

## Combating Climate Change through Sustainable Development: A comparative analysis of Massachusetts' Health Impact Assessment and California's Co-benefits

Nancy Morales, B.A Candidate, University of California, Los Angeles

*Examining Massachusetts' HNEF Health Impact Assessment, this comparative analysis offers suggestions on 12 (3 are displayed) health related metrics that AHSC in California can use when finalizing grants applications for projects. The suggested health metrics include a health determinant, recommended data sources, recommendations to better metrics, and the proposed potential health impacts. In light of this, policy makers should prioritize taking into consideration the suggested health related metrics as we know climate change and the build environment has an impact on health. Surprisingly, according to a non-random survey through Mturk, the majority of participants did not know the relationship a neighborhood has on health (figure 2). Therefore a consideration on the importance of tracking, reporting, and monitoring project's effectiveness and effects on health would be a strategic move. Many thanks to Elizabeth Baca and the Strategic Growth Council for advising in the early stages of this research project.*

### SUSTAINABLE DEVELOPMENT & ITS RELATION TO HEALTH BENEFITS

Climate change is not only affecting our planet but also our health. As part of California's integrated plan for addressing the greenhouse gas reduction law, AB 32, and the Sustainable Communities and Climate Protection Act of 2008, known as SB 375, the Affordable Housing and Sustainable Communities (AHSC) program was developed to fund grants and loans for "land-use, housing, transportation, and land preservation projects to support infill and compact development that reduce greenhouse gas ("GHG") emissions" (SGC). AHSC is just one of California's incentive programs to help achieve the GHG levels and in addition it comes with health co-benefits as part of the plan to incentivize grant program applicants. However, AHSC program only keeps track of the health co-benefits associated with each funded project but there is no health related metrics to know project's effectiveness and effect on health.

In contrast, the Conservation Law Foundation (CLF) and the Massachusetts Housing Investment Corporation (MHIC) have proposed the creation of a \$30 million private equity fund model, HNEF, which considers the community, environmental, and health benefits of a proposed project as well as the financial risks and returns. HNEF is tracking project's effectiveness and effects on health through health-related metrics.

### OBJECTIVE

How programs such as HNEF in Massachusetts assess project's effectiveness and impact on health outcomes over time and how can a program like AHSC start tracking effectiveness and impact on health outcomes over time?

### KEY FINDINGS


- AHSC only reviews project's health co-benefits with no monitoring/not using health metrics.
- HNEF has invested into a Health Impact Assessment to develop 12 health determinants using health-related metrics to assess project's effectiveness and impact on health outcomes over time.
- Using HNEF's model, AHSC already collects information on 9 of 12 health determinants, except on safety from crime, social cohesion, and environmental contamination.
- See Figure 3 for the 3 feasible health determinants AHSC is already focusing but not monitoring → policy suggestions.

### GOING FORWARD

- **Implication:** AHSC is only a 2 year old program with a more direct focus on Governor, "Jerry" Brown's plan to reduce GHG levels and is not particularly part of monitoring Californians' health.
- **Implication:** Changes to the AHSC's metrics in particular adding health-related metrics to track funded project's effectiveness and effects on health had potential debatable because AHSC's objective and goals was is focused on reducing GHG levels.
- **Implication:** AHSC project awardees have a contract of three years with the State government and after the contract is over there is no need to report any information back to the state.
- **Limitation:** Difficult to come up with health metrics that are affordable, feasible, and fast for a 3 year project contract.
- **Suggestion:** AHSC should consider the 3 health determinants, health determinant metric, recommended data sources, recommendations, and proposed potential health impacts to be part of their scoring for future grant applicants to monitor project's co-benefits and its effectiveness and effects on health because climate change and the build environment affects the health of individuals.
- Ask for the other 9 suggested health metrics\*

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### California



#### Affordable Housing and Sustainable Communities (AHSC) Program

The program AHSC from California can help achieve result in the reduction of greenhouse gas emissions and vehicle miles travelled (VMT). Increase accessibility of housing, employment centers and key destinations through low-carbon transportation options such as walking, biking and transit.


