Southern Windsor County
2015 Traffic Count Program Summary

May 2016

SWCRPC
SOUTHERN WINDSOR COUNTY
REGIONAL PLANNING COMMISSION

The Southern Windsor County Regional Planning Commission (the "RPC") has been monitoring traffic at 19 locations throughout the southern Windsor County region (the "Region") since 1999, with additional counts performed as needed. Each location is typically surveyed for one to two weeks, avoiding periods of irregular traffic flows, such as July 4th or Labor Day weekend. Traffic is monitored through the use of automatic traffic counters, which track three types of traffic related data:

- Traffic volume (number of vehicle trips at a specified location);
- Vehicle classification (passenger car, pick-up truck, tractor trailer, etc.); and
- Approximate speed of the vehicles.

The RPC collects and analyzes the traffic data as part of their annual transportation program. This information is valuable in understanding traffic flow trends over time and to support the decision-making process related to road maintenance and project development. The Vermont Agency of Transportation (VTrans) has a large, statewide traffic count program. VTrans counters are typically placed out at each location once every three or six years. The RPC traffic count program is intended to supplement VTrans' traffic data in this Region. The RPC also performs traffic counts at the request of towns on a limited first-come, first-served basis.

2015 Traffic Counts

In 2015, the following counts were carried out in the region. Raw data for these traffic counts are available upon request from SWCRPC.

Regularly monitored locations

RPC ID	VTrans	Town	Route/Road	Location	AADT[1]
2	Y700	CAVENDISH	VT 131	50' WEST OF POWER PLANT ROAD (TH68)	2,200
3	Y701	READING	VT 106	500' SOUTH OF FELCHVILLE SCHOOL ENTRANCE	1,500
5	Y702	SPRINGFIELD	VT 106	400' SOUTH OF VT 10	5,900
6	Y703	CHESTER	VT 10	1000' WEST OF NORTH MAIN STREET (NO. SPRI. TH 6)	3,200
7	Y712	CAVENDISH	VT 103	1000' SOUTH OF RT 131	4,800
8	Y732	LUDLOW	VT 100	1000' NORTH OF VT 103 (SOUTH OF ROD AND GUN CLUB ROAD)	3,000
9	Y740	LUDLOW	HIGH ST (TH 4)	100' WEST OF GILL TERRACE (TH 312)	600
10	Y213	LUDLOW	DUG RD (TH 4)	50' WEST OF PROSPECT ST (TH 306)	380
12	Y711	READING	TYSON RD (TH 1)	50' WEST OF PUCKERBRUSH RD (TH 48)	450
16	Y708	WINDSOR	US 5	100' NORTH OF CEDAR HILL DR (PVT RD)	2,900
17	Y733	WEATHERSFIELD	VT 106	50' NORTH OF HIGH STREET (BY PERKINSVILLE GREEN) (TH 69)	2,400
18	Y365	CAVENDISH	TWENTY MILE STREAM RD (TH 3)	0.5 MILE NORTH OF VT 131	570
19	Y054	SPRINGFIELD	RESERVOIR RD (TH 9)	AT WEATHERFIELD/ SPRINGFIELD TOWN LINE	1,100

[1] AADT calculations were carried out in the new VTrans Traffic Data Management System (http://vtrans.ms2soft.com

