



Appendices for Attachment 1 to Item 4.3.1.

Appendices

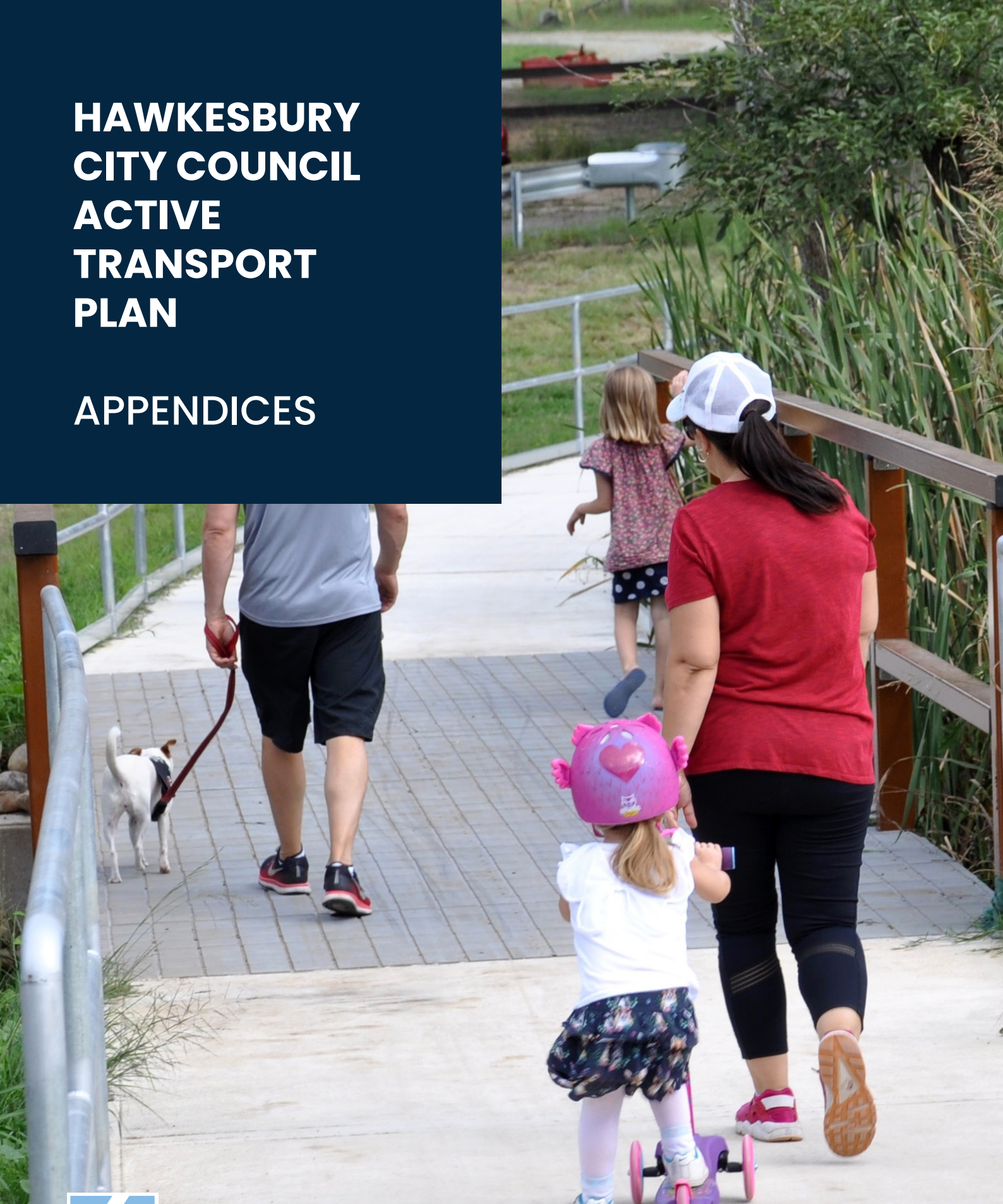
Date of meeting: 12 March 2024

Location: Council Chambers

Time: 6:30 p.m.

HAWKESBURY CITY COUNCIL ACTIVE TRANSPORT PLAN

APPENDICES



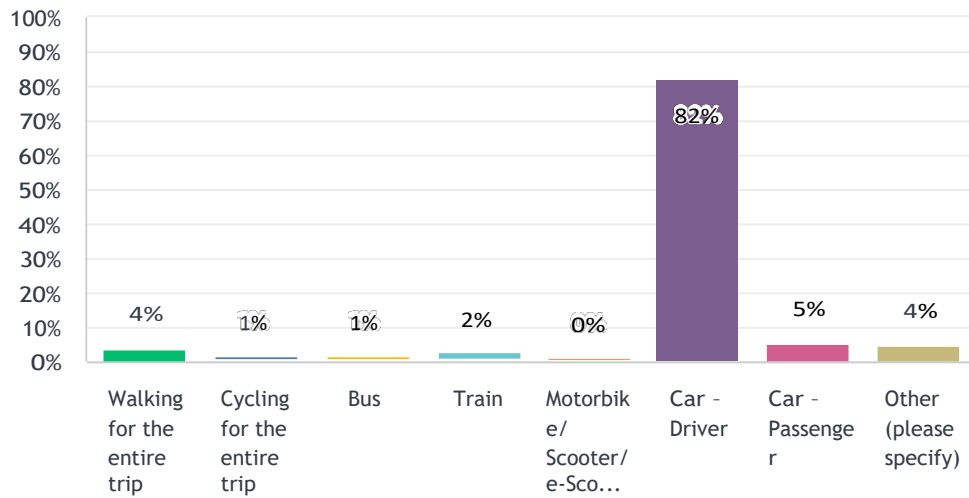
A photograph of a family walking away from the camera on a paved path. In the foreground, a man in a grey t-shirt and black shorts walks a small white dog on a red leash. To his right, a woman in a red t-shirt and black leggings walks a young child on a purple tricycle. The child is wearing a white shirt, a floral skirt, and a pink hat. In the background, another person is walking. The path is bordered by a metal railing on the left and some greenery on the right. A red car is parked in the distance. The text "APPENDIX A" and "Community Survey Responses" is overlaid in white on the image.

APPENDIX A

Community Survey Responses

Q1 What is your usual primary method of transport?

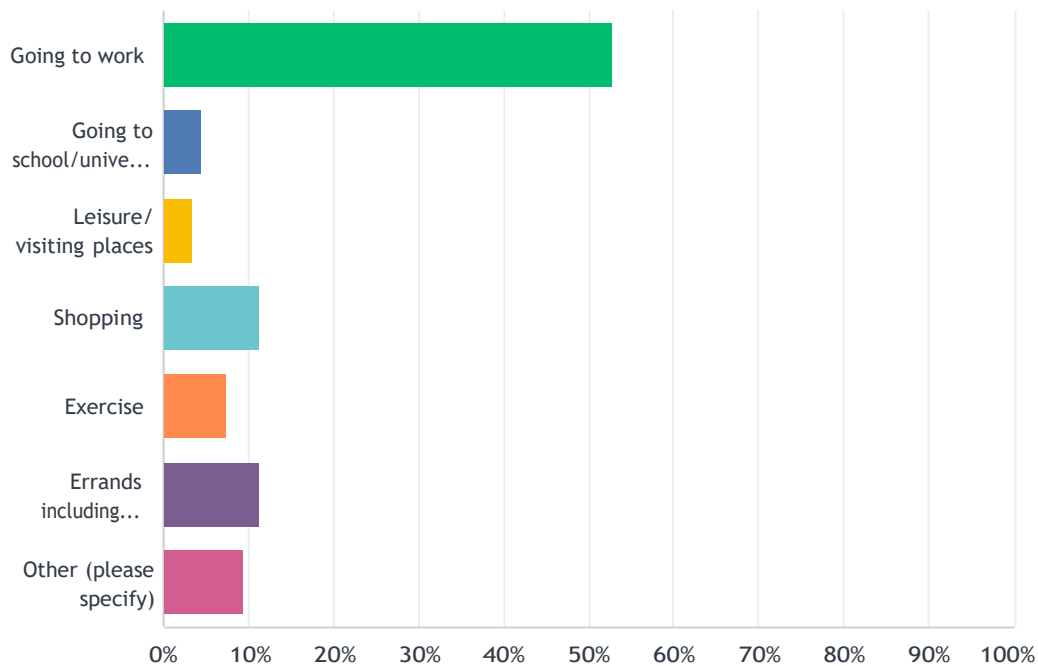
Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Walking for the entire trip	4%	10
Cycling for the entire trip	1%	3
Bus	1%	3
Train	2%	5
Motorbike/ Scooter/ e-Scooter	0%	1
Car – Driver	82%	219
Car – Passenger	5%	14
Other (please specify)	4%	12
TOTAL		267

Q2 On a typical weekday, what is the main trip you would undertake during the day?

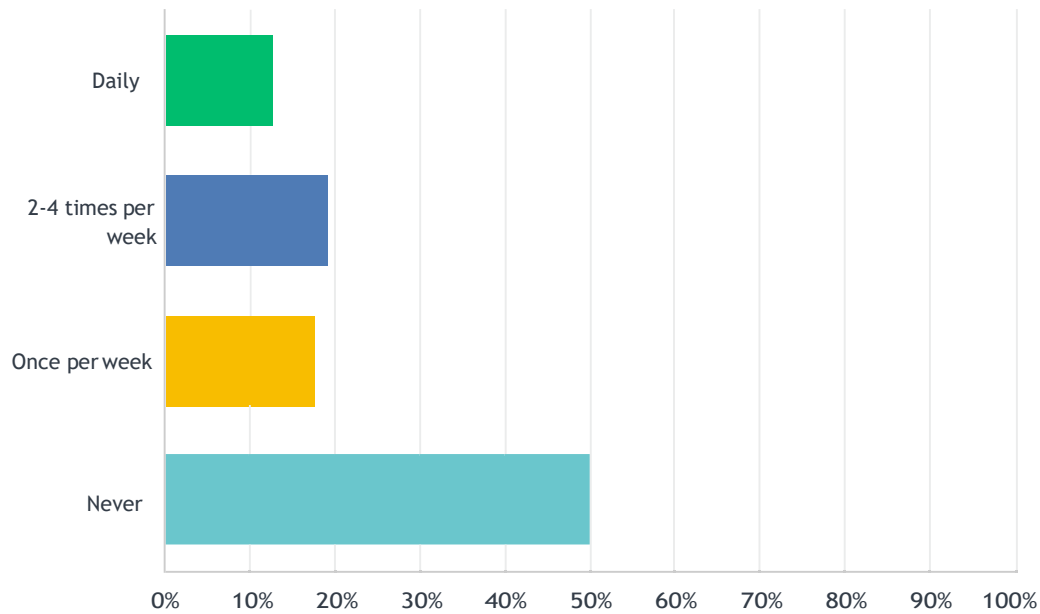
Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Going to work	52.81%	141
Going to school/university	4.49%	12
Leisure/ visiting places	3.37%	9
Shopping	11.24%	30
Exercise	7.49%	20
Errands including medical appointments	11.24%	30
Other (please specify)	9.36%	25
TOTAL		267

Q3 How often do you walk to a destination in a week?

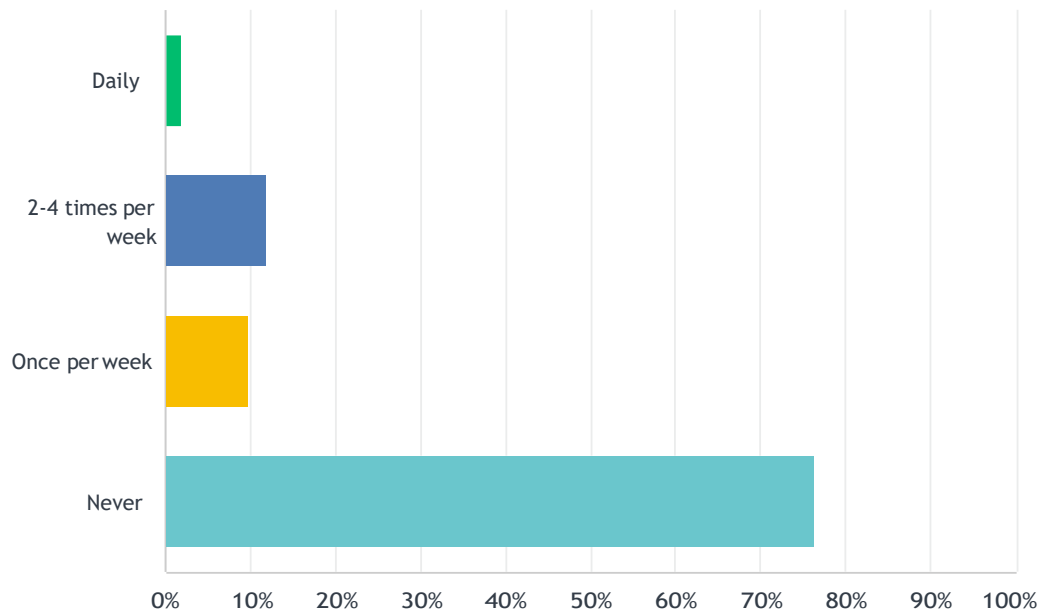
Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Daily	12.73%	34
2-4 times per week	19.10%	51
Once per week	17.60%	47
Never	50.56%	135
TOTAL		267

Q4 How often do you cycle in a week?

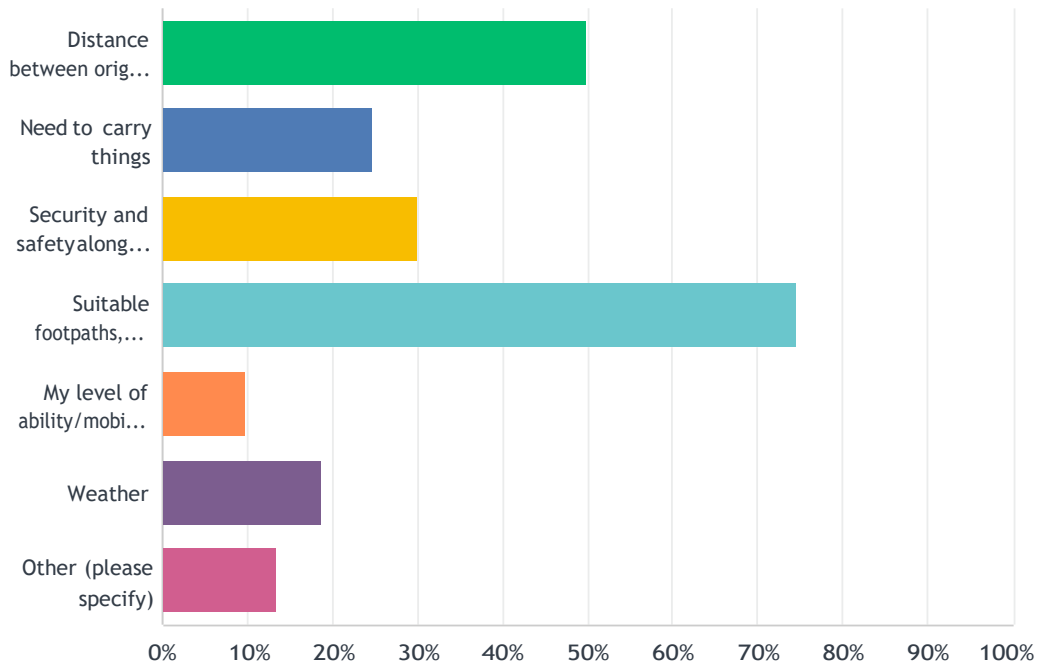
Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Daily	1.87%	5
2-4 times per week	11.99%	32
Once per week	9.74%	26
Never	76.40%	204
TOTAL		267

Q5 What factors/ barriers deter you from walking more? Please select all that apply.

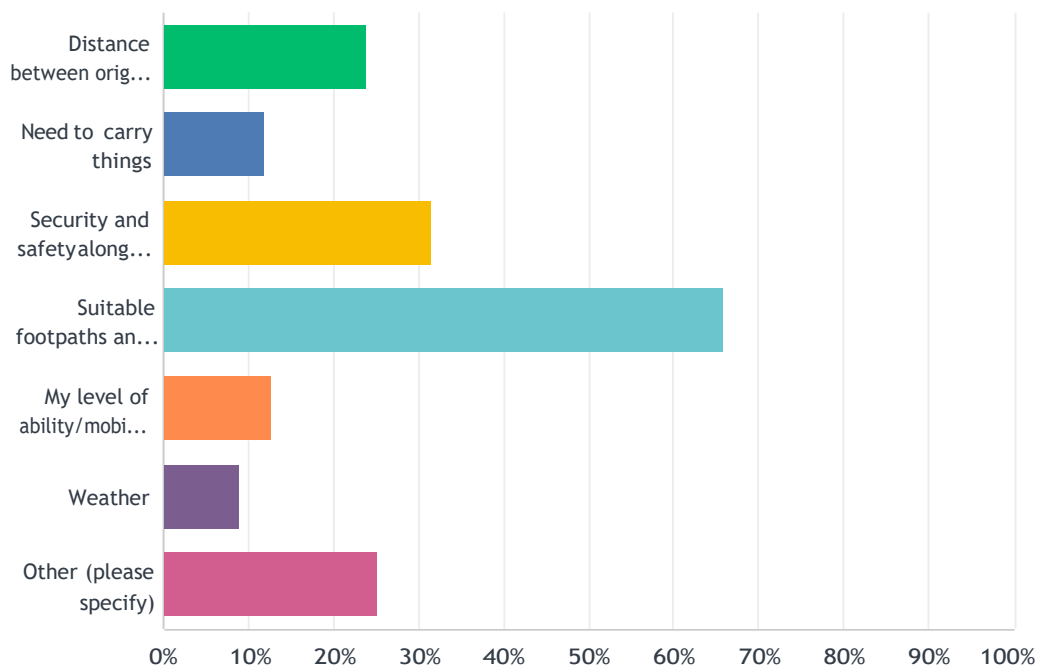
Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Distance between origin and destination	49.81%	133
Need to carry things	24.72%	66
Security and safety along the route	29.96%	80
Suitable footpaths, bicycle paths and shared paths	74.53%	199
My level of ability/mobility	9.74%	26
Weather	18.73%	50
Other (please specify)	13.48%	36
Total Respondents: 267		

Q6 What factors/ barriers deter you from cycling more? Please select all that apply.

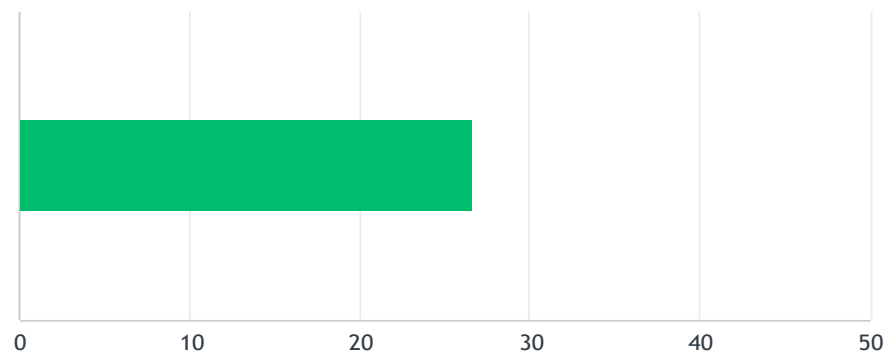
Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Distance between origin and destination	23.97%	64
Need to carry things	11.99%	32
Security and safety along the route	31.46%	84
Suitable footpaths and shared paths	65.92%	176
My level of ability/mobility	12.73%	34
Weather	8.99%	24
Other (please specify)	25.09%	67
Total Respondents: 267		

Q7 How would you rate the walkability in your local suburb?

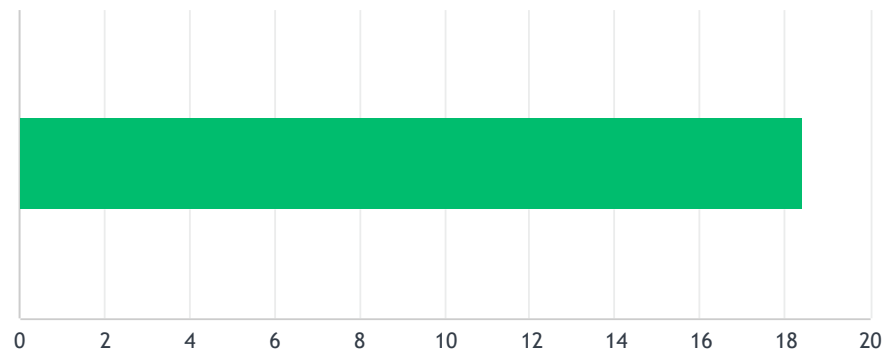
Answered: 267 Skipped: 0



ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	27	7,106	267
Total Respondents: 267			

Q8 How would you rate the cycling in your local suburb?

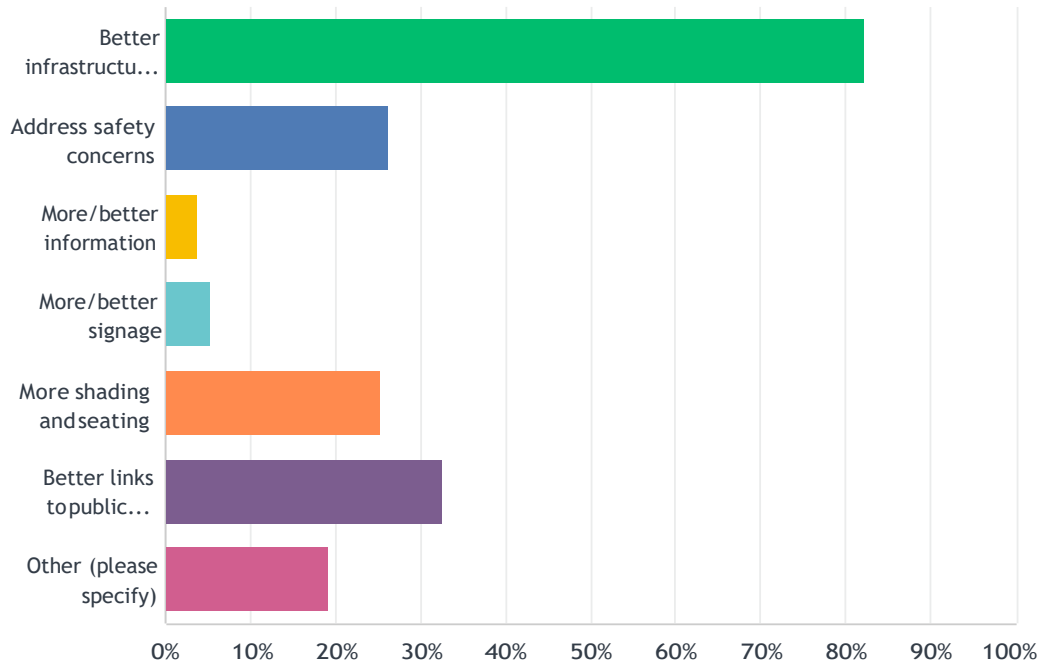
Answered: 267 Skipped: 0



ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	18	4,915	267
Total Respondents: 267			

Q9 What would encourage you to walk more? Please select all that apply.

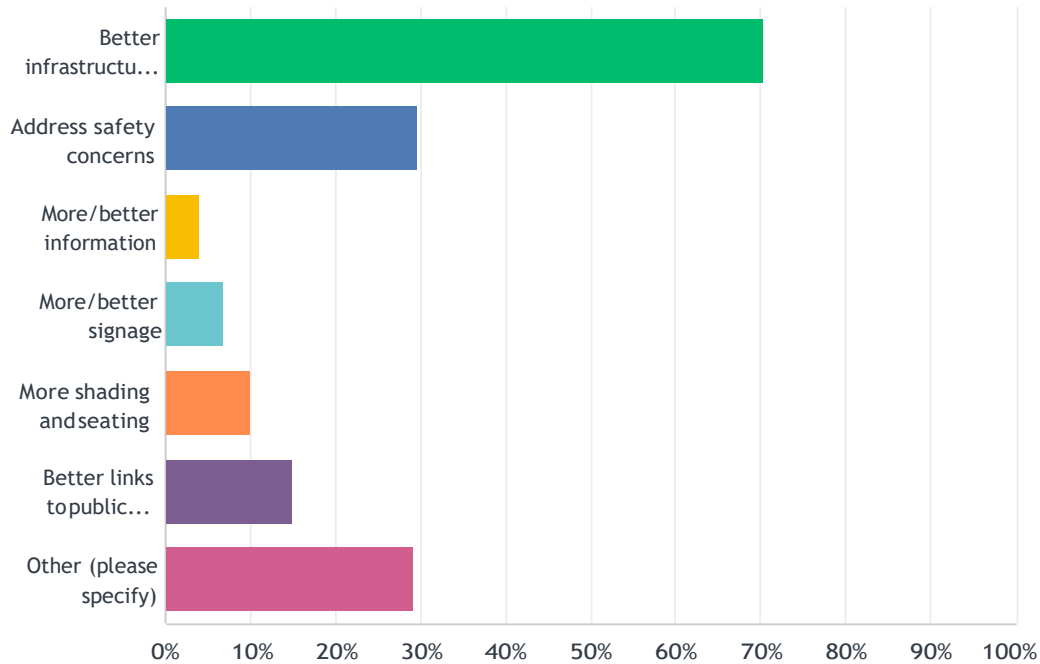
Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Better infrastructure (footpaths and walkways)	82.40%	220
Address safety concerns	26.22%	70
More/better information	3.75%	10
More/better signage	5.24%	14
More shading and seating	25.47%	68
Better links to public transport	32.58%	87
Other (please specify)	19.10%	51
Total Respondents: 267		

Q10 What would encourage you to cycle more? Please select all that apply.

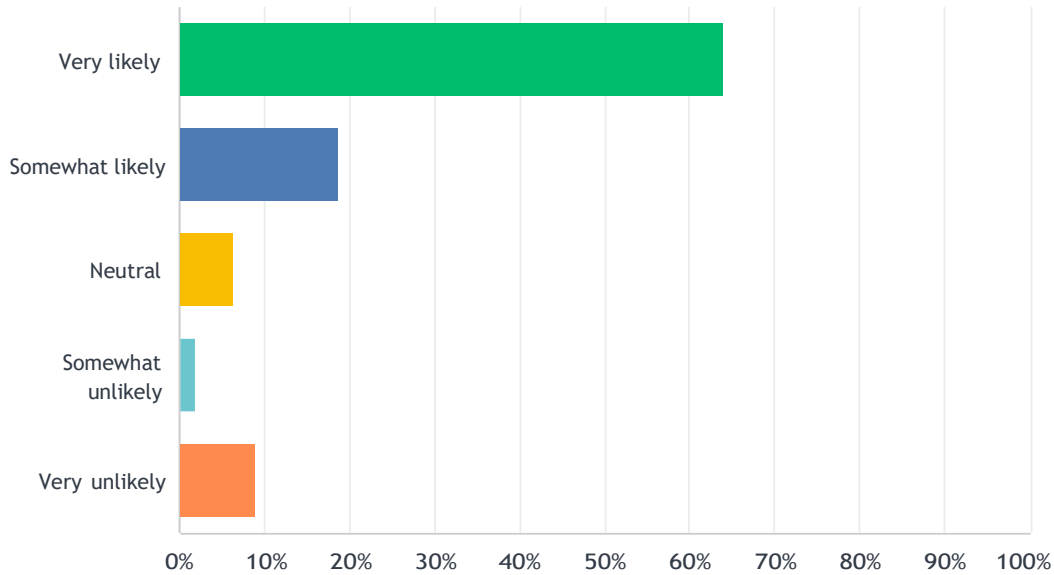
Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Better infrastructure (bike paths)	70.41%	188
Address safety concerns	29.59%	79
More/better information	4.12%	11
More/better signage	6.74%	18
More shading and seating	10.11%	27
Better links to public transport	14.98%	40
Other (please specify)	29.21%	78
Total Respondents: 267		

Q11 If the above improvements were introduced, how likely is it that you would walk or cycle more?

Answered: 267 Skipped: 0



ANSWER CHOICES	RESPONSES	
Very likely	64.04%	171
Somewhat likely	18.73%	50
Neutral	6.37%	17
Somewhat unlikely	1.87%	5
Very unlikely	8.99%	24
TOTAL		267

Q12 Council would like to know more about issues for safety, walking and cycling and your suggestions to address these issues. Please provide up to three issues you noticed when walking and cycling in the Hawkesbury LGA.

Answered: 224 Skipped: 43

ANSWER CHOICES		RESPONSES
Issue #1		100.00% 224
Issue #2		85.71% 192
Issue #3		66.96% 150

#	ISSUE #1	DATE
1	Having to walk on the street as there is a lack of safe footpaths to utilise	3/31/2023 9:00 AM
2	Cycling dangerous because of trucks	3/30/2023 7:48 PM
3	No footpaths	3/30/2023 7:18 PM
4	Large number of the roads do not even have a verge so you can move out of the way for traffic	3/30/2023 6:25 PM
5	I'm a mum with a pram and I feel very unsafe walking on the roads cause there's no footpaths	3/30/2023 5:45 PM
6	I don't cycle	3/30/2023 4:28 PM
7	Developments impact this community already severely impacted by neglect due to corruption of Bassett and Regent	3/30/2023 1:17 PM
8	Cyclists using narrow rural roads are a hazard to themselves and others	3/30/2023 1:08 PM
9	Too much traffic	3/30/2023 8:23 AM
10	Loose dogs in Bowen Mountain, aggressive and have attacked small dogs. This is my primary deterrent	3/30/2023 8:07 AM
11	Redbank walking is FABULOUS, but that can't be applied to the whole Hawkesbury	3/30/2023 7:18 AM
12	the state of the roads	3/30/2023 6:44 AM
13	No footpaths	3/30/2023 6:33 AM
14	Public Transport	3/30/2023 6:08 AM
15	No walking paths	3/30/2023 5:16 AM
16	No footpaths from Kurrajong hills to Kurrajong village	3/30/2023 5:03 AM
17	Constantly on the road	3/29/2023 9:04 PM
18	Have to walk on the road which is dangerous.	3/29/2023 5:16 PM
19	No footpath and to dangerous to ride on the road	3/29/2023 10:08 AM
20	No walking paths to wilberforce public school..kids have to walk and/cycle on the road just to get to school. Every day I see near misses. There should be at a minimum footpaths extending every direction for at least a block...	3/29/2023 9:29 AM
21	The grass along the footpath gets very long	3/29/2023 5:09 AM
22	Safety	3/29/2023 4:43 AM
23	Road safety for cyclists	3/29/2023 4:33 AM
24	Swallow Rock walking trail was so over grown and now unsafe after floods but	3/28/2023 10:55 PM

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25	No pathway	3/28/2023 10:43 PM
26	Whenever we build a bridge it MUST be public transport, bike and footpath ready. That is, it should be FUTURE-READY!	3/28/2023 6:43 PM
27	Poor condition of road shoulders	3/28/2023 5:04 PM
28	Footpath/bike path link between Kurrajong public school to Kuyper school and then into Colo High school. (Grose vale rd, Greggs rd and Redbank rd) encourage kids to walk and ride to school, unsafe at the moment	3/28/2023 3:27 PM
29	There's no footpaths or cycle paths in Glossodia	3/28/2023 3:22 PM
30	Poor road conditions	3/28/2023 2:23 PM
31	Uneven footpaths	3/28/2023 1:48 PM
32	Dangerous roads are very narrow with damaged verges	3/28/2023 1:14 PM
33	No footpaths in local area, many paths too narrow to cycle safely	3/28/2023 12:26 PM
34	Lack of safe spaces to walk and cycle- no footpaths and so walking/ cycling has to be done on a main road	3/28/2023 10:41 AM
35	Not enough footpaths	3/28/2023 8:07 AM
36	George Street has no footpath near rifle range rd	3/28/2023 6:10 AM
37	Walking along King Rd in Wilberforce, you must use the road if you have a pram. Walking with young children along this road is dangerous and impossible in some sections with a pram and one young child walking.	3/28/2023 4:40 AM
38	Walking paths uncommon	3/28/2023 3:41 AM
39	Lack of cycleways	3/27/2023 11:25 PM
40	No footpaths where I live in Wilberforce Village	3/27/2023 9:49 PM
41	Footpaths along Terrace Rd freeman's reach to improve safety and access	3/27/2023 9:49 PM
42	No cycle way or footpath at all.	3/27/2023 9:20 PM
43	no bike pathway/footpath on Comleroy/Blaxland's Rdige	3/27/2023 8:43 PM
44	No designated walkway/cycleway from Pitt Town to Windsor Rd	3/27/2023 8:07 PM
45	Local road too narrow	3/27/2023 8:06 PM
46	Lack of off-road walking/cycling/running paths that link destinations	3/27/2023 7:28 PM
47	The roads aren't suitable for bikes	3/27/2023 7:21 PM
48	lack of bike lanes or shared pathways	3/27/2023 7:19 PM
49	Not enough walkways	3/27/2023 6:14 PM
50	I noticed the roads are pathetic, with cars swerving at me when I am on my bike	3/27/2023 5:40 PM
51	Distance	3/27/2023 4:52 PM
52	It's not safe there is very unsafe drivers and unsafe people	3/27/2023 4:37 PM
53	No cycling link between Pitt Town and Windsor rd	3/27/2023 4:08 PM
54	Foreshore at Windsor, footpath repaired after floods damage and create footpath walk to the Governor Phillip Park	3/27/2023 3:20 PM
55	Bilpin needs more footpaths linking the businesses together	3/27/2023 2:14 PM
56	Lack of footpath in Greenway Cres Windsor is very dangerous	3/27/2023 1:26 PM
57	Broken footpaths, if any footpath at all	3/27/2023 1:19 PM
58	There is no pedestrian crossing from rifle range Rd onto George street	3/27/2023 1:17 PM
59	No clear walk way from my home to my local village	3/27/2023 11:30 AM
60	Bike/walking path ends at Kurmond, should continue to Kurrajong	3/27/2023 10:49 AM
61	poor condition of roads to walk on	3/27/2023 10:32 AM

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62	Lack of paths and space along main roads	3/27/2023 7:31 AM
63	North richmond bridge on road. Build underpass on richmond side to allow cyclists to get back on the road safely.	3/26/2023 8:58 PM
64	No pathways	3/26/2023 8:16 PM
65	Lack of walking and cycling paths on major roads	3/26/2023 8:15 PM
66	No path between kurrajong and and Kurmond, or between north richmond and richmond. A link between Kjong and Richmond would decrease Rd transport.	3/26/2023 6:14 PM
67	Improve Road and Footpath	3/26/2023 4:38 PM
68	The path over Yarramundi bridge goes nowhere	3/26/2023 9:24 AM
69	Pitttown rd mcgraths hill walk ways either non existent or don't link to windsor rd shared pathway	3/26/2023 9:16 AM
70	We would be better served if there were specific walking tracks signposted	3/26/2023 8:34 AM
71	The edge of the road is too uneven - they need to be fixed	3/25/2023 10:09 PM
72	There aren't enough paths, walking on the road or the nature strip is hazardous, especially for people with mobility issues.	3/25/2023 7:56 PM
73	No connection of major towns with walking and cycling paths	3/25/2023 5:21 PM
74	Need more shade trees along footpaths	3/25/2023 4:28 PM
75	Not footpaths or stable walkways in most areas.	3/25/2023 1:53 PM
76	Cyclists on roads - ie roads to narrow	3/25/2023 1:03 PM
77	Busy roads with no footpath/cycle path off side	3/25/2023 11:26 AM
78	There is not enough safe walking paths in our area.	3/25/2023 7:51 AM
79	No footpaths	3/25/2023 3:21 AM
80	No footpath between Richmond and Northo.	3/25/2023 1:40 AM
81	Bikes on the road causing issues for motorists	3/25/2023 12:12 AM
82	Cars throwing beer bottle at you while cycling	3/24/2023 10:54 PM
83	Not enough bike paths signage on roads, with dangerous drivers	3/24/2023 8:14 PM
84	Damage footpaths from floods still not fixed	3/24/2023 8:12 PM
85	Lack of footpaths	3/24/2023 5:21 PM
86	No School Crossing across bells line of road	3/24/2023 4:19 PM
87	Pedestrian crossing at Kurmond Public on Bells Line of Road. As the crossing guard isn't there at times a lot of children cross	3/24/2023 3:11 PM
88	Cars trucks and buses skimming cyclists	3/24/2023 10:53 AM
89	Trip hazards eg paving on Ham Common	3/24/2023 6:59 AM
90	There is no footpath on the residents side of ham st south windsor forcing to push a pram and kids bike along a busy road around cars and off the bumpy grass	3/24/2023 4:42 AM
91	Low hanging/over grown trees/hedges	3/23/2023 8:38 PM
92	Pot holes on roads mean that cars veer to close to side of road	3/23/2023 5:19 PM
93	Footpaths need improving	3/23/2023 7:54 AM
94	Walking path between Richmond and north Richmond	3/23/2023 6:38 AM
95	Narrow footpaths	3/22/2023 8:39 PM
96	Not a suitable shared path between North richmond and richmond	3/22/2023 6:34 PM
97	No safe pathways linking pitt town to McGraths hill	3/22/2023 3:28 PM
98	No footpaths	3/22/2023 3:10 PM
99	No appropriate bridge connecting the other side of river no point in doing footpath with an	3/22/2023 2:29 PM

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ancient outdated bridge that floods

100	There are no cycle ways on most roads, roads are narrow with increasingly large numbers of trucks. The road shoulders (often just ditches) are too rough to use even on a mountain bike. Avoiding pot holes & other road damage is very dangerous.	3/22/2023 12:41 PM
101	Footpath needed on George St, Wilberforce	3/22/2023 11:42 AM
102	Uneven footpaths	3/22/2023 10:44 AM
103	No pathway or cycleway from wilberforce to windsor	3/22/2023 7:52 AM
104	NO FOOTPATH	3/22/2023 7:44 AM
105	Wilberforce is not on the map provided	3/22/2023 6:20 AM
106	no verges on paths	3/22/2023 5:36 AM
107	Accessibility concerns for people using mobility aids.	3/22/2023 5:33 AM
108	Lack of path on Bells Line of road between Kurmond Shops and Kurrajong exposes walkers to danger from trucks - large trucks pass within cm .	3/22/2023 3:49 AM
109	Not enough footpaths, more footpaths would help you walk safety and not be on the road.	3/21/2023 6:09 PM
110	Focus on the roads first, they are dangerous and damaging	3/21/2023 10:42 AM
111	Please, please reduce the speed limit on BLOR between the district hall and servo to 60.	3/20/2023 4:48 PM
112	Heat	3/20/2023 2:32 PM
113	improved footpaths	3/20/2023 1:48 PM
114	Footpaths broken	3/20/2023 8:12 AM
115	rural roads have no lighting	3/20/2023 7:54 AM
116	Limited amount of footpaths in the area	3/18/2023 10:04 PM
117	Distance	3/18/2023 7:51 PM
118	Unsafe to walk along the side of the road	3/18/2023 8:10 AM
119	Active Transport Pathway need not follow roads.	3/18/2023 7:02 AM
120	No paths	3/18/2023 12:06 AM
121	Bells line of road. No foot path	3/17/2023 9:13 PM
122	No verge on either side of roads where it is wide enough or safe to walk	3/17/2023 8:35 PM
123	I would love for the footpath in bilpin to be extended for better access to school and centre of town	3/17/2023 2:15 PM
124	There is no designated footpath/cyclepath	3/17/2023 12:53 PM
125	In Kurrajong Village, at the end of the school days, there are a lot of children who cross Old Bells Line of Road without looking out for the many cars around the area	3/17/2023 12:37 PM
126	no shared pathways	3/17/2023 12:15 PM
127	National parks are often closed due to adverse track surfaces.	3/17/2023 12:13 PM
128	Bells Line of Road is not a safe place to either walk, cycle or run in Bilpin.	3/17/2023 12:10 PM
129	Lack of paths and bike lanes	3/17/2023 11:57 AM
130	Footpaths	3/17/2023 10:59 AM
131	there are no paths - Bells Line of Road is unsafe for walking and cycling due to heavy traffic	3/17/2023 10:57 AM
132	paths linking suburbs.	3/17/2023 8:47 AM
133	No corridor's	3/17/2023 8:29 AM
134	Footpaths often end as major roads begin, leading to a lack of walking options between suburbs	3/17/2023 6:17 AM
135	It would be fantastic to have a safe footpath all the way from Richmond to Kurrajong Heights	3/16/2023 6:15 PM

