

Pomfret Capital Planning Committee
5218 Pomfret Rd.
Pomfret, Vermont 05053

FY2022 Highway Vehicle Capital Planning

Date: November 13, 2020

The Pomfret Capital Planning Committee (CPC) respectfully submits its capital planning options for Highway vehicle acquisitions for fiscal year 2022 (FY22).

Introduction

The CPC identified the following goals for the FY2022 Highway Vehicle Capital Plan:

- Consider and evaluate the possible variations of the two most viable funding options (the traditional method of saving up for purchases through the vehicle reserve fund and dealer financing);
- Evaluate and model out which options present the most economic approach for Pomfret taxpayers through more thorough quantitative analysis than past capital planning cycles;
- Consider the costs and practical risks of keeping vehicles beyond the manufacturers' or dealer's warranty period for a given piece of equipment;
- Determine the optimal time periods for keeping each vehicle type (trucks vs. heavy equipment) based on trade-in value, manufacturers'/dealer's warranty period, and available/feasible financing periods;
- Consider how different funding models impact taxpayer equity and fairness through the timing of the benefits of equipment use vs. the taxpayer cost burdens

The committee would like to thank Jim Potter, Pomfret's Road Foreman, for participating in our meetings and providing valuable input. In keeping with the goals above, the FY22 Highway capital planning options described in this document represent a substantial change from past planning cycles since 2016 with the acceleration of all purchases. In the last model presented to the Selectboard, the average annual contribution to pay for the previous replacement schedule was about \$120,000 per year. Accelerating the purchase of vehicles does result in an increase of what will be needed each year from the taxpayers.

- Dump trucks are now on a five-year replacement cycle, reduced from seven years
- The one-ton truck is now on a five-year replacement cycle, reduced from nine years
- The grader is now on a fourteen or seven-year cycle, reduced from twenty-five years
- The loader is now on a ten or seven-year replacement cycle, reduced from fifteen years

In previous planning cycles, the committee based the "keep for" period on the calculation of keeping a piece of equipment to the point where the maintenance costs started to exceed the projected trade-in value. In the FY22 analysis, however, the "keep for" period is based on tying the replacement cycle to the warranty period to minimize maintenance costs and optimize trade-in value. It's important to note that the numbers in this document do not reflect the savings on maintenance costs that the Town would realize by keeping a given piece of equipment for a shorter period of time. But based on an authoritative article from Caterpillar, for example, the

Town could expect to save \$5.00 per service hour on a piece of heavy equipment by replacing that equipment at the end of the warranty period versus keeping the equipment past the warranty period. For example, if the grader is kept for seven years beyond the seven-year warranty period, the Town might expect to pay \$14,000 more in maintenance (\$5 x 400 hours/year x seven years) and as the trade-in value would continue to decline in that period as well. Please see the following link for a helpful article: https://www.cat.com/en_US/by-industry/governmental-local-state/case-studies/every-minute-story.html. Similar to keeping the trucks for five-year warranty period to minimize issues with the electrical systems, emissions, etc., there are similar cost savings to keeping a piece of heavy equipment for a shorter period of time as well.

Advantages and Disadvantages of Funding Options

The following table outlines the pro’s and con’s between cash purchases and financing. Cash purchases is the conventional model in Pomfret. It’s always less expensive to make cash purchases than financing, but each model has advantages and disadvantages. Financing is a more common practice when government must purchase many vehicles. If Pomfret adds a fourth road crew member, financing might be more appealing given that there will be more equipment purchases that need to be made.

	Advantages	Disadvantages
Cash Purchase After Saving Up	<ul style="list-style-type: none"> • Most familiar to Pomfret’s past practices • Avoids the risk of a rapidly rising interest rate environment • Less expensive than financing when adding up total outlays over the analysis period 	<ul style="list-style-type: none"> • Requires significant capital infusion in 2022 for near-term purchases • The town may be “stuck with a lemon” vehicle and will incur high maintenance costs before saving up enough to replace it • If the Town successfully acquires a grant, it will carry “extra” reserves which would be subject to loss of net present value • Greater peaks and valleys in annual payments
Financing	<ul style="list-style-type: none"> • Doesn’t require capital infusion in 2022 for near-term purchases • Offers smoother annual payments in “pay as you go” models • Matches the timing of benefits and taxpayer burdens • Greater flexibility in getting rid of non-performing equipment • At current rates, financing benefits taxpayers due to the windfall savings experienced in the first 5-7 years of each vehicle purchase • If the Town successfully acquires a grant to fund a piece of equipment, it can pay off the loan early without carrying excess reserves 	<ul style="list-style-type: none"> • Borrowing adds debt to the town's balance sheet • Is less familiar to Pomfret’s past practices of making cash purchases

