



# CITY OF EAST GRAND RAPIDS

750 LAKESIDE DRIVE SE-EAST GRAND RAPIDS, MICHIGAN 49506

## **Traffic Control Order #77**

**Locations:** Uncontrolled crosswalks at:

- Breton Road and Berwyck Road

**Order:** Modify existing W11-2/W16-7P crosswalk signs and install Rectangular Rapids Flashing Beacon (RRFB) devices at the location noted. Existing advance warning signs and pavement markings to remain.

**Background:** See Attached Memo, RRFB policy, installation layout, and associated study.

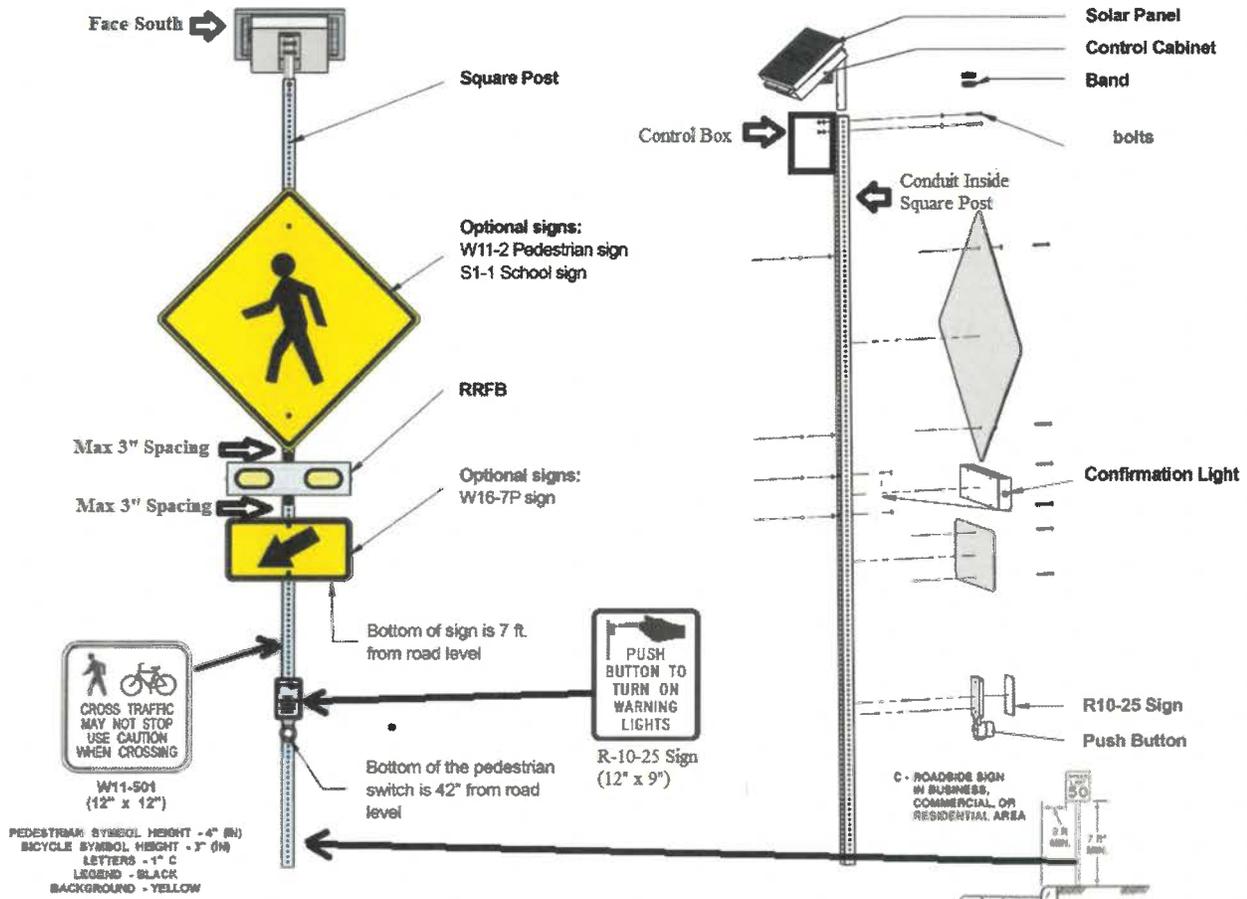
### **Installation and Timing Programing:**

#### **Timing:**

FHWA guidance on timing is to utilize MUTCD 4E.06. This is the same method for calculating crossing times for pedestrian signals at traffic signal locations. Utilizing 3.5 feet per second would require approximately 10 seconds as a minimum. Factoring in some time for perception, reaction, eye contact and to start walking the engineers recommended and set timing is for 20 seconds.

#### **Signage Plan:**

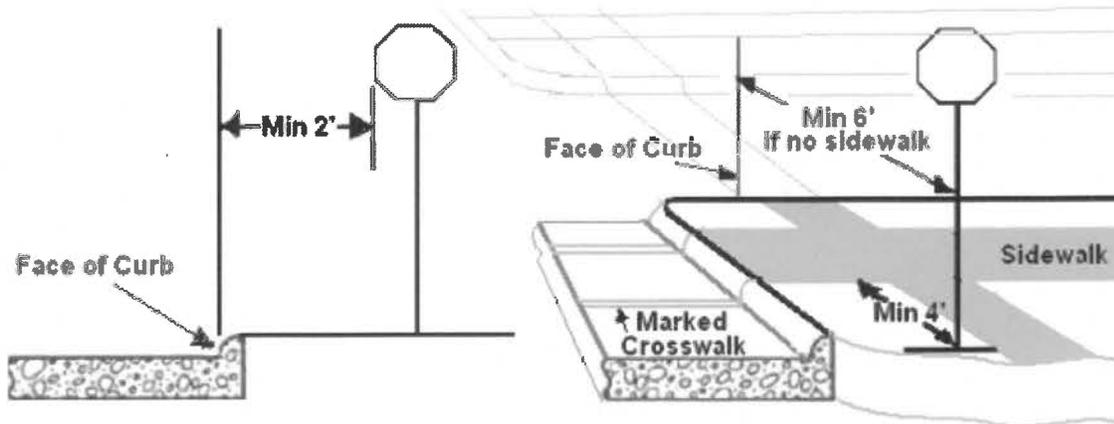
**RRFB signage assembly and related signage requirements and locations on following pages.**



