

SRPEDD TRAFFIC COUNT FILE 2001-2010



SOUTHEASTERN MASSACHUSETTS METROPOLITAN PLANNING ORGANIZATION



Southeastern Regional Planning and Economic Development District (SRPEDD)

88 Broadway, Taunton, MA 02780

TEL: 508 824-1367

FAX: 508 823-1803

www.srpedd.org

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Economic Development District
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Taunton, MA 02780
(508) 824-1367
(508) 823-1803

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Stephen C. Smith, Executive Director
James C. Hadfield, Transportation Planning Manager

Principal Contributor

Christopher Cardaci, Transportation Planning Technician

Other Contributors

Lilia Cabral, Senior Transportation Planner
Paul L. Mission, Director of Highway Planning
Karen M. Porter, Comprehensive GIS Specialist
Jacqueline Schmidt, Transportation Planner
Adam Recchia, Senior Transportation Planner
Matthew Gonneville, Transportation Intern
Amanda Gricus, Transportation Intern
Andrew Grota, Transportation Intern

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TRAFFIC VOLUMES BY ROUTE, NUMERICALLY

SRPEDD'S TRAFFIC COUNT FILE

Transportation planning often requires traffic volume counts. The information obtained from these counts enables planners and engineers to study existing road and highway conditions that relate to the problem at hand. The ability to project volumes into the future provides the opportunity to identify potential problems before they develop, as well as seek solutions to existing situations.

The Southeastern Regional Planning and Economic Development District (SRPEDD) 2010 Traffic Volumes Report is a comprehensive compilation of all traffic counts available throughout the 27 communities within the SRPEDD region, through year end 2010. This report contains traffic information from a variety of sources: The Southeastern Regional Planning and Economic Development District; Massachusetts Department of Transportation (MassDOT); and various consulting and engineering firms.

The report contains the most up-to-date traffic volumes adjusted with the 2010 MHD Weekday Seasonal Adjustment Factors, projected annual percentage growth rate for SRPEDD state numbered highways and the methodology necessary to project future traffic volumes on these roads. This report contains over 2400 traffic counts, and approximately 100 new traffic counts.

The following method is generally used to obtain traffic volumes:

- A mechanical counter is positioned on the roadway to record traffic for varying periods of time. From the resulting data, the ADT or AADT is determined. Both SRPEDD and MassDOT conduct these counts on a regular basis throughout the region.

The traffic volumes in this report are presented either by Average Daily Traffic (ADT) or Average Annual Daily Traffic (AADT). The ADT usually results from traffic counts taken for a consecutive 48 hour period and average out over the two days. An AADT volume is an ADT that has been adjusted to reflect daily and monthly variations. Both the ADT and AADT are measures of the traffic volume in either or both directions at a specified location on the roadway.

This report is a sampling of the traffic data maintained by SRPEDD. SRPEDD offers the following traffic services: 48 hour ADT collection; turning movement counts; speed studies; vehicle classification studies; level of service analyses, and traffic signal warrant evaluations. During 2010 SRPEDD responded to over a dozen requests for traffic counts and related studies.

In addition to directly working with the local communities and MasDOT, SRPEDD conducts volume counts to: assist with the transportation planning efforts of the region; provide screenline data for calibration of the SRPEDD Regional Travel Demand Model; prepare the annual Traffic Counting Report; and aid with local safety studies and corridor planning studies.

SRPEDD also maintains a database of all signalized intersections in the region. The database is an interactive map that contains information about every signalized intersection in the SRPEDD region. Traffic volumes, levels of service, delays per vehicle, crash rates and aerial photos of each intersection are included. The database can be found at www.srpedd.org under the Transportation section.

