

HOLLAND'S COMMUNITY ENERGY PLAN
Home Energy Retrofit Task Force — Pilot Project
“A Science Experiment”

Our Question: 50% home energy savings — Is it reasonable?

Related Questions:

- What motivates home owners like you to invest in energy savings?
- Which home improvements give you the best energy savings?
- How is the size of your investment related to your energy savings?
- What can go wrong?

Our Data & Observations — See other side

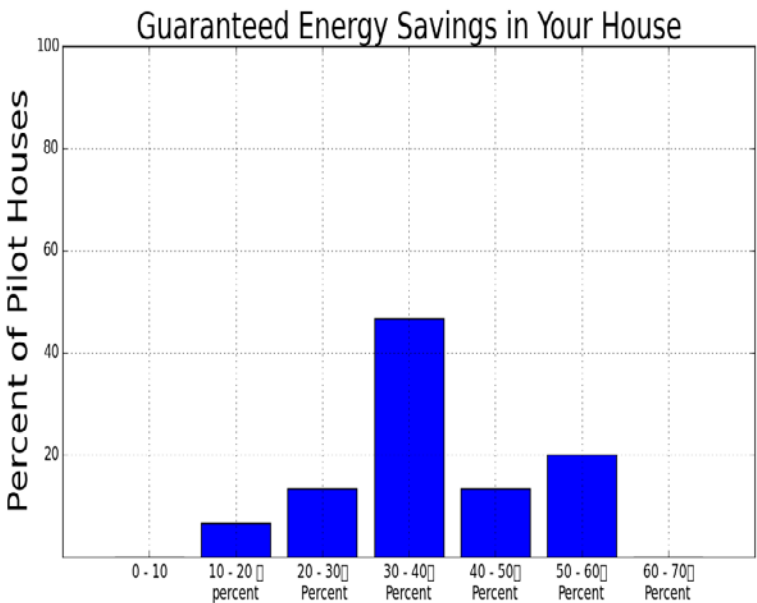
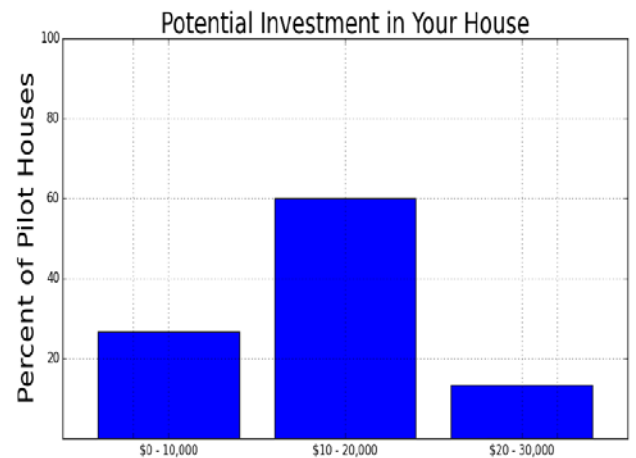
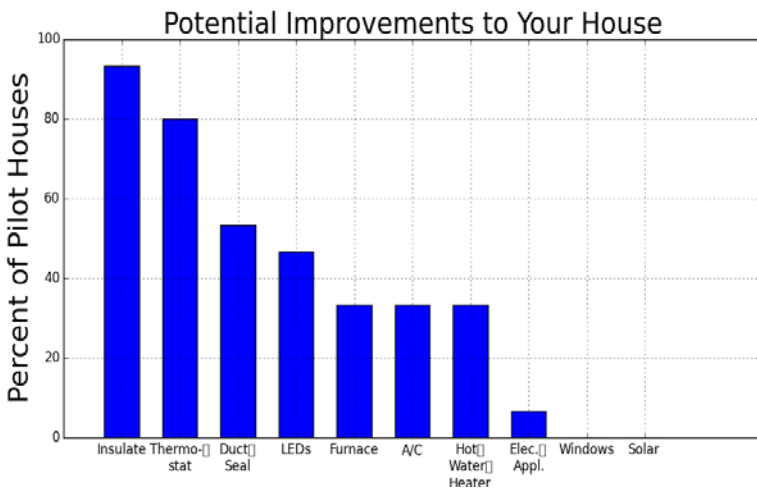
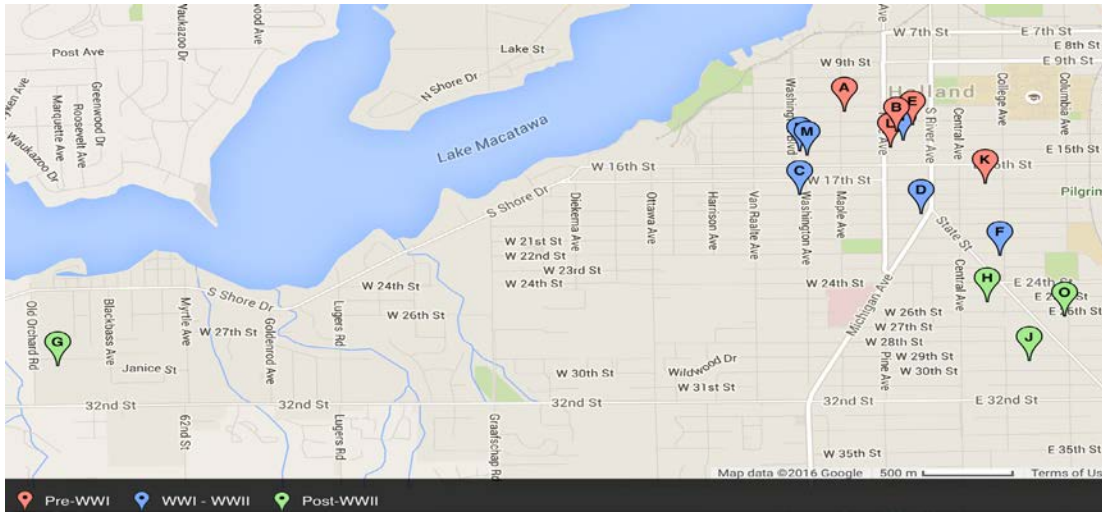
Our Conclusions — Things We Learned

