

## Presentation to Clarence Valley Council

5 April 2011

Maclean Council Chambers





#### Agenda

Opening comments and project update - Bob Higgins

**Project overview - Chris Clark** 

December 2010 community update and postal survey – Chris Clark

Shortlisting of community suggestions and project process - Chris Clark

**Technical investigations - Chris Clark** 

Heavy vehicle study - Chris Clark

What happens next? - Chris Clark

**Questions – Bob Higgins and Chris Clark** 



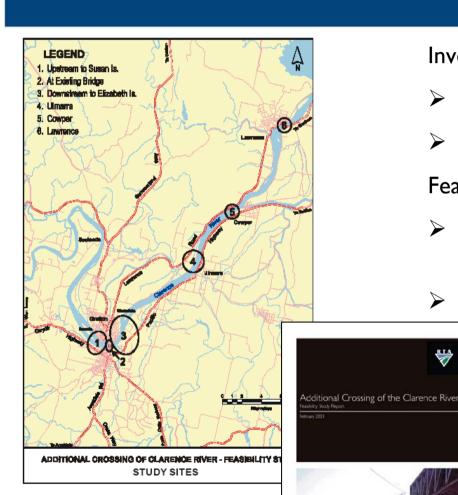
#### Opening comments and project update

#### Some key points:

- Revised process commenced December 2010
- No preferred option has been identified
- We want input from Council and the community into the process and project
- Decision by RTA and the Minister on the preferred option to be taken to the next stage



#### **Project overview**



Investigations (Reports available on RTA website):

- > 2003 04
- Recommenced 2009

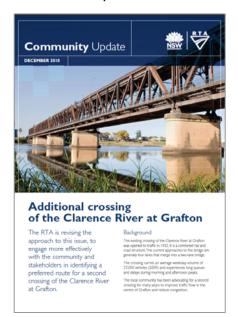
Feasibility Study (2003):

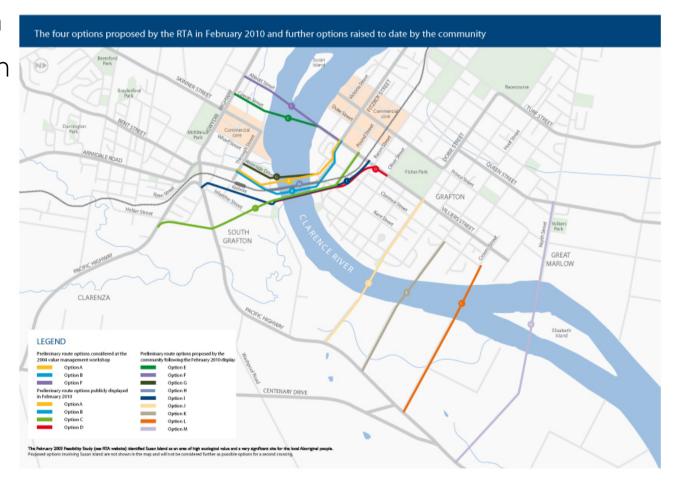
- Investigated six strategic locations for an additional crossing between Susan Island and Lawrence
- Study concluded:
  - Most feasible location in the vicinity of the existing bridge
  - Locations upstream and downstream of the existing bridge also feasible.
  - Further investigations required.
  - Locations at Ulmarra, Cowper and Lawrence are not feasible as they:
    - Do not meet a number of the objectives of the project.
    - Would not contribute greatly to reducing congestion or improving safety at the existing bridge.

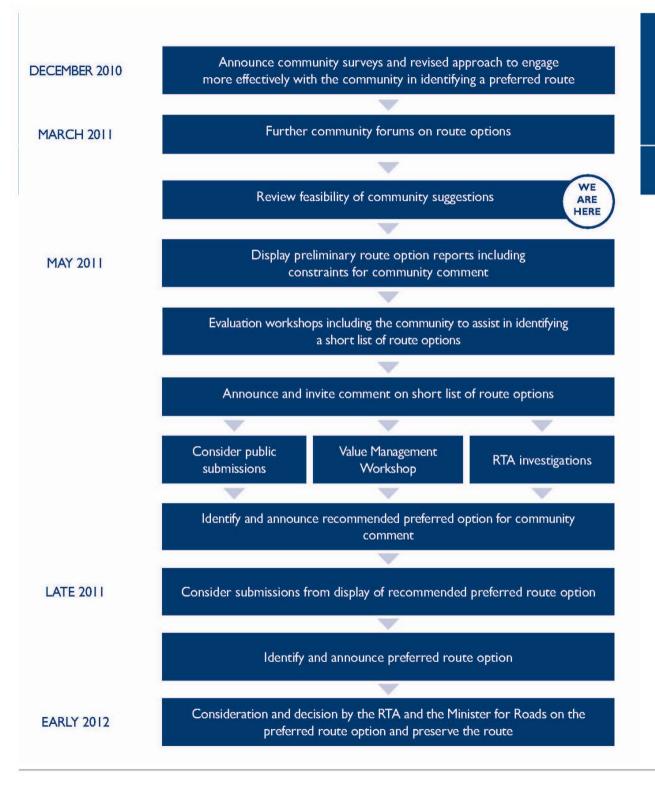


#### **December 2010 Community Update**

- > Announced revised approach
- ➤ Identified 13 options between Susan and Elizabeth Islands (including 7 outside February 2010 study area)
- > Included postal survey