Addresses health through co-benefits and other forms of one-time reporting at the time of application for funding/proposed projects

Co-benefits do not require tracking the project's effectiveness and effects on health

**Examples of Co-Benefits:**

- Economic:** Reduce housing costs
- Public Health and Safety:** reduce air pollution
- Public Health:** increase access to active modes (walking and biking)
- Economic:** Increase access to public transportation

### Massachusetts



#### Healthy Neighborhood Equity Fund (HNEF) Program

The program is HNEF from Massachusetts can help achieve\* results in investments that have the potential to transform neighborhoods, strengthen population and environmental health, and promote regional equity while providing investors with financial and social returns\*

Addresses health through HIA's Health Determinants, which include

- Health determinant metric
- Recommended data source
- Recommendations
- Potential Health Impacts

Health related metrics to track project's effectiveness and effects on health

**Examples of Health Determinants:**

1. Walkability/Active Transport
2. Affordable housing
3. Access to affordable healthy foods
4. Safety from crime
5. Green housing
6. Safety from traffic
7. Economic opportunity
8. Social cohesion
9. air quality
10. Displacement/gentrification
11. Green space
12. Environmental contamination

Figure 1. Current Situation: Comparison of AHSC's Health co-benefits and HNEF's health-related metrics.

### Examples of Health Determinants:

- #### 1. Walkability/Active Transport:

Health determinant metric: State of Place score, Number of bicycle and pedestrian accommodations, Number of parking spaces

Recommended data source: State of Place and Project notification forms

Recommendations: Promote density, mixed land-use, availability of destinations and amenities, short distance to transit, bicycle and pedestrian accommodations, and lower ratios of on-and-off- street parking into the development design

Potential Health Impacts: Physical activity, mental health, chronic disease, obesity
- #### 2. Access to Healthy Affordable Food

Health determinant metric: Food Access Score, Account for unhealthy food access in the region by totaling validated NAICS coded data on "fast food" and "liquor" stores

Recommended data source: San Francisco Sustainable Communities Food Access Score and InfoUSA

Recommendations: Encourage expanding access to healthy food resources that offer a wide range of affordable goods within walking distance, particularly in areas with low access.

Potential Health Impacts: Nutrition, chronic disease, obesity
- #### 3. Displacement:

Health determinant metric: Percent of cost-burdened households in the neighborhood and Percent of households making less than \$35,000 in the neighborhood

Recommended data source: American Community Survey (Cost Burdened Households by Income and Tenure) And American Community Survey (Household Income by Tenure)

Recommendations: Promote the use of anti-displacement strategies between communities and developers such as Community Benefits Agreements. Promote local regulatory changes that support anti-displacement strategies such as inclusionary zoning, Condominium conversion ordinances, and one for one affordable housing displacement ordinances.

Potential Health Impacts: Mental health, economic stability

Figure 3. Suggested Situation: 3 of 12 feasible suggested Health-related Metrics for AHSC to track project's effectiveness and effects on health over time. Ask for the other 9 suggested health metrics\*

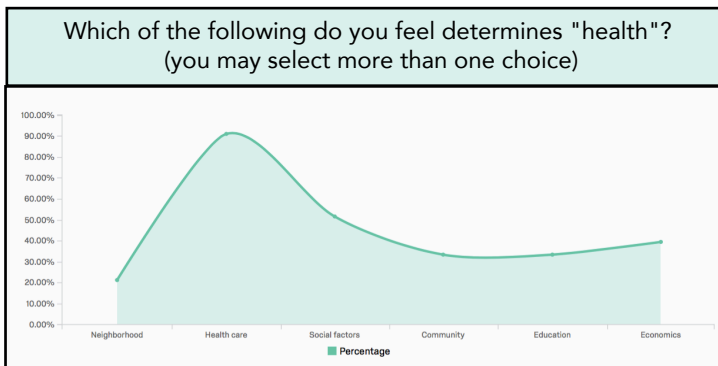


Figure 2. Curiosity to get an idea of people's knowledge about the build environment and its connection to Health. Results from a non-random Survey distributed using Mturk indicates the majority of participants felt 'health care' determined health and least majority felt 'neighborhood' determined health.