



Cornell University

**Chemung County  
Winter Road  
Maintenance:  
Final Report**

**A Report Prepared for:  
Chemung County Shared  
Services Task Force**



**The Local Government Program**

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**Chemung County Shared Services Task Force**

**June, 2005**

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# *Executive Summary*

## **Introduction**

The Chemung County Shared Services task force agreed to examine opportunities for improvement in winter highway services. A previous report provided a preliminary assessment of the current winter road maintenance practices in Chemung County. The preliminary report was based on a review of existing budgetary and other data and face to face interviews with all municipal road managers in Chemung County. It provided a set of recommendations for further examination.

Seven areas were suggested for further study in the preliminary assessment and an eighth added by the task force's review. Implementation suggestions for each option are summarized below.

### **1. County Contracting with Towns for Winter Maintenance**

*Network analysis (see Figure 1, page 5) was done to assess opportunities for reduced deadheading through town maintenance of county road mileage. It appears that county road managers are already addressing the largest area with the highest deadheading losses in Chemung County in the Towns of Van Etten, Chemung, and Baldwin. The Towns of Southport, Erin, and Ashland may provide additional, although less significant, opportunities for reducing costs from deadheading. County plow routes average about 19 miles per route, so both Southport and Erin represent the potential to swap out an entire county plow route through a maintenance agreement with a single town. There may also be an opportunity for replacing a full county route by contracting for county roads in Ashland, additional portions of Chemung and Baldwin and the eastern portion of the Town of Elmira. It is suggested that existing arrangements and any new ones be formalized in a flexible, written agreement that protects the legal and financial interests of both municipalities.*

*The potential opportunity for additional contracting will have to be examined by management personnel in the county highway department. The potential for reductions in deadheading would have to be balanced against other operational factors (see full report). After this assessment, county staff (assuming one or more town areas for additional contracting have potential) should approach town highway personnel from the relevant towns to discuss the details of route changes and possible equipment, manpower and materials arrangements. Once preliminary details have been worked out, both departments should approach their respective governing boards for the development of an appropriate agreement.*

### **2. County Deployment of Equipment, Materials & Personnel to Town Locations**

*Implementation was not recommended*

### **3. Routine Availability of De-icing and Abrasive Materials at Town Facilities**

*This appears to be more of a special need rather than a routine one. County management staff should discuss this need with their crews. Arrangements should be explored for meeting this need for those plow route drivers that have experienced such situations. One on one discussion with town highway superintendents in needed areas should be adequate to address this situation. This will require assessing the availability of storage, reimbursement options, and other operational issues.*

### **4. Storm Alerts and Call-out Coordination**

*Modest changes to expand county call-out practices are recommended to include other municipal road managers in the county. County Highway managers should have the current*

highway superintendents polled by phone or mail for their interest in this kind of call-out coordination. Once identified, relevant county staff could meet and discuss the details of how to incorporate town personnel in county call-out operations.

**5. One Person Plowing Operations**

One person plowing is a topic of controversy among highway professionals. A balanced educational program with consideration of alternatives should be a next step on this issue. The Cornell Local Roads Program could assist in recruiting speakers and in moderating a discussion of competing perspectives on this issue with highway managers in the county.

**6. Consistent Budgeting and Financial Recordkeeping for Cost Accounting**

More comparable and useful cost data on winter snow and ice control could be achieved with preliminary agreement on cost accounting practices. As noted in the report, an initial effort should focus on actual versus seasonal reporting of personnel time. This can be accomplished by summarizing daily/weekly time card data in charging established highway expenditure categories/accounts. This could be established by joint agreement of a set of categories by highway managers, municipal governing boards and municipal accounting/bookkeeping staff. The consent and participation of all three of these groups would be necessary. Having comparable data would be valuable in helping highway managers and governing board members identify areas where different practices may be leading to cost savings or service improvements. Comparable cost data would be even more valuable if municipalities would also lay out differences in service standards. Service standards and policy are discussed in Section 8 of the report.

**7. Bulk Purchasing of De-icing/Abrasive Materials**

Pursuit of this option was passed to the county's purchasing task force after review of the preliminary assessment report.

**8. Winter Maintenance Standards/Policy**

The development of policy for winter maintenance is a joint project of the highway manager and the town or county governing board. Highway managers will have a lead role because of their responsibilities and understanding of the service area. There is also significant potential gain from a county wide discussion of winter maintenance policy and standards. Town highway superintendents and the county highway staff could benefit from an effort to find a mutually acceptable policy statement.

This could be accomplished by a subgroup of these officials drafting an initial statement for the remaining highway managers to review and modify. This discussion and any resulting agreed upon general winter maintenance policy would help both communicating with the public and in providing understanding between departments and governments. As noted earlier, a virtual county wide winter maintenance policy would have, at best, a limited set of items in common countywide. But identifying the areas of difference in service policy would be very valuable as well. This discussion and policy would also be an important factor in future efforts for cooperation and improvement of highways services in the county.

County wide agreement on one or two basic performance standards would be a significant addition to this effort. Collecting and assessing common data on winter maintenance for all highway departments county wide would provide needed baseline information to help improve performance and identify cost saving practices. Agreement would be needed on common approaches to allocating costs, etc. Again this would be an important activity for future cooperation and coordination within the county.

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## **Introduction**

The Chemung County Shared Services task force agreed to examine opportunities for improvement in winter highway services. A previous report provided a preliminary assessment of the current winter road maintenance practices in Chemung County. The preliminary report was based on a review of existing budgetary and other data and face to face interviews with all municipal road managers in Chemung County. It provided a set of recommendations for further examination.

Opportunities to improve service and reduce costs through additional service cooperation may exist: an environment of mutual trust must be present to take advantage of them. Seven areas were suggested for further study in the preliminary assessment. Based on information in the report, one additional area, the development of winter maintenance standards and policy, was added as a result of task force discussion of the final report. The eight areas discussed in this report are listed below.

### **Town County Winter Maintenance Options**

1. County Contracting with Towns for Winter Maintenance
2. County Deployment of Equipment, Materials & Personnel to Town Locations.
3. Routine Availability of De-icing and Abrasive Materials at Town Facilities

### **Additional Issues**

4. Storm Alerts and Call-out Coordination
5. One Person Plowing Operations
6. Consistent Budgeting and Financial Recordkeeping for Cost Accounting
7. Bulk Purchasing of De-icing/Abrasive Materials (passed to other task force)
8. Winter Maintenance Standards/Policy (added by task force during review of preliminary assessment report).

## **Town-County Winter Maintenance Options**

Over 98% of county owned road mileage is located in one of the county's 11 towns. The remaining 1-2% is in the county's villages and the City of Elmira (about 3.7 centerline miles of road). Many town highway departments traverse a high percentage of the county's roads to plow town roads. In many cases, town highway garage facilities are well located to provide a short travel time to maintain county mileage. These characteristics suggest at least three options to explore which may reduce deployment time (e.g. - reduce travel time to and from plow routes) and overall plowing time within the county.

There are three town-county maintenance options to exam. First, the potential of assigning, through contract or agreement, the maintenance of some additional portion of county roads by town highway personnel and equipment is assessed. The county currently has this kind of arrangement with the Towns of Baldwin, Chemung and Van Etten. The assessment explores the value of extending this option to additional town areas. A second option is to assess the potential of deploying county trucks and personnel at town highway facilities to reduce travel times to county plow routes. The third potential opportunity is to examine the value of more streamlined arrangements for county trucks to be able to reload with de-icing/abrasive materials at town locations. It

may be that a mixture of these three options will be beneficial. We will discuss each of these below.

