



Center for
Local Government

Building Community Capacity – A Case Study in Roads

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Centre for
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Background

- Gwydir Shire Council worked with us to undertake a community deliberative panel process in 2016 as part of their Special Rate Variation (SRV) application
- The panel recommended that Council pursue the SRV and to engage the community on service levels, particularly roads, more broadly in future
- To that end, Council engaged us to undertake a further deliberative panel process with a focus on roads in 2017

What is deliberation?

- Deliberation is an innovative form of contemporary community engagement
- It aims to bring together community members with different perspectives and values on a public problem, provide them with all the evidence elected representatives have available in making decisions, and then ask community members to provide non-binding recommendations to government on how to proceed with the problem
- In this way, deliberation empowers community members by simulating government decision-making conditions and, in doing so, provides elected representatives with a greater level of confidence in the decisions they make

Our approach

- Our approach to this project comprised three components:
 1. A random dial phone survey about roads in the Gwydir Shire Council area
 2. A deliberative panel process with 25 residents held over 2.5 days
 3. A follow-up random dial phone survey to test the advice provided by the panel

Our approach – First phone survey

- The first phone survey focused on community views about and preferences toward roads, such as:
 - Patterns and types of usage
 - Quality of roads and maintenance
 - Biggest concerns about the road network etc.
- The survey included closed and open questions and draw on other well accepted surveys of road users, such as the Western Australia Main Roads Annual Community Perceptions Survey, and serve as panel recruitment method
- It was undertaken a couple of months before the panel so the findings could inform content and design

Results - First phone survey

- Most important lifestyle factors
 - Good quality roads
 - Availability of healthcare
 - Safety
- Most important council services
 - Roads
 - Emergency and disaster management
 - Planning for future
- Highest priority areas for increased Council investment
 - Unsealed roads
 - Sealed roads
 - Supporting local economy

Results - First phone survey

- Problems with roads
 - Pot holes
 - Rough or bumpy surface
 - Poor shoulders
- Industrial users
 - More likely to identify problems with roads
 - Concern over slippery/ loose surfaces
 - Concern over flood prone roads
- Funding for roads should come from reallocation of council budget

Our approach – Deliberative panel process

- A deliberative panel of 25 residents was appointed that represented the broad demographics of Gwydir Shire and perspectives expressed in the phone survey
- We worked with Council staff and elected representatives to co-design the panel, including developing the problems, questions and relevant evidence inputs put to the panel, as well as availability of Council's road engineers to provide technical advice to the panel, well in advance of it occurring
- First, we spent a day with the panel out on the road so they could inspect and see Council's road network for themselves, and provide an opportunity to ask questions of Council's road engineers on how it is maintained and managed

Our approach – Deliberative panel process

- Then we spent 1.5 briefing the panel on a wide range of data, and seeking their views on options. The data included:
 - **Details of the Gwydir community and Council context** (including demography, the local economy, community priorities, and benchmarking with peers)
 - **The Gwydir roads context** (including definitions, images and service standards of Gwydir's road classes, roads service levels, and benchmarking with peers)
 - **Accident data and phone survey findings**

Our approach – Deliberative panel process

- The options included:
 - Four options for roads service levels for each class of Shire road: minimum, bronze, silver, and gold
 - The minimum options constituted maintenance only; the gold options constitute maintenance, patching, resealing and upgrading; and the bronze and silver options are in between

Example Slide from Panel

Review road service level options, and advise on a level for each class of road (NOT every road)

