

# **WESTFORD ROAD PLAN**

## **Report and Recommendations of the 2010 Westford Road Committee MARCH 2011**

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## I. INTRODUCTION

In 1998, following a very rainy and prolonged mud season, the Westford Selectboard appointed the first road committee. The task of that road committee was "...to identify existing road maintenance policies and procedures and to make recommendations to the Selectboard for improving the Westford road maintenance program...." (1999 Westford Road Plan, pg 2). The 1998 Road Committee developed a plan and presented it to the Westford Selectboard in February 1999. The plan identified road maintenance and repair areas to be completed within five (5) years. The Selectboard adopted the 1999 Westford Road Plan on April 12, 1999.

In March 2003, the Westford Selectboard appointed the second road committee. Its focus was to: 1) review and update the Westford Road Plan adopted on April 12, 1999; 2) identify highway problems and new construction projects to be completed during the next five years; 3) make recommendations for budget items to be considered by the Selectboard for inclusion in the town budget; 4) make recommendations regarding road repair/maintenance standards as well as other general road related policies. The 2003 Road Committee developed a plan and presented it to the Westford Selectboard in February 2004 (2004 Westford Road Plan). That plan evaluated the work that was completed on the priority areas identified in the 1999 Westford Road Plan, identified maintenance and repair areas to be completed within five (5) years, evaluated budget items, and made recommendations regarding vehicular speed and safety. The Selectboard adopted the plan on April 27, 2004.

In the spring of 2010, the Westford Selectboard appointed the six current members of the 2010 Westford Road Committee.

The 2010 Road Committee first met on April 27, 2010. The committee met again on May 25, 2010, June 22, 2010, July 27, 2010, September 28, 2010, November 16, 2010 and January 4, 2011. A public forum regarding the roads was held on October 26, 2010. At two of the meetings the road crew foreman, Gary Estus, was present and provided the committee with valuable information. The committee members also spoke with townspeople individually about their concerns regarding the roads. Committee members also drove the roads to identify problem areas and to inspect the areas that Gary Estus recommended for repair during the next five (5) years.

Much like the directives to the previous road committees, the Westford Selectboard's directive to the 2010 Road Committee was again to 1) review and update the Westford Road Plans adopted on April 12, 1999 and April 27, 2004; 2) identify highway problems and new construction projects to be completed during the next five years; 3) make recommendations for budget items to be considered by the Selectboard for inclusion in the town budget; 4) make recommendations regarding road repair/maintenance standards as well as other general road related policies. The 2010 Road Committee discussed and considered these issues.

This report is not intended to replace either the 1999 or 2004 Westford Road Plans. Rather, it is intended to build upon the work and road improvements that have been implemented as a result of the two previous plans. The focus of the 1999 plan was on road improvement and road maintenance following a devastating spring mud season. The 1999 plan focused primarily on material quality, costs of repair and maintenance, and overall improvement of the underlying structure of the roads, from the base layer to the top coat of gravel. As a result of the implementation of many of the recommendations from the 1999 plan, the overall condition of Westford's roads improved, and continues to improve.

The 2004 plan concentrated more on road improvement projects than on material quality. Many, but not all, of the road improvement recommendations have been completed. A few listed below, have not. However, the 2004 plan did recommend that the Selectboard significantly increase the Town's gravel budget every year, and establish a program for replacing gravel on every town road at a rate that will compensate for the loss of approximately one inch per year. This has not been done, and the gravel budget has remained static for at least the past eight years. The 2004 plan also recommended the installation of stop signs on several major through roads as a traffic calming measure. This recommendation was also not implemented.

The current Road Committee supports the recommendations contained in the 2004 plan for the rate of gravel replacement, and for an annual increase to the budget for the purchase of gravel. The Committee also recommends that the Town investigate the quality of the gravel currently on the roads, and the quality of the gravel the Town purchases. Further, the committee recommends an increase in the budgeted amount for speed enforcement, the hiring of a fourth road crew person, and the specific road repair and maintenance projects identified below.

## **II. RECOMMENDED AREAS FOR REPAIR AND MAINTENANCE**

Following the recommendations contained in the 1999 and 2004 Road Plans, the current Road Committee recommends that the projects identified below be completed within the next five years. This list is organized by town highway number.