## 1. County Contracting with Towns for Winter Maintenance

It is worth exploring the potential for savings from additional county contracting for winter maintenance services with towns. Most towns indicated that they cover a significant amount of county mileage in providing winter maintenance on town roads. The material in this report indicates that many towns already have a high percentage of paved road mileage and plow routes devoted to mainly paved surface roads. Because of these linkages and similarities, many town highway managers believed that they could take on some additional mileage without adding additional equipment or manpower. At the same time, county staff believe that truck deployment time is high for some plow routes. A number of factors need to be considered in fairly evaluating this trade off. Among the important factors to consider are the following:

- *Town Capacity* This is the town’s ability to take on additional mileage without significant increases in manpower or equipment
- *Complementary impacts* on other county highway maintenance need must be considered. If winter maintenance contracting to towns led to a reduced need for county personnel, will the implied reductions hamper the county’s ability to provide other basis highway services? Winter maintenance cannot be looked at in isolation.
- *Mutual benefit* Will both municipalities gain from the change?
- *Continuity and Confidence* County road managers would have to have confidence in the town road manager that was taking over maintenance responsibilities. The potential for continuity in town management is also an issue of concern.
- *Standards of Service* It would be important to have agreed upon service standards for winter road maintenance. These could include: the mix of de-icing/abrasive materials, type of plowing equipment to be used, standards for when roads will be cleared, etc. Additional time needed to complete road clearing within the town should also be addressed.
- *Transactions Costs of Contracts for Services* An approach to reimbursement and monitoring has already been established by the county. The county is already reimbursing three towns for winter maintenance: Van Etten, Chemung, and Baldwin. Contracting with additional towns to provide winter maintenance could utilize the experience and pattern developed with these three towns.

### Potential Sources of Saving and Expense from Winter Maintenance of County Roads by Town Highway Departments

There are two potential sources of savings from additional contracting: reduced “deadheading” and savings from plowing county roads already traversed by town trucks to get to town road mileage on the same local road network. *Deadheading* is defined as time when the truck is moving but the plow blade is not in service (e.g. driving from the truck station to the start of a route, or driving between service areas.) It is assumed that deadheaded mileage is cleared by another plow. Reducing *deadheading* is one strategy for lowering costs and decreasing overall plowing time. While *deadheading* has to be balanced against other factors, highway managers want to minimize it in general.

The size of equipment used for plowing and materials spreading can also have an impact on the time lost to *deadheading*. Smaller equipment which holds a smaller amount of materials can lead to more trips back to the garage to reload. Return trips to and from the same route can dramatically increase deadheading. For example, Chemung County has the highest average number of miles covered per route among departments in the county. This is, in part, a result of the use of tandems with adequate materials hauling capacity, reducing the need for reloading. It is also a function of the county road network. Sizes of routes also need to be traded off against the total time it takes to clear the whole road network. The county is using tandem axle trucks which enable them to complete their routes without reloading. Some other departments in the county have road networks that preclude the exclusive use of tandems. Town highway departments should consider the use of tandem axle trucks to increase the length of routes and reduce the need for reloading.

Another important factor is the integration of the local road network. County road mileage is not a separate network from town roads. Instead, county roads provide a backbone that ties together town roads (which generally serve as residential and commercial service roads directly to property). As a result, town vehicles have to traverse county road mileage in their jurisdiction to provide plowing and de-icing services on town roads. Given this linkage, there may be savings from contracting out winter maintenance to town governments. This is not a given, however.

Another practice that needs to be minimized is sometimes referred to as *stitching*. *Stitching* occurs when a plow truck travels a portion of a main (collector or connector) road and then turns off to plow a residential side road, returning to the main road repeatedly until the whole route served by the main road is plowed. This leaves the main road plowed “in pieces” during the plowing operation. It is preferred that such connectors or collectors be plowed without such *stitching* for both safety reasons and the volume of traffic they carry. In many cases where the main county roads are plowed first then plowing patterns, even by a single vehicle, will not differ significantly from the two local governments plowing their own roads. In other words, a similar pattern of traveling the main or county road twice will persist if there is no *stitching*. With or without *stitching*, (assuming no increase in equipment or personnel) we would expect that the total time it takes for a town staff to plow and/or put down de-icing or abrasive materials to increase with the addition of county mileage to maintain.

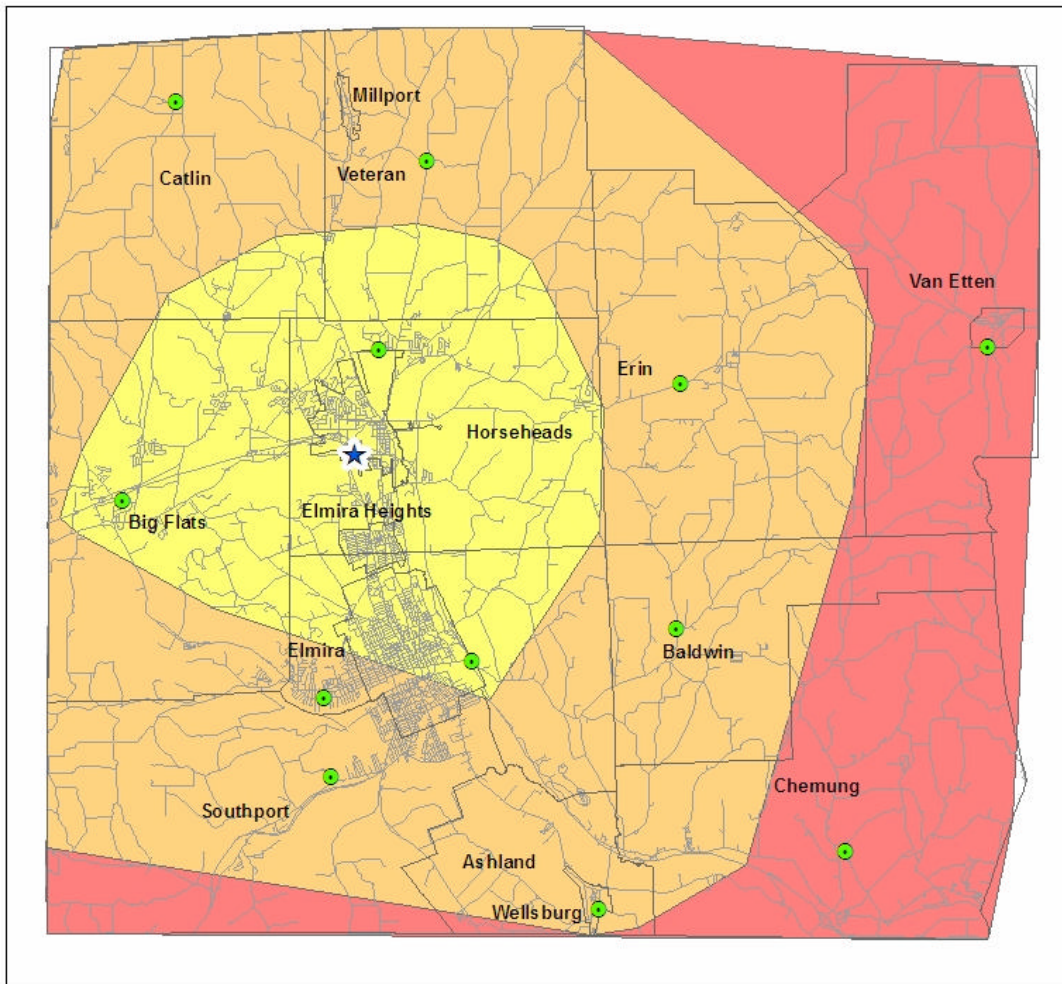
We assume that deadheading is the more critical cost variable to look at in assessing opportunities for contracting with towns. We have used a standard network analysis tool to provide indications of where the most significant deadheading might occur in the county. Network Analyst (software trademark) is used with the existing Chemung County network of roads, intersections and travel speeds. Starting from the existing County highway facility, it determines an area that can be reached by truck within a fixed amount of time. For these purposes, we examined the total area that can be reached on the existing road network in 10, 20 and 30 minutes respectively. We used ten, twenty and thirty minute limits to provide insight into potential deadheading patterns for county roads. Figure 1 contains a map indicating several travel time thresholds for Chemung County. These map estimates provide an approximate sense of where county roads are most difficult to reach.

