

To: Town of Spafford Town Board/Highway Superintendent
From: Town Highway Committee (K. Adams, M. Delaney, L. Springstead, L. DeWitt, L. Hanlon)
Re: Town of Spafford: Highway Committee Report
Date: August 14, 2014

INTRODUCTION

The Spafford Town Board appointed a committee to address the following issues with respect to the Town Highway Department. The intent of the committee is to both support the Highway Superintendent and his team, and to make an objective assessment of the buildings, equipment and operations. Members of this committee are the following:

Lou Hanlon, Chair
Lee Springsteen
Luke DeWitt
Mark Delaney
Kathy Bragg-Adams

PROJECT MISSION:

Make recommendations to improve the overall efficiency and effectiveness of the Town Highway department so as to aid in Town Board and Town Highway Superintendent decision-making.

KEY ISSUES:

1. PESH recommendations were not fully implemented.
2. Current facility conditions in Town Highway facilities are below par. Though some issues are a result of structural issues over which the staff has no control, other issues may be a result of current work processes or practices that could be adjusted for better results.
3. Currently, there are insufficient reserve funds available to support a capital building project.
4. One plow/dump truck should be replaced in the near term. There is a partially funded reserve for this truck.
5. The Town Board has questions about the current operating cost of the Highway Department, which appears to be the highest in Onondaga County.

PROJECT OBJECTIVES

1. Assess and recommend the best approach to address the issues raised in the PESH report, and in the Codes Enforcement Officer's review of the Town Highway Garage
2. Determine the long-term viability of the Town Highway Garage building, and recommend the most efficient and effective way to address the structural, size and operational concerns.
3. Analyze cost drivers in the Highway Department; determine why Town of Spafford has the highest cost per mile of Onondaga County towns.
4. Evaluate equipment cost, maintenance and replacement processes and plans; make recommendations for improvements where needed
5. Evaluate road project planning, and make recommendations for process improvements where needed
6. Evaluate staff training and support needs
7. In the process of the overall assessment, identify potential opportunities for cost savings that would reduce or eliminate the need for tax increases to fund needed equipment and Town Highway Building projects.

PROJECT PROCESS:

1. Gather Data and Assess Current Situation
2. Recommend Short Term Actions
3. Prepare Summary of Findings
4. Analyze Findings
5. Prepare and Submit Report and Recommendations

ASSUMPTIONS

The Highway Committee approached the project in this way:

1. We are neighbors, friends and citizens who come together with a common mission: to find the facts as best we can and to help our stakeholders—Town Board, Highway Department and involved citizens—to understand our Highway operations, our costs, and to provide information so that each can make the best decisions possible regarding the cost effectiveness of the Highway Department. As the largest single category of expense in most Town governments, Spafford, like other such towns, is interested in ensuring the most effective use of tax dollars for our citizens. We support that objective.
2. Our approach is as neutral as we can make it. We believe that a properly equipped Highway Team, armed with good data, a good environment and good management, will perform well for the citizens of the Town.
3. We believe that good information is essential to good decision-making, and though we have found some information gaps, we are not interested in revisiting the past. Our recommendations focus on how to improve our Highway Operations now and in the future.

ACTIONS:

Our operations review consisted of the following:

1. Inspection of the Town Highway Garage and Storage Barn. Carl Weirs provided the tour and pointed out issues that were of concern to him and his employees.
2. Review of PESH and Codes Enforcement Officer inspection reports
3. Explored feasibility of adapting current Town Highway Garage for long term Town Highway Department needs. Produced concept drawings/sketches of potential alternatives.
4. Inspected all town roads, culverts and bridges. Reviewed plans for highway maintenance and repair.
5. Reviewed maintenance records of selected pieces of town highway equipment. Prepared simple DRAFT spreadsheet tool to monitor time and expenditures.
6. Reviewed 2013 Highway expenditures; analyzed largest cost drivers.
7. Interviewed selected neighboring Town Highway Superintendents and visited their facilities.
8. Reviewed NY State Highway Laws and NY State Highway Superintendent Manual
9. Attended NY State Sponsored Highway School (Cornell Local Roads Program)
10. Prioritized short and longer-term issues. Note: We support the actions already underway to correct the electrical issues, repair the most urgent structural issues of the building, and install cabinet storage for selected materials. Additionally, we recommended that the Town Board take the following action as soon as is practicable: Replace the exit door on the north side of the building with one that meets code and allows appropriate ingress and egress from the building. We believe this action would represent a modest cost, and is required regardless of other actions that may ultimately be recommended to address the building concerns.
11. Reviewed all collected data and individual observations. Discussed findings, critical issues and prepared final report.

