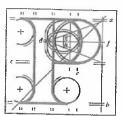
Our Case Number: ABP-314610-22

Planning Authority Reference Number:



An Bord Pleanála

Beyond the Junction and others C/O Anne Bedos 167 Phibsborough Road Phibsborough Dublin 7 D07 KP96

Date: 22 November 2022

Re: BusConnects Ballymun/Finglas to City Centre Core Bus Corridor Scheme

Ballymun/Finglas to Dublin City Centre

Dear Sir / Madam,

An Bord Pleanála has received your recent submission (including your fee of €50) in relation to the above-mentioned proposed road development and will take it into consideration in its determination of the matter.

Please note that the proposed road development shall not be carried out unless the Board has approved it or approved it with modifications.

If you have any queries in the mean time, please contact the undersigned. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

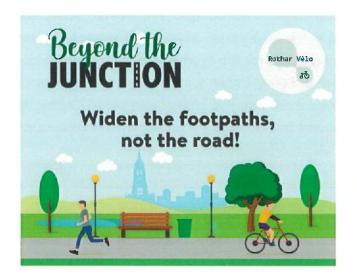
Executive Officer

Direct Line: 01-8737287

HA02 (Acknowledgement - No Receipt to Issue)

Ríomhphost





167 Phibsborough road, D07KP96, Dublin 7

Nov 15th 2022

Re: ABP: Case reference: HA29.314610 / 314610: Ballymun/Finglas to Dublin City Centre

Introduction:

This is our submission as residents and independent business owners living and working in the area covered by the CBC3 BusConnects route, Finglas / Ballymun to the city centre. We are part of local groups such as Beyond The Junction and the Phibsborough Sustainable Energy Community, and are active at a local level. We sent our observations to the National Transport Authority during the first round of consultation and met with some of their representatives twice to explain our views.

This observation to An Bord Pleanala covers the section between CrossGuns bridge (Hart's corner) to the quays, as this is where we live and work. The design and the proposal will have a deep impact on our lives and the future of our area.

Firstly, we fully support a new integrated, segregated and more efficient bus service. This will be a huge improvement for the city.

However, we object to the applicant's proposals, as they place far too much emphasis on private vehicular movement and not enough on creating a high-quality

public realm that prioritises and encourages walking and cycling. The proposal will also make air quality in the area worse, as the environmental report shows (Chapter 7 - Air Quality (AQ), especially for Nitrogen Dioxide (NO₂) and Particulate Matter (PM). This is in breach of EU legislation and will have dire consequences on people's health. The technological solution (increase of number of Electric Vehicles) proposed by the NTA does not take into account Particulate Matter (PM) coming from tyres, which will increase with increased traffic and heavier vehicles.

Secondly, the methodology used for assessing the quality of the proposed cycle lanes is questionable, and the proposal is in breach of several policies.

Finally, the proposal is just not suitable in the time of climate and ecological collapse.

Our area:

Phibsborough is a mixed commercial and residential neighbourhood on the Northside of Dublin. It is located about 4 km north of the city centre, in Dublin 7. It is one of the busiest areas in the city, and widely known to be one of the most congested, especially at the junction between the national roads R101 and R108, commonly known as Doyles' Corner.

Phibsborough is a very densely populated area and has been forced to shoulder the external consequences of people driving from greener, quieter, cleaner suburbs for the past 40 years. The NTA's plans for BusConnects are unfortunately continuing with this "tradition", and the intention is to have two bus lanes and two lanes of vehicular traffic in each direction, as well as redirecting traffic onto Connaught street from Cabra Cross, will make an already congested area worse for air quality, biodiversity, and quality of life.

How we get around

Phibsborough is an area with one of the lowest car ownerships in the country: between 59% of residents in Phibsborough and 71% around Church street do not own a car, and only between 13% and 16% of us commute to work by car ¹.

Phibsborough will also be one of the best served areas in the city with Luas, two MetroLink stations, BusConnects and the Royal Canal Greenway - it is therefore a

¹ Data extracted from <u>census.cso.ie/sapmap/</u> — 2016 Census Small Area Population Statistics, Theme 15: Motor Car Availability, PC Ownership and Internet Access

missed opportunity to see private traffic being given a lot of space preventing real modal shift and traffic evaporation ².

What our observation is about. After very careful study of the different reports that are part of this application to An Bord Pleanala, we would like to make the following observations.

