Pacific Highway
Wells Crossing to Iluka Road Upgrade

Combined CLG – 23 March 2006

Roads and Traffic Authority

Agenda

- Value Management Workshop overview by Project Team
- CLG VMW participant overview
- Group discussion of VMW process
- Next steps
- Next meeting
- Meeting close at 8:30pm

Value Management Workshop objectives

- Clarify the objectives of the project
- Examine the short-listed options developed to meet the project objectives
- Recommend a preferred option(s) to the RTA to progress the project
- Develop an action plan to progress the project

Value Management Workshop participants

Clarence Valley Council

- Kerry Lloyd
- Doug McKenzie
- David Morrison
- Jim Spencer

CLG members

- Tony McGrath
- Austin Sheehan
- Bruce Walsh
- Bill Noonan
- Tony Wade
- Ian Rees
- Sarah Dunlop

Local business

- Greg Hayes

Cane Growers Association

- Pat Battersby

Local Aboriginal Land Council

- Rod Duroux (Grafton Ngerrie)
- Elsie Smith (Birrigan Gargle)

NRMA

- Hilary Wise

Government Departments

- Lisa Mitchell (DoP)
- John Finlay (DoP)
- Josh Chivers (DNR
- Kelly Roche (DEC)
- Scott Hunter (DEC)
- Max Enklaar
- Rick Whithead
- John Murray
- Jeff Brownlow

RTA

- Bob Higgins
- Mark Eastwood
- Diana Loges
- Scott Smith
- John O'Donnell
- Steve Summerell
- David Corry
- Mary-Lou Buck

SKM

- Jo Moss
- Peter Prince
- Paul Robilliard
- Richard Davies
- Evonne McCabe
- Peter McGown

Value Management process

- Split into 5 groups and defined “what’s important”
- Assumptions made about the project were identified (some required clarification)
- Criteria to assess options were identified (using the what’s important issues)
- Assessment of line combinations
- Development of modified routes
- Evaluation of modified routes
- Consensus of workshop

What's important

- Maintaining the living environment for people
- Having creative solutions to perceived and real problems
- Having a safe road for new and existing routes including safe intersections
- Reducing travel times
- Mitigating all impacts effectively and cost effectively
- Maintaining the environment for flora and fauna (especially for the coastal emu)
- Funding is assured before the project commences
- Having access to the highway (especially local access)
- Having safe and efficient transportation for freight
- Minimising sensitive vegetation impacts
- Considering the feasibility and effectiveness of mitigation at the route selection stage
- Location of interchanges to service Grafton, the airport and Wooli as well as Harwood and providing access for emergency vehicles
- Better driving conditions on dual carriageway
- Minimising the spread of pollution by the new highway

What's important

- Minimising impacts on SEPP 14 wetlands and other wetlands
- Ensuring a fair assessment of impacts of the whole corridor including the existing highway
- Linking up with the adjoining upgrade sections of the highway (ie. not just half the job)
- Providing a highway acceptable to the community and other travellers
- Protection of the existing environment
- Minimising the impacts on the livelihood of all businesses (including farms, highway related businesses, forestry and others)
- Maintaining landscape and ecological functions
- Minimising the impact of the highway on flooding in the valley
- Protecting the creeks and waterways (particularly the Clarence River system)
- Respecting cultural heritage (indigenous and non-indigenous)
- Reducing impacts on people's homes
- Recognising the social and historical choices of residents
- Minimising the fragmentation of properties and communities
- Providing value for money

What's important

- Having a highway system which is functional in the medium and long term
- Having adequate and timely compensation
- The decision making is done with adequate information
- Supplying the best available data to provide the best possible outcomes
- Meeting overall highway and project objectives
- Reducing the number of heavy vehicles in urban areas
- Separating local and through traffic
- Reducing multiple accesses to highway (generally)
- Considering the cost of environmental mitigation at route selection stage for each option
- Continuing community liaison through and beyond project delivery
- Protecting quarry resources from sterilisation (especially Shark Creek Quarry)
- Achieving a balance between social, cost, function and environmental perspectives
- Improving the flooding immunity along the highway
- Ensuring Aboriginal groups and traditional owners are heard and given feedback
- Protecting petroleum prospects from sterilisation (especially Shark Creek Ridge)
- Protecting future land use opportunities