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136	main thoroughfares have limited/no walkway.	3/16/2023 8:22 AM
137	Foot paths are no existent or too narrow and covered by plants	3/16/2023 7:15 AM
138	Bells Line of road has no seperated cycle paths. So cycling is dangerous with all the trucks. A 1500mm shoulder on Bells Line of Road would alleviate alot of problems. Gives a safer zone for cycling. And a safer shoulder for vehicles would reduce crashes	3/16/2023 5:23 AM
139	Some roads in my area don't even have footpaths never mind bike paths, it's not safe on a bike. mind	3/16/2023 4:40 AM
140	No cycleway between Windsor and Richmond	3/15/2023 11:13 PM
141	Paths in poor condition fix them	3/15/2023 7:01 PM
142	No footpath on the eastern end of Ham St.	3/15/2023 3:37 PM
143	The roads are a disaster with blind corners, pot holes and speed limits that are too high for safe cycling. Also as a driver the roads are so poor that it is dangerous to drive with errant cyclists who are oblivious to the local conditions on the road.	3/15/2023 2:38 PM
144	Roads are full of pothole	3/15/2023 2:11 PM
145	Footpaths and cycle paths just end suddenly	3/15/2023 8:45 AM
146	Lack of footpaths in some areas	3/15/2023 8:28 AM
147	Bikers don't care about walkers	3/15/2023 6:16 AM
148	Safety re traffic	3/15/2023 5:44 AM
149	Speed limits need to be reduced in and around Bilpin	3/15/2023 4:52 AM
150	We have a short part in bilpin now but it's not connected to anything	3/14/2023 9:23 PM
151	Trucks speeding along BLOR causing difficulty crossing riad	3/14/2023 8:11 PM
152	We need more paths in BILPIN	3/14/2023 8:06 PM
153	Lack of obvious route for walking from Bligh park to anywhere	3/14/2023 7:46 PM
154	No safe area off the roadside	3/14/2023 7:31 PM
155	REPAIR POT HOLES	3/14/2023 6:03 PM
156	Can't even walk safely where I live in Bandon rd Vineyard	3/14/2023 5:53 PM
157	Construct More Raised Pedestrian Crossings throughout each town at key locations and reduced road width at intersection so there is less open road for pedestrians to cross.	3/14/2023 3:52 PM
158	No footpaths in Glossodia	3/14/2023 3:35 PM
159	Cyclists using Bells Line of Road, especially Bellbird Hill, are dangerous and it is only a matter of time before one, or more, are killed	3/14/2023 3:06 PM
160	Uneven ground in grass- risk of falls	3/14/2023 3:02 PM
161	Wilberforce has no footpaths. I have three children and do not feel safe going for a walk with them while they ride scooters or bikes on the road	3/14/2023 11:08 AM
162	Not enough footpaths	3/14/2023 10:08 AM
163	Uneven ground..... many trip hazards when walking. All paths require levelling	3/14/2023 9:49 AM
164	Traffic	3/13/2023 10:41 PM
165	Trucks and cars using Pitt Town Rd speed. Reduce the speed limit please.	3/13/2023 10:02 PM
166	No footpaths/ shared cycle paths in my area	3/13/2023 9:52 PM
167	Lack of decent footpaths to walk on	3/13/2023 9:25 PM
168	no lights	3/13/2023 9:21 PM
169	Bike paths	3/13/2023 6:40 PM
170	There just isn't a safe shoulder to ride or run on next to the road.	3/13/2023 6:16 PM
171	Rest area	3/13/2023 6:07 PM

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172	Safe walking/cycling path through more of Bilpin	3/13/2023 4:38 PM
173	No pedestrian access along Bells Line of Road	3/13/2023 4:13 PM
174	Public Toilet access	3/13/2023 12:41 PM
175	Better public transport more regular	3/13/2023 9:12 AM
176	Locked public toilets	3/13/2023 7:43 AM
177	Lack of footpath between Richmond and Windsor	3/12/2023 7:38 PM
178	Cycle ways on road ways	3/12/2023 5:12 PM
179	Mammoth amount of potholes	3/12/2023 5:04 PM
180	Uneven footpaths	3/12/2023 4:50 PM
181	Not enough pathways that link safe crossing for kids and families	3/12/2023 4:47 PM
182	Cycle paths runout at narrow spots making it super dangerous	3/12/2023 8:39 AM
183	Access to a footpath	3/11/2023 9:12 PM
184	Facial recognition cameras	3/11/2023 5:17 PM
185	Footpaths aren't linked or just stop or there aren't any.	3/11/2023 2:49 PM
186	Lack of lighting after dark	3/11/2023 1:09 PM
187	No safe way to cycle or walk between North Richmond and Richmond.	3/11/2023 12:41 PM
188	Lack of footpaths	3/11/2023 12:09 PM
189	To get to shopping precinct, station etc you have to walk on road because there are no footpaths.	3/11/2023 11:25 AM
190	Connectivity between Windsor, Richmond, north Richmond, Krrajong	3/11/2023 5:38 AM
191	Heat	3/10/2023 6:57 PM
192	As a person with disabilities, I don't like having to use the road to cycle. A path would be great. I'm very happy once I get to Windsor Rd and can use the cycle path down towards rouse hill, but up here in south windsor, it's not safe. Especially getting to Richmond.	3/10/2023 6:47 PM
193	Dangerous	3/10/2023 6:01 PM
194	Not enough for paths	3/10/2023 12:27 PM
195	Poor road conditions	3/10/2023 9:06 AM
196	Not enough walking paths or path stops at certain points and you have to walk on the road	3/10/2023 8:55 AM
197	Richmond is isolated, no cycle path to North Richmond or Windsor	3/10/2023 8:29 AM
198	Poorly constructed and aging footpath. Surfaces need to be level not sloping across path	3/10/2023 7:12 AM
199	No issue with safety	3/9/2023 9:40 PM
200	Unsafe roads to cycle on	3/9/2023 9:21 PM
201	No safe cycle paths from Bligh park in to Windsor or richmond	3/9/2023 9:11 PM
202	Can't ride from Bligh Park to Richmond without riding on the main road	3/9/2023 9:11 PM
203	Richmond Station at times is very unsafe	3/9/2023 8:44 PM
204	There are no foot paths at all in my suburb of Bowen Mountain	3/9/2023 7:26 PM
205	Lack of good access to bush reserves for mountain biking	3/9/2023 5:50 PM
206	Cracked broken footpaths, not maintained	3/9/2023 3:54 PM
207	Lack of footpaths	3/9/2023 3:40 PM
208	lack of set cycle ways	3/9/2023 3:40 PM
209	Youth problem	3/9/2023 12:10 PM
210	No footpaths in oakville	3/8/2023 6:33 PM

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211	Walking in my area - Maraylya - is dangerous because of the traffic. BUT thanking council we have now more signs warning about horseriding activity = walking, gives safe environment at least feeling of it.	3/8/2023 6:17 PM
212	Rubbish left on / near pathways	3/8/2023 5:37 PM
213	No concrete path from Southy Rd to Agnes Banks.	3/8/2023 2:51 PM
214	Bicycle/walking track around the RAAF - you need to link the existing track to cross Richmond Road to get to the park and continue around the RAAF. Great track to take kids or for exercise as an adult but there are parts that are too dangerous	3/8/2023 2:46 PM
215	road edges are VERY rough and dangerous	3/8/2023 12:40 PM
216	Terrible Roads	3/8/2023 8:35 AM
217	Better bus services to windsor town centre.	3/7/2023 9:33 PM
218	Lack of foot paths	3/7/2023 4:09 PM
219	Uneven footpaths and we need more wheelchair accessible parks	3/7/2023 3:56 PM
220	No safe cycle or walk path ways from Bligh Park to Windsor, Richmond, Elara or Penrith. Its taking your life into your hands	3/3/2023 8:26 AM
221	The lack of footpaths even in built up areas	3/2/2023 8:39 PM
222	Cyclists prefer pathways that are continuous and not made in the same manner as footpaths with joins constantly	3/2/2023 7:39 PM
223	Better bus services to windsor town centre.	3/2/2023 4:44 PM
224	Infrastructure: Not enough shared/separated cycling lanes and footpaths.	3/2/2023 1:39 PM
#	ISSUE #2	DATE
1	Lack of connected footpaths between points of interest (shops, park, community centre, school)	3/31/2023 9:00 AM
2	Safety	3/30/2023 7:48 PM
3	Narrow roads	3/30/2023 7:18 PM
4	There is simply no safe way to walk out of kurrajong village	3/30/2023 6:25 PM
5	There are no street lights making me feel unsafe when it's darker	3/30/2023 5:45 PM
6	I don't walk to a destination	3/30/2023 4:28 PM
7	POTHoles	3/30/2023 1:17 PM
8	State of the roads in the Hawkesbury is shocking and should be addressed first	3/30/2023 1:08 PM
9	No footpaths in Bowen Mountain. Forces walkers and cyclists onto the road and then risk of car hitting you	3/30/2023 8:07 AM
10	Cyclists using MAIN roads ie lots together 3 abreast They should not be permitted to organise these events using main thoroughfare roads designed for cars!! ie Comleroy, blaxlands ridge, etc DANGEROUS	3/30/2023 7:18 AM
11	no footpaths	3/30/2023 6:44 AM
12	No bicycle lanes	3/30/2023 6:33 AM
13	Public Transport	3/30/2023 6:08 AM
14	No allocated cycleways	3/30/2023 5:16 AM
15	Lack of public transport options that are safe to walk to from Kurrajong Hills	3/30/2023 5:03 AM
16	Drivers dodging potholes	3/29/2023 9:04 PM
17	Blind corners, make it even more dangerous	3/29/2023 5:16 PM
18	Windsor Rd is only 3 km from home but there is no safe way to get to that pushbike lane	3/29/2023 10:08 AM
19	Uneven footpaths due to no upkeep..	3/29/2023 9:29 AM
20	Too dangerous to ride	3/29/2023 5:09 AM

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21	Seating and shade	3/29/2023 4:43 AM
22	Width and smoothness of roads and cycleways	3/29/2023 4:33 AM
23	Paths near Ebenezer school are covered in water after rain.	3/28/2023 10:55 PM
24	Dangerous with cars	3/28/2023 10:43 PM
25	Local culture is the most hostile against cyclists that I have ever seen in any place I have ever lived, and I've lived in many places. Community awareness about sharing the road is CRITICAL because the hatred and actual death threats I've seen online against cyclists is completely unacceptable.	3/28/2023 6:43 PM
26	Too much vegetation on road shoulders	3/28/2023 5:04 PM
27	Clear vegetation back from the road to improve visibility and safety for cyclists and walkers along Greggs Rd/Redbank road	3/28/2023 3:27 PM
28	The roads are in very poor condition	3/28/2023 3:22 PM
29	Poorly maintained verge	3/28/2023 2:23 PM
30	Lack of footpaths outside of high traffic areas	3/28/2023 1:48 PM
31	Not enough suitable paths for walking or riding	3/28/2023 1:14 PM
32	No safe cycling paths for families with children	3/28/2023 12:26 PM
33	Lack of well lit paths to walk after work	3/28/2023 10:41 AM
34	Poor lighting	3/28/2023 8:07 AM
35	You need to cross rifle range rd 3 times to stay on the footpath as a roundabout has not been laid out properly	3/28/2023 6:10 AM
36	No footpaths for kids to walk and ride to school in wilberforce, forcing kids to walk on the road.	3/28/2023 4:40 AM
37	Road quality is poor in area	3/28/2023 3:41 AM
38	Potholes	3/27/2023 11:25 PM
39	Improve quality of road edging to enable bike riders to move closer to the gutters and not veer over into traffic	3/27/2023 9:49 PM
40	Too many trucks and driving way too fast	3/27/2023 9:20 PM
41	speeding traffic	3/27/2023 8:43 PM
42	Too much traffic on Pitt Town Rd going too fast , 80k should be dropped to 70k	3/27/2023 8:07 PM
43	no footpath	3/27/2023 8:06 PM
44	The roads aren't suitable for walking	3/27/2023 7:21 PM
45	very limited shading along paths	3/27/2023 7:19 PM
46	Heavy transport	3/27/2023 6:14 PM
47	Accessibility with children	3/27/2023 4:52 PM
48	The walks can be anywhere from an hour plus just to get to the destination which doesn't then include you having to walk back	3/27/2023 4:37 PM
49	No cycle/walk loop path b/t Windsor Bridge and North Richmond bridge. Like Penrith has	3/27/2023 4:08 PM
50	Open parking area at Deerubin Park, always locked	3/27/2023 3:20 PM
51	Bilpin needs at least two pedestrian crossings, people are forced to run across the road in high traffic. Someone is going to get hurt or killed	3/27/2023 2:14 PM
52	Potholes & the atrocious state of our roads	3/27/2023 1:19 PM
53	There are no walking paths despite there being a bus stop within 100m of my driveway so people walk along the median strip which causes issues for residents trying to get in and out of their driveways especially during peak hour. With cars picking up speed from the light, people coming in and out of the child care centre and vet along with cyclist and pedestrian traffic there is a real need for a foot path	3/27/2023 1:17 PM

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54	No dedicated bike lanes on Bells Line of Rd	3/27/2023 10:49 AM
55	overgrown pathways	3/27/2023 10:32 AM
56	Lack of safe crossings along main roads	3/27/2023 7:31 AM
57	No off road cycle route from north richmond to richmond. Work with local farmers to create routes.	3/26/2023 8:58 PM
58	Safety	3/26/2023 8:16 PM
59	Little or poor condition of verge for walking or cycling in the absence of paths	3/26/2023 8:15 PM
60	No dedicated recreational bike riding facilities or tracks. Especially mountain biking.	3/26/2023 6:14 PM
61	make Flood free Hawkesbury	3/26/2023 4:38 PM
62	No pathway to colbee park	3/26/2023 9:16 AM
63	Potholes and dangerous shared space	3/26/2023 8:34 AM
64	It would help to have designated cycle lanes	3/25/2023 10:09 PM
65	People cycling on the few paths we have is dangerous.	3/25/2023 7:56 PM
66	Need more foot paths	3/25/2023 4:28 PM
67	No footpaths	3/25/2023 1:03 PM
68	There should be a bike track so you don't have to put your safety at risk and ride on the road	3/25/2023 7:51 AM
69	No curb and guttering	3/25/2023 3:21 AM
70	Bad paths Trip hazards	3/25/2023 12:12 AM
71	Cars driving behind cyclist beeping horn as no safe room to get of the road to let car past	3/24/2023 10:54 PM
72	Trip hazards uneven concrete for walkers and runners	3/24/2023 8:14 PM
73	Damaged roads ignored	3/24/2023 8:12 PM
74	Poor road conditions	3/24/2023 5:21 PM
75	No safe footpath crossing from school to path on bells line of road	3/24/2023 4:19 PM
76	Vehicles not giving correct distancing esp BLOR	3/24/2023 10:53 AM
77	Narrow roads eg Springwood Rd	3/24/2023 6:59 AM
78	There is no footpaths in the berger rd and surrounding areas of south windsor except for the big bike path, you still need to try get to that path safely somehow without a footpath.	3/24/2023 4:42 AM
79	Footpaths ending suddenly/not connecting	3/23/2023 8:38 PM
80	No footpaths in many areas	3/23/2023 5:19 PM
81	Seating - additional seat benches needed along footpaths	3/23/2023 7:54 AM
82	Walking path further than Kurmond	3/23/2023 6:38 AM
83	Lighting	3/22/2023 8:39 PM
84	Not enough seating, shelters, shade	3/22/2023 6:34 PM
85	No pedestrian crossings	3/22/2023 3:10 PM
86	Poor roads dangerous for walking near and cycling near high risk of accidents	3/22/2023 2:29 PM
87	There are no footpaths in our area and the road shoulders are too rough & badly maintained to walk on without twisting an ankle. Mostly big holes and waist high grass so difficult to find a place to step onto to let traffic pass.	3/22/2023 12:41 PM
88	Disabled parking needed in Macquarie Park near existing footpath/playground	3/22/2023 11:42 AM
89	Potholes	3/22/2023 10:44 AM
90	Truck movemet	3/22/2023 7:44 AM
91	Don't like walking with my dog on the road	3/22/2023 6:20 AM

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92	paths in disrepair	3/22/2023 5:36 AM
93	Some new walking tracks like in blue mountains and even Cumberland state forest would be a great addition and attraction	3/22/2023 5:33 AM
94	Cycle paths for riding with children.	3/21/2023 6:09 PM
95	There is very minimal interest in walking or cycle compared to driving	3/21/2023 10:42 AM
96	Please extend pathway to at least the servo	3/20/2023 4:48 PM
97	repairs to footpaths	3/20/2023 1:48 PM
98	rural roads mean no side areas to walk on safely	3/20/2023 7:54 AM
99	Limited Public transport offered	3/18/2023 10:04 PM
100	Weather (particularly heat/lack of shade)	3/18/2023 7:51 PM
101	No lighting to walk safely at dawn or dusk	3/18/2023 8:10 AM
102	No seats	3/18/2023 12:06 AM
103	Poor maintenance of roads and verges	3/17/2023 8:35 PM
104	The roads here at 80km and very narrow	3/17/2023 12:53 PM
105	It would be great to have more connected pathways throughout Kurrajong Village. Often times you are walking on the road.	3/17/2023 12:37 PM
106	roads are in extremely poor condition	3/17/2023 12:15 PM
107	Every pathway invites weed incursion. Please, no more tracks.	3/17/2023 12:13 PM
108	The amount of trucks driving in Bells Line of Road and the speeds at which they drive	3/17/2023 12:10 PM
109	Speed limit of main road	3/17/2023 11:57 AM
110	forced to walk on side of road	3/17/2023 10:57 AM
111	cycle way to penrith	3/17/2023 8:47 AM
112	Too far to walk or cycle to anything	3/17/2023 8:29 AM
113	No dedicated cycle paths	3/17/2023 6:17 AM
114	Too much heavy traffic, especially trucks	3/16/2023 6:15 PM
115	Having recently moved here, don't feel same level of safety	3/16/2023 7:15 AM
116	Walking in Bilpin we now have a short length of footpath which is great. Needs to be extended east & west to allow walking to the shops, orchards, petrol station mini mart etc	3/16/2023 5:23 AM
117	More pedestrian crossings around the town at windsor	3/15/2023 11:13 PM
118	Paths lead to nowhere not linked	3/15/2023 7:01 PM
119	No safe walking / Cycling path between Windsor and Richmond (Hawksbury Valley Way)	3/15/2023 3:37 PM
120	There are not footpaths so it is unsafe to walk. I would love to walk more, but the long side grass and shitty road edges make this impossible	3/15/2023 2:38 PM
121	Footpaths are uneven	3/15/2023 2:11 PM
122	Most places don't even have safe areas to walk	3/15/2023 8:45 AM
123	Lack of cycle ways that connect without having to go on roads	3/15/2023 8:28 AM
124	Safety security in parks or other areas	3/15/2023 6:16 AM
125	No footpaths in wilberforce	3/15/2023 5:44 AM
126	The footpath in Bilpin needs to be extended	3/15/2023 4:52 AM
127	Narrow roads in my area. It's not safe to walk or cycle on the road	3/14/2023 9:23 PM
128	Lack if safe pathways	3/14/2023 8:11 PM
129	Roads are so busy with cars and trucks that it is not safe to walk or cycle	3/14/2023 7:46 PM
130	Dark streets	3/14/2023 7:31 PM

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131	Provide Footpaths	3/14/2023 6:03 PM
132	No park to walk to, just busy Windsor Rd	3/14/2023 5:53 PM
133	Better quality paths that are a min 2m wide, level ground and minimise trip hazards from breaks in concrete.	3/14/2023 3:52 PM
134	Poor road conditions	3/14/2023 3:35 PM
135	More walking tracks on the 'lowlands'	3/14/2023 3:06 PM
136	Not much room- walking on the road	3/14/2023 3:02 PM
137	The river walk at Windsor has fallen apart. I cannot get to the bridge without walking on the road. I'd love a walking loop like they have at the Nepean River walk (this would require a second bridge).	3/14/2023 11:08 AM
138	If there isn't a footpath I would expect the road or council strip to be in good condition but a lot of times there are potholes or overgrown	3/14/2023 10:08 AM
139	Can't cycle due to having to divert onto roads and dodge traffic. Need dedicated cycle ways. Unsafe for kids to ride ahead or behind parents.	3/14/2023 9:49 AM
140	Bad roads	3/13/2023 10:41 PM
141	The side of the road side is currently not maintained for people to use to walk safely	3/13/2023 10:02 PM
142	No where to safely ride or walk	3/13/2023 9:52 PM
143	Lack of decent footpaths to walk on	3/13/2023 9:25 PM
144	no path	3/13/2023 9:21 PM
145	Fixing Pot holes and road conditions	3/13/2023 6:40 PM
146	Areas where the footpath simply stops and the only alternative is the unsafe road.	3/13/2023 6:16 PM
147	Safety	3/13/2023 6:07 PM
148	Shade (particularly at bus stops)	3/13/2023 4:38 PM
149	No shoulder to ride in the dirt	3/13/2023 4:13 PM
150	Access to drinking water taps	3/13/2023 12:41 PM
151	Better roads FIX THE POT HOLES	3/13/2023 9:12 AM
152	Nowhere to walk or ride on George Street from Bligh Park to Windsor	3/13/2023 7:43 AM
153	Poor roads on the Richmond lowlands	3/12/2023 7:38 PM
154	Cycle ways in road ways	3/12/2023 5:12 PM
155	No walkways in are	3/12/2023 5:04 PM
156	Little shade	3/12/2023 4:50 PM
157	No safe crossing to McDonald's, the kids are running in front of cars,	3/12/2023 4:47 PM
158	No walking paths where I live. Traffic is too busy	3/12/2023 8:39 AM
159	Safer ability to cross a main thoroughfare	3/11/2023 9:12 PM
160	15 minute city	3/11/2023 5:17 PM
161	Lack of safety with traffic and minimal paths for walking/cycling	3/11/2023 2:49 PM
162	No safe cycleways to get around suburban Hawkesbury areas.	3/11/2023 12:41 PM
163	Potholes on roadways	3/11/2023 12:09 PM
164	Where footpaths are available they are not consistent meaning they stop and your back to road walking or riding or you have to cross the road to use the the next section of pathway	3/11/2023 11:25 AM
165	More shaded seating would help with rest stops.	3/10/2023 6:47 PM
166	Roads too narrow	3/10/2023 6:01 PM
167	Uneven paths	3/10/2023 12:27 PM
168	Lack of safe cycling path	3/10/2023 9:06 AM

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169	Too much traffic in the area	3/10/2023 8:55 AM
170	More pedestrian crossings eg Jersey Street Richmond	3/10/2023 7:12 AM
171	Footpaths or bike paths. Roads not safe to walk	3/9/2023 9:40 PM
172	Nothing connects the main suburbs to town centres	3/9/2023 9:11 PM
173	Richmond Park can be unsafe at various times	3/9/2023 8:44 PM
174	A lot of people do come to Bowen Mountain for cycling, but feel like they do not have enough protection from cars	3/9/2023 7:26 PM
175	Overgrown grass and trees overhanging or lack of shade	3/9/2023 3:54 PM
176	Speed of cars	3/9/2023 3:40 PM
177	Uneven pathways	3/9/2023 12:10 PM
178	Potholes are deadly to cars, let alone bikes in Oakville	3/8/2023 6:33 PM
179	Where there are cycling paths, bicycles should stay on them! Very dangerous for all not to.	3/8/2023 6:17 PM
180	Dedicated cycle / walkway Richmond to North Richmond	3/8/2023 5:37 PM
181	Cyclists using the main road instead of the cycleway beside road.	3/8/2023 2:51 PM
182	Bicycle/Walking track from Bensons lane doing a loop around through Richmond CBD. It is close to 5km and would be a great walk like the penrith Lakes one	3/8/2023 2:46 PM
183	Drivers are rude and arrogant	3/8/2023 12:40 PM
184	Trucks speeding	3/8/2023 8:35 AM
185	Maintenance of foot paths.	3/7/2023 9:33 PM
186	Have to walk on roads	3/7/2023 4:09 PM
187	More things for people with disabilities and adults	3/7/2023 3:56 PM
188	No seats to rest, even if wanting to wait for a bus	3/3/2023 8:26 AM
189	Lack of cycling lanes	3/2/2023 8:39 PM
190	Footpaths are uneven and regularly covered in leaves etc	3/2/2023 7:39 PM
191	Maintenance of foot paths.	3/2/2023 4:44 PM
192	Safety: Footpaths not wide enough, uneven, or not there. Bike lanes on side of road are not safe.	3/2/2023 1:39 PM
#	ISSUE #3	DATE
1	Substandard condition of existing footpaths	3/31/2023 9:00 AM
2	Linking paths	3/30/2023 7:48 PM
3	Lots and Lots of Potholes	3/30/2023 7:18 PM
4	Road lighting is minimal therefore a dedicated path off the roadway is the most safe option, which is not available	3/30/2023 6:25 PM
5	It's very hilly, there are potholes and poor roads making it very difficult to push a pram on the road cause of no footpaths	3/30/2023 5:45 PM
6	I'd like decent roads to drive on	3/30/2023 4:28 PM
7	Public transport on narrow potholes road lack of Bike paths for new bridge designs	3/30/2023 1:17 PM
8	Where there are no paths, grass is not kept mown.	3/30/2023 1:08 PM
9	People will drive to areas to walk - THAT IS OK!	3/30/2023 7:18 AM
10	lack of continued maintenance , eg. long grass where there are no footpaths eg, Grose Vale Rd	3/30/2023 6:44 AM
11	Too many cars on single lane roads	3/30/2023 6:33 AM
12	Public transport	3/30/2023 6:08 AM

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13	Uneven paths	3/30/2023 5:16 AM
14	Lack of linked modes if transport	3/30/2023 5:03 AM
15	As there are no footpath, the edges of the road are sometimes very slippery, and the surface is uneven, broken and with glass	3/29/2023 5:16 PM
16	Roads full of pot holes and cars swerving to miss them, also swerving to miss them when riding a pushbike	3/29/2023 10:08 AM
17	Overgrown access routes due to lack of maintenance.	3/29/2023 9:29 AM
18	Transport and Accessibility	3/29/2023 4:43 AM
19	Linking up walk ways and parks safely	3/29/2023 4:33 AM
20	Between Wilberforce shopping centre and butterfly farm is disgraceful. Foot path needs to be edged and tidied up!	3/28/2023 10:55 PM
21	No crossing	3/28/2023 10:43 PM
22	A public bus service that actually is useful to us and comprehensively covers the entire area will get more people on foot and on bikes. They just can't count on buses here.	3/28/2023 6:43 PM
23	Not many places to park safely and go for a walk	3/28/2023 5:04 PM
24	Cycle path from Kurrajong village to Bells Line of Rd and down to Kurmond School	3/28/2023 3:27 PM
25	Dogs that aren't fenced in worry me!	3/28/2023 3:22 PM
26	Speeding	3/28/2023 2:23 PM
27	Many roads and corners are obscured and dangerous on bike, walking or by car	3/28/2023 1:14 PM
28	Poorly maintained fire trails and mtb paths not allowing access to full route options	3/28/2023 12:26 PM
29	Poor connectivity between townships and suburbs	3/28/2023 10:41 AM
30	Signage	3/28/2023 8:07 AM
31	No footpaths in wilberforce leading to the park. This again causes kids to walk on the road.	3/28/2023 4:40 AM
32	Uneven surfaces	3/28/2023 3:41 AM
33	Poor maintenance of the road	3/27/2023 9:20 PM
34	Not enough busses from Pitt town to Mulgrave station early ie starting at 6:30 and stopping along Pitt Town Rd	3/27/2023 8:07 PM
35	overgrown verges	3/27/2023 8:06 PM
36	The roads are hardly suitable for driving on	3/27/2023 7:21 PM
37	Cross walks	3/27/2023 6:14 PM
38	Shelter	3/27/2023 4:52 PM
39	Busses should be a thing not pathways	3/27/2023 4:37 PM
40	Better cycling network in Windsor	3/27/2023 4:08 PM
41	Repair damaged roads in Cornwallis & Lowlands	3/27/2023 3:20 PM
42	Bilpin needs a bike lane, bikes are forced to ride on the road	3/27/2023 2:14 PM
43	Unkept trees and gardens with low hanging branches obstructing paths (if any) and causing danger to our low vision members of the community	3/27/2023 1:19 PM
44	We can't safely walk to the shop, park or dog park from our house as the terrain dosent allow us to use a pram and the risk of walking on the median or road is not worth it. As a parent is becomes an anxiety filled trip instead of enjoyable family time	3/27/2023 1:17 PM
45	Other roads not safe due to width and potholes	3/27/2023 10:49 AM
46	unmowed council maintained median strips	3/27/2023 10:32 AM
47	Large trucks going too fast with small space available.	3/27/2023 7:31 AM
48	No push to support cycling. More safe off road routes will bring more toursim.	3/26/2023 8:58 PM

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49	Lighting	3/26/2023 8:16 PM
50	Poor road conditions	3/26/2023 8:15 PM
51	No place to safely store bikes at commercial businesses.	3/26/2023 6:14 PM
52	Flood	3/26/2023 4:38 PM
53	Pathway to Lynwood golf club and Pitttown	3/26/2023 9:16 AM
54	Windsor Downs Nature Reserve could be far better utilised but is a mess	3/26/2023 8:34 AM
55	Riding over the Richmond Bridge is unsafe - needs a cycle lane	3/25/2023 10:09 PM
56	Cycling on a designated path, that isn't separate to the road is a hazard.	3/25/2023 7:56 PM
57	Need more trees and less grass	3/25/2023 4:28 PM
58	Poor condition of walkways	3/25/2023 1:03 PM
59	Why can we have paths that link our towns so you don't have to be worried about being hit by a car while walking	3/25/2023 7:51 AM
60	No safety	3/25/2023 3:21 AM
61	No footpaths	3/25/2023 12:12 AM
62	Pathways end and no where to continue when in wheelchair	3/24/2023 10:54 PM
63	Richmond public school crossing, cars don't stop, upgrade to flashing lights	3/24/2023 8:14 PM
64	Council work staff hiding and avoiding work duties	3/24/2023 8:12 PM
65	Lack of safe ways to cross busy roads	3/24/2023 5:21 PM
66	When walking across major intersection not sufficient time for green lights	3/24/2023 10:53 AM
67	Lack of safe walking all way from Richmond CBD to Windsor CBD	3/24/2023 6:59 AM
68	Should be a pedestrian crossing surrounding the netball courts	3/24/2023 4:42 AM
69	Concrete with large gaps between them	3/23/2023 8:38 PM
70	Lack of parking at national park access points	3/23/2023 5:19 PM
71	No enough security for leaving bikes in shopping centres.	3/22/2023 6:34 PM
72	Nowhere off the road to walk due to scrub/ long grass	3/22/2023 3:10 PM
73	Lack of maintenance programs to keep maintaining so if we're introduced they'd be a mess in no time	3/22/2023 2:29 PM
74	What is the point of having short, nice shared bike/walking paths that you have to drive to use. We need bike paths that could also be used by walkers beside all roads so walking and cycling can be used as a safe alternative for shopping & transport instead of cars and irregular buses.	3/22/2023 12:41 PM
75	Need new footpaths in some areas	3/22/2023 10:44 AM
76	Too dangerous for anyone to walk or cycle along the only route to our major centre	3/22/2023 7:44 AM
77	Leisure walks along nice avenues and parks not busy roads. Busy roads need plenty of signage and barriers from Rd	3/22/2023 6:20 AM
78	no path linkages	3/22/2023 5:36 AM
79	Parking of cars on corners and t-sections whilst not illegal it makes visibility hard for road users and then accidents with pedestrians/cyclists are more likely.	3/21/2023 6:09 PM
80	Frankly, the trucks on BLOR have become a liability	3/20/2023 4:48 PM
81	lack of bike ways means they drive on rural roads and sometimes cause delays for vehicles	3/20/2023 7:54 AM
82	Poor driving (eg. cars blowing through pedestrian crossings when pedestrians are about to cross)	3/18/2023 7:51 PM
83	Unsafe to walk on side of road I. Long grass due to snakes	3/18/2023 8:10 AM
84	More bus stops	3/18/2023 12:06 AM

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85	Terrain is too steep	3/17/2023 8:35 PM
86	There are no safe places to cross the roads	3/17/2023 12:53 PM
87	road widths discourage cycling	3/17/2023 12:15 PM
88	The new footpath in Bilpin is for the benefit of a tiny number of people.	3/17/2023 12:13 PM
89	No fitness facilities in the Bilpin area	3/17/2023 12:10 PM
90	Unsafe use of road by large vehicles specifically trucks	3/17/2023 11:57 AM
91	forced to share small country road with enormous trucks that treat it like a highway	3/17/2023 10:57 AM
92	Limited recreational cycling locations (gravel/MTB trails)	3/17/2023 6:17 AM
93	No notice taken by drivers of BLOR speed limits, need limiting road furniture	3/16/2023 6:15 PM
94	Too much of road rush to feel safe to cycle.	3/16/2023 7:15 AM
95	Missing link cycleway from Percival st to the RAAF base cycleway	3/15/2023 11:13 PM
96	Roads are not suitable for cars and bikes together	3/15/2023 7:01 PM
97	We live in Tuckerman Rd Ebenezer. The roads are so so dangerous for walkers and cyclists. It would be a dream if this was fixed and we had cycle ways.	3/15/2023 2:38 PM
98	Not a lot of lighting along the ones we have	3/15/2023 2:11 PM
99	Not enough secure locations to leave bikes while shopping	3/15/2023 8:28 AM
100	Dogs getting out of properties	3/15/2023 6:16 AM
101	There are heavy trucks in our area. It's not safe to walk or ride unless on a designated path	3/14/2023 9:23 PM
102	Loose dogs	3/14/2023 7:31 PM
103	Improved public transport & information on service provided	3/14/2023 6:03 PM
104	To walk in quiet streets, there is the fear of dogs	3/14/2023 5:53 PM
105	Many cycleways and footpaths are limited to recreational purposes like parks - but more should be designed to connect everyday activities such as direct paths/cycleways between schools, shops, public transport and large residential areas.	3/14/2023 3:52 PM
106	Not even a safe walkway at Freemans Reach public school on Kurmond Road at the start of the school on the left	3/14/2023 3:35 PM
107	Make cycle ways usable for cyclists. You build them (eg Kurmond to Colo) and they are not used	3/14/2023 3:06 PM
108	Lighting- for sections where there's no footpath	3/14/2023 3:02 PM
109	Not enough footpaths connecting to other footpaths. They stop, you walk off a path then in a couple of kilometres the footpath springs up again. It's illogical.	3/14/2023 10:08 AM
110	Crazy drivers	3/13/2023 10:41 PM
111	Put some roundabouts along Pitt Town Rd at Saunders Rd and Glebe Rd to slow the traffic down	3/13/2023 10:02 PM
112	Lack of decent footpaths to walk on	3/13/2023 9:25 PM
113	no rail	3/13/2023 9:21 PM
114	Trucks travelling at 80km within 1m of the bike	3/13/2023 4:13 PM
115	Shade locations including weather proof shelters	3/13/2023 12:41 PM
116	No foot paths	3/13/2023 9:12 AM
117	Potholes everywhere, so dangerous	3/13/2023 7:43 AM
118	Lack of footpath between East Richmond behind the RAAF	3/12/2023 7:38 PM
119	Cycle ways on road ways	3/12/2023 5:12 PM
120	Bus not available after certain times in Hawkesbury	3/12/2023 5:04 PM
121	Poorly lit areas	3/12/2023 4:50 PM

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122	Traffic is bad causing road rage and speeding	3/12/2023 4:47 PM
123	Parks like Phues Lagoon are not connected by path to anywhere	3/12/2023 8:39 AM
124	Improving lighting for safety	3/11/2023 9:12 PM
125	You all are traitors to yourself	3/11/2023 5:17 PM
126	Driver road rage/ lack of care for pedestrians or cyclist. Places away from cars is ideal especially when teaching kids road safety	3/11/2023 2:49 PM
127	What limited cycle/walking paths there are are not linked.	3/11/2023 12:41 PM
128	Insufficient lighting	3/11/2023 12:09 PM
129	Local playgrounds need some low lighting to discourage undesirable adult behaviours such as drug dealing and use or consuming alcohol	3/11/2023 11:25 AM
130	Lighting to make the whole of windsor and south windsor safer at night or dusk.	3/10/2023 6:47 PM
131	No where to walk to	3/10/2023 6:01 PM
132	Development - infrastructure should be in place on roads/footpaths before adding housing	3/10/2023 8:55 AM
133	Width. Some of the older paths are too narrow. Hard when using stroller and walking with children	3/10/2023 7:12 AM
134	Signage to various towns with distances	3/9/2023 9:40 PM
135	Weeds and broken glass on existing walkways	3/9/2023 9:11 PM
136	Windsor station can be unsafe	3/9/2023 8:44 PM
137	not enough trees along footpaths to provide shade when walking especially during hot summer months. Love what is done in South Windsor and Richmond with trees	3/9/2023 3:54 PM
138	condition of the roads	3/9/2023 3:40 PM
139	oakville no t even drivable at the moment due to the excessive amount of traffic impediments due to developers having roadworks	3/8/2023 6:33 PM
140	Pedestrians not using reflecting materials / "things", cars not keeping lights on	3/8/2023 6:17 PM
141	Dedicated cycle / walkway Richmond to Windsor	3/8/2023 5:37 PM
142	Kerb and Channeling in the old part of Agnes Banks pre bylaw changes.	3/8/2023 2:51 PM
143	Bicycle/Walking track around Windsor through Deerubin. Great area for another walking track	3/8/2023 2:46 PM
144	Public Water access	3/8/2023 12:40 PM
145	No footpaths	3/8/2023 8:35 AM
146	Shade and seating.	3/7/2023 9:33 PM
147	Not enough shade, so its too hot	3/3/2023 8:26 AM
148	Lack of cycling lane/path interconnectedness	3/2/2023 8:39 PM
149	Shade and seating.	3/2/2023 4:44 PM
150	Heat: need trees along pathways for shade and cooling.	3/2/2023 1:39 PM

Q13 Please provide any further suggestions to improve the walking and cycling network or infrastructure in the Hawkesbury LGA.