Requested locations

RPC ID	VTrans	Town	Route/Road	Location	AADT
2015_20	Y239	WINDSOR	VT-44 (ASCUTNEY ST)	350ft east of Enright Ave	2,300
2015_21	Y234	WINDSOR	STATE ST (TH-3)	200ft west of Jacob St (TH-30)	3,100
2015_22	Y235	WINDSOR	US-5 (MAIN ST)	250ft north of Union St (VT-44)	6,200
2015_23	YYCB	LUDLOW	PLEASANT ST (TH-332)	100ft west of Elm St (TH-328)	690
2015_24	YYCC	LUDLOW	PLEASANT ST EXTENSION (TH-26)	150ft south of VT-103	940
2015_25	YYCD	LUDLOW	COMMONWEALTH AVE (TH-316)	450ft north of VT-103	500
2015_26	YYCE	LUDLOW	BARKER RD (TH-18)	600ft east of Bixby Road (TH-6)	180
2015_27	YYCA	CAVENDISH	QUENT PHELAN RD (TH-9)	300ft south of Barker Road (Lud TH-18)	210
2015_28	Y750	WEST WINDSOR	VT 44	450ft east of Flatiron Road (Rea TH-5)	800
2015_29	Y749	READING	VT-106	250ft north of VT-44	1,000
2015_30	Y165	READING	VT-106	400ft south of VT-44	1,300
2015_31	Y363	LUDLOW	Andover St (VT-100)	400ft south of Hemenway Hill Rd	2,300
2015_32	Y363	LUDLOW	Andover St (VT-100)	400ft south of Hemenway Hill Rd	2,300
2015_33	Y436	SPRINGFIELD	VT-106 (River St)	1800ft south of Orchard Lane (No. Spr TH-774)	900
2015_35	YYCG	SPRINGFIELD	Fairbanks Rd (North Spr TH-704)	700ft south of Main St (North Spr TH-6)	520
2015_36	YYAF	SPRINGFIELD	Precision Drive (North Spr TH-706)	400ft south of Main St (North Spr TH-6)	700
2015_37	YYAG	SPRINGFIELD	Main Street (North Spr) (North Spr TH-6)	300ft east of Precision Drive (North Spr TH-706)	1400
2015_38	Y729	CAVENDISH	High St (TH-23)	50 ft west of Tierney Rd (TH-22)	210
2015_39	Y357	WEST WINDSOR	VT-44	150ft east of Brownsville-Hartland Rd (TH-1)	1800

Traffic count data is also collated and collected by the Vermont Agency of Transportation (VTrans). Traffic Count reports are published online in two locations (both state and SWCRPC counts):

