
TRAFFIC IMPACT STUDY

For

**Bristol-Myers Squibb Parking Lot Expansion
Township of Lawrence
Mercer County, New Jersey**

Prepared For:

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Prepared By:

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LANGAN

**5 September 2024
130213801**

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EXECUTIVE SUMMARY

Bristol-Myers Squibb (BMS) has retained Langan Engineering and Environmental Services to prepare a traffic impact study for the proposed parking lot expansion at their Lawrence Township campus. The campus is located along Princeton Pike (County Route (CR 583) in the Township of Lawrence, Mercer County, New Jersey.

The campus currently consists of approximately 630,000 square feet of office space with an assigned employee population of approximately 2,537. The campus is supported by multiple surfaces parking lots consisting of 2,267 parking spaces.

It is proposed to construct an additional surface parking lot consisting of 244 parking spaces within the existing BMS Campus. The additional spaces are to accommodate the anticipated future BMS needs as the assigned employees to the campus grows to approximately 2,800 employees. This study has been prepared to evaluate the future 2026 operations with a growth of the BMS assigned employee population to the projected 2,800 employee count.

Access to the campus is provided via two access driveways. The first access is full-movement and intersects Princeton Pike (CR 583) to form the western leg of a signalized intersection. The second access is a right-out only yield-controlled driveway along Princeton Pike (CR 583) southbound. Both driveways will continue to provide access to/from the campus.

Langan has estimated the number of trips the proposed employee increase (263 persons) would generate based on rates developed using the existing campus' employee population and the existing entering and exiting traffic volumes. Accordingly, Langan estimated that the expansion will generate approximately 61 new trips (57 enter, 4 exit) during the weekday morning peak hour and 54 new trips (5 enter, 49 exit) during the weekday evening peak hour.

We determined the directional distribution of the site-generated trips for the development based on an examination of existing and expected travel patterns in the study area and a review of other studies conducted in the area. We conducted capacity analyses at the following intersections:

- Princeton Pike (CR 583) and BMS Drive/Lenox Drive North
- Princeton Pike (CR 583) and Lenox Drive South
- Princeton Pike (CR 583) and BMS Exit Driveway Southbound Merge Section

Based upon a review of the analyses, it is determined that the proposed expansion will not significantly impact traffic operations in the study area during peak hours. Moreover, the

development's access driveways are expected to continue to operate within capacity with the expected future growth of the Campus.

INTRODUCTION

Bristol-Myers Squibb (BMS) has retained Langan Engineering and Environmental Services to prepare a traffic impact study for the proposed parking lot expansion at their Lawrence Township campus. The campus is located along Princeton Pike (County Route (CR 583) in the Township of Lawrence, Mercer County, New Jersey. The site location is shown in Figure 1.

Project Description

It is proposed to construct an additional surface parking lot consisting of 244 parking spaces within the existing BMS Campus. The additional spaces are to accommodate the anticipated future BMS needs as the campus grows to approximately 2,800 assigned employees. This study has been prepared to evaluate the future 2026 operations with a growth of the BMS employee population to the projected 2,800 employee count.

Access to the campus is provided via two access driveways. The first access is full-movement and intersects Princeton Pike (CR 583) to form the western leg of a signalized intersection. The second access is a right-out only yield-controlled driveway along Princeton Pike (CR 583) southbound. Both driveways will continue to provide access to/from the campus.

Study Area

We conducted capacity analyses at the following intersections:

- Princeton Pike (CR 583) and BMS Drive/Lenox Drive North
- Princeton Pike (CR 583) and Lenox Drive South
- Princeton Pike (CR 583) and BMS Exit Driveway Southbound Merge Section

An inventory of the physical road conditions is presented in the section "Description of Existing Conditions."

Scope of Study

Langan undertook the following steps to prepare this study in accordance with standard traffic engineering methodologies:

1. Conducted a field examination of the development and surrounding road network to inventory physical and regulatory conditions including the number of lanes, lane assignments, channelization, traffic-control devices, lateral clearances and other factors that limit traffic capacity.
2. Conducted a series of turning movement traffic counts at the study intersections identified in the previous section. Note that the counts were conducted when schools were open for in-person learning. We conducted counts on a typical weekday from 6:00 AM to 9:00 AM and from 2:00 PM to 6:00 PM. We then identified existing weekday morning and evening peak hour traffic volumes based on the traffic count data.
3. Established "2023 Existing" traffic volumes using the turning movement traffic count data.
4. Established 2026 Base traffic volumes by applying the New Jersey Department of Transportation (NJDOT) Mercer County growth factor of 1.5 percent per year to the existing traffic volumes.
5. Identified other planned developments in the study area and established 2026 No-Build traffic volumes with the other development generated trips, including any improvements identified by those developments.
6. Prepared trip estimates for the expansion based on rates that are representative of the existing trip generation characteristics of the BMS campus. To develop the rates we used the existing total traffic generated at the BMS driveways and the total current employee population on the campus.
7. Developed trip distribution for the project based on an examination of existing and expected travel patterns in the study area and a review of other studies conducted in the area.
8. Assigned site-generated trips to the development access roads and surrounding road network based on the likely travel routes motorists will use to travel to and from the development.
9. Established future 2026 Build traffic volumes by adding the total additional site-generated trips to the 2026 No-Build traffic volumes.
10. Performed intersection capacity analyses for the weekday morning and evening peak hours using Synchro software.

DESCRIPTION OF EXISTING CONDITIONS

This section describes the roads, intersections and traffic volumes in the area of the development located in the Township of Lawrence, Mercer County, New Jersey.

Roads

Princeton Pike (CR 583)

Princeton Pike (CR 583) is classified as an urban minor arterial and is under municipal jurisdiction. It has a general north-south directional orientation. The roadway provides two lanes of travel in each direction along the project frontage and one lane of travel in each direction to the north of the subject property. The posted speed limit varies from 40 mph to 45 mph in the vicinity of the site.

Lenox Drive

Lenox Drive has a general east-west directional orientation. Lenox Drive intersects Princeton Pike from the east, and provides access to the Princeton Pike Corporate Center. The roadway provides one lane of travel in each direction.

Intersections

Princeton Pike (CR 583) and BMS Drive / Lenox Drive North

BMS Drive and Lenox Drive North intersect Princeton Pike (CR 583) to form a four-leg intersection under signal control. The eastbound BMS Drive approach provides one shared left-turn/through lane and one channelized right-turn lane. The westbound Lenox Drive North approach provides one left-turn lane and one shared through/right-turn lane. The northbound Princeton Pike (CR 583) approach provides two left-turn lanes, two through lanes, and one right-turn lane. The southbound Princeton Pike (CR 583) approach provides one left-turn lane, one exclusive through lane, and one shared through/right-turn lane.

Princeton Pike (CR 583) and Lenox Drive South

Lenox Drive South intersects Princeton Pike (CR 583) to form a T-shaped intersection under signal control. The westbound Lenox Drive South approach provides two left-turn lanes and one right-turn lane. The northbound Princeton Pike (CR 583) approach provides two through lanes and one channelized right-turn lane. The southbound Princeton Pike (CR 583) approach provides one left-turn lane and two through lanes.

Princeton Pike (CR 583) and BMS Exit Driveway Southbound Merge Section

The BMS Exit Driveway diverges into the southbound Princeton Pike (CR 583) traffic flow to the south of the Princeton Pike (CR 583) and Lenox Drive South. The southbound Princeton Pike (CR 583) approach provides two through lanes. The BMS Exit Driveway approach consists of an approximate 400' acceleration lane that merges with Princeton Pike (CR 583).

Traffic Volumes

Langan arranged turning movement traffic counts to be conducted during the morning and evening peak hours on a typical weekday at the study intersections. Note that the counts were conducted on a day when schools were open for in-person learning. Specifically, turning movement traffic counts were conducted on Thursday, October 5, 2023, from 6:00 AM to 9:00 AM and from 2:00 PM to 6:00 PM.

The traffic counts identify distinct times during the weekday morning and evening hours when traffic experienced its highest levels. According to the traffic count data collected, the weekday morning peak hour occurred from 8:00 AM to 9:00 AM and the weekday evening peak hour occurred from 4:30 PM to 5:30 PM.

Figure 2 illustrates the 2023 Existing weekday morning and evening peak hour traffic volumes. Summaries of the traffic counts are contained in Appendix C.

ESTIMATE OF FUTURE CONDITIONS

This section of the report covers background traffic growth, No-Build condition, site-generated trips, trip distribution and future traffic volumes. We anticipate the project will be completed by the end of 2026. Accordingly, we projected traffic volumes to include the existing traffic and new traffic created by background growth and other approved developments in the area to derive the 2026 No-Build traffic volumes. We then added the site-generated trips to the 2026 No-Build traffic volumes to derive the 2026 Build traffic volumes. All traffic volume worksheets are contained in Appendix A.

Background Traffic Growth

We increased the existing peak hour traffic volumes by a compounded annual growth rate of 1.5 percent, established by the New Jersey Department of Transportation (NJDOT) for Mercer County for short term growth projections, to derive the 2026 Base traffic volumes. Figure 3 illustrates the 2026 Base traffic volumes.

No-Build Condition

In addition to general background growth, there are prior approvals for a development within the site vicinity that will influence traffic on the surrounding road network. In preparing the future traffic projections, we have incorporated the traffic and improvements associated with the adjacent development on the study area intersections. The following are the developments considered in the No-Build condition:

- The Trail at Princeton Pike (Shropshire Associates LLC) – 221 multifamily units;

Traffic associated with this development was developed from of its respective traffic study. In addition, due to the immediate proximity to the Princeton Pike Corporate Center it is expected that current traffic volumes in the study area are lower than what pre-COVID counts illustrate due to the ongoing hybrid work methods that are expected to continue for the foreseeable future. We conservatively adjusted the traffic volumes in the area to account for the full occupancy of the Princeton Pike Corporate Center. The re-occupancy traffic volumes were developed from the traffic study conducted for the BMS Campus dated April 2014. The collective traffic from these developments are shown on Figure 4. In order to develop the 2026 No-Build traffic volumes, the total adjacent developments' traffic was added to the 2026 Base traffic volumes. The 2026 No-Build traffic volumes are shown in Figure 5.

Site-Generated Trips

We prepared trip generation estimates for the expansion based on rates that are representative of the 2023 existing trip generation characteristics of the BMS campus. These characteristics include the total current assigned employee count and the arrival and departure behavior of the campus' personnel as a result of BMS's work place policies that provide flexibility to an employee's work day hours. A review of the 2023 traffic counts show employees arriving in significant numbers starting at 6:00 AM through 9:00 AM and departing the campus as early as 2:00 PM through the evening hours.

To develop the rates we used the total existing traffic counted at the BMS driveways and the total assigned employee population on the campus (2,537 persons). Therefore, the trip generation rate we calculated is based on vehicle trips per employee for the current campus. This is the same methodology used by the Institute of Transportation Engineers (ITE) in the publication Trip Generation, 11th edition. However, by using tenant specific calculated rates we are obtaining a more precise estimate of additional trips based on the existing campus' operations. We applied the calculated rates to the proposed additional assigned employees (263 persons) to determine the total new trip generation estimates for the expansion. Table 1 summarizes the future trip generation estimates.

Table 1 – Future Trip Generation Estimates

Use	Weekday AM Peak Hour			Weekday PM Peak Hour		
	In	Out	Total	In	Out	Total
Existing BMS Driveway Traffic	548	42	590	46	476	522
Existing BMS Trip Generation Rates*	0.2160	0.0165	0.2326	0.0181	0.1876	0.2057
263 Proposed Employees	57	4	61	5	49	54

*Calculated based on 2,537 existing assigned employees.

Trip Distribution

We determined the directional distribution of the new site-generated trips based on the existing travel pattern observed at the study intersections and a review of previous studies conducted in the area. The directional distribution of site traffic is shown in Table 2.

Table 2 – Trip Distribution

DIRECTION (TO/FROM)	TOTAL DISTRIBUTION
Interstate 295 (North)	20%
Interstate 295 (South)	40%
Princeton Pike – CR 583 (North)	30%
Princeton Pike – CR 583 (South)	10%
Total	100%

The arrival and departure distributions associated with the proposed expansion are shown on Figure 6. The site-generated trips were then applied to the adjacent roadway system as per the above distributions. Figure 7 shows the total new site-generated trips assigned to the roadway network.

Build Traffic Volumes

We derived the 2026 Build traffic volumes by adding the total new site-generated trips to the 2026 No-Build traffic volumes. Figure 8 illustrates the 2026 Build weekday morning and evening peak hour traffic volumes.

ANALYSIS OF TRAFFIC OPERATIONS

This section describes the capacity analysis we conducted to assess traffic operations for the No-Build and Build conditions. Capacity analysis provides an indication of the adequacy of road facilities to serve traffic demand.

Level of Service Criteria

Level of Service (LOS) is the term used to denote different operating conditions that occur on a given road segment under various traffic volume demands. LOS is a qualitative measure that considers a number of factors including road geometry, speed, travel delay and freedom to maneuver. LOS designations range from A to F and provide an index of operational qualities of a road segment or an intersection. LOS A represents the best operating conditions; LOS F represents the worst.

For unsignalized intersections, the analysis considers the operation of all movements that conflict with other movements, such as main-line left turns and traffic exiting a side street. The evaluation criteria used to analyze the study area intersections are based on the Highway Capacity Manual (HCM), published by the Transportation Research Board and the Synchro Software.

The HCM defines LOS for signalized intersections as follows:

<u>LOS</u>	<u>Control Delay per Vehicle</u>
A	≤10 sec
B	>10 and ≤20 sec
C	>20 and ≤35 sec
D	>35 and ≤55 sec
E	>55 and ≤80 sec
F	>80 sec

The HCM defines LOS for merge segments as follows:

<u>LOS</u>	<u>Delay Range (sec/veh)</u>
A	≤10 sec
B	>10 – 20
C	>20 – 28
D	>28 – 35
E	>35
F	Demand exceeds capacity

Capacity Analysis

We conducted capacity analyses for the intersections in the study area and found that the proposed expansion will not significantly impact traffic operations in the study area. Table 3 summarizes the 2026 No-Build and 2026 Build levels of service (LOS) at each relevant study intersection during the weekday morning and evening peak hours. The following are discussions pertaining to each of the intersections analyzed for the development. Note that all capacity analyses worksheets are contained in Appendix D.

Table 3 – Intersection Capacity Analysis Summary

Location	Movement	Weekday Morning Peak Hour		Weekday Evening Peak Hour		
		No-Build	Build	No-Build	Build	
Signalized Intersections						
Princeton Pike (CR 583) and BMS Drive / Lenox Drive North	EB	L,T	E (58.6)	E (58.9)	C (30.2)	C (30.8)
		R	A (1.3)	A (1.4)	A (5.8)	A (7.1)
	WB	L	E (64.7)	E (64.7)	F (82.8)	F (111.1)
		T,R	C (20.8)	C (20.8)	A (0.5)	A (0.5)
	NB	L	E (62.5)	E (61.2)	E (75.9)	E (76.5)
		T	A (4.0)	A (3.6)	B (17.3)	B (17.3)
		R	A (3.1)	A (1.1)	A (0.2)	A (0.2)
	SB	L	E (66.4)	E (64.5)	E (66.1)	E (66.1)
		T,R	B (11.0)	B (11.8)	C (28.4)	C (28.7)
	Overall		B (18.2)	B (18.7)	C (31.2)	D (35.1)
Princeton Pike (CR 583) and Lenox Drive South	WB	L	E (58.6)	E (58.6)	E (55.2)	E (55.3)
		R	C (22.7)	C (22.7)	A (8.1)	A (8.0)
	NB	T	A (9.6)	B (10.0)	B (10.5)	B (10.6)
		R	A (4.7)	A (4.8)	A (2.6)	A (2.6)
	SB	L	B (18.3)	B (19.9)	A (5.0)	A (5.3)
		T	A (2.2)	A (2.2)	A (8.4)	A (8.7)
	Overall		A (8.2)	A (8.6)	B (16.6)	B (16.8)
Merge Section						
Princeton Pike (CR 583) and BMS Exit Driveway	EB	R	A (6.6)	A (6.6)	C (21.6)	C (21.9)

Based on Synchro Software: Level of Service (Average vehicle delay [seconds per vehicle])

Princeton Pike (CR 583) and BMS Drive / Lenox Drive North

The signalized intersection is expected to operate at an overall LOS B during the weekday morning peak hour and an overall LOS C during the weekday evening peak hour under the No-Build condition. Under the Build condition, the intersection is expected to operate at an overall LOS B during the weekday morning peak hour and at an overall LOS D during the weekday evening peak hour.

Princeton Pike (CR 583) and Lenox Drive South

The signalized intersection is expected to operate at an overall LOS A during the weekday morning peak hour and an overall LOS B during the weekday evening peak hour under the No-Build condition. Under the Build condition, the intersection is expected to continue to operate at

an overall LOS A during the weekday morning peak hour and at an overall LOS B during the weekday evening peak hour.

Princeton Pike (CR 583) and BMS Exit Driveway

The merge is expected to operate at a LOS A during the weekday morning peak hour and at a LOS C during the weekday evening peak hour under the No-Build condition. Under the Build condition, the merge segment is expected to continue to operate at a LOS A during the weekday morning peak hour and at a LOS C during the weekday evening peak hour.

CONCLUSIONS

Langan finds that the proposed campus expansion will not significantly impact traffic operations in the study area during peak traffic hours and the property's driveways are expected to continue to operate within capacity.

The campus' access and internal circulation layout will continue to provide efficient access and on-site circulation. The development accommodates passenger vehicles, service vehicles and emergency vehicle. We expect that the future parking supply will adequately accommodate anticipated parking demands.

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APPENDIX A
FIGURES



AERIAL IMAGE FROM GOOGLE EARTH

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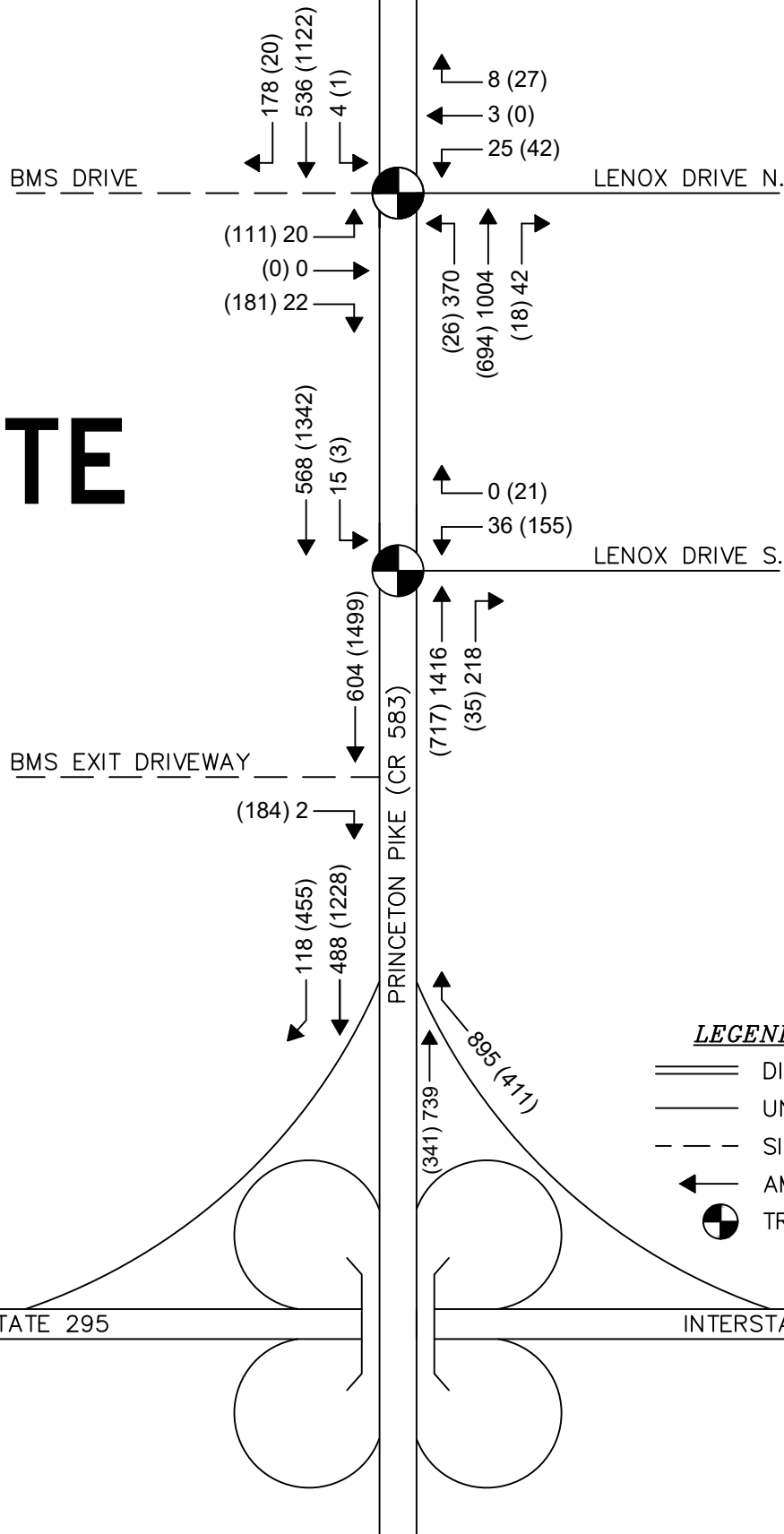
Project
**BRISTOL-MEYERS SQUIB
 PARKING LOT EXPANSION**
 TOWNSHIP OF LAWRENCE
 COUNTY STATE