Answered: 164 Skipped: 103

#	RESPONSES	DATE
1	We don't utilise the local sport field as much as we would like as it is not safe to walk my children on the road to get to the sports field/park. My children should be able to safely walk or ride their bikes, but instead we don't as this currently requires them to walk/ride on the road. I walk my children to school most days. It is difficult to push a pram and supervise my other children when having to walk on the road given the lack of footpaths and connected footpaths in my area. That state of the footpath outside of Kurrajong Public School is appalling. It is too narrow and in such a poor state that it makes it very difficult to push a pram along. It is unsafe when all the kids leave school and many often walk in the gutter/on the road in this section as its too narrow. I often see kids trip over given the extensive trip hazards in this section of the footpath.	3/31/2023 9:00 AM
2	Would love linked cycleways ie more than 20kms long. Unsafe to cycle on roads due to speeding trucks.	3/30/2023 7:48 PM
3	Roads need massive improvements and need to be wider with footpaths	3/30/2023 7:18 PM
4	Looking forward to seeing the kurmond to kurrjaong link footpath.	3/30/2023 6:25 PM
5	There needs to be more footpaths through Kurrajong especially on Old Bells Line of Road. We like to walk from the memorial park in the village down to McMahon's park and it's very unsafe on that road with speeding drivers and not being able to see around corners	3/30/2023 5:45 PM
6	This seems to be directed at people around Windsor/Richmond. On this side of the river we have nothing. Our roads are crap. We've been forgotten. We don't count. We pay our rates like everybody else and we get nothing. Just crappy roads that destroy our vehicles, which have to be roadworthy. FIX THE ROADS FIRST.	3/30/2023 4:28 PM
7	The neglect of Hawkesbury Council to remedy issue on council roads is incredible then again moat major party councillors push developments time after time. Why is this ? Don't tell me councillor affiliated with major parties are funded by developers again ?	3/30/2023 1:17 PM
8	Less traffic	3/30/2023 8:23 AM
9	- Rangers to impound unsecured dogs - Build footpaths in Bowen Mountain - Free local tour guides for walking and cycling, advertise certain times of day and residents can join	3/30/2023 8:07 AM
10	Cyclists do not use the current purpose built track alongside BLOR - they hold up traffic! There are a multitude of things to do on acreage properties. They HAVE green space. To be honest, the roads are in such a bad state, most people would not feel safe walking or cycling on most of them for fear of getting skittles by a car thrown off course	3/30/2023 7:18 AM
11	continued maintenance	3/30/2023 6:44 AM
12	Upgrade the roads. We have a gazillion houses being constructed in North Richmond and no upgrades to the roads or infrastructure built decades ago	3/30/2023 6:33 AM
13	It's actually not about the walking or cycling paths. We need better public transport options. The Hawkesbury is so spread out, and has such limited transport options.	3/30/2023 6:08 AM
14	Fix the whole of infrastructure It all works together Potholes make Drivers use road unsafely thus if cyclists are near moving cars they are at risk Too many near misses No pathways I use the road putting myself at risk of being hit It's not rocket science	3/30/2023 5:16 AM
15	Better access in KHills to bus stops Better access to Kurrajong village along BLOR east of K hills	3/30/2023 5:03 AM
16	The Hawkesbury LGA is a large area with many communities. We have mountains, rivers and flat ground to name a few. How can one survey like this be a true reflection on individual community needs? I love and understand community engagement but unless it has real outcomes it is pointless.	3/29/2023 9:28 PM
17	Would love paths in Ebenezer.	3/29/2023 9:04 PM

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18	There desperately needs to be a walkway/cycle path from Mount Irvine Road in Bilpin, up to the Kurrajong Heights bowling club. It would be awesome if it actually linked to the walkway at Kurmond and also continued down bells line to the botanical Gardens.	3/29/2023 5:16 PM
19	Fixing boundary Rd, there is nowhere to ride or walk without taking your life in your hands. For such a major Rd it is a disgrace. There is no safe way to get to Windsor Rd from any of the areas around there	3/29/2023 10:08 AM
20	Please address access in and around Wilberforce public school. More than 200 students each day in and out with a footpath that runs for about 100m on only 2 roads... More footpaths are needed urgently so kids can safely arrive to school. Cycleway extending from Windsor bridge to Wilberforce....that one is a long shot though!	3/29/2023 9:29 AM
21	Bike paths along East Kurrajong Rd, Comleroy Rd and Grose Vale Rd. There is plenty of people that ride the loop along these roads but it is so dangerous.	3/29/2023 5:09 AM
22	Routine public transport for accessibility to places designed for leisure and physical activities for all ages! (Particularly from the mountains nearby) With shaded rest areas and amenities ! More of these areas also! The local shopping centres should not be the only attraction for these people! Get young and old more engaged with in the community making it a united not divisive community! The very young need to express their physical capabilities and release much pent up energies resulting in happy and more productive youth! For the aging and disabled people exercise accessibility and rest areas a must to live their fullest lives and still contribute to the community!	3/29/2023 4:43 AM
23	Cycle paths that we do have are not good and cannot be used as they are covered in sticks, rocks and dirt making them dangerous and slippery for cyclists. The paths themselves are concrete with expansion joints which no country with cycling commuting (Netherlands Denmark, London etc) uses. Because the constant bumping is not present and forces cyclists here to the road. Adding more concrete bike paths that are dirty will not help. PLEASE LOOK AT WHAT OTHER COUNTRIES DO SUCCESSIVELY FOR CYCLING.	3/29/2023 4:33 AM
24	I would like to encourage a bike bush track. My boys love riding but usually pack our gear and head to Bungaree in Blacktown or the bike track just off M7 on Elizabeth drive. Please start maintaining or building things for children to go. Especially on Wilberforce side of the river!!!	3/28/2023 10:55 PM
25	Linking areas with pathways especially for children in Kurrajong outside of the village. We are on Comleroy and I don't like walking or riding due to cars and no paths. It would be a great link to the village	3/28/2023 10:43 PM
26	Council should be putting funds towards all of the dangerous roads due to pot holes and vision obstructions on council verge's as a priority. The Grose Vale Rd, Grose River Road and Grose Wold Road have been hammered by construction vehicles leading up to the Redbank development. Cars frequently swerving into oncoming traffic to avoid un repaired roads. If I was doing a construction job and left the road as dangerous as it is council would be all over me. Very Poor and embarrassing "infrastructure management" has left your community left out to dry and you want to talk about footpaths? A lot of people in the Hawkesbury are to far from anywhere to walk/ride hours. Wake up HCC	3/28/2023 7:30 PM
27	No new development without focusing on getting cars off roads. No new infrastructure without making it bus, bike and foot-friendly. People have to see it as being easier and quicker, as well as reliably safe, to walk, bike or use a bus. This place is too car-dependant and the conversation around changing that is just not happening. But it needs to happen YESTERDAY.	3/28/2023 6:43 PM
28	Clear back overgrown vegetation from both sides of Greggs rd and Redbank Rd, many cyclists use this road on weekends and it can be dangerous due to poor visibility on the bends. Install a cycle way or shared footpaths for walkers and cyclists. Get kids active a give them a safe route to be able to walk or ride to school. Kurrajong Public to Kuyper School to Colo High. Roads involeved (Grose Vale rd, Greggs Rd and Redbank Rd)	3/28/2023 3:27 PM
29	My 4 kids often ride their mountain bikes from our street in Mitchell Drive, Glossodia to Woodbury Reserve. The biggest problem is safety! As there's no walkways, footpaths or cycleways in Glossodia, they have no choice but to ride on the road weaving around parked cars and potholes! I'm very anxious every time they do it but encourage it as it's an enjoyable form of exercise... It's amazing that there's no walkways or short cuts for walking or cycling to the park or shops in Glossodia! The suburb was very poorly designed for pedestrians to get to the local shops and park! The only way is to go along the main road which doesn't have a footpath either! My kids rely on buses daily too and the timetable is laughable! The public buses to Glossodia are very infrequent, meaning that my husband and I have to drive our teens to work in North Richmond often...	3/28/2023 3:22 PM

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30	Maintain verge and road perimeters. Often overgrown with long grass which discourages walking due to the risk of snakes. Where possible widen roads to provide enough room for safe overtaking. Work collaborative RMS to implement speed reduction measures including greater use of mobile speed cameras. Public awareness campaign to educate drivers on the rules around overtaking a cyclist and driver safety around pedestrians.	3/28/2023 2:23 PM
31	I would like to see a pathway/cycle way from Grose Vale Rd roundabout down Grose River road to Navau Reserve and cross the new bridge to Springwood road. Many Residents would utilise this path to Grose River Reserve and Redbank. It would be beautiful	3/28/2023 1:14 PM
32	Improve footpaths in general. Improve firetrail and local mtb trails especially mapping of said trails to allow connectivity of routes rmt to cyclists	3/28/2023 12:26 PM
33	A separate walking / cycling path. One for safe recreational walking around suburbs and a cycle track to get to main towns like Richmond from suburbs like Yarramundi. Potential to trial the use of electric scooter hire to get from places with poor transport into towns (eg: Yarramundi to Richmond) - this would be ideal for youth who want to access local sports but have no transport.	3/28/2023 10:41 AM
34	The known evacuation route's should also have a footpath as not everyone has a car	3/28/2023 6:10 AM
35	Stop replacing existing footpaths and create new ones in other suburbs	3/28/2023 4:40 AM
36	Better quality road upkeep for cyclists Better maintainice for paths More walking / cycle paths on main roads at a minimum	3/28/2023 3:41 AM
37	Build a cycleway between Richmond and Penrith Fix the lowlands roads	3/27/2023 11:25 PM
38	Put footpaths in residential areas (Wilberforce Village).	3/27/2023 9:49 PM
39	Consider a walkway cycleway between Richmond and Windsor via the lowlands. Similar to the bridge to bridge walk in Penrith. Simple concrete pathways that hopefully would withstand flooding	3/27/2023 9:49 PM
40	It would really great for Kurrajong Heights to be connected to other next door towns with a safe footpath/ cycleway. There is bushland that could be used as a safe nature footpath/ access for people.	3/27/2023 9:20 PM
41	I do not approve of 15 or 20 minute cities - or smart cities	3/27/2023 8:43 PM
42	There is an urgent need for a biking and footpath between bilpin, Kurrajong Heights and Kurmond.	3/27/2023 8:17 PM
43	Pitt Town Rd is very busy and too dangerous to walk/cycle along. A dedicated path would be well used by the Pitt Town community.	3/27/2023 8:07 PM
44	we lots of cyclists on Blaxlands Ridge Rd. They have trouble finding safe bitumen but cpersist because of the hills to get here.It is too narrow a road for locals to walk on but a wider area for bikers and walkers would be a huge improvement.	3/27/2023 8:06 PM
45	Opening up a "rail trail" a long the historic Richmond-Kurrajong railroad, to provide a link from North Richmond to Kurrajong for walkers/runners/cyclists. A trail from North Richmond bridge along the river to Navua Reserve. In general, paths that facilitate active transport not on (or close to) busy roads, and that link up to form networks of paths covering greater distances. In the Hawkesbury these will generally be in pleasant, natural environments. The roads in Richmond lowlands (Benson's lane, etc) are a good example of quiet roads in a pleasant environment that are good for runners and cyclists. It would be good if these were open through to Windsor.	3/27/2023 7:28 PM
46	Dedicated lanes to keep cyclists off busy roads would be good	3/27/2023 7:21 PM
47	it would be nice to have dedicated bike lanes or shared pathways that prevent being on the road in places which have fast moving traffic or narrow roads which puts these users at greater risk. One biggest area is along Hawkesbury Valley Way particularly between Windsor and clarendon, as well as the end of the shared pathway from Hobart street and along Bourke street to the train station	3/27/2023 7:19 PM
48	Well linked footpaths between destinations and various different parks for children to explore	3/27/2023 4:52 PM
49	I believe the roads should be fixed up because half of the cars are damaged due to the road and nobody in my area would be able to use a pathway or bike due to the fact of blind corners nobody can see them if they dart across the road and my main thing is GET BUSSES don't worry about doing these new suggestions	3/27/2023 4:37 PM
50	Any cycling along the river is a big draw card. Parramatta river cycle wayis very popular,	3/27/2023 4:08 PM

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great for small business.

51	- Most footpaths are marked as shared walking/cycling, seldom used by cyclists - Cyclists ride very inconsiderately in regard to other road users- and residents on the road, often woken up by cyclists yelling and spitting - Dog walkers make up a significant number of walkers - Many walkers are social walkers - walk with friends - and also patronise local businesses - many people looking for health benefit want to walk 10000 steps, great length for a walking circuit!	3/27/2023 3:20 PM
52	So many people use the new footpath but it doesn't go far enough and people are still ending up walking or riding on the roads with trucks and heavy traffic, running across the roads.	3/27/2023 2:14 PM
53	Pitt Town needs a dual carriageway footpath to McGraths Hill. From McGraths Hill there are a lot better transport options however for the members of community that don't drive, they are difficult to access from Pitt Town. The footpath needs to be a safe distance away from the road to avoid the ridiculous speeds the trucks drive at and lit up to allow safe passage at any time. I'm sure this would encourage a lot of Pitt Town locals to walk or cycle and would be a safe path for the locals to travel, particularly the teenagers who ride to McGraths Hill daily in a large group in the school holidays. They don't always have helmets and can make silly decisions, if they at least had a safe pathway rather than riding down the side of the road we might avoid the horrific accident that seems imminent.	3/27/2023 1:19 PM
54	Please put in foot paths along George street and a pedestrian crossing at the lights on rifle range Road. There are school kids trying to cross and lots of traffic created from the vet and childcare centre, aside from the fact its a main road. We also use the local swim school which is 5 mins walk from our house but it is too hazardous for us to walk there. My husband works at the University we were thinking about becoming a 1 car family, and he was keen to ride to work, but again there is no safe way for him to get to the university from George Street.	3/27/2023 1:17 PM
55	At a minimum connect kurrajong village to the Kurmond walking cycle track	3/27/2023 11:30 AM
56	Connect existing paths, e.g. netball courts. Place paths all along George street through South Windsor and bligh Park. People should have path access to walking paths to their local shops and school. More crossings at traffic lights on main roads or options to cross. Paths to bus stops, particularly on main roads.	3/27/2023 7:31 AM
57	Its not just about the cycling network. Education is needed as well.	3/26/2023 8:58 PM
58	I live on the driftway and would love to walk or cycle more but to dangerous on the road.	3/26/2023 8:16 PM
59	Increase paths for walking and cycling, clear or repair verge on roads to enable walking or cycling, increase frequency of current public transport and increase routes.	3/26/2023 8:15 PM
60	Pls make flood free.	3/26/2023 4:38 PM
61	Walkways along Hawkesbury river at windsor	3/26/2023 9:16 AM
62	Having walking routes well signposted that lead somewhere or are circular would be beneficial. Even walking along the river in windsor and across to Deerubbin leads to nowhere and there is a lack of public amenities en route.	3/26/2023 8:34 AM
63	Many suburbs in the Hawkesbury do not have walking paths at all, only a short distance is paved, near schools and shops, I see more walkers than cyclists, so walkers should be heavily catered too before cyclists. If someone has even a slight mobility issue, it's difficult for them to exercise, if they have to walk on the road or on nature strips. Also anyone pushing a pram has to use the road as a foot path, which is most unsafe.	3/25/2023 7:56 PM
64	Windsor, Richmond and North Richmond should be connected by walking and cycle paths. It would give people more options to move between these towns. Ham common is great but it goes nowhere. It is used a lot for exercise. It would be better for the planet if people could walk between these areas. It would be better for people. It would then give people the option of walking from Kurmond to Windsor. It would be nice if Kurrajong could be linked in as well.	3/25/2023 5:21 PM
65	Plant more trees in Hobartville. There is to much grass and no one uses it but council to pay people to mow it	3/25/2023 4:28 PM
66	I live in Londonderry closer to Richmond than Penrith and would love a connecting cycle way down Londonderry Rd into Richmond. There is the room for it on the verge	3/25/2023 11:26 AM
67	It is unsafe to walk in Mitchell Drive, Glossodia as the road is disgraceful and has been for many years! At the suburban beginning of the road, there is no curb and guttering and a huge amount of potholes especially concentrated in that section of the road. There is no	3/25/2023 3:21 AM

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safe place to walk that section of the road as it is also very narrow and dangerous! It is shameful that we are still waiting for the infrastructure to happen here when it is so badly needed and such a high traffic area as well as the bus route!

68	Footpath between Richmond and Northo.	3/25/2023 1:40 AM
69	Spend the money fixing the roads first, that will take 10 years	3/25/2023 12:12 AM
70	Make it proper wheelchair access not just for prams get in a nin eketric wheelchair and try getting around richm ir windsor .You will probably fall out due to steepmess of access points.Wider maintained edges of roads in rural areas	3/24/2023 10:54 PM
71	Better paths (fix concrete/ uneven surface) Encourage cycling with bike paths and signage (watch out for bikes /1.5 mtr rule) Upgrade zebra crossings (ripple strips leading up to them and flashing yellow lights)	3/24/2023 8:14 PM
72	Stop the bullshit and fix what's broken before you start building anything new. The Richmond shop upgrade and Wilberforce shops upgrades are a total waste of money. Both offer no improvement and actual leave less for the community. Wilberforce has no setting, tables etc. Richmond lost parking and the slope on the footpath make it impossible for elderly and disabled access. You should be ashamed of your great improvements	3/24/2023 8:12 PM
73	Please provide a school crossing to the otherside of bells line of road for Kurmond Publoc School	3/24/2023 4:19 PM
74	There is not enough protection for Walkers crossing traffic lights that only allow half of the distance to cross. I walk fast and cannot get to the other side safely. I have seen roads i.e. Londonery Rd and Freemans road that have been repaired with no additional bitumin for walking or cycling.	3/24/2023 10:53 AM
75	Install footpaths along ham st south windsor on the residents side from fairey rd to netball courts and surrounding streets please. Us parents walking our dog and kids are forced to use the road with prams and kids bikes it is very dangerous along such a busy road used by cars and heavy vehicles. Bligh park is full of footpaths, why was south windsor forgotten about?	3/24/2023 4:42 AM
76	Crossings connecting paths Level footpaths Footpaths connecting to each other Less dog poo over everything	3/23/2023 8:38 PM
77	Better access at national park points Install footpaths on secondary roads P Maintained public toilets at key points	3/23/2023 5:19 PM
78	A bike path along the river from north richmond to Windsor would be amazing and a real tourist attraction. I understand there has been alot of damage from the floods..	3/22/2023 6:34 PM
79	Linking of suburbs with suitable paths/cycle ways. Currently there is no safe way to walk/cycle from Pitt Town to McGraths Hill. Once at McGrath's hill adequate paths exist to many areas.	3/22/2023 3:28 PM
80	Put footpaths in!	3/22/2023 3:10 PM
81	Fix the roads first Bridge with appropriate safe riding walking lanes done properly forward planning and infrastructure that takes into account ten years and more down track.	3/22/2023 2:29 PM
82	There is a cycle way that goes all the way from Windsor to Parramatta - but there is no decent , off road parking area at the start of the bike path at Windsor to park a car and off load the bikes to use it. What is bizarre is that there is actually council land on the opposite side of the bike path that would be perfect for public parking for people wanting to use the bike path but there is a sign actually prohibiting parking in the area. Sometimes we take a walk on the bike/walking path along the River at Windsor after doing the weekly shopping. We notice there has been a lavish new parking area put in near the football/playing fields where the path ends. BUT ACCESS TO IT IS ALWAYS LOCKED SO UNUSEABLE. WE would like to be able to park here for a walk instead of the shopping center. Other people using the dog recreation area and others using the playing fields have to park in the road. Likewise cyclists carrying their bikes by car to use the bikeway also have to park beside the road instead of being able to use this fabulous new parking area. How outrageous! Is this parking area just for the benefit of council who have their own key?	3/22/2023 12:41 PM
83	In Bilpin 2758	3/22/2023 11:24 AM
84	Fix shonky uneven footpaths and clean areas of footpaths where leaves/flowers (especially Jacaranda) cause slippery paths after rain or been there a while	3/22/2023 10:44 AM
85	Between Pitt Town and Mcgraths Hill, there is NO WAY to traverse this 5km route unless by car or bus. If a footpath/cycleway were constructed, it would provide the ability for the	3/22/2023 7:44 AM

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residents of Pitt Town to cycle or walk to Windsor, Mulgrave Station, even for older children to cycle to Arndel College, or the bike track located at McGraths Hill. It is currently too dangerous for anyone to do this, so we have no accessibility to get to the rail line or the major hub of Windsor. It would be faster to cycle there than catch the bus. I get jealous when I travel up Pitt Town Road, Kenthurst and see the residents able to walk or cycle all the way from Lang Road Kenthurst to Round Corner Dural - a distance of 11km - They have a footpath and there are less residents than there are in Pitt Town and we can't get anywhere

86	As above	3/22/2023 6:20 AM
87	less focus on Richmond and Windsor... more routed in glossodia freemans reach wilberforce etc those suburbs are always missed.	3/22/2023 5:36 AM
88	We have a beautiful and large lga, but it seems like a lot of it is wasted on national parks where we could improve access to this by adding waking tracks or cycling attractions. This may also assist local business by attracting outside attention and visitors to the region	3/22/2023 5:33 AM
89	Adequate footpaths/cycle paths even just one side of a street could be done. Parking restrictions at busy corners, intersections, t-sections that assist drivers being able to turn without their visibility being hampered and therefore being able to see pedestrians/cyclists better. A zebra crossing on Hereford Street behind the High School to assist the many students walking home and crossing the road. This street in the afternoon is very dangerous with students crossing everywhere.	3/21/2023 6:09 PM
90	As above	3/20/2023 4:48 PM
91	Need more seats for older people	3/20/2023 8:12 AM
92	Having safe, shaded, short/direct routes, possibly a mechanism to avoid needing to wait for lights/sometimes unsafe pedestrian crossings (eg. grade separated paths that cross over/under roads)	3/18/2023 7:51 PM
93	Extend the footpath to the fathers love orchard to the hillbilly cider to make it a worth while exercise path and access for safe path for children to get to and from school and the hall for activities.	3/18/2023 8:10 AM
94	Firstly I'm from out of area. I live in Winmalee so feel free to exclude my datum. Just adding my voice of support. Secondly highly recommend you watch YouTuber channel Not Just Bikes that goes into a lot of detail of what works and what doesn't. So save yourself 30 years of R&D and pick up the subtle details that have proven to work over sea and move away from those that don't work. Note that all of Sydney is one of the most hilliest cities compared to Amsterdam, Melbourne and Brisbane, so if we added disadvantage of extra cost when trying to keep a route as level as possible. Note too, that it will most likely take decades for an Active Transport Pathway (ATP) to be considered a success where people choose to walk/cycle over drive a car. Your plan needs to be a force for good for decades to come. You need to prioritise ATP traffic over cars, it needs to be safe, and well lit. Lastly you need to add safe, secure infrastructure like bike sheds at destinations like train stations. Perhaps with conjunction to public toilets.	3/18/2023 7:02 AM
95	There is no footpath along bells line of road. There is also only one bus per day. A cycleway and footpath are nedded	3/17/2023 9:13 PM
96	It would be great to just start with foot/cycle paths around the shopping areas that link up with the main roads eg there is nowhere safe to walk from North Richmond to Richmond	3/17/2023 12:53 PM
97	provide major cycling and walking networks between townships and interconnect these networks with public transport	3/17/2023 12:15 PM
98	Paths and cycleways don't exist independently of other infrastructure. Before the Bilpin footpath was built, I didn't see any indication of a cost/benefit analysis or of the town planning that one assumes must have been behind such a massive expenditure. Was there such an analysis? I have lived in the Netherlands for a total of 25 years. The bike paths are an integral part of the (very flat) landscape and allow people to get to their destinations, whether work or leisure, with great ease. Australia is very different. Without a cost/benefit analysis, I would utterly oppose more paths and bikeways being built in the area in which I live. Bilpin is already struggling to cope with parking issues caused by the presence of the bakery/hardware store complex. Please fix that first.	3/17/2023 12:13 PM
99	Extend the new footpath (thanks for this btw) to cross Bilpin ideally from Berambing to the Grumpy Baker. Put an outdoor gym at the Bilpin Oval for the people who walk/run/cycle along the new path. Fix Bells Line of Road and stop trucks from driving through this road.	3/17/2023 12:10 PM
100	A designated bike path/footpath from Berambing to Kurrajong heights would transform the	3/17/2023 11:57 AM

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area. It would transform the area from a vehicle thoroughfare to a community connected by low impact travel options for all.

101	No allowance in this survey for people who never cycle! A false presumption that everybody has a bike, or would ever think of getting one	3/17/2023 10:59 AM
102	We need an extension of the Bilpin footpath. The path that has been created is the best piece of infrastructure we have had. It makes it possible to walk, for my kids to ride their bikes, for me to safely walk my dog. My husband has had back surgery and the Bilpin footpath is the only place he can go for a walk with even ground as he recovers. Every time I use it I see others using it - pushing prams etc. It is excellent community infrastructure with a huge beneficial impact. Now, we just need it extended! The longer the better. I would like to establish a local Bilpin ParkRun event (community 5km every Saturday morning) as our closest ParkRun currently is East Richmond or Lithgow. The presence of a safe path enables so many good things for physical activity and community spirit.	3/17/2023 10:57 AM
103	safe places for very young children to learn to ride, a fenced area with paths and seats for adults who supervise	3/17/2023 8:47 AM
104	If it is for exercise then we don't have any problem as you can pick a quiet route. But if it is to go somewhere, then we don't have any public transport nearby, we don't have any facilities nearby.	3/17/2023 8:29 AM
105	We just need it all to join up together, and with bus stops. I never walk because of a 300m dangerous section of road with no footpath and speeding semi trailers. If there was a safe dedicated path I would walk the 2km to work every day	3/16/2023 6:15 PM
106	Any upgraded facilities for pedestrians and cyclists (outside the village hubs) should also consider horse riders as they have similar issues with "sharing the road".	3/16/2023 8:22 AM
107	See comments above.	3/16/2023 5:23 AM
108	Even a graded track is better than nothing and cheaper than concrete, people mountain bike you know. Make tracks more interesting too.	3/16/2023 4:40 AM
109	It's very unsafe to ride a bike between windsor and Richmond especially near Rickaby creek Bridge near the Crown motel . No proper cycleway linking the RAAF base cycle way on Percival St More crossings near St Mathew's primary school on little church Street and Tubutt Street near Mquade Park Stadium . More Crossings on George street Main Street in windsor	3/15/2023 11:13 PM
110	Needs to link towns via shared access pathways A walking path was put in from Richmond high school along Castlereagh rd to southee rd If you ride a bike on the road in the same area it also stops at souther rd Heaps of room to go to the drift way and back along Londonderry rd all the way back to Richmond town This is one of many options that could be done	3/15/2023 7:01 PM
111	A bike path like from Windsor down Windsor rd would open a world of walking/cycling for local residence. We are all car bound which impacts the roads and the mobility of residents. Without a car you are housebound in Ebenezer. It would be lovely to change this. Also the speed limit around the Tractor 828 really needs to be dropped to 60 as it is such a dangerous area.	3/15/2023 2:38 PM
112	The walking path from north richmond path could be extended to go from Richmond to Kurrajong village or Kurrajong heights	3/15/2023 8:45 AM
113	Walkers should have precedence over cyclists to encourage the elderly to be able to exercise	3/15/2023 6:16 AM
114	I would love to see more walking trails alongside our beautiful river We should make rhe river our show piece	3/15/2023 5:44 AM
115	More cycle/ walk ways that connect to places, like other facilities bushwalking's paths, ovals etc	3/14/2023 9:23 PM
116	Paths are not linked up, some streets have a path that just stops at the next street. Cars do not care about pedestrians or cyclists. There is often no safe area on the side of roads	3/14/2023 7:31 PM
117	FIT THE POT HOLES	3/14/2023 6:03 PM
118	No pavements except on Windsor Rd and that's not a healthy place to go for a walk. Traffic, noise and pollution.	3/14/2023 5:53 PM
119	Fix the roads, we need footpaths	3/14/2023 3:35 PM

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120	As a Bilpin resident I am not in favour of extending the current cycleway. Bilpin is a rural town, and having concrete tracks detracts from the nature of the town. Any new tracks should be sensitive to the rural and bush aspect, rather than concrete.	3/14/2023 3:20 PM
121	Footpaths are desperately needed especially as Winter approaches and it gets darker earlier. There is nowhere safe to walk for exercise- either around the park or a circuit around the streets. A level footpath with adequate lighting so people can walk when they get home from work.	3/14/2023 3:02 PM
122	1. Any footpaths in Wilberforce 2. A footpath loop around the park block in Wilberforce 3. A footpath loop for the Windsor River walk (this would require a second bridge and a ramp or something to get to the current Windsor bridge without having to use steps or go on the road).	3/14/2023 11:08 AM
123	I'm big on walking but find the footpaths in the Hawkesbury are too few, too unkept or don't link to existing footpaths for me to use and extend my walk.	3/14/2023 10:08 AM
124	Just need dedicated paths and cycle ways so we don't have to go off and on roads trying to get to destination.	3/14/2023 9:49 AM
125	A shared bike/ walking track from Windsor Rd to Pitt Town would enable safe access for residents along the route to join the bike track on Windsor Rd and then travel to rouse hill or Windsor safely. It would be great if the light rail came through to mcgraths hill to give even more varied access for residents.	3/13/2023 10:02 PM
126	There needs to be a safe separate cycle path/shared walking path to link Cattai to Windsor or Cattai to Box Hill.	3/13/2023 9:52 PM
127	Ensure they are wide enough to cater for both walkers and cyclists when sharing a footpath	3/13/2023 9:25 PM
128	Shared footpaths are a great way to get the community healthy and active. Providing people with a safe place to ride will help with traffic congestion and pollution.	3/13/2023 6:16 PM
129	Please extend the highly popular walking/bike trail in Bilpin west to the Metro service station and east to the Fruit Bowl. It provides access to all age groups, exercise for mums and prams, the elderly, kids learning to ride and skateboard/roller blade access between the hall and the bakery. A dedicated trail from Kurrajong Heights to Mt Tomah along the Bells Line would be extremely popular with locals as well as tourists.	3/13/2023 4:13 PM
130	You can walk around your block but you can't actually walk to another suburb due to lack of paths. So everyone ends up driving to get to a dog park in another suburb to walk their dog because having dogs in normal parks is illegal apparently going by the council signs. Would love to be able to get my bike out instead of my car, but it's too dangerous trying to get anywhere I need for errands when you have narrow one lane roads with no footpaths.	3/13/2023 7:43 AM
131	I like to walk from Richmond to Clarendon via Dight St, East Richmond. I feel very unsafe due to the lack of a footpath. It's a quieter walk as opposed to the Windsor St footpath through the Park. Also to note if the footpath was extended with a bike path to Windsor connecting the two Macquarie towns would be great for businesses. Similar to the bike path/footpath along Windsor Road at McGraths hill.	3/12/2023 7:38 PM
132	There needs to be safety systems in place like emergency voice points to activate Police if needed	3/12/2023 4:50 PM
133	Widening of George st to 2 lanes each way with pedestrian crossings, more pedestrians crossings on main routes,	3/12/2023 4:47 PM
134	Join kids park with walking/cycle paths and signpost it. We want to do things with kids but have to pack them in the car first. Make it a safe adventure to move between parks. Publish maps of the tracks. Include picnic spots and plant info.	3/12/2023 8:39 AM
135	Footpath / Cycleway from North Richmond Bridge to Richmond CBD, a footpath along Drift Road, Inalls La, Long St, Southee Road, Catchpole and Thomson ave, Londonderry Road to link with the University plus all road within 1 km of Valder ave to access the local public school so that kids can lead and learn safe egress to school and an active lifestyle, a safer way to cross Castlereagh road at or near the intersection of Inalls / Castlereagh and Southee road.	3/11/2023 9:12 PM
136	Leave us alone you took the bridge for this atrocious act of selling us out to Washington DC. I've followed the money	3/11/2023 5:17 PM
137	Having walking tracks with lovely native gardens and larger trees. It would also be great for this to lead to parks for family gatherings as well as activities for teenagers such as basketball courts, skate areas, bike tracks, water parks. Council has a lot of areas that	3/11/2023 2:49 PM

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need to be mowed with inadequate finding for this maintenance. Carefully designed gardens that consider flood zones, drought hardy and ground cover as well as large trees for shade would be ideal in these areas. It reduces the heat, improves air quality, helps with global warming reduction, improves homes for our wildlife, attracts more bees, butterflies, dragonflies, birds and native insects and animals. It would be good for people to be attracted to how green we can make the area be again. Hawkesbury was always known for the relaxed country feel, but with developments we are losing this. Community involvement with garden planning, plant choices would be wonderful as well as community gardens run by locals. I'm definitely happy to help in my area

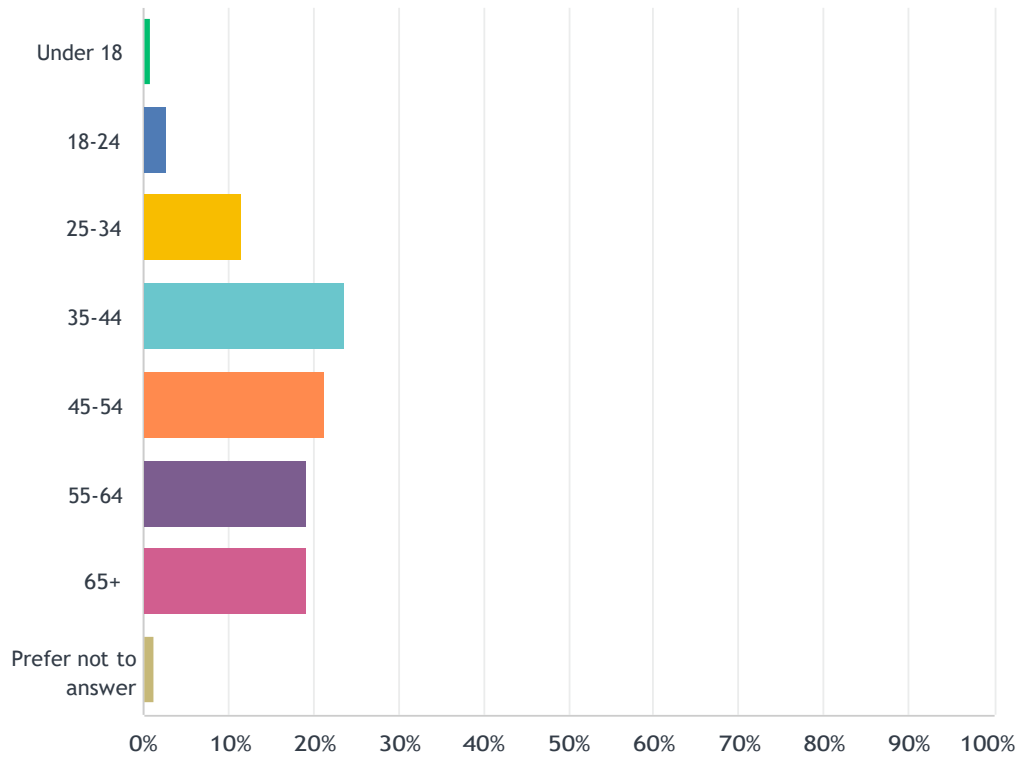
138	Prime example of lack of safe walking/cycling is between Richmond and North Richmond. I used to see kids and adults walking between the two townships before the intersection at Old Kurrajong Road and Bells Line of Rd was changed (now traffic is slowed between the townships because traffic from Penrith way take right of way!!) . No street lights there either and it is a busy intersection!!! I recently spoke to a retired couple who used to walk from North Richmond to Richmond, have a coffee and walk back but can no longer do so due to the amount of traffic and no safe walking path. Try riding your bike on Bell's line of Rd near Pugh's Lagoon and have a bus or B double go past at 80km and see how you feel. Get a bike/walking path from North Richmond to Chapel Street Richmond there is plenty of land without houses.	3/11/2023 12:41 PM
139	South Windsor needs footpaths from Milham street to Macquarie street to McQuade Avenue and from Bell Street to George Street & Macquarie st, creating a walking and riding circuit allowing community access for all including disabled elderly and young to shops, parks, Golf course, railway and beyond. You also need to ditch the trees you planted on the roads in South Windsor an Richmond. They create pedestrian, parking and driving blind spots, damage cars. You could have done this so much better.	3/11/2023 11:25 AM
140	I saw an older person get their walker struck in a wire grate over a drain this week. We need to think about older people with walkers more.	3/10/2023 6:57 PM
141	Paths need to be wide, painted as keep left unless overtaking. Works well all through Homebush! There needs to be lighting and some small areas to fix a tyre or have a little rest. Access between south windsor and Richmond is particularly treacherous on a bike or walking, and needs to be widened over the creek. Not all adults and teens should be or want to be riding on the roads. It's too unsafe. Also, once over the windsor bridge, it's scary and needs shared paths.	3/10/2023 6:47 PM
142	Upgrade widen and seal all roads in the Hawkesbury to improve road safety for all users. Dont let cyclist ride on road, they are a hazard.	3/10/2023 6:01 PM
143	More footpaths needed in residential areas, such as Eaton Street Agnes Banks. There is no safe footpath for pedestrians and lots of people walk along that street each day.	3/10/2023 2:06 PM
144	Introducing safe cycling paths between key areas- ie to and from Richmond or Windsor	3/10/2023 9:06 AM
145	Please fix the infrastructure/traffic issues before you allow more housing development	3/10/2023 8:55 AM
146	Our family would love to bicycle further afield and would dearly love to see footpaths/cycle paths connecting Richmond to other towns	3/10/2023 8:29 AM
147	More pedestrian islands	3/10/2023 7:12 AM
148	We cycle from Redbank estate to Richmond, through the turf farms every week. The roads around the turf farms are in a very dangerous state. Trying to get from north Richmond to Richmond is very busy and not bike friendly. I would like to see some walking/ bike paths to link the 2 towns	3/9/2023 9:21 PM
149	Please provide safe routes for cyclists to traverse parts of the Hawkesbury without travelling on main roads . Something that would allow families to ride together without fear of traffic would be ideal.	3/9/2023 9:11 PM
150	Develop a cycle ways map Hold family cycling events Bike racks in key locations	3/9/2023 9:11 PM
151	Connected cycleways are desired	3/9/2023 5:50 PM
152	Whilst improved, there is a lack of general footpaths in North Richmond so small kids if riding/walking have to ride on the road	3/9/2023 3:40 PM
153	Better supervision/policing of area Fix pathways and roadways	3/9/2023 12:10 PM
154	More footpaths in rural areas, and walking tracks with trailmarkers in parkland areas. We need more rail options, and buses that go more places would allow us to leave the car at home.	3/8/2023 6:33 PM

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155	Stop wasting money on beautifying the main street of Richmond, losing parking bays. Fix the flood evacuation routes out of the Hawkesbury area. Any new works (North Richmond Bridge) to be flood free all the way NOT like the Windsor Bridge where the land on the other side of the river is under water and you can't go anywhere? STOP wasting money.	3/8/2023 2:51 PM
156	As above, the 3 walking tracks mentioned would be great. You could incorporate more cafes along the RAAF walk and through the Windsor walk mentioned. All three could promote business as walkers usually meet up for coffee, breakfast or lunch after. I am sure there are other great areas walks could be promoted at but this is just from my experience.	3/8/2023 2:46 PM
157	Fix the roads	3/8/2023 12:40 PM
158	Bus shelter maintenance.	3/7/2023 9:33 PM
159	To much time and money is put in to cycling infrastructure for a very small number of people.	3/7/2023 6:41 PM
160	A safe place to walk wheelchairs and for the blind and hearing impaired, traffic lights , braille	3/7/2023 3:56 PM
161	There should be safe wide cycle ways from Bligh Park, to the top of Windsor, Richmond, Nth Richmond, Penrith and Elara. These could be shared with mobility scooters, but should not be shared with vehicles. Cycle ways need to be safe if you want to encourage people to use them.	3/3/2023 8:26 AM
162	All streets in our main townships (windsor, richmond, north richmond) should have footpaths on AT LEAST one side of the road. I live on honartville approximately 200 metres from both Hobartville Public school and Richmond High School and there are NO footpaths on my street. There should be dedicated cycling lanes almost everywhere and the cycling network needs to be integrated. One should be able to ride from kurrajong to Windsor and then linking up with richmond road and/or windsor road cycle lanes/paths in dedicated cycle lanes or paths. One example of this issue is that there is no link at the terminus of the Windsor Rd cycleway, it just starts in the middle of nowhere with no clear way how go legally and safely get on to it from surrounding streets. Another example is the link from the Ham Common cycleway to the shared path to the richmond uni. The bike path merely ends at the western end and turns into a footpath with no clear way or link to existing roads or other shared paths. The Richmond lowlands also used to be a great cycling destinations however all the roads have been destroyed and are in various states of disrepair. These roads need to be fixed and they should have dedicated cycling lanes installed. This is safe and enjoyable place to ride with a beautiful outlook for all ages and experience. Lastly, the Hawkesbury Mobility Plan 2010 made great suggestions regarding improving cycling and walking infrastructure yet nearly every single one of its recommendations were completely ignored or deferred. What is the point of doing a review each decade or so and then doing absolutely nothing with it? I submit that Council knows what it needs to improve but that it simply refuses to do it.	3/2/2023 8:39 PM
163	Better maintenance of bus shelters. The glass has fallen out at kable street and never replaced.	3/2/2023 4:44 PM
164	- connecting main suburbs.	3/2/2023 1:39 PM

Q14 Please enter your age group?

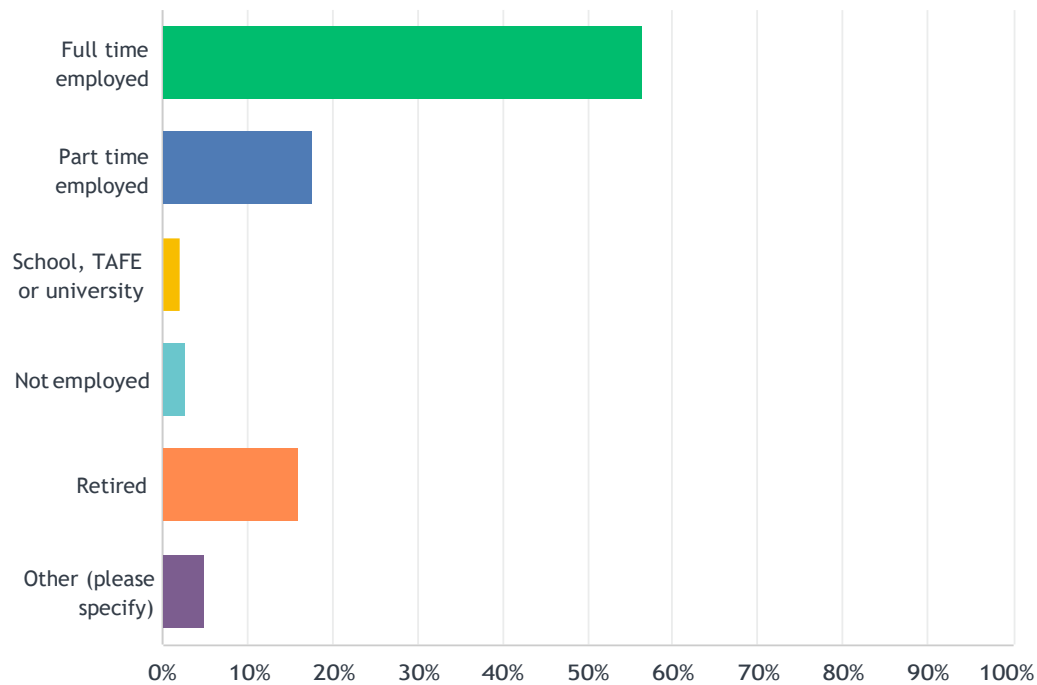
Answered: 244 Skipped: 23



ANSWER CHOICES	RESPONSES	
Under 18	0.82%	2
18-24	2.87%	7
25-34	11.48%	28
35-44	23.77%	58
45-54	21.31%	52
55-64	19.26%	47
65+	19.26%	47
Prefer not to answer	1.23%	3
TOTAL		244

Q15 Please select your current employment status?

Answered: 244 Skipped: 23



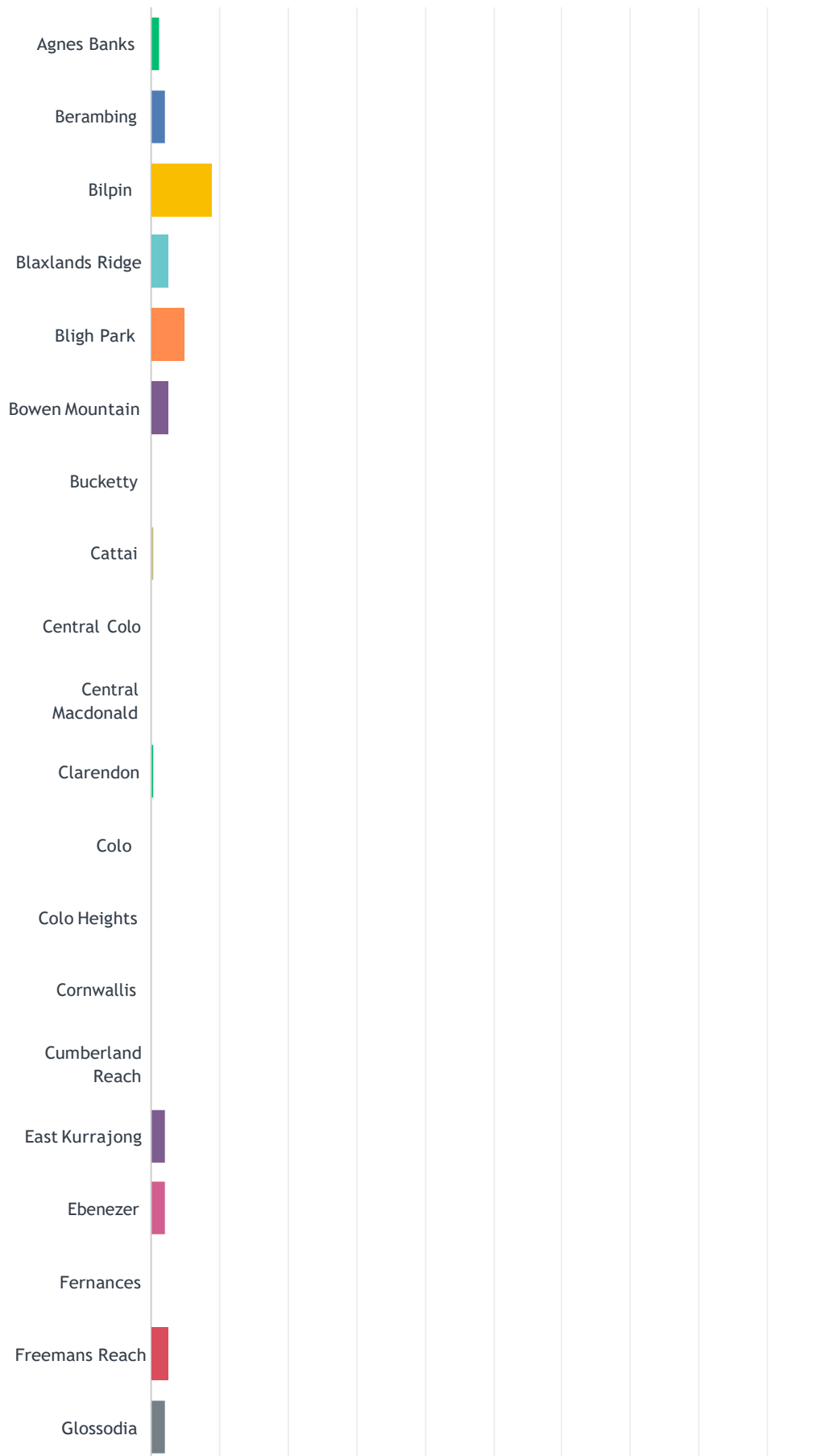
ANSWER CHOICES	RESPONSES	
Full time employed	56.56%	138
Part time employed	17.62%	43
School, TAFE or university	2.05%	5
Not employed	2.87%	7
Retired	15.98%	39
Other (please specify)	4.92%	12
TOTAL		244

Q16 Please provide your postcode.