Chapter 1. Air Quality (NO₂ and PM) - thanks to the measurements done as part of the Environmental Report, the NTA shows parts of the route are not and will not be compliant with the EU's requirements for NO₂ even after the implementation of the scheme. The levels of PM are also way beyond what the World Health Organisation recommends. Furthermore, there is no mitigation measure for the increase in NO₂ levels. There is also no focus on Particulate Matter and how to mitigate its increase due to elevated traffic levels or uptake of Electric Vehicles (EVs).

Chapter 2. General observations on the route - how the methodology used is not backed by any literature and how it is against international best practice and in breach of several policies.

Chapter 3. Biodiversity and Climate Change - with its focus on road building, the scheme does not allow for mitigation measures to prepare the area for climate change, and proposes to pave over an area with biodiversity where studies show we should restore ecosystems.

Chapter 1. Air Quality

General comments and values cited by the NTA

Clean air is a basic human right. Yet, air pollution continues to pose a significant threat to people worldwide – it is the greatest environmental threat to health and a

² c.f. O'Connor, D. 2017. So Where Will All the City-Centre Traffic Go? *Dublin Inquirer*, 17 May 2017. Available online:

https://www.dublininguirer.com/2017/05/17/david-so-where-will-all-the-city-centre-traffic-go

leading cause of non-communicable diseases (NCDs) such as heart attacks or stroke. In Ireland, the number of premature deaths attributable to air pollution is estimated at 1,300 people. Of growing concern are levels of particulate matter, due to domestic solid fuel burning, and levels of nitrogen dioxide in our urban areas, due to our dependence on diesel and petrol fuelled vehicles. ³

'The WHO Air Quality Guidelines (WHO 2006) values relating to NO2, PM10 and PM2.5 are shown in Table 7.3. The WHO Air Quality Guidelines values are more stringent than the European Union (EU) statutory limit values for PM10 and PM2.5. In relation to NO2, the compliance limit values are equivalent.

However, the WHO one-hour guideline value is an absolute value while the EU standards allow this limit to be exceeded for 18 hours / annum without breaching the statutory limit value. In May 2020, as part of the joint WHO / United Nations Environment Program (UNEP) / World Bank BreatheLife campaign, the four Dublin local authorities signed a commitment to achieve the WHO Air Quality Guidelines by a target date of 2030.

The appropriate compliance limit values for the assessment of air quality impacts of the Proposed Scheme are those outlined in the Air Quality Regulations, which incorporates the CAFE Directive. Both the compliance limit value and WHO Air Quality Guidelines value for NO2, the pollutant most likely to exceed either, are 40µg/m3 (micrograms per metre cubed). The assessment therefore considers both compliance with the EU limit and meeting the WHO Air Quality Guidelines value.'

https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/air/#:~:text=ln%20Ireland%2C%20the%20number%20of,diesel%20and%20petrol%20fuelled%20vehicles.

⁴ https://ballymunfinglasscheme.ie/ - Chapter 7 - page 5

Below is what the National Transport Authority presents as being the current WHO guidelines ⁵

Table 7.3: WHO Air Quality Guidelines (WHO 2006)

Pollutant	Regulation	Limit Type	Value
NO ₂	WHO Air Quality Guidelines	Hourly limit for protection of human health	200μg/m³ NO ₂
		Annual limit for protection of human health	40μg/m³ NO₂
PM (as PM ₁₀)		24-hour limit for protection of human health	50µg/m³ РМ ₁₀
(== :,)		Annual limit for protection of human health	20μg/m³ PM ₁₀
PM (as PM _{2.5})		24-hour limit for protection of human health	25µg/m³ PM _{2.5}
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Annual limit for protection of human health	10μg/m³ PM _{2.5}

However, these levels were reviewed in 2021, and below are the actual current WHO limits ⁶.

Recommended 2021 AQG levels compared to 2005 air quality guidelines

Pollutant	Averaging Time	2005 AQGs	2021 AQGs
PM _{2.5} , μg/m ³	Annual	10	5
	24-hour ^a	25	15
PM ₁₀ , μg/m ³	Annual	20	15
	24-hour ^a	50	45
O ₃ , μg/m ³	Peak season ^b	-	60
	8-hour ^a	100	100
NO ₂ , μg/m ³	Annual	40	10
	24-hour ^a	-	25
SO ₂ , μg/m ³	24-hour ^a	20	40
CO, mg/m ³	24-hour ^a	-	4

lt

is striking that the NTA, despite publishing their study and applying for planning permission in September 2022, has not taken into account WHO guidelines that were published a year prior as part of the study, but rather older, less stringent ones. The reason the WHO have revised their guidelines is because we now know that air pollution causes illness and death at much lower levels than was previously recognised.

