Streetscape design – two aspects of safety

Crime prevention

Traffic safety



I. Crime prevention through environmental design (CPTED)



CPTED was originally coined and formulated by <u>criminologist</u> C. Ray Jeffery. A more limited approach, termed <u>defensible space</u>, was developed concurrently by <u>architect</u> Oscar Newman. Both men built on the previous work of <u>Elizabeth</u> <u>Wood</u>, <u>Jane Jacobs</u> and Schlomo Angel.

Techniques guiding / influencing peoples performance

Controlling shoppers

Controlling speed



Crime prevention urban design principles

- Access safe movement and connections
- Surveillance and sightliness: see and be seen
- Layout: clear and logical orientation
- Activity mix eyes on the street
- Sense of ownership: showing a space is cared for
- Quality environments: well-designed, managed and maintained environments
- Physical protection: using active security measures



Access: - safe movement and connections

Avoid wherepossible underground crossings

Clear views make a safer place

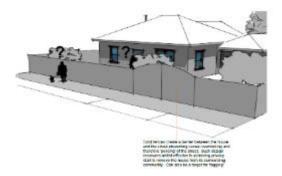


Surveillance and sightliness: see and be seen





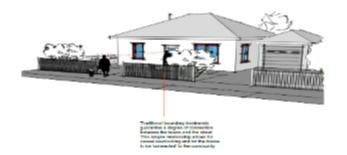




Solid fences create a barrier between the house and the street preventing casual overlooking and therefore 'policing' of the street. Such design measures whilst effective in achieving privacy, start to remove the house from its surrounding community and can also be a target for 'tagging'.

Surveillance - Active front room

Maximising the amount of glazing from an active living room (a kitchen, dining room, lounge or family room) on the front elevation helps to reinforce a sense of surveillance and security to and from the street or public space. This again helps ensure a sense of personal safety for all users. Upper floors should also have windows overlooking the space, with elements such as balconies or bay windows to add interest and articulation to the façade.



Layout - clear and logical orientation





Activity mix – eyes on the street



Sense of ownership – showing the space is cared for





Quality environments - well designed, managed and maintained



Physical protection – using active security measures



II Traffic safety improvement

In general – all streets shall be safe. The tools used depeng on the street function, location, etc.





Physical division of traffic



Traffic calming

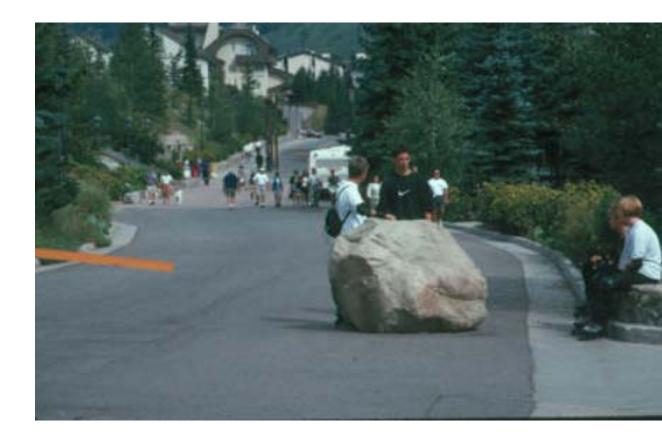
natural...



