

Examples of Emerging Metrics

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Multiple Dimensions of Environmental Exposures

- Cumulative impacts can result from positive and negative environmental exposures
- Evidence suggests both exposure types can influence health and both can modify effects of other exposures (e.g., air pollution)

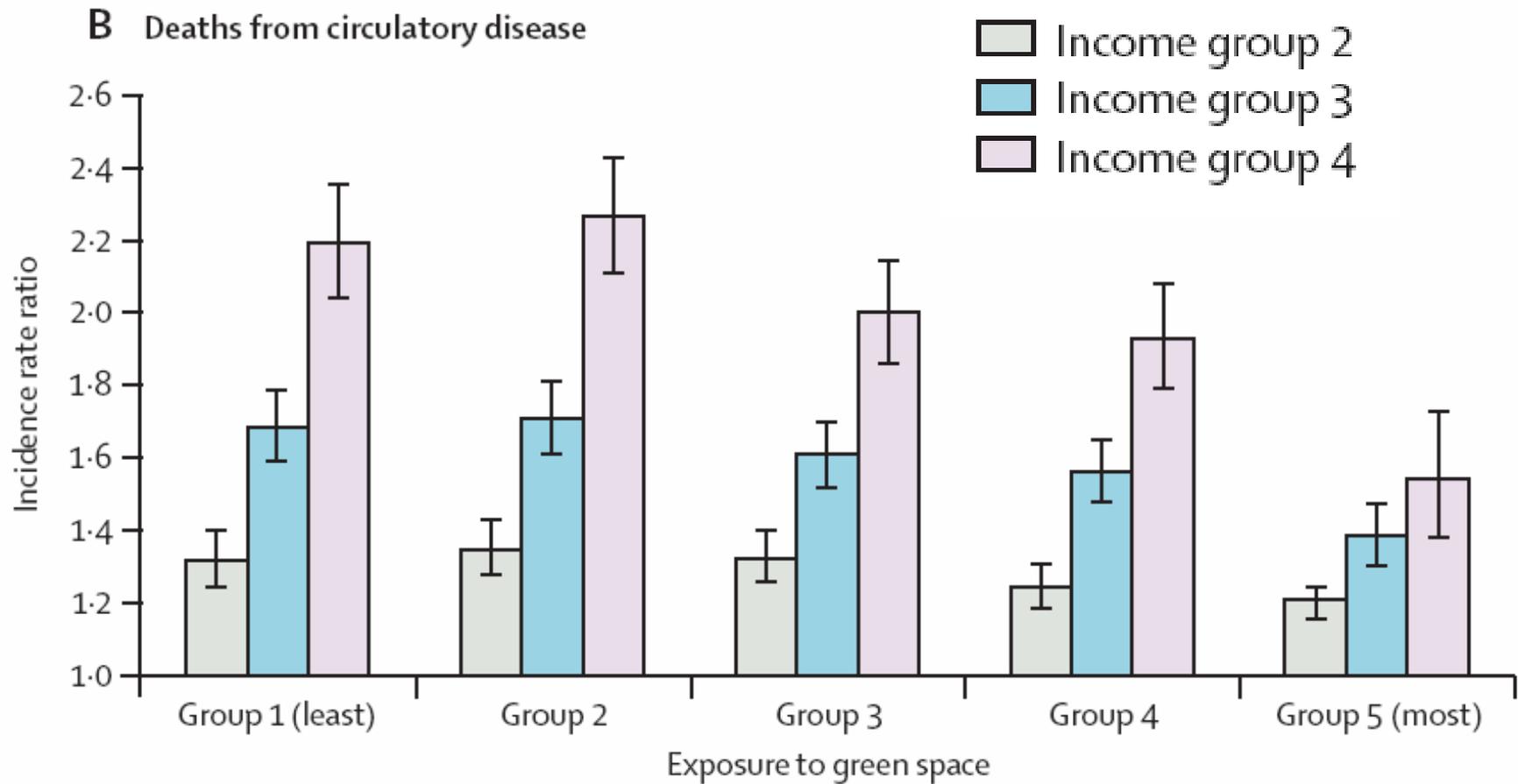
English Green Space Example

- Green space may buffer from heat, promote physical activity, provide stress relief, improve recovery time in hospital (Mitchell and Popham 2008, Lancet)

Effect of exposure to natural environment on health inequalities: an observational population study

