

# How assessment methods can advance Health in All Policies

An introduction to **Health Impact Assessment**

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Minnesota Department of Health

# Acknowledgement/Disclaimer

*Funding for this training was made possible (in part) by the Centers for Disease Control and Prevention. The views expressed in written materials and by speakers do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.*

# Goals for today

- **What is a health impact assessment?**
- **How was it been used in Minnesota?**
- **HIA vs. Health Equity Data Analysis**







Photo credit: Eamon Flynn

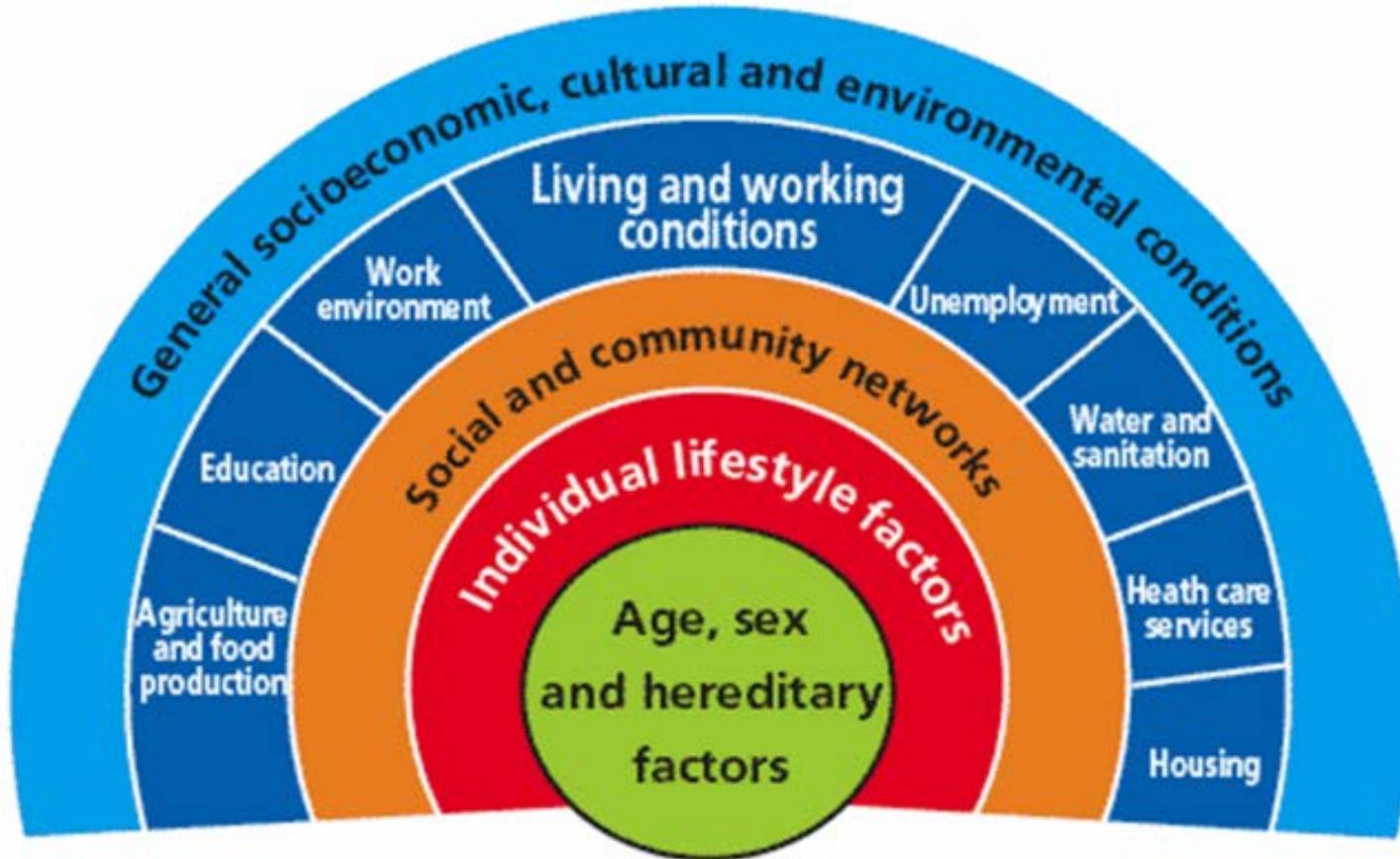


# Social Determinants of Health



Health status is determined by: 30% by genetics; only 10% by health care; but **60% by social & environmental conditions, and behavior**

# Layers of Influence

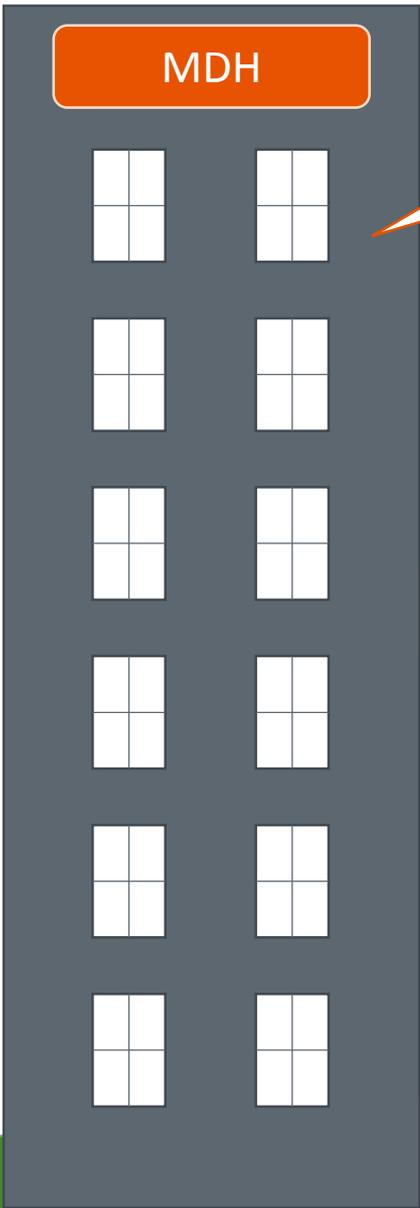


Health Equity Data Analysis

If we want to impact health, we need to act outside the health sector.



## Health in All Policies

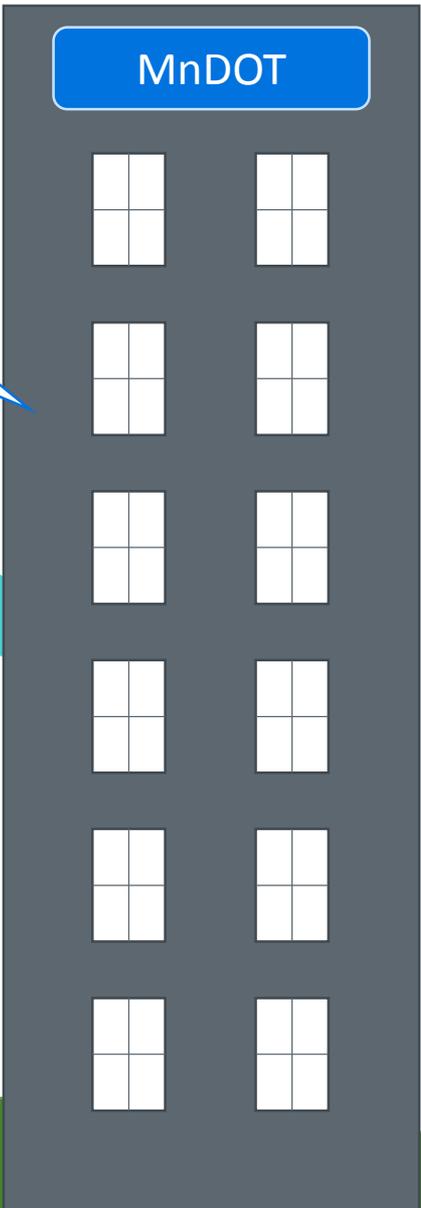


MDH

It's important to bike!

