

AGENCY OF TRANSPORTATION

TECHNICAL SERVICES DIVISION

January 2005

GUIDELINES/PROCEDURES

FOR

SELECTION OF CLASS 2 TOWN HIGHWAYS

AGENCY OF TRANSPORTATION

Guidelines for Selection of Class 2 Town Highways

1. Serves Region - from town to town.
2. 3-rod right-of-way - Certified by Selectmen.
3. 70 points needed. (Classification Rating)
4. Total Mileage of Class 2 Town Highways Divided by Total Mileage of Class 2 and 3 Town Highways should not exceed 25%.
5. Gravel Typical: 20' shoulder to shoulder
Paved Typical: 22' shoulder to shoulder
6. Any transfers from Class 3 to Class 2 Town Highways approved by the Agency would usually be effective on the first day of the subsequent fiscal year.

PLEASE NOTE:

--Towns are required to submit their requests to their VAOT District Transportation Administrator (DTA) by November 1. The DTAs will forward the information to Program Development Division, Highway Research Unit Supervisor, for review.

--Requests for reclassification are due in VAOT home office in Montpelier by December 1 of each year. Those request received after that date will be held until the next analysis period.

STATE OF VERMONT
CLASS 3 TO CLASS 2 TOWN HIGHWAY TRANSFERS
RATING FORM

9/97

District _____ Town _____

Town _____

Town Highway No. _____

Miles _____

ADT _____

Average ADT _____ Increasing _____ Decreasing _____

One Terminal _____

Other Terminal _____

Special Considerations: Less than 2nd Class Gravel (2G) _____

Dead End-No Place (DE)(NP) _____ Parallel (PR) _____ Local (LH) _____ Residential (RS) _____

Land Access (LA) _____ Imp. Place (IP) (RRS) _____ Paved (PH) _____

Rating By _____ DTA _____ Rec. _____ (Over) _____

1. Traffic AADT (Max. 40) 400 - Over 40 a. 270 - 399 30 b. 160 - 269 20 c. 100 - 159 10 d. 10 - 99 0	3. Economic Features (Max. 20) a. County Seat & FAU St. Minor Coll. (Any 1) 5 Community Need (Part) 3 b. VO-REC-IND-TG (Any 1) 5 (Part) 3 c. SB-MR-RFD-FM (Each one) 3 (Part) 1	2. Geographic Features (Max. 20) a. Town to Town 10 Pl. To Pl. 5 b. Land Access (LA) 5 c. Integration (Int.) 5 d. Terminals SH to SH 5 SH to Cl. 2 TH or Pl. 3 Cl. 2 TH to Cl. 2 TH or Pl. 2
4. Traffic Classification and (Max 10) State of Improvement a. Gravel (20' typical, shld. to shld.) 5 Paved (22' typical, shld. to shld.) 10 b. Foreign or Through 5		
5. National Defense and (Max. 10) Public Service a. Conn. Interstate (Dir.) 5 (5 mi.) 2 b. Alternate Route (3-10 mi.) 5 Floods, etc. c. Def. Ind. or Strat. Mat. 5 or National Forest		
Total H.P.V. _____		

Recommendation _____

SELECTION OF CLASS 2 TOWN HIGHWAYS

RATING FORM ABBREVIATIONS

SH	-	State Highway	VO	-	Village Outlet
TH	-	Town Highway	Rec.	-	Recreational
2G	-	2nd Class Gravel	Ind.	-	Industry
DE	-	Dead End	TG	-	Traffic Generator
NP	-	No Place	SB	-	School Bus
PR	-	Parallel	MR	-	Milk Route
RS	-	Residential	RFD	-	Rural Free Delivery
LH	-	Local Highway	FM	-	Farm to Market
LA	-	Land Access	Shld.	-	Shoulder
IP	-	Important Place	Def. Ind.	-	Defense Industry
RRS	-	Railroad Station	Strat. Mat.-	-	Strategic Material
PH	-	Paved Highway	H.P.V.	-	Highway Point Value
PL	-	Place			
Int.	-	Integration			
Cl.	-	Class			

Proposed Rating Procedure
Selection of Class 2 Town Highways

The proposed rating procedure which has been developed is composed of a combination of credits or points for various criteria which are generally accepted as a measure of the local and statewide values of Class 2 Town Highways.

