

NW Washington Case Study: The Economic Impact of \$1 Spent on Community Energy Efficiency



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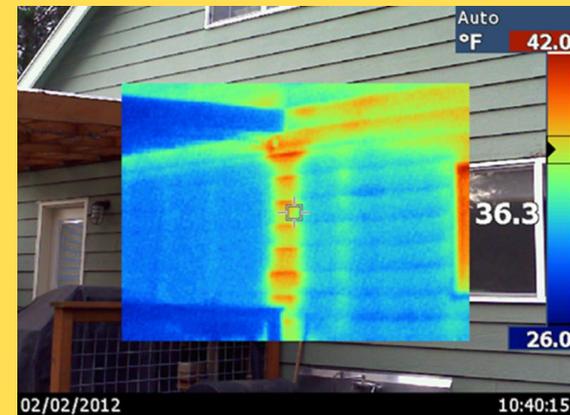
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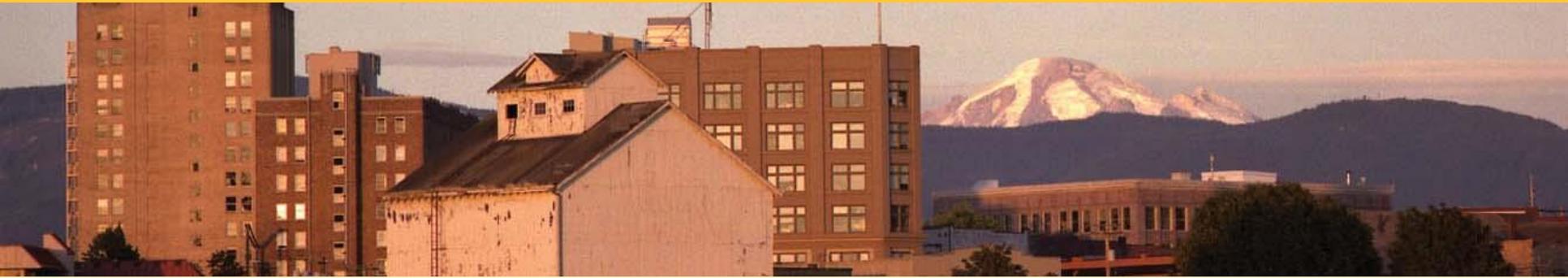


Agenda

- Overview of the Community Energy Challenge
- Measuring our impact
- Economic analysis
- What we can do with that analysis
- How we talk about it



Community Energy Challenge



Making energy efficiency, **accessible, affordable, and attractive** by creating a One Stop Shop for Energy Efficiency in Northwest Washington

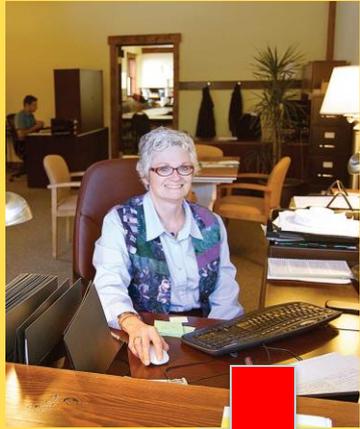


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Overview the CEC process



Results to Date: Residential Retrofits



Since 2010:

- 1542 Home Energy Assessments Complete
- 1148 completed energy efficiency projects in 881 homes
- Average 23% energy savings (\$470/year) at a total cost of \$6,662/project.



