Dynamic Ridesharing: Challenges and Public Policy Considerations

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Overview

- What is dynamic or real-time ridesharing?
- Why is it important to individuals?
- Why is it important to the public sector?
- Is this concept “for real”?
- What are the challenges to implementation?
- What potential solutions have been identified?
- What types of innovations are worthy of consideration?
- What is the likely and/or appropriate government role in implementation?
What is Dynamic Ridesharing?

- One-time, one-direction carpools arranged “on the fly”.
- Includes meaningful participation incentives for drivers and passengers.
- Arranges for a critical mass of participants at a particular time and in a particular corridor so that ride matches are likely.
- Includes measures to ensure personal safety.
- Guarantees convenient transportation back home for riders agreeing to leave their cars at home.
Why is Dynamic Ridesharing Important to Individuals?

- Flexible
- Fast
- Convenient
- Comfortable
- Reliable
- Inexpensive
Why is Dynamic Ridesharing Important to Government?

- Reduces vehicle-miles traveled, leading to:
  - Congestion mitigation
  - Carbon and air-pollutant emissions cuts
  - New road infrastructure expenditure reductions
- Could provide socially-necessary transportation.
- All of the above could potentially be achieved with little public resources.
Is Dynamic Ridesharing “Real”? 

- Yes, but only in a few applications.
  - Major casual carpooling operations in the Washington, DC, and San Francisco metropolitan areas.
  - NuRide
  - Various start-ups
Challenges to Implementation

- Many people believe that they would be uncomfortable carpooling with strangers.
- Difficult to get a critical mass of users at the beginning, but without it, failed matches will lead to a failed system.
- Security measures need to be designed into the system.
- Back-up services must be reliable, convenient, paid for, and pre-arranged.
Potential Remedies

- Others at this workshop will speak to these. The key question for each remedy is whether it will really work.
- It is worth closely examining casual carpooling operations before designing dynamic ridesharing systems.
Innovations for Consideration

- Combining ridesharing with carsharing (Zipcar/Zimride partnership).
- Limiting service times and corridors.
- Introducing the transfer concept to dynamic ridesharing.
- Partnering with transit agencies to fix one trip end, bolster transit use, and more efficiently utilize transit park-and-ride facilities.
Government Role

- Federal Congestion Mitigation and Air Quality Improvement (CMAQ) Program funding.
- Federal discretionary grant funding.
- State and local funding.
For Further Information

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