Arterial Sealed - Baroma Downs Road



Collector Sealed - Oregon Road



Local Unsealed - Allandale Road



Arterial Unsealed - Country Boundary Road



Collector Unsealed - Gineroi Road



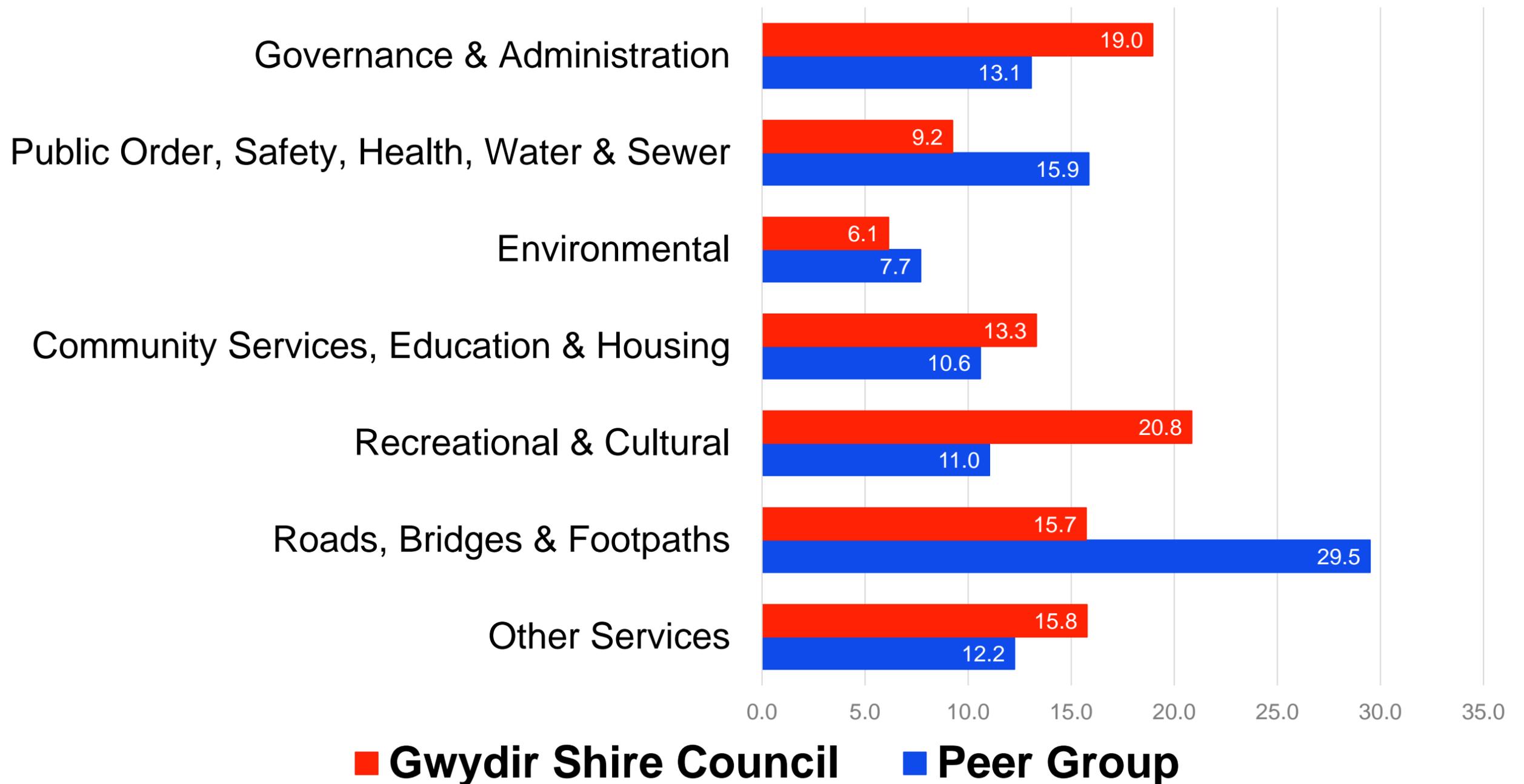
Minor Unsealed - Inverness Road