Build a turnpike?

Health Impact Assessment



MnDOT

MDH

MnDOT

**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.

*National Research Council, Improving Health in the United States: The Role of Health Impact Assessment, 2011.*

MENU

SHARE

# Minnesota GO

A Collaborative Vision for Transportation



RSVP for our Stakeholder Forums, Nov. 5, 6, & 9

RSVP now

## Planning Minnesota's



## Transportation Future



Climate Change

Help us plan



Demographics

Help us plan



Dynamic (road) Pricing

Help us plan



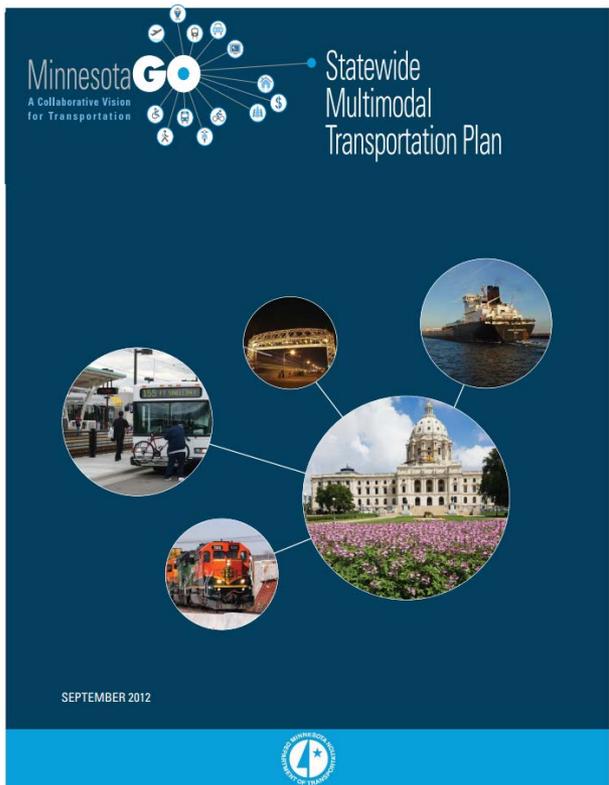
Economy & Employment

Help us plan



Environmental Quality

Help us plan



Participate in three workgroups.

Assist with trend analysis papers.

Regular meetings.

Assess proposed revisions (HIA).



Climate Change

Help us plan



Demographics

Help us plan



Dynamic (road) Pricing

Help us plan



Economy & Employment

Help us plan



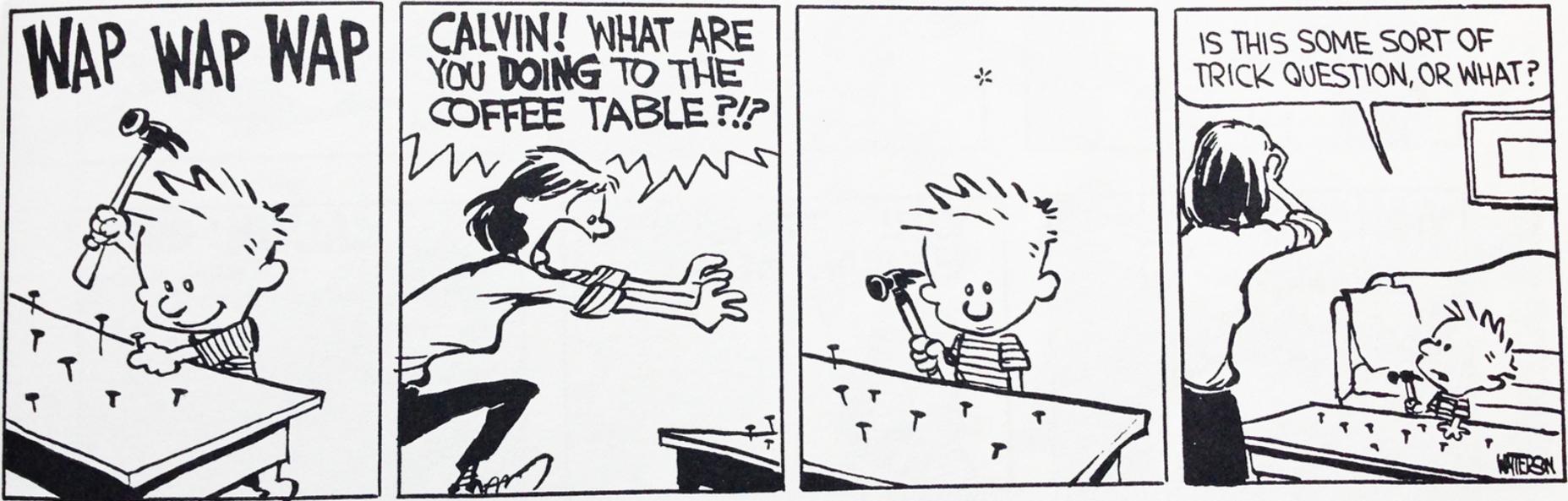
Environmental Quality

Help us plan

# Why Conduct HIA?

- Identify harms and benefits before decisions are made
- Translate research into action
- Increase transparency & community engagement in the policy decision-making process
- Advance equity and justice
- Shift conversation to a health lens
- Facilitate decisions and their implementation
  
- **Advance Health in All Policies**

HIA is a **tool** – results may vary.



Calvin and Hobbes by Bill Watterson

# Six Steps of HIA



# SHIP & HIA

**HIA is NOT required!**

**Tool to achieve SHIP goals**

**Complementary to Health Equity Data Analysis (HEDA, which *is* required).**

1. Connection
2. Population
3. Differences
4. Conditions
5. Causes

**For more on HEDA, contact Ari & Kim:**

**[Arielle.McHenry@state.mn.us](mailto:Arielle.McHenry@state.mn.us)**

**[Kim.Edelman@state.mn.us](mailto:Kim.Edelman@state.mn.us)**

# Step 1: Screening

**Is an HIA feasible and will it add value to the decision-making process?**

# Step 1: Screening

**The Screening process helps determine if:**

- **... the HIA is feasible**
  - Is there a clear decision event for a policy, program, or plan?
  - Is there sufficient information about the decision?
  - Are there available resources to conduct the HIA?

# Step 1: Screening

## The Screening process helps determine if:

- ... the HIA is feasible
  - Is there a clear decision event for a policy, program, or plan?
  - Is there sufficient information about the decision?
  - Are there available resources to conduct the HIA?
- ... **the HIA would add value to the decision making process**
  - Is health already at the table? Whose health?
  - Are they willing to listen?

# Step 1: Screening

## The Screening process helps determine if:

- ... the HIA is feasible
  - Is there a clear decision event for a policy, program, or plan?
  - Is there sufficient information about the decision?
  - Are there available resources to conduct the HIA?
- ... the HIA would add value to the decision making process
  - Is health already at the table? Whose health?
  - Are they willing to listen?
- ... the HIA can be done in a timely manner
  - Can the HIA fit within the decision-making time frame?