Simple one



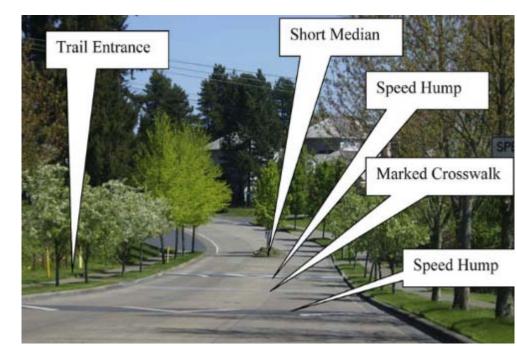
Robust



Smarter

The Traffic Calming Toolbox

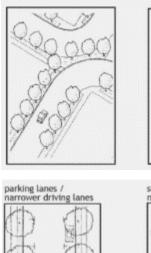
- Diagonal Parking
- Changing One-Way Streets to Two-Way
- Widening Sidewalks/Narrowing Streets and Traffic Lanes
- Bulbs Chokers Neckdowns
- Chicanes
- Roundabouts
- Traffic Circles
- Raised Medians
- Tight Corner Curbs
- Diverters
- Road Humps, Speed Tables, and Cushions
- · Rumble Strips and Other Surface Treatments



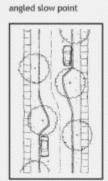
Geometry / sreet dimensions for traffic calming

chicane

t intersection



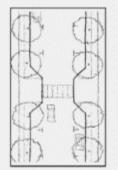
diagonal median



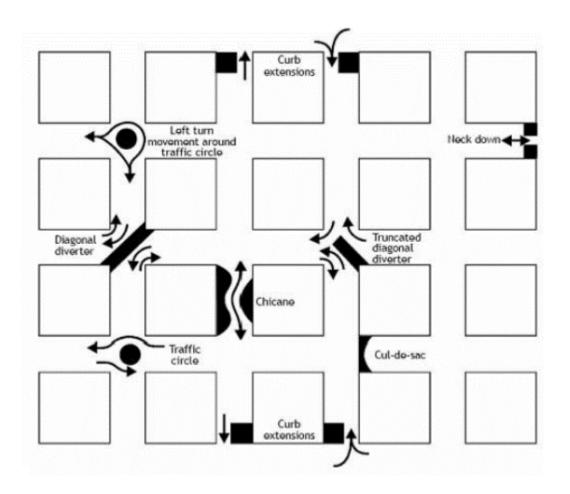
striped bicycle lanes / narrower driving lanes



mid-block bulb-outs



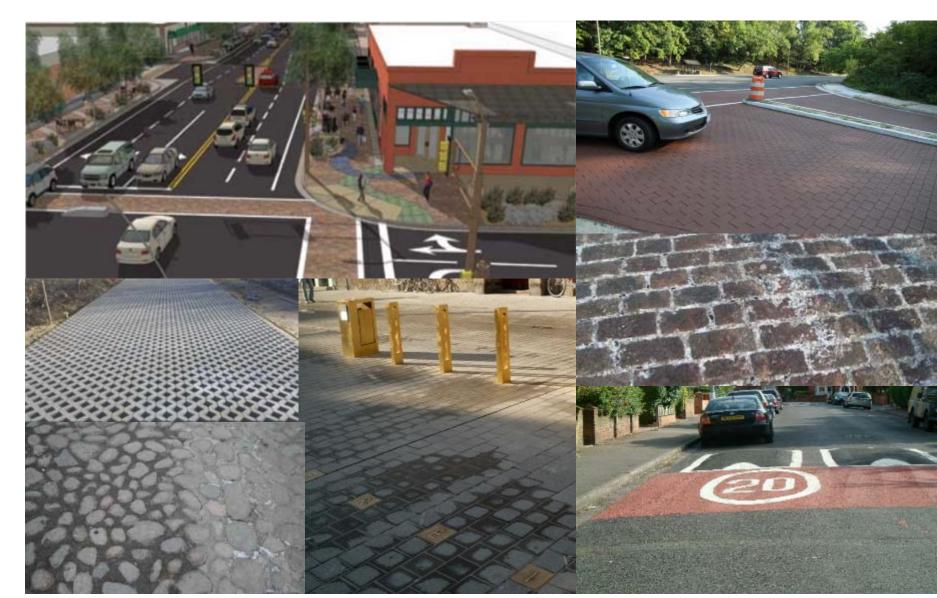




Quality design and maintenance



Different paving



Shared spaces