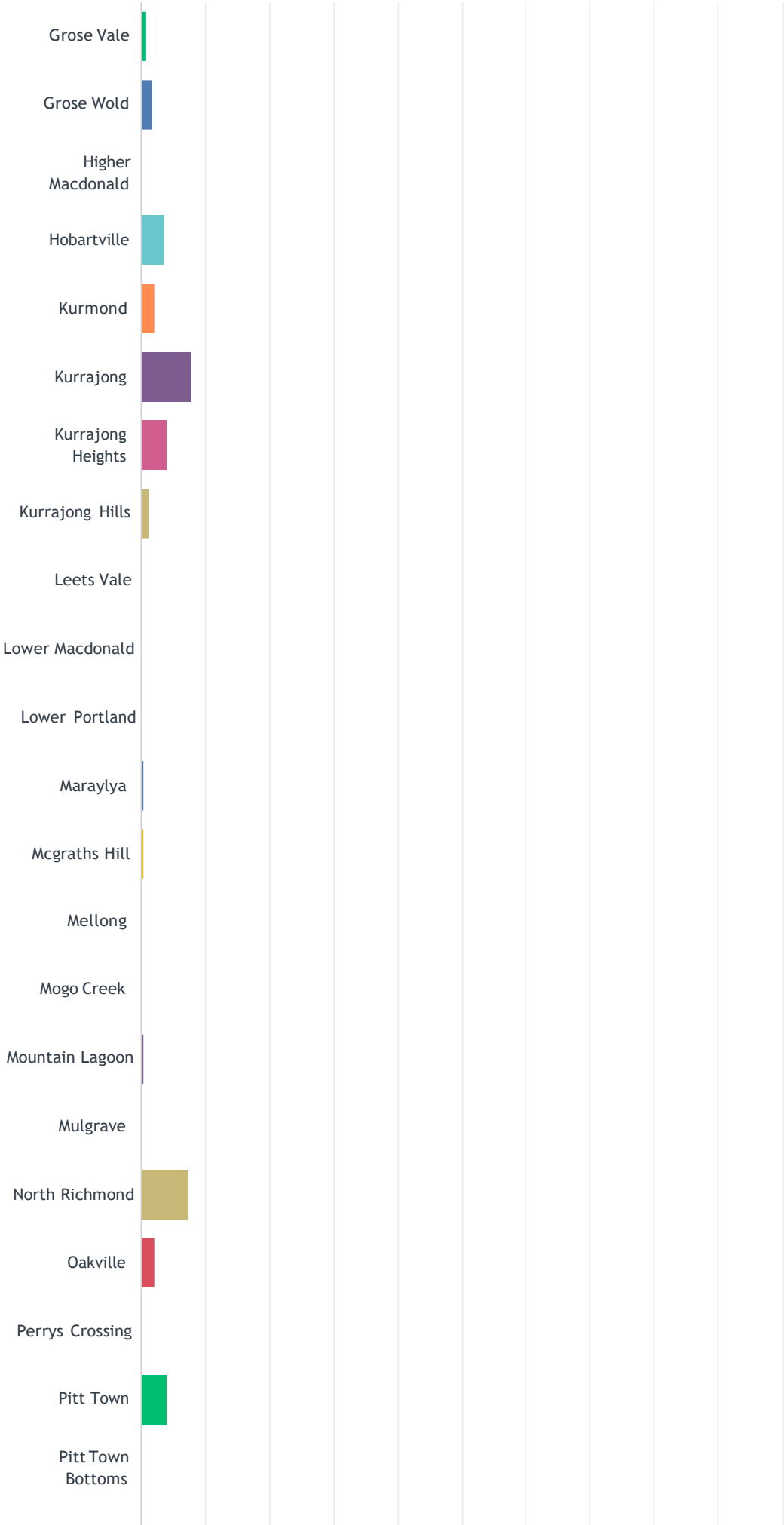
Answered: 226 Skipped: 41

Q17 Please enter your suburb name.

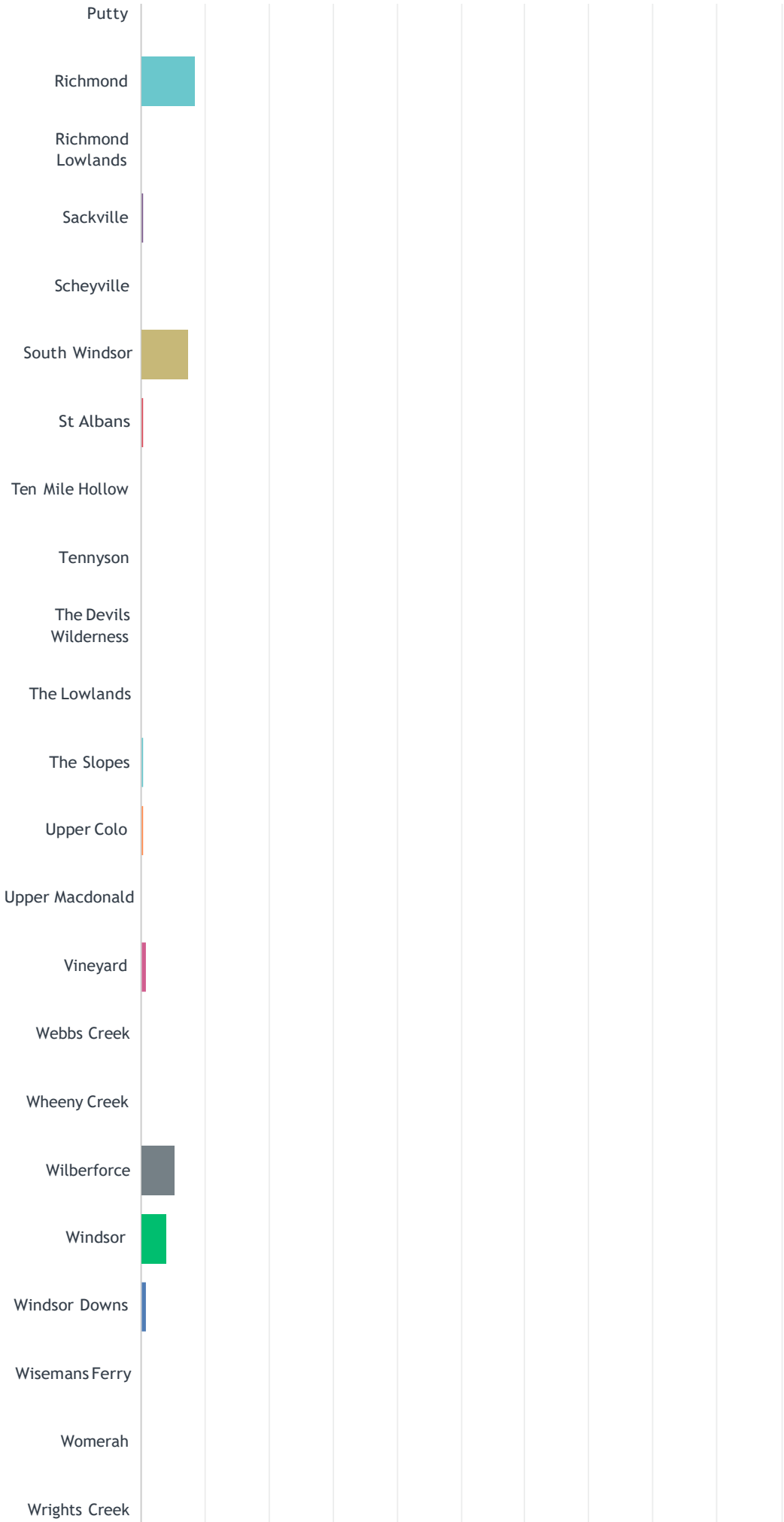
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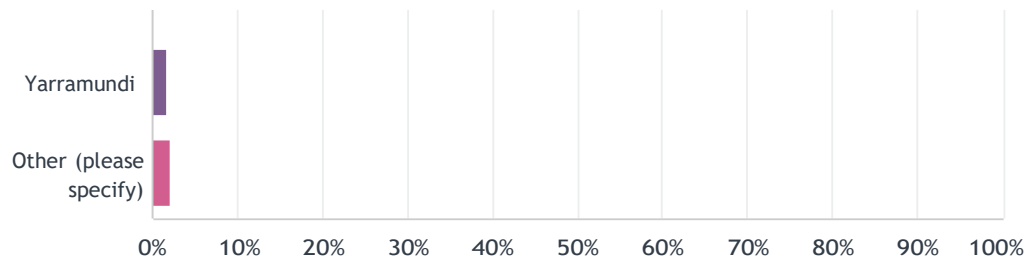
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A photograph of a family walking away from the camera on a paved path. In the foreground, a man in a grey t-shirt and black shorts walks a small white dog on a red leash. To his right, a woman in a red t-shirt and black leggings walks a young child on a purple tricycle. The child is wearing a pink hat and a floral skirt. In the background, another person is walking. A red car is parked on a grassy area to the left. The path is bordered by a metal railing on the left and some greenery on the right.

APPENDIX B

Social Pinpoint Responses

Mode	Suburb	Location of points	Latitude	Longitude	Comment
Cycling	Agnes Banks	10 Springwood Rd, Agnes Banks NSW 2753, Australia	-33.6124	150.7011	Dangerous corner for cyclists. There is no 'side of the road' so cyclists are on the road on a corner where cars can't see around.
Walking	Bligh Park	89 Colonial Dr, Bligh Park NSW 2756, Australia	-33.6382	150.7972	Footpath ceases and pedestrians have to choose between walking on uneven lawn or in parking lane / bus stop. Recommend continuation of footpath or realignment of footpath section
Walking	Bligh Park	11 Pearson St, Bligh Park NSW 2756, Australia	-33.6365	150.8065	Install kerb and off-road path to connect end of street to existing walking track in reserve
Walking	Bligh Park	11 Norman Pl, Bligh Park NSW 2756, Australia	-33.6401	150.8104	Inadequate street lighting along footpath. Footpath is uneven and a trip hazard when dark. Solar street lights would be fabulous along this stretch of road from colonial drive/ rifle range intersection to up to Windsor park public school
Walking	Bligh Park	14 Scarsborough Cres, Bligh Park NSW 2756, Australia	-33.6345	150.7928	Inadequate shade along the alleyways. This is a spot that children will walk home from school to avoid traffic and walking distances. With the heat and lack of trees, it gets quite hot. Some lovely large growing trees would be wonderful please
Walking	Bligh Park	8 Neilson Cres, Bligh Park NSW 2756, Australia	-33.64	150.8025	We have a few trees along here but it gets quite hot and would be lovely for more trees (much like the walkways in the ponds floodways/causeways). It would also attract more birds and provide a home for them
Walking	Bowen Mountain	31 Pamela Cres, Bowen Mountain NSW 2753, Australia	-33.5728	150.6245	The suburb is fairly isolated from others so this being the only park within reach (as well as the only community centre) means that I come here with certain frequency. Foot paths are virtually non-existent in the entire suburb, and I would feel safer from motorized vehicles when I need to walk towards the park for my routine exercise.
Cycling	Clarendon	9RR2+4J Clarendon NSW, Australia	33.609641	150.801601	Connecting the existing shared pedestrian/cycleway to Windsor would increase opportunity for more people to safely get from one town centre to another.
Cycling	Clarendon	Percival St after Hawkesbury Valley Way, Clarendon NSW 2756, Australia	33.607879	150.799427	Separated bike lane, especially on corner



Mode	Suburb	Location of points	Latitude	Longitude	Comment
Cycling	East Kurrajong	181 E Kurrajong Rd, East Kurrajong NSW 2758, Australia	33.518852	150.707446	East Kurrajong road is often frequented by cyclist groups. The road is already in a poor state of repair and without any cycling/walking paths, it puts greater risks for both cyclists and drivers on the same road. Would highly recommend building a cyclist lane along the length of this road. Or actually repairing the road properly.
Cycling	Freemans Reach	27 Wilberforce Rd, Freemans Reach NSW 2756, Australia	33.601622	150.822179	Providing a safe cycling network from Windsor to Freemans Reach/Glossodia etc., would be an excellent way to connect towns and be an avenue for tourism. Many cyclists/bike riders cycle along Freemans Reach Road - and it is dangerous as there is very little road space for them.
Cycling	Freemans Reach	10 Cliff Rd, Freemans Reach NSW 2756, Australia	33.565533	150.772505	A beautiful spot to cycle/walk. A possible tourism opportunity and spot for locals to enjoy outdoor recreation. A shared cycle pedestrian path loop could be from Streeton Lookout: Terrace Road, Wire Lane, Kurmond Road and back to the lookout via Terrace Road. Would encourage people to be active in the area they live in, rather than having to travel to walk/cycle- and would promote people to visit the area.
Walking	Freemans Reach	2 Freemans Reach Rd, Freemans Reach NSW 2756, Australia	33.603107	150.822737	Would be great if the river walk could connect as a loop with a pedestrian bridge like the Penrith 'Great River Walk' (Bridge to Bridge loop). Encouraging people to exercise, boost tourism and people visiting the area - especially because it is close to our Library, Museum and Gallery. Having a walk close to the Windsor Mall would also boost people visiting local businesses for a meal or drink after their walk. Many people visit Penrith just to do the walk.
Walking	Freemans Reach	2 Freemans Reach Rd, Freemans Reach NSW 2756, Australia	33.603107	150.822737	Yes! Great for kids.
Walking	Freemans Reach	525 Kurmond Rd, Freemans Reach NSW 2756, Australia	33.557873	150.787903	Footpath stops here. Would be good if it continued at least until the end of the houses.
Walking	Freemans Reach	1A Wilberforce Rd, Freemans Reach NSW 2756, Australia	33.602978	150.819669	Disable car spaces required. If these were in Macquarie Park near the existing footpath/playground people would be able to use the footpath to walk more. Note: comment made on behalf of resident unable to access computer.



Mode	Suburb	Location of points	Latitude	Longitude	Comment
Cycling	Hobartville	30 Londonderry Rd, Hobartville NSW 2753, Australia	33.605429	150.750083	Should be a wide shared cycle/pedestrian path the length of Londonderry Road and Paget Street. This would provide better active transport connection from Hobartville and the University Entranceway to the shops and train station in Richmond.
Cycling	Hobartville	41 Castlereagh Rd, Hobartville NSW 2753, Australia	33.600859	150.738271	Should be a wide shared pedestrian/cycle path for the length of Castlereagh Road, starting at Southee Intersection. This would provide active transport for residence of Hobartville to Richmond High School and the Local Shops.
Walking	Hobartville	62 Luttrell St, Hobartville NSW 2753, Australia	33.607566	150.745676	Should extend the Luttrell Street footpath for the full length of the street.
Walking	Hobartville	36 Valder Ave, Hobartville NSW 2753, Australia	-33.6041	150.7397	Should extend the Valder Ave Footpath for the full length of the road to provide safe area for school kids to walk to Hobartville Public and for the bus stops along this road.
Walking	Hobartville	65 Southee Rd, Hobartville NSW 2753, Australia	-33.6069	150.7391	Providing a footpath along Southee Road, and Londonderry Road would be beneficial. A shared cycling pedestrian path would be even better (connecting onto Castlereagh Road).
Walking	Hobartville	1 Brentwood Ave, Hobartville NSW 2753, Australia	-33.6026	150.7499	Footpath ends - would be great if it continued on this side as all the trees are on this side.
Walking	Hobartville	65 E Market St, Hobartville NSW 2753, Australia	-33.6026	150.7496	Would be excellent to have more trees on this side of the path (and throughout the streets of Richmond). Many schools walk to the pool for swimming lessons or carnivals and the pedestrian routes from the schools to the Richmond Pool lack trees.
Walking	Hobartville	Laurence St at Harold Ave, Hobartville NSW 2753, Australia	-33.6051	150.7453	Many of the pocket parks in Hobartville don't get used often as there are no public toilets nearby. Would be good to consider public toilets- or mixed use development to allow for cafes amongst houses, which would in turn provide toilets to customers.
Walking	Hobartville	108 Londonderry Rd, Hobartville NSW 2753, Australia	-33.6099	150.7442	A safe pedestrian path along Londonderry Road to connect from the mall to the university. A safe pedestrian access to cross the road into the university near Southee Rd would be helpful for students and for users of the university child care centre.



Mode	Suburb	Location of points	Latitude	Longitude	Comment
Walking	Hobartville	3 Smith Ave, Hobartville NSW 2753, Australia	-33.609	150.7445	Smith Ave is frequently used by heavy vehicles. There are a number of pedestrians that use this street as a walk through from the school/ university and do not have a safe path to keep them off the road. Would suggest a footpath or adding a restriction vehicle weight limit to the area.
Walking	Kurmond	1444 Kurmond Rd, Kurmond NSW 2757, Australia	-33.5507	150.6932	It would be wonderful to have a crossing here for before and after school to allow children to cross safely.
Walking	Kurmond	15A Jacqueline Pl, Kurmond NSW 2757, Australia	-33.5506	150.692	Pedestrian Crossing as the crossing guard does g work the hours a lot of children need to cross
Cycling	North Richmond	4 Bells Line of Rd, North Richmond NSW 2754, Australia	33.583932	150.723474	New bridge should have a cycle and walk path potential to make it like the new Penrith river walk a new active destination for all
Cycling	North Richmond	82 Terrace Rd, North Richmond NSW 2754, Australia	-33.57506	150.727701	Providing a safe cycling network from North Richmond to Freemans Reach/Glossodia etc., would be an excellent way to connect towns and be an avenue for tourism. Many cyclists/bike riders cycle along Terrace Road - and it is dangerous as there is very little road space for them.
Walking	North Richmond	6 Terrace Rd, North Richmond NSW 2754, Australia	33.579433	150.720628	Missing footpath connection to businesses to the west
Walking	North Richmond	3 Elizabeth St, North Richmond NSW 2754, Australia	33.581499	150.716999	Lack of safe crossings (i.e. zebra crossings) around the school
Walking	North Richmond	23 Grose Vale Rd, North Richmond NSW 2754, Australia	33.581317	150.717584	Needs to be a flat pedestrian crossing, and the crossing needs to be moved it's too unsafe for cars and pedestrians right now
Walking	North Richmond	36-38 Riverview St, North Richmond NSW 2754, Australia	33.581027	150.719022	Should be some crossing around here to allow for pedestrians to access the shops more easily right now it's pedestrians darting across busy road very unsafe
Walking	North Richmond	71a Grose Vale Rd, North Richmond NSW 2754, Australia	33.583903	150.71394	Should provide a safer location for pedestrian to cross Grose vale Road near Pecks Road.



Mode	Suburb	Location of points	Latitude	Longitude	Comment
Walking	North Richmond	13 Grose Vale Rd, North Richmond NSW 2754, Australia	33.580662	150.718671	The Intersection of Grose Vale Road and Riverview Street is very dangerous for Cars and Pedestrians crossing. A highly visible, raised pedestrian crossing is really needed across Riverview Street near the intersection. This would provide an important pedestrian connection to shops, schools and bus stops.
Cycling	Pitt Town	212a Pitt Town Rd, Pitt Town NSW 2756, Australia	33.607107	150.854216	With all the new development in Pitt Town, would be excellent to have cycling/pedestrian connectivity to Windsor, Richmond, Bligh Park etc. - would also be a very scenic walk/cycle for Tourism purposes.
Cycling	Richmond	9QG9+WW Richmond NSW, Australia	33.622681	150.769823	A bike track that connects Richmond to Bligh Park will increase access to employment opportunities for youth of Bligh Park and Windsor Downs
Cycling	Richmond	47 B59, Richmond NSW 2753, Australia	33.601394	150.761586	Shared pedestrian cycleway starts here. Would be great if this connected all the way into the town centre of Richmond (or to the train station for improved connectivity).
Cycling	Richmond	9QP7+Q9 Richmond NSW, Australia	33.613095	150.76345	Having a separated bike path here would increase the amount of people cycling. Currently, there is only the side of the road, and this is too dangerous on an 80km speed limit road. Connecting Richmond to Bligh Park would open up further employment opportunities for people who can't drive.
Cycling	Richmond	CP3H+8C Richmond NSW, Australia	33.596693	150.728559	Would be great to see a path connecting Richmond/Hobartville to the Soccer fields so kids have the opportunity to cycle/walk here rather than relying on getting driven. It would also be a safer route for cyclists travelling to North Richmond.
Cycling	Richmond	4 Lennox St, Richmond NSW 2753, Australia	33.604083	150.757318	Bike lane from Blacktown Road disappears into turning lane at this intersection. Very dangerous for cyclists.
Walking	Richmond	CP3H+8C Richmond NSW, Australia	33.596693	150.728559	Would love to see a fully pathed walkable cycleway link that connects Richmond and north Richmond. It would encourage me to bike to the station
Walking	Richmond	93A John Tebbutt Pl, Richmond NSW 2753, Australia	33.598489	150.745549	No pedestrian crossing available within the vicinity of the school to cross Castlereagh Rd



Mode	Suburb	Location of points	Latitude	Longitude	Comment
Walking	Richmond	175 Francis St, Richmond NSW 2753, Australia	33.591947	150.744631	Creating a footpath to Pughs Lagoon (Smith Park) via either Francis Street or Windsor Street would improve the accessibility of this park for vulnerable community members and allow mobility for all.
Walking	Richmond	10 Lennox St, Richmond NSW 2753, Australia	33.603427	150.756526	Complete the footpath along the south side of Lennox Street.
Walking	Richmond	100 Dight St, Richmond NSW 2753, Australia	33.596333	150.775308	Installation of pedestrian footpath and bike lane. Especially for young people taking themselves to school or cadets
Walking	Richmond	137 Lennox St, Richmond NSW 2753, Australia	33.598524	150.746654	Cars typically do not stop at this pedestrian crossing. Often, I've been already crossing and a car will continue through - or I've been waiting to cross and have had several cars drive through instead of stopping. Would benefit from being a raised crossing, or from implementing some type of traffic calming measures (especially being out the front of a school).
Walking	Richmond	51 W Market St, Richmond NSW 2753, Australia	33.599352	150.748306	Cars typically do not stop at this pedestrian crossing. Often, I've been already crossing and a car will continue through - or I've been waiting to cross and have had several cars drive through instead of stopping. Would benefit from being a raised crossing, or from implementing some type of traffic calming measures (especially being out the front of a school).
Walking	Richmond	134 B59, Richmond NSW 2753, Australia	33.598011	150.749388	The pedestrian island here is often damaged from being hit by a vehicle. This raises a safety concern that the island for protecting pedestrians while they cross is constantly being hit.
Walking	Richmond	340 Windsor St, Richmond NSW 2753, Australia	33.595487	150.748065	There is a pole right in front of the crossing here- it makes it difficult for anyone with a pram, wheelchair etc. to easily cross.
Walking	Richmond	14 Bosworth St, Richmond NSW 2753, Australia	33.595523	150.747893	There is a pole right in front of the crossing here- it makes it difficult for anyone with a pram, wheelchair etc. to easily cross.
Walking	Richmond	161 Windsor St, Richmond NSW 2753, Australia	33.597743	150.752863	The footpath directs people onto the middle of the road, rather than to where the crossing is. This has proven to make the crossing very difficult for someone who has a pram, walking frame, wheelchair etc. Re-designing this crossing would be beneficial for pedestrian safety.



Mode	Suburb	Location of points	Latitude	Longitude	Comment
Walking	Richmond	92 B59, Richmond NSW 2753, Australia	33.600104	150.757827	This issue is not unique to this particular spot: Many of the connections between the foot path and the road are not a smooth connection. For someone with a pram, walking aid, wheelchair or bicycle, this makes crossing the road uncomfortable and inconvenient. Would be excellent to consider redesigning many of the connections to improve user experience. A small change that would make a big difference.
Walking	Richmond	Francis Street Pre School, 95 Francis St, Richmond NSW 2753, Australia	33.595933	150.753279	No footpath on this side of Francis Street. Would be good if this footpath continued all the way along to Smith Park (Pughs Lagoon).
Walking	Richmond	Londonderry Rd opp Vines Dr, Richmond NSW 2753, Australia	33.610951	150.743172	Providing a crossing to university would be a benefit for any students of the university or TAFE living in Hobartville.
Walking	Richmond	57 Bosworth St, Richmond NSW 2753, Australia	33.597893	150.746144	This side of the footpath is very uneven.
Walking	Richmond	9QW9+HR Richmond NSW, Australia	33.603564	150.769603	Opportunity for more trees along this walk to shade the path.
Walking	Richmond	25 Chapel St, Richmond NSW 2753, Australia	33.595357	150.740614	Path/Cycleway connecting Richmond to North Richmond.
Cycling	Richmond Lowlands	4 Bensons Ln, Richmond Lowlands NSW 2753, Australia	33.590708	150.75747	It would be a great location to cycle or walk along Bensons Lane from Richmond down to the Sports field.
Cycling	South Windsor	662 George St, South Windsor NSW 2756, Australia	33.628163	150.796022	Should have a wide shared cycle/pedestrian path for the full length of Macquarie Street. This would provide good connection between the public transport and shops in Bligh Park, South Windsor and Windsor. This should include appropriate locations for safe crossings.
Cycling	South Windsor	26 Kingsley Cl, South Windsor NSW 2756, Australia	33.623859	150.805589	This bike track stops here. Connect up
Walking	South Windsor	657 A9, South Windsor NSW 2756, Australia	-33.62759	150.795877	Installation of formal walking track / footpath to separate pedestrians from road way. Currently pedestrians choose between broken and uneven dirt and walking up the breakdown lane
Walking	South Windsor	699 A9, South Windsor NSW 2756, Australia	33.631537	150.791806	Having a footpath/ shared cycle pedestrian path along this entire road would allow for more people to be able to get from each town centre without having to rely on a car.



Mode	Suburb	Location of points	Latitude	Longitude	Comment
Walking	South Windsor	693 A9, South Windsor NSW 2756, Australia	33.630138	150.793297	Having somewhere safe to cross this road would be good. It is a main road with lots of traffic and a bus stop that is hard to access
Walking	South Windsor	259 Mileham St, South Windsor NSW 2756, Australia	-33.63112	150.795808	Busy street that is very difficult to cross to get kids to school
Walking	South Windsor	61 Woods Rd, South Windsor NSW 2756, Australia	33.630522	150.803103	Foot path ends on the corner and Pedestrians are expected to cross the road at the bend. With parked there is low visibility of oncoming traffic
Walking	South Windsor	Cnr George Street &, Blacktown Rd, South Windsor NSW 2756, Australia	33.638596	150.78513	Footpath ends here
Walking	Wilberforce	2 Hawkins Pl, Wilberforce NSW 2756, Australia	33.558555	150.842843	Footpath needed - note comments are on behalf of a resident unable to access computer.
Cycling	Windsor	93 The Terrace, Windsor NSW 2756, Australia	33.607333	150.815546	There is a 'bike' lane along this street, however I have never not seen it filled with parked cars.
Walking	Windsor	61 The Terrace, Windsor NSW 2756, Australia	33.605758	150.817787	Great location for a raised pedestrian crossing as it connects the paths along the Terrace River walk to paths that lead to the local shops and the main street.
Walking	Windsor	2 Kable St, Windsor NSW 2756, Australia	33.604687	150.820343	Great location for a raised pedestrian crossing as it connects the lookout and picnic area along the Terrace to paths that lead to the shops, main street and parking areas.
Walking	Windsor	Macquarie St before Day St, Windsor NSW 2756, Australia	33.609766	150.818542	Lack of shade along Macquarie Street for people walking along the path. This street is a main connection to the Library, Town centre, Hospital etc. Would be beneficial to add trees along this street to improve walkability, in turn this would also reduce urban heat. It connects onto the shared pedestrian/cycleway to McGraths Hill and would benefit cyclists too.
Walking	Windsor	23 George St, Windsor NSW 2756, Australia	33.602516	150.825301	Shared path connecting Howe Park/Windsor Wharf to Governor Phillip Park. Either an elevated boardwalk or acquire river frontage.



Mode	Suburb	Location of points	Latitude	Longitude	Comment
Walking	Windsor	29A Greenway Cres, Windsor NSW 2756, Australia	33.607709	150.810388	Shared pathway connection from Deerubbin Park to McQuade Park. This would create a loop from the river walk back to the Windsor township.
Walking	Windsor	164 Macquarie St, Windsor NSW 2756, Australia	33.613154	150.814605	The pedestrian crossings at this intersection are faded and ignored by drivers. It's unsafe for children to cross here
Walking	Windsor	323 George St, Windsor NSW 2756, Australia	33.609631	150.816439	Raised pedestrian crossing here would be beneficial. Currently as a pedestrian you need to walk out onto the road to see if any cars are coming because you can't see due to the parked cars. Dangerous spot to cross, especially if you have a pram, wheelchair etc.
Walking	Windsor	299 George St, Windsor NSW 2756, Australia	33.608779	150.817451	Pedestrian crossings so pedestrians can walk the length of George Street safely.
Walking	Windsor	265 George St, Windsor NSW 2756, Australia	-33.60804	150.818585	Pedestrian crossings so pedestrians can walk the length of George Street safely.
Walking	Windsor	97 The Terrace, Windsor NSW 2756, Australia	33.607502	150.815069	This particular roundabout is very difficult to cross if you are on a wheelchair or have a pram. The path disappears on one side, and there is no way to cross to the other side of the road without going into the middle of the roundabout first.
Walking	Windsor	109 The Terrace, Windsor NSW 2756, Australia	33.608181	150.814347	No footpath this side of the road
Walking	Windsor	2 Kable St, Windsor NSW 2756, Australia	33.604687	150.820343	Agree. Would also be great if it can connect to the public toilets in the car park.
Walking	Windsor	86 Hawkesbury Valley Way, Windsor NSW 2756, Australia	33.610865	150.806657	Walking/Cycling path connecting Windsor to Clarendon.



A group of people are walking away from the camera on a paved path. In the foreground, a man in a grey t-shirt and black shorts is walking a small white dog on a red leash. To his right, a woman in a red t-shirt and black leggings is walking. In front of her, a young child in a white shirt and floral skirt is riding a purple tricycle. Further ahead, another person is visible. The path is bordered by a metal railing on the left and some greenery on the right. In the background, a red car is parked on a street.

APPENDIX C

Route Identification

Route ID	Route Name	Route Classification	Section	Length	Typology	Description	Land Use	Key Attractions	User Group	Opportunity	Challenges	Council comments	
Route 1	Windsor - Rouse Hill	Primary	S1	7,800	Shared Path	Route 1 is a existing route which connects Windsor to Rouse Hill. This route is part of Greater Sydney's strategic cycleway corridor.	<ul style="list-style-type: none">Windsor and Rouse Hill are both categorised as strategic centres. Both areas can be considered as mixed use, with residential, commercial and recreational uses.	<ul style="list-style-type: none">Windsor CBDRouse Hill CBDHomeCo.		<ul style="list-style-type: none">An extension corridor that connects the strategic centres of Windsor and Richmond to other centres in the Western Parkland CityInfrastructure across the route already existsForms part of the TNSW Strategic Cycleway Corridor.	<ul style="list-style-type: none">The distance between Windsor and Rouse Hill is large, with the extended route approximately at 12,000m, which will only appeal to immediate / advanced cyclistsThe network runs parallel with one of the busiest roads in Hawkesbury which can affect the feeling of safety and wellbeing.	<ul style="list-style-type: none">Agree with route.	
Route 2	Bligh Park - Windsor via South Windsor	Primary	S1	1,200	Shared Path	Existing route which starts from Macquarie Street/Windsor Street and ends at Macquarie Street/Hawkesbury Valley Way.	<ul style="list-style-type: none">Bligh Park is primarily residential.South Windsor caters to both residential and industrial forms of land uses.Windsor is a strategic centre.	<ul style="list-style-type: none">Windsor Sporting ComplexService Station Bligh ParkSouth Windsor Town CentreMcQuade park		<ul style="list-style-type: none">Provide a direct connection to South Windsor and Windsor local centresImproves accessibility across Bligh Park and South Windsor	<ul style="list-style-type: none">Limitations across busy intersections will require crossing improvementsUtilities and vegetation along George Street will need to be relocated.High volumes of traffic including freight vehicles	<ul style="list-style-type: none">Agree with route.	
			S2	4,200	Shared Path	Section 2 builds off the existing route, extending a connection along George Street through South Windsor to Bligh Park.							
Route 3	Windsor - North Richmond via Richmond & Clarendon	Primary	S1	400	Shared Path	Section 1 looks to connect the existing shared path along Macquarie Street to the new Westinvest path along Hawkesbury Valley Way from Cox Street. This section will also provide support for route 2 as it will provide the link between its two sections.	<ul style="list-style-type: none">Windsor is a strategic centreClarendon provides access to recreational and employment opportunitiesRichmond is a strategic centreNorth Richmond has primarily residential land uses, however, also provides industrial and retail land uses.	<ul style="list-style-type: none">Windsor CBDRichmond CBDFriendship ParkRichmond OvalRichmond Station		<ul style="list-style-type: none">Provide a route which aligns with the Greater Sydney strategic cycleway corridor.Maximise the benefit of Westinvest by providing connections to from town centres to the route.Utilise reduced traffic along Kurrajong Road due to the bypass created via the Richmond Bridge project, in order to create a direct active transport link.Utilise new active transport along the Bridge.Provides a connection to Richmond Station.	<ul style="list-style-type: none">Utilities on Hawkesbury Valley Way may need to be relocated for section 1This route is dependent on the Richmond Bridge duplication.Certain sections of the carriageway along Kurrajong Road does not provide sufficient space and will require further investigation and additional infrastructure.	<ul style="list-style-type: none">Agree with proposed route. Section S2 should be changed to 'Missing' and the relevant distance included as it isn't funded.Agree with proposed route noting that this is dependent on Richmond Bridge duplication alignment	
			S2	2,000	Shared Path	Part of the Westinvest, this section connects Windsor to the existing shared path, which runs from near Clarendon Station to Richmond.							
			S3	2,400	Shared Path	Existing route which runs adjacent to Hawkesbury Valley Way. The route runs through Friendship Park, stopping at Windsor Street near Pitt Street.							
			S4	900	Shared Path	Section 4 looks to provide the missing link from the existing shared path to the centre of Richmond, near E Market Street.							
Route 4	North Richmond - Kurrajong via Kurmond	Secondary	S1	4,500	Shared Path	Existing path which connects North Richmond to Kurmond via a shared path.	<ul style="list-style-type: none">Both Kurmond and Kurrajong provide primarily residential land uses.	<ul style="list-style-type: none">North Richmond Shopping VillageHawkesbury ParkKurmond Town CentreKurrajong Town Centre		<ul style="list-style-type: none">Create a direct regional link which builds off the existing network and extends to the locality of Kurrajong.Provide a safe path for cyclists and pedestrians to travel along Bells Line of Road.	<ul style="list-style-type: none">The longer distance of the route will not be attractive to most recreational cyclists, drawing in mostly immediate/advanced riders.	<ul style="list-style-type: none">Agree with proposed route	
			S2	1,750	Shared Path	Part of the Westinvest, this section will connect Kurmond directly to Kurrajong via Bells Line of Road and Old Bells Line of Road.							
Route 5	North Richmond	Secondary	S1	1,350	Shared Path	Connects the centre of North Richmond (North Richmond Shopping Village) to the Redbank Development via Grose Vale Road.	<ul style="list-style-type: none">North Richmond is primarily residential land uses, particularly in and around the Redbank Development, with retail and other land uses located near and along Bells Line of Road.	<ul style="list-style-type: none">North Richmond Shopping Village (recreational/work/services, amenities)Richmond North Public SchoolNorth Richmond Community CentreNorth Richmond BMX TrackJohn Wellington Oval		<ul style="list-style-type: none">Provide a connection from the Redbank residential developments to the town centre of North RichmondConnect North Richmond residents on to the proposed primary and secondary cycle network	<ul style="list-style-type: none">Utilities and vegetation along Grose Vale Road may need to be relocated.	<ul style="list-style-type: none">Agree with route.	
Route 6	Hobartville - Richmond	Secondary	S1	1,000	Shared Path	Section 1 connects the centre of Richmond to Powell Street, passing two new Westinvest Projects, Templin Field and Richmond Shopping Centre.	<ul style="list-style-type: none">Hobartville is primarily residential land use, with a small town centre along Laurence Street.Richmond is a strategic centre.	<ul style="list-style-type: none">Richmond CBDTemplin FieldRichmond Swimming CentreRichmond and East Richmond Train StationWestern Sydney UniversityWindsor CBDRichmond High School		<ul style="list-style-type: none">Support Hobartville with a safe and comfortable access to Richmond town centreProvide access to new Westinvest projectsProvide increased access to Richmond High School	<ul style="list-style-type: none">Utilities and vegetation along Lennox Street and Powell Street may need relocation	<ul style="list-style-type: none">Change S1 to start from E Market Street then continue along Laurence St, turn right into Powell St, right into Douglas St, left into Hereford St right onto Castlereagh Rd and turn right into Lennox Street to complete the loop	
			S2	1,000	Shared Path	Section 2 provides a connection through Hobartville.							
			S3	1,200	Shared Path	Section 3 connects the proposed new sections to the existing shared path on Bourke street. This section also provides better access towards East Richmond Station.							
			S4	1,300	Shared Path	Existing path from East Richmond Train Station to Western Sydney University.							
			S5	170	Shared Path	Provides a connection from East Richmond Train Station to the proposed Route 3 section 4							
Route 7	Bligh Park - South Windsor	Secondary	S1	1,400	Shared Path	Section 1 aims to bring improved access across Bligh Park.	<ul style="list-style-type: none">Bligh Park is primarily residential.South Windsor caters to both residential and industrial forms of land uses.	<ul style="list-style-type: none">Colonial ReserveBerger Road ReserveHawkesbury Indoor StadiumHawkesbury OasisWindsor Down Natures Reserve		<ul style="list-style-type: none">Provide accessibility across Bligh Park via Colonial DriveConnect to existing shared path networkProvide a direct route to the proposed primary network	<ul style="list-style-type: none">Vegetation along Colonial Drive may need relocation	<ul style="list-style-type: none">Agree with majority of route.Updates to include a path along Rifle Range Road towards the unpaved route to Windsor Downs	
			S2	190	Shared Path	Green link connecting Colony Drive and Porpoise Crescent							
			S3	2,300	Shared Path	Provide a connection along Rifle Range Road towards the pedestrian/cycle trail through Windsor Downs Natures Reserve.							
			S4	3,500	Shared Path	Existing shared path which runs from Bligh Park to South Windsor through parklands.							
			S5	450	Shared Path	Section 5 provides access to the proposed Route 2 section 2, as well as the new Westinvest Hawkesbury Oasis							
Route 8	Windsor - Wilberforce	Secondary	S1	6,100	On Road	Existing on-road path (road shoulders) which connect Wilberforce to Windsor.	<ul style="list-style-type: none">The core of Wilberforce is primarily residential land use, with a few retail and commercial operations.Windsor is a strategic centre.	<ul style="list-style-type: none">Windsor CBD		<ul style="list-style-type: none">The existing route is a direct connection for both townsProvide cyclists in Wilberforce the opportunity to access Windsor's town centre and train station	<ul style="list-style-type: none">A major pinch point at Bullerworth Creek, where the on-road cycleway merges into roadDue to the distance between the two suburbs, over 5km, the route will not appeal to cyclists of all levelsWilberforce Road connects with Putty Road, and thus receives higher levels of traffic.	<ul style="list-style-type: none">Agree with route.	
Route 9	McGraths Hill	Secondary	S1	1,200	Shared Path	Section one connects the existing Route 1 directly to Mulgrave Station via Mulgrave Road.	<ul style="list-style-type: none">McGraths Hill provides residential land uses.Commercial, retail, industrial, and public transport options are provided in Mulgrave.	<ul style="list-style-type: none">Colbee ParkHomeCo McGraths HillArndell CollegeWindsor High SchoolMulgrave industrial zoneWindsor town centre	<ul style="list-style-type: none">School Students travelling to Windsor High School and Arndell College (walking and cycling)McGraths Hill residents travelling to Windsor Town centre (Cycling-recreational/work/appointments)McGraths Hill residents travelling to Mulgrave industrial zone (Walking/cycling - Work Purposes)McGraths Hill residents travelling to HomeCo / AISI (Walking - Recreational)		<ul style="list-style-type: none">Connect McGraths Hill residents to amenities near byConnect McGraths Hill residents to existing cycling networkProvides access to Mulgrave station and Windsor High School	<ul style="list-style-type: none">A new signalised intersection will need to be installed at the intersection of McGrath Road/Windsor Road	<ul style="list-style-type: none">Agree with majority of routes.Changes to S6.Inclusion of a link towards Oakville to connect to Vineyard in the future.
			S2	960	Shared Path	Section 2 connects to McGrath Hill, via Pittstown Road, allowing residents of McGraths Hill safe access to the remainder of the network.							
			S3	650	On Road	On road path through the core of McGraths Hill via Andrew Thompson Drive.							
			S4	660	Shared Path	Section 4 aims to connect the residents of McGraths Hill directly to the retail and commercial land uses along Windsor Road.							
			S5	970	Shared Path	Section 5 provides connection across McGraths Hill from Pitt Town Road to Colbee Park.							
			S6	480	Shared Path	Connects Old Hawksbury Road to Wolsley Road.							
			S7	2,320	Shared Path	Section 5 provides a connection to Oakville via Wolsley Road and Oakville Road, for a future connection to the developing Vineyard Precinct.							
Route 10	Mcgraths Hill - Pitt Town	Secondary	S1	3,800	On Road	This route will look to connect Pitt Town to McGraths Hill via Pitt Town Road. Due to the large distance between the towns, a on-road path (road shoulders) has been proposed as the typology.	<ul style="list-style-type: none">Both Pitt Town and McGraths Hill provide residential land uses.	<ul style="list-style-type: none">Colbee Park/BMX parkFerndeell park		<ul style="list-style-type: none">Utilise the traffic calming benefits of the Pitt Town Road bypassUtilise the extra carriageway space created via the Pitt Town Road bypass	<ul style="list-style-type: none">Due to the distance between the two suburbs route will not appeal to cyclists of all levels	<ul style="list-style-type: none">Agree with proposed routeTo investigate further links	

A photograph of a family walking away from the camera on a paved path. In the foreground, a man in a grey t-shirt and black shorts walks a small white dog on a red leash. To his right, a woman in a red t-shirt and black leggings walks a young child on a purple tricycle. The child is wearing a pink hat and a floral skirt. In the background, another person is walking. The path is bordered by a metal railing on the left and some greenery on the right. A red car is parked in the distance.

