Solid Waste and Recycling Needs

In the Event of an Unanticipated Landfill Closure

Bethlehem Advisory

Transfer Station Committee

May 2020

To The Select Board

Please accept this contingency plan for your consideration.

# The Purpose of a Contingency Plan

It is possible that North Country Environmental Services, Inc. (NCES) will receive approval for a Stage VI expansion, which will provide years for Bethlehem to develop a long-term, solid waste management plan[[1]](#endnote-1). However, the Transfer Station Committee (Committee) believes it is reasonable to have a contingency plan in place, since:

1. The current, authorized landfill capacity will be reached in April of 2021, less than a year from now;
2. The new application by NCES for the Stage VI expansion likely will take months to consider, and events, such as the current coronavirus crisis, could cause additional regulatory and/or construction delays; and
3. It cannot be assumed that approval by the New Hampshire Department of Environmental Services (DES) is a certainty.

This contingency plan also would be of value if some other unexpected event disrupted the Town’s present solid waste collection and disposal system.

**NOTE:** Nothing in this proposed contingency plan should be interpreted as being contrary to any existing agreement between the Town and NCES. It is the Committee’s intent always to honor Town agreements. The Committee will also continue its efforts to explore a long-term, cost-efficient, and environmentally benign solution for Bethlehem’s post-landfill future.

# Information-Gathering

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We wish to acknowledge the leadership and diligence of the Select Board liaisons over the years in obtaining vital information for the Committee’s analysis. Select Board members have devoted considerable time and effort to the Committee, and in meetings and communications with the Executive Director of the Androscoggin Valley Regional Refuse Disposal District (AVRRDD) to obtain preliminary permission to use its Mt. Carberry landfill if needed.[[2]](#endnote-2) The Select Board liaison also consulted other regional experts and providers in the solid waste and recycling markets to produce valuable information in weighing the costs and benefits of various options.

Committee members have similarly devoted considerable time toward:

1. Reviewing the operations and budgets of various neighboring transfer stations, and the solid waste management and recycling efforts of several Vermont communities, of similar population to Bethlehem;
2. Consulting with regional organizations with substantial expertise in solid waste management operations, such as the Northeast Resource Recovery Authority (NRRA), the North Country Council (NCC), and the Pemi-Baker Solid Waste District (Pemi-Baker);
3. Attending training sessions, seminars, and webinars on solid waste management and recycling;
4. Reviewing Town records concerning the Town’s successful management of its solid waste needs, during 2009-2012, when the Town was confronted with an unexpected disruption of its collection and disposal system;
5. Communicating with DES to determine regulatory requirements and the current status of NCES’ proposed Stage VI extension;
6. Visiting and assessing potential sites for a Town transfer station;
7. Meeting with Town Highway Department employees;
8. Interfacing with members of the Town’s Conservation Commission to make sure that the Committee’s solid waste and recycling goals and plans are consistent with the Town’s values and efforts in maintaining a healthy and clean environment to enhance Bethlehem’s economy and recreational attractions;
9. Reviewing New Hampshire laws, reports, and stated objectives and policies for the management of the State’s solid waste, to insure compliance with these policies and objectives.

**NOTE:** A copy of this proposed contingency plan has been sent to the Bethlehem Conservation Commission concurrently for its review and input. The Select Board may also want to forward a copy of this contingency plan to the NRRA, which the Town recently joined as a member, and the NCC, which has provided Committee members with valuable information.

# The Town’s Garage on Prospect Street as a Temporary Transfer Station

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The Committee believes that the Town should have its own transfer station, even as part of a temporary, contingency plan. Committee members had several meetings with Mr. Brian Patnoe, manager of the Littleton Transfer Station and a person with widespread respect as a regional expert on solid waste management and recycling. The Committee inquired into several options for post-landfill, solid waste management. Mr. Patnoe suggested that a cost-efficient option might consist of Bethlehem having its own transfer station, but contract with a neighboring transfer station for handling of its recycling and, perhaps, other needs.

Preliminary estimates for utilizing the Littleton Transfer Station for all purposes, in lieu of Bethlehem having its own transfer station, indicate that set-up and annual costs probably would require subsidization from the Town’s general funds and additional out-of-pocket costs for Bethlehem residents[[3]](#endnote-3). Furthermore, while the Committee has not ruled out the Route 116 site for a long-term transfer station, they do not believe that this site would be the most cost-efficient option for a temporary transfer station based on a review of Town records and inspections of the Route 116 site.[[4]](#endnote-4) The contingency plan herein will not preclude a future, alternative option for meeting the Town’s long-term needs.