The eastern portion (area in red) of the county in the towns of Van Etten, Baldwin and Chemung is the largest portion of the county with the longest access times. In this zone, access times are between twenty and thirty minutes. This implies that the round trip time losses in this region could be as high as 40-60 minutes. It is in this zone or area where the county already has arrangements for winter maintenance with town highway departments. County roads in the Towns of Chemung, Baldwin and Van Etten are already maintained by the towns with reimbursement. It appears that county road managers are already addressing the largest area with the highest deadheading losses in Chemung County. It is suggested that these existing arrangements and any new ones (see below) be formalized in a flexible, written agreement that protects the legal and financial interests of both parties.

The Towns of Southport, Erin, and Ashland may provide additional, although less significant, opportunities for reducing costs from *deadheading*. Most of the county roads in each of these towns can be reached in ten to twenty minutes from the county highway facility. Portions of county road mileage in Erin and Southport are more than twenty minutes from the county facility. The Town of Southport contains almost 30 miles of county roads, while Erin contains approximately 20 miles and Ashland 2.3 miles of county road. County plow routes average about 19 miles per route, so both Southport and Erin represent the potential to “swap out” an entire county plow route through a maintenance agreement with a single town. Southport utilizes a mix ratio similar to that used by the county. There may also be an opportunity for replacing a full county route by contracting for county roads in Ashland, additional portions of Chemung and Baldwin and the eastern portion of the Town of Elmira. This four town area has significant county road mileage, and one or more of these towns may have the capacity in the highway department to accommodate providing additional winter road maintenance for the county.

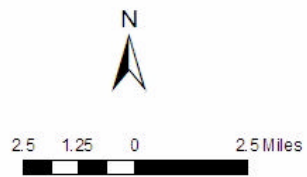
The county highway department provides de-icing-abrasive mix for the three towns that currently provide winter maintenance on county roads. For the Towns of Van Etten and Chemung, the county also reimburses for labor costs and equipments costs at state rates. This arrangement could be replicated if contracting for winter maintenance were extended to additional towns for other county road mileage. Depending upon the situation the county may wish to explore use of existing county equipment as an alternative to reimbursing for the use of town equipment. This and a variety of other details are best negotiated by supervisory personnel from the two departments. In some cases, it may be cost effective for both the county and a town to enter into a winter

**Figure 1**  
**Network Analysis of Travel Times from Chemung County Highway Facility**



**Legend**

- |                    |   |                 |
|--------------------|---|-----------------|
| <b>Travel Time</b> | ● | Town Facilities |
| 10 minutes         | ★ | County Facility |
| 20 minutes         |   |                 |
| 30 minutes         |   |                 |



maintenance agreement that would require the town to purchase additional equipment. Where additional town equipment investment is required, a longer term agreement may be needed to assure the town an adequate revenue stream for the added multi-year capital investment costs.

Any actual reduced costs from these two sources (reduced *deadheading* and *network plowing*) have to be balanced against the impacts on other service needs that the county highway department is responsible for. Highway staffing accomplishes a bundle of complementary tasks and service delivery needs. Pulling one task out of the bundle through contracting can leave either under staffing for some tasks or underutilized resources if no staff reductions are associated with contracting out some winter maintenance responsibilities. Additional contracting with towns for winter maintenance services could leave voids in county maintenance needs in winter and/or summer. During the winter months, county highway employees are engaged in other maintenance and repair activities when not performing snow and ice removal. Similarly, there is an ongoing need for county forces to accomplish summer maintenance and improvement tasks. If contracting out winter road maintenance tasks to the towns would result in a reduction in county forces, then county highway managers would have to be assured that other winter and summer tasks could be adequately accomplished with the remaining employees or through additional cost effective contracting.

**Implementation** The potential opportunity for additional contracting will have to be examined by management personnel in the county highway department. The potential for reductions in deadheading would have to be balanced against other operational factors, including those identified above. After this assessment, county staff (assuming one or more town areas for additional contracting have potential) should approach town highway personnel from the relevant towns to discuss the details of route changes and possible equipment, manpower and materials arrangements. Once preliminary details have been worked out, both departments should approach their respective governing boards for the development of an appropriate agreement.

*Figure 2 in the appendix demonstrates the extent of county wide coverage available within ten minutes travel time of all town highway departments as points of initiation. Figure 2 demonstrates the effectiveness of multiple points of deploying highway equipment for winter maintenance.*

## **2. County Deployment of Equipment, Materials & Personnel to Town Locations**

A second option proposed for further examination would be to deploy county manpower and equipment from some town garage sites. This proposal assumes that there may be savings from reduced deadheading costs by locating trucks at some town garage sites during peak winter maintenance months. County employees would then report to those sites, presumably closer to their plow route starting point. This change raises a different set of issues, including: costs of reimbursement for fuel, the adequacy of town materials storage, etc.

While this option has some attraction for snow plowing and the application of de-icing and abrasive materials, it is not attractive under general conditions. When other maintenance tasks are being completed, this deployment option would frustrate

communications with county highway supervisory personnel and often lead to increased transportation costs for the employee to report to the county's facility. Some New York counties have regionalized their highway staff, but this is generally done for groups of employees or regional supervisory personnel that coordinate contract work among groupings of town departments. Under those conditions, supervisory personnel are also regionalized, facilitating oversight of any county personnel that are also reporting to regional or town facilities. There would be significant problems and costs to the county of not having their employees report to county facilities. A variety of routine tasks would receive less attention at the county facility under this change in winter reporting locations. Because of these limitations, further analysis of this option was not pursued.

### **3. Routine Availability of De-icing and Abrasive Materials at Town Facilities**

There appears to be the potential for some savings through increased availability of de-icing/abrasive materials at town garage locations for county trucks while traveling their plow routes. This does not appear to be a "routine" need. In typical snow and ice conditions, county crews have adequate materials to complete their routes without the need for return to the county facility. There are conditions, however, that make it valuable for county crews to reload at some town facilities. County management staff should discuss this need with their crews. Arrangements should be explored for meeting this need for those plow route drivers that have experienced such situations. One on one discussion with town highway superintendents in needed areas should be adequate to address this situation. This will require assessing the availability of storage, reimbursement options, and other operational issues.

### **Additional Issues**

There are four other opportunities or issues to look at. First, there may be valuable changes toward a more coordinated approach to storm alert and call-out procedures within the county. Second, the New York State Department of Transportation and some local governments have converted to one man plowing operations. Exploration of the value of this option within the county may be valuable. Third, a common approach to expense reporting for winter maintenance will facilitate future considerations of options for shared or contract services within the county. Fourth, there may be cost saving available from a more coordinated or bulk purchase of de-icing/abrasive materials within the county. Each of these four options will be discussed in more detail below.

### **4. Storm Alerts and Call-out**

There may be opportunities to develop a more coordinated and effective system for alerting supervisors of road conditions and generating callout of crews. County law enforcement and emergency management agencies have some level of 24/7 presence on the roads. The Chemung County Highway Department has a watchman on duty at the county highway garage 24-7 during the winter months. The current system used by many local highway managers does not tap these capabilities in a systematic or coordinated way. Other counties have worked to develop a more coordinated system so that the town highway managers responsible for monitoring road conditions get some relief. This should be examined as an area for improvement and coordination on a county wide basis with the possibility of learning from the example of other counties.

