Weatherization at Scale Trajectory

Draft 11/7/2021

The Weatherization at Scale Working Group has been pursuing funding, financing, and programmatic efforts toward a target of a total of 120,000 homes weatherized by 2030. This initiative would be comprised of 90,000 new weatherization projects on top of the 30,000 homes weatherized to date in Vermont. The primary focus of this effort will be directed towards low- and moderate-income (LMI) homeowners and renters given that they can benefit most from the energy cost savings and additional health and safety benefits that go along with weatherization.

Figure 1 shows the trajectory of the cumulative total weatherization jobs required to achieve 120,000 homes weatherized by 2030, starting with the 30,000 completed to date.

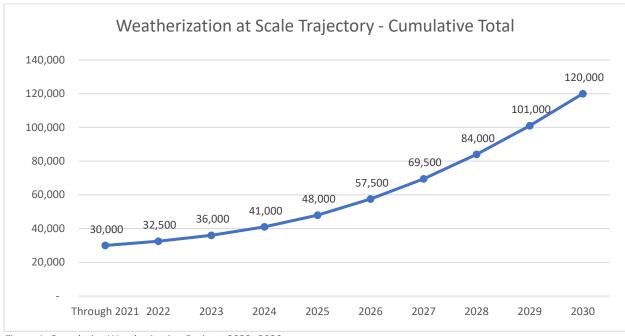


Figure 1. Cumulative Weatherization Projects 2022 -2030

As shown in Figure 2, achieving 120,000 cumulative weatherization projects by 2030 will require a significant increase over today's approximately 2,000 annual weatherization jobs. Annual increases of 25% to 43% through 2027 as the industry ramps up will then be followed by year-over-year project completion growth rates of 21% down to 12% by 2030. However, the project completion trajectory will still need to continue to grow beyond 2030 until 2050 when 243,500 homes will need to have been weatherized, almost three-quarters of Vermont's housing units, to meet the GWSA targets. The Weatherization at Scale Working Group acknowledges that achieving the goal of 90,000 additional homes weatherized is ambitious, but it can and must be accomplished as an important component of meeting the GWSA goals for both 1) reducing thermal energy use, and 2) enabling clean heat pumps to operate more effectively in tight buildings.

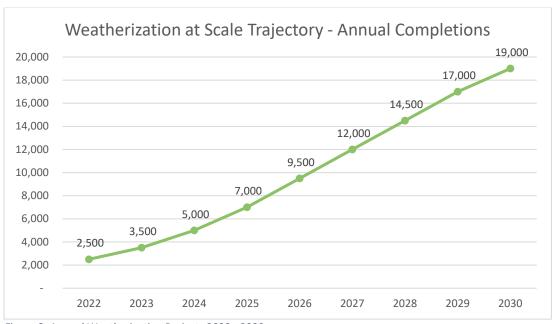


Figure 2. Annual Weatherization Projects 2022 - 2030

Workforce and supply chain issues are real and will need focused attention to enlist new workers and businesses into the weatherization industry and ensure that insulation and air sealing equipment and supplies remain available. With the focus on the LMI community, the Vermont Office of Economic Opportunity, and their Weatherization Assistance Program (WAP) providers will likely carry a significant share of this initiative. They currently deliver about half of the state's annual weatherization jobs and would likely be asked to carry at least this share of new projects going forward. The WAP providers are trusted entities with the LMI community and have a proven track record of quality and effective weatherization project delivery. However, like much of the construction industry, they are striving to find workers.

Securing workers and businesses to meet this volume of activity is going to require innovation, fresh thinking, increased funding, and hard work. To lure more workers and entice construction businesses to get into the weatherization business, there needs to be dedicated funding streams for grants and incentives and a clear long-term commitment to the weatherization goals. Construction or other businesses are not going to enter this line of services without some assurances that funding, financing, and marketing will be around to drive consumer demand and interest for years to come. With this significant commitment in place, we will likely see many of the larger construction and contracting firms diversify into the weatherization space. Providing them the ability to offer higher wages to their workers along with the recognition that weatherization can provide a climate-friendly career path for their employees, may draw in more businesses.

Other creative means of enlisting workers and businesses should also be considered including, but certainly not limited to recruitment of immigrants, development of automation and IT solutions including robots, drones, remote imaging and other approaches.