Some of the projects are identified as "**Priority**". What this means is that the committee believes that these projects will either 1) require planning and funding above and beyond normal maintenance and repair projects, or 2) are important enough for road safety to warrant repair as soon as financially possible and, therefore, should be a priority for the Selectboard to consider. The Committee believes that the actual repair schedule of the non-**Priority** projects listed below should be left to the discretion of the road foreman and the Selectboard based upon available resources and costs.

Most of the recommended projects listed below have an estimated cost for completion. These estimates are based on the road foreman's estimate of man hours and materials needed to complete the project, at current rates and costs. As the cost for materials and labor increase over time, the cost for completion of these projects will likely also increase. The four (4) projects listed below, originally in the 2004 Road Plan, have not yet been completed.

**A. 2004 Road Plan Projects not yet Completed:**

1. Brookside Road (TH #1) (Map #1)

At mail box 167, gravel needs to be added to road so that the road and private driveway meet without a hump, thereby making maintenance and snow clearing easier.

Est. Cost: \$300

2. Cambridge Road Bridge (TH #3)--**PRIORITY** (Map #2)

The support beams and decking of the bridge need to be replaced. A temporary solution was achieved a few years ago when the roadway was paved with a reinforced overlay, but the beams and underlying decking will continue to deteriorate. This project will require advance planning, including design, engineering and permitting. This project will require State assistance, coordination and funding. Grants may be available and should be pursued early so that the money is in place well before reconstruction begins. Due to the condition of the bridge this project should be planned within the next 5 years and completed within the next 10 years. It is estimated that the current temporary repair could last 10-15 years from 2004.

Est. Cost: unknown

3. Old Stage Road (TH #6) (Map #3)

The roadway from mailbox 1362 to mailbox 1302 was rebuilt with fabric, stone and gravel. From mailbox 1302 to mailbox 1182 3" of gravel needs to be added. The road crew hits stone base when grading the road.

Est. Cost: \$50,000

4. Covey Road North and Old # 11 Road intersection (TH #14 & 15) (Map #4)

The northeast corner of the intersection needs improved sight lines and visibility looking east up Old Number 11 Road. The work involves tree cutting, removal of stone wall and high embankment, ditching and lining the ditch with stone. This project will likely involve land beyond the Town's right of way and, therefore, landowners consent and cooperation will be required.

Est. Cost: unknown

**B. 2011 Road Plan Repair and Maintenance Recommendations:**

1. Cambridge Road (TH #3) (Map #5)

Several years ago Cambridge Road was paved from the intersection with Rt. 128, to just north of the entrance to the Town Garage. Prior to paving, this section of roadway frequently had numerous large pot holes and required significant amount time and resources to maintain. Maintenance of this section has significantly decreased since paving. At the edge of the pavement, just north of the Town Garage, numerous pot holes and ruts are created due to

vehicles speeding up and slowing down. It is recommended, in order to make grading more efficient and safer, that Cambridge Road be paved from just north of the Town Garage to just north of the intersection with Old #11 Road. In addition, for safety and efficiency of grading, it is recommended that Old # 11 Road be paved from the intersection with Cambridge Road approximately 40 feet east.

Est. Cost: \$200,000

2. Old Stage Road (TH # 6)—PRIORITY (Map #10)

Parts of Old Stage Road are notoriously bad in mud season. Several years ago, the Town selected one particularly difficult section to maintain as a test site for five (5) different road base rebuilds. Each section is approximately 300' in length. Three (3) of the test sites are acceptable, and two (2) are not. The two sites that need repair will have to have the current material removed, and then rebuilt with fabric, stone and gravel.

Est. Cost: \$25,000

3. Huntley Road (TH # 8)—PRIORITY (Map #6)

a. Culvert # 85, located under the road just south of Drinkwine Lane, needs to be replaced. It is undersized and deteriorating. The Town was recently denied a grant for this project. Other grants will have to be explored. This project will require a permit from the State of Vermont. It is recommended that the permit be obtained first, and as soon as feasibly possible, so that when a grant or other funding is obtained, the Town will be ready to move forward. In addition, some grants require permits to be in place at the time the town applies for the grant.