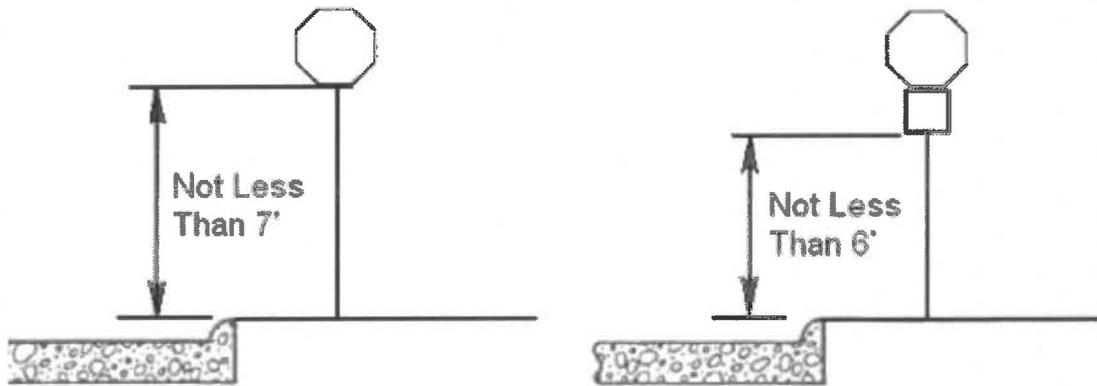
\*Where parking or pedestrian movements are likely to occur.

# Lateral and Longitudinal Placement

In Urban Areas



## Sign Mounting Heights



Submitted by: Doug La Fave, Department of Public Works

City Commission: Approved: September 16, 2024.

Installation Completed: Modification and RRFB's installed by the Department of Public Works:

- Breton Road and Berwyck Road

*NRB 1/6/25*

Distribution: City Clerk  
Public Works  
Public Safety



CITY OF  
EAST GRAND RAPIDS

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750 LAKESIDE DRIVE SE • EAST GRAND RAPIDS, MICHIGAN 49506

(616) 940-4817

www.eastgr.org

DOUG LA FAVE  
DEPUTY CITY MANAGER

**MEMORANDUM**

TO: Honorable Mayor and City Commissioners  
FROM: Doug La Fave, Deputy City Manager  
DATE: September 10, 2024

RE: Consideration for Authorizing of Rectangular Rapid Flashing Beacon (RRFB) Devices for the Uncontrolled Crosswalk at Breton Road and Berwyck Road and associated R10-15 Sign at the Berwyck Road approach.

Action Requested: Consideration to authorize the installation of RRFB devices for the uncontrolled crosswalk at Breton Road and Berwyck Road to enhance the existing crossing treatment of in-street school crosswalk signs (R-1-6b).

Background: At the August 5, 2024, City Commission meeting, RRFB authorization recommendations for four additional locations were approved for uncontrolled crosswalk locations in addition to the five existing locations that have been authorized and installed since 2019 throughout the city. Of the recent authorized locations, installations have been completed at Breton Road and Elinor Lane and Lakeside Drive and Reeds Lake Boulevard. Remaining installations are in-process.

A subsequent pedestrian study was conducted at the Breton Road and Berwyck Road uncontrolled crosswalk as was noted at the August 5, 2024, City Commission meeting and results demonstrate that this location does meet criteria in accordance with the RRFB Policy. The RRFB policy was adopted by the City Commission on August 7, 2023 and based on The Michigan Department of Transportation (MDOT) intermediate/updated Guidance for Installation of Pedestrian Crosswalks on Michigan State Trunklines (MDOT-Towards Zero Deaths January 2023) and various traffic engineering literature reviews that inform updated state and federal traffic manuals. Included with materials is the City RRFB Policy and pedestrian count study data results.

Public Works Staff consulted with Traffic Engineers related to the spacing considerations related to the existing RRFB at Breton Road and Elinor Lane as well as the controlled intersection (traffic signal) of Breton Road and Boston Street as overuse of treatments and signage can cause drivers to become used to and lead to ignoring additional signs, markings, devices, and reduce the effectiveness of such traffic control devices. The distance between the Breton Road and Elinor Lane uncontrolled crosswalk with the recently installed RRFB and the uncontrolled crosswalk at Breton Road and Berwyck Road is 675 feet and this crossing and the controlled intersection at Breton Road and Boston Street is 450 feet. Due to the different destinations of the RRFB location at Breton Road and Elinor Lane providing access to Breton Village and the Breton Road and Berwyck Road to Breton Downs Elementary, spacing has been determined to be acceptable. RRFB's are best utilized at midblock locations and can cause challenges when located adjacent to an intersecting street. When located near adjacent intersecting streets, the intersecting street should have an R10-15 sign at the approach, in this case, at Berwyck Road.

If authorized, the Department of Public Works will complete the installation as soon as possible.