Current practices by the Chemung County Highway Department are broadly similar to winter call-out procedures in other counties. Other counties in the region have a permanent night or second shift dispatcher during the winter months. County highway departments generally appreciate and utilize information on road and storm conditions provided by law enforcement (local police and sheriffs departments) and emergency services personnel. However, information on conditions has to be evaluated by road management personnel to determine the need for response. The Chemung County practice utilizes personnel in the “watchman” title to monitor conditions, including taking calls from other agencies. A watchman communicates, when needed, with an on-duty supervisor. If staff and equipment need to be deployed, the on-duty supervisor reports along with other staff and serves as a shift dispatcher. The county serves the dispatching function for county crews.

A modest extension of the current practice could accommodate some town highway superintendents or their designated on-duty supervisors. The current county call-out management could be extended to call-out on-duty town supervisory personnel *in affected areas* requiring winter maintenance. This slight modification would include only those towns that wished to participate. This kind of call-out coordination could improve coordination in snow maintenance activities. It would, of course, be a courtesy call and not require or dictate action on the part of the responding towns. This call-out assistance for town supervisory personnel could yield improved rest, alertness and decision-making for participating town staff.

**Implementation** County Highway managers should have the current highway superintendents polled by phone or mail for their interest in this kind of call-out coordination. Once identified, relevant county staff could meet and discuss the details of how to incorporate town personnel in county call-out operations.

## **5. One Person Plowing Operations**

The New York State Department of Transportation has been an advocate for conversion to one person plowing operations. This requires some changes in equipment and controls. It is also a point of controversy among highway managers. Given the presence of two person plowing operations, this is an issue worth some examination by departments in the county.

**Implementation** A balanced educational program with consideration of alternatives should be a next step on this issue. The Cornell Local Roads Program could assist in recruiting a panel of speakers and moderating a discussion of competing perspectives on this issue with highway managers in the county.

## **6. Consistent Budgeting and Financial Record Keeping**

In the long run, efforts to examine cost effective changes in service delivery will be hampered by current budgeting and cost accounting practices. Current budgeting and cost accounting practices make it difficult to compare the cost of service provision from one municipality or one practice to another. It would be valuable for local governments in the county to explore changes in these practices to improve the ability to evaluate and compare actual service costs. Software is available that assists in this area.

The key is improving the ability for local leaders and highway managers to aggregate costs associated with winter road maintenance and other tasks in the highway service

bundle. This can be done at various levels of detail. A starting point is to maintain and aggregate time card information by a set of project categories on a daily or weekly basis. Instead of this approach, most highway departments in the county seasonally allocate whole or nearly whole weekly or biweekly payrolls to winter maintenance, summer maintenance and possibly a few additional categories. By allocating payrolls seasonally, highway managers and municipal decision makers review figures that do not reflect the actual or approximate personnel costs associated with highway tasks like winter maintenance. A seasonal approach to allocating personnel expenditures frustrates year-to-year or other comparisons of service costs.

A further step would be to allocate other costs by service area or events. For example, the Village of Elmira Heights allocates materials and equipment costs (charged at state rates) by storm or plowing event. In this way, the Village knows the number of snow and ice events, and the costs associated with snow and ice removal for each event.

General knowledge tells us, and research has shown that the nature of the complement of local roads maintained varies significantly across the different types of municipalities. It is important to recognize that, in general, counties, cities, villages, and towns have road systems quite different from one another requiring different snow and ice control services. Generally speaking, cities spend more time and resources on plowing because their plow operators have to drive at slower speeds to contend with driveways, cul-de-sacs, intersections, alleys, and traffic. In contrast, operators plowing long stretches of uninterrupted county or town roads usually cover miles more quickly. Cities' and villages' costs per lane mile tend to be higher as a result. Cities typically have more operators per lane mile and spend more snowplow personnel hours on snow and ice control per lane mile than counties or towns.

In New York, almost all unpaved roads (dirt and gravel roads) are town roads. Unpaved roads generally require lower levels of winter maintenance than paved roads. As demonstrated in the first report, town road networks in Chemung County vary significantly in the percent of paved versus unpaved roads. Chemung County towns also vary in the volume of "city like" streets in their network. For example, the Towns of Elmira and Southport maintain "city like" neighborhood areas bordering the city of Elmira's southern portion. This mix of road types impacts costs per mile of road maintained among the county's town highway departments.

**Implementation** More comparable and useful cost data on winter snow and ice control could be achieved with preliminary agreement on cost accounting practices. As noted above, an initial effort should focus on actual versus seasonal reporting of personnel time. This can be accomplished by summarizing daily/weekly time card data and charging established highway expenditure categories. This could be established by joint agreement of a set of categories by highway managers, municipal governing boards and municipal accounting/bookkeeping staff. The consent and participation of all three of these groups would be necessary. Having comparable data would be valuable in helping highway managers and governing board members identify areas where different practices may lead to cost savings or service improvements. Comparable cost data would be even more valuable if municipalities would also lay out differences in service standards. Service standards and policy are discussed below in Section 8.

## **7. Bulk Purchasing of De-icing/Abrasive Materials**

Some highway managers in the county believe that there may be savings from a more coordinated approach to purchasing winter de-icing/abrasive materials. At the presentation of the preliminary assessment, pursuit of this option was referred to Chemung County's purchasing task force.

## **8. Winter Maintenance Policy**

*This item was added by the task force during a review of preliminary assessment reports.*

Public service standards can vary significantly from one municipality to another. General winter road maintenance service standards can range from a "bare pavement" policy to more modest goals of "passable" or "wheel track bare" road. These are usually flexible goals that apply to a "typical" or "normal" snow event, and generally not to extended storm conditions. A number of municipalities in Chemung County expressed a general policy of maintaining "passable" or "drivable" roads. However, none of the managers provided or indicated that there was a written policy for the municipality on general service standards. Agreement on some reasonable standard with appropriate disclaimers would be valuable for enhanced cooperation and coordination between highway departments in the future. Even if a general agreement on standards cannot be achieved, clarity on how municipalities differ would also be valuable in charting future cooperative endeavors.

**Summary of Shared Goals in Chemung County** Municipal road managers in Chemung County all indicated operational goals for road clearing in the morning. Managers expressed responsiveness to morning commuting needs and school bus routes. All highway managers indicated that to accommodate these needs, they tried to have key or essential routes plowed by 6:00 to 7:00 a.m. Depending on conditions, there may also be a need to apply de-icing/abrasive materials. Complete clearing of municipal roads follows the attempt to clear the "essential" road segments. Road managers indicated that they work to apply needed materials under icy conditions for the same morning time period when plowing was not required. There is some indication of a need for coordination between county and town crews to assure an open road network for these morning travelers.

A statewide review in Minnesota identified five "best practices" relating to administration and management which contribute to effective and efficient snow and ice control operations. The five are: adopt written snow policies, encourage cooperative or coordinated snow plowing services or facilities, contract for service when appropriate, measure performance, and plan for equipment replacement (Minnesota Legislative Auditor, 1995).

Clear, written winter maintenance policies are beneficial for several reasons. Writing and adopting policies to guide snow and ice control programs can protect the municipality, help employees and inform the public. Written winter maintenance policies can address: the timing of plowing and/or sanding/salting, priorities in routes and procedures, general guidelines for the use of materials, and the option to maintain flexibility to change procedures in response to weather and road conditions.

If adopted by a jurisdiction's legislative body, policies that balance the competing needs of road safety, employee safety, and fiscal constraints can offer some protection to communities against liability for accidents. Written policies can also be valuable to

familiarize employees with the jurisdiction’s standards and expectations. Clear written policies can also help educate residents about what to expect from their local government during winter snow and ice conditions.

