## Additional crossing of the Clarence River at Grafton



## Presentation to Community Forum

18 September 2012

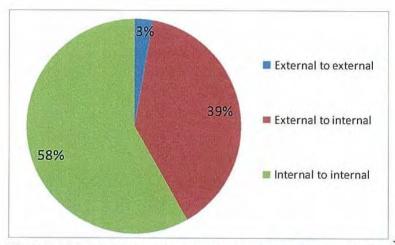
#### **Traffic assessment**



#### **Existing Traffic data – Grafton Bridge**

#### **All vehicles**

#### Heavy vehicles (5% of all vehicles)



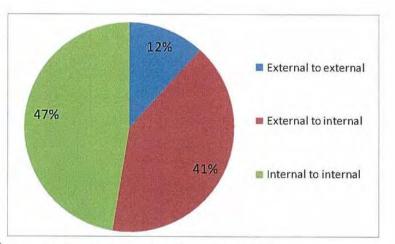


Figure 11: Vehicle trip types crossing Grafton Bridge on 19 August 2010 (5 am - 7 pm).

Trip type	No. of vehicles	% of vehicles
Internal to internal	15,466	58
External to internal	10,360	39
External to external	728	3
Total	26,554	100

Trip type	No. of vehicles	% of vehicles
Internal to internal	658	47
External to internal	567	41
External to external	163	12
Total	1,388	100

### Traffic data – Villiers Street Grafton and Pacific Highway



## Villiers Street between Fitzroy and Pound Streets, Grafton (June 2011)

Vehicle type	No. of vehicles	% of total vehicles
Light vehicles	10,730	92
Heavy vehicles		
<ul><li>Rigid heavy vehicles</li></ul>	750	6
<ul> <li>Articulated heavy vehicles</li> </ul>	240	2
Total	11,720	100

# Pacific Highway north of Centenary Drive, South Grafton (August 2010)

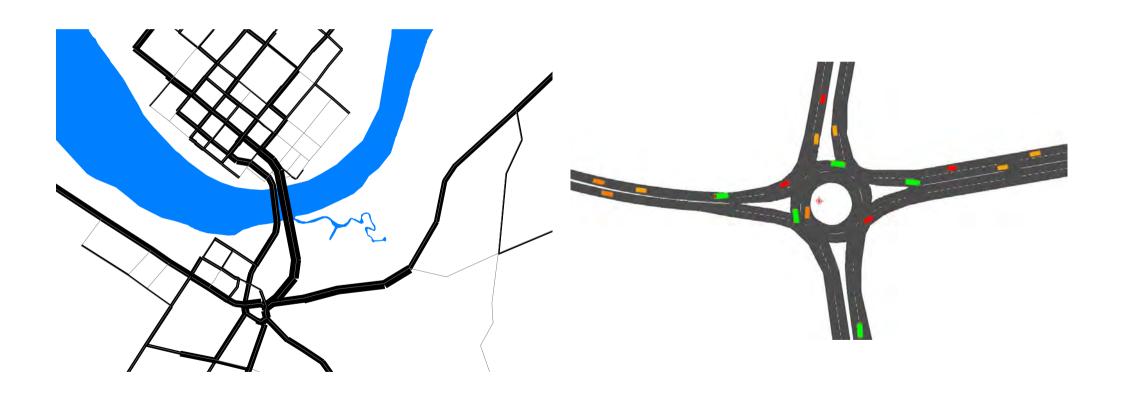
Vehicle type	No. of vehicles	% of total vehicles
Light vehicles	8,025	78
Heavy vehicles		
•Rigid heavy vehicles	730	7
<ul> <li>Articulated heavy vehicles</li> </ul>	1,520	15
Total	10,275	100