Richard Mitchell, Frank Popham

Green Space Reduces Health Inequalities from Poverty

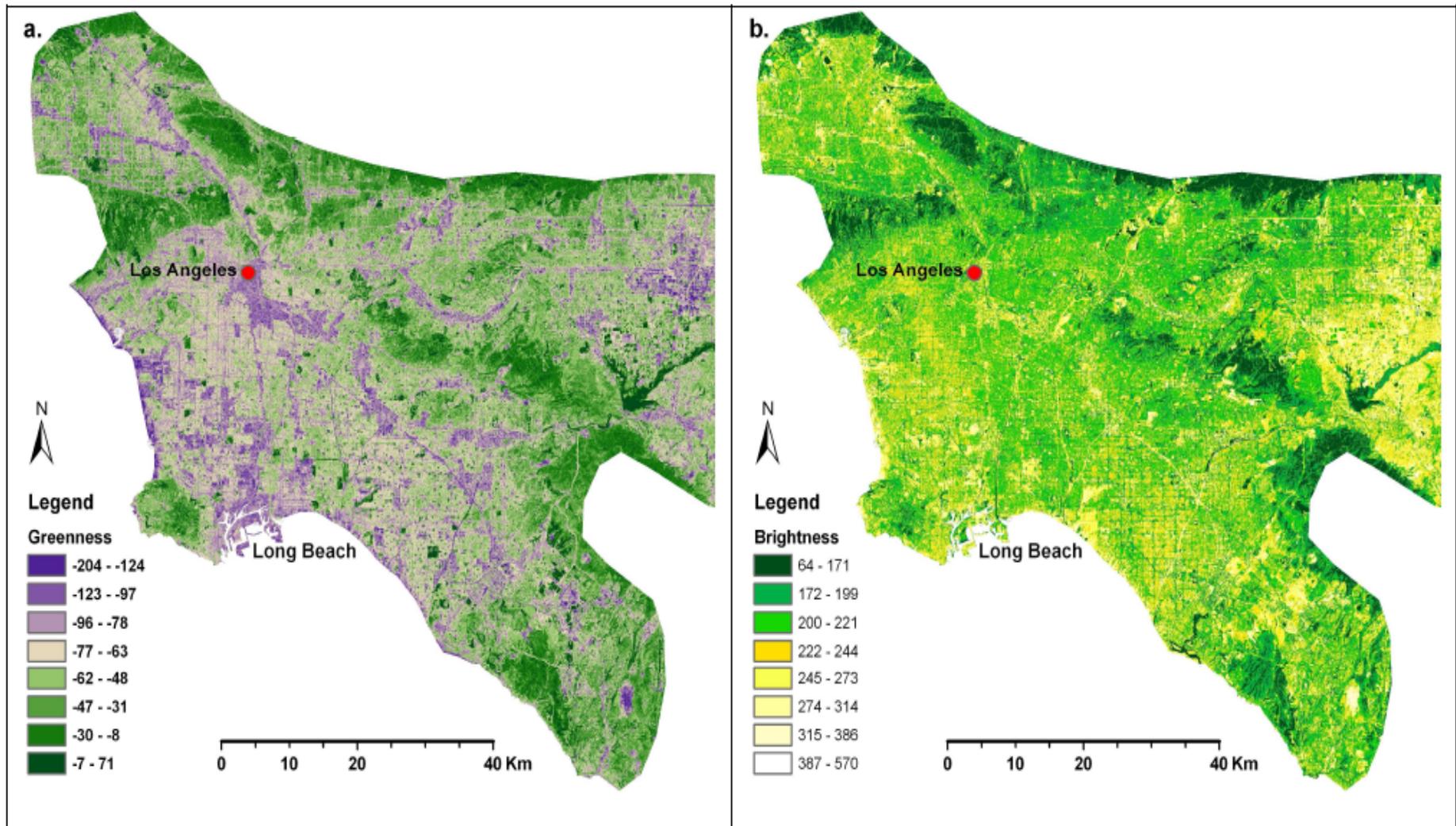


Some Examples

- Green cover and paved areas
- Parks and recreation programming
- Food access
- Traffic safety and noise