Drawing Title
**SITE LOCATION
 MAP**

Project No.
 130213801
 Date
 08/27/2024
 Drawn By
 EJW
 Checked By
 KP

Figure
1
 Sheet 1 of 8

SITE



LEGEND

- DIVIDED ROADWAY
- UNDIVIDED ROADWAY
- SITE DRIVEWAY
- AM (PM) PEAK HOUR
- TRAFFIC SIGNAL

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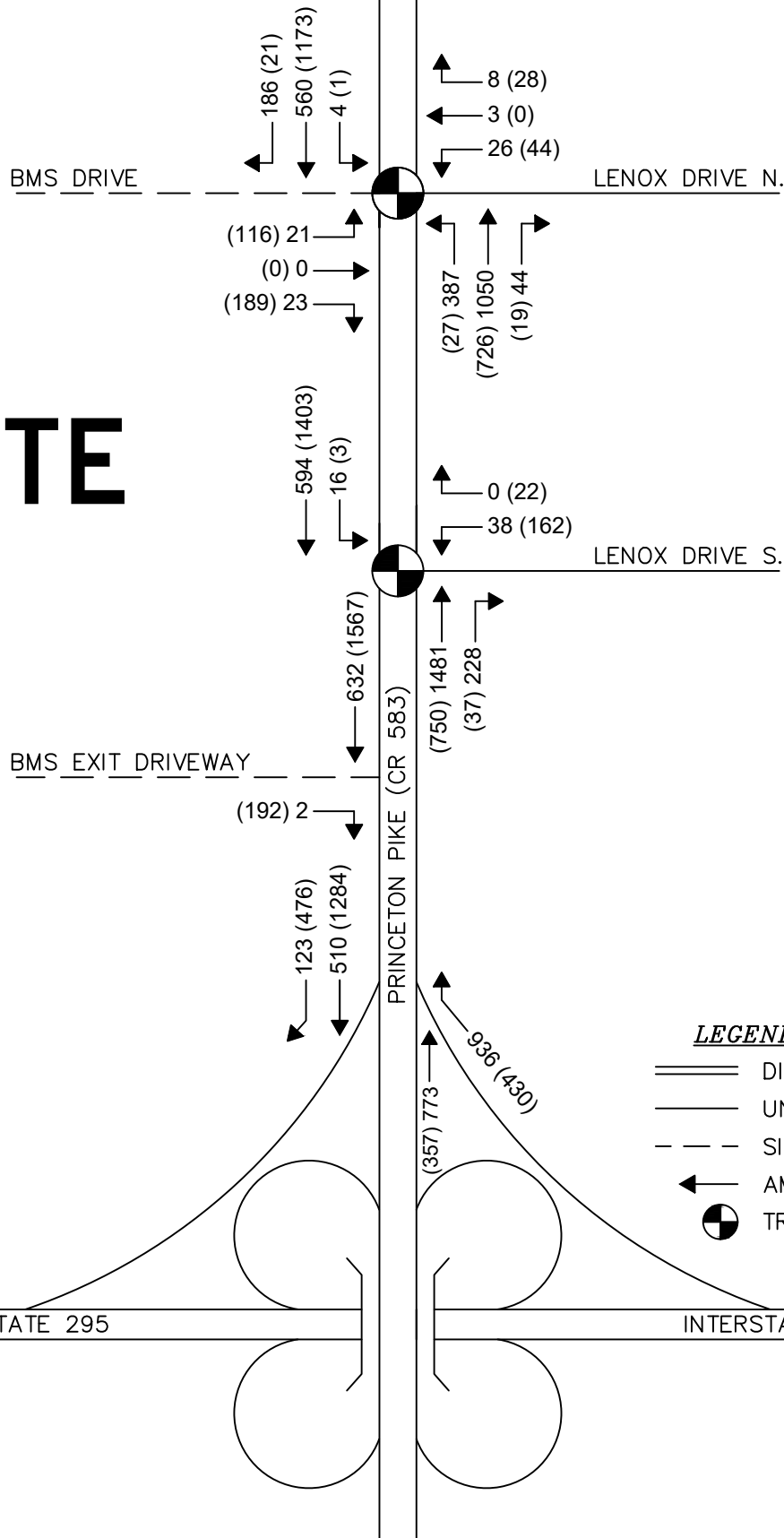
Project
**BRISTOL-MEYERS SQUIB
 PARKING LOT EXPANSION**
 TOWNSHIP OF LAWRENCE
 COUNTY STATE

Drawing Title
**2023 EXISTING
 TRAFFIC VOLUMES**

Project No.
 130213801
 Date
 08/27/2024
 Drawn By
 EJV
 Checked By
 KP

Figure
2
 Sheet 2 of 8

SITE



LEGEND

- DIVIDED ROADWAY
- UNDIVIDED ROADWAY
- SITE DRIVEWAY
- AM (PM) PEAK HOUR
- TRAFFIC SIGNAL

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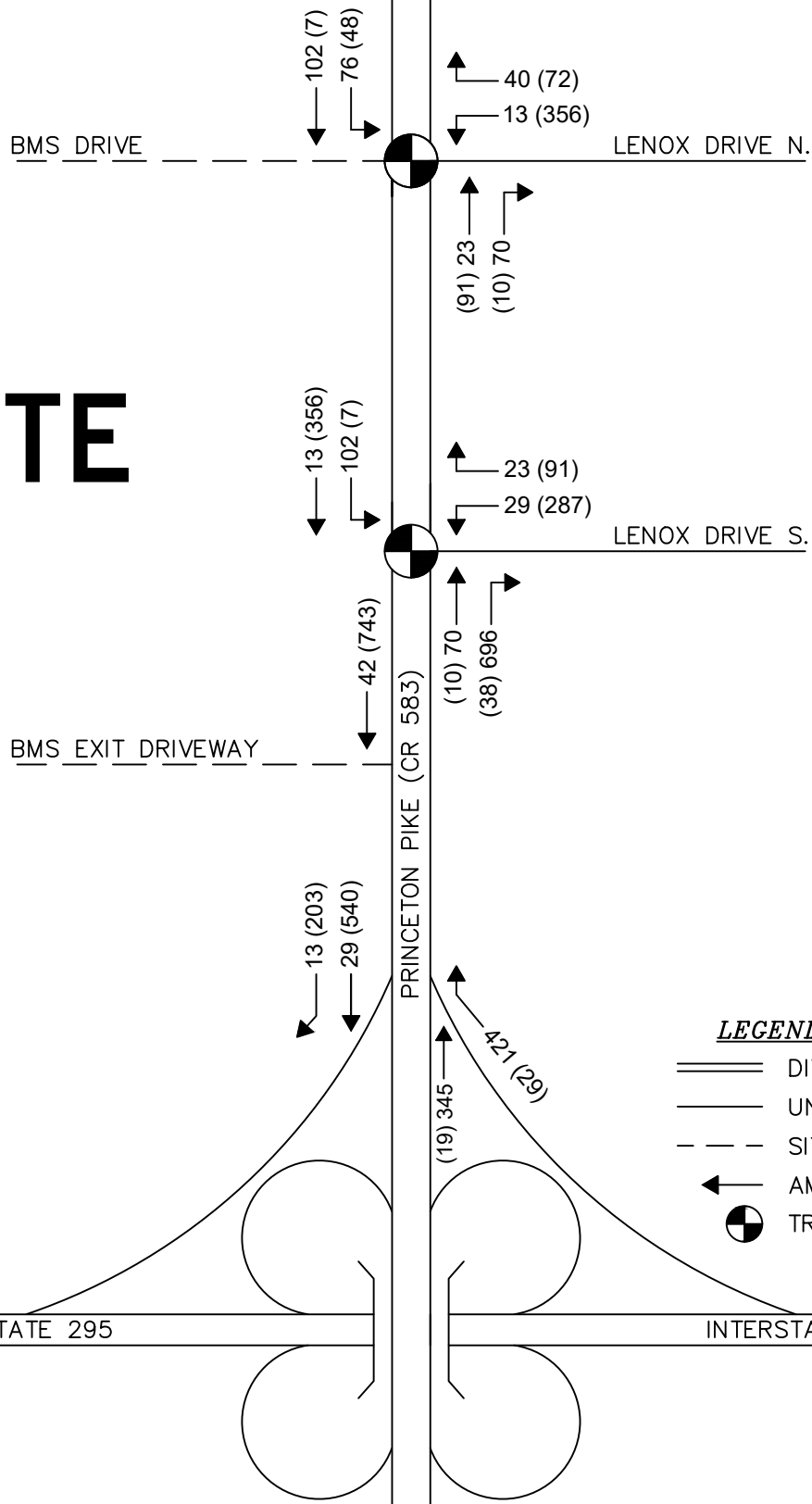
Project
**BRISTOL-MEYERS SQUIB
 PARKING LOT EXPANSION**
 TOWNSHIP OF LAWRENCE
 COUNTY STATE

Drawing Title
**2026 BASE
 TRAFFIC VOLUMES**

Project No.
 130213801
 Date
 08/27/2024
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 EJV
 Checked By
 KP

Figure
3
 Sheet 3 of 8

SITE



LEGEND

- DIVIDED ROADWAY
- UNDIVIDED ROADWAY
- SITE DRIVEWAY
- AM (PM) PEAK HOUR
- TRAFFIC SIGNAL

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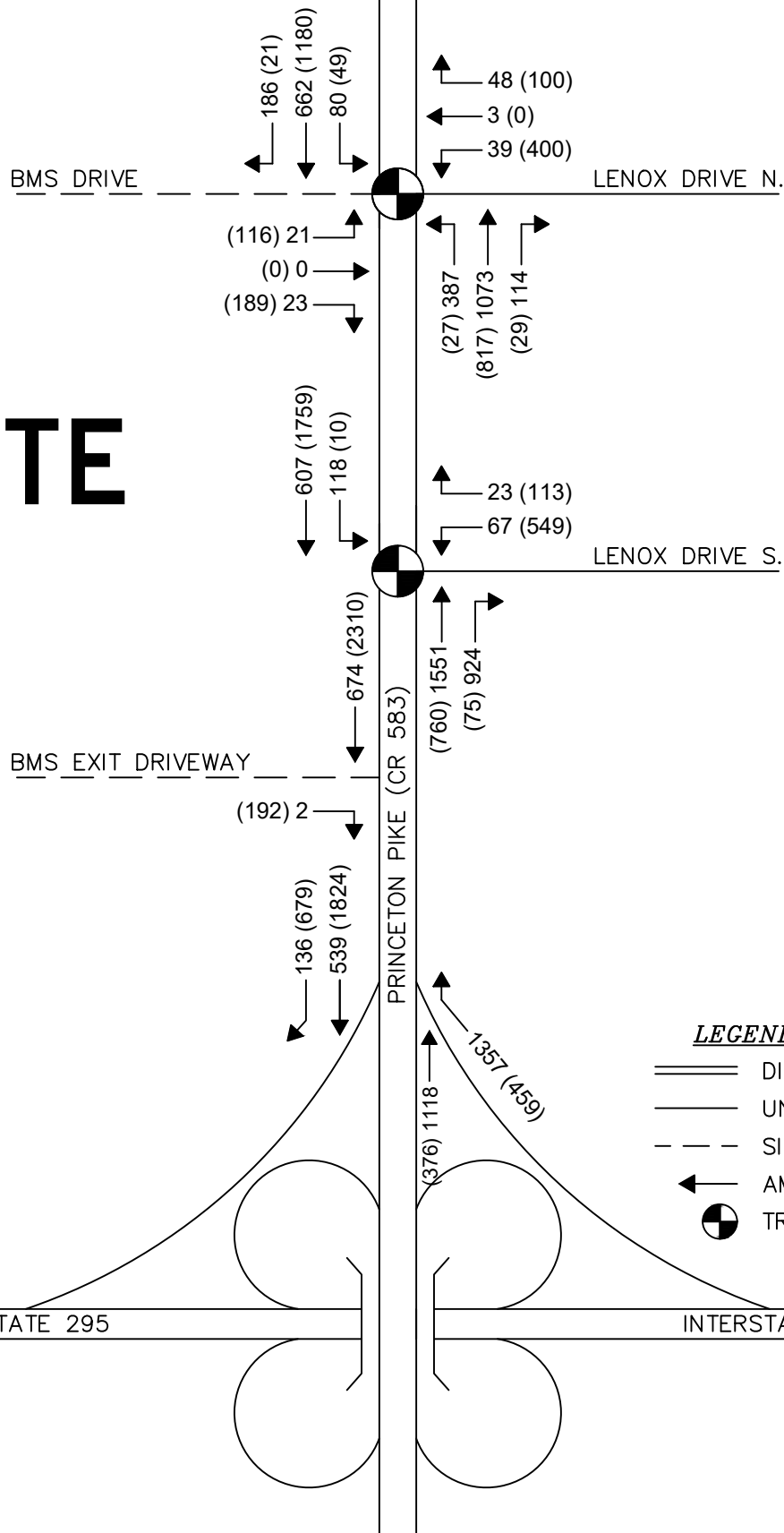
Project
**BRISTOL-MEYERS SQUIB
 PARKING LOT EXPANSION**
 TOWNSHIP OF LAWRENCE
 COUNTY STATE

Drawing Title
**TOTAL ADJACENT
 DEVELOPMENT
 TRAFFIC VOLUMES**

Project No.
 130213801
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 08/27/2024
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 KP

Figure
4
 Sheet 4 of 8

SITE



LEGEND

- DIVIDED ROADWAY
- UNDIVIDED ROADWAY
- SITE DRIVEWAY
- AM (PM) PEAK HOUR
- TRAFFIC SIGNAL

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Project
**BRISTOL-MEYERS SQUIB
 PARKING LOT EXPANSION**
 TOWNSHIP OF LAWRENCE
 COUNTY STATE

Drawing Title
**2026 NO-BUILD
 TRAFFIC VOLUMES**

Project No.
 130213801
 Date
 08/27/2024
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Figure
5
 Sheet 5 of 8

SITE

BMS DRIVE

LENOX DRIVE N.

30%
35%

70%

LENOX DRIVE S.

BMS EXIT DRIVEWAY

35%

70%

PRINCETON PIKE (CR 583)

20%
50%

30%
40%

INTERSTATE 295

INTERSTATE 295

40%
10%

20%
10%

LEGEND

-  DIVIDED ROADWAY
-  UNDIVIDED ROADWAY
-  SITE DRIVEWAY
-  ARRIVAL DISTRIBUTIONS
-  DEPARTURE DISTRIBUTIONS
-  TRAFFIC SIGNAL



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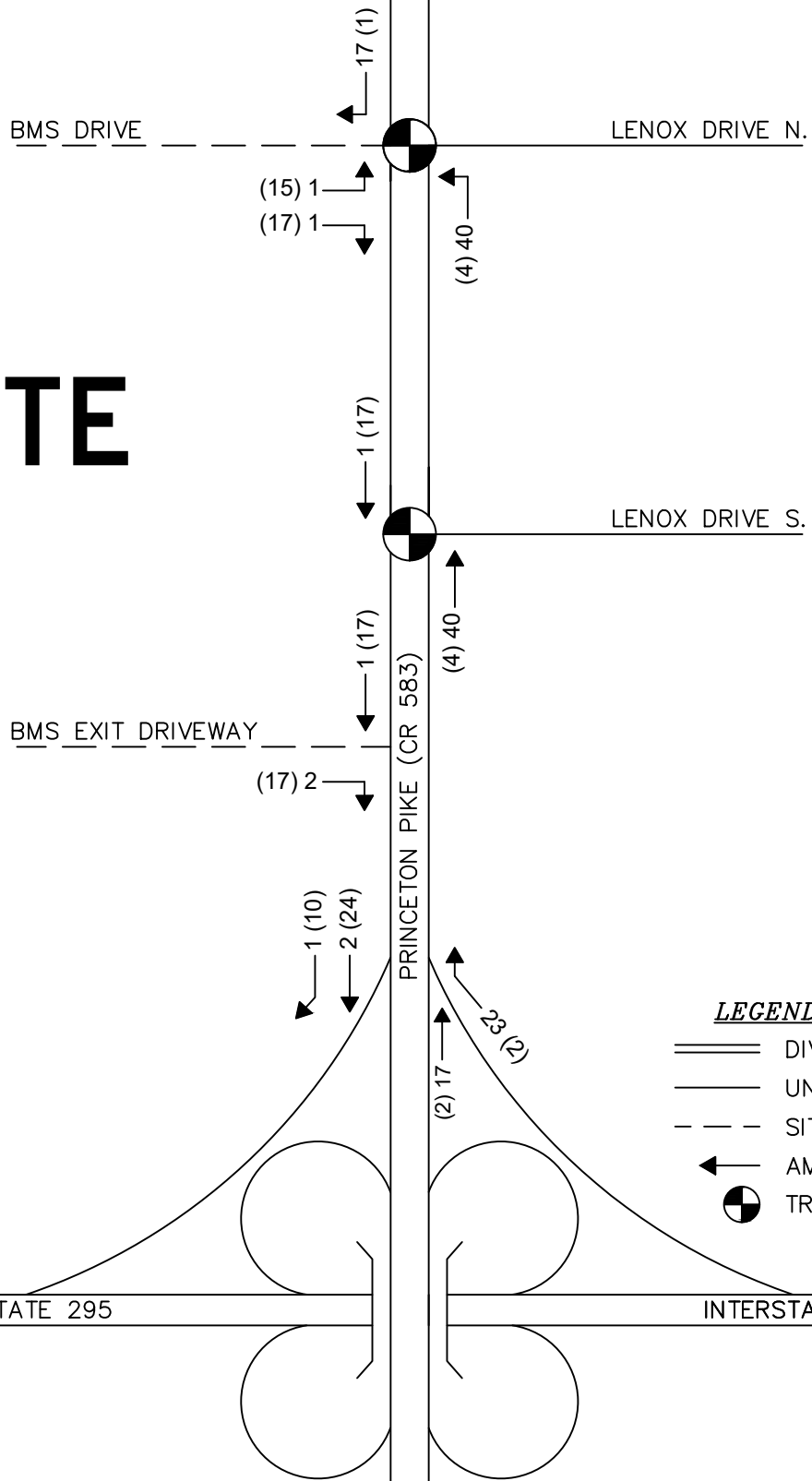
Project
**BRISTOL-MEYERS SQUIB
PARKING LOT EXPANSION**
TOWNSHIP OF LAWRENCE
COUNTY STATE

Drawing Title
**ARRIVAL AND
DEPARTURE
DISTRIBUTIONS**

Project No.
130213801
Date
08/27/2024
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Checked By
KP

Figure
6
Sheet 6 of 8

SITE



LEGEND

- DIVIDED ROADWAY
- UNDIVIDED ROADWAY
- SITE DRIVEWAY
- AM (PM) PEAK HOUR
- TRAFFIC SIGNAL

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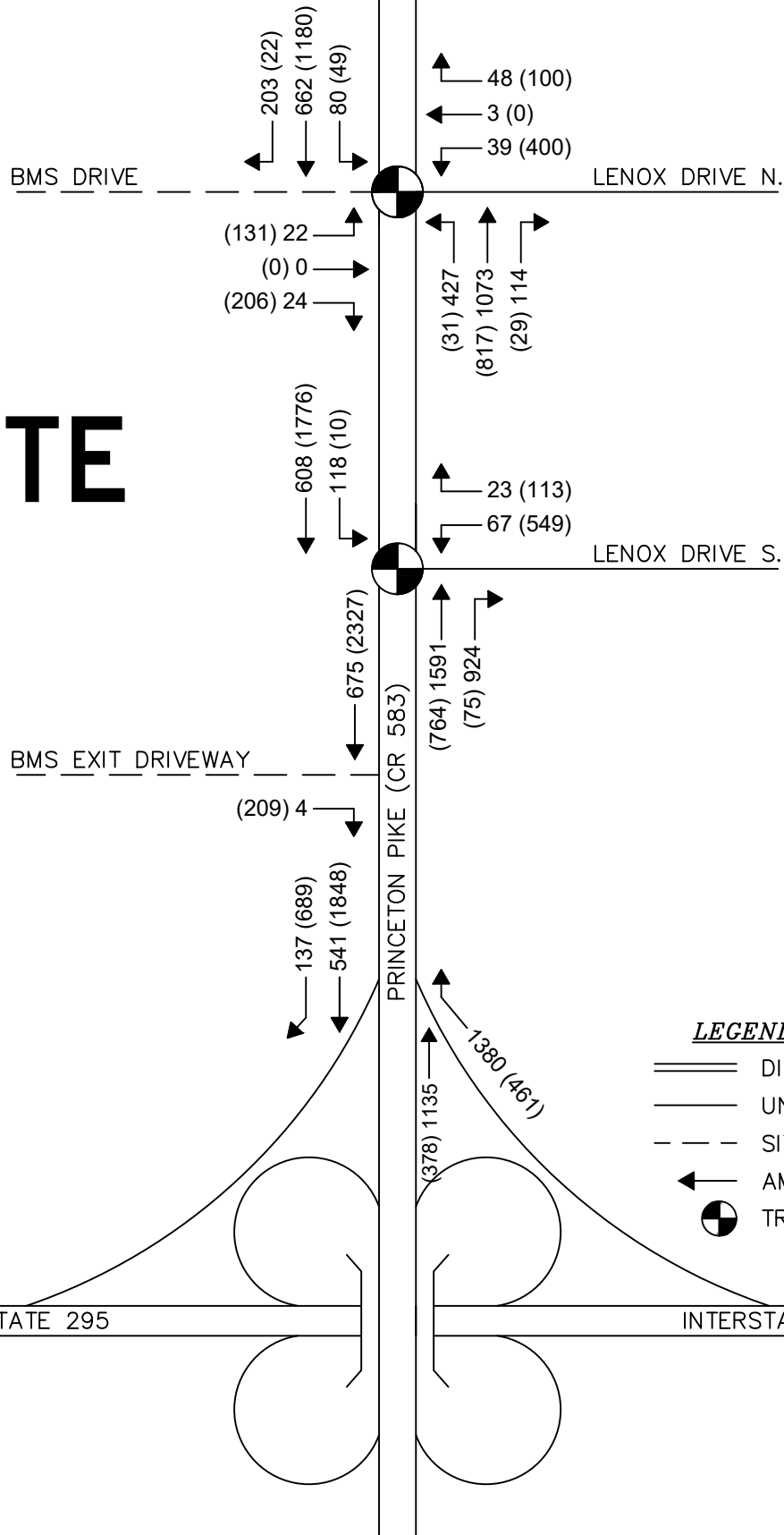
Project
**BRISTOL-MEYERS SQUIB
 PARKING LOT EXPANSION**
 TOWNSHIP OF LAWRENCE
 COUNTY STATE

