Social equity in urban transportation planning

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During the 20th century, urban transportation planning in North America was mainly concerned with easing traffic congestion, improving safety and saving time for motorists. These days, most cities' transportation plans evoke a more complex blend of environmental, economic, and social-equity goals - all aimed at promoting "sustainability." Yet, many fail to include meaningful measurements of social-equity objectives, such as helping disadvantaged neighborhoods access essential services, according to researchers at McGill University.

In a study published recently in the journal *Transport Policy*, the researchers analyze the transportation plans of 18 metropolitan areas across the U.S. and Canada - from San Diego to Montreal—and find that

many plans focus largely on local environmental and congestion-reduction goals.

"Many of the plans talk a lot about social-equity goals, but these goals are not translated into clearly specified objectives - and it's not at all clear how the goals are incorporated into decision-making," says Kevin Manaugh, lead author of the paper and an assistant professor in McGill's Department of Geography and School of Environment.

That's partly because traffic speed and certain environmental effects are easier to measure than social-justice considerations, such as access to job opportunities or health care for low-income groups, or balancing the interests of pedestrians and cyclists with those of motorists. (The transportation plans cover the gamut of infrastructure projects, from sidewalks to highways and bicycle paths to suburban rail systems.)

At the same time, a few cities - notably Boston, San Francisco, San Diego and Chicago—have managed to build in clear, measurable indicators for achieving social-equity goals, says Prof. Manaugh, who co-authored the study with professors Madhav Badami and Ahmed El-Geneidy of McGill's School of Urban Planning.

Building such considerations into the process is important, because "these are very long-term decisions," Manaugh notes. "Once you build a highway, it's there for many decades."

The researchers suggest several specific measures or indicators that cities can use to guide social-equity objectives:

- Changes in accessibility to desired destinations, particularly for disadvantaged groups;
- Difference in travel times, to work and to essential services, between car and public transit;

- Difference between top and bottom income quintiles in the proportion of household expenditures spent on transportation;
- Difference between car users and pedestrians or cyclists in traffic injuries and deaths, on a per-trip basis.

These indicators are "relatively straightforward to capture with a combination of census data, regional travel surveys, and on-board (commuter) surveys," the researchers write. "A plan with these kinds of indicators could potentially go a long way toward making social equity a less 'intangible' aspect of transportation planning."

More information: "Integrating social equity into urban transportation planning: A critical evaluation of equity objectives and measures in transportation plans in North America". K. Manaugh, M. Badami, A. El-Geneidy, *Transport Policy*, published online 25 Nov. 2014. DOI: 10.1016/j.tranpol.2014.09.013

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