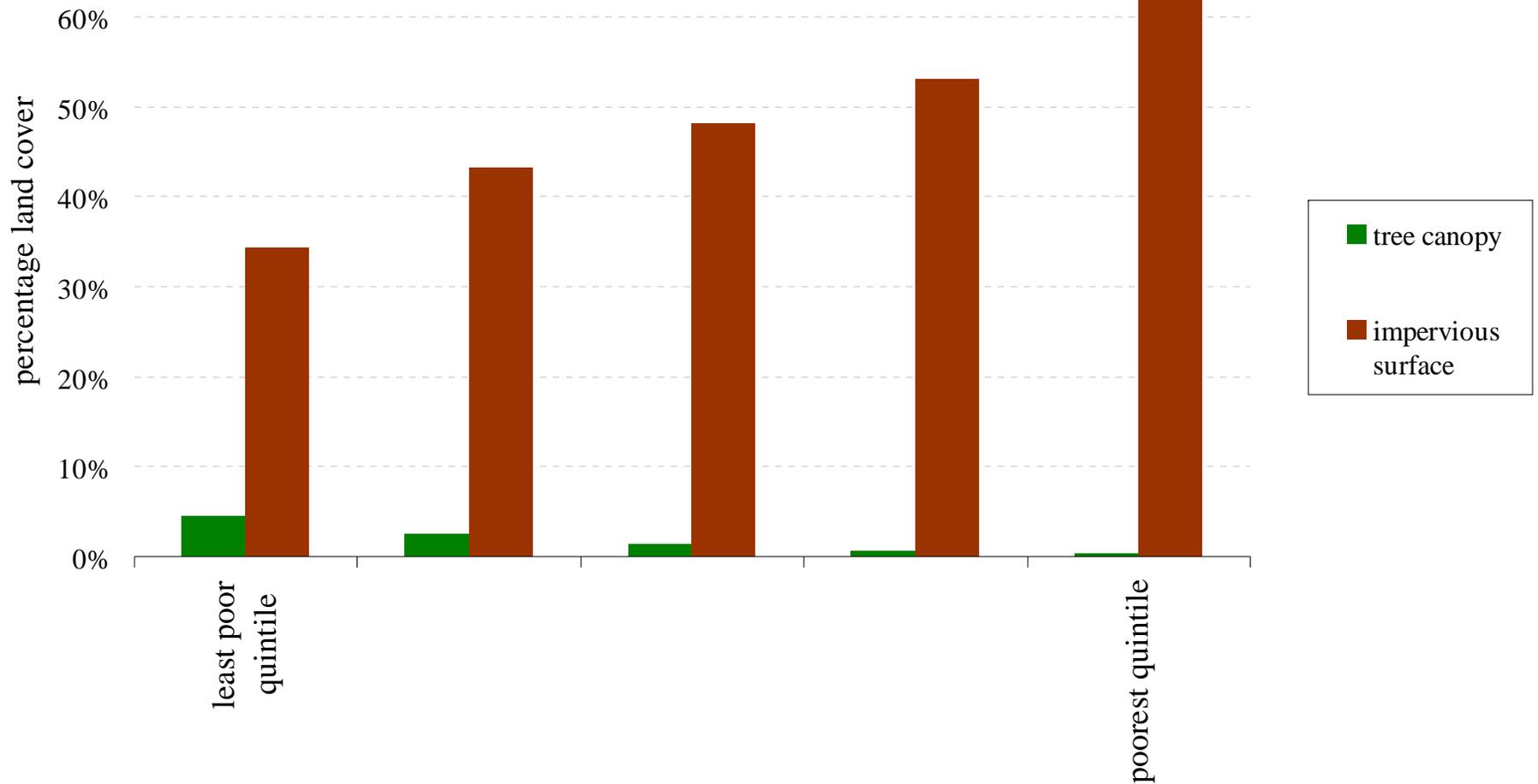
Remote Sensing of Green Cover and Paved Areas

(Su et al. 2008 in review)

