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Response to public consultation on  
Proposed Clontarf to City Centre Cycle Route.  
Clontarf Road/Alfie Byrne Road, Dublin 3 to Amiens Street/Talbot Street, Dublin 1.

A chairde,

Thank you for the opportunity to engage with this proposal.

I write both on my own behalf as a frequent road user (by bicycle, bus and car) on this route, as well as in my role as Councillor for the Howth/ Malahide area, for whose population this route is the main road access to Dublin City Centre.

I very much welcome the City Council's intention to improve facilities for cyclists on this route. However, the proposed design leaves a lot to be desired. Below I set out the reasons why this proposal should be redesigned and brought back to public consultation in a different form.

1. No consultation with cyclists or bus drivers in drawing up the design

Neither Dublin Cycling Campaign, nor any other cycling organisation was consulted in the process of drawing up the design, despite the fact that a range of other parties were consulted. Nor was there any consultation with bus drivers, Dublin Bus, nor any organisation representing bus passengers. This process flaw has led to a design which is seriously to the disadvantage of both cyclists and buses/ bus passengers.

2. Erroneous reversal of analysis identifying a two-way route as the best option

Roughan O'Donovan's 2012 Options report recommended a two-way cycleway as the best option. A process of reanalysis was undertaken in 2015 by RPS to justify the selection of a one-way facility. I attach in Annex A a note on the fundamental flaws in that reanalysis.

3. Incomplete analysis behind the design

A number of essential considerations seem to have been omitted from the design process:

a) Accidents and collisions

The 2012 Options report included outline statistics on road accidents on the route in the

period from 2005 to 2009. The subsequent 2015 report and the documentation on the Part 8 application indicate that no further analysis of road accidents on the route was carried out by the new consultants. Examination of available data on collisions and accidents is of course an essential part of the road/street design process. The dangerous situation at the Annesley Bridge /East Wall Road junction is evident from these statistics.

The further examination which should have been done would have noted the death of Dante de Vere Padua, killed by a left-turning truck at this junction in 2005. The jury at the Coroner's Court recommended that the City Council examine the configuration of the junction. (<http://www.independent.ie/irish-news/cyclist-crushed-to-death-under-wheels-of-lorry-26403884.html> ) The junction has not been changed in the intervening decade. This design also proposes no change to the road layout at this location. There seems to have been no consideration given to this in the design process.

#### b) Traffic modelling

In my experience it is normal for major road redesign proposals to be accompanied by analysis based on traffic modelling. In this instance, design choices with serious negative implications for pedestrians, cyclists and existing mature street trees are being proposed on the basis of avoiding traffic congestion. However the analysis of traffic is very basic. The modelling capabilities of the DTO model are not being used.

The Part 8 application is based on a premise that it is essential to maintain four lanes of general traffic through Fairview. In the absence of traffic modelling this is unsubstantiated. Prima facie, it is illogical given that North Strand and Amiens St. have only two lanes of general traffic and the overall capacity of the City Centre, which has reduced significantly, is proposed to be reduced further with the closure of Eden Quay to general traffic.

Similarly, full pedestrian crossing facilities are not being proposed at the Five Lamps junction due to concerns to maintain vehicular traffic flows through the junction, despite the dangerous situation for pedestrians crossing the southern arm of the junction.

It would have made sense for the various options in the scheme to be fed into the DTO model to analyse their impacts. This is essential when it is proposed to rule out options which would be much better at meeting the other design objectives.

#### c) Air quality

Air quality is a problem on this major route particularly given the large numbers of diesel buses. There is no analysis in the design of air quality issues, nor of the different impact of different design options. The renewed national and EU attention to Clean Air policies should be reflected in the design.

#### 4. Bus stop design directly contrary to National Cycle Manual

At both national and city level, policies commit to encouraging cycling, promoting a modal shift to active modes and providing cycling facilities for all ages and abilities. This proposal refuses to implement those policies. It seeks to continue to mix cyclists and buses at bus stops, the most cyclist-hostile element of the current street layout on the route. This design element is not suitable

for cyclists of all ages and abilities. It serves as a major disincentive to many existing and potential cyclists who would be willing to use a separated cycleway.

