

Integrating Non-Motorised Transport with Public Transport



United Nations
Centre for Regional Development

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Lloyd Wright



**If customers cannot safely and easily
access the public transport station, then
eventually they will not be customers.**



I. Pedestrian access to station

- Auditing NMT quality
- Street crossings
- Universal access
- Transit malls

II. Bicycle integration

- Cycle ways
- Bicycle parking
- Bicycles on-board vehicles
- Bicycle sharing programmes
- Pedicabs





Bangkok



Dhaka



Pune



Jakarta



Kuala Lumpur



Kunming



Manila



Vientiane





NOVOTEL

SOMERSET

Clife Quay

Welcome To

RC-3



The reality



Lloyd Wright

- Obstructed footpaths
- Uneven surfaces / holes
- Poor water drainage
- Lack of crossings
- Lack of street lighting
- Insecure

Part I. Pedestrian Access to Public Transport



Ways to lose public transport customers



Home to station



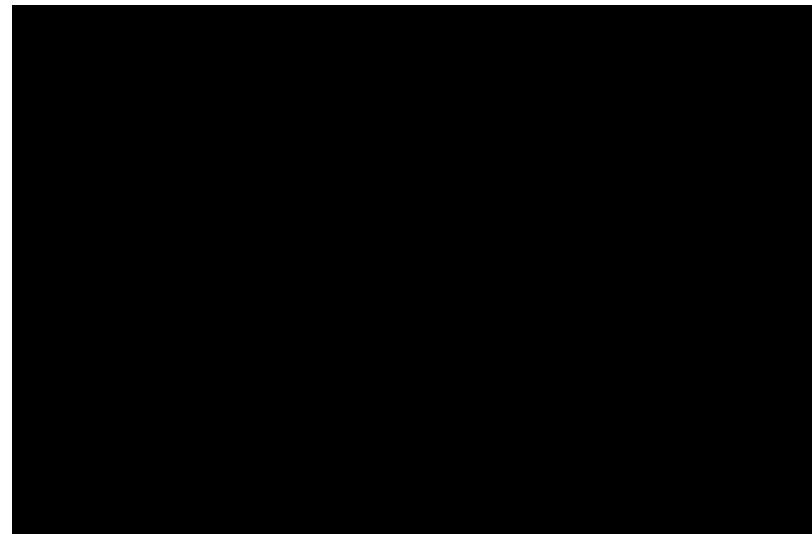
Accessing platform



Boarding vehicle

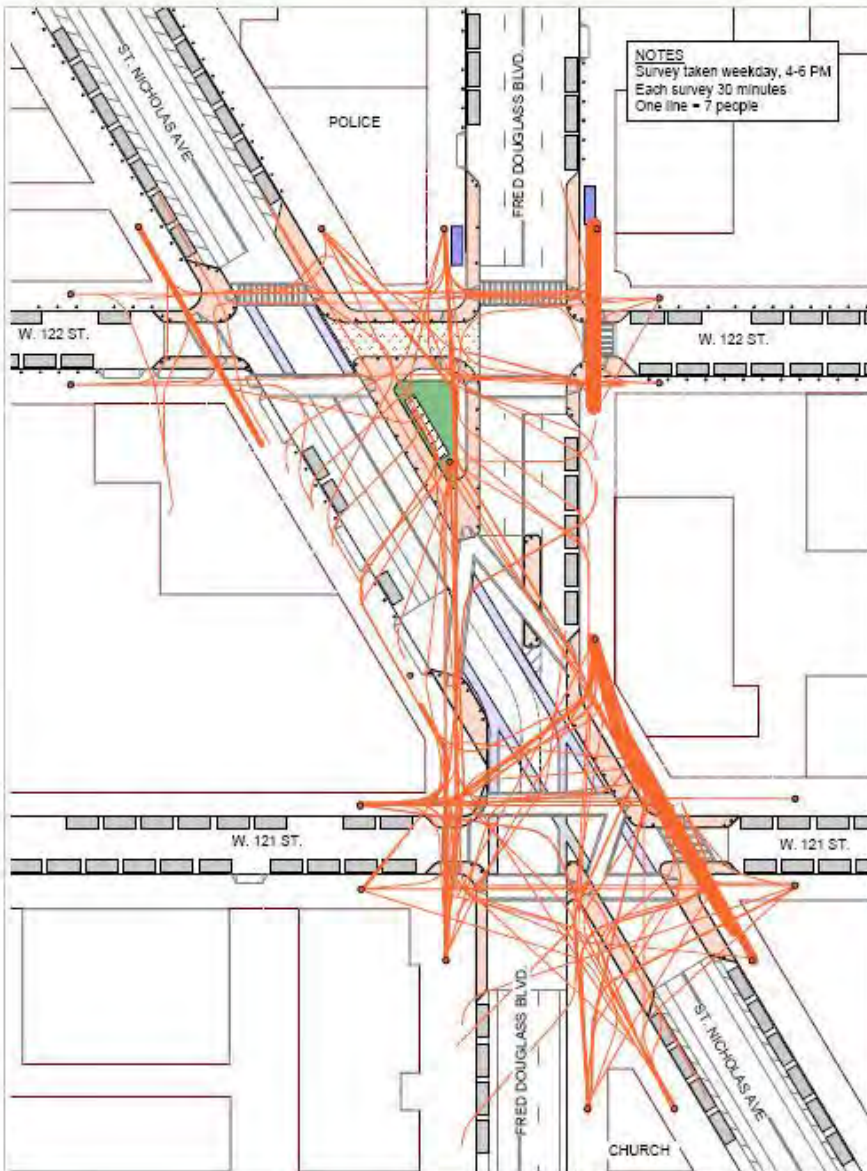


Exiting station

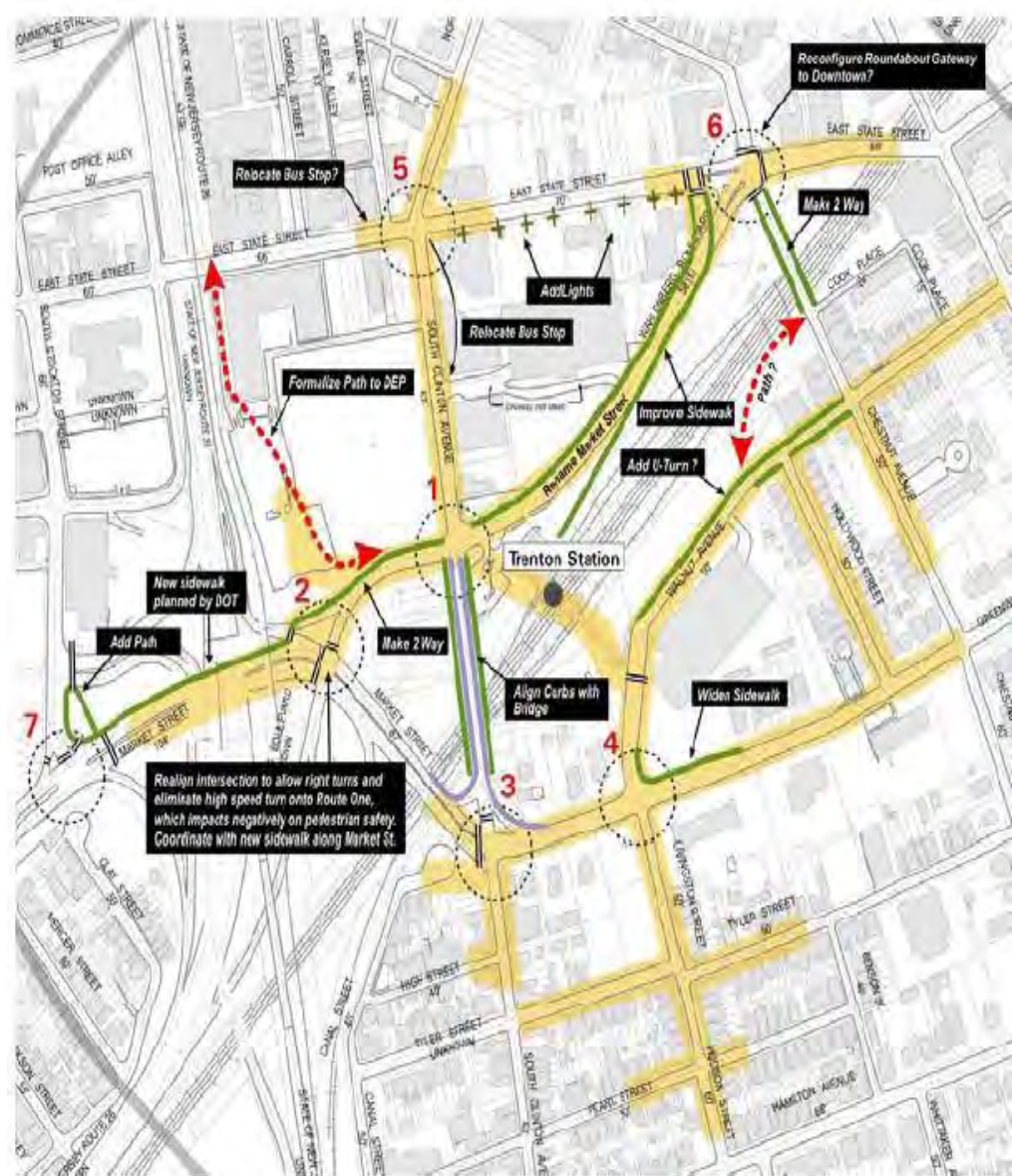


Station to destination

Auditing walking routes



Existing walking patterns



Time map

Auditing walking routes



● Killed ● Hospitalized

Data from Jakarta Police

Existing pedestrian conditions

Accident mapping



At-grade crossings



Grade-separated crossings



**At-grade crossings
are generally
preferred over grade
separation**

Pedestrians avoid overpasses





Obstructions



Physically difficult



Security



Underground connections



Ramped underpass



- ✓ Clear sight lines
- ✓ Lighting
- ✓ CCTV
- ✓ Wide
- ✓ Quality tiles and ceiling