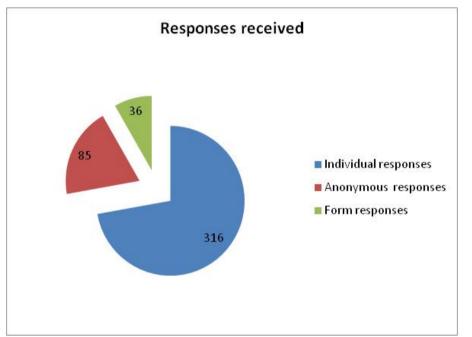




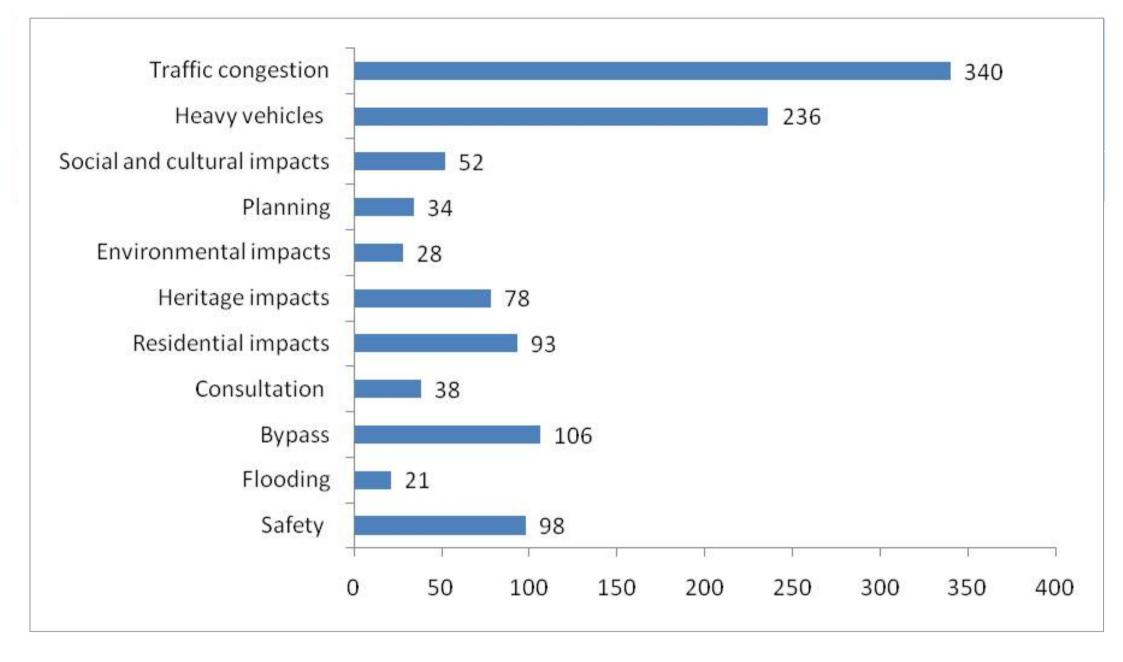


#### Postal survey - Community feedback

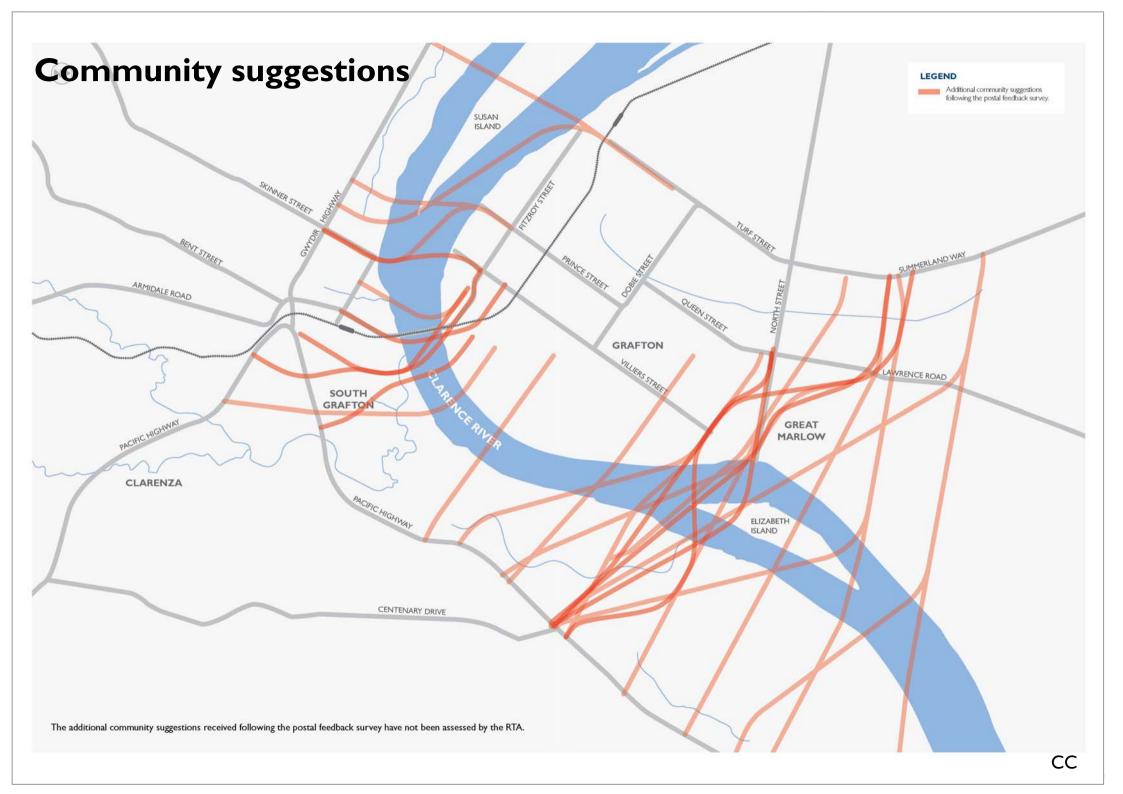
• 437 submissions received.



- Feedback received from the questionnaire was extensive, received from across the Clarence Valley
