#### Phillip Brown

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#### **Urban Design**

- Both an art and a science
- Create localities in which people live, engage with each other and the physical space around them

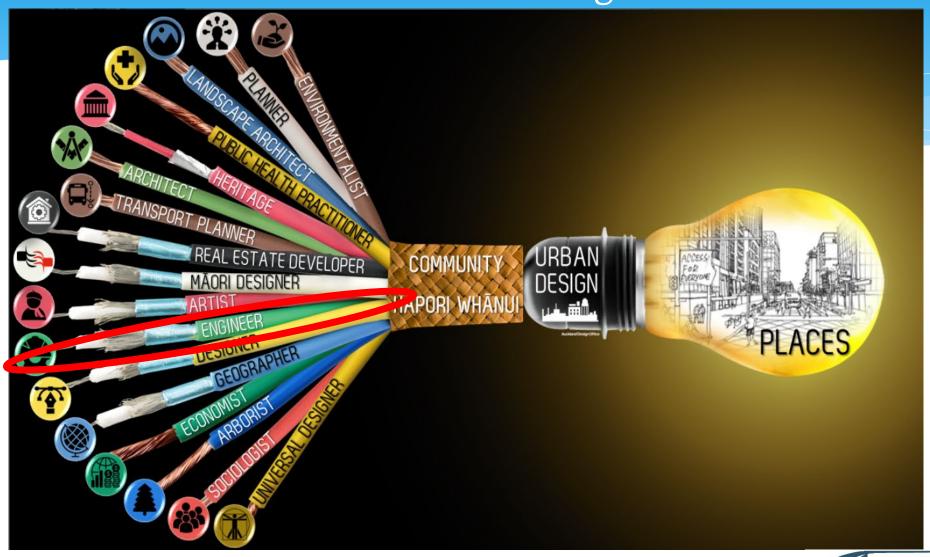


#### **Urban Design**

- Operates from the macro scale (planning, transport and infrastructure) to the micro scale (street furniture and lighting)
- Involves many disciplines







## Seven Essential Design Qualities

(MFE Urban Design Guide)

Context

Character

Choice

Collaboration

Connections

Creativity

Custodianship



#### Seven Essential Design Qualities

(MFE Urban Design Guide)

Context

Character

Choice

Collaboration

Good co-ordination with all decision-makers

- Central & Local Government
- Professionals
- Transport Operators
- Developers & Users

Connections

Creativity

Custodianship



#### Seven Essential Design Qualities

(MFE Urban Design Guide)

Context

Character

Choice

Collaboration

Connections

- Create safe & attractive pathways and links
- Provide networks that connect public and private spaces
- High priority on walking, cycling and public transport
- Streets have multiple functions
- Encourage people to become more physically active
- Provide for efficient movement of goods and people

