UNDP – Government of Malaysia Project
Support for the development of accessible public transport in Penang

Kit Mitchell
<table>
<thead>
<tr>
<th>Penang Island</th>
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<tr>
<td>Area</td>
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<tr>
<td>Total population</td>
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<tr>
<td>Old George Town</td>
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<td>Greater urban area</td>
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<th>Mainland part of State</th>
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<tr>
<td>Area</td>
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<td>Population</td>
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Old George Town is mainly low-rise
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George Town is a World Heritage Site
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George Town is a World Heritage Site
There was an excellent network of colonnaded pedestrian thoroughfares.
Pedestrian colonnades
The 12-month project aims to support the development of a fully accessible public transport system for Penang State, as a pilot for the rest of Malaysia.
The project focuses on access audits of public transport facilities, capacity building and awareness raising activities.
In 2000, I felt that the main access problems were poor or no pedestrian footways, and elderly buses.
George Town street, 2000
Some things are still the same in 2009
But a new bus operator is very professional, using modern vehicles, has well-trained staff, and has a purpose built bus terminal in Georgetown.
A number of accessible sections of pedestrian footway have been built, and one street converted to space sharing.
Existing accessible footways and crossings

- Existing accessible
- Road crossings

Bus and ferry terminal
The improvements are having an effect

By December 2009, you could see wheelchairs and baby strollers in central George Town

Bus passengers have increased from 1,100,000 to 1,800,000 per four week period
But:
- Accessible footways are not well connected or continuous;
- Main bus and ferry terminals do not connect to accessible footways;
- Construction is often not to correct standards;
- Maintenance is sometimes poor;
- Enforcement of traffic and parking regulations is almost wholly lacking.
Lack of continuity of accessible footway at entrance to Government building
Kerb ramp less than 70 cm wide
Poor maintenance
Kerb ramp blocked by incense burner
Pedestrian colonnades blocked
Ramp blocked by MPPP flowerpot
Footway and ramp blocked by parked vehicles
Motorcycle following a blind pedestrian
From December 2009, cruise ships have been able to dock alongside in George Town.

There is no safe pedestrian link from the pier to the Heritage Site.
Exit from pier for cruise ships
Improvements the UNDP study will recommend include:

- Connectivity of footways;
- Connect bus and ferry terminal to footway network;
- Pedestrian link to pier for cruise ships;
- Start work on demonstration bus corridor.
World Heritage Site: priorities for improvements to footways
Improvements to footways and road crossings

- Existing accessible
- 1st priority
- Road crossings

Pier
Bus and ferry terminal
The first priority improvements (shown red) are estimated to cost 814,000 MR (about $230,000 US).

Work on improvements started in December 2009.
Installing kerb ramps (kerb height 12 inches)
I now feel that providing accessible infrastructure and vehicles is relatively easy, but institutional problems are very difficult

- When ramp kerbs are fitted, motorcycles ride along the footway;
- Police do not enforce traffic and parking regulations;
- Buses do not stop close to the kerb.
Motorcycle behaviour
Parking at bus stops
Failing to stop close to the kerb
Failing to stop close to the kerb
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Failing to stop close to the kerb
The reasons bus drivers stop away from the kerb are:

- Stops are often blocked by parked vehicles;
- Stops have railings that prevent passengers boarding and alighting;
- Geometry of stops in lay-bys makes it impossible for drivers to get close;
- Bus stop shelter roofs overhang kerb.
I have suggested the use of bus stop boarders (bus stop bulbs) without railings to make it easy for drivers to stop close to the kerb, and to prevent vehicles driving through the line of passengers.
Accessible bus stops
Consider using kerb extensions at bus stops (bus boarders)
Bus boarder in Belfast
Because traffic does not stop at pedestrian crossings, I have suggested the use of median pedestrian refuges at crossings.
For lower priority pedestrian crossings, median pedestrian refuges offer benefits.

Pedestrian refuge on 40mph (64kph) suburban road, Britain
Perhaps most important, I am urging a long-term programme of institutional change, involving education and enforcement, to support the excellent engineering already in place.
This includes changes within the local authority, to encourage regular inspection and maintenance of footways, control of retail intrusion onto footways, and control of unapproved construction on footways and blocking colonnades.
Only time will tell whether the improvements in accessibility can be protected from road user behaviour, lack of enforcement and lack of inspection and maintenance.
This project has made me realise that, as experts on accessibility, we are not paying enough attention to the social differences between countries, and the need to design transport to be suitable for local situations.
I hope this raises an issue for discussion.