- Support and opposition for options upstream of the bridge, in the vicinity of the bridge and downstream of the bridge



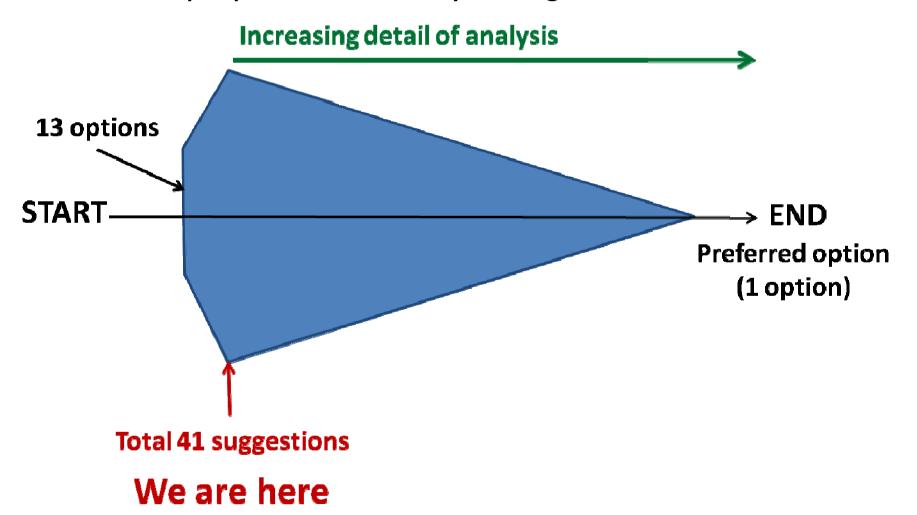
• The community focused on the key issues of traffic congestion and heavy vehicles.





