AECOM

A6027 De Havilland Way Corridor Scheme

Consultation Summary Report

Bolton Council

July 2022

Delivering a better world

Quality information

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1. Introduction

1.1 In order to improve and inform the final scheme designs for the De Havilland Way Corridor Improvement scheme Bolton Council completed a full consultation exercise which engaged local residents, businesses and members of the public. The consultation was held between Thursday 19th May and Friday 10th June 2022, a period of three weeks. The consultation approach involved:

- Press release and social media campaigns;
- Bespoke email address (luf@bolton.gov.uk);
- Opportunity to provide feedback via letters and email;
- A dedicated public engagement event (Monday 6th June); and
- A dedicated website, Commonplace,

Summary of Response Volumes

1.2 **Table 1** presents a summary of the total responses received throughout the consultation broken down by media type.

Table 1 Summary of Consultation Responses by Media Type

Respondent Type	Engagement Method	Count
Residents	Common Place	424*
	Paper Surveys	6
	Emails	70
	Letters (Including Campaign)	6
Business / Stakeholders	Emails	2
	Letters	1
Total		509

*6,552 visitors resulting in 424 respondents and 732 responses

1.3 Of the 424 respondents on the Commonplace website 43% supported the proposals and 42% were unsupportive. Furthermore, 82% of respondents stated they preferred Option One: Two Way traffic on Austin's Lane compared to Option Two: One Way.

Key Response Themes and Scheme Benefits

1.4 Analysis of all 424 respondents' answers towards each of the junctions which comprise the scheme (supportive or unsupportive) identified that the top three key themes prevalent in responses towards improving the existing junctions were:

- Better Road Maintenance;
- Safer Junctions; and
- Improve Traffic Signals;

1.5 The full break down is presented in **Appendix A** of this report. The key themes derived from respondents' answers towards improving the junctions suggests that there may have been some confusion and lack of understanding of the proposals as the scheme will ensure:

- All junctions within the corridor benefit from modern integrated traffic signal control which will offer capacity benefits and better management of delays within the corridor, which will help both general traffic as well as improving bus reliability.
- That traffic movements are controlled and do not rely upon drivers' judgement of gaps between vehicles at stop lines of roundabouts, therefore offering increased safety benefits.
- That the junctions are all designed to the latest standards[1] and will provide full crossing facilities for cycling and walking trips, improving connectivity for sustainable modes and increasing safety.
- The interconnecting links between the junctions will provide cycling and walking facilities which are segregated from live traffic ensuring there will be a full end to end route for cycling and walking trips.

1.6 The scheme will address all of the top three themes identified by respondents towards how they felt the existing junctions could be improved, as well as improving cycling and walking facilities, which a number of respondents also wanted to see. See the detailed breakdown of Commonplace responses in **Appendix A**.

Other Themes

1.7 Each of the questions on Commonplace enabled the respondent to give other responses. Some of these responses included but not limited to 'add in M61 J7', 'reduced development in the area' or 'provide a footbridge'. 'Add in M61 J7' was recorded highest, with 11 out of the 85 responses in the question about the M61 junction 6When local residents, as part of a separate residents campaign, were asked if they felt Junction 7 formed an alternative option for alleviating local congestion, 180 out of the 191 surveyed indicated they believed it would. Whilst the council is cognisant of the desire for a new Junction 7, this is not within the Council's area and would require Lancashire County Council, Chorley Borough Council and National Highways to take a lead on this aspiration. It should be noted that there is no scheme design nor planning approvals for a new Junction on the M61 and hence it would not be possible to bid for Junction 7 to the Levelling up Funding Round 2.

1.8 It should also be noted that whilst 424 respondents is a good response rate for a similar consultation, it only represents 6% of the total visitors to the Commonplace website. Therefore, 94% of those who reviewed the information on the Commonplace website did not leave a response.

[1] https://www.gov.uk/government/publications/cycle-infrastructure-design-ltn-120

Emails and Letters

1.9 The 85 letters, emails and paper surveys which were received separately to the Commonplace consultation are, summarised in **Appendix B.** A significant proportion of the concerns raised within the letters, emails and paper surveys mirror those posted on Commonplace with the addition of others such as:

- Loss of habitat along the De Havilland Way corridor
- The environmental impact of traffic signals stopping cars during the off-peak periods; and
- The roundabouts should be kept and operate with signals during the peak periods.

1.10 Equally the responses also note the need to address the existing congestion problems along the corridor and that further information should be provided as to how the proposals can do this.

1.11 The scheme design process has considered a number of options for each of the junctions within the corridor including operating the existing roundabouts as signalised junctions. The design works identified that it was very difficult to fully signalise the existing roundabouts without requiring additional land outside of the council ownership which is a significant barrier to delivery. The proposed corridor scheme forms the best design possible that can be accommodated within the existing highway boundary. As a result of remaining within the highway boundary the scheme limits the loss of habitat along the corridor. Operating traffic signals only during peak periods is not best practise as it leads to confusion with drivers and increases the difficulty of ensuring pedestrians can cross all arms of the junctions safely.

1.12 Should the De Havilland Way Scheme be successful in securing funding then the comments received from the consultation will be further taken into account during the detailed design stage.

Public Engagement Event

1.13 Over 100 people attended the public engagement event which is summarised in **Appendix B**. Key areas for discussion was around the retention of Austin's Lane for two-way traffic and the desire to see Junction 7 on the M61 delivered, either in support of or as an alternative to the proposed scheme. As noted above, the Council is cognisant to the desires to see Junction 7 realised, but this is not within the Council's control being within Chorley Council and Lancashire County Council's area, and also requiring permission from National Highways. Bolton Council do not believe the proposed scheme will inhibit the ability to realise junction 7 in the long term but gives the opportunity to deal with local congestion issues in the short term.

Feedback and Lessons Learnt

1.14 Feedback post the consultation exercise has identified that respondents felt there was little opportunity to provide an answer other than yes or no to the questions. Furthermore, it was felt the options towards the direction of flow on Austin's Lane were leading and did not include an alternative as no change.

1.15 The following are lessons learnt from the Consultation Exercise:

- A clearer set of questions on the Commonplace website;
- Earlier engagement of all stakeholders;
- Provide clearer evidence of the benefits and consequences of not completing the scheme; and
- Ensure that engagement with stakeholders is ongoing throughout the delivery period of a scheme.

1.16 The lessons learnt will be used to inform the ongoing stakeholder engagement moving forward on the De Havilland Way Corridor such as updating the Frequently Asked Questions upon the Commonplace website and using it as a key platform for providing important update and information towards the scheme.

Conclusions

1.17 The consultation exercise has identified that there is overall support for the De Havilland Way Corridor Improvement scheme. Of the top three key themes of the responses received towards perceived improvements required within the corridor the scheme is forecast to address these by reducing congestion, improve journey time reliability for bus and vehicles, improve pedestrian and cycling crossing facilities, and improved safety.

Appendix A Detailed Breakdown of Responses on Commonplace

Commonplace Responses

Question:

Overall, are you supportive of the combined proposals for De Havilland Way?

Answer:

Figure 1 Summary of Overall Support

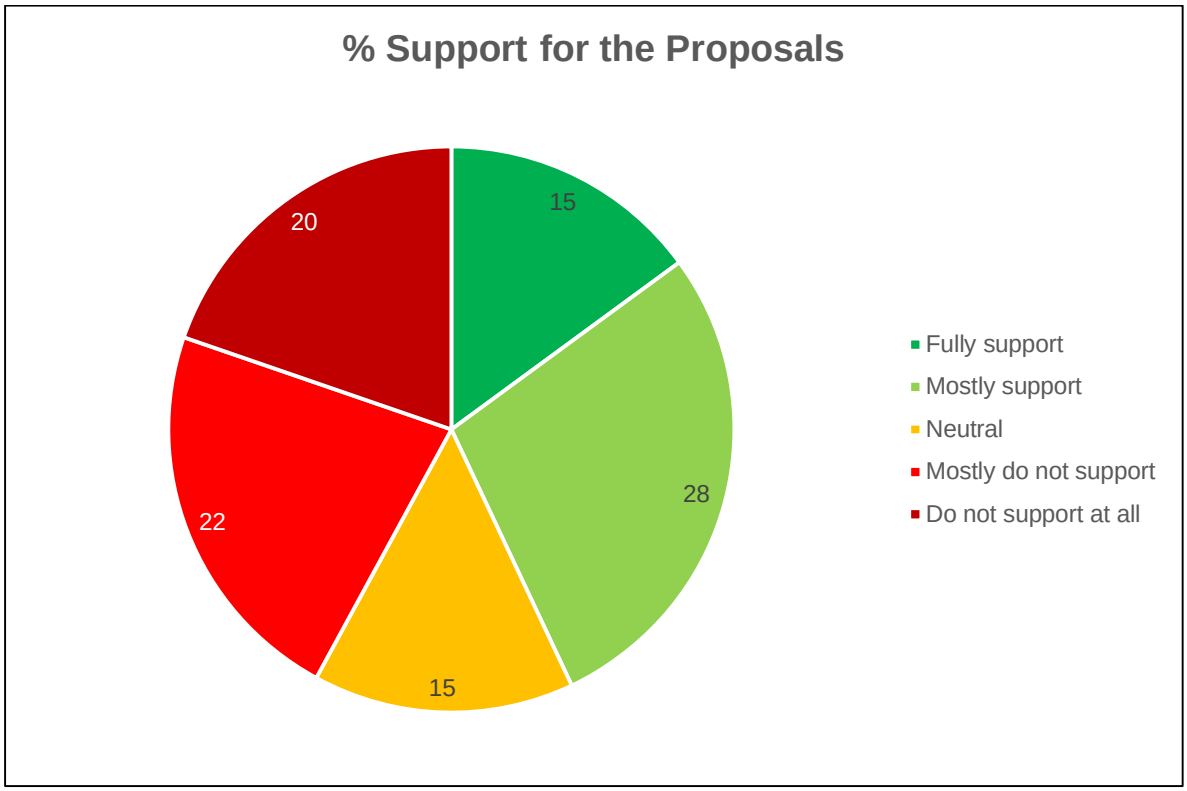

Table 2 Summary of Overall Support

Response	n	%
Fully support	50	15
Mostly support	94	28
Neutral	50	15
Mostly do not support	75	22
Do not support at all	66	20
Subtotal	**335**	
Missing	89	
Base	424	

Question:

How else could we improve this junction?

