

Transportation Center Seminar.....

“Flexible Transit for Low-Density Communities”

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Systems Analysis & Planning,
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Northwestern University

Thursday—1/22/15

3:30 - 5:00 pm

Location:

Transportation Center
Chambers Hall
600 Foster, Evanston - Lower level

Abstract

Demand for transport in low-density areas can be highly variable over time, and quality (or absence) of transit service may reinforce existing mode choices among travelers. Transit services that can flex with demand have been explored to address this variation. This paper describes a method to identify bus stop locations for a flexible service with characteristics of both fixed-route and demand-responsive transit. Once stops are identified, vehicle tours using actual origin-destination demand are constructed to evaluate relative operational efficiency. Simulations for a case study area in metropolitan Denver, Colorado and demand estimation results will be presented. The methodology is appropriate to determine checkpoint locations and evaluate fleet allocation to structure flexible. The method can be extended to evaluate design of flexible transit in other low-density area; such future extensions will be discussed, particularly in the context of evolving vehicle technology and customer service expectations.

Bio

Charlotte Frei is a PhD Candidate in Transportation Systems Analysis and Planning at Northwestern University. Her research interests include travel behavior and public transit, with emphasis on topics related to transit mode choice. Charlotte earned a BS in Civil Engineering from the University of Texas at Austin.