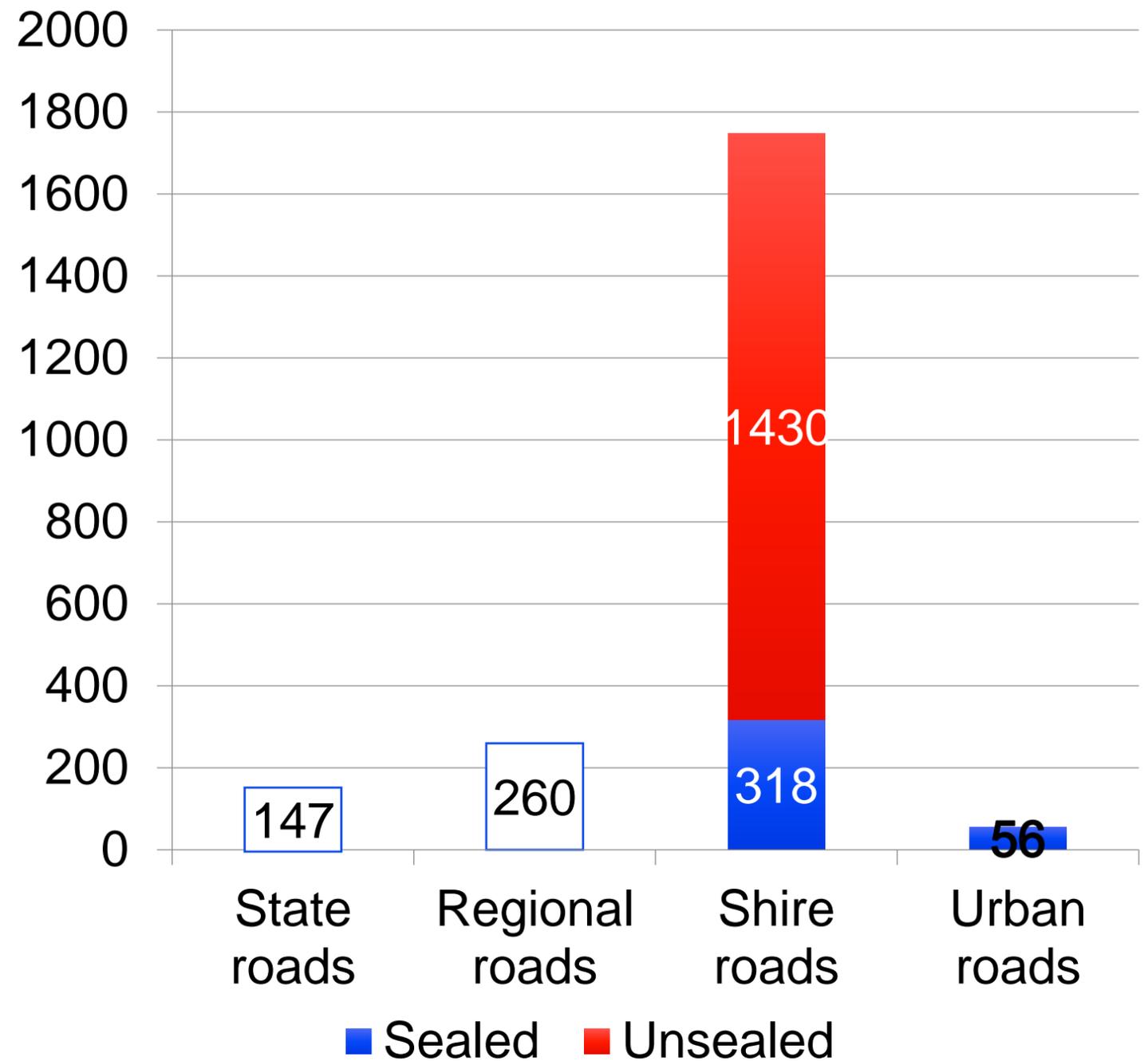
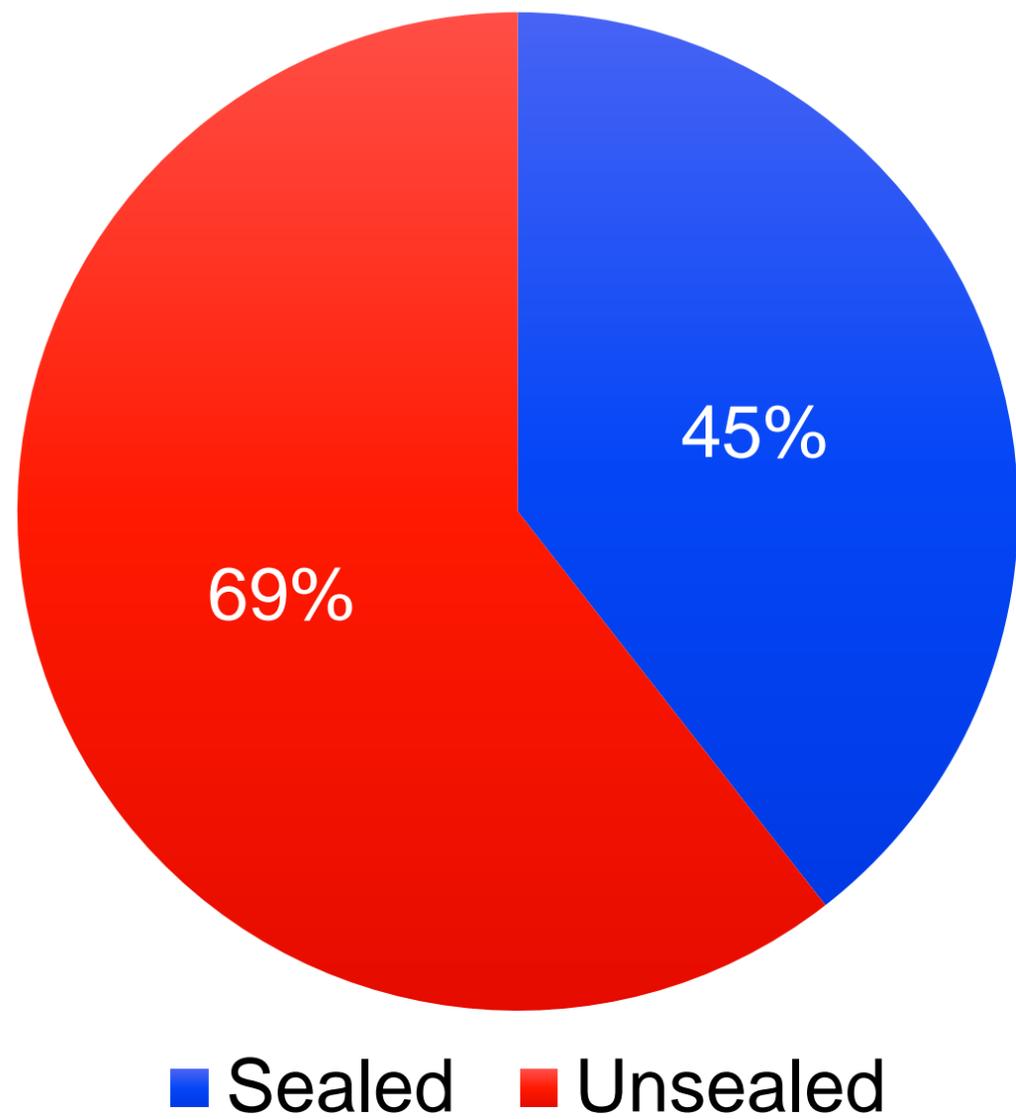
YOU SAW DIFFERENT CLASSES OF ROAD ON THE BUS STOP