- Every home and every family is unique. “Typical results” offer a perspective but not a recipe.
 - Typically, Holland home owners can achieve an **energy savings of 2.5% for every \$1000 invested** in energy saving home improvements.
 - Typically, Holland home owners are willing to invest **\$13,000 for a guaranteed energy savings of 35 - 40%**.
- The recipe for effective energy savings investments is a common sense “loading order”:
 - First, **don't throw energy away** — insulate the envelope and seal the ducts.
 - Second, **use energy efficiently** — LEDs, a better furnace, A/C, and hot water heater.
 - After the first 2 steps are complete, consider appliances, windows, and solar energy.
- A successful program requires strong coordination by a “**trusted energy advisor**” **locally accountable** to serve the home owners interest,

Our Recommendations to City Council

1. “Go to scale” as a city program: 1000 homes by 2020, then 250 homes per year
 - Benefits to city — Unifying community that attracts investment, better homes that make better neighborhoods, fulfillment of the Community Energy Plan, and an expanded tax base.
 - Benefits to home owners — Healthier and more comfortable homes, increased home values, better neighborhoods, the satisfaction of contributing to a better environment.
2. Offer home owners the convenience of “On Bill” financing
3. Reinforce a “deep loading order” based on building science with these steps
 - Establish a structured energy audit program to give home owners the best recommendations.
 - Offer modest financial incentives to encourage home owners to make effective improvements.
 - Set measurable performance standards for contractors fulfilling audit recommendations.
4. Hire a trusted energy advisor to administer the program and manage the contractors to protect the best interests of the city and the home owners.

Pilot Project Data and Observations



Cost Comparison for a "TYPICAL" Home Over 20 Years

