



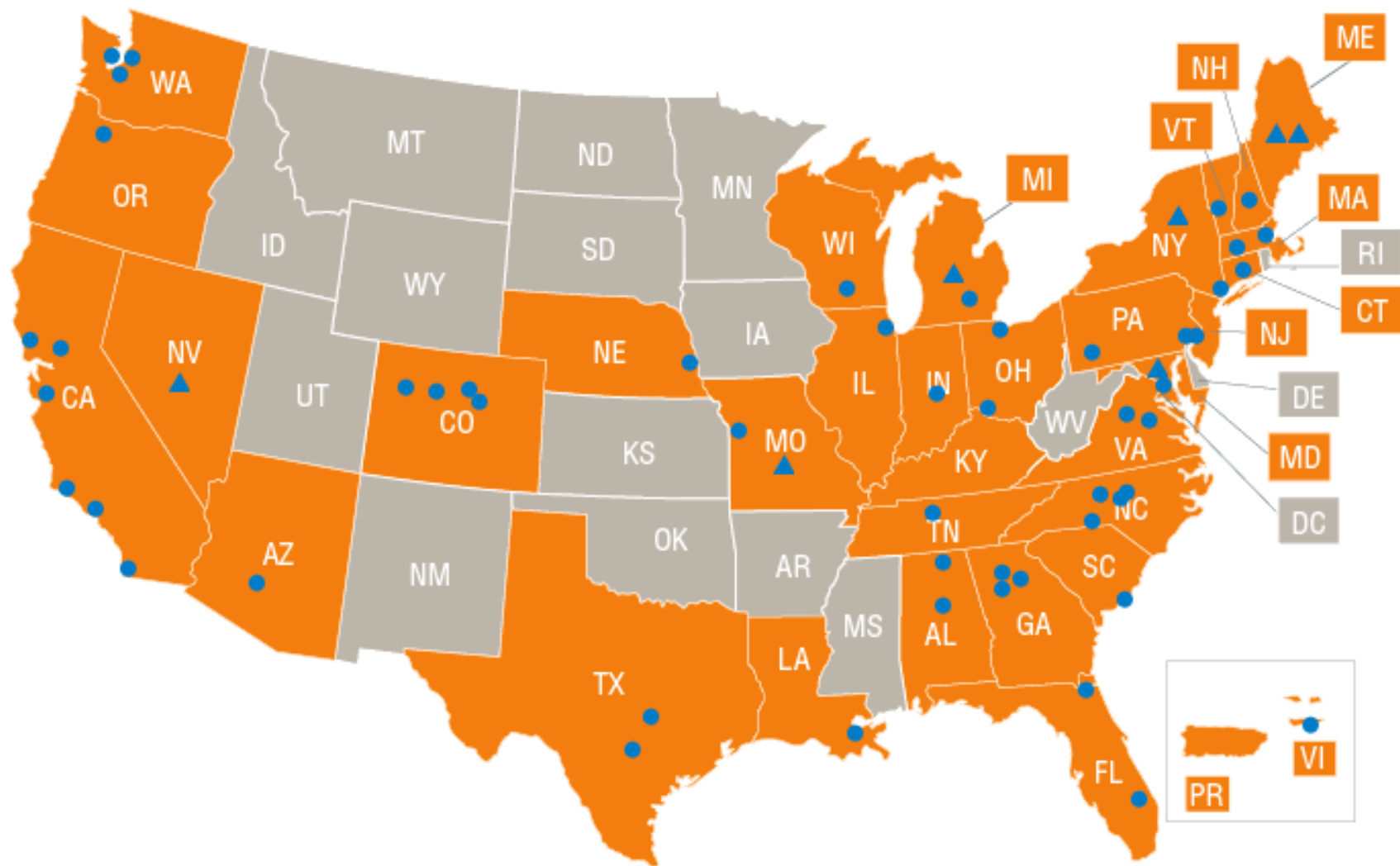
# **Better Buildings, Better Economy: An Economic Impact Analysis of a Federal Retrofit Program**