The basic criteria and established point values are as follows:

1. Traffic Volume	40 points
2. Geographic Features	20 points
3. Economic Features	20 points
4. Traffic Classification & State of Improvement	10 points
5. National Defense and Public Service	<u>10 points</u>
Total	100 points

Each basic criteria is subdivided into several items for which a range of point values have been established, based upon experience, observation of current changes and problems, and a comparison of conditions about the state. A rating of 70 points has been established as a requirement for the selection of a highway as Class 2. (To be determined with experience.)

An explanation of the basic criteria and the rating system follows:

1. Traffic Volume (40 points max.)

Traffic is the basic measure of the present use of a highway.

To determine a point value for the several traffic groupings used in the study, it was necessary to establish a minimum and a maximum traffic volume that was characteristic of a Class 2 Town Highway.

In 1960, a rating procedure was developed for conducting the 10-year Reselection of State Aid Highways (now Class 2 Town Highways) required by Vermont Statutes. This procedure was used as a guideline to provide an impartial and scientific method for the selection of state aid highways.

At that time, minimum and maximum traffic volumes of 40 vehicles and 160 vehicles per day, respectively, were established as volumes characteristic of state aid highways. A rating of 60 points or more was established as a requirement for a highway to qualify as state aid. (For more details, see 1960 Rating Procedure).

In 1969, a review was conducted of the 1960 rating procedures in preparation for the 1970 Ten-Year Reselection of State Aid Highways required by the Vermont Statutes. This review consisted of an analysis of the 1955, 1962 and 1965 traffic volumes on state aid highways. Normal increase factors were determined and new minimum and maximum traffic volumes were established at 60 vehicles and 250 vehicles a day, which were characteristic of a state aid highway. A rating of 60 points or more remained the same requirement as in 1960 for the selection of a highway as state aid. For more details, see Supplement I to Rating Procedure, dated October, 1969.

The enactment of Act 63 in 1973 provided for substantial increases in the financial assistance rendered to the towns for the construction and maintenance of Class 2 Town Highways (former state aid). In view of Act 63 and in anticipation of several Class 2 transfer requests, a review of the rating form was conducted and the point values assigned each traffic volume group were decreased. Also, a rating of 70 points or more was established as the requirement for selection of a highway as Class 2. The new rating and additional criteria as shown on page 1 were recommended for Highway Board Policy and was adopted in May 1975.

In 1997, a review of the traffic volume group criteria was conducted, normal growth factors determined, and traffic volume groups were adjusted with the new minimum and maximum established at 100 vehicles and 400 vehicles a day, which were characteristic of a Class 2 Town

Highway. All other criteria remained the same.

The traffic volume groups and assigned point values are presently as follows:

<u>ADT</u>	<u>Points</u>
400 and over	40
270 - 399	30
160 - 269	20
100 - 159	10
10 - 99	0

2. Geographic Features (20 points Max.)

The geographic features of a highway refer to its physical location and its ability to provide transportation from town to town, access to rural land areas, facility of integration between systems, trunk lines or places of more than common interest.

(a) A highway which crosses a town line and is part of a direct route from one community or trunk route to another is classified as Town to Town and assigned 10 points. A highway which does not cross a town line, but is or is part of a direct route between important places and/or trunk lines shall be assigned 5 points.

(b) A highway which is five or more miles long may be classified as providing Land Access and assigned 5 points.

(c) A highway, which by its location serves to supplement and improve the integration of the existing highway network, shall be assigned 5 points.

(d) A highway which connects two state highways is considered to be of more relative importance than a highway which connects a state highway and a Class 2 Town Highway (or important place) or one that connects a Class 2 Town Highway with

another Class 2 Town Highway (or important place). An important place is defined as a traffic generating facility such as a village, recreational area, industry, school, etc. On the basis of their system importance we have assigned the following points:

State Highway to State Highway	5
State Highway to Class 2 TH or Important Place	3
Class 2 TH to Class 2 TH or Important Place	2

3. Economic Features (20 points Max.)

The economic features of a highway are related to its use or designation. Some highways are used as village outlets, access to recreational areas or industries, provide the principal route to a county seat or similar community need. Some highways are designated as Minor Collections (Functional Class), RFD routes, or school bus, and milk routes. Each of these features has been considered in the rating, as follows:

	Maximum	Partial
a) County Seat, Minor Collector & FAU St. or Community Need	5 points	3 points
b) Village outlet, recreational area, industrial plant and other traffic generator	5 points (any 1)	3 points
c) School bus, RFD, Milk Route Farm to Market	12 points	1 point

The maximum point value on the above listed items is applicable only when these features are provided over half the length of the highway being rated.