SUMMARY OF FINDINGS

General

1. **QUALITY:** Quality of work of Town of Spafford Highway department is generally good to excellent.
2. **MANAGEMENT TOOLS:** The Town of Spafford Highway Department does not appear to make use of modern management tools, e.g., computer programs or other technology systems that would provide data and information about costs, labor utilization and would reveal problem patterns.
 - a. Although maintenance and repair for each piece of equipment is kept in a binder, the data is kept manually. Using a software based maintenance management system would enable the Superintendent to quickly analyze costs, establish economic replacement cycles, or provide constructive feedback and reinforcement to the highway department team members.
 - b. Utilization of equipment, materials and labor does not appear to be formally tracked. Therefore, we do not know:
 - i. Costs to maintain individual roads or equipment
 - ii. Labor hours per job/project either historical or planned
 - iii. Optimal maintenance/repair cycles per road segment or structure
3. **REPORTING:** The Town of Spafford Highway Department does not provide detailed reporting to the taxpayers as to the costs associated with maintaining the infrastructure of the Town of Spafford.

Budget Process

1. **BUDGET ASSUMPTIONS:** The budget process appears to assume that the previous year's budget amount is the starting point for the next year's budget. Additional items are listed, but estimates for detailed costs by category are not provided.
2. **SECTION 284 REQUIREMENTS:** The budget process does not appear to follow the requirements in the Highway Law, Section 284. That is, each year, the Highway Superintendent is required to submit a budget for a defined set of projects. Each project is described and the costs associated with the project are defined. Once the budget is agreed upon and approved, the Highway Superintendent and the Town Board members (a majority) enter into a "284 Agreement" in writing. Thereafter, the Town Board may approve bills associated with each project for payment.

Buildings

1. **SIZE:** The Town of Spafford Highway Garage is too small for the vehicles in use.
 - a. Space for maintenance work and proper storage of tools and supplies is limited, constraining the team's ability to do an excellent job.
 - b. Parking the Highway Department trucks with plows requires all available depth of the building. Although building ingress and egress is not overly limited, movement around each truck and from one bay to another is limited.
2. **MAINTENANCE:** The program or process for performing maintenance on the Town buildings and grounds is not clear. For example:
 - a. Buildings do not appear to be kept clean and orderly on a regular basis. Sand/salt mix is predominant on floor and on trucks, and may have contributed to metal failure on building columns.
 - b. Building temperature found at 70 degrees F in winter. The furnace fresh air intake is located too close to combustible fluids.

Town of Spafford: Highway Committee Report August 14, 2014

3. **CONDITION:** The list of issues on the PESH report and on the CEO's report were still outstanding at the time of our first observation of the building. A follow-up inspection on 8/12/14 found that some items were still outstanding.

Equipment

1. **MAINTENANCE:** Equipment appears to be reasonably well maintained. Records of scheduled maintenance and repairs are kept, although the time required to perform individual truck/equipment maintenance and repair does not appear to be kept, and if so, the full cost to maintain the equipment cannot be calculated.
2. **UTILIZATION:** Utilization of equipment is not monitored—e.g., hours of use per year or season, hours per project. Therefore, it is difficult to make a cost-effective decision about how often a piece of equipment should be replaced, whether the Town should own, lease, temporarily rent or share various types of equipment.

Operations

1. **PROJECT PLANNING:** Projects seem to be selected and chosen solely on the assessment of the Town Highway Superintendent, without aid of the information tools mentioned above. While we acknowledge and recognize the experience and judgment of the Superintendent, even the most experienced of managers in today's cost conscious environment are advised to use data/information to guide and support decision-making. Software and assistance is available from the Cornell Local Roads program. Commercial programs to manage roads and equipment maintenance are also available at fairly reasonable costs.
2. **REPORTING:** Reporting to the Town Board and citizens at the monthly Town Board meeting appears to focus on issues and funding requests. Regular accomplishments and planned projects are seldom included, though these topics are routinely addressed by other department heads.
3. **DECISION PROCESS:** Operations management is not data driven. Because the resources of the department are not tracked by project, by road, by employee or by task, the Superintendent is unable to track costs by individual roads.
 - a. For example, the Superintendent stated, "gravel roads are more expensive to maintain than paved roads." However, there is no data to confirm or reject such statements. How do we know what the costs are for each road so that we, as a community, can support budget decisions to fund individual projects?