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IEPEC Long Beach 2015



# 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



- City/County Level Grant
- ▲ Statewide Grant
- State Energy Program Award



# 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



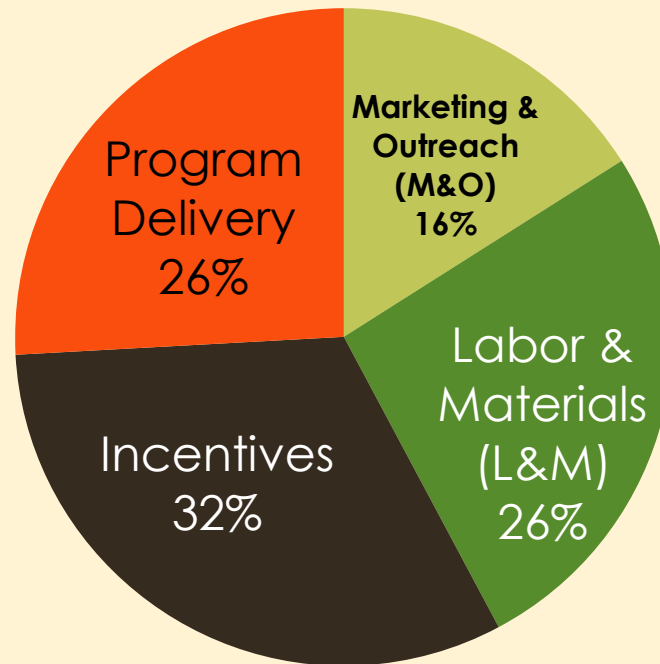
# Input-Output Model

- 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

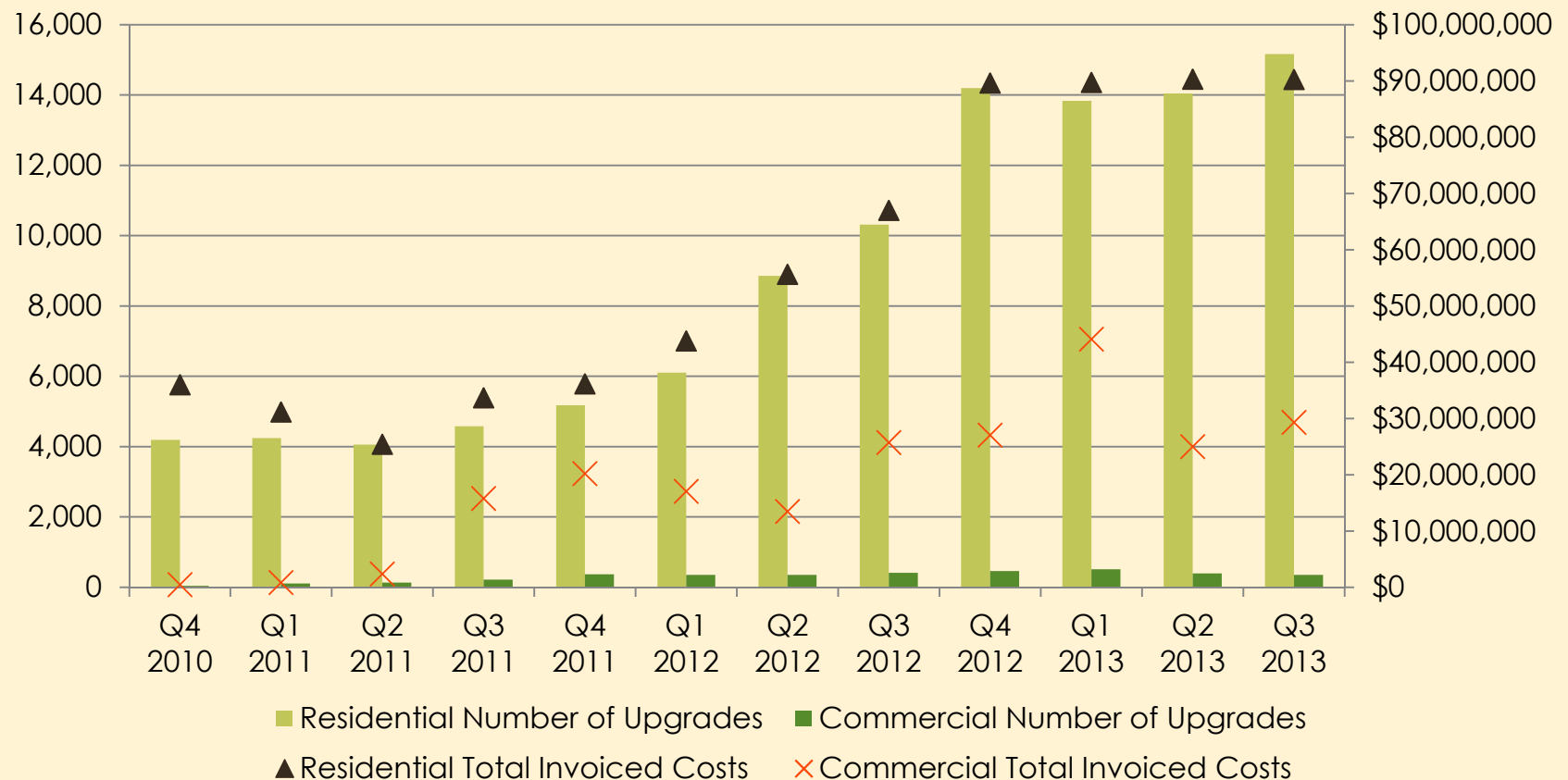
- Inputs include:
  - Grantee outlays: \$445.2 million