Est. Cost: \$106,000

b. At the same time that culvert #85 is replaced, the culvert under Drinkwine Lane should also be replaced because it is undersized, thereby restricting the flow upstream of the new culvert. If the Drinkwine Lane culvert fails or becomes blocked, it will likely cause damage to Huntley Road. Clyde Drinkwine has indicated he is willing to work with the town to replace the culvert under Drinkwine Lane. The Town will have to find funding for this project also.

Est. Cost: \$30,000

4. Covey Road South (TH #14) (Map #7)

The intersection of Covey Road South with Old #11 Road needs to be raised. The current slope makes it difficult to stop and start in the winter and makes plowing more difficult. The road needs to be widened slightly and built up with stone and gravel. Trees must be removed to improve sight lines. Ditching will be needed along the roadway.

Est. Cost: \$30,923

5. Old #11 Road (TH #15) (Map #8)

The first blind steep curve, approximately .5 miles from the intersection of Cambridge Road, needs clearing for improved sight lines and safety, and for improved drainage. Just past the first guardrail, on the south side of the road, trees need to be removed and a stone lined ditch installed.

Est. Cost: \$8,055

6. Old #11 Road (TH #15) (Map # 9)

The second blind steep curve is located just past mailbox # 344, at approximately 1.7 miles. It also needs clearing for improved sight lines and safety, and for improved drainage. Proceeding east from mailbox #344, trees need to be removed, roadway needs to be widened, if possible, and a stone lined ditch installed.

Est. Cost: \$7,618

7. Cowie Road (TH #18) (Map #11)

Located off Rt. 15 on the Underhill side of town, this is short road that is in current need of general maintenance in order to make the road safer and easier for winter maintenance. The road needs widening in certain spots, which involve tree removal, ditching and adding gravel where needed.

Est. Cost: \$8,214

8. Rollin Irish Road (TH #31) (Map #12)

At the intersection of Old Stage Road, the current slope creates a problem when starting and stopping a vehicle in winter weather. The intersection needs to be built up with stone and gravel; trees and brush need to be removed for improved sight lines.

Est. Cost: \$7,402

9. Old Stage Road (TH #6) (Map #13)

At the intersection of Manley Road, heading south to box 1362, the road retains water and is prone to be muddy, especially during the spring. This section of road needs to be drained and about 6 inches of gravel added to the surface.

Est. Cost: unknown

10. Old Stage Road (TH #6) (Map #14)

At approximately box 1132 proceeding south approximately 1/3 of a mile, the road needs to be leveled, and approximately 3 inches of gravel need to be added. The road crew hopes to complete this project during the summer of 2011.

Est. Cost: \$30,000

11. Commons Road (TH #33) (Map #15)

The Town is currently working towards the purchase of the “Spiller” property on the Common Road. If that property is purchased and eventually used for town/public purposes, it will increase the traffic on Common Road, perhaps negatively impacting other residents who live on the road. If this occurs, the Town should seriously consider paving Common Road.

**III. SPEED CONTROL/SAFETY**

While it is true that most of the repair and maintenance recommendations made above are somehow related to safety, the recommendations made below are specifically made with speed control and road safety in mind.

**A. Speed Control**

1. One recurring concern of Westford residents is about excessive speed, particularly on the high traffic roads such as Cambridge, Woods Hollow and Old Stage. The committee believes that speed enforcement by the State Police and/or Sheriff’s Department is an effective way to try to control excessive speed, and is most effective when it is conducted on the roads that have the highest traffic volume. The two comments the committee received most regarding speed enforcement are: a) if the Town is paying for speed enforcement, then it should occur on the Town’s roads, not the State highway; and b) the frequency of the speed enforcement patrols should be increased.

The Road Committee recommends that the Town of Westford continue contracting with the State Police and/or Sheriff for speed enforcement, and that enforcement should take place primarily on Cambridge, Woods Hollow and Old Stage roads. The Town should not be using its limited funds to pay the State Police and Sheriff to conduct speed enforcement on Route 128.