Answer:

Spirit of Sport

Figure 2 Summary of Suggested Junction Improvements at Spirit of Sport

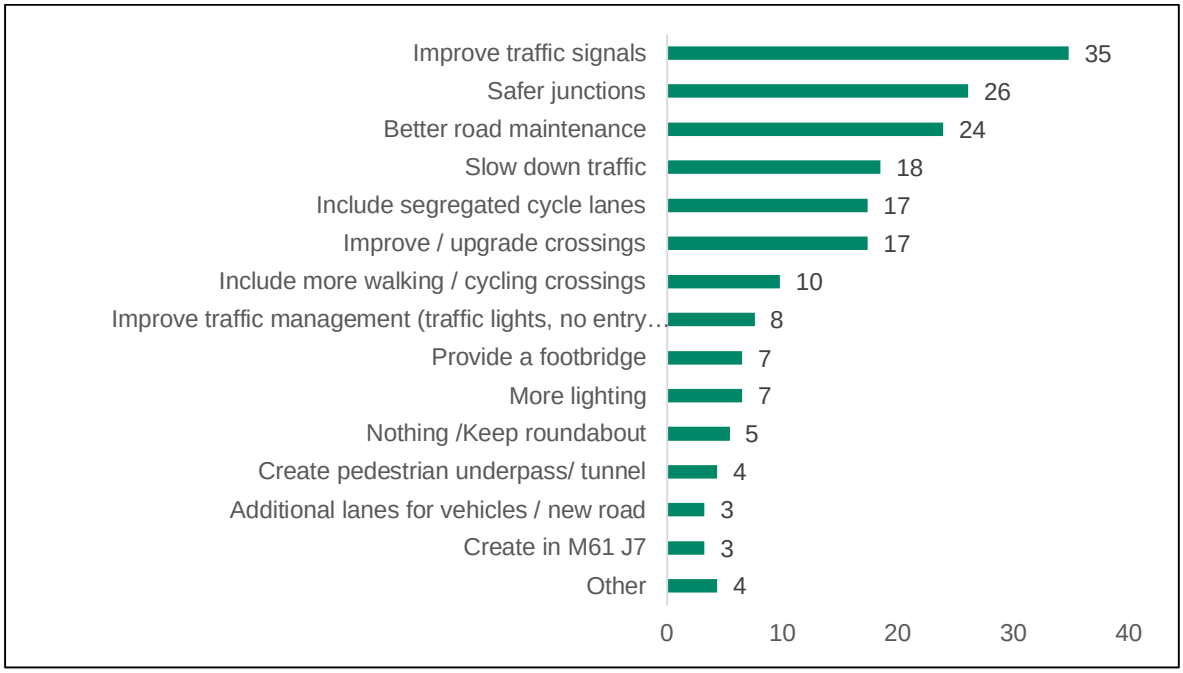

Table 3 Summary of Suggested Junction Improvements at Spirit of Sport

Response	n	%
Other	4	4
Create in M61 J7	3	3
Additional lanes for vehicles / new road	3	3
Create pedestrian underpass/ tunnel	4	4
Nothing /Keep roundabout	5	5
More lighting	6	7
Provide a footbridge	6	7
Improve traffic management (traffic lights, no entry box)	7	8
Include more walking / cycling crossings	9	10
Improve / upgrade crossings	16	17
Include segregated cycle lanes	16	17
Slow down traffic	17	18
Better road maintenance	22	24
Safer junctions	24	26
Improve traffic signals	32	35
Base	**92**	

A673 Chorley New Road

Figure 3 Summary of Suggested Junction Improvements at Beehive

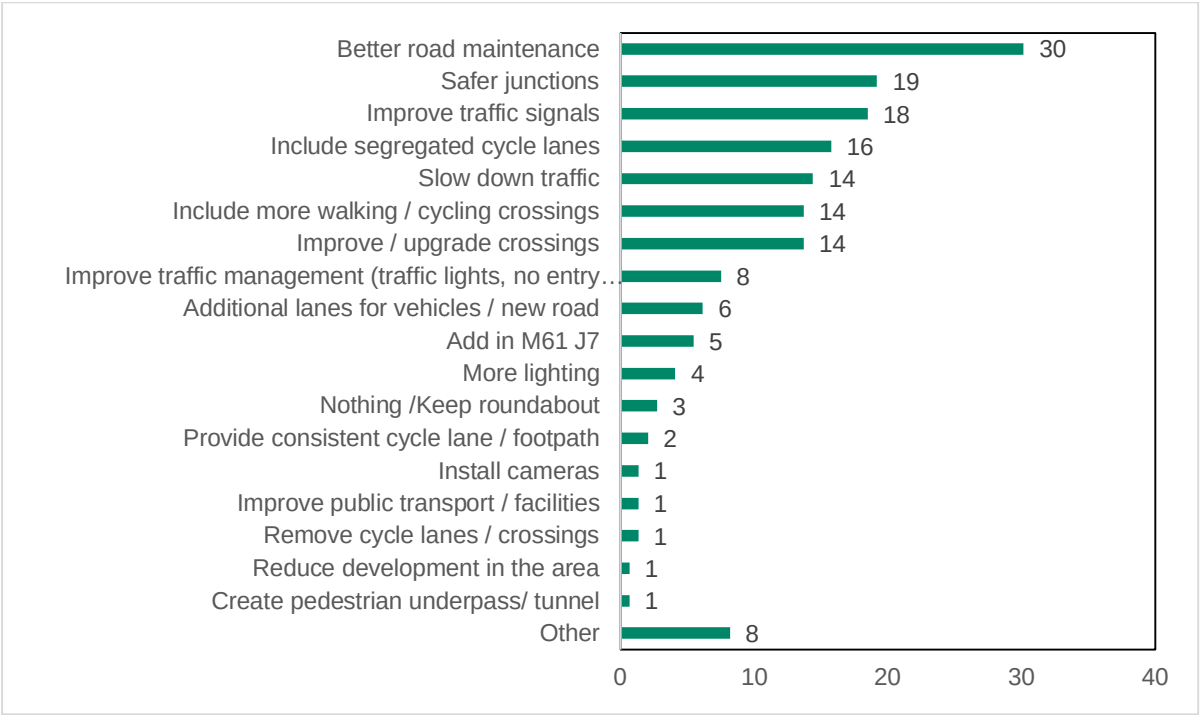

Table 4 Summary of Suggested Junction Improvements at Beehive

Response	n	%
Other	12	8
Create pedestrian underpass/ tunnel	1	1
Reduce development in the area	1	1
Remove cycle lanes / crossings	2	1
Improve public transport / facilities	2	1
Install cameras	2	1
Provide consistent cycle lane / footpath	3	2
Nothing /Keep roundabout	4	3
More lighting	6	4
Add in M61 J7	8	5
Additional lanes for vehicles / new road	9	6
Improve traffic management (traffic lights, no entry box)	11	8
Improve / upgrade crossings	20	14
Include more walking / cycling crossings	20	14
Slow down traffic	21	14
Include segregated cycle lanes	23	16
Improve traffic signals	27	18
Safer junctions	28	19
Better road maintenance	44	30
Base	**146**	

M61 Junction 6

Figure 4 Summary of Suggested Junction Improvements at M61 Junction 6

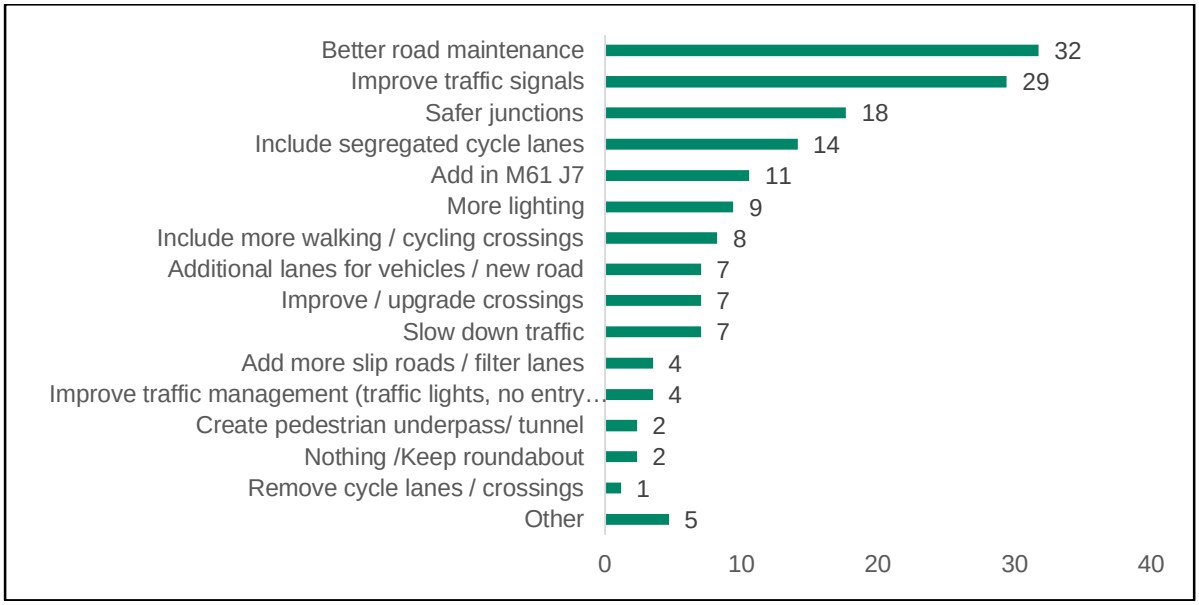

Table 5 Summary of Suggested Junction Improvements at M61 Junction 6

Response	n	%
Other	4	5
Remove cycle lanes / crossings	1	1
Nothing /Keep roundabout	2	2
Create pedestrian underpass/ tunnel	2	2
Improve traffic management (traffic lights, no entry box)	3	4
Add more slip roads / filter lanes	3	4
Slow down traffic	6	7
Improve / upgrade crossings	6	7
Additional lanes for vehicles / new road	6	7
Include more walking / cycling crossings	7	8
More lighting	8	9
Add in M61 J7	9	11
Include segregated cycle lanes	12	14
Safer junctions	15	18
Improve traffic signals	25	29
Better road maintenance	27	32
Base	**85**	

