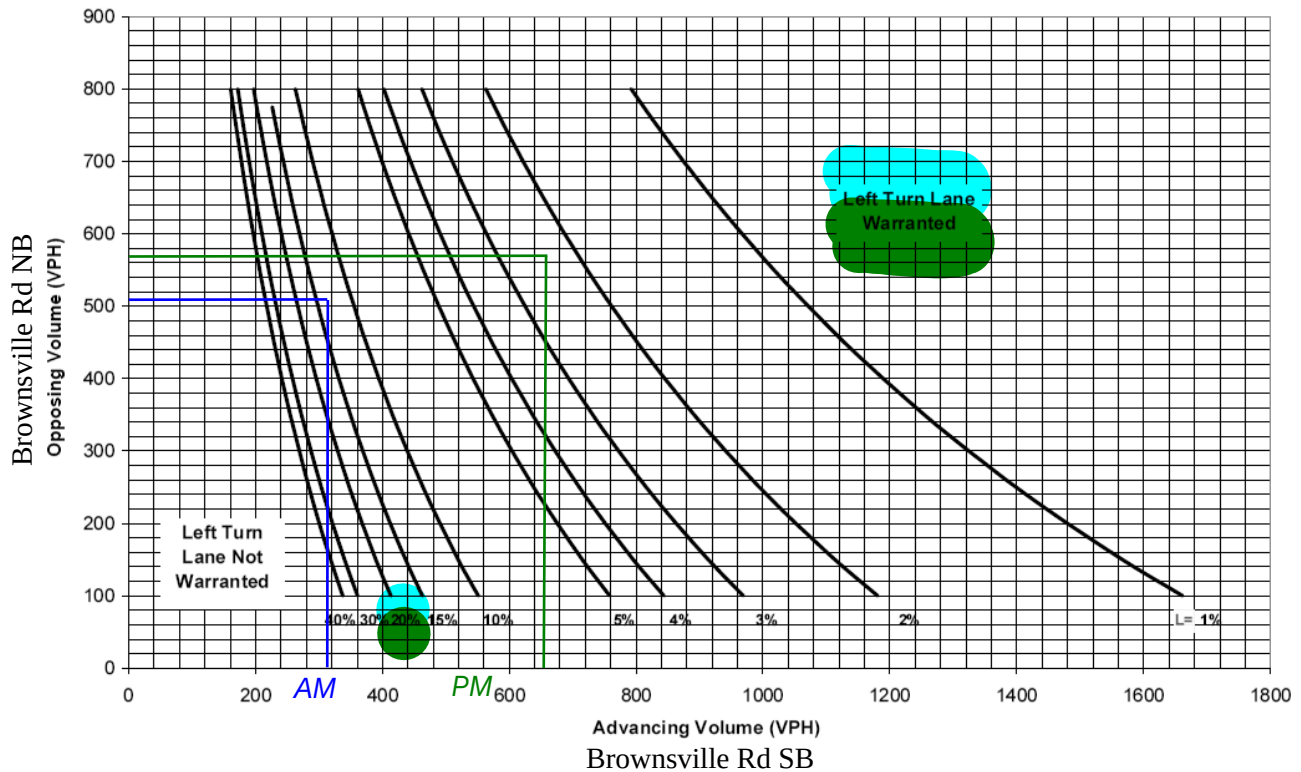


Appendix A: Turning Lane Warrants

Appendix A: Turning Lane Warrants

Brownsville Rd @ Sankey Ave Left Turn Lane Warrant Nomograph

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and signalized intersections)
(L = % Left Turns in Advancing Volume)



SB advancing = $69 + 235 = 304$
 Left Turn % = $69 / 304 = 22.7\%$
 Intersection Truck % = 5.5%
 Truck Adjustment Factor = $1 + 0.055(1.5 - 1) = 1.028$
 P.C.E. Advancing: $304 * 1.028 = 313$
 P.C.E. Opposing = $(168 + 328) * 1.028 = 510$

SB advancing = $161 + 484 = 645$
 Left Turn % = $161 / 645 = 25\%$
 Intersection Truck % = 2.1%
 Truck Adjustment Factor = $1 + 0.02(1.5 - 1) = 1.01$
 P.C.E. Advancing: $645 * 1.01 = 651$
 P.C.E. Opposing = $(268 + 296) * 1.01 = 570$

The hourly volume shall be multiplied by the truck adjustment factor (T), and the resulting passenger-car equivalent volume shall then be used in all subsequent calculations identified in these guidelines. The truck adjustment factors were taken from Reference 3 (see page 50).

Turn Lane Warrants

Use Figures 1 through 8 in the **Chapter 11 Appendix** page 60 to determine whether a left turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. Use Figures 9 through 12 in the **Chapter 11 Appendix** to determine whether a right turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. For unsignalized intersections, the warrants only apply to the free flow approach. For left turns, if the plotted point falls above the appropriate left turn percentage line (L), a left turn lane is considered warranted. Engineering District discretion should be used as to whether the actual left turn percentage should be rounded up or down to match one of the lines in the graph. A turn lane may be considered if the criteria is met for any one-hour period.

Figures 1 through 8 in the **Chapter 11 Appendix** were adapted from References 1, 2, 4, and 9. Figures 9 through 12 in the **Chapter 11 Appendix** were taken from Reference 5 (see page 50 for a list of references).

Turn Lane Storage Length

Use **Exhibit 11-6** through **Exhibit 11-8** to compute storage length for left and right turn lanes at unsignalized and signalized intersections. **Exhibit 11-6** to **Exhibit 11-8** were adapted from Reference 5. Minimum recommended storage length is 75 feet, and all results should be rounded the next highest 25-foot increment. Turn lane storage length does not include taper length.

Consider using dual left turn lanes at signalized intersections when the hourly left turn volume exceeds 300 vehicles per hour.

Exhibit 11-6 Turn Lane Storage - Type of Traffic Control Condition (A, B or C)

TYPE OF TRAFFIC CONTROL	SPEED (MPH)					
	25 – 35		40 – 45		50 - 60	
	TURN DEMAND VOLUME					
	HIGH	LOW*	HIGH	LOW*	HIGH	LOW*
SIGNALIZED	A	A	B or C**	B or C**	B or C**	B or C**
UNSIGNALIZED	A	A	C	B	B or C**	B

* LOW is considered 10% or less of approach traffic volume

** Whichever is greater

Exhibit 11-7 Turn Lane Storage – For Speed and Condition

CONDITION A	
SPEED (MPH)	STORAGE LENGTH
Any speed	Length from Exhibit 11-8
CONDITION B	
SPEED (MPH)	STORAGE LENGTH
40	75'
45	125'
50	175'
55	235'
60	295'
CONDITION C	
SPEED (MPH)	STORAGE LENGTH
40	61' + Additional length from Exhibit 11-8
45	75' + Additional length from Exhibit 11-8
50	93' + Additional length from Exhibit 11-8
55	114' + Additional length from Exhibit 11-8
60	131' + Additional length from Exhibit 11-8

Exhibit 11-8 Turn Lane Storage Based on Average No. of Vehicles/Cycle

Average no. of vehicles/cycle*	Length (feet)	Average no. of vehicles/cycle*	Length (feet)
1	75	17	600
2	100	18	625
3	150	19	650
4	175	20	675
5	200	21	725
6	250	22	750
7	275	23	775
8	325	24	800
9	350	25	825
10	375	30	975
11	400	35	1125
12	450	40	1250
13	475	45	1400
14	500	50	1550
15	525	55	1700
16	550	60	1850

161 left turn volume / 40 cycles per hour (for a 3 phase signal) = 4.0 vehicles/cycle.

* Average no. of vehicles/cycle = design hour volume of turning lane/cycles per hour

If cycles per hour are unknown, assume:

Unsignalized or 2 phase – 60 cycles per hour

3 phase – 40 cycles per hour

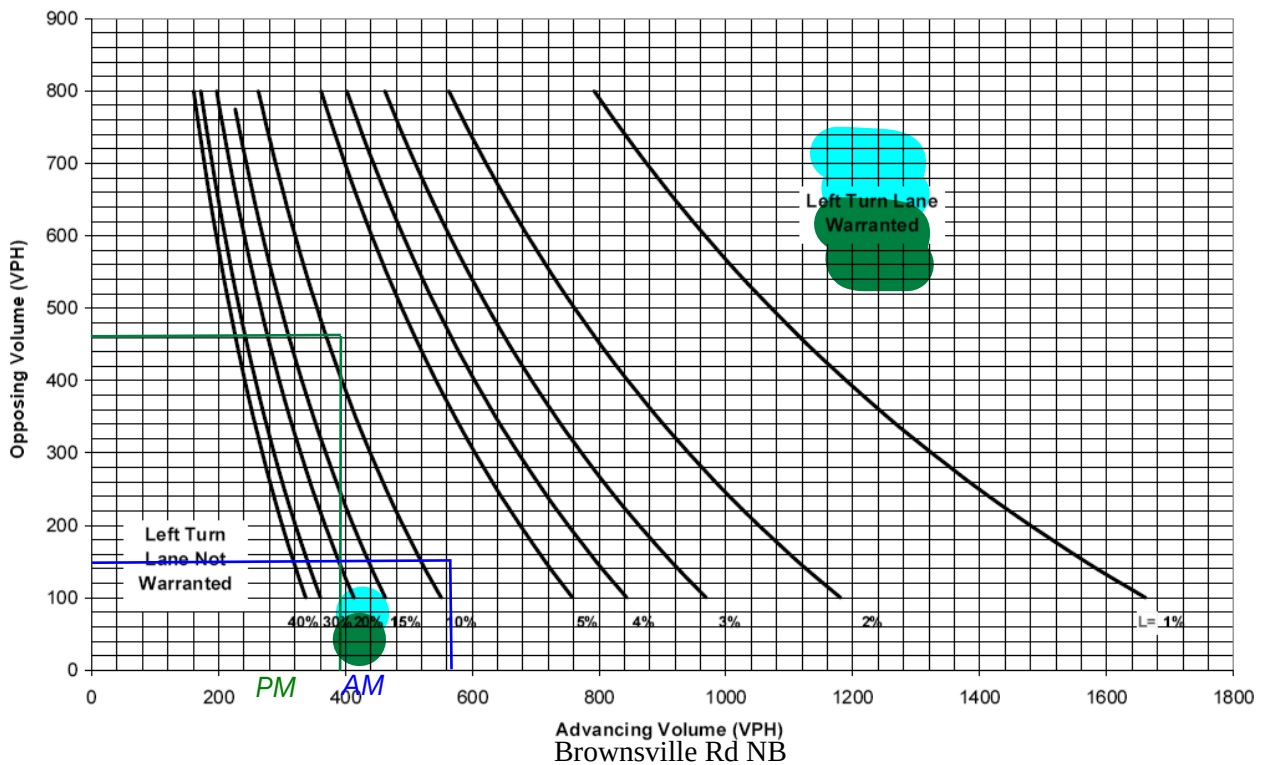
4 phase or more – 30 cycles per hour

At signalized intersections, consider dual left turn lanes and operational analysis.

Turn Lane Warrant Figures

Brownsville Rd @ Maytide St Left Turn Lane
Warrant Nomograph

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and
signalized intersections)
(L = % Left Turns in Advancing Volume)



NB advancing = 144 + 405 = 549
Left Turn % = 144 / 549 = 26.2%
Intersection Truck % = 5.9%
Truck Adjustment Factor = $1 + 0.06(1.5 - 1) = 1.03$
Passenger Car Equivalents (P.C.E.) Advancing: $549 * 1.03 = 565$
P.C.E. Opposing = $(145) * 1.03 = 149$

NB advancing = 301 + 88 = 389
Left Turn % = $88 / 389 = 22.6\%$
Intersection Truck % = 2.9%
Truck Adjustment Factor = $1 + 0.03(1.5 - 1) = 1.015$
P.C.E. Advancing: $389 * 1.015 = 395$
P.C.E. Opposing = $(456) * 1.015 = 463$

The hourly volume shall be multiplied by the truck adjustment factor (T), and the resulting passenger-car equivalent volume shall then be used in all subsequent calculations identified in these guidelines. The truck adjustment factors were taken from Reference 3 (see page 50).

Turn Lane Warrants

Use Figures 1 through 8 in the **Chapter 11 Appendix** page 60 to determine whether a left turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. Use Figures 9 through 12 in the **Chapter 11 Appendix** to determine whether a right turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. For unsignalized intersections, the warrants only apply to the free flow approach. For left turns, if the plotted point falls above the appropriate left turn percentage line (L), a left turn lane is considered warranted. Engineering District discretion should be used as to whether the actual left turn percentage should be rounded up or down to match one of the lines in the graph. A turn lane may be considered if the criteria is met for any one-hour period.

Figures 1 through 8 in the **Chapter 11 Appendix** were adapted from References 1, 2, 4, and 9. Figures 9 through 12 in the **Chapter 11 Appendix** were taken from Reference 5 (see page 50 for a list of references).

Turn Lane Storage Length

Use **Exhibit 11-6** through **Exhibit 11-8** to compute storage length for left and right turn lanes at unsignalized and signalized intersections. **Exhibit 11-6** to **Exhibit 11-8** were adapted from Reference 5. Minimum recommended storage length is 75 feet, and all results should be rounded the next highest 25-foot increment. Turn lane storage length does not include taper length.

Consider using dual left turn lanes at signalized intersections when the hourly left turn volume exceeds 300 vehicles per hour.

Exhibit 11-6 Turn Lane Storage - Type of Traffic Control Condition (A, B or C)

TYPE OF TRAFFIC CONTROL	SPEED (MPH)					
	25 – 35		40 – 45		50 - 60	
	TURN DEMAND VOLUME					
	HIGH	LOW*	HIGH	LOW*	HIGH	LOW*
SIGNALIZED	A	A	B or C**	B or C**	B or C**	B or C**
UNSIGNALIZED	A	A	C	B	B or C**	B

* LOW is considered 10% or less of approach traffic volume

** Whichever is greater

Exhibit 11-7 Turn Lane Storage – For Speed and Condition

CONDITION A	
SPEED (MPH)	STORAGE LENGTH
Any speed	Length from Exhibit 11-8
CONDITION B	
SPEED (MPH)	STORAGE LENGTH
40	75'
45	125'
50	175'
55	235'
60	295'
CONDITION C	
SPEED (MPH)	STORAGE LENGTH
40	61' + Additional length from Exhibit 11-8
45	75' + Additional length from Exhibit 11-8
50	93' + Additional length from Exhibit 11-8
55	114' + Additional length from Exhibit 11-8
60	131' + Additional length from Exhibit 11-8

Exhibit 11-8 Turn Lane Storage Based on Average No. of Vehicles/Cycle

Average no. of vehicles/cycle*	Length (feet)	Average no. of vehicles/cycle*	Length (feet)
1	75	17	600
2	100	18	625
3	150	19	650
4	175	20	675
5	200	21	725
6	250	22	750
7	275	23	775
8	325	24	800
9	350	25	825
10	375	30	975
11	400	35	1125
12	450	40	1250
13	475	45	1400
14	500	50	1550
15	525	55	1700
16	550	60	1850

144 left turn volume / 40 cycles per hour (for a 3 phase signal) = 3.6 vehicles/cycle.

* Average no. of vehicles/cycle = design hour volume of turning lane/cycles per hour

If cycles per hour are unknown, assume:

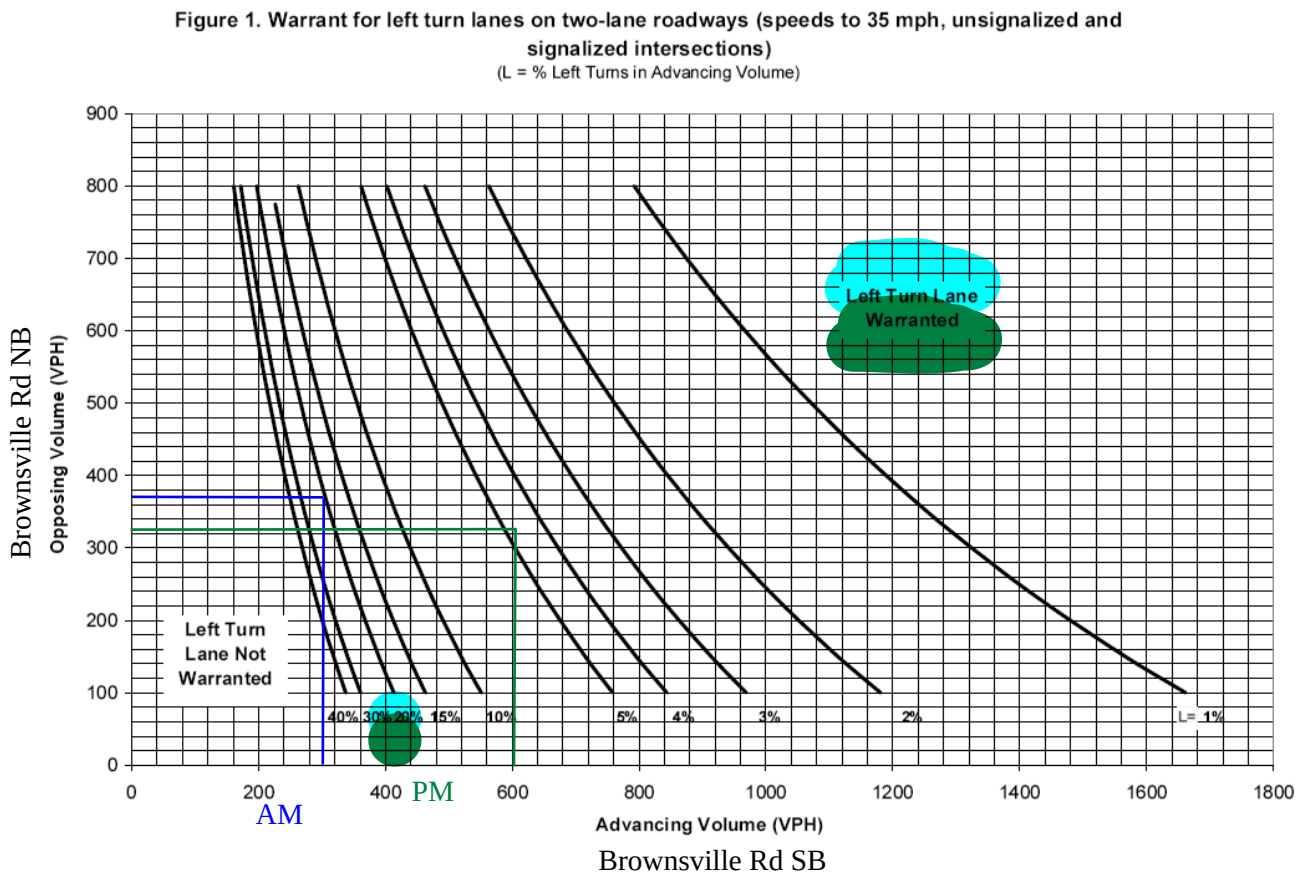
Unsignalized or 2 phase – 60 cycles per hour

3 phase – 40 cycles per hour

4 phase or more – 30 cycles per hour

At signalized intersections, consider dual left turn lanes and operational analysis.

Brownsville Rd @ Churchview Ave Left Turn Lane Warrant Nomograph



SB advancing = $1+70+224=295$
 Left Turn % = $70/295 = 23.7\%$
 Intersection Truck % = 4.2%
 Truck Adjustment Factor = $1+0.04(1.5-1) = 1.02$
 Passenger Car Equivalents (P.C.E.) Advancing: $295 \times 1.02 = 301$
 P.C.E. Opposing = $(327+34) \times 1.02 = 368$

SB advancing = $144+453=597$
 Left Turn % = $144/597 = 24.1\%$
 Intersection Truck % = 2.2%
 Truck Adjustment Factor = $1+0.02(1.5-1) = 1.01$
 P.C.E. Advancing: $597 \times 1.01 = 603$
 P.C.E. Opposing = $(267+56) \times 1.01 = 326$

The hourly volume shall be multiplied by the truck adjustment factor (T), and the resulting passenger-car equivalent volume shall then be used in all subsequent calculations identified in these guidelines. The truck adjustment factors were taken from Reference 3 (see page 50).

Turn Lane Warrants

Use Figures 1 through 8 in the **Chapter 11 Appendix** page 60 to determine whether a left turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. Use Figures 9 through 12 in the **Chapter 11 Appendix** to determine whether a right turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. For unsignalized intersections, the warrants only apply to the free flow approach. For left turns, if the plotted point falls above the appropriate left turn percentage line (L), a left turn lane is considered warranted. Engineering District discretion should be used as to whether the actual left turn percentage should be rounded up or down to match one of the lines in the graph. A turn lane may be considered if the criteria is met for any one-hour period.

Figures 1 through 8 in the **Chapter 11 Appendix** were adapted from References 1, 2, 4, and 9. Figures 9 through 12 in the **Chapter 11 Appendix** were taken from Reference 5 (see page 50 for a list of references).

Turn Lane Storage Length

Use **Exhibit 11-6** through **Exhibit 11-8** to compute storage length for left and right turn lanes at unsignalized and signalized intersections. **Exhibit 11-6** to **Exhibit 11-8** were adapted from Reference 5. Minimum recommended storage length is 75 feet, and all results should be rounded the next highest 25-foot increment. Turn lane storage length does not include taper length.

Consider using dual left turn lanes at signalized intersections when the hourly left turn volume exceeds 300 vehicles per hour.

Exhibit 11-6 Turn Lane Storage - Type of Traffic Control Condition (A, B or C)

TYPE OF TRAFFIC CONTROL	SPEED (MPH)					
	25 – 35		40 – 45		50 - 60	
	TURN DEMAND VOLUME					
	HIGH	LOW*	HIGH	LOW*	HIGH	LOW*
SIGNALIZED	A	A	B or C**	B or C**	B or C**	B or C**
UNSIGNALIZED	A	A	C	B	B or C**	B

* LOW is considered 10% or less of approach traffic volume

** Whichever is greater

Exhibit 11-7 Turn Lane Storage – For Speed and Condition

CONDITION A	
SPEED (MPH)	STORAGE LENGTH
Any speed	Length from Exhibit 11-8
CONDITION B	
SPEED (MPH)	STORAGE LENGTH
40	75'
45	125'
50	175'
55	235'
60	295'
CONDITION C	
SPEED (MPH)	STORAGE LENGTH
40	61' + Additional length from Exhibit 11-8
45	75' + Additional length from Exhibit 11-8
50	93' + Additional length from Exhibit 11-8
55	114' + Additional length from Exhibit 11-8
60	131' + Additional length from Exhibit 11-8

Exhibit 11-8 Turn Lane Storage Based on Average No. of Vehicles/Cycle

Average no. of vehicles/cycle*	Length (feet)	Average no. of vehicles/cycle*	Length (feet)
1	75	17	600
2	100	18	625
3	150	19	650
4	175	20	675
5	200	21	725
6	250	22	750
7	275	23	775
8	325	24	800
9	350	25	825
10	375	30	975
11	400	35	1125
12	450	40	1250
13	475	45	1400
14	500	50	1550
15	525	55	1700
16	550	60	1850

* Average no. of vehicles/cycle = design hour volume of turning lane/cycles per hour

If cycles per hour are unknown, assume:

Unsignalized or 2 phase – 60 cycles per hour

3 phase – 40 cycles per hour

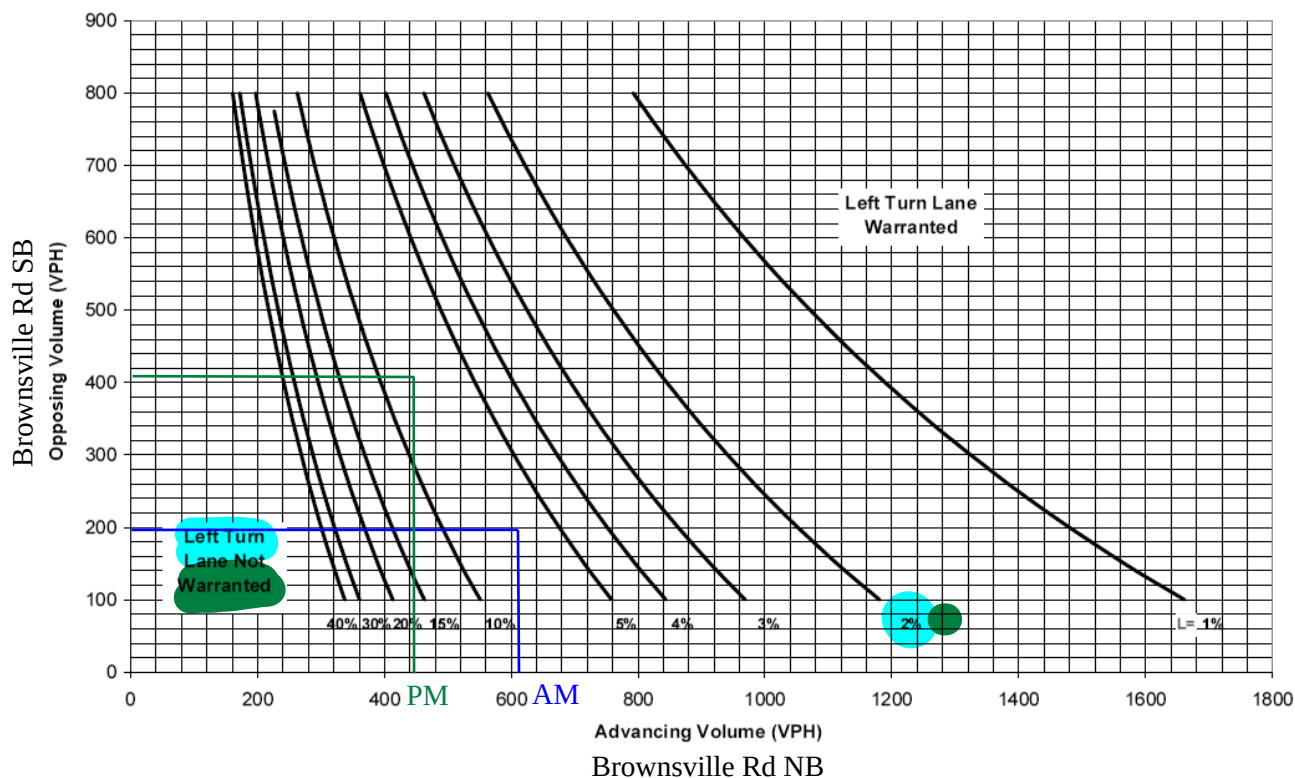
4 phase or more – 30 cycles per hour

At signalized intersections, consider dual left turn lanes and operational analysis.

Turn Lane Warrant Figures

Brownsville Rd @ Becks Run Rd / Biscayne Dr Left
Turn Lane Warrant Nomograph

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and
signalized intersections)
(L = % Left Turns in Advancing Volume)



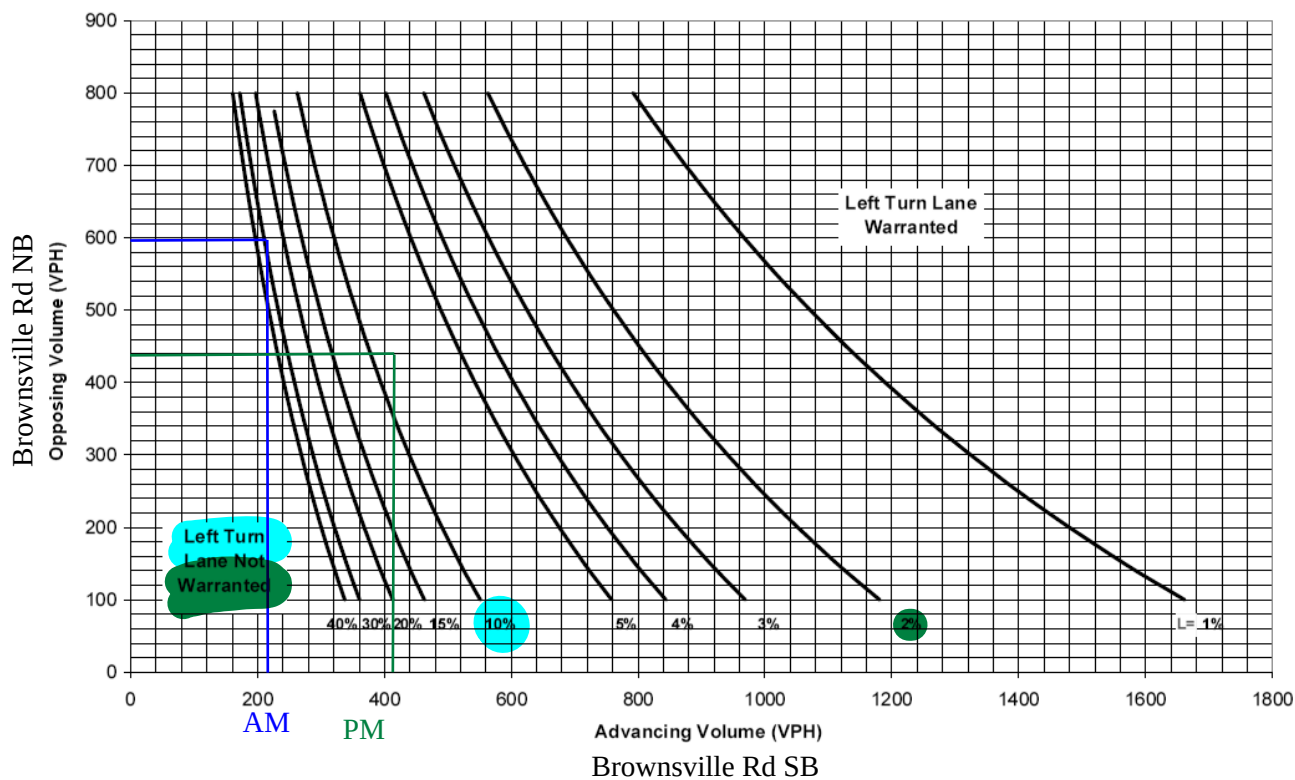
NB advancing $11+350+234=595$
 Left Turn % = $11/595 = 2\%$
 Intersection Truck % = $(2.8\%+1.9\%+0.3\%)=5\%$
 Truck Adjustment Factor = $1+0.05(1.5-1) = 1.025$
 Passenger Car Equivalents (P.C.E.) Advancing: $595 \times 1.025 = 610$
 P.C.E. Opposing = $(170+23) \times 1.025 = 198$

NB advancing $7+354+82=443$
 Left Turn % = $7/443 = 1.5\%$
 Intersection Truck % = 2%
 Truck Adjustment Factor = $1+0.02(1.5-1) = 1.01$
 P.C.E. Advancing: $443 \times 1.01 = 447$
 P.C.E. Opposing = $(371+30) \times 1.01 = 405$

Turn Lane Warrant Figures

Brownsville Rd @ Becks Run Rd / Biscayne Dr Left
Turn Lane Warrant Nomograph

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and signalized intersections)
(L = % Left Turns in Advancing Volume)

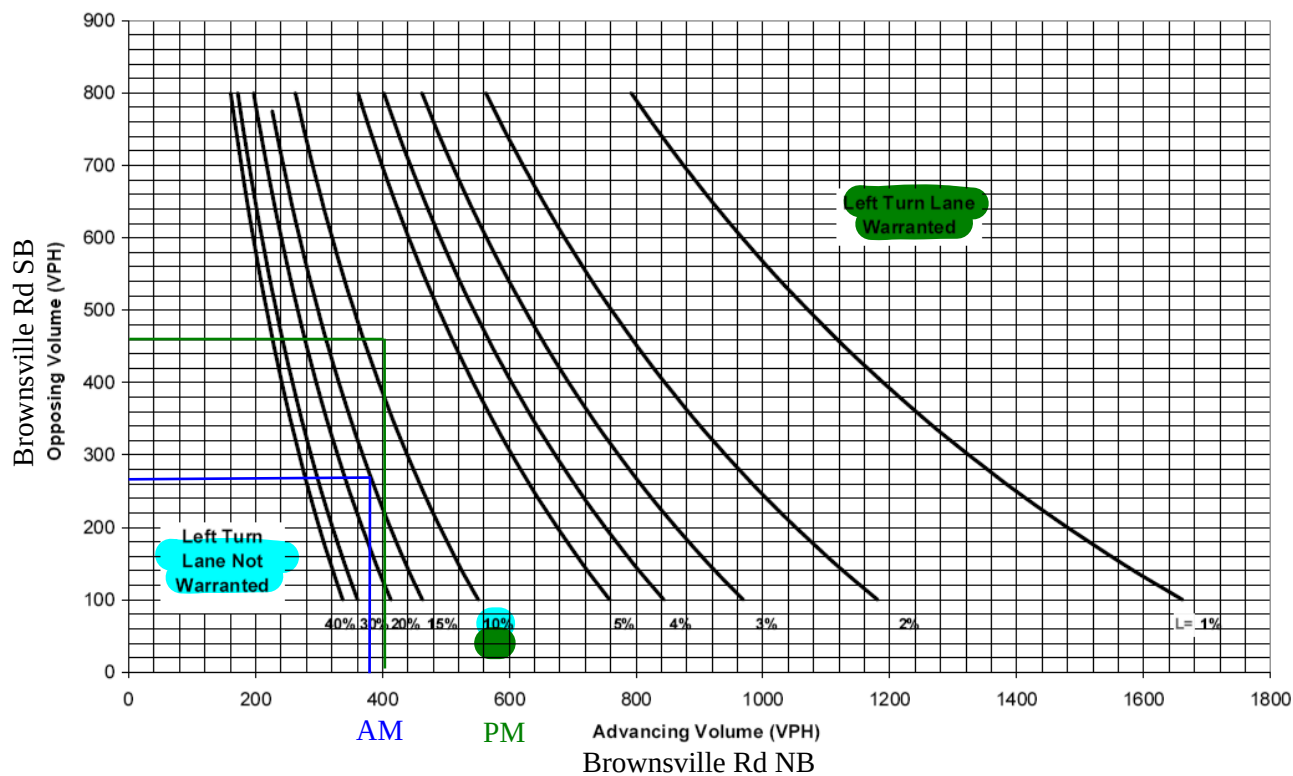


SB advancing $16+170+23=209$
 Left Turn % = $16/209 = 7.7\%$
 Intersection Truck % = 5%
 Truck Adjustment Factor = $1+0.05(1.5-1)=1.025$
 Passenger Car Equivalents (P.C.E.) Advancing: $209*1.025=214$
 P.C.E. Opposing = $(350+234)*1.025=599$

SB advancing $10+371+30=411$
 Left Turn % = $10/411 = 2.4\%$
 Intersection Truck % = 2%
 Truck Adjustment Factor = $1+0.02(1.5-1)=1.01$
 P.C.E. Advancing: $411*1.01=415$
 P.C.E. Opposing = $(354+82)*1.01=440$

Brownsville Rd @ Overbrook Blvd Left Turn Lane Warrant Nomograph

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and
signalized intersections)
(L = % Left Turns in Advancing Volume)



NB advancing = 34+335=369
 Left Turn % = 34/369=9.2%
 Intersection Truck % = 6.7%
 Truck Adjustment Factor = $1+0.067(1.5-1)=1.034$
 Passenger Car Equivalents (P.C.E.) Advancing: $369 \times 1.034=382$
 P.C.E. Opposing = $(226+30) \times 1.034=265$

NB advancing = 40+359=399
 Left Turn % = $40/399 = 10\%$
 Intersection Truck % = 2.8%
 Truck Adjustment Factor = $1+0.03(1.5-1)=1.015$
 P.C.E. Advancing: $399 \times 1.015=405$
 P.C.E. Opposing = $(399+55) \times 1.015=461$

The hourly volume shall be multiplied by the truck adjustment factor (T), and the resulting passenger-car equivalent volume shall then be used in all subsequent calculations identified in these guidelines. The truck adjustment factors were taken from Reference 3 (see page 50).