Example Slide from Panel

SERVICES AS A % OF TOTAL EXPENDITURE IN 2015/16



Example Slide from Panel



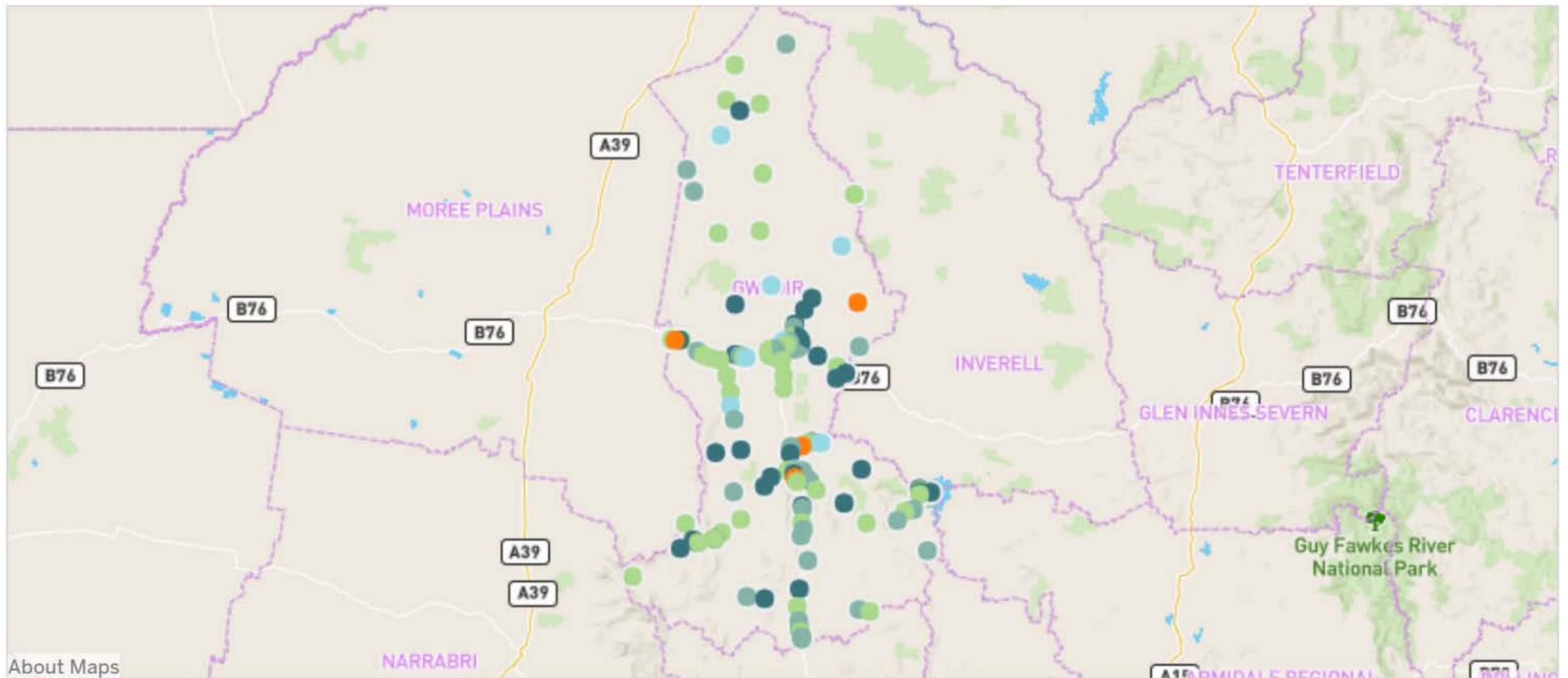
Example Slide from Panel

Council's **expenditure across all Shire roads of the last three years has averaged \$4,515,305** (additionally, expenditure on regional roads has averaged \$1.9m and state roads \$2.7m).

- The **Minimum** options are **79% lower** (\$935,450p.a);
- The **Bronze** options are **58% lower** (\$1,897,018p.a);
- The **Silver** options are **21% higher** (\$5,478,345p.a); and
- The **Gold** options are **613% higher** (\$32,190,405p.a).