A6 Chorley Road

Figure 5 Summary of Suggested Junction Improvements at A6 Chorley Road

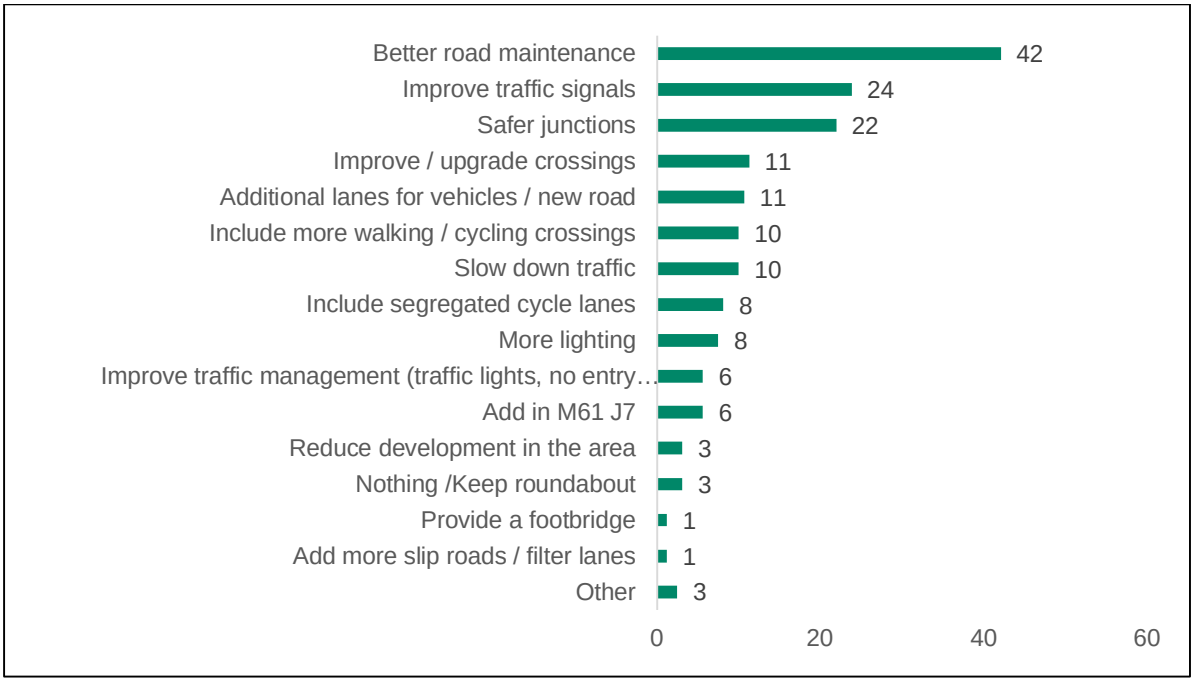

Table 6 Summary of Suggested Junction Improvements at A6 Chorley Road

Response	n	%
Other	4	3
Add more slip roads / filter lanes	2	1
Provide a footbridge	2	1
Nothing /Keep roundabout	5	3
Reduce development in the area	5	3
Add in M61 J7	9	6
Improve traffic management (traffic lights, no entry box)	9	6
More lighting	12	8
Include segregated cycle lanes	13	8
Slow down traffic	16	10
Include more walking / cycling crossings	16	10
Additional lanes for vehicles / new road	17	11
Improve / upgrade crossings	18	11
Safer junctions	35	22
Improve traffic signals	38	24
Better road maintenance	67	42
Base	**159**	

Further Comments

Respondents were given the opportunity to provide further comments on each of the proposals. A total of 314 comments across all the proposals were provided. Austin's Lane and A673 Chorley New Road (Beehive Roundabout) received the highest number of comments (97 and 81 comments respectively). **Table 7** provides a breakdown of the key themes

Table 7 Further Comments Overview (Count)

Comment	Count
Change light / flow sequences	38
Don't change it / not needed / not a good idea	34
Restrict Parking / add double yellow lines	33
Concerns over businesses on Austin's Lane	32
There needs to be a junction 7 M61	32
Vehicles should not be driving through residential areas especially large and HGVs	29
Criticism of council / plans	24
Concerns about school/ safety for children	22
Add more lanes / new road	22
Comment talking about another junction / roundabout / giving another option	22
Oppose Austin's Lane Option Two	20
Crompton Way/Ainscow Avenue and Wilson Fold are subject to car issues	18
Reduce cycle lanes/ pedestrian crossings, make more room for cars / less stopping and starting	16
Need separate cycle and pedestrian lanes	15
They do nothing to green or civilise the area to make it pleasant to walk or cycle.	14
Addition of lights to this junction has an environmental impact, increasing power consumption / pollution.	14
The problem is Blackrod direction / under resourced	13
There are no plans for cycle network for them to link into.	12
The bottle neck on to the A6 and the poor traffic management on the M61/A6 link which creates the real risk.	11
Need to have working traffic cameras	10
Need to be a yellow box junction	9
Move the congestion elsewhere	9
Comment on new developments	9
Concerns over the duration of construction	7

Comment	Count
Provision of bridges or underpass for pedestrians and cyclists	3
Concerns over the location of the Spirit of Sport statue	2
Currently journey times are excessive	2
Improve public transport services / dedicated bus lane	1
Support proposed changes	1
Support Austin's Lane Option Two	1
Other	17
Base (n)	**314**

Appendix B Detailed Breakdown of Responses Through Other Media

Additional Methods Analysis

The following section provides a breakdown of the emails and letters received to Bolton Council during the consultation. As respondents are not asked to provide a name, it should be noted that respondents may have provided feedback via Commonplace and via email or letter, therefore the following sections provide a breakdown of themes that have been identified.

Electronic and Letter Feedback

A total of **70 emails** and **six** letters from residents were received by Bolton Council Consultation and Research team, due to the volume of responses in **Table 8** provides a summary of key information. Emails and letters received from stakeholders can be found in **Stakeholder Feedback.**

Table 8 provides a breakdown of the key themes from resident emails and letters.

Table 8 Email Resident Feedback

Theme	Key comments raised
A6 Chorley Road	· Why does the roundabout need to be removed? Traffic lights could be turned off to allow traffic to flow outside of peak times.
M61 Junction 6	· Comments acknowledge that the junction is subject to heavy congestion during rush hour. o Traffic often gets backed up from the M61 – adding more traffic lights will increase traffic and driver frustration. o Concerns raised that when M61 lights operate, it can take almost an hour to get from the Beehive to the M61. · Suggest that traffic lights to be installed at the junction 24 hours a day. · Suggest traffic lights are only used for peak hours would increase safety. · Disagree with removing the left lane from the M61 southbound entry. · Proposals work for those living in South Horwich. · Concern that not enough thought has been given to traffic flow for the hours of the day which are off-peak. It may be that the environmental impact of stopping traffic at traffic lights during off-peak offsets any benefit during peak times.
Spirit of Sport	· Concerns raised that the Spirit of Sport statue is a key landmark and should not be relocated. · Suggest traffic lights are introduced using the existing roundabout to improve traffic flow. · Suggest removing the pedestrian crossings on the Spirit of Sport roundabout and replacing with either bridge or subways would also speed up vehicular transit along De Havilland Way. · Suggest the replacement of the two pedestrian crossings by four crossings closer to the junction could reduce the ease of movement of pedestrians
A673 Beehive Roundabout	· Comments acknowledged that this area is subject to heavy congestion: o Issues with congestion are due to the traffic lights at Paragon House and St Joseph's School – if this can be changed, the pressure on the roundabout would be resolved. o Congestion is caused just before Wilson Fold at the pedestrian crossing – could an alternative crossing solution be implemented? (e.g footbridge or subway) · Concerns that removing the roundabout would not fix the source of the problem which is the number of new houses that will rely on Chorley New Road. · Approach to Beehive Roundabout would benefit from reducing speed to 30mph. · Concerns that the proposals will cause greater congestion.

Theme	Key comments raised
	· Concerns that there is excess of traffic lights within the area e.g., the 1.5 miles between Winter Hey Lane and the Beehive there are already 2 sets of traffic lights plus 3 pedestrian crossings – with some of the pedestrian crossings having an 'on demand' sequence meaning they're nearly always on red. · Concerns that the Beehive Junction is currently the home of the Horwich "Christmas Tree", and where would this be moved to? · Suggestions for improvements: o Suggest locating traffic lights at the junction of Claypool Rd and Chorley New Rd. o Suggest a separate exit off Middlebrook to higher up Chorley New Road. o Suggest traffic lights at the junction of Crompton Rd and Chorley New Road is a good idea. o Suggest traffic lights be added to the roundabout and used only during peak times. o Suggest that there is no requirement for traffic lights on Beehive Roundabout
Austin's Lane Option 1	· Numerous comments of support based upon: o Proposals trying to treat the congestion at the bottom of Austin's Lane, rather than addressing what is causing the problem. o This will not address current problems – will only impact local residents whose narrow streets will be turned into busy through roads. o Businesses at the entrance to Austin's Lane need to come up with a viable solution to deal with the current issues which they are adding to/causing by blocking the road with excessive vehicles parked along it. o Suggest proper access for pedestrians is provided on both sides of Austin's Lane o Preferred solution – causes minimum disruption to local residents and offers improved accessibility to cyclists and pedestrians.
Austin's Lane Option 2	· Numerous comments of objections received due to a variety of reasons: o Concerns it would cause extreme problems for traffic down Ainscow Avenue/Crompton Road as cars currently park on either side of the road making it difficult for cars to pass, this will be particularly difficult for HGVs/buses/emergency vehicles. o Dangerous for walkers and cyclists. Concern that these roads cannot handle this amount of traffic as they are not designed for it. o Concern for children attending local school crossing at Ainscow Avenue with increased traffic. o Concerns that this proposal is aimed at tackling congestion at the bottom of Austin's Lane, rather than addressing what is causing the problem. o This will not address current problems – will only impact local residents whose narrow streets will be turned into busy through roads. o Concerns that neighbouring roads are unsuitable for large vehicles / HGV due to tight corners, very steep gradient and narrow roads. o This also means high likelihood of accidents in winter with ice and snow o Roads nearby suffer from issues of excess car parking along the road. · Suggest extending the dead end of Salisbury Road so cars can exit onto Claypool Rd. · Suggest that businesses at the entrance to Austin's Lane need to come up with a viable solution to deal with the current issues which they are adding to/causing by blocking the road with excessive vehicles parked along it.
General Comments	· Comments noted proposals should not go ahead as there were concerns the proposals will not improve congestion, will only improve it in the short term and just create a stop – start system. · Comments noted that the area does require improvement to deal with congestion and support elements of the proposals.