Turn Lane Warrants

Use Figures 1 through 8 in the [Chapter 11 Appendix](#) page 60 to determine whether a left turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. Use Figures 9 through 12 in the [Chapter 11 Appendix](#) to determine whether a right turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. For unsignalized intersections, the warrants only apply to the free flow approach. For left turns, if the plotted point falls above the appropriate left turn percentage line (L), a left turn lane is considered warranted. Engineering District discretion should be used as to whether the actual left turn percentage should be rounded up or down to match one of the lines in the graph. A turn lane may be considered if the criteria is met for any one-hour period.

Figures 1 through 8 in the [Chapter 11 Appendix](#) were adapted from References 1, 2, 4, and 9. Figures 9 through 12 in the [Chapter 11 Appendix](#) were taken from Reference 5 (see page 50 for a list of references).

Turn Lane Storage Length

Use [Exhibit 11-6](#) through [Exhibit 11-8](#) to compute storage length for left and right turn lanes at unsignalized and signalized intersections. [Exhibit 11-6](#) to [Exhibit 11-8](#) were adapted from Reference 5. Minimum recommended storage length is 75 feet, and all results should be rounded the next highest 25-foot increment. Turn lane storage length does not include taper length.

Consider using dual left turn lanes at signalized intersections when the hourly left turn volume exceeds 300 vehicles per hour.

Exhibit 11-6 Turn Lane Storage - Type of Traffic Control Condition (A, B or C)

TYPE OF TRAFFIC CONTROL	SPEED (MPH)					
	25 – 35		40 – 45		50 - 60	
	TURN DEMAND VOLUME					
	HIGH	LOW*	HIGH	LOW*	HIGH	LOW*
SIGNALIZED	A	A	B or C**	B or C**	B or C**	B or C**
UNSIGNALIZED	A	A	C	B	B or C**	B

* LOW is considered 10% or less of approach traffic volume

** Whichever is greater

Exhibit 11-7 Turn Lane Storage – For Speed and Condition

CONDITION A	
SPEED (MPH)	STORAGE LENGTH
Any speed	Length from Exhibit 11-8
CONDITION B	
SPEED (MPH)	STORAGE LENGTH
40	75'
45	125'
50	175'
55	235'
60	295'
CONDITION C	
SPEED (MPH)	STORAGE LENGTH
40	61' + Additional length from Exhibit 11-8
45	75' + Additional length from Exhibit 11-8
50	93' + Additional length from Exhibit 11-8
55	114' + Additional length from Exhibit 11-8
60	131' + Additional length from Exhibit 11-8

Exhibit 11-8 Turn Lane Storage Based on Average No. of Vehicles/Cycle

Average no. of vehicles/cycle*	Length (feet)	Average no. of vehicles/cycle*	Length (feet)
1	75	17	600
2	100	18	625
3	150	19	650
4	175	20	675
5	200	21	725
6	250	22	750
7	275	23	775
8	325	24	800
9	350	25	825
10	375	30	975
11	400	35	1125
12	450	40	1250
13	475	45	1400
14	500	50	1550
15	525	55	1700
16	550	60	1850

* Average no. of vehicles/cycle = design hour volume of turning lane/cycles per hour

If cycles per hour are unknown, assume:

Unsignalized or 2 phase – 60 cycles per hour

3 phase – 40 cycles per hour

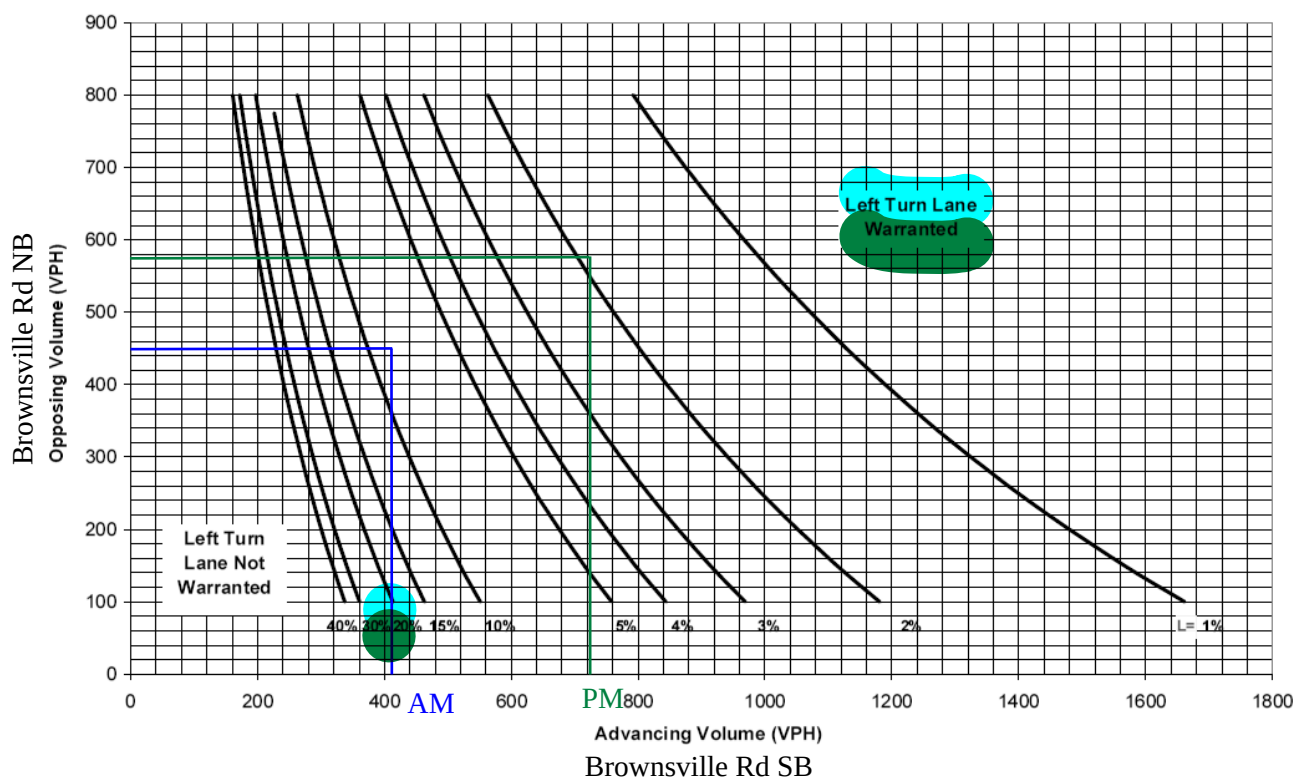
4 phase or more – 30 cycles per hour

In other words, peak hour vehicles per minute. It is 40 for the NB approach of Brownsville Rd.

At signalized intersections, consider dual left turn lanes and operational analysis.

Brownsville Rd @ E W Agnew Ave Left Turn Lane Warrant Nomograph

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and signalized intersections)
(L = % Left Turns in Advancing Volume)



SB advancing = 114+294+3=411

Left Turn % = 114/411 = 27.7%

Intersection Truck % = 5.3%

Truck Adjustment Factor = $1 + 0.05(1.5 - 1) = 1.025$

Passenger Car Equivalents (P.C.E.) Advancing: $411 * 1.025 = 421$

P.C.E. Opposing = $(399 + 47) * 1.025 = 457$

SB advancing = 179+531+1=712

Left Turn % = 179/712 = 25.1%

Intersection Truck % = 3%

Truck Adjustment Factor = $1 + 0.03(1.5 - 1) = 1.015$

P.C.E. Advancing: $712 * 1.015 = 723$

P.C.E. Opposing = $(501 + 68) * 1.015 = 578$

The hourly volume shall be multiplied by the truck adjustment factor (T), and the resulting passenger-car equivalent volume shall then be used in all subsequent calculations identified in these guidelines. The truck adjustment factors were taken from Reference 3 (see page 50).

Turn Lane Warrants

Use Figures 1 through 8 in the **Chapter 11 Appendix** page 60 to determine whether a left turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. Use Figures 9 through 12 in the **Chapter 11 Appendix** to determine whether a right turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. For unsignalized intersections, the warrants only apply to the free flow approach. For left turns, if the plotted point falls above the appropriate left turn percentage line (L), a left turn lane is considered warranted. Engineering District discretion should be used as to whether the actual left turn percentage should be rounded up or down to match one of the lines in the graph. A turn lane may be considered if the criteria is met for any one-hour period.

Figures 1 through 8 in the **Chapter 11 Appendix** were adapted from References 1, 2, 4, and 9. Figures 9 through 12 in the **Chapter 11 Appendix** were taken from Reference 5 (see page 50 for a list of references).

Turn Lane Storage Length

Use **Exhibit 11-6** through **Exhibit 11-8** to compute storage length for left and right turn lanes at unsignalized and signalized intersections. **Exhibit 11-6** to **Exhibit 11-8** were adapted from Reference 5. Minimum recommended storage length is 75 feet, and all results should be rounded the next highest 25-foot increment. Turn lane storage length does not include taper length.

Consider using dual left turn lanes at signalized intersections when the hourly left turn volume exceeds 300 vehicles per hour.

Exhibit 11-6 Turn Lane Storage - Type of Traffic Control Condition (A, B or C)

TYPE OF TRAFFIC CONTROL	SPEED (MPH)					
	25 – 35		40 – 45		50 - 60	
	TURN DEMAND VOLUME					
	HIGH	LOW*	HIGH	LOW*	HIGH	LOW*
SIGNALIZED	A	A	B or C**	B or C**	B or C**	B or C**
UNSIGNALIZED	A	A	C	B	B or C**	B

* LOW is considered 10% or less of approach traffic volume

** Whichever is greater

Exhibit 11-7 Turn Lane Storage – For Speed and Condition

CONDITION A	
SPEED (MPH)	STORAGE LENGTH
Any speed	Length from Exhibit 11-8
CONDITION B	
SPEED (MPH)	STORAGE LENGTH
40	75'
45	125'
50	175'
55	235'
60	295'
CONDITION C	
SPEED (MPH)	STORAGE LENGTH
40	61' + Additional length from Exhibit 11-8
45	75' + Additional length from Exhibit 11-8
50	93' + Additional length from Exhibit 11-8
55	114' + Additional length from Exhibit 11-8
60	131' + Additional length from Exhibit 11-8

Exhibit 11-8 Turn Lane Storage Based on Average No. of Vehicles/Cycle

Average no. of vehicles/cycle*	Length (feet)	Average no. of vehicles/cycle*	Length (feet)
1	75	17	600
2	100	18	625
3	150	19	650
4	175	20	675
5	200	21	725
6	250	22	750
7	275	23	775
8	325	24	800
9	350	25	825
10	375	30	975
11	400	35	1125
12	450	40	1250
13	475	45	1400
14	500	50	1550
15	525	55	1700
16	550	60	1850

* Average no. of vehicles/cycle = design hour volume of turning lane/cycles per hour

If cycles per hour are unknown, assume:

Unsignalized or 2 phase – 60 cycles per hour

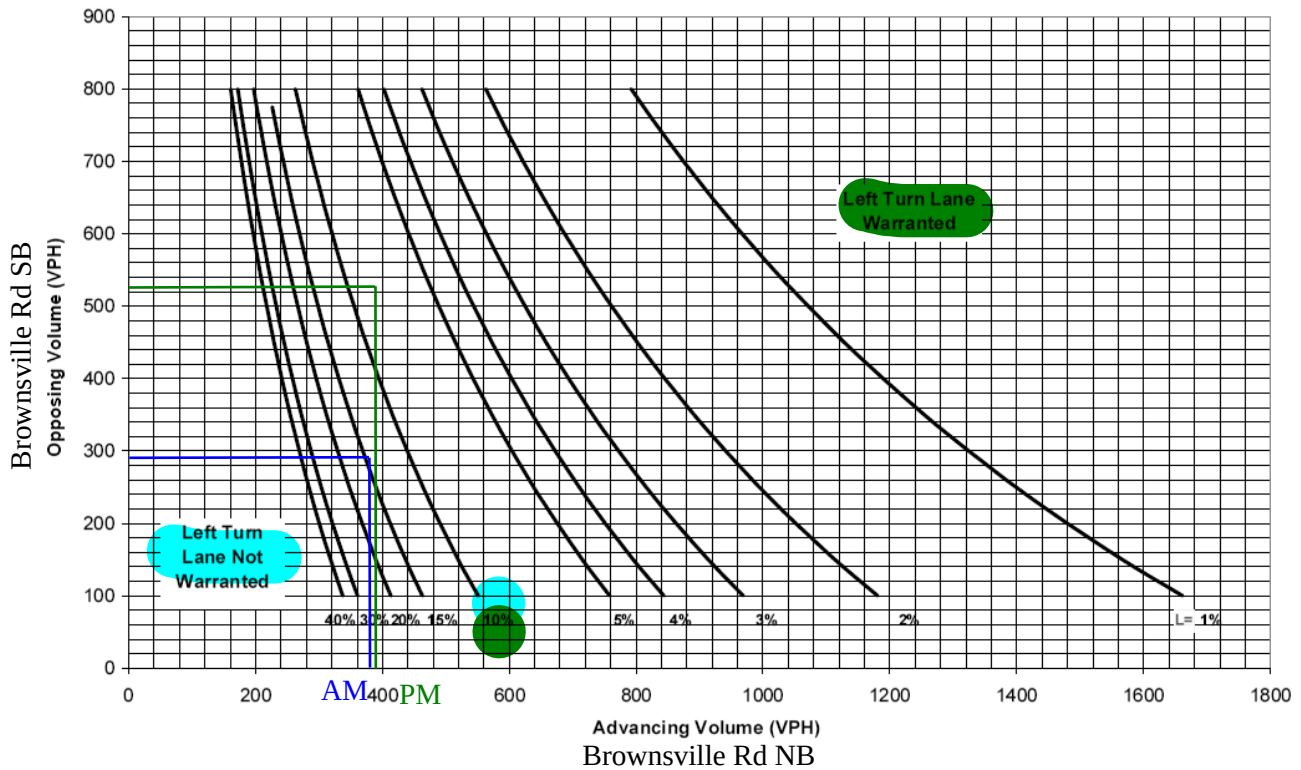
3 phase – 40 cycles per hour

4 phase or more – 30 cycles per hour

At signalized intersections, consider dual left turn lanes and operational analysis.

Brownsville Rd @ Nobles Ln Left Turn Lane Warrant Nomograph

Figure 1. Warrant for left turn lanes on two-lane roadways (speeds to 35 mph, unsignalized and signalized intersections)
(L = % Left Turns in Advancing Volume)



NB advancing = $38 + 333 = 371$
 Left Turn % = $38 / 371 = 10.2\%$
 Intersection Truck % = 6.5%
 Truck Adjustment Factor = $1 + 0.065(1.5 - 1) = 1.033$
 Passenger Car Equivalents (P.C.E.) Advancing: $371 * 1.033 = 383$
 P.C.E. Opposing = $(199 + 81 + 4) * 1.033 = 293$

NB advancing = $42 + 344 = 386$
 Left Turn % = $42 / 386 = 10.9\%$
 Intersection Truck % = 2.4%
 Truck Adjustment Factor = $1 + 0.024(1.5 - 1) = 1.012$
 P.C.E. Advancing: $386 * 1.012 = 391$
 P.C.E. Opposing = $(450 + 71) * 1.012 = 527$

The hourly volume shall be multiplied by the truck adjustment factor (T), and the resulting passenger-car equivalent volume shall then be used in all subsequent calculations identified in these guidelines. The truck adjustment factors were taken from Reference 3 (see page 50).

Turn Lane Warrants

Use Figures 1 through 8 in the **Chapter 11 Appendix** page 60 to determine whether a left turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. Use Figures 9 through 12 in the **Chapter 11 Appendix** to determine whether a right turn lane is warranted on two-lane and four-lane roadways at unsignalized and signalized intersections. For unsignalized intersections, the warrants only apply to the free flow approach. For left turns, if the plotted point falls above the appropriate left turn percentage line (L), a left turn lane is considered warranted. Engineering District discretion should be used as to whether the actual left turn percentage should be rounded up or down to match one of the lines in the graph. A turn lane may be considered if the criteria is met for any one-hour period.

Figures 1 through 8 in the **Chapter 11 Appendix** were adapted from References 1, 2, 4, and 9. Figures 9 through 12 in the **Chapter 11 Appendix** were taken from Reference 5 (see page 50 for a list of references).

Turn Lane Storage Length

Use **Exhibit 11-6** through **Exhibit 11-8** to compute storage length for left and right turn lanes at unsignalized and signalized intersections. **Exhibit 11-6** to **Exhibit 11-8** were adapted from Reference 5. Minimum recommended storage length is 75 feet, and all results should be rounded the next highest 25-foot increment. Turn lane storage length does not include taper length.

Consider using dual left turn lanes at signalized intersections when the hourly left turn volume exceeds 300 vehicles per hour.

Exhibit 11-6 Turn Lane Storage - Type of Traffic Control Condition (A, B or C)

TYPE OF TRAFFIC CONTROL	SPEED (MPH)					
	25 – 35		40 – 45		50 - 60	
	TURN DEMAND VOLUME					
	HIGH	LOW*	HIGH	LOW*	HIGH	LOW*
SIGNALIZED	A	A	B or C**	B or C**	B or C**	B or C**
UNSIGNALIZED	A	A	C	B	B or C**	B

* LOW is considered 10% or less of approach traffic volume

** Whichever is greater

Exhibit 11-7 Turn Lane Storage – For Speed and Condition

CONDITION A	
SPEED (MPH)	STORAGE LENGTH
Any speed	Length from Exhibit 11-8
CONDITION B	
SPEED (MPH)	STORAGE LENGTH
40	75'
45	125'
50	175'
55	235'
60	295'
CONDITION C	
SPEED (MPH)	STORAGE LENGTH
40	61' + Additional length from Exhibit 11-8
45	75' + Additional length from Exhibit 11-8
50	93' + Additional length from Exhibit 11-8
55	114' + Additional length from Exhibit 11-8
60	131' + Additional length from Exhibit 11-8

Exhibit 11-8 Turn Lane Storage Based on Average No. of Vehicles/Cycle

Average no. of vehicles/cycle*	Length (feet)	Average no. of vehicles/cycle*	Length (feet)
1	75	17	600
2	100	18	625
3	150	19	650
4	175	20	675
5	200	21	725
6	250	22	750
7	275	23	775
8	325	24	800
9	350	25	825
10	375	30	975
11	400	35	1125
12	450	40	1250
13	475	45	1400
14	500	50	1550
15	525	55	1700
16	550	60	1850

* Average no. of vehicles/cycle = design hour volume of turning lane/cycles per hour

If cycles per hour are unknown, assume:

Unsignalized or 2 phase – 60 cycles per hour

3 phase – 40 cycles per hour

4 phase or more – 30 cycles per hour

At signalized intersections, consider dual left turn lanes and operational analysis.

Other Warranting Factors and Considerations

While the preceding sections present analytical procedures to determine whether turn lanes may be warranted, it must be recognized that there are other factors that may need to be considered. These factors may justify turn lanes at some locations where the numerical warrants are not satisfied.

Some of the factors, or combinations of factors, that may need to be considered and may justify turn lanes to preserve safe and efficient traffic flow include crash history; sight distance; deceleration requirements; the type and volume of turning traffic considering nearby land use; grades; locations on high-speed, multilane highways; 85th percentile and safe running speeds; and engineering judgment.

Example Problem

Problem Statement

Determine whether an exclusive left turn lane is warranted and its desired storage length on a signalized approach of a rural arterial highway (speed = 50 mph, 20% trucks, rolling terrain). Intersection approach volumes consist of 100 left turning vehicles per hour and 680 through vehicles per hour. Opposing traffic volume is 500 vehicles per hour. The traffic signal has a 90-second cycle length.

Determine Whether a Left Turn Lane Is Warranted

First, convert the hourly volume to a passenger-car equivalent volume:

$$T = 1 + .2 (2.5 - 1) = 1.3$$

$$\text{Passenger-car equivalent volume (left)} = 1.3 (100) = 130 \text{ vehicles}$$

$$\text{Passenger-car equivalent volume (through)} = 1.3 (680) = 884 \text{ vehicles}$$

$$\text{Passenger-car equivalent volume (opposing)} = 1.3 (500) = 650 \text{ vehicles}$$

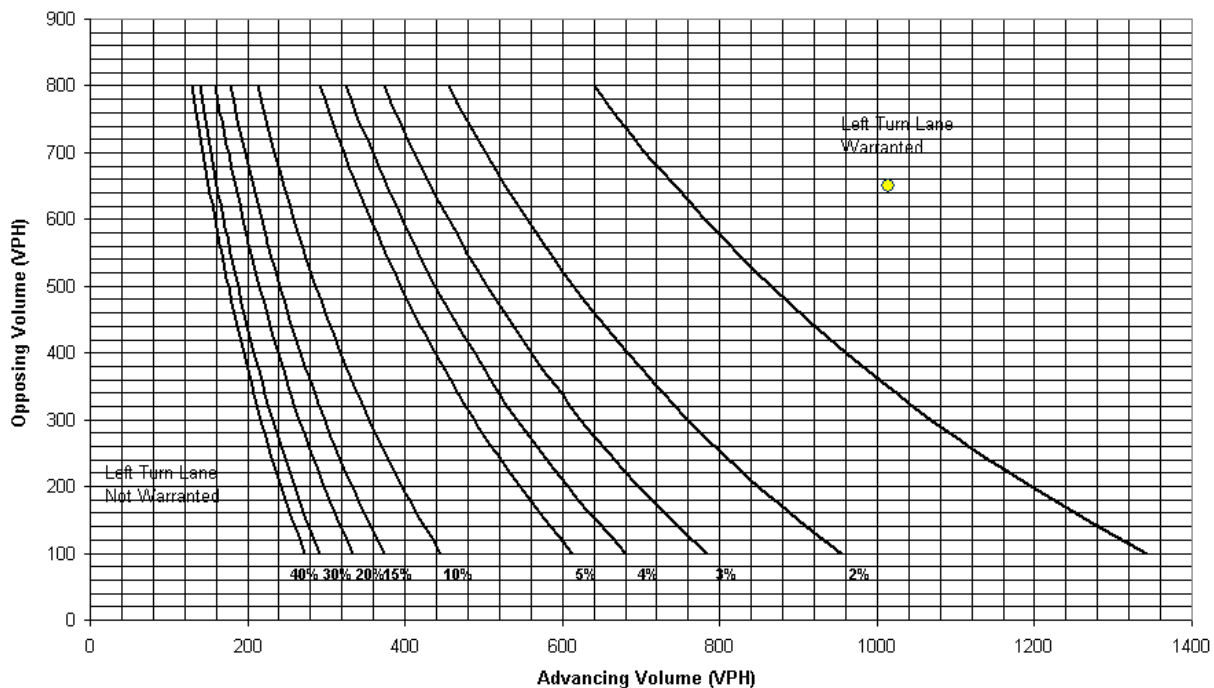
$$\text{Passenger-car equivalent volume (advancing)} = 130 + 884 = 1,014 \text{ vehicles.}$$

Next, identify the percentage of left turns contained in the advancing volume:

$$L = 130/1014 = 12.8\%.$$

Then, use the appropriate graph from Figures 1 through 8 in the [Chapter 11 Appendix](#) to determine if a left turn lane is warranted. Therefore, based on site conditions, **Figure 4** will be utilized to plot the traffic information as follows:

Figure 4. Warrant for left turn lanes on two-lane highways (50 mph speed, unsignalized and signalized intersections)
(L = % Left Turns in Advancing Volume)



Since the plotted point falls above all of the left turn percentage lines, a left turn lane is warranted.

Determine Storage Length

Refer to [Exhibit 11-6](#). Using the given speed of 50 mph, enter the column with the speed “50-60”. Next, determine if the left turn demand volume is “high” or “low”. “Low” is considered 10% or less of the approach traffic flow. The demand is $130 / (884 + 130) = 12.8\%$. Therefore, the left turn demand is considered “high”. Based on a “signalized” intersection, the table indicates that Condition B or C (whichever is greater) should be used to calculate the storage length of the left turn lane.

Condition B, for the 50 mph speed from [Exhibit 11-7](#) gives a storage length of 175 feet.

Condition C is calculated by adding the 93 feet (for the 50 mph speed from [Exhibit 11-7](#)) to the additional length determined from [Exhibit 11-8](#). To determine the additional length, first calculate the number of cycles/hour ($3600 \text{ seconds/hour} \div 90 \text{ seconds/cycle} = 40 \text{ cycles/hour}$). Next, divide the hourly left turn approach volume by the number of cycles per hour ($130 \text{ left turning vehicles} \div 40 \text{ cycles/hour} = 3.25 = \text{round to } 3$). Using [Exhibit 11-8](#), the additional length is 150 feet. Adding the 150 feet to the 93 feet noted above equals 243 feet. A comparison of the values from Condition B and Condition C yields a storage length of 175 feet and 243 feet, respectively. Therefore, use the greater value of 243 feet. Rounding to the next highest 25-foot increment results in a recommended left turn storage length of 250 feet.