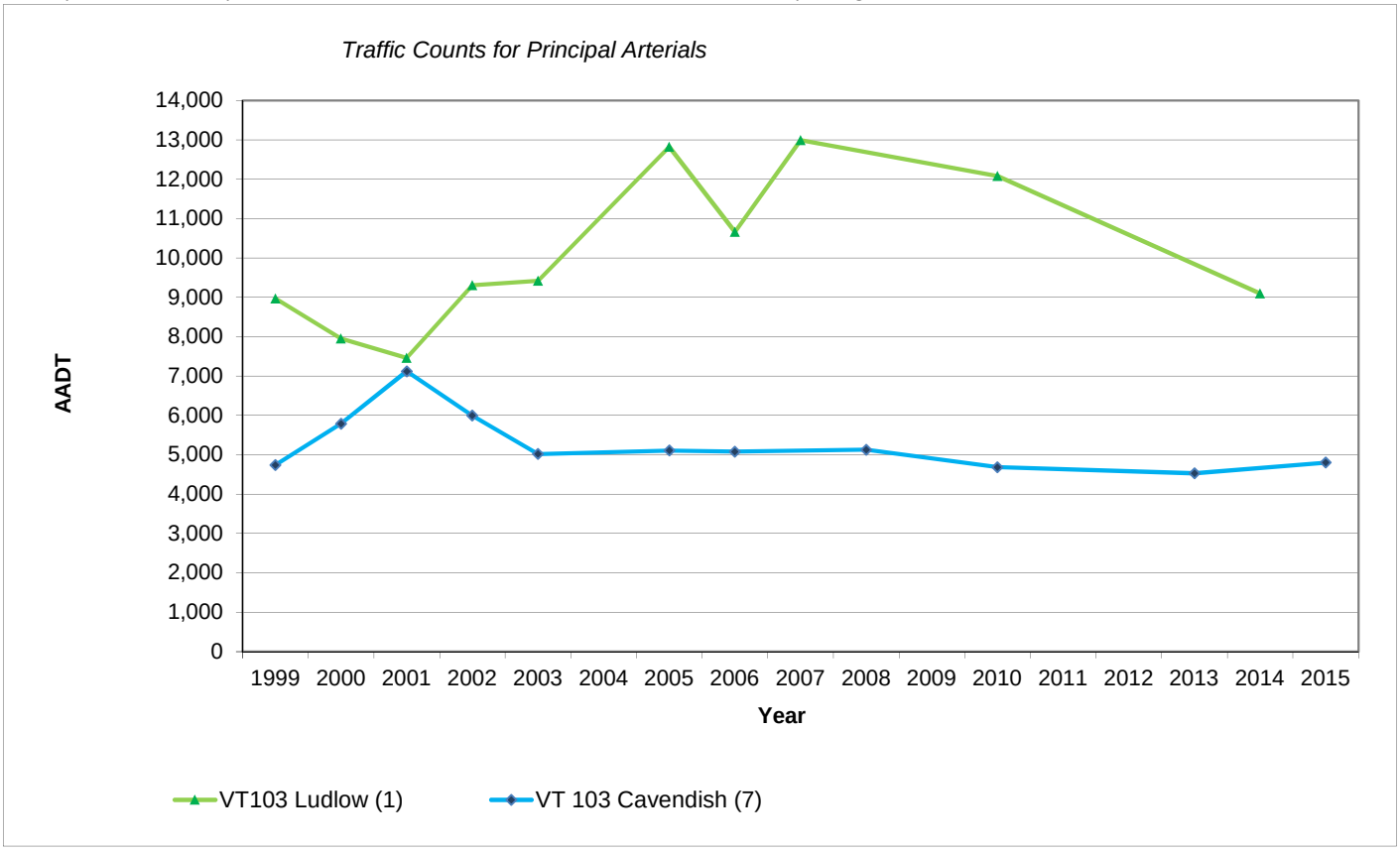
- VTrans Traffic Research Publications (http://vtransplanning.vermont.gov/research/traffic/publications).
    - Most count locations have basic traffic count data available in the "Automatic Traffic Recorder Station History" reports
    - Some count locations also have information about what type of vehicles (cars, motorcycles, buses and trucks) used the roads ("Automatic Vehicle Classification Reports").
    - One of the counters in Ludlow is permanently collecting data (P6Y209 – on Okemo Mountain Road 300ft from VT103). Data for this site is available in the "Red Book" (2014 Continuous Traffic Counter Grouping Study and Regression Analysis Report).
- VTrans Traffic Data Management System (http://vtrans.ms2soft.com)
    - Counts from all locations are available.
    - The database is searchable and has an online map.
    - Includes summary data (eg AADT), as well as data for individual days and hours.
    - Includes traffic counts, speed data and turning movement counts

Traffic Count History for Routine Count Locations

The following graphs show traffic volumes by year at each location where traffic counts are performed regularly. The tables are organized by the functional classification of each roadway.