The design option where buses stop in the cycle lane (In-line Bus Stop, p.157 of Manual) is specifically identified for “Low to Medium Bus Flows (Headway 5 minutes or greater)” The Manual identifies Island Bus Stops as the options to be used for “High Bus Flows – Headway up to 2 minutes), which is the situation here.

It is not acceptable to mix bicycles and buses on such a busy arterial route for cyclists and for buses. It is clearly in breach of the National Cycle Manual.

#### 5. Unnecessary removal of mature street trees.

The current proposal involves the removal of all street trees along the entire front of Fairview Park (over 50 large trees.) (This is unnecessarily hard to read from the drawings. The landscape drawings do not show any of the trees which are to be removed, only the after development landscape.)

The options considered for Fairview which would involve losing a traffic lane were all ruled out for causing congestion on a major artery into the city centre. However, as discussed above, this change has not been put into the DTO model to see what the result would be.

Given the width of the overall road alignment at Fairview, there is a lot of potential for high quality design using some of the current lane space. For example, this might include a service road with parking along the western side, giving access to shops and businesses as well as a more protected mixed environment for local cycle trips, with a two-way cycleway on the east side which could be provided without affecting the existing street trees. Other options include a median strip with trees, or putting the bus lanes in the centre of the road with island bus stops.

However, no options which would involve reducing the current 4 general traffic lanes were considered. The proposal to remove so many mature trees is not justified.

#### 6. Other non-compliant design elements for cyclists

Many of the junction designs are not thought through and don't reflect the geometry of cycling or the requirements of the National Cycle Manual. For example at the Alfie Byrne Road junction, northbound cyclists are expected to make a sharp 90 degree turn to go across toucan lights while southbound cyclists are directed onto a traffic island with no route to return to a cycle lane.

#### 7. Recommendation

The two-way separated cycleway option identified in the 2012 Options Report should be followed up and taken to full design.

It is the option most consistent with Smarter Travel, the City Development Plan and other national and city policies which all undertake to encourage cycling to meet climate, transport and public health objectives. Those policies should find expression in a mandate to design a high-quality route

which will encourage and facilitate people of all ages and abilities to cycle.

It is the option which will provide the best level of service for the large and growing numbers of cyclists on the route as it caters for larger numbers given the inherently greater capacity of every two-way route, accentuated by 'tidal' flow pattern on this arterial route.

Thank you for your attention to this submission.

Best regards

Cllr. David Healy

## Annex A

Clontarf to City Centre Cycle Route - how did we get to the current design?

The reports on display don't get into the details of the choice of between those two options. This is the relevant part of the of the display report (p.12):

An Options Review and Feasibility Report was prepared in October 2015. The report reviewed and reappraised the three options presented in the Concept Design and Options Selection Report. The appraisal was based on five criteria; Environment, Economy, Safety, Accessibility and Integration. The options of the two-way cycle track and the upgrade to the existing cycle lanes ranked similarly. This report concluded that the emerging solution was to upgrade the existing cycle lanes as this appraisal ranked the number of conflicts to be less than with the two-way cycleway option. The option of upgrading the existing cycle lanes also scored better as the separate northbound cycle lane caters better for outbound cyclists.

So what's in the Options Review and Feasibility Report?

The report is basically a process of reversing the priority assessed by Roughan O'Donovan in their 2012 "Concept Design and Option Selection Report" which recommended a segregated route.

The report started by reviewing the options considered in the 2012 report.

**Table 2.1 - QoS of Cycleway Options from “Concept Design and Option Selection Report” - Roughan O’Donovan 2012**

Scheme Option	QoS	Description
Do Nothing	C	The existing cycle facilities are discontinuous and include sections of shared use with buses along a busy traffic route.
Option 1	A	The two-way raised adjacent cycle track on the eastern side of the road provides an element of segregation, allows side by side or overtaking cyclists and minimises conflicts, particularly along Fairview pk.
Option 2	C	Upgrade the existing cycle lanes and provide cycle tracks where possible, however this option only accommodates single file cycling and comfort is reduced being immediately adjacent busy bus lanes.
Option 3	C	A combination of Option 1 two-way cycle track and a back street route, which provides a good degree of segregation but has a significant journey time delay as it is not along the main desire line and results in a longer route. Many cyclists would likely remain on North Strand Road.