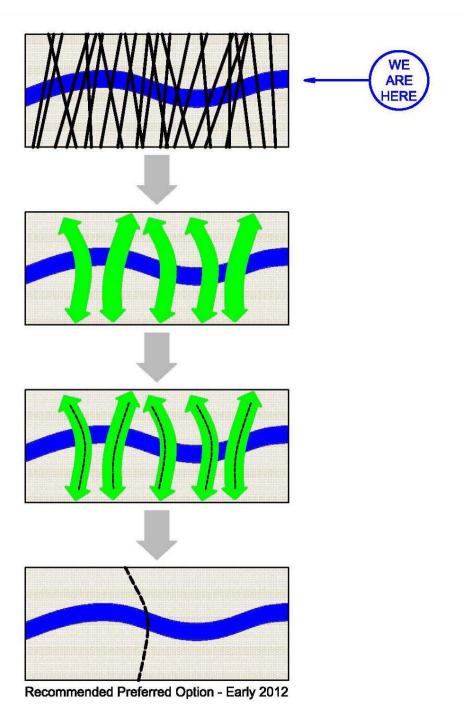
#### **Short-listing process**

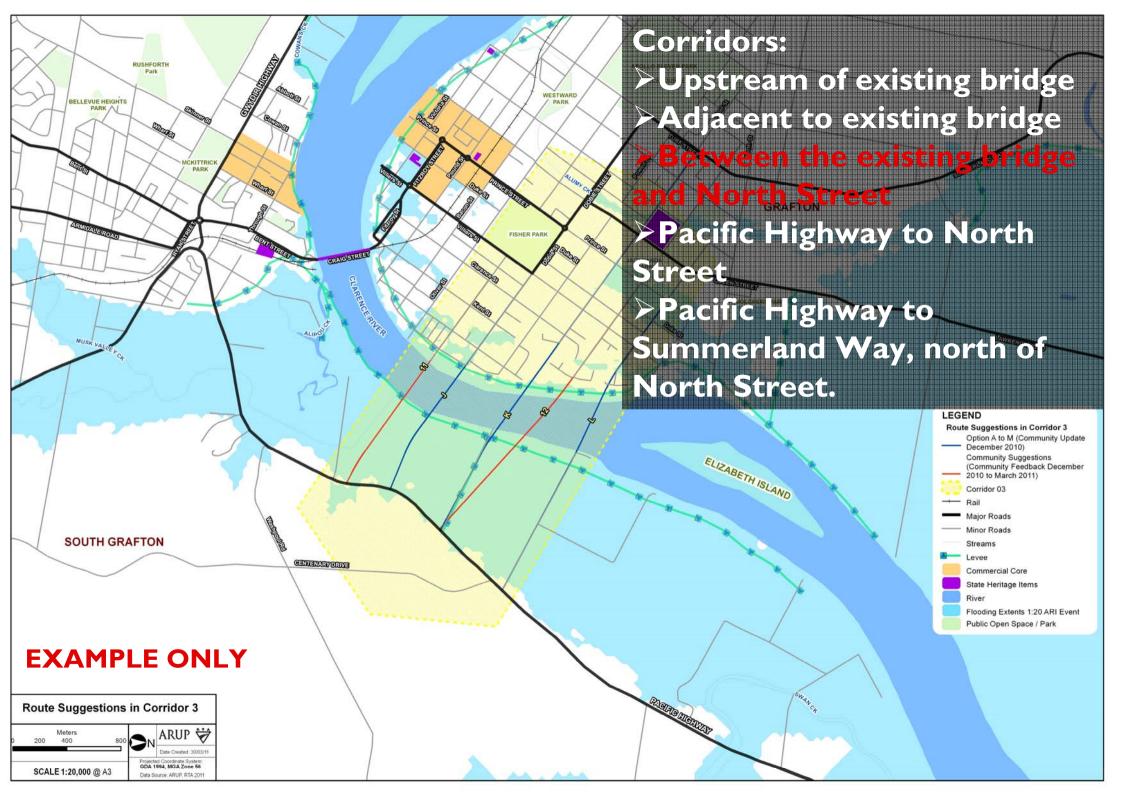
Main purpose of the study is to go from 41 routes to 1



# Methodology for short-listing community suggestions

- Three methods discussed at forum on 3 March 2011 - No community preference expressed
- ➤ Method 2 adopted
- Feedback from 3 March community forum about information that will assist in evaluating suggestions will be used during the short-listing process
- > 5 corridors identified







#### Technical investigations underway

#### Functional issues:

oRoad safety

oTraffic and transport efficiency

- •Future traffic volumes and travel patterns.
- •Use of new and existing bridge.
- •Capacity of existing roundabouts / intersections need for upgrades.
- Connections to CBD and Regional Road network.

#### ➤ Heritage impacts:

**o**Aboriginal

•Areas of significance to the local Aboriginal community

oNon-Aboriginal



#### Technical investigations underway (cont.)

#### Socio-economic issues:

oLanduse

oUrban character

oAmenity (lifestyle) impacts – including noise, vibration and visual impacts

- Level of traffic noise
- Increase in traffic noise

oBusiness impacts

oFlooding impacts

- •Height and extent of increase in flood level
- •Flood mitigation measures

#### Ecological issues:

oTerrestrial ecology

oAquatic ecology

#### Economic issues:

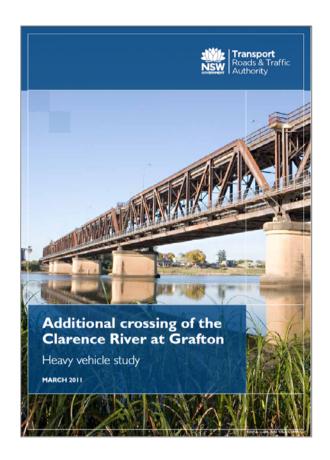
oCost.

oValue for money (Benefit / cost ratio)



