Better Buildings, Better Economy: An Economic Impact Analysis of a Federal Retrofit Program

Matt Koson
Evergreen Economics
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Program Background

• The Better Buildings Neighborhood Program (BBNP) was administered by the US Department of Energy’s Office of Energy Efficiency and Renewable Energy

• Funded through the American Recovery and Reinvestment Act of 2009 (ARRA)

• Program began in 2010 and allocated over $500 million among 41 grantees
Evaluation Background

• Part of a team contracted by DOE to conduct a comprehensive evaluation of BBNP
• Measuring economic impacts associated with the program was one component of the study
• Final analysis report was submitted this summer
• Evaluation period was Q4 2010 through Q3 2013
Input-Output Model

• Each dollar spent in a community will be spent multiple times

• The IMPLAN input-output model estimates:
  ➢ Direct Effects: Result from initial program-related spending
  ➢ Indirect Effects: Secondary impacts from supporting industries
  ➢ Induced Effects: Result from spending due to increased personal income
Input Data

• Inputs include:
  ➢ Grantee outlays: $445.2 million
Retrofit invoiced costs: $910.2 million
Energy savings: $41.5 million
Net Impacts

- Counterfactual (or Base Case) scenario assumes BBNP funding is instead spent on the next most likely use of funds
- Net impacts = Gross Impacts – Counterfactual
- **Counterfactual 1**: BBNP funds are spent on other, non-defense government expenditures
- **Counterfactual 2**: BBNP funds are returned to taxpayers and spent according to historical patterns (i.e. 2010)
Output Metrics

- **Output**: represents the value of industry production
- **Personal Income**: total payroll cost of the employee paid by the employer
- **Small Business Income**: payments received by self-employed individuals and unincorporated business owners
Gross and Net Economic Impact Metrics

- **Output**: $2,097
- **Personal Income**: $1,345, $632
- **Small Business Income**: $398, $142, $111
- **State and Local Taxes**: $84, $49, $40
- **Federal Taxes**: $161, $81, $104

<table>
<thead>
<tr>
<th>Gross Impacts</th>
<th>Net Impacts (Counterfactual 1)</th>
<th>Net Impacts (Counterfactual 2)</th>
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Jobs

Gross Impacts: 13,333
Net Impacts (Counterfactual 1): 10,191
Net Impacts (Counterfactual 2): 9,189
Summary and Conclusions

• Using government spending counterfactual, BBNP activities caused:
  ➢ An increase of $1.3 billion in economic output
  ➢ An increase of $230.2 million in income
  ➢ 10,191 full-time jobs.

• Using the alternate, taxpayer counterfactual, BBNP activities caused:
  ➢ An increase of $1.4 billion in economic output
  ➢ An increase of $398.1 million in income
  ➢ 9,000 full-time jobs.
Contact Information

For more information, contact:

Matt Koson
koson@evergreenecon.com
(503) 741-8086