⁵ https://ballymunfinglasscheme.ie/ - Chapter 7 - page 6

⁶ https://www.who.int/news-room/feature-stories/detail/what-are-the-who-air-quality-guidelines

We will see throughout this document that WHO levels are continuously broken, currently and in the projections. The air is not safe anywhere where the scheme is proposed, breaks (EU and WHO) current guidelines, and will be doing so for years to come unless we aggressively limit the volume of vehicular traffic passing through the area.

Nitrogen Dioxide (NO₂)

Air Quality (AQ), and especially Nitrogen Dioxide (NO_2), which emanates from vehicular traffic, has become a strong focus in the past few years. Research is showing that high levels of exposure to it affects the vast majority of people in cities in the world, and that its effects on human health are wide and far reaching. New research shows links between NO_2 and cancer 7 , as well as low bone density leading to fractures 8 , dementia 9 and early death 10 .

Ireland as an EU member state is obliged to implement EU Directive 2008/50/EC on ambient air quality and cleaner air for Europe (also referred to as the CAFÉ Directive) which limits sulphur dioxide, NO_2 and other oxides of nitrogen, particulate matter (PM10, PM2,5), lead, benzene and carbon monoxide emissions from 2010. Hourly average emissions of NO_2 are limited to 200 μ g/m³ and yearly to 40 μ g/m³.

As previously mentioned, the World Health Organisation is now recommending much stricter limits to protect human health - from 40 to $10 \,\mu g/m^3$. Even though these limits are not yet legally binding in the EU, it is expected that Europe will bring air quality standards closer to World Health Organisation (WHO) guidelines in the coming year 11 .

Furthermore, in May 2020, as part of the joint WHO / United Nations Environment Program (UNEP) / World Bank *BreatheLife* campaign, the four Dublin local authorities signed a commitment to achieve the WHO Air Quality Guidelines by a target date of

 $\frac{\text{https://www.theguardian.com/science/2022/sep/10/cancer-breakthrough-is-a-wake-up-call-on-dange}{\text{r-of-air-pollution}}$

https://link.springer.com/article/10.1007/s00198-022-06445-4?utm_source=toc&utm_medium=email &utm_campaign=toc_198_33_9&utm_content=etoc_springer_20220910_

7

https://www.ifiscience.com/health-and-medicine/strong-link-found-between-air-pollution-and-alzhei mers-dementia/

¹⁰ https://www.eea.europa.eu/themes/air/health-impacts-of-air-pollution

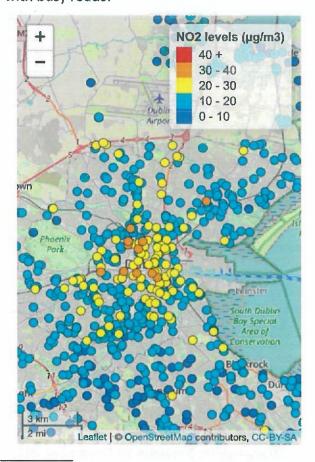
¹¹ https://ec.europa.eu/environment/air/clean_air/review.htm

2030. ¹². Lastly, Dublin City Council has as a policy 'to monitor and improve air quality in accordance with national and EU policy directives on air quality and, where appropriate, promote compliance with established targets.' ¹³

EU citizens are taking action on air pollution, and there are currently 31 infringement procedures ongoing in 18 different EU countries because of poor levels of air pollution, according to the European Commission ¹⁴.

AQ - Dublin

Rothar and other local groups participated in the Clean Air Together strategy organised by the Environmental Protection Agency (EPA) in November and December 2021. Diffusion tubes were installed in the area, and the results published in March 2022 (map below), showing 80% of areas show high levels of NO_2 within the canals, and especially along the quays, in Phibsborough, North Wall, Glasnevin, and the general city centre with busy roads. ¹⁵ ¹⁶



¹² https://www.rte.ie/news/dublin/2020/0217/1115907-dublin-air-quality/

15

https://irishcycle.com/2022/03/11/80-of-dublin-air-monitors-exceed-who-limits-for-traffic-related-pollution/

¹³ Dublin City Council Development Plan 2016 - 2022, policy SI24, page 55

¹⁴ https://euobserver.com/green-economy/156010

¹⁶ https://www.youtube.com/watch?v=Ce3W0aWCK5I&ab_channel=EPAIreland

These results are consistent with another study done by the EPA in 2017 to 2019, which showed high levels of NO_2 in central, congested areas such as Pearse st or Gardiner st. The graph below shows that many of the busy roads in Dublin breached EU levels. ¹⁷

