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Urban Greenway Infrastructure: Economic and Social Impacts

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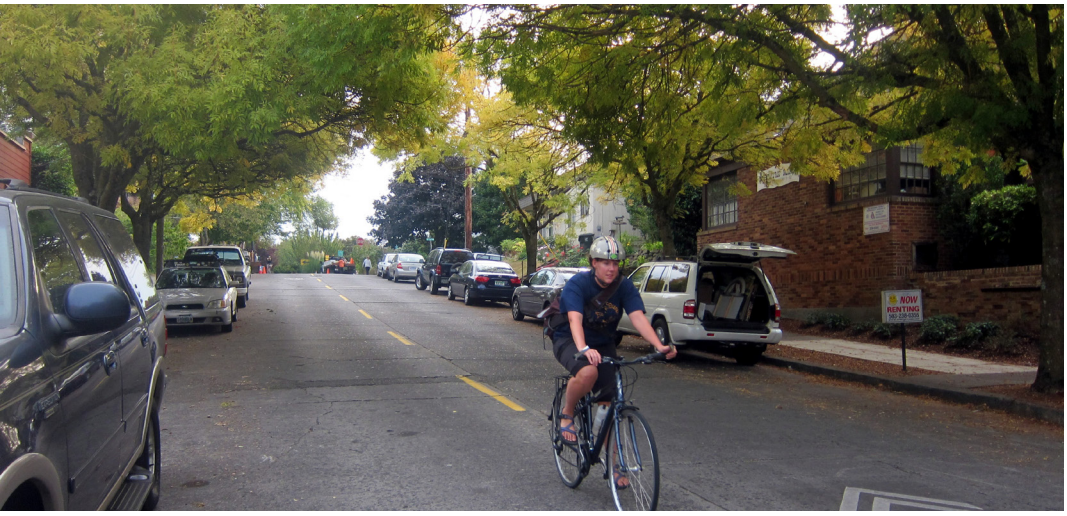

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URBAN GREENWAY INFRASTRUCTURE: ECONOMIC AND SOCIAL IMPACTS

"City Greenways" is a concept proposed as part of Portland's 2035 Comprehensive Plan, which calls for a citywide network of park-like pedestrian and bicycle friendly streets crisscrossing the city at roughly three-mile intervals. This research establishes several approaches to measure the transportation network impact of the "City Greenways" and relate bicycle network measures to economic and equity outcomes.

Researchers developed three sets of bicycle accessibility measures (BAMs), which incorporate different components of a comprehensive bicycle network:

- Distance-based BAM: measures accessibility of the active transportation infrastructure via a proximity measurement
- Destination-based BAM: measures the ease of access to the closest five important employment, retail, service and parks/recreation destinations
- Low-stress network-based BAM: measures users' comfort levels and willingness to use active transportation modes as a travel option, incorporating bicycle level of stress factors to determine the overall accessibility of the urban greenway network.

The three sets of defined BAMs were applied to Portland's current (2016) and proposed (2035) scenarios. In general, better BAMs were associated with higher levels of economic activity. Researchers found that the 2035 City Greenways plan slightly favors the disadvantaged population. These results indicate that while residents might be better able to access the urban greenway network as more bicycle infrastructure is built, this does not necessarily translate into better access to important destinations without complementary economic development and land use policies to support the expansion of the transportation infrastructure.

Urban greenways can create a more well-connected bicycle network, but this doesn't necessarily always translate into better transportation accessibility. Land use policies are needed to ensure access to important destinations.

Understanding the economic impacts of urban greenway infrastructure (#2018-858)

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