# Input Data Cont.

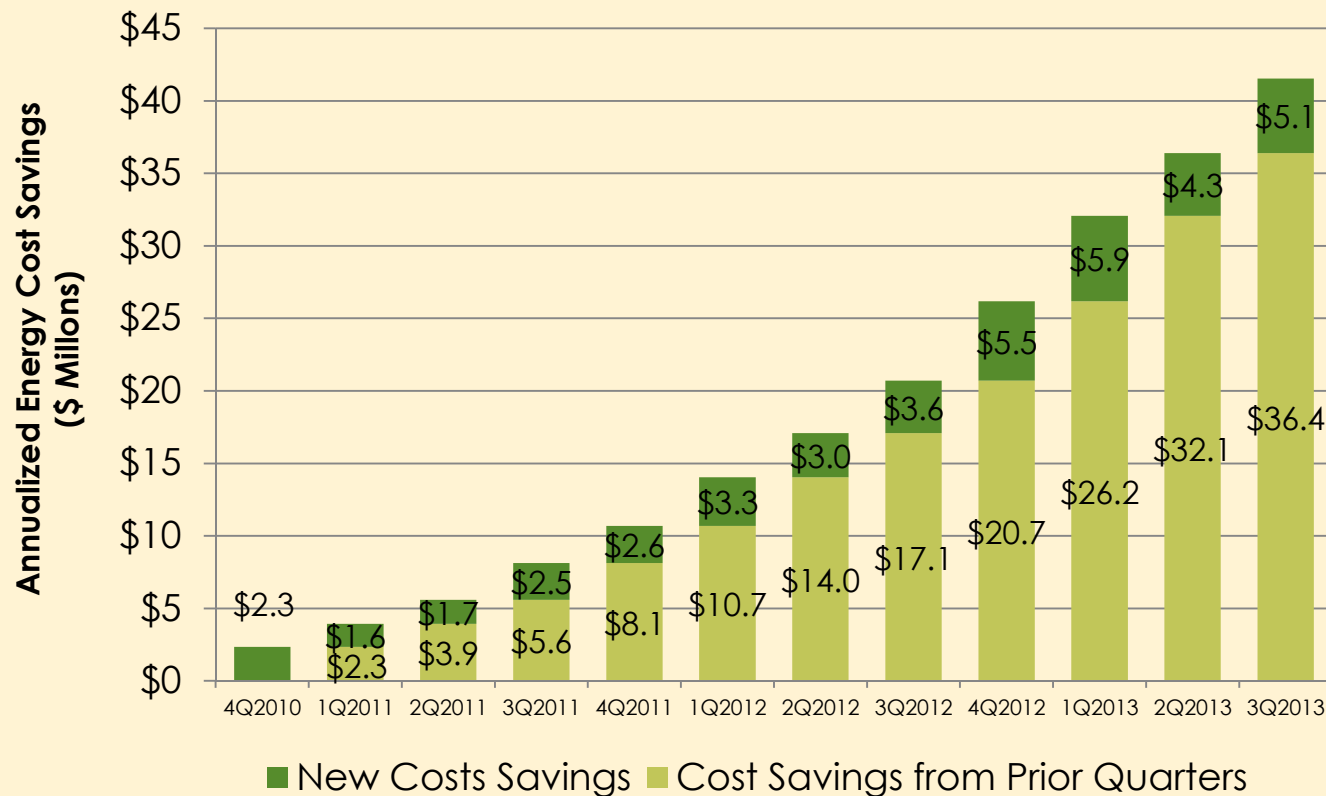
## ➤ Retrofit invoiced costs: \$910.2 million