The partial point values are applicable when these economic features are present on less than half of the length of the highway. If, for example, a highway serves as a village outlet and is assigned 5 points, it receives no additional credit for also serving a recreational area. If however, it only partially serves both, it receives 6 points or 3 points for each partial

service. In no case shall the total point value for Economic Features exceed 20 points.

4. Traffic Classification & State of Improvement (10 points Max.)

The present status of improvement of a highway and the classification of traffic using it is a good indication of its importance or value in providing service.

A highway which has not been improved to at least a 2nd class gravel surface would indicate it being of minor importance and not to be considered for selection. A highway must be improved to 2nd class gravel or better with a 20-foot typical, shoulder to shoulder, to be assigned a minimum of 5 points. A highway must be improved to a superior to gravel surface with a 22-foot typical, shoulder to shoulder, shall be assigned 10 points. If the highway is in the process of being improved to a 2nd class gravel or better than gravel surface and indications point to its completion in a year or so, full point values can be given.

If a highway carries through traffic, it shall receive more credit than a highway which provides essentially local use. If the traffic volume at the midpoint of a 1st or 2nd class gravel highway is equal to or greater than the average traffic over its entire length, then it shall be rated as carrying through traffic and be assigned an additional 5 points. A paved highway is assumed to carry through traffic and receives the maximum 10 points for being paved.

5. National Defense and Public Service (10 points)

National defense conditions would include direct access or indirect access (5 miles) to the Interstate Highway, access to strategic materials or defense industries and highways which would serve as alternate routes around disaster areas.

Public service highways would include those highways providing access to a state or national forest area and highways serving as alternate routes around sections of state highway

subject to annual flooding.

The following points have been assigned to the above conditions:

- | | | |
|----|--|----------|
| a) | Direct Access to Interstate | 5 points |
| | 1) Indirect Access (5 Miles) | 2 points |
| b) | Alternate routes (flood or disaster areas) | 5 points |
| c) | Access routes (strategic materials, defense industries and national and state forests) | 5 points |

General

On the rating sheet, space has been provided for entering pertinent data needed in making the rating. Under special considerations, several items such as A dead end-no place≡, A parallel≡, etc., have been defined. A list of these definitions has been attached.

One of the most important considerations in rating is to rate the entire highway between termini, transcending town lines, rather than to rate by sections. If two alternate routes having a common portion are rated it may be necessary, due to their similarity, to rate both routes over their entire length in order to make a choice. However, if a selection is made on this basis, the portion of the alternate route which is not common to the selected route must be rerated on its own merits using its intersection with the selected route as one of its termini.

PROPOSED RATING PROCEDURE
FOR
SELECTION OF CLASS 2 TOWN HIGHWAYS
Definitions

2nd Class Gravel (2G) - A highway that has been improved by the addition of an appreciable amount of gravel, has adequate base, drainage, and sufficient width (20 feet) to permit winter maintenance and is negotiable under normal conditions, all seasons of the year. Thus, any such highway that has been improved more than half its length and is under a continuing progress of improvement to be completed within a year or so, will be considered 2nd class gravel.

Dead-End (DE) - Highways which extend between towns shall not be considered for selection as a Class 2 Town Highway in only one town, thus Adead-ending \cong at a town line. In such cases, the highway terminus must be cut back to a village or other traffic generator, if such exists, or must extend through to a logical terminus in another town.

Ends No Place in Particular (NP) - Several highways do not appear to end at a logical terminus. In some cases the highway merely serves as a collector of several dead-end highways, and for all particular purposes makes the highway Aend no place \cong . Such highways cannot be considered for selection as Class 2 Town Highways.

Parallel Road (PR) - A parallel road is one which is parallel to another road of the same highway system having a higher traffic volume and begins and ends at essentially the same places. It is questionable if such a highway provides any service to the area that is not provided by the heavier volume route. There are exceptions wherein the highways are separated by geographic features such as a river or mountain with no particular cross

connection and which provide services not duplicated by each other. If a highway does provide duplicate service by paralleling another which has been selected, it should not be considered for selection.