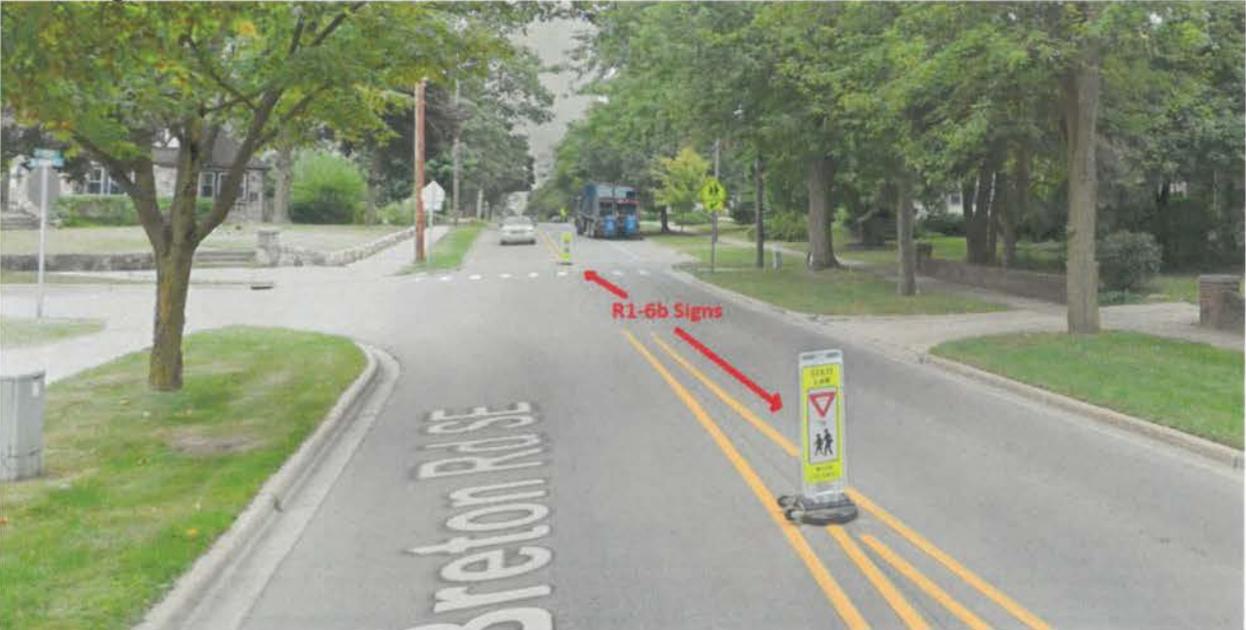
For additional, more comprehensive information related to traffic safety and traffic safety improvements, planning, process, resources and more, please visit the following link to the August 5, 2024 City Commission Agenda and view pages 64-160: [08052024-835 \(eastgrmi.gov\)](https://www.eastgrmi.gov/08052024-835)

For reference:

RRFB Devices-Below



R1-6b Signs-Below

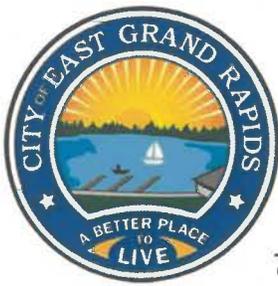


R10-15 Sign-Below



**REVIEWED & APPROVED FOR SUBMISSION:**

Shea Charles  
City Manager



# CITY OF EAST GRAND RAPIDS

750 LAKESIDE DRIVE SE, EAST GRAND RAPIDS, MICHIGAN 49506

## Policy and Guidelines for the Installation of Rectangular Rapid Flashing Beacons

### A. Purpose and Objective

Objectives of Rectangular Rapid Flashing Beacons (RRFBs) installations are:

- To increase the visibility and awareness of pedestrians and bicyclists wishing to cross a street.
- To supplement the standard pedestrian crossing signs to increase drivers' awareness and yielding patterns/behaviors.

### B. Conditions for Use/Placement

RRFBs may be considered for use if the conditions for pedestrian crossing pavement markings are met and where the following conditions exist:

- The pedestrian volume is less than 400 pedestrians per hour and greater than 20 pedestrians at any one hour.
- The traffic volume is higher than 1,500 vehicles per day (150 vehicles per hour) and less than 3,000 vehicles per hour.
- For roadways with speed limits of 35-miles-per-hour (mph) and less, the decision chart below (Figure 1) may be used in selecting a good candidate for RRFB installation.