# Input Data Cont.

➤ 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)

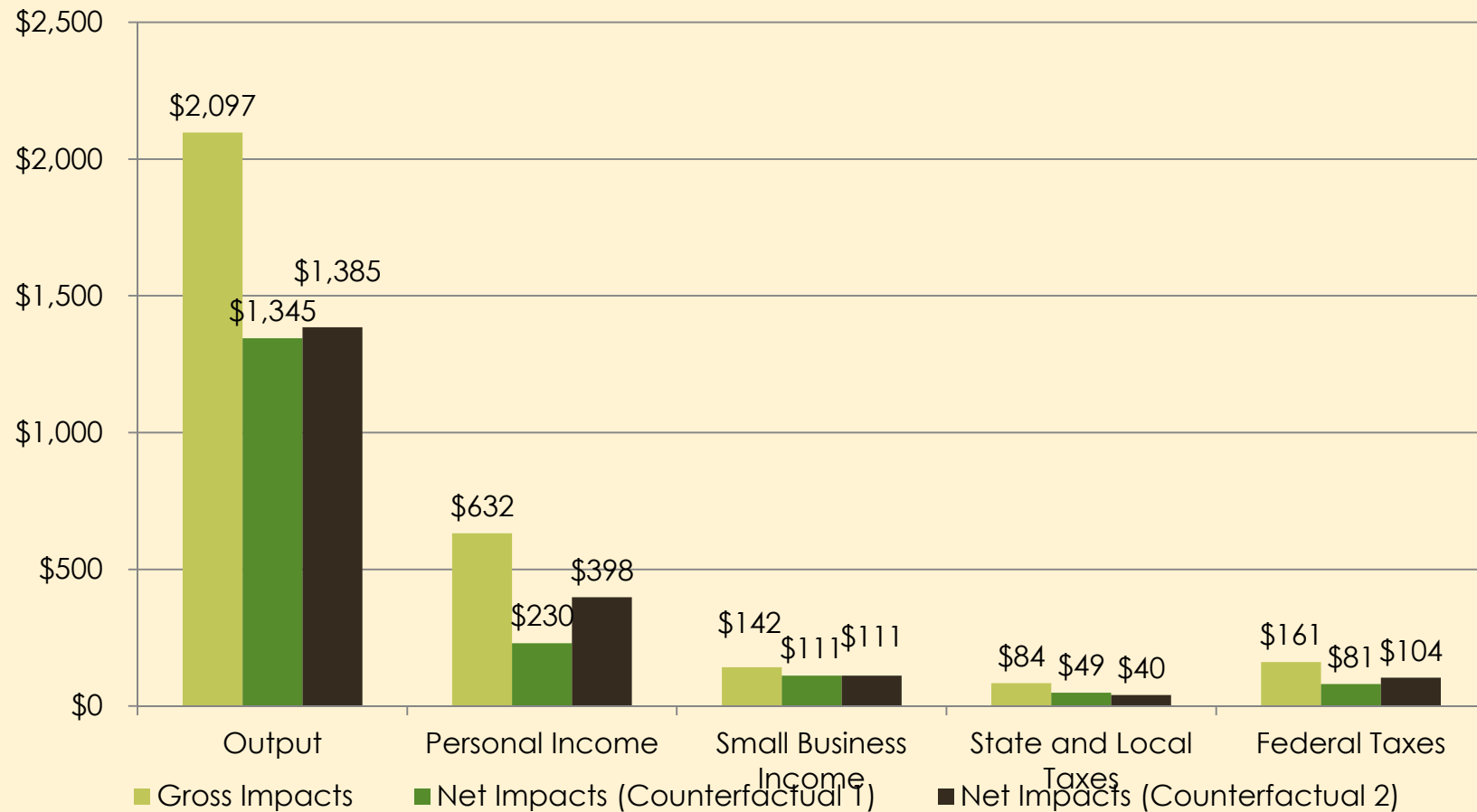


# Output Metrics

- 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