Drawing Title
**TOTAL
 SITE-GENERATED
 TRIPS**

Project No.
 130213801
 Date
 08/27/2024
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 EJV
 Checked By
 KP

Figure
7
 Sheet 7 of 8

SITE



LEGEND

- DIVIDED ROADWAY
- UNDIVIDED ROADWAY
- SITE DRIVEWAY
- AM (PM) PEAK HOUR
- TRAFFIC SIGNAL

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Project
**BRISTOL-MEYERS SQUIB
 PARKING LOT EXPANSION**
 TOWNSHIP OF LAWRENCE
 COUNTY STATE

Drawing Title
**2026 BUILD
 TRAFFIC VOLUMES**

Project No.
 130213801
 Date
 08/27/2024
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 Checked By
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Figure
8
 Sheet 8 of 8

APPENDIX B
TRAFFIC COUNTS



Lawrence Twp, NJ
 Princeton Pike & Lenox Dr
 North/BMS Driveway
 Thursday, October 5, 2023
 Location: 40.291815, -
 74.708526

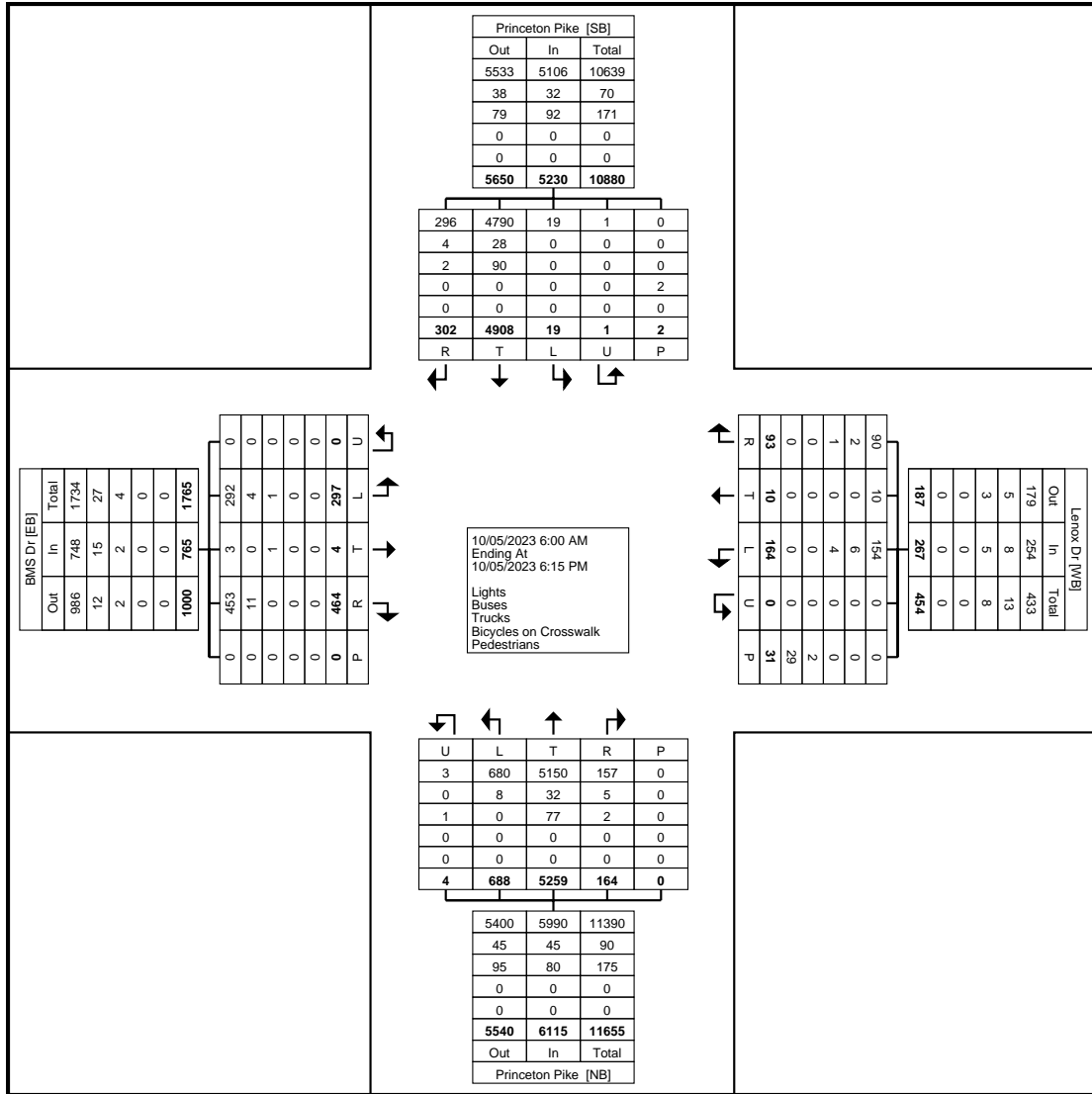
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 184 Baker Rd

Coatesville, Pennsylvania, United States 19320
 610-466-1469
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Count Name: Princeton Pike &
 Lenox Dr North/BMS Dr
 Site Code:
 Start Date: 10/05/2023
 Page No: 1

Turning Movement Data

Start Time	BMS Dr Eastbound							Lenox Dr Westbound							Princeton Pike Northbound							Princeton Pike 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	0	0	0	1	0	0	1	3	0	0	1	0	0	4	5	92	1	0	0	0	98	0	22	0	0	0	0	22	125
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	172	3	0	0	0	186	0	32	3	0	0	0	35	221
6:30 AM	1	0	0	1	0	0	2	0	0	0	0	0	0	0	15	228	3	0	0	0	246	1	42	2	0	0	1	45	293
6:45 AM	1	0	0	1	0	0	2	3	0	0	1	0	0	4	27	237	14	0	0	0	278	1	47	7	1	0	0	56	340
Hourly Total	2	0	0	3	0	0	5	6	0	0	2	0	0	8	58	729	21	0	0	0	808	2	143	12	1	0	1	158	979
7:00 AM	3	0	2	4	0	0	9	5	0	0	2	0	0	7	27	250	6	0	0	0	283	0	56	4	1	0	0	61	360
7:15 AM	0	1	0	0	0	0	1	4	2	3	0	0	0	9	40	279	8	2	0	0	329	0	83	10	1	0	0	94	433
7:30 AM	2	1	1	2	0	0	6	3	3	0	2	0	0	8	38	287	10	1	0	0	336	0	102	14	1	0	0	117	467
7:45 AM	1	1	0	5	0	0	7	5	0	0	0	0	0	5	60	280	9	3	0	0	352	2	116	29	0	0	0	147	511
Hourly Total	6	3	3	11	0	0	23	17	5	3	4	0	0	29	165	1096	33	6	0	0	1300	2	357	57	3	0	0	419	1771
8:00 AM	4	0	0	1	0	0	5	5	1	1	0	0	0	7	61	260	9	2	0	0	332	0	131	35	8	0	0	174	518
8:15 AM	2	0	4	2	0	0	8	6	0	0	1	0	0	7	95	237	12	1	0	0	345	2	155	30	2	0	0	189	549
8:30 AM	9	0	2	5	0	0	16	6	2	0	3	0	0	11	109	242	8	3	0	0	362	1	125	48	7	0	0	181	570
8:45 AM	5	0	4	4	0	0	13	8	0	1	2	0	0	11	105	256	5	2	0	0	368	1	116	39	9	0	0	165	557
Hourly Total	20	0	10	12	0	0	42	25	3	2	6	0	0	36	370	995	34	8	0	0	1407	4	527	152	26	0	0	709	2194
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
2:00 PM	8	0	7	3	0	0	18	6	1	0	3	0	0	10	5	103	3	0	0	0	111	1	124	4	0	0	0	129	268
2:15 PM	10	0	2	8	0	0	20	1	0	0	3	0	0	4	4	129	5	0	0	0	138	1	174	1	0	0	0	176	338
2:30 PM	11	0	4	7	0	0	22	6	0	2	1	0	0	9	5	139	3	1	2	0	150	1	185	2	0	0	0	188	369
2:45 PM	13	0	8	6	0	0	27	2	0	0	0	0	0	2	5	151	5	0	0	0	161	1	227	6	0	0	0	234	424
Hourly Total	42	0	21	24	0	0	87	15	1	2	7	0	0	25	19	522	16	1	2	0	560	4	710	13	0	0	0	727	1399
3:00 PM	10	0	4	9	0	0	23	8	0	2	4	0	1	14	5	161	5	1	0	0	172	0	259	3	0	0	0	262	471
3:15 PM	11	0	16	14	0	0	41	6	0	1	1	0	0	8	10	180	2	0	1	0	193	1	226	3	0	0	0	230	472
3:30 PM	14	0	12	17	0	0	43	6	0	0	1	0	0	7	9	147	7	0	0	0	163	0	262	0	0	0	0	262	475
3:45 PM	6	0	7	11	0	0	24	6	1	2	3	0	5	12	6	135	1	0	0	0	142	1	275	2	0	0	0	278	456
Hourly Total	41	0	39	51	0	0	131	26	1	5	9	0	6	41	30	623	15	1	1	0	670	2	1022	8	0	0	0	1032	1874
4:00 PM	14	1	8	22	0	0	45	8	0	9	1	0	6	18	4	145	2	0	0	0	151	0	271	0	0	0	0	271	485
4:15 PM	15	0	6	11	0	0	32	10	0	3	2	0	8	15	4	146	2	0	0	0	152	1	249	2	0	0	0	252	451
4:30 PM	27	0	7	28	0	0	62	6	0	9	2	0	4	17	6	172	3	0	0	0	181	0	252	2	0	0	0	254	514
4:45 PM	21	0	12	35	0	0	68	9	0	2	1	0	7	12	5	144	4	1	0	0	154	0	305	5	0	0	0	310	544
Hourly Total	77	1	33	96	0	0	207	33	0	23	6	0	25	62	19	607	11	1	0	0	638	1	1077	9	0	0	0	1087	1994
5:00 PM	27	0	10	32	0	0	69	17	0	2	9	0	0	28	12	203	5	1	0	0	221	0	281	6	1	0	0	288	606
5:15 PM	36	0	20	37	0	0	93	10	0	2	0	0	0	12	3	169	3	1	0	0	176	1	282	6	0	1	1	290	571
5:30 PM	25	0	12	25	0	0	62	11	0	4	5	0	0	20	8	169	3	1	1	0	182	3	246	4	1	0	0	254	518
5:45 PM	21	0	10	15	0	0	46	4	0	1	1	0	0	6	4	143	2	1	0	0	150	0	263	3	0	0	0	266	468
Hourly Total	109	0	52	109	0	0	270	42	0	9	15	0	0	66	27	684	13	4	1	0	729	4	1072	19	2	1	1	1098	2163
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	2
Grand Total	297	4	158	306	0	0	765	164	10	44	49	0	31	267	688	5299	143	21	4	0	6115	19	4908	270	32	1	2	5230	12377
Approach %	38.8	0.5	20.7	40.0	0.0	-	-	61.4	3.7	16.5	18.4	0.0	-	-	11.3	86.0	2.3	0.3	0.1	-	-	0.4	93.8	5.2	0.6	0.0	-	-	-
Total %	2.4	0.0	1.3	2.5	0.0	-	6.2	1.3	0.1	0.4	0.4	0.0	-	2.2	5.6	42.5	1.2	0.2	0.0	-	49.4	0.2	39.7	2.2	0.3	0.0	-	42.3	-
Lights	292	3	154	299	0	-	748	154	10	41	49	0	-	254	680	5150	136	21	3	-	5990	19	4790	264	32	1	-	5106	12098
% Lights	98.3	75.0	97.5	97.7	-	-	97.8	93.9	100.0	93.2	100.0	-	-	95.1	98.8	97.9	95.1	100.0	75.0	-	98.0	100.0	97.6	97.8	100.0	100.0	-	97.6	97.7
Buses	4	0	4	7	0	-	15	6	0	2	0	0	-	8	8	32	5	0	0	-	45	0	28	4	0	0	-	32	100
% Buses	1.3	0.0	2.5	2.3	-	-	2.0	3.7	0.0	4.5	0.0	-	-	3.0	1.2	0.6	3.5	0.0	0.0	-	0.7	0.0	0.6	1.5	0.0	0.0	-	0.6	0.8
Trucks	1	1	0	0	0	-	2	4	0	1	0	0	-	5	0	77	2	0	1	-	80	0	90	2	0	0	-	92	179
% Trucks	0.3	25.0	0.0	0.0	-	-	0.3	2.4	0.0	2.3	0.0	-	-	1.9	0.0	1.5	1.4	0.0	25.0	-	1.3	0.0	1.8	0.7	0.0	0.0	-	1.8	1.4
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	2	-	-	-	-	-	-	0	-	-	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	29	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	93.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-



Turning Movement Data Plot

Princeton Pike & Lenox Dr North/BMS Dr - TMC

Thu Oct 5, 2023

Forced Peak (4:30 PM - 5:30 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1117292, Location: 40.291815, -74.708526



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

Leg Direction	BMS Dr Eastbound							Lenox Dr Westbound						
	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*
2023-10-05 4:30PM	27	0	7	0	28	62	0	6	0	9	0	2	17	4
4:45PM	21	0	12	0	35	68	0	9	0	2	0	1	12	7
5:00PM	27	0	10	0	32	69	0	17	0	2	0	9	28	0
5:15PM	36	0	20	0	37	93	0	10	0	2	0	0	12	0
Total	111	0	49	0	132	292	0	42	0	15	0	12	69	11
% Approach	38.0%	0%	16.8%	0%	45.2%	-	-	60.9%	0%	21.7%	0%	17.4%	-	-
% Total	5.0%	0%	2.2%	0%	5.9%	13.1%	-	1.9%	0%	0.7%	0%	0.5%	3.1%	-
PHF	0.771	-	0.613	-	0.892	0.785	-	0.618	-	0.417	-	0.333	0.616	-
Lights	111	0	49	0	128	288	-	38	0	15	0	12	65	-
% Lights	100%	0%	100%	0%	97.0%	98.6%	-	90.5%	0%	100%	0%	100%	94.2%	-
Articulated Trucks and Single-Unit Trucks	0	0	0	0	0	0	-	0	0	0	0	0	0	-
% Articulated Trucks and Single-Unit Trucks	0%	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	0%	-
Buses	0	0	0	0	4	4	-	4	0	0	0	0	4	-
% Buses	0%	0%	0%	0%	3.0%	1.4%	-	9.5%	0%	0%	0%	0%	5.8%	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	11
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	0%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Princeton Pike & Lenox Dr North/BMS Dr - TMC

Thu Oct 5, 2023

Forced Peak (4:30 PM - 5:30 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1117292, Location: 40.291815, -74.708526



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

Leg Direction	Princeton Pike Northbound							Princeton Pike Southbound							Int
	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*	
2023-10-05 4:30PM	6	172	3	0	0	181	0	0	252	2	0	0	254	0	514
4:45PM	5	144	4	0	1	154	0	0	305	5	0	0	310	0	544
5:00PM	12	203	5	0	1	221	0	0	281	6	0	1	288	0	606
5:15PM	3	169	3	0	1	176	0	1	282	6	1	0	290	1	571
Total	26	688	15	0	3	732	0	1	1120	19	1	1	1142	1	2235
% Approach	3.6%	94.0%	2.0%	0%	0.4%	-	-	0.1%	98.1%	1.7%	0.1%	0.1%	-	-	-
% Total	1.2%	30.8%	0.7%	0%	0.1%	32.8%	-	0%	50.1%	0.9%	0%	0%	51.1%	-	-
PHF	0.542	0.847	0.750	-	0.750	0.828	-	0.250	0.918	0.792	0.250	0.250	0.921	-	0.922
Lights	24	685	15	0	3	727	-	1	1107	18	1	1	1128	-	2208
% Lights	92.3%	99.6%	100%	0%	100%	99.3%	-	100%	98.8%	94.7%	100%	100%	98.8%	-	98.8%
Articulated Trucks and Single-Unit Trucks	0	3	0	0	0	3	-	0	10	0	0	0	10	-	13
% Articulated Trucks and Single-Unit Trucks	0%	0.4%	0%	0%	0%	0.4%	-	0%	0.9%	0%	0%	0%	0.9%	-	0.6%
Buses	2	0	0	0	0	2	-	0	3	1	0	0	4	-	14
% Buses	7.7%	0%	0%	0%	0%	0.3%	-	0%	0.3%	5.3%	0%	0%	0.4%	-	0.6%
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, RR: Right on red, T: Thru, U: U-Turn

Princeton Pike & Lenox Dr North/BMS Dr - TMC

Thu Oct 5, 2023

Forced Peak (4:30 PM - 5:30 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

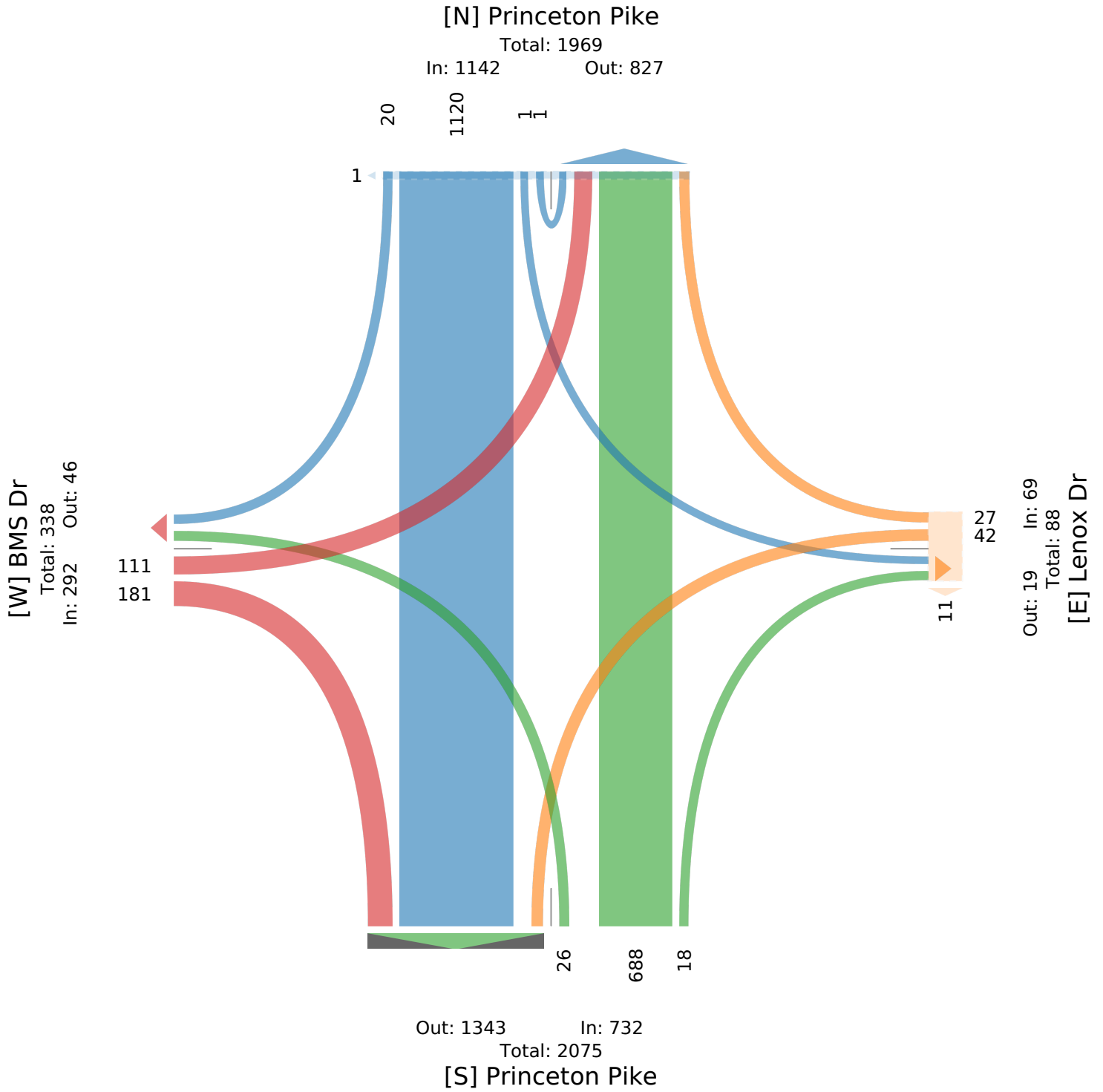
All Movements

ID: 1117292, Location: 40.291815, -74.708526



Provided by: Tri-State Traffic Data, Inc.