What's important

- Preserving the local road system and access
- Having the ability to differentiate all options on the basis of environmental values and impacts
- Providing a solution that is constructible
- Facilitating communities to adapt to economic impacts
- Maximising energy savings by the most direct route
- Reducing impacts on water and air quality
- Having sustainability of quarry supplies (post construction)
- Reflecting community desires
- Minimising noise impacts (existing and new receivers)
- Protecting Aboriginal sites, heritage and places
- Ameliorating fish passage and road run-off of pollutants
- Maximising the use of existing infrastructure
- Minimising habitat loss
- Minimising loss of native vegetation
- Ensuring detailed Aboriginal site surveys, inspections and documentation
- Having consistent driving conditions

What's important

- Having a review of signage (eg. bigger signs)
- Having good wildlife crossings
- Preserving wildlife corridors
- Protecting threatened species
- Having a route that has least impact on environment and communities
- Considering the cost of threatened species management
- Having roads which are passed onto council being in good condition and funded
- Consulting with Aboriginal groups regarding stockpiles
- Minimising impacts on indigenous sites in Pillar Valley
- Shortening the timelines for new construction and staging
- Having certainty so we can get back to normal
- Preventing crime in previously isolated areas being accessible because of the new highway
- Minimising impact on property values
- Considering visual impact/urban design
- Considering investments already made (existing asset)
- Preserving the character of the area

Functional Perspective - Criteria

A Travel times within the study area

B Engineering risks

C Effective access to highway and local road network

D Ability to stage

E Safer “traffic corridor”

F Energy savings

G Visual/urban design impacts experienced by the road users

Social and Local Economic Perspective – Criteria

A	Impact on Aboriginal heritage and culture
B	Impact on non-Aboriginal heritage and culture
C	Visual/urban design impacts for community
D	Impact of noise on existing and new receivers
E	Extent of community severance
F	Extent of homes/residences lost
G	Impact on future land uses
H	Impacts on local businesses
I	Impact on farms and productive lands (including forests and fragmentation)
J	Social and economic risks of changes in flood impacts
K	Impacts on lifestyle environment choices
L	Impact on DEC estates and State Forest Conservation Zones

Natural Environment Perspective - Criteria

A	Area of native vegetation lost including high value habitat
B	Impact on EECs
C	Threatened and regionally significant flora impacts
D	Threatened and regionally significant fauna impacts
E	Impacts on wildlife corridors
F	Environmental impacts of changes to hydrological regimes
G	Impacts on SEPP 14 and other wetlands
H	Impacts on water quality and the aquatic environment not assessed in other criteria

