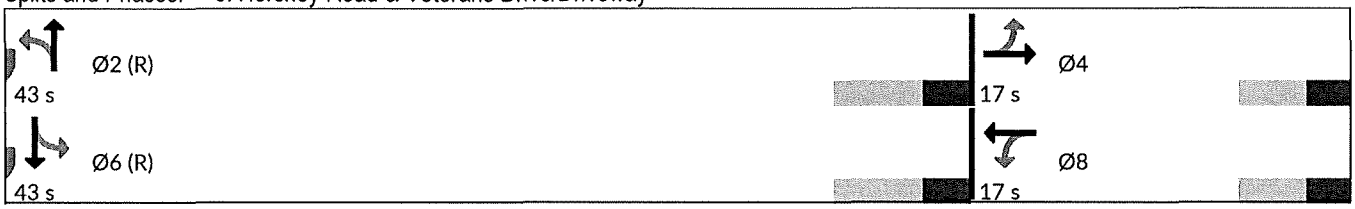
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	11.1	11.1						37.9			37.9	
Actuated g/C Ratio	0.19	0.19						0.63			0.63	
v/c Ratio	0.74	0.22						1.05			0.81	
Control Delay (s/veh)	45.3	1.1						74.7			16.5	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay (s/veh)	45.3	1.1						74.7			16.5	
LOS	D	A						E			B	
Approach Delay (s/veh)		27.8						74.7			16.5	
Approach LOS		C						E			B	
90th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
90th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
70th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
50th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	11.5	11.5		11.5	11.5		37.5	37.5		37.5	37.5	
30th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	7.9	7.9		7.9	7.9		41.1	41.1		41.1	41.1	
10th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
Stops (vph)	140	0						784			567	
Fuel Used(gal)	3	0						25			22	
CO Emissions (g/hr)	180	26						1748			1546	
NOx Emissions (g/hr)	35	5						340			301	
VOC Emissions (g/hr)	42	6						405			358	
Dilemma Vehicles (#)	0	0						77			69	
Queue Length 50th (ft)	56	0						~592			198	
Queue Length 95th (ft)	#137	0						#838			#457	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	508						637			1072	
Starvation Cap Reductn	0	0						0			0	

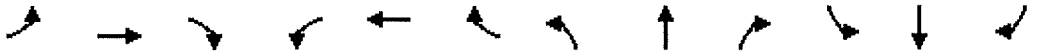
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0						0			0	
Storage Cap Reductn	0	0						0			0	
Reduced v/c Ratio	0.69	0.21						1.05			0.81	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 26 (43%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay (s/veh): 39.7 Intersection LOS: D
Intersection Capacity Utilization 110.2% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway

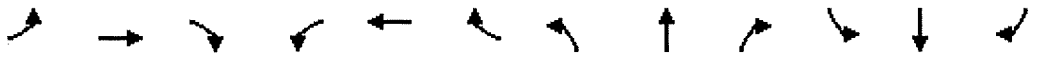




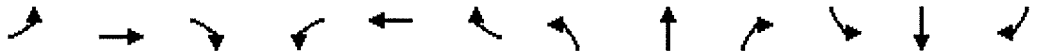
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	0	108	0	0	0	112	552	0	0	665	192
Future Volume (veh/h)	164	0	108	0	0	0	112	552	0	0	665	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	1669	1711	1697	1875	1875	1875	1912	1869	1912	1750	1708	1708
Adj Flow Rate, veh/h	166	0	109	0	0	0	113	558	0	0	672	194
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	0	1	0	0	0	0	3	0	0	3	3
Cap, veh/h	341	0	202	0	261	0	146	662	0	0	863	249
Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.68	0.68
Sat Flow, veh/h	1589	0	1450	0	1875	0	111	977	0	0	1274	368
Grp Volume(v), veh/h	166	0	109	0	0	0	671	0	0	0	0	866
Grp Sat Flow(s),veh/h/ln	1589	0	1450	0	1875	0	1088	0	0	0	0	1641
Q Serve(g_s), s	6.0	0.0	4.2	0.0	0.0	0.0	19.0	0.0	0.0	0.0	0.0	21.6
Cycle Q Clear(g_c), s	6.0	0.0	4.2	0.0	0.0	0.0	40.6	0.0	0.0	0.0	0.0	21.6
Prop In Lane	1.00		1.00	0.00		0.00	0.17		0.00	0.00		0.22
Lane Grp Cap(c), veh/h	341	0	202	0	261	0	807	0	0	0	0	1112
V/C Ratio(X)	0.49	0.00	0.54	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.78
Avail Cap(c_a), veh/h	438	0	290	0	375	0	807	0	0	0	0	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	24.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	6.6
Incr Delay (d2), s/veh	1.1	0.0	2.2	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	5.4
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(95%),veh/ln	4.1	0.0	2.7	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.9	0.0	26.3	0.0	0.0	0.0	12.1	0.0	0.0	0.0	0.0	12.0
LnGrp LOS	C		C				B					B
Approach Vol, veh/h		275			0			671			866	
Approach Delay, s/veh		26.0			0.0			12.1			12.0	
Approach LOS		C						B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.6		13.4		46.6		13.4				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		37.0		12.0		37.0		12.0				
Max Q Clear Time (g_c+I1), s		42.6		8.0		23.6		0.0				
Green Ext Time (p_c), s		0.0		0.4		3.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.2
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	0	108	0	0	0	112	552	0	0	665	192
Future Volume (vph)	164	0	108	0	0	0	112	552	0	0	665	192
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850									0.970	
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1519	1485	0	0	1818	0	1736	1774	0	0	1670	0
Flt Permitted	0.757						0.128					
Satd. Flow (perm)	1210	1485	0	0	1818	0	234	1774	0	0	1670	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		318									24	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	0%	1%	0%	0%	0%	0%	3%	0%	0%	3%	3%
Adj. Flow (vph)	166	0	109	0	0	0	113	558	0	0	672	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	109	0	0	0	0	113	558	0	0	866	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



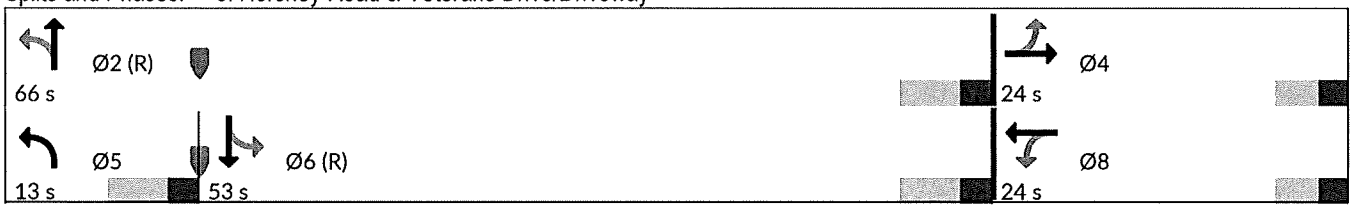
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA					pm+pt	NA			NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		13.0	66.0		53.0	53.0	
Total Split (%)	26.7%	26.7%		26.7%	26.7%		14.4%	73.3%		58.9%	58.9%	
Maximum Green (s)	19.0	19.0		19.0	19.0		7.0	60.0		47.0	47.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Act Effct Green (s)	16.1	16.1					62.9	62.9			52.5	
Actuated g/C Ratio	0.18	0.18					0.70	0.70			0.58	
v/c Ratio	0.77	0.21					0.41	0.45			0.88	
Control Delay (s/veh)	57.9	0.9					9.5	7.9			30.9	
Queue Delay	0.0	0.0					0.0	0.0			0.0	
Total Delay (s/veh)	57.9	0.9					9.5	7.9			30.9	
LOS	E	A					A	A			C	
Approach Delay (s/veh)		35.3						8.2			30.9	
Approach LOS		D						A			C	
90th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	60.0		47.0	47.0	
90th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
70th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	60.0		47.0	47.0	
70th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
50th %ile Green (s)	17.7	17.7		17.7	17.7		7.4	61.3		47.9	47.9	
50th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord		Coord	Coord	
30th %ile Green (s)	14.6	14.6		14.6	14.6		6.7	64.4		51.7	51.7	
30th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord		Coord	Coord	
10th %ile Green (s)	10.2	10.2		10.2	10.2		0.0	68.8		68.8	68.8	
10th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Coord		Coord	Coord	
Stops (vph)	150	0					36	234			622	
Fuel Used(gal)	3	0					2	8			25	
CO Emissions (g/hr)	212	25					107	565			1770	
NOx Emissions (g/hr)	41	5					21	110			344	
VOC Emissions (g/hr)	49	6					25	131			410	
Dilemma Vehicles (#)	0	0					0	31			44	
Queue Length 50th (ft)	89	0					19	128			437	
Queue Length 95th (ft)	#170	0					38	204			#730	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225						175					
Base Capacity (vph)	255	564					281	1239			983	
Starvation Cap Reductn	0	0					0	0			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0					0	0			0	
Storage Cap Reductn	0	0					0	0			0	
Reduced v/c Ratio	0.65	0.19					0.40	0.45			0.88	