Theme	Key comments raised
	· Traffic lights will help improve accessibility for people walking and cycling but will hinder traffic movements. · Scheme seems to be a waste of money and could be spent on alternative ways to improve the area. · Yellow box junction markings will also be needed - it is not clear from the drawings whether these are already included
Concerns over proposals / consultations	· Some comments received noted concerns over the information available as part of the consultation and the option development process o There is no consideration of the different options that may be available and no estimate of costs. There is no analysis of the likely impacts of the proposals. Not clear that the proposals will have any positive impact. The specific proposals are devoid of any context, with no consideration of anything outside of the highway envelope. o Requested technical reports to review including traffic assessments, feasibility/options environmental assessments etc. o Proposals are a waste of time and tax-payer's money. o The proposals would not offer any benefits to local residents. o The plans should be aiming to minimise the need to travel and maximise the proportion of trips that are made by walking, cycling and public transport – it appears to be aiming to increase the flow of private motor vehicles.
Walking and cycling	· Concerns that the proposals are looking to increase the amount of people walking and cycling. · Junction signalisation has the potential to enhance walking and cycling, but unclear how this will happen, and if done incorrectly it could worsen the situation. · Concerns that removing crossings will increase the distance people have to walk to access amenities. · Concern that the Burden Way crossing will be removed as this will reduce pedestrian accessibility. · Make the cycle to Bolton easier to access and extend it to Chorley. · Cycling and walking routes should not be shared use for safety
Impacts	· Concern about the impacts of the proposals on residential areas. · Concern about the environmental quality and appearance of the corridor. Any loss of trees should be avoided, change from roundabouts to signalised junctions will reduce greenery and should be compensated for throughout the corridor to improve its attractiveness for walking and cycling.
Future Development	· Concerns addressed the number of developments proposed for Horwich and Blackrod which would increase congestion: o Construction of further development at Wingates and Rivington Chase should be stopped. o Concerns that Horwich cannot handle the current road system with the increases in houses and businesses.
Congestion	· Numerous comments noted that adding traffic lights will increase congestion. · Concerns that this will only help congestion in the short term and the amount of new traffic using the route will quickly exceed capacity · Concerns over congestion in heavy traffic times ie football matches, suggestion to change lights sequence and limit parking, possibly permits during football days
Alternative Solutions	· Suggest installing traffic lights to the three roundabouts along De Havilland Way, with cameras to catch motorists who go through a red light · Increase number of parking spaces at Horwich parkway train station. · Support most of the improvements but suggest current roundabouts function as roundabouts out of peak times. · Better use of money would be to improve road maintenance (e.g. potholes) · Suggestions to improve public transport and invest in that to help reduce congestion

Theme	Key comments raised
	· Suggestion that the new road for the Loco Works (Rivington Chase) housing development must be completed · Remove the pedestrian crossings and replace with a bridge or underpass · Numerous comments received regarding the M61 Junction 7: o Build a new motorway junction (7) around Adlington – this will allow people to leave the motorway without having to travel through Horwich. to divert traffic through the top areas of Horwich rather than travelling along Chorley New Road towards De Havilland Way or the A6. o A back route off Middlebrook connecting to the missing Junction 7 which was supposed to have a link across to the M58 at Wigan, combined with the Westhoughton bypass from Chequerbent to the A579 along the old train line would take pressure off Junction 6. o Changes to existing roads should be · Consideration of the Beaumont Road/Chorley New Road junction where there is sufficient land to carry out traffic flow improvements at very limited cost

Residents' Campaign

A residents' campaign undertook a review with residents of Austin's Lane and neighbouring streets to collate their thoughts on the proposed options for Austin's Lane. Residents were provided a letter containing details of the consultation, with a particular focus on Austin's Lane.

A total of 191 resident signatures providing feedback on the proposals,10 emails and a letter summarising the level of objection to the proposals on Austin's Lane. In the supporting covering letter provided to Bolton Council the campaign made note to the potential development of M61 Junction 7 as a third option to alleviate the challenges that De Havilland Way currently faces. The feedback was provided in a letter pack to the council, and is available upon request**.**

Providing three options, a breakdown of how residents voted on this is provided in the **Table 9**.

Table 9 Counts for Austin's Lane Options

Option 1 Two Way	Option 2 One Way	Option 3 M61 J7
32	3	180

Residents could provide more than one option.

A summary of the key themes identified from the emails can be found in **Table 10**.

Table 10 Key Concerns from Residents

Concern	Comment
Austin's Lane	▪ Concerns over that the change of Austin's Lane to one way traffic will cause more traffic to be forced on neighbouring roads, St Leonards, Ainscow Avenue ▪ Concerns that the roads are not suitable for the regular use of large delivery vehicles / coaches that would have to travel one-way via Crompton Road;

Concern	Comment
	▪ Concerns over road maintenance, trajectory for entering and leaving the area, especially St Leonards, Wilson Fold, Ainscow Avenue and Crompton Road. ▪ A review of how businesses located at the entry of Austin's Lane use road space and footpaths.
Associated impacts	▪ Associated impact on people walking and cycling in the area with traffic funnelled through one route. ▪ Associated impact on emergency vehicles accessing the surrounding residents. ▪ Impact of traffic lights on Crompton Road / Cambridge Road delaying traffic in the area.
Traffic	▪ Traffic management is perceived as an issue with cars parking on double yellow lines at peak times. ▪ Traffic will be forced to travel through neighbouring roads via Crompton Road and is a particular concern with regards to school traffic at Claypool Primary School. ▪ Acknowledgement that the A673 Chorley New Road (Beehive Roundabout) would benefit from improvement to manage tailback traffic.

In addition to the concerns raised on Austin's Lane, there were additional comments received on the wider proposals:

- Queries over the information of how the proposals will improve public transport.
- Queries over how the proposals will address future development, in particular Aldi Food Store adjacent to Paragon Business Park,
- Queries when the proposed link road from Middlebrook through Rivington Chase development will commence and anticipated completion.
- Concerns that signalising junctions will be counterproductive and increase congestion in the area.
- Concerns over disruption to journeys during the construction period and how will this be mitigated.

Questions and queries that have been received during the consultation have been responded to by Bolton Council.

Stakeholder Feedback

As noted in Error! Reference source not found.**,** the consultation was promoted to a variety of stakeholders. Three stakeholders provided formal feedback, **Table 11** provides a summary of the comments.

Table 11 Summary of Stakeholder Comments

Stakeholder	Comments
Aldi Stores Ltd	Aldi Stores Ltd object to the proposals for the A673 Chorley New Road (Beehive roundabout) improvement on the following grounds: ▪ Further information provision as to the extent the improvement proposals will decrease travel times and queue lengths; ▪ How the proposals will be amended to include an all-movements access arrangement for the extant office development (as set out in planning application 03437/18); and ▪ How the proposals will be amended to include an all-movements access arrangement for the proposed Aldi Foodstore (as set out in planning application 13158/22). It should be noted that the overall concept of delivering highway improvements along the De Havilland Way corridor is supported along with inclusion of cycle and pedestrian facility initiatives.
Stocks Resident's Association	Concerns that future development including planning applications that have been made for homes on the Loco Works (00730/17, 09862/20), in regard to the golf course (02434/17, 07245/19, 09488/20) and in regard to Lever Park (04042-20) will add to congestion in the area. Suggest that the Council's Highways Department conduct their own modelling of routes that are commonly used, for example, from the Beehive Roundabout to the Crown and present the journey durations for these routes to the public now, and then provide to the public the journey times that will result once new roads are in place.
Emerson Group on behalf of Orbit Investments (Northern) Limited Owners	Requested to review the modelling report, which at the time of writing was not yet available. ▪ The junctions along De Havilland Way are critically important as they provide access to major developments such as Middlebrook, Parklands etc. High interest in these schemes and to reassure the board that the proposals won't be detrimental to these assets.

Stakeholder	Comments
	▪ Appreciate the aim of enhancing pedestrian and cycle facilities and that the traffic signal junctions would generally enhance facilities for these road users – although note that the crossing between Parklands and Burnden Way at the Spirt of Sport junction would be longer under the proposed scheme than it is at present. ▪ Understand that there are issues of congestion along the corridor and that development pressure, most notably Rivington Chase will add to this. The need for highway improvements which provide more road capacity is therefore important. ▪ Concerns over converting roundabouts to traffic signal junctions as not always successful, particularly where there are high right turn traffic flows, which there are at all 3 junctions, A6 Chorley Road, Spirit of Sport and Beehive. ▪ Request modelling report to determine how the schemes have been modelled including how pedestrian flows have been modelled, particularly in the context of Spirit of Sport where pedestrian movements between Parklands and Burnden Way are very high in the peak periods. As the scheme may allow more traffic to use the De Havilland Way corridor, it is important to understand the affect this would have on the operation of the Mansell Way junction, which does not look like it would be altered. ▪ Very concerned about the potential for travel disruption during the construction of the proposed highways works. It is critical that this is fully assessed and phasing of works and the management of traffic maximises the volume of traffic flows and creates the least disruption. ▪ Query the consideration has been given to building M61 Junction 7 which would have the potential to reduce traffic flows on De Havilland Way.
Bolton Active Travel Forum	A response provided from the Technical Review Group focuses on the active travel aspects of the proposal can be found in **Appendix C**. Key comments include: ▪ It is important that the walking and cycling links between each junction along this corridor should be designed and built to be compliant with the government's cycle infrastructure design guidance, LTN1/20

Stakeholder	Comments
	▪ Mansell Way junction was not addressed as part of the proposals, however are aware that the walking and cycling facilities at this junction will be upgraded to be LTN 1/20 compliant. ▪ A673 Chorley New Road (Beehive Roundabout) - very pleasing to see that a full cyclops junction design is proposed at this very busy junction. Hopefully in the future this will link into protected cycleways on Chorley New Road to the north-west and south-east. It will be essential to ensure that wait times for people using the facility to cycle across the junction should be minimized, concerns about the amount of waiting space available at the intermediate stages on the crossings. ▪ Austin's Lane should note that a continuous footway would be preferable to a raised table. Concerned that the cycleway leaving the cyclops junction to the east onto A673 Chorley New Road does not continue, this could be improved to continue across Austin's Lane. Concern that the advisory cycle lane is narrow and could be a hazard caused by car doors opening from parked cars. ▪ Spirit of Sport junction appears to be less ambitious as this junction will be used to access Horwich Parkway Railway Station. The geometry shown for the crossings appears to be very tight for any cycles and especially so for cargo cycles, trailers and other adapted cycles. In addition, the available space on crossing refuges may be too little to allow for significant cycle movements. Consideration should be given to providing separate, more direct cycle crossing facilities at this junction. ▪ M61 Junction 6 overall pleased with the proposed changes: o Design provides a vast improvement to the existing layout, especially with the inclusion of signalised crossings which will help improve safety for cyclists and pedestrians. Pleased to note the improvement to the access road for Amey, which will reinforce the existing priority for people walking and cycling over motor vehicles entering and exiting the site. o Consideration should be given to ensuring that motor vehicles entering the site have sufficient space to wait without blocking the carriageway on De Havilland Way as that would help to remove some of the pressure on drivers to fail to give way.