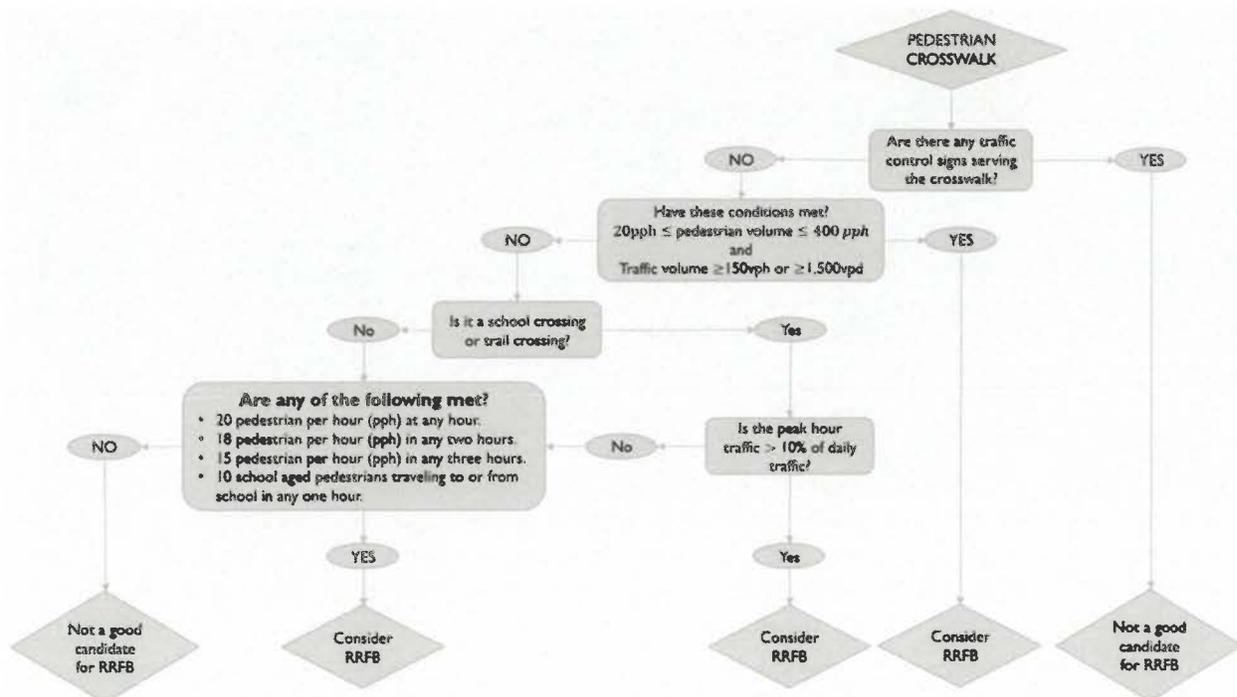


Figure 1: Decision matrix to follow when choosing a good candidate for RRFB installation.

Note: Each young and elderly pedestrian should be counted twice (i.e. 2X) towards pedestrian volume calculations.

C. Technical Requirements:

The City of East Grand Rapids (City) must agree to comply with the detailed technical conditions for RRFB provided in the Federal Highway Administration (FHWA): MUTCD Interim Approval for Optional use of Pedestrian – Actuated Rectangular Rapid Flashing Beacon at Uncontrolled Marked Crosswalks (1A-21), dated March 2018. Appendix A is the copy of the FHWA (1A-21) memorandum. In summary, the following should be observed when installing RRFBs:

- RRFBs should be installed in the median rather than the far side of the roadway if there is a pedestrian refuge or other type of median.
- Solar-power panels may be used to eliminate the need for a power source.
- Reserve the use of RRFBs for locations with significant pedestrian safety issues, as over-use of RRFB treatments may diminish their effectiveness.
- RRFBs should never be used without a pedestrian, school, or trail crossing warning sign.
- RRFBs should never be used for crosswalks across approaches controlled by YIELD signs, STOP signs, traffic control signals, or pedestrian hybrid beacons, except for the approach or egress from a roundabout.
- For installation details, see the most recent guidelines by Michigan Department of Transportation (MDOT). Attached are the current installation details from MDOT, dated 2013 (Appendix A).

D. Installation Consideration for Reviewed Locations:

- If criteria are not met, installation consideration will be considered concluded.
- If criteria are met, City Staff will provide associated location, study, and fiscal impact to the City Commission for formal approval. If approved by the City Commission a Traffic Control Order will be issued when installation has concluded.

E. Permanent Removal of rectangular rapid flashing beacons:

- Subject to ongoing approval, standards, and design by the MMUTCD.
- Subject to rescinding of the interim approval by FHWA.
- Subject to functionality of the RSFS and budget constraints.
- Subject to future studies and associated pedestrian and vehicle volumes.

Effective Date Approved by the City Commission: August 7, 2023



## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 14, 2024 12:00 PM	1	1	0
Aug 14, 2024 1:00 PM	31	24	7
Aug 14, 2024 2:00 PM	5	3	2
Aug 14, 2024 3:00 PM	9	5	4
Aug 14, 2024 4:00 PM	4	4	0
Aug 14, 2024 5:00 PM	4	2	2
Aug 14, 2024 6:00 PM	6	3	3
Aug 14, 2024 7:00 PM	1	0	1
Aug 14, 2024 8:00 PM	3	1	2
Aug 14, 2024 9:00 PM	1	0	1
Aug 14, 2024 10:00 PM	0	0	0
Aug 14, 2024 11:00 PM	0	0	0
Aug 15, 2024 12:00 AM	0	0	0
Aug 15, 2024 1:00 AM	0	0	0
Aug 15, 2024 2:00 AM	0	0	0
Aug 15, 2024 3:00 AM	0	0	0
Aug 15, 2024 4:00 AM	0	0	0
Aug 15, 2024 5:00 AM	0	0	0
Aug 15, 2024 6:00 AM	0	0	0

## Breton and Berwyck

August 13, 2024 12:00 AM → August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 15, 2024 7:00 AM	2	2	0
Aug 15, 2024 8:00 AM	4	3	1
Aug 15, 2024 9:00 AM	1	0	1
Aug 15, 2024 10:00 AM	7	5	2
Aug 15, 2024 11:00 AM	5	4	1
Aug 15, 2024 12:00 PM	4	3	1
Aug 15, 2024 1:00 PM	17	8	9
Aug 15, 2024 2:00 PM	11	5	6
Aug 15, 2024 3:00 PM	15	7	8
Aug 15, 2024 4:00 PM	12	8	4
Aug 15, 2024 5:00 PM	6	2	4
Aug 15, 2024 6:00 PM	3	1	2
Aug 15, 2024 7:00 PM	8	5	3
Aug 15, 2024 8:00 PM	0	0	0
Aug 15, 2024 9:00 PM	0	0	0
Aug 15, 2024 10:00 PM	0	0	0
Aug 15, 2024 11:00 PM	0	0	0
Aug 16, 2024 12:00 AM	0	0	0
Aug 16, 2024 1:00 AM	0	0	0