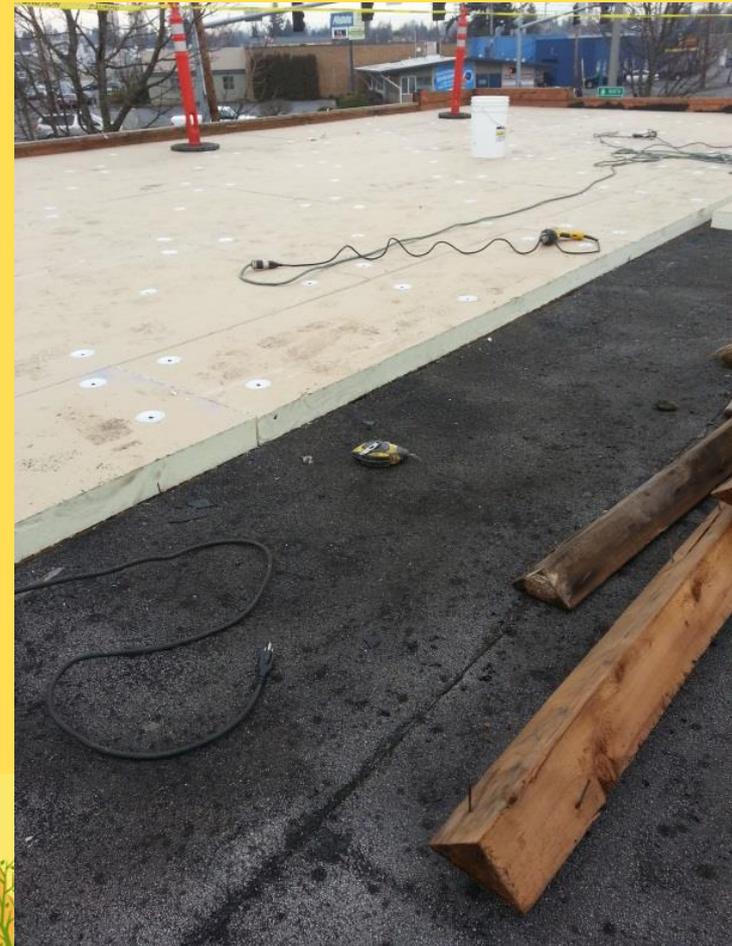
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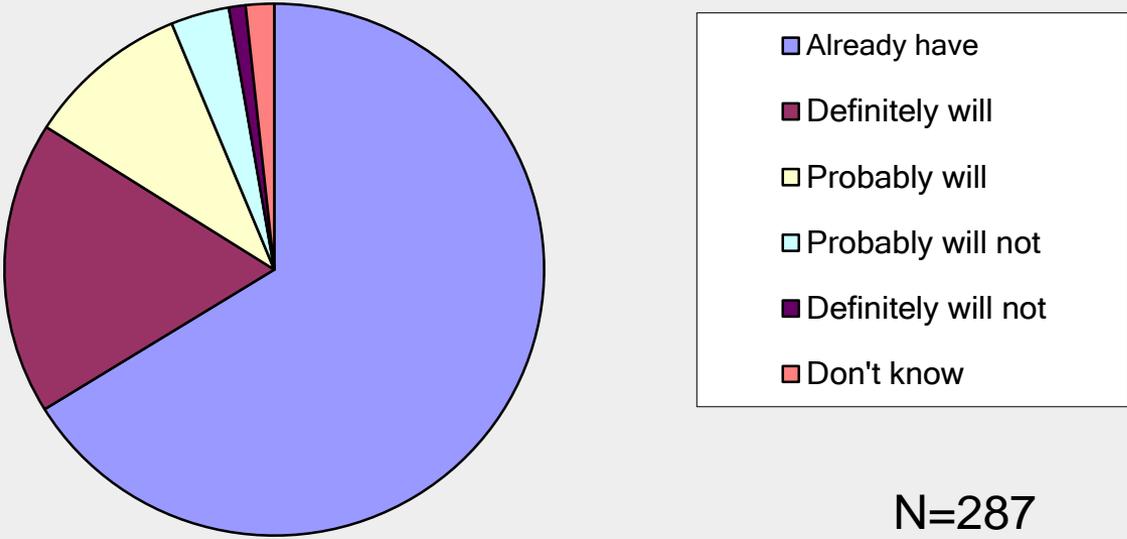
Results to Date: Business Retrofits

- Since 2010:
 - 404 business assessments
 - 179 major energy projects at 115 businesses



Results from Customer Satisfaction Survey

How likely are you to recommend the Community Energy Challenge program to others?



94% of customers already have or will recommend the CEC to others



Results to Date

- Energy savings of over \$649,000/year
- Equivalent to taking 1319 cars off the road
 - \$16 million in total economic activity



Results to Date: Job Creation



- The Community Energy Challenge regularly works with more than 25 contractors.
- In 2013, the CEC generated more than \$5 million in direct economic activity for local businesses.