Stakeholder	Comments
	▪ A6 Chorley Road geometry shown for the crossings appears to be very tight for any cycles and especially so for cargo cycles, trailers and other adapted cycles. In addition, the available space on crossing refuges may be too little to allow for significant cycle movements. Consideration should be given to providing separate, more direct cycle crossing facilities at this junction

Public Engagement Event Overview

The public engagement event was well attended with approximately 100 attendees throughout the afternoon. Photographs of the event can be seen in **Figure 6**. Due to the number of attendees, it was decided to organise two sit down Q&A sessions, one at 3.15pm and the second at 7.15pm to provide the opportunities for attendees to pose questions to both Bolton Council and AECOM representatives.

Attendees were also encouraged to view the exhibition boards and provide feedback via the Commonplace link via iPads.

Figure 6 Attendees to Public Consultation Event (Monday 6th June)

Source: AECOM

A total number of six paper surveys were collected as part of the event**.**

A summary of the key points identified during the event are detailed below:

- Councillor Brady asked why the scheme did not have a cycle lane on both sides of De Havilland Way and should be considered as part of the proposals;
- A number of residents have identified the businesses on Austin's Lane, park vehicles on double yellow lines and block pavements. Comments were also received that the nature of the business at times saw vehicles being fixed and maintained on the pavement and roads and operating in an anti-social manner;

- Queries were raised by residents as to whether the current pedestrianised link at Salisbury Road connecting to Claypool Road could opened and create a one-way traffic past the school;
- A number of residents advised they typically witness queues back onto the Beehive Roundabout from either of the Chorley New Road exits, this was identified as a result of the pedestrian crossing on Chorley Road South, delays further along Chorley New Road south or St Joseph's High School.
- The Paragon Business Park / Chorley New Road Junction – residents highlighted that this junction appeared to result in vehicles queueing back onto Beehive Roundabout on a regular basis. The operation of the junction was questioned as it appears to give disproportionate amounts of green time to side roads for very little traffic.
- Attendees expressed concern with the implications of operating a one-way system on Austin's Lane and the diversion of traffic along Ainscough Avenue and Crompton Road. There was general support for the option to retain Austin's Lane for two-way traffic.
- Residents inquired how the junction of Alexandra Road with Chorley New Road would operate in the new junction design. This will need to be picked up in the detailed design.
- In accordance with the petitions submitted as part of the consultation, the promotion of Junction 7 on the M61 was raised both in conjunction with, or as a replacement to the proposed scheme.

Appendix C Active Travel Group Technical Review

Bolton Active Travel Forum Technical Review Group

Response to the consultation on the De Havilland Way LUF proposal

10th June 2022

Table of Contents

1. Executive Summary

It is the hope that this scheme will be funded via the Government's Levelling Up Fund, which is managed jointly by HM Treasury (HMT), the Ministry of Housing, Communities and Local Government (MHCLG) and the Department for Transport (DfT). The DfT has adopted a policy that all highways projects must support its strategy: *Gear change: a bold vision for cycling and walking.* This is an ambitious plan, which aims "*to see a step-change in cycling and walking in the coming years"*. We focus on this aspect in this consultation response.

We understand that the primary motivation of this scheme is to relieve motor vehicle congestion by increasing the motor vehicle capacities at the four junctions discussed in the consultation. However, we question the wisdom of this approach as there is significant, compelling evidence that increasing the capacity of motor vehicle routes only increases demand, so that the benefits regarding congestion are short-lived at best. (See Section 5.1)

We also question the limitations of an approach that focusses on specific junctions or short corridors without considering the local context within which the scheme exists. Much can be gained by considering the possibilities for active travel (as well as public transport), which has the potential to reduce congestion in far more sustainable ways. This is discussed further in Section 5.2.

The consultation documentation focusses specifically on four junctions, but fails to look at the links between junctions and misses out the Mansell Way junction altogether. This is unfortunate as the active travel aspects need to address provision along the whole corridor. These aspects are discussed briefly in Section 6.

The remainder of the response looks at the proposed junction designs in detail. Whilst we have some concerns, the proposals for The Beehive junction (Section 7) and M61 Junction 6 (Section 9) represent a vast improvement on what is currently in place, and we would, subject to our concerns being addressed, endorse these whole-heartedly. However, we feel that the designs for the Spirit of Sport junction (Section 8) and the A6 Chorley Road junction (Section 10) are lacking in ambition and do not reflect a desire to see a significant shift to walking and cycling for short journeys as set out in the Gear Change strategy[3].

2. Introduction

This is a response from the Technical Review Group of Bolton Active Travel Forum to the proposed designs for the De Havilland Way LUF highway scheme proposal[1]. As would be expected, we focus in this review on the active travel aspects of the proposal.

The review is informed by discussions amongst the Technical Review Group of the forum, and a two and a half hour Forum-wide workshop that was held on Wednesday 8th June to consider the scheme and its context.

3. Information Sources

In this review, we refer to the document *Cycle infrastructure design (LTN 1/20)*[2] published by the DfT in July 2020. This is the latest Government guidance for local authorities on designing high-quality, safe cycle infrastructure and is likely to be used to judge the quality of proposals submitted for funding, and possibly schemes that have already been approved under this funding programme.

Alongside the cycle infrastructure design guidance, the DfT published the Government's cycling and walking plan for England, titled: *Gear change: a bold vision for cycling and walking*[3].

We also refer to the Greater Manchester Interim Active Travel Design Guide[4], published by Transport for Greater Manchester in March 2021, which must be followed for Bee Network schemes, and any other active travel schemes funded, or part funded, by GMCA.

4. Risks

A number of generic risks are identified by the technical review group:

1. There is a risk that schemes that do not meet the quality guidelines published by the DfT or GMCA may result in future active travel funding bids being looked at less favourably.[3]
2. In its 2020 cycling and walking plan for England[3], the DfT states:

   > *"From next year, Active Travel England [a new inspectorate] will also begin to inspect, and publish annual reports on, highway authorities, whether or not they have received funding from us, grading them on their performance on active travel and identifying particularly dangerous failings in their highways for cyclists and pedestrians."*

   It goes on to state:

   > *"Active Travel England's assessment of an authority's performance on active travel will influence the funding it receives for other forms of transport"*

1 https://dehavillandwaycorridor.commonplace.is/
2 https://www.gov.uk/government/publications/cycle-infrastructure-design-ltn-120
3 https://www.gov.uk/government/publications/cycling-and-walking-plan-for-england
4 https://assets.ctfassets.net/xfhv954w443t/733sV0dPajoAu8MCvmAyRm/c16cb043c976d5a68daa5184bd67a527/GM_Interim_Active_Travel_Design_Guide_v1.0.pdf

Consequently, there is a risk that failure to meet expected standards on walking and cycling infrastructure may affect the ability of the Council to secure funding for road and transport schemes generally in the future.

3. There is a risk that failure to identify and address issues in the highway that affect the safety of people walking and cycling may result in collisions and injury.
4. Even in the absence of incidents, there is a risk that failure to identify and address issues in the highway that affect the safety, or perceived safety, of people walking and cycling will cause people not to use the infrastructure provided, resulting in reputational damage.
5. An important consideration in defining cycleway parameters in LTN1/20[2] is the requirement to ensure that facilities are accessible to all, including disabled people. There is a risk that facilities that do not meet that requirement could leave the Council open to legal challenge under the Equality Act of 2010[5].

5. General principles

5.1. Overall philosophy of the proposal

> *"Building more roads to prevent congestion is like a fat man loosening his belt to prevent obesity" - Lewis Mumford*[6]

We understand that the primary motivation of this scheme is to relieve motor vehicle congestion by increasing the motor vehicle capacities at the four junctions discussed and increasing the number of lanes on some of the links. However, there is significant, compelling evidence[7] that increasing the capacity of motor vehicle routes only increases demand, so that the benefits regarding congestion are short-lived at best. This principle is likely to be even more significant in a location that is currently undergoing extensive expansion of housing stock and is planned to undergo even more in the future.

The only way to reduce congestion in a sustainable manner is to reduce traffic by providing people with viable alternatives, such as good quality public transport and active travel (walking and cycling) infrastructure. It is not clear whether any analysis has been carried out regarding trip origins, destinations and distances of journeys making use of the De Havilland Way corridor. However, it is known[8] that over 78% of all car and van trips in Bolton Borough are 10km or less, which is easily cycleable by many people, and over a third of car and van journeys are 2km or less, which is walkable.

Whilst walking and cycling improvements along this specific corridor are to be welcomed, such improvements over a very small distance are not likely to result in any significant change until they link to a dense network of facilities across the borough. The estimated cost of this project is roughly

5 Equality Act, 2010. HM Government. https://www.legislation.gov.uk/ukpga/2010/15/contents
6 "The Sky Line: The Roaring Traffic's Boom", Lewis Mumford, New Yorker, April 2nd, 1955.
7 Latest Evidence On Induced Travel Demand: An Evidence Review. Department for Transport, 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/762976/latest-evidence-on-induced-travel-demand-an-evidence-review.pdf
8 TfGM Travel Diary Survey 2020.

£20 million, which could pay for such walking and cycling infrastructure across a large area if that were prioritised, and would be far more likely to bring about a sustainable reduction in traffic congestion across the borough, including on De Havilland Way.

5.2. The local context

We were disappointed that there appears to be little attention to the local context in which this corridor exists, which is especially important when considering active travel aspects. Analysis of existing and future potential walking, cycling and public transport trip demand, according to the guidance provided in Chapter 3 of LTN1/20, would allow the facilities provided along this corridor to be considered in a more holistic manner. A workshop was held by Bolton Active Travel Forum recently to look at the proposal and consider those contextual aspects and some of the outputs from that workshop are considered here. These are incomplete, but give an idea of what is needed.

Of particular importance is to consider the existing permeability of the area around the corridor, as this affects the ability of people to make use of walking and cycling to travel short journeys rather than making those journeys by car. Figure 1 shows some of the severances that may limit the permeability for people walking and cycling.