In the private sector, financing is typically used as a way to manage cashflow. While governments have the ability to raise taxes to pay cash for budget expenditures, governments have similar cashflow concerns in terms of stabilizing the tax rate over time. Financing could be one way to maintain more predictable outlays and to create headroom in the budget for other expenditures where there's less flexibility to affect the tax rate, e.g., gross labor, healthcare and fringe benefits, or annual paving. The Selectboard should decide the approach that makes the most sense in the long-term.

The model data in the next three tables represents three basic scenarios under each funding approach (see list below). The Selectboard may easily eliminate some of the scenarios because of practical concerns. For instance, in the cash purchase scenarios, it may not make sense for the Town to “pay as you go” because in some years there are projected annual expenditures well over \$200,000. But for a financing approach, because the payments are spread out, a “pay as you go” approach could make sense.

Our goal in presenting the full range of scenarios for the cash purchase, financing and mixed models is to have an “apples-to-apples” comparison of the options, even though some of the scenarios may be easily eliminated:

- (1) a “pay as you go” scenario without using the projected vehicle highway reserve fund balance of \$131,000 where the money going into the reserve fund is equal the money needed for a given year;
- (2) a leveled approach with a 2% annual lift where more money is going into the reserve fund than is needed for a given year, but the overall effect is to smooth out the contributions, and while using the projected balance of \$131,000 in FY22 to offset near-term expenditures (grader, loader and one-ton), and
- (3) the same scenario as (1), but using the projected \$131,000 reserve balance.

*****Important note:** All model data in this document contemplate the grader being replaced in 2022, the loader in 2023 and truck #4 (one-ton) being replaced in 2025.

“Pomfret” Model Data

(Trucks replaced at 5 years, Grader at 14 years, Loader at 10 years)

Table 1.1: “Pomfret” Save Up/Cash Purchase Model (top) & Loan/Financing Model (bottom)

Model and Variation		Avg. Annual	10-yr Tot.	Tot. '32-37	Fut. Loan Pay. '37+	Total
Pomfret Save Up/Cash Purchase Model	Tax and Pay-as-you-go w/o using Current Reserves	\$182,507	\$1,696,992	\$1,223,126	N/A	<u>\$2,920,118</u>
	Taxes Leveled with a 2% annual increase, first using the Current Reserves	\$174,712	\$1,702,275	\$1,093,124	N/A	<u>\$2,795,399</u>
	Tax and Pay-as-you-go, first using Current Reserves	\$174,302	\$1,565,992	\$1,223,126	N/A	<u>\$2,789,118</u>

Pomfret Loan/Fin. Model	Tax and Pay-as-you-go w/o using Current Reserves	\$151,335	\$1,346,161	\$1,075,206	\$627,745	<u>\$3,049,112</u>
	Taxes Leveled with a 2% annual increase, first using the Current Reserves	\$143,290	\$1,346,816	\$945,816	\$627,745	<u>\$2,920,377</u>
	Tax and Pay-as-you-go, first using Current Reserves	\$143,148	\$1,215,161	\$1,075,206	\$627,745	<u>\$2,918,112</u>

In the “Save Up/Cash Purchase” model above, the Town would need to raise **\$418,554 in 2022** to make the necessary near-term purchases for the grader, the loader and to replace the one-ton, if the Town did not use the existing balance in the vehicle reserve fund and went with the “pay as you go” model (first cash model). But, even if the Selectboard chooses to use the balance, then the amount needed to be raised in 2022 would still be significant -**\$287,854** - for the other two cash models.

In the loan model, the Town would need to raise \$71,868 for the same near-term purchases, if the Town did not use the existing balance in the vehicle reserve fund and went with the “pay as you go” model (first financing model). The Town would need to raise \$123,000 if the Selectboard wanted to level the amount to pay annually with a 2% lift and using the current vehicle reserve fund balance. In the last loan model, the Town would not have to raise any money at all in 2022 on a “pay as you go” basis, if the current vehicle reserve balance is used.