There are numerous reasons in favor of having the Town’s Garage on Prospect Street serve as a temporary transfer station site.

1. It was successfully used as a temporary station in 2009-2011 during the last disruption of the Town’s solid waste management system.

1. Its use will be the most cost-efficient method that can be implemented in a relatively short time.
2. The current Road Agent and manager of the Town’s Highway Department is a veteran of the Town’s last solid waste contingency plan in 2009-2012, and is supportive of the proposal herein.
3. The location of the Garage would be convenient for the greatest number of Town residents.
4. The Town Garage has heavy equipment, buildings, and electricity that would substantially reduce the need for capital expenditures, and also provide greater security.

The Town Garage, however, is not an appropriate site for food composting. Nevertheless, when the Town engages in competitive bidding, as set forth in Section G below, it should solicit proposals for a pilot project for the disposal of food waste that does not utilize the Town Garage. While the Town Garage should receive pre-sorted recyclables, as discussed in Section H below, it should not be a site for collecting construction debris, bulky waste, appliances, tires, batteries, or hazardous waste. These services should be among the items subject to competitive bidding, or provided through the services of a regional organization.

When the Town Garage was used as a temporary transfer station in 2009-2011, the hours of operation were Saturday from 8 AM to 4 PM and Sunday from 9AM to 1PM. When the Route 116 Transfer Station was open during September 1, 2011 through February 18, 2012, its hours of operation were Mondays and Fridays from 8 AM to noon, and on Saturdays from 8 AM to 4PM. The Committee recommends that the Town Garage be open for delivery of solid waste and pre-sorted recyclables during at least two days per week, at hours to be determined by the Select Board.

The Town Garage is currently in need of additional storage capacity, such as an addition to its main garage. The Committee is waiting for a rough estimate of the cost of such an addition. This addition would not only facilitate the Garage’s site as a temporary transfer station, but would also have substantial value to the Town Highway Department in the event that this contingency plan never has to be implemented, or is implemented for just a short period of time.

# Necessary Equipment and Labor for the Town’s Garage to Operate as A Temporary Transfer Station

The Committee believes that the equipment, supplies, and labor necessary to facilitate the Town Garage as a temporary transfer station are, as follows:

1. Compactor truck, either purchased, rented, or provided through a third-party contractual service that will facilitate collection of up to six tons of solid waste. This is an amount the Committee believes will be sufficient to allow a single weekly trip for disposal at the Mt. Carberry landfill;
2. Bins to allow the collection of pre-sorted recyclables;

1. A baler for recyclables;
2. Signage to direct traffic and to set forth Town requirements;
3. Pay-as-you-throw (“PAYT”) bags for direct sale at the Garage, in addition to those available at local businesses;
4. Personnel

a. To ensure compliance with Town requirements during days that the Garage is open to collection;

b. To make a weekly delivery to the Mt. Carberry landfill if the Town purchases or rents a compactor truck[[5]](#endnote-5);

1. Periodically, to transport recyclables for marketing.

Whether the Town purchases or rents this equipment, or enters into contracts with one or more third parties, will depend on the results of competitive bidding, as recommended in Section G below. The anticipated duration of the need for a temporary transfer station will also affect which competitive bidding responses will best serve the Town’s needs. For example, the purchase of a compactor truck, as opposed to rental or using third party services, would not be cost-efficient if the need for a contingency plan was only for a short time. Unlike the investment in a garage expansion, the purchase of a compactor truck would not have any material use for Town Garage operations beyond use for solid waste collection and transportation.

# Financing

Bethlehem’s ability to implement a contingency plan with little or no supplementation from future general tax revenue is due to the foresight by Town voters and the Select Board in establishing a Transfer Station Capital Reserve Fund. With the addition of the $20,000 contribution overwhelmingly approved by voters in March, 2020, the Capital Reserve Fund will stand at approximately $160,000.

Littleton and Whitefield supplement their solid waste management systems with general funds[[6]](#endnote-6). It should also be noted that while Vermont towns are required, under that State’s universal recycling law, to implement unit pricing systems that cover hauling and tipping fee costs for solid waste, personnel for their transfer stations and recycling costs often require subsidization through general funds.

It is highly unlikely that the implementation of any long-term, responsible solid waste management plan can be wholly tax neutral through a PAYT program. However, the contingency plan herein can be implemented with little or no subsidization from future general tax revenues.