It is important for highway agencies to reserve the flexibility to change their procedures depending upon the type of snow, wind, and times of day the snow falls. To make the policy workable, agencies can involve operators in developing the policy, as well as in reviewing and updating it as needed.

Agreement of service standards and policy can help agencies as they try to work together to provide winter snow maintenance across the county’s network of roadways and highway departments.

There is a summary of the kinds of information that is often included in snow removal policies below. Several examples of municipal snow and ice control policies are included in the appendix.

Statement of General Goals or Intent: *Examples:*

- Provide safe travel for motorists;
- Maintain passable streets for emergency vehicles and the general public, in an efficient cost effective manner;
- Provide a level of service to the community which will ensure safe and efficient movement of vehicles and pedestrian traffic during snowfall/icing events.

**1. Snow Removal**

- **Conditions** that will guide or trigger snow removal action (number of inches of snowfall, icing conditions, projected storm impacts, etc). Can be general or specific. *Example: “a snow emergency is declared when weather predictions or occurrences indicate the need.”*
- **Priorities** of snow removal and plowing. Critical, primary roads that are cleared first (arterial and collector streets or roads), intersections, timing of clearing roads used by school buses, safe driving conditions prior to “peak traffic hours.” etc. *Example: “Depending on the duration of any snowfall event, it may be necessary to continually clear primary streets in order to assure public safety”*
- **Exceptions** during particular hours (*Example: midnight to 5 a.m.*) days (*Saturday and Sunday*), holidays, or during late spring and/or early fall for snow removal.
- **Call-out** Procedures and guidelines for how and when different parts of the department’s personnel are notified for call-out report to work conditions after or before normal working hours. (*example, partial vs. full call-out*)
- **Timing** Provide a general estimate or range which indicates how long it will take for your crews to clear all roads after a storm.

- **Flexibility** Policy needed to help clarify and communicate what you typically do. It is important to include a general statement that provides administrative flexibility because of the tremendous variety of conditions you face. *Example: All of the above are standard procedures. These procedures may be modified by the highway supervisor in case of emergency or other specific circumstances.*
- **Application of de-icing materials** before during and after a winter snow and ice event.

Materials used

General guidance on when and how applied

2. **Related Issues** Parking & parking restrictions, removal of parked cars, removal policies, responsibilities for sidewalks, restrictions for private snow removal contractors (dumping or plowing snow onto public streets and roads), responsibilities of residents (clearing driveways, sidewalks, around trash cans, mailboxes, fire hydrants, etc.)
3. **Citizen Education** Descriptions of particular practices or patterns that help the public understand the department’s activities. Guidance on when to call, where to call or look for storm conditions and maintenance activities. Suggestions regarding what to carry in your car trunk for winter emergencies.

**Service or Performance Standards** Snow and ice removal policies can be supplemented or combined with measurable service standards or performance measures that are used to help gauge and improve municipal performance. By maintaining annual records on these measures, departments can assess their performance and better evaluate the effects of their practices. A number of departments using common measures can compare figures to identify practices that improve performance. The following example demonstrates how local departments can develop performance measures linked to service goals.

Example: Provide a level of service to the community which will ensure safe and efficient movement of vehicles and pedestrian traffic during snowfall/icing events.

Objectives:

- Plow snow and ice from all priority roads in “X” hours and from all other roads in “X” hours.
- Reduce average costs per winter snow plowing event

Measures:

- Average time to plow or sand routes (total labor hours to plow or sand/total number of routes)
- Average time to plow or sand routes per storm response, storm type, lane mile, operator, and crew or shift

**Implementation** The development of policy for winter maintenance is a joint project of the highway manager and the town or county governing board. Highway managers will have lead role because of their responsibilities and understanding of the service area. There is also significant potential gain from a county wide discussion of winter maintenance policy and standards. Town highway superintendents and the county highway staff could benefit from an effort to find a mutually acceptable policy statement.

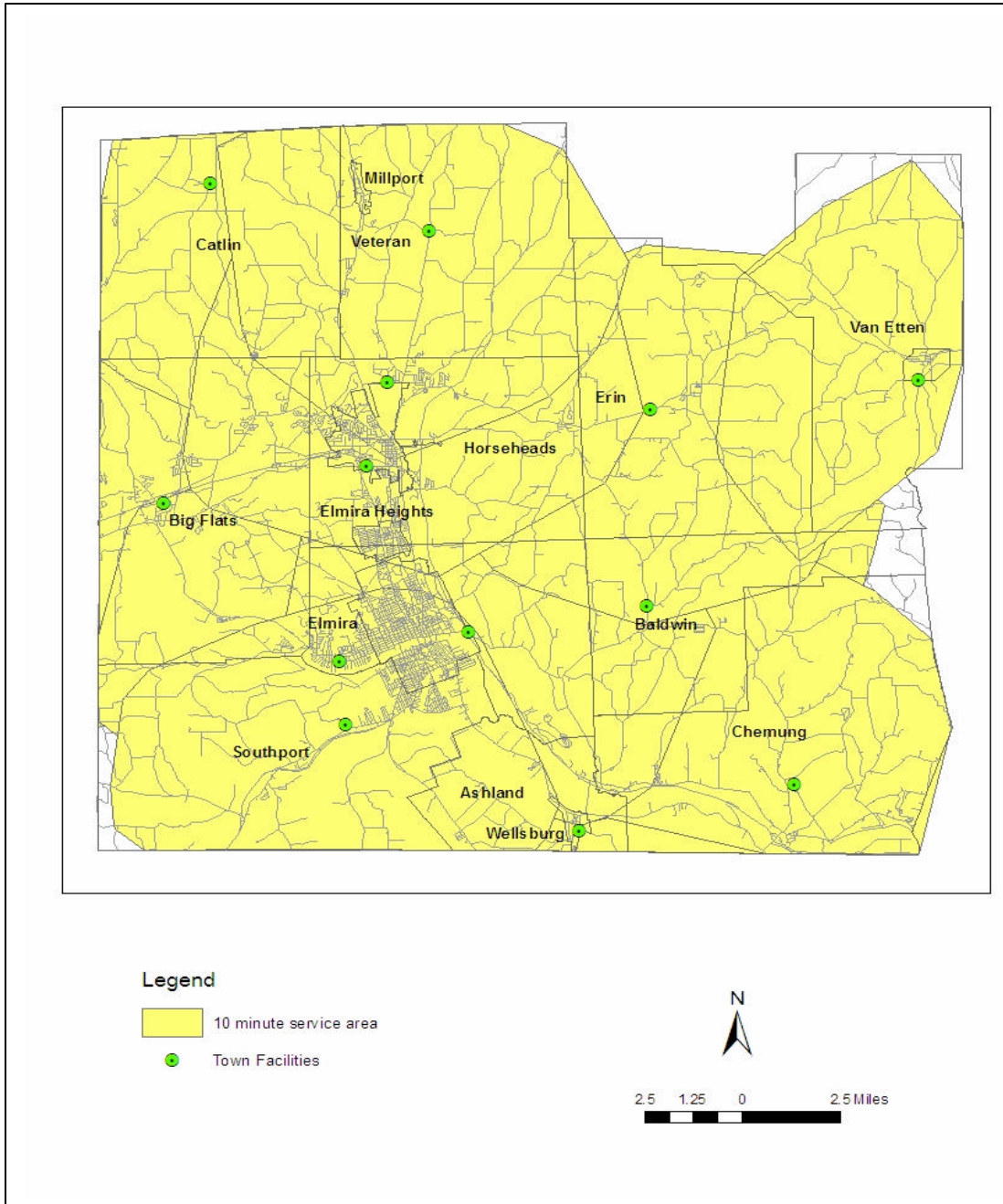
This could be accomplished by a subgroup of these officials drafting an initial statement for the remaining highway managers to review and modify. This discussion and any resulting agreed upon general winter maintenance policy would help both communicating with the public and in providing understanding between departments and governments. As noted earlier, a virtual county wide winter maintenance policy would have, at best, a limited set of items in common countywide. But, identifying the areas of difference in service policy would be very valuable as well. This discussion and policy would also be an important factor in future efforts for cooperation and improvement of highways services in the county.