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 16, 2024 2:00 AM	0	0	0
Aug 16, 2024 3:00 AM	0	0	0
Aug 16, 2024 4:00 AM	0	0	0
Aug 16, 2024 5:00 AM	0	0	0
Aug 16, 2024 6:00 AM	1	0	1
Aug 16, 2024 7:00 AM	0	0	0
Aug 16, 2024 8:00 AM	0	0	0
Aug 16, 2024 9:00 AM	0	0	0
Aug 16, 2024 10:00 AM	0	0	0
Aug 16, 2024 11:00 AM	13	10	3
Aug 16, 2024 12:00 PM	7	4	3
Aug 16, 2024 1:00 PM	17	13	4
Aug 16, 2024 2:00 PM	6	5	1
Aug 16, 2024 3:00 PM	3	3	0
Aug 16, 2024 4:00 PM	1	1	0
Aug 16, 2024 5:00 PM	1	1	0
Aug 16, 2024 6:00 PM	10	6	4
Aug 16, 2024 7:00 PM	6	3	3
Aug 16, 2024 8:00 PM	2	2	0

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 16, 2024 9:00 PM	0	0	0
Aug 16, 2024 10:00 PM	1	1	0
Aug 16, 2024 11:00 PM	0	0	0
Aug 17, 2024 12:00 AM	0	0	0
Aug 17, 2024 1:00 AM	0	0	0
Aug 17, 2024 2:00 AM	0	0	0
Aug 17, 2024 3:00 AM	1	1	0
Aug 17, 2024 4:00 AM	0	0	0
Aug 17, 2024 5:00 AM	0	0	0
Aug 17, 2024 6:00 AM	0	0	0
Aug 17, 2024 7:00 AM	3	2	1
Aug 17, 2024 8:00 AM	2	1	1
Aug 17, 2024 9:00 AM	0	0	0
Aug 17, 2024 10:00 AM	7	3	4
Aug 17, 2024 11:00 AM	6	2	4
Aug 17, 2024 12:00 PM	4	3	1
Aug 17, 2024 1:00 PM	3	2	1
Aug 17, 2024 2:00 PM	1	0	1
Aug 17, 2024 3:00 PM	1	1	0

## Breton and Berwyck

August 13, 2024 12:00 AM → August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 17, 2024 4:00 PM	1	0	1
Aug 17, 2024 5:00 PM	2	1	1
Aug 17, 2024 6:00 PM	1	0	1
Aug 17, 2024 7:00 PM	2	1	1
Aug 17, 2024 8:00 PM	0	0	0
Aug 17, 2024 9:00 PM	0	0	0
Aug 17, 2024 10:00 PM	0	0	0
Aug 17, 2024 11:00 PM	0	0	0
Aug 18, 2024 12:00 AM	0	0	0
Aug 18, 2024 1:00 AM	0	0	0
Aug 18, 2024 2:00 AM	0	0	0
Aug 18, 2024 3:00 AM	0	0	0
Aug 18, 2024 4:00 AM	0	0	0
Aug 18, 2024 5:00 AM	0	0	0
Aug 18, 2024 6:00 AM	1	0	1
Aug 18, 2024 7:00 AM	0	0	0
Aug 18, 2024 8:00 AM	3	2	1
Aug 18, 2024 9:00 AM	0	0	0
Aug 18, 2024 10:00 AM	2	2	0

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 18, 2024 11:00 AM	1	0	1
Aug 18, 2024 12:00 PM	2	1	1
Aug 18, 2024 1:00 PM	1	0	1
Aug 18, 2024 2:00 PM	14	9	5
Aug 18, 2024 3:00 PM	3	3	0
Aug 18, 2024 4:00 PM	8	2	6
Aug 18, 2024 5:00 PM	2	0	2
Aug 18, 2024 6:00 PM	5	4	1
Aug 18, 2024 7:00 PM	4	3	1
Aug 18, 2024 8:00 PM	1	0	1
Aug 18, 2024 9:00 PM	1	1	0
Aug 18, 2024 10:00 PM	0	0	0
Aug 18, 2024 11:00 PM	0	0	0
Aug 19, 2024 12:00 AM	0	0	0
Aug 19, 2024 1:00 AM	0	0	0
Aug 19, 2024 2:00 AM	0	0	0
Aug 19, 2024 3:00 AM	0	0	0
Aug 19, 2024 4:00 AM	0	0	0
Aug 19, 2024 5:00 AM	0	0	0

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 19, 2024 6:00 AM	4	3	1
Aug 19, 2024 7:00 AM	3	1	2
Aug 19, 2024 8:00 AM	13	3	10
Aug 19, 2024 9:00 AM	1	1	0
Aug 19, 2024 10:00 AM	4	3	1
Aug 19, 2024 11:00 AM	10	5	5
Aug 19, 2024 12:00 PM	6	6	0
Aug 19, 2024 1:00 PM	1	0	1
Aug 19, 2024 2:00 PM	11	9	2
Aug 19, 2024 3:00 PM	5	0	5
Aug 19, 2024 4:00 PM	4	3	1
Aug 19, 2024 5:00 PM	5	4	1
Aug 19, 2024 6:00 PM	8	5	3
Aug 19, 2024 7:00 PM	5	3	2
Aug 19, 2024 8:00 PM	2	1	1
Aug 19, 2024 9:00 PM	0	0	0
Aug 19, 2024 10:00 PM	1	0	1
Aug 19, 2024 11:00 PM	0	0	0
Aug 20, 2024 12:00 AM	0	0	0

## Breton and Berwyck

August 13, 2024 12:00 AM → August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 20, 2024 1:00 AM	0	0	0
Aug 20, 2024 2:00 AM	0	0	0
Aug 20, 2024 3:00 AM	0	0	0
Aug 20, 2024 4:00 AM	0	0	0
Aug 20, 2024 5:00 AM	0	0	0
Aug 20, 2024 6:00 AM	0	0	0
Aug 20, 2024 7:00 AM	0	0	0
Aug 20, 2024 8:00 AM	7	4	3
Aug 20, 2024 9:00 AM	2	0	2
Aug 20, 2024 10:00 AM	0	0	0
Aug 20, 2024 11:00 AM	4	1	3
Aug 20, 2024 12:00 PM	7	3	4
Aug 20, 2024 1:00 PM	0	0	0
Aug 20, 2024 2:00 PM	17	8	9
Aug 20, 2024 3:00 PM	11	9	2
Aug 20, 2024 4:00 PM	3	1	2
Aug 20, 2024 5:00 PM	10	9	1
Aug 20, 2024 6:00 PM	11	5	6
Aug 20, 2024 7:00 PM	20	6	14