This was the appraisal and ranking:

**Table 2.2 - Options Appraisal and Ranking from “Concept Design and Option Selection Report” - Roughan O’Donovan 2012**

Ranking	Do Nothing	Option 1	Option 2	Option 3
Environment & Planning	0	+1	+1	+1
Economy	0	0	0	0
Safety	-3	+3	+2	+1
Accessibility & Social Inclusion	0	+1	+1	+1
Integration	0	+2	+1	+1
<b>Overall</b>	<b>-3</b>	<b>+7</b>	<b>+5</b>	<b>+4</b>

The ranking is a 7 point scale, with +3 as highly positive, 0 as neutral and -3 as highly negative.

The review reappraised both the

- a) Quality of Service scores, and
- b) the Options Appraisal scores, under the headings
  - i. 'Safety' and
  - ii. 'Integration'

## Quality of Service

This review was presented in this table

**Table 2.3 - Assessment of QoS for Option 1, Two-Way Cycle Track**

Criteria	Concept Report		Assessment	
	Value	QoS	Value	QoS
Pavement Condition	86-100	A+	86-100	A+
No. of adjacent cyclists	1+1	A	1+1	A
Number of conflicts per 100m of route	0-1	A	1-3	B
Journey time delay (% of total travel time)	11-25%	B	11-25%	B
HGV influence (% of total traffic volume)	0-5%	A+	0-5%	A+
	<b>QUALITY OF SERVICE:</b>	<b>A</b>	<b>QUALITY OF SERVICE:</b>	<b>A/B</b>

The only change here is to increase the number of conflicts per 100m. As far as I can establish there is no map of the conflict points and there was no actual count. This is the analysis:

“On review of Option 1, it is found that the number of conflicts is greater and in the range of 1-3, rather than the range 0-1 as previously assessed. In line with the criteria as per the NTA National Cycle Manual, ‘the Number of conflicts is a measure of the potential interruptions to a cyclist per 100m and may include bus stops, side-roads, driveways, entrances, junctions etc.’ The number of conflicts can vary considerably along the route, depending on the direction of travel and the side of the carriageway. Therefore on review it was considered that the number of conflicts for the whole scheme would be closer to the range of 1-3 rather than 0-1 as previously suggested.”

How can you assess the number of conflicts other than by actually counting them? Indeed, why wouldn't you count them?

In the same section of the report, not connected to the Quality of Service analysis, is a discussion of the difficulties of two-way cycle routes in the abstract. There is no analysis of the issues as they actually arise on this route. This leads to a “conclusion that a two-way segregated cycle track would not adequately function for commuting cyclists in this busy environment.”

A revised Quality of Service Analysis is then presented for Option 2.

**Table 2.4 - Assessment of QoS Service for Option 2 and a revised Option 2**

Criteria	Concept Report Option 2 (upgrade of existing cycle lanes)		Revised Option 2 (cycle lanes on both sides of the carriageway)	
	Value	QoS	Value	QoS
Pavement Condition	86-100	A+	86-100	A+
No. of adjacent cyclists	1+0	B	1+1	A
Number of conflicts per 100m of route	1-3	B	1-3	B
Journey time delay (% of total travel time)	26-50%	C	11-25%	B
HGV influence (% of total traffic volume)	6-10%	C	2-5%	B
	<b>QUALITY OF SERVICE:</b>	<b>C</b>	<b>QUALITY OF SERVICE:</b>	<b>A/B</b>

The changes here are in “No. of adjacent cyclists”, “Journey time delay” and “HGV influence”

### “Number of Adjacent Cyclists”

The analysis is based on the idea on page 7 that “the width is proposed to be maximised and allow for a single file cycling with overtaking.”