City and Town Abbreviations

Acushnet	ACU	Lakeville	LAK	Raynham	RAY
Attleboro	ATT	Mansfield	MAN	Rehoboth	REH
Berkley	BER	Marion	MAR	Rochester	ROC
Carver	CAR	Mattapoisett	MAT	Seekonk	SEE
Dartmouth	DAR	Middleboro	MID	Somerset	SOM
Dighton	DIG	New Bedford	NBE	Swansea	SWA
Fairhaven	FAI	North Attleborough	NOA	Taunton	TAU
Fall River	FRI	Norton	NOR	Wareham	WAR
Freetown	FRE	Plainville	PLA	Westport	WES

Code Key Index

Route #	State Route Number given where appropriate.
Community	Town or city in which traffic count was taken.
Roadway	Road on which traffic count was taken.
Location	Specific geographic location of the traffic counter. “T/L” and “C/L” denote Town Line and City Line respectively.
Year	Year in which traffic count was taken.
Date	When available, the first day the traffic count was taken (M/D/Y).
Dir	Direction; All traffic counts listed are for total of both directions or total Average Daily Traffic (ADT) unless otherwise noted by NB (Northbound), SB (Southbound), EB (Eastbound), WB (Westbound).
ADT	Average Daily Traffic
AADT	Average Annual Daily Traffic
U/R	Federal Aid Urban / Rural Designation. <ul style="list-style-type: none"> ➤ U – Urban Area ➤ R - Rural Area
Station #	State or local identification number used for certain locations to make locating, more precise. (E.g., 6009, S762)

FC Functional Classification – this identifies the roadway’s category depending upon its characteristics of traffic volume and its purpose in the transportation network. The categories are as follows with an R indicating a rural area and a U indicating an urban area.

Function Class	Urban	Rural
Local	U-0	R-0
Interstate	U-1	R-1
Principle Arterial	U-2	R-2
Minor Arterial	U-5	R-3
Collector	U-6	R-5, R-6

- 0 ***Local*** – Roads that provide access to adjacent land, and roads that provide service for relatively short distances. Local roads include all roads not classified as part of the principle arterial, minor arterial, or collector system.
- 1 ***Interstate*** – Facilities that serve as principle arterials providing service to substantial statewide and interstate travel.
- 2 ***Rural Principle Arterial and Urban Extensions*** – Major divided highways that serve corridor movements having trip lengths and travel densities characteristic of interstates.
- 3 ***Rural Minor Arterial and Urban Extensions*** – Roadways with statewide significance that link cities and large towns, forming an integrated network on the county level.
- 4 ***Other Urban Principal Arterials*** – Roadways that provide service access to and within urbanized areas. Connections to interstate and rural principle arterial roadways are typical.
- 5 ***Rural Major Collector and Urban Minor Arterials*** – Roadways that provide service to cities, towns and other traffic generators not being served by the arterial system; roads that link these places with the arterial system; and roads that serve the intra-county travel corridors.
- 6 ***Rural Minor Collector and Urban Collector*** – Roads that bring traffic from local roads to collector roads, and roads that provide service to small communities and link local traffic generators to the rural areas.

In order to interpret the function classification of a particular road, one must consider the following: density and types of land use; density of street and highway network; nature of travel patterns; and the manner in which all of these elements are related to the definition of highway function. Additionally, one must take into account the particular urban / rural designation. Roads classified as rural Minor Collector or local are not Federal-Aid eligible. Figure 1 displays the Roadway Functional Classification for the SRPEDD region.

Volume Projection Methodology

To calculate future volume use this formula:

$$FV = BV \times (1 + (AG\% \div 100))^{(DY - BY)}$$

Where:

FV = Future Volume BV = Base Year Volume AG = Annual Growth %
 DY = Desired Year BY = Base Year

Example – Find FV Where:

BV = 10,000	FV = BV x (1 + (AG% ÷ 100)) ^(DY - BY)
AG = 5%	FV = 10,000 x (1 + (5% ÷ 100)) ^(2005 - 1998)
DY = 2005	FV = 10,000 x (1 + .05) ^(2005 - 1998)
BY = 1998	FV = (10,000 x 1.05) ⁷
	FV = 14,071

To calculate previous volume use this formula:

$$PV = BV \div (1 + (AG\% \div 100))^{(BY - DY)}$$

Where:

PV = Previous Volume BV = Base Year Volume AG = Annual Growth %
 DY = Desired Year BY = Base Year

Example – Find FV Where:

BV = 14,701	PV = BV x (1 + (AG% ÷ 100)) ^(BY - DY)
AG = 5%	PV = 14,701 ÷ (1 + (5% ÷ 100)) ^(2005 - 1998)
BY = 2005	PV = 14,701 ÷ (1 + .05) ^(2005 - 1998)
DY = 1998	PV = (14,701 ÷ 1.05) ⁷
	PV = 10,000