

Exploring How Health Impact Assessments Monetize Health Benefits of Transportation Plans and Projects

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Bethany Rogerson, brogerson@pewtrusts.org

Moving Active Transportation to Higher Ground:

Opportunities for Accelerating the Assessment of Health Impacts

A collaboration between Robert Wood Johnson Foundation and The Pew Charitable Trusts.

Health Impact Project

Funding
(~100 HIAs to date)

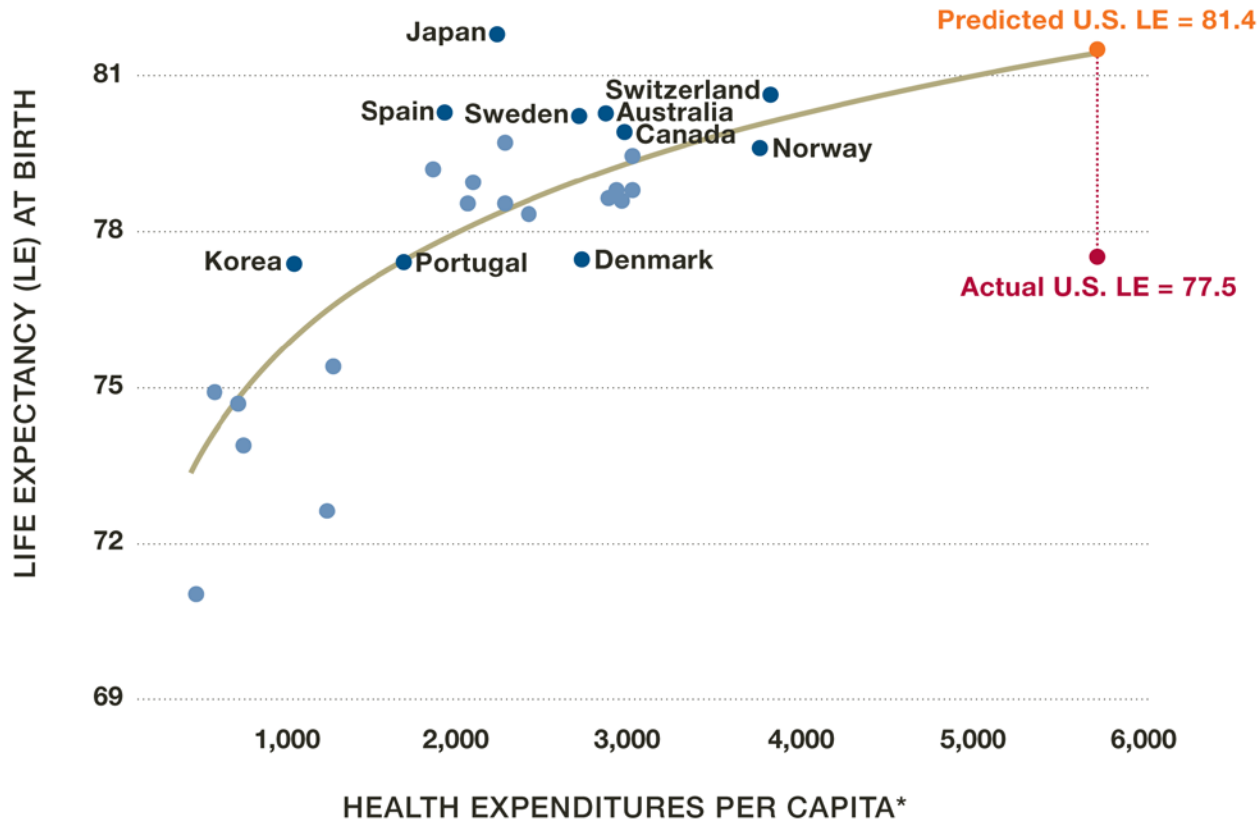
Leading
(Two federal level HIAs)

Convening
(~500 professional at each national meetings)

Training
(Trained over 800 individuals)

America Is Not Getting Good Value for Its Health Dollar

The U.S. spends more money per person on health than any other country, but our lives are shorter—by nearly four years—than expected based on health expenditures.



Prepared for the Robert Wood Johnson Foundation by the Center on Social Disparities in Health at the University of California, San Francisco.

Sources: OECD Health Data 2007.

Does not include countries with populations smaller than 500,000. Data are for 2003.