The Committee will continue to work toward a long-term solid waste management plan that will require minimal tax subsidization, but also comply with New Hampshire solid waste laws and goals, as well as Town values for a healthy environment.

Bethlehem previously utilized PAYT bags for solid waste management. The North Country Council has prepared a Community Planning Guide, addressing PAYT programs[[7]](#endnote-7). Among the benefits of a PAYT program, as highlighted by the NCC, are significant increases in recycling and reductions in waste, providing an equitable and cost-efficient mechanism for meeting solid waste management expenses, and eliminating the incentive for non-residents to have a “free ride” in bringing in unauthorized solid waste. The U.S. Environmental Protection Agency similarly has promoted the benefits of implementing a PAYT program[[8]](#endnote-8).

The Town’s Transfer Station Capital Reserve Fund should be sufficient to acquire the necessary equipment to establish a temporary transfer station, cover initial educational/informational needs, and provide a reserve fund of thousands of dollars to stabilize PAYT revenue.

While PAYT revenue should be used for financing annual operation and maintenance costs, PAYT revenue is notorious for being difficult to predict for any single year. Bags may not be purchased in the year that they are used, and actual solid waste generation may vary from projections. Bethlehem experienced difficulty in projecting annual PAYT revenues during the 2009-2011 period[[9]](#endnote-9). When one Vermont official was asked for advice as to how to avoid the difficulties and disruption of trying to price PAYT bags to match annual expense needs, she said it would be helpful to have a pool of money available to help stabilize PAYT revenue over a longer time period. A portion of the Capital Reserve Fund can achieve this objective.

Littleton currently prices its PAYT bags at $3 for large (33 gallon) bags and $2 for small (20 gallon bags). The Committee recommends that the same prices charged by Littleton be used for Bethlehem’s PAYT bags. It is reasonable to expect that bags, priced at this level, could bring in approximately $70,000 annually on average, based on Littleton’s and Whitefield’s experience[[10]](#endnote-10), as well as the prior experience of Bethlehem.

A PAYT workshop by DES indicated that, for planning purposes, it could be assumed that each large bag will hold 25 pounds of solid waste on average, resulting in 80 bags per ton.[[11]](#endnote-11) A rough calculation using this information (based solely on the use of large bags) would result in $72,000 of revenue for 300 tons of solid waste.

For purposes of determining whether this contingency plan might be able to raise PAYT revenues sufficient to pay for all or most of annual operation and maintenance costs, a scenario has been constructed on the assumption that the Town would purchase or rent a compactor truck[[12]](#endnote-12), and operate it with its own personnel. Under this scenario, the following, possible annual operating and maintenance costs might occur:

1. Twenty thousand ($20,000.00) dollars for labor costs. This amount should be sufficient to:

a. Provide a livable hourly wage for surveillance personnel to insure compliance with Town requirements during times when the Town Garage is open for delivery of solid waste and recyclables;

b. Cover voluntary overtime by Town employees to make a weekly disposal trip to the Mt. Carberry landfill, and less frequent processing and transportation of recyclables for marketing. The Town’s Road Agent should have authority over the management of this expenditure.

1. Approximately $18,000 for landfill tipping fees at Mt. Carberry based on 300 to 350 tons of annual solid waste.
2. Membership fee of approximately $2,000 to $2,200[[13]](#endnote-13) in Pemi-Baker, to facilitate hazardous waste days and other services, such as Pemi-Baker obtaining a preferred tipping fee due to its greater negotiating power.
3. Fifteen thousand ($15,000) dollars per year for vehicle maintenance, operation and depreciation. Depreciation would consist of setting aside a portion of this $15,000, not necessary for maintenance and operation, to allow for the purchase of a replacement truck after the useful life of an existing compactor truck is exhausted. If the truck is rented, it is assumed that the rental fee will be taken from the Capital Reserve Fund for at least the first year, and that any of this $15,000 left over after maintenance and operation would be put into the Capital Reserve Fund for future rental or purchase expenses.
4. Eight thousand ($8,000) dollars for the purchase of PAYT bags, public educational and informational needs, and other supplies. It is assumed that the initial purchase of PAYT bags, and the initial public educational and informational campaigns, will come from the Capital Reserve Fund. The form and content of any public educational and informational campaigns should have the prior approval of the Select Board.