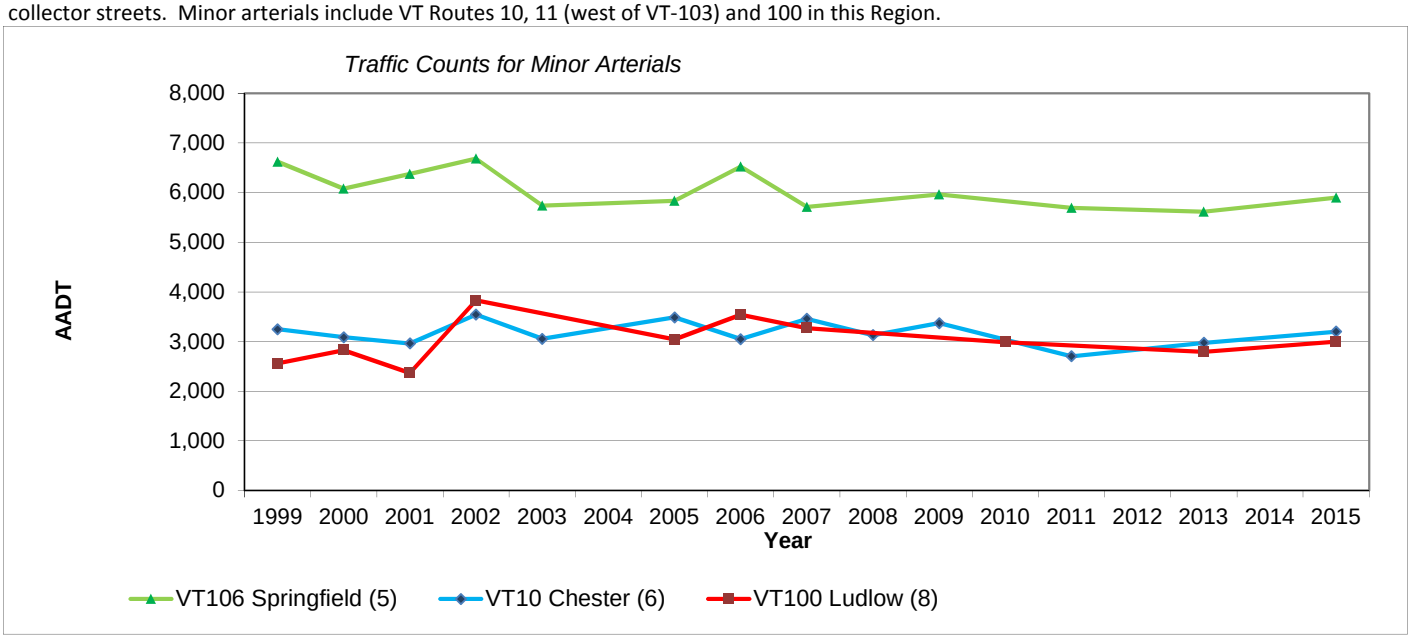
Principal Arterial

Principal Arterial roads are designed to carry large volumes of traffic for long distances, and include I-91 and VT Route 103 in this Region. They are usually characterized by controlled access, channelized intersections and restricted parking, and link Minor Arterials.