Development of Value Management Criteria

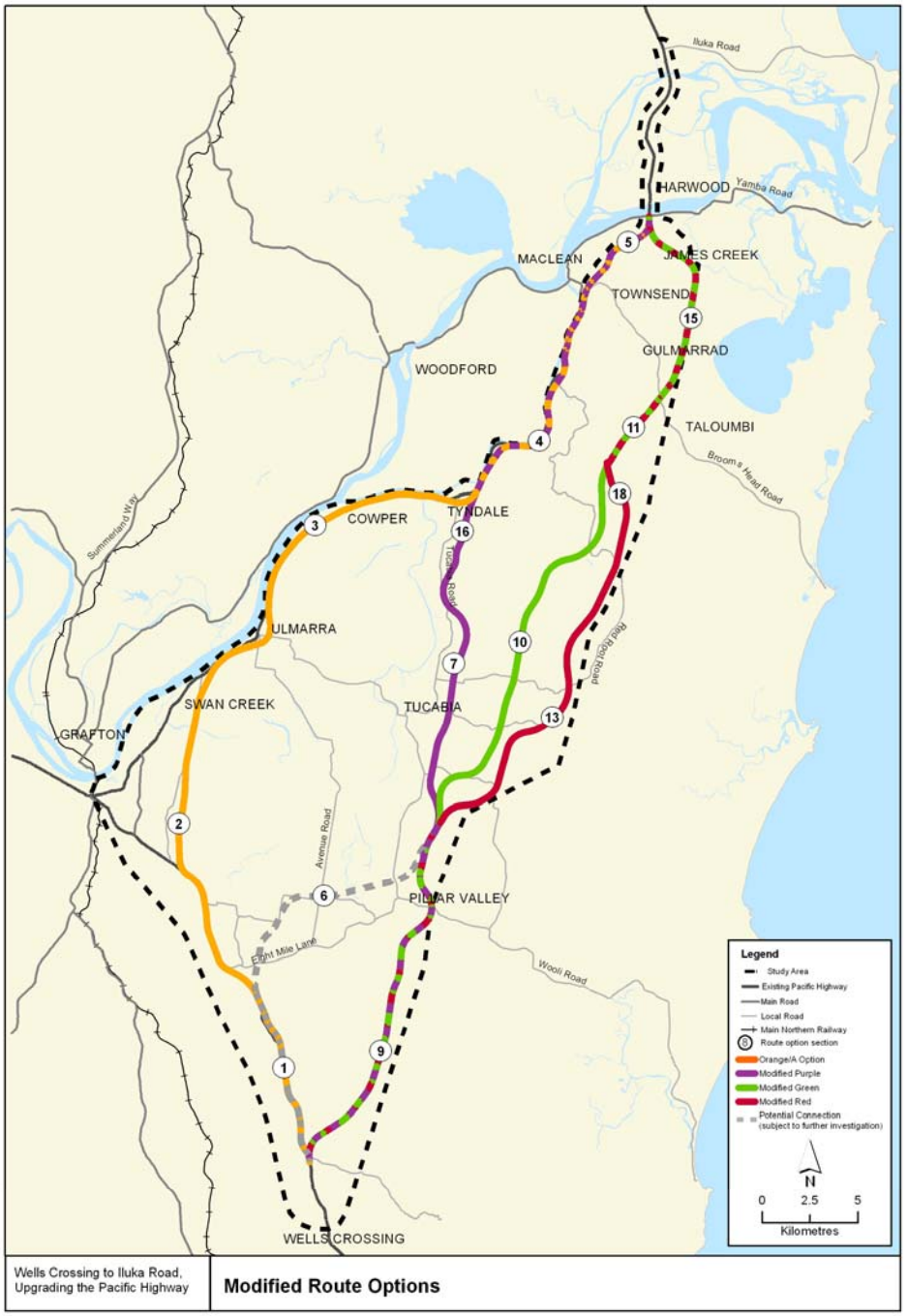
- "what's important" issues used to develop criteria
- Whole workshop group agreed on criteria to assess options
- Criteria developed were in line with community and other stakeholder feedback from submissions – no surprises
- Whole workshop group weighted criteria using paired comparison technique

	B	C	D	E	F	G	H
A	A/B	A/C	A/D	1A	1A	A/G	A/H
B		B/C	B/D	1B	1B	B/G	1B
C			C/D	C/E	1C	C/G	C/H
D				D/E	1D	D/G	D/H
E					1F	1G	1H
F						1G	1H
G							G/H
H							

3. Major Preference
2. Medium Preference
1. Minor Preference

Value Management Criteria with weightings

Functional	Wt	Social and Local Economic	Wt	Natural Environment	Wt
Travel times within the study area	16.5%	Impact on Aboriginal heritage and culture	17%	Area of native vegetation lost including high value habitat	16%
Engineering risks	13%	Impact on non-Aboriginal heritage and culture	5.5%	Impact on EECs	18%
Effective access to highway and local road network	14%	Visual/urban design impacts for community	1%	Threatened and regionally significant flora impacts	14%
Ability to stage	4.5%	Impact of noise on existing and new receivers	10%	Threatened and regionally significant fauna impacts	14%
Safer “traffic corridor”	39%	Extent of community severance	11%	Impacts on wildlife corridors	4%
Energy savings	13%	Extent of homes/residences lost	14%	Environmental impacts of changes to hydrological regimes	4%
Visual/urban design impacts experienced by the road users	-	Impact on future land uses	2.5%	Impacts on SEPP 14 and other wetlands	16%
		Impacts on local businesses	9%	Impacts on water quality and aquatic environment (not assessed in other criteria)	14%
		Impact on farms and productive lands	12%		
		Social and economic risks of changes in flood impacts	5%		
		Impacts on lifestyle environment choices	10%		
		Impact on DEC estates and State Forest Conservation Zones	3%		



Workshop activities

- Phase 1 – Assessment of the line combinations against their various alternatives
- Phase 2 – Assessment by the whole group as to which of the various line combinations to determine “modified” corridor options
- Phase 3 – Assessment of the modified corridor options against the assessment criteria from Wells Crossing to Harwood Bridge)