Chart 1.1: “Pomfret” Save Up/Cash Purchase Model

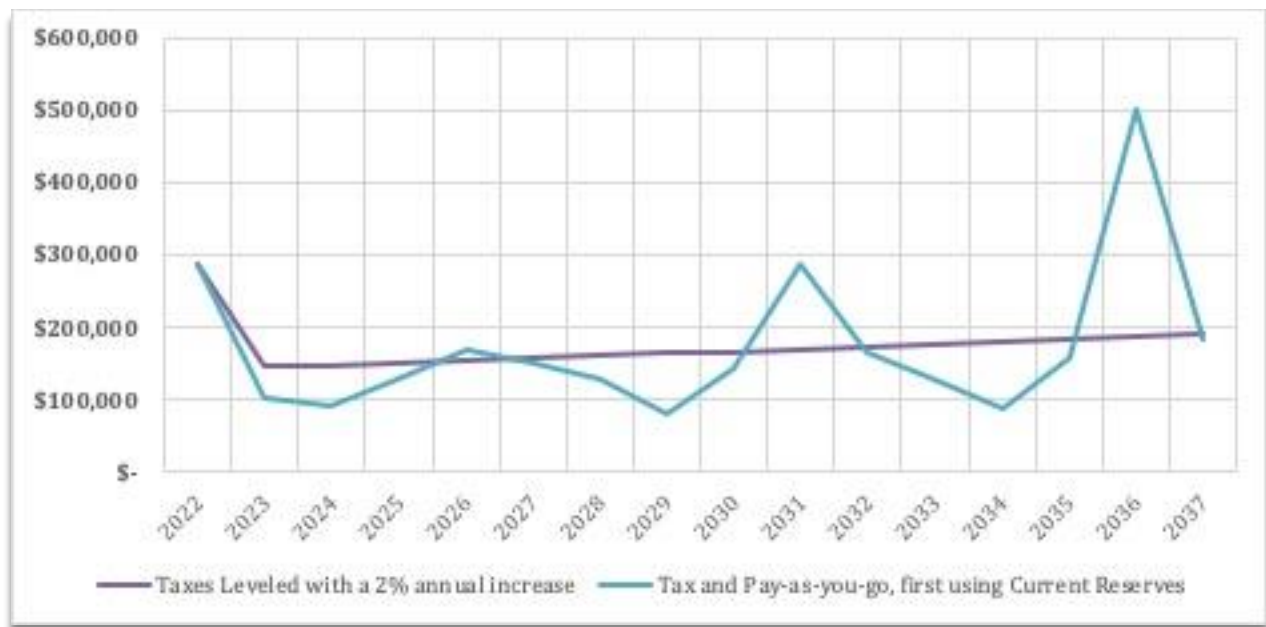
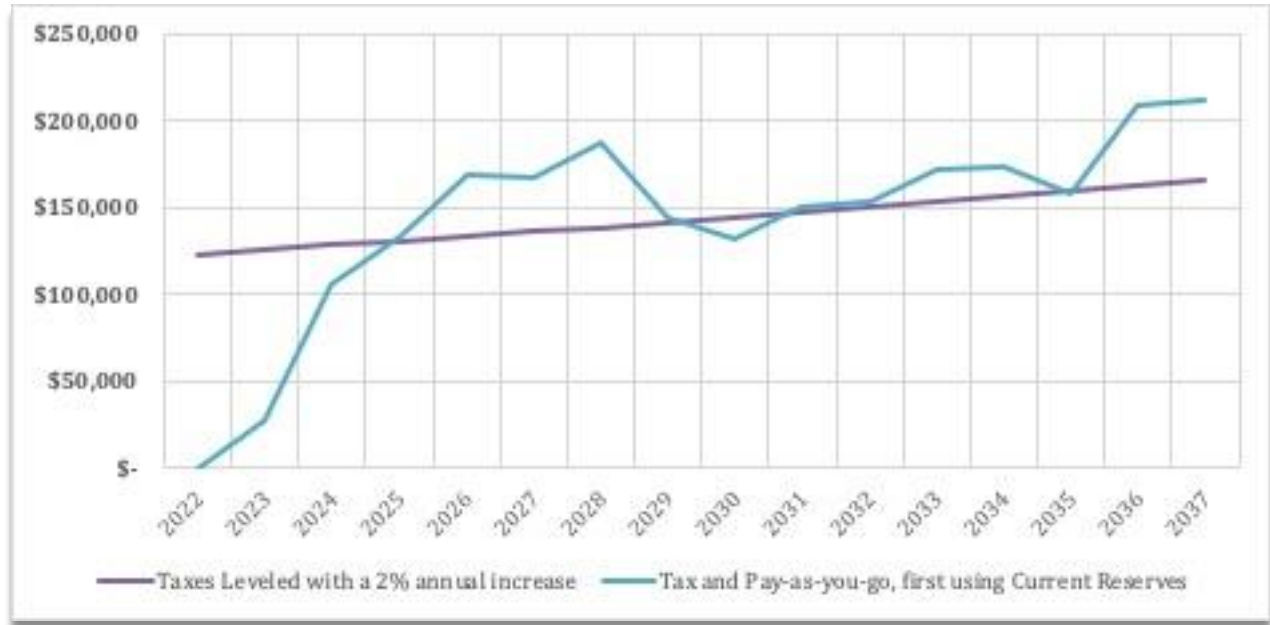