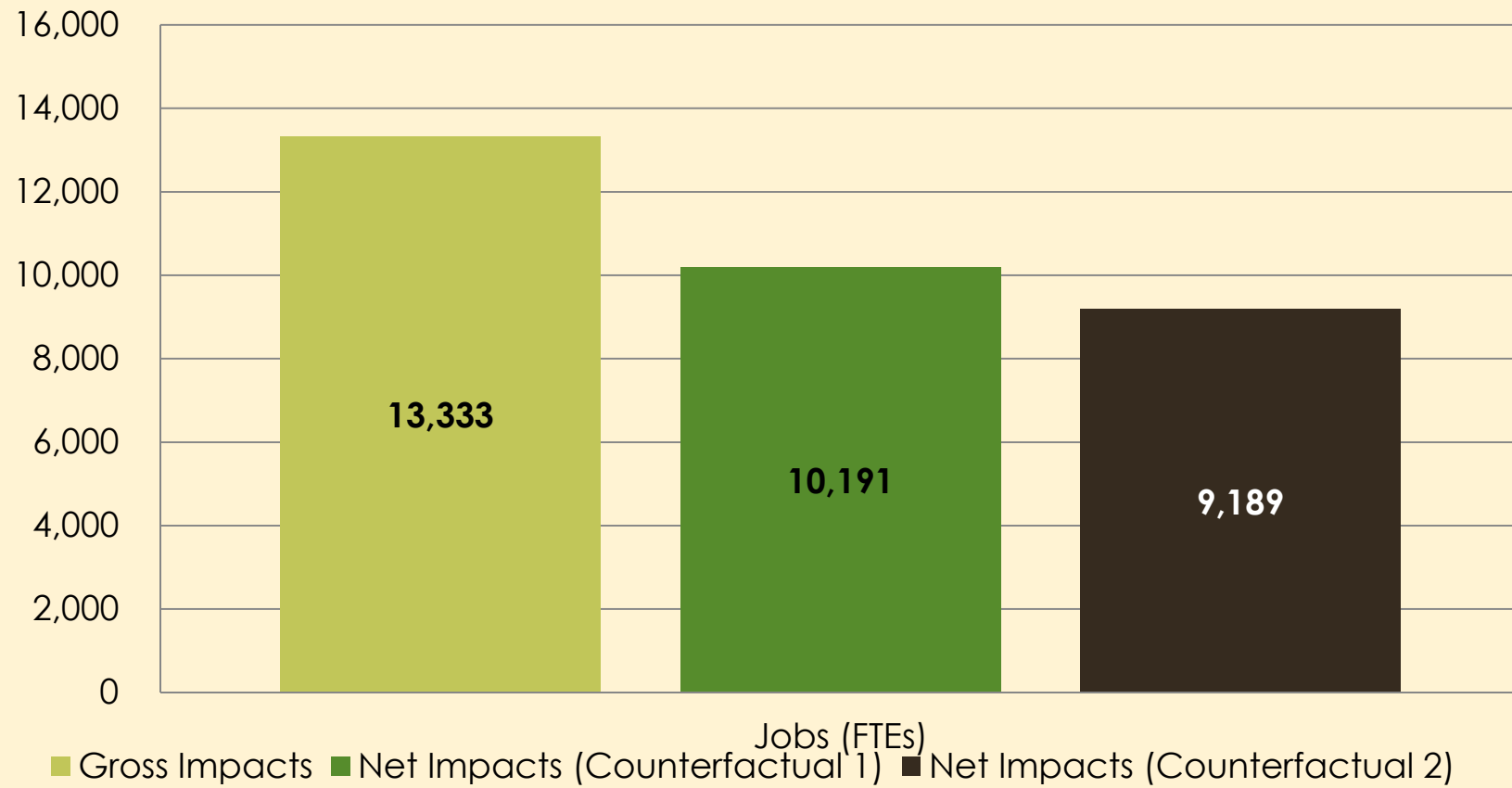


# Gross and Net Economic Impact Metrics





# Jobs





# 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

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