Evaluation of options

Corridor Options	Assessment Perspective			
	Functional	Social & Local Economic	Natural Environment	Strategic Cost Estimate ($M)
Orange	1 (372.5)	3 (299)	1 (464)	$1530
Modified Purple	1 (381.5)	3 (311.5)	2 (282)	$970
Modified Green	1 (362)	1 (358)	2 (268)	$830
Modified Red	1 (345.5)	1 (363.5)	4 (198)	$820

- Scores derived using the weightings of the criteria and a comparative ranking for each option - not a mathematical formula

Conclusions of workshop

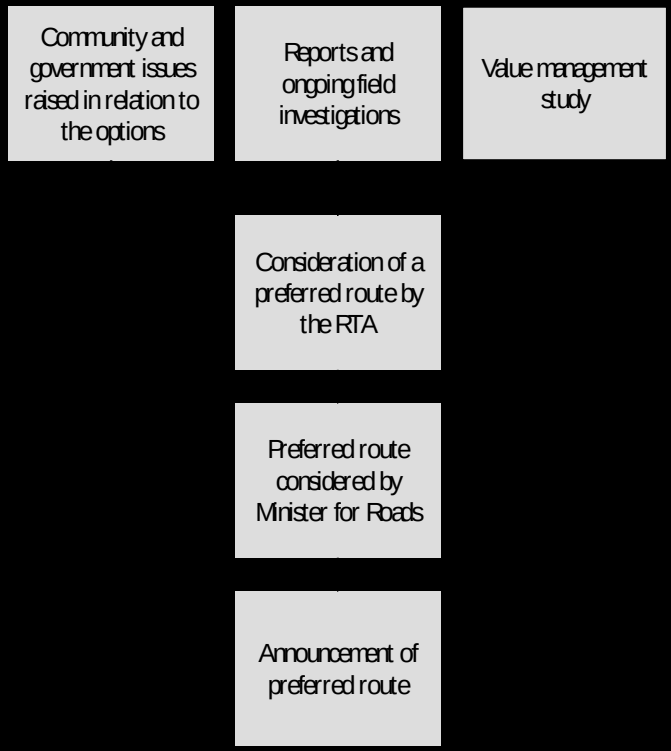
- Modified Green performs overall and on balance better than the other options (if strategic cost estimates are included in the comparison). Modified Green Option ranked first from a Social and Local Economic perspective, equal first from a Functional perspective and equal second from a Natural Environment perspective
- The Modified Green Option includes the Line 9 component rather than the Line 1+6 component at the southern end of the study area. There was no consensus reached in the workshop as to which offered the better line combination (ie. Line 1+6 or Line 9 at the southern end) and further work would be required to resolve the issues raised before a recommendation as to the preferred line in this area could be reached
- There are a number of issues associated with both Line 1+6 and Line 9. Line 1+6 has environmental issues (ie. impacts on EECs, impacts on SEPP14 and other wetlands, insufficient information on threatened and regionally significant flora and fauna, etc) whereas Line 9 has a number of social and local economic issues (ie. impacts on aboriginal heritage and cultural sites, visual impacts, impacts on future land uses and impacts for convenient access to local businesses and Grafton). Also there are some significant ecological issues with Line 9 which may have a cost