Chart 1.2: “Pomfret” Loan/Financing Model



“Woodstock/Weathersfield” Model Data

(Trucks replaced at 5 years, Heavy Equipment replaced at 7 years)

Table 2.1: “Woodstock/Weathersfield” Save Up/Cash Purchase Model (top) & Loan/Financing Model (bottom)

Model and Variation		Avg. Annual	10-yr Tot.	Tot. '32-37	Fut. Loan Pay. '37+	Total
Woodstock Save Up/Cash Purchase Model	Tax and Pay-as-you-go w/o using Current Reserves	\$198,448	\$1,979,867	\$1,195,296	N/A	<u>\$3,175,163</u>
	Taxes Leveled with a 2% annual increase, first using the Current Reserves	\$190,925	\$1,848,595	\$1,206,206	N/A	<u>\$3,054,801</u>
	Tax and Pay-as-you-go, first using Current Reserves	\$190,260	\$1,848,867	\$1,195,296	N/A	<u>\$3,044,163</u>
Woodstock Loan/Financing Model	Tax and Pay-as-you-go w/o using Current Reserves	\$165,681	\$1,459,528	\$1,191,365	\$667,047	<u>\$3,317,940</u>
	Taxes Leveled with a 2% annual increase, first using the Current Reserves	\$157,269	\$1,478,212	\$1,038,091	\$667,047	<u>\$3,183,351</u>

	Tax and Pay-as-you-go, first using Current Reserves	\$157,493	\$1,328,528	\$1,191,365	\$667,047	<u>\$3,186,940</u>
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In the “Save Up/Cash Purchase” model above, similar to the “Pomfret” model, the Town would need to raise \$418,554 in 2022 to make the necessary near-term purchases for the grader, the loader and to replace the one-ton, if the Town did not use the existing balance in the vehicle reserve fund and went with the “pay as you go” model (first cash model). But, if the Selectboard chooses to use the balance, then the amount needed to be raised in 2022 would be \$287,854 for the other two cash models.

In the loan model, similar to the “Pomfret” model, the Town would need to raise \$71,868 for the same near-term purchases, if the Town did not use the existing balance in the vehicle reserve fund and went with the “pay as you go” model (first financing model). The Town would need to raise \$135,000 if the Selectboard wanted to level the amount to pay annually with a 2% lift and using the current vehicle reserve fund balance. In the last loan model, the Town would not have to raise any money at all in 2022 on a “pay as you go” basis, if the current vehicle reserve balance is used.