The following historical budget information regarding speed enforcement was obtained from the Town Treasurer:

	<u>BUDGET</u>	<u>ACTUAL</u>	<u>INCOME</u>
2002-03	6,000.00	5,499.00	3,519.50
2003-04	10,000.00	9,063.40	5,165.32
2004-05	20,000.00	15,113.42	7,077.38
2005-06	30,000.00	15,668.40	7,221.77
2006-07	30,000.00	22,303.72	7,555.47
2007-08	20,000.00	23,553.27	9,790.31
2008-09	20,000.00	20,485.99	7,931.54
2009-10	15,000.00	21,815.78	8,038.36
2010-11	20,000.00		

The Road Committee recommends that the Selectboard budget at least \$20,000 each year for State Police and Sheriff speed enforcement. It is the committee's understanding that the budgeted amount for next fiscal year is only \$15,000, which is \$5,000 less than in 2008-2009 and \$15,000 less than that budgeted in 2005-2006 and 2006-2007. It is the recommendation of the committee that the amount the Selectboard budgets for speed enforcement be raised by \$5000 in the next fiscal year to \$20,000. In addition, based on the figures above, it seems that the Town frequently spends more on speed enforcement than what was budgeted. The committee recommends that the amount budgeted for speed enforcement be raised by another \$5,000 in the near future.

2. The Road Committee recommends that the Town lease or buy a mobile (portable) solar powered speed sign to be used on the high traffic roads of Cambridge, Woods Hollow and Old Stage. The Committee believes that this type of sign can be an effective speed calming devise, especially if moved periodically. The sign flashes the driver's speed when it is above the posted speed limit. These types of signs have been used in Jericho, Essex and Hinesburg in areas where high vehicle speeds had been normal. The cost for purchasing one of these portable signs is about \$3690 and they are available from All Traffic Solutions (814) 237-9050. [www.alltrafficsolutions.com/HomePage.aspx](http://www.alltrafficsolutions.com/HomePage.aspx) There may be money available from the federal highway safety program (800) 649-6825. It appears as though the units can only be purchased, not rented. The signs are also available from Information Display Company [www.informationdisplay.com](http://www.informationdisplay.com) although no pricing was available on the website.

3. Currently, speed limit signs in Westford are placed approximately every ½ mile. The Road Committee recommends that speed limit signs on high traffic roads be placed more frequently, perhaps every ¼ mile. A sign every ½ mile is not sufficient on the high traffic roads. While the committee understands that some people believe that more signs will not help reduce speeds, the committee respectfully disagrees. If speed limit signs do not affect the speed at which people drive, then one could argue that there is no need for any speed limit signs. The committee strongly believes that reminding drivers more frequently about the speed limit will result in overall speed calming on those roads.

4. The section of Brookside Road, ½ mile in either direction of the Elementary School, is particularly important for the safety of school children. The committee recommends that additional signage be located on Brookside Road, within ½ mile in both directions of the school, notifying motorists that they are traveling in a school zone, and the speed limit is 25 MPH. The committee does not believe that the current signage is adequate. The committee has identified this as a **PRIORITY** project due to safety.

## B. Safety

1. The installation of guardrails can be considered a maintenance project, but the Committee believes the guardrails recommended here are a safety issue. The Committee recommends that new guardrails be installed as follows. The list is in order of priority:

- a. Brookside Road (East side, 0.24 miles north of Maple Tree Lane)
- b. Old Number 11 Rd. (South side, 0.08 miles west of Covey Road)
- c. Cambridge Road (East side, 0.13 miles north of Plains Road)
- d. Machia Hill Road (North side, 0.19 miles east of Osgood Hill Road)

The estimated cost for guardrail installation is about \$20/foot, plus about \$500 for anchors and the wrap-around end pieces. We have estimated an average of 100 feet per location identified above, (some are a bit more and some a bit less). That results in an average price of about \$2500 per location, or a total of \$10,000 for all four projects.