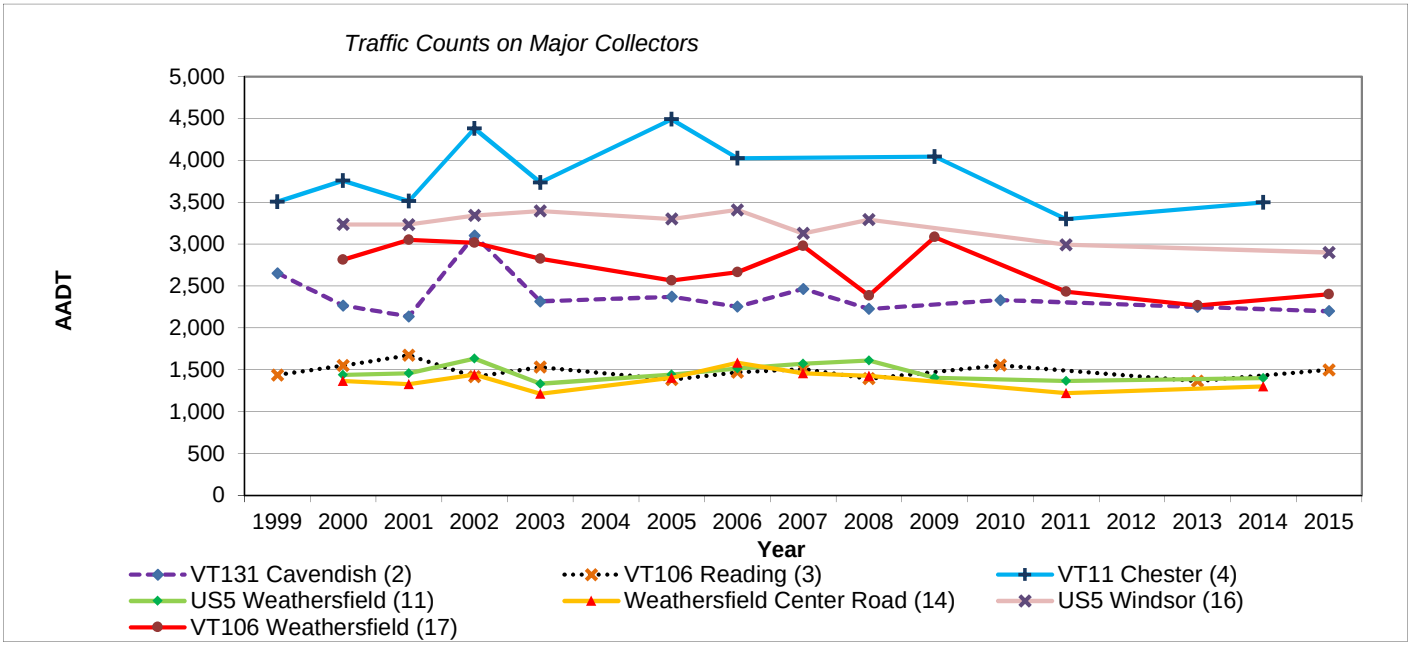
Minor Arterial

Minor Arterial roads usually have signals or stop signs at intersection with side streets, and function primarily to distribute traffic to and from collector streets. Minor arterials include VT Routes 10, 11 (west of VT-103) and 100 in this Region.



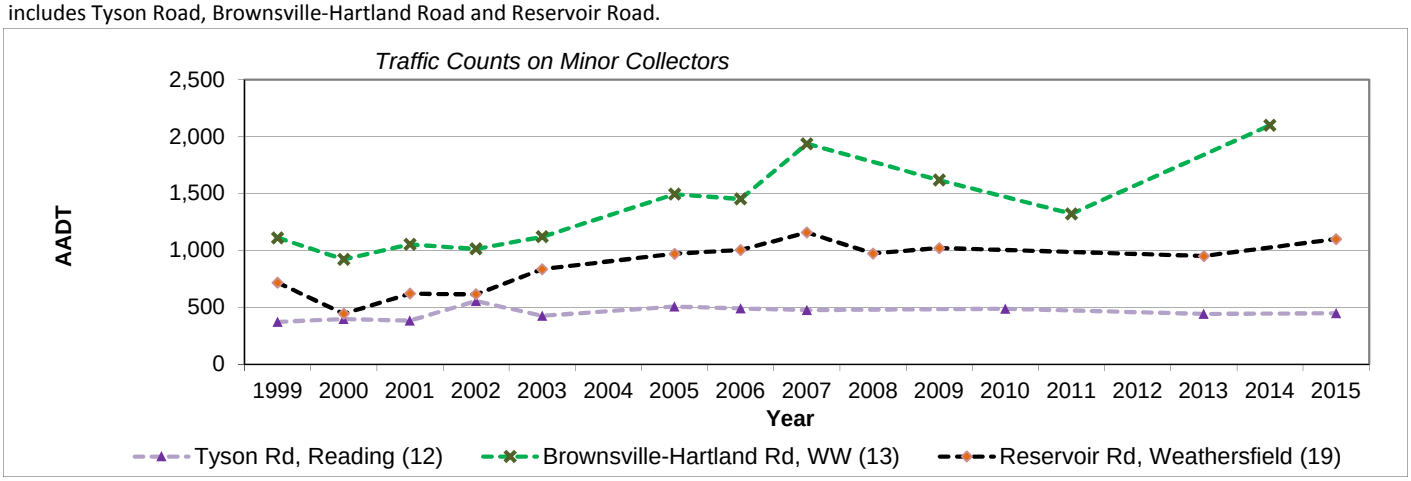
Major Collector

Collector roads channel traffic from lesser traveled roads to the arterial system. Major collectors generally serve traffic between towns and communities, and include US Route 5, VT Routes 106 and 131, and certain local roads including Weathersfield Center Road and Grafton Road.