Using Program Data to Conduct Evaluation

- Good data systems pay dividends
- Analyze and revise metrics over time
- This supports both program improvement and budgeting but also future funding requests
- Collaborate with higher ed. for deeper analysis – economic analysis, surveys, etc.



Economic Impact Analysis

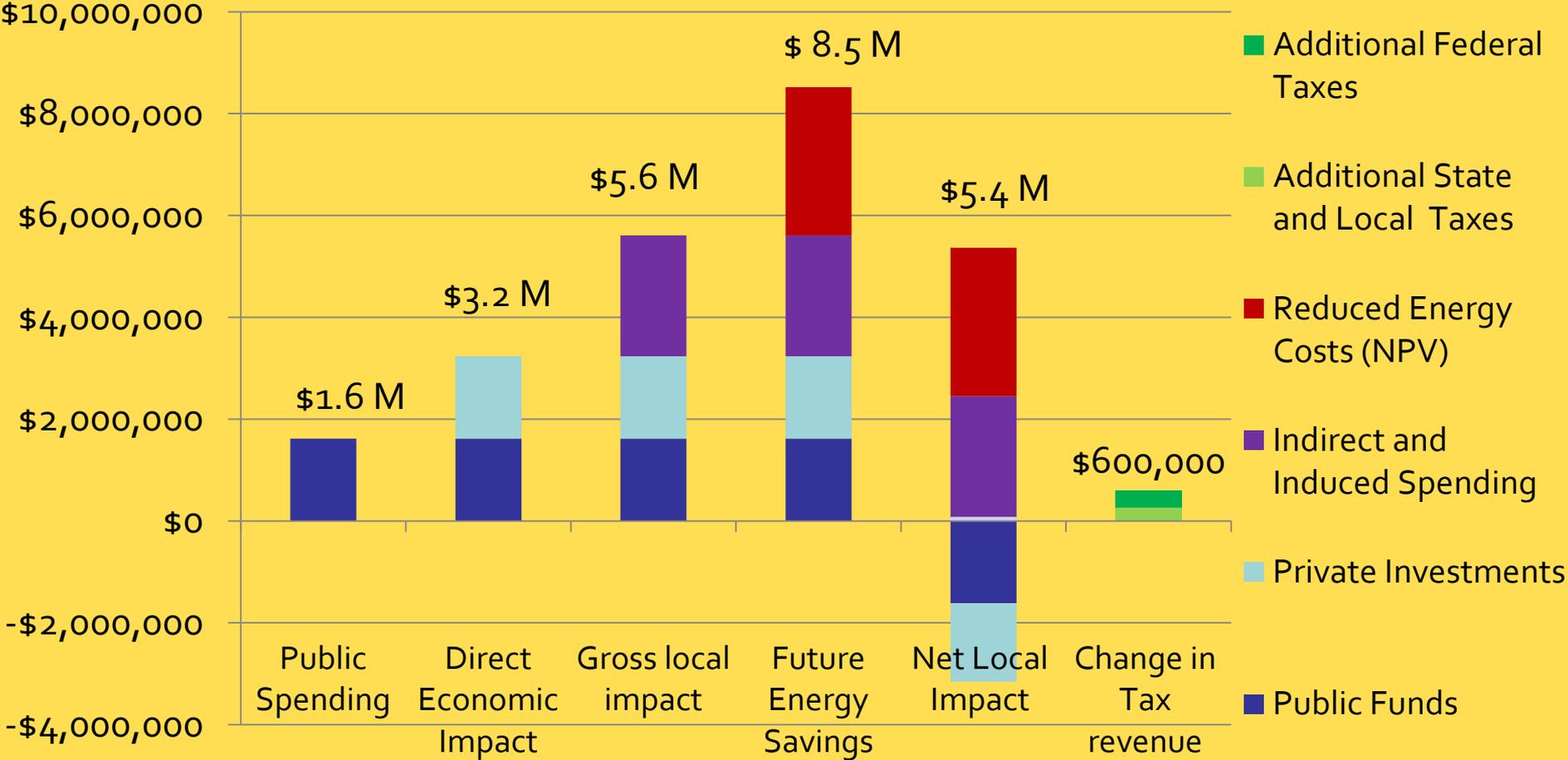
Results

$\$1 = \5.27

- Public funding is more than matched by private investment and utility rebate.
- When local contractors are used, there is an economic multiplier effect (indirect and induced spending) from purchase of supplies and equipment and employees with more money in their pockets.
- Money spent making efficiency improvements reduces future energy costs which have a significant net present value.