# Step 2: Scoping

**Which health topics are you going to focus on?**

**What are your key research questions?**

**Who needs to be involved & when?**

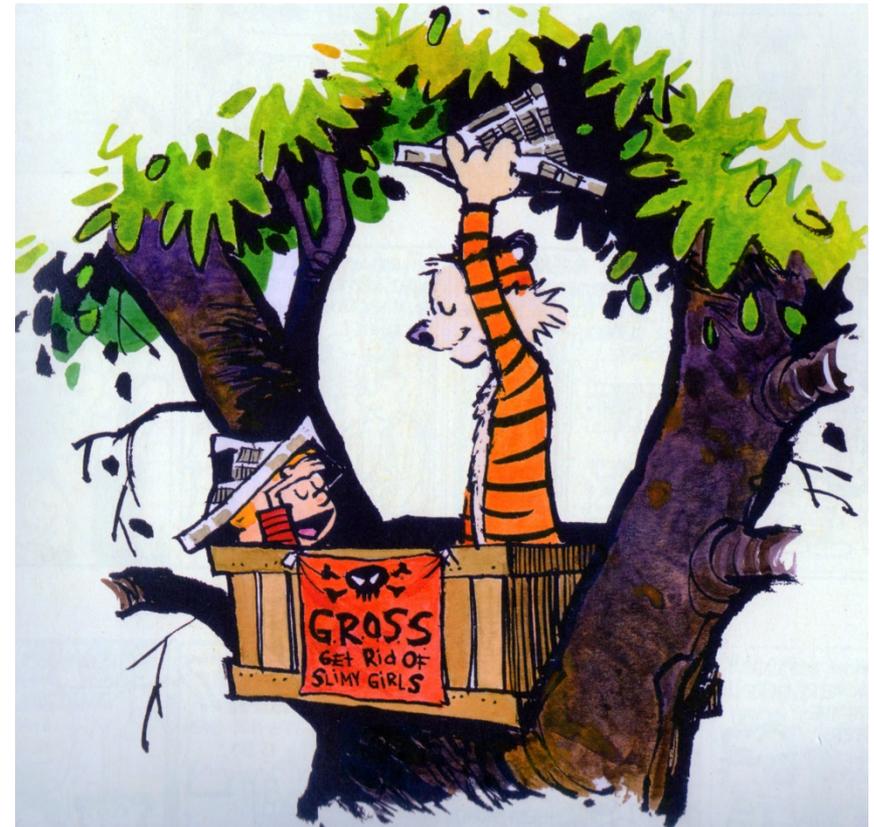
# Steering Committee

## Who:

- Subject matter experts
- Community members
- Community organizations
- Decision-makers

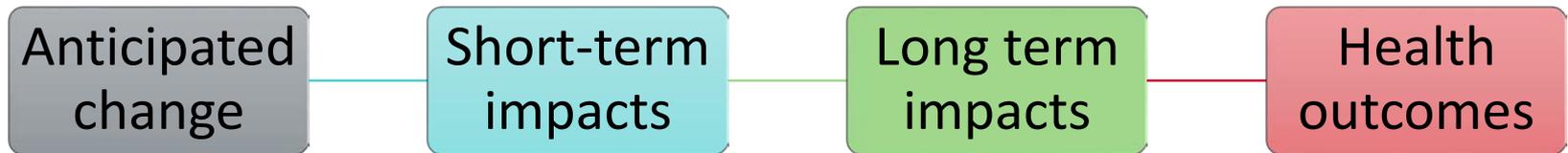
## Role:

- Guide the HIA through each step
- Provide input and feedback
- Connect to resources
- Ground-truth results



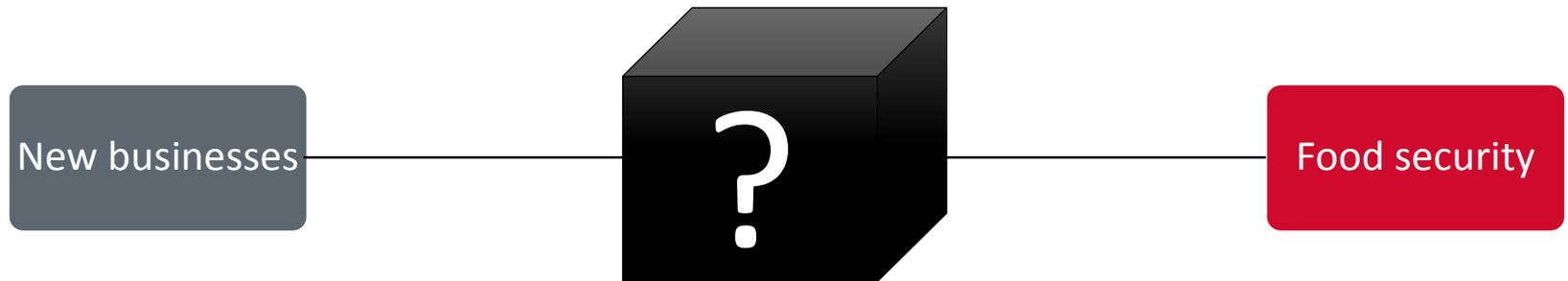
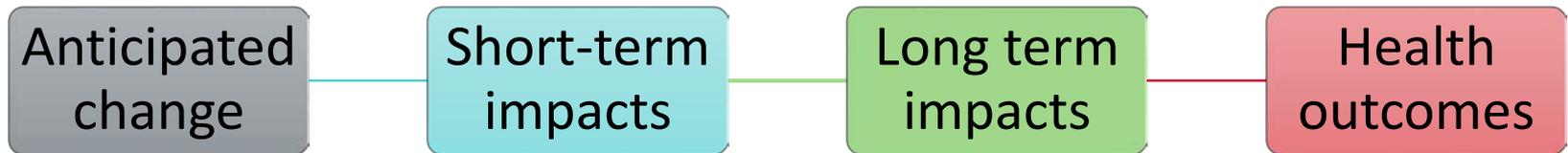
Calvin and Hobbes by Bill Watterson

# Pathway Diagrams



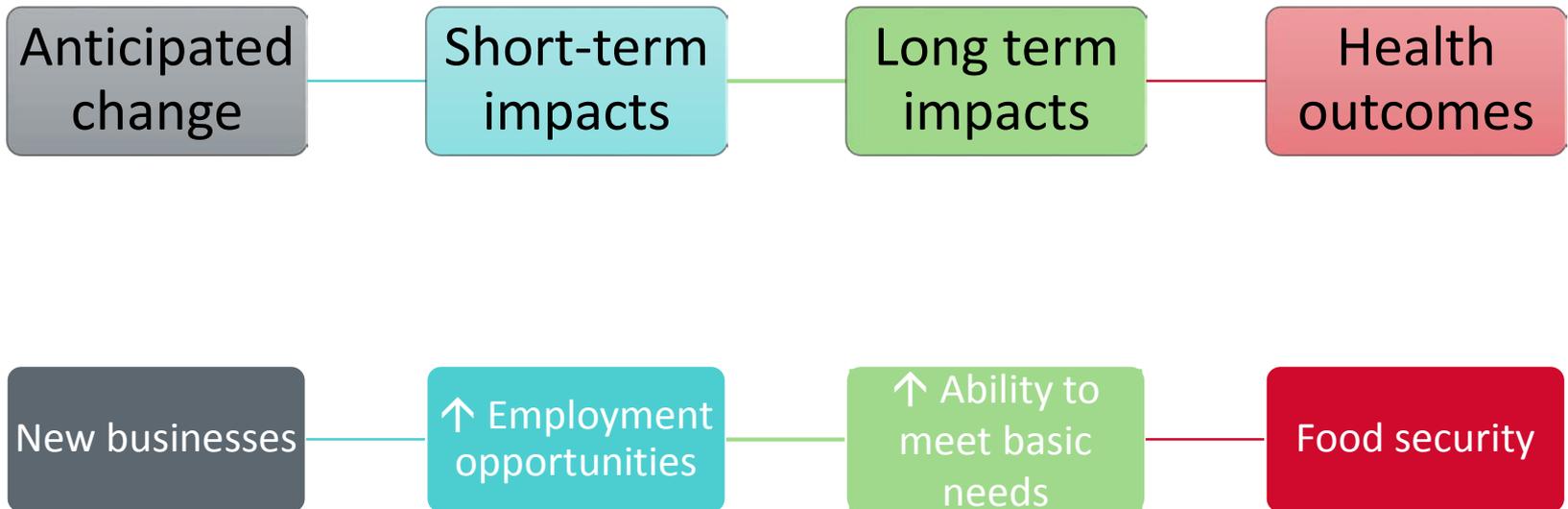
- **“What does this have to do with health?”**
- **Explore range of potential health impacts.**
  - Include **positive** and **negative** impacts.
  - Bringing baseline data can be helpful.
- **Identifies key health determinants.**