However the Ideal Cross Section p.12 shows that this requires lanes of 2.25m or 2.00m. In fact the following pages 13 to 22, (which go into more detail in the analysis of Option 2) show that the possible cycle lane widths for this option are less than this for all but the Fairview Park section of the route.

Incredibly, immediately after demonstrating that such widths were assessed as unavailable over most of the route, the report in Table 3.2 on page 24 marks all sections as to achieve Quality of Service A on the basis that they are 1+1, wide enough to pass on, between 2.0 and 2.25m.

Note that although the process started with Option 1 as preferred, there is no such analysis in the report of the potential cycle facility widths under Option 1 and whether or not they can achieve ideal cross sections.

## “Journey time delay” and “HGV influence”

These are analysed together in this paragraph:

“It is considered however, that the journey time delay and HGV influences can be reduced for Revised Option 2. The reason being that cyclists will have priority at the junctions with the main traffic, there will be improved crossing facilities and linking of the traffic signals would be expected. During peak hours, cyclists can also travel more freely than general traffic. According to Google Maps, for this route the current journey time for a cyclist is 9 minutes. This equates to a speed of 16.67km/hr, with the average speed of a cyclist assumed to be between 15km/hr to 20km/hr, there is minimum delay currently and this can only be improved with improved facilities. Therefore, the journey time delay is reduced to between 11-25% from the previous 26-50%. For the HGV influence, cyclists will have a dedicated cycle lane, adjacent to a bus lane and be separated from live traffic and so the influence from HGVs is considered to reduce to 2-5% from the previous 6-10%, but is not considered to be as low as Option 1, ranked at 0-5%. Therefore, it is considered that the overall QoS achievable is for Revised Option 2 is greater than previously presented and scores an improved QoS A/B.”

It's quite incredible that RPS's analysis consisted of checking the Google Maps estimate of journey time. Where did Google Maps get that estimate from? Similarly, what is the basis for the HGV figure?

This all then leads to what it is hard to avoid concluding is the QED of the exercise:

“Therefore, for Option 2 the QoS achievable is considered to be the same as that for Option 1.”

## Options Appraisal

This is the original options appraisal:

**Table 2.2 - Options Appraisal and Ranking from “Concept Design and Option Selection Report” - Roughan O'Donovan 2012**

Ranking	Do Nothing	Option 1	Option 2	Option 3
Environment & Planning	0	+1	+1	+1
Economy	0	0	0	0
Safety	-3	+3	+2	+1
Accessibility & Social Inclusion	0	+1	+1	+1
Integration	0	+2	+1	+1
<b>Overall</b>	<b>-3</b>	<b>+7</b>	<b>+5</b>	<b>+4</b>

The ranking is a 7 point scale, with +3 as highly positive, 0 as neutral and -3 as highly negative.

And the revised appraisal:

**Table 2.6 - Options Appraisal and Ranking**

Ranking	Do Nothing (as previous)	Option 1	Option 2	Option 3
Environment	0	-1	-1	-1
Economy	0	+1	+1	+1
Safety	-3	+2	+3	+1
Accessibility & Social Inclusion	0	+1	+1	+1
Integration	0	+2	+2.5	+1
<b>Overall</b>	<b>-3</b>	<b>+5</b>	<b>+6.5</b>	<b>+3</b>

The ranking is a 7 point scale, with +3 as highly positive, 0 as neutral and -3 as highly negative.

So the two areas where the evaluation has changed are Safety (Option 1 being revised from +3 to +2 and Option 2 going from +2 to +3) and Integration (Option 2 being revised from +1 to +2.5.)

### **“Safety”**

This is the entirety of the analysis:

“Safety

“The safety assessment is considered in terms of the possible reduction in accidents and security of road users. The scheme will improve cycle and pedestrian facilities, aims to reduce traffic speeds and encourage a shift towards more sustainable transport. Therefore the scheme is positive in terms of safety. Option 2 is considered the safer option, Option 1 will be positive but lower compared to Option 2 as cyclists will need to cross the carriageway to access/egress the two-way cycle track more compared to the two by one-way cycle lanes. Also Option 1 has the additional cyclist safety risk at side road conflicts due to the unexpected contra-flow cyclist movement. Option 3 is considered the lowest in terms of safety due the poor security by the quiet back streets.”

