

Developing Safe Accessible Shared Spaces – a collaborative approach

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Definitions

“A street or place designed to improve pedestrian movement and comfort by reducing the dominance of motor vehicles and enabling all users to share the space rather than follow the clearly defined rules implied by more conventional designs.”

Local Transport Note 1/11 October 2011 Department for Transport; London

“A road that has been designed to slow traffic and give priority to pedestrians. Drivers give way to pedestrians who, in turn, should not impede traffic.”

New Zealand Transport Agency (NZTA) shared zone
Transport (Road User) Rule 2004

Aims

- Improved pedestrian amenity
- Increased social interaction
- Reduce motorised vehicle dominance
- Reduced vehicle speeds
- Creation of flexible space
- Improved economic activity
- Revitalisation

Planning

- Essential to the success of the project
- Stakeholder engagement – three step consultation process
- Documenting
- Auditing
- Monitoring (built into costs)

New Zealand Standards and Best Practice Guidelines

- NZS 4121:2001 Design for Access and Mobility-Buildings and Associated Facilities
- AS/NZ Standard 1428.4.1:2009 Means to assist the orientation of people with vision impairment
 - Tactile ground surface indicators
- RTS 14 Guidelines for Facilities for blind and vision-impaired pedestrians
- NZTA Pedestrian Planning and Design Guide

Issues

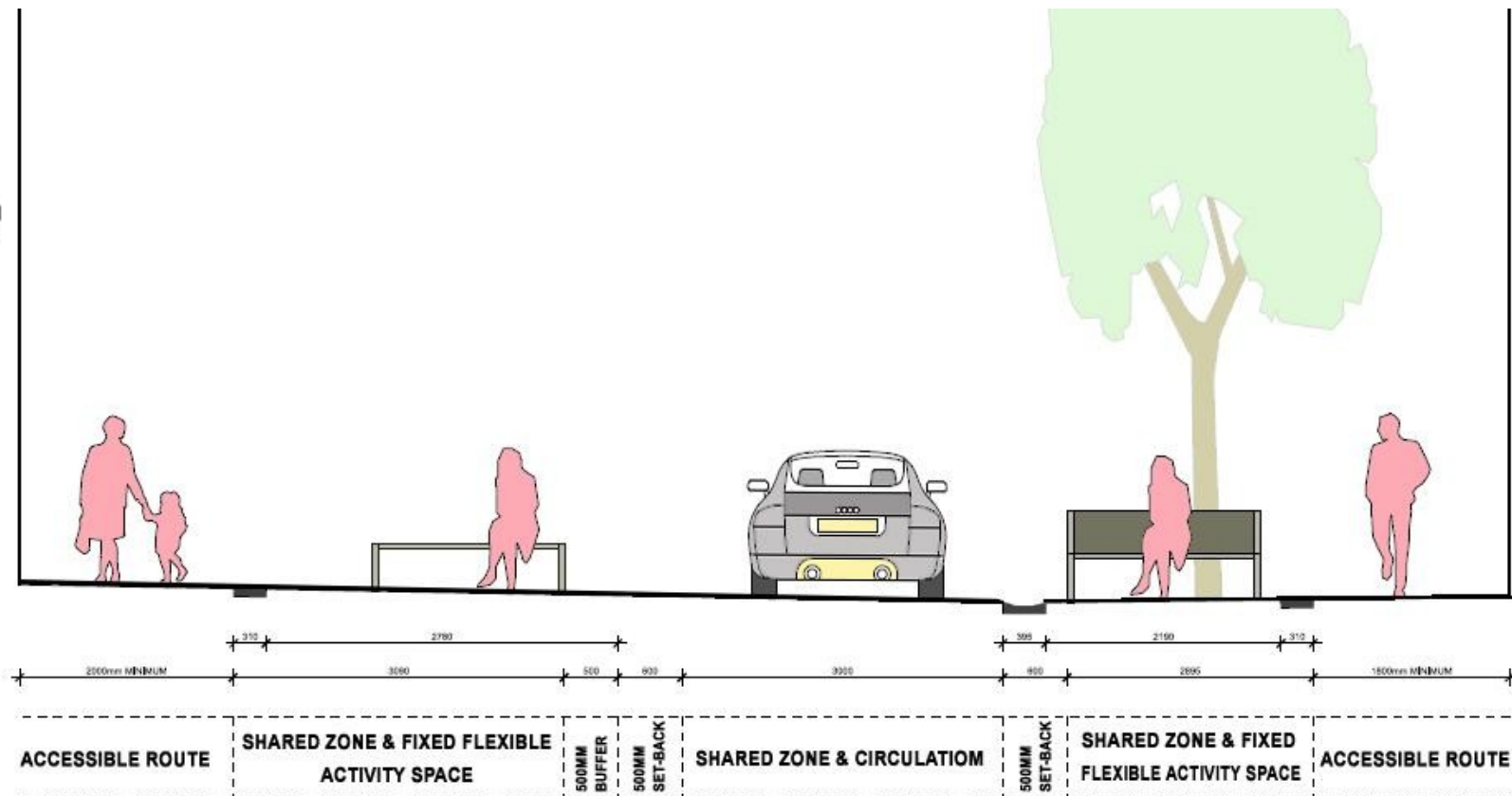
- Need kerbs or clearly detectable alternative demarcation
- Dealing with cyclists
- Need usable traditional guidance cues and guidance paths
- Need detectable marked places to cross
- Need designated parking places or a no parking zone
- Knowledge of entering/exiting a shared space area