Chart 2.1: “Woodstock/Weathersfield” Save Up/Cash Purchase Model

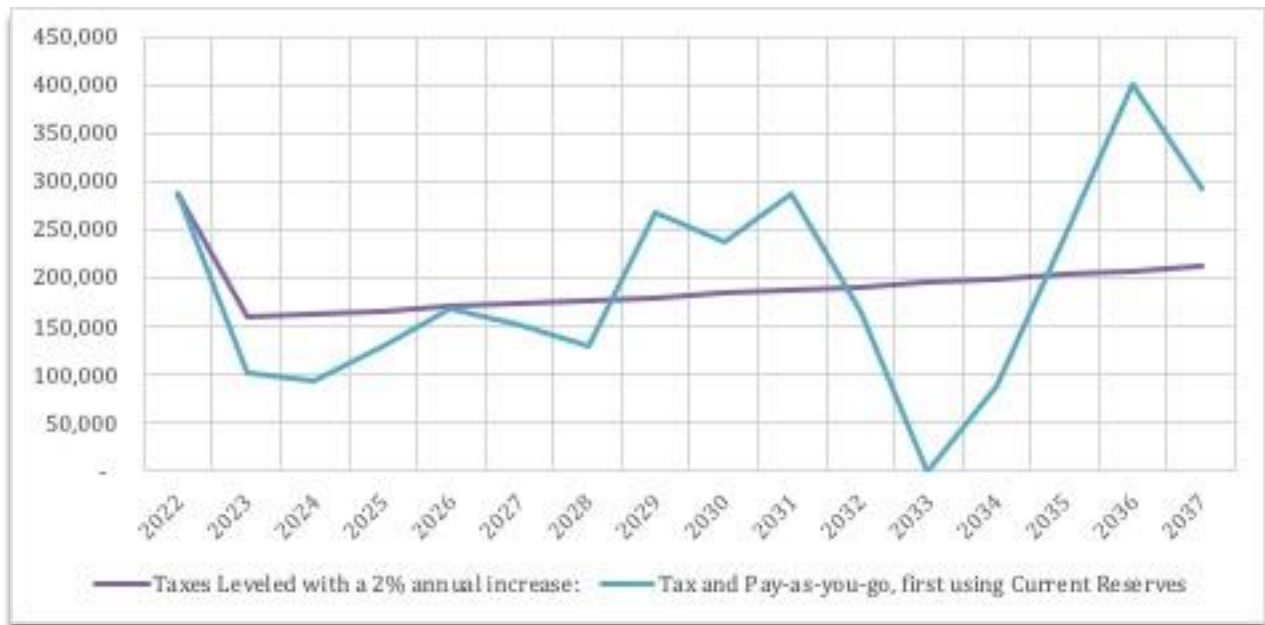
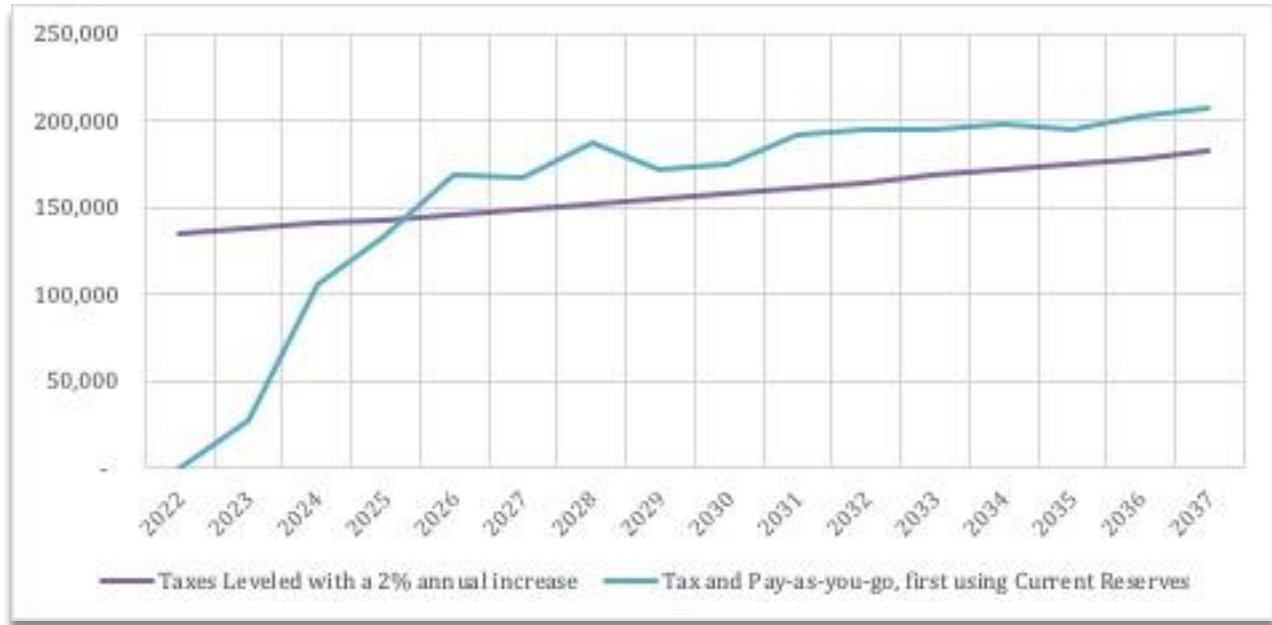


Chart 2.2: “Woodstock/Weathersfield” Loan/Financing Model



“Pomfret” Save Up/Cash Purchase Model for Trucks, Financing for Heavy Equipment at Extended Service life