*Per capita health expenditures in 2003 U.S. dollars, purchasing power parity

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www.commissiononhealth.org

Social Determinants of Health



HIA Addresses Social Determinants of Health

How might the proposed project, plan, policy



affect

- Housing
- Air quality
- Noise
- Safety

- Social networks
- Nutrition

- Parks and natural space
- Private goods and services

- Public services
- Transportation

- Livelihood
- Water quality
- Education
- Inequities



and potentially lead to predicted health outcomes?

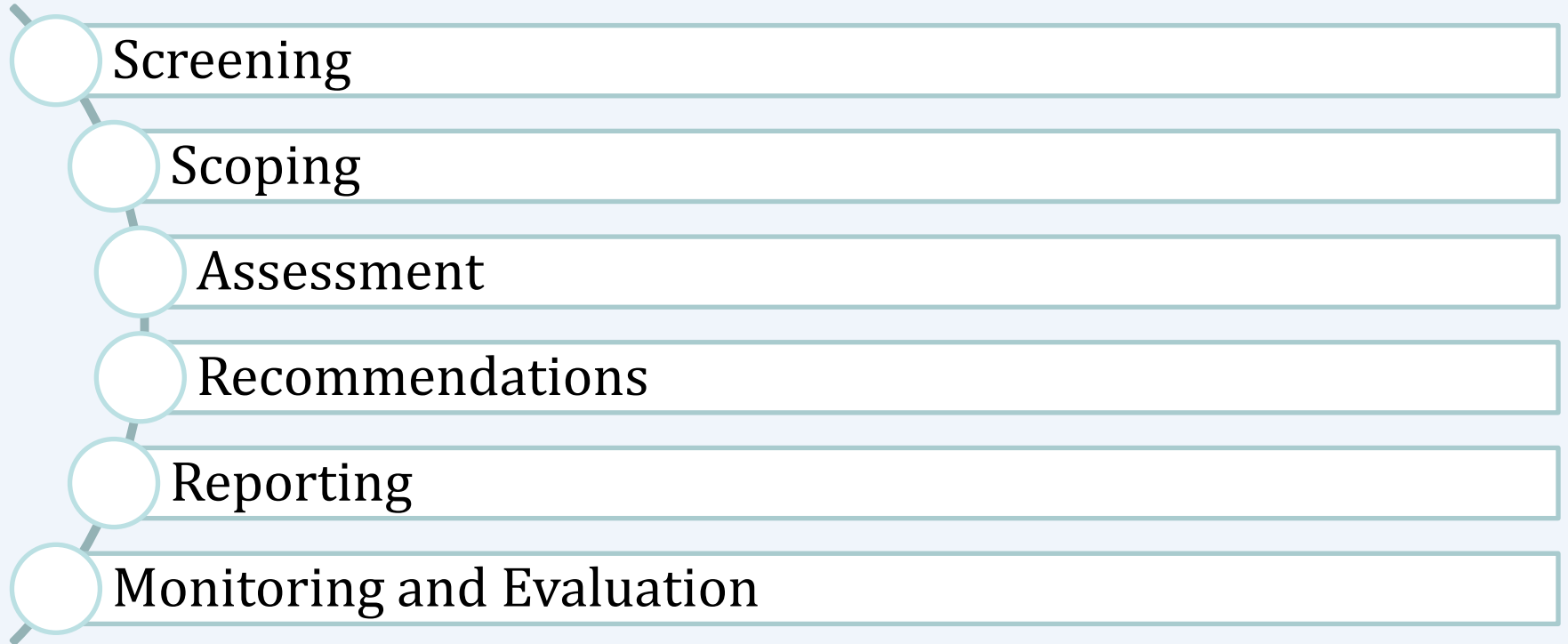
Slide courtesy of Human Impact Partners (www.humanimpact.org)

Defining Health Impact Assessment

“A systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program or project on the health of a population and the distribution of those effects within the population. [HIA] provides recommendations on monitoring and managing those effects.”