Intersection Summary

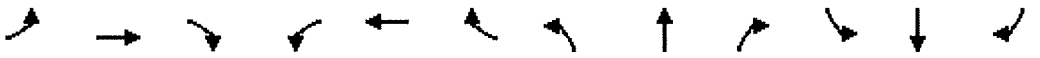
Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay (s/veh): 23.2 Intersection LOS: C
Intersection Capacity Utilization 103.7% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	0	108	0	0	0	112	552	0	0	665	192
Future Volume (veh/h)	164	0	108	0	0	0	112	552	0	0	665	192
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	1669	1711	1697	1875	1875	1875	1912	1869	1912	1750	1708	1708
Adj Flow Rate, veh/h	166	0	109	0	0	0	113	558	0	0	672	194
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	0	1	0	0	0	0	3	0	0	3	3
Cap, veh/h	288	0	190	0	246	0	314	1396	0	0	800	231
Arrive On Green	0.13	0.00	0.13	0.00	0.00	0.00	0.05	0.75	0.00	0.00	0.63	0.63
Sat Flow, veh/h	1589	0	1450	0	1875	0	1821	1869	0	0	1274	368
Grp Volume(v), veh/h	166	0	109	0	0	0	113	558	0	0	0	866
Grp Sat Flow(s),veh/h/ln	1589	0	1450	0	1875	0	1821	1869	0	0	0	1641
Q Serve(g_s), s	9.1	0.0	6.4	0.0	0.0	0.0	1.8	9.7	0.0	0.0	0.0	37.4
Cycle Q Clear(g_c), s	9.1	0.0	6.4	0.0	0.0	0.0	1.8	9.7	0.0	0.0	0.0	37.4
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	0.00		0.22
Lane Grp Cap(c), veh/h	288	0	190	0	246	0	314	1396	0	0	0	1031
V/C Ratio(X)	0.58	0.00	0.57	0.00	0.00	0.00	0.36	0.40	0.00	0.00	0.00	0.84
Avail Cap(c_a), veh/h	415	0	306	0	396	0	360	1396	0	0	0	1031
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	0.00	0.00	0.00	0.52	0.52	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	37.9	0.0	36.7	0.0	0.0	0.0	14.7	4.1	0.0	0.0	0.0	13.2
Incr Delay (d2), s/veh	1.8	0.0	2.7	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	8.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.6	0.0	4.3	0.0	0.0	0.0	1.9	4.2	0.0	0.0	0.0	18.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.8	0.0	39.5	0.0	0.0	0.0	15.0	4.6	0.0	0.0	0.0	21.4
LnGrp LOS	D		D				B	A				C
Approach Vol, veh/h		275			0			671			866	
Approach Delay, s/veh		39.6			0.0			6.3			21.4	
Approach LOS		D						A			C	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		73.2		16.8	10.7	62.5		16.8				
Change Period (Y+Rc), s		6.0		5.0	6.0	6.0		5.0				
Max Green Setting (Gmax), s		60.0		19.0	7.0	47.0		19.0				
Max Q Clear Time (g_c+I1), s		11.7		11.1	3.8	39.4		0.0				
Green Ext Time (p_c), s		3.6		0.7	0.1	2.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			18.6									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	0	73	0	0	0	81	580	0	0	700	64
Future Volume (vph)	39	0	73	0	0	0	81	580	0	0	700	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850									0.989	
Flt Protected	0.950							0.994				
Satd. Flow (prot)	1519	1485	0	0	1818	0	0	1769	0	0	1702	0
Flt Permitted	0.757							0.844				
Satd. Flow (perm)	1210	1485	0	0	1818	0	0	1502	0	0	1702	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		245									14	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	0%	1%	0%	0%	0%	0%	3%	0%	0%	3%	3%
Adj. Flow (vph)	39	0	74	0	0	0	82	586	0	0	707	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	74	0	0	0	0	0	668	0	0	772	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