Local Highway (LH) - A local highway is one which is located entirely within a town and serves local interests only rather than being part of a trunk line to an important place, such as village, recreational area, industry, etc.. In most cases, the highway serves a few farms and residences and although it may be an important town highway, would not qualify as a Class 2 Town Highway, if rated.

Land Access (LA) - This type of highway is essential for fire protection and access to and through low or unpopulated areas not served by other highways and their selection are desirable for system integration. Consideration should be given to the present and future development of the area through which these highways extend under this category. Highways which serve as Land Access should be at least 5 miles long and with very few exceptions, extend from town to town.

Important Place (IP) - An important place shall be considered a hamlet or village of 50 population or more, a recreational area, hospital, industry, active RR station, school, etc.

Additional Explanation of Classification

Rating Form

The first lines on the rating sheet call for factual information on each highway being considered. Since any complete highway may be located in more than one town, space has been allowed for writing in all of the towns involved. There is also space for the corresponding information on Route No., miles, and ADT, directly under the town. The ADT for a complete highway shall be calculated as a weighted average on a mileage basis.

Examples:

100 ADT for 1.0 mile = 100 Vehicle Miles

40 ADT for 1.0 mile = 40 V.M.

100 ADT for 1.0 mile = 100 V.M.

3.0 miles = 240 V.M.

Average ADT = $240/3 = 80$ ADT

In borderline cases where traffic is increasing or decreasing, this fact should be considered in making a final approval or disapproval. A description of the terminals will specify the highway more completely and aid in the analysis. At least one terminal of a Class 2 Town Highway must be a State or another Class 2 Town Highway.

Certain special existing conditions are undesirable in a Class 2 System as they do not contribute to the reasons for granting State Aid money. These conditions are generally expressed as unimproved or graded and drained only (less than 2nd Class Gravel), dead-end or ends no place in particular, parallel, local, or residential. There is a place on the rating sheet to check if any of these do not apply. If any one does apply, it should be circled, or

otherwise indicated, to aid in the analysis.

Certain other conditions contribute to the need for improved highways of considerable value to the State, and may be more expensive to improve or maintain than the town can be expected to do alone. These are land access roads, roads to important places, and highways which have been paved. There are places on the Form to check if they do not apply, and they should be circled, or otherwise indicated, if they need to be considered in the analysis.

Definitions

Less than 2nd Class (2G): It is believed that the use of a highway can be measured by its state of improvement. If a highway is important to the town and to the county, traffic will have built up to the point where the town must make a real effort to meet this demand by working toward at least 2nd Class Gravel throughout its length. If the Town has not improved the highway so that it is more than half 2nd Class Gravel, or better, it should not receive credit for the following:

2 (a)	Town to Town	10 points
2 (b)	Land Access (LA)	5 points
2 (c)	Integration (Int.)	5 points
3 (c)	Village Outlet (VO) Recreation Area (Rec.)	
	Industry (Ind) Traffic Generator (T.G.)	5 points
4 (a)	2nd Class Gravel, or better	5 points
4 (b)	Foreign or Through Traffic	5 points
Total		<hr/> 35 points

Dead-End (DE): A dead-end highway is one which is connected to a State Highway, or another State Aid Highway, at only one end. When so defined, some dead-end highways may serve as a village outlet, ski area access, or other traffic generating activity of more than

local interest and therefore, qualify as a Class 2 Town Highway. Others, not so well situated, end at a town line or at no place in particular and should not qualify for Class 2 unless they can be extended to another State or Class 2 Town Highway. Such a highway, unless extended, generally cannot claim credit for the following:

2 (a)	Town to Town	10 points
2 (d)	Terminal Condition - Trunk Line	5 points
3 (c)	Village Outlet (V.O.)	
	Recreation Area (Rec)	
	Industry (Ind.) Traffic	
	Generator (T.G.)	5 points
4 (b)	Foreign or Through Traffic	5 points
5 (a)	Connects to Interstate Direct	5 points
5 (b)	Alternate Route (3-10 miles)	5 points
Total		<hr/> 35 points

Ends No Place in Particular (NP): This term, in common use, means just what it says. The highway may be the axis of several intersecting highways with traffic gradually reducing as we approach its end. It is similar to a dead-end highway which should not qualify for Class 2 and cannot claim credit for the 35 points listed under dead-end.