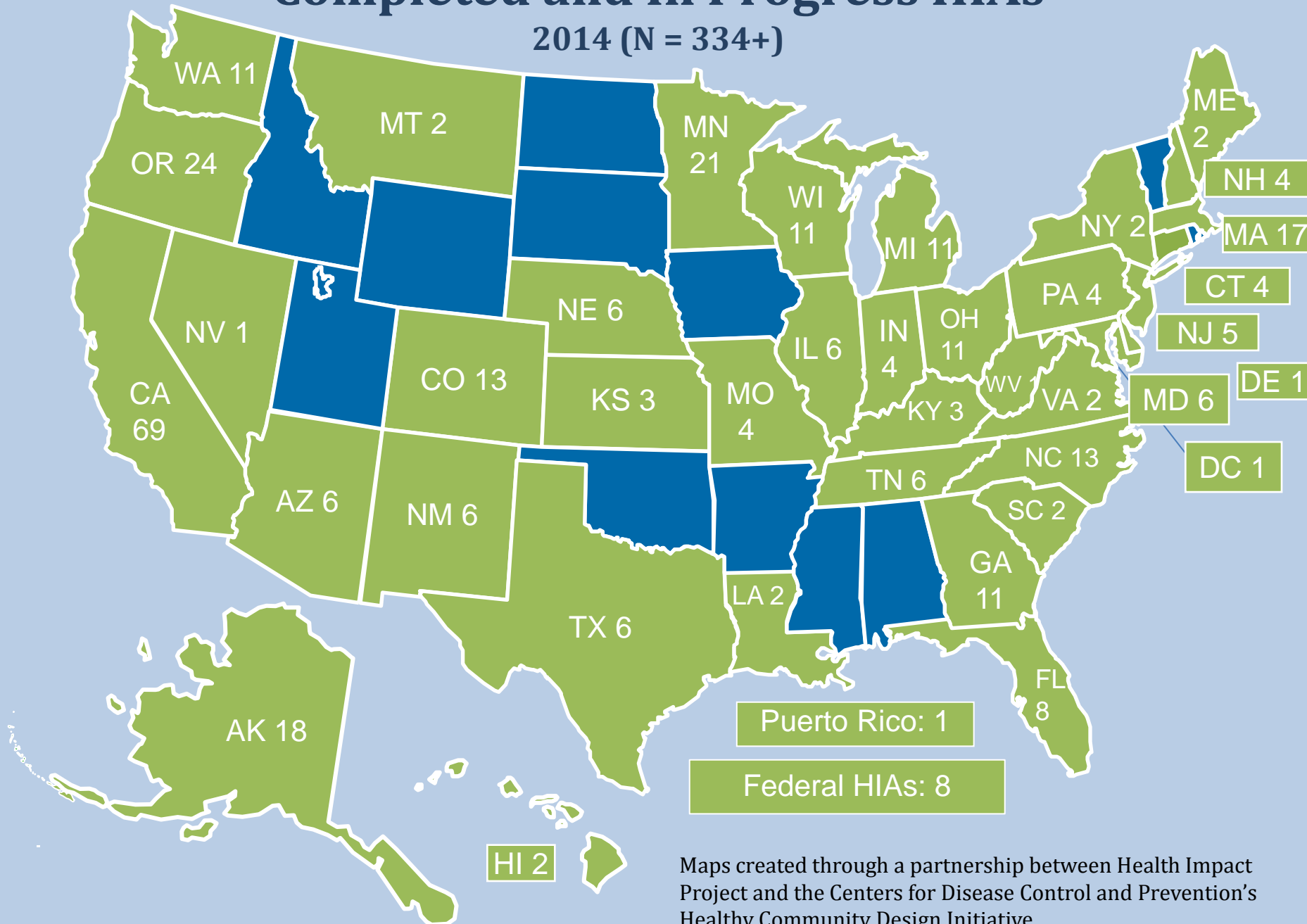
Source: “Improving Health in the United States: The Role of Health Impact Assessments” by the National Research Council, September 2011