(Trucks replaced at 5 years, Grader at 14 years, Loader at 10 years)

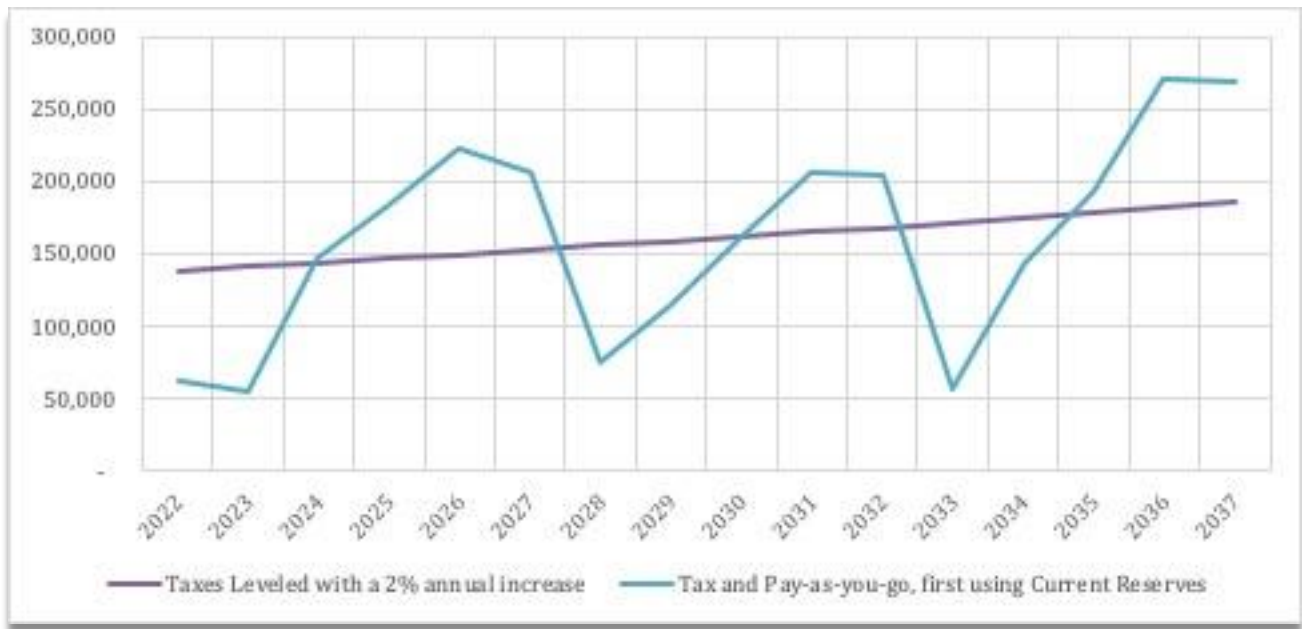
Table 3.1: Mixed Cash Purchase (Trucks) and Financing (Heavy Equipment)

Model and Variation		Avg. Annual	10-yr Tot.	Tot. '32-37	Fut. Loan Pay. '37+	Total
Mixed Cash/Fin. Model	Tax and Pay-as-you-go w/o using Current Reserves	\$168,847	\$1,566,217	\$1,135,329	\$275,552	<u>\$2,977,098</u>
	Taxes Leveled with a 2% annual increase, first using the Current Reserves	\$160,764	\$1,511,061	\$1,061,160	\$275,552	<u>\$2,847,773</u>
	Tax and Pay-as-you-go, first using Current Reserves	\$160,659	\$1,435,217	\$1,135,329	\$275,552	<u>\$2,846,098</u>

If the Selectboard chooses not to use the existing vehicle reserve balance, then under the first scenario above, the Town would need to raise \$193,844 in 2022 for near-term purchases. In a level funding scenario using the reserve balance (second scenario above), the Town would need to