1. Access from community to corridor
2. Access over street crossing
3. Access to station and fare payment
4. Access through turnstiles
5. Access from platform to vehicle
6. Access inside vehicle
7. Access with respect to trunk and feeders
8. Access to services such as public toilets
9. Access to information and displays
10. Access for staff



Access for the disadvantaged



In Bogotá, 4,500 physically disabled persons, who previously could not leave their own neighbourhood, can now travel in the city





sbis2

PINHEIS/COMPRIDO

17L25

CARAVELLE
PALACE HOTEL

Madorama

OTEL
CIN
DIN

SO
DA
O
DO
30
TEL
80

ALMO
PAIN
LIVRO

TEA



Wayfinding signage



Transit malls



Corridor
for only
public
transport
and NMT



Part II. Bicycles and public transport





Permitting bicycles onto vehicles





Bicycle use on public transport lanes



Bicycle parking



- ✓ Security of bicycle
- ✓ Weather protection
- ✓ Convenient location
- ✓ Ease of use
- ✓ Low or no cost

Secure bicycle parking station





Bicycle hubs



Sydney



Minneapolis

- Showers*
- Change rooms*
- Bicycle repair stations*
- Cafes*

Bicycle sharing programmes



Velib'

Paris



Copenhagen





Osaka Monorail
RENTACYCLE
大阪モノレール レンタサイクル



03-0

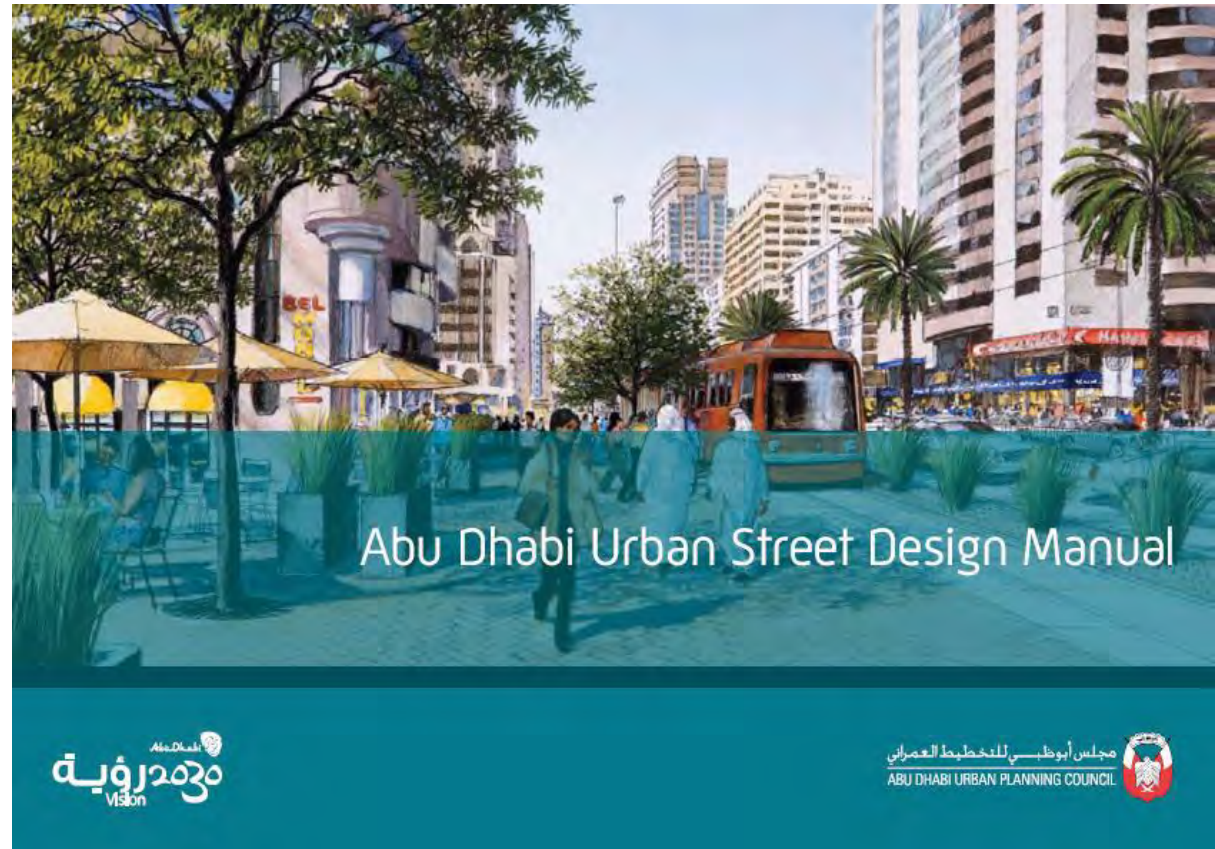


Pedicabs as feeder services



New York City Street Design Manual

<http://www.nyc.gov/html/dot/html/about/streetdesignmanual.shtml>



Abu Dhabi Street Design Manual

<http://www.upc.gov.ae/guidelines/urban-street-design-manual.aspx?lang=en-US>

Thank You

Lloyd Wright
Lwright@vivacities.org