Shared Services

1. **COLLABORATION:** The Spafford Highway Department already shares services. However, we don't know how many hours this entails, both for our employees and our equipment.

Human Resources

1. **UTILIZATION OF TIME:** The Spafford Highway Department does not appear to track time allocated to the various tasks of the department, e.g., equipment maintenance or individual projects on roads, culverts and bridges.

CONCLUSIONS

Our most significant observation is that the Highway Department operates without clear data to support its requests or guide its decisions. That is not to say that the Highway Department has no knowledge of its operations, only that this knowledge is tacit and experience based. The Highway Superintendent has a “sense” when costs on a particular machine are trending higher, but there is little readily available data to support his conclusions.

In comparing the budget, staffing and equipment with nearby towns of similar size, we find that our Highway Department has a higher cost per mile, and in some cases, more equipment and a slightly larger staff. One of our foundational objectives was to find out why the cost per mile was noticeably higher than similar towns. We still do not know. We have only a partial story. We know to whom our funds are paid, but we sometimes do not know what the purchased items or services were used for. Even when this is tracked, locating the information is a tedious manual process. We know the equipment is being maintained, but we don’t know how much labor that requires. We know that our equipment and staff are used reciprocally for summer projects to accomplish work with nearby towns, but we don’t know what percentage of our labor and equipment is consumed in this way. We suspect the Highway Superintendent knows the answers to some of these questions, but the information is not formally tracked or reported.

During the course of this operations review, we have been told that a Highway Superintendent operates with independent authority and while that is true, closer examination of the law reveals that there is a limit to that authority. Specifically, as part of the Town Budget System, the Highway Superintendent “must submit an estimate showing the amount to be raised by taxation for the construction, improvement, maintenance and repair of town highways.” “A Town board may decrease or increase the Highway Superintendent’s expenditures under the town budget system.” Once the projects and budget amounts are agreed to, the Town Board and the Highway Superintendent are required to enter into a Section 284 agreement.

“The Highway Law §284 agreement is the single most important transaction a town Superintendent of Highways will enter into each year. . . . This annual agreement imposes specific limitations on the power of a town Superintendent of Highways to act and expend highway fund monies. Once the highway fund, subject to the Highway Law §284 agreement is established, Highway Law §284 requires that a written agreement must be entered into before those funds can be legally expended. The agreement must establish a plan for the repair and improvement of highways, sluices, culverts, and bridges and walks, at such places and in such manner as may be agreed upon by the town Superintendent of Highways and Town Board (Highway Law §284). After the agreement is entered into, moneys may be paid out by the town Supervisor only “on vouchers approved by the town Superintendent in accordance with such written agreement.”

The most recent S284 agreement that we could locate was entered into between Merrill Clark and the Town Board members in office in 2000.

Note: Quotations are from the 2014 manual: Powers and Duties of Local Highway Officials, Published by the Cornell Local Roads program, which contains specific citations from relevant New York State laws.

Without adequate data and tracking of costs and labor, the Highway Superintendent’s ability to estimate and project costs for each budget year is limited, and thus his ability to comply with these agreements is similarly limited.

The legal requirements of Section 284 of the Highway Law that bind both the Town Board and the Highway Superintendent are very specific. Simply put, if the Highway Superintendent undertakes projects outside the S284 agreement, or if no agreement is in place, the Town board cannot legally authorize payment for such projects.

The combination of these two factors: the absence of data necessary for reasonable management decision-making, and the absence of associated controls exercised by the Town Board yield a budget that is not rooted in today's fiscal realities. With the tax cap and the resounding message that tax payers sent to the newly elected town officials restricting any contemplation of tax increases, we must find a way to fund new equipment and better facilities within the current budget.

Our theory is that finding funds within the current budget is feasible, but without the data to provide a clear picture of our current expenditures and internal costs, we cannot be sure. We offer the following recommendations to bring the fiscal picture into clearer focus, and to enable the Town Board and the Highway Superintendent to determine the best approach to fund the needed resources. We also believe that our recommendations to adopt "best practices" from other towns as well as to use methodologies recommended by the Highway School resources will help the Highway Superintendent to more cost-effectively manage the Highway Department on behalf of the citizens of Spafford.

