ACNU 08

2008 NATIONAL CONGRESS OF THE AUSTRALIAN COUNCIL FOR NEW URBANISM

Brisbane

6th - 9th February, 2008
Part 1

What is Queensland Streets?
• Design Manual
• Cited by many Planning Schemes
• Written as a guideline
• (But used as a standard)
Topics
Traffic Volume… Speed…
Parking… Carriageway Width… Hierarchy…
Geometric Design… Intersections…
Turning Areas… Speed Control… Pedestrians and Cyclists… Design Detail… Road System… Rural Residential… Industrial… Medium Density…

Innovations?
• Performance Criteria
• Residential Street V Traffic Route
• Reduced Vehicle Speed
• Reduced Traffic Volume
• “No-Access Collector Street”
• Essentially Queensland Streets is the driving force behind suburban form and the nature of new streets in Queensland...

• ...helping to produce streets and suburbs that are plain, predictable and standardised; car-centric and hot.
Part 2

The 7 Deadly Sins of Queensland Streets?
The 7 Deadly Sins of Queensland Streets

1. No such thing as neighbourhoods and towns only suburbs 1800 lots @10 du/ha with a school as the typological increment of settlements

2. Major streets run on the edges of suburbs in a 1200-1600m grid

3. No such thing as through traffic in a suburb. Collector streets do not connect and do not go anywhere except to the nearest major road and a hierarchical street network is necessary

4. Streets with more than 3000 vpd must be no access and no frontage

5. The safe speed in residential streets is 30 km/hr

6. Intersection spacing on busier streets should not impede through traffic flow

7. Four way intersections are always dangerous. T’s and roundabouts are always preferred
No such thing as neighbourhoods and towns only suburbs 1800 lots @10 du/ha with a school as the typological increment of settlements

‘A residential neighbourhood may be defined as a homogenous residential area, .. which is largely self contained’. P68

One obvious desirable feature is that each neighbourhood be capable of supporting its own primary school, so that primary school do not need to cross a major road on their trip between home and school.’ P68

Maximum catchment for a primary school from Dept education 1800 maximum, 1800 allotments is considered reasonable optimum for determining neighbourhood size’ p68

‘Town Planning controls need to be utilised to ensure that land uses other than those designed for do not creep into single dwelling areas, e.g. multi-unit residential, shopping centres etc …’P16
2. Major streets run on the edges of suburbs in a 1200-1600m grid

‘Neighbourhood boundaries are barriers to movement, eg major roads, railways, rivers or creeks…’ P68

‘The whole design of the residential street system is based on the assumption that it carries only traffic with its destination and origin within the neighbourhood, and that **through traffic is absolutely excluded**’ P71

‘Locate any required new Major Roads, to conform with Road Authority overall planning, and desirably to provide a “grid” to create viable neighbourhoods of 1200 to 1800 lots. Check that grading, alignment and intersection locations are satisfactory.’ p103
The 7 Deadly Sins of Queensland Streets

3 No such thing as through traffic in a suburb. Collector streets do not connect and do not go anywhere except to the nearest major road.

‘excessive connectivity is undesirable as it may encourage through traffic to rat run through the neighbourhood, make assessment of traffic volumes indeterminate and make the street layout confusing…‘ Qld Streets P71

‘A grid iron street pattern is considered quite inappropriate in the surrounding essentially residential areas. For residential streets it is considered that a fully branching hierarchical street system is superior in Safety, Amenity and Economy and is therefore more appropriate than the grid iron system.’ Qld Streets P10c
How many traffic calming devices are in this plan

A  1-4
B  5-8
C  9-11
D  12+
Part 3

What is the role for Queensland Streets in 2008 and beyond?
“Qualities of Good Urban Places”

- Connected
- Accessible
- Meaningful
- Legible
Outcomes

- Street Hierarchy by Function
- Interconnected streets
- Use 4-ways where possible
- Don’t use roundabouts
- Designed for all users
- Enclosure
- Define property boundaries
- Put trees in carriageway
- Buildings front all streets and major roads
Principle Functions of Streets

- Place
- Movement
- Access
- Parking
- Services
User Hierarchy

- Pedestrians
- Cyclists
- Public Transport
- Servicing
- Cars
Place Movement
Access
Parking Services

Laurel Ave, Brisbane

ACNU08
Brisbane
Place
Movement
Access
Parking Services

Bulimba, Brisbane

Varsity Lakes, Gold Coast
Place Movement Access Parking Services

Grey St & Edenbrooke, Brisbane

ACNU08 Brisbane
Part 4

A New Hierarchy of Streets for Queensland?
Part 5

Street Typologies
SPRINGFIELD LAKES
DESIGN MANUAL
4.1.1 Neighbourhood Commercial Street (Dual Carriageway)