184 Baker Road,
Coatesville, PA, 19320, US





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184 Baker Rd

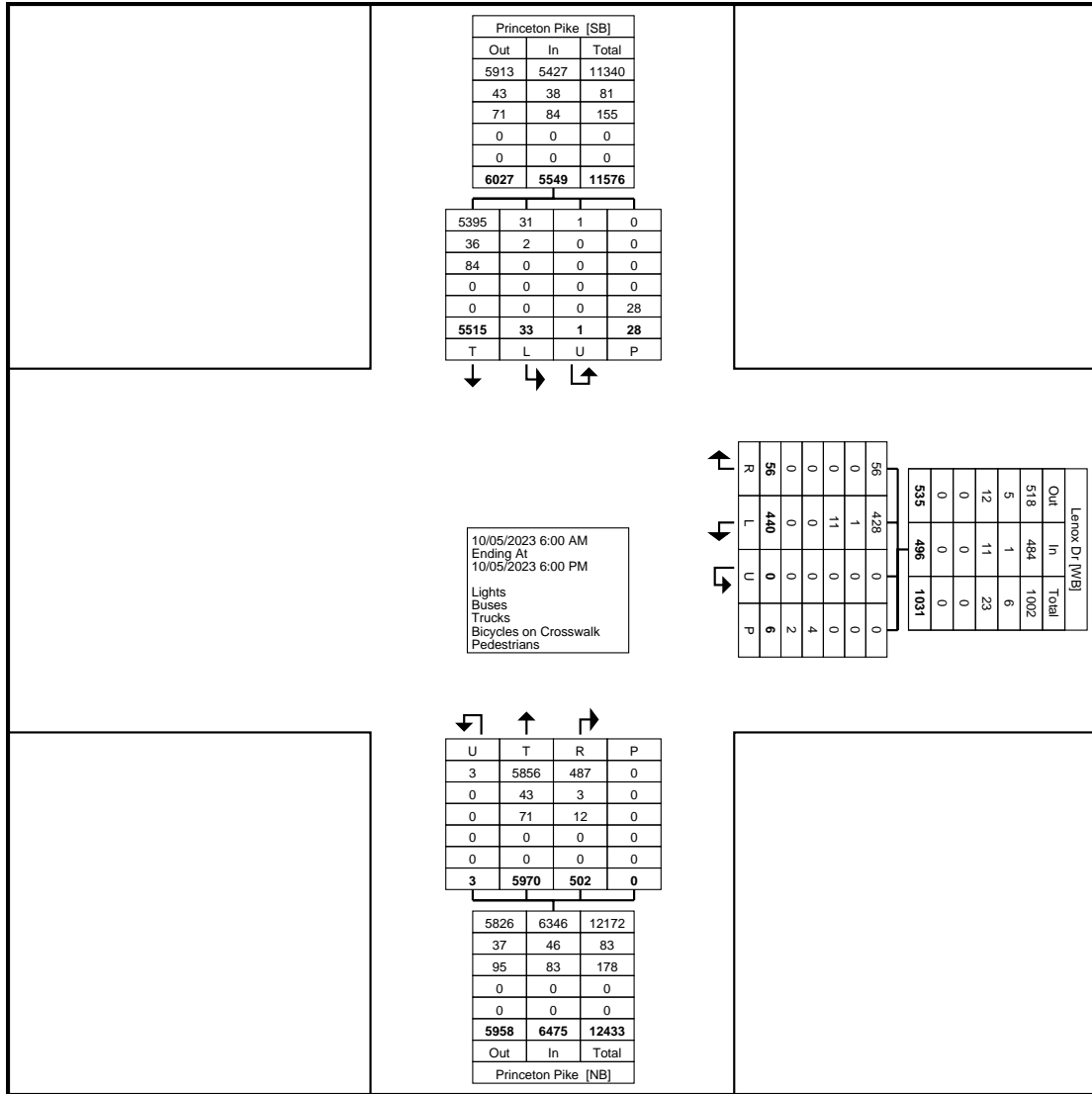
Coatesville, Pennsylvania, United States 19320
610-466-1469
Serving Transportation Professionals Since 1995

Lawrence Twp, NJ
Princeton Pike & Lenox Dr
Thursday, October 5, 2023
Location: 40.290032, -
74.709914

Count Name: Princeton Pike &
Lenox Dr
Site Code:
Start Date: 10/05/2023
Page No: 1

Turning Movement Data

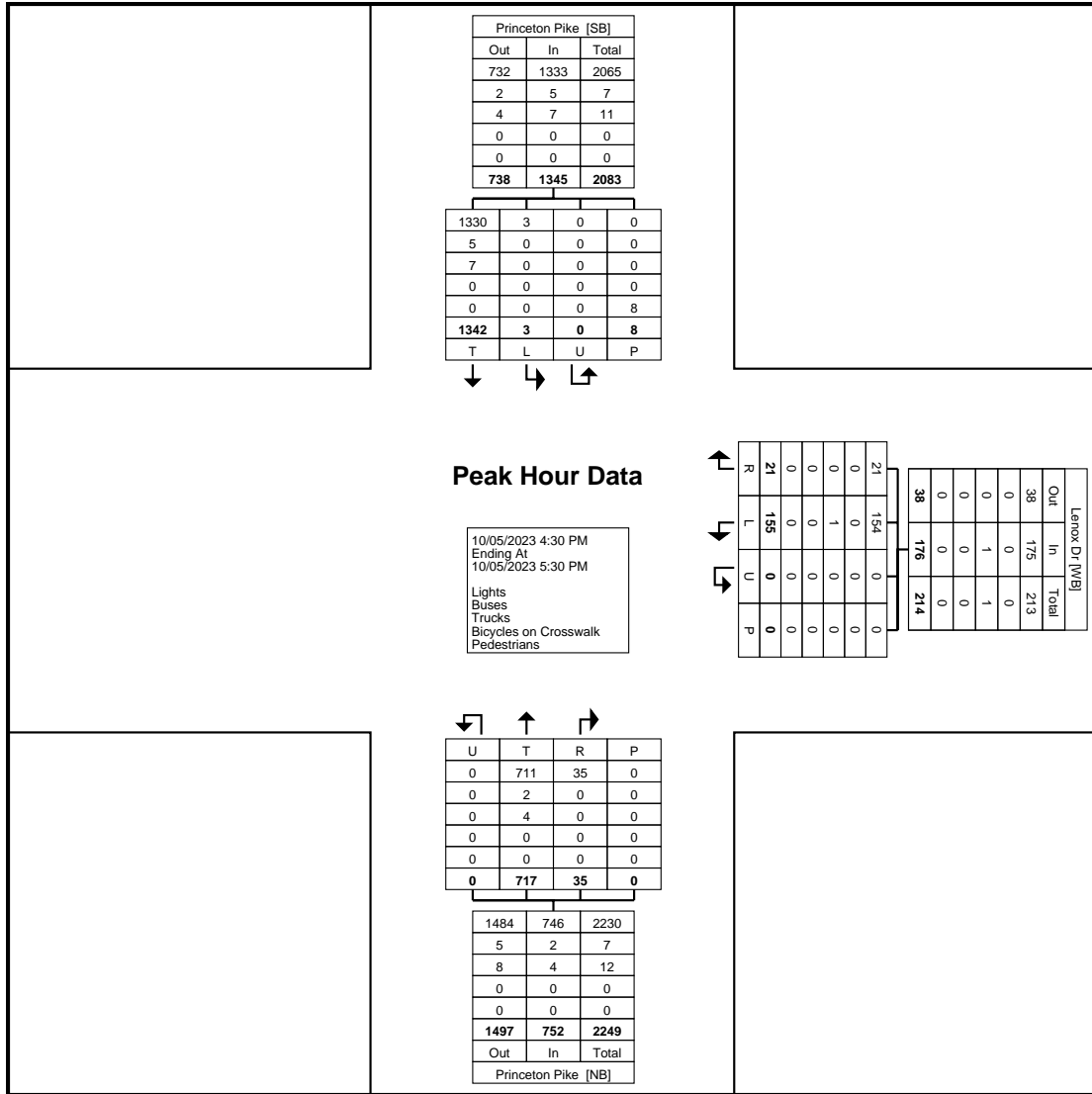
Start Time	Lenox Dr Westbound						Princeton Pike Northbound						Princeton Pike Southbound					Int. Total
	Left	Right	Right on Red	U-Turn	Peds	App. Total	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
6:00 AM	2	0	0	0	0	2	91	4	0	1	0	96	0	35	0	0	35	133
6:15 AM	1	0	0	0	0	1	189	3	0	0	0	192	0	24	0	0	24	217
6:30 AM	1	0	0	0	0	1	245	7	0	0	0	252	1	47	0	0	48	301
6:45 AM	2	0	0	0	1	2	273	21	0	0	0	294	1	44	0	2	45	341
Hourly Total	6	0	0	0	1	6	798	35	0	1	0	834	2	150	0	2	152	992
7:00 AM	1	0	1	0	1	2	281	14	0	0	0	295	0	66	0	0	66	363
7:15 AM	2	1	0	0	1	3	326	19	0	0	0	345	1	95	0	0	96	444
7:30 AM	1	1	1	0	2	3	332	23	0	0	0	355	1	97	1	0	99	457
7:45 AM	5	0	0	0	0	5	354	40	3	0	0	397	2	135	0	0	137	539
Hourly Total	9	2	2	0	4	13	1293	96	3	0	0	1392	4	393	1	0	398	1803
8:00 AM	11	0	0	0	0	11	322	42	5	0	0	369	1	128	0	0	129	509
8:15 AM	7	0	0	0	0	7	334	43	14	0	0	391	5	165	0	0	170	568
8:30 AM	9	0	0	0	0	9	332	42	11	0	0	385	5	132	0	0	137	531
8:45 AM	9	0	0	0	0	9	334	51	8	0	0	393	4	143	0	0	147	549
Hourly Total	36	0	0	0	0	36	1322	178	38	0	0	1538	15	568	0	0	583	2157
9:00 AM	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
2:00 PM	9	1	1	0	0	11	107	13	1	0	0	121	0	138	0	0	138	270
2:15 PM	14	2	0	0	0	16	138	4	3	0	0	145	3	190	0	1	193	354
2:30 PM	8	4	1	0	1	13	148	12	1	0	0	161	2	203	0	1	205	379
2:45 PM	14	1	2	0	0	17	156	8	4	0	0	168	0	247	0	0	247	432
Hourly Total	45	8	4	0	1	57	549	37	9	0	0	595	5	778	0	2	783	1435
3:00 PM	16	0	2	0	0	18	169	7	0	0	0	176	0	280	0	1	280	474
3:15 PM	13	1	2	0	0	16	195	8	0	0	0	203	0	255	0	1	255	474
3:30 PM	29	0	2	0	0	31	149	8	2	1	0	160	1	299	0	0	300	491
3:45 PM	23	1	2	0	0	26	140	8	0	0	0	148	1	288	0	4	289	463
Hourly Total	81	2	8	0	0	91	653	31	2	1	0	687	2	1122	0	6	1124	1902
4:00 PM	31	1	1	0	0	33	149	5	0	0	0	154	0	315	0	7	315	502
4:15 PM	30	0	0	0	0	30	166	7	7	0	0	180	0	272	0	3	272	482
4:30 PM	31	2	1	0	0	34	165	6	2	0	0	173	0	304	0	2	304	511
4:45 PM	32	3	4	0	0	39	174	4	2	0	0	180	1	352	0	5	353	572
Hourly Total	124	6	6	0	0	136	654	22	11	0	0	687	1	1243	0	17	1244	2067
5:00 PM	56	3	4	0	0	63	195	7	0	0	0	202	0	344	0	1	344	609
5:15 PM	36	0	4	0	0	40	183	12	2	0	0	197	2	342	0	0	344	581
5:30 PM	22	2	1	0	0	25	171	10	0	0	0	181	1	292	0	0	293	499
5:45 PM	25	0	4	0	0	29	152	9	0	1	0	162	1	283	0	0	284	475
Hourly Total	139	5	13	0	0	157	701	38	2	1	0	742	4	1261	0	1	1265	2164
Grand Total	440	23	33	0	6	496	5970	437	65	3	0	6475	33	5515	1	28	5549	12520
Approach %	88.7	4.6	6.7	0.0	-	-	92.2	6.7	1.0	0.0	-	-	0.6	99.4	0.0	-	-	-
Total %	3.5	0.2	0.3	0.0	-	4.0	47.7	3.5	0.5	0.0	-	51.7	0.3	44.0	0.0	-	44.3	-
Lights	428	23	33	0	-	484	5856	426	61	3	-	6346	31	5395	1	-	5427	12257
% Lights	97.3	100.0	100.0	-	-	97.6	98.1	97.5	93.8	100.0	-	98.0	93.9	97.8	100.0	-	97.8	97.9
Buses	1	0	0	0	-	1	43	3	0	0	-	46	2	36	0	-	38	85
% Buses	0.2	0.0	0.0	-	-	0.2	0.7	0.7	0.0	0.0	-	0.7	6.1	0.7	0.0	-	0.7	0.7
Trucks	11	0	0	0	-	11	71	8	4	0	-	83	0	84	0	-	84	178
% Trucks	2.5	0.0	0.0	-	-	2.2	1.2	1.8	6.2	0.0	-	1.3	0.0	1.5	0.0	-	1.5	1.4
Bicycles on Crosswalk	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	66.7	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	28	-	-
% Pedestrians	-	-	-	-	33.3	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Data Plot

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Lenox Dr Westbound						Princeton Pike Northbound						Princeton Pike Southbound					Int. Total
	Left	Right	Right on Red	U-Turn	Peds	App. Total	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	
4:30 PM	31	2	1	0	0	34	165	6	2	0	0	173	0	304	0	2	304	511
4:45 PM	32	3	4	0	0	39	174	4	2	0	0	180	1	352	0	5	353	572
5:00 PM	56	3	4	0	0	63	195	7	0	0	0	202	0	344	0	1	344	609
5:15 PM	36	0	4	0	0	40	183	12	2	0	0	197	2	342	0	0	344	581
Total	155	8	13	0	0	176	717	29	6	0	0	752	3	1342	0	8	1345	2273
Approach %	88.1	4.5	7.4	0.0	-	-	95.3	3.9	0.8	0.0	-	-	0.2	99.8	0.0	-	-	-
Total %	6.8	0.4	0.6	0.0	-	7.7	31.5	1.3	0.3	0.0	-	33.1	0.1	59.0	0.0	-	59.2	-
PHF	0.692	0.667	0.813	0.000	-	0.698	0.919	0.604	0.750	0.000	-	0.931	0.375	0.953	0.000	-	0.953	0.933
Lights	154	8	13	0	-	175	711	29	6	0	-	746	3	1330	0	-	1333	2254
% Lights	99.4	100.0	100.0	-	-	99.4	99.2	100.0	100.0	-	-	99.2	100.0	99.1	-	-	99.1	99.2
Buses	0	0	0	0	-	0	2	0	0	0	-	2	0	5	0	-	5	7
% Buses	0.0	0.0	0.0	-	-	0.0	0.3	0.0	0.0	-	-	0.3	0.0	0.4	-	-	0.4	0.3
Trucks	1	0	0	0	-	1	4	0	0	0	-	4	0	7	0	-	7	12
% Trucks	0.6	0.0	0.0	-	-	0.6	0.6	0.0	0.0	-	-	0.5	0.0	0.5	-	-	0.5	0.5
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	8	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



Turning Movement Peak Hour Data Plot (4:30 PM)



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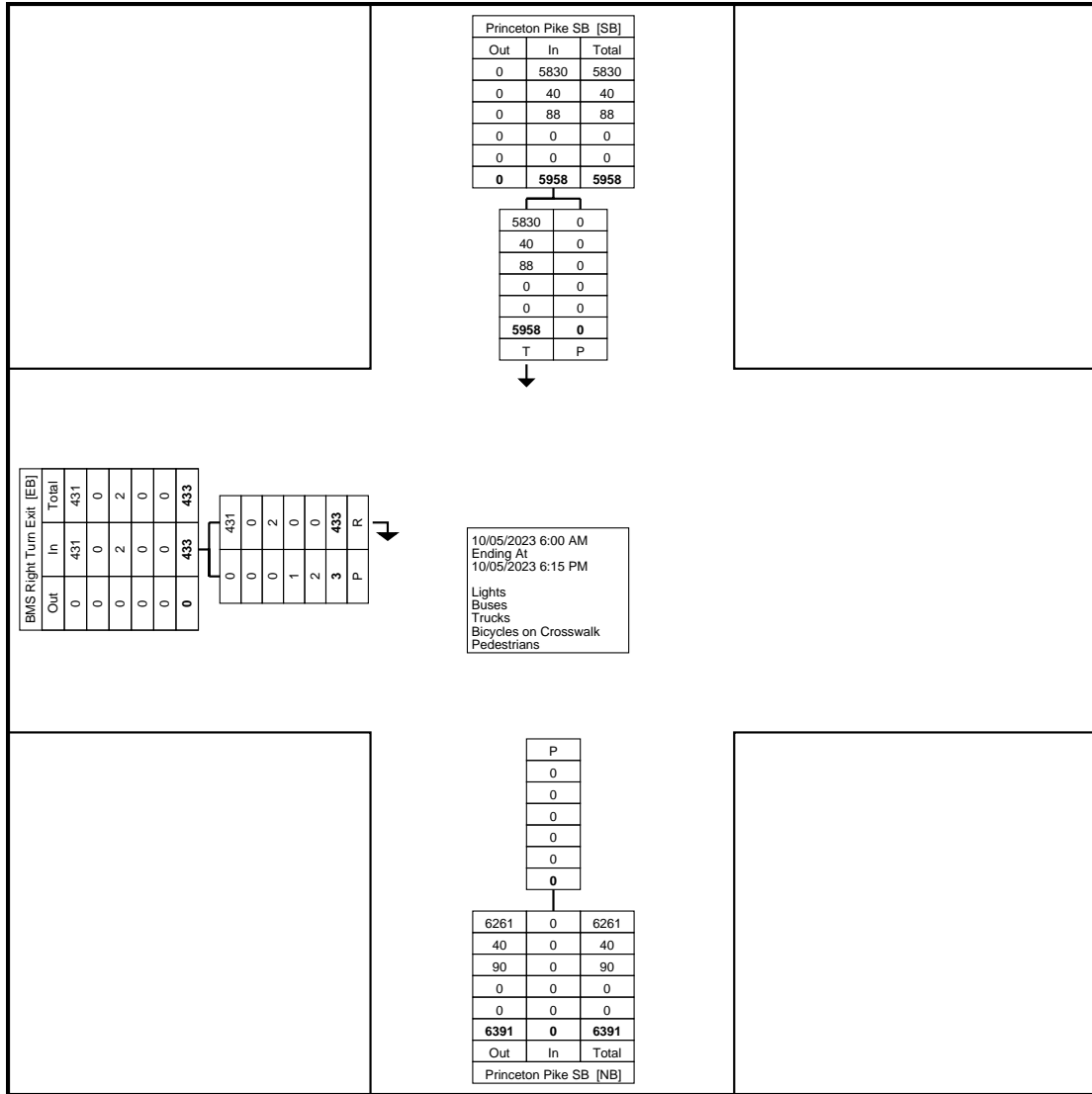
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Lawrence Twp, NJ
Princeton Pike SB & BMS Right
Turn Exit
Thursday, October 5, 2023
Location: 40.289728, -
74.710389

Count Name: Princeton Pike SB
& BMS Right Turn Exit
Site Code:
Start Date: 10/05/2023
Page No: 1

