

Health Impact Assessment Policy Brief

State Funding for Mass Transit

*UCLA School of Public Health
Health Impact Assessment Project¹
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Last Minute Update (8/31/07)

On August 21 the California State Legislature approved a budget for fiscal year 2007 that included the Governor's proposed re-direction of \$1.3 billion in transportation "spillover" funds to the State's General Funds. Although the fate of this particular bill has already been decided, allocation of public funds for transit in California continues to be a high priority issue. Local government officials will need to decide how to respond to the loss of these state funds and undoubtedly the State Legislature will continue to revisit the issue in future sessions. We believe that the information contained in this health impact assessment will continue to be salient and will provide a foundation for other analyses of potential health impacts of future transit funding proposals at the state and local level.

Purpose and Scope

The Governor's proposed budget for fiscal year 2007/2008 contains provisions for reallocating approximately \$1.3 billion in gasoline sales tax revenue ("spillover funds") that had been set aside for funding transit programs throughout the state for other purposes. However, due to variations in funding sources, considerable uncertainty exists as to how these potential budget cuts will manifest themselves.

In light of potential cuts, this health impact assessment (HIA) sought to do two things: 1.) To synthesize and communicate research evidence on how proposed cuts in state funding of mass transit may impact the public's health. 2.) To identify potential opportunities for public policies outside the traditional purview of public health (such as transportation policy) to contribute to public health promotion efforts, particularly in an effort to address and curb the rise in childhood obesity and sedentary lifestyle.

Summary of Health Impacts

Even in a state as large as California \$1.3 billion is a significant sum of money. Funding cuts of this magnitude would certainly have some effects on transit service and eventually some downstream effects on health.

Consequently selection of this policy as the focus of an HIA was guided by the California Endowment HIA Working Group as part of the Healthy Eating Active Communities (HEAC) Initiative. This particular issue was selected among a number of others because the working group felt that it best met the following criteria:

1. *Utility, including:*
 - a. A link between the proposed policy and childhood obesity;
 - b. Political salience/timeliness/potential for policy change;
 - c. Potential relevance for HEAC Community Grantees;
2. *Technical feasibility/data availability*

Health Impacts Examined

While we cannot predict the magnitude or distribution of these effects, we can describe the pathways through which transportation in general, and transit availability and utilization in particular, affect the public's health.

After reviewing state budget documents, transit advocacy claims and literature on transportation and health, the HIA project team identified and examined eight major pathways through which transit and state transit funding might impact health: air, water and noise pollution; economics, land-use, physical activity, discretionary time and social capital.

The information synthesized in this HIA can help guide policy assessments of potential health effects on other policy decisions affecting transit service, including analyses of local transportation proposals for alternative transit operations and projects, particularly when more detailed information is available.

¹The HIA Project is based at the UCLA School of Public Health. Project staff include: Jonathan Fielding, M.D., M.P.H., M.B.A., Principal Investigator; Brian Cole, Dr.P.H. Program Manager; Riti Shimkhada, Ph.D. Lead Analyst; Georgina Agyekum, M.P.H. and Sandra Hoffman, M.P.H., Research Assistants. This research was funded by the California Endowment.

Potential Pathways

Through review of the research literature and consultation with experts in the transportation field, the HIA project team identified the following pathways as potentially significant mechanisms through which the proposed cuts to transit funding might impact public health:

- **Air Pollution:** Pollutants such as carbon monoxide, ozone, particulate matter, and sulfur dioxide emitted from motor vehicles contribute greatly to poor air quality and have been found to cause significant health impacts, including lung cancer, cardiovascular disease, asthma and other respiratory problems linked to impaired quality of life and premature mortality
- **Water Pollution:** Motor vehicle indirectly takes a toll on water quality due to its association with land use patterns. Cancer causing compounds found in exhaust have also been shown to contaminate water, and are found in high concentration in areas with increased traffic volume
- **Noise Pollution:** A major source of urban noise is mass transit as well as motor vehicles. Exposure to excessive noise levels can induce hearing loss and negatively impact mental and cardiovascular health. Noise-induced hearing loss is a significant problem in urban settings among industrialized nations
- **Economics:** At the level of individual households, a well functioning transit system has the potential to increase income by improving access to jobs and reducing expenditures on transportation. Transportation costs comprise a substantial share of Americans' household expenses—on average 20% of household expenses
- **Social Capital:** Studies indicate that friendly interactions directly improve health. Public transportation encourages community cohesion as well as increases personal security and provides more opportunities to walk and partake in social activities
- **Physical Activity:** The total amount of vehicle miles driven per year and driving to work is associated with physical inactivity. Increased time spent in a car and decreased walking are also associated with obesity. In California, close to 26% of all adults report no physical activity in a typical week
- **Discretionary Time:** Time spent in public transit may be greater than time spent in the car, however the two are not necessarily equivalent; i.e., the time spent driving in congestion and other high stress situations has been shown to differ from the time spent in a pleasurable ride that permits activities such as reading, sleeping, or working
- **Land Use:** Transit-Oriented Development (TOD) creates compact, mixed-use, walkable communities within a walking distance of a transit stop. TOD also encourages walk to transit and transit use

Key findings:

- Considerable uncertainty exists as to the exact, on-the-ground manifestations of potential budget cuts, however, what is known is that state transit funds (those subject to these proposed cuts) are one of the few non-local sources that can be used for transit operations in metropolitan areas over 200,000 people
- Encouraging people to drive less and utilize mass transit more has the potential to benefit health in a number of ways—possibly by reducing air pollution, increasing physical activity, improving mental health and boosting community social capital
- Having a well-functioning mass transit system in place can serve a number of other functions, including providing mobility to people with limited or no access to private vehicles, improving land-use and stimulating economic development
- While the proposed funding cuts will not lead to a wholesale shutdown of transit service in the state, vulnerable agencies and populations likely to be impacted include: (1) smaller transit agencies for whom state funds make up a critical portion of revenue and which have limited ability to raise replacement revenue from other sources (e.g. fare increases), and (2) transit-dependent populations served by these transit providers, including the poor, children, seniors and the mobility impaired.

What is a Health Impact Assessment?

Health Impact Assessment is a "multidisciplinary process within which a range of evidence about the health effects of a proposal is considered in a structured framework. . .based on a broad model of health which proposes that economic, political, social, psychological, and environmental factors determine population health."

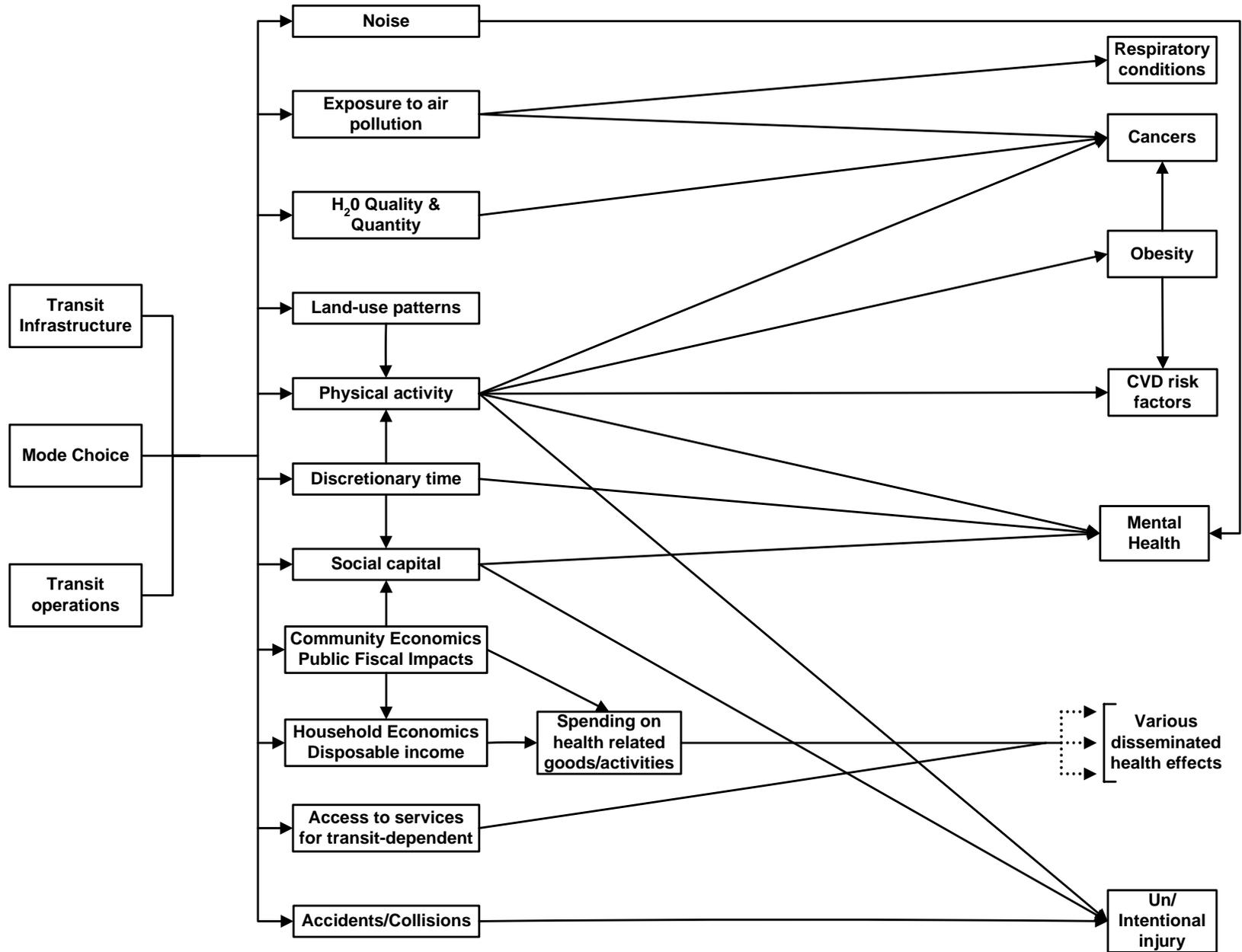
Northern and York Public Health Observatory, 2001

Why use HIA?

- Influence decision-makers using a broad understanding of health and a wide range of evidence
- Highlight potentially significant health impacts that are unknown, unrecognized or unexpected

Transit Policy and Utilization

Health Outcomes



Logic Framework for the health impact assessment of state funding for transit