Example Slide from Panel

Map of Road Accidents in Gwydir - 2012 to 2016 (NSW Transport, 2017)



About Maps

Degree of crash

- Fatal
- Serious Injury
- Moderate Injury
- Minor/Other Injury
- Non-casualty (towaway)

Arterial Shire Road

Arterial Sealed - Baroma Downs Road



Arterial Unsealed - Country Boundary Road



Major link road between service centres or tourism route used for access and transport for through traffic and providing a link to Collector, Local and Minor roads.

- Bitumen road renewal or upgrade standard – 9 metre formation with 8 metres seal (where achievable, particularly where the road is likely to be used for High Productivity Vehicles).
- Bitumen **resealing on a 15-year cycle**. Gravel road renewal standard – 8 metre 200mm depth gravel surface.
- Gravel material to be well-graded granular material with 100% passing 37.5 mm sieve and a Plasticity Index (PI) greater than 6 and less than 12.
- Gravel resheeting on a 12-year cycle, where required.
- Full maintenance activity including a minimum of 2 x gradings per year (additional grading required if excessive wet weather/flooding), drainage works.

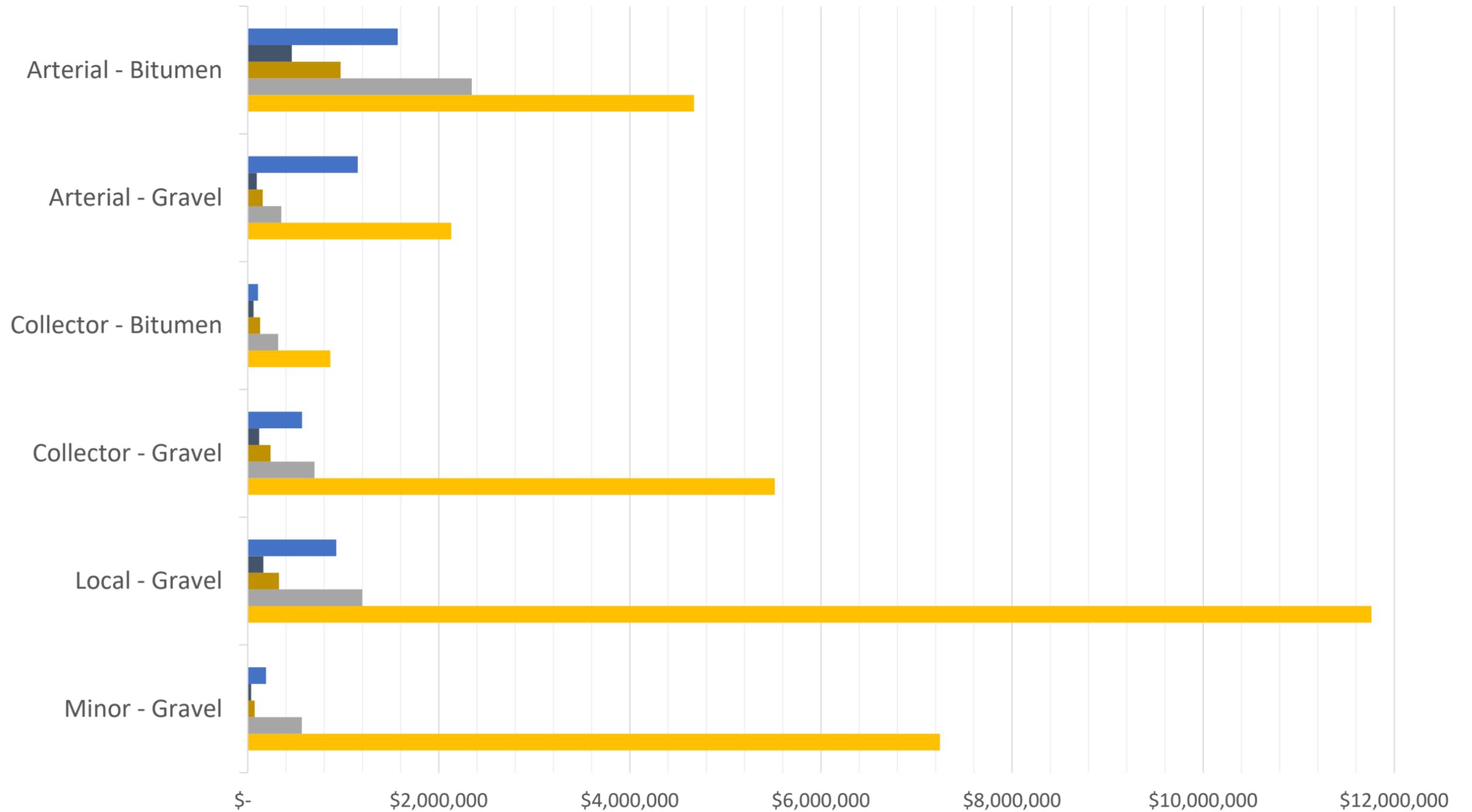
Arterial – Bitumen

Current Construction and Maintenance Standard:	Minimum Level	Bronze	Silver	Gold
<p>Major service link road between centres, or tourism route used for access and transport for through traffic and providing a link for Collector, Local and Minor shire roads.</p> <p>Bitumen road renewal or upgrade standard – 9 metre formation with 8 metres seal (where achievable, particularly where the road is likely to be used for High Productivity Vehicles). Bitumen resealing on a 15 year cycle.</p> <p>2014/15: \$346,374</p> <p>2015/16: \$1,624,728</p> <p>2016/17: \$2,737,350</p>	<p><u>Maintenance ONLY.</u> Maintain and repair at existing standard:</p> <ul style="list-style-type: none"> - includes pothole patching and heavy patching but not resealing. <p>Result:</p> <ul style="list-style-type: none"> • Average condition across the Arterial Road Network with an incremental decrease in overall Level of Service (LOS) over time; • Will result in an incremental increase in overall renewals due to not meeting consumption requirements; • No improvement of facility to meet changing demands with the road becoming less 'fit for purpose'. 	