Appendix B: Traffic Counts

Stewart Ave

1. Brownsville Road, Biscayne Drive & Becks ... - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121312, Location: 40.382851, -79.976829, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Stewart Avenue Eastbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
2023-10-11 6:30AM	3	97	0	100	0	65	3	0	68	0	4	1	0	5	0	173
6:45AM	0	121	0	121	1	55	6	0	61	0	5	0	0	5	0	187
Hourly Total	3	218	0	221	1	120	9	0	129	0	9	1	0	10	0	360
7:00AM	4	120	0	124	0	87	5	0	92	0	5	3	0	8	1	224
7:15AM	2	136	0	138	0	72	11	0	83	0	7	2	0	9	1	230
7:30AM	2	121	0	123	1	69	8	0	77	0	18	2	0	20	2	220
7:45AM	4	108	0	112	1	72	12	0	84	0	13	4	0	17	2	213
Hourly Total	12	485	0	497	2	300	36	0	336	0	43	11	0	54	6	887
8:00AM	2	93	0	95	3	70	8	0	78	0	9	1	0	10	1	183
8:15AM	2	134	0	136	0	121	4	0	125	0	6	3	0	9	6	270
8:30AM	2	106	0	108	1	103	15	0	118	0	17	3	0	20	4	246
8:45AM	1	87	0	88	0	96	11	0	107	0	16	5	0	21	4	216
Hourly Total	7	420	0	427	4	390	38	0	428	0	48	12	0	60	15	915
9:00AM	2	98	0	100	0	80	12	0	92	0	10	6	0	16	4	208
9:15AM	4	92	0	96	0	108	9	0	117	0	5	5	0	10	8	223
Hourly Total	6	190	0	196	0	188	21	0	209	0	15	11	0	26	12	431
2:00PM	2	133	0	135	1	95	8	0	103	1	17	8	0	25	5	263
2:15PM	5	132	0	137	0	128	6	0	134	0	10	3	0	13	8	284
2:30PM	6	121	0	127	2	141	14	0	155	1	16	5	0	21	8	303
2:45PM	5	100	0	105	0	125	10	0	135	0	10	3	0	13	2	253
Hourly Total	18	486	0	504	3	489	38	0	527	2	53	19	0	72	23	1103
3:00PM	2	112	0	114	0	116	19	0	135	0	6	5	0	11	3	260
3:15PM	1	136	0	137	1	136	17	0	153	1	15	6	0	21	4	311
3:30PM	3	113	0	116	4	156	13	0	169	0	13	6	0	19	2	304
3:45PM	2	112	0	114	0	147	17	0	164	0	8	5	0	13	10	291
Hourly Total	8	473	0	481	5	555	66	0	621	1	42	22	0	64	19	1166
4:00PM	2	107	0	109	0	156	13	0	169	0	10	3	0	13	8	291
4:15PM	7	132	0	139	2	158	16	0	174	0	14	6	0	20	8	333
4:30PM	1	135	0	136	0	166	15	0	181	0	10	8	0	18	2	335
4:45PM	4	124	0	128	5	189	23	0	212	0	8	4	0	12	5	352
Hourly Total	14	498	0	512	7	669	67	0	736	0	42	21	0	63	23	1311
5:00PM	8	125	0	133	0	175	15	0	190	0	11	6	0	17	3	340
5:15PM	1	133	0	134	1	159	10	0	169	0	13	4	0	17	2	320
5:30PM	4	133	0	137	1	164	14	0	178	0	14	8	0	22	3	337
5:45PM	2	132	0	134	0	159	11	0	170	2	21	7	0	28	5	332
Hourly Total	15	523	0	538	2	657	50	0	707	2	59	25	0	84	13	1329
Total	83	3293	0	3376	24	3368	325	0	3693	5	311	122	0	433	111	7502

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Stewart Avenue Eastbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
% Approach	2.5%	97.5%	0%	-	-	91.2%	8.8%	0%	-	-	71.8%	28.2%	0%	-	-	-
% Total	1.1%	43.9%	0%	45.0%	-	44.9%	4.3%	0%	49.2%	-	4.1%	1.6%	0%	5.8%	-	-
Motorcycles	0	5	0	5	-	5	1	0	6	-	0	1	0	1	-	12
% Motorcycles	0%	0.2%	0%	0.1%	-	0.1%	0.3%	0%	0.2%	-	0%	0.8%	0%	0.2%	-	0.2%
Lights	83	3156	0	3239	-	3237	310	0	3547	-	296	121	0	417	-	7203
% Lights	100%	95.8%	0%	95.9%	-	96.1%	95.4%	0%	96.0%	-	95.2%	99.2%	0%	96.3%	-	96.0%
Single-Unit Trucks	0	32	0	32	-	35	4	0	39	-	4	0	0	4	-	75
% Single-Unit Trucks	0%	1.0%	0%	0.9%	-	1.0%	1.2%	0%	1.1%	-	1.3%	0%	0%	0.9%	-	1.0%
Articulated Trucks	0	7	0	7	-	5	0	0	5	-	0	0	0	0	-	12
% Articulated Trucks	0%	0.2%	0%	0.2%	-	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	-	0.2%
Buses	0	91	0	91	-	82	10	0	92	-	11	0	0	11	-	194
% Buses	0%	2.8%	0%	2.7%	-	2.4%	3.1%	0%	2.5%	-	3.5%	0%	0%	2.5%	-	2.6%
Bicycles on Road	0	2	0	2	-	4	0	0	4	-	0	0	0	0	-	6
% Bicycles on Road	0%	0.1%	0%	0.1%	-	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	24	-	-	-	-	5	-	-	-	-	108	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	97.3%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	2.7%	-

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

Stewart Ave

1. Brownsville Road, Biscayne Drive & Becks ... - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

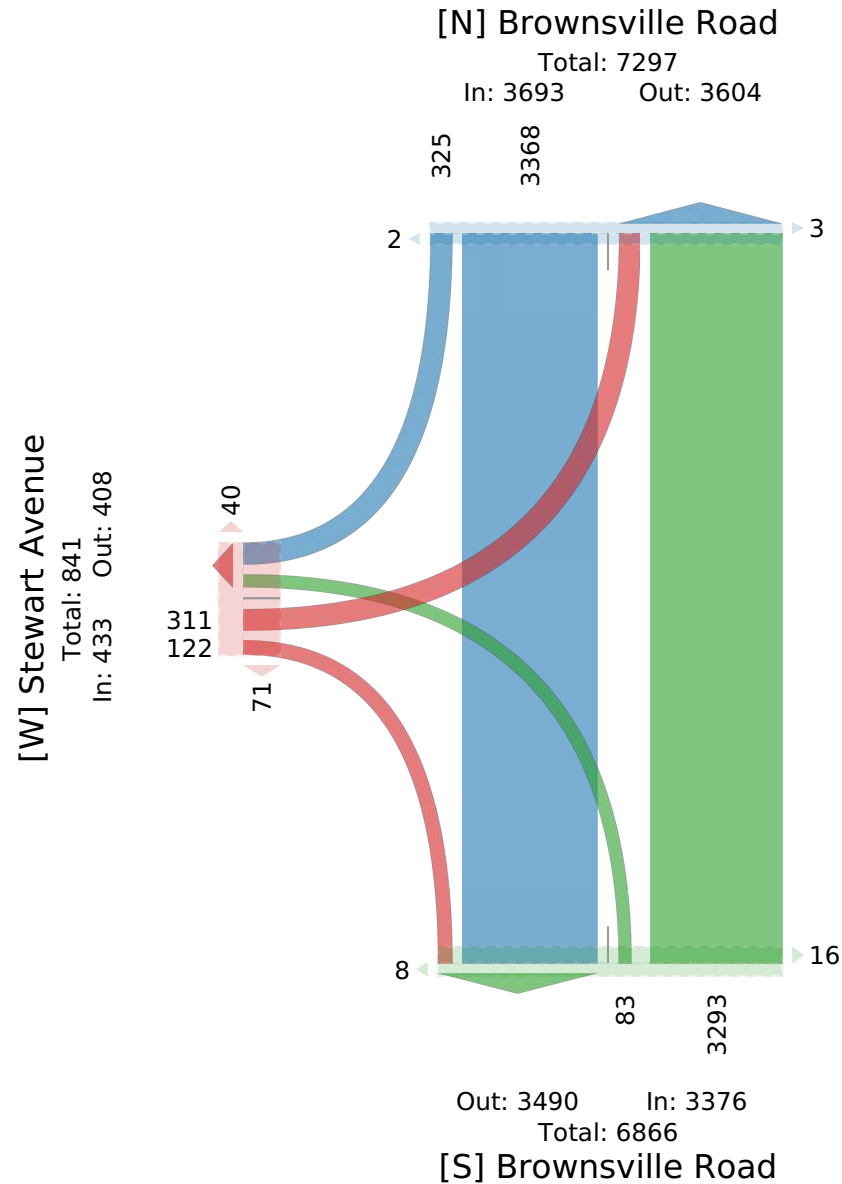
All Movements

ID: 1121312, Location: 40.382851, -79.976829, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US



Stewart Ave

1. Brownsville Road, Biscayne Drive & Becks ... - TMC

Wed Oct 11, 2023

AM Peak (8:15 AM - 9:15 AM)

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

All Movements

ID: 1121312, Location: 40.382851, -79.976829, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Stewart Avenue Eastbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
2023-10-11 8:15AM	2	134	0	136	0	121	4	0	125	0	6	3	0	9	6	270
8:30AM	2	106	0	108	1	103	15	0	118	0	17	3	0	20	4	246
8:45AM	1	87	0	88	0	96	11	0	107	0	16	5	0	21	4	216
9:00AM	2	98	0	100	0	80	12	0	92	0	10	6	0	16	4	208
Total	7	425	0	432	1	400	42	0	442	0	49	17	0	66	18	940
% Approach	1.6%	98.4%	0%	-	-	90.5%	9.5%	0%	-	-	74.2%	25.8%	0%	-	-	-
% Total	0.7%	45.2%	0%	46.0%	-	42.6%	4.5%	0%	47.0%	-	5.2%	1.8%	0%	7.0%	-	-
PHF	0.875	0.791	-	0.792	-	0.826	0.700	-	0.884	-	0.721	0.708	-	0.786	-	0.869
Motorcycles	0	0	0	0	-	0	0	0	0	-	0	1	0	1	-	1
% Motorcycles	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	5.9%	0%	1.5%	-	0.1%
Lights	7	402	0	409	-	373	40	0	413	-	46	16	0	62	-	884
% Lights	100%	94.6%	0%	94.7%	-	93.3%	95.2%	0%	93.4%	-	93.9%	94.1%	0%	93.9%	-	94.0%
Single-Unit Trucks	0	8	0	8	-	11	2	0	13	-	3	0	0	3	-	24
% Single-Unit Trucks	0%	1.9%	0%	1.9%	-	2.8%	4.8%	0%	2.9%	-	6.1%	0%	0%	4.5%	-	2.6%
Articulated Trucks	0	0	0	0	-	2	0	0	2	-	0	0	0	0	-	2
% Articulated Trucks	0%	0%	0%	0%	-	0.5%	0%	0%	0.5%	-	0%	0%	0%	0%	-	0.2%
Buses	0	14	0	14	-	14	0	0	14	-	0	0	0	0	-	28
% Buses	0%	3.3%	0%	3.2%	-	3.5%	0%	0%	3.2%	-	0%	0%	0%	0%	-	3.0%
Bicycles on Road	0	1	0	1	-	0	0	0	0	-	0	0	0	0	-	1
% Bicycles on Road	0%	0.2%	0%	0.2%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	1	-	-	-	-	0	-	-	-	-	18	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	0%	-

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

Stewart Ave

1. Brownsville Road, Biscayne Drive & Becks... - TMC

Wed Oct 11, 2023

AM Peak (8:15 AM - 9:15 AM)

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

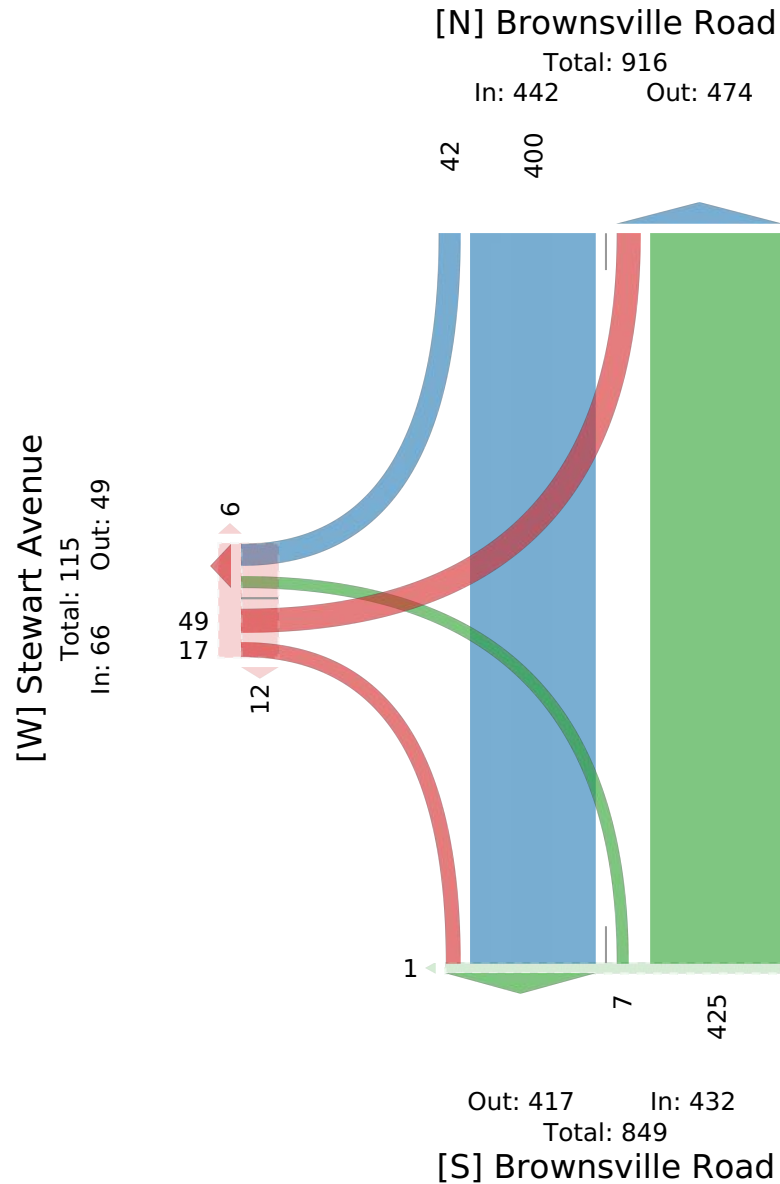
All Movements

ID: 1121312, Location: 40.382851, -79.976829, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US



Stewart Ave

1. Brownsville Road, Biscayne Drive & Becks ... - TMC

Wed Oct 11, 2023

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

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

All Movements

ID: 1121312, Location: 40.382851, -79.976829, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Stewart Avenue Eastbound						
Time	L	T	U	App	Ped*		T	R	U	App	Ped*		L	R	U	App	Ped*	Int	
2023-10-11 4:15PM	7	132	0	139	2		158	16	0	174	0		14	6	0	20	8	333	
4:30PM	1	135	0	136	0		166	15	0	181	0		10	8	0	18	2	335	
4:45PM	4	124	0	128	5		189	23	0	212	0		8	4	0	12	5	352	
5:00PM	8	125	0	133	0		175	15	0	190	0		11	6	0	17	3	340	
Total	20	516	0	536	7		688	69	0	757	0		43	24	0	67	18	1360	
% Approach	3.7%	96.3%	0%	-	-		90.9%	9.1%	0%	-	-		64.2%	35.8%	0%	-	-	-	
% Total	1.5%	37.9%	0%	39.4%	-		50.6%	5.1%	0%	55.7%	-		3.2%	1.8%	0%	4.9%	-	-	
PHF	0.625	0.956	-	0.964	-		0.912	0.750	-	0.895	-		0.768	0.750	-	0.838	-	0.967	
Motorcycles	0	0	0	0	-		1	1	0	2	-		0	0	0	0	-	2	
% Motorcycles	0%	0%	0%	0%	-		0.1%	1.4%	0%	0.3%	-		0%	0%	0%	0%	-	0.1%	
Lights	20	501	0	521	-		666	66	0	732	-		42	24	0	66	-	1319	
% Lights	100%	97.1%	0%	97.2%	-		96.8%	95.7%	0%	96.7%	-		97.7%	100%	0%	98.5%	-	97.0%	
Single-Unit Trucks	0	4	0	4	-		2	0	0	2	-		0	0	0	0	-	6	
% Single-Unit Trucks	0%	0.8%	0%	0.7%	-		0.3%	0%	0%	0.3%	-		0%	0%	0%	0%	-	0.4%	
Articulated Trucks	0	1	0	1	-		0	0	0	0	-		0	0	0	0	-	1	
% Articulated Trucks	0%	0.2%	0%	0.2%	-		0%	0%	0%	0%	-		0%	0%	0%	0%	-	0.1%	
Buses	0	10	0	10	-		17	2	0	19	-		1	0	0	1	-	30	
% Buses	0%	1.9%	0%	1.9%	-		2.5%	2.9%	0%	2.5%	-		2.3%	0%	0%	1.5%	-	2.2%	
Bicycles on Road	0	0	0	0	-		2	0	0	2	-		0	0	0	0	-	2	
% Bicycles on Road	0%	0%	0%	0%	-		0.3%	0%	0%	0.3%	-		0%	0%	0%	0%	-	0.1%	
Pedestrians	-	-	-	-	7		-	-	-	-	0		-	-	-	-	18		
% Pedestrians	-	-	-	-	100%		-	-	-	-	-		-	-	-	-	100%	-	
Bicycles on Crosswalk	-	-	-	-	0		-	-	-	-	0		-	-	-	-	0		
% Bicycles on Crosswalk	-	-	-	-	0%		-	-	-	-	-		-	-	-	-	0%		

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

Stewart Ave

1. Brownsville Road, Biscayne Drive & Becks ... - TMC

Wed Oct 11, 2023

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

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

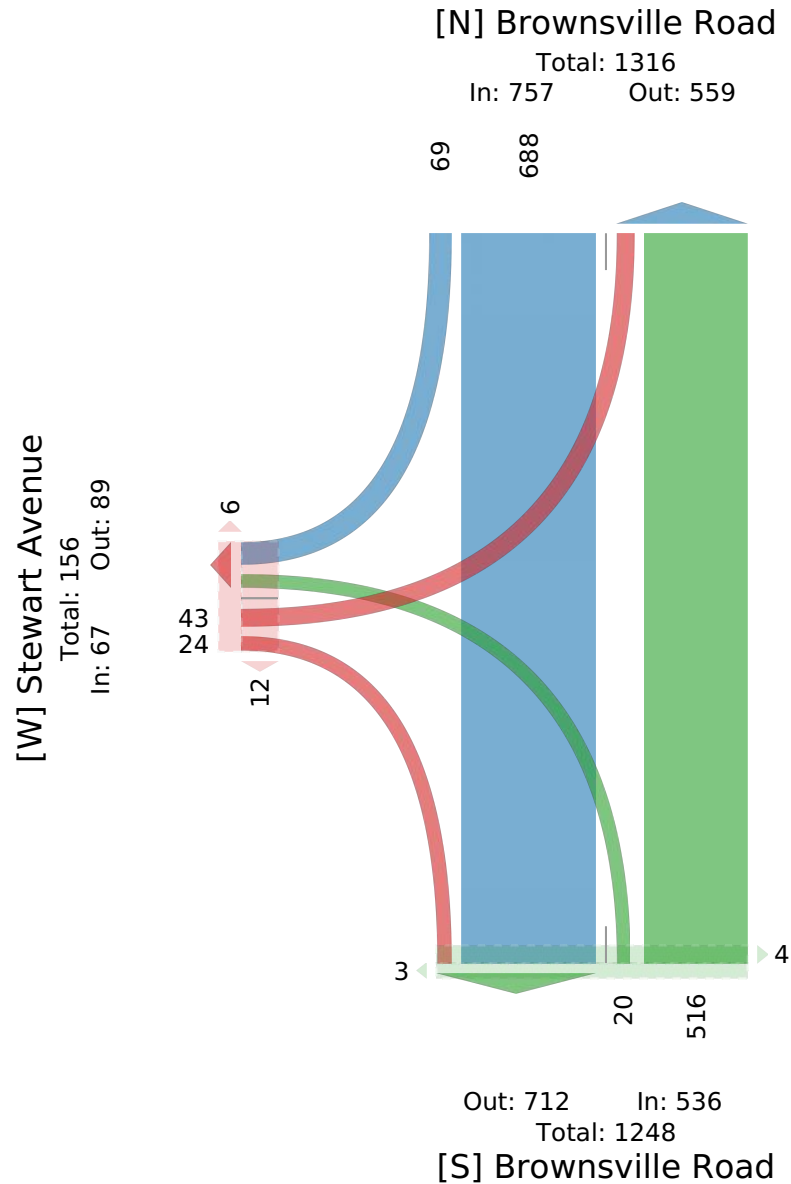
All Movements

ID: 1121312, Location: 40.382851, -79.976829, Site Code: 1

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US



2. Brownsville Road at Sankey Avenue - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1124621, Location: 40.384135, -79.977628, Site Code: 2

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound					Sankey Avenue Westbound							
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int	
2023-10-11 6:30AM	94	19	0	0	113	0	8	38	0	46	0	33	33	0	0	66	0	225	
6:45AM	111	18	0	0	129	0	23	34	0	57	0	31	32	0	1	64	0	250	
Hourly Total	205	37	0	0	242	0	31	72	0	103	0	64	65	0	1	130	0	475	
7:00AM	105	22	0	0	127	0	17	39	0	56	0	52	32	0	3	87	0	270	
7:15AM	121	26	0	0	147	0	17	43	0	60	0	42	28	0	1	71	1	278	
7:30AM	110	17	0	3	130	0	19	52	0	71	5	28	17	0	4	49	0	250	
7:45AM	95	33	0	2	130	0	16	40	0	56	1	42	24	0	2	68	6	254	
Hourly Total	431	98	0	5	534	0	69	174	0	243	6	164	101	0	10	275	7	1052	
8:00AM	70	26	0	0	96	0	16	49	0	65	0	39	19	0	2	60	11	221	
8:15AM	107	45	0	0	152	0	22	70	0	92	0	52	24	0	0	76	3	320	
8:30AM	82	50	0	1	133	0	16	63	0	79	1	62	17	0	0	79	1	291	
8:45AM	70	32	1	0	103	0	11	50	0	61	3	58	17	0	0	75	0	239	
Hourly Total	329	153	1	1	484	0	65	232	0	297	4	211	77	0	2	290	15	1071	
9:00AM	69	40	0	0	109	0	20	52	0	72	0	49	23	0	1	73	1	254	
9:15AM	64	34	0	0	98	0	16	69	0	85	0	45	24	0	0	69	0	252	
Hourly Total	133	74	0	0	207	0	36	121	0	157	0	94	47	0	1	142	1	506	
2:00PM	81	67	0	0	148	0	17	70	0	87	2	39	22	0	0	61	4	296	
2:15PM	69	68	0	0	137	0	27	72	0	99	1	72	20	0	0	92	2	328	
2:30PM	80	59	0	0	139	0	32	89	0	121	0	77	23	0	0	100	3	360	
2:45PM	59	58	0	0	117	0	39	84	0	123	1	55	21	0	0	76	0	316	
Hourly Total	289	252	0	0	541	0	115	315	0	430	4	243	86	0	0	329	9	1300	
3:00PM	84	49	0	0	133	0	33	87	0	120	0	51	18	0	2	71	0	324	
3:15PM	82	66	0	0	148	0	40	101	0	141	0	54	27	0	0	81	2	370	
3:30PM	74	63	0	0	137	0	31	103	0	134	0	67	28	0	0	95	3	366	
3:45PM	72	57	0	0	129	4	32	106	0	138	1	66	23	0	0	89	14	356	
Hourly Total	312	235	0	0	547	4	136	397	0	533	1	238	96	0	2	336	19	1416	
4:00PM	58	54	0	0	112	2	51	95	0	146	2	76	18	0	0	94	5	352	
4:15PM	82	62	0	0	144	0	43	111	0	154	0	65	19	0	1	85	8	383	
4:30PM	86	72	0	0	158	0	29	114	0	143	6	62	24	0	0	86	8	387	
4:45PM	70	67	0	3	140	4	40	132	0	172	3	74	20	0	0	94	6	406	
Hourly Total	296	255	0	3	554	6	163	452	0	615	11	277	81	0	1	359	27	1528	
5:00PM	62	74	0	0	136	0	37	117	0	154	1	72	21	0	0	93	5	383	
5:15PM	65	77	0	0	142	0	38	116	0	154	0	59	15	0	0	74	8	370	
5:30PM	71	75	0	0	146	1	46	119	0	165	1	70	22	0	0	92	4	403	
5:45PM	75	80	0	0	155	4	36	104	0	140	0	60	18	0	0	78	3	373	
Hourly Total	273	306	0	0	579	5	157	456	0	613	2	261	76	0	0	337	20	1529	
Total	2268	1410	1	9	3688	15	772	2219	0	2991	28	1552	629	0	17	2198	98	8877	

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Sankey Avenue Westbound						
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int	
% Approach	61.5%	38.2%	0%	0.2%	-	-	25.8%	74.2%	0%	-	-	70.6%	28.6%	0%	0.8%	-	-	-	
% Total	25.5%	15.9%	0%	0.1%	41.5%	-	8.7%	25.0%	0%	33.7%	-	17.5%	7.1%	0%	0.2%	24.8%	-	-	
Motorcycles	4	1	0	0	5	-	3	4	0	7	-	1	1	0	0	2	-	14	
% Motorcycles	0.2%	0.1%	0%	0%	0.1%	-	0.4%	0.2%	0%	0.2%	-	0.1%	0.2%	0%	0%	0.1%	-	0.2%	
Lights	2163	1359	1	9	3532	-	742	2120	0	2862	-	1500	608	0	17	2125	-	8519	
% Lights	95.4%	96.4%	100%	100%	95.8%	-	96.1%	95.5%	0%	95.7%	-	96.6%	96.7%	0%	100%	96.7%	-	96.0%	
Single-Unit Trucks	30	14	0	0	44	-	15	31	0	46	-	12	15	0	0	27	-	117	
% Single-Unit Trucks	1.3%	1.0%	0%	0%	1.2%	-	1.9%	1.4%	0%	1.5%	-	0.8%	2.4%	0%	0%	1.2%	-	1.3%	
Articulated Trucks	7	2	0	0	9	-	3	6	0	9	-	2	1	0	0	3	-	21	
% Articulated Trucks	0.3%	0.1%	0%	0%	0.2%	-	0.4%	0.3%	0%	0.3%	-	0.1%	0.2%	0%	0%	0.1%	-	0.2%	
Buses	62	34	0	0	96	-	9	55	0	64	-	36	3	0	0	39	-	199	
% Buses	2.7%	2.4%	0%	0%	2.6%	-	1.2%	2.5%	0%	2.1%	-	2.3%	0.5%	0%	0%	1.8%	-	2.2%	
Bicycles on Road	2	0	0	0	2	-	0	3	0	3	-	1	1	0	0	2	-	7	
% Bicycles on Road	0.1%	0%	0%	0%	0.1%	-	0%	0.1%	0%	0.1%	-	0.1%	0.2%	0%	0%	0.1%	-	0.1%	
Pedestrians	-	-	-	-	-	15	-	-	-	-	28	-	-	-	-	-	98		
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	-	100%	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0		
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	0%		

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

2. Brownsville Road at Sankey Avenue - TMC

Wed Oct 11, 2023

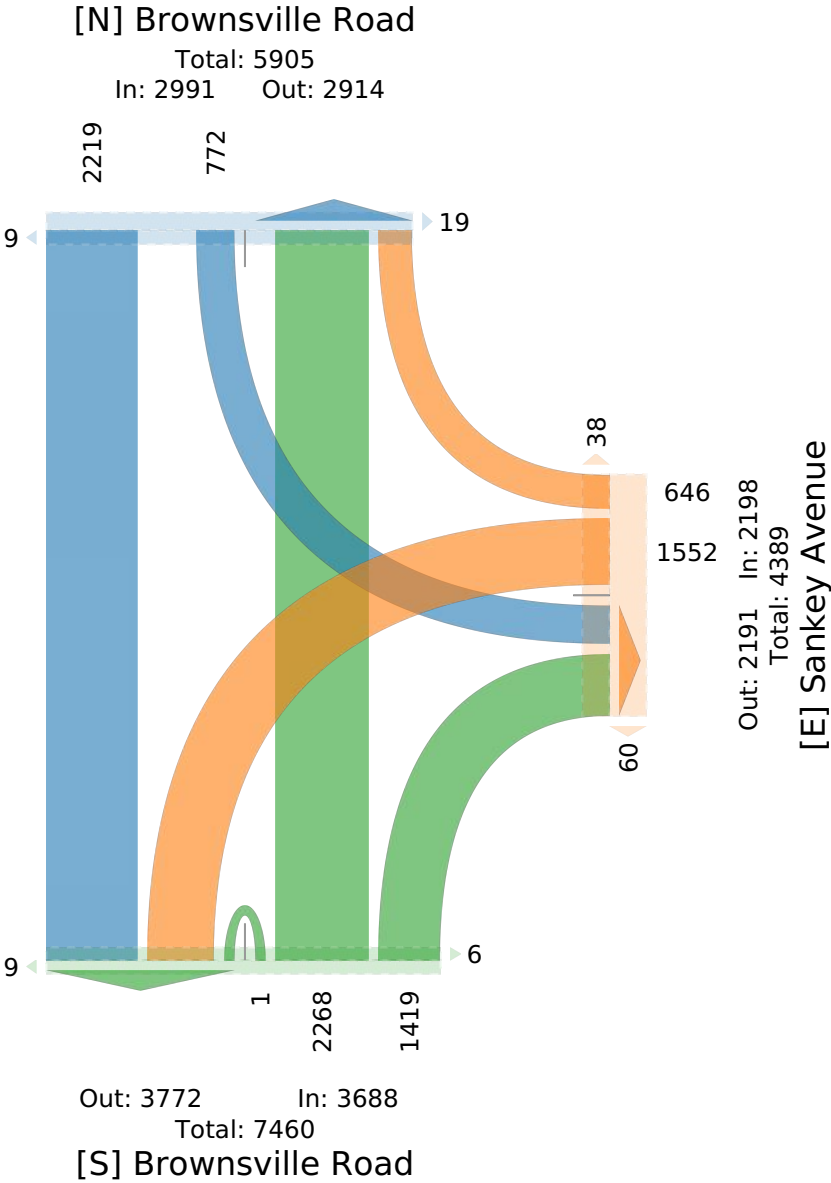
Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1124621, Location: 40.384135, -79.977628, Site Code: 2

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



2. Brownsville Road at Sankey Avenue - TMC

Wed Oct 11, 2023

AM Peak (8:15 AM - 9:15 AM)

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

All Movements

ID: 1124621, Location: 40.384135, -79.977628, Site Code: 2

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound					Sankey Avenue Westbound							
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int	
2023-10-11 8:15AM	107	45	0	0	152	0	22	70	0	92	0	52	24	0	0	76	3	320	
8:30AM	82	50	0	1	133	0	16	63	0	79	1	62	17	0	0	79	1	291	
8:45AM	70	32	1	0	103	0	11	50	0	61	3	58	17	0	0	75	0	239	
9:00AM	69	40	0	0	109	0	20	52	0	72	0	49	23	0	1	73	1	254	
Total	328	167	1	1	497	0	69	235	0	304	4	221	81	0	1	303	5	1104	
% Approach	66.0%	33.6%	0.2%	0.2%	-	-	22.7%	77.3%	0%	-	-	72.9%	26.7%	0%	0.3%	-	-	-	
% Total	29.7%	15.1%	0.1%	0.1%	45.0%	-	6.3%	21.3%	0%	27.5%	-	20.0%	7.3%	0%	0.1%	27.4%	-	-	
PHF	0.764	0.835	0.250	0.250	0.816	-	0.784	0.839	-	0.826	-	0.891	0.844	-	0.250	0.959	-	0.862	
Motorcycles	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	
% Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	
Lights	307	160	1	1	469	-	63	220	0	283	-	210	78	0	1	289	-	1041	
% Lights	93.6%	95.8%	100%	100%	94.4%	-	91.3%	93.6%	0%	93.1%	-	95.0%	96.3%	0%	100%	95.4%	-	94.3%	
Single-Unit Trucks	10	3	0	0	13	-	3	4	0	7	-	4	3	0	0	7	-	27	
% Single-Unit Trucks	3.0%	1.8%	0%	0%	2.6%	-	4.3%	1.7%	0%	2.3%	-	1.8%	3.7%	0%	0%	2.3%	-	2.4%	
Articulated Trucks	2	0	0	0	2	-	2	3	0	5	-	1	0	0	0	1	-	8	
% Articulated Trucks	0.6%	0%	0%	0%	0.4%	-	2.9%	1.3%	0%	1.6%	-	0.5%	0%	0%	0%	0.3%	-	0.7%	
Buses	8	4	0	0	12	-	1	8	0	9	-	6	0	0	0	6	-	27	
% Buses	2.4%	2.4%	0%	0%	2.4%	-	1.4%	3.4%	0%	3.0%	-	2.7%	0%	0%	0%	2.0%	-	2.4%	
Bicycles on Road	1	0	0	0	1	-	0	0	0	0	-	0	0	0	0	0	-	1	
% Bicycles on Road	0.3%	0%	0%	0%	0.2%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%	
Pedestrians	-	-	-	-	-	0	-	-	-	-	4	-	-	-	-	-	5		
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0		
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	