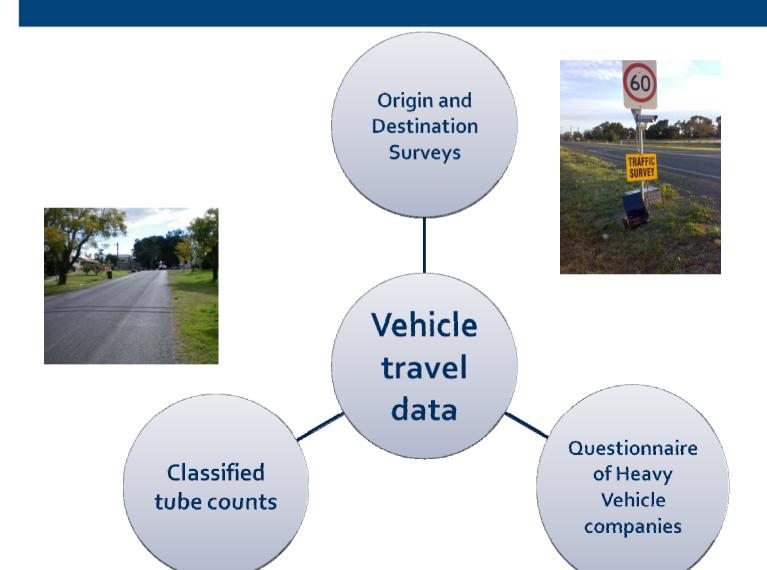
#### **Heavy Vehicle Study (March 2011)**

- Purpose To obtain an understanding of the existing:
  - o Traffic volumes and classification
  - o Points of origin and destination of traffic using the Grafton Bridge
  - o Travel patterns over a daily and weekly period
  - o Bus movements and utilisation
- ➤ Complement previous studies and other traffic data (incl. March 2009 study)
- How will this information be used in this project?





#### **Heavy Vehicle Study Methodology**







#### **Vehicle Classification**

Light Vehicles

Heavy Vehicles

Vehicle Description	Class	Typical Configuration		
Light Vehicles				
Short	1			
Short - Towing	2			
Heavy Vehicles				
Two Axle Truck or Bus	3			
Three Axle Truck or Bus	4			
Four Axle Truck	5			
Three Axle Articulated	6			
Four Axle Articulated	7			
Five Axle Articulated	8			
Six Axle Articulated	9			
B Double	10	CC CC		

Source: Austroads Vehicle Classification



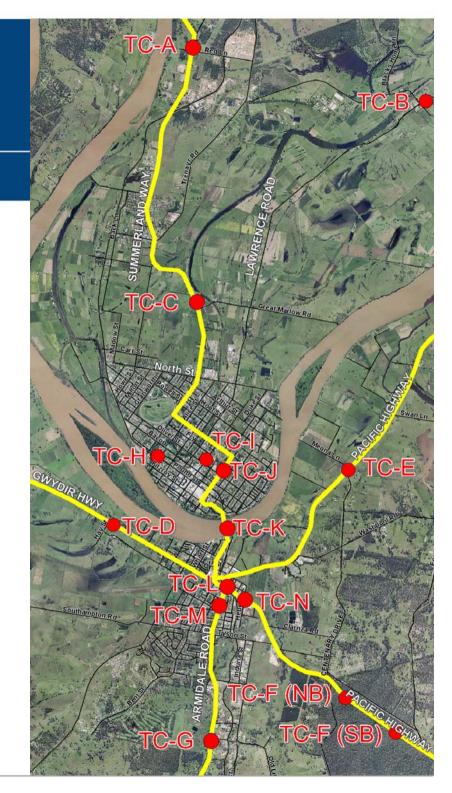


# CLASSIFIED TUBE COUNT SURVEYS



#### **Classified Tube Counts**

- ➤ 14 tube count locations between 19<sup>th</sup> and 26<sup>th</sup> August 2010
- ➤ Vehicles recorded by direction and vehicle type





#### **Classified Tube Counts Key Findings**

Key findings of the classified tube counts (Mon – Fri) are:

- ➤ Grafton Bridge:
  - Total traffic 27,580 vehicles per weekday (average)
  - Heavy vehicles 1,390 per weekday (5% of total traffic)
- ➤ Summerland Way:
  - North of Butterfactory Lane 610 heavy vehicles per weekday
  - North of Junction Hill 380 heavy vehicles per weekday
- ➤ Gwydir Highway 445 heavy vehicles per weekday
- ➤ Pacific Highway 2,200 heavy vehicles per weekday