RECOMMENDATIONS

General

1. Contact Cornell Local Roads Program to determine available assistance with selection of software and transition to a more comprehensive system of tracking costs and activities of the Highway Department.
2. Begin now to track costs and labor by project.

Budget Process

1. Follow the required Town budget system:
 - a. Budget for projects, with funds set aside for unforeseen requirements
2. Once the budget for 2015 is established, enter into a Section 284 Agreement between Town Board and Highway Superintendent.
3. Allocate savings to reserve fund for new/modified building and for new equipment.

Buildings

1. Although we acknowledge that the current Town Highway garage is inadequate over the long term, funding for a new building is not currently available. In the interim, Town Highway employees need to do planned/preventative maintenance on the Town Hall and Garage on a regular basis, including cleaning and organizing tools, equipment and supplies. Such work is consistent with expectations of other highway departments and is a reasonable expectation for the Town of Spafford employees. Additionally, the PESH report citations are primarily matters of housekeeping and proper storage of materials. A list of annual maintenance and emergency repairs should be completed and submitted to the Town Board and citizens.
2. Begin now to designate funds for a new building or an addition to and rehab of the existing building. Though further study is required to determine the best alternative, we believe the funding can be accumulated and a suitable building project can be accomplished cost effectively within the next five years. As a starting point, the Town Board may consider the building expansion approach as conceived the attached drawings.

Equipment

1. Daily truck inspection should be performed and logged.
2. Analyze equipment use by project or task and devise a method by which each piece of necessary equipment is acquired, maintained and replaced on a schedule that optimizes the cost effectiveness of the fleet. Expand "own" and "rent" alternatives to include:

- a. Own/replace on optimal schedule
- b. Lease/replace on optimal schedule
- c. Rent for occasional use
- d. Share with 2-3 towns for intermittent but routine use
- e. Other?

Note: Sharing equipment with other municipalities requires Town Board authorization.

Operations

1. Consider a planned road and culvert maintenance program consistent with best practices recommended by the Local Roads program. This would entail establishing a 10-20 year cycle of planned maintenance for each road in our system, with funds set aside for emergencies. Tracking road maintenance cost and frequency will enable the Highway Department to monitor costs by road and project type, and will make this information available to the Town Board as well so that all can make appropriate decisions on behalf of the community.
 - a. Without adequate data, it is difficult to determine the potential savings available with a planned road maintenance program, but surrounding towns with similar road types and terrain report an annual operating budget in the 3-500K range. If we could achieve similar economics, then a reserve for equipment replacement and modifications to the building could be accumulated over a 3-5 year period.
2. Improve documentation and tracking of equipment maintenance, daily inspection, and project costs. Use software and Cornell Local Roads resources to help implement the use of these tools so as to not burden the Superintendent with the start-up of this project. Note: this is a substantial and distinct project that will require its own plan, including needs analysis, goals, implementation plan, training and equipment requirements, etc. While this is a substantial undertaking, we believe it will assist in better managing costs and resources, and will provide data typically required to obtain grants and funding from state and federal sources.
3. Consider planned and documented experiments with different materials and methods that would enable the Highway Department to determine and use the most cost effective approach to both snow removal and highway maintenance.

Budgeting/Purchasing

1. Require Highway Superintendent to annually submit projects for budgeting and follow procedures out lined in Section 284 of the Highway Law. This will ensure that the Town Board, and the citizens of Spafford are apprised of the planned expenditures each year.
2. Establish a reserve fund for road repairs required outside the normal maintenance schedule. (If feasible, this reserve fund should be maintained in the general fund so that maximum budgetary flexibility and visibility is available to the town board.
3. Where feasible and cost effective, consider using Onondaga County purchasing expertise and services. Explore potential to negotiate prices below state contract pricing.

Human Resources

1. Require town highway employees, except Highway Superintendent, to use a fingerprint or swipe card time clock, or some other track-able work order system. Provision is in the existing union contract, and this would aid in tracking the costs of each project for continuous improvement efforts.
2. Submit all incidents regarding truck damage, building damage, and property damage to Town Supervisor immediately.
3. Perform periodic employee evaluations.