# Pathway Diagrams



**HEDA**  
Step 1:  
Connection

## Pathway Diagrams



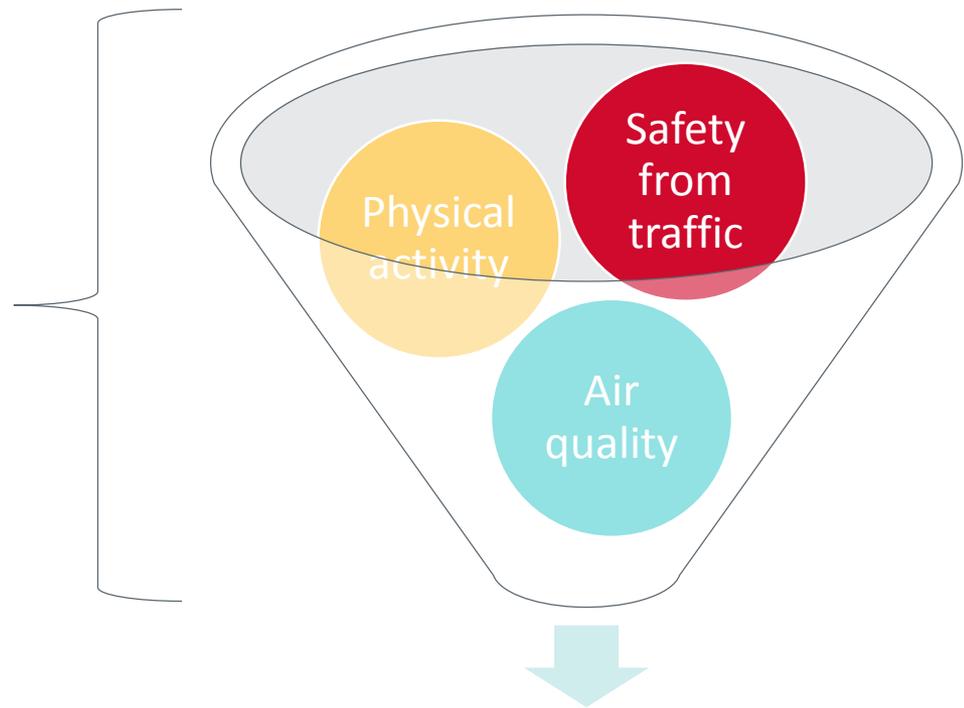
**You can't look at everything.**

Which of these health determinants are the most important to the community?

Which are feasible to assess?

Which impact equity?

Which have the greatest impact on health?



**Priority health issues**

Typically 3-5 per HIA

# Research questions guide the assessment

## Existing conditions

- **What is the current status of the health determinant in the impacted community?**

# Research questions guide the assessment

## Existing conditions

- How many convenience stores carry at least three kinds of fresh fruits or vegetables?

## Potential Impact

- **How can we expect the proposed policy, plan, or program to impact the selected health determinant?**

# Research questions guide the assessment

## Existing conditions

- How many convenience stores carry at least three kinds of fresh fruits or vegetables?

## Potential Impact

- How many store owners indicated that they would carry fresh produce if it was easier to have it delivered?

## Vulnerable populations

- **Who is currently or would be disproportionately impacted?**

# Research questions guide the assessment

## Existing conditions

- How many convenience stores carry at least three kinds of fresh fruits or vegetables?

## Potential Impact

- How many store owners indicated that they would carry fresh produce if it was easier to have it delivered?

**HEDA**  
Step 2:  
Population

## Vulnerable populations

- How many low-income families live within ½ mile of a convenience store?

# Step 3: Assessment

**Answer your research questions.**

## Step 3: Assessment

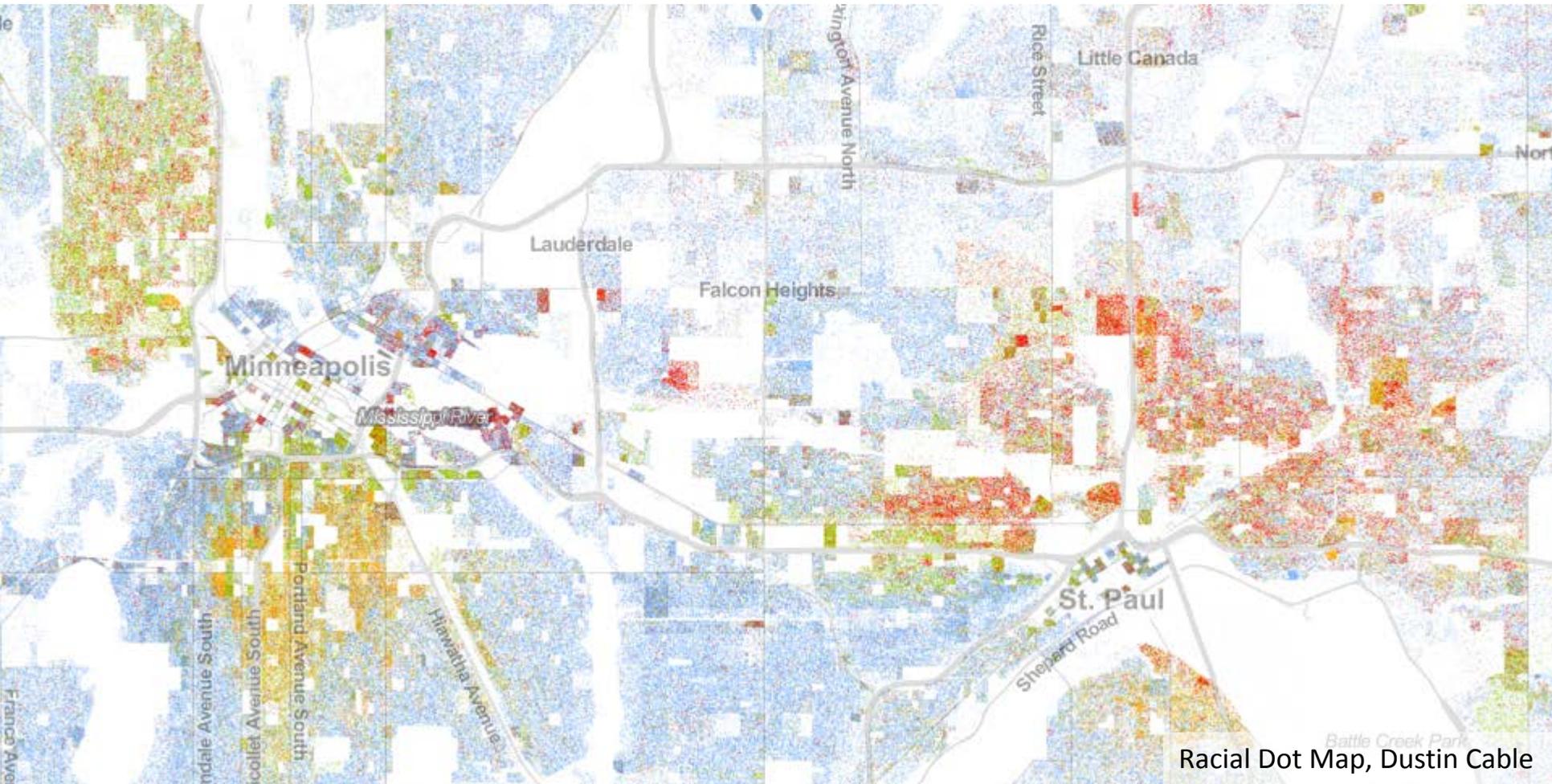
### A. Existing conditions

- Establish baseline
- Who will be affected?