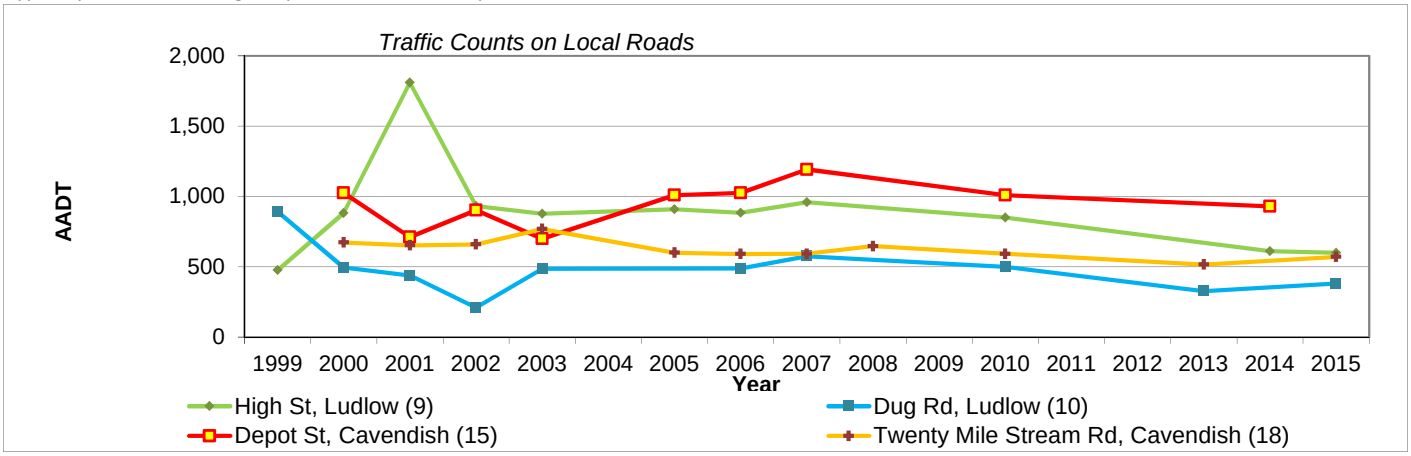
Minor Collector

Minor collectors generally collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road. This includes Tyson Road, Brownsville-Hartland Road and Reservoir Road.



Local Roads

Local roads primarily provide access to adjacent lands, and generally have limited through traffic. Local roads surveyed in this program are typically Class 2 town highways which serve as important links between communities.



Traffic Terms and Abbreviations

AADT - Annual Average Daily Traffic is the term used to show the average traffic volume in both directions on a section of road, adjusted for seasonal variation. VTrans recommended methodology and adjustment factors have been used to determine the AADT at each location.

ADT – Average Daily Traffic is the unadjusted, average number of vehicles passing in both directions at a specified location of a roadway.

Average Weekday Traffic – Average Weekday Traffic is similar to ADT, however, excludes weekend traffic volumes.

Average Weekend Traffic – Average Weekend Traffic is the unadjusted, average number of vehicles on weekend days only.

Direction of Travel – Some data are summarized based on the generalized direction of travel on a roadway: northbound (NB), southbound (SB), eastbound (EB) or westbound (WB).

Vehicle Classification – The type of vehicle is based on the Federal Highway Administration's (FHWA) 13 separate classes of vehicles. For the purposes of this report, vehicle class is summarized into three groups:

- **Passenger Vehicles** - Passenger vehicle class includes motorcycles, passenger cars, pickup trucks and SUVs (FHWA Classes 1-3)
- **Single-Unit Trucks** - Single-unit truck class includes school buses, 2-axle, 3-axle and 4-axle single-unit trucks (FHWA Classes 4-7; also called medium-duty trucks or "mediums")
- **Tractor Trailer Trucks** - Tractor-trailer truck class includes heavy-duty vehicles with four or more axles; a semi-tractor pulling a trailer(s), i.e. a "semi" or "18-wheeler" (FHWA Classes 8-13 or "heavies")

Vehicle Speed – Vehicular speed of travel is measured in miles per hour (mph), and for the purpose of this report is described in three ways:

- **Median Speed** – Statistical measurement based on the 50th percentile vehicle speed at the specified location. One-half of the vehicles in the sample travel faster, and one-half travel slower than the median speed.
- **Average Speed** – Average or mean travel speed of all vehicles at a specified location.
- **85th Percentile Speed** – The speed below which 85 percent of motorists travel at a specified location. The 85th percentile speed is typically used by transportation engineers as the basis for setting the posted speed limit, although other factors should also be considered.