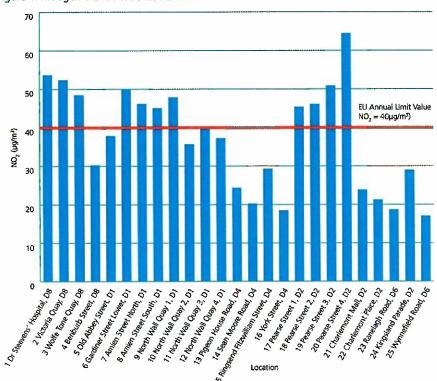


Figure 4: Nitrogen dioxide tube results 2017

Phibsborough BusConnects AQ monitoring

There is no monitoring of NO2 levels in Phibsborough despite Doyles' corner being a major crossroads between two national roads and the junction being one of the most congested in the city with extremely high traffic levels.

However, due to the BusConnects project and the obligation to report on AQ, the NTA conducted a thorough study of AQ on the route.

Monitoring at 112 locations was completed for a seven-month data collection period (with six diffusion tube change-overs between 15 November 2019 to 8 June 2020).

¹⁷

https://www.epa.ie/publications/monitoring-assessment/air/urban-environmental-indicators-nitrogen-dioxide-levels-in-dublin.php

'Monitoring of NO₂ in proximity to the Proposed Scheme, and roads that have the potential to be impacted by it, was carried out using passive diffusion tubes. The baseline monitoring study was carried out close to the alignment of the Proposed Scheme, with monitoring focusing on areas of greatest potential impact. The results of the monitoring survey allow for an indicative comparison with the annual limit value for NO₂. Diffusion tubes are a useful tool for assessing the spatial variation of NO₂ as they do not require an electrical connection and allow for multiple locations to be monitored at the same time(...) A baseline NO₂ monitoring survey was undertaken as part of the air quality assessment for the BusConnects Dublin - Core Bus Corridors Infrastructure Works (hereafter referred to as the CBC Infrastructure Works). Monitoring at 112 locations was completed for a seven-month data collection period (with six diffusion tube change-overs between 15 November 2019 to 8 June 2020). However, due to COVID-19 impacts on the baseline traffic environment, the final two data sets (16 March 2020 to 8 June 2020) are considered non 'typical' baseline data and therefore are not included in the baseline data set.' ¹⁸

The nine monitored locations in the vicinity of the Proposed Scheme are listed in the table below, showing one breach at Prospect road. ¹⁹

No.		to 15 Dec 2019 (μg/m³)	2019 to 15 Jan 2020 (µg/m³)	17 Feb 2020 (µg/m³)	16 Mar 2020 (µg/m³)		Adjusted and Annualised NO ₂ Concentration (µg m ⁻³) ^{Note 1} . Note 2
3,1	Finglas EPA Colocation	28.1	25.2	15.9	15.2	21.1	16.0
3.2	Shangan Road	44.2	Lost	Lost	26.1	35.2	26.7
3.3	Our Lady of Victories Catholic Church	36.5	34.0	Lost	19.6	30.0	22.8
3.4	R108 Ballymun Road / Church Avenue	37.2	30.8	25.6	20.5	28.5	21.6
3.5	R108 St. Mobhi Road	42.3	39.2	39.6	29.2	37.6	28.5
3.6	157 Botanic Road	37.2	30.9	25.7	17.7	27.9	21.2
3.7	St. Vincent's School, R135 Finglas Road	41.3	34.0	27.9	19.7	30.7	23.3
3.8	R108 Prospect Road	71.6	62.7	52.5	43.5	57.6	43.7
3.9	R108 Phibsborough Road / King's Inns Court	60.3	47.5	42.4	30.3	45.1	34.2

It is worth noting that schools, childcare facilities and cultural institutions closed on March 12th 2020 because of COVID 19, ahead of the national lockdown, and that the last of the data sets includes this date until March 16th 2020. Considering that the school run is a major contributor to traffic levels in Dublin, it would make sense to

¹⁸ https://ballymunfinglasscheme.ie/ - Chapter 7 - page 25

¹⁹ https://ballymunfinglasscheme.ie/ - Chapter 7 - page 27

exclude this sample from the set, leading to different annual averages and potentially to several breaches. The NTA excluded the final two data sets (16 March 2020 to 8 June 2020) as they considered them non 'typical' baseline data - we argue a sample including four days when schools are closed and the country in a health emergency situation is not typical either. This was highlighted in the interim report 'Urban Transport Related Air Group (UTRAP)' of March 2021 ²⁰.