The above estimated, annual operating and maintenance costs amount to approximately $63,000, which, theoretically, could be covered by annual, average PAYT revenue. However, there still would be a need for revenue to finance whatever recycling plans the Town adopts, and any costs that may be associated with allowing the use of another transfer station for bulky waste, appliances, construction debris, electronics, tires, batteries, etc. by Town residents, if the costs of these supplemental services are not fully covered by the fees charged by such transfer station. The cost impacts of these items will have to await the results of competitive bidding and the ultimate plan adopted by the Select Board.

# Curbside Pick-Up

There are several reasons why the Committee is not recommending Town-wide, curbside pick-up of solid waste and recyclables for its contingency plan. First, the Town’s large geographical size and miles of street would make such a program prohibitively expensive – likely several hundred thousand dollars per year.

Second, curbside pick-up for recyclables is generally single-stream recycling, which imposes perhaps the highest per ton charge for solid waste disposal, given the lack of a single-stream facility within New Hampshire, and the current state of the recycling market. Single stream recycling can result in high contamination rates, which makes recyclables less marketable[[14]](#endnote-14), and even prior to the 2017 initiation of stringent Chinese contamination standards, perhaps a quarter of single stream recyclables still ended up in landfills[[15]](#endnote-15). With the new standards, single stream recycling may result in less recycling than other alternatives[[16]](#endnote-16). The Committee proposes that the Town engage in pre-sorted recycling, in lieu of single stream, as set forth in Section H below.

Nevertheless, an inquiry could be made of the Village District to determine what its charges would be for solid waste curbside pick-up for a more concentrated part of the Town. Currently, the Village District has approximately 620 customers, consisting of residents and businesses. If the Village District were to go forward with any curbside pick-up of solid waste, it should be financed through charges to its customers, or through its precinct tax, so as to be tax neutral to the Town’s general funds, and fair to other Town residents who are not customers.

# Competitive Bidding

The Committee recommends that competitive bidding be used wherever feasible for obtaining the equipment, supplies, and recycling necessary for the Town’s contingency plan. Competitive bidding is a valuable aid in obtaining good services at the lowest, responsible prices, by stimulating competition and by preventing favoritism. Competitive bidding should be considered in the following areas:

1. The use of a compactor truck that can facilitate a 6-ton load for a weekly trip to the Mt. Carberry landfill, either through direct purchase or rental (if possible with an option to purchase), to be operated by a Town employee;
2. Third party contractor proposals for providing their own truck and driver at the Town transfer station during certain hours for receipt and disposal of solid waste. The determination as to whether to rent, purchase, or contract will depend on the projected duration of this contingency plan, as well as the bid offers. If the Town were to purchase a compactor truck, it would not have a further use for this truck if there were a restoration of host community services.
3. The use of an existing, neighboring transfer station, including the NCES Trudeau Road transfer station, as a possible bidder for all or a portion of the Town’s recycling needs and other disposal services (e.g., white goods, construction debris, electronics, bulky waste, batteries, tires, brush, etc.). While the Town Garage could still receive pre-sorted, recyclables, it may be to Bethlehem’s advantage to use another transfer station for marketing and other purposes.
4. The purchase or rental (with an option to buy, if possible) of a baler, and bins for pre-sorted recyclables that can be transported to another transfer station or direct purchaser.
5. The production of PAYT bags, with prices set forth for standard bags, and for bags that are compostable and/or biodegradable.
6. An hourly rate and services for preparing graphics, including mailings, brochures, and signage, for the Town’s educational and informational program, by an organization with expertise in solid waste management, such as the NCC and NRRA.
7. A pilot program for the collection and/or disposal of food waste from Town schools, restaurants, food stores, and other selected businesses with cafeterias, etc., that does not utilize the Town Garage.

# Presorted Recyclables

The recyclables that were collected at the Town Garage during the 2009-2011 timeframe were  cardboard, paper, plastic bottles and containers, non-ferrous metals (cans and scrap metal), glass bottles and jars, and textiles (reusable clothing).  Littleton lists the following items as acceptable, presorted recyclables:  cardboard, paper (newspaper, magazines, junk mail, boxboard, office paper, etc), glass, steel cans, aluminum cans, and plastics 1, 2, 4 & 5. It appears that Littleton has a burn pit for brush, pallets, and crates. The Committee recommends following Littleton’s list for pre-sorted recyclables that will be received at the Town Garage, along with having a container for reusable clothing.