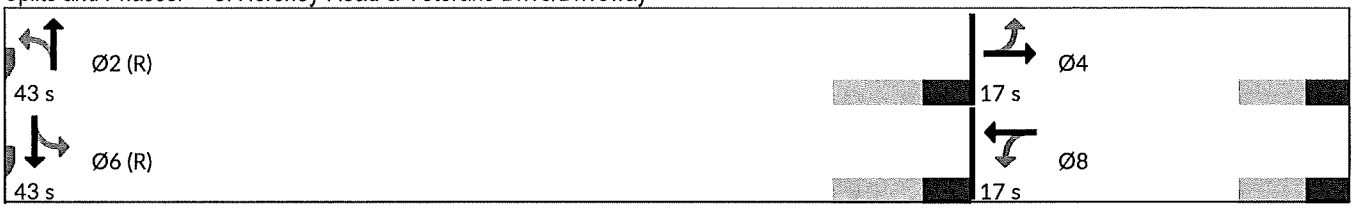
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	7.5	7.5						44.8			44.8	
Actuated g/C Ratio	0.13	0.13						0.75			0.75	
v/c Ratio	0.26	0.19						0.60			0.61	
Control Delay (s/veh)	27.2	1.0						13.8			7.9	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay (s/veh)	27.2	1.0						13.8			7.9	
LOS	C	A						B			A	
Approach Delay (s/veh)		10.1						13.8			7.9	
Approach LOS		B						B			A	
90th %ile Green (s)	10.2	10.2		10.2	10.2		38.8	38.8		38.8	38.8	
90th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	8.5	8.5		8.5	8.5		40.5	40.5		40.5	40.5	
70th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	7.3	7.3		7.3	7.3		41.7	41.7		41.7	41.7	
50th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	6.1	6.1		6.1	6.1		42.9	42.9		42.9	42.9	
30th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	0.0	0.0		0.0	0.0		54.0	54.0		54.0	54.0	
10th %ile Term Code	Skip	Skip		Skip	Skip		Coord	Coord		Coord	Coord	
Stops (vph)	37	0						587			382	
Fuel Used(gal)	0	0						14			17	
CO Emissions (g/hr)	34	17						998			1177	
NOx Emissions (g/hr)	7	3						194			229	
VOC Emissions (g/hr)	8	4						231			273	
Dilemma Vehicles (#)	0	0						72			55	
Queue Length 50th (ft)	13	0						371			118	
Queue Length 95th (ft)	36	0						596			260	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	493						1120			1273	
Starvation Cap Reductn	0	0						0			0	

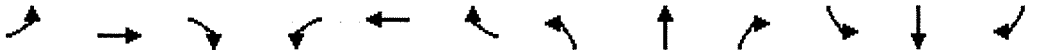
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0						0			0	
Storage Cap Reductn	0	0						0			0	
Reduced v/c Ratio	0.16	0.15						0.60			0.61	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 26 (43%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay (s/veh): 10.6 Intersection LOS: B
Intersection Capacity Utilization 98.9% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway



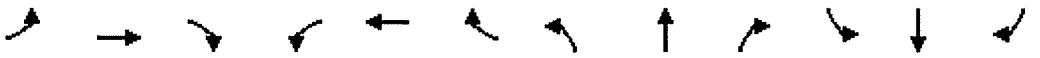


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	0	73	0	0	0	81	580	0	0	700	64
Future Volume (veh/h)	39	0	73	0	0	0	81	580	0	0	700	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1669	1711	1697	1875	1875	1875	1912	1869	1912	1750	1708	1708
Adj Flow Rate, veh/h	39	0	74	0	0	0	82	586	0	0	707	65
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	0	1	0	0	0	0	3	0	0	3	3
Cap, veh/h	237	0	107	0	138	0	166	1125	0	0	1145	105
Arrive On Green	0.07	0.00	0.07	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.74	0.74
Sat Flow, veh/h	1589	0	1450	0	1875	0	133	1514	0	0	1541	142
Grp Volume(v), veh/h	39	0	74	0	0	0	668	0	0	0	0	772
Grp Sat Flow(s),veh/h/ln	1589	0	1450	0	1875	0	1646	0	0	0	0	1682
Q Serve(g_s), s	1.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1
Cycle Q Clear(g_c), s	1.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1
Prop In Lane	1.00		1.00	0.00		0.00	0.12		0.00	0.00		0.08
Lane Grp Cap(c), veh/h	237	0	107	0	138	0	1291	0	0	0	0	1250
V/C Ratio(X)	0.16	0.00	0.69	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.62
Avail Cap(c_a), veh/h	438	0	290	0	375	0	1291	0	0	0	0	1250
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	27.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
Incr Delay (d2), s/veh	0.3	0.0	7.8	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	2.3
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(95%),veh/ln	1.0	0.0	2.2	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.7	0.0	34.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	6.0
LnGrp LOS	C		C				A					A
Approach Vol, veh/h		113			0			668			772	
Approach Delay, s/veh		32.1			0.0			0.9			6.0	
Approach LOS		C						A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.6		9.4		50.6		9.4				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		37.0		12.0		37.0		12.0				
Max Q Clear Time (g_c+I1), s		2.0		5.0		15.1		0.0				
Green Ext Time (p_c), s		5.3		0.2		3.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			5.7									
HCM 6th LOS			A									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	0	110	0	0	0	114	566	0	0	682	194
Future Volume (vph)	166	0	110	0	0	0	114	566	0	0	682	194
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850									0.970	
Flt Protected	0.950							0.992				
Satd. Flow (prot)	1519	1485	0	0	1818	0	0	1768	0	0	1670	0
Flt Permitted	0.757							0.543				
Satd. Flow (perm)	1210	1485	0	0	1818	0	0	968	0	0	1670	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		254									45	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	0%	1%	0%	0%	0%	0%	3%	0%	0%	3%	3%
Adj. Flow (vph)	168	0	111	0	0	0	115	572	0	0	689	196
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	111	0	0	0	0	0	687	0	0	885	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



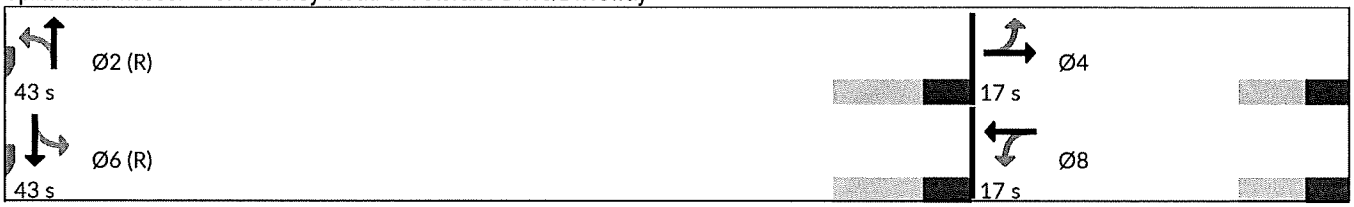
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA					Perm	NA			NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	17.0	17.0		17.0	17.0		43.0	43.0		43.0	43.0	
Total Split (%)	28.3%	28.3%		28.3%	28.3%		71.7%	71.7%		71.7%	71.7%	
Maximum Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effct Green (s)	11.1	11.1						37.9			37.9	
Actuated g/C Ratio	0.19	0.19						0.63			0.63	
v/c Ratio	0.75	0.23						1.13			0.83	
Control Delay (s/veh)	45.9	1.1						100.7			17.6	
Queue Delay	0.0	0.0						0.0			0.0	
Total Delay (s/veh)	45.9	1.1						100.7			17.6	
LOS	D	A						F			B	
Approach Delay (s/veh)		28.1						100.7			17.6	
Approach LOS		C						F			B	
90th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
90th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
70th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
70th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
50th %ile Green (s)	12.0	12.0		12.0	12.0		37.0	37.0		37.0	37.0	
50th %ile Term Code	Max	Max		Hold	Hold		Coord	Coord		Coord	Coord	
30th %ile Green (s)	11.6	11.6		11.6	11.6		37.4	37.4		37.4	37.4	
30th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
10th %ile Green (s)	8.0	8.0		8.0	8.0		41.0	41.0		41.0	41.0	
10th %ile Term Code	Gap	Gap		Hold	Hold		Coord	Coord		Coord	Coord	
Stops (vph)	143	0						789			589	
Fuel Used(gal)	3	0						29			23	
CO Emissions (g/hr)	184	26						2029			1602	
NOx Emissions (g/hr)	36	5						395			312	
VOC Emissions (g/hr)	43	6						470			371	
Dilemma Vehicles (#)	0	0						75			71	
Queue Length 50th (ft)	57	0						~644			208	
Queue Length 95th (ft)	#139	0						#887			#474	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225											
Base Capacity (vph)	242	500						610			1071	
Starvation Cap Reductn	0	0						0			0	