Results of the AQ tests done by the NTA

Current situation:

On the overall route, breaches were calculated at different locations:

'In the 2019 Existing Baseline Scenario, annual mean concentrations of NO₂ are above the relevant national air quality value in some areas. Ninety exceedances were modelled at receptors on R132 Dorset Street / R804 King Inn Street North / R132 Bolton Street / Church Street, R108 Phibsborough Road / R135 Finglas Road / R108 Botanic Road / R108 High Street, R148 Queen Street and R805 Manor Street.'²¹

With BusConnects:

'The Do Something is a defined scenario within the traffic modelling exercise in Chapter 6 (Traffic & Transport) and is based on the likely conditions of the road network with all major committed transportation schemes in place that will impact on the use of public transport and private cars, including the Proposed Scheme. The output of this analysis and its impact on air quality has been modelled using AMDS-Roads for the Opening Year (2028) in line with the methodology set out in Section 7.2.4.1. '22

This modelling is based on the assumption that the scheme will be completed, operational and that the planned modal shift between the private car and buses has occurred. This scenario includes a number of future transport projects which have yet to commence or be completed and there is no guarantee they will be completed by 2028 with the consequent impacts on traffic flows in the area.

²⁰

https://www.gov.ie/en/publication/3f634-urban-transport-related-air-pollution-utrap-working-group/, page 36

²¹ <u>https://ballymunfinglasscheme.ie/</u> - Chapter 7 - page 26

https://ballymunfinglasscheme.ie/ - Chapter 7 - page 52

'In the 2028 Do Something scenario, annual mean concentrations of NO2 are above the relevant national air quality limit value in some areas. Sixty-nine exceedances were modelled at receptors on R132 Dorset Street / R804 King Street North / R132 Bolton Street / R132 Church Street, R108 Phibsborough Road / R135 Finglas Road / R108 Botanic Road / R108 High Street, R148 Arran Quay, R804 Queen Street and R805 Manor Street.

It is worth noting that the EU levels are averages, and therefore do not take into account peaks of pollution that may occur during the day and impact the health of vulnerable people. Even though some of these measurements fall within the law, we are dismayed by the fact that a transformative and expensive project such as BusConnects will not improve things for the Phibsborough residents, and that it will even make the situation worse for some parts of the route:

'A slight adverse impact is expected at 18 receptors and a moderate adverse impact at two receptors on the R101 North Circular Road Junction with R108 Phibsborough Road. These localised moderate adverse impacts are considered Negative, Significant and Short- Term, as NO2 concentrations exceed the limit value, but will decrease below the limit by 2043 due to reductions in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet.' ²⁴

The plan will worsen air quality for areas where hundreds of people live. The area between Phibsborough Shopping Centre and the Rothar shop was the home of 450 people according to the CSO 2016 census ²⁵. We can reasonably assume this number has increased since. It will also be increasing with the number of developments planned for the area: the Phibsborough Shopping Centre will be redeveloped in 300 shared units (works commencing soon)²⁶ and the Des Kelly's site (beside the Rothar shop) has been proposed for redevelopment for 80 apartments (mix of 1, 2 and 3 bedroom), that will house another 100 people or more ²⁷. These two sites will see the population at Doyles corner doubling in size in the coming years, exposing even more people to dangerous levels of NO₂.

https://www.independent.ie/regionals/dublin/dublin-news/talks-clear-way-for-almost-300-shared-living-units-at-phibsboro-shopping-centre-in-dublin-41305703.html

²³ <u>https://ballymunfinglasscheme.ie/</u> - Chapter 7 - page 56

²⁴ <u>https://ballymunfinglasscheme.ie/</u> - Chapter 7 - page 62

²⁵ Data from 2016 extracted from Census small area population statistics https://visual.cso.ie/?body=entity/ima/cop/2016&boundary=C03736V04484&guid=4c07d11e-35df-851d-e053-ca3ca8c0ca7f

²⁷ https://neasahourigan.com/post/new-des-kelly-application/

Again, Ireland has legal obligations in terms of EU limits and these are not met already, and that litigation has been taken in other jurisdictions in relation to ongoing breaches of EU limits, especially following the case of Ella Kissi Debrah²⁸. Recent reports have shown excessive levels of air pollution around hospitals ²⁹ endangering patients, and especially children - Phibsborough is where the largest Irish public hospital is (The Mater Misericordiae), which comprises trauma and cancer units, where extremely vulnerable people are treated. The NTA's report clearly indicates the CAFÉ values are breached on a regular basis, and will be even after implementation, leading even to higher levels on Doyles' corner, and thus until 2043, not due to mitigation measures but thanks to technology, i.e. the uptake of electric vehicles (EVs).