Turning Movement Data

Start Time	BMS Right Turn Exit Eastbound			Princeton Pike SB Northbound		Princeton Pike SB Southbound			Int. Total
	Right	Peds	App. Total	Peds	App. Total	Thru	Peds	App. Total	
6:00 AM	0	0	0	0	0	30	0	30	30
6:15 AM	2	0	2	0	0	23	0	23	25
6:30 AM	0	0	0	0	0	48	0	48	48
6:45 AM	0	0	0	0	0	47	0	47	47
Hourly Total	2	0	2	0	0	148	0	148	150
7:00 AM	3	0	3	0	0	67	0	67	70
7:15 AM	1	0	1	0	0	97	0	97	98
7:30 AM	1	0	1	0	0	97	0	97	98
7:45 AM	1	0	1	0	0	142	0	142	143
Hourly Total	6	0	6	0	0	403	0	403	409
8:00 AM	0	0	0	0	0	142	0	142	142
8:15 AM	0	0	0	0	0	169	0	169	169
8:30 AM	0	2	0	0	0	140	0	140	140
8:45 AM	2	0	2	0	0	151	0	151	153
Hourly Total	2	2	2	0	0	602	0	602	604
9:00 AM	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0
2:00 PM	12	0	12	0	0	146	0	146	158
2:15 PM	7	0	7	0	0	205	0	205	212
2:30 PM	12	0	12	0	0	211	0	211	223
2:45 PM	12	0	12	0	0	259	0	259	271
Hourly Total	43	0	43	0	0	821	0	821	864
3:00 PM	23	0	23	0	0	299	0	299	322
3:15 PM	26	0	26	0	0	269	0	269	295
3:30 PM	27	1	27	0	0	327	0	327	354
3:45 PM	22	0	22	0	0	318	0	318	340
Hourly Total	98	1	98	0	0	1213	0	1213	1311
4:00 PM	24	0	24	0	0	343	0	343	367
4:15 PM	32	0	32	0	0	306	0	306	338
4:30 PM	37	0	37	0	0	336	0	336	373
4:45 PM	54	0	54	0	0	384	0	384	438
Hourly Total	147	0	147	0	0	1369	0	1369	1516
5:00 PM	55	0	55	0	0	399	0	399	454
5:15 PM	38	0	38	0	0	380	0	380	418
5:30 PM	24	0	24	0	0	314	0	314	338
5:45 PM	18	0	18	0	0	309	0	309	327
Hourly Total	135	0	135	0	0	1402	0	1402	1537
6:00 PM	0	0	0	0	0	0	0	0	0
Grand Total	433	3	433	0	0	5958	0	5958	6391
Approach %	100.0	-	-	-	-	100.0	-	-	-
Total %	6.8	-	6.8	-	0.0	93.2	-	93.2	-
Lights	431	-	431	-	0	5830	-	5830	6261
% Lights	99.5	-	99.5	-	-	97.9	-	97.9	98.0
Buses	0	-	0	-	0	40	-	40	40
% Buses	0.0	-	0.0	-	-	0.7	-	0.7	0.6
Trucks	2	-	2	-	0	88	-	88	90
% Trucks	0.5	-	0.5	-	-	1.5	-	1.5	1.4
Bicycles on Crosswalk	-	1	-	0	-	-	0	-	-
% Bicycles on Crosswalk	-	33.3	-	-	-	-	-	-	-
Pedestrians	-	2	-	0	-	-	0	-	-
% Pedestrians	-	66.7	-	-	-	-	-	-	-



Turning Movement Data Plot



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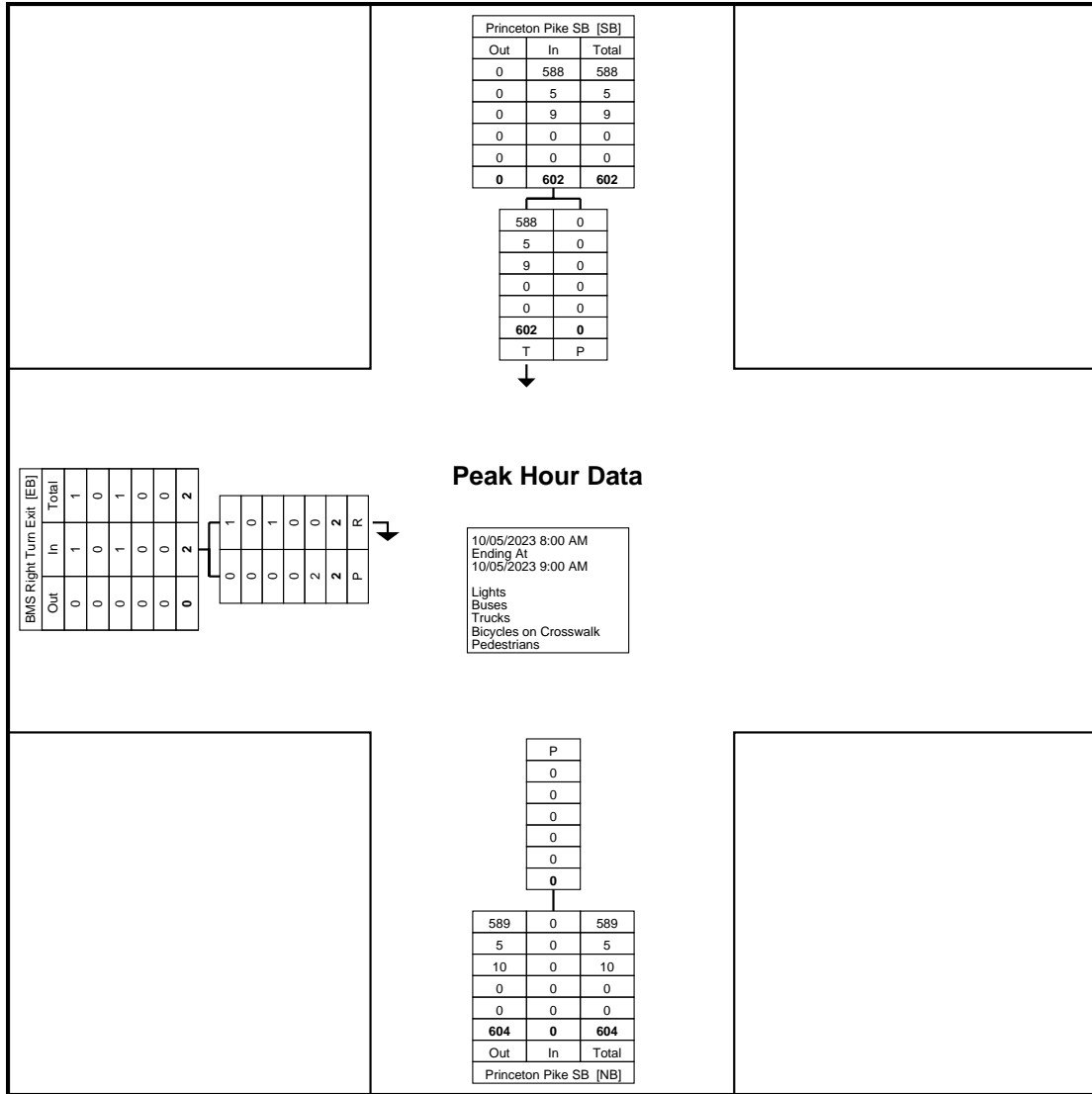
Lawrence Twp, NJ
Princeton Pike SB & BMS Right
Turn Exit
Thursday, October 5, 2023
Location: 40.289728, -
74.710389

Count Name: Princeton Pike SB
& BMS Right Turn Exit
Site Code:
Start Date: 10/05/2023
Page No: 3

Turning Movement Peak Hour Data (8:00 AM)

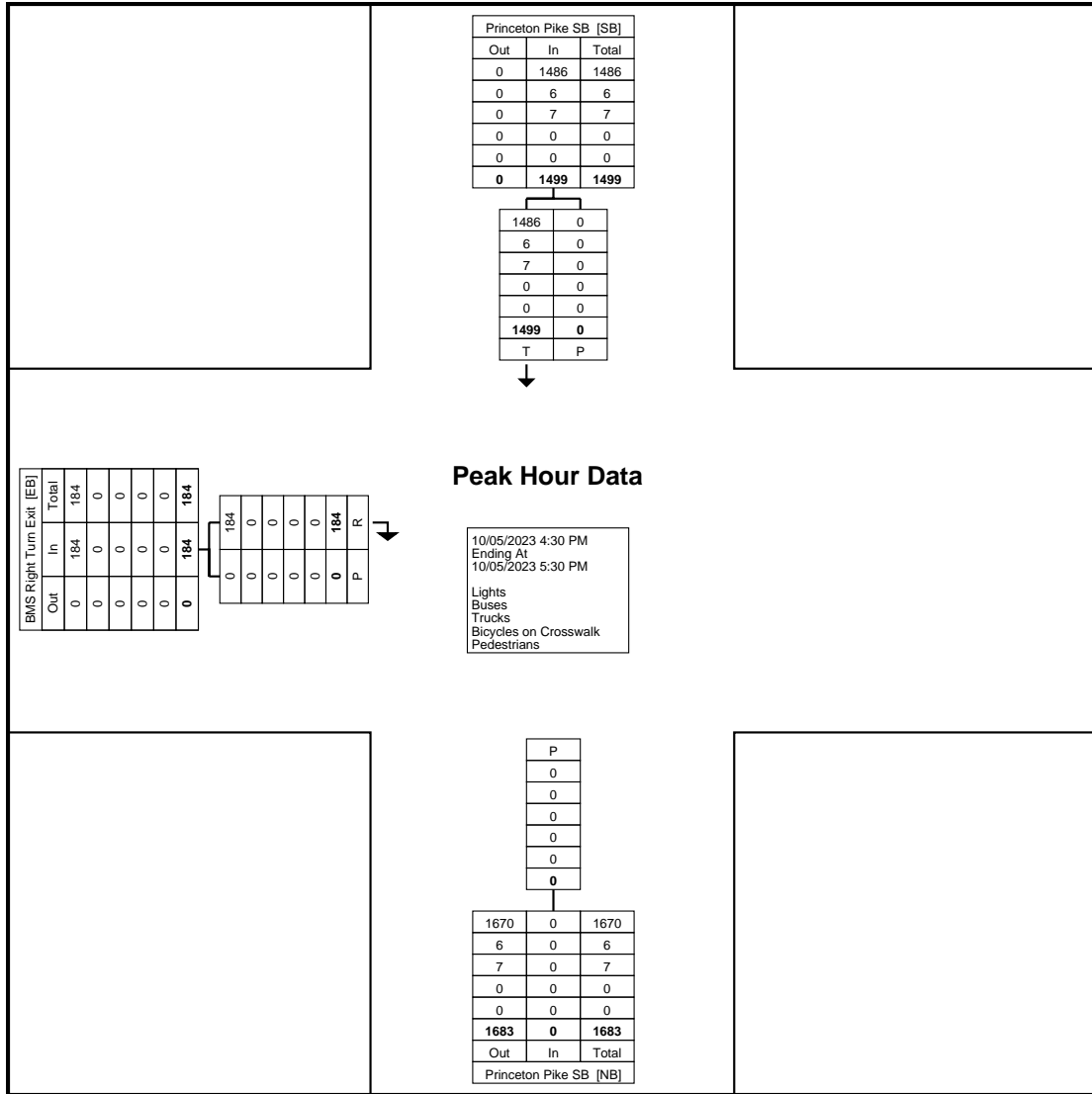
Start Time	BMS Right Turn Exit Eastbound			Princeton Pike SB Northbound		Princeton Pike SB Southbound			Int. Total
	Right	Peds	App. Total	Peds	App. Total	Thru	Peds	App. Total	
8:00 AM	0	0	0	0	0	142	0	142	142
8:15 AM	0	0	0	0	0	169	0	169	169
8:30 AM	0	2	0	0	0	140	0	140	140
8:45 AM	2	0	2	0	0	151	0	151	153
Total	2	2	2	0	0	602	0	602	604
Approach %	100.0	-	-	-	-	100.0	-	-	-
Total %	0.3	-	0.3	-	0.0	99.7	-	99.7	-
PHF	0.250	-	0.250	-	0.000	0.891	-	0.891	0.893
Lights	1	-	1	-	0	588	-	588	589
% Lights	50.0	-	50.0	-	-	97.7	-	97.7	97.5
Buses	0	-	0	-	0	5	-	5	5
% Buses	0.0	-	0.0	-	-	0.8	-	0.8	0.8
Trucks	1	-	1	-	0	9	-	9	10
% Trucks	50.0	-	50.0	-	-	1.5	-	1.5	1.7
Bicycles on Crosswalk	-	0	-	0	-	-	0	-	-
% Bicycles on Crosswalk	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	2	-	0	-	-	0	-	-
% Pedestrians	-	100.0	-	-	-	-	-	-	-

Lawrence Twp, NJ
Princeton Pike SB & BMS Right
Turn Exit
Thursday, October 5, 2023
Location: 40.289728, -
74.710389



Turning Movement Peak Hour Data Plot (8:00 AM)

Lawrence Twp, NJ
Princeton Pike SB & BMS Right
Turn Exit
Thursday, October 5, 2023
Location: 40.289728, -
74.710389



Turning Movement Peak Hour Data Plot (4:30 PM)



Lawrence Twp, NJ
 Princeton Pike NB & I295 NB Off
 Ramp
 Thursday, October 5, 2023
 Location: 40.288977, -
 74.710686

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 184 Baker Rd

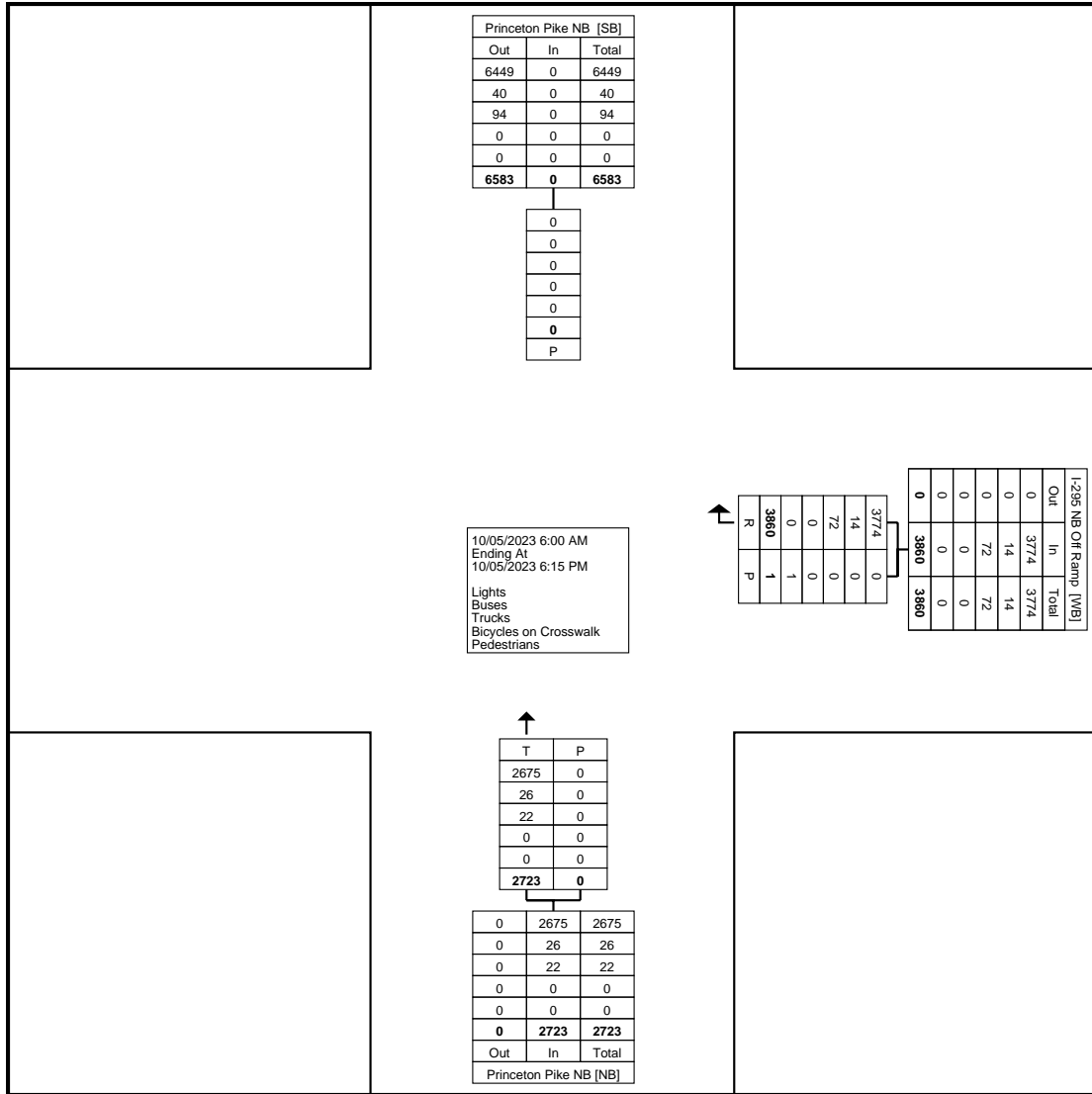
Coatesville, Pennsylvania, United States 19320
 610-466-1469
 Serving Transportation Professionals Since 1995

Count Name: Princeton Pike NB
 & I-295 NB Off Ramp
 Site Code:
 Start Date: 10/05/2023
 Page No: 1

Turning Movement Data

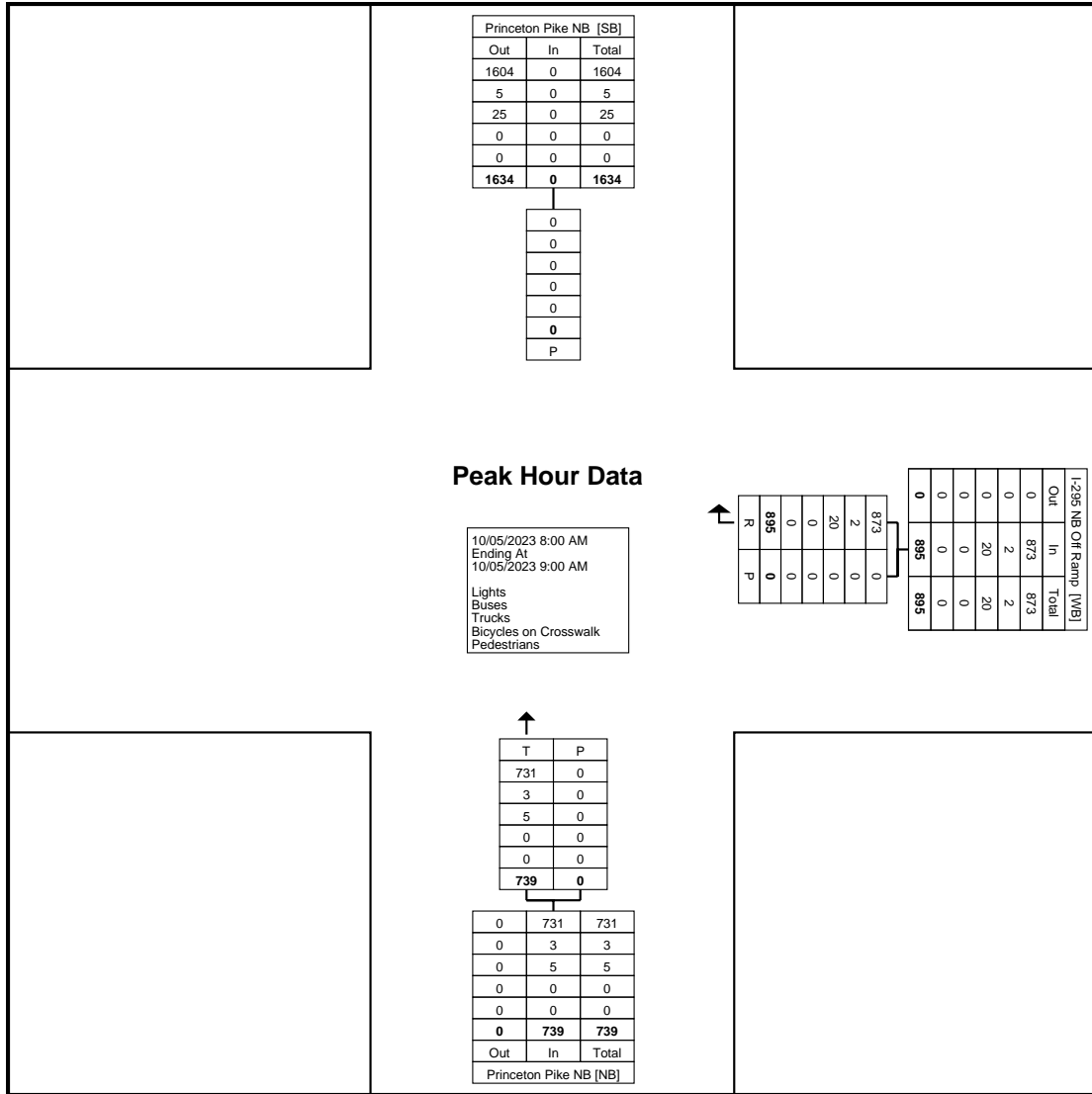
Start Time	I-295 NB Off Ramp Westbound			Princeton Pike NB Northbound			Princeton Pike NB Southbound		Int. Total
	Right	Peds	App. Total	Thru	Peds	App. Total	Peds	App. Total	
6:00 AM	68	0	68	28	0	28	0	0	96
6:15 AM	147	0	147	49	0	49	0	0	196
6:30 AM	183	0	183	66	0	66	0	0	249
6:45 AM	200	0	200	90	0	90	0	0	290
Hourly Total	598	0	598	233	0	233	0	0	831
7:00 AM	227	0	227	69	0	69	0	0	296
7:15 AM	228	0	228	121	0	121	0	0	349
7:30 AM	208	1	208	152	0	152	0	0	360
7:45 AM	249	0	249	154	0	154	0	0	403
Hourly Total	912	1	912	496	0	496	0	0	1408
8:00 AM	209	0	209	178	0	178	0	0	387
8:15 AM	205	0	205	204	0	204	0	0	409
8:30 AM	228	0	228	189	0	189	0	0	417
8:45 AM	253	0	253	168	0	168	0	0	421
Hourly Total	895	0	895	739	0	739	0	0	1634
9:00 AM	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0
2:00 PM	59	0	59	63	0	63	0	0	122
2:15 PM	72	0	72	71	0	71	0	0	143
2:30 PM	91	0	91	69	0	69	0	0	160
2:45 PM	99	0	99	71	0	71	0	0	170
Hourly Total	321	0	321	274	0	274	0	0	595
3:00 PM	99	0	99	78	0	78	0	0	177
3:15 PM	116	0	116	92	0	92	0	0	208
3:30 PM	82	0	82	84	0	84	0	0	166
3:45 PM	73	0	73	71	0	71	0	0	144
Hourly Total	370	0	370	325	0	325	0	0	695
4:00 PM	78	0	78	80	0	80	0	0	158
4:15 PM	92	0	92	85	0	85	0	0	177
4:30 PM	96	0	96	80	0	80	0	0	176
4:45 PM	90	0	90	74	0	74	0	0	164
Hourly Total	356	0	356	319	0	319	0	0	675
5:00 PM	109	0	109	97	0	97	0	0	206
5:15 PM	109	0	109	85	0	85	0	0	194
5:30 PM	103	0	103	82	0	82	0	0	185
5:45 PM	87	0	87	73	0	73	0	0	160
Hourly Total	408	0	408	337	0	337	0	0	745
6:00 PM	0	0	0	0	0	0	0	0	0
Grand Total	3860	1	3860	2723	0	2723	0	0	6583
Approach %	100.0	-	-	100.0	-	-	-	-	-
Total %	58.6	-	58.6	41.4	-	41.4	-	0.0	-
Lights	3774	-	3774	2675	-	2675	-	0	6449
% Lights	97.8	-	97.8	98.2	-	98.2	-	-	98.0
Buses	14	-	14	26	-	26	-	0	40
% Buses	0.4	-	0.4	1.0	-	1.0	-	-	0.6
Trucks	72	-	72	22	-	22	-	0	94
% Trucks	1.9	-	1.9	0.8	-	0.8	-	-	1.4
Bicycles on Crosswalk	-	0	-	-	0	-	0	-	-
% Bicycles on Crosswalk	-	0.0	-	-	-	-	-	-	-
Pedestrians	-	1	-	-	0	-	0	-	-
% Pedestrians	-	100.0	-	-	-	-	-	-	-