#### **Traffic Modelling PROR to RODR**

#### **Strategic Traffic Modelling**

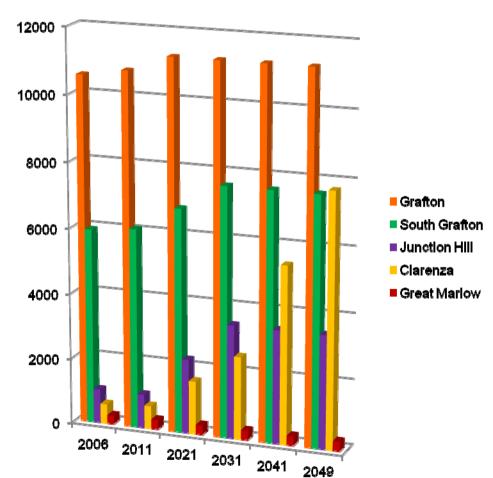
#### **Micro - Simulation Modelling**





#### **Future Population Growth**

- > Mid North Coast Strategy identified Grafton as a key centre
- > Clarence Valley Council available land, sequencing, focused on development in Junction Hill, Clarenza, Waterview Heights
- > Population increases from 18,803 (2011) to 30,330 (2049)
- > As capacity reached development accelerates in areas with spare capacity
- > Population allocated to each zone in the model
- >Trips estimated based on the change in population within each zone



### Key Outcomes – Bridge Volumes



- > Cross river traffic in AM peak
  - **2019 4,086 trips**
  - **2049 8,048 trips**
- ➤ Option E,A,C capture similar proportion of cross-river traffic in 2019 and 2049
- > Dominant travel into the existing Grafton central area
- > Option 11 increases to 45% of cross river traffic at 2049 as the Clarenza development approaches capacity
- > Option 14 & 15 lower proportion of travel in 2019 as OD's of demand & distance to the bridge
- > Options 14 and 15 at 2049 attracts greater proportion of cross river trips due to change in OD's and delays elsewhere

	Forecast Year	
Option	2019	2049
E	2,697 (66%)	5,231 (65%)
A	3,188 (78%)	5,919 (74%)
С	2,808 (67%)	5,431 (68%)
11	1,296 (32%)	3,515 (45%)
14	936 (23%)	2,673 (36%)
15	921 (22%)	2,578 (35%)

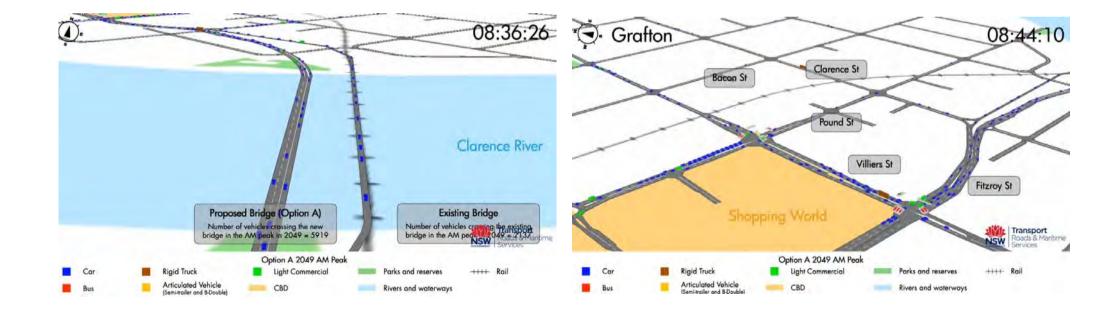


#### **Option E - 2049**





#### **Option A - 2049**





#### **Option C - 2049**



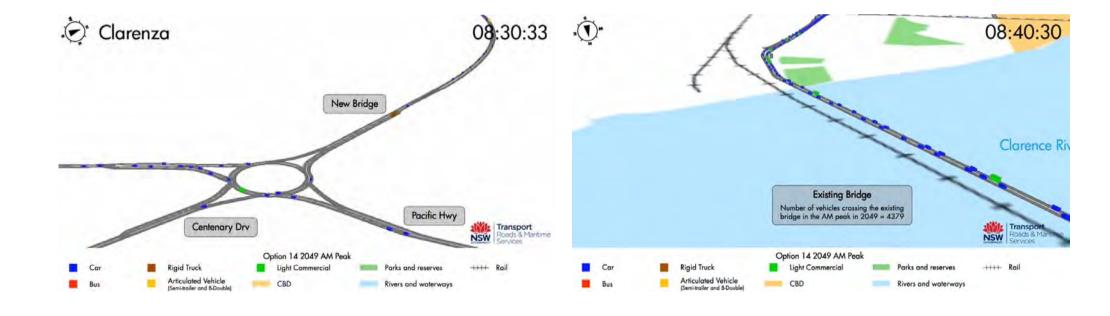


#### **Option II - 2049**





#### **Option 14 - 2049**





#### **Option 15 - 2049**

