

Study argues that pedestrian-friendly environments are critical to trip chains in urban centers

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Polycentric development is being promoted to lessen problems of urban sprawl and reduce vehicle miles traveled (VMT). A new article



published in the August 2021 issue of *Applied Geography* examines the difference between "morphological" and "functional" polycentricity in the Wasatch Front Region of Utah.

"Trip generation, trip chains and polycentric <u>development</u> in metropolitan U.S.: A Case Study of the Wasatch Front Region, Utah" asserts that walking-friendly built environments are a critical concern in generating trip chains within urban centers, and public transit is an essential mode to connect centers.

Authored by Yehua Dennis Wei, Weiye Xiao and Yangyi Wu of the University of Utah Department of Geography, the paper draws on findings from the NITC project "Reducing VMT, Encouraging Walk Trips, and Facilitating Efficient Trip Chains through Polycentric Development."

The authors argue that moderately compact urban design helps trip generation more than extremely compact urban design. The study examines polycentric development in the Wasatch Front Region, Utah, from a morphological perspective using employment data and a functional perspective by analyzing trip chain behavior. Regarding trip chains, the researchers find that although the automobile is the dominant travel mode outside urban centers, trip chains by walking and biking are common in urban centers.

More information is available at <u>this link to the original study</u>, <u>Regional Transportation Goals</u>: <u>Reducing Sprawl through Interconnected Centers</u>.

More information: Yehua Dennis Wei et al, Trip generation, trip chains and polycentric development in metropolitan USA: A Case Study of the Wasatch Front Region, Utah, *Applied Geography* (2021). DOI: 10.1016/j.apgeog.2021.102488



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