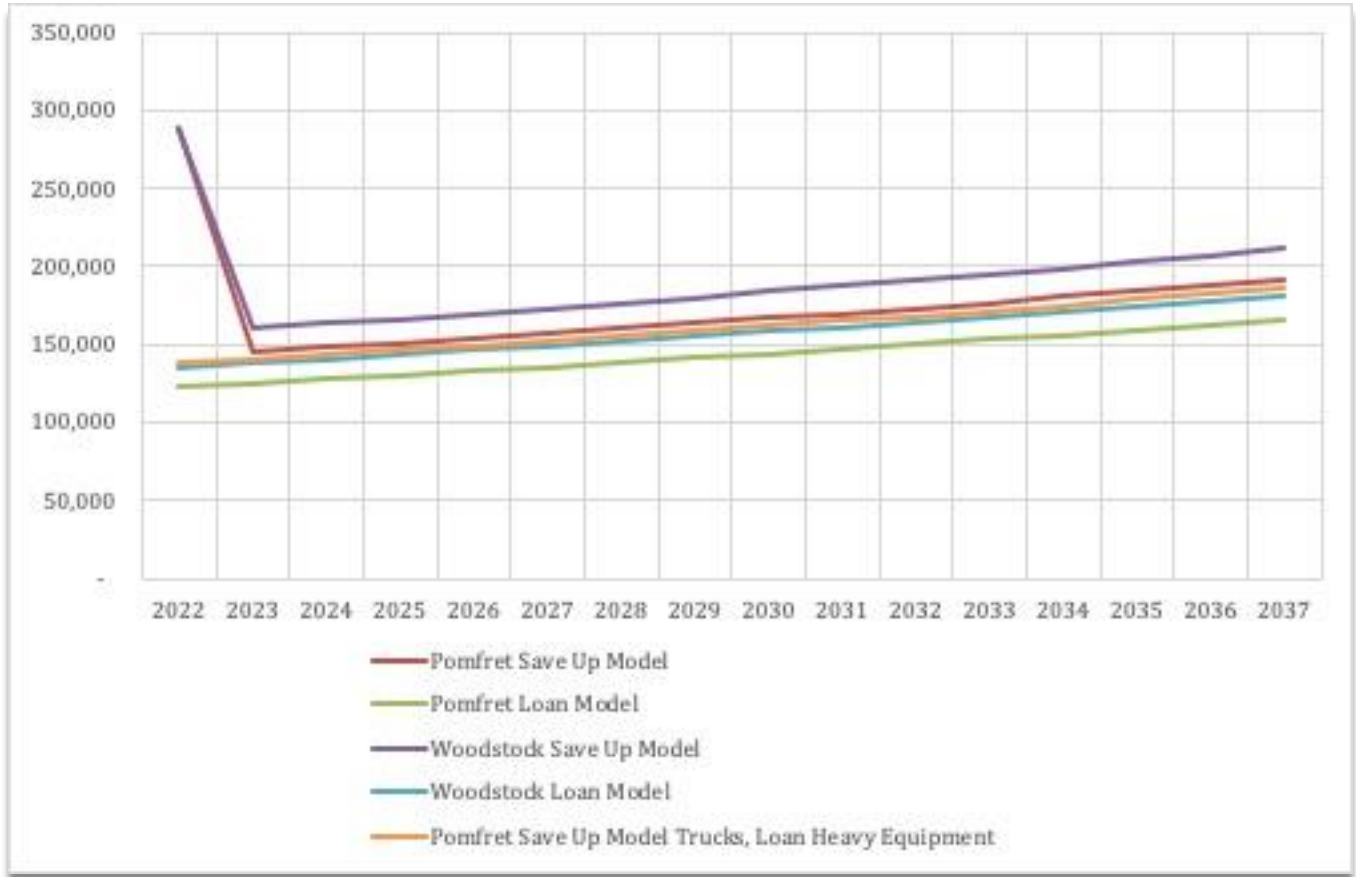
raise \$138,000 in 2022. Finally, in the third “pay as you go” scenario above, which also uses the current reserve fund balance, the Town would need to only raise \$62,844 in 2022.

Chart 3.1: Mixed Cash Purchase (Trucks) & Financing (Heavy Equipment)



Summary Charts for All Models

Chart 4.1: Required Funding with Levelled 2% Annual Lift Approach, using Existing Reserve