Design Considerations

- Comfort space/continuous accessible route
- Inclusive
- Current users and street functions
- Planned users and street functions
- Flexibility of use – day versus night
- Demarcation
- Traffic volumes and speed
- Materials, implementation and maintenance

ATRIUM ON
ELLIOTT

NEW ORIENT
RESTAURANT





Elliot Street



Darby Street



Jean Batten Place



Fort Street



Fort Lane



Consultation

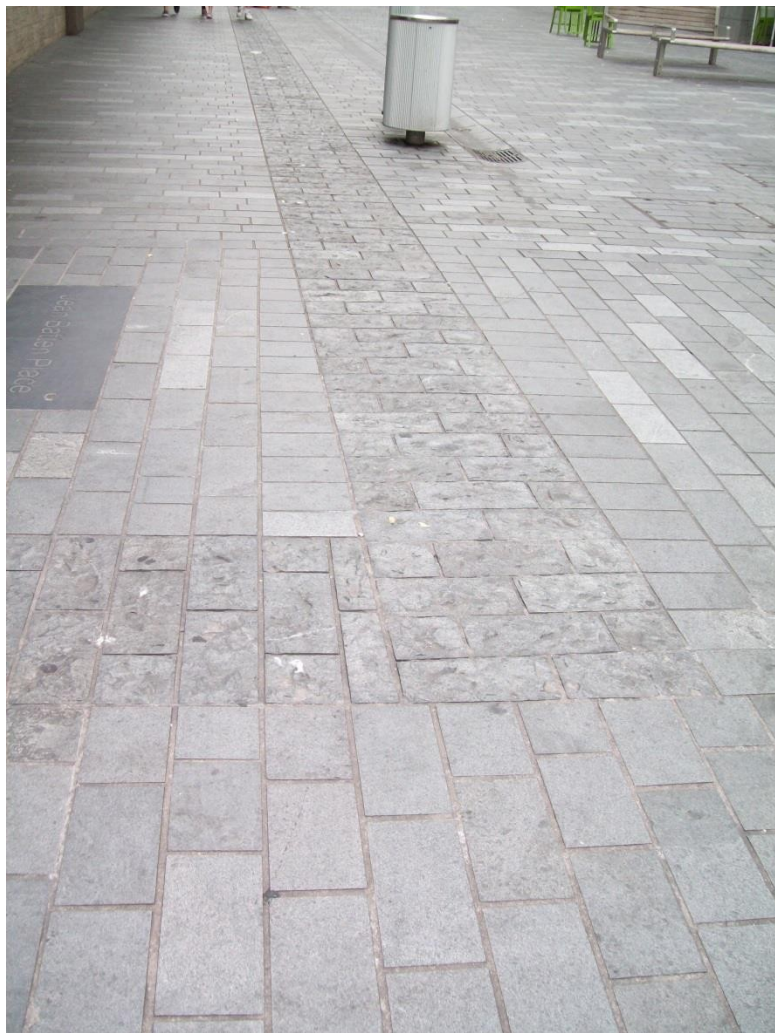


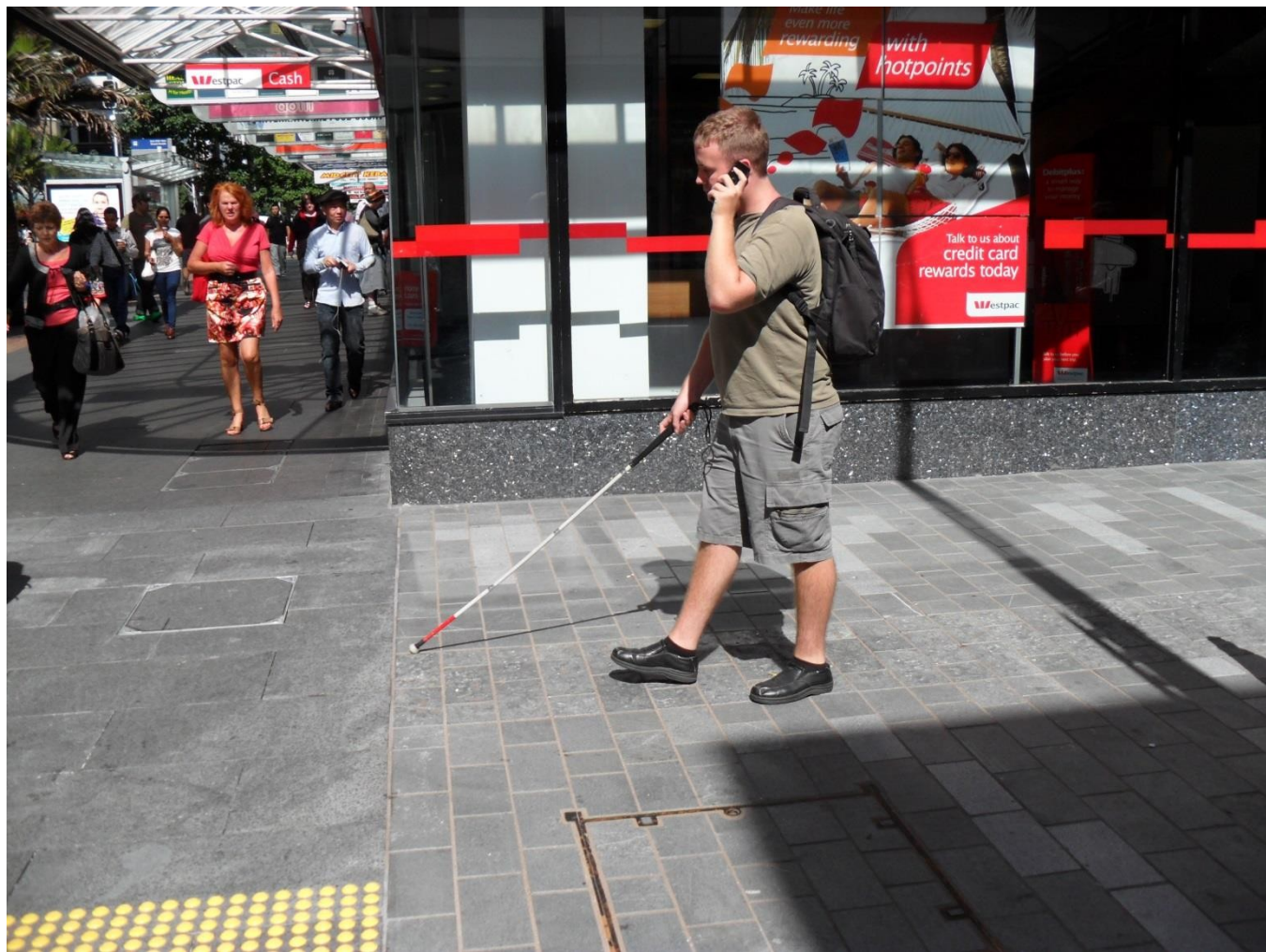
Source:

Boffa Miskell Elliot Street and Darby Street NZIL Award Submission 2013









Tactile ground surface indicators



Reduced street width



Peak traffic flows



Signage





Entry/exit treatments



Seating



Fort Street car parking facility

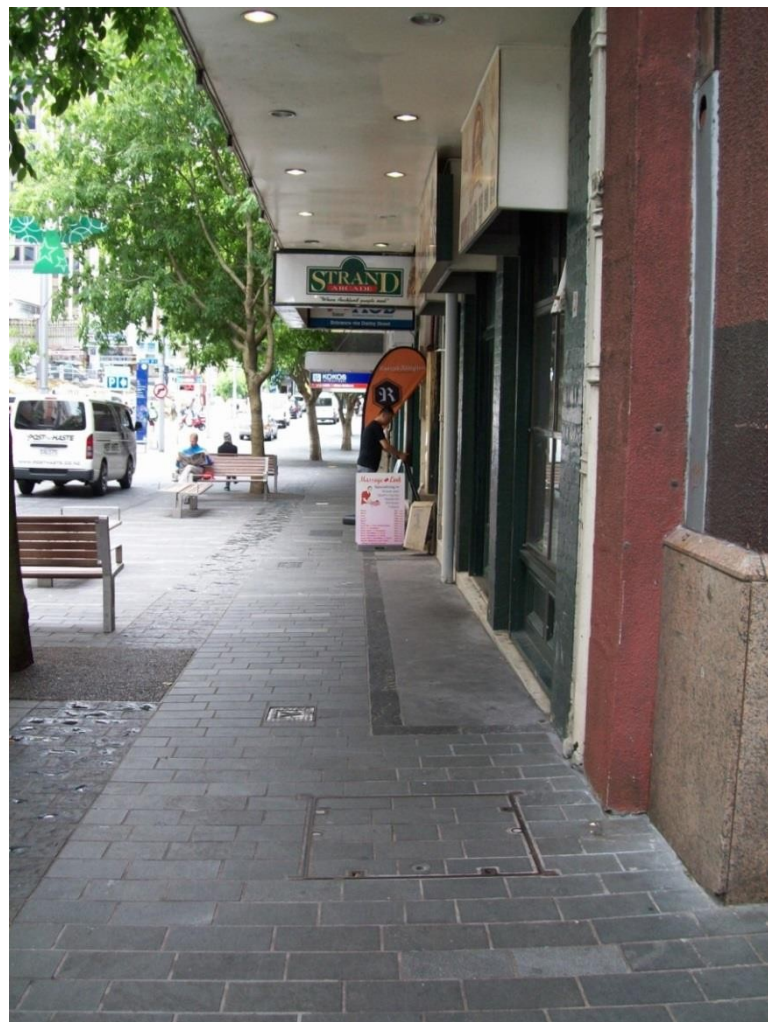


Flexibility in use

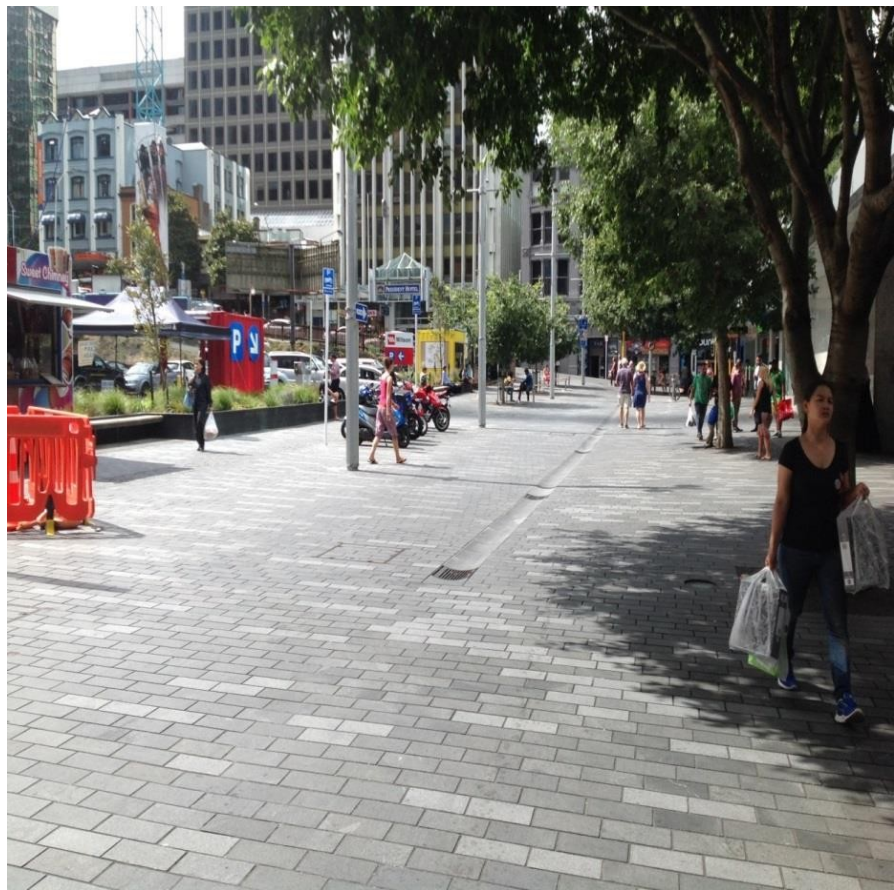


Monitoring





























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Evaluating

- Pedestrian numbers within the shared space
- Levels of social interaction and leisure activity
- Time spent in the street
- Drivers and cyclists giving way to pedestrians
- Drivers giving way to cyclists
- Pedestrians crossing the space at a place of their choosing

Blind Foundation recommendations

- Tgsi only used where essential
- Tgsi meet RTS 14
- Only agreed tactile delineator should be used
- In larger and/or longer sections landmarks and clues should be used to assist orientation
- Consistency in design and use of features

- Large vehicles should not be included as through traffic
- No parking across accessible path
- No items placed in tactile delineator
- Continuous accessible path of travel
- Signage
- Pedestrian priority where cars cross the path

- Identification of entry/exit points for vehicles
- Furniture/activity zone between capt and vehicle permitted area
- Avoid coloured and complex surface patterns
- Surface finishes – including activity zones able to be easily negotiated
- Logical crossing points
- Issues for guide dog handlers
- Monitoring/enforcement

New Zealand research – Flow Transportation Specialists

- Most successful are designed within context of existing environment
- Determine the appropriate design for each site
- Consider vehicle volumes
- Type of vehicles and purpose
- Availability of alternative routes
- Consultation with Blind Foundation and other interest groups

Flow continued

- Review of NZ installations for recommendations to be documented
- Incorporate Crime Prevention Through Environmental Design Principles (CPTED)
- Allowing parking – limited
- Signage
- Design for cyclists
- Public transportation
- Identification of moving into a shared zone

Flow continued

- Should be on pedestrian (and cycling) desire lines
- High numbers using the space
- Surrounding land use should attract pedestrians – food based
- Include public place making design features (i.e. seating, art, night time use)
- Vehicle speed < 24km/hour – visual narrowing (paving), place making, edge friction
- Length of straight stretches of road
- Traffic speed most important factor in determining success of a shared space

Conclusions

- Inadequate international guidance or evidence
- Work with Local Authorities to ensure inclusion in consultation from design phase
- Work with consumer groups and other stakeholders to determine best tactile delineation
- Consistency – expectations of all users
- Sustainable design
- Monitoring essential
- Review