Parallel Road (PR): A parallel road is one which is parallel to a higher traffic route of the same classification beginning and ending at essentially the same places. Many of the services which it supplies can be just as well supplied by the higher traffic route. It is doubtful if such a parallel highway can claim credit for the following:

2 (a)	Town to Town	10 points
2 (b)	Land Access (LA)	5 points
2 (c)	Integration (Int.)	5 points
3 (b)	Road to County Seat (County)	5 points
3 (c)	VO-REC-IND-TG	5 points
4 (b)	Foreign or (Through Traffic)	5 points
5 (a)	Connects to Interstate	5 points
Total		<hr/> 40 points

Some parallel highways do serve useful purposes, not readily provided by the higher traffic route, and may be given credit for these services. They should be treated as exceptions and be given credit for any credits which apply.

(a) When the two roads are over five miles apart and might be considered farm to market, land access, etc.

(b) When either route is over four miles long and separated by a stream or mountain, with no practical cross connection, each providing services on opposite sides of the obstruction.

(c) A parallel route which contains a traffic generating unit such as a village or an intersecting highway.

(d) A parallel highway which has a paved surface and an average ADT of over 270 vehicles per day.

(e) A parallel highway which serves as a bypass or alternate route, avoiding a congested area and appreciably reducing the mileage required for through traffic.

Local Highway (LH): A local highway is one which is entirely within one township and serves local interests. Such a highway may in some cases carry foreign traffic and otherwise qualify for Class 2, but in general it cannot claim credit for the following:

2 (a) Town to Town	10 points
4 (a) Foreign or Through Traffic	5 points
Total	<hr/> 15 points

Residential Section (RS): A residential section is the part of a highway which has houses averaging to stand one hundred feet or less apart for a distance of one-half mile. Whenever a highway containing such a section is to be rated, it shall be rated without consideration of the residential section. The residential section shall constitute a terminal, place or center, as appears appropriate and the residential section shall be selected as Class 2

only when the remainder of the highway being considered is so designated. The direct effect of this method of procedure will be to change the average ADT (generally reduced) and possibly change the terminal credit.

Land Access (LA): A highway which is at least five miles long extending from a State or Class 2 Town Highway into or through a rural or forested area with no other good access to the area for fire protection, logging, etc., shall be classed Land Access. A few long, low traffic Land Access Roads may not rate high enough to qualify as Class 2 Town Highway yet, they are desirable for integration and reducing distances from one community to another. If the traffic is increasing and it is unreasonable to expect that the traffic volume will go to the next higher traffic credit bracket in the near future, the highway may be rerated in anticipation of the higher traffic credit. The highway may be approved if the 10 extra points are sufficient to qualify.

Important Place (IP)(RRS): An important place shall be considered a city, village of 50 or more people, or a recreational area, hospital, industry, important railroad station, school, etc., of similar characteristics. When used as a terminal, the place must be of this order.

Paved Highway (PH): A paved highway is relatively expensive to maintain. If the highway being rated is half paved, it shall be given five extra credits, if 3/4 paved, 7.5 credits, etc., but not to increase the Traffic Classification and State of Improvement over the maximum of 10 points.

Integration: The State Highway System furnishes the framework upon which the Class 2 System is established and the Class 3 Highways act as feeders to both systems. An improved highway within an area between two State or Class 2 Town Highways, which

serves as a collector of traffic and/or provides the best opportunity for circulation from one important place to another forms the basis of an integrated system of highways. Such a highway shall be given 5 points credit for integration.

Termini: The intersection of two or more State or Class 2 Town Highways or a city or important place at the end of a highway, may be considered a terminal. Highways should be rated between two adjacent termini and should not be rated to a town line. Highways crossing highway district lines should be coordinated by the two district transportation administrators involved.

Village Outlet: Class 2 Town Highways are provided to connect smaller villages with the State Highway System and larger centers of population. For this purpose a village should have a population of 50, or more, people (14 - 15 houses). In general, a village will have only one outlet in the direction of greatest traffic. In some cases of nearly equal traffic in opposite directions, and where the village is also a terminal, both may be counted as a Village Outlet.

400 ADT: Any highway which has an average annual daily traffic of 400 or more vehicles per day may be approved as Class 2 provided it is not a dead-end road ending at a town line or no place in particular, a parallel road, a purely local highway, or a residential section.

270 AADT and Paved: Any highway which has been improved to a paved surface and has an annual average daily traffic of over 270 vehicles per day may be considered eligible for Class 2, provided it is not a dead-end road ending at a town line or at no place in particular, a parallel road, a purely local highway, or in a residential section.