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

2. Brownsville Road at Sankey Avenue - TMC

Wed Oct 11, 2023

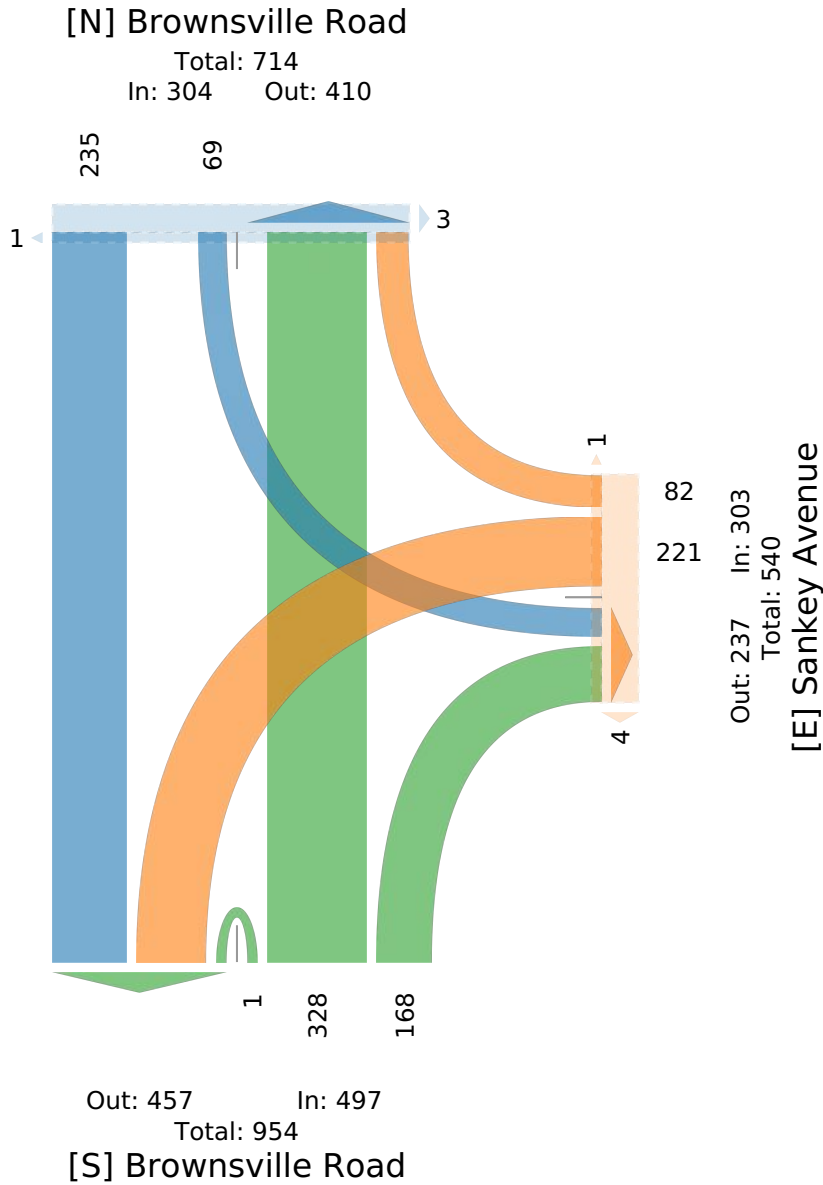
AM Peak (8:15 AM - 9:15 AM)

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

All Movements

ID: 1124621, Location: 40.384135, -79.977628, Site Code: 2

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



2. Brownsville Road at Sankey Avenue - TMC

Wed Oct 11, 2023

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

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

All Movements

ID: 1124621, Location: 40.384135, -79.977628, Site Code: 2

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Sankey Avenue Westbound						
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int	
2023-10-11 4:45PM	70	67	0	3	140	4	40	132	0	172	3	74	20	0	0	94	6	406	
5:00PM	62	74	0	0	136	0	37	117	0	154	1	72	21	0	0	93	5	383	
5:15PM	65	77	0	0	142	0	38	116	0	154	0	59	15	0	0	74	8	370	
5:30PM	71	75	0	0	146	1	46	119	0	165	1	70	22	0	0	92	4	403	
Total	268	293	0	3	564	5	161	484	0	645	5	275	78	0	0	353	23	1562	
% Approach	47.5%	52.0%	0%	0.5%	-	-	25.0%	75.0%	0%	-	-	77.9%	22.1%	0%	0%	-	-	-	
% Total	17.2%	18.8%	0%	0.2%	36.1%	-	10.3%	31.0%	0%	41.3%	-	17.6%	5.0%	0%	0%	22.6%	-	-	
PHF	0.944	0.951	-	0.250	0.966	-	0.875	0.920	-	0.940	-	0.929	0.886	-	-	0.939	-	0.963	
Motorcycles	0	0	0	0	0	-	0	0	0	0	-	1	1	0	0	2	-	2	
% Motorcycles	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.4%	1.3%	0%	0%	0.6%	-	0.1%	
Lights	262	290	0	3	555	-	160	464	0	624	-	270	77	0	0	347	-	1526	
% Lights	97.8%	99.0%	0%	100%	98.4%	-	99.4%	95.9%	0%	96.7%	-	98.2%	98.7%	0%	0%	98.3%	-	97.7%	
Single-Unit Trucks	1	1	0	0	2	-	1	6	0	7	-	0	0	0	0	0	-	9	
% Single-Unit Trucks	0.4%	0.3%	0%	0%	0.4%	-	0.6%	1.2%	0%	1.1%	-	0%	0%	0%	0%	0%	-	0.6%	
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	
Buses	5	2	0	0	7	-	0	12	0	12	-	4	0	0	0	4	-	23	
% Buses	1.9%	0.7%	0%	0%	1.2%	-	0%	2.5%	0%	1.9%	-	1.5%	0%	0%	0%	1.1%	-	1.5%	
Bicycles on Road	0	0	0	0	0	-	0	2	0	2	-	0	0	0	0	0	-	2	
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0.1%	
Pedestrians	-	-	-	-	-	5	-	-	-	-	5	-	-	-	-	-	23		
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	-	100%	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0		
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	0%	-	

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

ID: 1124621, Location: 40.384135, -79.977628, Site Code: 2

PO Box 4637, Cherry Hill, NJ, 08003, US



3. Brownsville Road & Maytide Street - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121364, Location: 40.384474, -79.977864, Site Code: 3

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Maytide Street Eastbound							
Time	L	T	U	App	Ped*	T	R	U	RR	App	Ped*	L	R	U	RR	App	Ped*	Int
2023-10-11 6:30AM	44	87	0	131	0	36	0	0	1	37	1	1	16	0	0	17	0	185
6:45AM	42	98	0	140	0	31	1	0	0	32	1	1	23	0	0	24	1	196
Hourly Total	86	185	0	271	0	67	1	0	1	69	2	2	39	0	0	41	1	381
7:00AM	43	95	0	138	0	32	0	0	0	32	2	1	23	0	1	25	3	195
7:15AM	32	111	0	143	0	38	2	0	0	40	3	7	25	0	0	32	4	215
7:30AM	27	101	0	128	0	44	3	0	1	48	0	6	25	0	1	32	1	208
7:45AM	38	88	0	126	0	42	2	0	0	44	1	6	14	0	1	21	1	191
Hourly Total	140	395	0	535	0	156	7	0	1	164	6	20	87	0	3	110	9	809
8:00AM	25	66	0	91	0	45	6	0	0	51	0	4	20	0	0	24	0	166
8:15AM	27	105	0	132	0	68	12	0	0	80	0	6	26	0	0	32	2	244
8:30AM	27	73	0	100	0	60	10	0	0	70	2	10	18	0	0	28	4	198
8:45AM	19	67	0	86	0	46	11	0	0	57	4	6	16	0	0	22	11	165
Hourly Total	98	311	0	409	0	219	39	0	0	258	6	26	80	0	0	106	17	773
9:00AM	24	66	0	90	0	46	8	0	0	54	5	13	28	0	0	41	7	185
9:15AM	31	58	0	89	0	71	10	0	0	81	2	10	16	0	0	26	3	196
Hourly Total	55	124	0	179	0	117	18	0	0	135	7	23	44	0	0	67	10	381
2:00PM	27	76	0	103	0	66	5	0	1	72	1	9	24	0	1	34	4	209
2:15PM	23	65	0	88	1	66	3	0	0	69	3	3	34	0	0	37	3	194
2:30PM	29	73	0	102	0	84	3	0	0	87	5	5	32	0	0	37	0	226
2:45PM	23	57	0	80	0	79	3	0	0	82	1	10	42	0	0	52	3	214
Hourly Total	102	271	0	373	1	295	14	0	1	310	10	27	132	0	1	160	10	843
3:00PM	23	78	0	101	0	85	4	0	0	89	2	8	36	0	0	44	12	234
3:15PM	23	86	0	109	0	105	3	0	0	108	0	8	37	0	0	45	2	262
3:30PM	28	68	0	96	0	97	3	0	0	100	0	9	39	0	0	48	3	244
3:45PM	24	69	0	93	0	105	3	0	1	109	7	12	40	0	0	52	14	254
Hourly Total	98	301	0	399	0	392	13	0	1	406	9	37	152	0	0	189	31	994
4:00PM	26	53	0	79	0	91	4	0	0	95	2	8	50	0	0	58	0	232
4:15PM	22	82	0	104	0	118	4	0	0	122	2	6	37	0	0	43	1	269
4:30PM	22	81	0	103	0	108	3	0	0	111	4	7	34	0	0	41	3	255
4:45PM	23	75	0	98	0	121	1	0	0	122	7	7	48	0	0	55	2	275
Hourly Total	93	291	0	384	0	438	12	0	0	450	15	28	169	0	0	197	6	1031
5:00PM	21	63	0	84	0	109	4	0	0	113	10	3	46	0	1	50	7	247
5:15PM	18	61	0	79	0	111	1	0	1	113	5	11	47	0	0	58	5	250
5:30PM	24	66	0	90	0	112	0	0	0	112	8	9	50	0	0	59	7	261
5:45PM	26	66	0	92	0	108	2	0	0	110	4	8	32	0	0	40	5	242
Hourly Total	89	256	0	345	0	440	7	0	1	448	27	31	175	0	1	207	24	1000
Total	761	2134	0	2895	1	2124	111	0	5	2240	82	194	878	0	5	1077	108	6212

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Maytide Street Eastbound							
Time	L	T	U	App	Ped*	T	R	U	RR	App	Ped*	L	R	U	RR	App	Ped*	Int
% Approach	26.3%	73.7%	0%	-	-	94.8%	5.0%	0%	0.2%	-	-	18.0%	81.5%	0%	0.5%	-	-	-
% Total	12.3%	34.4%	0%	46.6%	-	34.2%	1.8%	0%	0.1%	36.1%	-	3.1%	14.1%	0%	0.1%	17.3%	-	-
Motorcycles	2	3	0	5	-	2	0	0	0	2	-	1	2	0	0	3	-	10
% Motorcycles	0.3%	0.1%	0%	0.2%	-	0.1%	0%	0%	0%	0.1%	-	0.5%	0.2%	0%	0%	0.3%	-	0.2%
Lights	738	2032	0	2770	-	2034	103	0	5	2142	-	185	856	0	5	1046	-	5958
% Lights	97.0%	95.2%	0%	95.7%	-	95.8%	92.8%	0%	100%	95.6%	-	95.4%	97.5%	0%	100%	97.1%	-	95.9%
Single-Unit Trucks	17	33	0	50	-	24	1	0	0	25	-	2	10	0	0	12	-	87
% Single-Unit Trucks	2.2%	1.5%	0%	1.7%	-	1.1%	0.9%	0%	0%	1.1%	-	1.0%	1.1%	0%	0%	1.1%	-	1.4%
Articulated Trucks	0	10	0	10	-	3	1	0	0	4	-	0	4	0	0	4	-	18
% Articulated Trucks	0%	0.5%	0%	0.3%	-	0.1%	0.9%	0%	0%	0.2%	-	0%	0.5%	0%	0%	0.4%	-	0.3%
Buses	4	55	0	59	-	58	6	0	0	64	-	6	6	0	0	12	-	135
% Buses	0.5%	2.6%	0%	2.0%	-	2.7%	5.4%	0%	0%	2.9%	-	3.1%	0.7%	0%	0%	1.1%	-	2.2%
Bicycles on Road	0	1	0	1	-	3	0	0	0	3	-	0	0	0	0	0	-	4
% Bicycles on Road	0%	0%	0%	0%	-	0.1%	0%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	1	-	-	-	-	-	82	-	-	-	-	-	105	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	97.2%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	2.8%	-

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

3. Brownsville Road & Maytide Street - TMC

Wed Oct 11, 2023

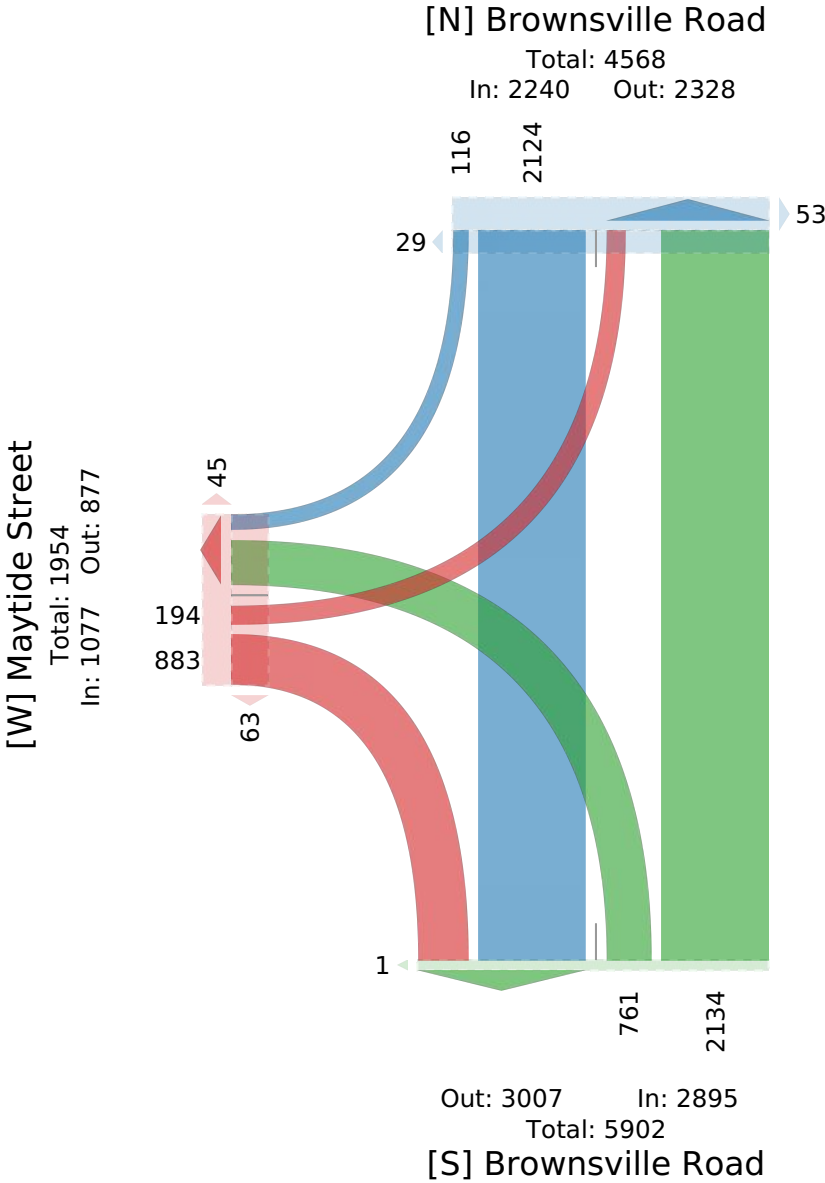
Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121364, Location: 40.384474, -79.977864, Site Code: 3

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



3. Brownsville Road & Maytide Street - TMC

Wed Oct 11, 2023

AM Peak (6:45 AM - 7:45 AM)

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

All Movements

ID: 1121364, Location: 40.384474, -79.977864, Site Code: 3

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound						Maytide Street Eastbound						
Time	L	T	U	App	Ped*	T	R	U	RR	App	Ped*	L	R	U	RR	App	Ped*	Int
2023-10-11 6:45AM	42	98	0	140	0	31	1	0	0	32	1	1	23	0	0	24	1	196
7:00AM	43	95	0	138	0	32	0	0	0	32	2	1	23	0	1	25	3	195
7:15AM	32	111	0	143	0	38	2	0	0	40	3	7	25	0	0	32	4	215
7:30AM	27	101	0	128	0	44	3	0	1	48	0	6	25	0	1	32	1	208
Total	144	405	0	549	0	145	6	0	1	152	6	15	96	0	2	113	9	814
% Approach	26.2%	73.8%	0%	-	-	95.4%	3.9%	0%	0.7%	-	-	13.3%	85.0%	0%	1.8%	-	-	-
% Total	17.7%	49.8%	0%	67.4%	-	17.8%	0.7%	0%	0.1%	18.7%	-	1.8%	11.8%	0%	0.2%	13.9%	-	-
PHF	0.837	0.912	-	0.960	-	0.824	0.500	-	0.250	0.792	-	0.536	0.960	-	0.500	0.883	-	0.947
Motorcycles	0	0	0	0	-	1	0	0	0	1	-	0	0	0	0	0	-	1
% Motorcycles	0%	0%	0%	0%	-	0.7%	0%	0%	0%	0.7%	-	0%	0%	0%	0%	0%	-	0.1%
Lights	139	381	0	520	-	133	5	0	1	139	-	13	91	0	2	106	-	765
% Lights	96.5%	94.1%	0%	94.7%	-	91.7%	83.3%	0%	100%	91.4%	-	86.7%	94.8%	0%	100%	93.8%	-	94.0%
Single-Unit Trucks	4	6	0	10	-	2	0	0	0	2	-	0	2	0	0	2	-	14
% Single-Unit Trucks	2.8%	1.5%	0%	1.8%	-	1.4%	0%	0%	0%	1.3%	-	0%	2.1%	0%	0%	1.8%	-	1.7%
Articulated Trucks	0	2	0	2	-	1	0	0	0	1	-	0	2	0	0	2	-	5
% Articulated Trucks	0%	0.5%	0%	0.4%	-	0.7%	0%	0%	0%	0.7%	-	0%	2.1%	0%	0%	1.8%	-	0.6%
Buses	1	16	0	17	-	8	1	0	0	9	-	2	1	0	0	3	-	29
% Buses	0.7%	4.0%	0%	3.1%	-	5.5%	16.7%	0%	0%	5.9%	-	13.3%	1.0%	0%	0%	2.7%	-	3.6%
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

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

3. Brownsville Road & Maytide Street - TMC

Wed Oct 11, 2023

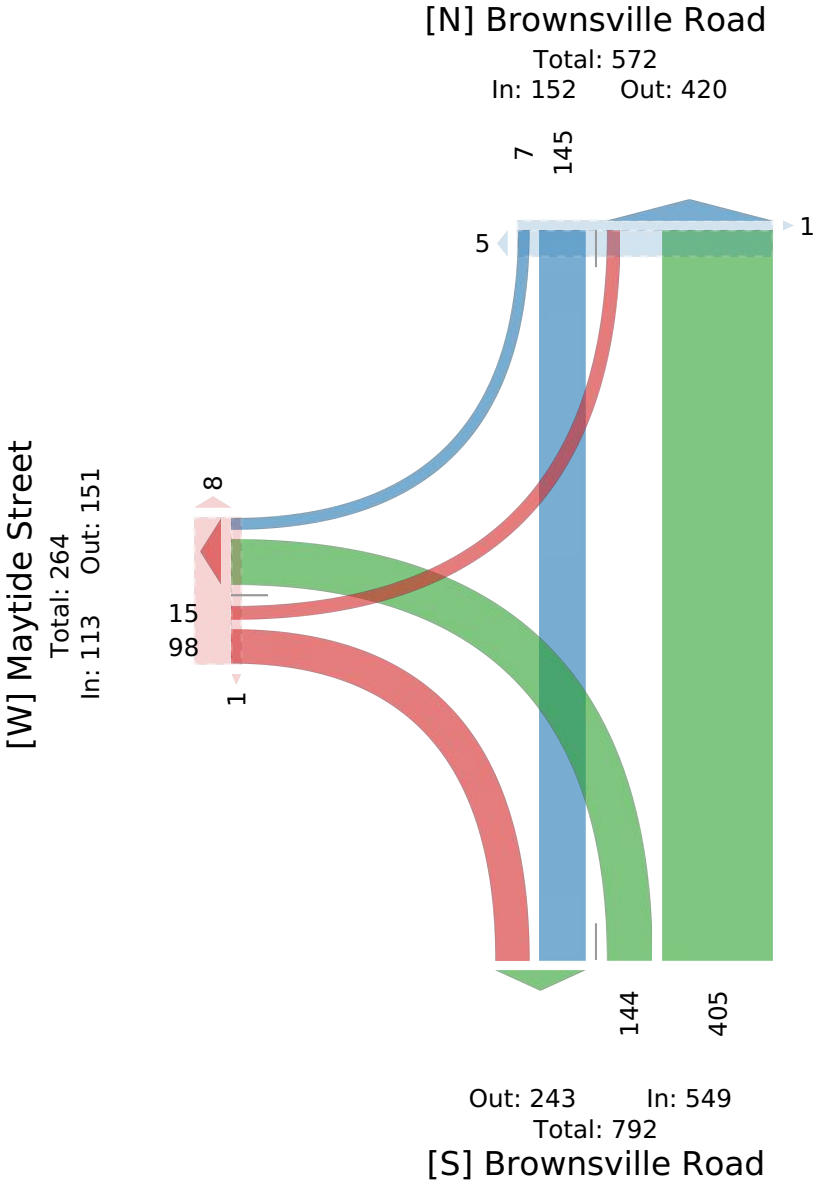
AM Peak (6:45 AM - 7:45 AM)

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

All Movements

ID: 1121364, Location: 40.384474, -79.977864, Site Code: 3

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



3. Brownsville Road & Maytide Street - TMC

Wed Oct 11, 2023

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

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

All Movements

ID: 1121364, Location: 40.384474, -79.977864, Site Code: 3

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Maytide Street Eastbound							
Time	L	T	U	App	Ped*	T	R	U	RR	App	Ped*	L	R	U	RR	App	Ped*	Int
2023-10-11 4:15PM	22	82	0	104	0	118	4	0	0	122	2	6	37	0	0	43	1	269
4:30PM	22	81	0	103	0	108	3	0	0	111	4	7	34	0	0	41	3	255
4:45PM	23	75	0	98	0	121	1	0	0	122	7	7	48	0	0	55	2	275
5:00PM	21	63	0	84	0	109	4	0	0	113	10	3	46	0	1	50	7	247
Total	88	301	0	389	0	456	12	0	0	468	23	23	165	0	1	189	13	1046
% Approach	22.6%	77.4%	0%	-	-	97.4%	2.6%	0%	0%	-	-	12.2%	87.3%	0%	0.5%	-	-	-
% Total	8.4%	28.8%	0%	37.2%	-	43.6%	1.1%	0%	0%	44.7%	-	2.2%	15.8%	0%	0.1%	18.1%	-	-
PHF	0.957	0.918	-	0.935	-	0.940	0.750	-	-	0.957	-	0.821	0.859	-	0.250	0.859	-	0.950
Motorcycles	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Motorcycles	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Lights	88	288	0	376	-	442	11	0	0	453	-	22	163	0	1	186	-	1015
% Lights	100%	95.7%	0%	96.7%	-	96.9%	91.7%	0%	0%	96.8%	-	95.7%	98.8%	0%	100%	98.4%	-	97.0%
Single-Unit Trucks	0	4	0	4	-	0	0	0	0	0	-	0	1	0	0	1	-	5
% Single-Unit Trucks	0%	1.3%	0%	1.0%	-	0%	0%	0%	0%	0%	-	0%	0.6%	0%	0%	0.5%	-	0.5%
Articulated Trucks	0	1	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Articulated Trucks	0%	0.3%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%
Buses	0	8	0	8	-	13	1	0	0	14	-	1	1	0	0	2	-	24
% Buses	0%	2.7%	0%	2.1%	-	2.9%	8.3%	0%	0%	3.0%	-	4.3%	0.6%	0%	0%	1.1%	-	2.3%
Bicycles on Road	0	0	0	0	-	1	0	0	0	1	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	-	0.2%	0%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	0	-	-	-	-	-	23	-	-	-	-	-	12	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	92.3%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	7.7%	-

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

3. Brownsville Road & Maytide Street - TMC

Wed Oct 11, 2023

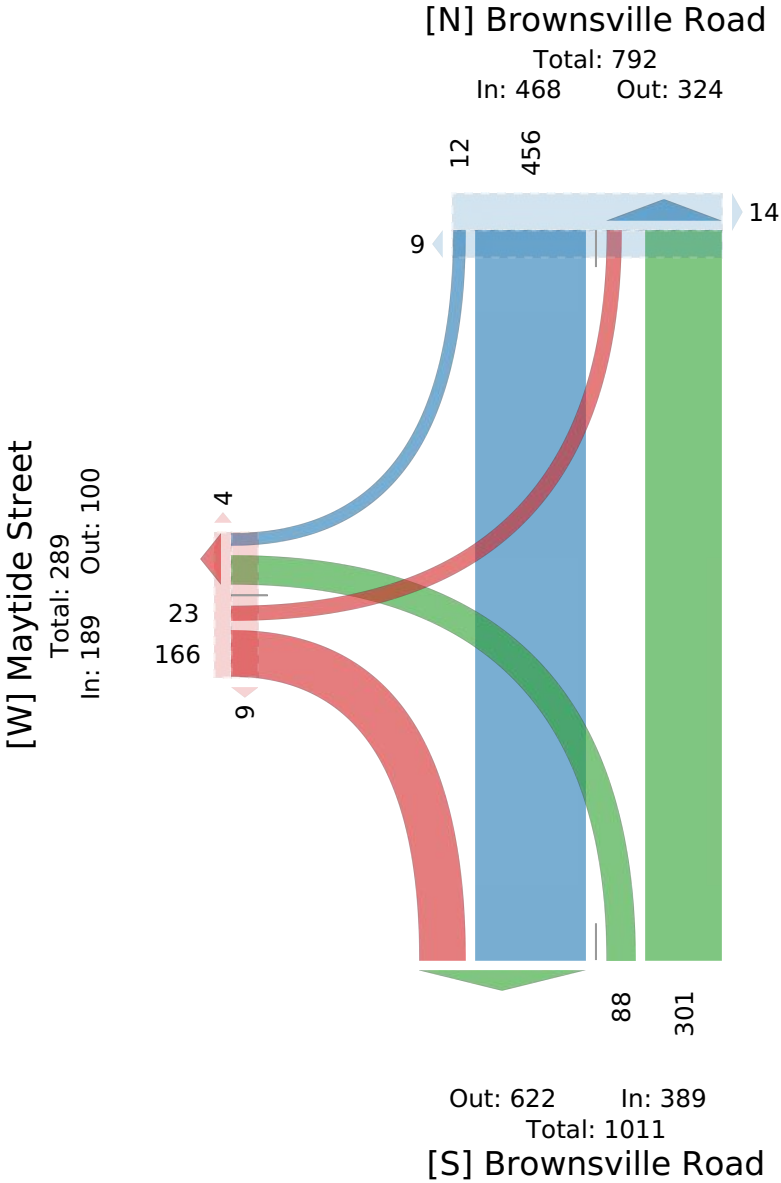
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

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

All Movements

ID: 1121364, Location: 40.384474, -79.977864, Site Code: 3

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



4. Brownsville Road & Churchview Avenue - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121322, Location: 40.385875, -79.978926, Site Code: 4

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Churchview Avenue Westbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2023-10-11 6:30AM	83	2	0	85	2	18	35	0	53	0	0	52	0	52	2	190
6:45AM	98	3	0	101	3	10	30	0	40	0	2	57	0	59	0	200
Hourly Total	181	5	0	186	5	28	65	0	93	0	2	109	0	111	2	390
7:00AM	95	2	0	97	0	14	33	0	47	0	1	61	0	62	0	206
7:15AM	117	10	0	127	0	15	37	0	52	0	1	60	1	62	3	241
7:30AM	93	15	0	108	6	16	39	0	55	0	3	67	0	70	4	233
7:45AM	87	9	0	96	0	18	35	0	53	0	1	54	0	55	3	204
Hourly Total	392	36	0	428	6	63	144	0	207	0	6	242	1	249	10	884
8:00AM	57	14	0	71	0	17	44	0	61	0	3	45	0	48	2	180
8:15AM	101	4	0	105	3	16	68	0	84	0	11	68	0	79	3	268
8:30AM	82	7	0	89	5	19	77	1	97	0	1	58	0	59	2	245
8:45AM	66	4	0	70	3	17	54	0	71	0	0	38	0	38	2	179
Hourly Total	306	29	0	335	11	69	243	1	313	0	15	209	0	224	9	872
9:00AM	82	7	0	89	3	20	52	0	72	0	1	37	0	38	0	199
9:15AM	54	12	0	66	2	18	94	0	112	0	0	37	0	37	1	215
Hourly Total	136	19	0	155	5	38	146	0	184	0	1	74	0	75	1	414
2:00PM	86	3	0	89	3	30	72	0	102	0	2	29	0	31	4	222
2:15PM	66	5	0	71	1	25	66	0	91	0	0	42	0	42	0	204
2:30PM	77	6	1	84	1	22	83	1	106	0	2	38	0	40	2	230
2:45PM	56	15	0	71	0	25	80	0	105	0	1	39	0	40	2	216
Hourly Total	285	29	1	315	5	102	301	1	404	0	5	148	0	153	8	872
3:00PM	74	11	0	85	4	24	92	0	116	0	1	44	0	45	1	246
3:15PM	97	4	0	101	4	28	101	0	129	0	3	45	0	48	1	278
3:30PM	76	6	0	82	4	39	104	0	143	0	1	52	0	53	3	278
3:45PM	78	5	0	83	5	26	103	0	129	0	0	35	0	35	2	247
Hourly Total	325	26	0	351	17	117	400	0	517	0	5	176	0	181	7	1049
4:00PM	54	14	1	69	1	28	102	0	130	0	3	36	0	39	2	238
4:15PM	73	12	0	85	4	45	102	0	147	0	4	52	0	56	0	288
4:30PM	80	10	0	90	2	28	117	0	145	0	0	26	0	26	2	261
4:45PM	74	12	0	86	4	43	108	0	151	0	0	51	0	51	1	288
Hourly Total	281	48	1	330	11	144	429	0	573	0	7	165	0	172	5	1075
5:00PM	60	15	0	75	6	30	115	0	145	0	1	47	0	48	2	268
5:15PM	66	15	0	81	3	44	114	0	158	0	1	51	0	52	7	291
5:30PM	67	14	0	81	4	27	116	0	143	0	1	51	0	52	5	276
5:45PM	76	12	0	88	2	40	112	0	152	0	1	36	0	37	2	277
Hourly Total	269	56	0	325	15	141	457	0	598	0	4	185	0	189	16	1112
Total	2175	248	2	2425	75	702	2185	2	2889	0	45	1308	1	1354	58	6668

