

Get Set Go

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Abstract- This paper begins by providing an overview of bike share programs, followed by a critical examination of the growing body of literature on these programs. This synthesis of previous works, both peer-reviewed and gray, includes an identification of the current gaps in knowledge related to the impacts of bike sharing programs. This synthesis represents a critically needed evaluation of the current state of global bike share research, in order to better understand, and maximize the effectiveness of current and future programs. Several consistent themes have emerged within the growing body of research on bike share programs. Firstly, the importance bike share members place on convenience and value for money appears paramount in their motivation to sign up and use these programs. Secondly, and somewhat counter intuitively, scheme members are more likely to own and use private bicycles than nonmembers. Thirdly, users demonstrate a greater reluctance to wear helmets than private bicycle riders and helmets have acted as a deterrent in jurisdictions in which helmets are mandatory. Finally, and perhaps most importantly from a sustainable transport perspective, the majority of scheme users are substituting from sustainable modes of transport rather than the car.

Keywords- Public bicycle, bicycle, bike share, transport, sustainable, cities.

I. INTRODUCTION

Bike share programs have existed for almost 50 years, although the last decade has seen a sharp increase in both their prevalence and popularity worldwide. Contemporary bike share programs refer to the provision of bicycles to enable short-term rental from one docking station to another. These bicycles usually contain technologies that allow scheme operators to track movements, from one docking station to the next, and for those with integrated global positioning system (GPS), the bike's movement through the network. Pricing structures generally encourage short-term rental (for example, the first 30 min are usually free), after which, users are charged on a sharply rising scale. Users are generally required to provide credit card details, which act both as a deposit, as well as payment for registration and usage fees.

II. REVIEW OF THE LITERATURE

This literature review begins by briefly identifying the policy context to which the bike sharing concept responds, in terms of the need to enhance the sustainability of the transport system, as well as meet public health and urban livability objectives. This review is followed by a discussion on the limited work directly investigating the impacts of bike share programs. These works were found through a scan of the academic literature on bike share, as well as through the gray literature between April 2011 and September 2012. Google Alerts were also established between these dates for the words "bike share" and "public bike". Readers are encouraged to refer to the bibliography to determine whether cited works are from the peer-reviewed or gray literature. As with any area of research, but perhaps particularly so with bike share, given the rapid pace of growth, papers can quickly become outdated.

2.1 Sustainability Challenges, Cycling and Its Promotion:

As contemporary urban policy seeks to overcome the challenges presented by car dependence, replacing car journeys with bicycles has emerged as an increasingly common response in many cities, as highlighted recently in the new book *City Cycling*. This paper does not seek to repeat a discussion of the benefits of bicycling found elsewhere, but simply wishes to highlight that the rise of bike share has come about ostensibly in an attempt to capitalize on the potential benefits associated with an increase in cycling. Finally, the establishment of bike share programs has prominently enabled cities to demonstrate their commitment to addressing climate change, population health issues, traffic congestion, oil dependence and livability.

2.2 Public Bicycle Share Schemes:

The policy context identified above, combined with improvements to the capability and affordability of tracking, communications, security and payment technology have enabled considerable growth in bike-sharing programs, mostly in Europe and China (and other Asian countries), but also in the US, and to a lesser extent, Australia.

2.3 Benefits:

In the overview of the bicycle share concept, history and future, outline the benefits of bike share programs, which can be summarized as:

- flexible mobility;
- individual financial savings;
- emission reductions;
- reduced congestion and fuel use;
- health benefits.

2.4 Mode substitution and impacts:

Implicit in many of the aforementioned benefits is the assumption that a significant proportion of users are transferring to public bicycle from single occupant car use. Yet, a wide range of papers from a number of countries have reported that this is seldom the case. A report on bike share from the United Nations warned about the possibility of exaggerating the benefits of these programs, given that it is quite common for the majority of bike share trips to be substituting for sustainable modes .

III. FUTURE ENHANCEMENT

Our application can help those people who has not have their own vehicles and any people who are new in city and wants to travel through rental vehicles. They can also get the vehicles at very low price.

IV. CONCLUSION

Interest in urban cycling is increasing and the number of bike share programs has grown rapidly over the last five years. The peer-reviewed literature on bike share is limited and there are important questions yet to be examined in detail. The ability of bike share to attract trips previously made by private car has emerged as a key challenge for bike share programs, and the literature that does exist on this question has exposed disappointing conversion rates. Whilst bike share program have undoubtedly enhanced user convenience and reduced travel time, an opportunity exists to enhance bike sharing's performance in reducing car use. Improving the level of service for bike share users, particularly in relation to a competitive advantage over car travel for short trips appears to be a plausible option for bike share programs seeking to maximize mode substitution from private car travel. This taps into a very clear theme in the literature: bike share users are most frequently motivated by convenience.

V. ACKNOWLEDGMENT

We express our sincere thanks to Prof. Ajaykumar T.Shah Head of Department of Computer Engineering, Alpha College of Engineering and Technology for their Support and guidance for this project and care taken by them in helping us to complete the project work successfully.

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