The Mobility Design Lab, located at MADA, is a leading research body whose enquiry concerns the design of the physical, environmental and experiential aspects of mobility, including rail. Rail systems can contain unintended structures and processes that are barriers to a well-functioning transport system. At Monash industrial designers, architects and communication designers are looking at the interface between rail transport and the interaction of passengers, users and environment.

**RESEARCH AND INDUSTRY SUPPORTED ACTIVITIES**

Drawing on the comprehensive range of design and development expertise, researchers now located in the Mobility Design Lab, have completed a number of significant national and international design projects in rail.

- Ameliorating anti-social behaviour on suburban trains. There have been a number of projects on this topic. Firstly for Connex the then Transport Operating Company for Melbourne and then later for the French National Railway, SNCF in Paris.

- The lab has undertaken research in collaboration with the faculty of IT at Monash into investigating methods of creating authentic passenger simulations, to measure dwell time stability and test the efficacy of train carriage interiors to disperse passengers during peak loads.

- Passenger train interior design research to mitigate the effects of variable passenger densities.

- Researchers in the Mobility Design Lab have been recipients of RailCRC funding for research into improving and overcoming the challenges of disability access at older suburban stations.

**STRATEGIC PARTNERSHIPS**

The Mobility Design Lab enjoys a close working relationship with both academic and industry partners including:

- SensiLab
- Metro Transport Melbourne
- Volgren
- IITB – Monash India
- Monash Public Transport Research Group
- The Institute of Transport Studies – Monash
- Monash University Accident Research Centre
- The Institute of Rail Technology
- The Australasian Transport Research Forum
- The Transport Research Board USA

**Three dimensional test rigs**

**Testing new designs in full size mock-ups**