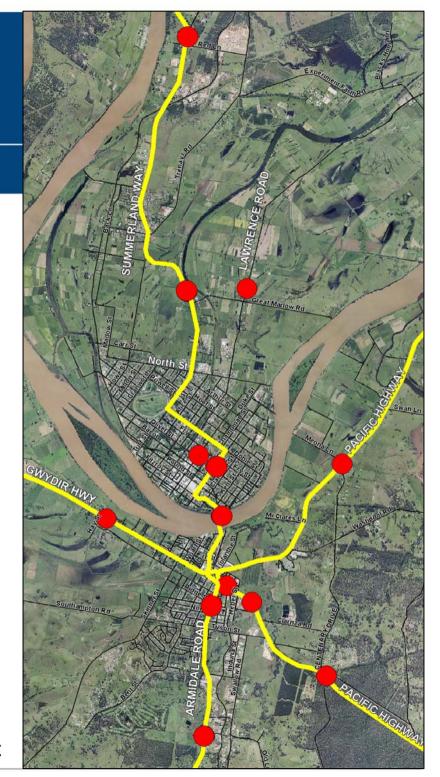




# ORIGIN AND DESTINATION SURVEYS

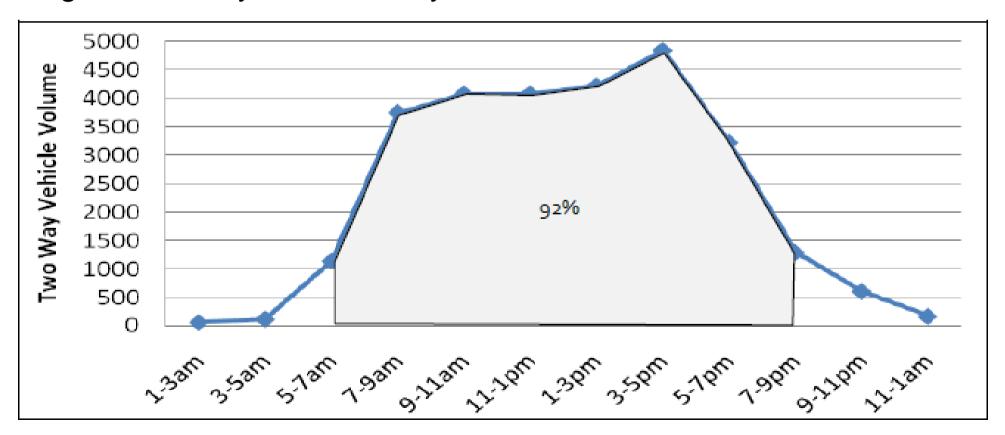


- ➤ 13 Survey Locations
- Locations chosen to separate the local and regional network including heavy vehicle generating precincts
- Surveys completed using video cameras on Thursday 19th August, 2010 between 5am 7pm
- Number plates of each vehicle passing each camera recorded
- ➤ Vehicles matched against other stations to determine their origins and destinations
- ➤ Vehicles were classified by type





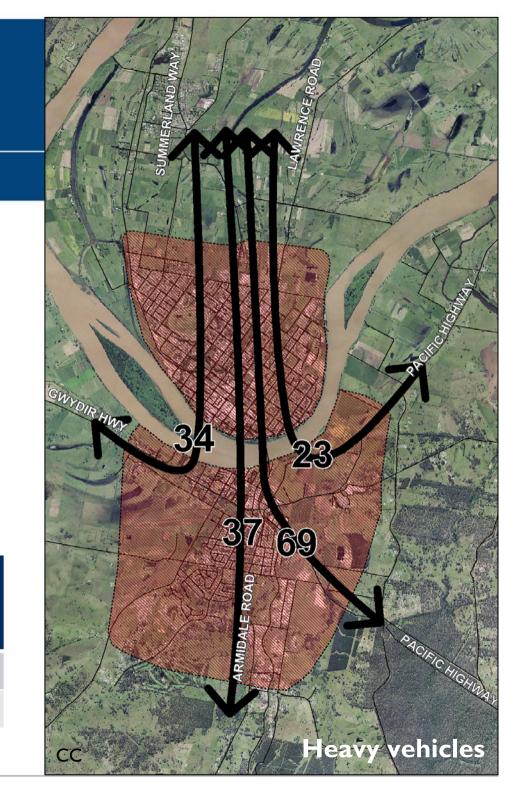
Surveys represented 92% of the total traffic crossing the Grafton Bridge on the day of the survey.



## External to External Trips

Number of Heavy vehicle trips on the 19<sup>th</sup> August 2010 (5am-7pm) crossing the Grafton Bridge that do not have an origin and/or destination in Grafton or South Grafton

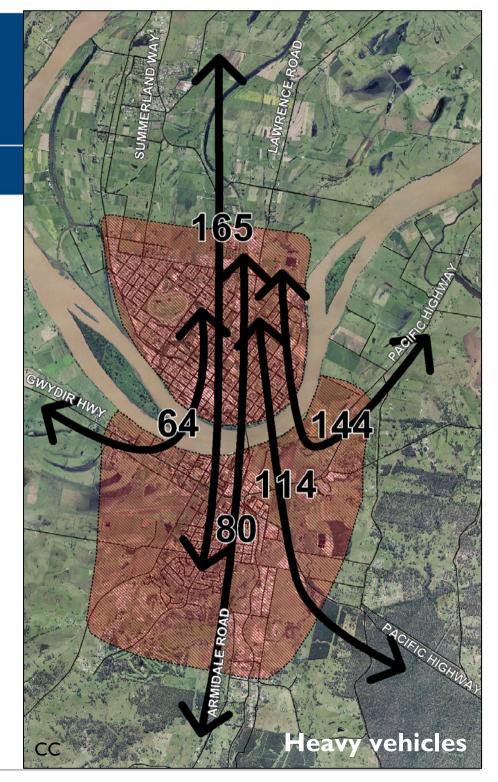
Vehicle Type	No. vehicles	% of vehicles crossing bridge
All	728	3
Heavy	163	12