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Churchview Avenue Westbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
% Approach	89.7%	10.2%	0.1%	-	-	24.3%	75.6%	0.1%	-	-	3.3%	96.6%	0.1%	-	-	-
% Total	32.6%	3.7%	0%	36.4%	-	10.5%	32.8%	0%	43.3%	-	0.7%	19.6%	0%	20.3%	-	-
Motorcycles	4	0	0	4	-	3	3	0	6	-	0	3	0	3	-	13
% Motorcycles	0.2%	0%	0%	0.2%	-	0.4%	0.1%	0%	0.2%	-	0%	0.2%	0%	0.2%	-	0.2%
Lights	2071	244	2	2317	-	681	2086	2	2769	-	40	1272	1	1313	-	6399
% Lights	95.2%	98.4%	100%	95.5%	-	97.0%	95.5%	100%	95.8%	-	88.9%	97.2%	100%	97.0%	-	96.0%
Single-Unit Trucks	26	2	0	28	-	8	26	0	34	-	2	14	0	16	-	78
% Single-Unit Trucks	1.2%	0.8%	0%	1.2%	-	1.1%	1.2%	0%	1.2%	-	4.4%	1.1%	0%	1.2%	-	1.2%
Articulated Trucks	6	0	0	6	-	0	3	0	3	-	0	2	0	2	-	11
% Articulated Trucks	0.3%	0%	0%	0.2%	-	0%	0.1%	0%	0.1%	-	0%	0.2%	0%	0.1%	-	0.2%
Buses	67	1	0	68	-	10	64	0	74	-	3	15	0	18	-	160
% Buses	3.1%	0.4%	0%	2.8%	-	1.4%	2.9%	0%	2.6%	-	6.7%	1.1%	0%	1.3%	-	2.4%
Bicycles on Road	1	1	0	2	-	0	3	0	3	-	0	2	0	2	-	7
% Bicycles on Road	0%	0.4%	0%	0.1%	-	0%	0.1%	0%	0.1%	-	0%	0.2%	0%	0.1%	-	0.1%
Pedestrians	-	-	-	-	75	-	-	-	-	0	-	-	-	-	58	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	0%	-

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

4. Brownsville Road & Churchview Avenue - TMC

Wed Oct 11, 2023

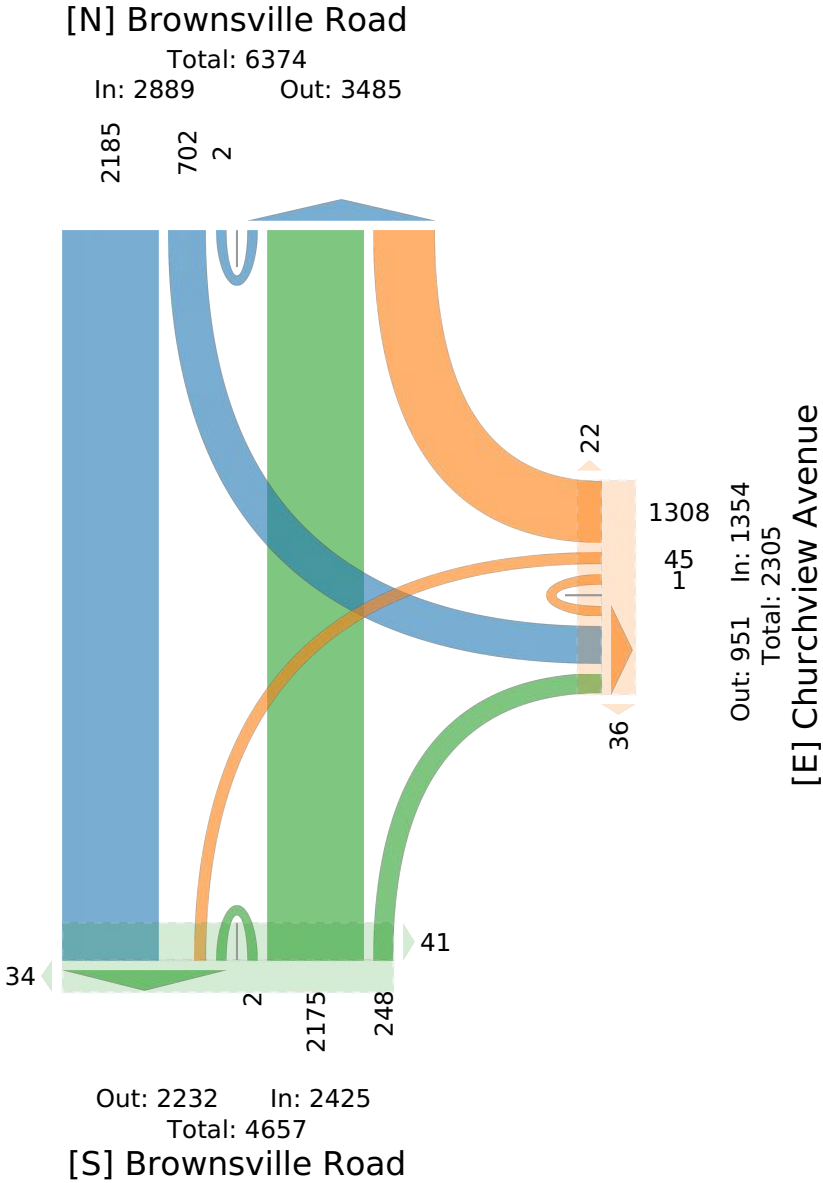
Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121322, Location: 40.385875, -79.978926, Site Code: 4

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



4. Brownsville Road & Churchview Avenue - TMC

Wed Oct 11, 2023

AM Peak (7:45 AM - 8:45 AM)

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

All Movements

ID: 1121322, Location: 40.385875, -79.978926, Site Code: 4

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Churchview Avenue Westbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2023-10-11 7:45AM	87	9	0	96	0	18	35	0	53	0	1	54	0	55	3	204
8:00AM	57	14	0	71	0	17	44	0	61	0	3	45	0	48	2	180
8:15AM	101	4	0	105	3	16	68	0	84	0	11	68	0	79	3	268
8:30AM	82	7	0	89	5	19	77	1	97	0	1	58	0	59	2	245
Total	327	34	0	361	8	70	224	1	295	0	16	225	0	241	10	897
% Approach	90.6%	9.4%	0%	-	-	23.7%	75.9%	0.3%	-	-	6.6%	93.4%	0%	-	-	-
% Total	36.5%	3.8%	0%	40.2%	-	7.8%	25.0%	0.1%	32.9%	-	1.8%	25.1%	0%	26.9%	-	-
PHF	0.809	0.607	-	0.860	-	0.921	0.727	0.250	0.760	-	0.364	0.827	-	0.763	-	0.837
Motorcycles	0	0	0	0	-	1	0	0	1	-	0	0	0	0	-	1
% Motorcycles	0%	0%	0%	0%	-	1.4%	0%	0%	0.3%	-	0%	0%	0%	0%	-	0.1%
Lights	312	34	0	346	-	67	210	1	278	-	16	218	0	234	-	858
% Lights	95.4%	100%	0%	95.8%	-	95.7%	93.8%	100%	94.2%	-	100%	96.9%	0%	97.1%	-	95.7%
Single-Unit Trucks	6	0	0	6	-	0	4	0	4	-	0	3	0	3	-	13
% Single-Unit Trucks	1.8%	0%	0%	1.7%	-	0%	1.8%	0%	1.4%	-	0%	1.3%	0%	1.2%	-	1.4%
Articulated Trucks	1	0	0	1	-	0	1	0	1	-	0	0	0	0	-	2
% Articulated Trucks	0.3%	0%	0%	0.3%	-	0%	0.4%	0%	0.3%	-	0%	0%	0%	0%	-	0.2%
Buses	8	0	0	8	-	2	9	0	11	-	0	4	0	4	-	23
% Buses	2.4%	0%	0%	2.2%	-	2.9%	4.0%	0%	3.7%	-	0%	1.8%	0%	1.7%	-	2.6%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	8	-	-	-	-	0	-	-	-	-	10	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	0%	-

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

4. Brownsville Road & Churchview Avenue - TMC

Wed Oct 11, 2023

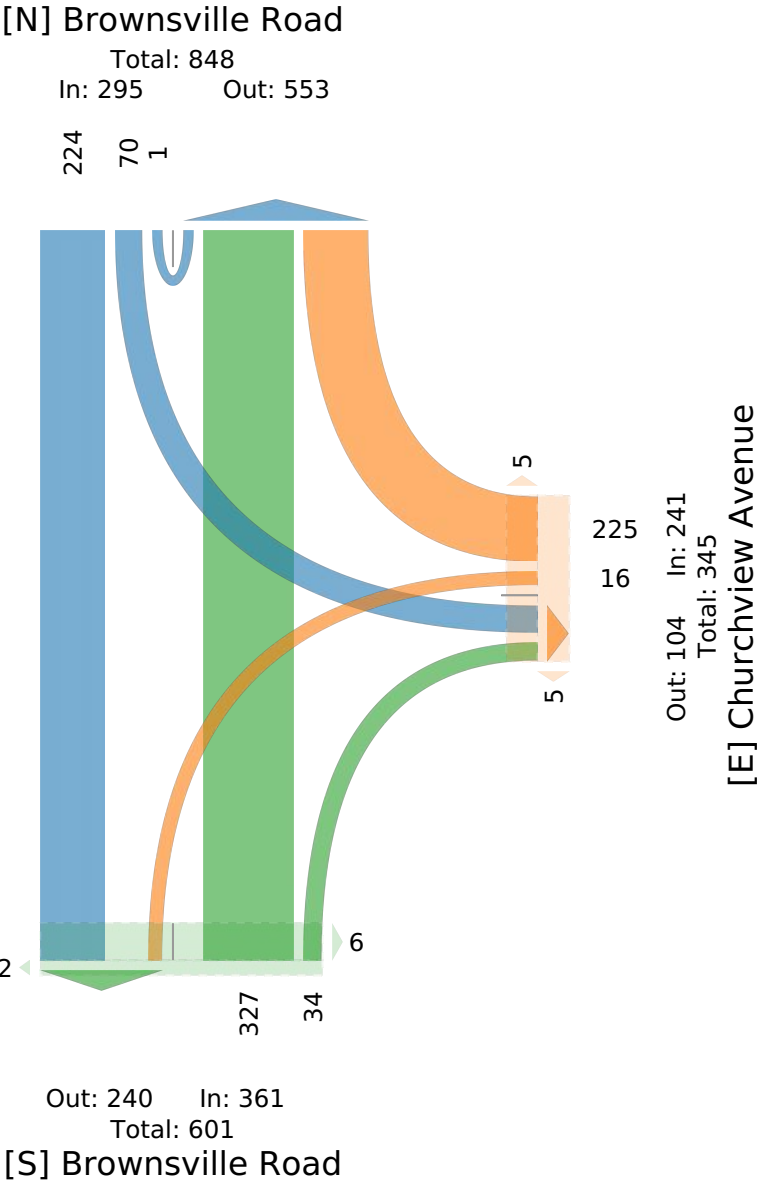
AM Peak (7:45 AM - 8:45 AM)

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

All Movements

ID: 1121322, Location: 40.385875, -79.978926, Site Code: 4

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



4. Brownsville Road & Churchview Avenue - TMC

Wed Oct 11, 2023

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

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

All Movements

ID: 1121322, Location: 40.385875, -79.978926, Site Code: 4

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Churchview Avenue Westbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2023-10-11 4:45PM	74	12	0	86	4	43	108	0	151	0	0	51	0	51	1	288
5:00PM	60	15	0	75	6	30	115	0	145	0	1	47	0	48	2	268
5:15PM	66	15	0	81	3	44	114	0	158	0	1	51	0	52	7	291
5:30PM	67	14	0	81	4	27	116	0	143	0	1	51	0	52	5	276
Total	267	56	0	323	17	144	453	0	597	0	3	200	0	203	15	1123
% Approach	82.7%	17.3%	0%	-	-	24.1%	75.9%	0%	-	-	1.5%	98.5%	0%	-	-	-
% Total	23.8%	5.0%	0%	28.8%	-	12.8%	40.3%	0%	53.2%	-	0.3%	17.8%	0%	18.1%	-	-
PHF	0.902	0.933	-	0.939	-	0.818	0.972	-	0.947	-	0.750	0.980	-	0.976	-	0.966
Motorcycles	0	0	0	0	-	1	0	0	1	-	0	2	0	2	-	3
% Motorcycles	0%	0%	0%	0%	-	0.7%	0%	0%	0.2%	-	0%	1.0%	0%	1.0%	-	0.3%
Lights	261	56	0	317	-	141	436	0	577	-	3	197	0	200	-	1094
% Lights	97.8%	100%	0%	98.1%	-	97.9%	96.2%	0%	96.6%	-	100%	98.5%	0%	98.5%	-	97.4%
Single-Unit Trucks	1	0	0	1	-	0	2	0	2	-	0	1	0	1	-	4
% Single-Unit Trucks	0.4%	0%	0%	0.3%	-	0%	0.4%	0%	0.3%	-	0%	0.5%	0%	0.5%	-	0.4%
Articulated Trucks	0	0	0	0	-	0	1	0	1	-	0	0	0	0	-	1
% Articulated Trucks	0%	0%	0%	0%	-	0%	0.2%	0%	0.2%	-	0%	0%	0%	0%	-	0.1%
Buses	5	0	0	5	-	2	12	0	14	-	0	0	0	0	-	19
% Buses	1.9%	0%	0%	1.5%	-	1.4%	2.6%	0%	2.3%	-	0%	0%	0%	0%	-	1.7%
Bicycles on Road	0	0	0	0	-	0	2	0	2	-	0	0	0	0	-	2
% Bicycles on Road	0%	0%	0%	0%	-	0%	0.4%	0%	0.3%	-	0%	0%	0%	0%	-	0.2%
Pedestrians	-	-	-	-	17	-	-	-	-	0	-	-	-	-	15	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	0%	-

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

4. Brownsville Road & Churchview Avenue - TMC

Wed Oct 11, 2023

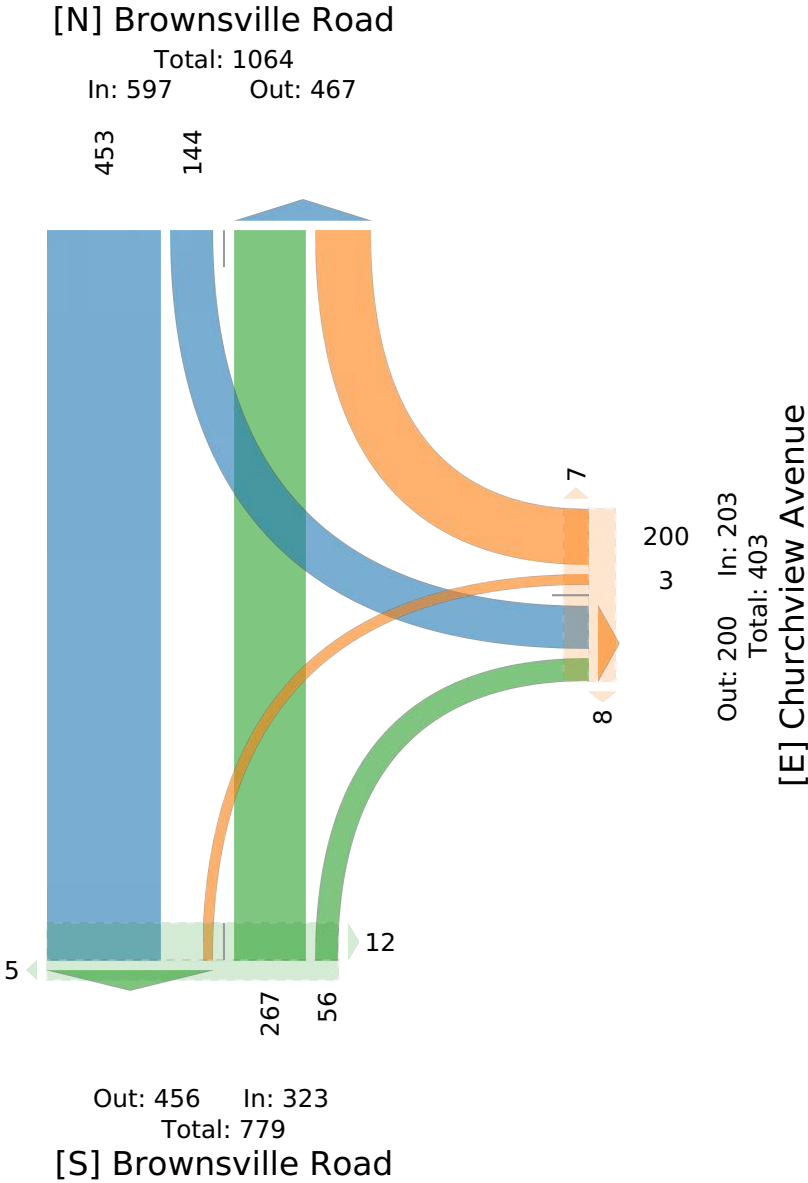
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

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

All Movements

ID: 1121322, Location: 40.385875, -79.978926, Site Code: 4

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



5. Brownsville Road at Becks Run Road (Thurs... - TMC

Thu Oct 12, 2023

Full Length (6:30 AM-9:30 AM)

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

All Movements

ID: 1122924, Location: 40.387337, -79.983808, Site Code: 5

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Becks Run Road Eastbound						Becks Run Road Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-10-12 6:30AM	1	75	51	0	127	4	1	27	5	0	33	0	2	30	2	0	34	1	12	14	2	0	28	4	222
6:45AM	1	75	63	0	139	1	1	26	6	0	33	0	2	42	3	0	47	0	18	13	2	0	33	5	252
Hourly Total	2	150	114	0	266	5	2	53	11	0	66	0	4	72	5	0	81	1	30	27	4	0	61	9	474
7:00AM	1	94	67	0	162	0	7	33	4	0	44	3	3	28	0	0	31	2	13	13	4	0	30	1	267
7:15AM	0	103	75	0	178	0	3	40	5	0	48	4	5	43	0	0	48	3	15	11	4	0	30	5	304
7:30AM	2	86	58	0	146	0	5	41	4	0	50	3	11	71	3	0	85	2	12	18	6	0	36	3	317
7:45AM	5	77	53	0	135	1	5	50	12	0	67	5	10	59	3	0	72	2	9	15	7	0	31	2	305
Hourly Total	8	360	253	0	621	1	20	164	25	0	209	15	29	201	6	0	236	9	49	57	21	0	127	11	1193
8:00AM	4	84	48	0	136	0	3	39	2	0	44	1	8	58	2	0	68	2	19	17	6	0	42	5	290
8:15AM	1	77	44	0	122	1	4	39	3	0	46	0	8	46	2	0	56	1	13	14	4	0	31	0	255
8:30AM	4	60	44	0	108	0	2	47	5	0	54	4	8	34	1	0	43	3	11	19	2	0	32	4	237
8:45AM	1	74	37	0	112	0	3	42	10	0	55	9	6	33	2	0	41	3	24	14	7	0	45	6	253
Hourly Total	10	295	173	0	478	1	12	167	20	0	199	14	30	171	7	0	208	9	67	64	19	0	150	15	1035
9:00AM	4	66	33	0	103	0	6	54	16	0	76	26	7	34	6	0	47	16	17	21	8	0	46	12	272
9:15AM	2	59	35	0	96	0	5	62	15	0	82	3	3	28	2	0	33	4	25	14	7	0	46	3	257
9:30AM	0	3	3	0	6	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Hourly Total	6	128	71	0	205	0	11	119	31	0	161	29	10	62	8	0	80	20	42	35	15	0	92	15	538
Total	26	933	611	0	1570	7	45	503	87	0	635	58	73	506	26	0	605	39	188	183	59	0	430	50	3240
% Approach	1.7%	59.4%	38.9%	0%	-	-	7.1%	79.2%	13.7%	0%	-	-	12.1%	83.6%	4.3%	0%	-	-	43.7%	42.6%	13.7%	0%	-	-	-
% Total	0.8%	28.8%	18.9%	0%	48.5%	-	1.4%	15.5%	2.7%	0%	19.6%	-	2.3%	15.6%	0.8%	0%	18.7%	-	5.8%	5.6%	1.8%	0%	13.3%	-	-
Motorcycles	0	2	3	0	5	-	0	1	0	0	1	-	0	0	0	0	0	-	1	0	0	0	1	-	7
% Motorcycles	0%	0.2%	0.5%	0%	0.3%	-	0%	0.2%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.5%	0%	0%	0%	0.2%	-	0.2%
Lights	24	868	597	0	1489	-	40	453	80	0	573	-	71	495	24	0	590	-	179	170	51	0	400	-	3052
% Lights	92.3%	93.0%	97.7%	0%	94.8%	-	88.9%	90.1%	92.0%	0%	90.2%	-	97.3%	97.8%	92.3%	0%	97.5%	-	95.2%	92.9%	86.4%	0%	93.0%	-	94.2%
Single-Unit Trucks	0	15	8	0	23	-	4	15	2	0	21	-	2	7	0	0	9	-	6	8	6	0	20	-	73
% Single-Unit Trucks	0%	1.6%	1.3%	0%	1.5%	-	8.9%	3.0%	2.3%	0%	3.3%	-	2.7%	1.4%	0%	0%	1.5%	-	3.2%	4.4%	10.2%	0%	4.7%	-	2.3%
Articulated Trucks	0	8	0	0	8	-	0	4	1	0	5	-	0	2	0	0	2	-	0	0	0	0	0	-	15
% Articulated Trucks	0%	0.9%	0%	0%	0.5%	-	0%	0.8%	1.1%	0%	0.8%	-	0%	0.4%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0.5%
Buses	2	39	3	0	44	-	1	30	4	0	35	-	0	2	2	0	4	-	2	5	2	0	9	-	92
% Buses	7.7%	4.2%	0.5%	0%	2.8%	-	2.2%	6.0%	4.6%	0%	5.5%	-	0%	0.4%	7.7%	0%	0.7%	-	1.1%	2.7%	3.4%	0%	2.1%	-	2.8%
Bicycles on Road	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	58	-	-	-	-	-	39	-	-	-	-	-	50	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	

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

5. Brownsville Road at Becks Run Road (Thurs... - TMC

Thu Oct 12, 2023

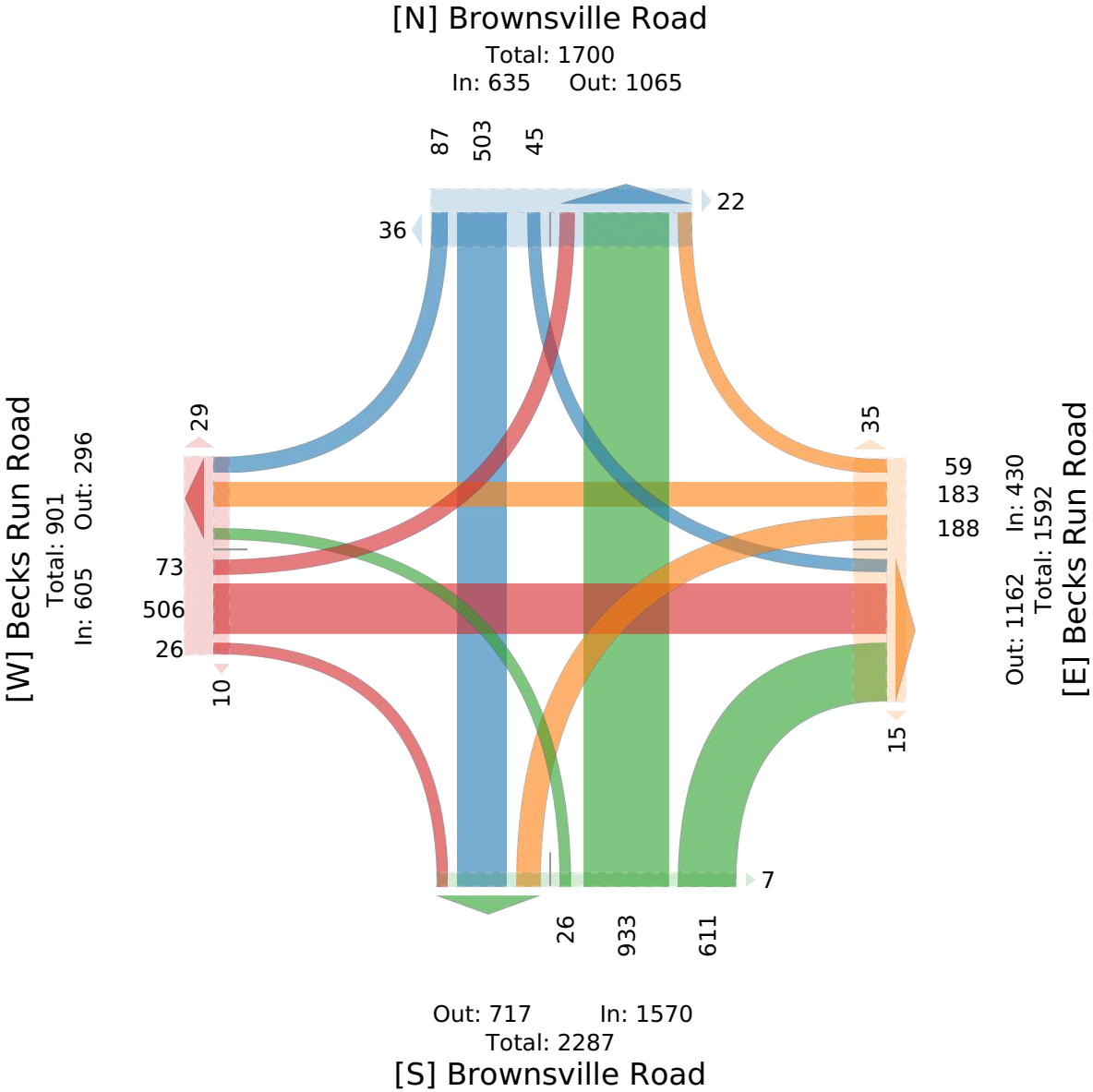
Full Length (6:30 AM-9:30 AM)

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

All Movements

ID: 1122924, Location: 40.387337, -79.983808, Site Code: 5

Provided by: Imperial Traffic & Data
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PO Box 4637, Cherry Hill, NJ, 08003, US



5. Brownsville Road at Becks Run Road (Thurs... - TMC

Thu Oct 12, 2023

AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour

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

All Movements

ID: 1122924, Location: 40.387337, -79.983808, Site Code: 5

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Becks Run Road Eastbound						Becks Run Road Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-10-12 7:15AM	0	103	75	0	178	0	3	40	5	0	48	4	5	43	0	0	48	3	15	11	4	0	30	5	304
7:30AM	2	86	58	0	146	0	5	41	4	0	50	3	11	71	3	0	85	2	12	18	6	0	36	3	317
7:45AM	5	77	53	0	135	1	5	50	12	0	67	5	10	59	3	0	72	2	9	15	7	0	31	2	305
8:00AM	4	84	48	0	136	0	3	39	2	0	44	1	8	58	2	0	68	2	19	17	6	0	42	5	290
Total	11	350	234	0	595	1	16	170	23	0	209	13	34	231	8	0	273	9	55	61	23	0	139	15	1216
% Approach	1.8%	58.8%	39.3%	0%	-	-	7.7%	81.3%	11.0%	0%	-	-	12.5%	84.6%	2.9%	0%	-	-	39.6%	43.9%	16.5%	0%	-	-	-
% Total	0.9%	28.8%	19.2%	0%	48.9%	-	1.3%	14.0%	1.9%	0%	17.2%	-	2.8%	19.0%	0.7%	0%	22.5%	-	4.5%	5.0%	1.9%	0%	11.4%	-	-
PHF	0.550	0.850	0.780	-	0.836	-	0.800	0.850	0.479	-	0.780	-	0.773	0.813	0.667	-	0.803	-	0.724	0.847	0.821	-	0.827	-	0.959
Motorcycles	0	1	2	0	3	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	4
% Motorcycles	0%	0.3%	0.9%	0%	0.5%	-	0%	0.6%	0%	0%	0.5%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.3%
Lights	9	328	227	0	564	-	15	152	20	0	187	-	34	226	8	0	268	-	53	58	21	0	132	-	1151
% Lights	81.8%	93.7%	97.0%	0%	94.8%	-	93.8%	89.4%	87.0%	0%	89.5%	-	100%	97.8%	100%	0%	98.2%	-	96.4%	95.1%	91.3%	0%	95.0%	-	94.7%
Single-Unit Trucks	0	3	4	0	7	-	0	6	1	0	7	-	0	3	0	0	3	-	2	3	1	0	6	-	23
% Single-Unit Trucks	0%	0.9%	1.7%	0%	1.2%	-	0%	3.5%	4.3%	0%	3.3%	-	0%	1.3%	0%	0%	1.1%	-	3.6%	4.9%	4.3%	0%	4.3%	-	1.9%
Articulated Trucks	0	2	0	0	2	-	0	1	0	0	1	-	0	1	0	0	1	-	0	0	0	0	0	-	4
% Articulated Trucks	0%	0.6%	0%	0%	0.3%	-	0%	0.6%	0%	0%	0.5%	-	0%	0.4%	0%	0%	0.4%	-	0%	0%	0%	0%	0%	-	0.3%
Buses	2	16	1	0	19	-	1	10	2	0	13	-	0	1	0	0	1	-	0	0	1	0	1	-	34
% Buses	18.2%	4.6%	0.4%	0%	3.2%	-	6.3%	5.9%	8.7%	0%	6.2%	-	0%	0.4%	0%	0%	0.4%	-	0%	0%	4.3%	0%	0.7%	-	2.8%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	13	-	-	-	-	-	9	-	-	-	-	-	15	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

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

5. Brownsville Road at Becks Run Road (Thurs... - TMC

Thu Oct 12, 2023

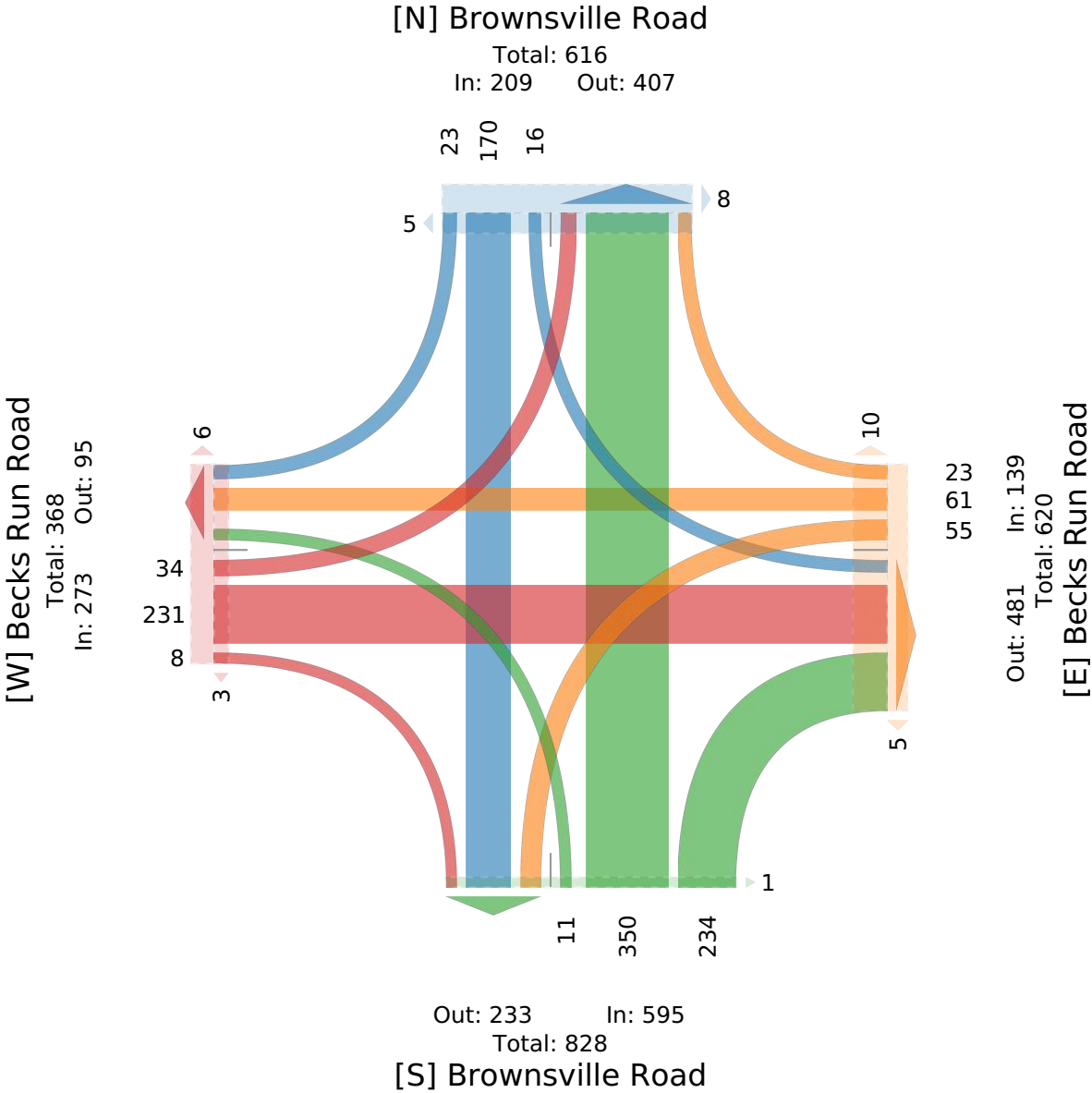
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour

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

All Movements

ID: 1122924, Location: 40.387337, -79.983808, Site Code: 5

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



6. Brownsville Road at Overbrook Boulevard - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121367, Location: 40.389229, -79.985387, Site Code: 6

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Overbrook Boulevard Eastbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
2023-10-11 6:30AM	2	79	0	81	0	38	1	0	39	1	2	2	0	4	1	124
6:45AM	3	85	0	88	0	29	3	0	32	0	1	3	0	4	1	124
Hourly Total	5	164	0	169	0	67	4	0	71	1	3	5	0	8	2	248
7:00AM	4	79	0	83	3	31	4	0	35	1	2	7	0	9	1	127
7:15AM	2	110	0	112	1	34	0	0	34	0	3	6	0	9	6	155
7:30AM	2	85	0	87	0	42	5	0	47	2	2	5	0	7	5	141
7:45AM	8	91	0	99	1	44	6	0	50	1	4	8	0	12	1	161
Hourly Total	16	365	0	381	5	151	15	0	166	4	11	26	0	37	13	584
8:00AM	7	65	0	72	0	49	2	0	51	1	4	8	0	12	2	135
8:15AM	12	85	0	97	0	55	4	0	59	0	4	3	0	7	0	163
8:30AM	6	67	0	73	0	61	4	0	65	0	6	6	0	12	3	150
8:45AM	8	68	0	76	0	80	2	0	82	0	3	18	0	21	17	179
Hourly Total	33	285	0	318	0	245	12	0	257	1	17	35	0	52	22	627
9:00AM	10	111	0	121	1	34	7	0	41	3	6	6	0	12	32	174
9:15AM	10	89	0	99	0	51	17	0	68	0	5	6	0	11	13	178
Hourly Total	20	200	0	220	1	85	24	0	109	3	11	12	0	23	45	352
2:00PM	6	79	0	85	1	65	7	0	72	2	1	4	0	5	7	162
2:15PM	4	85	0	89	0	65	3	0	68	0	2	2	0	4	1	161
2:30PM	11	70	0	81	1	72	11	1	84	0	1	9	0	10	10	175
2:45PM	6	84	0	90	0	70	7	0	77	1	2	9	0	11	17	178
Hourly Total	27	318	0	345	2	272	28	1	301	3	6	24	0	30	35	676
3:00PM	14	77	0	91	0	82	10	0	92	1	3	8	0	11	0	194
3:15PM	7	110	0	117	0	94	12	0	106	2	4	4	0	8	5	231
3:30PM	8	81	1	90	0	89	9	0	98	0	4	12	0	16	13	204
3:45PM	18	82	1	101	1	74	13	0	87	5	6	13	0	19	38	207
Hourly Total	47	350	2	399	1	339	44	0	383	8	17	37	0	54	56	836
4:00PM	16	109	0	125	0	49	20	0	69	1	6	6	0	12	54	206
4:15PM	9	77	0	86	0	84	10	0	94	2	3	5	0	8	25	188
4:30PM	5	84	0	89	0	76	8	0	84	1	5	7	0	12	5	185
4:45PM	15	89	0	104	0	88	10	0	98	2	3	9	0	12	8	214
Hourly Total	45	359	0	404	0	297	48	0	345	6	17	27	0	44	92	793
5:00PM	10	81	0	91	1	90	9	0	99	0	4	3	0	7	4	197
5:15PM	10	90	0	100	0	101	16	1	118	1	3	5	0	8	9	226
5:30PM	6	101	0	107	0	96	16	0	112	0	2	5	0	7	6	226
5:45PM	14	87	0	101	1	112	14	0	126	5	4	12	0	16	5	243
Hourly Total	40	359	0	399	2	399	55	1	455	6	13	25	0	38	24	892
Total	233	2400	2	2635	11	1855	230	2	2087	32	95	191	0	286	289	5008

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Overbrook Boulevard Eastbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
% Approach	8.8%	91.1%	0.1%	-	-	88.9%	11.0%	0.1%	-	-	33.2%	66.8%	0%	-	-	-
% Total	4.7%	47.9%	0%	52.6%	-	37.0%	4.6%	0%	41.7%	-	1.9%	3.8%	0%	5.7%	-	-
Motorcycles	1	5	0	6	-	6	1	0	7	-	2	2	0	4	-	17
% Motorcycles	0.4%	0.2%	0%	0.2%	-	0.3%	0.4%	0%	0.3%	-	2.1%	1.0%	0%	1.4%	-	0.3%
Lights	222	2276	2	2500	-	1737	219	2	1958	-	86	182	0	268	-	4726
% Lights	95.3%	94.8%	100%	94.9%	-	93.6%	95.2%	100%	93.8%	-	90.5%	95.3%	0%	93.7%	-	94.4%
Single-Unit Trucks	5	36	0	41	-	38	5	0	43	-	2	2	0	4	-	88
% Single-Unit Trucks	2.1%	1.5%	0%	1.6%	-	2.0%	2.2%	0%	2.1%	-	2.1%	1.0%	0%	1.4%	-	1.8%
Articulated Trucks	0	6	0	6	-	1	0	0	1	-	0	0	0	0	-	7
% Articulated Trucks	0%	0.3%	0%	0.2%	-	0.1%	0%	0%	0%	-	0%	0%	0%	0%	-	0.1%
Buses	4	75	0	79	-	71	5	0	76	-	5	4	0	9	-	164
% Buses	1.7%	3.1%	0%	3.0%	-	3.8%	2.2%	0%	3.6%	-	5.3%	2.1%	0%	3.1%	-	3.3%
Bicycles on Road	1	2	0	3	-	2	0	0	2	-	0	1	0	1	-	6
% Bicycles on Road	0.4%	0.1%	0%	0.1%	-	0.1%	0%	0%	0.1%	-	0%	0.5%	0%	0.3%	-	0.1%
Pedestrians	-	-	-	-	11	-	-	-	-	32	-	-	-	-	288	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	99.7%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0.3%	-

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

6. Brownsville Road at Overbrook Boulevard - TMC

Wed Oct 11, 2023

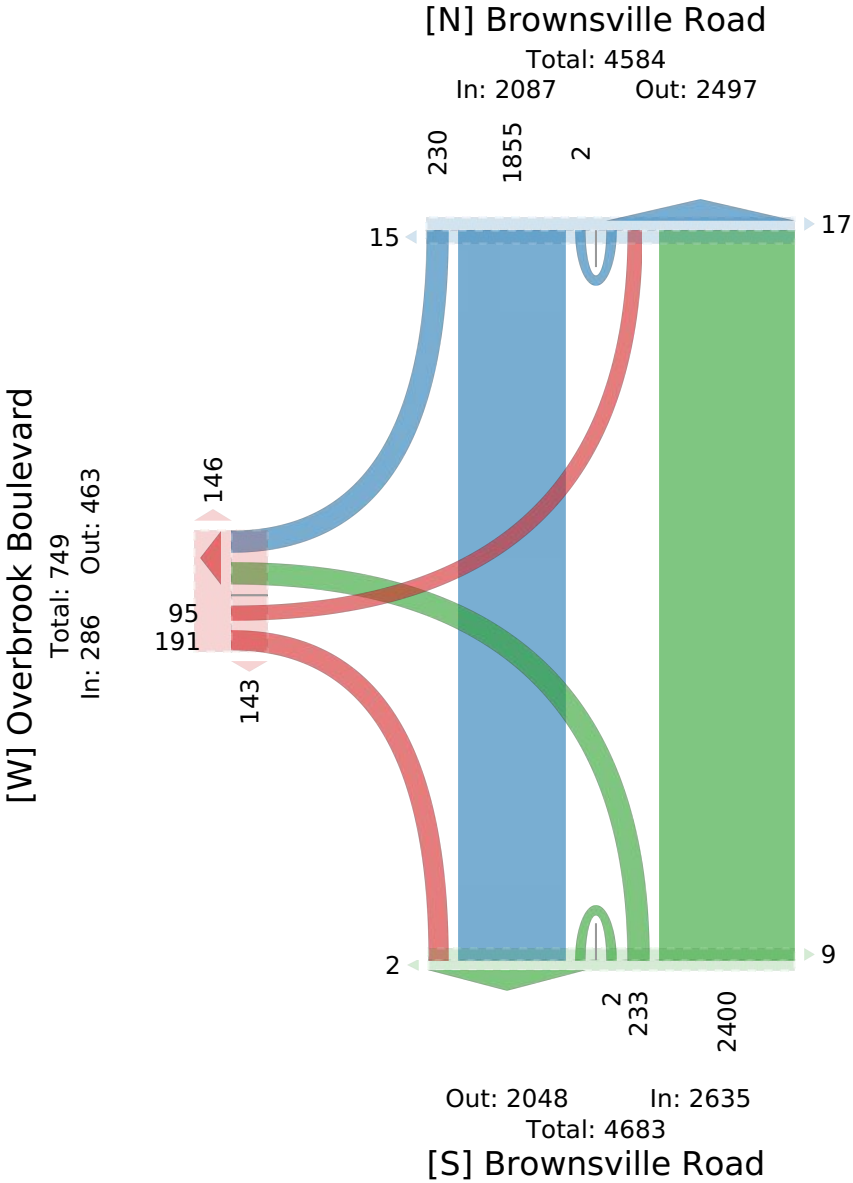
Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121367, Location: 40.389229, -79.985387, Site Code: 6

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



6. Brownsville Road at Overbrook Boulevard - TMC

Wed Oct 11, 2023

AM Peak (8:30 AM - 9:30 AM)

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

All Movements

ID: 1121367, Location: 40.389229, -79.985387, Site Code: 6

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Overbrook Boulevard Eastbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
2023-10-11 8:30AM	6	67	0	73	0	61	4	0	65	0	6	6	0	12	3	150
8:45AM	8	68	0	76	0	80	2	0	82	0	3	18	0	21	17	179
9:00AM	10	111	0	121	1	34	7	0	41	3	6	6	0	12	32	174
9:15AM	10	89	0	99	0	51	17	0	68	0	5	6	0	11	13	178
Total	34	335	0	369	1	226	30	0	256	3	20	36	0	56	65	681
% Approach	9.2%	90.8%	0%	-	-	88.3%	11.7%	0%	-	-	35.7%	64.3%	0%	-	-	-
% Total	5.0%	49.2%	0%	54.2%	-	33.2%	4.4%	0%	37.6%	-	2.9%	5.3%	0%	8.2%	-	-
PHF	0.825	0.755	-	0.767	-	0.706	0.441	-	0.780	-	0.833	0.500	-	0.667	-	0.950
Motorcycles	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Motorcycles	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Lights	32	313	0	345	-	207	28	0	235	-	20	34	0	54	-	634
% Lights	94.1%	93.4%	0%	93.5%	-	91.6%	93.3%	0%	91.8%	-	100%	94.4%	0%	96.4%	-	93.1%
Single-Unit Trucks	1	7	0	8	-	8	2	0	10	-	0	1	0	1	-	19
% Single-Unit Trucks	2.9%	2.1%	0%	2.2%	-	3.5%	6.7%	0%	3.9%	-	0%	2.8%	0%	1.8%	-	2.8%
Articulated Trucks	0	1	0	1	-	0	0	0	0	-	0	0	0	0	-	1
% Articulated Trucks	0%	0.3%	0%	0.3%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.1%
Buses	0	14	0	14	-	11	0	0	11	-	0	1	0	1	-	26
% Buses	0%	4.2%	0%	3.8%	-	4.9%	0%	0%	4.3%	-	0%	2.8%	0%	1.8%	-	3.8%
Bicycles on Road	1	0	0	1	-	0	0	0	0	-	0	0	0	0	-	1
% Bicycles on Road	2.9%	0%	0%	0.3%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	1	-	-	-	-	3	-	-	-	-	65	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-

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

6. Brownsville Road at Overbrook Boulevard - TMC

Wed Oct 11, 2023

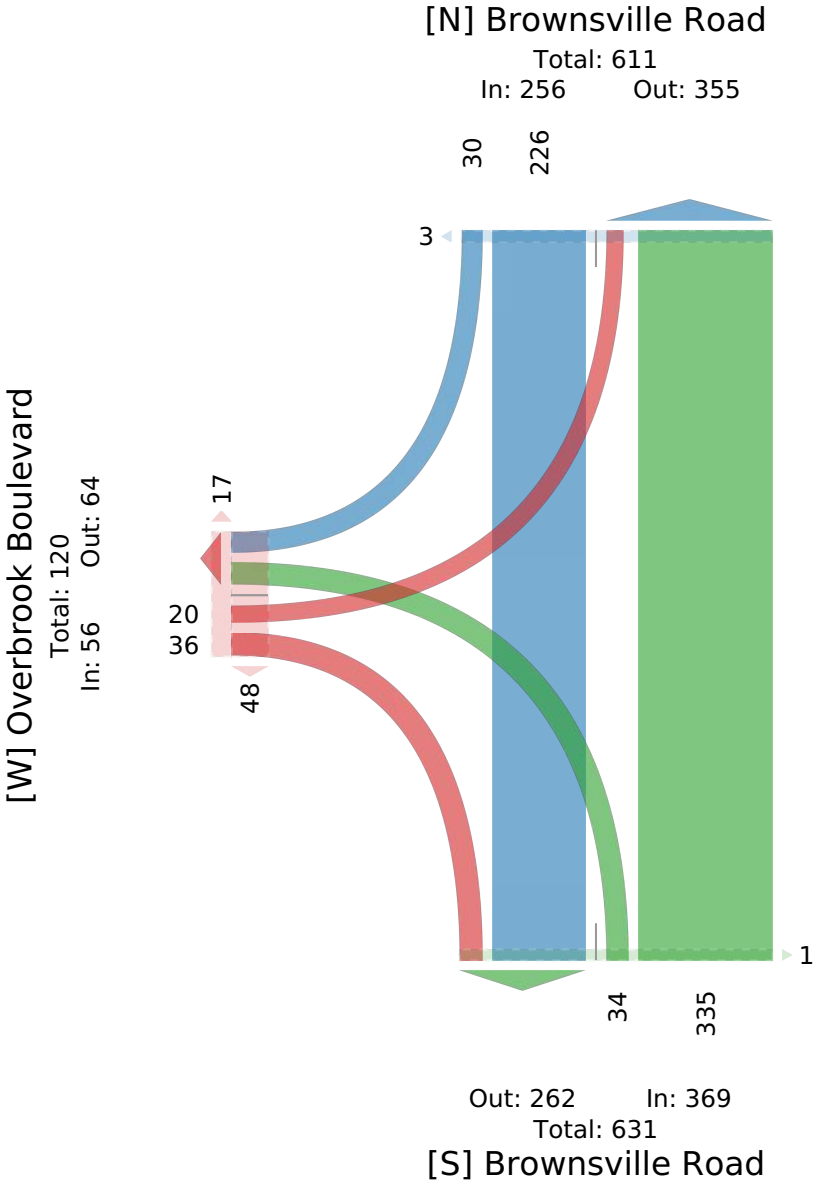
AM Peak (8:30 AM - 9:30 AM)

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

All Movements

ID: 1121367, Location: 40.389229, -79.985387, Site Code: 6

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



6. Brownsville Road at Overbrook Boulevard - TMC

Wed Oct 11, 2023

PM Peak (5 PM - 6 PM) - Overall Peak Hour

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

All Movements

ID: 1121367, Location: 40.389229, -79.985387, Site Code: 6

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound					Brownsville Road Southbound					Overbrook Boulevard Eastbound					
Time	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	Int
2023-10-11 5:00PM	10	81	0	91	1	90	9	0	99	0	4	3	0	7	4	197
5:15PM	10	90	0	100	0	101	16	1	118	1	3	5	0	8	9	226
5:30PM	6	101	0	107	0	96	16	0	112	0	2	5	0	7	6	226
5:45PM	14	87	0	101	1	112	14	0	126	5	4	12	0	16	5	243
Total	40	359	0	399	2	399	55	1	455	6	13	25	0	38	24	892
% Approach	10.0%	90.0%	0%	-	-	87.7%	12.1%	0.2%	-	-	34.2%	65.8%	0%	-	-	-
% Total	4.5%	40.2%	0%	44.7%	-	44.7%	6.2%	0.1%	51.0%	-	1.5%	2.8%	0%	4.3%	-	-
PHF	0.714	0.889	-	0.932	-	0.891	0.859	0.250	0.903	-	0.813	0.500	-	0.578	-	0.917
Motorcycles	1	0	0	1	-	0	1	0	1	-	1	1	0	2	-	4
% Motorcycles	2.5%	0%	0%	0.3%	-	0%	1.8%	0%	0.2%	-	7.7%	4.0%	0%	5.3%	-	0.4%
Lights	39	353	0	392	-	380	54	1	435	-	12	23	0	35	-	862
% Lights	97.5%	98.3%	0%	98.2%	-	95.2%	98.2%	100%	95.6%	-	92.3%	92.0%	0%	92.1%	-	96.6%
Single-Unit Trucks	0	2	0	2	-	5	0	0	5	-	0	0	0	0	-	7
% Single-Unit Trucks	0%	0.6%	0%	0.5%	-	1.3%	0%	0%	1.1%	-	0%	0%	0%	0%	-	0.8%
Articulated Trucks	0	0	0	0	-	1	0	0	1	-	0	0	0	0	-	1
% Articulated Trucks	0%	0%	0%	0%	-	0.3%	0%	0%	0.2%	-	0%	0%	0%	0%	-	0.1%
Buses	0	4	0	4	-	13	0	0	13	-	0	0	0	0	-	17
% Buses	0%	1.1%	0%	1.0%	-	3.3%	0%	0%	2.9%	-	0%	0%	0%	0%	-	1.9%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	1	0	1	-	1
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	4.0%	0%	2.6%	-	0.1%
Pedestrians	-	-	-	-	2	-	-	-	-	6	-	-	-	-	24	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-

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

6. Brownsville Road at Overbrook Boulevard - TMC

Wed Oct 11, 2023

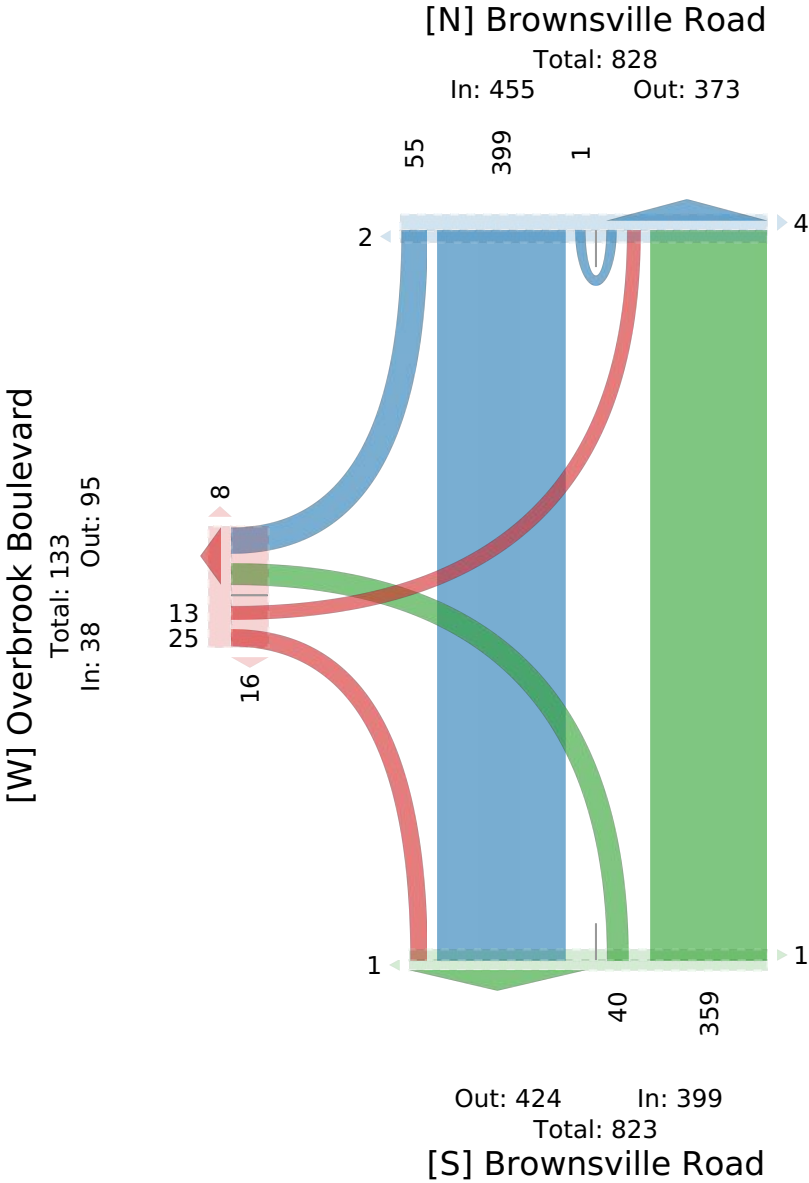
PM Peak (5 PM - 6 PM) - Overall Peak Hour

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

All Movements

ID: 1121367, Location: 40.389229, -79.985387, Site Code: 6

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



7. Brownsville Road at East/West Agnew Avenu... - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121378, Location: 40.395176, -79.986761, Site Code: 7

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						West Agnew Avenue Eastbound						East Agnew Avenue Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-10-11 6:30AM	1	130	5	0	136	0	15	38	0	0	53	1	2	1	1	0	4	1	2	0	4	0	6	2	199
6:45AM	0	96	5	0	101	0	17	38	0	0	55	0	0	1	3	0	4	1	3	0	3	0	6	4	166
Hourly Total	1	226	10	0	237	0	32	76	0	0	108	1	2	2	4	0	8	2	5	0	7	0	12	6	365
7:00AM	2	119	8	0	129	0	18	44	0	0	62	2	0	1	1	0	2	2	1	0	1	0	2	0	195
7:15AM	1	130	13	0	144	1	13	65	0	0	78	4	0	0	1	0	1	4	1	0	2	0	3	2	226
7:30AM	3	123	9	0	135	5	21	67	0	0	88	2	0	1	5	0	6	8	1	0	2	0	3	1	232
7:45AM	2	112	8	0	122	0	28	63	0	0	91	0	0	1	2	0	3	1	2	0	2	0	4	0	220
Hourly Total	8	484	38	0	530	6	80	239	0	0	319	8	0	3	9	0	12	15	5	0	7	0	12	3	873
8:00AM	3	98	4	1	106	5	15	64	2	0	81	0	4	1	2	0	7	9	1	0	1	0	2	1	196
8:15AM	3	103	14	0	120	1	33	78	0	0	111	2	0	0	2	0	2	0	2	0	2	0	4	2	237
8:30AM	2	88	11	1	102	2	30	65	0	0	95	3	0	1	0	0	1	3	3	0	1	0	4	1	202
8:45AM	5	95	12	0	112	0	23	82	1	0	106	0	0	0	0	0	0	0	3	0	0	0	3	1	221
Hourly Total	13	384	41	2	440	8	101	289	3	0	393	5	4	2	4	0	10	12	9	0	4	0	13	5	856
9:00AM	0	113	10	0	123	1	28	69	2	0	99	0	1	0	1	1	3	0	2	0	1	0	3	2	228
9:15AM	0	101	8	0	109	1	19	47	0	0	66	0	1	0	1	0	2	2	2	0	1	0	3	0	180
Hourly Total	0	214	18	0	232	2	47	116	2	0	165	0	2	0	2	1	5	2	4	0	2	0	6	2	408
2:00PM	0	95	12	0	107	7	24	92	1	0	117	0	2	0	1	0	3	6	0	0	2	0	2	1	229
2:15PM	0	104	15	0	119	6	18	88	2	0	108	0	0	0	1	0	1	2	2	0	2	0	4	5	232
2:30PM	1	125	19	0	145	1	16	102	2	0	120	0	0	0	1	0	1	6	1	0	1	0	2	1	268
2:45PM	1	124	10	0	135	9	24	91	1	0	116	2	0	0	1	0	1	21	1	0	1	0	2	4	254
Hourly Total	2	448	56	0	506	23	82	373	6	0	461	2	2	0	4	0	6	35	4	0	6	0	10	11	983
3:00PM	2	129	14	0	145	1	39	104	2	0	145	1	1	2	2	0	5	4	2	0	0	0	2	1	297
3:15PM	2	109	18	0	129	4	34	107	0	0	141	3	0	1	0	0	1	8	0	0	0	0	0	1	271
3:30PM	5	132	14	0	151	0	44	124	3	0	171	1	0	0	2	0	2	4	2	0	1	0	3	4	327
3:45PM	3	115	8	0	126	0	37	91	1	0	129	0	0	3	1	0	4	9	1	0	0	0	1	3	260
Hourly Total	12	485	54	0	551	5	154	426	6	0	586	5	1	6	5	0	12	25	5	0	1	0	6	9	1155
4:00PM	4	145	17	0	166	1	52	117	2	0	171	1	0	2	2	0	4	8	1	1	1	0	3	5	344
4:15PM	2	119	17	0	138	6	37	106	0	0	143	1	1	0	1	0	2	17	1	0	3	0	4	5	287
4:30PM	3	120	15	0	138	1	48	142	1	0	191	1	1	2	1	0	4	2	0	0	4	0	4	2	337
4:45PM	7	133	8	1	149	4	43	118	0	1	162	1	0	0	2	0	2	9	1	0	3	0	4	7	317
Hourly Total	16	517	57	1	591	12	180	483	3	1	667	4	2	4	6	0	12	36	3	1	11	0	15	19	1285
5:00PM	2	121	18	0	141	1	48	133	0	0	181	0	0	2	2	0	4	2	1	0	0	0	1	8	327
5:15PM	1	127	27	0	155	5	40	138	0	0	178	1	0	1	6	0	7	6	1	0	3	0	4	5	344
5:30PM	0	128	19	0	147	3	42	120	0	0	162	1	0	4	1	0	5	5	3	0	1	0	4	2	318
5:45PM	1	128	6	0	135	1	33	128	0	0	161	0	0	1	2	0	3	4	7	1	5	0	13	4	312
Hourly Total	4	504	70	0	578	10	163	519	0	0	682	2	0	8	11	0	19	17	12	1	9	0	22	19	1301
Total	56	3262	344	3	3665	66	839	2521	20	1	3381	27	13	25	45	1	84	144	47	2	47	0	96	74	7226

Leg Direction	Brownsville Road Northbound							Brownsville Road Southbound							West Agnew Avenue Eastbound							East Agnew Avenue Westbound							
Time	L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		Int
% Approach	1.5%	89.0%	9.4%	0.1%	-	-		24.8%	74.6%	0.6%	0%	-	-		15.5%	29.8%	53.6%	1.2%	-	-		49.0%	2.1%	49.0%	0%	-	-		-
% Total	0.8%	45.1%	4.8%	0%	50.7%	-		11.6%	34.9%	0.3%	0%	46.8%	-		0.2%	0.3%	0.6%	0%	1.2%	-		0.7%	0%	0.7%	0%	1.3%	-		-
Motorcycles	0	14	1	0	15	-		2	9	0	0	11	-		0	0	0	0	0	-		5	0	0	0	5	-		31
% Motorcycles	0%	0.4%	0.3%	0%	0.4%	-		0.2%	0.4%	0%	0%	0.3%	-		0%	0%	0%	0%	0%	-		10.6%	0%	0%	0%	5.2%	-		0.4%
Lights	55	3106	332	3	3496	-		825	2385	19	1	3230	-		13	25	43	1	82	-		38	2	46	0	86	-		6894
% Lights	98.2%	95.2%	96.5%	100%	95.4%	-		98.3%	94.6%	95.0%	100%	95.5%	-		100%	100%	95.6%	100%	97.6%	-		80.9%	100%	97.9%	0%	89.6%	-		95.4%
Single-Unit Trucks	1	41	9	0	51	-		9	37	0	0	46	-		0	0	2	0	2	-		2	0	0	0	2	-		101
% Single-Unit Trucks	1.8%	1.3%	2.6%	0%	1.4%	-		1.1%	1.5%	0%	0%	1.4%	-		0%	0%	4.4%	0%	2.4%	-		4.3%	0%	0%	0%	2.1%	-		1.4%
Articulated Trucks	0	7	0	0	7	-		1	1	0	0	2	-		0	0	0	0	0	-		0	0	0	0	0	-		9
% Articulated Trucks	0%	0.2%	0%	0%	0.2%	-		0.1%	0%	0%	0%	0.1%	-		0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0.1%
Buses	0	91	2	0	93	-		2	85	1	0	88	-		0	0	0	0	0	-		1	0	1	0	2	-		183
% Buses	0%	2.8%	0.6%	0%	2.5%	-		0.2%	3.4%	5.0%	0%	2.6%	-		0%	0%	0%	0%	0%	-		2.1%	0%	2.1%	0%	2.1%	-		2.5%
Bicycles on Road	0	3	0	0	3	-		0	4	0	0	4	-		0	0	0	0	0	-		1	0	0	0	1	-		8
% Bicycles on Road	0%	0.1%	0%	0%	0.1%	-		0%	0.2%	0%	0%	0.1%	-		0%	0%	0%	0%	0%	-		2.1%	0%	0%	0%	1.0%	-		0.1%
Pedestrians	-	-	-	-	-	66		-	-	-	-	-	27		-	-	-	-	-	143		-	-	-	-	-	74		
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	-	100%		-	-	-	-	-	99.3%		-	-	-	-	-	100%		-
Bicycles on Crosswalk	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	1		-	-	-	-	-	0		
% Bicycles on Crosswalk	-	-	-	-	-	0%		-	-	-	-	-	0%		-	-	-	-	-	0.7%		-	-	-	-	-	0%		-