Steps of HIA



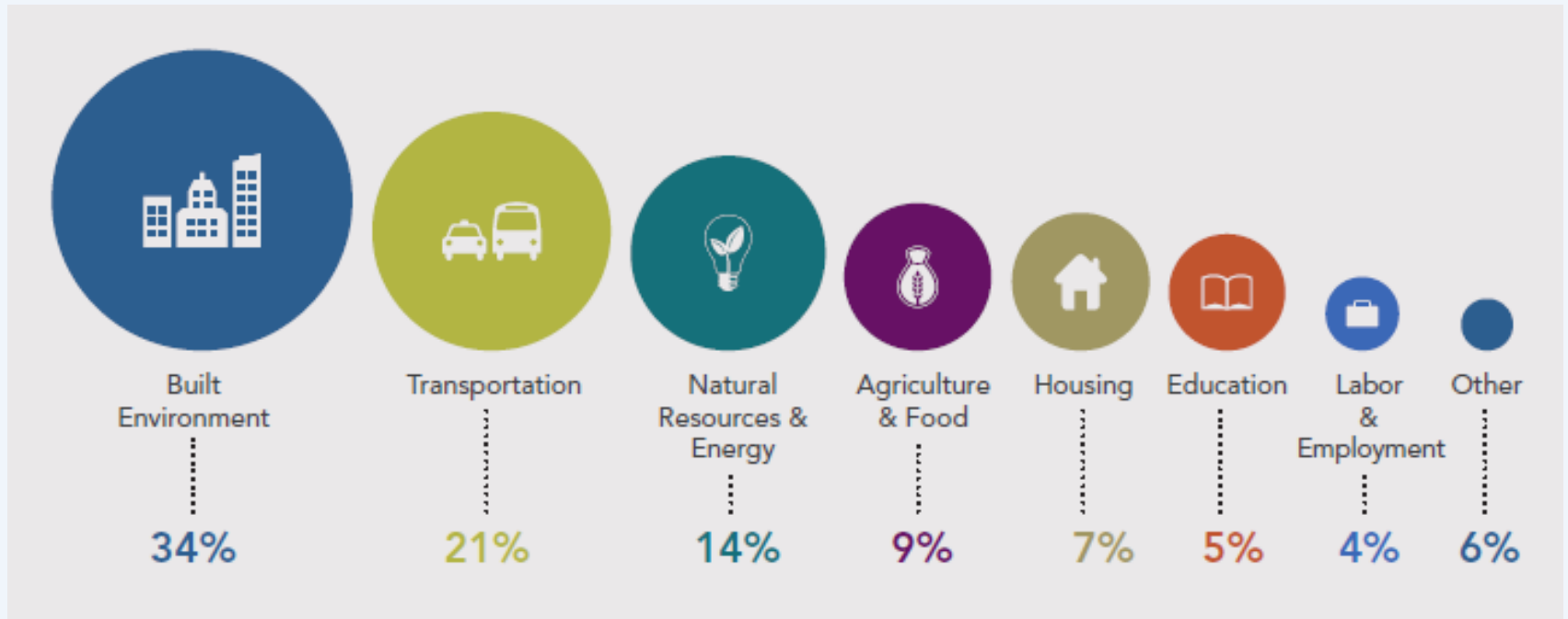
Completed and In Progress HIAs

2014 (N = 334+)



Maps created through a partnership between Health Impact Project and the Centers for Disease Control and Prevention's Healthy Community Design Initiative

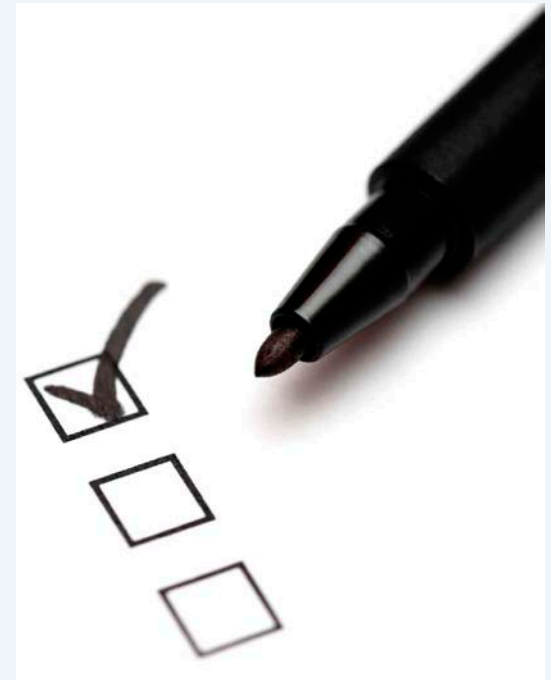
HIA can be applied to a range of sectors



What have we learned so far about value of HIA?

HIAs can:

- 1) bring health information to non-health decision-making;
- 2) bring community voice to a decision-making process;
- 3) build consensus between decision-makers and stakeholders, and facilitate cross-sector collaboration.



Economic Data Valued by Decision Makers

Decision makers reported that HIAs have shaped their decision-making

Example: “Cost savings or economic data was useful.”