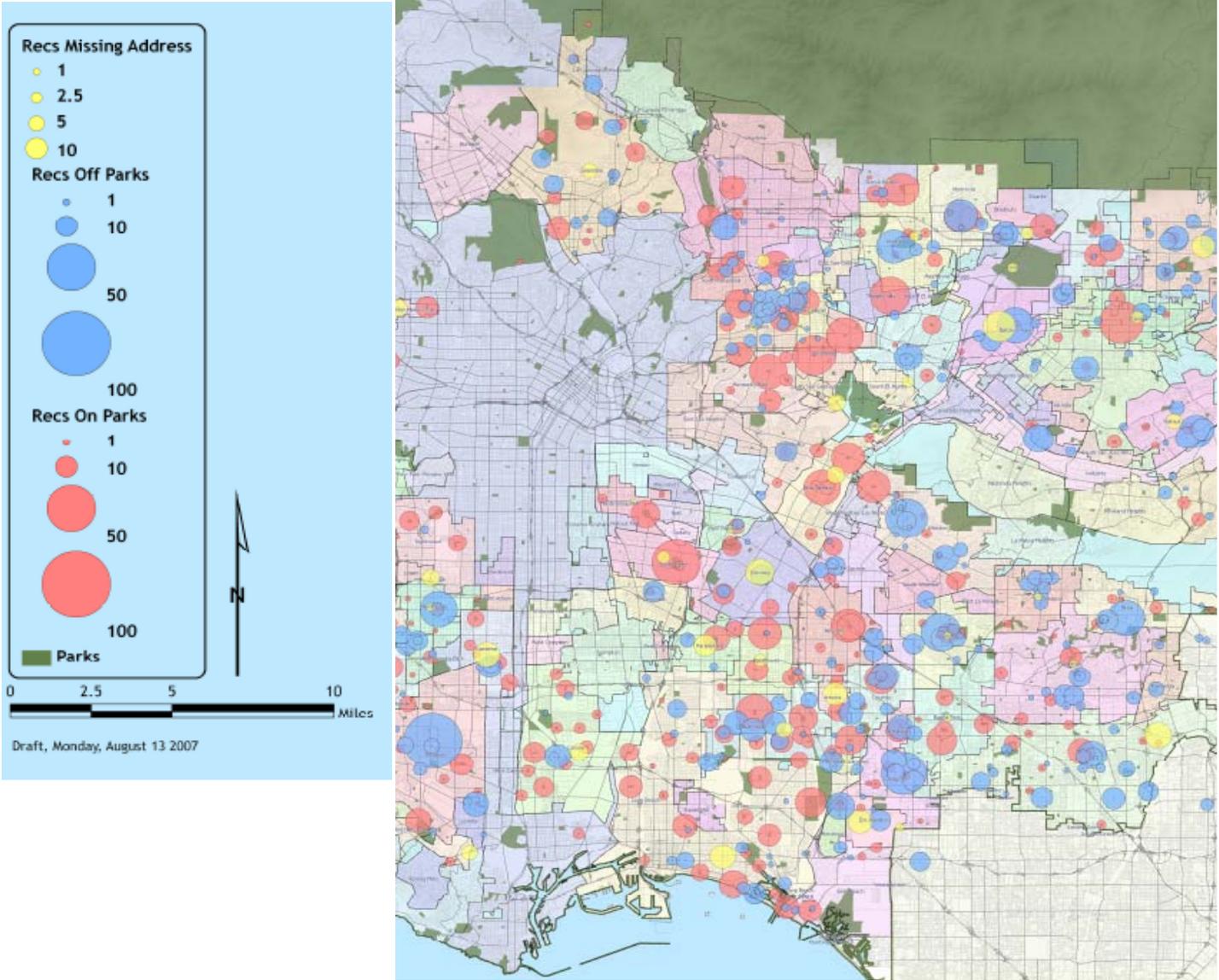


Inequality in Green Cover and Paved Areas by Poverty (Morello-Frosch Pers. Comm. 2008)