Lawrence Twp, NJ
Princeton Pike NB & I295 NB Off
Ramp
Thursday, October 5, 2023
Location: 40.288977, -
74.710686



Turning Movement Data Plot

Lawrence Twp, NJ
Princeton Pike NB & I295 NB Off
Ramp
Thursday, October 5, 2023
Location: 40.288977, -
74.710686



Turning Movement Peak Hour Data Plot (8:00 AM)

Princeton Pike NB & I-295 NB Off Ramp - TMC

Thu Oct 5, 2023

Forced Peak (4:30 PM - 5:30 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1117289, Location: 40.288977, -74.710686



Provided by: Tri-State Traffic Data, Inc.
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Leg Direction	I-295 NB Off Ramp Westbound			Princeton Pike NB Northbound			Princeton Pike NB Southbound		Int	
	R	App	Ped*	T	App	Ped*	App	Ped*		
Time										
	2023-10-05 4:30PM	96	96	0	80	80	0	0	0	176
	4:45PM	90	90	0	74	74	0	0	0	164
	5:00PM	109	109	0	97	97	0	0	0	206
	5:15PM	109	109	0	85	85	0	0	0	194
	Total	404	404	0	336	336	0	0	0	740
	% Approach	100%	-	-	100%	-	-	-	-	-
	% Total	54.6%	54.6%	-	45.4%	45.4%	-	0%	-	-
	PHF	0.927	0.927	-	0.866	0.866	-	-	-	0.898
	Lights	400	400	-	335	335	-	0	-	735
	% Lights	99.0%	99.0%	-	99.7%	99.7%	-	-	-	99.3%
	Articulated Trucks and Single-Unit Trucks	3	3	-	1	1	-	0	-	4
	% Articulated Trucks and Single-Unit Trucks	0.7%	0.7%	-	0.3%	0.3%	-	-	-	0.5%
	Buses	1	1	-	0	0	-	0	-	1
	% Buses	0.2%	0.2%	-	0%	0%	-	-	-	0.1%
	Pedestrians	-	-	0	-	-	0	-	0	
	% Pedestrians	-	-	-	-	-	-	-	-	-
	Bicycles on Crosswalk	-	-	0	-	-	0	-	0	
	% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. R: Right, T: Thru

Princeton Pike NB & I-295 NB Off Ramp - TMC

Thu Oct 5, 2023

Forced Peak (4:30 PM - 5:30 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1117289, Location: 40.288977, -74.710686

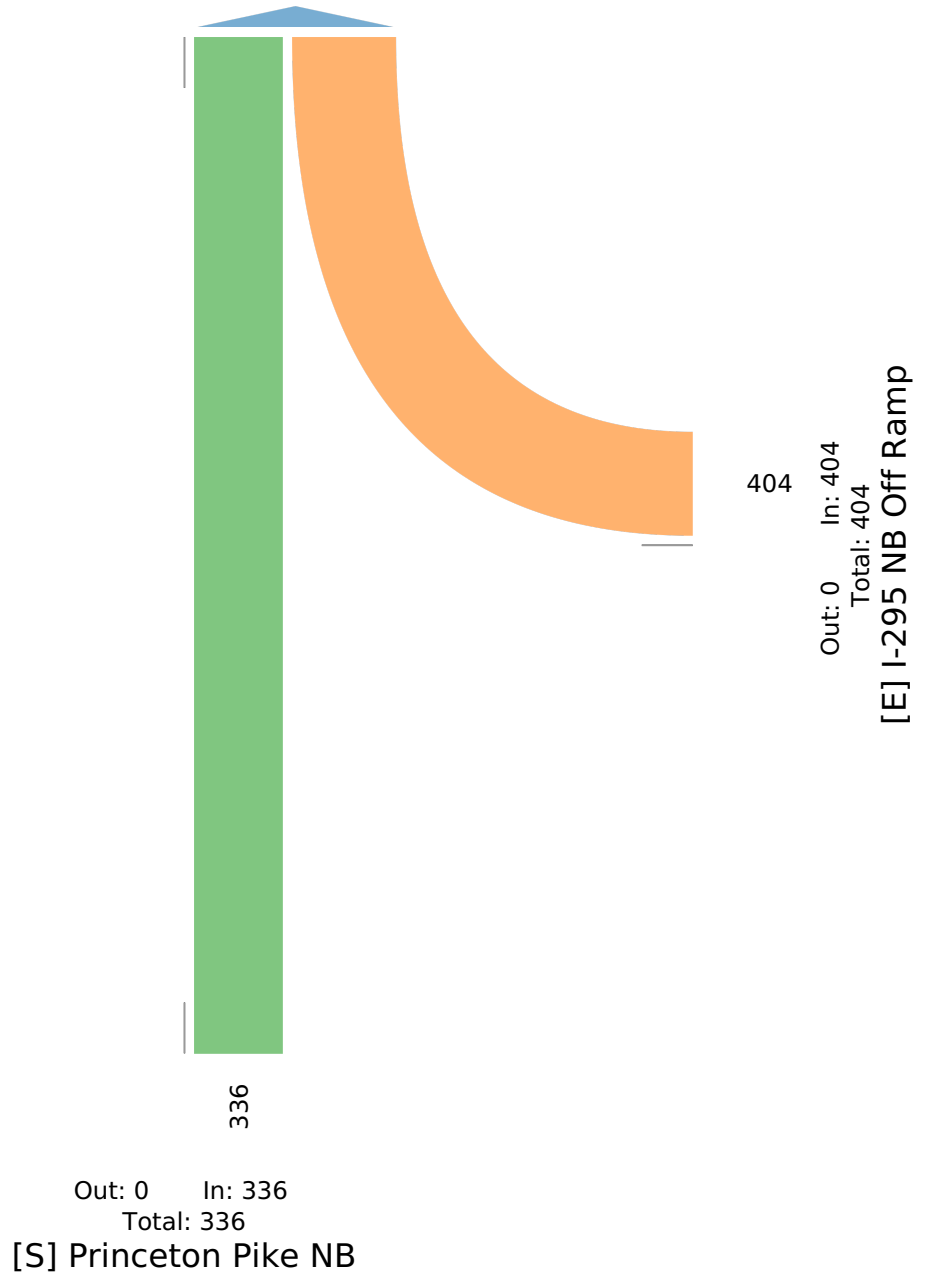


Provided by: Tri-State Traffic Data, Inc.

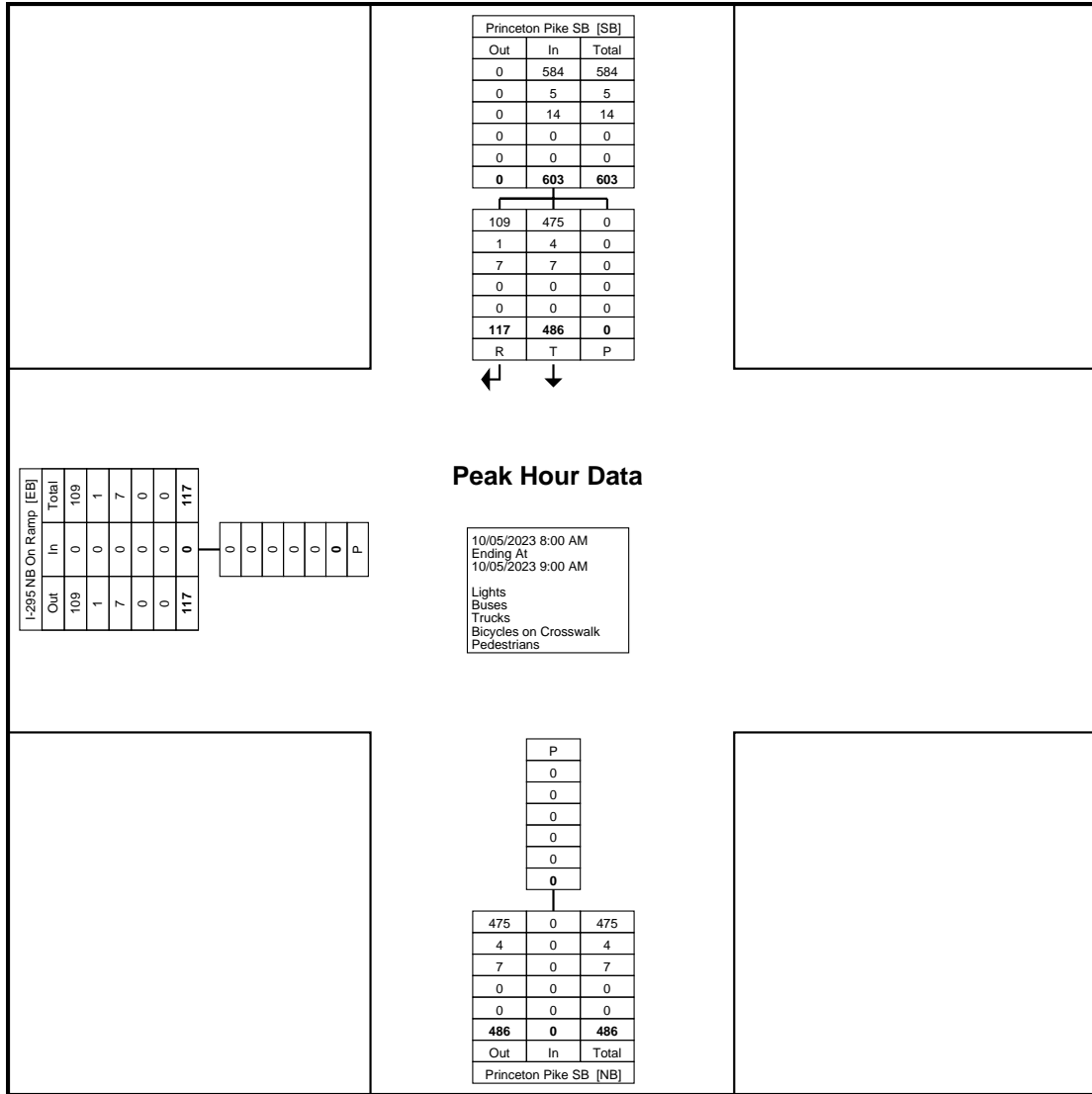
184 Baker Road,
Coatesville, PA, 19320, US

[N] Princeton Pike NB

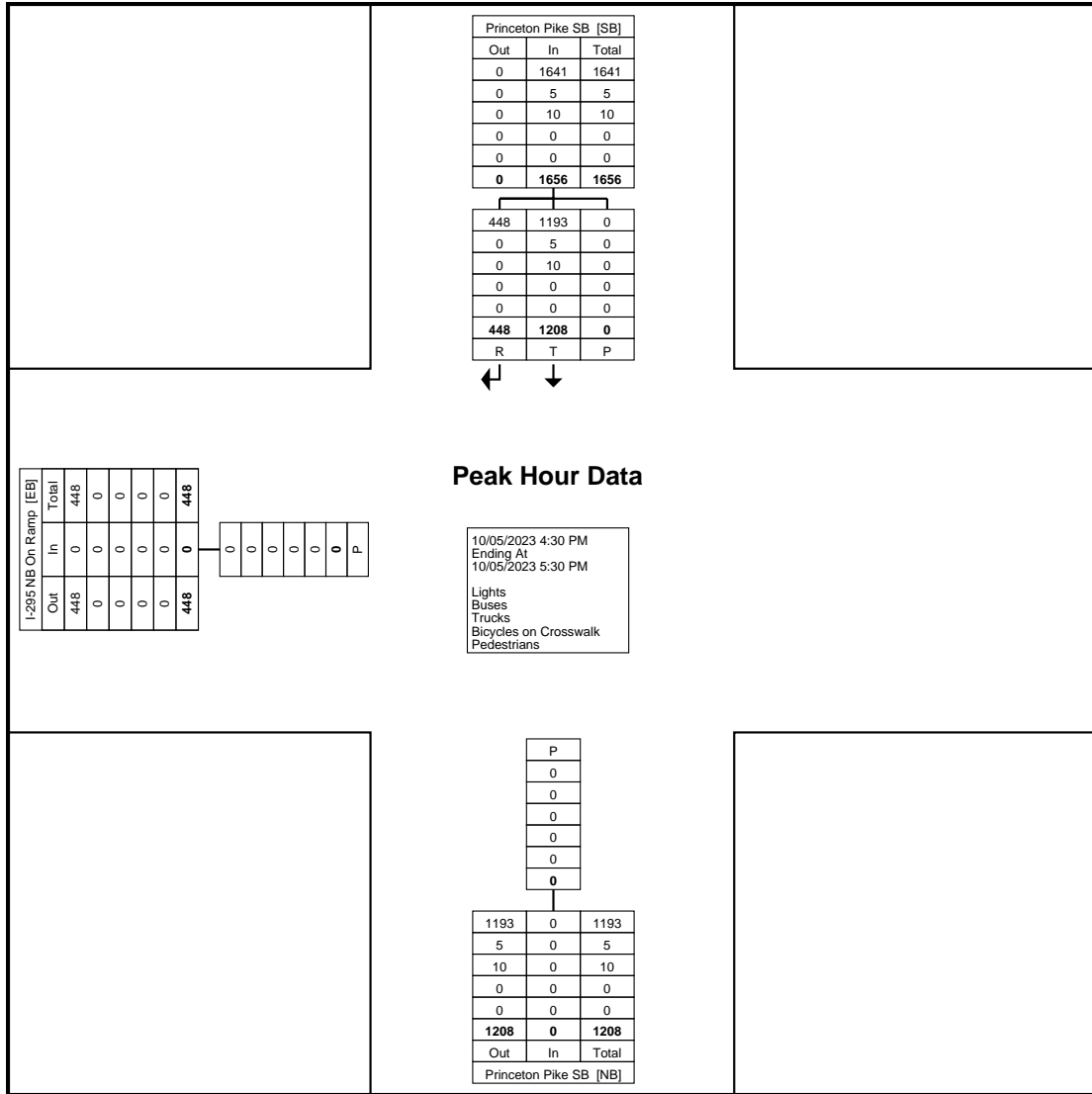
Total: 740
In: 0 Out: 740



Lawrence Twp, NJ
Princeton Pike SB & I295 NB On
Ramp
Thursday, October 5, 2023
Location: 40.287703, -
74.711883



Turning Movement Peak Hour Data Plot (8:00 AM)



Turning Movement Peak Hour Data Plot (4:30 PM)

APPENDIX C
TIMING DIRECTIVES

VEHICLE ACTUATION

INDICATIONS

Phase	Route and Cross Street	1,2	3,4,5	6,7	8,9,10	11 - 17	P1, P2, P5, P6	P3, P4	TIME (SEC) I	TIME (SEC) II	TIME (SEC) III
A.	Princeton Pike (C.R. 583) Lead Lefts Change Clearance	<G- <Y- <R-	R R R	<G- <Y- <R-	R R R	R R R	DW DW DW	DW DW DW	8-34 3 2	5-10 3 2	5-15 3 2
B.	Princeton Pike (C.R. 583) R.O.W. Pedestrian Clearance Change Clearance	<R- <R- <R- <R-	G G Y R	<R- <R- <R- <R-	G G Y R	R R R R	W FDW DW DW	DW DW DW DW	72-38 16 5 2	75-35 16 5 2	45-27 16 5 2
C.	Lenox Drive North/BMS Drive R.O.W Change Clearance	<R- <R- <R-	R R R	<R- <R- <R-	R R R	G Y R	DW DW DW	DW DW DW	7-15 3 2	7-42 3 2	7-15 3 2
EMERGENCY FLASH		<R-	Y	<R-	Y	R	DARK	DARK	-	-	-
OFFSET (Note 10)									22	107	31
BACKGROUND CYCLE									120	120	90

NOTES:

1. The memory circuits are to be disconnected.
2. The vehicle extension shall be set at 2 seconds.
3. The manual control is to be disconnected.
4. The controller shall rest in Phase B.
5. Phase B shall always follow Phase A.
6. All presence detection is to have a delay of 3 seconds.
7. The controller shall have the capability of skipping Phases A and C.
8. The Princeton Pike Lead left turn lanes (Phase A) are to be separate phases but concurrently timed if actuation occurs on both movements. Each left turn lane to have the capability of terminating or extending independently of each other, thereby reverting the timing to the non-conflicting Phase B through Movement.
9. Timing Schedule I operates: 6:00 AM – 10:00 AM (Monday to Friday)
 Timing Schedule II operates: 3:00 PM – 7:00 PM (Monday to Friday)
 Timing Schedule III operates: All other times
10. An offset is to be measured from the beginning of yellow to Princeton Pike R.O.W (Phase C) to the beginning of yellow to Princeton Pike R.O.W. (Phase C) at Lenox Drive South.