County wide agreement on one or two basic performance standards would be a significant addition to this effort. Collecting and assessing common data on winter maintenance for all highway departments county wide would provide needed baseline information to help improve performance and identify cost saving practices. Agreement would be needed on common approaches to allocating costs, etc. Again, this would be an important activity for future cooperation and coordination within the county.

# APPENDIX

## Figure 2

### Network Analysis of Coverage of all Municipal Roads in Chemung County Deploying from all Town Highway Facilities



**Examples of Municipal Snow and Ice Control Policies**

# Town of Dartmouth

## Department of Public Works - Snow & Ice Control and Curbside Collection

### [Snow & Ice Control Policy](#) [Curbside Collection](#)

### *Snow & Ice Control Policy*

#### GENERAL

The purpose of this policy is to set up acceptable procedures and policies for the winter maintenance of public roads, as to snow and ice removal in the Town of Dartmouth, Massachusetts. The intent of establishing the Town of Dartmouth Winter Maintenance Policy concerning snow and ice is to provide a uniform understanding of the priorities and procedures used to combat snow and ice related conditions. The responsibility for providing snow and ice control for the Town of Dartmouth infrastructure including over 200 miles of roads and cul-de-sacs rest entirely with the Department of Public Works. Snow and ice control is considered emergency work in that pavement must be cleared any time of the day or night. Because of the potential hazard to the motoring public and high incidence of overtime involved in this program, careful planning and preparation must be done prior to the snow and ice season. Each winter storm has unique characteristics, climatological factors such as storm intensity and duration, wind, temperature and moisture content affect the total amount of snow and or ice accumulation and influence the methodology used to combat the resulting snow and or ice related conditions.

The timing of a storm will influence the removal of snow and ice. The Highway Division of the Department of Public Works has regular work hours, and if a storm requires attention after hours, weekends or holidays this would require overtime. The Highway Division endeavors to maintain adequate traction for pedestrians and vehicles properly equipped for winter driving conditions. This does not mean bare, dry pavement should be expected after each snowfall or ice storm. Furthermore, this does not mean the streets will be free of ice and snow.

#### ROADS AND PUBLIC AREAS

Obviously certain areas of the Town have a greater intensity of use and priority for maintenance to serve the users. The concern of safety, general welfare and duration of travel necessitate the priority be given to certain areas over others. It may be necessary to clear a route immediately for water main breaks, fires, ambulance calls, power outage or other obvious emergencies.

## **DETERMINATION OF NEED FOR MAINTENANCE**

The need for implementation of a maintenance policy shall be determined by snowfall of depth more than 3 inches or less if combined with freezing and icing conditions. Also the occurrence of an ice storm or freezing rain, which would make the Public ways difficult to travel. The weather reports issued by the National Weather Service shall be taken into account to prepare for anticipated maintenance service. The responsibility for ordering personnel and equipment into service for a winter maintenance operation shall be primarily with the Highway Supervisor or his designee. The police department, during off hours, shall keep watch and assist in notification to the Highway Supervisor or his designee of needed service. All complaints received must be forwarded to the Highway Supervisor during normal hours.

## **EQUIPMENT AVAILABLE FOR WINTER MAINTENANCE**

It should be expected that 90% of the Highway Division equipment should be available for a winter maintenance program and 75% of equipment should be kept operational with less than a one-hour repair time. Outside private equipment may be contracted for per as needed.

## **PERSONNEL AVAILABLE FOR WINTER MAINTENANCE PROGRAM**

All full time employees of the Highway Division shall be kept on call at all times from November 15<sup>th</sup> to April 1<sup>st</sup> to assist in snow and ice removal. Trucks with gross weight equal or greater than 26000GVW are assigned two personnel and trucks with less than 26000GVW are assigned one driver. Drivers must exercise care during plowing and sanding. They must attempt to prevent or minimize property damage such as mailboxes, etc. Outside contract the Superintendent of Public Works or his designee shall authorize help.

## **PLOWING**

Plowing shall consist of moving the snow or ice to either side of the specific area or may also include loading and trucking to a point of non-environmental concern. Plowing shall commence as the Highway Supervisor or his designee shall direct. Service shall be in order of priority of maintenance. The streets are prioritized by use, main streets being the number one priority with the secondary routes consisting of collector streets and then residential streets and cul-de-sacs are the last priority. The Department of public works usually does not call for plowing until 3 inches of snow have fallen. Anything less than 3 inches is treated with salt/sand mixed on the arterial and secondary routes only. This operation will cost between 10k and 30k depending upon the variables such as time of day, day of the week and storm duration.

When it is expected that 3 or more inches of snowfall will fall a full plow operation is activated and the operation is underway. Department of public works utilizes private contractors as needed. These trucks are assigned specific routes. Even after plowing the entire Town some streets are still snow covered. This is due to the amount of traffic the street has seen since the

beginning of the storm. Traffic packs the snow, which makes removal difficult. Some storms start with snow and change to freezing rain, which also makes plowing difficult and ineffective. Other factors that affect the quality of the plowing operation are the number of cars parked in the street and whether or not the parking ban was observed. There will be no plowing of private roads by the Department of Public Works. No snow or ice removed from private roads or property shall be deposited in the public ways in areas expected to be cleared by the Department of Public Works. This would include any of the following, which are prohibited:

1. Pushing snow or ice across roadway or walk.
2. Pushing or carrying and depositing snow or ice on a public way, where expected to be maintained for pedestrian or vehicular traffic.
3. The blowing of snow or ice onto a pedestrian or vehicular travel area.

Any of the above is dangerous and could cause injury or accidents, and may not allow for safe passage by the general public. Violations of any of the above may result in the department taken action against the property owner, punishable by a per diem fine to be set by ordinance until such nuisance shall be removed. The Town through notification of the property owner may also make removal. A penalty to be set by ordinance plus actual removal cost would be assessed against the property owner.

## **SALTING**

Salting shall provide placement of calcium chloride or sodium chloride upon a snow or ice surface to remove accumulation when temperatures are below freezing. Salt shall not be used only when absolutely necessary as determined by the Highway Supervisor in areas of high volume traffic or dangerous conditions. Salt may have adverse effects on the environment and shall be used with this in mind. Salt is not effective when temperature is below a certain degree adjusting by the amount of available sunlight.

## **SANDING**

Sanding shall consist of spreading sand to provide a traction surface on packed snow or ice and shall be applied only in areas of high traffic movement or unsafe areas as determined by the Highway Supervisor. Sanding of streets/roads can cause a buildup of sand in storm sewers and points of discharge, which could require additional maintenance. Therefore sand shall be used only as absolutely needed.

## **SAND AND SALT MIXTURE**

A mixture of sand and salt maybe required as directed by the Highway Supervisor to provide a safe surface for traffic.

## **PROPERTY DAMAGE**

During the course of operations throughout any given winter, a certain amount of damage to Town and private property may be incurred by the snow removal forces. If a Town plow or truck damages a mailbox either through direct contact or due to forces of the snow rolling off the plow, the mailbox will be repaired or replaced in accordance with established guidelines with a standard type mailbox. The Town cannot replace decorative mailboxes. A standard design will be used for all mailbox replacements. A property owner who installs decorative materials on the road does so at his/her own risk.

## **DEPARTURE FROM POLICY**

The Town recognizes that the conditions may be so unusual or unexpected that a departure from these general policies should be authorized. Therefore when conditions warrant, the Public Works Superintendent in consultation with the Highway Supervisor or his/her designee may order a departure from these general rules when in the opinion of the Superintendent, condition requires such action.