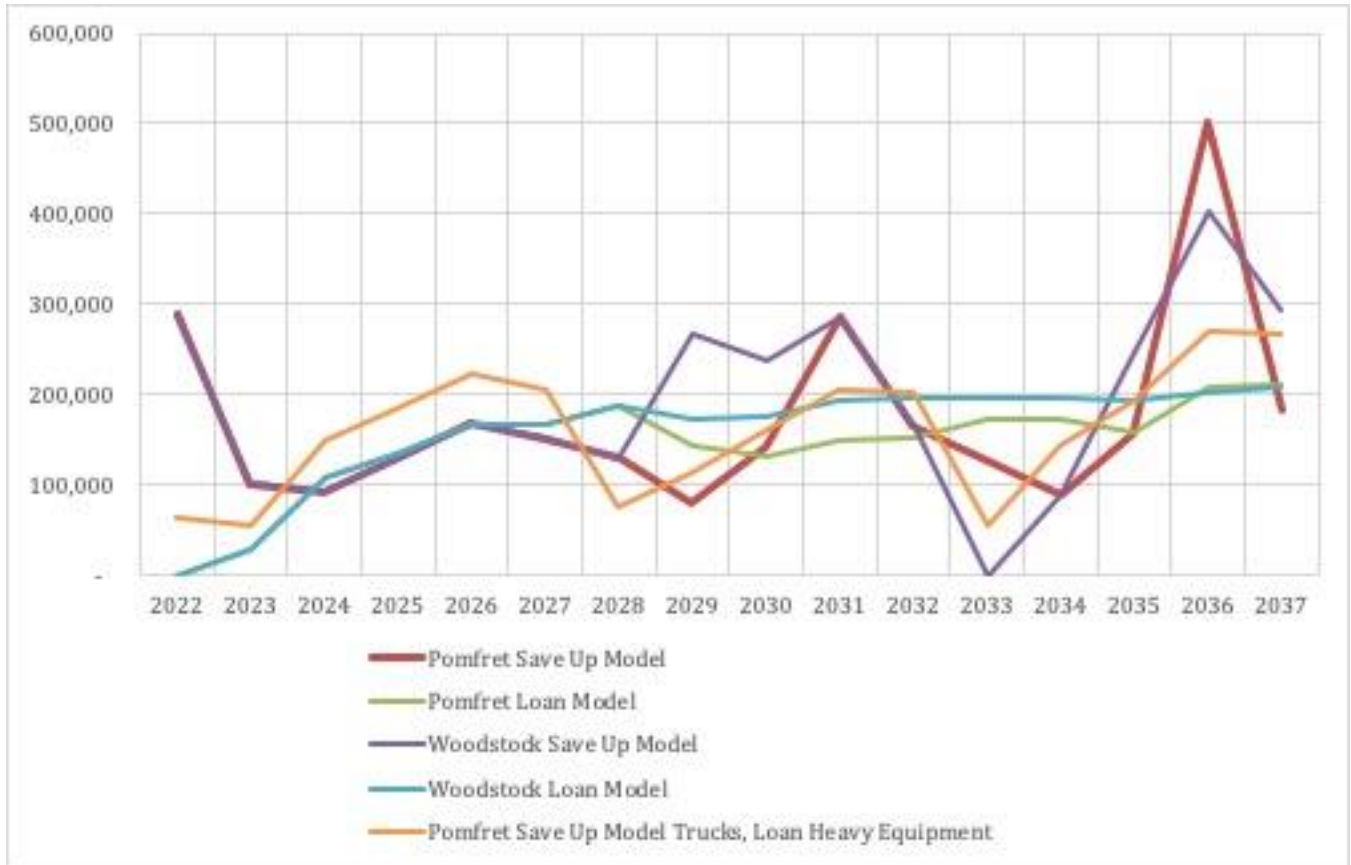
The chart above summarizes how much in taxes that the Town would need to raise each year for each different funding model where the amount to be raised by taxpayers is leveled to smooth out the tax burden and while also increasing that amount by two-percent annually to mirror the rate of inflation. Note that in both pure cash payment models the Town would need to raise the previously mentioned \$287,854 in FY22 to accommodate near-term purchases of the grader, loader and one-ton.

Chart 4.2: Total Cost, Leveled Contribution with 2% Annual Lift, using Existing Reserve



The chart above summarizes the total sixteen-year cost of all funding options. This chart correlates to the “Total” column in the previous tables for each funding model. For instances, the total for the Pomfret Loan Model is \$2,920,377 when combining all payments, including those beyond 2037 for purchases within the sixteen year period.

Chart 4.3: Annual Outlays of Each Model with Use of Current Reserve Fund Balance



In contrast to the previous chart, this chart shows the annual and long-term payments out for each of the same models in Chart 4.1. Noticeable is the choppiness of Save Up/Cash Expenditure model where as the two loan models have smoother lines over time due to the schedule of payments. Compare this chart to the 1.1, 1.2, 2.1, 2.2, and 3.1 charts on previous pages.