2. The Common Committee has done a wonderful job with the plantings on the east side of the Common (near Westford Market). However, the plantings have grown significantly and impair sight lines of motorists traveling east bound along Route 128 towards Westford Market. The problem is that vehicles traveling on Route 128 from the direction of Fairfax towards Westford Market have to pull out almost into the traffic traveling in the other direction before having a clear view. We mentioned this to the Common Committee, and they trimmed several of the plantings, which improved visibility. However, the Road Committee believes that additional trimming is necessary. This is particularly true with regard to the larger plantings. This is a problem that will repeat itself every few years. The Road Committee recommends that if the plantings remain in their current location, a regular trimming schedule be established so that good visibility is continually maintained. In the alternative, the plantings can be moved 20 feet to the west (away from Westford Market) thus eliminating the need to do any future trimming.

3. The Town has a legal right of way (ROW) of 24.75 feet in each direction from the centerline of each dirt road. That ROW is designed to protect public safety and maintain safe roads through improved grading, ditching and water drainage. This right of way can be particularly important when it comes to having sufficient area for ditching without making the road too narrow. It is the impression of the committee that the Town has, for many years, been reluctant to fully use that ROW. It seems to the committee that the Town has not been aggressive in using what it has a right to use. The committee recommends that the Town should, when necessary, utilize its right of ways to improve road conditions and road safety.

4. The committee received a request from Richard Mathieu for a school bus turnaround sign on Old Stage Road at or near the Essex town line. Currently, the school bus turns around by backing into a driveway on Old Stage Road. This creates a dangerous situation as cars traveling in both directions try to pass the school bus as it is backing up. It is hoped that a sign notifying motorists of the bus turnaround will give adequate warning that a school bus traveling on that road will likely turn around.

The other alternative is to construct a turn around on Old Stage Road such that the school bus will not have to back into a driveway. Such a project will likely require cooperation from adjoining landowners. It will also require more planning and perhaps a grant for funding. Whichever alternative is selected, it is recommended that the Selectboard confer with Richard Mathieu for the placement of the sign or the construction of the turnaround. The Committee has identified this as a **PRIORITY** project due to safety.

5. One of the problems the committee noticed on the roads is the numerous instances where the road surface contains numerous pot holes at the location where a private driveway meets the roadway. The committee believes that one of the reasons for this is excess water running off the private driveways onto the road surface, thus accelerating the creation of pot holes. In fact, a report on the devastating flooding of 1998 determined that the damage on some roads was due primarily to poor driveway access control. The Committee recommends that the Town enforce the current zoning regulations and look into possibly drafting new zoning regulations that require future driveways to be constructed such that water drains off them before reaching the road surface.

6. During the past several weeks there have been many complaints about a section of Woods Hollow Road that was reconstructed during the summer of 2010. Approximately 10 vehicles ended up in the ditch. At this particular location, due to the reconstruction of last summer, the road is crowned more prominently than other segments of the road, and the ditch is deeper and further towards the centerline of the road than most other roads. In the winter the ditches fill in with snow, and drivers have a hard time determining where the road ends and the ditching begins. While the crowning of the road and the ditching create a situation which requires motorists to pay close attention to the operation of their vehicles, excessive speed has been a factor in most, if not all, of the accidents where vehicles ended up in the ditch.

The committee recommends that the ditch in this particular area be marked more visibly, especially for winter driving. Marking the ditches with reflectors mounted on poles, similar to the ones added at the intersection with Phelps Road, may be effective in helping motorists know where the road ends and the ditch begins. This would likely be a temporary measure until the road widens and the ditch narrows through repeated grading and road use.

In addition, any future road reconstruction projects that will require significant ditching, should incorporate a method for clearly marking the end of the road and the beginning of the ditch, especially for winter travel. This should become a standard operating procedure.

#### IV. ROAD MATERIAL COST and ANALYSIS

The Road Committee has learned that the budgeted amount for gravel has remained the same for at least the last eight years. Currently \$100,000 is budgeted for road restoration (top coating) and \$20,000 for specific construction projects. During this time, inflation has caused the price of gravel to rise. This has resulted in the Town of Westford getting less gravel for our roads each time the cost goes up. The Road Committee recommends that the gravel budget be increased by \$20,000 to offset the rise in cost that has occurred over the last several years. The committee also recommends that the amount budgeted each year for gravel be adjusted to keep pace with changes in the cost of the gravel so that each year the Town purchases the necessary quantity and quality of gravel to properly maintain the roads.