# Assisting the Needs of Low-Income Persons and Persons with Disabilities

While the Town legally could provide a discount in the cost of bags for low-income persons and families, no such program is included in the estimates herein, for several reasons. First, means-tested programs are difficult to administer, and persons and families often have changes in their incomes.

Second, if one group of persons is given discounts, this will necessitate higher PAYT bag prices for others to raise the same amount of revenue.

Third, the Committee believes that it is best for Town residents to donate PAYT bags to the Town’s food pantry, and to allow those in need to obtain assistance in this manner.

The Town should also have a volunteer system to help persons with disabilities get their solid waste and recyclables to the Town Garage. The Town should preserve its “Neighbors Helping Neighbors” program developed during the COVID-19 pandemic for this purpose. The Town should also provide information about programs for persons with disabilities and low-income persons and families in all informational and educational brochures and mailings. The Town should continue to evaluate the needs of physically and economically disadvantaged residents in all of its solid waste and recycling plans.

# The Proposed Plan Complies with State Solid Waste Management Goals and Objectives

The New Hampshire General Court has declared that “(i)t is important to reserve landfill …capacity for solid wastes which cannot be reduced, reused, recycled or composted…”, and has set a goal “…to achieve a 40 percent minimum weight diversion of solid waste landfilled...on a per capita basis…” by 2000.[[17]](#endnote-17) This 40% goal has never been achieved, and in 2019, the legislature enacted House Bill 617 to have a Joint Committee of New Hampshire legislators study, and make recommendations concerning, the State’s recycling streams and solid waste management. On November 1, 2019, the Joint Committee issued its Report, which was a call to action for New Hampshire to improve its commitment to providing for the wise management of its solid waste[[18]](#endnote-18).

Among its findings and recommendations are:

1. New Hampshire’s solid waste management planning and education efforts “…have fallen far behind that of our neighboring states and nationally…” and require “immediate attention”.
2. The state’s setback in solid waste management and planning has likely contributed toward neighboring states exporting their solid waste to New Hampshire landfills, which are experiencing “rapidly dwindling” capacity. Currently, approximately 50% of the solid waste disposed of in the state’s landfills comes from out-of-state. Our neighboring states have instituted certain disposal bans at their landfills, such as food waste, certain plastics, and construction and demolition debris. “This makes New Hampshire’s commercial landfills, with no such bans, a more attractive disposal option…”.
3. “Landfills are the least favored method of solid waste disposal.” The most favored methods are, in order of preference, source reduction, recycling and reuse, composting, waste-to-energy, and incineration.
4. The state’s landfill capacity is “plummeting”, with shortages projected to occur as early as 2025. “It is important to reserve dwindling landfill and incinerator capacity for solid wastes which cannot be otherwise reduced, reused, recycled or composted….”
5. Most of our food waste, which constitutes more than 20% of solid waste, is landfilled, even though composting or other uses could save municipalities money by reducing tipping fees.
6. Plastics are another major source of waste that could be better managed. The Report notes that “…by some estimates 91% of total plastic ever produced has been disposed of in landfills or litters our land and seas.” These plastics often take centuries to decompose in landfills, producing greenhouse gases that can also harm the environment. The Report further notes that “(r)eduction of single use plastics in our waste stream is necessary.”[[19]](#endnote-19)

The Conservation Law Foundation has noted that the Joint Committee’s Report has been serving “…as the state’s springboard for doubling down on critical legislative efforts…” including Senate Bill 591, which would “…replace the state’s current 40% waste diversion goal with a *waste disposal reduction* goal of 25% by 2030 and 45% by 2050…” (emphasis in original); and Senate Bill 629, which would place an additional charge on landfill tipping fees to raise revenue to provide DES and local communities with “much-need funds” to develop and implement waste reduction strategies.[[20]](#endnote-20)

Our Committee believes, based on a review of past Town records, and the consistent history of PAYT programs having a substantial impact on the reduction of waste[[21]](#endnote-21), that the contingency plan herein would achieve the waste disposal reduction goals recommended by the Joint Committee within a short period of time. The Joint Committee Report has recommended that communities consider implementing PAYT programs.

