Items for Discussion

1. Transport outcome
2. Demographic and behavioural change
3. Changing UQ travel choice
4. Existing conditions
5. Where to from here?
Transport Outcome

Transport outcome:

To continue to reduce reliance on private car travel

- Understanding demographic and behavioural change:
  - Reshaping transport needs – mobility

- Understanding existing network conditions:
  - Traffic flow and network operations
  - Public transport and active transport
  - Parking
Changing Demographic

Young people:

- Staying at home longer
- Staying in education longer
- Combining study with work
- Most technologically literate
- Preference for social entrepreneurship
- Innovation and sustainability
- Less likely to have a license or own a car
- More likely to use public transport, walk or cycle
Young people choosing to use public transport, cycle or walk

- Why?
  - Travel time reliability: Avoid recurrent and non-recurrent congestion
  - Time conscious: Commuting < 10 hrs / week. Live on campus / close by
  - Sustainability: Willing to pay more for sustainable offerings
  - Infrastructure and services: Quality infrastructure, fleet and high frequency
  - Technology focused:
    - Dr Rod Tolley (Walk 21) – ‘Young told not to use technology while driving. We did not expect them to give up the car’

- Redefining car ownership – Shifting from ownership to service
  - Car usage: ~ 4% of the time; parked ~ 96% of time
  - Fuel cost: Production costs will continue to increase supply cost
  - Additional costs: Parking / insurance / depreciating asset

- Health focus: Students are more health conscious
  - ‘Millennium baiting’ – shaping the design of new cities / walking communities
UQ Travel Mode Choice

St Lucia Campus 2014

- 40% car
- 36% public transport (bus & ferry)
- 24% active transport (walk & cycle)

St Lucia Campus 2002

- 59% car
- 26% public transport
- 13% walking
- 2% cycling

2014 trips

Compared to 2002…

(Major shift away from car travel)

- 19% reduction in proportion of car trips
- 10% increase in proportion of public transport trips
- 7% increase in proportion of walk trips
- 2% increase in proportion of cycle trips

Data obtained from UQ Transport Surveys
UQ Travel Mode Choice Comparison - City and Suburbs

UQ travel choice - a ‘bench mark’ for other suburbs

St Lucia Campus 2014
- Public Transport: 36%
- Cycling: 20%
- Walking: 5%
- Private Vehicle: 4%

Brisbane 2011
- Public Transport: 15%
- Cycling: 4%
- Walking: 1%
- Private Vehicle: 80%

New Farm 2011
- Public Transport: 26%
- Cycling: 5%
- Walking: 6%
- Private Vehicle: 63%

Bulimba 2011
- Public Transport: 5%
- Cycling: 18%
- Walking: 3%
- Private Vehicle: 74%
UQ Travel Mode Choice Comparison - Other Universities

Source: TMR Tertiary Students Travel Survey 2008
Reasons for Shift from Car Travel

- Significant investment in infrastructure and adoption of sustainable transport policies:
  1. Construction of Eleanor Schonell - ‘Green Bridge’
  2. Expansion of external parking permit areas (Dutton Park)
  3. Development of UQ Lakes Bus Station and walkway – Direct access to heart of UQ
  4. Repositioning and upgrade of UQ City Cat Terminal
  5. Signalisation of Sir Fred Schonell Drive / Coldridge Street intersection
  6. Increased and upgraded bicycle racks
  7. Installation of new end-of-trip bicycle facilities
  8. Research funding for development of Smartphone Carpooling App
  9. Introduction of web-based carpooling
  10. Reduced rate of parking supply in conjunction with increasing prices

*University led projects*
Benefits of Green Bridge

Public Transport 60min Catchment

60min Public Transport Catchment is quite extensive

Bus travel more attractive due to:

- Significant PT investment
- Linking of rail / bus services
Benefit of Green Bridge

Cycle 5km Catchment

5km cycle catchment for UQ St Lucia campus:
Traffic Flow and Network Operations

Proportion of UQ traffic through external intersections:

- ~5% UQ / ~95% Other
- ~40% UQ / ~60% Other
- ~7% UQ / ~93% Other
- ~25% UQ / ~75% Other

UQ
# Traffic Flow and Network Operations

## What is the effect of UQ on network operations around St Lucia?

Performance of intersections in the absence of external influences:

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Peak</th>
<th>Volume (vph)</th>
<th>DoS (X)</th>
<th>Ave Delay (s)</th>
<th>Level of Service</th>
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<tr>
<td>Sir Fred Schonell Drive / Coldridge Street</td>
<td>AM</td>
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<td>Clarence Road / Westminster Street</td>
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<td>PM</td>
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<td>0.48</td>
<td>12</td>
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</table>

Note: Maximum Practical Degree of Saturation (DoS) for signalised intersections - 0.95
Coronation Drive / Benson Street / High Street intersection

- Complex intersection within the road network
  - 3 intersections – very close and operating in unison
  - Major shopping centre access

- Priority given to Moggill Rd / Coronation Drive corridor
Coronation Drive

- Brisbane has a centric road network with a limited number of bridges

CORRIDOR TRAFFIC VOLUME SUMMARY
AVERAGE SIX-MONTH VOLUMES (JAN-JUN 2014)

MRCagney
Public Transport and Active Transport

Understanding existing conditions

- **412**
  - High utilisation during peak hours between Toowong and UQ
  - Spare capacity along rest of journey between Toowong and City
  - Primarily attributable to a large increase in passengers boarding / alighting at Toowong
  - Toowong is a transfer point
    - Connects with bus, rail services
  - Potential to improve service / network
Understanding existing conditions

- 169 and 66
  - Well utilised
  - Perform important distinct roles in wider network
  - Provide access to UQ via the Green Bridge (do not increase congestion into St Lucia peninsular)
  - Increases in demand on these routes may require an increase in service levels
Parking - Need to get the Balance Right

**Supply:**
- Not enough
  - On-street parking in local suburb

**Pricing:**
- Too expensive
  - On-street parking in local suburb

**Enforcement:**
- Too lax
  - On-street parking in local suburb

**Supply:**
- Too much
  - More traffic on local network

**Pricing:**
- Underutilised spaces

**Enforcement:**
- Too cheap or no differentiation
  - More traffic on local network

**Broad principles:**
- Ensure the cost of parking is part of the overall trip cost – to allow equity in mode choice
- Pricing that encourages optimal utilisation
- Control supply offset with investment in sustainable transport.
- Monitor and adjust regulation accordingly
Parking Control

Dutton Park Parking Control Area
- Two hour parking limit between 7am and 7pm, Monday to Friday, unless signed otherwise.
- Four hour parking limit also applies to disability parking bays during these times.
- Resident permits excepted.

St Lucia residential parking permit area
- Short and medium term parking limits.
- Resident permits excepted.

St Lucia traffic area
- Two hour parking limit between 7am and 6pm, Monday to Friday, between February and November, unless signed otherwise.
- Resident permits excepted.
Where to from Here?

1. Not just one key solution
   - Need to deliver a coordinated package in partnership with the community, government, students and staff

2. Support paradigm shift towards sustainable modes of transport

3. Address immediate concerns but also have a BIG picture focus
   - Shaping the next 20 years of travel behavior
Transport Initiatives

Working together with government…

- Public transport
  - Service improvements
  - Infrastructure upgrades - especially to the west
- Parking
  - Increase parking charges – differential rates
  - Expand technology – pre-trip information
- Cycling and walking
  - Infrastructure to meet the growing demand
  - Pedestrian / cycle bridge (as per Council’s planning)
30 minute walk catchment of the UQ St Lucia campus:

Green – increased area covered