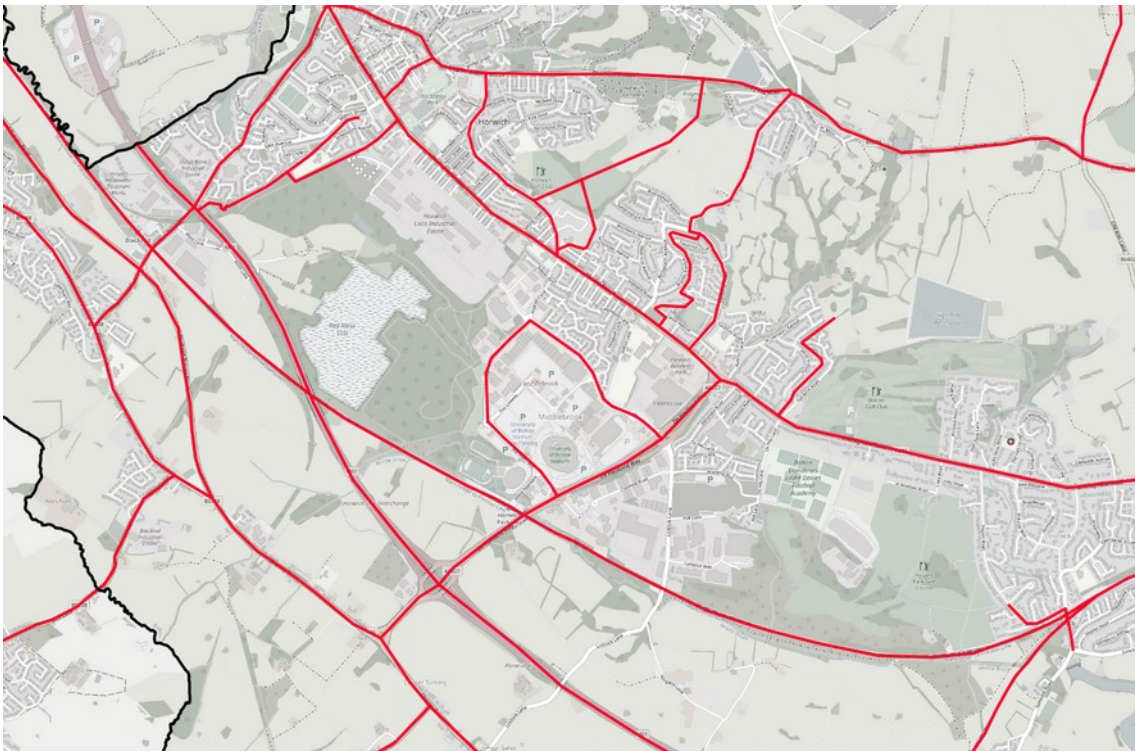

Figure 1: Some of the severances that affect permeability in the surrounding area.

These are drawn partly from the analysis carried out for the planning of the Bee Network and partly from additions made in the workshop. The picture is incomplete and needs to be developed further, but we give two example in the following sections to illustrate how the context is relevant to this scheme and needs to be considered carefully. These are just two examples of what could be achieved by adopting a more holistic approach to addressing the underlying problem that this proposal seeks to address rather than just making a naive, very local, attempt to address the problem in a manner that is known to be unsustainable.

a) Example 1 - Access to Middlebrook and Horwich Parkway Station

For example access to Middlebrook trading estate, including to the railway station, is probably a significant cause of congestion at the north-east end of the De Havilland Way corridor. However, there is already a *low traffic neighbourhood* between Chorley New Road and Mansell Way with several modal filters, which provides convenient, safe walking and cycling access to Middlebrook from at least two points on Chorley New Road (see Figure 2). Upgraded crossings on Chorley New Road, plus some limited improvements for walking and cycling on Chorley New Road itself, along with improved wayfinding, could allow many more people to access Middlebrook by walking and/or cycling rather than driving via De Havilland Way, which could help with congestion at that end of the corridor.

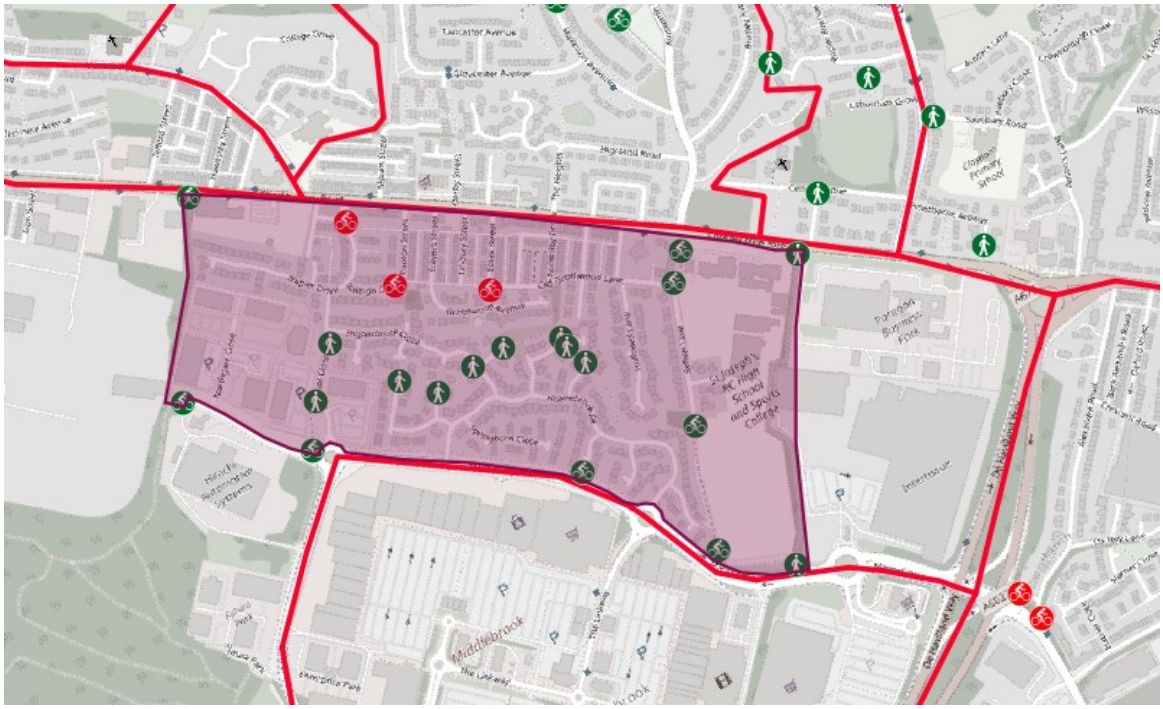

Figure 2: An existing Low Traffic Neighbourhood

Similarly, to the east of De Havilland Way, running parallel to it, Alexandra Street potentially provides a suitable walking and cycling route from Chorley New Road east of the Beehive junction to the Mansell Way junction, avoiding De Havilland Way, which is far more attractive, safe and comfortable. Again, suitable attention to crossing points and improved wayfinding could allow some people to access Middlebrook without driving along De Havilland Way, also reducing congestion on that section.

b) Example 2 - Access from Westhoughton

As an example for longer longer journeys that are still short enough to be cycled, journeys between Westhoughton and Horwich (bottom right and top left respectively in Figure 3) are hindered by three major severances formed by the railway line, the M61 motorway and the A6. These severances could be mitigated by creating a more comfortable and safe walking and cycling route using Lostock Lane and Wingates Lane, again providing the potential to reduce the amount of local traffic contributing to congestion on the western end of De Havilland Way. This would require a

significant reduction in the volume and speeds of motor traffic on those roads, however, as well as some limited provision on the A6 to enable a joined-up route to be created.

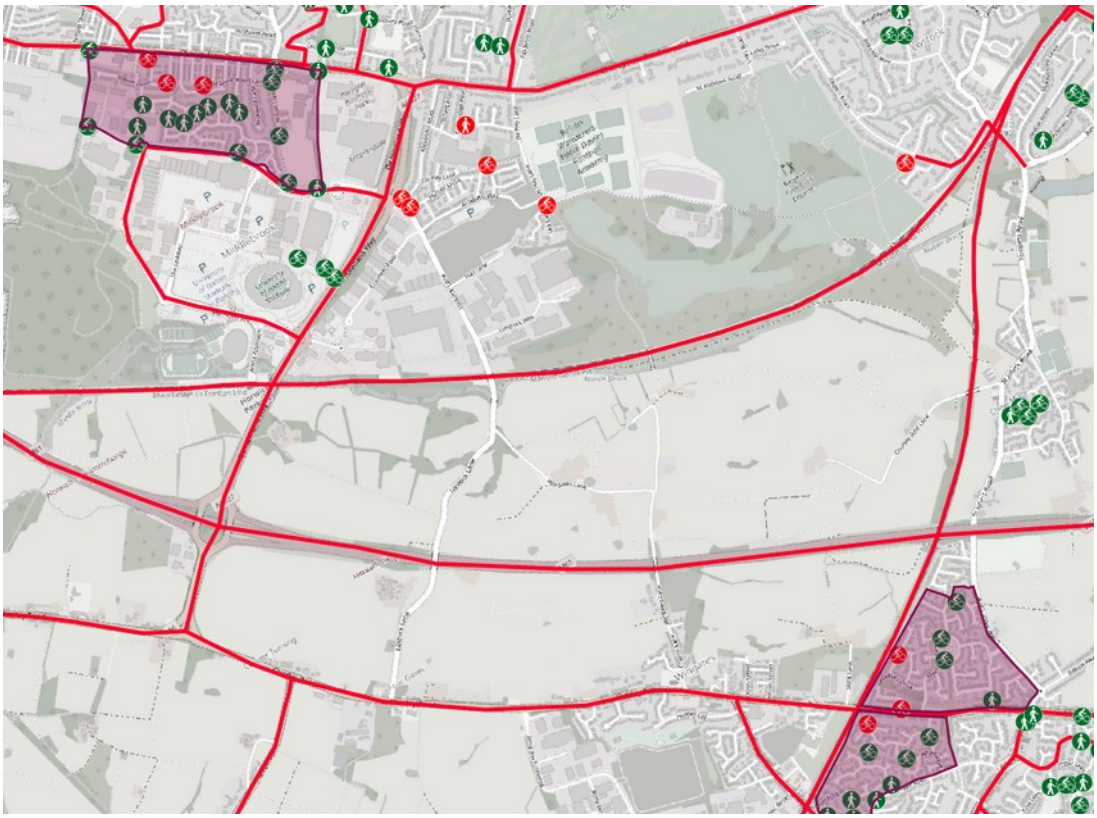

Figure 3: Severances between Westhoughton and Horwich

Similar arguments apply regarding access to the many businesses on the east side of De Havilland Way, which could be accessed by walking, cycling and public transport (especially the railway).