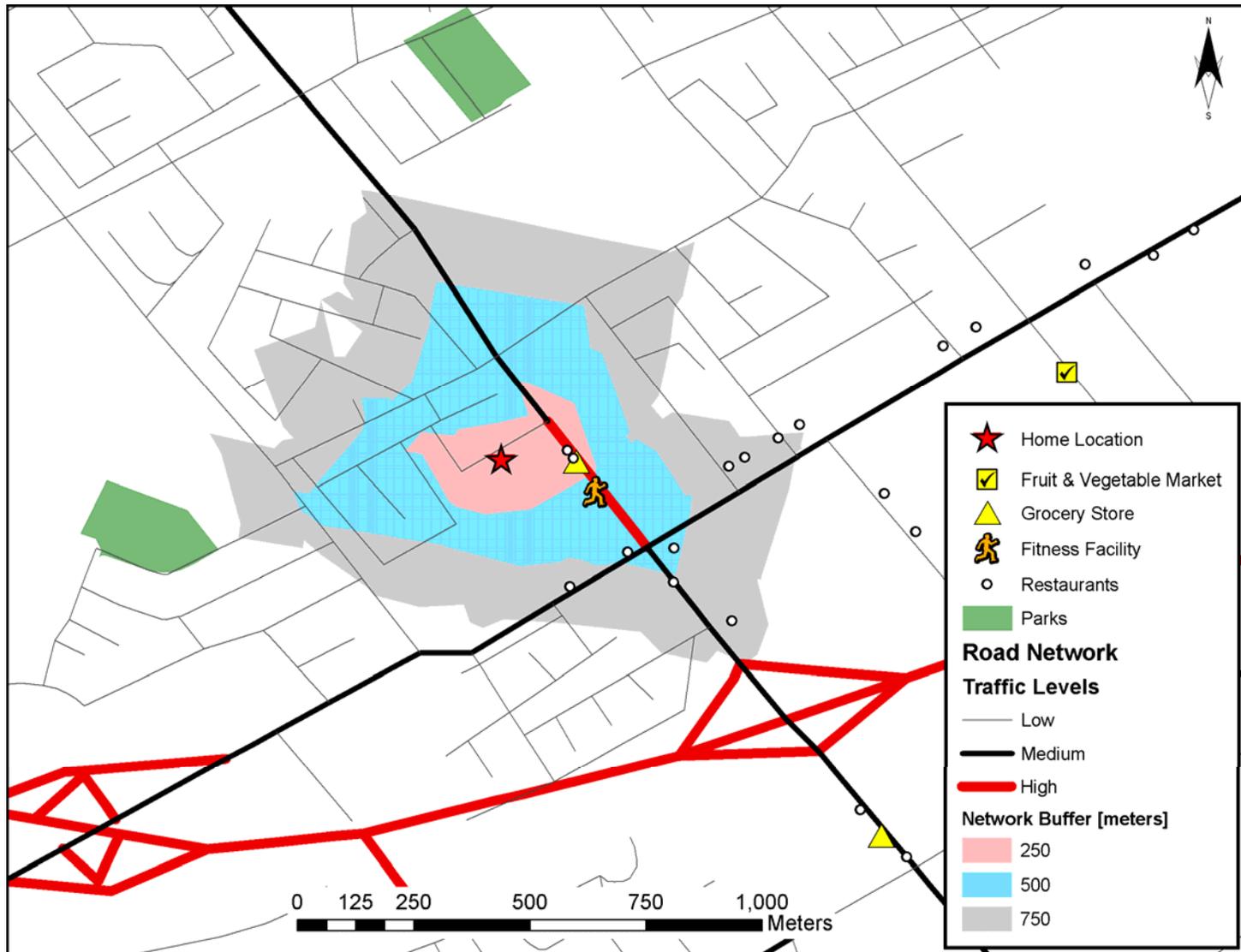
land cover by neighborhood poverty rate,
Los Angeles 5 county region, 2001



