

Uptake of Public Transport

Overview

Public transport is a critical aspect to low carbon mobility. Backed by policy directives, metro rail systems are expanding across Indian cities. However, ridership rates remain suboptimal and GHG mitigation goals are unfulfilled. Shifting commuters from private vehicles to metro usership requires a behavioural approach to overcome biases.

The Low Carbon Lifestyles (LCL) programme by CSBC leverages behavioural science for sustainable lifestyle choices. Through a detailed literature review, diagnostic field work, and design ideation workshops, we identified behavioural pathways and interventions to increase metro rail usage in urban India.

Solutions to increase metro ridership lie in improving the experience of commuting and planning trips, reframing the benefits of using public transport, and tackling concerns around safety.

Indian metro systems have **30%** of projected ridership

Road transport accounts for **12%** of India's energy-related CO2 emissions

Behavioural Barriers

Target behaviour

Switch to metro rail from private vehicles for commuting

Target population

Commuters using ICE vehicles in cities with accessible metro systems

- **Poor last-mile experience:** commuters prefer the convenience of private vehicles due to first and last-mile connectivity due to poor lighting, safety concerns, and perceived effort
- **Perceived high effort and lack of flexibility:** metro use is seen as uncomfortable, time-consuming due to transfers and wait times, and an inflexible option—even when it saves time overall
- **Status bias:** Cars are seen as symbols of success while the metro is viewed as mass-oriented driven by financial reasons
- **Lack of safety:** people perceive the metro as unsafe, largely based on other's experiences, which deters adoption of public transport



Behavioural Pathways

BEHAVIOURAL PATHWAY

INTERVENTION IDEA



Improve last-mile connectivity

Introduce safe bicycle parking, public bike docks, and organised para-transits stands at metro stations to improve last-time connectivity



Improve trip planning and navigation

Standardise and improve signage at metro stations to reduce navigation effort

Design a real-time, integrated trip planning app to ease uncertainty and perceived effort for non-routine users



Create status-signaling campaigns

Show successful professionals like senior executives or celebrities using the metro to challenge status bias and perceptions about metro users



Reframe metro benefits based on user values

Frame the benefits of metro usage that are meaningful to riders such as:

- Time (gain a week of family time per year)
- Cost (save enough to buy a smartphone)
- Environment (cut emissions with every ride)



Run campaigns on rider safety

Share positive stories and experiences of real metro users who commute regularly to combat perceptions of lack of safety