How (Should) We Evaluate Demand Responsive Transit’s Impact on Transport Equity?

A Systematic Review

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How have we evaluated DRT’s impact on equity in the past?

DRT is able to more efficiently serve low demand rather than following a fixed time table.

Research Questions

- How have we evaluated DRT’s impact on equity in the past?
- How should we perceive benefits from these services moving forward?

Study Design

- DRT is able to more efficiently serve low density populations.
- Historically, DRT has served the elderly and mobility impaired.

What is DRT

Demand Responsive Transit (DRT) is a form of shared public transit where vehicles adjust their routes based on demand rather than following a fixed time table.

Think a mix between a taxi and a bus.

Conclusions

User Demographics

Measurement and reporting of user demographics must be standardized. At a minimum: age, ability, gender, income, race, and car ownership of users must be collected.

Trip Purposes

Recording of trip purpose is necessary. Links to health, education, shopping, employment, and recreational services should be identified.

Integration

In many low density areas DRT is the most viable form of public transit. DRT’s presence in "Mobility as a Service" will be pivotal for the transport disadvantaged living on the fringes of our cities.

Subsidization Data

Sharing of cost metrics and alternative evaluation methods is needed to develop industry best practices. Lack of transparency is leading multiple trials to make the same mistakes.

Standard Operations

A collective set of success factors and best practice guidelines for local authorities and planners is required. Research into operational characteristics and success measures is needed to develop normalized DRT service provision.

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