During the Road Committee discussions concerning the cost of gravel we also determined that the actual type of material being used should be looked at as well. We have heard concerns from many residents about our roads being slick and sloppy in wet and rainy conditions. This could be the result of too many fines in the material we are using. We have done research on sieve testing which is a process that takes a sample of a gravel material and determines the breakdown of different sizes of aggregate in the gravel material. Several sources were researched that gave recommendations for the desired sieve test results for material to be used on gravel roads. These sources included the U.S. Department of Transportation, Cornell Local Roads Program and Highway Engineering by Leo J. Ritter, Jr. & Radnor J. Paquette. The pertinent sieve test recommendations information from these documents are attached. In short, if a road has too many fines it can be slippery and muddy when moisture is introduced, too few fines and the road will not bind together properly, tend to develop "washboards" and be very rough. The trick is getting the right balance between the two.

Hardness of the material is another factor and we have learned through conversations with various town engineers that the material we presently use may be too soft for some locations. There are materials out there (at a comparable cost) from other local quarries that have a much higher hardness factor and these materials should be considered. Another factor that may be adding to the roads being slick after rain is the practice of spreading calcium chloride for dust control. While this is a very effective tool for keeping dust down (and keeping materials on the road) too much calcium chloride can make the surface very sloppy when moisture is introduced.

The Town of Westford has been buying gravel from Tatro for many years and no sieve tests have been done on this material. We recommend that several samples of the material that exists on our roads be collected and sieve tests be performed on them (in addition to a non-contaminated sample directly from our stock pile at the Town Garage). We also recommend obtaining samples from other gravel pits and having a sieve analysis performed on them to determine if there may be materials out there that better suite the towns needs. Sieve tests cost approximately \$60 each from Knight Consulting Engineers in Williston and volunteers from the Road Committee will collect the samples and drop off. We also recommend that the amount of calcium chloride and the process by which it is spread be discussed. The committee

recommends that \$2,000 be budgeted for sieve testing of the existing roads and that the Town ask its future gravel suppliers for sieve tests of all gravel purchases.

Cost of the different materials is an important factor and we have obtained information on that as well. The cost from Tatro is \$14.50 per ton, including delivery to the town garage. For comparison we obtained gravel costs from 2 other sources and added in trucking fees based on conversations with a local trucker. Rainville Quarry in Georgia sells a 5/8" minus road material that costs \$10.00 per yard, factoring in delivery we estimate the cost will be \$13.30 per ton. Whitcomb Quarry in Winooski and Swanton Limestone in Swanton also sell materials for use on gravel roads and the prices are similar. Based on these numbers, other sources of gravel are in fact comparable in cost to our current source. It should be noted that these alternate materials have a hardness factor that is higher than the Tatro material.

We recommend that after all existing and potential materials have been tested, the material that falls within the desired sieve test results be mixed in with existing materials in selected test areas of the Town and the results be monitored to see how it performs (if in fact the material that meets the sieve test guidelines is different than the material we currently use). If by some chance the material from Tatro meets the sieve test guidelines and the amount of calcium chloride is appropriate, we will have to come up with another approach as to why our roads seem so slippery in certain areas.

#### V. ROAD CREW--PRIORITY

The committee believes that the Westford road crew does a very good job maintaining and repairing the roads, given the financial constraints of the Town. It is the general consensus in the Town that the roads are vastly improved from 10-15 years ago when the Town experienced severe washouts of several roads. However, the three men on the road crew are all over 60 years old, the youngest being 62. They will all likely retire in less than five years. The Road Committee believes that the Selectboard must start thinking about new road crew members now. The knowledge of the current road crew needs to be passed on to any new employees. This will require some overlap.

In addition, the road crew foreman has indicated to the committee that he and his crew can get more work done, and do it more efficiently, if they had one more person on the crew. Three men can only do so much per day on repair and maintenance projects, especially when one of them has to remain at the town garage to load trucks with gravel. A fourth person will also help deliver more efficient snow removal in winter. The committee strongly recommends that the Selectboard increase the town budget by approximately \$40,000 for a fourth person (salary and benefits) as soon as possible, and that this be done no later than the next budget year.