Common characteristics that increased likelihood of success

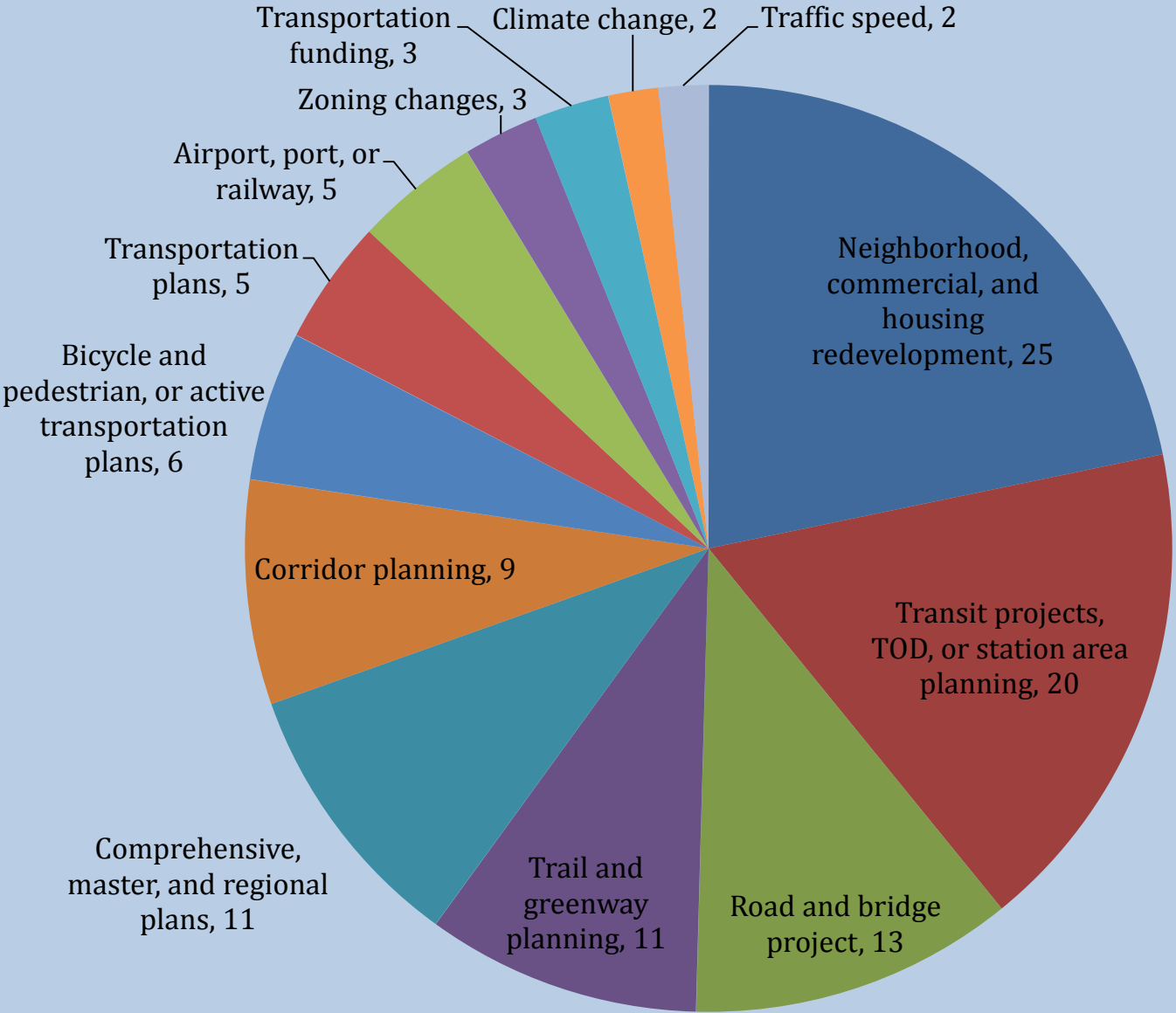
- Including health and economic benefits of various options was helpful when engaging decision makers and stakeholders.
- Including findings and recommendations related to economic benefits of a particular policy.

Bourcier, E., Charbonneau, D., Cahill, C., & Dannenberg, A. (2014). Do health impact assessments make a difference? A national evaluation of HIAs in the United States. Seattle: Center for Community Health and Evaluation.