Finally, the Joint Committee Report addressed the laudability of zero waste efforts, as follows:

“Testimony indicates that our state and our world benefit from consistently pushing toward source reduction and reuse. The public, our municipalities, businesses, and state agencies want to do the right thing. Many pathways to improvement …exist. We need to consistently strive to improve and be given the tools to do so. **Zero waste is a worthy goal**.” (Emphasis added)

No issue has so united the diverse members of our Committee than the worthy goals of source reduction, reuse, and recycling.  The Committee, therefore, recommends that Bethlehem's Select Board endorse a 'zero waste initiative', where it will direct the Committee to work with the Conservation Commission to produce, for review by the Select Board, a joint:

1. Assessment and definition of what zero waste entails.
2. Recommendation for 5-, 10-, and 20-year goals for reduction of solid waste disposal upon the implementation of any long-term plan.
3. Recommendation for a public awareness and education plan, including ways to solicit public input and support.
4. Suggested mechanism for Bethlehem to designate itself as a "Zero Waste Initiative Community."

# Timetable for Implementation

If the NCES Stage VI expansion does not seem likely to be approved by approximately October 1, 2020 then the Select Board may want to pursue the following schedule:

1. **On or about October 1, 2020**. The Town should commence preparation of a DES permit by notification[[22]](#endnote-22) to allow the operation of the Town’s contingency solid waste management plan. Contact should be made with an appropriate DES official charged with the statutory duty[[23]](#endnote-23) of providing advice to municipalities engaged in preliminary project planning and design to insure a proper and timely filing. There is no filing fee for such a permit, and substantial flexibility is provided for seeking modifications, such as changes in operating hours, types of recyclables collected, and certain facility improvements, in the event that competitive bids would make such changes advantageous.

While the approval process could be accomplished in as little as 60 days, planning for a longer timeframe would appear to be prudent to take into account delays and possible supplemental filing needs. The Town should also consult with its insurer to determine whether changes in its insurance coverage are necessary or desirable as a result of establishing a temporary transfer station.

1. **On or about December 1, 2020**. If it does not appear that approval of Stage VI will happen by this date and be implemented in a timely way:

A bid document and advertising should commence to request proposals for graphic services, as addressed in Section G.6 above, with responses requested within twenty days.

The Town should begin negotiations to join Pemi-Baker, and decide whether to negotiate a tipping fee for use of the Mt. Carberry landfill directly, or through the bargaining power of Pemi-Baker.

1. **On or about January 1, 2021**. If it does not appear by this date that Stage VI expansion will be approved and be implemented in a timely way, the following actions are recommended:

The Town should commence its bidding process, for the remaining items in Section G. 1, 2, 3, 4, 5 and 7, requesting replies within a thirty (30) day period, and reserving the rights to reject all bids, in whole or in part, etc.

The Town, with the assistance of its graphics contractor, should inform residents, through the Town’s website, public media, and perhaps through a direct mailing, that it has commenced bidding, the reason for commencing bidding, its anticipation of having a new system for solid waste management for implementation on or about April 1st, 2021, and all relevant information developed, to date, such as the site and hours of the temporary transfer station, the implementation of a PAYT program, and proposed, pre-sorted recyclables.

The Town should make inquiries of local businesses concerning the sale of PAYT bags, and a list should be made of Town offices where such bags also could be sold.

1. **On or about February 15, 2021.** The Select Board should approve a final solid waste management program, after analysis of the competitive bidding proposals, and begin the contracting and purchasing necessary for the plan to be implemented by April 1, 2021. The Town should commence an ongoing public education and informational campaign, in consultation with its graphics expert.

# Conclusion

The Committee again wants to thank the many Town officials, employees, residents, and regional organizations and experts who have been providing valuable information and input. We are honored to devote time to our charge, because we deeply believe in the resilience of our community, and that Bethlehem will always remain a jewel of the North Country.