<p><u>Maintenance + Heavy Patch + Reseal.</u> Maintain and repair at existing standard:</p> <ul style="list-style-type: none"> - includes pothole patching, heavy patching (0.6%pa) and resealing (4%pa surface consumption). <p>Result:</p> <ul style="list-style-type: none"> • Average condition across the Arterial Road Network with an incremental decrease in Pavement LOS over time; • Will result in an incremental increase in pavement renewal due to not meeting consumption requirements; • No improvement of facility to meet changing demands with the road becoming less 'fit for purpose'. 	<p><u>Maintenance + Heavy Patch + Reseal + Pavement Renewal .</u> Maintain and repair at existing standard:</p> <ul style="list-style-type: none"> - includes pothole patching, heavy patching (0.6%pa) and resealing (6.6%pa surface consumption) and pavement renewal (2.5%pa) to existing standard (pavement consumption). <p>Result:</p> <ul style="list-style-type: none"> • Average condition across the Arterial Road Network with no change in Surface or Pavement LOS; • Will result in keeping up with seal and pavement consumption; • No improvement of facility to meet changing demands with the road becoming less 'fit for purpose'. 	<p><u>Maintenance + Heavy Patch + Reseal + Upgrade to Modern Standards – 'Fit for Purpose'.</u> Maintain and repair at existing standard:</p> <ul style="list-style-type: none"> - includes pothole patching, heavy patching (0.6%pa) and resealing (6.6%pa surface consumption) and pavement upgrade (5%pa) to modern standards for strength and geometry. <p>Result:</p> <ul style="list-style-type: none"> • Average condition across the Arterial Road Network with an incremental increase in Surface and Pavement LOS; • Will result in improving the network to meet changing demands; • Improvement of facility to meet changing demands with the road becoming increasingly 'fit for purpose'.
	<p>Cost: \$461,120/yr Current annual maintenance cost ONLY.</p>	<p>Cost: \$971,938/yr Current annual maintenance cost + heavy patching + resealing.</p>	<p>Cost: \$2,344,500/yr Annual maintenance cost + heavy patching + resealing + renewal.</p>	<p>Cost: \$4,671,750/yr Annual maintenance cost + heavy patching + upgrade.</p>