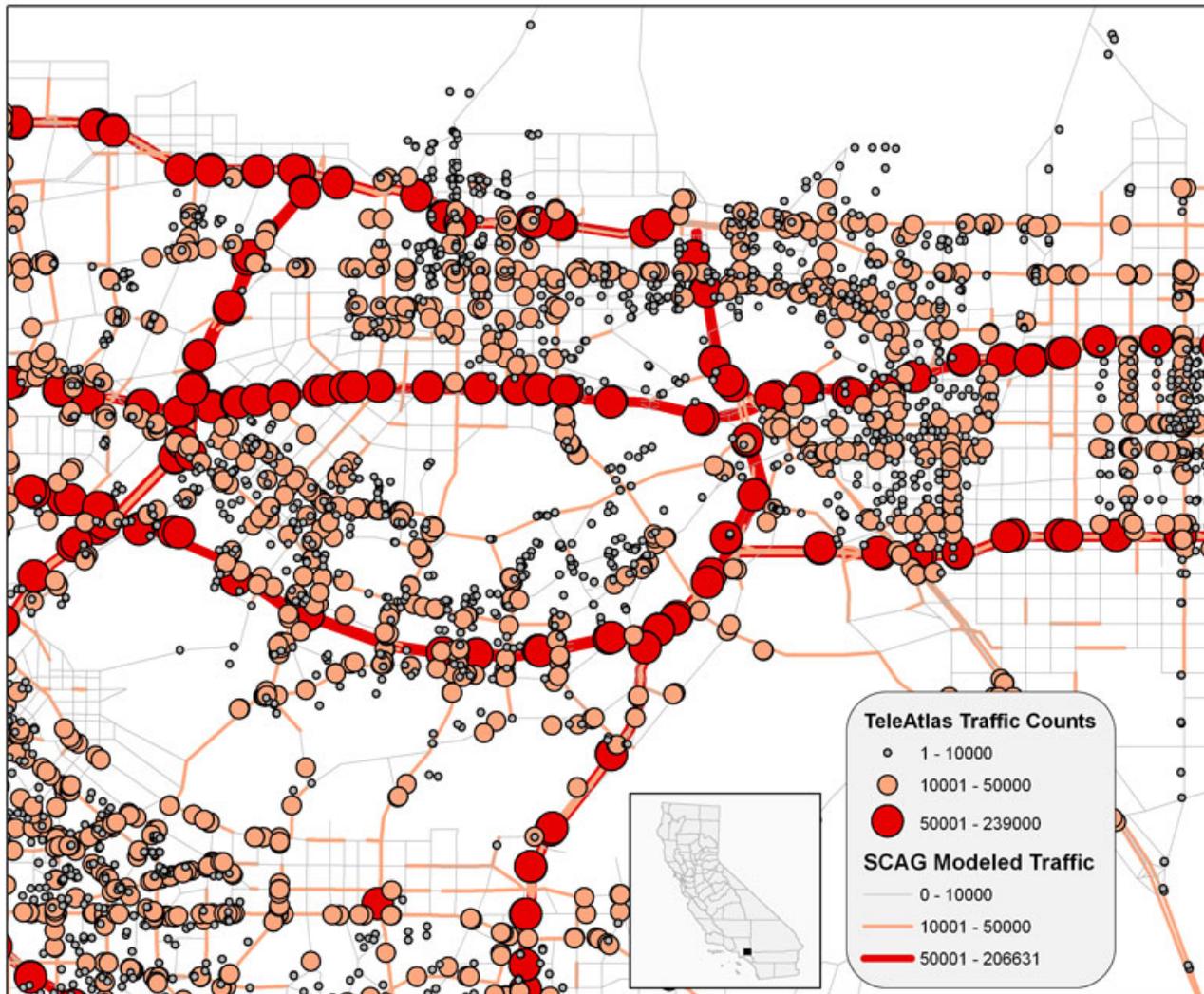
Access to Recreational Programs in S. California Unequal (Wolch 2008 Pers. Comm; in prep)