Directive # _____
 Lenox Drive North/Bristol-Myers Squibb Drive & Princeton Pike (C.R. 583)
 Lawrenceville, Mercer County
 130042803
 April 21, 2015

INDICATIONS

WITH PEDESTRIAN ACTUATION

Phase	Route and Cross Street	1,2	3,4,5	6,7	8,9,10	11 - 17	P1, P2, P5, P6	P3, P4	TIME (SEC) I	TIME (SEC) II	TIME (SEC) III
A.	Princeton Pike (C.R. 583) Lead Lefts Change Clearance	<G- <Y- <R-	R R R	<G- <Y- <R-	R R R	R R R	DW DW DW	DW DW DW	8-34 3 2	5-10 3 2	5-15 3 2
B.	Princeton Pike (C.R. 583) R.O.W. Pedestrian Clearance Change Clearance	<R- <R- <R- <R-	G G Y R	<R- <R- <R- <R-	G G Y R	R R R R	W FDW DW DW	DW DW DW DW	48-22 16 5 2	51-35 16 5 2	21-11 16 5 2
C.	Lenox Drive North/BMS Drive R.O.W. Pedestrian Clearance Change Clearance	<R- <R- <R- <R-	R R R R	<R- <R- <R- <R-	R R R R	G G Y R	DW DW DW DW	W FDW DW DW	5 26 3 2	5-16 26 3 2	5 26 3 2
EMERGENCY FLASH		<R-	Y	<R-	Y	R	DARK	DARK	-	-	-
OFFSET									22	107	31
BACKGROUND CYCLE									120	120	90

VEHICLE ACTUATION

Phase	Route and Cross Street	INDICATIONS										
		1,2,3	4,5,6	7,8,9	10,11,12	13,14	P1, P2	P3 – P6	TIME (SEC) I	TIME (SEC) II	TIME (SEC) III	
A.	Princeton Pike (C.R. 583) SB Lead Change Clearance	R	<G-	G	R	R/-G>	DW	DW	5-12	5-12	5-10	
		R	<Y-	G	R	R/-Y>	DW	DW	3	3	3	
		R	<R-	G	R	R	DW	DW	2	2	2	
B.	Princeton Pike (C.R. 583) R.O.W. Pedestrian Clearance Change Clearance	G	<R-	G	R	R	W	DW	68-53	68-34	38-20	
		G	<R-	G	R	R	FDW	DW	21	21	21	
		Y	<R-	Y	R	R	DW	DW	5	5	5	
		R	<R-	R	R	R	DW	DW	2	2	2	
C.	Lenox Drive South R.O.W. Change Clearance	R	<R-	R	G	G	DW	DW	7-15	7-34	7-20	
		R	<R-	R	Y	Y(*)	DW	DW	4	4	4	
		R	<R-	R	R	R(**)	DW	DW	3	3	3	
EMERGENCY FLASH		Y	<R-	Y	R	R	DARK	DARK	-	-	-	
OFFSET									0	0	0	
BACKGROUND CYCLE									120	120	90	

NOTES:

1. The memory circuits are to be disconnected.
2. The vehicle extension shall be set at 2 seconds.
3. The manual control is to be disconnected.
4. The controller shall rest in Phase B.
5. Phase B shall always follow Phase A.
6. Phase A and Phase C may be skipped.
7. Permissible phase sequence: A-B-C-A, B-C-B, B-C-A-B, B-A-B
8. All presence detection is to have a delay of 3 seconds with the exception of Lenox Drive South right turn lane, which shall be set at 10 seconds.
9. Timing Schedule I operates: 6:00 AM – 10:00 AM (Monday to Friday)
 Timing Schedule II operates: 3:00 PM – 7:00 PM (Monday to Friday)
 Timing Schedule III operates: All other times

10. (*)Heads 13 and 14 shall display a Yellow Ball/Green Arrow if Phase C is followed by Phase A.
 (**)Heads 13 and 14 shall display a Red Ball/Green Arrow if Phase C is followed by Phase A.























Directive # _____
 Lenox Drive South & Princeton Pike (C.R. 583)
 Lawrenceville, Mercer County
 130042803
 November 26, 2014

WITH PEDESTRIAN ACTUATION		INDICATIONS										
Phase	Route and Cross Street	1,2,3	4,5,6	7,8,9	10,11,12	13,14	P1, P2	P3 – P6	TIME (SEC) I	TIME (SEC) II	TIME (SEC) III	
A.	Princeton Pike (C.R. 583) SB Lead Change Clearance	R R R	<G- <Y- <R-	G G G	R R R	R/-G> R/-Y> R	DW DW DW	DW DW DW	5-12 3 2	5-12 3 2	5-10 3 2	
B.	Princeton Pike (C.R. 583) R.O.W. Pedestrian Clearance Change Clearance	G G Y R	<R- <R- <R- <R-	G G Y R	R R R R	R R R R	W FDW DW DW	DW DW DW DW	44-37 21 5 2	44-34 21 5 2	14-9 21 5 2	
C.	Lenox Drive South R.O.W Pedestrian Clearance Change Clearance	R R R R	<R- <R- <R- <R-	R R R R	G G Y R	G G Y(*) R(**)	DW DW DW DW	W FDW DW DW	5 26 4 3	5-8 26 4 3	5 26 4 3	
EMERGENCY FLASH		Y	<R-	Y	R	R	DARK	DARK	-	-	-	
OFFSET									0	0	0	
BACKGROUND CYCLE									120	120	90	

APPENDIX D
CAPACITY ANALYSIS WORKSHEETS

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 No-Build
 AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	0	23	39	3	48	387	1073	114	80	662	186
Future Volume (vph)	21	0	23	39	3	48	387	1073	114	80	662	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	365		115	95		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			25			55			70		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.858				0.850		0.967	
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1641	1615	1805	1630	0	3502	3505	1615	1805	3430	0
Flt Permitted		0.722		0.743			0.950			0.950		
Satd. Flow (perm)	0	1247	1615	1412	1630	0	3502	3505	1615	1805	3430	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		50				64		39	
Link Speed (mph)		25		25			40		40		40	
Link Distance (ft)		236		170			742		452		452	
Travel Time (s)		6.4		4.6			12.6		7.7		7.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	10%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	1%
Adj. Flow (vph)	22	0	24	41	3	50	403	1118	119	83	690	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	24	41	53	0	403	1118	119	83	884	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12		12			31		24		24	
Link Offset(ft)		-25		15			0		10		10	
Crosswalk Width(ft)		30		35			40		30		30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	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	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94		94			94		94		94	
Detector 2 Size(ft)		6		6			6		6		6	
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0			0.0		0.0		0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4		8			5	2		1	6	

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 No-Build
 AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8					2			
Detector Phase	4	4	4	8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		8.0	54.0	54.0	5.0	54.0	
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0		13.0	61.0	61.0	10.0	61.0	
Total Split (s)	20.0	20.0	20.0	20.0	20.0		39.0	61.0	61.0	39.0	61.0	
Total Split (%)	16.7%	16.7%	16.7%	16.7%	16.7%		32.5%	50.8%	50.8%	32.5%	50.8%	
Maximum Green (s)	15.0	15.0	15.0	15.0	15.0		34.0	54.0	54.0	34.0	54.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0		5.0	7.0	7.0	5.0	7.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)		8.6	8.6	8.6	8.6		18.3	90.4	90.4	9.9	78.5	
Actuated g/C Ratio		0.07	0.07	0.07	0.07		0.15	0.75	0.75	0.08	0.65	
v/c Ratio		0.25	0.13	0.41	0.33		0.75	0.42	0.10	0.56	0.39	
Control Delay (s/veh)		58.6	1.3	64.7	20.8		62.5	4.0	1.3	66.4	11.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		58.6	1.3	64.7	20.8		62.5	4.0	1.3	66.4	11.0	
LOS		E	A	E	C		E	A	A	E	B	
Approach Delay (s/veh)		28.7			40.0			18.2			15.7	
Approach LOS		C			D			B			B	
90th %ile Green (s)	11.7	11.7	11.7	11.7	11.7		23.2	77.1	77.1	14.2	68.1	
90th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Gap	Coord	Coord	Gap	Coord	
70th %ile Green (s)	9.4	9.4	9.4	9.4	9.4		20.3	81.9	81.9	11.7	73.3	
70th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Gap	Coord	Coord	Gap	Coord	
50th %ile Green (s)	7.9	7.9	7.9	7.9	7.9		18.3	85.2	85.2	9.9	76.8	
50th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Gap	Coord	Coord	Gap	Coord	
30th %ile Green (s)	7.0	7.0	7.0	7.0	7.0		16.3	87.8	87.8	8.2	79.7	
30th %ile Term Code	Hold	Hold	Hold	Min	Min		Gap	Coord	Coord	Gap	Coord	
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0		13.4	113.0	113.0	0.0	94.6	
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip		Gap	Coord	Coord	Skip	Coord	
Stops (vph)		21	0	37	14		323	454	15	75	371	
Fuel Used(gal)		0	0	1	0		10	11	1	2	8	
CO Emissions (g/hr)		32	9	50	24		702	750	52	144	569	
NOx Emissions (g/hr)		6	2	10	5		137	146	10	28	111	
VOC Emissions (g/hr)		7	2	12	6		163	174	12	33	132	
Dilemma Vehicles (#)		0	0	0	0		0	3	0	0	35	
Queue Length 50th (ft)		17	0	31	2		129	184	10	63	153	
Queue Length 95th (ft)		43	0	67	42		172	199	m19	113	238	
Internal Link Dist (ft)		156			90			662			372	
Turn Bay Length (ft)							365		115	95		
Base Capacity (vph)		155	273	176	247		992	2640	1232	511	2257	
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 No-Build
 AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.14	0.09	0.23	0.21		0.41	0.42	0.10	0.16	0.39	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 22 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay (s/veh): 18.2 Intersection LOS: B
 Intersection Capacity Utilization 79.0% ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

Ø1 39 s	Ø2 (R) 61 s		Ø4 20 s
Ø5 39 s	Ø6 (R) 61 s		Ø8 20 s

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 Build
 AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↗		↖	↕	↗	↖	↕	↖
Traffic Volume (vph)	22	0	24	39	3	48	427	1073	114	80	662	203
Future Volume (vph)	22	0	24	39	3	48	427	1073	114	80	662	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	365		115	95		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			25			55			70		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.858				0.850		0.965	
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1656	1615	1805	1630	0	3502	3505	1615	1805	3423	0
Flt Permitted		0.722		0.742			0.950			0.950		
Satd. Flow (perm)	0	1259	1615	1410	1630	0	3502	3505	1615	1805	3423	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		50				64			44
Link Speed (mph)		25		25				40				40
Link Distance (ft)		236		170				742				452
Travel Time (s)		6.4		4.6				12.6				7.7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	9%	0%	0%	0%	0%	0%	0%	3%	0%	0%	2%	1%
Adj. Flow (vph)	23	0	25	41	3	50	445	1118	119	83	690	211
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	25	41	53	0	445	1118	119	83	901	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			31				24
Link Offset(ft)		-25			15			0				10
Crosswalk Width(ft)		30			35			40				30
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	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	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1		6

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 Build
 AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8					2			
Detector Phase	4	4	4	8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		8.0	54.0	54.0	8.0	54.0	
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0		13.0	61.0	61.0	13.0	61.0	
Total Split (s)	20.0	20.0	20.0	20.0	20.0		39.0	61.0	61.0	39.0	61.0	
Total Split (%)	16.7%	16.7%	16.7%	16.7%	16.7%		32.5%	50.8%	50.8%	32.5%	50.8%	
Maximum Green (s)	15.0	15.0	15.0	15.0	15.0		34.0	54.0	54.0	34.0	54.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0		5.0	7.0	7.0	5.0	7.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)		8.6	8.6	8.6	8.6		19.8	90.4	90.4	10.4	77.0	
Actuated g/C Ratio		0.07	0.07	0.07	0.07		0.17	0.75	0.75	0.09	0.64	
v/c Ratio		0.26	0.13	0.41	0.33		0.77	0.42	0.10	0.53	0.41	
Control Delay (s/veh)		58.9	1.4	64.7	20.8		61.2	3.6	1.1	64.5	11.8	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		58.9	1.4	64.7	20.8		61.2	3.6	1.1	64.5	11.8	
LOS		E	A	E	C		E	A	A	E	B	
Approach Delay (s/veh)		29.0			40.0			18.7			16.2	
Approach LOS		C			D			B			B	
90th %ile Green (s)	11.7	11.7	11.7	11.7	11.7		24.8	77.1	77.1	14.2	66.5	
90th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Gap	Coord	Coord	Gap	Coord	
70th %ile Green (s)	9.4	9.4	9.4	9.4	9.4		21.9	81.9	81.9	11.7	71.7	
70th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Gap	Coord	Coord	Gap	Coord	
50th %ile Green (s)	7.9	7.9	7.9	7.9	7.9		19.8	85.2	85.2	9.9	75.3	
50th %ile Term Code	Hold	Hold	Hold	Gap	Gap		Gap	Coord	Coord	Gap	Coord	
30th %ile Green (s)	7.0	7.0	7.0	7.0	7.0		17.7	87.8	87.8	8.2	78.3	
30th %ile Term Code	Hold	Hold	Hold	Min	Min		Gap	Coord	Coord	Gap	Coord	
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0		14.6	113.0	113.0	0.0	93.4	
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip		Gap	Coord	Coord	Skip	Coord	
Stops (vph)		22	0	37	14		357	422	14	74	395	
Fuel Used(gal)		0	0	1	0		11	10	1	2	9	
CO Emissions (g/hr)		34	9	50	24		767	722	52	141	601	
NOx Emissions (g/hr)		7	2	10	5		149	141	10	28	117	
VOC Emissions (g/hr)		8	2	12	6		178	167	12	33	139	
Dilemma Vehicles (#)		0	0	0	0		0	3	0	0	36	
Queue Length 50th (ft)		17	0	31	2		142	170	9	63	163	
Queue Length 95th (ft)		44	0	67	42		187	168	m16	113	252	
Internal Link Dist (ft)		156			90			662			372	
Turn Bay Length (ft)							365		115	95		
Base Capacity (vph)		157	273	176	247		992	2640	1232	511	2213	
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 Build
 AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.15	0.09	0.23	0.21		0.45	0.42	0.10	0.16	0.41	

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	22 (18%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.77
Intersection Signal Delay (s/veh):	18.7
Intersection LOS:	B
Intersection Capacity Utilization	80.2%
ICU Level of Service	D
Analysis Period (min)	15























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

Splits and Phases: 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

Ø1 39 s	Ø2 (R) 61 s	Ø4 20 s
Ø5 39 s	Ø6 (R) 61 s	Ø8 20 s

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 No-Build
 PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	0	189	400	0	100	27	817	29	49	1180	21
Future Volume (vph)	116	0	189	400	0	100	27	817	29	49	1180	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	365		115	95		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			25			55			70		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.850				0.850		0.997	
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1805	1583	1787	1615	0	3273	3610	1615	1805	3561	0
Flt Permitted		0.686		0.662			0.950			0.950		
Satd. Flow (perm)	0	1303	1583	1245	1615	0	3273	3610	1615	1805	3561	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			194		235				64			2
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		236			170			742			452	
Travel Time (s)		6.4			4.6			12.6			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	7%	0%	0%	0%	1%	5%
Adj. Flow (vph)	126	0	205	435	0	109	29	888	32	53	1283	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	126	205	435	109	0	29	888	32	53	1306	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			31			24	
Link Offset(ft)		-25			15			0			10	
Crosswalk Width(ft)		30			35			40			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	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	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 No-Build
 PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8					2			
Detector Phase	4	4	4	8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		5.0	51.0	51.0	5.0	51.0	
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0		10.0	58.0	58.0	10.0	58.0	
Total Split (s)	47.0	47.0	47.0	47.0	47.0		15.0	58.0	58.0	15.0	58.0	
Total Split (%)	39.2%	39.2%	39.2%	39.2%	39.2%		12.5%	48.3%	48.3%	12.5%	48.3%	
Maximum Green (s)	42.0	42.0	42.0	42.0	42.0		10.0	51.0	51.0	10.0	51.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0		5.0	7.0	7.0	5.0	7.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)		42.0	42.0	42.0	42.0		5.7	55.3	55.3	7.7	59.3	
Actuated g/C Ratio		0.35	0.35	0.35	0.35		0.05	0.46	0.46	0.06	0.49	
v/c Ratio		0.28	0.30	1.00	0.15		0.19	0.53	0.04	0.46	0.74	
Control Delay (s/veh)		30.2	5.8	82.8	0.5		75.9	17.3	0.2	66.1	28.4	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		30.2	5.8	82.8	0.5		75.9	17.3	0.2	66.1	28.4	
LOS		C	A	F	A		E	B	A	E	C	
Approach Delay (s/veh)		15.0			66.3			18.5			29.9	
Approach LOS		B			E			B			C	
90th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		6.9	51.0	51.0	10.0	54.1	
90th %ile Term Code	Hold	Hold	Hold	Max	Max		Gap	Coord	Coord	Max	Coord	
70th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		6.0	51.7	51.7	9.3	55.0	
70th %ile Term Code	Hold	Hold	Hold	Max	Max		Gap	Coord	Coord	Gap	Coord	
50th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		5.5	53.1	53.1	7.9	55.5	
50th %ile Term Code	Hold	Hold	Hold	Max	Max		Gap	Coord	Coord	Gap	Coord	
30th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		0.0	54.5	54.5	6.5	66.0	
30th %ile Term Code	Hold	Hold	Hold	Max	Max		Skip	Coord	Coord	Gap	Coord	
10th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		0.0	66.0	66.0	0.0	66.0	
10th %ile Term Code	Hold	Hold	Hold	Max	Max		Skip	Coord	Coord	Skip	Coord	
Stops (vph)		81	22	343	0		29	445	0	46	943	
Fuel Used(gal)		2	1	9	0		1	11	0	1	20	
CO Emissions (g/hr)		118	90	604	11		59	795	10	88	1391	
NOx Emissions (g/hr)		23	17	118	2		11	155	2	17	271	
VOC Emissions (g/hr)		27	21	140	2		14	184	2	20	322	
Dilemma Vehicles (#)		0	0	0	0		0	34	0	0	50	
Queue Length 50th (ft)		70	6	334	0		12	261	0	40	440	
Queue Length 95th (ft)		121	57	#553	0		29	131	1	82	546	
Internal Link Dist (ft)		156			90			662			372	
Turn Bay Length (ft)							365		115	95		
Base Capacity (vph)		456	680	435	718		272	1662	778	150	1761	
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	5	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 No-Build
 PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.28	0.30	1.00	0.15		0.11	0.53	0.04	0.35	0.74	

Intersection Summary























Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 107 (89%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.00
 Intersection Signal Delay (s/veh): 31.2 Intersection LOS: C
 Intersection Capacity Utilization 90.5% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North



Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 Build
 PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	0	206	400	0	100	31	817	29	49	1180	22
Future Volume (vph)	131	0	206	400	0	100	31	817	29	49	1180	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	365		115	95		0
Storage Lanes	0		1	1		0	1		1	1		0
Taper Length (ft)	25			25			55			70		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	0.95
Frt			0.850		0.850				0.850		0.997	
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1805	1583	1687	1615	0	3273	3610	1615	1805	3561	0
Flt Permitted		0.686		0.640			0.950			0.950		
Satd. Flow (perm)	0	1303	1583	1136	1615	0	3273	3610	1615	1805	3561	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			194		235				64			2
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		236			170			742			452	
Travel Time (s)		6.4			4.6			12.6			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	7%	0%	0%	7%	0%	0%	0%	1%	5%
Adj. Flow (vph)	142	0	224	435	0	109	34	888	32	53	1283	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	142	224	435	109	0	34	888	32	53	1307	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			31			24	
Link Offset(ft)		-25			15			0			10	
Crosswalk Width(ft)		30			35			40			30	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	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	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 Build
 PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8					2			
Detector Phase	4	4	4	8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0		5.0	51.0	51.0	5.0	51.0	
Minimum Split (s)	12.0	12.0	12.0	12.0	12.0		10.0	58.0	58.0	10.0	58.0	
Total Split (s)	47.0	47.0	47.0	47.0	47.0		15.0	58.0	58.0	15.0	58.0	
Total Split (%)	39.2%	39.2%	39.2%	39.2%	39.2%		12.5%	48.3%	48.3%	12.5%	48.3%	
Maximum Green (s)	42.0	42.0	42.0	42.0	42.0		10.0	51.0	51.0	10.0	51.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	5.0	5.0	3.0	5.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		5.0	5.0	5.0	5.0		5.0	7.0	7.0	5.0	7.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	None	None	None	None		None	C-Min	C-Min	None	C-Min	
Act Effct Green (s)		42.0	42.0	42.0	42.0		5.9	55.3	55.3	7.7	59.2	
Actuated g/C Ratio		0.35	0.35	0.35	0.35		0.05	0.46	0.46	0.06	0.49	
v/c Ratio		0.31	0.33	1.10	0.15		0.21	0.53	0.04	0.46	0.74	
Control Delay (s/veh)		30.8	7.1	111.1	0.5		76.5	17.3	0.2	66.1	28.6	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)		30.8	7.1	111.1	0.5		76.5	17.3	0.2	66.1	28.7	
LOS		C	A	F	A		E	B	A	E	C	
Approach Delay (s/veh)		16.3			88.9			18.8			30.1	
Approach LOS		B			F			B			C	
90th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		7.2	51.0	51.0	10.0	53.8	
90th %ile Term Code	Hold	Hold	Hold	Max	Max		Gap	Coord	Coord	Max	Coord	
70th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		6.3	51.7	51.7	9.3	54.7	
70th %ile Term Code	Hold	Hold	Hold	Max	Max		Gap	Coord	Coord	Gap	Coord	
50th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		5.7	53.1	53.1	7.9	55.3	
50th %ile Term Code	Hold	Hold	Hold	Max	Max		Gap	Coord	Coord	Gap	Coord	
30th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		0.0	54.5	54.5	6.5	66.0	
30th %ile Term Code	Hold	Hold	Hold	Max	Max		Skip	Coord	Coord	Gap	Coord	
10th %ile Green (s)	42.0	42.0	42.0	42.0	42.0		0.0	66.0	66.0	0.0	66.0	
10th %ile Term Code	Hold	Hold	Hold	Max	Max		Skip	Coord	Coord	Skip	Coord	
Stops (vph)		94	31	332	0		32	441	0	46	947	
Fuel Used(gal)		2	1	11	0		1	11	0	1	20	
CO Emissions (g/hr)		136	104	762	11		67	791	10	88	1398	
NOx Emissions (g/hr)		26	20	148	2		13	154	2	17	272	
VOC Emissions (g/hr)		31	24	177	2		15	183	2	20	324	
Dilemma Vehicles (#)		0	0	0	0		0	33	0	0	50	
Queue Length 50th (ft)		80	15	~381	0		13	262	1	40	442	
Queue Length 95th (ft)		135	71	#584	0		32	131	1	82	550	
Internal Link Dist (ft)		156			90			662			372	
Turn Bay Length (ft)							365		115	95		
Base Capacity (vph)		456	680	397	718		272	1662	778	150	1756	
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	11	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	