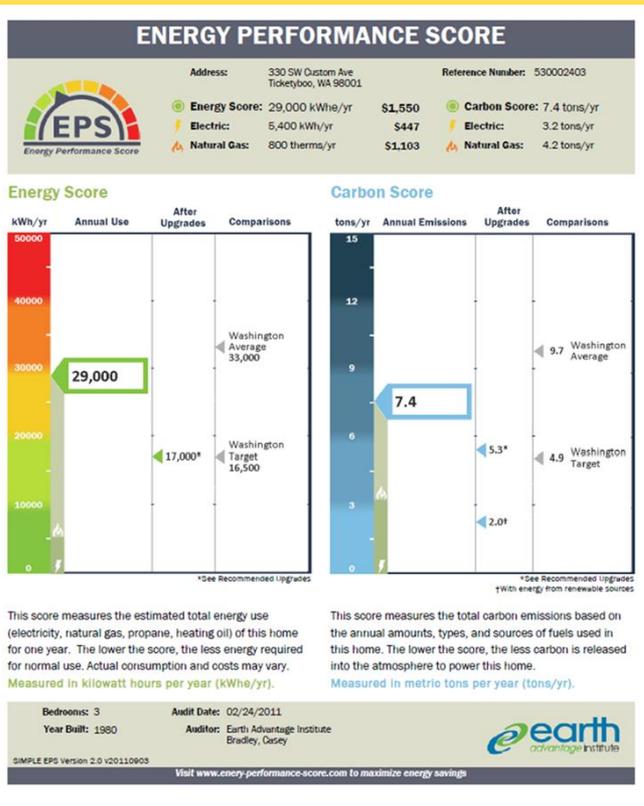
Local Economic Impacts



Key Assumptions

- Local base impacts – what would have happened with the money if we didn't do this?
- 3% discount rate
- Cost of energy
- IMPLAN model assumptions: economic activity by sector for each county
- Utility responses to reduced energy consumption
- Solar production credit

So is this any good?



- Limitation on how this model can be used:
 - Apples to apples comparison figures for other uses of public funds don't really exist
 - Doesn't suggest ways to improve our multiplier
- This tool is best for starting a conversation that allows us to describe the details.

Communicating about Economic Impacts

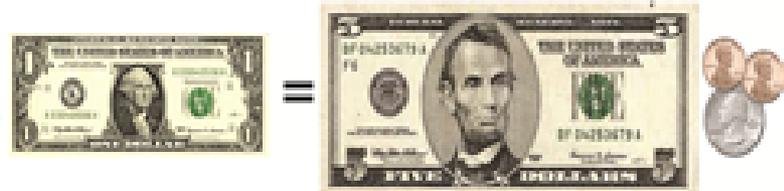
- Audience: funders, budget writers, community leaders, business people
- Methodology probably isn't interesting.
- Think of statistics as a way to tell a story, not the story itself.



Communicating about Economic Impacts

Keep it simple, even for sophisticated audiences

Economic Results



- A recent economic analysis found that public funds invested in CEEP in Whatcom County have an economic multiplier greater than 5:1.
- This results from three factors:
 - public investment makes it easy for building owners to upgrade their homes and businesses, and is more than matched by private investment and utility rebate programs.
 - indirect and induced spending (economic multiplier effect) from purchase of supplies and equipment as well as employees with more money in their pockets
 - Money spent making energy efficiency improvements reduces future costs with a positive net present value.
- Public funds invested in Matchmakers leverages utility and landlord funds at a better than 1:1.

Questions



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