Creativity

Custodianship









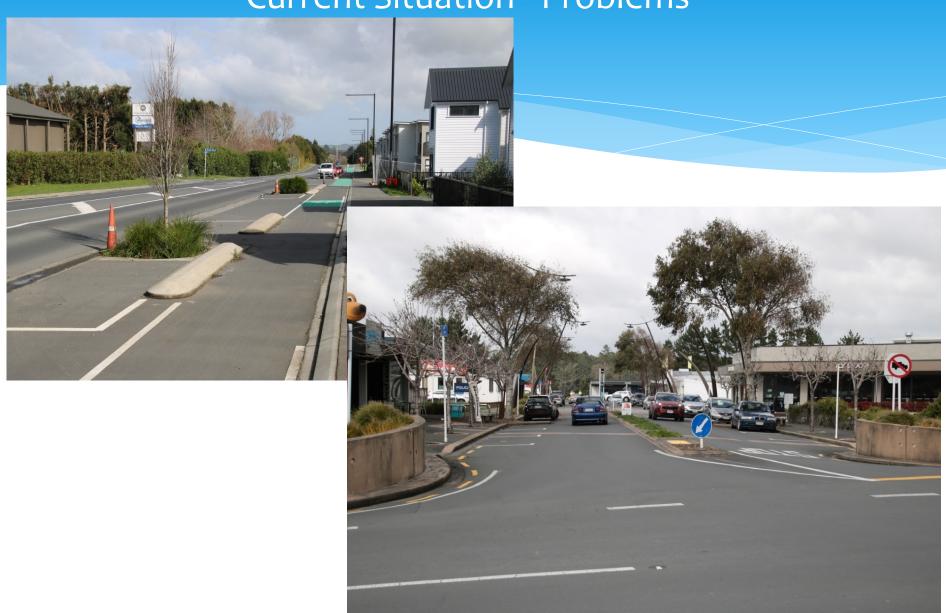












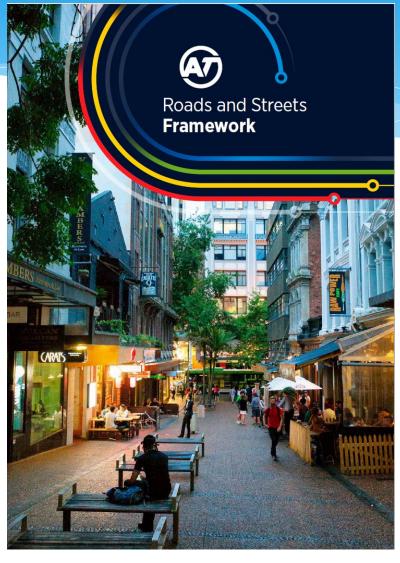
## Recent Designs – Better Outcomes



#### Key problems in the past

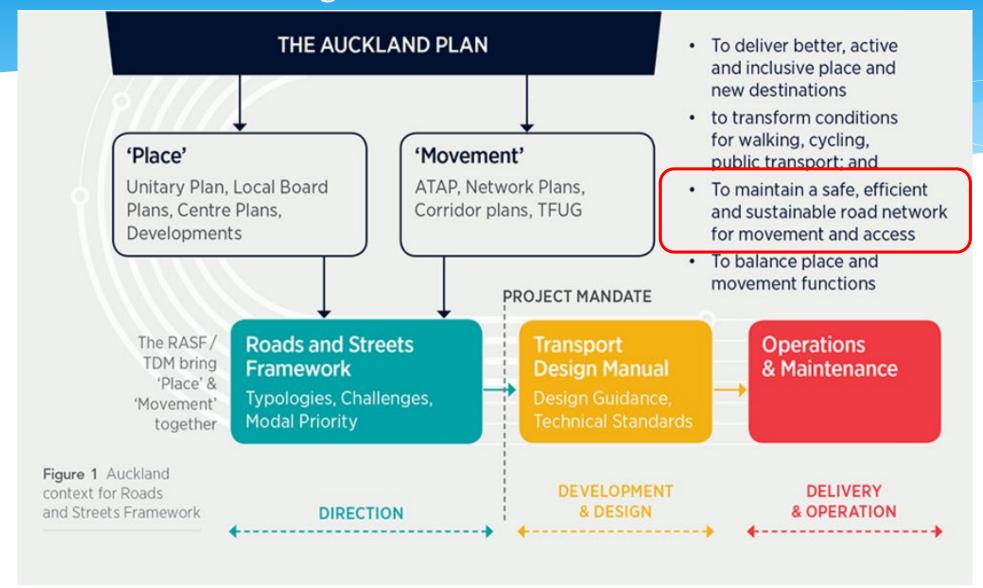
- Conflicts between different modes of transport
- Lack of guidance on road development
- Limited ability to respond to wider needs
- Different objectives between transport needs and other infrastructure providers - how is street space best used
- Lack of strategic direction and design guidance pressures in existing and new growth areas
- Servicing needs within a site not fully appreciated





Phillip Brown, Traffic Engineering & Management Ltd





#### Movement



Road and street networks perform a wide range of movement functions, from roads carrying very high volumes of people, mixes of traffic (e.g. cars, buses, trucks, cyclists) and goods, to streets with a local movement function only.

Many streets and roads also support more specialised transport networks, e.g:

- Walking
- · Public transport routes
- Cycling
- · Heavy vehicle routes
- · Service and delivery.

These specialised transport networks have different requirements and it is important that their role is recognised and understood as part of the wider network.

Different networks also often compete for the same space and can conflict with each other, particularly where roads are narrow or crowded, or at intersections. This can cause specific issues for particular modes such as safety concerns for cyclists. These specialised transport networks have different requirements and it is important that their role is recognised and understood as part of the wider network.

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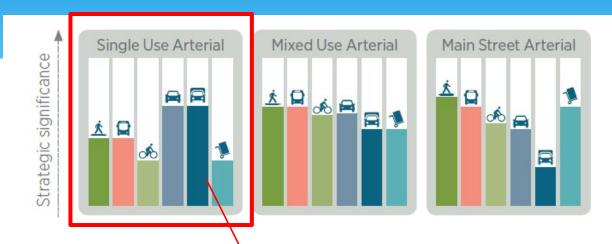








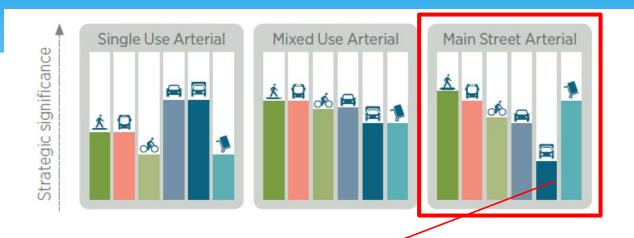




SERVICE & DELIVERY

FREIGHT

- Loading zones to support delivery activities near commercial / industrial / transport hubs.
- Freight route signage to assist routes to Port, motorway and manufacturing /industrial centres using strategic routes
- Freight route lane priority where required connecting to strategic routes and to access freight destinations
- Minimise or consolidate driveways for easier freight access
- Over-weight/over-size routes by permit only, time controlled.



#### SERVICE & DELIVERY

FREIGHT

- Loading for service delivery off peak or time controlled.
- Prefer reroute around town centre Main streets
- Over-weight/over-size routes by permit only, time controlled.



## Architects/Designers

#### Better appreciation of:

- Consequences of constrained/'over-designed' sites
  - Smaller/inappropriate vehicles used for design
  - Access & circulation needs



## Architects/Designers

#### Better appreciation of:

- Consequences of constrained/'over-designed' sites
  - Smaller/inappropriate vehicles used for design
  - Access & circulation needs
- Appreciation that on-site HCV needs have a major effect on design
  - Rubbish collection
  - Deliveries



#### Freight/Servicing Industry

#### Responding to demand

- Small & low specialised rubbish trucks constrained basements of apartment buildings
- Steerable/castoring axles (reduce swept path)
- Single unit rigid trucks with swing-lift capabilities
- Working with/informing owners/tenants/designers/Councils
- Experience/knowledge exchange Industry Champion?



- Problems in the past starting to be recognised
- Moves to improve if changes are adopted (Auckland document useful elsewhere)
- Multi-sector involvement



- Problems in the past starting to be recognised
- Moves to improve if changes are adopted (Auckland document useful elsewhere)
- Multi-sector involvement
- Problems affect all
- Space is limited



Freight is important in Urban Design

All other facets are equally important



Freight is important in Urban Design

All other facets are equally important

Urban Designers need to balance all competing needs



# Thank You