## **WINTER TRAVELING TIPS**

Stay off the roads unless it is absolutely necessary to travel  
If you must go out leave early and expect your trip to take longer  
Drive slowly many speed limits are reduced during winter weather events  
Maintain extra distance from the car in front of you  
Obey the Parking Ban

## **WINTER EMERGENCY KIT**

**We encourage drivers to carry the following in their vehicles where possible:**

First aid kit	Windshield scraper
Sand or cat litter (for traction)	Blanket (for yourself as well as for the passengers)
De-icing spray	Snowbrush
Tire chains	Flashlights
Rope	Flares or reflective emergency triangles
Cellular phone or CB radio	

**Also helpful are :** extra fuses, fire extinguisher, waterproof winter clothing, jug of water and food

## **EMERGENCY SNOW PARKING PROCLAMATION**

When it is determined by the Superintendent of Public Works, that the extent of a storm will call for more than normal operations an emergency proclamation will be issued. When an emergency snow plowing proclamation is issued, the following will be effect:

1. No parking on hydrant side of street
2. If no hydrant, park on even house numbered side
3. No parking ban remain in effect for the duration of the proclamation

## **WINTER STORM EMERGENCY PHONE NUMBERS**

Emergency 911

Highway & Sanitation Division 999-0744

Dartmouth Police Dispatch 910-1734

State Police 993-8373

## **NEWS MEDIA**

Channel 18 DCTV 984-1359

Channel 6 TV (401) 453-8044

Channel 10 TV (401) 455-9105

Channel 12 TV (401) 438-7200

Standard Times City Desk 997-7411

WBSM – AM 1480 993-1767

WNBH – AM 1340 979-8003

WFHN – FM 107 993-1767

WJFD – FM 97.3 997-2929

## *Curbside Collection*

### **REFUSE**

Refuse must be at the curb by 7:00 a.m. on your regular collection day. Containers must be metal or non-brittle plastic with handles. Plastic bags must be used. Total weight **must not** exceed 70 pounds when full.

### **WE RECYCLE THESE ITEMS**

**LEAVES** are collected at the curb each spring and fall. *Dates to be announced.* Leaves are **ONLY** collected in biodegradable bags. Leaves in plastic bags or in barrels will not be collected. Leaves are collected on your regularly refuse scheduled collection day by a separate truck. Leaves will not be collected at the curb during other times of the year.

**NEWSPAPER** Newspapers, including inserts tie with string or bundle in brown paper bag. Place on one side of the blue bin or place inside of the blue bin loose and clean bottles and cans on top. *Loose newspapers cause litter. Please place loose newspaper on the bottom of the bin, otherwise bag or tie.*

**NO** magazines or junk mails, cereal boxes, tissues, egg cartons, or plastic bags

**NO** newspaper pickup on rainy or snowy days

### **GLASS BOTTLES & JARS**

Rinse and clean, remove lids and place loose in the blue bin.

**NO** dishes, light bulbs, windows, pyrex, mirrors, ceramic or broken glass

### **METAL FOOD & BEVERAGE CONTAINERS**

Rinse and clean, including clean aluminum and tin foil & plates. Place loose in blue bin with glass and plastic bottles.

**NO** pots and pans, coat hangers, paint cans or other scrap metal.

### **PLASTIC CONTAINERS**

Rinse; remove lids and place loose in blue bin with glass bottles and metal cans. Only milk plastic bottles with the number 2 inside a triangle of arrows on the bottom of the bottle is currently allowed.

**NO** motor oil containers, hood milk containers, toys, flower pots, film, plastic or styrofoam

Free blue bins are available at the Highway and Sanitation Division located at 976 Russells Mills Road. Blue bins must be at the curb by 7:00 a.m. on your regular collection day. If you have any questions, please call 999-0744 during office hours.

**Office Hours** : Monday thru Friday 7:00am – 3:30pm



## SNOW AND ICE CONTROL

The term "snow/ice control" as used herein is to cover all work connected with snow removal operations including application of anti-icing, de-icing, abrasive material, snow plowing, and snow blowing. Snow/ice control is deemed an emergency and will take precedents over al work. Snow/ice control is conducted on a prioritized basis.

The Washoe County Roads Division system contains approximately 653 miles of paved streets, and 405 unpaved roads. Within the system, all roads are classified as Priority 1, Priority 2, and Priority 3, snow routes. The Roads Division goal is to restore two way traffic movement within 24 hours of a storm event on all Priority 1 and Priority 2 snow routes. Priority 3 routes are addressed soon there after.

### **PRIORITY 1**

Roads which are identified as major arterial and collectors, major structures, overpasses, bridges, steep grades, school bus routes at or above 6,000 feet, emergency vehicle routes, fire station sites, schools and freeway feeder streets.

### **PRIORITY 2**

Roads which are identified as secondary arterial, secondary collectors, residential roads, all remaining school bus routes.

### **PRIORITY 3**

All unpaved routes, cul-de-sacs and County jogging/bicycle paths. Snow/ice control activities are staged out of these four maintenance yards: Longley Lane, Incline Village, Gerlach, and Vya. From these locations, crews address the prioritized snow routes. Each location is equipped and staffed to function independently

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## **Snow and Ice Control**

There are approximately 107 miles of Township roadway. We also perform snow and ice control on 12.5 miles of state owned roads. The Township has 13 trucks with material (salt and anti skid) spreaders and plows. We also have an additional 4 trucks with plows, 2 backhoes and one front end loader. Depending upon the storm, we lease additional equipment to assist our forces in clearing the roads for which we are responsible.

Public Works personnel monitor roadway conditions during normal daylight and evening hours. After late evening and on weekends, we are kept informed by Police Department personnel of the conditions and/or the need for some type of treatment. We also have ongoing communication with the Tredyffrin/Easttown School District regarding Tredyffrin road conditions.

The Township has established primary roadways in each of our nine snow and ice routes that are done first to get the majority of residents moving. Our crews proceed to address less traveled roadways and cul-de-sacs. Cul-de-sacs are typically done last due to the limited amount of traffic and because they normally take longer to clear.

### ***Parking***

Parking in the street is prohibited during snow events from the beginning of the accumulation until the roadway is cleared. It makes it difficult for our plow trucks to maneuver and prevents us from plowing curb to curb. The Police Department may issue parking tickets to illegally parked vehicles and will tow vehicles left abandoned on the roadway or parked in such a manner as to create a hazard.

Parking permits are available for residents with steep driveways and are only issued on a case-by-case basis. Call (610) 644-1400 or email [permits@tredyffrin.org](mailto:permits@tredyffrin.org) to apply for a snow parking permit.

### ***The following streets or parts thereof are hereby designated as snow emergency routes:***

1. King of Prussia Road - Full length of road
2. Radnor Road - Full length of road

Pushing or throwing snow into the street is prohibited as well as placing obstacles in the street to block plows or some parking spaces. If it snows on your trash day, trash bags and cans should be left at the end of the driveway behind the curb.

## ***Sidewalks***

Sidewalks must be cleared at least twenty-four (24) inches wide within thirty (30) hours of the end of precipitation.

**TOWN OF DEERING**  
**762 Deering Center Road**  
**Deering, NH 03244**  
**INCLEMENT WEATHER POLICY**

It is the goal of the Town of Deering, NH, to provide a level of service to the community, which will ensure the safe and efficient movement of vehicle and pedestrian traffic during snowfall/icing events, and provide for removal procedures and operational tasks.

**General Maintenance Requirements:**

*Snowfall less than 2"*

Generally, snow removal is not necessary, sanding procedures are adequate to provide safe driving conditions during inclement weather.