### B. Potential impacts

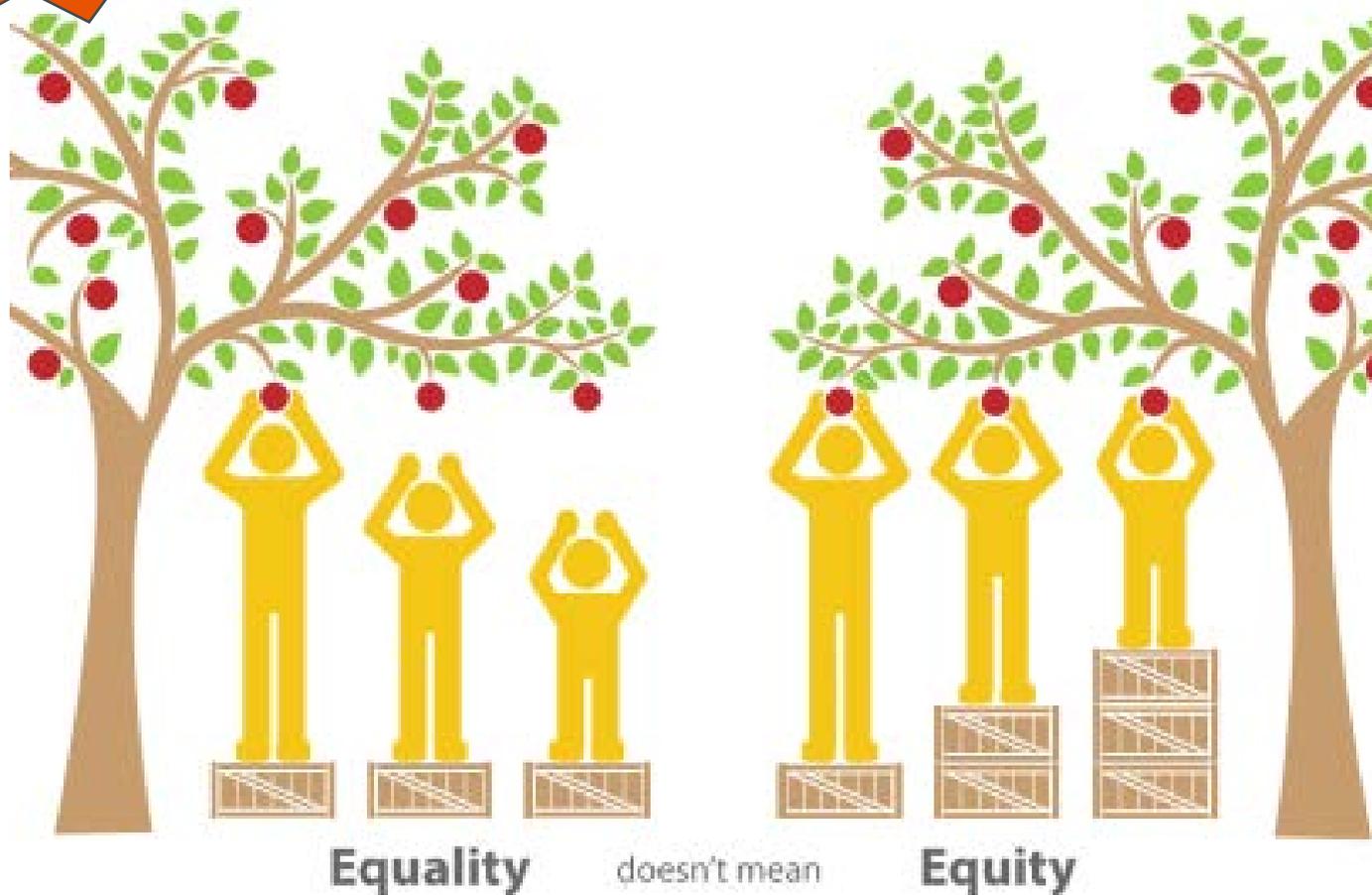
- What will change as a result?
- What are the projected health impacts?

# Existing Conditions



**HEDA**  
Step 3:  
Differences

## Who's health?





**HEDA**  
Step 4:  
Conditions

## Data Sources

- **U.S. Census**
- **Hospital-discharge records**
- **Environmental Public Health Tracking (MDH)**
- **Behavioral Risk Factor Surveillance Survey**
- **Community Needs Assessment**
- **Travel Behavior Inventory**
- **Local surveys**

## Step 3: Assessment

### A. Existing conditions

- Establish baseline
- Who might be impacted?

### B. Potential impacts

- What will change as a result?
- What are the projected health impacts?

# Assessment Methods

- **Literature review (start here)**
- **Qualitative**
  - Surveys, focus groups, sidewalk assessments
- **Quantitative**
  - Statistics, models, epi studies
- **Tools that can help**
  - GIS, HEAT, COBRA



Moderate Scenario	Change in disease burden		Change in DALYs per year
Cardiovascular Diseases	31.3%	↓	4326
Diabetes	11.2%	↓	1252
Depression	2.7%	↓	460
Dementia	3.9%	↓	879
Breast cancer	2.8%	↓	124
Colon Cancer	2.6%	↓	94
Collisions	13.8%	↑	1476

Leslie Meehan, Calibrating the ITHIM Tool in Nashville Tennessee (2015)

