

Economist puts dollar figures on impact of underserved and minority training

By Eddy Ball

The NIEHS Worker Training Program hosted a talk Oct. 6 by College of the Holy Cross labor economist Bryan Engelhardt, Ph.D., on the program assessment he is conducting with colleagues Robert Baumann, Ph.D., and Katherine Kiel, Ph.D.

Through a contract with NIEHS, the team is nearing completion of a comprehensive economic impact analysis of the Minority Worker Training Program. Since 1995, the initiative has prepared 9,600 participants across the U.S. for skilled jobs in construction, many of them directly related to environmental improvement and remediation.

Engelhardt's

(<http://college.holycross.edu/faculty/bengelha/>)

presentation was hosted by NIEHS industrial hygienist **Sharon Beard**

(<http://www.niehs.nih.gov/research/supported/dert/wet/staff/beard/index.cfm>)

, founding coordinator of the Minority Worker Training Program, who was honored by the American Public Health Association in 2013 for her service to the health and safety of minority workers (see [story](#)).

Through Engelhardt's research, Beard is now striving to quantify the economic benefits of the program to participants and society as a whole. This effort, Engelhardt explained at the beginning of his talk, is consistent with goal 10 of the NIEHS 2012-2017 [strategic plan](#)

(<http://www.niehs.nih.gov/about/strategicplan/index.cfm>)

, to measure the economic benefits and the comparative effectiveness of NIEHS initiatives, especially in public health and community engagement.

Wages, safety, taxes, and crime

"There was a huge employment bump [for program participants]," Engelhardt told the audience. "Sixty percent were more likely to be placed in [higher paying, full-time] jobs."

For minority workers with low wages, unemployment or underemployment, and experience in the criminal justice system, the steady paycheck for working more hours and a nearly 33 percent boost in pay after completing training was transforming. Over an average lifetime, compared with people of similar backgrounds who did not participate in minority worker training, graduates and their families benefited significantly and made positive contributions to society.

The most favorable estimates of value added over a lifetime for the 9,600 participants and others include:

- Higher earnings over a lifetime — estimated at a total of \$1.6 billion
- Savings from improved safety on the job — \$181.2 million in reduced workplace injury costs



"How conservative can I make this number?" Engelhardt asked, as he reached the end of his presentation and played devil's advocate with his estimates. (Photo courtesy of Steve McCaw)



"We're just ecstatic," Beard said of the prospect of solid metrics to evaluate the training program. (Photo courtesy of Steve McCaw)



Representing the Worker Training Program's contractor, MDB Inc., Larry Reed underscored the need for a detailed understanding of economics to frame impact assessment. (Photo courtesy of Steve McCaw)

- Savings for employers — lower turnover resulting in a savings of \$23.7 million in reduced hiring and training costs
- Savings for taxpayers and victims of crime — an estimated reduction of \$22.1 million in crime-related costs
- Increased tax collections and reductions in government transfers, such as the earned income credit — an estimated \$711.6 million boost for governments

With one-third of participants transitioning to jobs in environmental remediation, Engelhardt said there were obviously environmental improvements that resulted from the training. However, he was reluctant to speculate on a dollar value, because of the difficulty in quantifying the effects on public health, property values, and community perception.

Equally difficult to measure are the long-range and intangible benefits of training and job security, such as the effects on children of participants, family stability, and self esteem.

A number of questions remain in this emerging field of health economics, before Engelhardt will have what he described as a bullet-proof methodology for measuring effectiveness. Still, no matter how critically he examined the metrics the team used to estimate the impact of minority worker training over nearly two decades, one thing was clear — without question, for participants, government, fellow citizens, and the environment, the program has paid for itself many times over.

(For more information about the Minority Working Training Program, including a guide to best practices, and other initiatives supported by the NIEHS Worker Training Program, visit the [National Clearinghouse for Worker Safety and Health Training website](#)

(<http://tools.niehs.nih.gov/wetp/>)

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The talk attracted NIEHS staff involved in grants management and program evaluation, such as Nicole Popovich, left, and Kristi Pettibone, Ph.D. (Photo courtesy of Steve McCaw)

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