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 20, 2024 8:00 PM	0	0	0
Aug 20, 2024 9:00 PM	0	0	0
Aug 20, 2024 10:00 PM	0	0	0
Aug 20, 2024 11:00 PM	0	0	0
Aug 21, 2024 12:00 AM	0	0	0
Aug 21, 2024 1:00 AM	0	0	0
Aug 21, 2024 2:00 AM	0	0	0
Aug 21, 2024 3:00 AM	0	0	0
Aug 21, 2024 4:00 AM	0	0	0
Aug 21, 2024 5:00 AM	1	1	0
Aug 21, 2024 6:00 AM	0	0	0
Aug 21, 2024 7:00 AM	4	3	1
Aug 21, 2024 8:00 AM	2	1	1
Aug 21, 2024 9:00 AM	1	0	1
Aug 21, 2024 10:00 AM	3	2	1
Aug 21, 2024 11:00 AM	0	0	0
Aug 21, 2024 12:00 PM	4	2	2
Aug 21, 2024 1:00 PM	3	1	2
Aug 21, 2024 2:00 PM	3	1	2

## Breton and Berwyck

August 13, 2024 12:00 AM → August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 21, 2024 3:00 PM	8	6	2
Aug 21, 2024 4:00 PM	3	2	1
Aug 21, 2024 5:00 PM	11	6	5
Aug 21, 2024 6:00 PM	0	0	0
Aug 21, 2024 7:00 PM	9	5	4
Aug 21, 2024 8:00 PM	4	2	2
Aug 21, 2024 9:00 PM	0	0	0
Aug 21, 2024 10:00 PM	0	0	0
Aug 21, 2024 11:00 PM	0	0	0
Aug 22, 2024 12:00 AM	0	0	0
Aug 22, 2024 1:00 AM	0	0	0
Aug 22, 2024 2:00 AM	0	0	0
Aug 22, 2024 3:00 AM	0	0	0
Aug 22, 2024 4:00 AM	0	0	0
Aug 22, 2024 5:00 AM	0	0	0
Aug 22, 2024 6:00 AM	0	0	0
Aug 22, 2024 7:00 AM	3	3	0
Aug 22, 2024 8:00 AM	5	2	3
Aug 22, 2024 9:00 AM	2	0	2

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 22, 2024 10:00 AM	0	0	0
Aug 22, 2024 11:00 AM	1	0	1
Aug 22, 2024 12:00 PM	1	0	1
Aug 22, 2024 1:00 PM	0	0	0
Aug 22, 2024 2:00 PM	2	1	1
Aug 22, 2024 3:00 PM	18	15	3
Aug 22, 2024 4:00 PM	13	7	6
Aug 22, 2024 5:00 PM	8	5	3
Aug 22, 2024 6:00 PM	4	3	1
Aug 22, 2024 7:00 PM	4	2	2
Aug 22, 2024 8:00 PM	3	0	3
Aug 22, 2024 9:00 PM	1	1	0
Aug 22, 2024 10:00 PM	0	0	0
Aug 22, 2024 11:00 PM	0	0	0
Aug 23, 2024 12:00 AM	0	0	0
Aug 23, 2024 1:00 AM	0	0	0
Aug 23, 2024 2:00 AM	0	0	0
Aug 23, 2024 3:00 AM	0	0	0
Aug 23, 2024 4:00 AM	0	0	0

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 23, 2024 5:00 AM	0	0	0
Aug 23, 2024 6:00 AM	0	0	0
Aug 23, 2024 7:00 AM	4	3	1
Aug 23, 2024 8:00 AM	3	2	1
Aug 23, 2024 9:00 AM	0	0	0
Aug 23, 2024 10:00 AM	1	0	1
Aug 23, 2024 11:00 AM	7	4	3
Aug 23, 2024 12:00 PM	4	3	1
Aug 23, 2024 1:00 PM	4	0	4
Aug 23, 2024 2:00 PM	3	2	1
Aug 23, 2024 3:00 PM	2	2	0
Aug 23, 2024 4:00 PM	3	2	1
Aug 23, 2024 5:00 PM	3	2	1
Aug 23, 2024 6:00 PM	5	4	1
Aug 23, 2024 7:00 PM	6	3	3
Aug 23, 2024 8:00 PM	2	1	1
Aug 23, 2024 9:00 PM	0	0	0
Aug 23, 2024 10:00 PM	0	0	0
Aug 23, 2024 11:00 PM	1	1	0

## Breton and Berwyck

August 13, 2024 12:00 AM → August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 24, 2024 12:00 AM	0	0	0
Aug 24, 2024 1:00 AM	0	0	0
Aug 24, 2024 2:00 AM	0	0	0
Aug 24, 2024 3:00 AM	0	0	0
Aug 24, 2024 4:00 AM	0	0	0
Aug 24, 2024 5:00 AM	0	0	0
Aug 24, 2024 6:00 AM	3	3	0
Aug 24, 2024 7:00 AM	3	2	1
Aug 24, 2024 8:00 AM	2	0	2
Aug 24, 2024 9:00 AM	3	2	1
Aug 24, 2024 10:00 AM	1	0	1
Aug 24, 2024 11:00 AM	0	0	0
Aug 24, 2024 12:00 PM	0	0	0
Aug 24, 2024 1:00 PM	4	2	2
Aug 24, 2024 2:00 PM	1	1	0
Aug 24, 2024 3:00 PM	13	6	7
Aug 24, 2024 4:00 PM	5	4	1
Aug 24, 2024 5:00 PM	6	3	3
Aug 24, 2024 6:00 PM	1	1	0