Later it says:

“In terms of safety, Option 2 is considered higher as it caters for cyclists on both sides of the carriageway.”

There seems to be a failure of basic mathematical reasoning in this sentence: “cyclists will need to cross the carriageway to access/egress the two-way cycle track more compared to the two by one-way cycle lanes.” Assuming origins and destinations to be evenly

distributed, then the total numbers of crossings of the carriageway is the same between Options 1 and 2.

Even if origins and destinations are disproportionately on one side, the degree of asymmetry would need to be identified. If it is significant, consideration could be given to locating the two-way route on that side. (However, given properly signalled junctions at the right places, then there should be no greater risks or inconvenience whichever side is used.)

The mixing of bikes and buses as proposed in the design on display isn't mentioned. The big problem at the moment is buses and bikes mixing so it seems completely unjustifiable to give the proposed design the same safety rating as a segregated design.

The point about unexpected contra-flow cyclist movement is valid, but can be addressed by designs to ensure road users from side roads look in the correct directions.

### **“Integration”**

This is the analysis:

“Option 2 is ranked slightly higher than Option 1 as it caters better for outbound commuter cyclists by providing facilities on the outbound carriageway which is a bit more natural and expected for these cyclists.”

This appears to be the same point again under a different heading. There is no explanation as to why RO'D reached the opposite conclusion, marking option 2 as lower than Option 1.

All of this leads to a final conclusion:

“It would appear that both Option 1, a proposed two-way cycle track and Option 2, upgrade of the existing cycle lanes on each side of the road, would provide a much improved QoS, ranking between A and B. However, Option 1 is unlikely to adequately function for commuting cyclists for this cycle route. The appraisal, under the criteria of environment, economy, safety, accessibility and social inclusion and integration, ranked all options positively with Option 2 ranking the highest.”

The conclusion that “Option 1 is unlikely to adequately function for commuting cyclists for this cycle route” has appeared from nowhere.

### **“Assessment of the Route”**

The next section of the report “Assessment of the Route” compares the space available on the route to an “ideal cross section”.

It finds that the only section where the desired 2m to 2.25m single-direction cycle track is possible is in Fairview. Then in contradiction of that analysis it concludes that a “1+1” cycle track is possible along the entire route. (The drawings on display do show 2m cycle tracks

on Amiens St. as well, but this does include running beside parking with no buffer zone. There are no 2.25m lanes on the display drawings.)

## **Fairview**

In Fairview, the option selected requires the removal of all established roadside trees. This is because the number of lanes is not to be reduced from the current 2 bus lanes and 4 general traffic lanes.

The analysis predicting “serious traffic congestion” if the number of general traffic lanes is reduced seems not to recognise that some travellers might switch to public transport or cycling. This is surprising given that the intention of the scheme is to encourage this switch. As far as I can establish there has been no traffic modelling of the various options for the scheme, which is surprising considering the DTO model could indicate the potential for modal shift resulting from the scheme in keeping with it's fundamental objectives.

## **What the Area Committee was told**

The switch from the previous preferred option to the current proposal was explained to the Area Committee as follows:

### **How and why has this change from a planned segregated cycle route to just painted cycle lanes come about?**

Consideration was given to the provision of a two way cycle track on one side of the road. The space constraints and the high number of side roads along the route highlighted an unacceptable level of conflict points that would result in increased safety issues and poor quality of service for cyclists. The proposed design provides for a cycle track that will be segregated, i.e raised from the carriageway wherever practicable. There will be locations where this will not be possible, in particular at bus stops where there is no space to provide bus stop bypasses or at major junctions. The cycle track is being designed in accordance with the National Cycle Manual requirements and will provide a high quality level of service for cyclists.

<http://naoise.ie/wp-content/uploads/2015/08/S2SClontarfToAmiensPart8.pdf>