
University of Pennsylvania
Institute for Environmental Studies



presents

Rob Neff

University of Maryland, Baltimore County

Transportation, Urban Development, and Greenhouse Gases: Patterns of consumption and inequity in Philadelphia, PA

To fill the gap in national policy, many state and municipal governments have adopted plans to bring about greenhouse gas (GHG) reductions. However, by applying global-scale thinking to local-scale problems, these approaches may place undue emphasis on specific policy makers, while ignoring options for mitigation that are outside of these individuals' control.

This presentation demonstrates the utility of *consumptive landscapes*, a metropolitan-scale, geographic lens through which to view the energy consumption that leads directly to GHG emissions. A traffic assignment model was applied to commuter origin-destination data, and the results were used to generate GHG emissions maps that were interpreted based on a historical understanding of the region and on contemporary demographic data. The results show that the responsibility for gasoline consumption lies disproportionately with the affluent suburb-to-suburb commuters traveling in automobiles. Conversely, poor populations working in the suburbs use public transport despite the poor quality of service.

These results demonstrate that consumption of gasoline is linked to Philadelphia's segregation patterns, which often are associated with an urban/suburban split. Nonetheless, the results also identify places that are not easily classified as urban or suburban. This "other" category is useful because it suggests alternative descriptions of cityspace based on the functioning of coupled human-environment systems rather than socioeconomic status and racialized identities. A social analysis of these findings makes the case for an extension of the environmental justice literature based on responsibility for environmental change, rather than just vulnerability to its effects.

Date: January 18, 2006

Time: NOON - 1:30 pm

Place: Carolyn Hoff Lynch Auditorium

On the Penn campus: Chemistry Building: 34 & Spruce Sts. (enter on 34 St)

NO REGISTRATION REQUIRED

Direct questions to: 215-573-3164

ies_penn@sas.upenn.edu; <http://www.sas.upenn.edu/earth/ies>

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