Options

Options for Roads Service Levels - Cost Comparison

■ 3-Year Trailing Average ■ Minimum ■ Bronze ■ Silver ■ Gold



Findings – Deliberative panel process

No.	Recommendation	Rationale
1	That Council increase spending on gravel arterial roads by about \$300,000 per year to bring them up to bitumen standard over the next 15 years	Gravel arterial roads need additional servicing because they benefit a large number of people and businesses, and are used by tourists and for heavy vehicles
2	That Council increase spending on gravel local roads by about \$200,000 per year to improve their condition	Gravel local roads require additional servicing because they are used by a large number of residents and school buses, as well as by industry
3	That Council increase spending on gravel collector roads by about \$100,000 per year to improve their condition	Gravel collector roads require additional servicing to ensure safety and access to arterial roads
4	That Council maintain current levels of spending on bitumen arterial, local and collector roads, as well as on regional roads	Gravel roads are the priority for increased servicing, and Council cannot afford to increase servicing of all classes of roads. The servicing of regional roads is funded and controlled by the state government

Findings – Deliberative panel process

No.	Recommendation	Rationale
5	That Council reconsider thresholds used to classify roads , based on the function and relative importance of each road to the community	Reviewing the thresholds used to classify roads would enable greater alignment of service levels to community expectation
6	That Council allocate any profit earned from state road contracts to servicing Council roads	Allocating profit from state road contracts to Council roads would increasing servicing of Council roads
7	That Council consider road widening and improved drainage as service standards	Road widening and improved drainage would improve the safety and overall condition of roads
8	That Council consider road education campaigns advising drivers to drive to the conditions	By driving to the conditions, drivers would reduce wear and tear on roads and increase safety

Findings – Deliberative panel process

No.	Recommendation	Rationale
9	That Council promote the self-help program to farmers, and look at providing additional insurance	Promoting the self-help program and insuring participants would enable farmers to use their own equipment to maintain minor and local gravel roads outside their properties
10	That Council prioritise the road needs of residents and industry above tourists	Residents and industry are the main funders and users of roads in the area
11	That Council upgrade an entire road at once rather than kilometre-by-kilometre	Upgrading entire roads at once would enable greater economies of scale and therefore reduce the overall cost
12	That Council fund increased roads service by seeking additional grants	Additional external funding would enable Council to provide increased roads service without reducing other services

Findings – Deliberative panel process

No.	Recommendation	Rationale
13	That Council fund increased roads service by reducing Council administration offices from two to one , and reducing administration staff accordingly	Most of Gwydir Shire Council's peer councils have only one administration office
14	That Council fund increased roads service by identifying ways to increase efficiency	Increased efficiency would enable Council to increase service provision within its existing financial resources
15	That Council fund increased roads service by reducing arts and cultural services	Gwydir Shire Council currently spends significantly more on arts and cultural services than its peer councils
16	The Council fund increased roads service by reducing parks and gardens services	Gwydir Shire Council currently spends significantly more on parks and gardens services than its peer councils

Our approach – Second phone survey

- This survey tested the advice provided by the panel with the broader community
- Over 80% agreed with all of the findings of the panel
 - Priority classes
 - Level of investment
 - Ways of funding increase investment
- Identified priority routes for investment
- Council using process to inform roads program for next 5 years

Thank
you

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