Exploring How HIAs have Incorporated Economic Analysis



Transportation HIAs by Sub-Topic

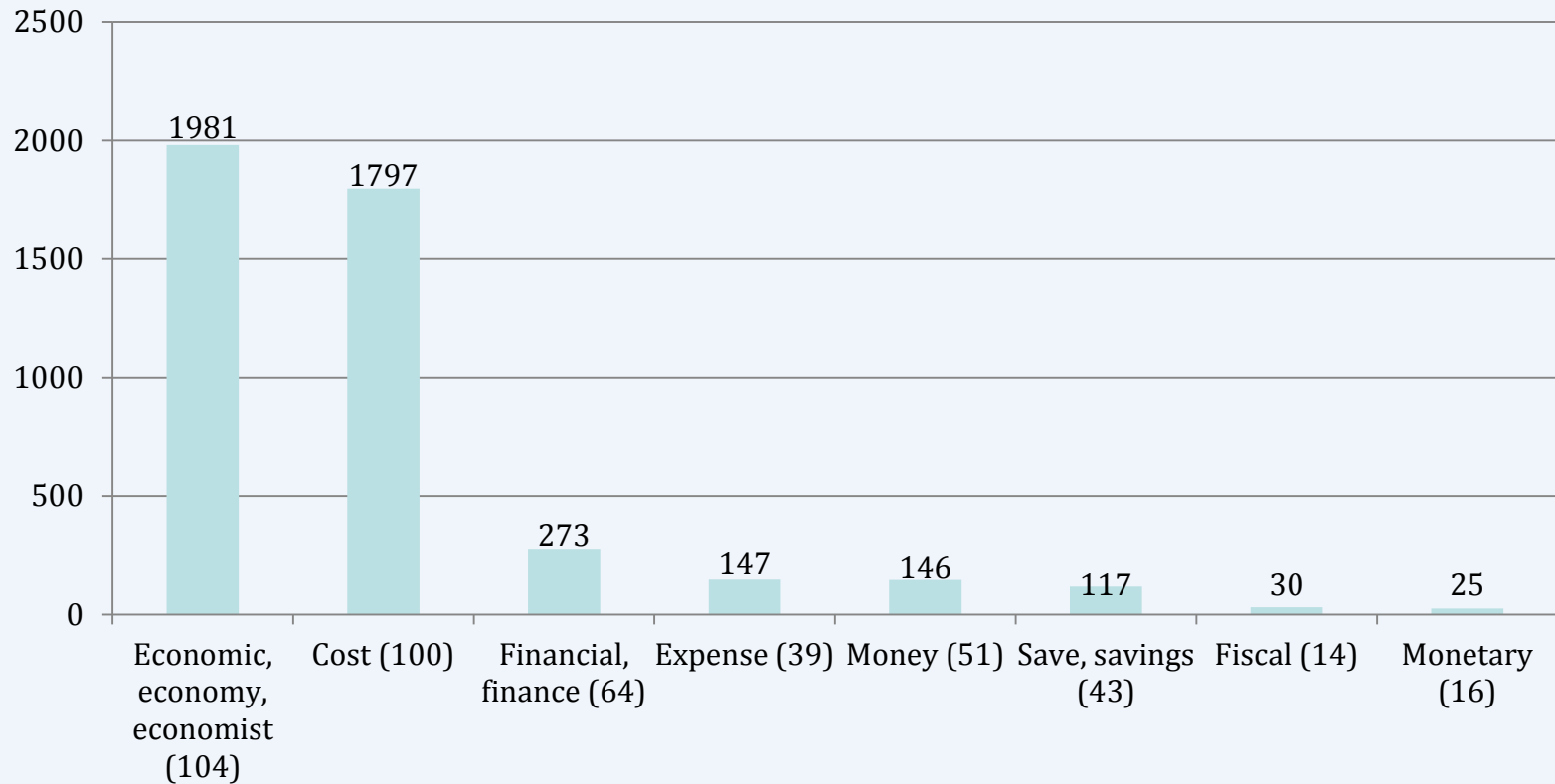


Key Words

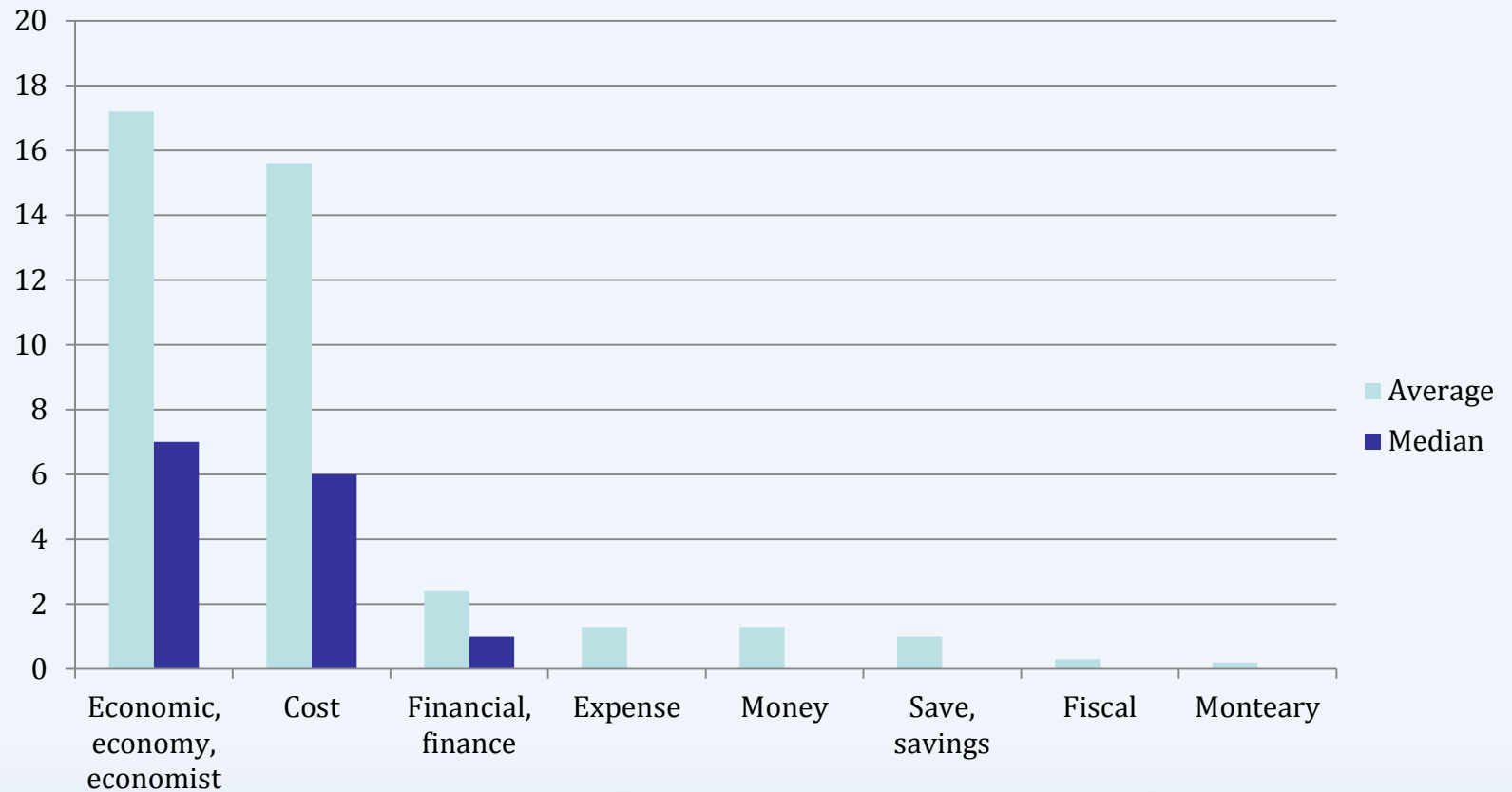
- Economic, economy, economist
- Finance, financial
- Fiscal
- Money
- Monetary
- Save, savings
- Expense
- Cost



Total Use of Key Terms Across Reports



Average and Median Use of Key Terms in HIA Reports



Examples of Assessment Methods

Using Literature

- Drawing on evidence base to make connections between health and economic impacts.