6. Limitations of the overall design presented

The information provided covers only the outline designs for four of the five junctions that are located on this corridor. These will be discussed in the later sections, but this section addresses aspects that are not covered in the consultation information nor in the response forms. It is disappointing that this information has not been provided as the consultation seems to focus only on sections that are directly relevant to motor vehicle movements.

We look forward to seeing the proposals for these locations in good time to make comments.

6.1. Links between junctions

Although not stated in the consultation web pages, we understand that the whole of the walking and cycling infrastructure along this corridor will be designed and built to be compliant with the government's cycle infrastructure design guidance, LTN1/20[2] (see §4.2 – core principles, plus relevant sections), including on the links between junctions.

It will be essential that this happens, as the existing infrastructure has many problems, including:

- Poor surface quality along the whole route (see LTN1/20 §15.2) and severe surface degradation due to tree roots,
- lack of width in places on two-way shared walking and cycling paths (see particularly LTN1/20 §15.2, §5, §6.5, and Summary Principle 5),
- obstacles in those paths making the effective width even less (see LTN1/20 §4.4.7),
- people on cycles being forced out onto the 40mph dual carriageway at several locations.

6.2. Mansell Way Junction

This junction is not addressed at all in the information presented on the consultation web site. However, we understand that the walking and cycling facilities at the junction will again be upgraded to be compliant with LTN1/20. Again, this will be essential as any route is only as good as its worst parts and the facilities provided currently at that junction have many problems.

As with the Spirit of Sport junction (Section 8) below, attention is particularly drawn to LTN1/20: §5, Summary principles 2), 5) and 18) in §1.6.1, §10.4.15 to §10.4.20, and §10.4.22.

7. Beehive Junction

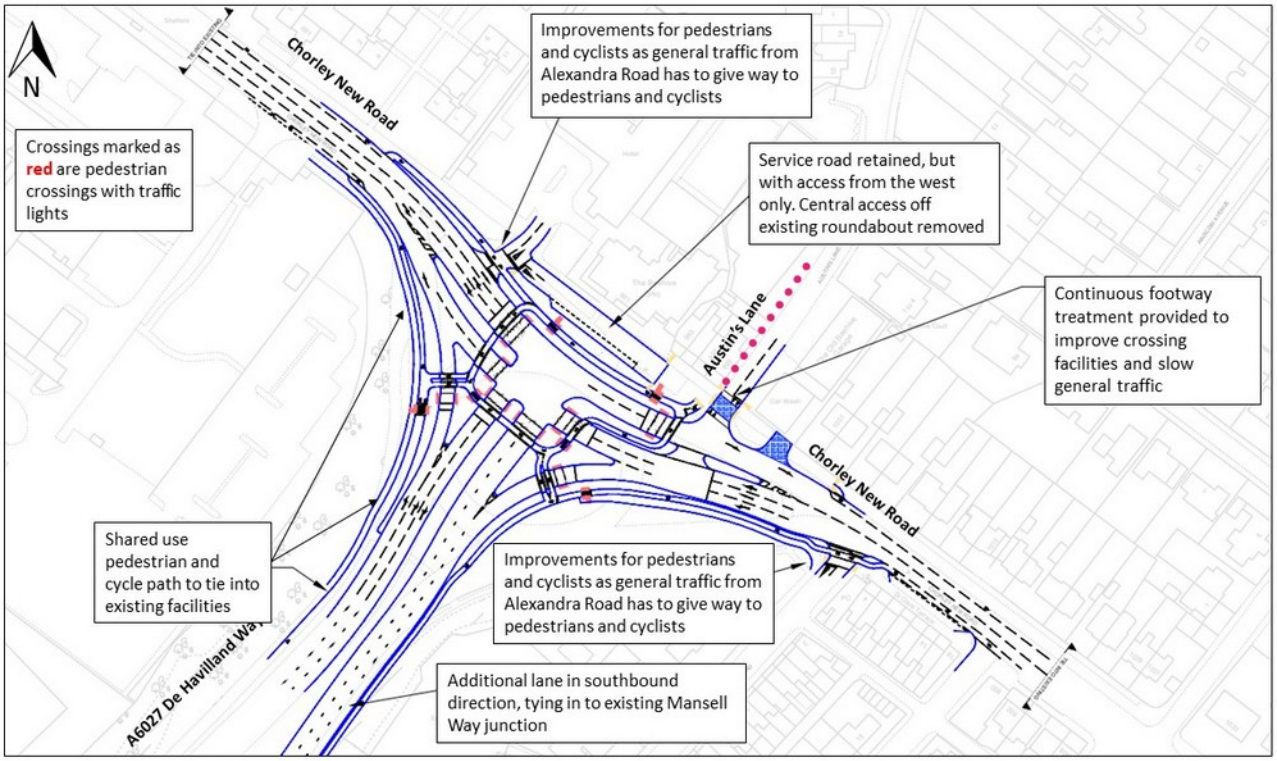

Figure 4: Beehive junction design from the online consultation.

The drawing provided (see figure 4) shows an extended “cyclops junction” design including crossings with tactile paving for people to walk across the cycle lanes, and "sparrow crossings" to allow people walking and cycling to get across the left turn lanes that go onto and off De Havilland Way. The text in the label on the left with the three arrows, however, states that these are “shared use pedestrian and cycle paths”, at least on the western corner. For the purpose of this review, we

have assumed that kerb-protected cycleways are proposed in line with the drawn elements rather than the text.

Given this assumption, it is very pleasing to see that a full cyclops junction design is proposed at this very busy junction. Hopefully in the future this will link into protected cycleways on Chorley New Road to the north-west and south-east. This represents a vast improvement to this junction from the points of view of both cycling and walking; however, we do have some concerns.

It will be essential to ensure that wait times for people using the facility to cycle across the junction should be minimized (see LTN1/20 §4.2.7 and Core Design Principle "Directness" in LTN1/20 Table 10-1). Too many delays will cause some riders to remain on the carriageway at risk to themselves and will cause others not to cycle at all, but to drive instead.

As always, we stress the importance of maintaining suitable widths and geometries in line with LTN1/20 on the protected cycleways shown at the junction; this is a particular concern on the crossings, which will need to be designed with a suitable geometry to accommodate the cycle design vehicle (see table 5-1 in LTN1/20). We also have concerns about the amount of waiting space available at the intermediate stages on the crossings as this looks rather small on the drawings.

The junction design shown on the drawing at Austin's Lane is labelled as a continuous footway, but the drawing shows a raised table, not a continuous footway. The same error appears in the example image shown in the section of the web site about Austin's Lane, which shows a raised table side road treatment, not a continuous footway.

Figure 5: Comparison of the raised table design (left) with a continuous footway (right)

Figure 5 compares the image shown in the consultation with an example of a continuous footway in Amsterdam. Note that the continuous footway design makes it very clear to drivers that they are crossing a footway and must give way to people walking (and cycling when a cycleway is also incorporated), unlike the design shown on the left. The Austin's Lane junction would benefit from an actual continuous footway, as would the junction of Alexandra Road, the access to the service road on the north side of the junction (which incorrectly labelled as Alexandra Road), and the access road adjacent to Austin's Lane.

We are concerned that the cycleway leaving the cyclops junction to the east onto Chorley New Road seems to disappear. It would be better if this were to be continued across Austin's Lane and

the adjacent access road in parallel with the continuous footway to join the cycle lane on Chorley New Road.

We are concerned that the narrow advisory cycle lane through the door opening zone of parked cars on the westbound carriageway of Chorley New Road approaching Alexandra Road appears to be retained. This is already a dangerous arrangement that is best avoided altogether by anyone approaching the junction on a cycle. This will also make it difficult to enter the cycleway when approaching the junction from the east along Chorley New Road.

8. Spirit of Sport junction

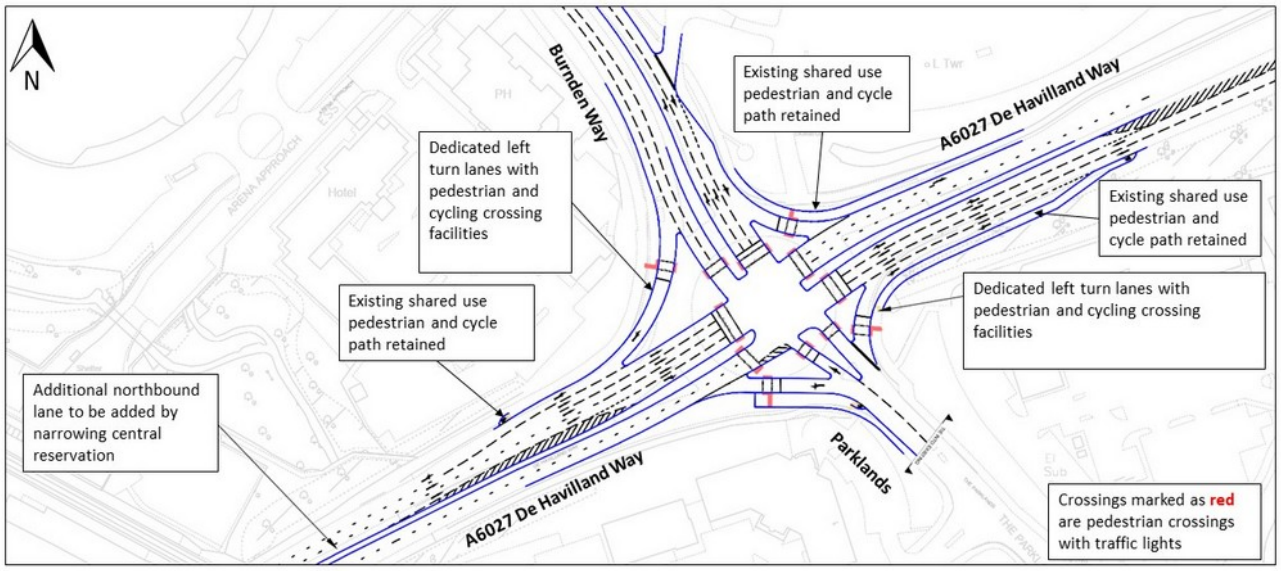

Figure 6: Spirit of Sport junction design from the online consultation.

