Variation in satisfaction with bus transit service among different bus users using a large-scale survey from London, UK

ABSTRACT

To retain and grow ridership, transit agencies continuously survey riders to learn how to improve services and understand what leads to rider satisfaction. Nevertheless, transit riders are not a homogeneous entity and understanding important distinctions among transit riders can help transit agencies in their efforts to provide satisfactory service and attract different rider segments.

We examined a large-scale survey from London to address how the satisfaction of riders with encumbrances and riders with disabilities may depend on different service characteristics.

Our findings indicate that improving waiting area conditions can increase the satisfaction of riders with disabilities and encumbrances.

By highlighting the needs of two special groups of bus riders that were previously overlooked in the public transport literature, we offer insights for transit planners about determinants of these riders’ satisfaction with bus service.

METHODOLOGY

Large-scale survey on satisfaction from London, UK from 2010–2015

Riders rated overall satisfaction on a 1–5 scale.

Riders were asked about satisfaction with different characteristics (bus cleanliness, reliability, etc.).

Riders were segmented into regular riders (no encumbrances and no disabilities), riders with disabilities (mobility, visual, and/or hearing), and riders with encumbrances (shopping bags, child, or large item).

Multinomial logit modelling of being satisfied overall based on different characteristics of service and some personal attributes.

THE PURSUIT OF HAPPINESS

Dealing with the different perspectives of the agencies.

The lack of consideration for riders with disabilities and encumbrances typical among transit riders is crucial for their satisfaction. Riders with disabilities may lack access to schedules on computers or through the telephone and may not be able to understand how encumbered riders and riders with disabilities typically overlook bus riders.

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MAIN FINDINGS

- Waiting area condition is most important out-of-vehicle factor
- Seat availability is most important in-vehicle factor
- Decreased odds of satisfaction for visible minorities
- Having a shelter is most important out-of-vehicle factor
- Seat availability is most important in-vehicle factor
- Decreased odds of satisfaction for child-related trips
- Bus information at the stop is most important out-of-vehicle factor
- Journey time satisfaction is most important in-vehicle factor
- Decreased odds of satisfaction for Black riders

CONCLUSIONS

- By studying typically overlooked bus riders, we uncovered how encumbered riders and riders with disabilities value different aspects of a bus journey.
- As some riders use buses for daily errands and may lack car access, having a shelter and seat or place on the bus for their encumbrances or child improves their satisfaction with the bus.
- For riders with disabilities, providing information at the bus stop is crucial for their satisfaction. Riders with disabilities may lack access to schedules on computers or other devices and thus rely on schedules at the stop.
- Transit agencies can improve the satisfaction of marginalized riders by targeting waiting area conditions and accessibility measures.

RECOMMENDATIONS

- Ensure clean and graffiti-free waiting area
- Provide a shelter where possible
- Schedule information is available and current, while accounting for visually- or hearing-impaired riders
- Sensitize riders with priority-seating awareness for encumbered riders
- Ensure clean bus interiors
- Ensure bus drivers are courteous and drive safely