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

7. Brownsville Road at East/West Agnew Avenue... - TMC

Wed Oct 11, 2023

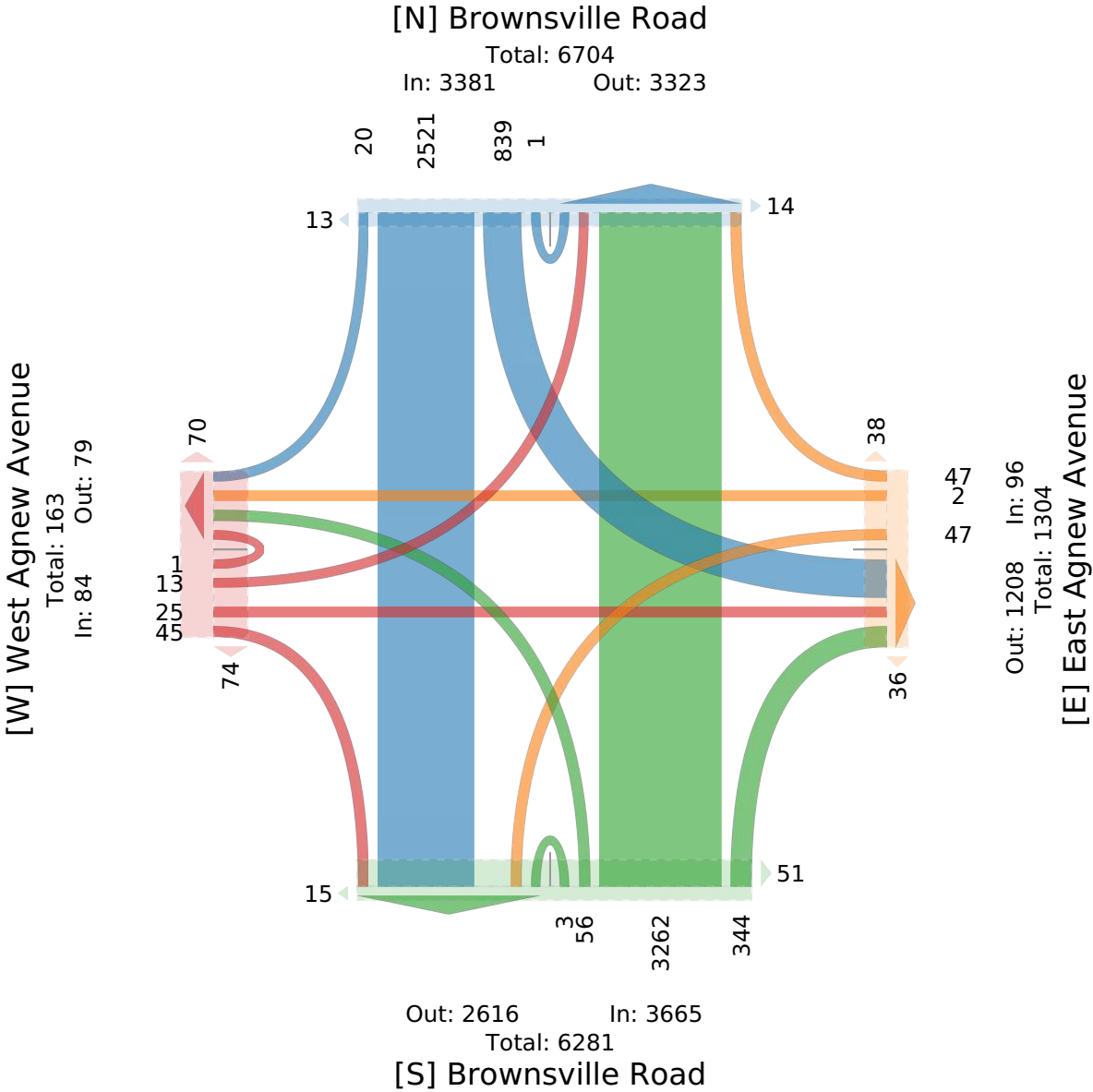
Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121378, Location: 40.395176, -79.986761, Site Code: 7

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



7. Brownsville Road at East/West Agnew Avenu... - TMC

Wed Oct 11, 2023

AM Peak (8:15 AM - 9:15 AM)

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

All Movements

ID: 1121378, Location: 40.395176, -79.986761, Site Code: 7

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						West Agnew Avenue Eastbound						East Agnew Avenue Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-10-11 8:15AM	3	103	14	0	120	1	33	78	0	0	111	2	0	0	2	0	2	0	2	0	2	0	4	2	237
8:30AM	2	88	11	1	102	2	30	65	0	0	95	3	0	1	0	0	1	3	3	0	1	0	4	1	202
8:45AM	5	95	12	0	112	0	23	82	1	0	106	0	0	0	0	0	0	0	3	0	0	0	3	1	221
9:00AM	0	113	10	0	123	1	28	69	2	0	99	0	1	0	1	1	3	0	2	0	1	0	3	2	228
Total	10	399	47	1	457	4	114	294	3	0	411	5	1	1	3	1	6	3	10	0	4	0	14	6	888
% Approach	2.2%	87.3%	10.3%	0.2%	-	-	27.7%	71.5%	0.7%	0%	-	-	16.7%	16.7%	50.0%	16.7%	-	-	71.4%	0%	28.6%	0%	-	-	-
% Total	1.1%	44.9%	5.3%	0.1%	51.5%	-	12.8%	33.1%	0.3%	0%	46.3%	-	0.1%	0.1%	0.3%	0.1%	0.7%	-	1.1%	0%	0.5%	0%	1.6%	-	-
PHF	0.500	0.888	0.839	0.250	0.934	-	0.864	0.896	0.375	-	0.926	-	0.250	0.250	0.375	0.250	0.500	-	0.833	-	0.500	-	0.875	-	0.936
Motorcycles	0	1	0	0	1	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	2
% Motorcycles	0%	0.3%	0%	0%	0.2%	-	0%	0.3%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.2%
Lights	10	374	47	1	432	-	113	271	3	0	387	-	1	1	3	1	6	-	9	0	4	0	13	-	838
% Lights	100%	93.7%	100%	100%	94.5%	-	99.1%	92.2%	100%	0%	94.2%	-	100%	100%	100%	100%	100%	-	90.0%	0%	100%	0%	92.9%	-	94.4%
Single-Unit Trucks	0	12	0	0	12	-	0	12	0	0	12	-	0	0	0	0	0	-	0	0	0	0	0	-	24
% Single-Unit Trucks	0%	3.0%	0%	0%	2.6%	-	0%	4.1%	0%	0%	2.9%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	2.7%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Buses	0	11	0	0	11	-	1	10	0	0	11	-	0	0	0	0	0	-	1	0	0	0	1	-	23
% Buses	0%	2.8%	0%	0%	2.4%	-	0.9%	3.4%	0%	0%	2.7%	-	0%	0%	0%	0%	0%	-	10.0%	0%	0%	0%	7.1%	-	2.6%
Bicycles on Road	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0.3%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	5	-	-	-	-	-	3	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

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

7. Brownsville Road at East/West Agnew Avenue... - TMC

Wed Oct 11, 2023

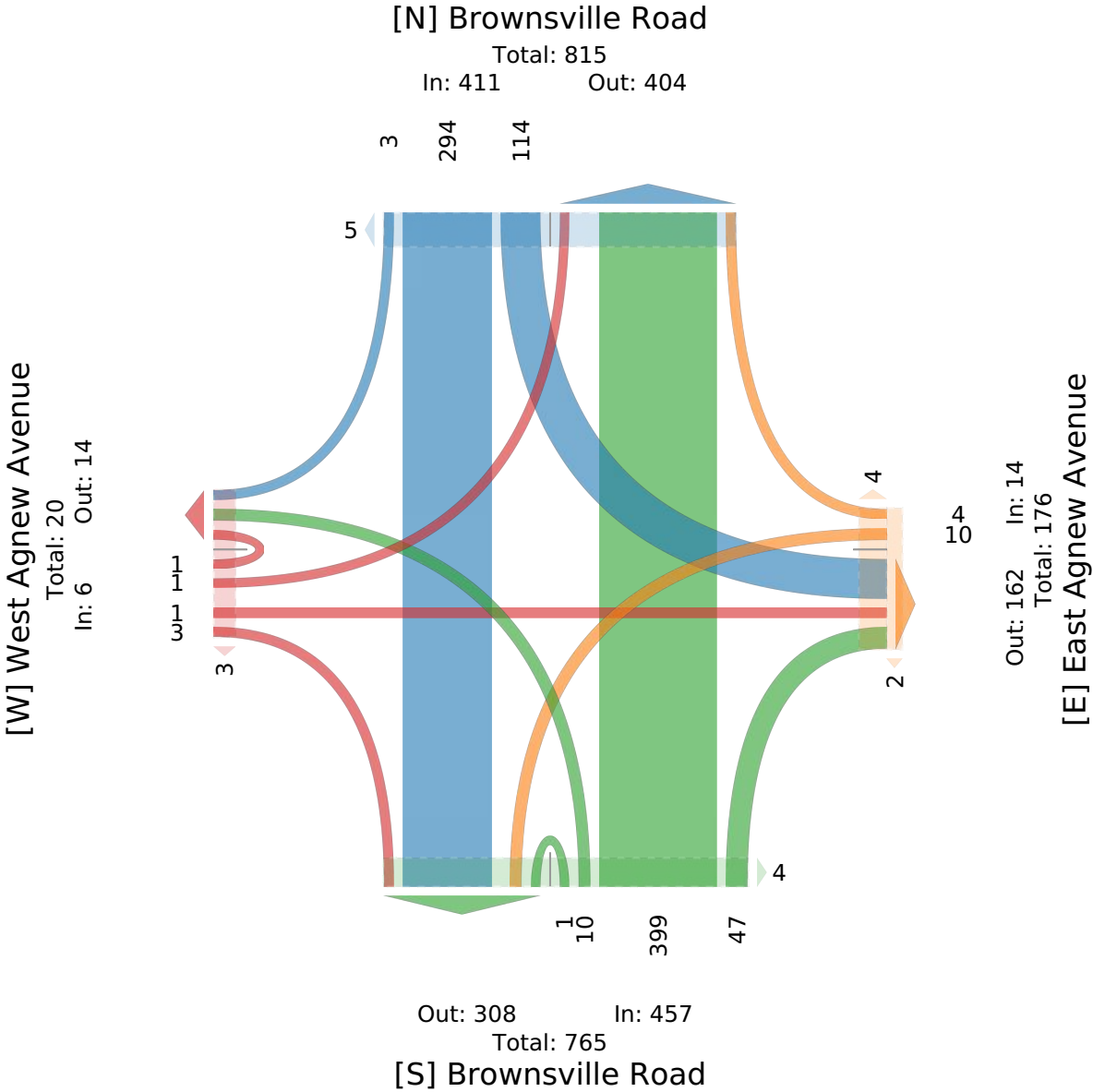
AM Peak (8:15 AM - 9:15 AM)

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

All Movements

ID: 1121378, Location: 40.395176, -79.986761, Site Code: 7

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



7. Brownsville Road at East/West Agnew Avenu... - TMC

Wed Oct 11, 2023

PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour

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

All Movements

ID: 1121378, Location: 40.395176, -79.986761, Site Code: 7

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						West Agnew Avenue Eastbound						East Agnew Avenue Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2023-10-11 4:30PM	3	120	15	0	138	1	48	142	1	0	191	1	1	2	1	0	4	2	0	0	4	0	4	2	337
4:45PM	7	133	8	1	149	4	43	118	0	1	162	1	0	0	2	0	2	9	1	0	3	0	4	7	317
5:00PM	2	121	18	0	141	1	48	133	0	0	181	0	0	2	2	0	4	2	1	0	0	0	1	8	327
5:15PM	1	127	27	0	155	5	40	138	0	0	178	1	0	1	6	0	7	6	1	0	3	0	4	5	344
Total	13	501	68	1	583	11	179	531	1	1	712	3	1	5	11	0	17	19	3	0	10	0	13	22	1325
% Approach	2.2%	85.9%	11.7%	0.2%	-	-	25.1%	74.6%	0.1%	0.1%	-	-	5.9%	29.4%	64.7%	0%	-	-	23.1%	0%	76.9%	0%	-	-	-
% Total	1.0%	37.8%	5.1%	0.1%	44.0%	-	13.5%	40.1%	0.1%	0.1%	53.7%	-	0.1%	0.4%	0.8%	0%	1.3%	-	0.2%	0%	0.8%	0%	1.0%	-	-
PHF	0.464	0.942	0.630	0.250	0.940	-	0.932	0.935	0.250	0.250	0.932	-	0.250	0.625	0.458	-	0.607	-	0.750	-	0.625	-	0.813	-	0.963
Motorcycles	0	3	0	0	3	-	0	2	0	0	2	-	0	0	0	0	0	-	0	0	0	0	0	-	5
% Motorcycles	0%	0.6%	0%	0%	0.5%	-	0%	0.4%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.4%
Lights	13	482	66	1	562	-	179	508	1	1	689	-	1	5	11	0	17	-	3	0	10	0	13	-	1281
% Lights	100%	96.2%	97.1%	100%	96.4%	-	100%	95.7%	100%	100%	96.8%	-	100%	100%	100%	0%	100%	-	100%	0%	100%	0%	100%	-	96.7%
Single-Unit Trucks	0	7	2	0	9	-	0	4	0	0	4	-	0	0	0	0	0	-	0	0	0	0	0	-	13
% Single-Unit Trucks	0%	1.4%	2.9%	0%	1.5%	-	0%	0.8%	0%	0%	0.6%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	1.0%
Articulated Trucks	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%
Buses	0	9	0	0	9	-	0	16	0	0	16	-	0	0	0	0	0	-	0	0	0	0	0	-	25
% Buses	0%	1.8%	0%	0%	1.5%	-	0%	3.0%	0%	0%	2.2%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	1.9%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	11	-	-	-	-	-	3	-	-	-	-	-	19	-	-	-	-	-	22	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

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

7. Brownsville Road at East/West Agnew Avenue... - TMC

Wed Oct 11, 2023

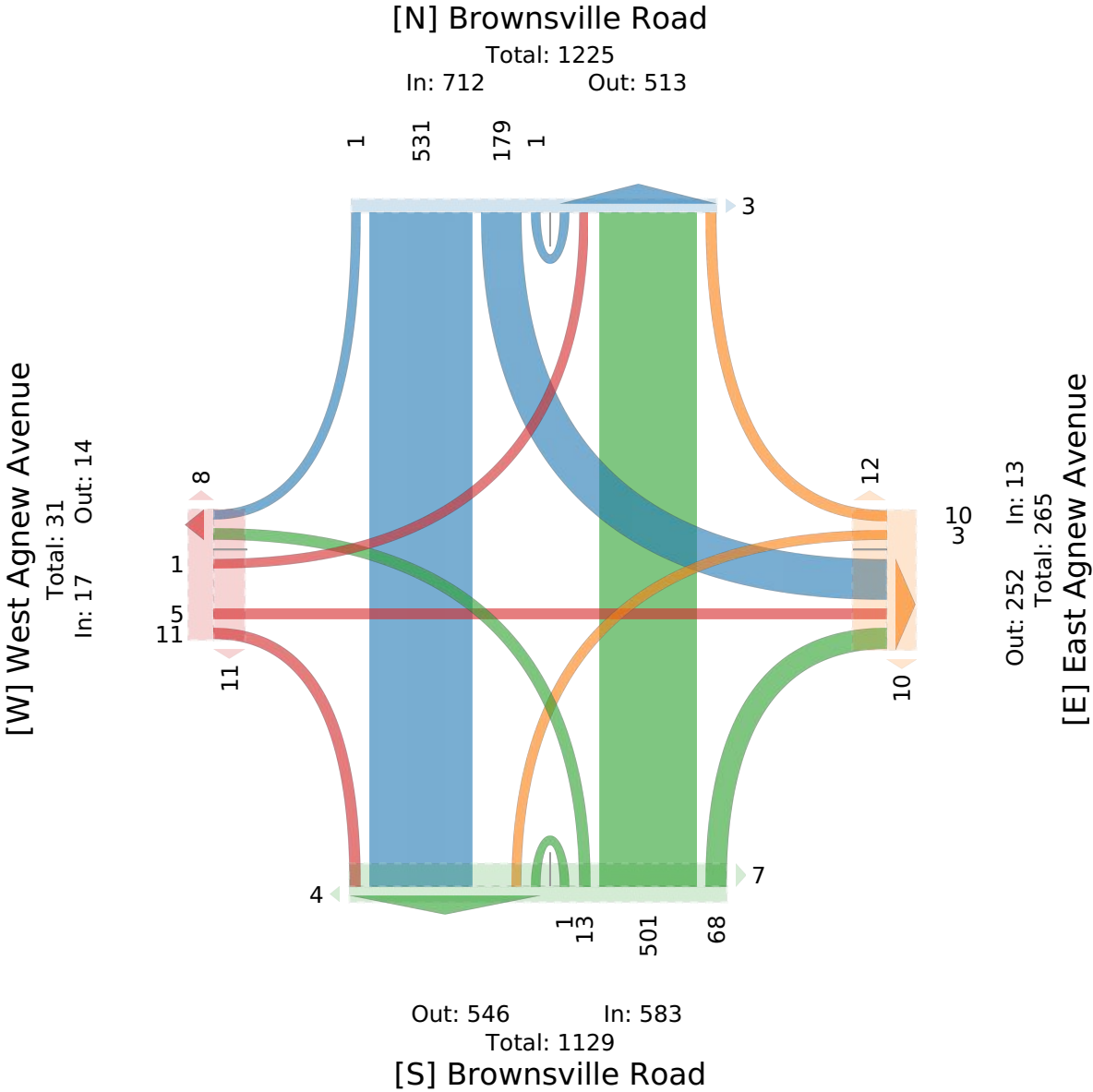
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour

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

All Movements

ID: 1121378, Location: 40.395176, -79.986761, Site Code: 7

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



8. Brownsville Road at Crailo Avenue - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121382, Location: 40.396708, -79.987674, Site Code: 8

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Crailo Avenue Westbound						
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int	
2023-10-11 6:30AM	122	0	0	0	122	0	0	30	0	30	0	0	5	0	0	5	6	157	
6:45AM	104	0	0	0	104	0	0	44	0	44	0	3	4	0	0	7	1	155	
Hourly Total	226	0	0	0	226	0	0	74	0	74	0	3	9	0	0	12	7	312	
7:00AM	109	0	0	0	109	1	0	38	0	38	1	1	7	0	0	8	1	155	
7:15AM	123	0	0	0	123	0	0	55	0	55	1	4	7	0	0	11	1	189	
7:30AM	123	0	0	0	123	0	0	61	0	61	2	6	4	0	1	11	0	195	
7:45AM	103	0	0	0	103	0	0	54	0	54	1	2	5	0	2	9	4	166	
Hourly Total	458	0	0	0	458	1	0	208	0	208	5	13	23	0	3	39	6	705	
8:00AM	98	0	0	0	98	0	0	53	0	53	1	3	3	0	0	6	1	157	
8:15AM	96	0	0	0	96	0	0	63	0	63	3	8	7	0	0	15	4	174	
8:30AM	73	0	0	0	73	0	0	64	0	64	0	5	6	0	2	13	3	150	
8:45AM	87	0	0	0	87	0	0	71	0	71	2	11	5	0	1	17	2	175	
Hourly Total	354	0	0	0	354	0	0	251	0	251	6	27	21	0	3	51	10	656	
9:00AM	104	0	0	0	104	0	0	69	0	69	0	6	1	0	1	8	4	181	
9:15AM	97	0	0	0	97	1	0	40	0	40	2	1	4	0	1	6	1	143	
Hourly Total	201	0	0	0	201	1	0	109	0	109	2	7	5	0	2	14	5	324	
2:00PM	91	0	0	0	91	0	0	86	0	86	0	1	6	0	0	7	1	184	
2:15PM	108	0	0	0	108	0	0	87	0	87	0	5	4	0	0	9	3	204	
2:30PM	122	0	0	0	122	2	0	94	0	94	0	2	7	0	0	9	2	225	
2:45PM	124	0	0	0	124	1	0	97	0	97	2	3	5	0	1	9	3	230	
Hourly Total	445	0	0	0	445	3	0	364	0	364	2	11	22	0	1	34	9	843	
3:00PM	110	0	0	0	110	2	0	106	0	106	2	5	5	0	0	10	7	226	
3:15PM	111	0	0	0	111	2	0	126	0	126	14	6	5	0	0	11	5	248	
3:30PM	113	0	0	0	113	2	0	121	0	121	5	2	4	0	3	9	7	243	
3:45PM	116	0	0	0	116	0	0	105	0	105	1	5	4	0	0	9	5	230	
Hourly Total	450	0	0	0	450	6	0	458	0	458	22	18	18	0	3	39	24	947	
4:00PM	136	0	0	0	136	3	0	113	0	113	1	6	4	0	1	11	6	260	
4:15PM	112	0	0	0	112	1	0	96	0	96	3	12	1	0	5	18	5	226	
4:30PM	128	0	0	0	128	0	0	132	0	132	1	8	3	0	0	11	14	271	
4:45PM	119	0	0	0	119	0	0	126	0	126	3	6	4	0	2	12	11	257	
Hourly Total	495	0	0	0	495	4	0	467	0	467	8	32	12	0	8	52	36	1014	
5:00PM	115	0	0	0	115	2	0	125	0	125	2	9	10	0	0	19	5	259	
5:15PM	116	0	0	0	116	0	0	131	0	131	1	6	5	0	0	11	2	258	
5:30PM	130	0	0	0	130	0	0	128	0	128	1	4	5	0	0	9	6	267	
5:45PM	126	0	0	0	126	1	0	132	0	132	0	8	4	0	0	12	6	270	
Hourly Total	487	0	0	0	487	3	0	516	0	516	4	27	24	0	0	51	19	1054	
Total	3116	0	0	0	3116	18	0	2447	0	2447	49	138	134	0	20	292	116	5855	

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Crailo Avenue Westbound						
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int	
% Approach	100%	0%	0%	0%	-	-	0%	100%	0%	-	-	47.3%	45.9%	0%	6.8%	-	-	-	
% Total	53.2%	0%	0%	0%	53.2%	-	0%	41.8%	0%	41.8%	-	2.4%	2.3%	0%	0.3%	5.0%	-	-	
Motorcycles	13	0	0	0	13	-	0	5	0	5	-	0	1	0	1	2	-	20	
% Motorcycles	0.4%	0%	0%	0%	0.4%	-	0%	0.2%	0%	0.2%	-	0%	0.7%	0%	5.0%	0.7%	-	0.3%	
Lights	2946	0	0	0	2946	-	0	2314	0	2314	-	131	131	0	19	281	-	5541	
% Lights	94.5%	0%	0%	0%	94.5%	-	0%	94.6%	0%	94.6%	-	94.9%	97.8%	0%	95.0%	96.2%	-	94.6%	
Single-Unit Trucks	49	0	0	0	49	-	0	33	0	33	-	5	1	0	0	6	-	88	
% Single-Unit Trucks	1.6%	0%	0%	0%	1.6%	-	0%	1.3%	0%	1.3%	-	3.6%	0.7%	0%	0%	2.1%	-	1.5%	
Articulated Trucks	8	0	0	0	8	-	0	3	0	3	-	1	0	0	0	1	-	12	
% Articulated Trucks	0.3%	0%	0%	0%	0.3%	-	0%	0.1%	0%	0.1%	-	0.7%	0%	0%	0%	0.3%	-	0.2%	
Buses	98	0	0	0	98	-	0	89	0	89	-	1	1	0	0	2	-	189	
% Buses	3.1%	0%	0%	0%	3.1%	-	0%	3.6%	0%	3.6%	-	0.7%	0.7%	0%	0%	0.7%	-	3.2%	
Bicycles on Road	2	0	0	0	2	-	0	3	0	3	-	0	0	0	0	0	-	5	
% Bicycles on Road	0.1%	0%	0%	0%	0.1%	-	0%	0.1%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0.1%	
Pedestrians	-	-	-	-	-	18	-	-	-	-	49	-	-	-	-	-	112		
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	-	96.6%	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	4		
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	3.4%		

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

8. Brownsville Road at Crailo Avenue - TMC

Wed Oct 11, 2023

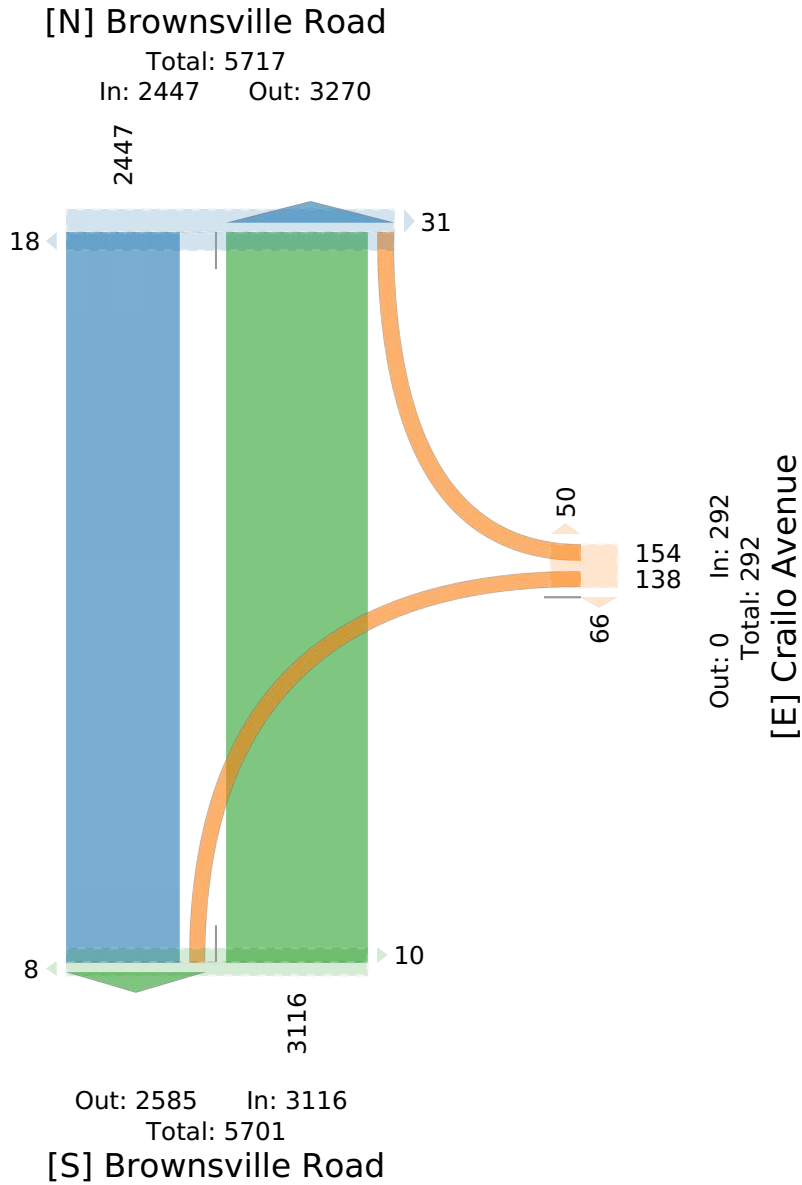
Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121382, Location: 40.396708, -79.987674, Site Code: 8

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



8. Brownsville Road at Crailo Avenue - TMC

Wed Oct 11, 2023

AM Peak (7:15 AM - 8:15 AM)

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

All Movements

ID: 1121382, Location: 40.396708, -79.987674, Site Code: 8

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Crailo Avenue Westbound						
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int	
2023-10-11 7:15AM	123	0	0	0	123	0	0	55	0	55	1	4	7	0	0	11	1	189	
7:30AM	123	0	0	0	123	0	0	61	0	61	2	6	4	0	1	11	0	195	
7:45AM	103	0	0	0	103	0	0	54	0	54	1	2	5	0	2	9	4	166	
8:00AM	98	0	0	0	98	0	0	53	0	53	1	3	3	0	0	6	1	157	
Total	447	0	0	0	447	0	0	223	0	223	5	15	19	0	3	37	6	707	
% Approach	100%	0%	0%	0%	-	-	0%	100%	0%	-	-	40.5%	51.4%	0%	8.1%	-	-	-	
% Total	63.2%	0%	0%	0%	63.2%	-	0%	31.5%	0%	31.5%	-	2.1%	2.7%	0%	0.4%	5.2%	-	-	
PHF	0.909	-	-	-	0.909	-	-	0.914	-	0.914	-	0.625	0.679	-	0.375	0.841	-	0.906	
Motorcycles	1	0	0	0	1	-	0	0	0	0	-	0	0	0	0	0	-	1	
% Motorcycles	0.2%	0%	0%	0%	0.2%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.1%	
Lights	418	0	0	0	418	-	0	200	0	200	-	15	19	0	3	37	-	655	
% Lights	93.5%	0%	0%	0%	93.5%	-	0%	89.7%	0%	89.7%	-	100%	100%	0%	100%	100%	-	92.6%	
Single-Unit Trucks	4	0	0	0	4	-	0	4	0	4	-	0	0	0	0	0	-	8	
% Single-Unit Trucks	0.9%	0%	0%	0%	0.9%	-	0%	1.8%	0%	1.8%	-	0%	0%	0%	0%	0%	-	1.1%	
Articulated Trucks	0	0	0	0	0	-	0	1	0	1	-	0	0	0	0	0	-	1	
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0.4%	-	0%	0%	0%	0%	0%	-	0.1%	
Buses	24	0	0	0	24	-	0	18	0	18	-	0	0	0	0	0	-	42	
% Buses	5.4%	0%	0%	0%	5.4%	-	0%	8.1%	0%	8.1%	-	0%	0%	0%	0%	0%	-	5.9%	
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	
Pedestrians	-	-	-	-	-	0	-	-	-	-	5	-	-	-	-	-	6		
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0		
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	

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

8. Brownsville Road at Crailo Avenue - TMC

Wed Oct 11, 2023

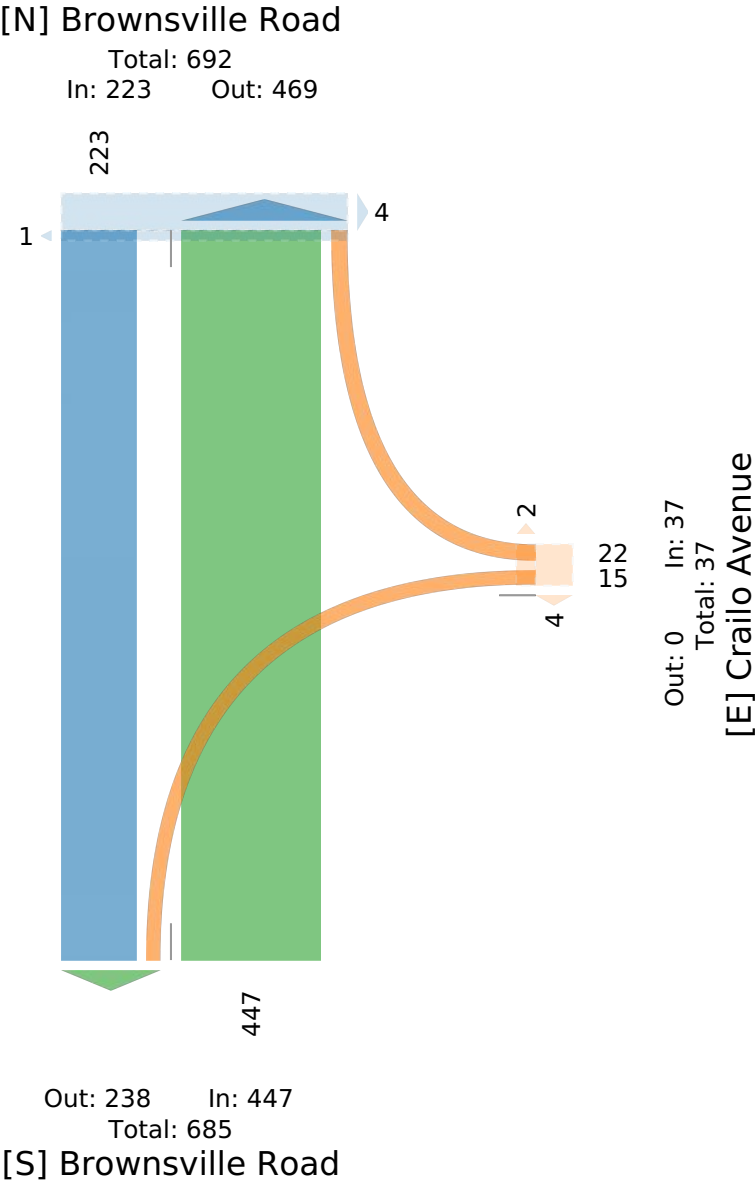
AM Peak (7:15 AM - 8:15 AM)