APPENDIX D

Background Report

Revision schedule

Rev No	Date	Description	Signature of Typed Name (documentation on file)			
			Prepared by	Checked by	Reviewed by	Approved by
1	14/03/23	Draft Report	Rijad Ahmic	Matt Todd	Niranjana Midde	Volker Buhl
2	13/04/23	Final Draft	Rijad Ahmic	Matt Todd	Niranjana Midde	Volker Buhl
3	19/05/23	Final	Rijad Ahmic	Matt Todd	Niranjana Midde	Volker Buhl

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Quality statement

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1 Introduction

Stantec has been commissioned by Hawkesbury City Council to prepare an Active Transport Action Plan (ATAP). Hawkesbury City Council previously prepared the Hawkesbury Mobility Plan (Bike Plan and Pedestrian Access and Mobility Plan P.A.M.P), which was adopted by Council on 11 May 2010. The 2010 PAMP set the direction for the next 10 years across the LGA and provides this study with the opportunity to review and realign priorities set previously. The purpose of the 2023 Active Transport Action Plan is to provide a framework for the integration of walking and cycling across the Hawkesbury region. This will be achieved through route recognition and prioritisation, and infrastructure recommendations.

The Active Transport Action Plan will form part of Hawkesbury City Councils wider policy and will align with the strategic direction set out in the Local Strategic Planning Statement and Hawkesbury Liveability Project Master Plan and Public Domain. The ATAP will align itself with State-wide planning policy including NSW Active Transport Strategy and Walking Space Guide.

1.1 Study Area

The Hawkesbury LGA is located 55 kilometres north-west of the Harbour CBD within the Hawkesbury River Valley. It is the largest LGA area in Greater Metropolitan Sydney, covering an expanse of approximately 2,800 square kilometres. The population as of the 2021 census was approximately 67,581. The extent of the Hawkesbury LGA is shown below in **Figure 1**.

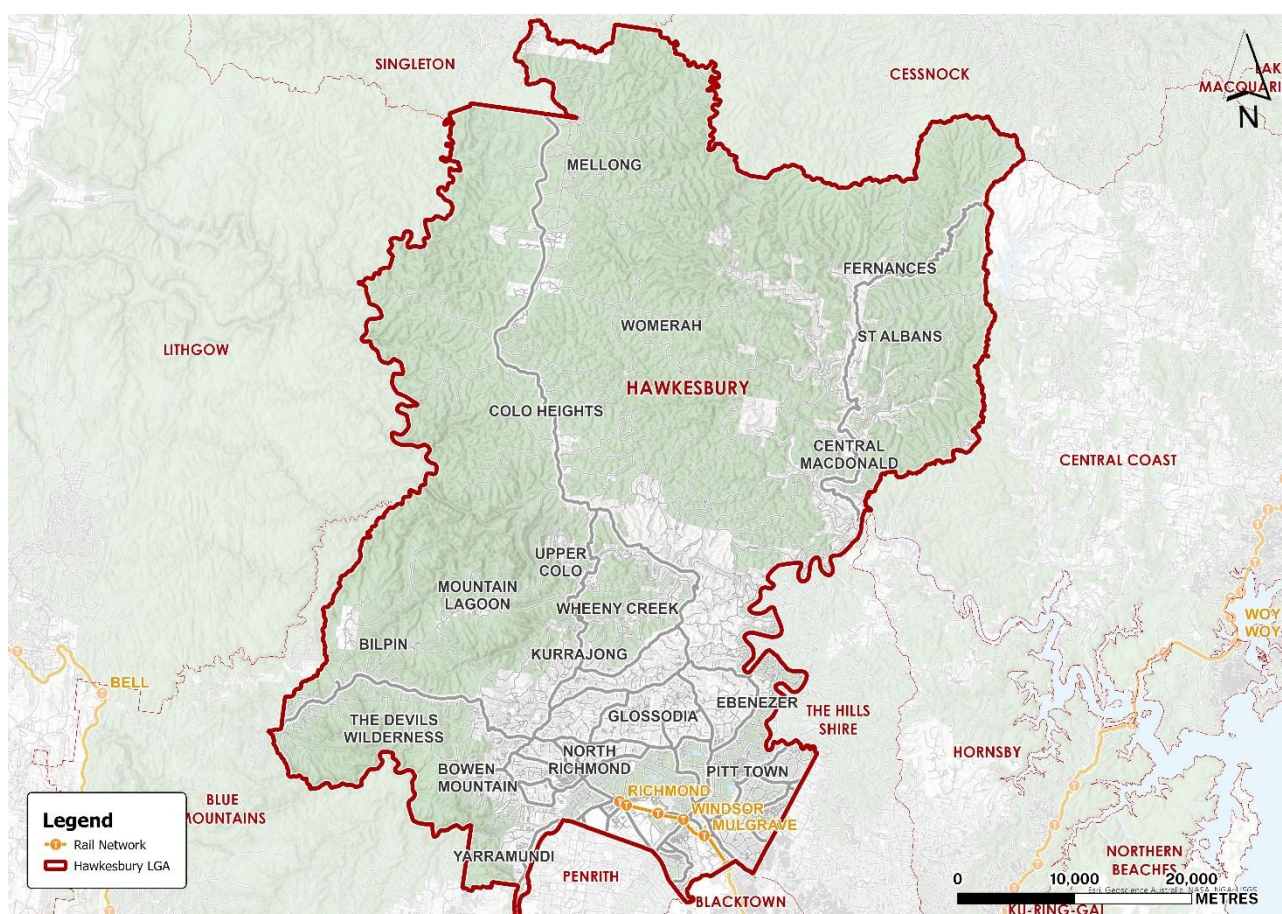


Figure 1: Hawkesbury LGA

The topography of the area is diverse ranging from fertile flood plains and wetlands, undulating hills and heavily timbered ridges, to inaccessible mountainous regions dissected by steep gorges and towering escarpments. As a result of these geographic features, the Hawkesbury LGA experiences regular flooding and bushfires, often resulting in disruption to agriculture, property, and community infrastructure. These features also limit development within the city.

Hawkesbury has diverse land use, ranging from strategic centres of Richmond and Windsor to industrial hubs such as Mulgrave. A strong proportion of the land within Hawkesbury is designated as national park (70 per cent). The majority of this national park is undeveloped, with many areas susceptible to bushfires. Hawkesbury has a complex river system,

which is made up of the Hawkesbury, Colo, Nepean, Grose and MacDonald Rivers. The region is highly prone to flooding, particularly during seasons of heavy rainfall. Other key land uses within Hawkesbury include the RAAF defence force, and recreational activities, which are particularly active in nature. Due to the abundance of the region's forestry and parks, Hawkesbury is a popular tourist destination, attracting outdoor enthusiasts.

The majority of Hawkesbury's population is centred in the southern half of the LGA, within Windsor, Richmond and the surrounding suburbs of North Richmond, South Windsor, Bligh Park and Hobartville. In addition to the more densely populated suburbs, there are several smaller localities throughout the LGA, such as Bilpin and St Albans. North Richmond and Richmond are the most populated centres however, it is Windsor, particularly South Windsor, which has the densest population, due to the high concentration of residences. In the grander scheme, population density across Hawkesbury is incredibly low at 24.35 persons per km². This is due to the vastness of uninhabited land in the region.

1.2 Project Aims

The aim of the Active Transport Action Plan is to:

- Promote walking and cycling within the LGA to encourage a mode shift away from private vehicles;
- Provide mobility links throughout the LGA to connect our centres, parks and facilities;
- Review and align priorities developed by the Hawkesbury Mobility Plan 2010 (Bike Plan and Pedestrian Access and Mobility Plan P.A.M.P);
- Review existing infrastructure and facilities across the Hawkesbury region;
- Improve the safety and wellbeing of pedestrians and cyclists through the LGA;
- Identify gaps in routes and provide opportunities to improve connectivity within the LGA and to surrounding infrastructure / key destinations;
- Develop a route evaluation matrix for prioritisation; and,
- Consider walkability, cycling, mobility challenges and any other identified modes of active transport.

2 Policy Framework

This section of the report summarises major regional and local planning policies which influence the development of the Hawkesbury Active Transport Action Plan.

2.1 Regional Context

2.1.1 Future Transport Strategy

Future Transport Strategy is the NSW State Government's vision for future mobility across Metropolitan Sydney and Regional NSW. Future Transport Strategy is the next iteration following Future Transport 2056, which was released in 2018. The document represents a major shift in social and economic change which has been brought about through the pandemic, bushfires and drought which have all happened since.

Future Transport Strategy is built around 14 strategic directions which sit under three key themes:

- Connecting our customers' whole lives (C1 – C4)
- Successful places for communities (P1 – P5)
- Enabling economic activity (E1 – E5)

Each key theme is supported by planning priorities and actions that provide direction in achieving the theme. The priorities and actions relevant to this study are provided in **Table 1**.

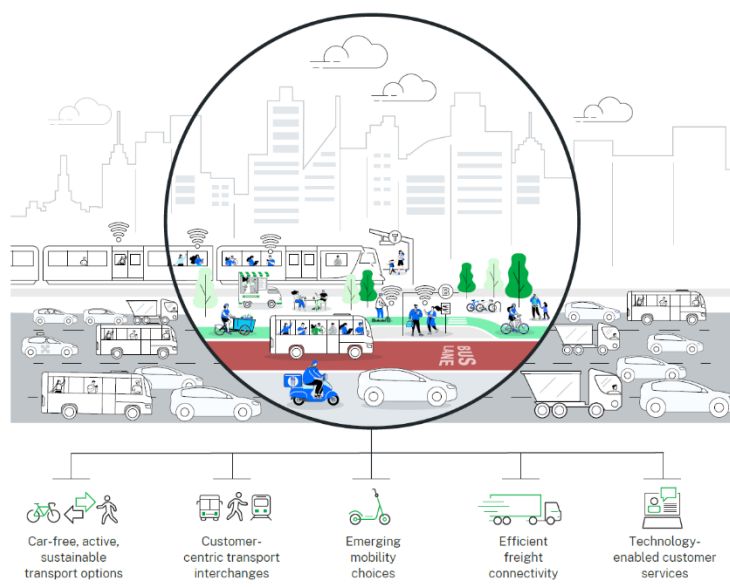


Figure 2: Future Transport Strategy at a glance

Table 1: Future Transport Strategy Planning Priorities

Planning Priorities	Priority Actions Relevant to the Study
C2.1 - Support Car free, active, sustainable transport options	<p>C2.1b - Develop Strategic Cycleway Corridors for each of the six cities to provide the foundation for safe, convenient and well-connected cycleways and support councils' local cycling networks.</p> <p>C2.1d - Simplify rules for Local Traffic Committees to reduce administration for approval of minor projects for walking, cycling or micro-mobility connections.</p> <p>C2.1f - Integrate safe and separate, first and last-mile walking and cycling connections and trip facilities into plans and projects to promote active transport for all travel purposes for people of all ages and abilities.</p> <p>C2.1i - Identify, review and amend regulations that disincentivise walking or cycling where appropriate.</p>
C3.1 - Provide transport choices for people no matter where they live	<p>C3.1b - Support disadvantaged communities by co-designing and providing transport services to increase inclusion, participation, health, and social wellbeing.</p>
C3.2 - Develop an inclusive transport system enabling access to services and places for all	<p>C3.2a Embed the principles of inclusion in our processes and policies.</p> <p>C3.2b Establish a standard for accessibility and inclusion that considers the needs of all customers across the end-to-end customer journey.</p> <p>C3.2c Continue to invest in our transport facilities to meet a high standard for inclusion, beyond the minimum standards established in legislation.</p>

Planning Priorities	Priority Actions Relevant to the Study
C3.3 - Make customers feel secure travelling day and night	<p>C3.3e Work with the community, councils, NSW Police and landowners on a range of measures to improve security to and from transport facilities.</p> <p>C3.3h Trial new interventions such as public art, and lighting enhancements around stops, stations and wharves.</p>
C4.5 - Improve the safety of people walking and cycling	<p>C4.5a Deliver reduced speeds and speed limits in urban places and local streets.</p> <p>C4.5b Deliver infrastructure safety treatments, including through the Towards Zero Safer Roads Program.</p> <p>C4.5c Continue investing in pedestrian crossings, refuge islands and traffic calming measures.</p> <p>C4.5d Support local communities and councils who wish to implement lower speed limits in their local areas.</p> <p>C4.5e Ensure micro-mobility devices are embedded safely within networks.</p>
P2.1 - Support thriving and healthy mobility 15-minute neighbourhoods	<p>P2.1c Ensure 15-minute walking, cycling and micro-mobility networks are planned or under development within the catchment prior to new train stations, major bus stops and interchanges and ferry wharves opening.</p> <p>P2.1d Investigate options to support council-led walking, cycling and place-making initiatives, to make it easier to activate local streets and centres.</p> <p>P2.1g Partner with the Department of Education and key stakeholders to improve safe walking, cycling and public transport access to schools.</p> <p>P2.1h Improve priority for walking trips in centres, towns and villages, such as reallocating road space to wider footpaths and providing more frequent and longer duration pedestrian crossing phases at traffic signals.</p>
P2.2 - Manage Street space as public space	<p>P2.2a Support trials of innovative and low-cost treatments to reallocate space for alternative public uses.</p> <p>P2.2b Reduce the cost and complexity of reallocating road space for alternative public uses.</p> <p>P2.2c Explore programs to revitalise streets as public spaces.</p>
P2.3 - Incorporate green, blue and OCHRE infrastructure	<p>P2.3b Work collaboratively to achieve a 40 per cent urban tree canopy target.</p> <p>P2.3d Incorporate the need for trees into urban street design and speed zoning guidance.</p>
P4.3 - Use space and assets more sustainably	<p>P4.3a Prioritise the reallocation of road space to more efficient and sustainable transport modes.</p> <p>P4.3b Investigate ways to reduce land required for transport in cities.</p> <p>P4.3c Consider measures and regulatory reforms to promote carpooling, car sharing and increased vehicle occupancy in point-to-point mobility.</p>
E2.2 - Stabilise Greater Sydney's traffic	<p>E2.2c Prioritise street space to walking, cycling and public transport where new projects provide alternative connections or bypasses for through traffic.</p>

2.1.2 Active Transport Strategy

The Active Transport Strategy (2022) sets out the NSW Government's vision to double active transport trips in 20 years. The strategy is built out of the Future Transport 2061 and forms the basis for this active transport action plan.

The plan identifies five focus areas and ambitions, which are supported by short-term (0-5 years) priority moves and deliverable actions. A key action is to provide communities with access to 15-minute neighbourhoods, which provide communities with access to health services, schools, shops and recreational events within a 15-minute walk or cycle.

The focus areas and actions that are relevant to delivering this plan are shown in **Table 2**.

Table 2: Active Transport Strategy Focus Areas and Actions

Focus Areas	Actions and Initiatives
Enable 15-minute neighbourhoods	<ul style="list-style-type: none"> • Integrate safe and separate, first and last-mile walking and cycling connections and trip facilities into plans and projects to promote active transport for all travel purposes for people of all ages and abilities. • Ensure 15-minute walking, cycling and micromobility networks are planned or under development within the catchment prior to new train stations, major bus stops and interchanges and ferry wharves opening. • Investigate options to support council-led walking, cycling and place-making initiatives, to make it easier to activate local streets and centres. • Partner with the Department of Education and key stakeholders to improve safe walking, cycling and public transport access to schools. • Improve priority for walking trips in centres, towns and villages, such as reallocating road space to widen footpaths and providing more frequent and longer duration pedestrian crossing phases at traffic signals. • Improve town amenity where possible by moving visitor car parking away from main streets. • Ensure there are footpaths on both sides of all streets within 400 metres of a local destination or main street and within 800 metres of a strategic or city centre. • Provide heavy vehicle bypasses of main streets and strategic or city centres. • Provide and upgrade safe cycle routes that establish or complete local networks. • Provide low-speed traffic environments to make walking and cycling safer.
Deliver connected and continuous cycling networks	<ul style="list-style-type: none"> • Improve cycle access to centres, stations, key precincts, and major parks and gardens – including the provision of suitable bike parking facilities. • Provide safe and connected cycleways for people of all ages and abilities that can be used by all current and future forms of micro mobility devices. • Improve car-free access to national parks and other natural assets.
Provide safer and better precincts and main streets	<ul style="list-style-type: none"> • Prioritise street space to walking, cycling and public transport where new projects provide alternative connections or bypasses for through traffic. • Implement signalised intersection upgrades to include missing crossings for pedestrians and bike riders. • Continue investing in pedestrian crossings, refuge islands and traffic calming measures. • Deliver walking improvements across the transport network, including lighting and smart technology to improve safety and visibility. • Support local communities and councils who wish to implement lower speed limits in their local areas. • Deliver reduced speeds and speed limits in urban places and local streets.
Promote walking and cycling and encourage behaviour change	<ul style="list-style-type: none"> • Work with councils to pilot infrastructure and traffic management initiatives, including temporary restricted vehicle access on roads adjacent to schools. • Partner with councils to improve consistent wayfinding information for walking and cycling across NSW. • Continue to work with other state agencies and stakeholders to attract and facilitate events that promote walking and cycling.

2.1.3 Practitioners Guide to Movement and Place

In partnership with the Government Architect NSW, Transport for NSW (TfNSW) has developed the Practitioners Guide to Movement and Place for use on NSW Government projects. The objective of Movement and Place is to achieve roads and streets that:




- Contribute to the network of public space within a location, where people can live healthy, productive lives, meet each other, interact, and go about their daily activities.
- Are enhanced by transport and have the appropriate space allocation to move people and goods safely and efficiently and connect places together. Balancing movement and place recognise that trade-offs may be required to achieve a best fit for the objectives.

The Hawkesbury ATAP will consider movement and place visions and outcomes for key streets within the study areas at a high level only. Recommendations will seek to maintain or enhance the unique character of places with the provision of active transport infrastructure that aligns with desired outcomes.

2.1.4 Transport for NSW Cycleway Design Toolbox

The Cycleway Design Toolbox was developed by Transport for NSW to guide practitioners on cycling and micro-mobility design across NSW. The toolbox guides practitioners with a range of design tools and best practices for the design and delivery of high-quality cycling infrastructure, an example of which is provided in **Figure 3**.

Local routes

Street typology (Movement and Place)	Civic space	Local street	Main street	Main road
Motor vehicle speed	≤10 km/h	≤30 km/h	≤50 km/h	>50 km/h
Motor vehicles / day	n/a	≤2,000	>2,000	n/a
<u>Bicycle path</u> (One and two-way)				
<u>Quietway</u>				
<u>Shared path</u> (Low pedestrian activity and low cross-cycleway movement)				
<u>Shared path</u> (High pedestrian activity or high cross-cycleway movement)				
<u>Shared zone</u>				

 Required for priority routes
  Suitable, but not preferred for priority routes

Figure 3: Cycleway Facility Selection Tool

The toolbox is centred around five internationally recognised design principals, and one more additional principal. The principals are defined to integrate cycling into urban and suburban environments, whilst balancing customer needs and achieving movement and place outcomes. Practitioners are encouraged to design and provide the infrastructure that meets all six of the principal's, which are shown in **Table 3**.

Table 3 Cycleway design toolbox principles

Principal	Description
Safe	Cycling infrastructure must not only be safe but should also be perceived to be safe so that people of all ages and abilities feel comfortable using the facilities.
Connected	Cycling infrastructure should be designed and planned to enable people to reach their day-to-day destinations easily, along routes that are connected, simple to navigate, and of a consistent quality that is appropriate for the expected use of that route.
Direct	Measured in both time (effort) and distance, direct routes should provide bicycle riders with the shortest and fastest way of travelling from place to place, and make cycling an attractive alternative to driving or even public transport, particularly for local journeys.

Principal	Description
Attractive	Cycling is a pleasurable activity, in part because it involves such close contact with the surroundings. Cycling infrastructure should connect to and help deliver public spaces that are well-designed and be places that people want to spend time.
Comfortable	Comfortable conditions for cycling require routes that are clearly demarcated from motor vehicles and pedestrians with high-quality, well-maintained and smooth surfaces.
Adaptable	Delivering a piece of infrastructure is only a part of a project's overall lifecycle. Adaptability should be embedded in the design of cycling infrastructure to ensure that it can evolve to accommodate changes in the needs and demands of its users over time.

2.1.5 Transport for NSW Walking Space Guide

The Walking Space Guide developed by Transport for NSW described the following principles for improved pedestrian comfort and safety:

- The importance of shade and trees to improve pedestrian comfort.
- Kerbside traffic and active building buffers depending on speed limits and pedestrian volumes.
- Lack of obstructions on footpaths and adequate pedestrian circulation space.

The Guide details recommended widths for different street activity levels which should be adopted in future development and implementation of the strategic pedestrian network, shown in **Table 4**.

Table 4: Walking Space Guide recommendations

Road type	Description	Recommended Minimum Walking Space
Local footpath – low activity	Appropriate where people walking are unlikely to pass people coming the other way.	2.0m with 1.3m kerbside traffic buffer
Local footpath – medium activity	Appropriate where people walking are more than likely to pass people coming the other way.	2.3m with 1.3m kerbside traffic buffer
Main street footpath – medium activity / Local footpath – high activity	Appropriate where people walking are virtually certain to pass people coming the other way.	3.2m with 1.3m kerbside traffic buffer
Main street footpath – high activity	Appropriate where people walking are virtually certain to meet multiple groups of people coming the other way.	3.9m with 1.5m kerbside traffic buffer
Main street footpath – very high activity	Appropriate where it is very busy most of the time e.g., direct connections to Sydney Metro station entrances.	4.5m with 1.5m kerbside traffic buffer

2.1.6 Western City District Plan

The Western City District Plan (WCDP) is a 20-year plan designed to manage economic, social and environmental growth matters to achieve the 40-year vision for Greater Sydney. The WCDP covers the local government areas of Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly. The WCDP identifies Richmond and Windsor as Strategic Centres. Through a series of actions, the District Plan is intended to guide decision-making to shape the region. Actions within the WCDP directly applicable to Hawkesbury and active transport are detailed in Table 5.

Table 5: Western City District Plan Priorities

Planning Priority		Action
W1	Planning for a city supported by infrastructure	3 Align forecast growth with infrastructure.
		4 Sequence infrastructure provision using a place-based approach.
		5 Consider the adaptability of infrastructure and its potential shared use when preparing infrastructure strategies and plans.
W3	Providing services and social infrastructure to	9 Deliver social infrastructure that reflects the needs of the community now and in the future.

Planning Priority		Action	
	meet people's changing needs	10	Optimise the use of available public land for social infrastructure
W4	Fostering healthy, creative, culturally rich and socially connected communities	11	Deliver healthy, safe and inclusive places for people of all ages and abilities that support active, resilient and socially connected communities by: <ul style="list-style-type: none"> a. providing walkable places at a human scale with active street life b. prioritising opportunities for people to walk, cycle and use public transport
		16	Strengthen social connections within and between communities through better understanding of the nature of social networks and supporting infrastructure in local places.
W6	Creating and renewing great places and local centres, and respecting the district's heritage	19	Using a place-based and collaborative approach throughout planning, design, development and management, deliver great places by: <ul style="list-style-type: none"> a. prioritising a people-friendly public realm and open spaces as a central organising design principle b. recognising and balancing the dual function of streets as places for people and movement c. providing fine grain urban form, diverse land use mix, high amenity and walkability, in and within a 10-minute walk of centres d. integrating social infrastructure to support social connections and provide a community hub e. recognising and celebrating the character of a place and its people.
		20	In Collaboration Areas, Planned Precincts, Growth Areas and planning for centres: <ul style="list-style-type: none"> c. consider the capacity for places to change and evolve, and accommodate diverse activities over time
		22	Use place-based planning to support the role of centres as a focus for connected neighbourhoods.
		23	Use flexible and innovative approaches to revitalise high streets in decline.
W7	Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City	24	Integrate land use and transport plans to deliver the 30-minute city.
		27	Prioritise transport investments that enhance access to the economic corridors and between centres within the corridors.
W8	Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis	40	Consider opportunities to implement place-based initiatives to attract more visitors, improve visitor experiences and ensure connections to transport at key tourist attractions.
W9	Growing and strengthening the metropolitan cluster	46	Prioritise: <ul style="list-style-type: none"> b. infrastructure investments which enhance walkability within two kilometres of the metropolitan cluster or strategic centres or 10 minutes walking distance of a local centre c. infrastructure investments, particularly those focused on access to the transport network, which enhance cycling connectivity within five kilometres of strategic centres or 10 kilometres of the metropolitan cluster

Planning Priority		Action
W11	Growing investment, business opportunities and jobs in strategic centres	65
Strengthen Richmond-Windsor through approaches that:		
<ul style="list-style-type: none"> b. Support master planning processes for Richmond and Windsor that encourage new lifestyle and entertainment uses, and employment opportunities, activate streets and places, grow the tourism economy and respect, and enhance the significant heritage value and assets. c. Facilitate the attraction of office/commercial floor space and provide opportunities to allow commercial and retail activities to innovate, including smart work hubs. 		

2.2 Local Context

2.2.1 Hawkesbury Mobility Plan 2010

The Hawkesbury Mobility Plan is a strategic plan which outlines priorities and strategies to help guide active transport decisions for the LGA. The Mobility plan sets out the objective of identifying key active transport routes that are convenient, connected, and coherent. To help achieve the outcome, the following actions have been identified:

- Integrate consistent and continuous active transport networks into the land use and transport system, to facilitate and encourage more walking and cycling.
- Linkage of pedestrian concentrations to pedestrian networks to facilitate and encourage safe and convenient accessibility and mobility for pedestrians.
- Development and integration of intra and inter-regional cycling routes, that form part of a connected cycling network.
- Ensure the use and safe operation of bicycles are incorporated into the plan for all classes of bike users.

2.2.2 Hawkesbury City Council Net Zero Emissions and Water Efficiency Strategy

The Hawkesbury City Council Net Zero Emissions and Water Efficiency Strategy (NZEWS) set out Council's strategy to achieve net zero across the region by 2050. As part of this, the strategy targets low carbon and local transport by:

- Providing public and on-demand transport infrastructure
- Encouraging active transport usage
- Provide and test use cases of electric scooters.

2.2.3 Hawkesbury City Council Community Strategic Plan (2022 – 2042)

The Hawkesbury Community Strategic Plan provides a vision and strategy for the region, which has been developed through consultation with the local community. This ensures that the opinions of the community are reflected and supported to help create a healthy and resilient future for the future. The Plan details key goals and objectives which are of relevance to this study, as shown in **Table 6**.

Table 6: Hawkesbury City Council outcomes

Community Outcome	Long Term Objectives	Success Indicators
1. Great Place to Live	<p>1.2 Encourage and enable our community to participate in a healthy lifestyle.</p> <p>1.4 Facilitate the delivery of infrastructure through relevant agencies for council's own works.</p> <p>1.5 Provide the right places and spaces to serve our community.</p>	<ul style="list-style-type: none"> • More of us will use public transport, walk or cycle for journeys, rather than personal cars. • Our infrastructure will service our community in the most effective and sustainable way.
2. Protected Environment and Valued History	<p>2.4 Encourage and enable our community to make more sustainable choices.</p> <p>2.6 Achieve net zero emissions targets.</p>	<ul style="list-style-type: none"> • We value our historic built environment and take active steps to protect and enhance them.

Community Outcome	Long Term Objectives	Success Indicators
3. Strong Economy	3.1 Creating an integrated and well-maintained transport system is an important local priority. 3.4 Support the revitalisation of our town centres and the growth of our business community.	<ul style="list-style-type: none"> Town centres of Windsor, Richmond and North Richmond have more residents and more diverse retail, cultural and service opportunities.
4. Reliable Council	4.7 Encourage informed planning, balanced growth, and community engagement. 4.8 Facilitate the delivery of infrastructure through relevant agencies and councils own works	<ul style="list-style-type: none"> We will be satisfied with transport infrastructure and transport options across the city.

2.2.4 Hawkesbury Local Strategic Planning Statement

The Hawkesbury LSPS outlines the long-term visions and planning priorities for the LGA. The LSPS provides a framework for managing growth throughout the area, as it sets out strategic directions and actions which help steer decision making towards community goals. To achieve certain planning priorities, the LSPS introduces active transport as actionable measures which will strategically push the community towards their desired outcomes. **Table 7** highlights the planning priorities relevant to transport:

Table 7: Hawkesbury LSPS planning priorities

Priority	Actions
Ensure infrastructure aligns with current needs and future growth.	<ul style="list-style-type: none"> Council will work with Transport for NSW to ensure that transport decisions enable and support liveability, employment and long-term community outcomes. Identify the shortfall of infrastructure to meet the social, economic and environmental needs of the growing community.
Provide a diversity of housing types to meet the needs of the changing population.	<ul style="list-style-type: none"> Ensure that there is adequate social and environmental infrastructure available to match the additional population and housing diversity.
Manage, enhance, and celebrate the distinctive heritage character of our towns, villages and naturally landscaped environment.	<ul style="list-style-type: none"> Prepare and implement the Vibrant Towns and Villages Master Plan to identify and enhance the distinctive character of the Hawkesbury's towns and villages.

3 Land Use and Local Context

3.1 Key Land Use and Locations

The Hawkesbury LGA is located in north-west Greater Metropolitan Sydney and is bounded by Lithgow, Singleton, Cessnock, Central Coast, The Hills Shire, Blacktown, Penrith and Blue Mountains LGA's. The region covers an expanse of 2,775 square kilometres for which the vast majority is National Park. Due to the vast size of the LGA, there is a large number of suburbs located in the region which are detailed below:

- Agnes Banks
- Berambing
- Bilpin
- Blaxlands Ridge
- Bligh Park
- Bowen Mountain
- Bucketty,
- Cattai
- Central Colo
- Central Macdonald
- Clarendon
- Colo
- Colo Heights
- Cornwallis
- Cumberland Reach
- East Kurrajong
- Ebenezer
- Fernances
- Freemans Reach
- Glossodia
- Grose Vale
- Grose Wold
- Higher Macdonald
- Hobartville
- Kurmond
- Kurrajong
- Kurrajong Heights
- Kurrajong Hills
- Leets Vale
- Lower Macdonald
- Lower Portland
- Maraylya
- McGraths Hill
- Mellong
- Mogo Creek
- Mountain Lagoon
- Mulgrave
- North Richmond
- Oakville
- Perrys Crossing
- Pitt Town
- Pitt Town Bottoms
- Putty
- Richmond
- Richmond Lowlands
- Sackville
- Scheyville
- South Windsor
- St Albans
- Ten Mile Hollow
- Tennyson
- The Devils Wilderness
- The Slopes
- Upper Colo
- Upper Macdonald
- Vineyard
- Webbs Creek
- Whiny Creek
- Wilberforce
- Windsor
- Windsor Downs
- Wisemans Ferry
- Womerah
- Wrights Creek
- Yarramundi

The Hawkesbury LGA is predominantly rural, with much of the population and employment opportunities located in the south of the region. Mulgrave, Richmond, North Richmond, Windsor and South Windsor have the greatest employment opportunities, with the highest concentrations found in Mulgrave, Richmond, and Windsor. Bligh Park, North Richmond, Richmond, South Windsor have the highest population and account for 35 per cent of the region's total population. **Table 8** details population and employ data for key suburbs located within the Hawkesbury LGA

Table 8: Local Population – 2021 Census

Location	Land Area (km ²)	Population 2021 (Persons)	Pop Density (per km ²)
Hawkesbury LGA	2,776	67,207	24
North Richmond	21.5	6,358	295
Bligh Park	2.1	6,220	2,934
South Windsor	8.8	5,948	671
Richmond	51.5	5,418	105
Pitt Town	39.5	3,871	98
Hobartville	1.1	2,712	2,488
McGraths Hill	3.1	2,537	816
Windsor	4.2	1,915	460
Vineyard	13.8	1,143	83
Mulgrave	5.8	78	13

Source: ABS Census Data 2021

Throughout the region there is a wide range of key facilities and trip attractors. **Table 9** details a number of these that are of relevance to this study.

Table 9: Key land uses within Hawkesbury

Type	Destination
Tertiary Education	<ul style="list-style-type: none"> • Macquarie Community College (Richmond) • New Era Institute (Windsor) • TAFE NSW (Richmond) • University of Notre Dame (Windsor) • Western Sydney University, Hawkesbury Campus (Richmond)
Shopping Centres	<ul style="list-style-type: none"> • Bligh Park Shopping Centre (Bligh Park) • Glossodia Neighbourhood Shopping Centre (Glossodia) • Hobartville Shopping Centre (Hobartville) • HomeCo. McGraths Hill (Vineyard) • Magnolia Mall (Richmond) • North Richmond Shopping Village (North Richmond) • Park Mall (Richmond) • Pitt Town Shopping Village (Pitt Town) • Richmond Mall (Richmond) • Richmond Marketplace (Richmond) • South Windsor Shopping Village (South Windsor) • Wilberforce Shopping Centre (Wilberforce) • Windsor Marketplace (Windsor) • Windsor Riverview Shopping Centre (Windsor)
Hospital/Medical Centre	<ul style="list-style-type: none"> • Hawkesbury Community Health Centre • Hawkesbury Community Mental Health Centre • Hawkesbury District Health Service (Windsor) • RAAF Richmond Health Centre • St John Of God Hawkesbury District Health Service (Windsor) • St John of God Richmond Hospital (North Richmond)

3.2 Key Centres

The following section describes some of Hawkesbury's key suburbs in further detail.

3.2.1 Bligh Park

Bligh Park is located to the south of South Windsor and is the most densely populated suburb in the Hawkesbury LGA. The area is comprised mostly of residential development, with some key areas including the local centre located on Colonial Drive and Bligh Park Public School.

3.2.2 Hobartville

Hobartville is entirely bordered by Richmond and is located to the south-west of Richmond town centre. Hobartville is the second most densely populated suburb in the Hawkesbury LGA due to its small size. Hobartville is generally residential, other than for key trip attractors such as Hobartville Shopping Centre and Hobartville Public School.

3.2.3 North Richmond

North Richmond is bounded by Kurmond and Tennyson in the north, Glossodia and Freemans Reach in the east, Hawkesbury River in the south, and Grose Vale and Kurrajong in the west. North Richmond is primarily residential, with commercial and retail land uses scattered throughout the suburb. North Richmond centre is located next to the intersection of Bells Line Road and Gross Vale Road. North Richmond is a relatively expansive suburb with a growing population, due to the ongoing residential developments focused on the northwest boundary.

Foot traffic in this region is primarily focused in and around North Richmond Village, with entry points to the shopping precinct on either Bells Line of Road or Riverview Street. Public transport in the region is limited to bus services that travel along key roads such as Grose Vale Rd and Bells Line of Road.

3.2.4 Richmond

Richmond is bordered by the Hawkesbury River to the north and west, Rickabys Creek and South Windsor to the east. Richmond is a strategic centre that consists of residential, commercial, and retail operations. Richmond has many Heritage listed buildings, that attract tourists to the area. Richmond is also home to the defence industry, the RAAF, which houses various military aircraft.

Richmond's core centre is focused on Windsor Street with an abundance of stores and eateries. Richmond Mall is also located along Windsor Street, with car park entry from Francis Street. Richmond is serviced by two rail stations, Richmond Station, located within the core centre, and East Richmond found further east on Bourke Street. Key locations within the suburb include the RAAF base, Richmond TAFE, and Western Sydney University Hawkesbury Campus.

3.2.5 South Windsor

South Windsor is bounded by the T1 rail line to the north, Rickabys Creek to the west, Penrith, Windsor Down and Bligh Park in the south, and Mulgrave in the east. South Windsor's centre is located on George Street, with a variety of shops and services present. The land use in the south of the suburb is focused on industrial services, with a large congregation of commercial businesses and employment opportunities. Bus services operate throughout South Windsor, providing access to Windsor Station. Whilst other services running through South Windsor connect to the key employment centres such as Mt Druitt and Penrith.

3.2.6 Windsor

Windsor is bounded by the Hawkesbury River in the north, South Creek in the east, the T1 rail line in the south, and Rickabys Creek in the west. Windsor is a strategic centre that is comprised of residential, retail and industrial land zoning. Windsor has a large local centre situated off Macquarie Street, which includes a large pedestrian-only zone. Windsor rail station is located in the southwest of the suburb away from the suburb's main centre. Windsor sits within a flood-prone area due to its proximity to the Hawkesbury River and sees occasional flooding occurring after periods of heavy rainfall.

3.2.7 Mulgrave

Mulgrave is bounded by South Windsor to the east, Windsor to the north, McGraths Hill to its east, and Vineyard wrapping up across its southern and eastern border. Mulgrave is quite devoid of residency, as its land use is focused on various industries, making it a key employment hub throughout the HCC. Despite having Windsor has a buffer between the Hawkesbury River, Mulgrave still occasionally face floods due to the overflowing river and creeks.

3.3 Travel Patterns and Journey to Work

The data shown in this chapter is taken from the journey to work dataset, collected in the Australian Bureau of Statistics (ABS) 2021 census. The data shown provides information on the mode of transport used by Hawkesbury residents to travel to their place of work in **Table 10**. The data shows that a significant amount of Hawkesbury residents work within the local LGA and have a strong reliance on private vehicle use. Walking is the second most popular mode of transport, with a share of 4.9 per cent of all journeys made. 0.9 per cent of all journeys made to work were undertaken by bicycle.

Table 10: Hawkesbury (Usual Residence) Journey to Work Mode Share

Mode of Transport	Place of Work			
	Hawkesbury		Greater Sydney	
	Number of Persons	Proportion (%)	Number of Persons	Proportion (%)
Car, as driver	7590	81%	15815	85.2%
Car, as passenger	654	7%	931	5%
Train	59	0.6%	369	2.0%
Bus	27	0.3%	51	0.3%
Cycle	46	0.5%	54	0.3%
Walk	500	5.3%	519	2.8%
Motorbike	48	0.6%	109	0.6%
Other	439	4.7%	709	3.8%

Source: ABS Census 2021

Table 11 shows the top 10 destinations for employment for persons where Hawkesbury is their usual place of residence. It shows that the majority of residents work within the LGA, with Blacktown and Penrith making up the top three destinations.

Table 11: Top 10 Destinations for Employment (Hawkesbury Residents)

Place of Work	Number of Persons	Proportion of Workers (%)
Hawkesbury	15,371	46.3%
Blacktown	3,938	11.9%
Penrith	3,057	9.2%
The Hills Shire	2,353	7.1%
Parramatta	1,455	4.4%
Sydney	1,064	3.2%
Cumberland	548	1.7%
Hornsby	476	1.4%
Fairfield	416	1.3%
Ryde	360	1.1%

Source: ABS Census 2021

Figure 4 shows the breakdown of areas that Hawkesbury residents are travelling to for employment within the LGA. Richmond – Clarendon is the most popular destination for employment, with Windsor – Bligh Park and Kurrajong Heights - Ebenezer slightly behind.

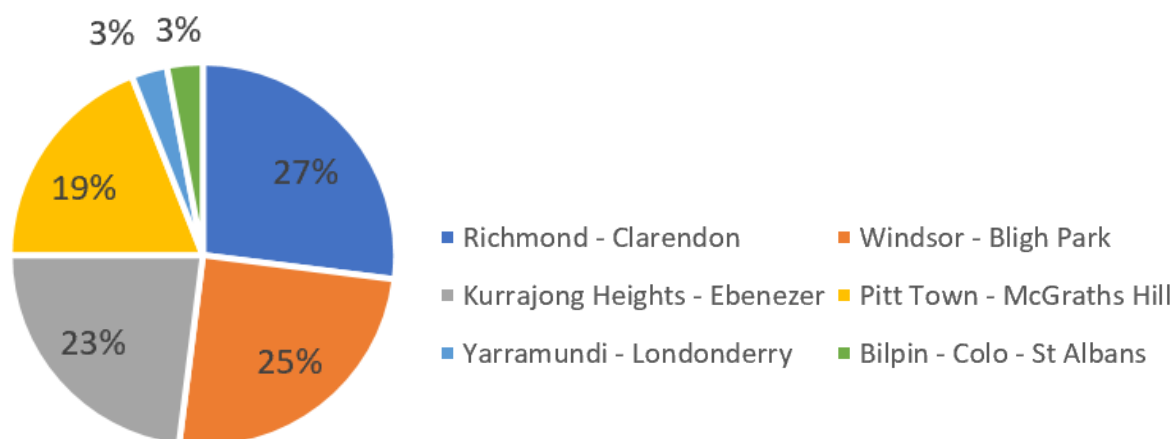


Figure 4: Hawkesbury Residents Place of Work

Table 12 shows key employment industries detailed by travel zone. Construction, retail, and health care assistance are key employment sectors in the LGA. Richmond has a significant proportion of public administration and safety, partly due to the location of RAAF.