Conclusions of workshop

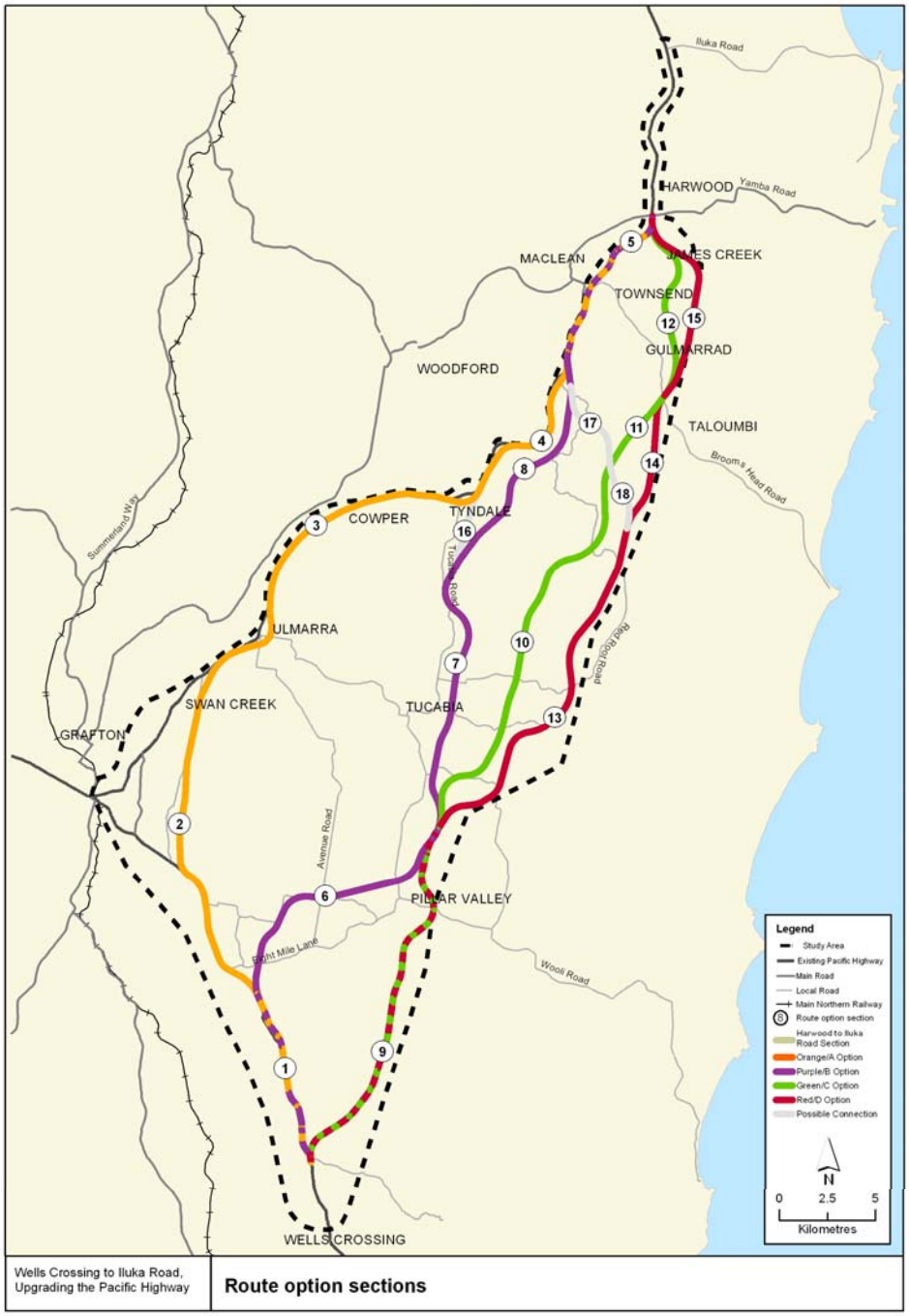
- If strategic cost estimates are excluded from the comparison, Modified Green and the Orange Option are closely ranked. The Orange Option has the least impact on the Natural Environment but has the greatest potential risk to flood impacts
- Modified Purple, Modified Green and Modified Red Options have more potential scope for improvement than the Orange Option
- The Orange Option and the Modified Purple Option have greatest impact from a Social and Local Economic perspective
- There was a larger difference in the rankings from a Natural Environment perspective than from a Social and Local Economic perspective
- There needs to be a further analysis of traffic data before a preferred option is chosen (to ensure the crash safety rate objectives are met)
- If an eastern option is moved forward as the preferred option, improvements to the existing highway will need to be explored

Next steps

- Harwood to Iluka Road section
- Additional investigations
  - Emu and other ecological investigations including cost and feasibility
  - Aboriginal
  - Costings
  - Safety and conditions of existing highway
  - Gateways and interchanges
  - Harwood bridge
  - Flooding
  - Resource availability



CLG Handout


Iluka Road
HARWOOD
Yamba Road
MACLEAN
JAMES CREEK
TOWNSEND
GULMARRAD
WOODFORD
TALOUMBI
Broom's Head Road
COWPER
TYNDALE
Summerland Way
Tucabia Road
ULMARRA
Red Rock Road
SWAN CREEK
TUCABIA
GRAFTON
Avenue Road
PILLAR VALLEY
Eight Mile Lane
Wooli Road
WELLS CROSSING
Legend
Study Area
Existing Pacific Highway
Main Road
Local Road
Main Northern Railway
Route option section
Harwood to Iluka Road Section
Orange/A Option
Purple/B Option
Green/C Option
Red/D Option
Possible Connection
N
0
2.5
5
Kilometres
Wells Crossing to Iluka Road, Upgrading the Pacific Highway
Route option sections