## Breton and Berwyck

August 13, 2024 12:00 AM → August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 24, 2024 7:00 PM	2	0	2
Aug 24, 2024 8:00 PM	3	3	0
Aug 24, 2024 9:00 PM	0	0	0
Aug 24, 2024 10:00 PM	0	0	0
Aug 24, 2024 11:00 PM	1	1	0
Aug 25, 2024 12:00 AM	0	0	0
Aug 25, 2024 1:00 AM	0	0	0
Aug 25, 2024 2:00 AM	0	0	0
Aug 25, 2024 3:00 AM	0	0	0
Aug 25, 2024 4:00 AM	0	0	0
Aug 25, 2024 5:00 AM	0	0	0
Aug 25, 2024 6:00 AM	0	0	0
Aug 25, 2024 7:00 AM	1	0	1
Aug 25, 2024 8:00 AM	6	5	1
Aug 25, 2024 9:00 AM	5	4	1
Aug 25, 2024 10:00 AM	0	0	0
Aug 25, 2024 11:00 AM	0	0	0
Aug 25, 2024 12:00 PM	5	0	5
Aug 25, 2024 1:00 PM	1	1	0



## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 25, 2024 2:00 PM	0	0	0
Aug 25, 2024 3:00 PM	4	2	2
Aug 25, 2024 4:00 PM	2	1	1
Aug 25, 2024 5:00 PM	1	0	1
Aug 25, 2024 6:00 PM	3	3	0
Aug 25, 2024 7:00 PM	6	3	3
Aug 25, 2024 8:00 PM	2	2	0
Aug 25, 2024 9:00 PM	1	0	1
Aug 25, 2024 10:00 PM	0	0	0
Aug 25, 2024 11:00 PM	0	0	0
Aug 26, 2024 12:00 AM	0	0	0
Aug 26, 2024 1:00 AM	0	0	0
Aug 26, 2024 2:00 AM	0	0	0
Aug 26, 2024 3:00 AM	0	0	0
Aug 26, 2024 4:00 AM	0	0	0
Aug 26, 2024 5:00 AM	0	0	0
Aug 26, 2024 6:00 AM	1	1	0
Aug 26, 2024 7:00 AM	3	3	0
Aug 26, 2024 8:00 AM	4	1	3

## Breton and Berwyck

August 13, 2024 12:00 AM → August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 26, 2024 9:00 AM	3	2	1
Aug 26, 2024 10:00 AM	0	0	0
Aug 26, 2024 11:00 AM	0	0	0
Aug 26, 2024 12:00 PM	0	0	0
Aug 26, 2024 1:00 PM	1	1	0
Aug 26, 2024 2:00 PM	0	0	0
Aug 26, 2024 3:00 PM	13	7	6
Aug 26, 2024 4:00 PM	3	2	1
Aug 26, 2024 5:00 PM	3	1	2
Aug 26, 2024 6:00 PM	10	2	8
Aug 26, 2024 7:00 PM	2	1	1
Aug 26, 2024 8:00 PM	0	0	0
Aug 26, 2024 9:00 PM	0	0	0
Aug 26, 2024 10:00 PM	0	0	0
Aug 26, 2024 11:00 PM	0	0	0
Aug 27, 2024 12:00 AM	0	0	0
Aug 27, 2024 1:00 AM	0	0	0
Aug 27, 2024 2:00 AM	0	0	0
Aug 27, 2024 3:00 AM	0	0	0

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 27, 2024 4:00 AM	0	0	0
Aug 27, 2024 5:00 AM	0	0	0
Aug 27, 2024 6:00 AM	0	0	0
Aug 27, 2024 7:00 AM	3	2	1
Aug 27, 2024 8:00 AM	6	3	3
Aug 27, 2024 9:00 AM	6	6	0
Aug 27, 2024 10:00 AM	3	1	2
Aug 27, 2024 11:00 AM	0	0	0
Aug 27, 2024 12:00 PM	1	1	0
Aug 27, 2024 1:00 PM	1	0	1
Aug 27, 2024 2:00 PM	1	0	1
Aug 27, 2024 3:00 PM	6	5	1
Aug 27, 2024 4:00 PM	0	0	0
Aug 27, 2024 5:00 PM	3	2	1
Aug 27, 2024 6:00 PM	3	2	1
Aug 27, 2024 7:00 PM	12	5	7
Aug 27, 2024 8:00 PM	0	0	0
Aug 27, 2024 9:00 PM	0	0	0
Aug 27, 2024 10:00 PM	0	0	0

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 27, 2024 11:00 PM	0	0	0
Aug 28, 2024 12:00 AM	0	0	0
Aug 28, 2024 1:00 AM	0	0	0
Aug 28, 2024 2:00 AM	0	0	0
Aug 28, 2024 3:00 AM	0	0	0
Aug 28, 2024 4:00 AM	0	0	0
Aug 28, 2024 5:00 AM	0	0	0
Aug 28, 2024 6:00 AM	1	1	0
Aug 28, 2024 7:00 AM	7	4	3
Aug 28, 2024 8:00 AM	1	1	0
Aug 28, 2024 9:00 AM	0	0	0
Aug 28, 2024 10:00 AM	3	3	0
Aug 28, 2024 11:00 AM	5	2	3
Aug 28, 2024 12:00 PM	2	1	1
Aug 28, 2024 1:00 PM	2	0	2
Aug 28, 2024 2:00 PM	17	11	6
Aug 28, 2024 3:00 PM	1	0	1
Aug 28, 2024 4:00 PM	3	1	2
Aug 28, 2024 5:00 PM	2	0	2

## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 28, 2024 6:00 PM	1	0	1
Aug 28, 2024 7:00 PM	1	1	0
Aug 28, 2024 8:00 PM	2	1	1
Aug 28, 2024 9:00 PM	0	0	0
Aug 28, 2024 10:00 PM	8	6	2
Aug 28, 2024 11:00 PM	0	0	0
Aug 29, 2024 12:00 AM	0	0	0
Aug 29, 2024 1:00 AM	0	0	0
Aug 29, 2024 2:00 AM	0	0	0
Aug 29, 2024 3:00 AM	0	0	0
Aug 29, 2024 4:00 AM	0	0	0
Aug 29, 2024 5:00 AM	0	0	0
Aug 29, 2024 6:00 AM	0	0	0
Aug 29, 2024 7:00 AM	13	8	5
Aug 29, 2024 8:00 AM	5	0	5
Aug 29, 2024 9:00 AM	3	2	1
Aug 29, 2024 10:00 AM	4	2	2
Aug 29, 2024 11:00 AM	2	0	2
Aug 29, 2024 12:00 PM	0	0	0

## Breton and Berwyck

August 13, 2024 12:00 AM → August 30, 2024 10:44 AM

Time	Breton and Berwyck	Breton and Berwyck Breton and Berwyck Pedestrian IN	Breton and Berwyck Breton and Berwyck Pedestrian OUT
Aug 29, 2024 1:00 PM	2	0	2
Aug 29, 2024 2:00 PM	0	0	0
Aug 29, 2024 3:00 PM	1	1	0
Aug 29, 2024 4:00 PM	5	3	2
Aug 29, 2024 5:00 PM	2	1	1
Aug 29, 2024 6:00 PM	1	1	0
Aug 29, 2024 7:00 PM	3	1	2
Aug 29, 2024 8:00 PM	6	5	1
Aug 29, 2024 9:00 PM	1	1	0
Aug 29, 2024 10:00 PM	0	0	0
Aug 29, 2024 11:00 PM	0	0	0
Aug 30, 2024 12:00 AM	0	0	0
Aug 30, 2024 1:00 AM	0	0	0
Aug 30, 2024 2:00 AM	0	0	0
Aug 30, 2024 3:00 AM	0	0	0
Aug 30, 2024 4:00 AM	0	0	0
Aug 30, 2024 5:00 AM	0	0	0
Aug 30, 2024 6:00 AM	0	0	0
Aug 30, 2024 7:00 AM	2	2	0

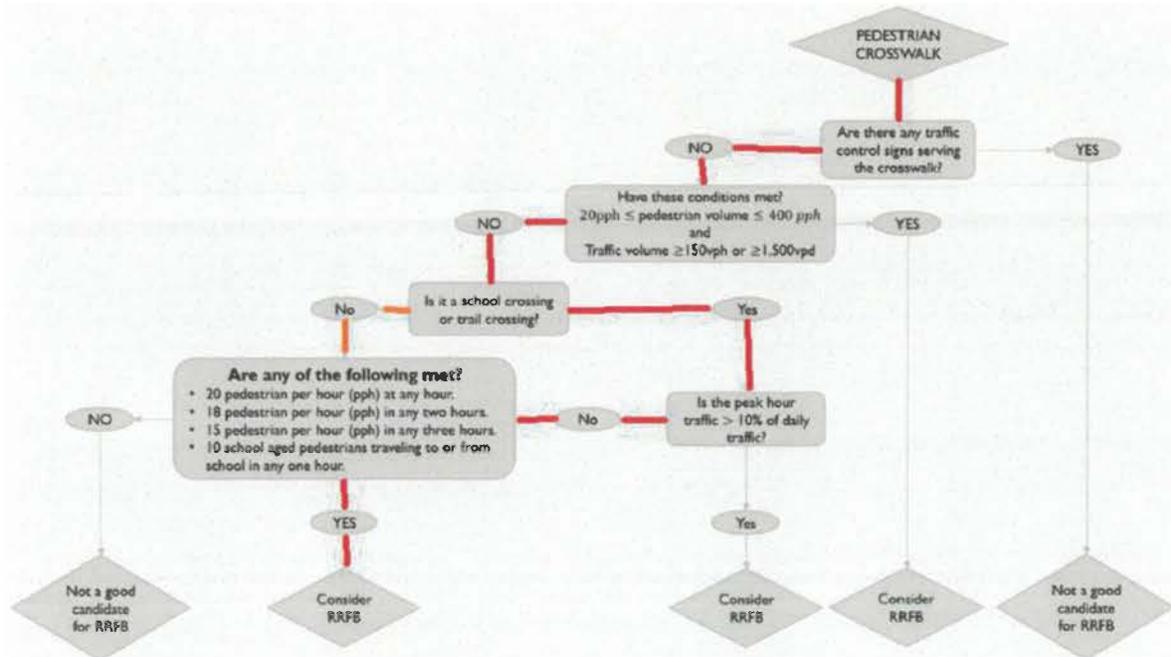
## Breton and Berwyck

August 13, 2024 12:00 AM – August 30, 2024 10:44 AM

<b>Time</b>	<b>Breton and Berwyck</b>	<b>Breton and Berwyck Breton and Berwyck Pedestrian IN</b>	<b>Breton and Berwyck Breton and Berwyck Pedestrian OUT</b>
Aug 30, 2024 8:00 AM			
Aug 30, 2024 9:00 AM			
<b>Total</b>	<b>933</b>	<b>538</b>	<b>395</b>

## Crosswalk-Pedestrian Counts-Breton Road and Berwyck Avenue

Study Conducted August 13-30, 2024



Pedestrian counts are taken during peak EGR pedestrian activity to align with traffic engineering best practices. Related to weather/season conditions and school in session, studies can typically be conducted between May and early June and late August and September.

### Vehicle Volumes-Annual Average Daily Traffic Volume (AADT)