Table 12 Industries in Hawkesbury

Key Travel Zones	Employment by Industry (2022)
Windsor Town Centre	<ul style="list-style-type: none"> • Health Care and Social Assistance • Public Administration and Safety • Retail Trade
South Windsor Industrial Area	<ul style="list-style-type: none"> • Construction • Electricity, Gas, Water and Waste Services • Polymer Product and Rubber Product Manufacturing
Richmond	<ul style="list-style-type: none"> • Health Care and Social Assistance • Retail Trade • Accommodation and Food Service
Richmond RAAF	<ul style="list-style-type: none"> • Public Administration and Safety • Transport equipment Manufacturing
Clarendon	<ul style="list-style-type: none"> • Education and Training • Health Care and Social Assistance
Mulgrave	<ul style="list-style-type: none"> • Construction • Retail Trade

3.3.1 Future Growth Projections

Table 13 shows future projections data taken from the Department for Planning and Environment (DPEs) Travel Zone Projections 2022. It shows that employment opportunities in the LGA are projected to grow by a third by 2061, with an increase of 10,000 forecasted jobs across the region. The population of Hawkesbury is forecast to grow by a total of 24,396 (35 per cent) in the same period up to 2061.

Table 13 Future Projections Hawkesbury

Projections	Years				
	2022	2031	2041	2051	2061
Projected Population	68,400	71,113	77,320	85,397	92,796
Projected Employment	30,488	32,204	34,784	37,544	40,415

Source: Travel Zone Projections 2022

Figure 5 shows population growth forecasts for the southern Hawkesbury region, taken from the 2022 Travel Zone Projections. It shows that Pitt Town is to see the greatest level of population change with over 2,000 additional persons residing in the suburb by 2041. North Richmond is expected to see a growth of between 1,000 to 2,000, with Glossodia also expecting visible change.

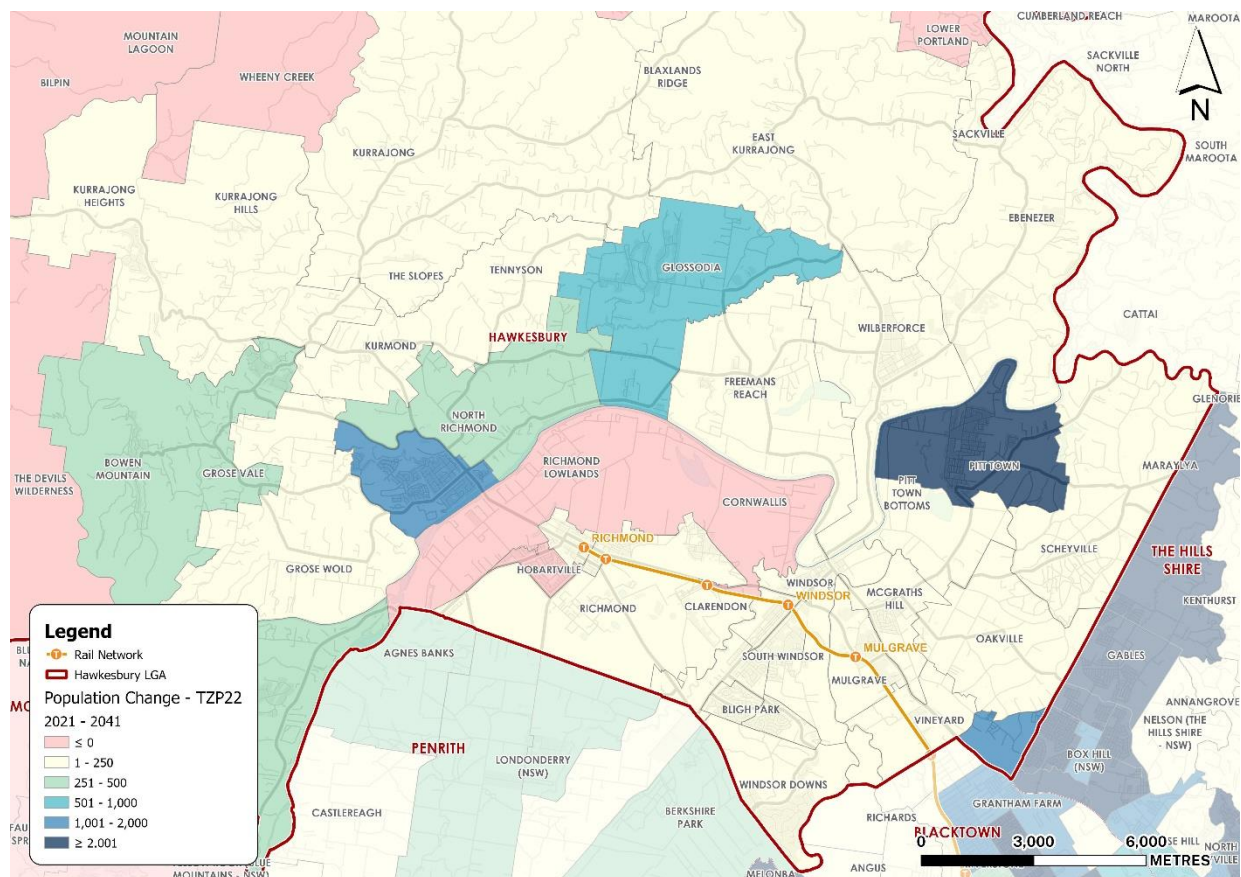


Figure 5: Population Growth 2021 - 2041

4 Existing Conditions

4.1 Pedestrians

4.1.1 North Richmond Pedestrian Infrastructure

Figure 6 details pedestrian infrastructure throughout the suburb of North Richmond. It shows a disparity between the availability of footpaths between newly built residential areas and older areas of housing. Within the newer developments to the west of the suburb, most streets have a functional footpath on at least one side of the road. In the areas with older residential developments, there is little to no footpath network other than along key roads. Where footpaths are present in this area, they are concentrated around the local centre, such as North Richmond Shopping Village along Bells Line of Road. Areas with higher foot traffic due to commercial and other mixed land uses, such as Williams Street, have available infrastructure. Where footpaths are present, they are generally narrow in width, making it difficult for vulnerable persons to manoeuvre. A pedestrian wombat crossing and pedestrian refuge is supplied on Grose Vale Road close to the local centre, which helps facilitate safe crossings to Richmond North Public School.

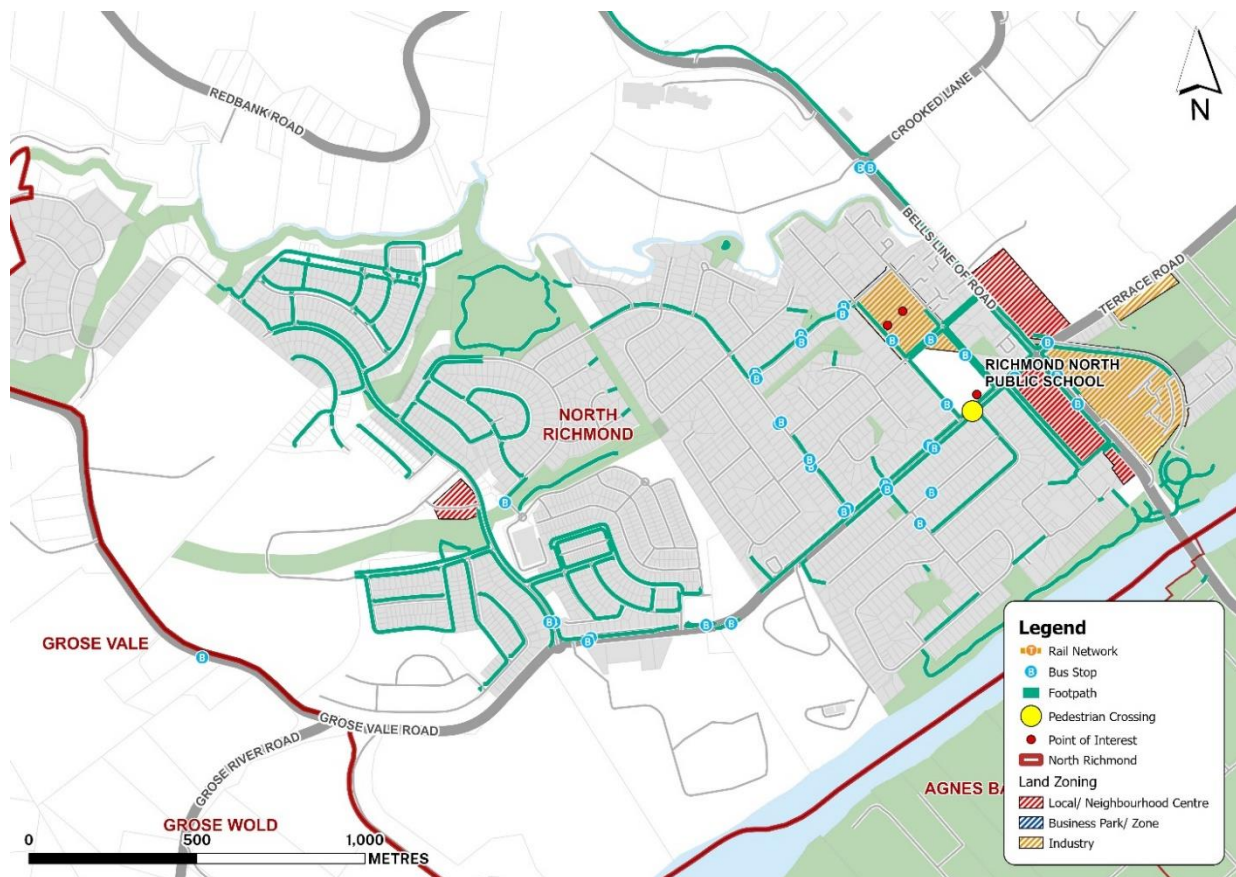


Figure 6: North Richmond Pedestrian Infrastructure

4.1.2 Hobartville and Richmond Pedestrian Infrastructure

Figure 7 shows pedestrian infrastructure for the suburbs of Hobartville and Richmond. It shows that Richmond has a strong pedestrian network within its centre, with supporting connections to surrounding areas. Pedestrian crossing facilities are widely present within the local centre, facilitating safe crossings to key locations such as Richmond Public School, Richmond Oval and between shops and eateries. All approaches to Richmond and East Richmond rail stations are serviced by functional infrastructure.

Richmond town centre and Hobartville shopping centre are connected by a consistent footpath network. Other than the connection to Richmond and around the local centre, the footpath network in Hobartville is generally non-existent.

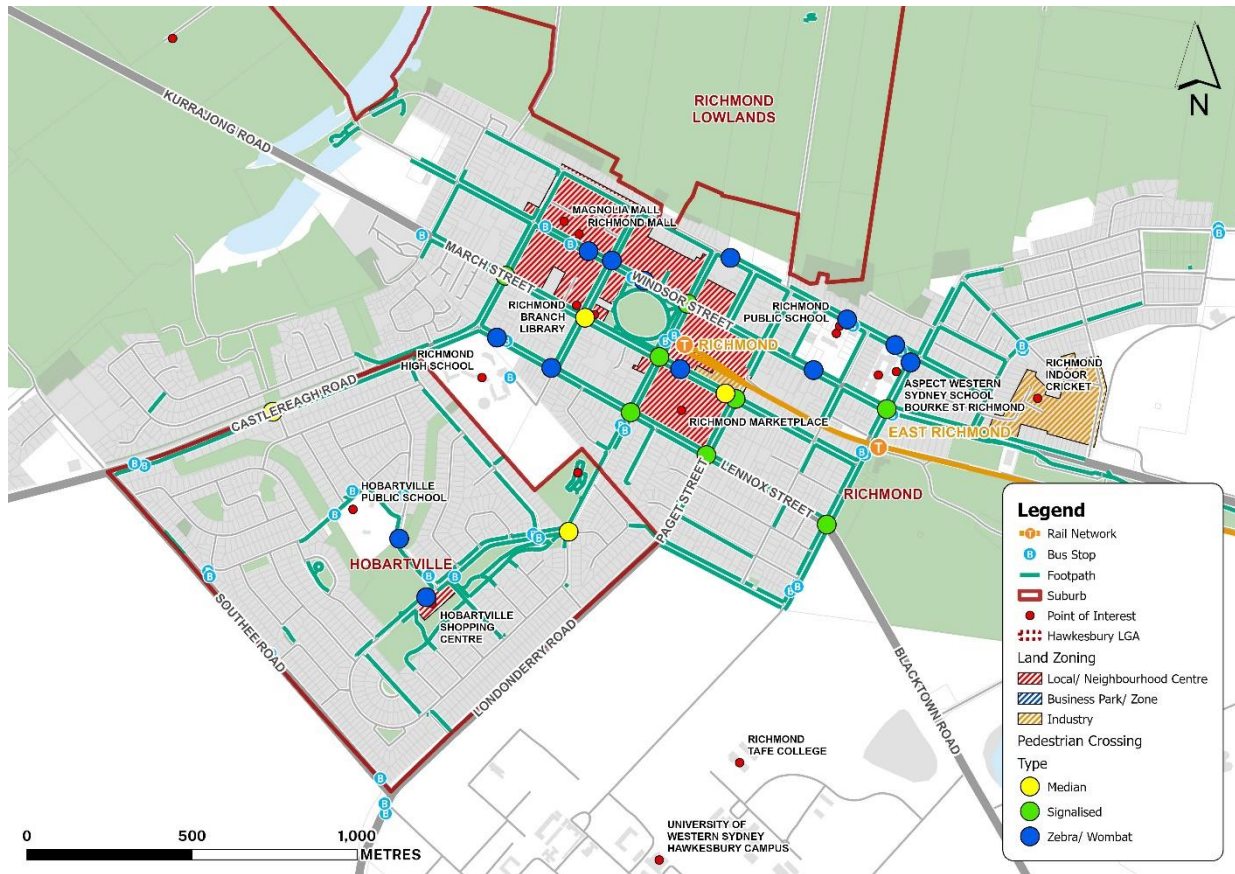


Figure 7: Hobartville and Richmond Pedestrian Infrastructure



Figure 8: Crossing point in Richmond



Figure 9: Zebra crossing in Richmond

4.1.3 Bligh Park and South Windsor Pedestrian Infrastructure

Figure 10 shows the pedestrian infrastructure within Bligh Park and South Windsor. South Windsor is well connected by a strong network of pedestrian footpaths, with all roads surrounding the local centre on George Street having a footpath on at least one extent of the road. Connections are provided through to Windsor station and into the industrial zone in the east of the suburb. Where footpaths are missing, they are predominantly in residential areas with low traffic, so do not pose great accessibility issues.

Bligh Park has a relatively strong network, with footpaths provided on busier roads. Pedestrian crossings are provided for both Bligh Park Public School and Windsor Park Public School. Bligh Park has high levels of permeability as can be seen by all the connecting footpaths in the map provided. A sealed shared path is provided between the woodland that connects the two suburbs. This provides residents with access to the industrial zoning without needing to make a large detour.

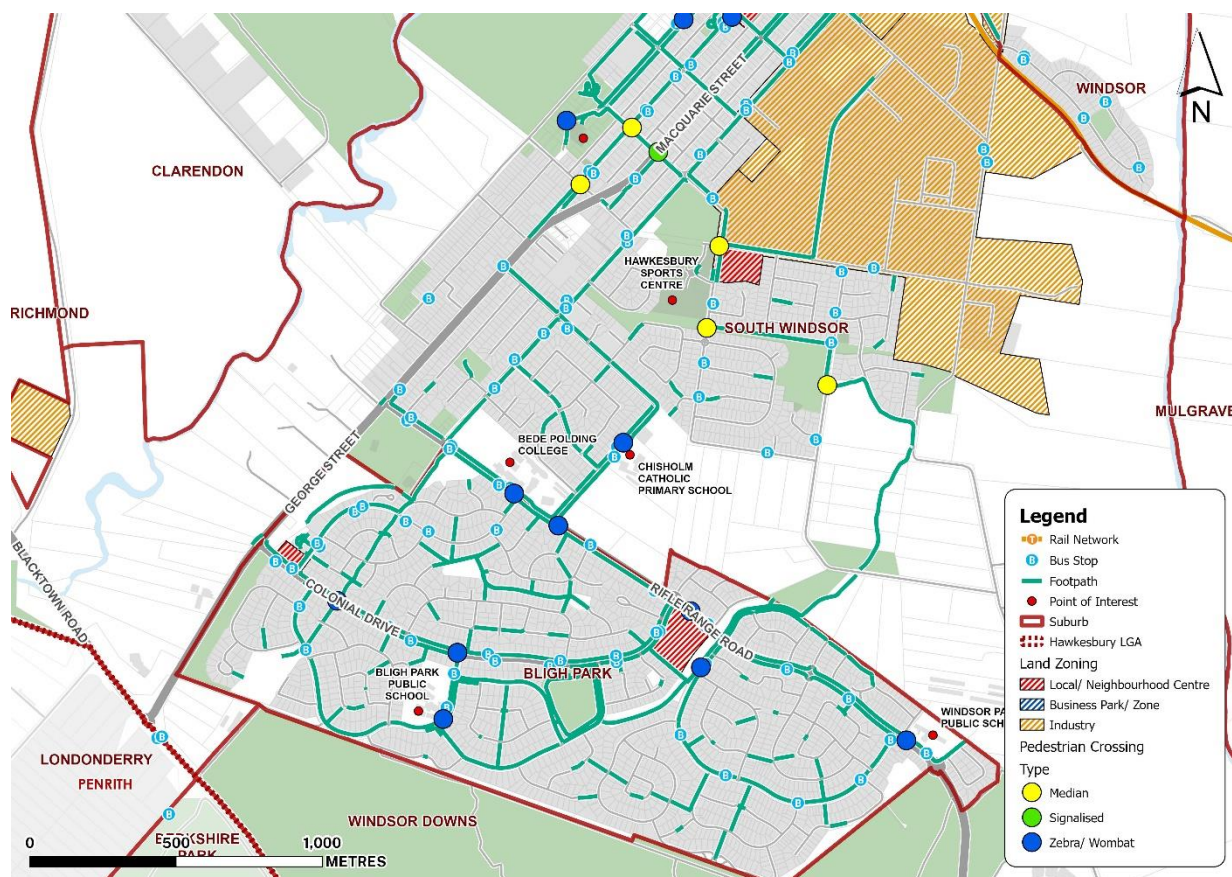


Figure 10: Bligh Park and South Windsor Pedestrian Infrastructure

4.1.4 Windsor Pedestrian Infrastructure

Figure 11 shows the pedestrian infrastructure for the suburb of Windsor. It shows that Windsor has a well-connected series of footpaths that provide a strong network around the strategic centre. Footpaths are provided all around the centre of the suburb, with a pedestrian-only area located on George Street between Fitzgerald Street and Baker Street. There is a high number of pedestrian priority crossings located on George Street through the town centre. A shared path is provided on the recently opened Windsor Bridge, which provides access to Macquarie Park and Windsor Beach.

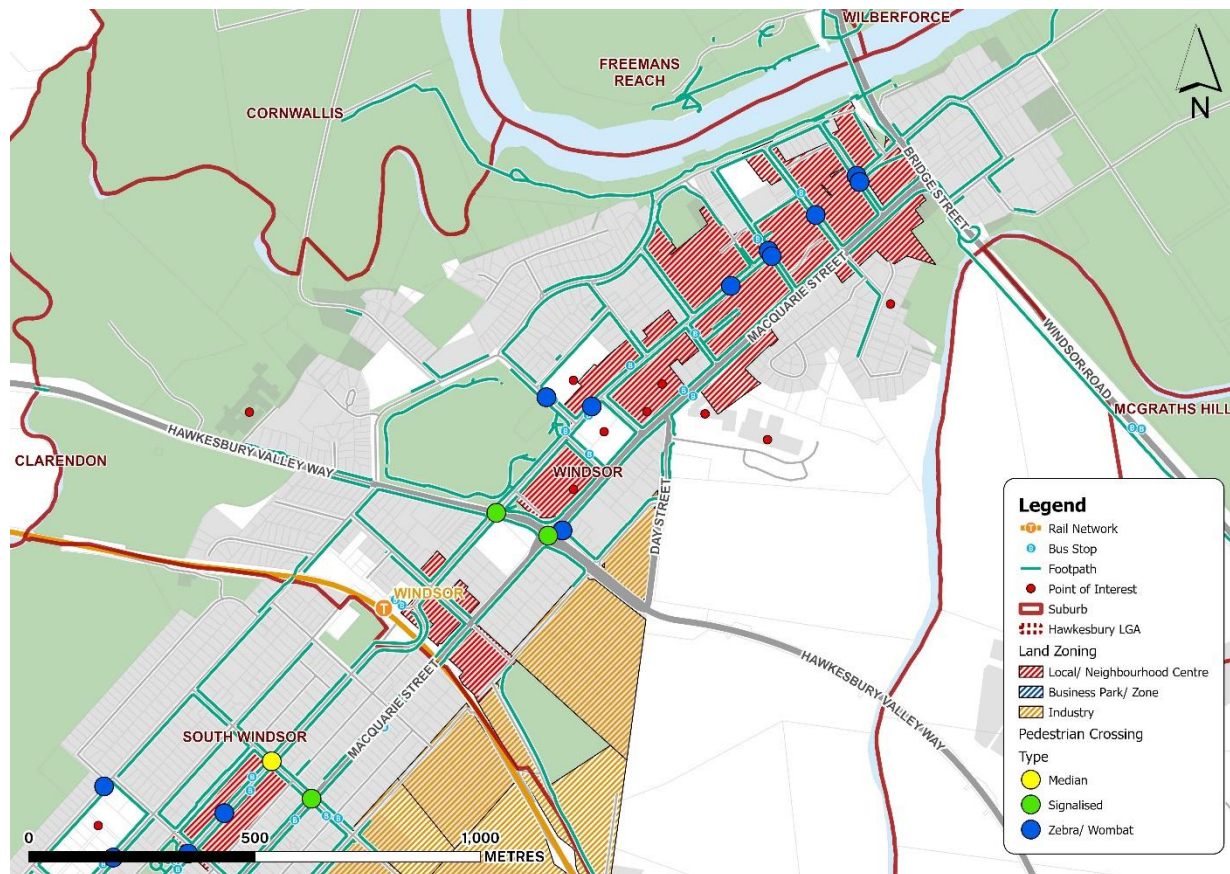


Figure 11: Windsor Pedestrian Infrastructure



Figure 12: Pedestrian Crossing at George Street



Figure 13: Windsor pedestrianised zone

4.2 Cycling

4.2.1 North Richmond Cycling Infrastructure

Figure 14 shows the cycling infrastructure that is present within the suburb of North Richmond. It shows that much of the suburb goes without either off or on-road paths available. A shared path is located along the eastern extent of Bells Line Road, which connects through to Kurmond. This shared path provides students with safe access to Colo High School, which is located between the two suburbs. On-road cycling is provided between Richmond and North Richmond and along Terrace Road to Freemans Reach. A series of shared paths are present in the newly built housing estate, which runs through Yobarnie Avenue. A shared path traverses the Hawkesbury River for around 700 metres in Hawkesbury Park.

No bicycle parking facilities are provided at North Richmond local centre, nor are there any suitable locations to temporarily attach a bike. This is likely to deter users from cycling to the shopping precinct.

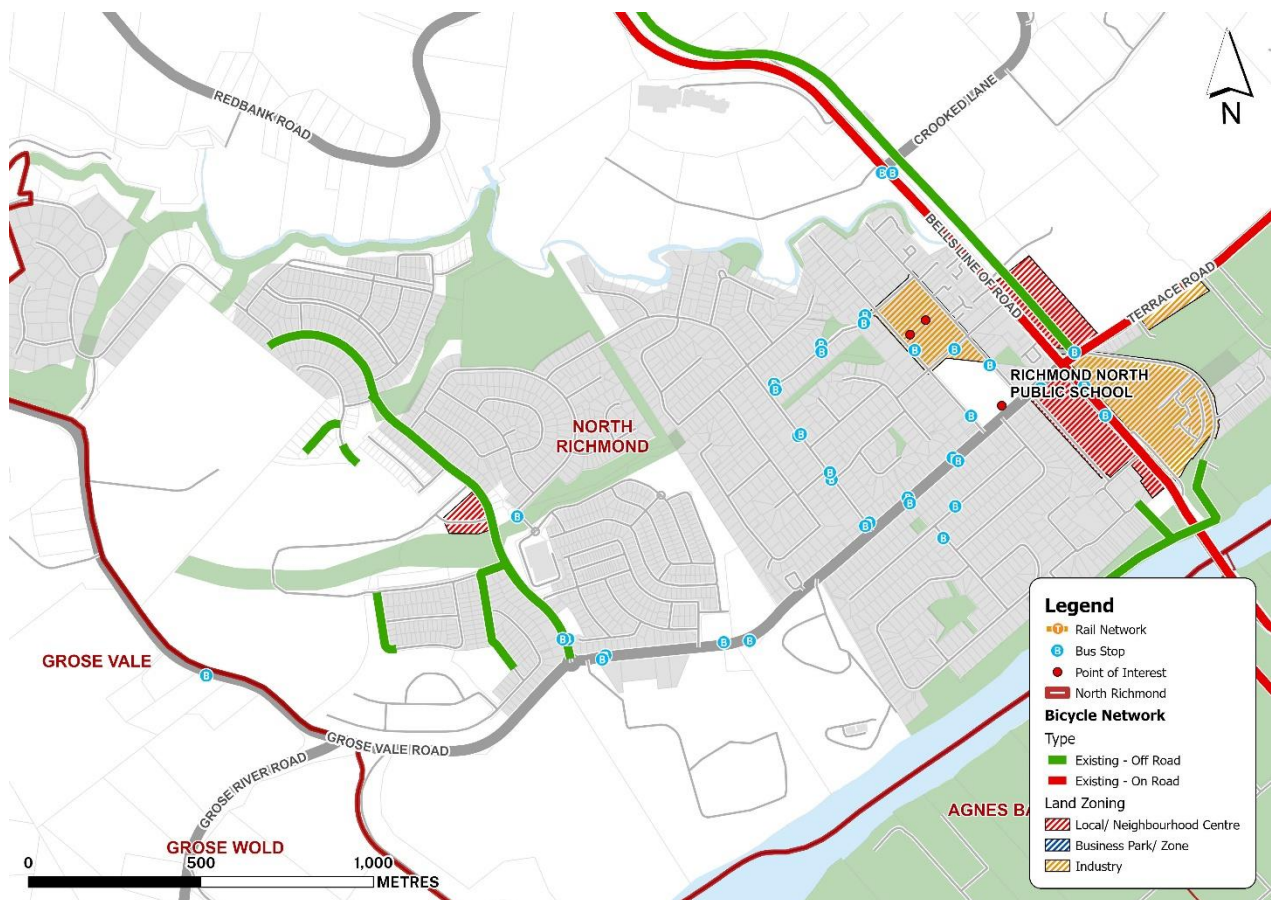


Figure 14: North Richmond Cycling Infrastructure

4.2.2 Hobartville and Richmond Cycling Infrastructure

Figure 15 shows the cycling infrastructure surrounding Richmond and Hobartville. Cycling infrastructure in the area is generally classified as on-road. There are no shared paths that run through the centre of Richmond, forcing users to share the road. There is also no dedicated cycling/ shared path infrastructure linking Hobartville and Richmond. Bicycle parking is available at Richmond station however, it is provided in security-locked storage which makes it inaccessible to the casual user (**Figure 16**). No bicycle parking is provided at East Richmond station, with demand causing issues due to bikes being locked up in parking spots. There is an off-road cycleway that runs from East Richmond Station to Clarendon Station, opposite the RAAF base. The shared path provides an opportunity for recreational activities with multiple points containing outdoor gym equipment spread throughout the area, and public toilet facilities also available. Bicycle users are forced onto the road after Clarendon to access Windsor.

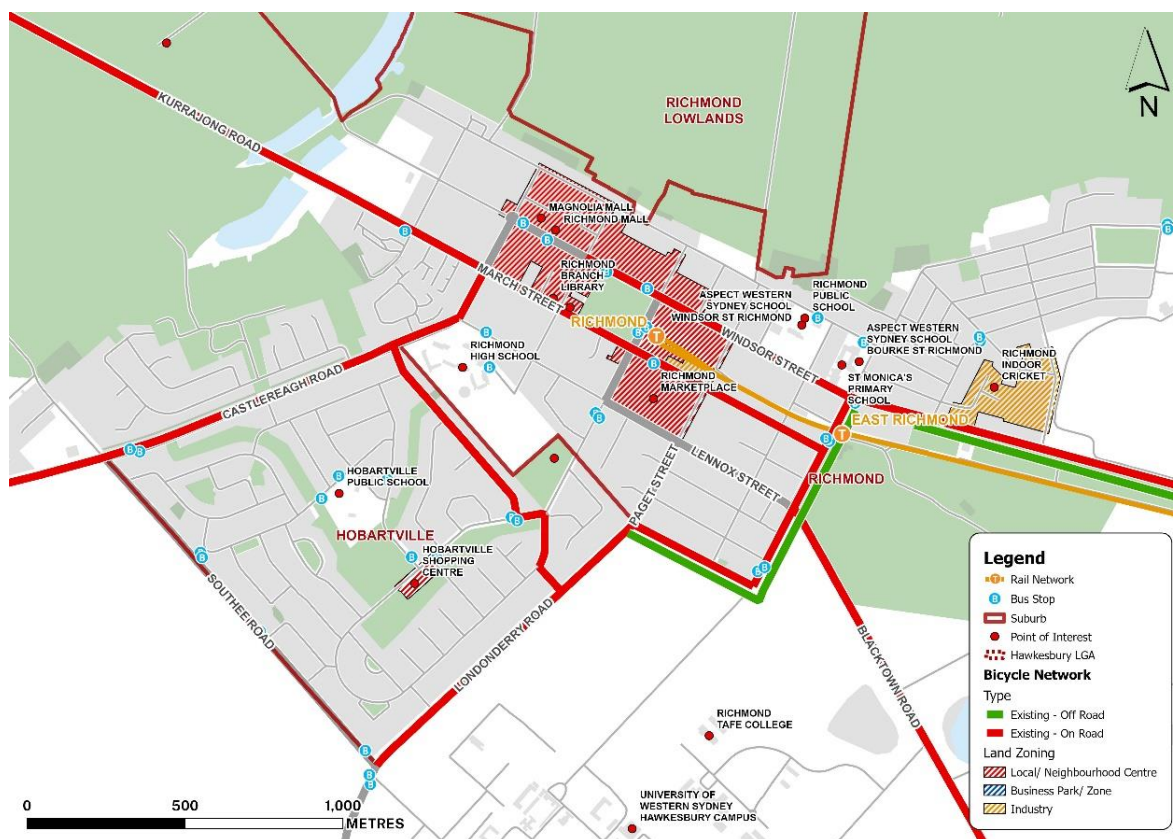


Figure 15: Hobartville and Richmond Cycling Infrastructure



Figure 16: Richmond Station bicycle parking facilities



Figure 17: Bicycle parking in Richmond local centre

4.2.3 Bligh Park and South Windsor Cycling Infrastructure

Figure 18 shows the cycleway infrastructure for the suburbs of Bligh Park and South Windsor. Designated on-road cycleways in the area function in a south-west to north-east manner, with two routes running along Macquarie Street and Mileham Street. The on-road cycling infrastructure in Windsor services Macquarie Street, which later merges into George Street, up to the intersection with Blacktown Road. Shared paths are provided through Bligh Park, connecting to South Windsor at the south of the industrial estate (**Figure 20** and **Figure 21**). Bicycle parking is provided at points along George Street within South Windsor local centre (**Figure 19**).

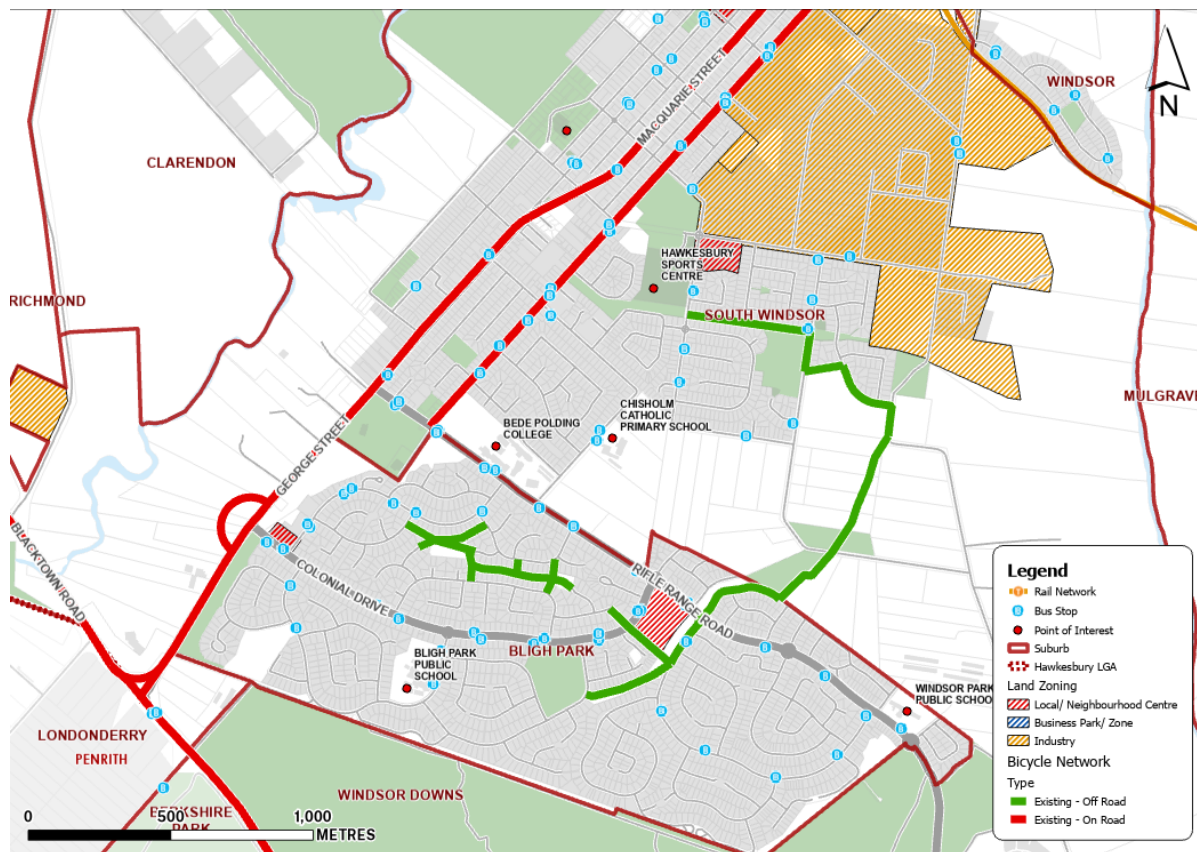


Figure 18: Bligh Park and South Windsor Cycling Infrastructure



Figure 19: Bicycle parking in South Windsor



Figure 20: Shared path located in South Windsor



Figure 21: Bligh Park to South Windsor shared path

4.2.4 Windsor Cycling Infrastructure

Cycling around Windsor centre is accessible with shared paths provided along Macquarie Street, Windsor Road and Bridge Street. The shared path runs across the recently built Windsor bridge into Wilberforce. On-road cycleways continue out to Wilberforce (**Figure 23** Error! Reference source not found.), however, there are some issues with pinch points at bridges removing the bicycle carriageway. Shared paths are provided along the Hawkesbury River from Bridge Street to Cornwallis and in Governor Phillip Park (**Figure 24** Error! Reference source not found.). There is no dedicated cycleway/ shared path infrastructure linking Windsor and South Windsor together. The shared path traversing Windsor Road continues to Rouse Hill, passing through the suburbs of McGraths Hill, Mulgrave and Vineyard. Bicycle parking is provided at Windsor Station (**Figure 22**), however, it is done through pre-booked storage lockers.

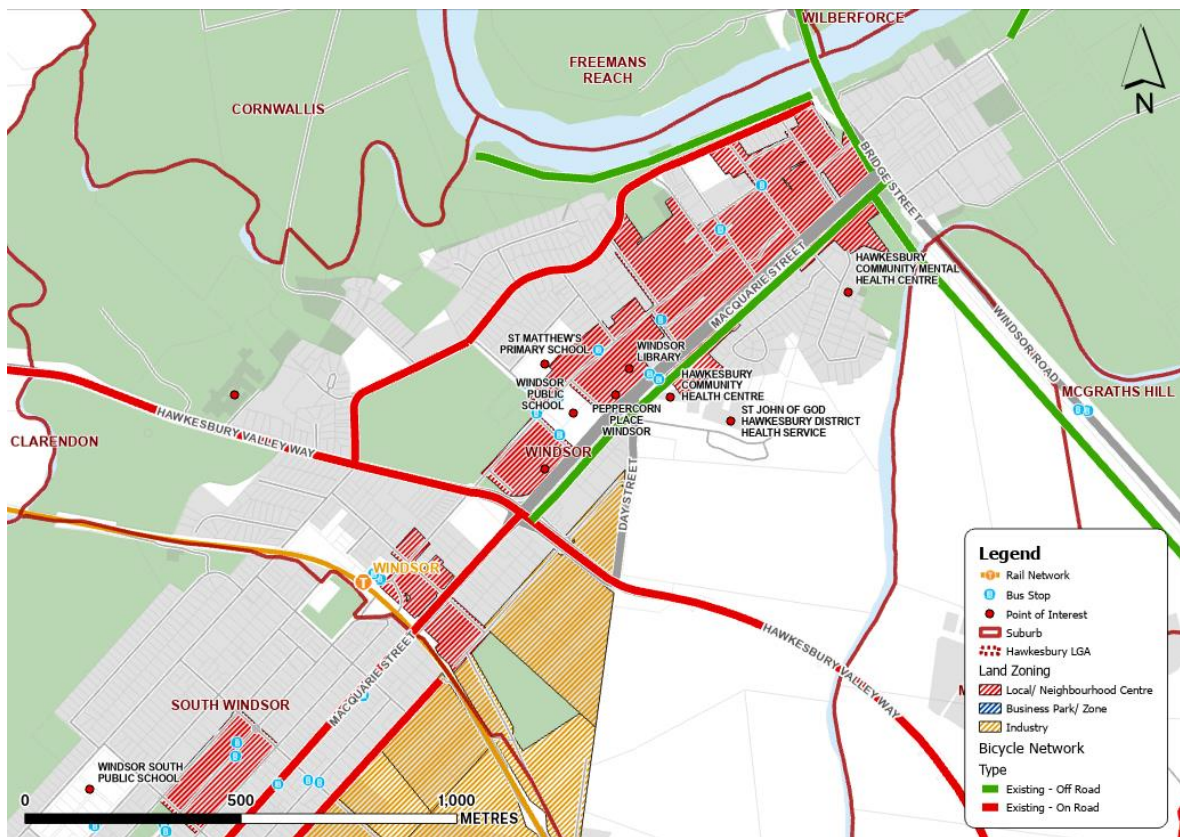


Figure 25: Windsor Cycling Infrastructure



Figure 22: Windsor Station bicycle parking



Figure 23: On-road cycleway



Figure 24: Governor Phillip Park shared path

4.3 Public Transport

4.3.1 Rail Services

Five rail stations are located within Hawkesbury, which are located in Clarendon, East Richmond, Mulgrave, Richmond and Windsor. The T1 North Shore & Western Line, and T5 – Cumberland Line both operate through all stations. Richmond Station is the last station within the Sydney Trains Network. Services on the T1 run through to Leppington whilst services on the T5 line run through to Central Station, or Penrith when changing at Blacktown Station. Both services operate through to Parramatta, whilst the T5 operates through Liverpool. Residents of Hawkesbury have options to access the wider network by changing at Parramatta (T2), Clyde (T6), Lidcombe (T3, T7), Strathfield (T1 North) or Redfern (T4, T8). All rail stations are concentrated within the southern region, with no services in the northern extent of the LGA.

4.3.2 Bus Network

The Hawkesbury LGA is serviced by a number of bus routes, as shown in **Figure 26**. The majority of buses operating in Hawkesbury are confined to the LGA. These local routes are focused on key locations, with the majority starting and ending their journeys at either Windsor or Richmond Train Station. For connections to Penrith, services 677 and 678 provide access from Richmond Station, whilst the 673 departs from Windsor Station.