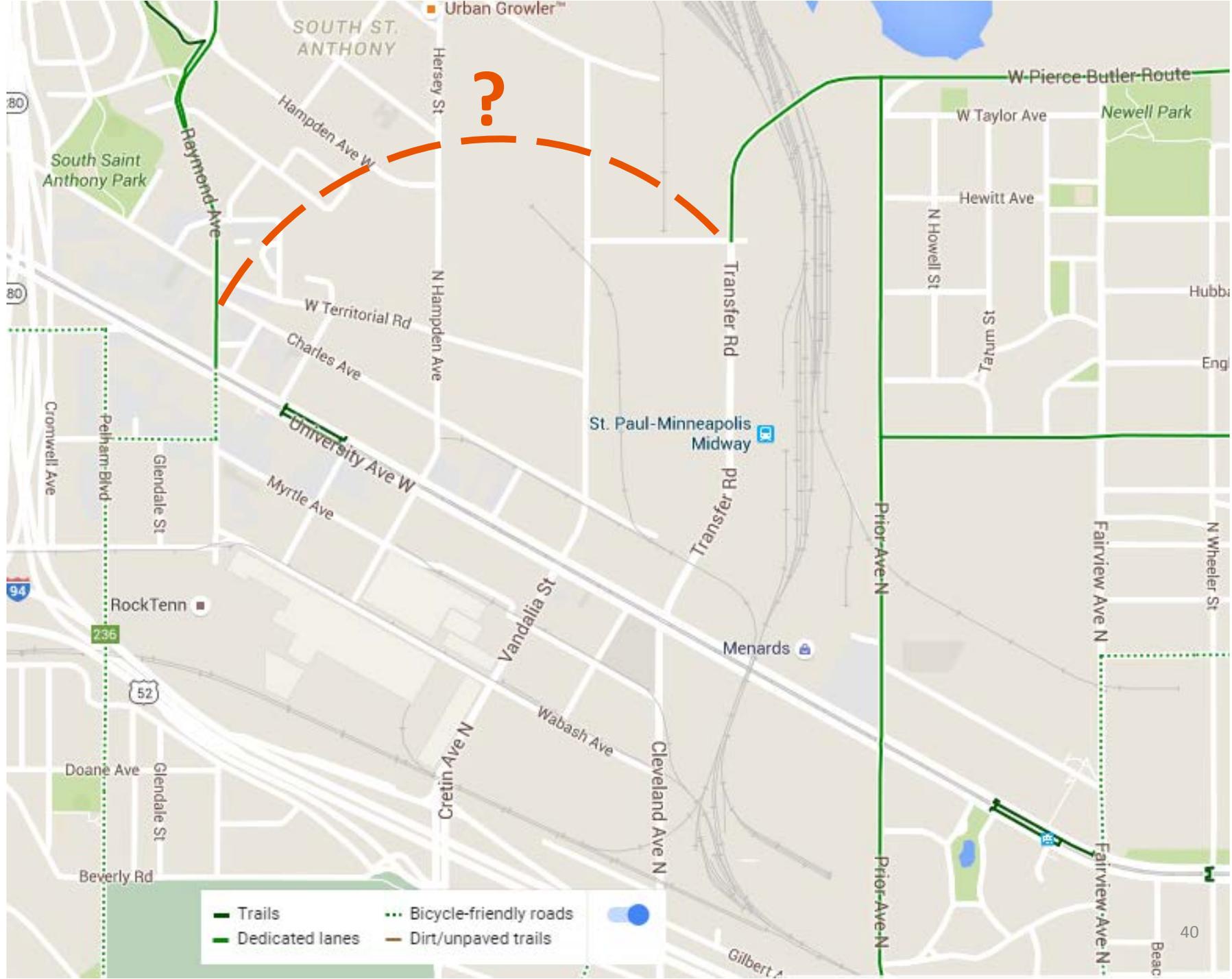


**HEDA**  
Step 3:  
Differences

## Check of the napkin calculations

- **Asthma hospitalization rates (age adjusted per 10,000)**
  - 55411 = 37 (pop = 27,695)
  - Hennepin Co. = 8.7 (pop = 3.5M)
- **If 55411 had the same rates as Hennepin Co.:**
  - $(37 - 8.7) / 10,000 * 27,695 \approx 78.4$  hospitalizations averted
- **Direct cost of asthma hospitalization\***
  - Child = \$3600
  - Adult = \$6600
- **78.4 x \$5100 (avg) = \$400,000**

\* Barrett, M. L., Wier, L. M., & Washington, R. (2006). Trends in Pediatric and Adult Hospital Stays for Asthma, 2000–2010: Statistical Brief# 169.



### **Where the walking trails end**

Farmington has many great walking paths. However, this path ends before it gets to my school, making the commute nearly impossible and very dangerous without a car. It would be great if the path continued. – Mariah *Health in my Hometown* (<http://healthinmyhometown.org/>)



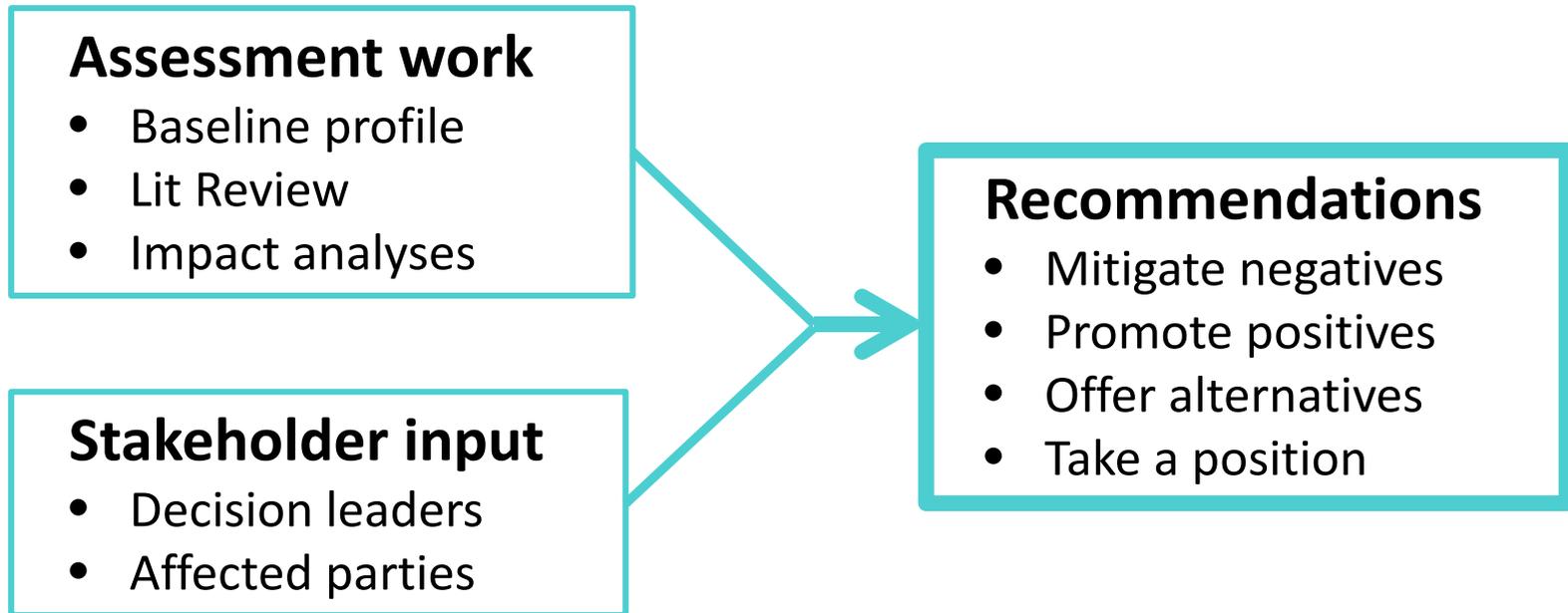
# Characterization of Impacts

- **Direction**
  - Positive or negative impact on health?
- **Magnitude**
  - Big change or little change?
- **Severity**
  - Life threatening impact or convenience
- **Distribution**
  - Everyone? Vulnerable populations?
- **Likelihood**
  - Political reality, challenges of implementation

# Step 4: Recommendations

**Based on your findings, how can the proposed decision be modified to maximize health opportunities and minimize health risks?**

# Step 4: Recommendations



# Make SMART recommendations

- **Specific** – What should be done, and who should do it?
- **Measurable** – How will you know if its accomplished?
- **Achievable** – Is it realistic & feasible?
- **Relevant** – Stick to your scoping priorities.
- **Time-bound** – When should it be done?

# Make SMART recommendations

Minneapolis should plant more trees to improve the urban canopy.

*If you were a decision-maker, which recommendation would be easier to act on?*

*The City of Minneapolis, with support from the DNR, should plant 20% more broad-leaf trees each year for the next 5 years. Environmental buffers along roads and areas impacted by the Emerald Ash Borer should be prioritized. Removal of mature trees should be limited to those that pose a threat to nearby persons or property.*

# Step 5: Reporting

**Who needs to know, what do they need to know, and how will they find out?**

# Reporting: Communication Plan

- **Goals**
- **Audiences**
- **Key messages**
- **Messengers**
- **Medium**

# Step 6: Monitoring & Evaluation

**How will you know if your HIA was successful?**

## Step 6: Evaluation & Monitoring

### **Evaluate:**

- **Process**
- **Impact**
- **Outcomes**

### **Monitor:**

- **Implementation**
- **Outcomes**
- **Modifications**

# Final Words about Evaluation & Monitoring

- Developing HIA goals during Scoping makes for easier Impact Evaluation
- SMART recommendations make for easy Monitoring Plans
- Historically overlooked, Evaluation & Monitoring becoming more important in field (esp. to funders)

## 1 SCREENING

Determine if a Health Impact Assessment (HIA) could be useful.

1

## 2 SCOPING

In consultation with stakeholders, identify which health effects to consider.

2

## 3 ASSESSMENT

Determine which people may be affected and how they may be affected.

3

## 4 RECOMMENDATIONS

Suggest changes to the proposal to promote positive or mitigate adverse health impacts.

4

## 5 REPORTING

Present the results to decision makers and other stakeholders.

5

## 6 MONITORING AND EVALUATION

Determine the affect of the HIA on the decision process.