Even though the committee believes the road crew is doing a good job, it also believes that the road crew, both current and future, would benefit greatly from the opportunity to attend and participate in road seminars and in the Local Road Scholar Program at Saint Michael's College. [www.vermontlocalroads.com](http://www.vermontlocalroads.com) (See Appendix). Essentially, we are recommending continuing education for the road crew. Many educational programs are sponsored by the State.

The committee recommends that the Selectboard budget \$2000 per year for the crew to attend educational seminars related to the maintenance and repair of dirt roads.

## VI. CAR POOLING/PARK AND RIDE

The Road Committee believes that increased use of carpooling is a valuable tool for energy conservation. Westford is a “drive-through” town for many people traveling from other towns. Traffic on Route 128 increases each year with most of that increase occurring mid-week due to single occupancy vehicles. This is a waste of energy and we, as a community, can help reduce the number of cars on the road, and reduce energy consumption.

In order for a car pooling/park and ride system to work, it will first require an adequate parking area where people can leave their vehicles for the day. The small parking areas on the Town Common are likely not sufficient. The committee recommends the development of a larger park and ride location, perhaps at the Town garage.

The committee discussed placing a new ride share bulletin board on the Town’s website. We also discussed the State of Vermont’s ride share program. Some on the committee believe that the State’s ride share program is not specific enough for Westford’s residents and that if a ride share bulletin board or web page were established on the Town’s website, more Westford residents would utilize ride share. We also discussed that a ride sharing/carpooling program can first be initiated through Front Porch Forum.

Part of the challenge with any ride share/carpooling system is educating the motoring public and convincing them that not having a car every day at work is not an unpleasant situation. We need to begin to change people’s attitudes and expectations. The community should be frequently reminded of the state’s ride share program. The Town should do more to encourage and promote ride sharing/carpooling activities through information distributed in the Town Newsletter and on Front Porch Forum. The Campus Area Transportation Management Association helps manage parking and transportation options into the downtown Burlington area. Its website is: [www.catmavt.org](http://www.catmavt.org) The community should be made aware of this resource as well.

The committee believes that this project should be coordinated with, and most likely spearheaded by, the Energy Committee. The Road Committee understands that this is an issue the Energy Committee has started to address. It is mentioned here because the Road Committee recognizes it as an issue related to Westford’s roads and one that will likely require planning and coordination with other services.

## **VII. SUMMARY OF BUDGET RECOMMENDATIONS**

A. Establish a schedule to repair and maintain the roads as set forth above, with greatest consideration given to those projects identified as **PRIORITY**;

B. Increase the amount budgeted for contracting with the State Police and/or Sheriff's Department to \$20,000 for the next fiscal year, and thereafter as needed to maintain adequate and effective speed enforcement on the Town's roads, particularly the high traffic roads;

C. As soon as financially possible, budget the amount of \$3,700.00 for the acquisition of a mobile (portable) solar powered speed sign for use on high traffic roads; budget the amount of \$5,000 for the purchase and installation of additional speed limit signs on the high traffic roads and additional speed limit and school zone signs for Brookside Road.

D. Install guardrails at the four (4) locations identified above at an estimated cost of \$20/foot or a total estimated cost of \$2,500.00 per location. This work may have to be completed over several years for budgetary reasons, but the committee believes that at least one guardrail per year should be installed during the next five (5) years;

E. Increase the amount budgeted for gravel purchases by at least \$20,000 in the next fiscal year, and thereafter set the budget for gravel purchases such that the Town will purchase the same quantity and quality of gravel each year; **PRIORITY**

F. Budget the amount of \$2,000 for the next fiscal year for sieve testing of current roadways, and thereafter make sure that purchases of gravel from our supplier be sieve tested before delivery to the Town. **PRIORITY**

G. Increase the budget as soon as possible by at least \$40,000 for the hiring of a fourth road crew person.

H. Budget the amount of \$2,000 each year each year for continuing training opportunities for the road crew.