### External to Internal Trips

Number of Heavy vehicle trips on the 19<sup>th</sup> August 2010 (5am-7pm) crossing the Grafton Bridge that have an origin and/or destination in Grafton or South Grafton

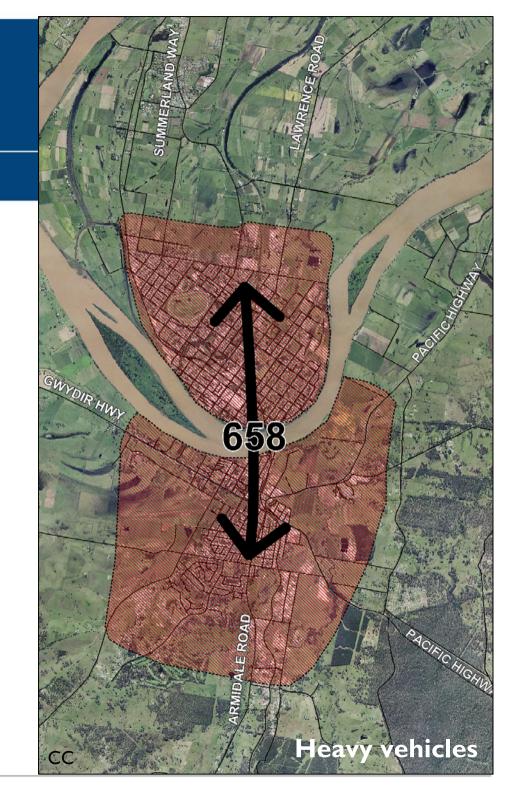
Vehicle Type	No. vehicles	% of vehicles crossing bridge
All	10,360	39
Heavy	567	41



### Internal to Internal Trips

Number of Heavy vehicle trips on the 19<sup>th</sup> of August 2010 (5am-7pm) crossing the Grafton Bridge that travel between Grafton and South Grafton

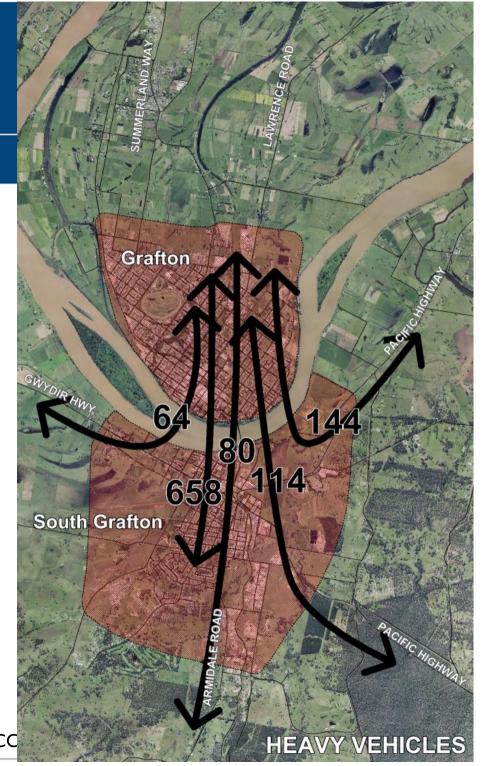
Vehicle Type	No. vehicles	% of vehicles crossing bridge
All	15,466	58
Heavy	658	47