1. **Endnotes**

   By letter, dated March 16, 2020, NCES notified the Bethlehem Town Clerk and Select Board of its new application for a Stage VI expansion. The letter notes that: “Construction of the Stage VI expansion is anticipated to start in 2020 with operations in the new cell anticipated to extend through 2026.” [↑](#endnote-ref-1)
2. 2 A contract with a negotiated tipping fee would have to be duly executed at some future date. The Berlin landfill is the closest, unrestricted landfill to Bethlehem, and was used for the Town’s solid waste disposal during the 2009-2012 period. If the proposed landfill in Dalton were to become available, the use of that landfill could be considered, if economically beneficial to the Town. However, there is substantial public opposition to the proposed Dalton landfill, and even with approval, it might take years before it becomes operational. [↑](#endnote-ref-2)
3. Very preliminary estimates by Mr. Patnoe indicated that initial set-up costs for additional equipment at the Littleton Transfer Station, to facilitate receipt of Bethlehem’s solid waste, could be in the range of $75,000 to $100,000, with the possibility of some additional capital costs updated on a three-year basis. Additional annual costs to Bethlehem residents would consist of: a) a $25-$35 per capita charge; and b) out-of-pocket costs from the use of Littleton’s PAYT bags. Thus, if Bethlehem were to utilize the Littleton Transfer Station for all of its solid waste and recycling needs, in lieu of having its own transfer station, a large portion of the Town’s Transfer Station Capital Reserve Fund would have to be used, and costs to Bethlehem residents could be in the $140,000 to $160,000 per year range, with perhaps half coming from general revenue or the remaining money in the Capital Reserve Fund, and half from resident purchases of Littleton PAYT bags.. [↑](#endnote-ref-3)
4. The Route 116 site currently has no buildings, machinery, or electrical connections, and could also require some landscaping costs to facilitate its use as a temporary transfer station in the event of a contingency. When the costs of building and operating a full transfer station at the Route 116 site went out to bid in late 2009, there appears to be a reasonable estimate for constructing a basic transfer station facility at $130,000, with an operating budget of $123,160 per year, both in 2010 dollars. It is not clear whether the capital costs of this estimate included the cost of three-phase power, which the April 6, 2009 Select Board minutes estimated to be approximately $30,000. However, three-phase power would not be necessary if the Town had access to a compactor truck or used a compactor that did not require such electrical installation.  The 2009 capital costs also do not appear to include the need for any further landscaping. Some such costs might be necessary today, since the facility has not been in use since 2012, and some materials have been removed.  In May of 2011, Mr. Scott Stevenson informed the Select Board that test holes and pipe inspection indicated that the initial landscaping at the Route 116 site was also not in accordance with bid specifications. Nevertheless, the Route 116 site was used for almost half a year as a transfer station after Mr. Stevenson issued his report. [↑](#endnote-ref-4)
5. 5 At least several, if not all of the employees at the Town Garage are licensed to drive a compactor truck of this type. [↑](#endnote-ref-5)
6. Whitefield.  The Town of Whitefield, with a population slightly lower than Bethlehem’s population, has a town-owned transfer station.  Whitefield’s 2018 Warrant and Budget for its Transfer Station/Solid Waste Collection was $156,333.  See <https://www.whitefieldnh.org/sites/whitefieldnh/files/uploads/2018_warrant_budget.pdf>. The 2019 Warrant and Budget for its Transfer Station/Solid Waste Collection was $162,278.

   See  [https://www.whitefieldnh.org/sites/whitefieldnh/files/uploads/2019\_warrant\_and\_budget.pdf](https://www.whitefieldnh.org/sites/whitefieldnh/files/uploads/2019_warrant_and_budget.pdf" \t "_blank). These expenses are far higher than the approximately $60,000 of revenue raised from the sale of PAYT bags, landfill fees and sale of recyclables, as noted on page 61 of the 2018 Whitefield annual report, which can be accessed at <https://www.whitefieldnh.org/sites/whitefieldnh/files/uploads/whitefield_annual_rpt_2018.pdf>

   Littleton The 2019 Annual Report of Littleton, with a population slightly higher than double that of Bethlehem, lists the 2019 budget for the Littleton Transfer Station as $395,543, with unaudited expenditures listed as $395,959. See <http://townoflittleton.org/uploads/PDFs%20and%20Forms/homepage2/2019%20Town%20Report%20Final%20Reduced.pdf>  There are three warrants listed in the 2019 Littleton report that relate to the Littleton transfer station, and they all passed..

   Article 6:  This Article raises and appropriates the sum of $405,544 for the purpose of the Littleton Transfer Station Operations with $269,905 to come from the Transfer Station Special Revenue Fund, and the balance of $135,639 to be raised through taxation.

   Article 14.  A $25,000 expenditure to replace, repair, fix, purchase, and maintain Transfer Station equipment, buildings, containers, vehicles, and purchase of additional supply of bags, but without tax impact, since it will come from the Transfer Station Special Revenue Fund.

   Article 15.  This involves a $60,000 purchase and installation of a new bulky waste Auger or Pre-crusher and Containers, of which $50,000 will come from taxes.