Lanes, Volumes, Timings
 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North

2026 Build
 PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.31	0.33	1.10	0.15		0.13	0.53	0.04	0.35	0.75	

Intersection Summary
















Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	107 (89%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle:	110
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.10
Intersection Signal Delay (s/veh):	35.1
Intersection LOS:	D
Intersection Capacity Utilization	91.6%
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: 1: Princeton Pike (CR 583) & BMS Drive/Lenox Drive North



Lanes, Volumes, Timings
2: Princeton Pike (CR 583) & Lenox Drive South

2026 No-Build
AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	 		 			 
Traffic Volume (vph)	67	23	1551	924	118	607
Future Volume (vph)	67	23	1551	924	118	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	205	
Storage Lanes	2	1		1	1	
Taper Length (ft)	25				45	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3127	1615	3574	1583	1805	3539
Flt Permitted	0.950				0.107	
Satd. Flow (perm)	3127	1615	3574	1583	203	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		24		801		
Link Speed (mph)	25		40			40
Link Distance (ft)	203		275			742
Travel Time (s)	5.5		4.7			12.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	12%	0%	1%	2%	0%	2%
Adj. Flow (vph)	71	24	1633	973	124	639
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	24	1633	973	124	639
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	40		40			19
Link Offset(ft)	-5		10			0
Crosswalk Width(ft)	25		16			30
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	10.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6

Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 No-Build
 AM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	74.0	74.0	5.0	84.0
Minimum Split (s)	14.0	14.0	81.0	81.0	10.0	91.0
Total Split (s)	22.0	22.0	81.0	81.0	17.0	98.0
Total Split (%)	18.3%	18.3%	67.5%	67.5%	14.2%	81.7%
Maximum Green (s)	15.0	15.0	74.0	74.0	12.0	91.0
Yellow Time (s)	4.0	4.0	5.0	5.0	3.0	5.0
All-Red Time (s)	3.0	3.0	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)	7.0	7.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	7.7	7.7	89.2	89.2	103.1	102.5
Actuated g/C Ratio	0.06	0.06	0.74	0.74	0.86	0.85
v/c Ratio	0.36	0.19	0.61	0.70	0.47	0.21
Control Delay (s/veh)	58.6	22.7	9.6	4.7	18.3	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.6	22.7	9.6	4.7	18.3	2.2
LOS	E	C	A	A	B	A
Approach Delay (s/veh)	49.5		7.7			4.8
Approach LOS	D		A			A
90th %ile Green (s)	9.4	9.4	81.1	81.1	10.5	96.6
90th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Coord
70th %ile Green (s)	8.0	8.0	85.6	85.6	7.4	98.0
70th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Coord
50th %ile Green (s)	7.1	7.1	88.0	88.0	5.9	98.9
50th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Coord
30th %ile Green (s)	7.0	7.0	88.5	88.5	5.5	99.0
30th %ile Term Code	Min	Min	Coord	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	103.0	103.0	5.0	113.0
10th %ile Term Code	Skip	Skip	Coord	Coord	Min	Coord
Stops (vph)	62	9	714	123	68	96
Fuel Used(gal)	1	0	13	4	2	4
CO Emissions (g/hr)	91	16	904	267	119	298
NOx Emissions (g/hr)	18	3	176	52	23	58
VOC Emissions (g/hr)	21	4	209	62	28	69
Dilemma Vehicles (#)	0	0	65	0	0	20
Queue Length 50th (ft)	27	0	286	35	16	40
Queue Length 95th (ft)	51	28	435	146	72	59
Internal Link Dist (ft)	123		195			662
Turn Bay Length (ft)					205	
Base Capacity (vph)	390	222	2657	1382	334	3022
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0

Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 No-Build
 AM Peak Hour

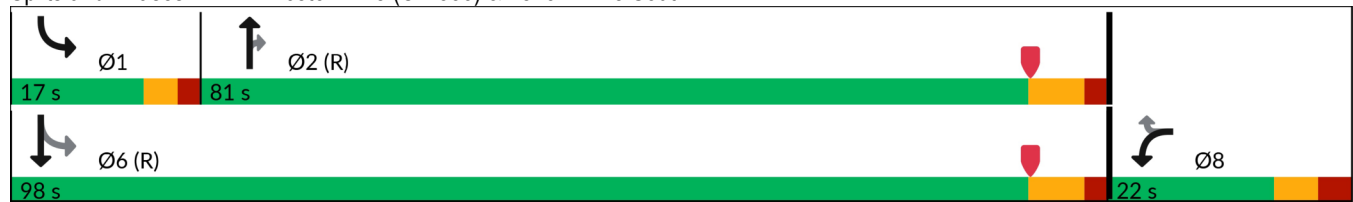


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Reduced v/c Ratio	0.18	0.11	0.61	0.70	0.37	0.21

Intersection Summary
















Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow, Master Intersection
Natural Cycle:	105
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay (s/veh):	8.2
Intersection LOS:	A
Intersection Capacity Utilization	89.9%
ICU Level of Service	E
Analysis Period (min)	15

Splits and Phases: 2: Princeton Pike (CR 583) & Lenox Drive South



Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 Build
 AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	 		 			 
Traffic Volume (vph)	67	23	1591	924	118	608
Future Volume (vph)	67	23	1591	924	118	608
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	205	
Storage Lanes	2	1		1	1	
Taper Length (ft)	25				45	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3127	1615	3574	1583	1805	3539
Flt Permitted	0.950				0.099	
Satd. Flow (perm)	3127	1615	3574	1583	188	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		24		795		
Link Speed (mph)	25		40			40
Link Distance (ft)	203		275			742
Travel Time (s)	5.5		4.7			12.6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	12%	0%	1%	2%	0%	2%
Adj. Flow (vph)	71	24	1675	973	124	640
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	24	1675	973	124	640
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	40		40			19
Link Offset(ft)	-5		10			0
Crosswalk Width(ft)	25		16			30
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	10.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6

Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 Build
 AM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	74.0	74.0	5.0	84.0
Minimum Split (s)	14.0	14.0	81.0	81.0	10.0	91.0
Total Split (s)	22.0	22.0	81.0	81.0	17.0	98.0
Total Split (%)	18.3%	18.3%	67.5%	67.5%	14.2%	81.7%
Maximum Green (s)	15.0	15.0	74.0	74.0	12.0	91.0
Yellow Time (s)	4.0	4.0	5.0	5.0	3.0	5.0
All-Red Time (s)	3.0	3.0	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)	7.0	7.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	7.7	7.7	89.0	89.0	103.1	102.5
Actuated g/C Ratio	0.06	0.06	0.74	0.74	0.86	0.85
v/c Ratio	0.36	0.19	0.63	0.71	0.48	0.21
Control Delay (s/veh)	58.6	22.7	10.0	4.8	19.9	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.6	22.7	10.0	4.8	19.9	2.2
LOS	E	C	B	A	B	A
Approach Delay (s/veh)	49.5		8.1			5.0
Approach LOS	D		A			A
90th %ile Green (s)	9.4	9.4	80.4	80.4	11.2	96.6
90th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Coord
70th %ile Green (s)	8.0	8.0	85.0	85.0	8.0	98.0
70th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Coord
50th %ile Green (s)	7.1	7.1	88.0	88.0	5.9	98.9
50th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Coord
30th %ile Green (s)	7.0	7.0	88.5	88.5	5.5	99.0
30th %ile Term Code	Min	Min	Coord	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	103.0	103.0	5.0	113.0
10th %ile Term Code	Skip	Skip	Coord	Coord	Min	Coord
Stops (vph)	62	9	757	130	60	96
Fuel Used(gal)	1	0	14	4	2	4
CO Emissions (g/hr)	91	16	955	273	116	299
NOx Emissions (g/hr)	18	3	186	53	23	58
VOC Emissions (g/hr)	21	4	221	63	27	69
Dilemma Vehicles (#)	0	0	66	0	0	20
Queue Length 50th (ft)	27	0	299	36	20	40
Queue Length 95th (ft)	51	28	466	157	97	59
Internal Link Dist (ft)	123		195			662
Turn Bay Length (ft)					205	
Base Capacity (vph)	390	222	2649	1379	323	3022
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0

Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 Build
 AM Peak Hour

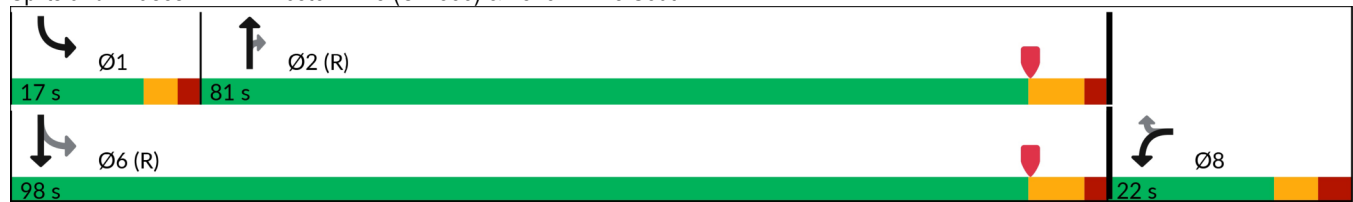


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Reduced v/c Ratio	0.18	0.11	0.63	0.71	0.38	0.21

Intersection Summary
















Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow, Master Intersection
Natural Cycle:	105
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.71
Intersection Signal Delay (s/veh):	8.6
Intersection LOS:	A
Intersection Capacity Utilization	89.9%
ICU Level of Service	E
Analysis Period (min)	15

Splits and Phases: 2: Princeton Pike (CR 583) & Lenox Drive South



Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 No-Build
 PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	 		 			 
Traffic Volume (vph)	549	113	760	75	10	1759
Future Volume (vph)	549	113	760	75	10	1759
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	205	
Storage Lanes	2	1		1	1	
Taper Length (ft)	25				45	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3502	1615	3574	1615	1805	3574
Flt Permitted	0.950				0.292	
Satd. Flow (perm)	3502	1615	3574	1615	555	3574
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		122		81		
Link Speed (mph)	25		40			40
Link Distance (ft)	203		275			742
Travel Time (s)	5.5		4.7			12.6
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%
Adj. Flow (vph)	590	122	817	81	11	1891
Shared Lane Traffic (%)						
Lane Group Flow (vph)	590	122	817	81	11	1891
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	40		40			19
Link Offset(ft)	-5		10			0
Crosswalk Width(ft)	25		16			30
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	10.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6

Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 No-Build
 PM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	55.0	55.0	5.0	65.0
Minimum Split (s)	14.0	14.0	62.0	62.0	10.0	72.0
Total Split (s)	41.0	41.0	62.0	62.0	17.0	79.0
Total Split (%)	34.2%	34.2%	51.7%	51.7%	14.2%	65.8%
Maximum Green (s)	34.0	34.0	55.0	55.0	12.0	72.0
Yellow Time (s)	4.0	4.0	5.0	5.0	3.0	5.0
All-Red Time (s)	3.0	3.0	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)	7.0	7.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	24.7	24.7	79.3	79.3	83.3	81.3
Actuated g/C Ratio	0.21	0.21	0.66	0.66	0.69	0.68
v/c Ratio	0.82	0.28	0.35	0.07	0.03	0.78
Control Delay (s/veh)	55.2	8.1	10.5	2.6	5.0	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.2	8.1	10.5	2.6	5.0	8.4
LOS	E	A	B	A	A	A
Approach Delay (s/veh)	47.2		9.8			8.4
Approach LOS	D		A			A
90th %ile Green (s)	30.4	30.4	65.3	65.3	5.3	75.6
90th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Coord
70th %ile Green (s)	27.1	27.1	78.9	78.9	0.0	78.9
70th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Coord
50th %ile Green (s)	24.7	24.7	81.3	81.3	0.0	81.3
50th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Coord
30th %ile Green (s)	22.3	22.3	83.7	83.7	0.0	83.7
30th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Coord
10th %ile Green (s)	18.9	18.9	87.1	87.1	0.0	87.1
10th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Coord
Stops (vph)	509	16	326	7	3	544
Fuel Used(gal)	10	1	6	0	0	17
CO Emissions (g/hr)	722	45	436	17	6	1201
NOx Emissions (g/hr)	141	9	85	3	1	234
VOC Emissions (g/hr)	167	10	101	4	1	278
Dilemma Vehicles (#)	0	0	32	0	0	22
Queue Length 50th (ft)	226	0	126	0	2	227
Queue Length 95th (ft)	275	48	236	23	m3	m264
Internal Link Dist (ft)	123		195			662
Turn Bay Length (ft)					205	
Base Capacity (vph)	992	545	2360	1094	510	2421
Starvation Cap Reductn	0	0	0	0	0	23
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0

Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 No-Build
 PM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Reduced v/c Ratio	0.59	0.22	0.35	0.07	0.02	0.79

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow, Master Intersection
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.82
Intersection Signal Delay (s/veh):	16.6
Intersection LOS:	B
Intersection Capacity Utilization	81.5%
ICU Level of Service	D
Analysis Period (min)	15
















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

Splits and Phases: 2: Princeton Pike (CR 583) & Lenox Drive South



Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 Build
 PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	 		 			 
Traffic Volume (vph)	549	113	764	75	10	1776
Future Volume (vph)	549	113	764	75	10	1776
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	205	
Storage Lanes	2	1		1	1	
Taper Length (ft)	25				45	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3467	1615	3574	1615	1805	3574
Flt Permitted	0.950				0.290	
Satd. Flow (perm)	3467	1615	3574	1615	551	3574
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		122		81		
Link Speed (mph)	25		40			40
Link Distance (ft)	203		275			742
Travel Time (s)	5.5		4.7			12.6
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	1%	0%	0%	1%
Adj. Flow (vph)	590	122	822	81	11	1910
Shared Lane Traffic (%)						
Lane Group Flow (vph)	590	122	822	81	11	1910
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	40		40			19
Link Offset(ft)	-5		10			0
Crosswalk Width(ft)	25		16			30
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	10.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6

Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 Build
 PM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	55.0	55.0	5.0	65.0
Minimum Split (s)	14.0	14.0	62.0	62.0	10.0	72.0
Total Split (s)	41.0	41.0	62.0	62.0	17.0	79.0
Total Split (%)	34.2%	34.2%	51.7%	51.7%	14.2%	65.8%
Maximum Green (s)	34.0	34.0	55.0	55.0	12.0	72.0
Yellow Time (s)	4.0	4.0	5.0	5.0	3.0	5.0
All-Red Time (s)	3.0	3.0	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)	7.0	7.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	24.9	24.9	79.1	79.1	83.1	81.1
Actuated g/C Ratio	0.21	0.21	0.66	0.66	0.69	0.68
v/c Ratio	0.82	0.28	0.35	0.07	0.03	0.79
Control Delay (s/veh)	55.3	8.0	10.6	2.6	5.3	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.3	8.0	10.6	2.6	5.3	8.7
LOS	E	A	B	A	A	A
Approach Delay (s/veh)	47.2		9.9			8.7
Approach LOS	D		A			A
90th %ile Green (s)	30.7	30.7	65.0	65.0	5.3	75.3
90th %ile Term Code	Gap	Gap	Coord	Coord	Gap	Coord
70th %ile Green (s)	27.3	27.3	78.7	78.7	0.0	78.7
70th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Coord
50th %ile Green (s)	24.9	24.9	81.1	81.1	0.0	81.1
50th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Coord
30th %ile Green (s)	22.5	22.5	83.5	83.5	0.0	83.5
30th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Coord
10th %ile Green (s)	19.0	19.0	87.0	87.0	0.0	87.0
10th %ile Term Code	Gap	Gap	Coord	Coord	Skip	Coord
Stops (vph)	509	16	330	7	3	585
Fuel Used(gal)	10	1	6	0	0	18
CO Emissions (g/hr)	722	45	442	17	6	1246
NOx Emissions (g/hr)	141	9	86	3	1	242
VOC Emissions (g/hr)	167	10	102	4	1	289
Dilemma Vehicles (#)	0	0	32	0	0	23
Queue Length 50th (ft)	226	0	128	0	2	236
Queue Length 95th (ft)	274	47	239	23	m3	m268
Internal Link Dist (ft)	123		195			662
Turn Bay Length (ft)					205	
Base Capacity (vph)	982	545	2354	1091	506	2415
Starvation Cap Reductn	0	0	0	0	0	21
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0

Lanes, Volumes, Timings
 2: Princeton Pike (CR 583) & Lenox Drive South

2026 Build
 PM Peak Hour



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Reduced v/c Ratio	0.60	0.22	0.35	0.07	0.02	0.80

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow, Master Intersection
Natural Cycle:	90
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.82
Intersection Signal Delay (s/veh):	16.8
Intersection LOS:	B
Intersection Capacity Utilization	81.5%
ICU Level of Service	D
Analysis Period (min)	15

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

Splits and Phases: 2: Princeton Pike (CR 583) & Lenox Drive South



HCS Freeway Merge Report

Project Information

Analyst	EJV	Date	8/28/2024
Agency	Langan	Analysis Year	2026
Jurisdiction	Municipal	Time Analyzed	AM No-Build
Project Description	130213801	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi), veh/h	674	2
Peak Hour Factor (PHF)	0.89	0.89
Total Trucks, %	2.00	50.00
Heavy Vehicle Adjustment Factor (fHV)	0.980	0.667
Flow Rate (vi), pc/h	773	3
Capacity (cmd), pc/h	4800	2000
Adjusted Capacity (cmda), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.16	0.00

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Downstream Equilibrium Distance (LEQ), ft	-	On-Ramp Influence Area Speed (SR), mi/h	66.3
Flow in Lanes 1 and 2 (v12), pc/h	773	Outer Lanes Freeway Speed (SO), mi/h	75.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	776	Ramp Junction Speed (S), mi/h	66.3
Number of Outer Lanes on Freeway (NO), ln	0	Average Density (D), pc/mi/ln	5.9
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	6.6

HCS Freeway Merge Report

Project Information

Analyst	EJV	Date	8/28/2024
Agency	Langan	Analysis Year	2026
Jurisdiction	Municipal	Time Analyzed	AM Build
Project Description	130213801	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi), veh/h	675	4
Peak Hour Factor (PHF)	0.89	0.89
Total Trucks, %	2.00	25.00
Heavy Vehicle Adjustment Factor (fHV)	0.980	0.800
Flow Rate (vi), pc/h	774	6
Capacity (cmd), pc/h	4800	2000
Adjusted Capacity (cmda), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.16	0.00

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Downstream Equilibrium Distance (LEQ), ft	-	On-Ramp Influence Area Speed (SR), mi/h	66.2
Flow in Lanes 1 and 2 (v12), pc/h	774	Outer Lanes Freeway Speed (SO), mi/h	75.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	780	Ramp Junction Speed (S), mi/h	66.2
Number of Outer Lanes on Freeway (NO), ln	0	Average Density (D), pc/mi/ln	5.9
Level of Service (LOS)	A	Density in Ramp Influence Area (DR), pc/mi/ln	6.6

HCS Freeway Merge Report

Project Information

Analyst	EJV	Date	8/28/2024
Agency	Langan	Analysis Year	2026
Jurisdiction	Municipal	Time Analyzed	PM No-Build
Project Description	130213801	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi), veh/h	2310	192
Peak Hour Factor (PHF)	0.93	0.93
Total Trucks, %	1.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	0.990	1.000
Flow Rate (vi), pc/h	2509	206
Capacity (cmd), pc/h	4800	2000
Adjusted Capacity (cmda), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.10

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Downstream Equilibrium Distance (LEQ), ft	-	On-Ramp Influence Area Speed (SR), mi/h	64.6
Flow in Lanes 1 and 2 (v12), pc/h	2509	Outer Lanes Freeway Speed (SO), mi/h	75.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	2715	Ramp Junction Speed (S), mi/h	64.6
Number of Outer Lanes on Freeway (NO), ln	0	Average Density (D), pc/mi/ln	21.0
Level of Service (LOS)	C	Density in Ramp Influence Area (DR), pc/mi/ln	21.6

HCS Freeway Merge Report

Project Information

Analyst	EJV	Date	8/28/2024
Agency	Langan	Analysis Year	2026
Jurisdiction	Municipal	Time Analyzed	PM Build
Project Description	130213801	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi), veh/h	2327	209
Peak Hour Factor (PHF)	0.93	0.93
Total Trucks, %	1.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	0.990	1.000
Flow Rate (vi), pc/h	2527	225
Capacity (cmd), pc/h	4800	2000
Adjusted Capacity (cmda), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.57	0.11

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Downstream Equilibrium Distance (LEQ), ft	-	On-Ramp Influence Area Speed (SR), mi/h	64.5
Flow in Lanes 1 and 2 (v12), pc/h	2527	Outer Lanes Freeway Speed (SO), mi/h	75.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	2752	Ramp Junction Speed (S), mi/h	64.5
Number of Outer Lanes on Freeway (NO), ln	0	Average Density (D), pc/mi/ln	21.3
Level of Service (LOS)	C	Density in Ramp Influence Area (DR), pc/mi/ln	21.9