The Perception of Access in Sydney

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Abstract: Ensuring good access is a key element of land-use planning, allowing people to move around and access different services. This project focuses on the perception of access, as people base their transport mode choice on it. The context of lockdown due to COVID-19 also made it possible to question individuals about their habits. This study is based on an online survey of 197 people and 7 interviews. The results show that the population generally overestimated the attractiveness of the center of Sydney compared to the entire agglomeration, as well as the access to work from home. They also overestimated the access to work offered by public transport compared to that offered by cycling. Overall, they overestimated travel times compared to Google Maps, especially for the trips made by car, and the trips made by pedestrians on short journeys. Estimates of public transport users are more scattered. Cycling generally has a positive image, but long distances and the danger of a fragmented cycling network deter many residents. During the COVID-19 lockdown, commuting times were missed more by public transport users and cyclists, then by electric bicycle users, pedestrians and finally motorists. The number of changes in public transport appears to have more impact on the appreciation of transport than the travel time. Finally, the sketches made by the respondents during the interviews show a difference between public transport users and others in the way they picture their usual journeys, especially in the elements used for orientation. The use of color coding to describe the level of comfort on a bicycle trip during the interviews suggests that the main sources of discomfort came from the confrontation with road traffic. This method proved effective in obtaining a near-exhaustive description of the advantages and disadvantages of a journey. Carried out on a larger scale and with other means of transport, it is a good way of obtaining an overview of the perception of the city and its travel possibilities by its inhabitants.

1.1. Perception of access to jobs

Cumulative distribution curve of the respondents estimate of the number of job in Greater Sydney area and in the City of Sydney

1.2. Perception of travel time

Average and (standard deviation) of the accuracy ratio R1 for every mode estimated, depending on the mode used by the respondent (* = non-representative)

2.1. Image of cycling in Sydney

Respondent’s cycling participation : 43% cycle less than once a month, 57% cycle more than once a month

Comparison of public transport and push bike travel time estimates

2.3 Comparison of cycling with public transport travel times

Respondents estimated the percentage of low traffic roads better than the percentage of roads equipped with bike facilities

R2 distribution for the estimates of roads equipped with bike facilities (left) and low traffic roads (right) in a 20m radius of the respondent’s residence, depending on the transport mode they use

3. Impacts of COVID-19 on travel behavior

Respondent’s answer on how much they miss transport time (Red = not at all, to Green = very much)

Respondent who miss transport time the most are the ones that use a transport mode allowing simultaneous activities Respondents who miss transport time & those who don’t have similar average travel times (35 & 39 minutes), but different variance (549 & 269 minutes)

Among public transport users, the more transfer they must make, the less they miss transport time