   Thus, for one year, the warrants authorized O&M at the Littleton transfer station of more than $400,000, with additional purchases of equipment and special maintenance of $85,000, and total tax subsidization of slightly more than $185,000.   [↑](#endnote-ref-6)
7. The NCC Community Planning Guide on PAYT programs can be accessed at <http://www.nccouncil.org/wp-content/uploads/2020/04/Pay-As-You-Throw-Community-Planning-Guide.pdf> [↑](#endnote-ref-7)
8. U.S. Environmental Protection Agency. Pay-As-You-Throw. Last updated on February 21, 2016. Last accessed on April 5, 2020 at <https://archive.epa.gov/wastes/conserve/tools/payt/web/html/index.html> [↑](#endnote-ref-8)
9. A review of Bethlehem’s actual and budgeted PAYT revenue for the 2009-2011 period were, as follows:

   Year: Prior Year Ptd Revenue Current Year Ptd Revenue Current Year Budgeted

   2009 $42,361.60 $68,299.00 $50,760.00

   2010 $68,299.00 $56,960.00 $117,160.00

   2011 $56,960.00 $48,541.50 $132.830.00 [↑](#endnote-ref-9)
10. When Mr. Patnoe appeared before the Committee, he stated that he was projecting $140,000 of PAYT revenue for the coming year for Littleton.  Littleton's population is slightly more than twice Bethlehem's   In Whitefield, when the PAYT bags were priced at about half the price of Littleton’s, PAYT revenue for 2017 was $33,577.   The actual PAYT revenue raised by Bethlehem during the 2009-2011 periods were examined, and the average, annual revenue raised, as noted in footnote 9 above, was less than $57,933.  During the 2009-2011 period Bethlehem PAYT bags, on average, appeared to be priced higher than Whitefield's bags, but lower than Littleton's. [↑](#endnote-ref-10)
11. Griffith J. Northeast Waste Management Officials’ Association. June 25, 2015. See Slide Number 21 at <http://www.newmoa.org/solidwaste/projects/smart/NEWMOA_PAYT_NHDES_6-25-15.pdf> [↑](#endnote-ref-11)
12. A new compactor truck that could facilitate a six-ton load might cost $140,000 or more.  The following web reference sets forth a good used, compactor truck being advertised for $89,900: <https://www.trashtrucksonline.com/category/GARBAGE-TRUCKS/Rear-Loaders/listings/17389/2013-Kenworth-T370-20yd-Pakmor>. Competitive bidding might produce a lower-cost compactor truck suitable for the Town’s needs.   The Town’s Highway Department employees appear to do an outstanding job in maintaining Town vehicles and equipment. [↑](#endnote-ref-12)
13. A recent estimate, provided by an NCC representative, is that 2020 membership cost for Bethlehem could be $2,038.14, depending on several factors. [↑](#endnote-ref-13)
14. Downstream of Single-Stream. Resource Recycling. November 2002.

    <http://www.maroneysinc.com/images/Downstream_of_Single_Stream.pdf> [↑](#endnote-ref-14)
15. Lacapra V. With ‘Single-Stream’ Recycling, Convenience Comes At A Cost. NPR.org. March 31, 2015. <https://www.npr.org/2015/03/31/396319000/with-single-stream-recycling-convenience-comes-at-a-cost> [↑](#endnote-ref-15)
16. Hofford C. Our recycling system is not working and will require major changes. Earth.com. May 1, 2019, which can be accessed at <https://www.earth.com/news/recycling-system-major-changes/>. [↑](#endnote-ref-16)
17. Chapter 149-M:2. [↑](#endnote-ref-17)
18. The November 1, 2019 Report can be accessed at <http://www.gencourt.state.nh.us/statstudcomm/committees/1476/reports/2019%20Final%20Report.pdf> [↑](#endnote-ref-18)
19. Connecticut, for example, has adopted legislation to phase out certain single use, plastic bags over the next few years. [↑](#endnote-ref-19)
20. Irwin T. Will New Hampshire Be A Dumping Ground for the Region? (Not If We Can Stop It). March 11, 2020. Last accessed on April 5, 2020 at <https://www.clf.org/blog/new-hampshire-waste-reduction-efforts/> [↑](#endnote-ref-20)
21. The NCC’s Community Planning Guide, referenced in footnote vii, gives examples of 4 small towns in Vermont, New Hampshire, and Massachusetts, which implemented PAYT programs. Solid waste tonnage was reduced by 40% to more than 50%. [↑](#endnote-ref-21)
22. Information on Permits by Notification may be accessed on the DES website at <https://www.des.nh.gov/organization/divisions/waste/swmb/pdrs/permit_sw_by_notification.htm> [↑](#endnote-ref-22)
23. Chapter 149-M:48. [↑](#endnote-ref-23)