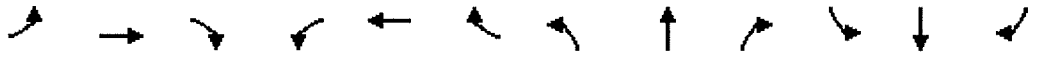
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0						0			0	
Storage Cap Reductn	0	0						0			0	
Reduced v/c Ratio	0.69	0.22						1.13			0.83	

Intersection Summary

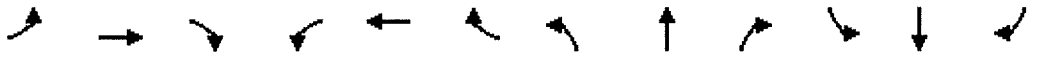
Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 26 (43%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay (s/veh): 50.0 Intersection LOS: D
Intersection Capacity Utilization 112.3% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Hershey Road & Veterans Drive/Driveway

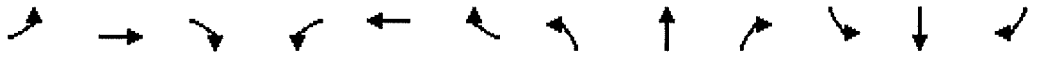




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	0	110	0	0	0	114	566	0	0	682	194
Future Volume (veh/h)	166	0	110	0	0	0	114	566	0	0	682	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	1669	1711	1697	1875	1875	1875	1912	1869	1912	1750	1708	1708
Adj Flow Rate, veh/h	168	0	111	0	0	0	115	572	0	0	689	196
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	0	1	0	0	0	0	3	0	0	3	3
Cap, veh/h	343	0	204	0	263	0	140	632	0	0	864	246
Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.68	0.68
Sat Flow, veh/h	1589	0	1450	0	1875	0	103	934	0	0	1278	364
Grp Volume(v), veh/h	168	0	111	0	0	0	687	0	0	0	0	885
Grp Sat Flow(s),veh/h/ln	1589	0	1450	0	1875	0	1038	0	0	0	0	1642
Q Serve(g_s), s	6.1	0.0	4.3	0.0	0.0	0.0	17.9	0.0	0.0	0.0	0.0	22.7
Cycle Q Clear(g_c), s	6.1	0.0	4.3	0.0	0.0	0.0	40.6	0.0	0.0	0.0	0.0	22.7
Prop In Lane	1.00		1.00	0.00		0.00	0.17		0.00	0.00		0.22
Lane Grp Cap(c), veh/h	343	0	204	0	263	0	772	0	0	0	0	1110
V/C Ratio(X)	0.49	0.00	0.54	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.80
Avail Cap(c_a), veh/h	438	0	290	0	375	0	772	0	0	0	0	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	24.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	6.8
Incr Delay (d2), s/veh	1.1	0.0	2.3	0.0	0.0	0.0	9.8	0.0	0.0	0.0	0.0	6.0
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(95%),veh/ln	4.1	0.0	2.8	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.9	0.0	26.3	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0	12.8
LnGrp LOS	C		C				B					B
Approach Vol, veh/h		279			0			687			885	
Approach Delay, s/veh		26.0			0.0			16.5			12.8	
Approach LOS		C						B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.6		13.4		46.6		13.4				
Change Period (Y+Rc), s		6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s		37.0		12.0		37.0		12.0				
Max Q Clear Time (g_c+I1), s		42.6		8.1		24.7		0.0				
Green Ext Time (p_c), s		0.0		0.4		3.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			16.2									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	0	110	0	0	0	114	566	0	0	682	194
Future Volume (vph)	166	0	110	0	0	0	114	566	0	0	682	194
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		4%			-2%			-3%			3%	
Storage Length (ft)	225		0	0		0	175		0	0		225
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850									0.970	