*Snowfall of 2-6"*

Typically, snow removal begins as soon as practical after snowfall has ceased, depending on the timing of the snowfall event. Every effort will be made to provide safe driving conditions prior to "peak traffic hours".

*Snowfall greater than 6"*

Each district has a system of primary and secondary streets that link neighborhoods, major arterial routes, and facilities such as schools, etc. Depending on the duration of any snowfall event, it may be necessary to continually clear primary streets in order to assure public safety. Once snowfall has ceased, priority streets within each district will be cleared before snow removal begins on secondary streets. In addition to streets and alleys, the Highway Department is responsible for snow removal from parking areas at Town hall, and the Highway Department.

*Equipment and Personnel*

The Highway Department has the following equipment used to remove snow from Town roads and parking areas: three (3) single axle trucks (with snowplows, wings and sanders) and one (1) ten-wheeled multi axle truck equipped with the same, one (1) grader with snowplow and wing, one (1) front-end loader, one (1) backhoe with loader, and one (1) one-ton with snowplow.

All Highway Department maintenance personnel will be available as needed for snow removal and deicing operations. In addition to this, seasonal or temporary employees from the private sector may be used during extreme adverse weather conditions. All calls or complaints from the public will be referred to the Highway Department during normal working hours. He will keep a running list of the problem areas reported and respond to those areas on a priority need basis. The normal scheduled working hours are from 7:00 AM until 3:30 PM, Monday through Friday.

#### *Call out procedures*

During regular scheduled working hours the Highway Department, with assistance from the Police Department, will monitor street conditions and are responsible for analyzing street conditions and determining when to begin snow removal and/or sanding operations. During nonworking hours the Police Department will monitor street conditions. The dispatcher will notify the street superintendent after receiving notice from the law enforcement shift supervisor of snow and ice conditions requiring attention.

#### *Snow removal procedures*

If a snow or ice event occurs after or before normal working hours or on holidays or weekends the street superintendent or his/her designee will be notified by the dispatcher after receiving notice from the law enforcement shift supervisor. A snow emergency is defined as a point in time when 2" has fallen and it is still snowing or if weather forecasts indicate that additional snow will fall. At that time employees will begin plowing as close as practical to the time the snowfall ceases. The intent is to avoid plowing more than once for a single snowfall.

Depending on the amount of snow, our goal is to remove snow from curb to curb within 48 hours on primary and secondary streets. Final clean up of areas will take place the next working day. The Town is not responsible for snow/ice deposits in driveways or sidewalks due to the removal operations.

#### *Plowing priorities*

In determining priority routes, considerations are given to topography, traffic volumes, and special usage. Heavily traveled routes are given greater priority over less traveled routes.

Streets adjacent to schools, medical centers, and commercial areas are given additional consideration. Necessary county roads and state highways outside the Town's corporate limits will be maintained by the individual jurisdictions.

#### *Sanding operations*

When streets become glazed or icy, sanding units will be dispatched to sand stop signs, intersections, hills, curves and other problem areas as needed. When icing

conditions exist the dispatcher will notify the Highway Department immediately to enact anti-icing or deicing procedures. All vehicle or pedestrian accidents will be served as a priority.

### *General*

All of the above are standard procedures. These procedures may be modified by the Road Agent in case of emergency. Written snow removal maintenance procedures will be reviewed by the Road Agent annually and changes may be made if deemed necessary. The Board of Selectmen will authorize final approval. To the extent that any previous rule, regulation, policy or past practice, written or unwritten, is in conflict with the provisions of this policy, such is hereby withdrawn, voided and all personnel should conduct themselves in conformity with the policy. This policy is not intended to create any duty to any individual member of the public or to protect any particular or circumscribed class of persons. All or parts of this policy may be affected by at least one or more of the following, which will delay all or some of the services provided:

- Equipment breakdowns;
- Vehicles disabled in deep snow;
- Weather so severe as to cause crews to be called in from the streets, (i.e. whiteout conditions/severe icing)
- Equipment rendered inadequate by the depths of the snow or drifts; crew breaks, and breaks required for fueling, refilling of material spreaders and installing chains or new blades; and
- Unforeseen emergencies.

### *SNOW ROUTES*

1. **Primary**
2. **Secondary**
3. **Schools**

## **Additional Information:**

### *Location of mailbox*

The Town is not responsible for the effects of plowing on your mailbox. Nor is the Town responsible for clearing the snow from around your mailbox. Mail and newspaper boxes are allowed, at the owner's risk, in the Town's right-of-way for purposes of convenience. Claims for damages or other liabilities resulting from their installation are the responsibility of the owner. The following are suggestions for reducing the possibility of damage and liability:

Mailboxes should be installed at least 3 feet from the edge of pavement. Installations should be sufficiently sturdy to withstand the weight of heavy snow resulting from plowing operations.

*Only mailboxes that have been damaged by Town snowplows will be repaired by the Town.* If it is determined that the mailbox is damaged or knocked down due to the force of the snow the property owner is responsible for repair or reinstallation. Temporary repairs will be made by the Town to mailboxes that are hit by the Town plow to avoid interruption of mail service. Permanent repairs will be made when weather permits. The Town is not responsible for sprinkler heads, shrubbery, planters or any decorative materials located in the right-of -ways, that are damaged as a result of snowplowing.

### *Winter Parking*

*The Winter Parking Ordinance is in effect from November 1<sup>st</sup> to April 1<sup>st</sup>.* During that time, no person shall park any motor vehicle on any public road between 12:00 midnight and 8:00 A.M. or at any other time in such a manner as to impede snow removal operations. Any vehicle parked in violation may be authorized to be towed by the Highway Department, Chief of Police or their agents, or by independent contractors engaged by the Highway Department or Chief of Police. Any vehicles so towed shall be stored and released to the owner only upon payment of the cost of towing. Any person violating this ordinance shall be subject to a penalty not to exceed \$50 for each offense.

### *No Snow on the Streets*

The Department wishes to remind residents of the ordinance regarding placement of snow on the streets. No person is allowed to place any snow or ice upon the surface of the traveled portion of any Town maintained portion of a road or highway except with Town approval by the Road Agent or his designated representative. Anyone violating these by-laws shall be subject to a penalty not exceeding the following: first offense – written warning; second offense - \$50 penalty; and third offense - \$100 penalty. Please remember, when you blow, shovel, or plow snow into the street, you are creating a very dangerous situation for drivers. The continuity of their speed, important to winter driving is interrupted, which can cause swerving and accidents.

### *Town's Right-of-Way*

We would like to remind residents *not* to put bark mulch, crushed rocks, stonewalls, fences, irrigation systems, trees or lawns in the Town right-of-way. The Town has a 50-foot right-of-way (25 feet from the center of the road – which includes 13 feet from the edge of pavement) on Town maintained roads. The Town is not liable for damages that may occur to property in its right-of-way. These items may interfere with heavy equipment and become a hazard for vehicles and pedestrians. They often cause drainage failures, and thereby road deterioration. In the process of snow removal if a property owner's grass is damaged, the damaged area will be repaired by the Highway Department in the spring. The Town is not responsible for cleaning of right-of-ways due to build up of sand or for dead grass due to chemical applications from Town de-icing operations.

### *Cleaning of culverts*

Deering Homeowners may not be aware that they are responsible for maintaining their driveway culverts in order for the culvert to remain clean at all times (RSA: 13, VI). We ask that you periodically check your culverts and free them of debris. This will go a long way toward alleviating erosion and drainage problems in the future.

### *Cleaning of catch basins*

It would be a tremendous help if the residents would help in keeping the catch basins clean from the falling leaves and pine needles.

### *Driveway Permits*

All new constructions require a driveway permit. A driveway permit is also required if you are relocating or modifying an existing driveway.