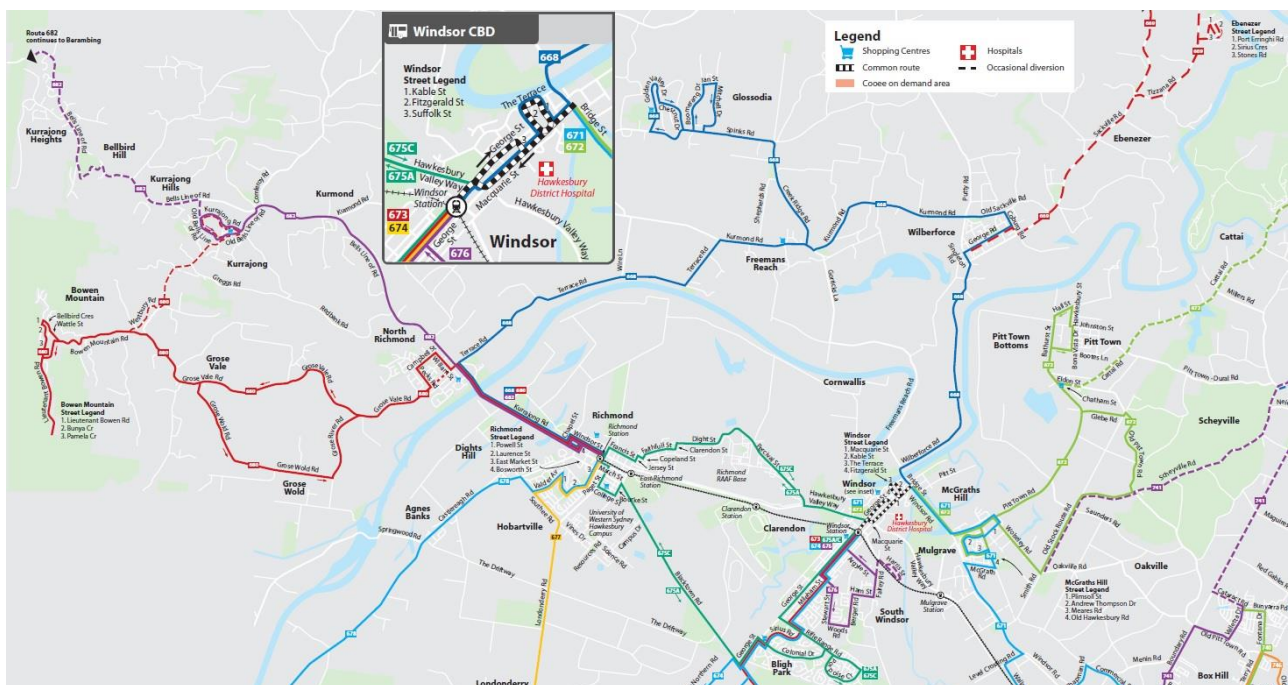


Figure 26: Greater Western Sydney Bus Network Map (Hawkesbury Region)

Source: Transport NSW

4.4 Road Network

The highest classification of road running through Hawkesbury LGA is arterial, as there are no motorways present within the LGA. The road hierarchy for the region is shown below in **Figure 27**, whilst key roads are detailed in **Table 14**.

Table 14: Key roads in the Hawkesbury LGA

Road	Description
Bells of Line Road	Bells of Line Road is an arterial road that extends from the town of Bell in Lithgow to Richmond. Bells Line of Road is one of only two crossings into the Blue Mountains and serves a role in connecting the Sydney Basin to Central Western NSW.
Blacktown Road	Blacktown Road is an arterial road that runs in a northwest-to-southeast direction. Blacktown Road connects Richmond to George Street and The Northern Road, which extends to Penrith.
Castlereagh Road	Castlereagh Road is an arterial road that connects Richmond to Penrith and the Blue Mountains via Springwood Road.
George Street/ Macquarie Street	George Street and Macquarie Street are arterial roads that run from Windsor Road to Blacktown Road. George Street provides access to Windsor centre for persons travelling from South Windsor and Bligh Park. George Street extends into Macquarie Street before it becomes a local road. Once a local road, it intersects the centres of Windsor and South Windsor, whilst also providing access to Windsor Station.
Hawkesbury Valley Way	Hawkesbury Valley Way runs in an east-to-west direction and connects the suburbs of Richmond, Windsor, Clarendon and Mulgrave. Hawkesbury Valley Way traverses the boundary of the RAAF base in Clarendon and is one of the most important roads in Hawkesbury as it connects the region's two strategic centres.
Londonderry Road	Londonderry Road runs in a north-south manner and connects Hobartville to The Northern Road. The road provides the main connection to the Western Sydney University campus from Richmond Station.
Pitt Town Road	Pitt Town Road is an arterial road that connects the suburbs of McGraths Hill and Pitt Town. The road connects to Cattai Road and provides access to Wisemans Ferry, a key tourist destination in the LGA. The road intersects with Windsor Road in the suburb of McGraths Hill.
Wilberforce Road	Wilberforce Road is an arterial road that extends from Windsor Bridge to the suburb of Wilberforce.
Windsor Road	Windsor Road is an arterial road that provides access between the Hawkesbury and Blacktown LGAs. Windsor Road extends from Windsor to Rouse Hill, eventually connecting with the M2 which provides access to the wider Sydney region and the Harbour CBD.
Windsor Street	Windsor Street is an arterial road that connects Richmond's local centre to Hawkesbury Valley Way. Windsor Street becomes a local road once it reaches the intersection with East Market Street. Windsor Street then provides access to several shops and eateries, including Richmond Mall.

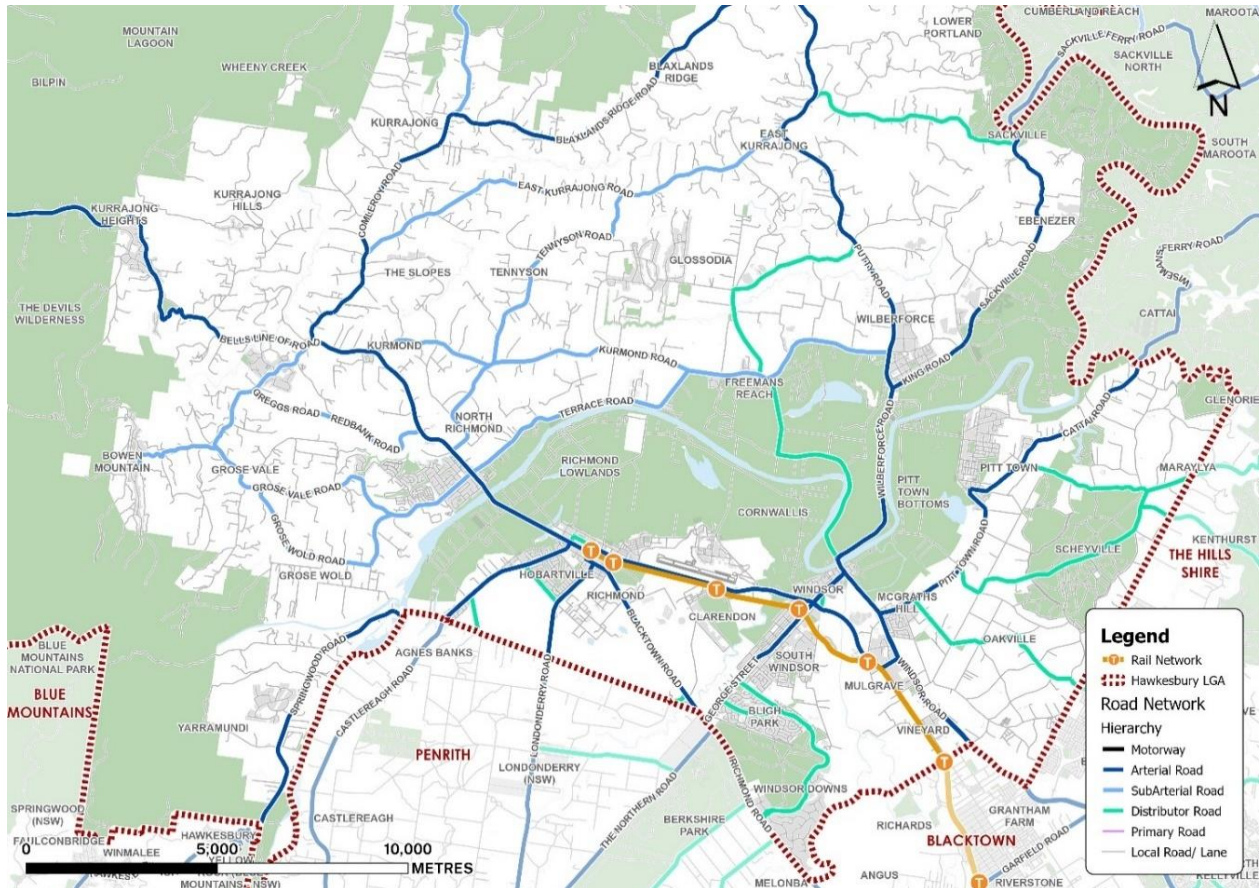


Figure 27: Hawkesbury Road Network Classifications

4.5 Freight

Freight routes within the Hawkesbury LGA consist of secondary and tertiary routes. There are no primary freight routes located within the LGA. Richmond Road, Blacktown Road and Kurrajong Road are classified as secondary freight routes, stopping at North Richmond. Hawkesbury Valley Way, George Street, The Northern Road and Windsor Road are all classified as tertiary freight routes. **Table 15** provides context on the freight movements within Hawkesbury through the key suburbs.

Table 15: Heavy Vehicle Movements within Hawkesbury

Road Name	Intersecting Road / Locality	Suburb	Road Status	HV % Total
George Street	Colonial Drive	Bligh Park	State	7.8%
Grose Vale Road	Elizabeth Street to Pecks Road	North Richmond	Regional	15.5%
Pecks Road	Hayman Street to Arnold Street	North Richmond	Local	13.0%
Eldon Street	Cattai Road	Pitt Town	State	11.7%
The Driftway	East and West of Londonderry Road	Richmond	Local	10.0%
Macquarie Street	Drummond Street	South Windsor	State	9.8%
King Road	Putty Road to Castlereagh Road	Wilberforce	Regional	16.0%
Bridge Street	200m north of George Street	Windsor	State	10.6%
Windsor Road	Macquarie Street	Windsor	State	7.8%

4.6 Safety

Between the period of 2015 – 2019, there was a total of 59 incidents within the study area which involved pedestrians or cyclists. From these 59 crashes, there was a total of 60 injuries. Incidents with pedestrians accounted for 37, while cyclists were involved in 22. The most common RUM crash classification involving pedestrians were 00 (near side) and 02 (far side) movements, respectively. Both these movements describe a perpendicular collision between the pedestrian and the vehicle.

The overall trend for crashes during the analysis period has an upward trajectory, carried particularly by the increase in incidents involving pedestrians. **Figure 28** shows a clear spike in accidents involving pedestrians in the year 2017, which remains relatively steady throughout the remainder of the data set.

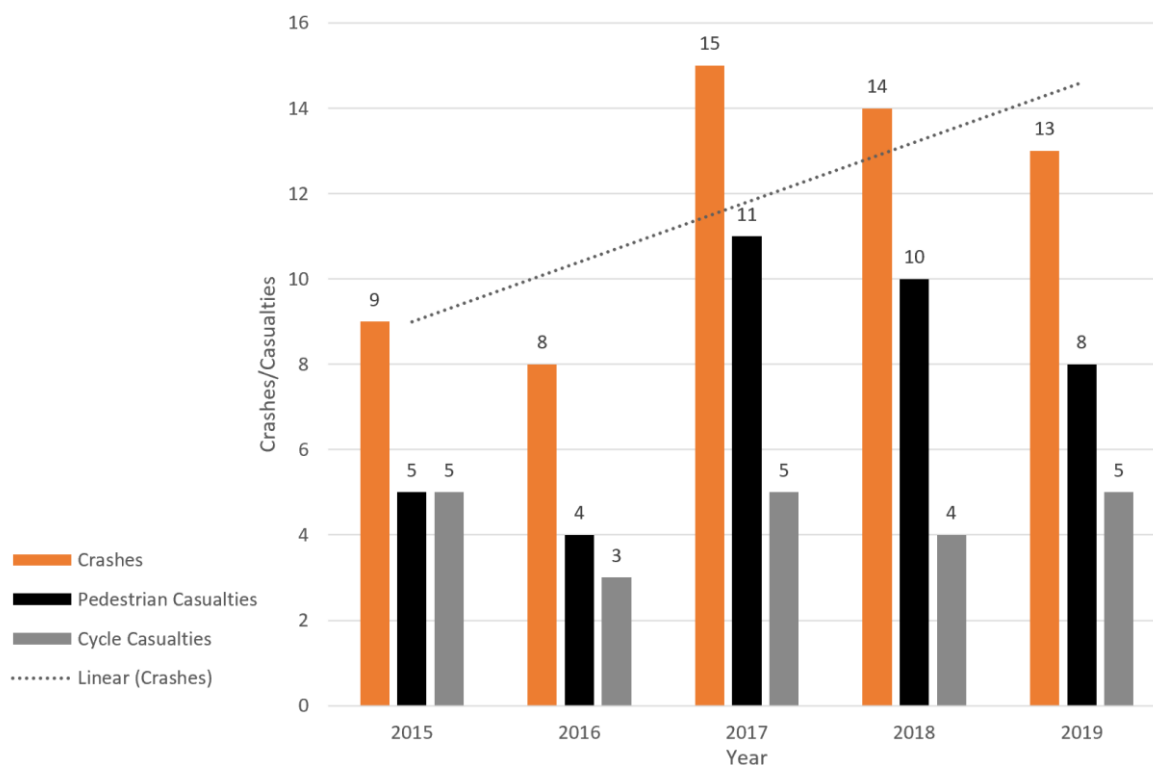


Figure 28: Crashes and Casualties by year (2015 – 2019)

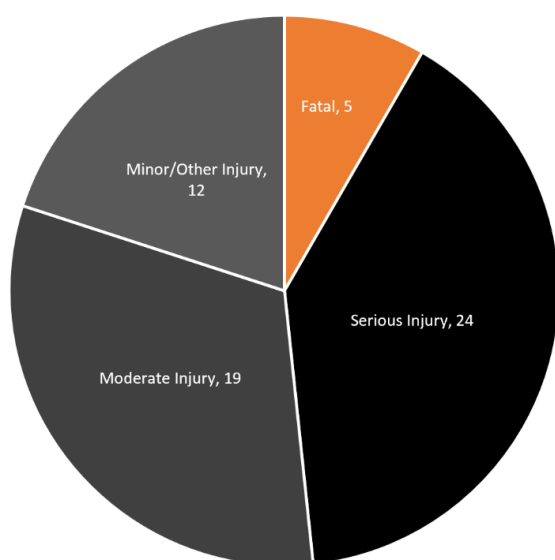


Figure 29: Severity of injury involving pedestrians and cyclists (2015 – 2019)

Figure 29 represents the severity of injury to pedestrians and cyclists involved. As highlighted, across 60 injuries from 59 accidents, there was a total of 5 fatalities (3 pedestrians and 2 cyclists). Severe injury was the most common severity type, with moderate injury after that.

Windsor and South Windsor are the locations for a total of 24 accidents, with 11 and 13 respectively. This might indicate some safety concerns, but also may be due to the propensity and increase in active transport in this region compared to other localities.

4.7 Topography

Figure 30 shows the slope degree elevation for the southern Hawkesbury region. The map is categorised by the level of difficulty depending on the degree of elevation. Land with less than 2.5° slope is considered accessible to all, whilst areas with elevation ranging between 2.6° to 4.1° slope are considered as acceptable. Most of the developed region, in particular the strategic centres of Windsor and Richmond sit within low lying land classified as being accessible. This makes it an attractive place for walking and cycling as accessibility barriers are low. However, this often means the area is susceptible to flooding after periods of prolonged heavy rainfall. North Richmond sits at the foot of the Blue Mountains National Park and is surrounded by land with steep gradients, which can make it unappealing to casual riders outside of the town centre.

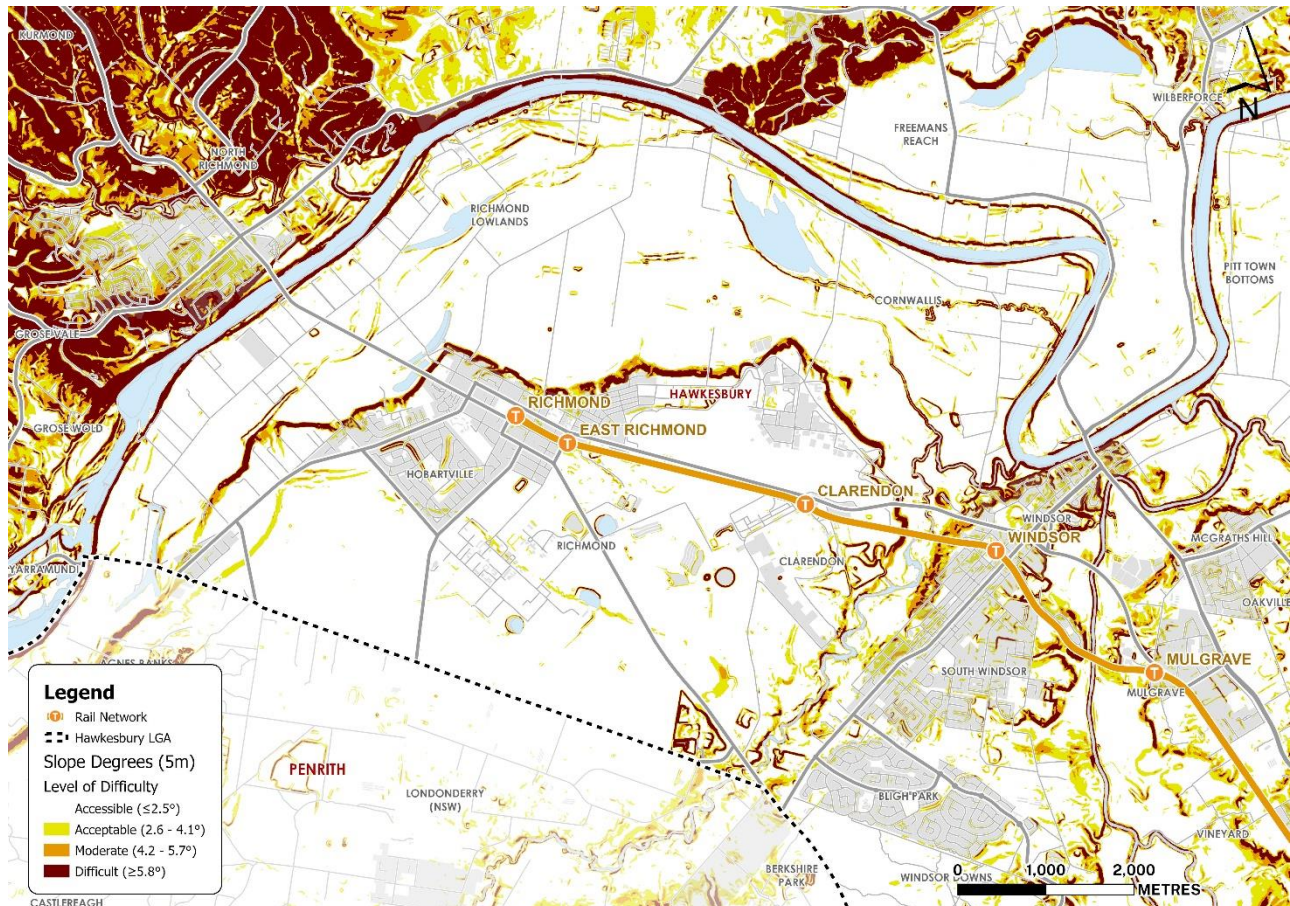


Figure 30: Southern Hawkesbury Slope Elevation

4.8 Planned Projects/Upgrades

4.8.1 Richmond Bridge

The new Richmond Bridge will provide a one-way carriage for eastbound traffic, while converting the existing bridge in a one-way westbound direction. It is intended that this will significantly reduce congestion between Richmond and North Richmond, by providing additional capacity over the Hawkesbury River. The bridge has been designed with flooding in mind, providing a 1 in 20-year flood resilience.

Figure 31 shows the new Richmond bridge design as of December 2022. As seen, the project includes other various traffic improvement to the area. One of these traffic improvement designs is the provision of a bypass, directing traffic away from the centre of Richmond. Furthermore, in regard to active transport, there will be a new shared path connection between Richmond and North Richmond, extending from the Richmond centre.

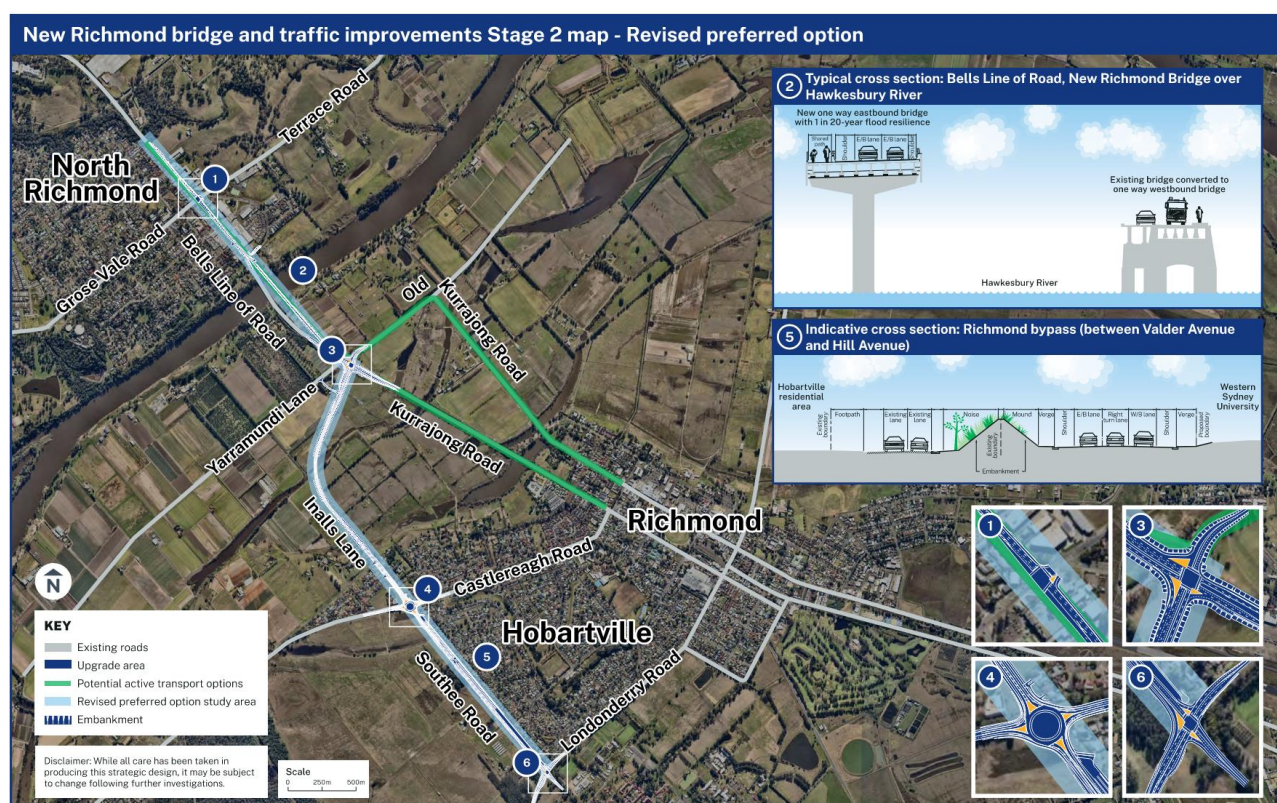


Figure 31: Richmond Bridge revised preferred option

Source: Transport for New South Wales - New Richmond Bridge and traffic improvements Revised Preferred Option Report

4.8.2 WestInvest

WestInvest is a government led program which has been designed to provide funding for transformative infrastructure projects across Western Sydney. One of six key focus areas is local traffic programs, which aims for local streets to be designed as comfortable, accessible and safe place for people of all accessibility needs. Examples of local traffic programmes include:

- Local streets are designed as improved places for a diverse range of needs (e.g., walking, wheeling and cycling, reducing reliance on cars) which would improve the liveability of neighbourhoods.
- Sufficient availability of active transport options to promote healthy lifestyles and reduce car dependency.

There are two local traffic programmes which have been approved for Hawkesbury, aimed at improving cycling and walking connectivity.

4.8.2.1 The Kurrajong to Kurmond Cycleway

The Kurrajong – Kurmond cycleway will improve active transport between the two suburbs. The cycleway will consist of an off-road shared path, traversing 1.75 kilometres of Bells Line of Road. The following benefits to the community have been identified as part of the cycleway:

- Provide pedestrians and cyclists of all abilities a safer continuous off-road route connectivity
- Support increased linkage to North Richmond Community Centre

- Be a catalyst for improved mobility and support Council's Mobility Strategy (bikeable cities goal)
- Add value to other WestInvest programmes

4.8.2.2 Cycleway Bridge over Rickabys Creek

The cycleway bridge will support the cycling link between Windsor – Richmond and will provide a continuous path of travel for cyclists and pedestrians, via an off-road route along Hawkesbury Valley Way. **Figure 32** below shows an image of the proposed bridge once constructed.

The project aims to:

- Provide pedestrians and cyclists of all abilities a safer continuous off-road route connectivity between Windsor and Richmond
- Provide proven health benefits and wider social benefits of reduced crime, increased cognitive function through being active and engaged in recreation
- Be a catalyst for improved mobility and support Councils Mobility Strategy



Figure 32: 3D rendition of proposed bridge

Source: Hawkesbury City Council - WestInvest to deliver transformative projects to the Hawkesbury

4.8.3 Bligh Park – South Windsor Shared Pathway Extension (Stage 8 – 2022)

Figure 33 identifies a planned extension to the existing shared path network. The proposed works would connect Bligh Park to South Windsor. Starting at Arkell Drive, near Rifle Range Way, an existing shared path, works will include a new connective link to existing paths which will be extended. The extension of paths comes in 4 stages (5 through 8), and will cross key roads like George Street, finishing at Church Street Reserve, South Windsor at the Hawkesbury Oasis Aquatic and Leisure Centre.



Figure 33: Shared path extension through South Windsor

Source: Hawkesbury City Council (2023)

4.8.4 Overview of Projects and Planning Changes

Table 16 highlights a combination of land use and infrastructure proposals in the Hawkesbury region. The proposed projects have been identified in the Hawkesbury Town & Village Place Plans and a number of other sources.

Table 16 Outlined Projects

Location	Name	Stage	Source
Bilpin	A new cycle link which will connect Bilpin to Mountain Lagoon	Proposed	Hawkesbury Town & Village Place Plans
Bilpin	Cycle path which will connect to Blue Mountains botanic gardens	Proposed	Hawkesbury Town & Village Place Plans
Bilpin	Two new hiking trails to Wollemi National Park (In two different directions)	Proposed	Hawkesbury Town & Village Place Plans
Bilpin	New shared path along Bells Line of Road	Proposed	Hawkesbury Town & Village Place Plans
St Albans	New cycle routes from St Albans, which will connect to Wollombi, as well as connect to Wisemans Ferry	Proposed	Hawkesbury Town & Village Place Plans
St Albans	A new riverwalk	Proposed	Hawkesbury Town & Village Place Plans
St Albans	A hiking trail to Jacks Trail	Proposed	Hawkesbury Town & Village Place Plans
Colo Heights	New cycleway which will connect to Colo River	Proposed	Hawkesbury Town & Village Place Plans
Colo Heights	New cycleway which will connect to Lower Portland (the path will go on wheelbarrow road, and the path will be nicknamed "Big Colo")	Proposed	Hawkesbury Town & Village Place Plans
Colo Heights	Shared path along Putty Rd	Proposed	Hawkesbury Town & Village Place Plans
Colo Heights	Hiking trail Camping site	Proposed	Hawkesbury Town & Village Place Plans
Colo Heights	Hiking trail to Bob Turners walking track	Proposed	Hawkesbury Town & Village Place Plans
Pitt Town	New shared path along Fernadell Park	Proposed	Hawkesbury Town & Village Place Plans
Pitt Town	New shared path along Hawkesbury River	Proposed	Hawkesbury Town & Village Place Plans
Pitt Town	New cycleway which will connect to McGraths Hill and Cattai National Park	Proposed	Hawkesbury Town & Village Place Plans
North Richmond	Shared path along Gross Vale Road which connects to Kingsford smith village	Proposed	Hawkesbury Town & Village Place Plans
North Richmond	Cycle path along the Richmond duplication which will connect to a trail link along waterfront (Proposal)	Proposed	Hawkesbury Town & Village Place Plans
North Richmond	Hiking/trail link along waterfront	Proposed	Hawkesbury Town & Village Place Plans
Kurrajong	Shared path from message board along Old Bell Line of Road, which then extends to a shared path to McMahon Park	Proposed	Hawkesbury Town & Village Place Plans
Kurrajong	Cycle way connects from shared path on Old Bell Line of Road and continues towards Kurrajong Heights	Proposed	Hawkesbury Town & Village Place Plans
Kurrajong	Cycle way connecting to North Richmond on Gross Value Road	Proposed	Hawkesbury Town & Village Place Plans

Location	Name	Stage	Source
Kurrajong – Kurmond	Cycle way connecting to Kurmond	Proposed	Hawkesbury Town & Village Place Plans
Kurmond – North Richmond	Cycleway along Bell of Line Rd connecting to North Richmond	Proposed	Hawkesbury Town & Village Place Plans
Kurmond	Shared path along the Road for pedestrians	Proposed	Hawkesbury Town & Village Place Plans
Kurmond	Shared path connecting to new open space on Bells Lane	Proposed	Hawkesbury Town & Village Place Plans
Wilberforce	Cycleway which connects to Glossodia and Colo River	Proposed	Hawkesbury Town & Village Place Plans
Wilberforce	Cycleway which connects to Windsor using Buttsworth Creek	Proposed	Hawkesbury Town & Village Place Plans
Wilberforce	Shared paths along Wilberforce Park	Proposed	Hawkesbury Town & Village Place Plans
Glossodia	Cycle path connecting to Putty Rd (towards Colo heights)	Proposed	Hawkesbury Town & Village Place Plans
Glossodia – Kurmond	Cycle path connecting to Kurmond	Proposed	Hawkesbury Town & Village Place Plans
Glossodia	Cycle path connecting to Wilberforce and Freemans Ranch	Proposed	Hawkesbury Town & Village Place Plans
Glossodia	Shared path throughout the main centre	Proposed	Hawkesbury Town & Village Place Plans
Glossodia	Enhanced hiking trail around Woodbury reserve	Proposed	Hawkesbury Town & Village Place Plans
Bligh Park	Shared path to Richmond and South Windsor	Proposed	Hawkesbury Town & Village Place Plans
Bligh Park	New cycleway connecting to colonial reserve	Proposed	Hawkesbury Town & Village Place Plans
Kurrajong, Kurmond	WestInvest Program – Kurrajong to Kurmond Cycleway (WICR914)	Approved	West Invest and Liveability Project
Richmond, Windsor	WestInvest Program – Cycleway Bridge over Rickabys Creek	Approved	West Invest and Liveability Project
Richmond, North Richmond	New Richmond Bridge and Traffic Improvements - Stage 2 (announcement of revised preferred option for traffic and progression onto concept design and environment assessment; preferred route and design for the active transport connection between the two town centres to be determined)	Planning	TfNSW
Great River Walk	Great River Walk (potential walking path from Lower Portland to Riverside Drive and towards Webbs Creek Ferry)	Proposed	Hawkesbury City Council
LGA-wide	Urban Forest Strategy Council is in the early stages of working with consultants to deliver an Urban Forest Strategy by mid-2023	Planning	Hawkesbury City Council
Jacaranda at Glossodia	Jacaranda is a greenfield residential development approved under LEP001/10 and LEP001/18. The development is anticipated to provide a total of 580 new lots on R2 and R5 zoned land ranging from 1000m2 to 4000m2. Applications for subdivision are yet to be lodged, and new VPA negotiations are being undertaken.	Planning	Hawkesbury City Council

Location	Name	Stage	Source
Redbank	Redbank estate (LEP002/11) was gazetted in 2014. The estate contains R2 Low Density Residential, R5 Large Lot Residential and R3 Medium Density Residential zoned land and is expected to deliver approximately 1400 new lots. Redbank estate is in the later stages of subdivision with approximately 1000 lots completed, notably subdivision of much of the south-western portion is yet to commence. There is a commercial precinct and recreational hub located in the centre of the estate, connected to a web of open space corridors.	Subdivision	Hawkesbury City Council
Vineyard (Stage 1)	Vineyard (Stage 1) was approved under State Environmental Planning Policy (Precincts – Central River City) 2021. The precinct is expected to deliver 2500 lots primarily on R2 Low Density, R3 Medium Density and C4 Environmental Living and B2 Local Centre zoned land.	Subdivision	Planning NSW
Vineyard (Stage 2)	Vineyard (stage 2) is a future land release area for Hawkesbury City Council. This precinct is part of the Northwest Growth Centre as per State Environmental Planning Policy (Precincts – Central River City) 2021. The rezoning and development of a precinct master plan is dependent on the finalisation of the corridor planning for the Outer Sydney Orbital by the Department of Planning AND environment and Transport for NSW	Planning	Hawkesbury City Council
LEP Review – Mulgrave Precinct	Council is currently undertaking an LEP review and proposing a suite of changes in the form of a planning proposal. Key to the review, the LEP proposes rezoning of certain land within the Mulgrave precinct. The proposed rezoning includes the expansion of industrial zoned land over adjacent RU4 and RU1 zoned land. Additionally, the rezoning of RU4 land between Windsor Road, Old Hawkesbury Road and McGraths Road to B6 Business Corridor (future E3 productivity support) is proposed. The map below contains the proposed rezoning for the Mulgrave precinct.	Planning	Hawkesbury City Council
Employment Zone Reform	In 2021 the Department of Planning and Environment's proposed employment zone reform which was finalised in 2022. This reform consolidated and replaced the existing Business and Industrial Zones with 5 new employment zones and 3 additional supporting zones under the Standard Instrument Order 2006. This reform is planned to be implemented in April 2023	Approved/ Waiting for Implementation	Hawkesbury City Council

5 Infrastructure Typology

The NSW Movement and Place framework classifies four road and street environments which are determined by their movement functions and or combinations of. The classifications defined by the NSW government in the Movement and Place framework are shown below in **Figure 34**. The road and street type classifications are important in identifying the use cases of the network. By identifying and understanding the intended function of roads and streets, they can be designed and maintained with appropriate characteristics and standards that support the user.

The infrastructure typology overview for walking and cycling will therefore review suitable infrastructure examples for both crossing facilities and route facilities for each of road/street type definitions under the Movement and Place framework, with examples of roads and streets in Hawkesbury LGA that fall under each of the definitions provided for reference.



Figure 34: Movement and Place roads and street classifications

5.1 Infrastructure Typology for Walking

5.1.1 Main Roads

Main provide safe, reliable, and efficient movement of people and goods between regions and strategic centres. They are classified as being either a motorway, transit boulevard, principal arterial, rural highway, or rural link.

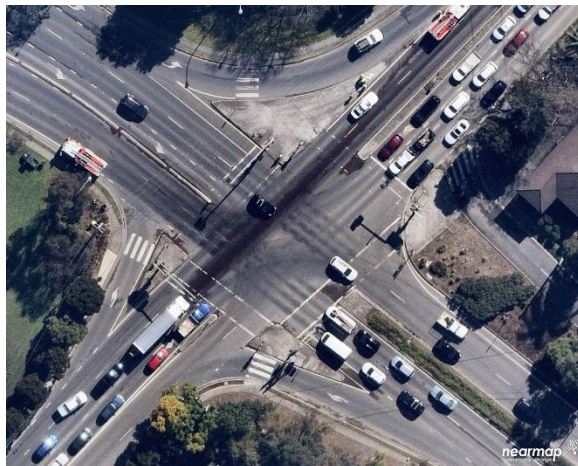
The following roads are identified as examples of Main roads in the Hawkesbury LGA:

- Bells of Line Road
- Blacktown Road
- Castlereagh Road
- George Street
- Hawkesbury Valley Way
- Londonderry Road
- Macquarie Street
- Pitt Town Road
- Wilberforce Road
- Windsor Road
- Windsor Street

Table 17 and **Table 18** show the recommended range of pedestrian infrastructure required for Main Roads with example imagery for each piece of recommended infrastructure provided.

5.1.1.1 Crossing Facilities

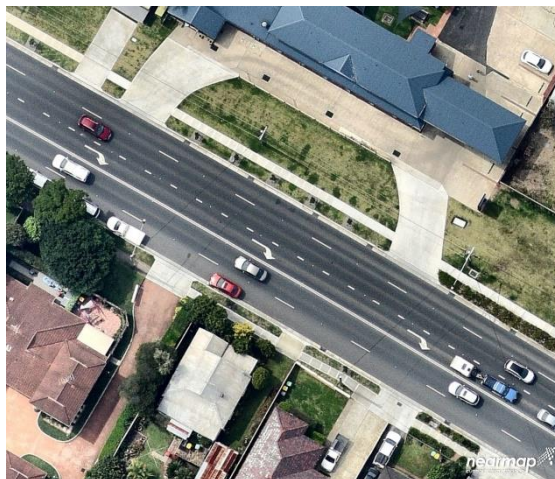
Table 17: Pedestrian Crossing Infrastructure Typology for Main Roads

Typology	Image
<p>Signalised pedestrian crossing with pedestrian phase and push button</p> <p>Signalised pedestrian crossings consist of signal displays, line markings and lighting. Signalised pedestrian crossings give priority to vehicles, and pedestrians are allowed to cross only when the signals halt vehicle traffic on the through road. Signals must be timed to give pedestrians long enough to complete their crossing before the signals change to allow vehicle traffic to start passing through the crossing again. This type of crossing facility is appropriate for Main Roads as it affords crossing pedestrians protection from oncoming traffic that is halted by the signal while prioritising the movement of vehicular traffic that is expected along a Main Road. An example of signalised pedestrian crossings is shown in Figure 35.</p>	 <p>Figure 35: Hawkesbury Valley Way and Macquarie St intersection</p>

5.1.1.2 Route Facility

Route facilities along Main Roads should be provided along at least one side of the road to account for and provide safe access for pedestrians. As the priority of main roads is the movement of vehicular traffic, pedestrian volumes along these corridors are often generally low. However, despite the low traffic footpaths are advised, particularly around residential areas. It is advisable to provide at least a minimum acceptable footpath width under [Austroads](#) footpath guidelines to allow for walking movement, which is described in **Table 18**.

Table 18: Pedestrian Route Infrastructure Typology for Main Roads

Typology	Image
<p>Footpaths</p> <p>The Austroads guide recommends that footpaths of at least 1.2m in width should be provided along movement corridors to allow for one-way movement of pedestrians and people on wheelchairs. Where space is available, a minimum width of at least 1.8 m should be provided to allow for the two-way passing of pedestrians and wheelchairs.</p> <p>The NSW Walking Space Guidelines recommend that to create a level of comfort for the user, footpaths should be provided at a minimum of 2m.</p>	 <p>Figure 36: Footpaths along both extents of March St/ Kurradjong Rd</p>

5.1.2 Main Streets

Main streets have both high Movement and Place functions. These streets are typically found in town centres, where there are high volumes of foot traffic and vehicular traffic due to the range of mixed-use activities present. Main Streets need to balance different demands within available road space whilst ensuring high levels of safety and accessibility. Whilst there are no major arterial high streets within the LGA, areas that can be identified as Main Streets within the Hawkesbury region include:


- Windsor Street from Toxana Street to Bosworth Street
- George Street from Fitzgerald Street to Hawkesbury Valley Way

Table 19 and **Table 20** provide the recommended range of pedestrian infrastructure required for Main Streets with an example photograph provided for each piece of infrastructure recommended.

5.1.2.1 Crossing Facilities

Table 19: Pedestrian Crossing Infrastructure Typology for Main Streets


Typology	Image
<p>Signalised Pedestrian Crossing with Pedestrian Lantern and Button</p> <p>Signalised pedestrian crossings consist of signal displays, line markings and lighting. Signalised pedestrian crossings give priority to vehicles, and pedestrians are allowed to cross only when the signals halt vehicle traffic on the through road. Signals must be timed to give pedestrians long enough to complete their crossing before the signals change to allow vehicle traffic to start passing through the crossing again. This crossing facility is appropriate on vibrant streets on the proviso that the frequency and length of pedestrian crossing does not cause disproportionate pedestrian delay, resulting in a low level of service for pedestrians.</p>	 <p>Figure 37: Signalised pedestrian crossing outside on Windsor Road at Mulgrave Road</p>
<p>Zebra Crossing</p> <p>Zebra crossings are a common pedestrian crossing facility in Australia. A zebra crossing consists of striped roadway markings running from kerb to kerb. Drivers are required to give way to pedestrians on both sides of all zebra crossings unless the crossing is divided by a raised traffic island. Zebra crossings are not recommended on streets with traffic speed over 50 km/h or where there are more than two lanes in any direction, as the pedestrian may not be able to determine the appropriate time to cross due to the higher speed and/or traffic volume of the road. Zebra crossings should be on raised tables where possible to further signal the required slowing down of cars along vibrant streets.</p>	 <p>Figure 38: Zebra crossing outside Richmond North Public School</p>

Typology	Image
<p>Raised Threshold and Continuous Footpath</p> <p>Where a footpath intersects with a road, it may be appropriate to provide the footpath with priority across a road where the footpath carries higher traffic volumes than the road it crosses in a manner that maintain a level surface and is usually accompanied with regulatory crossing treatments such as a zebra crossing.</p> <p>Two types of treatments exist as shown in the example photographs. A raised threshold allows for continuous prioritised walking over the road, but the surface treatment provides a visual distinction from the footpath treatment either side of the facility. A continuous footpath is the same as a raised threshold, but the footpath surface treatment continues through the crossing facility, giving the effect of a continuing footpath across the intersection.</p> <p>This crossing facility is appropriate for Main Streets that have pedestrian volumes that are higher than traffic volumes intersecting from a perpendicular street.</p>	 <p>Figure 39: Raised threshold crossing, Windsor town centre</p>

5.1.2.2 Route Facility

Route facilities along Main Streets should comprise footpaths on both sides of the road to facilitate walking movements. As Main Streets have both Movement and Place characteristics, the volumes of pedestrians and vehicles are typically high. Accordingly, it is advisable to provide footpath widths that support high pedestrian volumes consistent as defined by the Walking Space Guide, which allow movement in both directions and for pedestrians to stop, mix and dwell. Under the Guide, main streets in Hawkesbury can be considered as either Type 3 or Type 4 classification.