Multiple Food and Recreation Features Shown at 3 Distances Near a Hypothetical Home

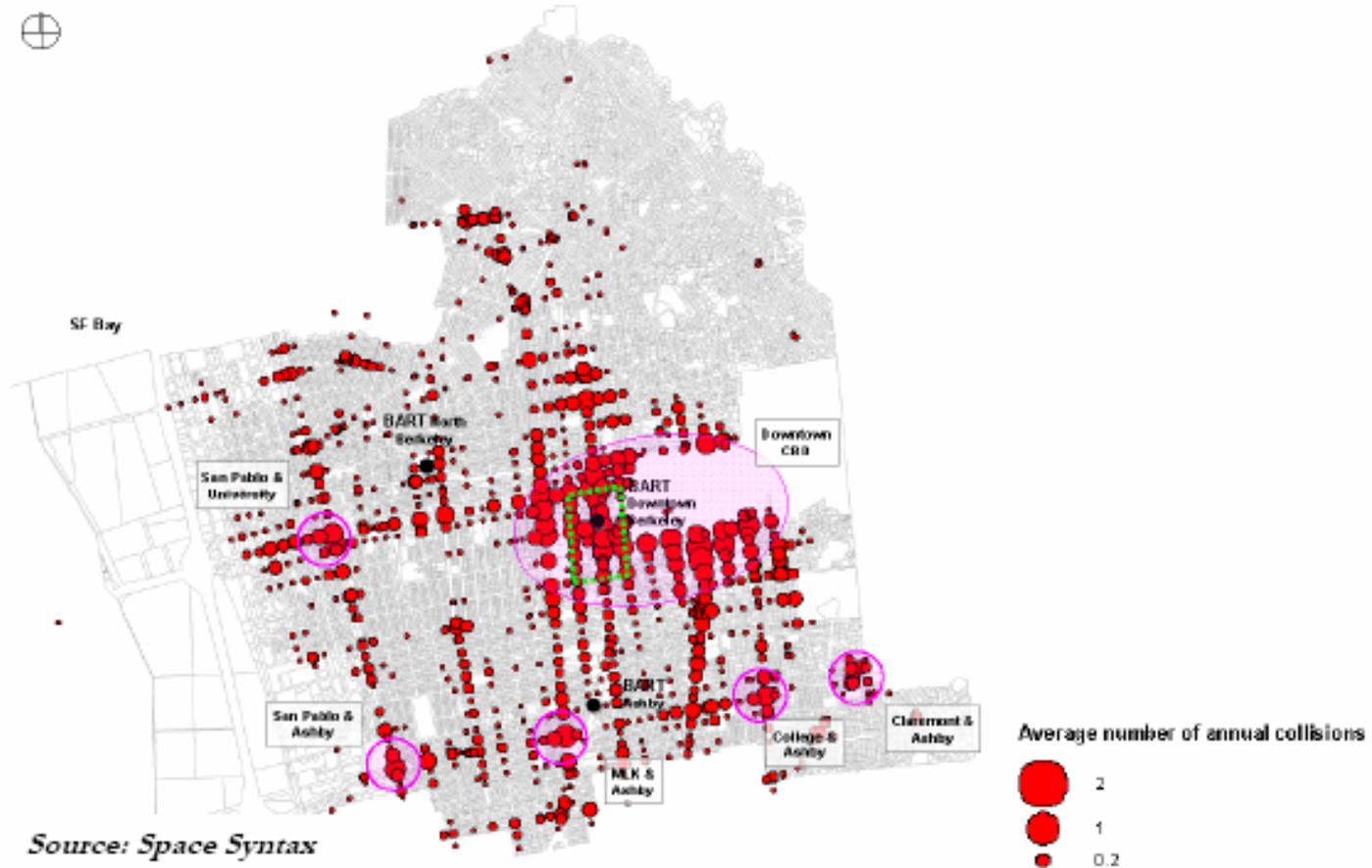


Traffic Counts and Models

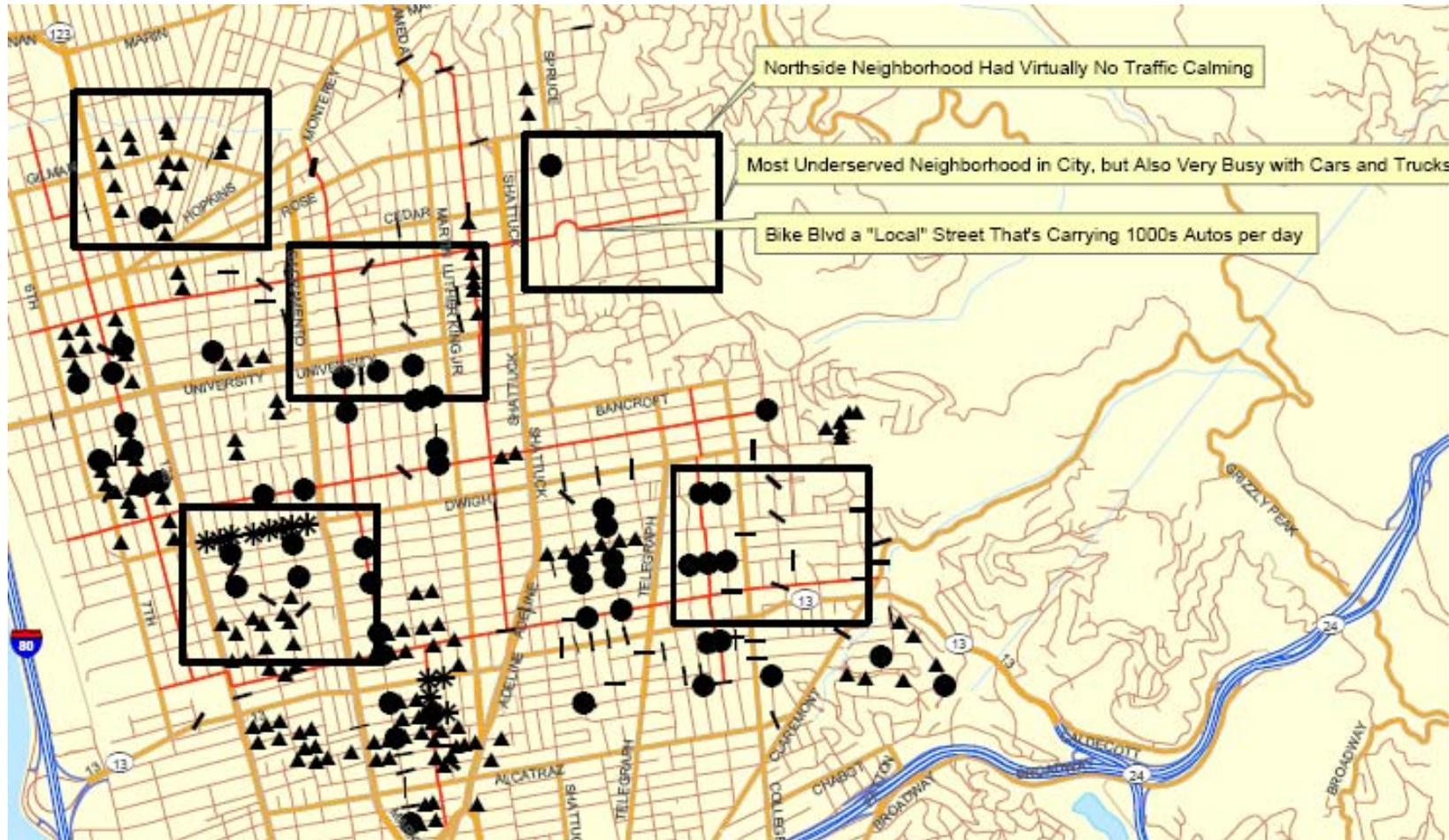


Pedestrian-Vehicle Collisions in Berkeley, CA

Figure 5-6
Collisions Per Junction



Traffic Safety and Calming Unequal in Berkeley, CA



Noise Annoyance in San Francisco (Seto et al. 2007)