6

### SHIP Priorities

1. Connection

2. Population

3. Differences

4. Conditions

5. Causes

# HIA & HEDA

- **Common underlying framework**
- **After HEDA:**
  - Stakeholder & community buy-in
  - Data collected and summarized
  - Identified potential causes.
  - **What's next? How will your community partners respond if you stop here?**

**HEDA outputs can help you get started on an HIA, moving you from **analysis** to **action**!**



## Health Impact Assessment

[Home](#)[HIA in Minnesota](#)[MDH HIA Reports](#)[Minnesota HIA Coalition](#)[HIA Resources](#)[HIA Training](#)

## Related Topics

[Healthy Places](#)[Environmental Review](#)[Comprehensive Plans](#)

## Environmental Health Division

[EH Division Home](#)

## Health Impact Assessment (HIA)



### First Annual MN HIA Conference Registration Now Open

**NEWS** The first statewide conference for Health Impact Assessments in Minnesota will be held November 16 & 17, 2015 in Minneapolis. Visit the [MN HIA Coalition 2015 Conference website](#) for more details and to register.

### Promoting health in all projects and policies

Our health is affected by decisions made daily in arenas outside of public health, such as in transportation, housing, and education. The Minnesota Department of Health (MDH) supports Health Impact Assessments (HIA) as a tool to ensure that health is considered in these and other important decisions. HIA is a systematic process used by organizations and community groups to provide decision-makers with information about how any policy, program or project may affect the health of people. HIA emphasizes a comprehensive approach to health, which includes economic, political, social, psychological, and environmental factors that influence people's health.

MDH's HIA initiative focuses on building our collective capacity to evaluate the health effects of projects and policies by the following activities:

- ▶ **Performing HIAs:** MDH is currently coordinating two HIAs: one on a proposed Green Zone policy in the City of Minneapolis and one on the Statewide Multimodal Transportation Plan being conducted with MnDOT. In addition, MDH is completing a Transit Oriented Development (TOD) Design Process HIA in partnership with the Metropolitan Council. MDH completed the [Gary/New Duluth Small Area Plan HIA](#) in 2014 and the [Lincoln Park Small Area Plan HIA](#) in 2015 in partnership with the City

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## Spotlight

### First MN HIA Coalition Conference

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## Questions?

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Health Impact  
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HIA in Minnesota

MDH HIA Program

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HIA Topics

## Related Topics

Healthy Places

Environmental

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Division

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- **2006-2016: 31 HIAs completed or in-progress**

- **MN HIA Coalition Conference Registration Now Open**

- **Training**

- **Technical Assistance**

- **Email newsletter**

- **Resources**

- **<http://www.health.state.mn.us/divs/hia/>**

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Thank you!

## Eamon Flynn, MPH

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[www.linkedin.com/in/eamonflynn](http://www.linkedin.com/in/eamonflynn)



Calvin and Hobbes by Bill Watterson



Questions?

# Extra slides

# The Power of HIA

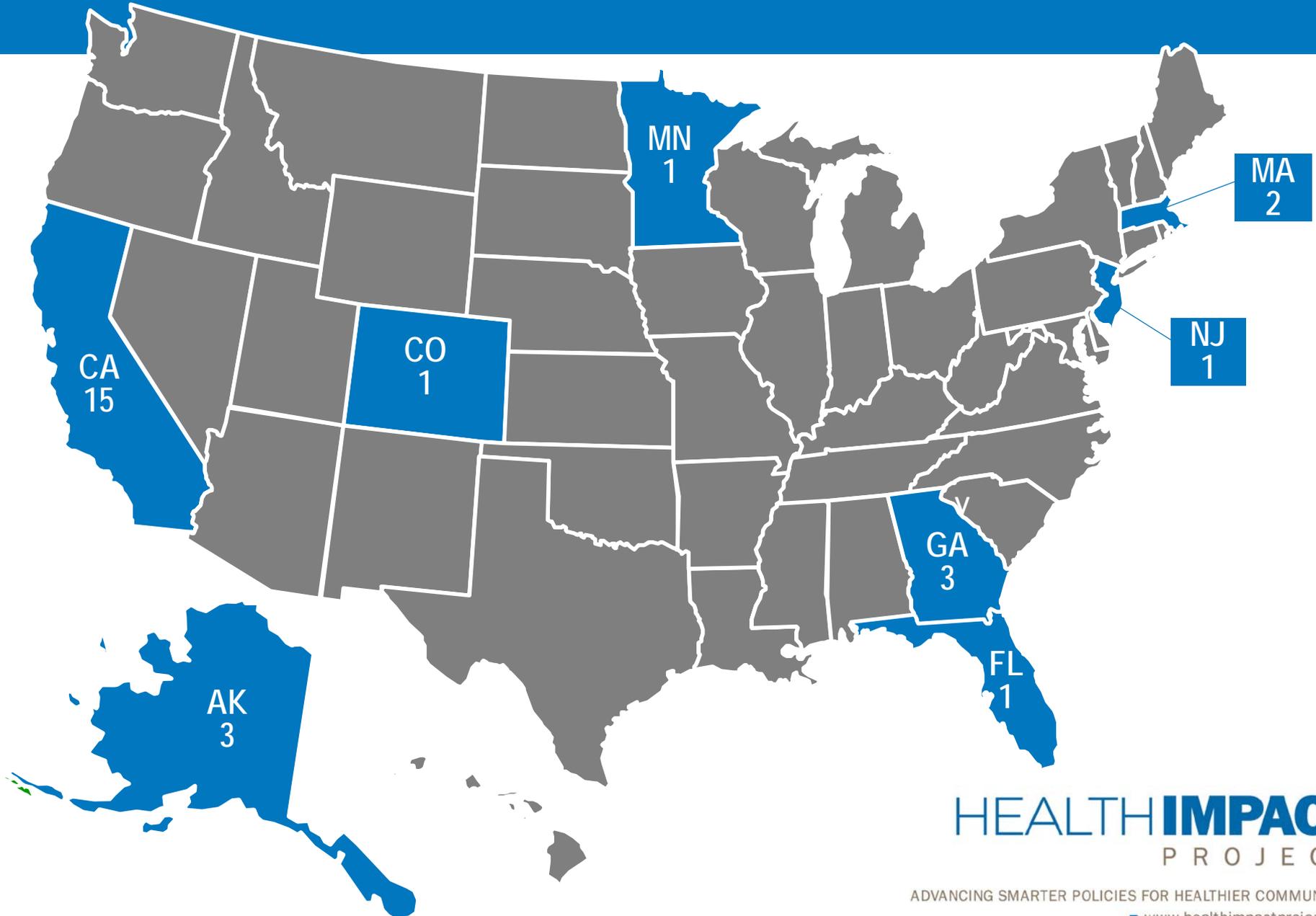
## **HIA Helps Families Replace Unsafe Manufactured Housing**