## Trips starting or ending in Grafton

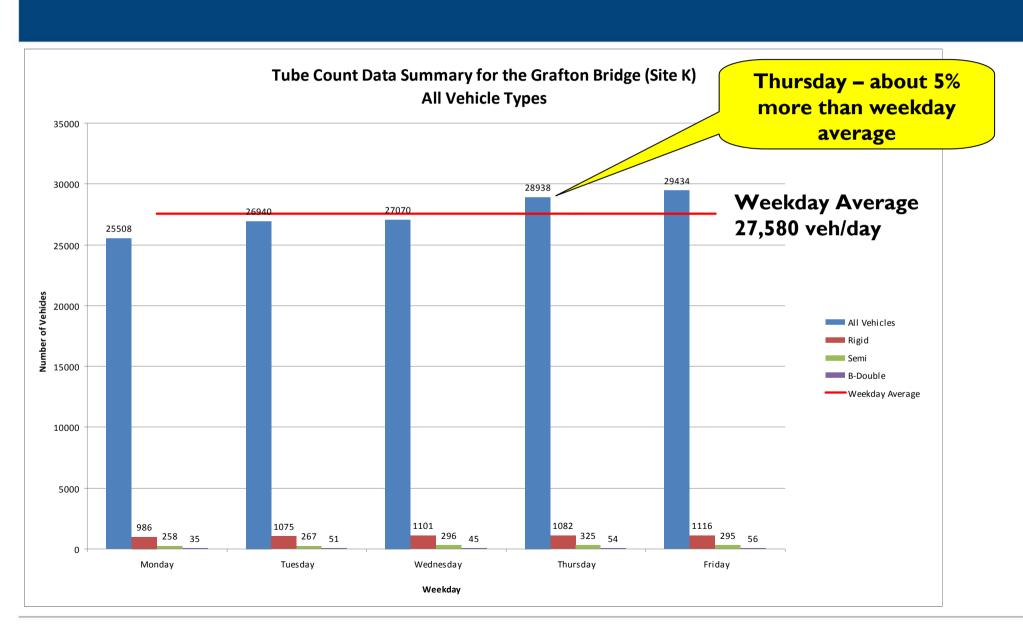
Number of Heavy vehicle trips on the 19th of August 2010 (5am-7pm) crossing the Grafton Bridge that have an origin or destination in Grafton

Vehicle Type	No. vehicles	% of vehicles crossing bridge
All	24,244	91
Heavy	1,060	76



# Comparison of Thursday traffic to weekday average







#### **Origin and Destination Survey Key Findings**

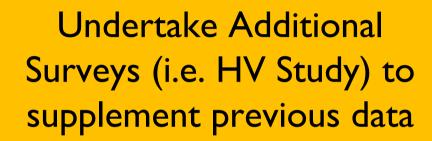
Between 5am and 7pm on Thursday 19th August 2010:

- $\triangleright$  Of the 26,554 vehicles that crossed the Grafton Bridge:
  - o 3% were through vehicles (external to external)
  - o 91% started or ended their trip in Grafton
- > Of the 1,388 heavy vehicles that crossed the Grafton Bridge:
  - 12% were through heavy vehicles (external to external)
  - o 76% started or ended their trip in Grafton



#### How will this information be used in the project?

Background Review of existing data from previous surveys

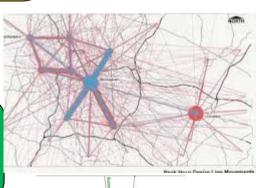






Identify Travel Patterns

Input into Strategic Modelling



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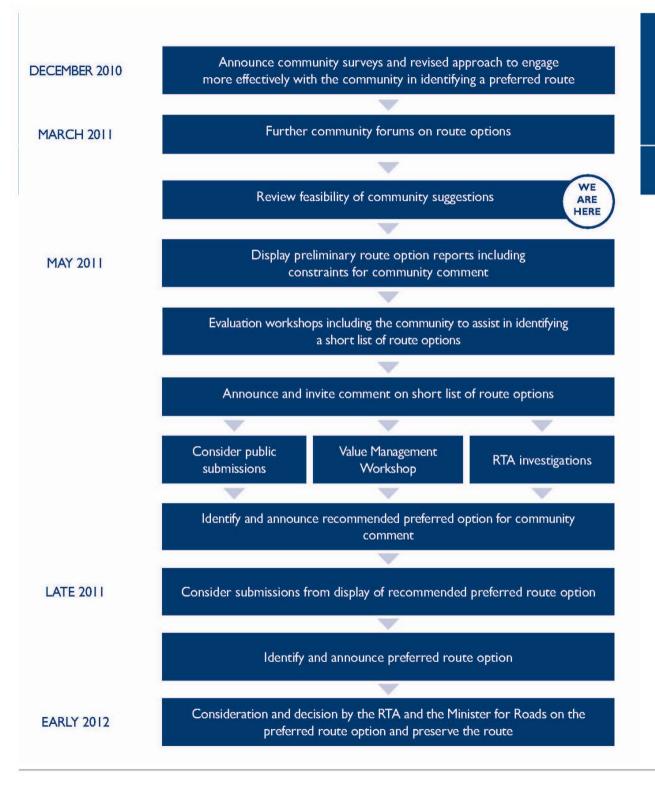
#### What happens next?

#### ➤ April 2011

- o Review and finalise project purpose and objectives based on community feedback
- o Finalise report on postal survey and place on project website
- o Finalise report on phone survey and place on project website
- o Carry out business survey
  - Being developed by Jetty Research
  - On-line survey through the Grafton Chamber of Commerce database
  - Businesses not on Chamber database invited to participate

#### ➤ May 2011

- o Finalise report on business survey and place on project website
- o Identify feasible options within each corridor to be taken forward for further assessment
- o Community forum to provide input into further assessment of feasible options







#### **Additional crossing of the Clarence River**

