

DEERFIELD TOWN HALL ENERGY STUDY



The Deerfield Town Hall was constructed in 1856 and noted as one of New Hampshire's best public examples of Greek Revival Architecture. It is on the National Register of Historic Place and is the centerpiece of the Deerfield Center Historic District.

Town Hall Energy Audit – Completed by SEEDS November 2021 – Sustainable Energy Education & Demonstration Services for the Deerfield Energy Committee and funded by Eversource
Proposed Energy Saving Measures (ESM) including weatherization efforts, lighting and equipment upgrades.

RECOMMENDATIONS AND COMMENTS

1. Add weatherstripping to all exterior doors and air seal penetrations in the floor of the attic before blowing in additional cellulose to achieve a level 18". Seal the attic hatch and rig with a pulley so that it can be easily closed.
2. Lay a commercial grade (>10ml) vapor barrier on the floor of the crawlspace and seal to the walls by spraying three inches closed cell foam against the foundation walls to the floor decking.
3. Repair and restore the historic wood windows. This measure is based on a proposal the Town has received. Simple replacing damaged panes and blocking of existing windows that do not stay closed is currently underway.
4. Restoring the windows (#3) will reduce air leakage and improve operability. Adding airtight interior glazing panels (from Innerglass.com for one example) yields additional air sealing as well as improving glazing performance.
5. Separated due to the relative long 'payback' by itself, insulating the exterior walls by dense packing cellulose into all cavity bays will complete an 'energy upgrade' package and improve comfort substantially

Based on investing \$60,074 into the thermal envelope or shell of the Town Hall is estimated to save \$7,018 a year heating costs based on 2019 occupancy patterns and the current price of **\$3.25 per gallon of oil**. *[This was the price at the time of the audit]*. At that price, a simple **payback would be less than nine years** and a 4.4% annual return on investment for each of the 25 years life of measure. Note These figures were based on 2021 estimates. In the intervening time costs for labor and material may have gone up but prices for oil definitely have increased. The current price is \$4.60 per gallon.

Resources

**Read the full 2021
Deerfield Town Hall
Energy Report**