- <https://www.youtube.com/watch?v=kGJvLeVJ41w>

# HIA in US & MN

**Trends**  
**Resources**

# Completed HIAs, 2007(N = 27)



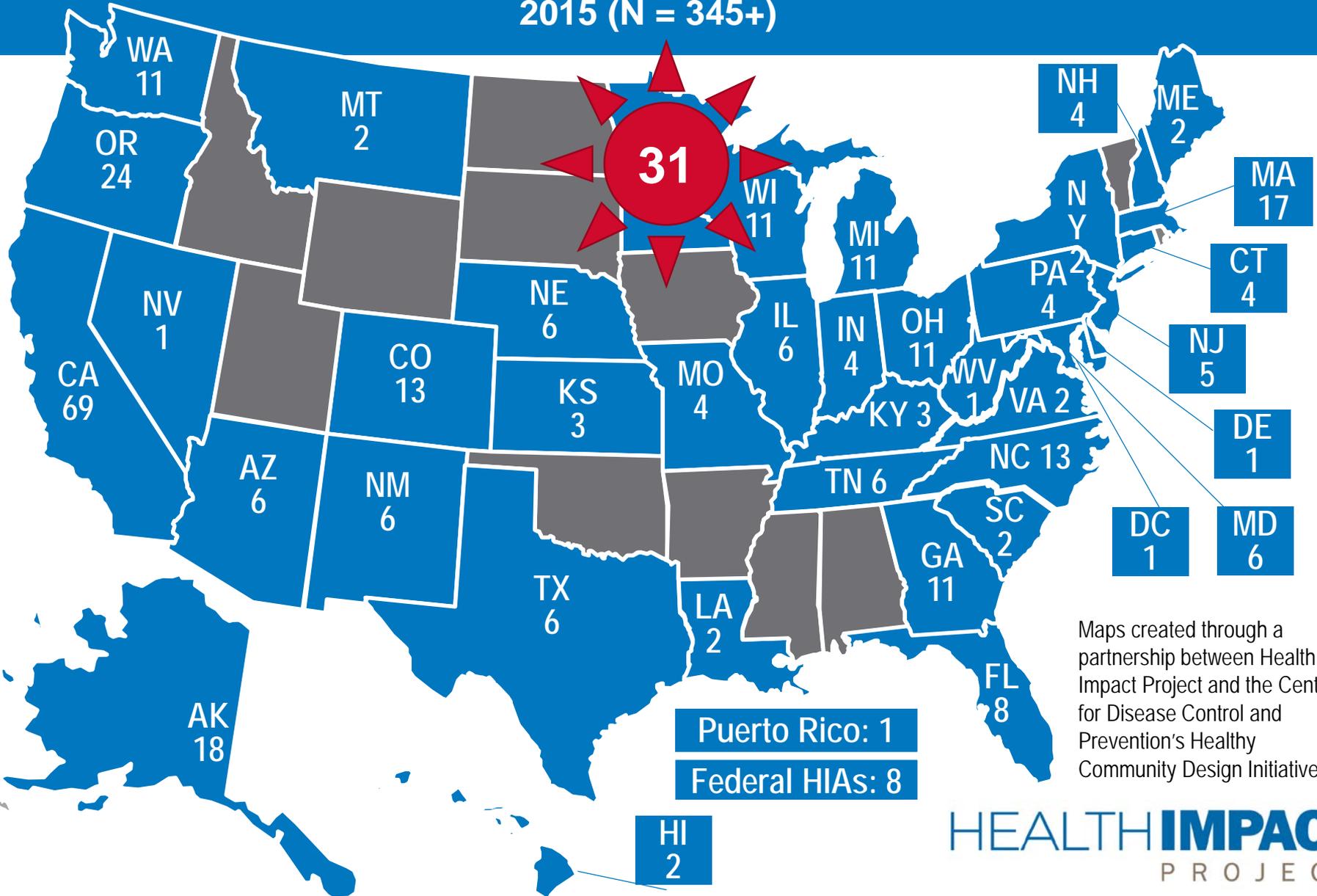
HEALTH **IMPACT**  
PROJECT

ADVANCING SMARTER POLICIES FOR HEALTHIER COMMUNITIES

■ [www.healthimpactproject.org](http://www.healthimpactproject.org)

# Completed and In Progress HIAs

2015 (N = 345+)



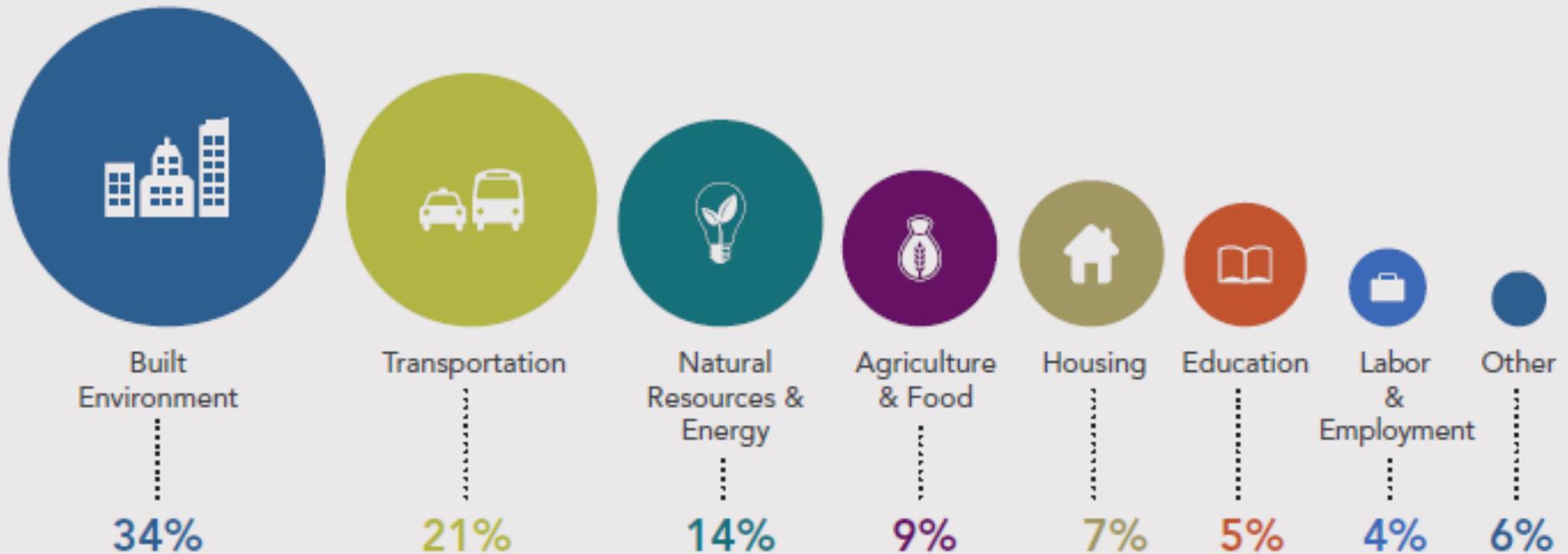
Maps created through a partnership between Health Impact Project and the Centers for Disease Control and Prevention's Healthy Community Design Initiative.

**HEALTH IMPACT**  
PROJECT

ADVANCING SMARTER POLICIES FOR HEALTHIER COMMUNITIES

www.healthimpactproject.org

# What topics have HIAs addressed?



# MN HIA Coalition

1. Educate on and promote the appropriate use of HIA.
2. Share information, tools, best practices and lessons learned (especially what works and what doesn't) from HIAs.
3. Collaborate on and coordinate (when applicable) HIA-related activities.
4. Support funding and act as a sounding board for future HIA projects.
5. Support efforts to evaluate and document the processes and outcomes of HIA.
6. Promote/institutionalize policies for HIAs and HiAP.

# MN HIA Coalition

- Open, independent, volunteer group
- Quarterly meetings
- Committees
  - Steering
  - Membership
  - Governance
  - Education & Communication
  - Multimodal Transportation
  - Health Equity & Eliminating Disparities
- **For more information: [health.hia@state.mn.us](mailto:health.hia@state.mn.us)**

# Resources

- **Human Impact Partners** <http://www.humanimpact.org>
  - Step-by-step guides
  - Toolkits
  - Equity guides
- **Society of Practitioners of HIA (SOPHIA)** <http://hiasociety.org>
  - Professional society – journal coming soon
  - Model HIAs
- **Health Impact Project website** <http://www.healthimpactproject.org/>
  - Worksheets & guides for each step of HIA
  - New rapid HIA methodology
- **CDC Healthy Places webpage** <http://www.cdc.gov/healthyplaces/hia.htm>
- **World Health Organization HIA webpage** <http://www.who.int/hia/en/>
- **HIA Gateway – Public Health England** [http://www.apho.org.uk/default.aspx?QN=P\\_HIA](http://www.apho.org.uk/default.aspx?QN=P_HIA)
- **UCLA – HIA Guide web** <http://www.hiaguide.org/>
- **Design for Health website** <http://www.designforhealth.net/resources/healthimpact.html>

# HIA Minimum Elements & Practice Standards



- **Minimum elements to include in every HIA**
- **Guidance for each step of HIA**
- **Guidance and training also available at Human Impact Partners (HIP)**

**[www.humanimpact.org/](http://www.humanimpact.org/)**