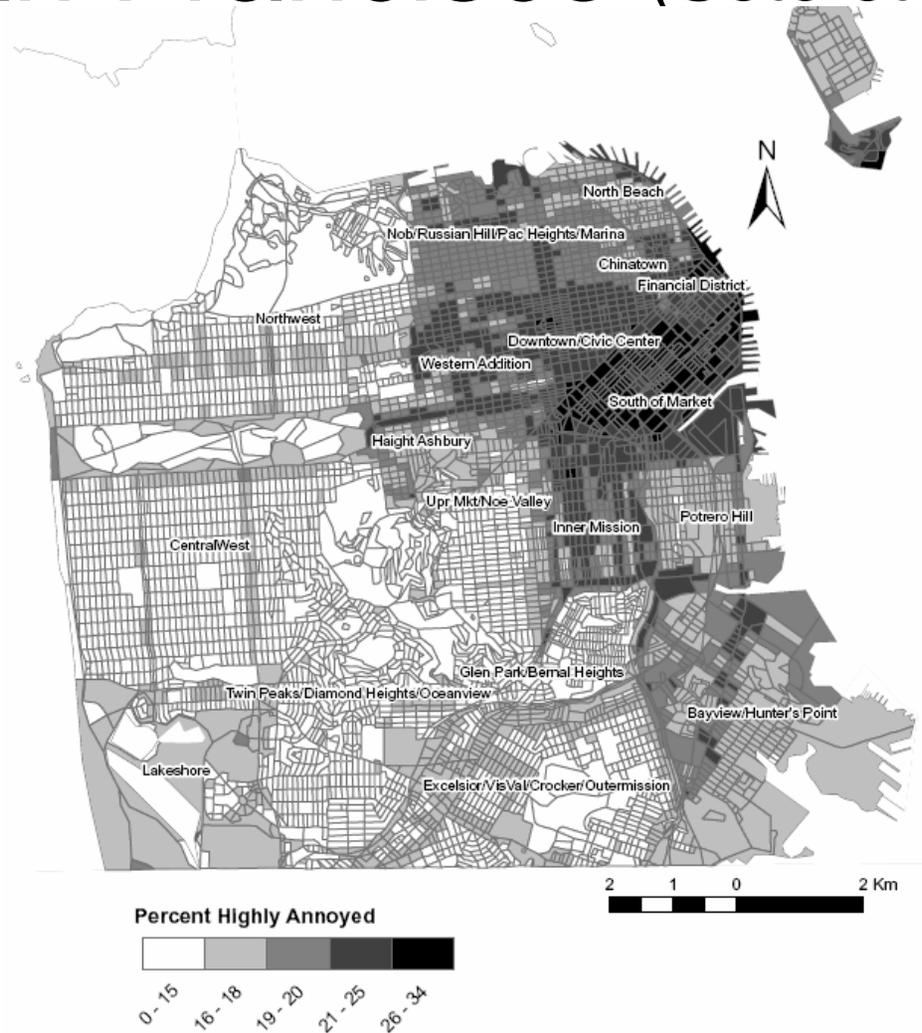


Figure 4
Spatial distribution of the risk of high annoyance to traffic noise.

Concluding Remarks

- Numerous positive and negative exposures accumulate and affect health
- Need to consider whether these exposures, largely related to the built environment, should be brought into cumulative impact assessment