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

All Movements

ID: 1121382, Location: 40.396708, -79.987674, Site Code: 8

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



8. Brownsville Road at Crailo Avenue - TMC

Wed Oct 11, 2023

PM Peak (5 PM - 6 PM) - Overall Peak Hour

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

All Movements

ID: 1121382, Location: 40.396708, -79.987674, Site Code: 8

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound					Crailo Avenue Westbound							
Time	T	R	U	RR	App	Ped*	L	T	U	App	Ped*	L	R	U	RR	App	Ped*	Int	
2023-10-11 5:00PM	115	0	0	0	115	2	0	125	0	125	2	9	10	0	0	19	5	259	
5:15PM	116	0	0	0	116	0	0	131	0	131	1	6	5	0	0	11	2	258	
5:30PM	130	0	0	0	130	0	0	128	0	128	1	4	5	0	0	9	6	267	
5:45PM	126	0	0	0	126	1	0	132	0	132	0	8	4	0	0	12	6	270	
Total	487	0	0	0	487	3	0	516	0	516	4	27	24	0	0	51	19	1054	
% Approach	100%	0%	0%	0%	-	-	0%	100%	0%	-	-	52.9%	47.1%	0%	0%	-	-	-	
% Total	46.2%	0%	0%	0%	46.2%	-	0%	49.0%	0%	49.0%	-	2.6%	2.3%	0%	0%	4.8%	-	-	
PHF	0.937	-	-	-	0.937	-	-	0.977	-	0.977	-	0.750	0.600	-	-	0.671	-	0.976	
Motorcycles	9	0	0	0	9	-	0	2	0	2	-	0	0	0	0	0	-	11	
% Motorcycles	1.8%	0%	0%	0%	1.8%	-	0%	0.4%	0%	0.4%	-	0%	0%	0%	0%	0%	-	1.0%	
Lights	466	0	0	0	466	-	0	500	0	500	-	27	24	0	0	51	-	1017	
% Lights	95.7%	0%	0%	0%	95.7%	-	0%	96.9%	0%	96.9%	-	100%	100%	0%	0%	100%	-	96.5%	
Single-Unit Trucks	6	0	0	0	6	-	0	1	0	1	-	0	0	0	0	0	-	7	
% Single-Unit Trucks	1.2%	0%	0%	0%	1.2%	-	0%	0.2%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.7%	
Articulated Trucks	0	0	0	0	0	-	0	1	0	1	-	0	0	0	0	0	-	1	
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0.2%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.1%	
Buses	6	0	0	0	6	-	0	12	0	12	-	0	0	0	0	0	-	18	
% Buses	1.2%	0%	0%	0%	1.2%	-	0%	2.3%	0%	2.3%	-	0%	0%	0%	0%	0%	-	1.7%	
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	
Pedestrians	-	-	-	-	-	3	-	-	-	-	4	-	-	-	-	-	19		
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	-	100%	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0		
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	0%	-	

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

8. Brownsville Road at Crailo Avenue - TMC

Wed Oct 11, 2023

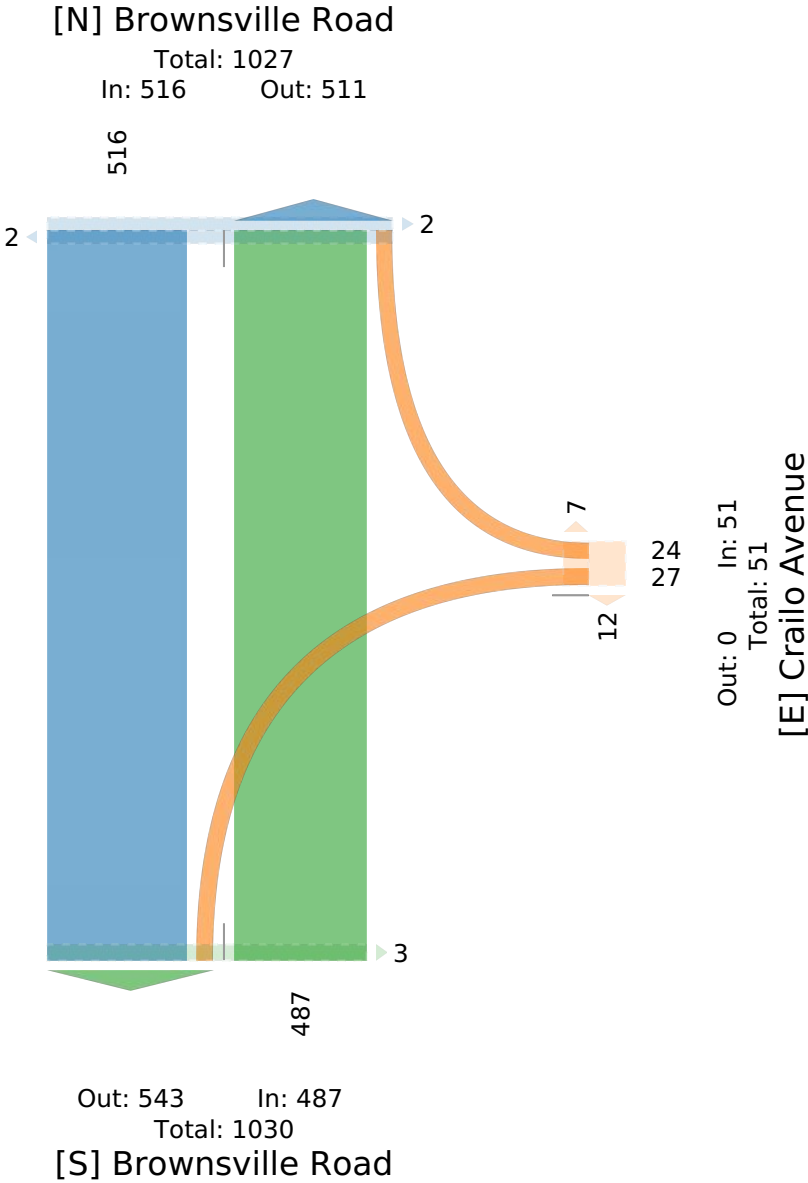
PM Peak (5 PM - 6 PM) - Overall Peak Hour

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

All Movements

ID: 1121382, Location: 40.396708, -79.987674, Site Code: 8

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



9. Brownsville Road at Nobles Lane - TMC

Wed Oct 11, 2023

Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121473, Location: 40.403815, -79.990114, Site Code: 9

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Nobles Lane Eastbound						East Westbound									
Time	L	T	R	U	App	Ped*	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*	L	T	R	U	App	Ped*	Int	
2023-10-11 6:30AM	7	71	0	0	78	0	0	25	15	0	1	41	0	14	0	1	0	1	16	0	0	0	0	0	0	0	1	135
6:45AM	7	81	0	0	88	1	0	30	13	0	0	43	0	15	0	7	0	3	25	5	0	0	0	0	0	0	1	156
Hourly Total	14	152	0	0	166	1	0	55	28	0	1	84	0	29	0	8	0	4	41	5	0	0	0	0	0	0	2	291
7:00AM	7	90	0	0	97	0	0	38	18	0	0	56	2	25	0	4	0	1	30	1	0	0	0	0	0	0	11	183
7:15AM	12	88	0	0	100	1	0	35	7	0	0	42	0	24	0	11	0	0	35	0	0	0	0	0	0	0	3	177
7:30AM	14	108	0	0	122	0	0	47	10	0	3	60	5	17	0	8	0	0	25	0	0	0	0	0	0	0	20	207
7:45AM	10	85	0	0	95	3	0	52	17	0	3	72	2	25	0	7	0	0	32	3	0	0	0	0	0	0	5	199
Hourly Total	43	371	0	0	414	4	0	172	52	0	6	230	9	91	0	30	0	1	122	4	0	0	0	0	0	0	39	766
8:00AM	6	88	0	0	94	0	0	37	22	0	1	60	0	32	0	8	0	1	41	4	0	0	0	0	0	0	9	195
8:15AM	11	96	0	0	107	0	1	55	12	0	0	68	3	38	0	6	0	0	44	4	0	0	0	0	0	0	2	219
8:30AM	11	64	0	0	75	0	0	55	30	0	0	85	0	41	0	10	0	0	51	3	0	0	0	0	0	0	5	211
8:45AM	10	59	0	0	69	0	0	57	20	0	0	77	2	25	0	9	0	0	34	4	0	0	0	0	0	0	2	180
Hourly Total	38	307	0	0	345	0	1	204	84	0	1	290	5	136	0	33	0	1	170	15	0	0	0	0	0	0	18	805
9:00AM	10	75	0	0	85	0	0	54	13	0	0	67	1	31	0	12	0	0	43	0	0	0	0	0	0	0	4	195
9:15AM	15	77	0	0	92	0	0	48	13	0	0	61	0	34	0	8	0	0	42	1	0	0	0	0	0	0	2	195
Hourly Total	25	152	0	0	177	0	0	102	26	0	0	128	1	65	0	20	0	0	85	1	0	0	0	0	0	0	6	390
2:00PM	5	63	0	0	68	0	0	62	19	0	1	82	1	27	0	18	0	3	48	2	0	0	0	0	0	0	14	198
2:15PM	10	67	0	0	77	0	0	62	22	0	0	84	3	24	0	19	0	1	44	5	0	0	0	0	0	0	9	205
2:30PM	17	86	0	0	103	0	0	83	21	0	0	104	1	32	0	11	0	0	43	1	0	0	0	0	0	0	5	250
2:45PM	5	92	0	0	97	0	0	97	16	0	2	115	3	36	0	12	0	1	49	2	0	0	0	0	0	0	7	261
Hourly Total	37	308	0	0	345	0	0	304	78	0	3	385	8	119	0	60	0	5	184	10	0	0	0	0	0	0	35	914
3:00PM	13	84	1	0	98	1	0	91	28	0	0	119	2	25	0	12	0	0	37	6	1	0	0	0	1	12	255	
3:15PM	17	81	0	0	98	0	0	105	21	0	0	126	0	33	0	7	0	0	40	12	0	0	0	0	0	0	4	264
3:30PM	8	91	0	0	99	0	0	106	18	0	0	124	3	37	0	12	0	0	49	8	0	0	0	0	0	0	3	272
3:45PM	19	75	0	0	94	0	0	94	16	0	0	110	3	34	0	14	0	0	48	3	0	0	0	0	0	0	4	252
Hourly Total	57	331	1	0	389	1	0	396	83	0	0	479	8	129	0	45	0	0	174	29	1	0	0	0	1	23	1043	
4:00PM	11	86	1	0	98	0	0	92	14	0	0	106	1	37	0	13	0	0	50	3	0	0	0	0	0	0	3	254
4:15PM	13	80	1	0	94	0	0	95	19	0	1	115	2	40	0	4	0	0	44	5	0	0	0	0	0	0	15	253
4:30PM	13	73	0	0	86	0	0	119	22	0	0	141	3	37	0	20	0	2	59	3	0	0	0	0	0	0	10	286
4:45PM	11	89	0	0	100	0	0	113	19	0	0	132	6	26	0	12	0	1	39	6	0	2	0	0	2	5	273	
Hourly Total	48	328	2	0	378	0	0	419	74	0	1	494	12	140	0	49	0	3	192	17	0	2	0	0	2	33	1066	
5:00PM	10	89	0	0	99	1	0	101	17	0	0	118	0	27	0	12	0	1	40	4	0	0	0	0	0	0	10	257
5:15PM	5	72	0	0	77	0	0	108	14	0	0	122	0	38	0	21	0	0	59	7	0	0	0	0	0	0	3	258
5:30PM	15	88	0	0	103	0	0	118	21	0	0	139	1	24	0	11	0	0	35	4	0	0	0	0	0	0	7	277
5:45PM	12	95	0	0	107	1	0	123	19	0	0	142	0	19	0	20	0	0	39	10	0	0	0	0	0	0	7	288
Hourly Total	42	344	0	0	386	2	0	450	71	0	0	521	1	108	0	64	0	1	173	25	0	0	0	0	0	0	27	1080
Total	304	2293	3	0	2600	8	1	2102	496	0	12	2611	44	817	0	309	0	15	1141	106	1	2	0	0	3	183	6355	

Leg Direction	Brownsville Road Northbound							Brownsville Road Southbound							Nobles Lane Eastbound							East Westbound								
Time	L	T	R	U	App	Ped*		L	T	R	U	RR	App	Ped*		L	T	R	U	RR	App	Ped*		L	T	R	U	App	Ped*	Int
% Approach	11.7%	88.2%	0.1%	0%	-	-		0%	80.5%	19.0%	0%	0.5%	-	-		71.6%	0%	27.1%	0%	1.3%	-	-		33.3%	66.7%	0%	0%	-	-	
% Total	4.8%	36.1%	0%	0%	40.9%	-		0%	33.1%	7.8%	0%	0.2%	41.1%	-		12.9%	0%	4.9%	0%	0.2%	18.0%	-		0%	0%	0%	0%	0%	-	
Motorcycles	0	6	0	0	6	-		0	9	0	0	0	9	-		1	0	0	0	0	1	-		0	0	0	0	0	-	16
% Motorcycles	0%	0.3%	0%	0%	0.2%	-		0%	0.4%	0%	0%	0%	0.3%	-		0.1%	0%	0%	0%	0%	0.1%	-		0%	0%	0%	0%	0%	-	0.3%
Lights	283	2159	3	0	2445	-		1	1981	478	0	11	2471	-		793	0	285	0	14	1092	-		1	2	0	0	3	-	6011
% Lights	93.1%	94.2%	100%	0%	94.0%	-		100%	94.2%	96.4%	0%	91.7%	94.6%	-		97.1%	0%	92.2%	0%	93.3%	95.7%	-		100%	100%	0%	0%	100%	-	94.6%
Single-Unit Trucks	17	25	0	0	42	-		0	21	8	0	1	30	-		6	0	17	0	0	23	-		0	0	0	0	0	-	95
% Single-Unit Trucks	5.6%	1.1%	0%	0%	1.6%	-		0%	1.0%	1.6%	0%	8.3%	1.1%	-		0.7%	0%	5.5%	0%	0%	2.0%	-		0%	0%	0%	0%	0%	-	1.5%
Articulated Trucks	2	8	0	0	10	-		0	5	3	0	0	8	-		1	0	2	0	0	3	-		0	0	0	0	0	-	21
% Articulated Trucks	0.7%	0.3%	0%	0%	0.4%	-		0%	0.2%	0.6%	0%	0%	0.3%	-		0.1%	0%	0.6%	0%	0%	0.3%	-		0%	0%	0%	0%	0%	-	0.3%
Buses	2	88	0	0	90	-		0	84	6	0	0	90	-		16	0	5	0	1	22	-		0	0	0	0	0	-	202
% Buses	0.7%	3.8%	0%	0%	3.5%	-		0%	4.0%	1.2%	0%	0%	3.4%	-		2.0%	0%	1.6%	0%	6.7%	1.9%	-		0%	0%	0%	0%	0%	-	3.2%
Bicycles on Road	0	7	0	0	7	-		0	2	1	0	0	3	-		0	0	0	0	0	0	-		0	0	0	0	0	-	10
% Bicycles on Road	0%	0.3%	0%	0%	0.3%	-		0%	0.1%	0.2%	0%	0%	0.1%	-		0%	0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-	0.2%
Pedestrians	-	-	-	-	-	8		-	-	-	-	-	-	44		-	-	-	-	-	-	105		-	-	-	-	-	181	
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	-	-	100%		-	-	-	-	-	-	99.1%		-	-	-	-	-	98.9%	-
Bicycles on Crosswalk	-	-	-	-	-	0		-	-	-	-	-	-	0		-	-	-	-	-	-	1		-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%		-	-	-	-	-	-	0%		-	-	-	-	-	-	0.9%		-	-	-	-	-	1.1%	-

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

9. Brownsville Road at Nobles Lane - TMC

Wed Oct 11, 2023

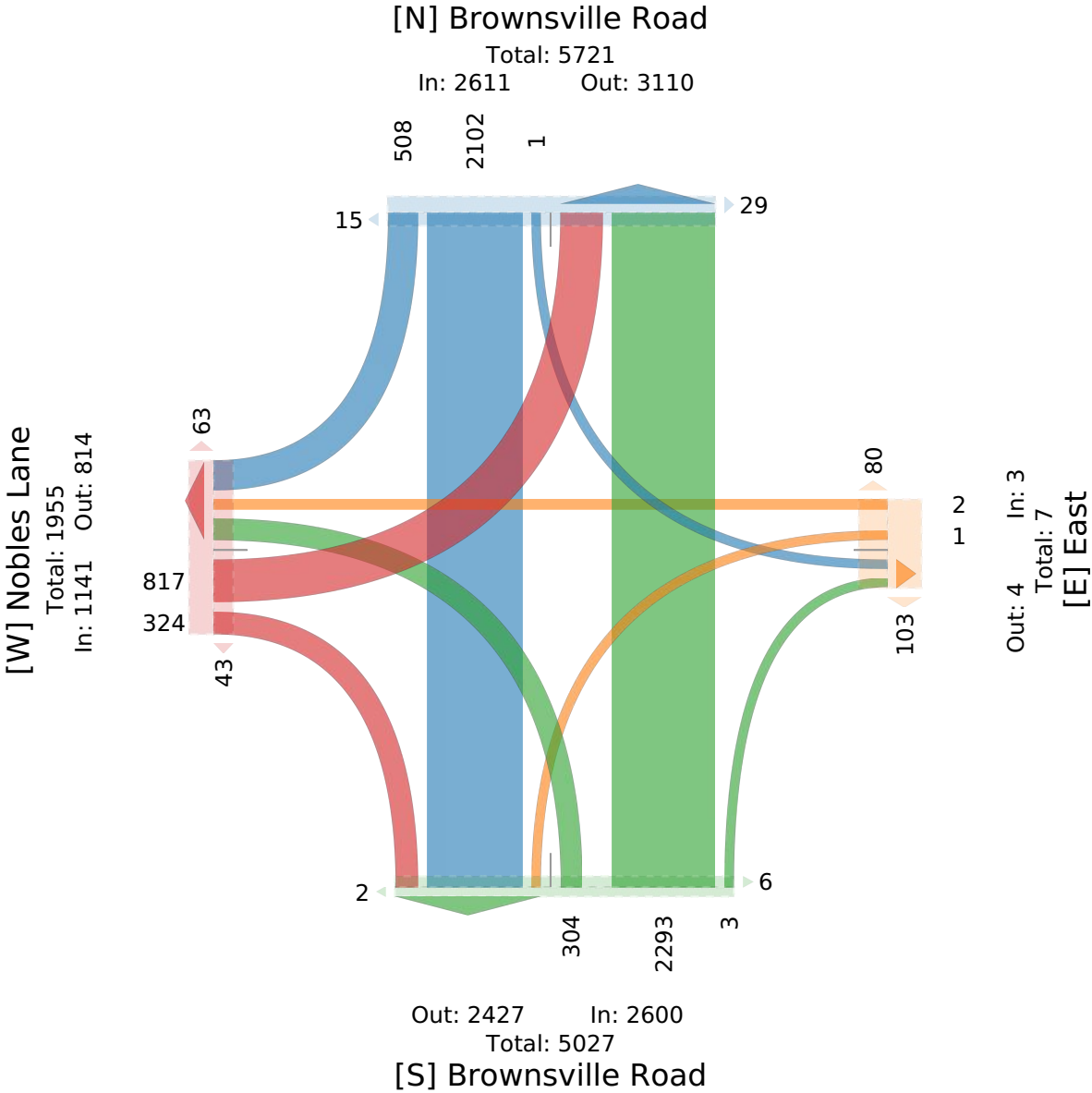
Full Length (6:30 AM-9:30 AM, 2 PM-6 PM)

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

All Movements

ID: 1121473, Location: 40.403815, -79.990114, Site Code: 9

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



9. Brownsville Road at Nobles Lane - TMC

Wed Oct 11, 2023

AM Peak (7:45 AM - 8:45 AM)

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

All Movements

ID: 1121473, Location: 40.403815, -79.990114, Site Code: 9

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Nobles Lane Eastbound						East Westbound								
Time	L	T	R	U	App	Ped*	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*	L	T	R	U	App	Ped*	Int
2023-10-11 7:45AM	10	85	0	0	95	3	0	52	17	0	3	72	2	25	0	7	0	0	32	3	0	0	0	0	0	5	199
8:00AM	6	88	0	0	94	0	0	37	22	0	1	60	0	32	0	8	0	1	41	4	0	0	0	0	0	9	195
8:15AM	11	96	0	0	107	0	1	55	12	0	0	68	3	38	0	6	0	0	44	4	0	0	0	0	0	2	219
8:30AM	11	64	0	0	75	0	0	55	30	0	0	85	0	41	0	10	0	0	51	3	0	0	0	0	0	5	211
Total	38	333	0	0	371	3	1	199	81	0	4	285	5	136	0	31	0	1	168	14	0	0	0	0	0	21	824
% Approach	10.2%	89.8%	0%	0%	-	-	0.4%	69.8%	28.4%	0%	1.4%	-	-	81.0%	0%	18.5%	0%	0.6%	-	-	0%	0%	0%	0%	-	-	-
% Total	4.6%	40.4%	0%	0%	45.0%	-	0.1%	24.2%	9.8%	0%	0.5%	34.6%	-	16.5%	0%	3.8%	0%	0.1%	20.4%	-	0%	0%	0%	0%	0%	-	-
PHF	0.864	0.867	-	-	0.867	-	0.250	0.905	0.675	-	0.333	0.838	-	0.829	-	0.775	-	0.250	0.824	-	-	-	-	-	-	-	0.941
Motorcycles	0	1	0	0	1	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	-	1
% Motorcycles	0%	0.3%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	-	0.1%
Lights	35	310	0	0	345	-	1	184	74	0	4	263	-	132	0	28	0	1	161	-	0	0	0	0	0	-	769
% Lights	92.1%	93.1%	0%	0%	93.0%	-	100%	92.5%	91.4%	0%	100%	92.3%	-	97.1%	0%	90.3%	0%	100%	95.8%	-	0%	0%	0%	0%	-	-	93.3%
Single-Unit Trucks	2	3	0	0	5	-	0	3	5	0	0	8	-	0	0	3	0	0	3	-	0	0	0	0	0	-	16
% Single-Unit Trucks	5.3%	0.9%	0%	0%	1.3%	-	0%	1.5%	6.2%	0%	0%	2.8%	-	0%	0%	9.7%	0%	0%	1.8%	-	0%	0%	0%	0%	-	-	1.9%
Articulated Trucks	0	1	0	0	1	-	0	0	0	0	0	0	-	1	0	0	0	0	1	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0.3%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	0%	-	0.7%	0%	0%	0%	0%	0.6%	-	0%	0%	0%	0%	-	-	0.2%
Buses	1	18	0	0	19	-	0	12	2	0	0	14	-	3	0	0	0	0	3	-	0	0	0	0	0	-	36
% Buses	2.6%	5.4%	0%	0%	5.1%	-	0%	6.0%	2.5%	0%	0%	4.9%	-	2.2%	0%	0%	0%	0%	1.8%	-	0%	0%	0%	0%	-	-	4.4%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	-	0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	-	5	-	-	-	-	-	-	14	-	-	-	-	-	21	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

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

9. Brownsville Road at Nobles Lane - TMC

Wed Oct 11, 2023

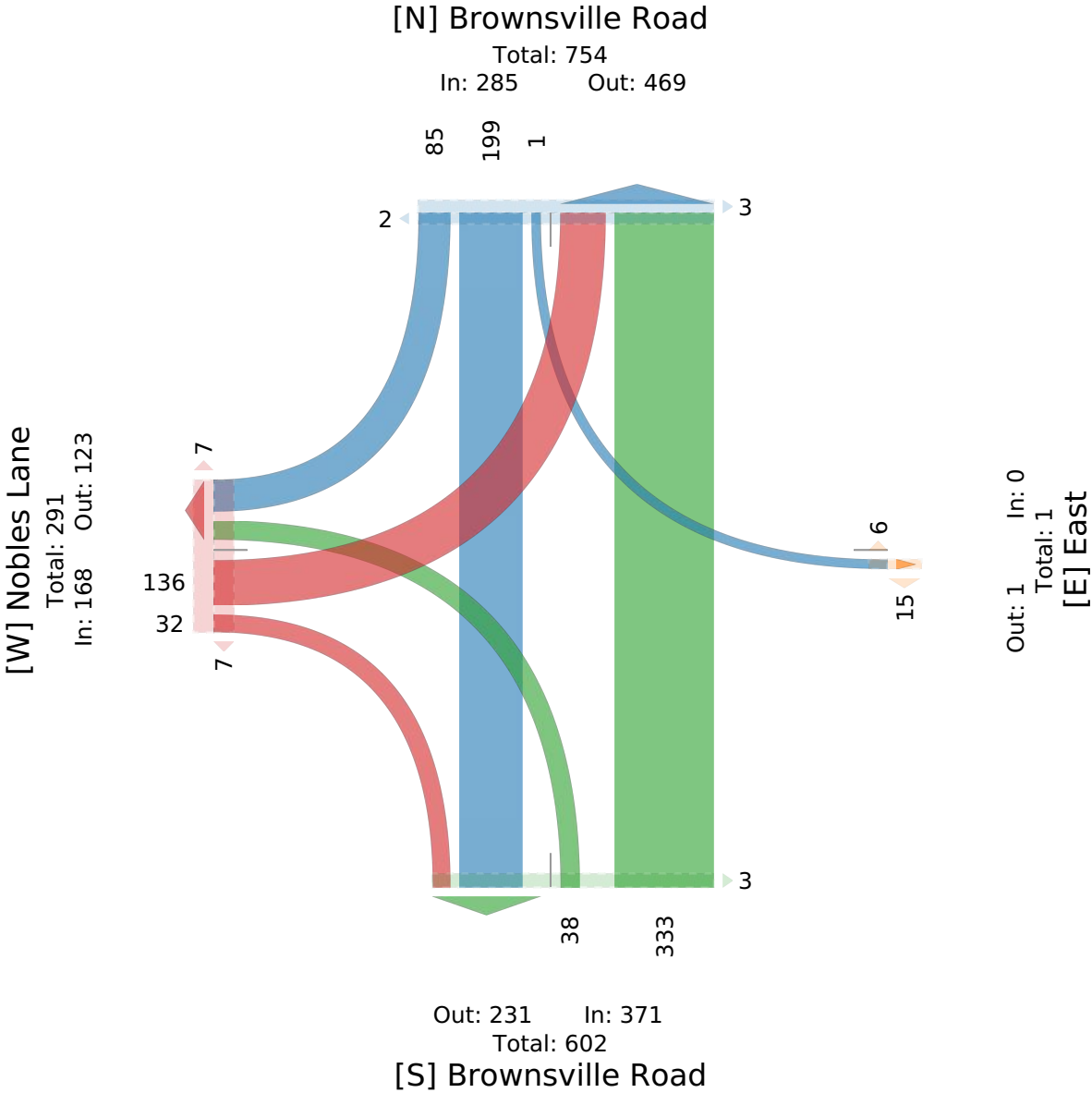
AM Peak (7:45 AM - 8:45 AM)

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

All Movements

ID: 1121473, Location: 40.403815, -79.990114, Site Code: 9

Provided by: Imperial Traffic & Data
Collection
PO Box 4637, Cherry Hill, NJ, 08003, US



9. Brownsville Road at Nobles Lane - TMC

Wed Oct 11, 2023

PM Peak (5 PM - 6 PM) - Overall Peak Hour

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

All Movements

ID: 1121473, Location: 40.403815, -79.990114, Site Code: 9

Provided by: Imperial Traffic & Data

Collection

PO Box 4637, Cherry Hill, NJ, 08003, US

Leg Direction	Brownsville Road Northbound						Brownsville Road Southbound						Nobles Lane Eastbound						East Westbound								
Time	L	T	R	U	App	Ped*	L	T	R	U	RR	App	Ped*	L	T	R	U	RR	App	Ped*	L	T	R	U	App	Ped*	Int
2023-10-11 5:00PM	10	89	0	0	99	1	0	101	17	0	0	118	0	27	0	12	0	1	40	4	0	0	0	0	0	10	257
5:15PM	5	72	0	0	77	0	0	108	14	0	0	122	0	38	0	21	0	0	59	7	0	0	0	0	0	3	258
5:30PM	15	88	0	0	103	0	0	118	21	0	0	139	1	24	0	11	0	0	35	4	0	0	0	0	0	7	277
5:45PM	12	95	0	0	107	1	0	123	19	0	0	142	0	19	0	20	0	0	39	10	0	0	0	0	0	7	288
Total	42	344	0	0	386	2	0	450	71	0	0	521	1	108	0	64	0	1	173	25	0	0	0	0	0	27	1080
% Approach	10.9%	89.1%	0%	0%	-	-	0%	86.4%	13.6%	0%	0%	-	-	62.4%	0%	37.0%	0%	0.6%	-	-	0%	0%	0%	0%	-	-	-
% Total	3.9%	31.9%	0%	0%	35.7%	-	0%	41.7%	6.6%	0%	0%	48.2%	-	10.0%	0%	5.9%	0%	0.1%	16.0%	-	0%	0%	0%	0%	0%	-	-
PHF	0.700	0.931	-	-	0.925	-	-	0.913	0.845	-	-	0.915	-	0.711	-	0.762	-	0.250	0.733	-	-	-	-	-	-	-	0.945
Motorcycles	0	1	0	0	1	-	0	1	0	0	0	1	-	0	0	0	0	0	0	-	0	0	0	0	0	-	2
% Motorcycles	0%	0.3%	0%	0%	0.3%	-	0%	0.2%	0%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	-	0.2%
Lights	42	330	0	0	372	-	0	434	71	0	0	505	-	107	0	62	0	1	170	-	0	0	0	0	0	-	1047
% Lights	100%	95.9%	0%	0%	96.4%	-	0%	96.4%	100%	0%	0%	96.9%	-	99.1%	0%	96.9%	0%	100%	98.3%	-	0%	0%	0%	0%	-	-	96.9%
Single-Unit Trucks	0	2	0	0	2	-	0	2	0	0	0	2	-	0	0	1	0	0	1	-	0	0	0	0	0	-	5
% Single-Unit Trucks	0%	0.6%	0%	0%	0.5%	-	0%	0.4%	0%	0%	0%	0.4%	-	0%	0%	1.6%	0%	0%	0.6%	-	0%	0%	0%	0%	-	-	0.5%
Articulated Trucks	0	1	0	0	1	-	0	1	0	0	0	1	-	0	0	0	0	0	0	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0.3%	0%	0%	0.3%	-	0%	0.2%	0%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	-	0.2%
Buses	0	5	0	0	5	-	0	11	0	0	0	11	-	1	0	1	0	0	2	-	0	0	0	0	0	-	18
% Buses	0%	1.5%	0%	0%	1.3%	-	0%	2.4%	0%	0%	0%	2.1%	-	0.9%	0%	1.6%	0%	0%	1.2%	-	0%	0%	0%	0%	-	-	1.7%
Bicycles on Road	0	5	0	0	5	-	0	1	0	0	0	1	-	0	0	0	0	0	0	-	0	0	0	0	0	-	6
% Bicycles on Road	0%	1.5%	0%	0%	1.3%	-	0%	0.2%	0%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	-	0.6%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	25	-	-	-	-	-	27	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

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

9. Brownsville Road at Nobles Lane - TMC

Wed Oct 11, 2023

PM Peak (5 PM - 6 PM) - Overall Peak Hour

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

All Movements

ID: 1121473, Location: 40.403815, -79.990114, Site Code: 9

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