

TOPIC RECOMMENDED FOR TCRP Project J-07
Synthesis of Information Related to Transit Problems

TITLE: Ridesharing as a Complement to Transit

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SCOPE:

Transit and carpooling/vanpooling (ridesharing) can be powerful allies – especially if leveraged together creatively. By embracing ridesharing, transit agencies have been seen to expand their market base, as well as enhance transit operations. Ridesharing can supplement transit services in the high-cost peak period, can serve marginal routes that are costly for transit, and can increase the justification for HOV designations that serve transit as well. If ridesharing and transit alternatives are packaged together, they can attract an even larger market share, displacing the single occupant auto in a growing number of metropolitan areas. At the same time some transit agencies seem reluctant to get into ridesharing.

For the transit agencies that are already very active in ridesharing: How do they do it? How does it affect their cost structure? What is the full potential? What if transit/ridesharing incentives and information were integrated and offered to the public through popular social networking media? How much farther could the transit network be expanded in metro areas if ridesharing was considered an extension of transit service? Could ridesharing be a substitute for regular transit services? Might individuals consider selling a second car or postponing a purchase after integrating ridesharing and transit services into their lifestyle? What energy and environmental benefits might accrue over time?

In the next 20 years, population is expected to grow almost 1% per year, and even more in metropolitan areas. Absorbing this growth into transit would require over 10% per year compound growth in transit over the first decade. It is unrealistic to expect transit to absorb this increased demand, leading to more congestion and frustration for individuals and businesses. Transit risks being seen as falling short – but could be seen as an even more important part of the solution if transit allies itself with ridesharing and increases the services that it offers – and the alternatives it offers to single-occupant vehicle travel.

It is proposed that a synthesis be prepared that gathers information from transit agencies that incorporate ridesharing, and those that do not, and from non-transit agencies that operate ridesharing services, to understand the perspectives of the relevant operators with regard to ridesharing as a complementary solution to transit for handling travel demand. Ridesharing in this case should include the broad spectrum of carpool and vanpool formation typologies including formal flexible carpooling (reference the Washington State Flexible Carpooling Pilot project), informal flexible carpooling (slug-lines and casual carpooling), traditional carpooling and vanpooling, dynamic ridesharing, and so on. The proposed project should explore examples of the integration or interface between ridesharing and the rest of the transit system and identify situations where ridesharing is operating synergistically with transit, and as much as possible capture the essence of best practice in this field.

INFORMATION SOURCES:

Organisations: UC Berkeley Transport Sustainability Research Center; Trip Convergence Ltd; AC Transit; King County Metro; Utah Transit Authority; The Ridesharing Institute (currently being established, see

<http://ridesharinginstitute.wikispaces.com>);

Individuals: Susan Shaheen; Paul Minett; Cindy Burbank; John English; Park Woodworth;

Documents: UC Davis Energy Efficiency Center Research Report: Flexible Carpooling: An Exploratory Analysis; Transit IDEA project: Flexible Carpooling to Transit Stations; Minett P, and Pearce J: Estimating the Energy Saving Impact of Casual Carpooling;

NOTES: In addition to the submitter, this Synthesis is supported by the following people, organisations, and TRB committees: Susan Shaheen; Cynthia Burbank; Metro Transit Rideshare (Seattle); The Ridesharing Institute (currently being established); Emerging and Innovative Public Transport and Technologies Committee (AP020); Transportation Demand Management Committee (ABE50); Intelligent Transportation Systems Committee (AHB15); High-Occupancy Vehicle, High-Occupancy Toll, and Managed Lanes Committee (AHB35). This synthesis proposal has been reviewed and endorsed by TRB Committee APO25 Public Transportation Planning and Development Research Sub-Committee.

A workshop at the TRB 2010 annual meeting explored the need for 'Reinventing Carpooling'. A new subcommittee is in the formation process, most likely to be called: Emerging Ridesharing Solutions Sub-Committee. The parent committees are AP020 (lead), AP025, ABE50, and AHB15. This proposed synthesis is highly relevant to the planned work of the new subcommittee.