It is disappointing to see a much less ambitious design for this junction. The use of shared footways, and the geometry of the walking and cycling facilities suggest that the council's ambition is for only very small numbers of people walking or cycling here. This is particularly disappointing given that this junction will be a main walking and cycling access route for Horwich Parkway railway station. Increased use of this railway station, coupled with the use of active travel means to get to it, should be a major element of the council's plans for reducing road congestion across the area as well as on De Havilland Way itself.

In addition to this general concern, we express some specific concerns below.

The plan makes repeated reference to "existing shared use pedestrian and cycle path retained". However, it will be necessary to upgrade and resurface these for the same reasons as set out in Section 6.1 regarding links between junctions. As they currently stand they are unlikely to comply with LTN1/20.

The geometry shown for the crossings appears to be very tight for any cycles and especially so for cargo cycles, trailers and other adapted cycles. In addition, the available space on crossing refuges may be too little to allow for significant cycle movements. Consideration should be given to providing separate, more direct cycle crossing facilities at this junction rather the tortuous routes

shared with pedestrians. Attention is again drawn to LTN1/20: §5, Summary principles 2), 5) and 18) in §1.6.1, §10.4.15 to §10.4.20, and §10.4.22.

It is worrying to see that cyclists approaching the junction from the east along De Havilland Way are shown filtering into a cycle lane from the main carriageway. This is the current arrangement and will be unacceptable. The route needs to be fully protected and continuous as indicated in the Core Principles in LTN1/20 §1.5.

It is not clear what provision, if any, will be made for walking and cycling on the south side of De Havilland Way to the west from this junction to the M61 junction. (See Section 9)

9. M61 Junction 6

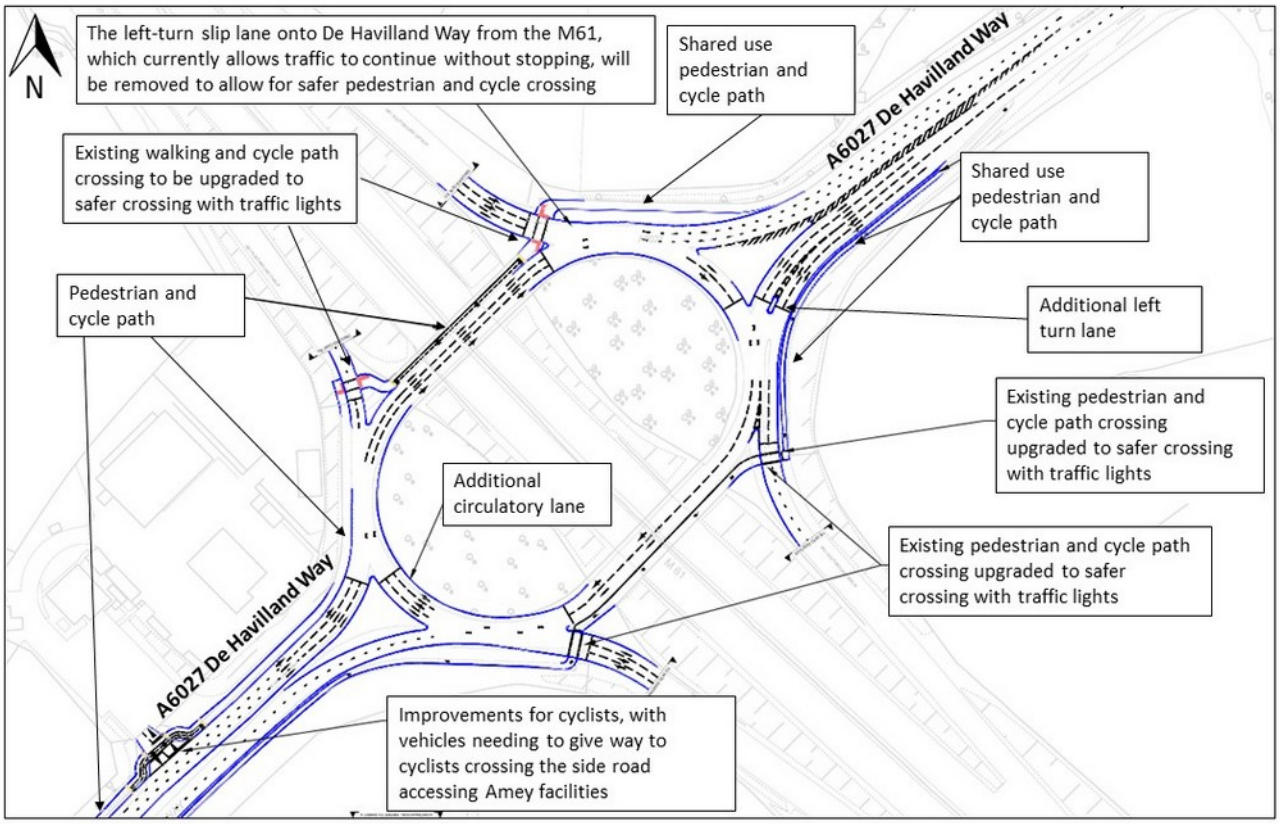

Figure 7: M61 Junction 6 design from the online consultation.

This design represents a vast improvement on the existing layout. We are particularly pleased with the signalization of the crossings, which are currently extremely dangerous with poor sight lines when crossing very fast motor traffic lanes, and simplification of the exit slip roads from the motorway, which currently suffer from inadequate cycle waiting space on refuges.

We are also pleased to see the improvement to the access road for Amey, which will reinforce the existing priority for people walking and cycling over motor vehicles entering and exiting the site. Consideration should be given to ensuring that motor vehicles entering the site have sufficient space to wait without blocking the carriageway on De Havilland Way as that would help to remove some of the pressure on drivers to fail to give way.

Attention does need to be paid to the quality of the surfaces on the shared footways here. (see LTN1/20 §15.2)

We are concerned that it is not clear what provision, if any, will be made for people approaching this junction on foot and cycles from the north-east along De Havilland Way. (See also Section 8) The arrangement shown in the drawing is just the existing provision, which requires cyclists to approach on the main carriageway.

We note that an additional lane has been introduced on the north-west side of the roundabout. This should not result in a significant reduction in the width of the shared walking and cycling path there. This is particularly important here as the route tends to be treated as two-way by people cycling.

10. A6 Chorley Road junction

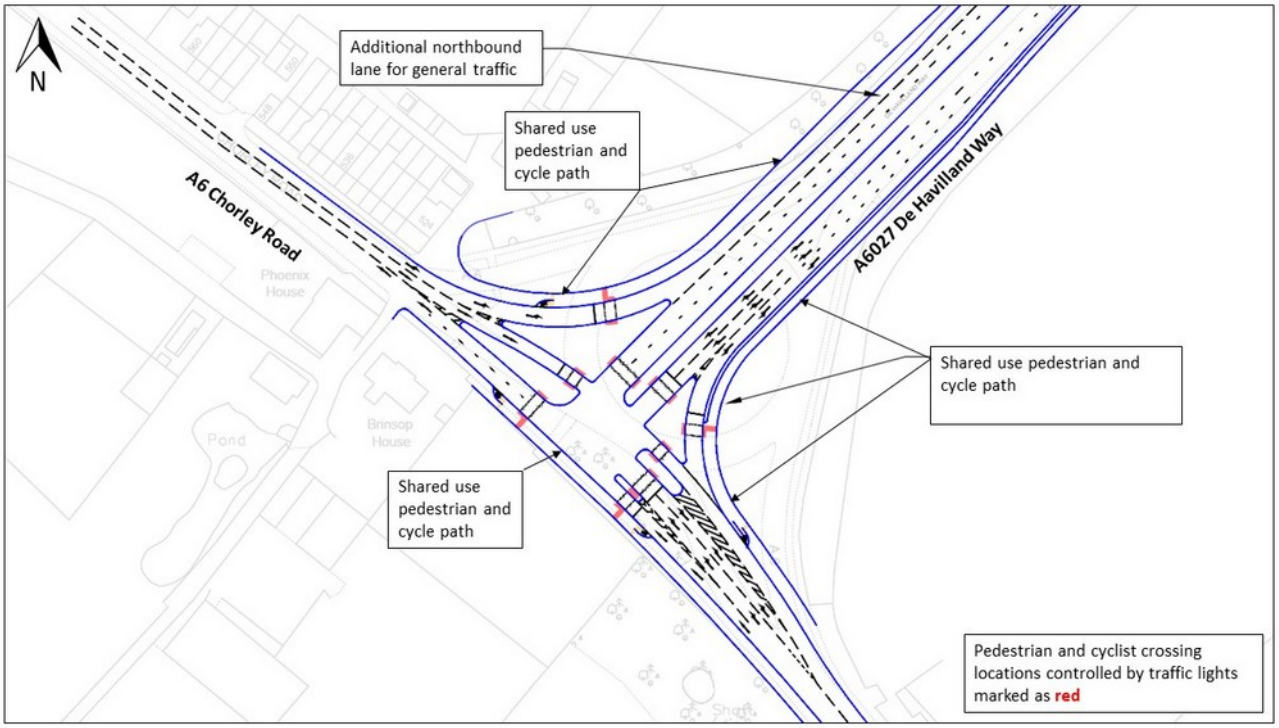

Figure 8: A6 Chorley Road junction design from the online consultation.

Our comments on this junction are similar to those on the Spirit of Sport junction (Section 8). The use of shared footways, and the geometry of the walking and cycling facilities suggest that the council's ambition is for only very small numbers of people walking or cycling here. This is particularly disappointing given that this junction will be a main walking and cycling route between Westhoughton, Aspul and other areas, and Horwich. Increased use of cycling particularly for intermediate distances such as this, including access to the railway station for people wishing to travel north, should be a major element of the council's plans for reducing road congestion across the area as well as on De Havilland Way itself.

Again, the geometry shown for the crossings appears to be very tight for any cycles and especially so for cargo cycles, trailers and other adapted cycles. In addition, the available space on crossing refuges may be too little to allow for significant cycle movements. Consideration should be given to

providing separate, more direct cycle crossing facilities at this junction rather the tortuous routes shared with pedestrians. Attention is again drawn to LTN1/20: §5, Summary principles 2), 5) and 18) in §1.6.1, §10.4.15 to §10.4.20, and §10.4.22.

Authors

This document has been authored by Dr Grahame Cooper with the assistance of members of the Active Travel Forum Technical Review Group, and with input from attendees of a workshop held on 8th June 2022.

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