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1519	1485	0	0	1818	0	1736	1774	0	0	1670	0
Flt Permitted	0.757						0.115					
Satd. Flow (perm)	1210	1485	0	0	1818	0	210	1774	0	0	1670	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		310									24	
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		373			1995			1196			2191	
Travel Time (s)		10.2			54.4			18.1			33.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	0%	1%	0%	0%	0%	0%	3%	0%	0%	3%	3%
Adj. Flow (vph)	168	0	111	0	0	0	115	572	0	0	689	196
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	111	0	0	0	0	115	572	0	0	885	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			13			13	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.20	1.10	1.10	1.06	1.06	1.06	1.05	1.05	1.05	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA					pm+pt	NA			NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		24.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		13.0	66.0		53.0	53.0	
Total Split (%)	26.7%	26.7%		26.7%	26.7%		14.4%	73.3%		58.9%	58.9%	
Maximum Green (s)	19.0	19.0		19.0	19.0		7.0	60.0		47.0	47.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	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	
Total Lost Time (s)	5.0	5.0			5.0		6.0	6.0			6.0	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		3.0	3.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		C-Max	C-Max	
Act Effct Green (s)	16.2	16.2					62.8	62.8			52.4	
Actuated g/C Ratio	0.18	0.18					0.70	0.70			0.58	
v/c Ratio	0.77	0.21					0.44	0.46			0.90	
Control Delay (s/veh)	58.3	0.9					10.4	8.1			33.3	
Queue Delay	0.0	0.0					0.0	0.0			0.0	
Total Delay (s/veh)	58.3	0.9					10.4	8.1			33.3	
LOS	E	A					B	A			C	
Approach Delay (s/veh)		35.5						8.5			33.3	
Approach LOS		D						A			C	
90th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	60.0		47.0	47.0	
90th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
70th %ile Green (s)	19.0	19.0		19.0	19.0		7.0	60.0		47.0	47.0	
70th %ile Term Code	Max	Max		Hold	Hold		Max	Coord		Coord	Coord	
50th %ile Green (s)	17.9	17.9		17.9	17.9		7.5	61.1		47.6	47.6	
50th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord		Coord	Coord	
30th %ile Green (s)	14.8	14.8		14.8	14.8		6.7	64.2		51.5	51.5	
30th %ile Term Code	Gap	Gap		Hold	Hold		Gap	Coord		Coord	Coord	
10th %ile Green (s)	10.3	10.3		10.3	10.3		0.0	68.7		68.7	68.7	
10th %ile Term Code	Gap	Gap		Hold	Hold		Skip	Coord		Coord	Coord	
Stops (vph)	151	0					36	244			639	
Fuel Used(gal)	3	0					2	8			26	
CO Emissions (g/hr)	215	26					110	584			1842	
NOx Emissions (g/hr)	42	5					21	114			358	
VOC Emissions (g/hr)	50	6					25	135			427	
Dilemma Vehicles (#)	0	0					0	31			45	
Queue Length 50th (ft)	90	0					20	134			462	
Queue Length 95th (ft)	#174	0					39	211			#756	
Internal Link Dist (ft)		293			1915			1116			2111	
Turn Bay Length (ft)	225						175					
Base Capacity (vph)	255	558					266	1237			981	
Starvation Cap Reductn	0	0					0	0			0	