Table 20: Pedestrian Route Infrastructure Typology for Main Streets

Typology	Image
<p>Footpath</p> <p>Footpaths of at least 2.4 m in width should be provided on footpaths along Main Streets in commercial areas to allow for two-way movement of pedestrians and people on wheelchairs, as well as space to stop and linger and street furniture.</p> <p>However, footpaths along main streets should ideally be designed according to Type 3 or 4 standards in the Walking Space Guide.</p> <p>Types can be differentiated by the peak hour number of people on the footpath:</p> <ul style="list-style-type: none"> • Type 3 = 70 – 399 PPHr • Type 4 = 400 – 2000 PPHr <p>Target minimums for these two types are 3m and 3.7m respectively. This allows for the two-way movement of pedestrians and wheelchairs while providing space to stop and dwell.</p>	 <p>Figure 40: Footpath along George St, South Windsor</p>

5.1.3 Local Streets

Local streets are categorised as streets that connect neighbourhoods and facilitate local community access. Local streets are accommodating to both pedestrian and vehicular traffic as both are typically low in volume. Due to the prevalence of residential neighbourhoods throughout the LGA, this street type is the most ubiquitous street type throughout Hawkesbury.

Table 21 and **Table 22** show the recommended range of pedestrian infrastructure required for local streets with an example photograph shown for each piece of infrastructure recommended.

5.1.3.1 Crossing Facilities

Table 21: Pedestrian Crossing Infrastructure Typology for Local Streets


Typology	Image
<p>Zebra Crossing</p> <p>Zebra crossings would typically not be appropriate on local streets as the pedestrian and traffic volumes combined would not meet the warrants specified by the Roads and Maritime Services division of Transport for NSW. Nonetheless, special circumstances may exist that necessitate the installation of a zebra crossing on local streets, as shown in the example photograph.</p>	 <p>Figure 41: Denman Road, Georges Hall</p>
<p>Medium Refuge Island</p> <p>A median refuge island allows pedestrians and cyclists to cross in stages when gaps in traffic allow. This facility type is useful in situations where a crossing facility is required mid-block or at an intersection, e.g. to facilitate wheelchair access, crossings near parks or a crossing that connects two discrete walking paths. Median refuge islands should be long enough to safely accommodate a person on a wheelchair or a bicycle (2.0 m or 2.5 m for cargo bikes) and wide enough to accommodate more than one wheelchair user or cyclist.</p>	 <p>Figure 42: Median refuge island on Berger Road, South Windsor</p>

5.1.3.2 Route Facility

Route facilities along local streets would ideally comprise of footpaths on both sides of the road to facilitate all walking movement. It is advisable to provide footpath widths that support low to medium pedestrian volumes. A minimum 1.5 m width and 1.8 m for sections passing allows pedestrian and wheelchair movement in at least one direction. Footpath widths can be broadened in situations where pedestrian volumes are likely to be higher, e.g. near parks and other recreational facilities.

Footpaths along local streets would be classified as Type One paths under the Walking Space guide. To meet the recommended minimum target of LOS C, 2m wide paths are advisable.

Table 22: Pedestrian Route Infrastructure Typology for Local Streets


Typology	Image
<p>Footpaths on Both Sides of a Local Street</p> <p>Footpaths should ideally be provided on both sides of a local street where possible.</p>	 <p>Figure 43: Footpaths on both sides, Auburn</p>

5.1.4 Civic Spaces

Civic spaces refer to areas designed for people through deliberate design choices which place pedestrians and other modes of transport over vehicles. Because of this, civic spaces receive high demand for activities and lower levels of vehicle movement. Civic spaces are seen as essential components of a healthy and vibrant community as they are open to all members of the community and play an important role in promoting social cohesion. They create places people enjoy, attract visitors, and are places communities value. Civic space examples in Hawkesbury include:

- George Street from Baker Street to Fitzgerald Street
- North Richmond Shopping Village

Table 23: Civic Spaces

Typology	Image
<p>Shared Zones</p> <p>Shared zones are special low-speed, mixed-traffic environments which are legally controlled by signs and line markings that restrict the speed limit to 10km/h. Parking is restricted to marked spaces to afford priority to pedestrians. Typically, the road environment is designed with special pavements, speed controls and landscaping, with few or no distinguishable footpaths and preferably no kerbs. Approval for all shared zones must be sought from Transport for NSW.</p>	 <p>Figure 44: Shared zone, Newtown</p> <p><i>Source: Google Street View</i></p>

5.2 Infrastructure Typology for Cycling

5.2.1 Main Road

Main roads can be considered as movement corridors, which provide safe, reliable, and efficient movement of people and goods between regions and strategic centres.


The following roads are identified as examples of main roads in the Hawkesbury LGA:

- Windsor Road
- Hawkesbury Valley Way
- George Street (Once merged with Macquarie Street)
- Blacktown Road
- Wilberforce Road
- Bells Line of Road
- Putty Road
- Londonderry Road

Table 24 and **Table 25** shows the recommended range of cycling infrastructure required for main roads with an example photograph for each piece of infrastructure.



5.2.1.1 Crossing Facilities


Table 24: Cycling Crossing Infrastructure Typology for Main Roads

Typology	Image
<p>Signalised crossing with bike phase and push button</p> <p>Designed to provide safe crossing for cyclists at a designated crossing point on a major roadway. The bike phase provides additional time for cyclists to cross the road safely, and thus reduce the risk of collisions with motor vehicles.</p>	 <p>Figure 45: Pedestrian/ cycling lantern, Bells of Line Road, North Richmond</p>

5.2.1.2 Route Facilities

Table 25: Cycling Route Infrastructure Typology for Main Roads

Typology	Image
<p>Separated Cycle Lane</p> <p>Bidirectional or unidirectional separated bicycle paths are located within the road reserve but are exclusive to bicycles. They are completely separated (often by a physical barrier) from parked cars, vehicle traffic and pedestrians.</p> <p>These facilities provide two-way or one-way travel along one side of the road and are highly desirable and safer than other on-road options.</p> <p>These facilities often require substantial engineering works to implement which needs to be balanced relative to competing demands for space within the road reserve, this type of facility is the preferred infrastructure type for major routes.</p>	 <p>Figure 46: Separated Cycle Lane, Sutherland</p> <p><i>Source: Near Maps</i></p>
<p>Bicycle Bypasses</p> <p>Bicycle bypasses provide a safer and more comfortable mechanism for cyclists to avoid passing through common obstructions on Main Roads such as bus shelters. They are desirable where there is a need to separate cyclists from other traffic to make routes more attractive for travel or to avoid squeeze points, adverse surface conditions, and other obstacles. The design of bicycle bypasses should be done in such a way that they take the cyclist past the device to a separated space or they allow safer reintegration with motorised traffic.</p>	 <p>Figure 47: Bicycle Bypass, Gold Coast</p> <p><i>Source: Google maps</i></p>

Typology	Image
<p>Off-Road Cycle Route (Dedicated or Shared)</p> <p>In situations where there is a need to avoid movement corridors altogether, off-road bicycle routes are provided to facilitate safe cycle movement outside of the road reserve and completely away from busy traffic conditions. Off-road cycle routes are typically constructed through parks, nature strips, the road verge, alongside rivers or are elevated over Main Roads. Off-road cycle routes typically function as shared paths with pedestrian movement allowed.</p> <p>Shared paths can be located adjacent to a road through the widening of a footpath or within the existing footprint of a wide footpath and are employed to provide protection for cyclists away from a high-speed traffic environment where separated cycle lanes are not achievable. They are used by both cyclists and pedestrians with line marking and/or signage designating their legal status as a shared path and helping to encourage safe use by both user groups. Pedestrians have the right of way on shared paths. There is the potential for conflict between user types when volumes of pedestrians and cyclists are high or when the path width is narrow. Hence this facility is recommended on movement corridors where pedestrian activity is usually limited. This type of facility can generally be implemented wherever there is sufficient width to accommodate a 3.0m wide path. Wider paths may be required depending on the volume of cyclists and pedestrians.</p>	 <p>Figure 48: Shared path, Bligh Park</p>

5.2.2 Main Streets



Main Streets have both high Movement and Place functions. These streets are typically found in town centres, where there are high volumes of foot traffic and vehicular traffic due to the range of mixed-use activities present. Main Streets need to balance different demands within available road space whilst ensuring high levels of safety and accessibility. Whilst there are no major arterial high streets within the LGA, areas that can be identified as Main Streets within the Hawkesbury region include:

- Windsor Street from Toxana Street to Bosworth Street
- George Street from Fitzgerald Street to Hawkesbury Valley Way

Table 26 & Table 27 provide the recommended range of cycling infrastructure required for main streets with an example photograph for each piece of infrastructure recommended.

5.2.2.1 Crossing Facilities


Table 26: Cycling Crossing Infrastructure Typology for Main Streets

Typology	Image
<p>Signalised Crossing with Bike Phase</p> <p>In Australia, bicycles are controlled at signalised intersections through the use of either a two-aspect bicycle symbol lantern (red and green) or a three-aspect bicycle symbol lantern (red, yellow and green). The bicycle lanterns apply for all bicycle movements (through, left and right) and currently there is no ability to differentiate between straight-through movements and turning movements. Every cyclist lantern needs to be provided with a push button to allow activation by users. This facility would be recommended on Main Streets in circumstances where prioritising cyclists crossing through a joint zebra crossing is not achievable.</p>	 <p>Figure 49: Signalised crossing, Kent Street</p> <p><i>Source: Google Street View</i></p>
<p>Zebra Crossing with Bicycle Crossing</p> <p>Zebra crossing with an attached bicycle crossing is a zebra crossing that has been widened to allow for separate crossing paths for cyclists and pedestrians. Similar to a conventional zebra crossing, drivers are required to give way to pedestrians and cyclists on both sides of all zebra crossings, unless the crossing is divided by a raised traffic island. Zebra crossings should be on raised tables where possible to further signal the required slowing down of cars along vibrant streets and usually allows for a flush transition between the cycle route that leads to this crossing facility.</p>	 <p>Figure 50: Denison Street, Bondi Junction</p>

Typology	Image
<p>Median Refuge Island</p> <p>A median refuge island allows cyclists to cross in stages when gaps in traffic allow. They can also be used in combination with pedestrian crossings. Median refuge islands should be long enough to safely accommodate a person on a bike (2.0 m or 2.5 m for cargo bikes) and wide enough to accommodate more than one cyclist.</p> <p>This facility would be recommended on vibrant streets in circumstances where prioritising cyclists crossing through the joint zebra crossing as described above is not achievable or where there are sufficiently low traffic volumes to allow for frequent gaps in traffic to cross.</p>	 <p>Figure 51: Croydon Road, Croydon</p>
<p>Cycle Transition Roundabout Treatment</p> <p>This treatment protects on-road cyclists at all legs of a roundabout by providing a bicycle ramp for cyclists to mount a shared path that circumnavigates the roundabout instead of requiring cyclists to enter the roundabout in mixed traffic.</p>	 <p>Figure 52: Yagoona</p> <p><i>Source: Google Maps</i></p>
<p>Intersection Transition</p> <p>This treatment provides an appropriate transition for cycle lanes that span across an intersection. Depending on local conditions, the transition can be designed to give cyclists the right-of-way over vehicles coming from the perpendicular lane or vice versa.</p>	 <p>Figure 53: Bourke Street, Surry Hills</p> <p><i>Source: Google Street View</i></p>

5.2.2.2 Route Facility

Table 27: Cycling Route Infrastructure Typology for Main Streets

Typology	Image
<p>Separated Cycle Lane</p> <p>Bidirectional or unidirectional separated bicycle paths are located within the road reserve but are exclusive to bicycles. They are completely separated (often by a physical barrier) from parked cars, vehicle traffic and pedestrians.</p> <p>These facilities provide two-way or one-way travel along one side of the road and are highly desirable and safer than other on-road options.</p> <p>These facilities often require substantial engineering works to implement which needs to be balanced relative to competing demands for space within the road reserve, this type of facility is the preferred infrastructure type for major routes.</p>	 <p>Figure 54: Kent Street, Sydney</p> <p><i>Source: Google Street View</i></p>

5.2.3 Local Streets


Local streets are categorised by low traffic volumes as these streets connect neighbourhoods facilitating local community access. Local streets are typically accommodating to both pedestrian and vehicular traffic as the volume for both these modes are low. Due to the prevalence of residential neighbourhoods throughout the LGA, this street type is the most ubiquitous street type throughout Hawkesbury.

Table 28 & Table 29 show the recommended range of pedestrian infrastructure required for local streets with an example photograph for each piece of infrastructure recommended.

5.2.3.1 Crossing Facilities



Table 28: Cycling Pedestrian Infrastructure Typology for Local Streets


Typology	Image
<p>Cycle Transition Roundabout Treatment</p> <p>This treatment protects on-road cyclists at all legs of a roundabout by providing a bicycle ramp for cyclists to mount a shared path that circumnavigates the roundabout instead of requiring cyclists to enter the roundabout in mixed traffic.</p>	 <p>Figure 55: Yagoona</p> <p><i>Source: Google Maps</i></p>

Typology	Image
<p>Medium Refuge Island</p> <p>A median refuge island allows cyclists to cross in stages when gaps in traffic allow. They can also be used in combination with pedestrian crossings. Median refuge islands should be long enough to safely accommodate a person on a bike (2.0 m or 2.5 m for cargo bikes) and wide enough to accommodate more than one cyclist. Holding rails are provided to allow cyclists to wait on the island without dismounting.</p> <p>This facility would be recommended on local streets in circumstances where there is an identified cycle route crossing through a street that attracts a discernible volume of cycle movement.</p>	 <p>Figure 56: Croydon Road, Croydon</p>

5.2.3.2 Route Facilities

Table 29: Cycling Route Infrastructure Typology for Local Streets

Typology	Image
<p>On-road bicycle lanes (contra-flow one-way)</p> <p>Contra-flow bicycle lanes are on-road lanes that are signed and marked to allow cycling in the opposite direction of an otherwise one-way street. Lanes are typically fitted with green paint to emphasise the presence of cyclists travelling in the opposite direction. A mixed-traffic facility can also be installed in the direction of vehicle travel in slow speed and low volume environments typical of local streets.</p>	 <p>Figure 57: Bicycle Lanes, Grove Street, Lilyfield</p>
<p>Quietway</p> <p>A Quietway is a mixed traffic treatment where cyclists ride in the centre of a travel lane on local roads with a speed limit of 30 kilometres per hour or less. Quietways are located away from trucks and buses, and overtaking is discouraged by the provision of medians, flat top-speed humps and narrower lanes. Bicycle symbols are also painted on the roadway to indicate priority.</p>	 <p>Figure 58: Quietway, Bankside Avenue, Earlwood</p>


Typology	Image
<p>Shared Path</p> <p>Shared paths can be located adjacent to a road through the widening of a footpath or within the existing footprint of a wide footpath and are employed in local streets to avoid the use of the carriageway for reasons such as mitigating on-street parking loss or to attract less confident cyclists that do not feel confident riding on-road, despite the low volume of traffic.</p> <p>They are used by both cyclists and pedestrians with line marking and/or signage designating their legal status as a shared path and helping to encourage safe use by both user groups. Pedestrians have the right of way on shared paths. There is the potential for conflict between user types when volumes of pedestrians and cyclists are high or when the path width is narrow. Hence this facility is recommended on movement corridors where pedestrian activity is usually limited.</p> <p>This type of facility can generally be implemented wherever there is sufficient width to accommodate a 3.0m wide path. Wider paths may be required depending on the volume of cyclists and pedestrians.</p>	 <p>Figure 59: Shared Path on local street, Milperra</p>

5.2.4 Civic Spaces

Civic spaces refer to areas designed for people through deliberate design choices which place pedestrians and other modes of transport over vehicles. Because of this, civic spaces receive high demand for activities and lower levels of vehicle movement. Civic spaces are seen as essential components of a healthy and vibrant community as they are open to all members of the community and play an important role in promoting social cohesion. They create places people enjoy, attract visitors, and are places communities value. Civic space examples in Hawkesbury include:

- George Street from Baker Street to Fitzgerald Street
- North Richmond Shopping Village

Table 30: Cycling Route Infrastructure Typology for Civic Spaces

Typology	Image
<p>Shared Spaces</p> <p>Shared Spaces are special low speed, mixed-traffic environments which are legally controlled by signs and line markings that restrict the speed limit to 10km/h. Parking is restricted to marked spaces to afford priority to pedestrians. Typically, the road environment is designed with special pavements, speed controls and landscaping, with few or no distinguishable footpaths and preferably no kerbs. Cyclists have lower priority in shared zones than pedestrians and where a shared zone attracts large amounts of pedestrian activity, encouraging a cycle route through the shared zone is not advisable due to the potential for conflict between pedestrians and cyclists.</p>	 <p>Figure 60: Little Hay Street, Sydney</p> <p><i>Source: Google Street View</i></p>

6 Compliance and Site Observations

The following chapter details industry standards required for delivering walking and cycling infrastructure and observations made on our site visit for this study regarding each of the criteria shown. Standards relevant to this study, the minimum level of compliance required, and the source of the standard are detailed in each table provided. The standards shown have been summarised for the identification of requirements. For further information please refer to the standards provided.

6.1.1 Pedestrian Paths

Pedestrian paths are reserved for pedestrians, wheelchairs, mobility scooters and additional walking aids such as walking frames. Footpaths provide access to and from any given point or provide access as a first or last link in a trip. When assessing the suitability of footpaths, other matters such as the road environment need to be taken into consideration.

Table 31 details the requirements for pedestrian path design, as detailed in Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling.

Table 31: Pedestrian path compliance assessment and treatment recommendations

Facility	Standard	Assessment	Recommended Improvement
Pedestrian Path	Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling (AGRD06A-17) Section 5.1	Compliant	Do nothing
		Cracked/ uneven surface (minor)	Repair facility
		Cracked/ uneven surface (major)	Reconstruct facility
		Missing	Construct facility
		Non-compliant width (<1.2m)	Widen facility

6.1.1.1 Disconnected Footpaths

There are many instances of disconnected footpaths throughout Hawkesbury. Where footpath connectivity is broken up, it creates barriers for users to access neighbourhoods. Not all instances of disconnected footpaths are of concern, such as that shown in **Figure 63**. This example shows footpaths moving away from densely populated areas where there is a greater demand and requirement for supporting infrastructure. **Figure 61** to **Figure 63** provide examples of a loss in footpaths that can have an impact on the overall mobility choices for persons in the LGA.



Figure 61: Disconnected path – George Street



Figure 62: Disconnected path – Hawkesbury Valley Way



Figure 63: Disconnected path – Wilberforce Road

6.1.1.2 Impediments and Degradation of Paths

Poorly maintained infrastructure limits the ability of users to move efficiently. Worn-down infrastructure can create knock-on effects, such as safety issues from unstable and loose materials. It was apparent throughout the LGA that paths were of poor quality in some areas. This was mostly confined to low-level traffic residential areas and is less of an issue than if it was to be located in or close to a local centre.

In addition to this, there were instances of impediments in the local networks due to obstructions, such as those shown in **Figure 64**. This creates additional barriers for persons with limited mobility or pushchair users which is unnecessary.



Figure 64: Footpath obstruction



Figure 65: Footpath degradation



Figure 66: Loss of footpath due to a lack of maintenance

6.1.1.3 Narrow Footpaths

Narrow footpaths are a general issue throughout much of the LGA, particularly so in residential areas. Local centres are generally better, with much wider footpaths provided to support the increase in foot traffic or support a shared path. The general width of footpaths mostly ranged between 1 to 1.2 metres in residential areas, which is classified as inadequate for the safe manoeuvrability of wheelchairs. Any footpath with a width of 1.5 metres or less is deemed to be an actionable item in the walking space guide. Wheelchair users were observed having difficulty in areas close to local centres due to the footpath widths present.

6.1.2 Bicycle Path

Dedicated cycleways can be provided in a one or two-way format, in support of:

- Large cycling volumes or where it is desirable to provide dedicated infrastructure;
- Motor vehicle use is restricted or limited; and,
- Improves alignments for cyclists that allow safe travel at a consistent speed.

The cycling network within the Hawkesbury LGA is classified as either a shared path or on-road. The levels of cycling demand that are present in the region do not demand a need for dedicated infrastructure at this point. Shared paths are generally adequate for the purpose where supplied.

Table 32: Bicycle path compliance assessment and treatment recommendations

Facility	Standard	Assessment	Recommended Improvement
Bicycle Path	Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling (AGRD06A-17) Section 5.1	Compliant	Do nothing
		Missing	Construct facility
		Non-compliant width (<1.5m)	Reconstruct facility

During the site visit it was observed that there were issues with on-road cycleways, particularly in areas where bridges provided limitations to carriageway width, creating pinch points. **Figure 67** shows an example of how the carriageway space thins, removing the capacity of the on-road cycleway. This causes cyclists to merge without warning into the traffic lane, which can cause safety issues.

Another observation made during the site visit was the lack of road markings for roads classified as having an on-road cycleway. This creates issues as it removes the awareness to the road user of the potential for encountering a cyclist and removes guidance for cyclists using each route.



Figure 67: Loss of on-road cycleway

6.1.3 Shared Paths

Shared paths are classified as routes for which pedestrians and cyclists share the same space. Shared paths are ideally suited to areas where there is pedestrian and cycling demand which does not require separate facilities to be constructed. Shared paths are suited for recreational purposes, local access and to provide linkages between key routes. Shared paths provide a safe place for inexperienced cyclists, recreational cyclists and young cyclists to learn and travel.

Table 33: Shared path compliance assessment and treatment recommendations

Facility	Standard	Assessment	Recommended Improvement
Shared Path	Austroads Guide to Road Design Part 6A: Paths for Walking and Cycling (AGRD06A-17) Section 5.1	Compliant	Do nothing
		Cracked/ uneven surface (minor)	Repair facility
		Cracked/ uneven surface (major)	Reconstruct facility
		Missing	Construct facility
		Non-compliant width (<2.5m)	Widen facility

Clear signage and paint markings are key to ensuring both pedestrians and cyclists are aware that they are travelling on a shared footpath. Figure 68 provides an example of clear signage which informs the user of the shared path. However, no additional paint is provided on the floor to create further awareness.

Shared path widths are generally quite narrow across the LGA. Where widths were assessed, they were found to be anywhere from 1.6 to 2 metres wide. This can create issues with persons passing one another, particularly those in wheelchairs or with young children. Narrow shared paths also increase the discomfort of pedestrians in regard to cyclists, as their speed is usually greater, and thus the width does not provide a comfortable spatial barrier between the two.



Figure 68: Shared footpath signage

6.1.4 Crossings

This section discusses crossing opportunities, different types of crossing and facilities that are present within the LGA.

6.1.4.1 Signalised Crossings

Table 34 details some of the compliance standards for signalised intersections. Generally, there were no major issues observed during the study concerning signalised crossings. Whilst there were instances where not all crossing legs were provided, most had clear functioning signage, lights, tactile markers and drop-down kerbs.

Table 34: Signalised pedestrian crossing compliance assessment and treatment recommendations

Facility	Standard	Compliance Requirement	Recommended Improvement
Missing crossing leg	AS 1742.10-2009 Pedestrian control and protection with preference to RMS supplement and TDT 2002/12c Stopping and Parking restrictions at intersections and crossings.	Pedestrian crossing on all intersection legs	Investigate the provision of an additional crossing leg
Delineated crossing width		Crossing width should be 3.3 metres (minimum)	Adjust line marking to provide 3.3-metre-wide pedestrian crossing zone
Pedestrian Lanterns		A green / red lantern should be visible to pedestrians from both sides of the crossing	Provide pedestrian lantern

6.1.4.2 Zebra Crossings

Table 35 details compliance assessment and treatment recommendations for zebra crossings.

Table 35: Zebra crossing compliance assessment and treatment recommendations

Facility	Standard	Compliance Requirement	Recommended Improvement
Painted Crossing Width	AS 1742.10-2009 Pedestrian control and protection with reference to RMS supplement and TDT 2001/04b Traffic calming devices as pedestrian crossings	Crossing should be 3.6m wide (minimum)	Widen crossing to a width of 3.6 metres
Sight Lines		Focus is given to crests and obstructions that may restrict the clear view of approaching vehicles	Evaluate options to redesign crossing facility
Line Markings		Pavement markings should be clearly visible by pedestrians and vehicle drivers	Re-paint line marking
Signage		Signage should be installed as per Figure 1 of AS1742.10-2009	Install signage



Figure 69: Worn-down crossings with no tactile markers



Figure 70: Crossing with good signage and tactile markers



Figure 71: Newly constructed zebra crossing

Figure 69 to Figure 71, provide examples of pedestrian crossings, including raised (wombat) crossings that can be found around the Hawkesbury LGA. It was observed that several new crossings were being installed within Richmond's local centre to support the level of pedestrian foot traffic. Where pedestrian crossings were provided they varied in terms of quality, with discrepancies between DDA compliance, markings, and overall condition changing between sites.

6.1.4.3 Pedestrian Refuge

The compliance assessment and treatment recommendations for pedestrian refuges islands is shown below in Table 36.

Table 36: Pedestrian refuge crossing compliance assessment and treatment recommendations

Facility	Standard	Compliance Requirement	Recommended Improvement
Refuge Dimensions	AS 1742.10-2009 Pedestrian control and protection with reference to RMS supplement and TDT 2011/01a.	3.0 metres parallel to the road direction of travel (minimum). 2.0 metres perpendicular to the road direction of travel (minimum).	Reconstruct refuge to provide compliant waiting space.
Faded line marking		Pavement markings should be clearly visible by pedestrians and vehicle drivers.	Re-paint line marking

Refuge Islands are ideal crossing opportunities for situations where the demand for a permanent crossing is not met, but where users require assistance to cross wider road carriageways safely.

Conditions for refuge islands varied throughout the LGA. **Figure 72** shows an example of a poorly maintained refuge island, which is covered in gravel and does not feature any safety barriers.



Figure 72: Poorly maintained refuge island

Figure 73 depicts a contrasting refuge crossing that is well maintained, free from debris and has additional safety precautions to protect the user.

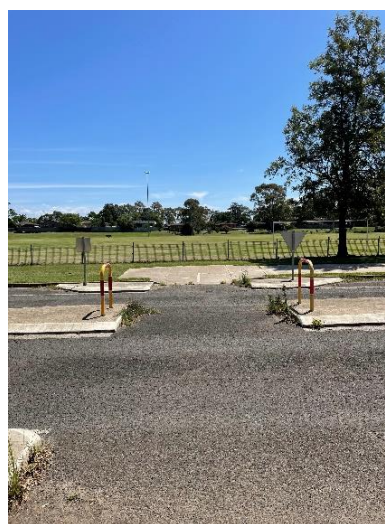


Figure 73: Well-maintained refuge island

6.1.4.4 Missing Crossings

Missing crossings are considered as locations where demand for a crossing point is high, but where one has not been provided to the date of the study. There were several instances across the LGA where this was of concern. This included Richmond town centre next to Aldi (**Figure 74**), and North Richmond local centre on Riverview Street. Both examples were in areas with high foot traffic and steady vehicle traffic on the road. This created an environment where potential safety issues could arise, particularly for vulnerable persons.



Figure 74: Lack of suitable crossing facility (Richmond)



Figure 75: Busy Road environment with no crossing (North Richmond)

The issue of missing crossings was also apparent around key transport infrastructure. Crossing opportunities at rail stations including Windsor and East Richmond were either non-existent or unsuitable for the volume of traffic passing through. The crossing opportunity shown in the third image (**Figure 78**), taken at East Richmond Station, is difficult for pedestrians to cross because of the frequent bi-directional traffic. **Figure 77** shows the lack of a crossing facility on George St between the roundabout and the railway bridge. Furthermore, pavement deterioration is another problem that impedes mobility, particularly for those with accessibility issues, as seen in **Figure 76**.



Figure 76: Windsor Station crossing



Figure 77: Windsor Station missing crossing point

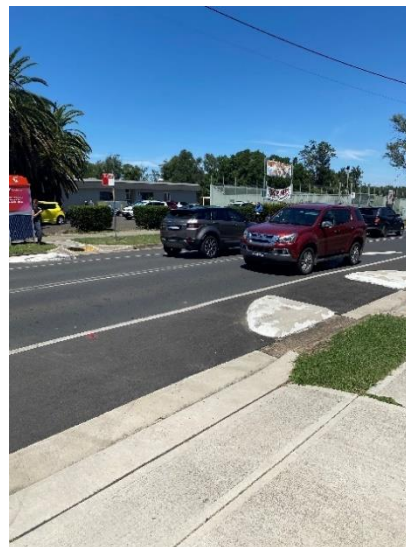


Figure 78: East Richmond Station missing crossing point

6.2 Other Observations

6.2.1 Bicycle Parking

There is a gap in the provision of bicycle parking throughout the LGA. While some key areas do provide parking, it is not as accessible as would be required to encourage an increase in casual trips.

No visible bicycle parking was found during the site visit to Windsor along the high street and next to the pedestrianised area. Richmond had some available bicycle parking but was limited to a few spaces. There was an absence of bicycle parking within North Richmond, Hobartville, Kurmond and Pitt Town around the respective local centres. South Windsor had limited parking availability at either end of the local centre.

Free and accessible bike parking is provided at some stations, as shown in **Figure 80**, however, it is generally in unprotected non-sheltered spaces. Some secure bicycle parking is provided at stations such as Richmond and Windsor however, they are made available only through pre-scheduled bookings.

These factors are likely to discourage riders as they increase the barriers to persons of all ages and abilities.

Where bicycle parking isn't provided such as Windsor High Street, as shown in **Figure 79**, cyclists are forced to lock their bikes up to informal furniture along the pavement. As this area receives a high amount of foot traffic, obstructions like this impede movement. Particularly, when there is space to the left of the bike, which could provide a spacious and covered zone.



Figure 80: Unsheltered bicycle parking



Figure 79: Parking demand in Windsor

6.2.2 Rail Crossings

Additional barriers to walking and cycling in the region are caused by the rail line which splits several suburbs within the LGA.

A series of rail crossings are provided along the line to give opportunities for safe crossing. Most crossing points support both pedestrians and cyclists, whilst some are pedestrian-only, such as the one on Cox Street, Windsor.

The two images to the right show the difference in quality between the types of crossing that can be found. **Figure 81** shows a typical crossing that can be found in a populated area. It has additional lights, safety features and warnings compared to more rural crossings which feature a standard barrier and no footpaths.



Figure 81: East Richmond railway crossing



Figure 82: Railway crossing on Fairey Road, Windsor

6.2.3 Permeability

Permeability through the lower half of the LGA is generally considered to be quite good. Areas such as Bligh Park have high levels of permeability, with connecting paths and alleys settled between property boundaries. This allows for efficient movement through a neighbourhood, whilst moving pedestrians and cyclists away from the road. Some of the newer developments do exhibit poor permeability, for example, Bootles Lane in Pitt Town. A large hedge row separates either side of the estate along Bootles Lane without providing the opportunity to cut through to roads such as Bona Vista Drive.

6.2.4 Damaged Signage

There were examples of damaged signage found during the site visit. It was not obvious what had caused them to become dislodged however, being absent from the roadside reduces the awareness made to other road users regarding cyclists which increases the overall safety risk.



Figure 83: Damaged Road signs

7 Issues

The issues presented in this chapter have been identified during this study. This list is intended to be updated throughout the duration of the project.

7.1 General Issues

Table 37: General Issues Identified

Category	Issue	Source
Pedestrian	Lack of shade and canopy coverage throughout the region. Wide stretches of footpaths are missing canopy, particularly the paths along main roads (Example: Macquarie Street).	Site Visit/ Vision Workshop
Pedestrian	There are disconnections throughout the pedestrian network (example: abrupt footpath ending along Hawkesbury Valley Way, towards Clarendon).	Desktop/Site Visit
Pedestrian	Inadequate crossing opportunities.	
Pedestrian, Cycling	Lack of End of Trip facilities like dedicated bicycle parking around key locations.	Desktop/Site Visit
Pedestrian	Park and walk is an initiative highlighted in Hawkesbury Town and Villages Place plans, however, the pedestrian infrastructure currently in place does not support this in most areas.	Desktop/Site Visit
Cyclists	There are missing links in the connection of regional centres through cycleways. There is currently some on road network links between places, however, the infrastructure can be poor in certain areas and will only attract riders who are very comfortable in such environments.	Desktop/Site Visit
Pedestrian	Inconsistent crossing opportunities. There are places along the footpath network that are very inconvenient to cross, as either there is no suitable infrastructure or the route which pedestrians must take is not the desired one.	Desktop/Site Visit
Pedestrian, Cycling	Lack of road reserve space to utilise for upgrades.	Site Visit/ Vision Workshop
Pedestrian, Cycling	Inconsistent lighting along routes for when people walk or cycle at night.	Vision Workshop

7.2 Location Specific

Table 38: Location Specific Issues Identified

Category	Issue	Location	Type	Source
Pedestrian	No footpath on Moray Street south of railway line that connects to footpath to the north.	Moray Street between railway line and March Street	Footpath	Desktop Audit
Pedestrian, Cycling	Shared path width of approx. 2.2m not compliant (<2.5m).	College Drive and Bourke Street (eastern side)	Shared path	Desktop Audit
Pedestrian, Cycling	Shared path width of approx. 2m not compliant (<2.5m).	College Street (southern side) between Paget Street and Bourke Street	Shared path	Desktop Audit
Pedestrian, Cycling	Majority of shared path width along Hawkesbury Valley Way of approx. 2-2.2m not compliant (<2.5m).	Hawkesbury Valley way (southern side) between Pitt Street and Racecourse Road	Shared path	Desktop Audit
Pedestrian	No kerb ramp on southern side of College Street to facilitate north-south crossing movement.	Paget Street crossing College Street	Crossing	Desktop Audit
Pedestrian, Cycling	No crossing facility providing east-west crossing movement across Paget Street.	College Street crossing Paget Street	Crossing	Desktop Audit
Pedestrian, Cycling	No crossing facility providing east-west crossing movement across College Drive.	College Street crossing College Drive	Crossing	Desktop Audit
Pedestrian, Cycling	Missing kerb ramp on eastern side of Bourke Street to facilitate crossing movement to footpath on the other side.	College Street crossing Bourke Street	Crossing	Desktop Audit
Pedestrian	Lack of crossing facility at Castlereagh Road that is adequately near Richmond High School.	Castlereagh Road west of Lennox Street	Crossing	Desktop Audit
Pedestrian	Kerb ramps not on desire line; opportunity to improve.	East Market Street crossing Grose Street	Crossing	Desktop Audit
Pedestrian	Footpath doesn't go all the way along Southee Road.	Southee Road	Footpath	Vision Workshop
Pedestrian	Footpath along northern side of Terrace Road west of Bells Line of Road ends at Beaumont Avenue; lack of footpath connection to shops and businesses further east; opportunity to improve.	Terrace Road (northern portion) east of Beaumont Avenue	Footpath	Desktop Audit
Pedestrian	Missing footpath connection to shops and fitness establishments on southern side of Terrace Road east of Beaumont Avenue; opportunity to improve.	Terrace Road (southern portion) east of Beaumont Avenue	Footpath	Desktop Audit
Pedestrian	Missing footpath connection on Beaumont Avenue to North Richmond Park and Hawkesbury River corridor; opportunity to improve.	Beaumont Avenue (western portion) from Terrace Road southwards	Footpath	Desktop Audit

Category	Issue	Location	Type	Source
Pedestrian	Missing footpath connection on Bells Line of Road to Hawkesbury River corridor; opportunity to improve.	Bells Line of Road (western portion) from Pitt Lane to Hawkesbury River corridor	Footpath	Desktop Audit
Pedestrian, Cycling	Shared path width of approx. 2m not compliant (<2.5m).	Bells Line of Road (eastern portion) from Terrace Road to Charles Street	Shared path	Desktop Audit
Pedestrian, Cycling	Shared path width along Richmond Bridge of approx. 2m not compliant (<2.5m).	Shared path along Richmond Bridge towards Old Kurrajong Road	Shared path	Desktop Audit
Pedestrian	Crossing distance approx. 13.5m. No formal crossing facility at William Street bordering the school.	Grose Vale Road crossing William Street	Crossing	Desktop Audit
Pedestrian	Crossing distance approx. 12m. No formal crossing facility at Elizabeth Street bordering the school.	Grose Vale Road crossing Elizabeth Street	Crossing	Desktop Audit
Pedestrian	Crossing distance approx. 17m. No formal crossing facility at Riverview Street bordering south of North Richmond shopping strip.	Grose Vale Road crossing Riverview Street	Crossing	Desktop Audit
Pedestrian	Kerb ramps not on desire line; opportunity to improve.	Terrace Road crossing Beaumont Avenue (western leg)	Crossing	Desktop Audit
Pedestrian	Kerb ramps slightly misaligned; opportunity to improve.	Elizabeth Street crossing Charles Street (eastern leg)	Crossing	Desktop Audit
Pedestrian	No crossing facility linking footpaths on either side of Grose Vale Road; opportunity to improve.	Grose Vale Road between Pecks Road and internal road to North Richmond Water Filtration Plant	Crossing	Desktop Audit
Pedestrian	Missing crossing facility (kerb ramps) to facilitate movement across William Street; Crossing distance approx. 9.5m.	Charles Street crossing William Street (southern leg)	Crossing	Desktop Audit
Pedestrian, Cycling	Pavement degradation.	Crooked Lane / Bells Line of Road intersection (north-eastern corner)	Crossing	Desktop Audit
Cycling	Many bike riders go up Terrace Road to get to Freemans Reach/ Glossodia etc. Side of road is very narrow, blind corners, and road often used by trucks.	Terrace Rd	On road Bike Lanes	Vision Workshop
Pedestrian	Pedestrian network on George Street abruptly finishes at the intersection with Yarrowong Street. There are bus stops in this section, however no infrastructure to facilitate their movement after the bus.	George Street at Yarrowong Street	Footpath	Desktop Audit
Pedestrian	At the signalised intersection there is no signalised pedestrian crossing. Major Gap.	George Street at Rifle Range Road	Crossing	Desktop Audit
Pedestrian	Foot path along Ham St ends at Walker St.	Ham Street at Walker Street	Footpath	Desktop Audit
Pedestrian	Foot path along Bergre Rd ends.	Berger Rd	Footpath	Desktop Audit

Category	Issue	Location	Type	Source
Pedestrian	Section of Macquarie Street which merges into George Street does not have footpaths nor any crossing opportunities.	Macquarie Street	Crossing	Desktop Audit
Pedestrian, Cycling	Highest urban heat in the LGA, due to lack of shade and trees (example Mileham).	Mileham Street	Shade	Vision Workshop
Pedestrian	There is a lack of dedicated pedestrian crossings around the station.	George Street	Crossing	Desktop Audit
Pedestrian	Foot Path ends abruptly. No provisions are provided for pedestrians. Part of the larger issue of a missing connected path along Hawkesbury Valley Way towards Clarendon.	Hawkesbury Valley Way at Rum Corp Lane	Footpath	Desktop Audit
Pedestrian, Cycling	Widths along Macquarie Street are inconsistent. After passing Christie Street, Widths are around 1.2 / 1.3 m. This path is labelled a shared path, and thus would be too narrow to facilitate both modes.	Macquarie St	Shared Path	Desktop Audit
Pedestrian	No Pedestrian infrastructure provided.	Wilberforce Rd	Footpath	Desktop Audit
Pedestrian	Pedestrian infrastructure ends abruptly near Brickfield Rd. The foot path does not extend towards the rail crossing and there is no pedestrian crossing provided to cross the rail tracks. After the rail crossing there is no infrastructure as well.	Fairy Rd	Footpath Crossing	Desktop Audit
Pedestrian	When walking along George St there are many streets you need to cross as a pedestrian which are unsafe, especially when crossing Christie St.	George Street at Christie Street	Crossing	Vision Workshop
Pedestrian	No dedicated pedestrian crossing from Thorley Street to cross George Street (to access service station and food outlets).	Bligh Park at Thorley Street	Crossing	Council
Pedestrian	No crossing near Bligh Park on Rife Range Road (closest dedicated crossing is located at Bede Polding College).	Bligh Park at Rife Range Road	Crossing	Council
Pedestrian	No dedicated crossing along Woods Street.	South Windsor at Woods Road	Crossing	Council

Some of the issues identified in **Table 37 and Table 38** are georeferenced (with coordinates) on the Google Maps. Click this link to view issues on Google Maps -

<https://www.google.com/maps/d/edit?mid=1UBHowGK--nMI5xjgg82a0P27dsFQle0&usp=sharing>

Note: Click on each issue to view photo (taken during the site visit) evidence.

8 Summary

This Background report has been developed to summarise strategic planning directions, conditions and compliance of the existing conditions of walking and cycling infrastructure (covers all high activity areas and destinations). The Background Report outlines the following:

- Outlines the local, state, and federal strategic planning context and its applicability;
- Analyses current population trends and outlines opportunities to increase walking and cycling rates;
- Provides typology for infrastructure based on the road hierarchy;
- Summarises the existing transport network conditions and crash data; and,
- Highlights common issues identified as part of the site audit;

This report builds the basis for the upcoming tasks and support in developing the Hawkesbury City Infrastructure Action Plan.

9 Next Steps

The next stage of this study will be to develop the Hawkesbury City Infrastructure Action Plan. As part of the Infrastructure Action Plan the following will be undertaken:

- Develop a route evaluation matrix to prioritise work, including timeframes indicative costs;
- Prioritise infrastructure recommendations based on the core walking routes, community feedback and network gaps and issues;
- Encourage policy and behavioural change in the community;
- Hold workshop with Council to develop the plan; and
- Develop Infrastructure Action Plan;

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We care about the communities we serve—because they're our communities too. This allows us to assess what's needed and connect our expertise, to appreciate nuances and envision what's never been considered, to bring together diverse perspectives so we can collaborate toward a shared success.

We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

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