



Best practice bicycle safety – improvement fact sheet

Time, space and noise

Overview




Studies from London, Montreal, the US and Colombia show that cyclist commuters are the most or among the **most satisfied** with their trips to work in terms of quality of time spent cycling [1, 3, 4, 5, 6]. The bicycle is very **space-efficient**: During 1 hour, 7 times more bikes than cars can cross a 3.5 m wide space in an urban environment. The **space** that is needed for a **single car-parking spot can fit up to 15 bicycles** [1]. By using the **public space** more **efficiently**, it is possible to move more people through the same infrastructure (more people can cross the section of the road on bicycles than in cars in given time) [8] **without harmful emissions and gases for the environment.**

Positive effects



A moving car takes up **28 times more space than a moving bicycle**. A parked car takes up 10-15 times more space than a **parked bicycle** [1, 2]. In metropolitan and urban areas, **parking a bicycle** in the vicinity of one's destination is far **easier than parking a car**. In metropolitan and urban areas, a **time of arrival** can be estimated **more accurately** and **more reliably** when travelling by bicycle rather than travelling by car (or public trans-

port). **Traffic noise** is a serious nuisance to roughly 30% of the population. An increase in the number of bicycles will **reduce** such **nuisance**, but the effects will be limited. For example: depending on the type of road, traffic composition and construction density, a halving of the number of motor vehicles will locally result in a **3 dB noise abatement**, a difference which is discernible to the human ear [2].

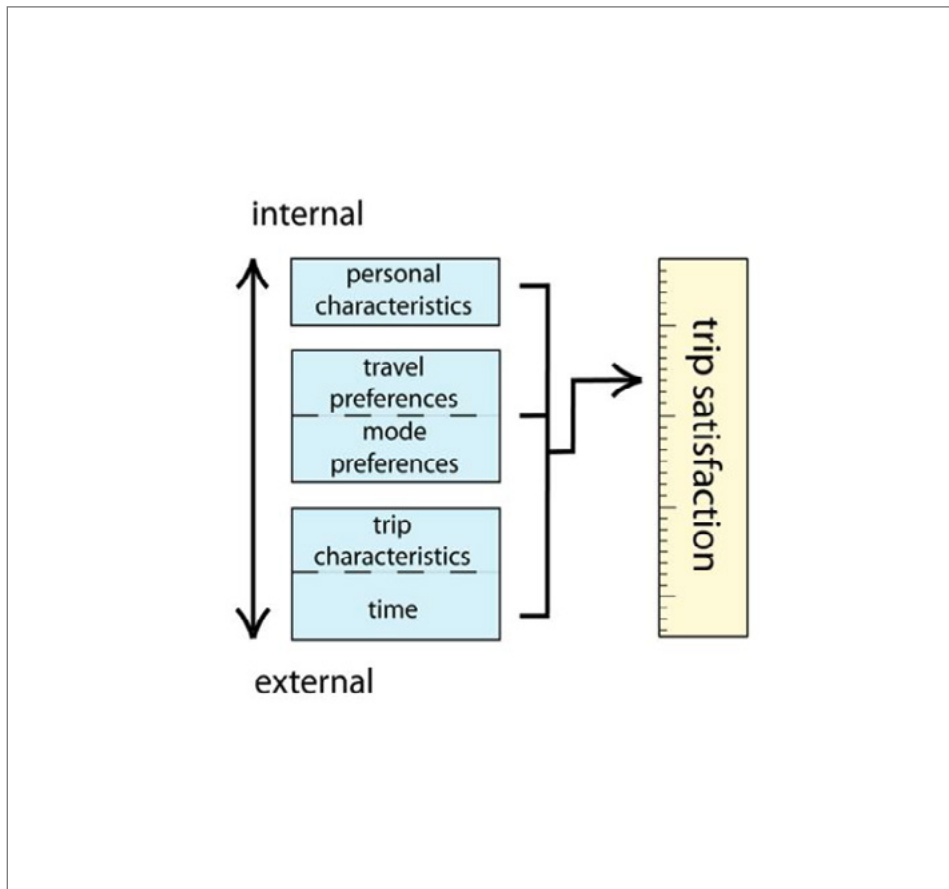
Benefits

	<p>More efficient use of space</p>
	<p>Noise reduction</p>
	<p>Moving more people through existing infrastructure</p>

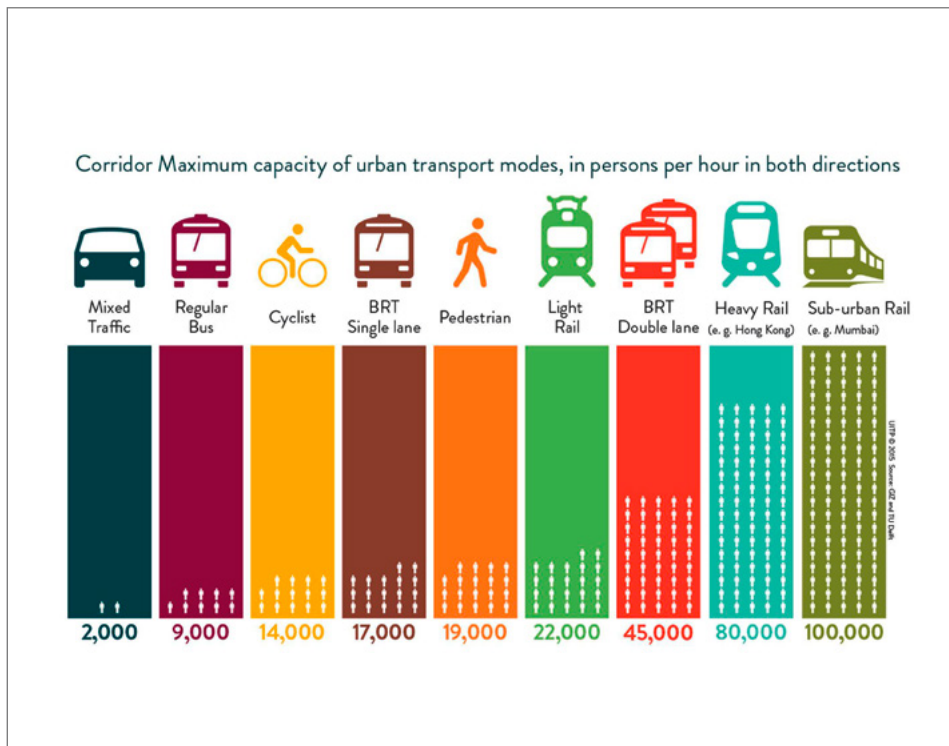
Issues

	<p>Conversion of space is needed which will result in less car purposed space</p>
	<p>It is necessary to provide parking facilities for bicycles</p>

Examples



“The happy commuter: A comparison of commuter satisfaction across modes” research showed that personal characteristics, travel and mode preferences, as well as trip and travel time characteristics can be placed on a continuum from internal to external, and all have influences on trip satisfaction [3].



A 3.5 m motor traffic lane can carry around 2,000 people per hour, assuming typical urban car occupancy rates. That same 3.5 m, allocated to cycling, can carry at least four times as many people per hour, perhaps even seven times as many – 14,000 people per hour [7, 9, 10].

References and links

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**SABRINA: No fears
about safety on
two wheels.**

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