NOTES:
1. Inappropriate for neighbourhood centres, local shops and commercial streets.
2. Intended to provide convenient access to premises and a safe, comfortable environment for pedestrians and cyclists.
3. Footpath or verge width may vary from 4.5-5.0m depending on intensity of commercial activity (e.g., outdoor dining). > 5.0m may be required to protect significant native vegetation or where topography requires barriers.
4. Where a commercial street is intended to become a ‘Main Street’, a total design package is to be negotiated with Council, inclusive of:
   • pedestrian link (e.g., travel lane and parking areas);
   • landscape treatments, paving and street furniture;
   • vehicle parking and loading areas;
   • cycle transport leg and facilities;
   • building location and design.
5. Absolute minimum median width 2m. Desirable 4m. > 4m may be required to protect significant native vegetation or where topography requires kerb/w.
6. Fasted speed 50 km/h.
7. Blocks should be in line with other similar streets at each end of the commercial street.

A Safe Place
An Active Public Realm
A Place of Mobility & Connectivity
High volume connector (collector) streets with frontage...

NOTES:
1. Appropriate for Trunk Collector Streets where residential frontage is desired to activate the street.

2. No residential driveways, > 10/room. Residential frontage may still be achieved using rear-loaded dwellings. Limited driveway access to integrated residential developments may be acceptable.

3. Design Speed 65 km/h, Planned speed 60km/h. Safe intersection sight distance based on 60 km/h must be achieved at all intersections.

4. Number and location of driveways controlled by one or more of the following methods:
   • access from car lane or street;
   • access from side street or narrowway;
   • angled driveways;
   • minimum driveway spacing;
   • minimum off-street parking requirement;
   • minimum lot width or lot size, and
   • shared driveways.

5. Minimum driveway width 4.0 m, > 4.0 m may be required to protect significant native vegetation or where topography requires buffers.

6. Bus stops to be provided at a maximum of 800m intervals (desirable 400m on both sides of street. Bus stops to be located within 2 km parking / cycle lanes.)
Rear Lanes…

4.1.14
Rear Lane

NOTES:
1. Garage access for rear – loaded housing.
2. 100 veh./hr. vehicles per day.
3. Desirable max. length of 100m between exit points.
4. Shared Zone, no footpaths.
5. Max Design Speed 20km/h.
6. Design should maximise available room over looking rear for casual surveillance both within the rear lane itself and at ends of lane. Backyard rooms over garage within lane are encouraged to increase casual surveillance.
7. Preferred central V-drain, one-way crossfall with kerb and channel an alternative. Rainwater connections where necessary.
9. Preference for rear lane to be elevated slightly above street level.
10. Design must ensure ability to enter garage.
11. Rear lane to be lit.
12. Additional reserve width is desirable at intervals and at entry points to allow for landscaping. Alternatively, landscaping may be provided within properties to soften built forms of lane.
Minor Street Types e.g. Parkfront Lanes...

4.1.13
Parkfront Lane

NOTES:
1. 1100 vehicles per day.
2. Desirable max length of 100m between out points.
3. Shared Zone, no footpath.
4. Max Design Speed 20km/h for pedestrian & cyclist safety.
5. Create on-park, bush or shrubbery wherever practical.
6. Creates amenity, pedestrian connectivity, and opportunity for social use of street.
8. Design should maximise habitable rooms overlooking lane for casual surveillance.
9. Not to be used as primary i.e. min 50% frontage to any recreation parks or stormwater.
Built Form...

4-ways...

Landscapes...
Learnings

- Norms are useful
- Collaborate
- Users will “dip” into manual
- Set principles to overcome entrenched positions

www.ipswich.qld.gov.au
Part 6

Where to from here?
UDAL Q Forum

- 60 people
- IPWEA
- Ways forward?
  - Increase number of street solutions
  - Revise Hierarchy
  - Prioritise non-car Users
Conclusions

• There remains a place for a technical design guideline – Queensland Streets
• 2008 is time for an update
• Include New Urbanism principles
• Increase number of “standard” solutions
• Collaboration required between disciplines
• Leadership needed from industry, government and professional bodies
New
QUEENSLAND STREETS
Design Guidelines for Neighbourhoods and Towns

ACNU08
Brisbane

Mike McKeown
Peter Richards

mmck08@gmail.com