e.g. active transportation and economic development

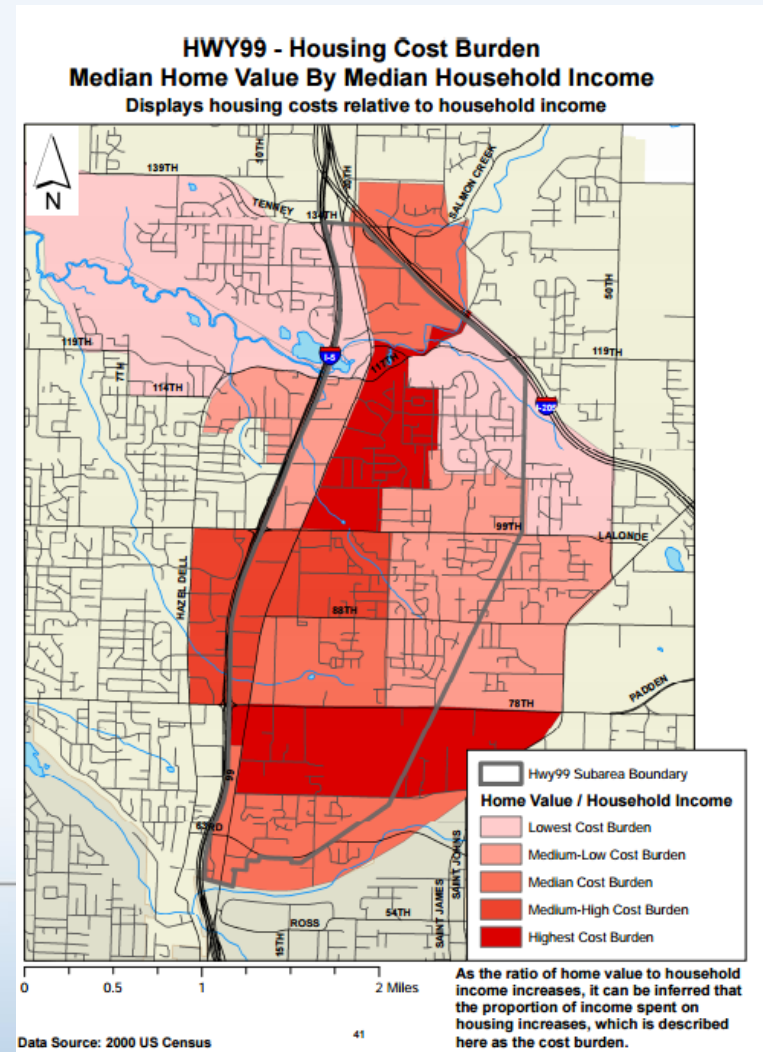


Examples of Assessment Methods

Mapping Economic Data

- Communicating economic information spatially.

e.g. cost burden (housing costs relative to household income)



Examples of Assessment Methods

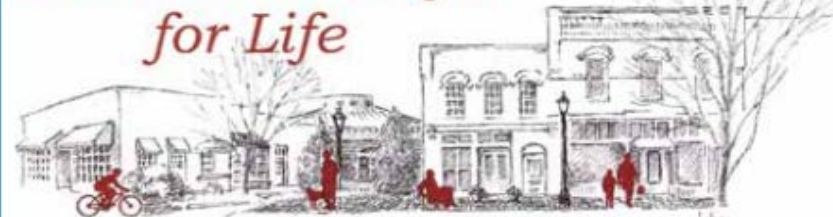
Estimating savings based on existing data

Table A.6: Potential Annual Benefits of Increased Walking in Davidson

	Current	25% increase from current levels	50% increase from current levels
Walk Commute Mode Share	6.1%	7.7%	9.2%
Annual VMT Reduced	463,000	580,000	690,000
Air Quality			
CO2 Emissions Reduced (pounds)	377,000	470,000	570,000
Other Vehicle Emissions Reduced (pounds)	15,000	20,000	20,000
Total Vehicle Emissions Costs Reduced	\$11,000	\$10,000	\$20,000
Social Benefits			
Reduced Traffic Congestion Costs	\$23,000	\$29,000	\$35,000
Reduced Vehicle Crash Costs	\$167,000	\$210,000	\$250,000
Reduced Road Maintenance Costs	\$70,000	\$90,000	\$110,000
Individual Benefits			
Household Vehicle Operation Cost Savings	\$262,000	\$330,000	\$390,000
Healthcare Cost Savings from Physical Activity	\$47,000	\$60,000	\$70,000
Total Monetized Benefits	\$579,000	\$730,000	\$880,000

Note: Estimates reflect conceptual benefits that would be generated at given mode shares as if they existed in Davidson today. Values are rounded for readability. Values are not discounted and do not reflect future demographic growth, cost changes or other multiplier changes.

*Davidson Design
for Life*



Examples of Assessment Methods

Using Health Economic Assessment Tool (HEAT)



San Francisco Road Pricing



Blue Ridge Corridor



Discussion and Next Steps

- Current practice: challenges and opportunities
- Conclusions and implications for future work



Resources

- Explore the interactive map:
www.healthimpactproject.org.
- Attend the National HIA Meeting in Washington, DC, June 16-17, 2015: www.nationalhiameeting.com.
- Visit the Society of Practitioners of HIA (SOPHIA) website to learn more: www.hiasociety.org.

Thank you!

Website: www.healthimpactproject.org

E-mail: brogerson@pewtrusts.org