'A slight adverse impact is expected at 18 receptors and a moderate adverse impact at two receptors on the R101 North Circular Road Junction with R108 Phibsborough Road. These localised moderate adverse impacts are considered Negative, Significant and Short- Term, as NO2 concentrations exceed the limit value, but will decrease below the limit by 2043 due to reductions in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet.'³⁰

This is an assumption, and does not offer a solution to an illegal and dangerous situation for people's health. The majority of Phibsborough and Church street residents do not own a car, but breathe toxic air as a result of their areas being considered thoroughfares and not places to live.

Particulate Matter (PM)

The only (conjectural) solution that the NTA is proposing to diminish NO₂ levels along the route is the hope that electric cars (EVs) will make up most of the fleet in 2043 (meaning breaches of the current CAFÉ levels and breach of DCC's commitment to get to WHO's levels by 2030 ³¹). Firstly, the uptake is much slower than anticipated ³² There is no assessment made of the required transition in order to achieve a set reduction in tailpipe emissions, and there is therefore no guarantee that those

30

https://www.independent.ie/irish-news/health/concern-over-air-pollution-levels-at-dublin-maternity-hospitals-and-its-impact-on-newborns-41994326.html

https://www.irishtimes.com/ireland/2022/09/30/electric-vehicles-on-irish-roads-to-fall-very-short-of-government-climate-goal-cag-warns/

²⁸ https://www.bbc.com/news/uk-england-london-55330945

²⁹ https://ballymunfinglasscheme.ie/ - Chapter 7 - page 60

³¹ https://breathelife2030.org/breathelifecity/dublin-ireland/

emissions will decrease as per the NTA's proposed mitigation measure. Secondly, other air pollutants are to be considered, especially Particulate Matter, that electric vehicles also produce ³³. As research advances, it becomes clearer that tyres and brakes are also huge emitters of PM.

PM is one of the most harmful pollutants there is - it is essentially tiny particulate matter, smaller than 2.5 microns in size (PM2.5), which can pass through the lungs into the bloodstream and affect other organs. PM has been shown to have very negative impacts on human health including asthma, stroke, heart disease, diabetes, obesity and dementia. The WHO classified these particles as cancer-causing in 2013.

Until recently, PM was a focus as diesel vehicles produce very high levels. It is now clear that the majority of PM coming from vehicles is not coming from exhausts but from brakes and tyres ³⁵.

Typically, EVs are much heavier than Internal Combustion Engines (ICE) cars, therefore leading to more tyre wear, leading to more PM emissions ³⁶, making their way into people's lungs and bodies. However, the NTA's report does not offer any calculation of the increase in PM that EVs will produce, despite presenting it as the solution to AQ issues on the route.

The WHO has reduced the guideline for annual average exposure to PM2.5 from 10 to 5 micrograms per cubic metre ($\mu g/m3$). The EU guidelines allow an annual average of 25 $\mu g/m3$, but again, it is expected the EU levels will be aligned with the WHO levels later this year ³⁷

To visualise, below are three tables with receptors between Harts corner and Church st with the current values, the projected ones for 2028, and how they align with EU and WHO levels.

³³ https://www.wunderground.com/cat6/air-pollution-cars-affects-everyone-why-we-should-care

³⁴ https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm 35

https://www.theguardian.com/environment/2022/jun/03/car-tyres-produce-more-particle-pollution-than-exhausts-tests-show

https://www.euractiv.com/section/transport/news/switch-to-evs-wont-solve-road-dust-pollution-in-fact-it-could-make-it-worse/

³⁷ https://ec.europa.eu/environment/air/clean_air/review.htm

Table 1. Baseline. Red dots indicate where levels are above EU levels

Base	eline 2019: red dots	indicate where levels are abo	ve EU le	vels	
Receptor	Receptor Location	Address	Annual Mean Conc		
			NO2	PM2.5	
AQ5	715,066,736,570	Botanic house, 22 Botanic rd	42.6	12.1	
AQ6	715,013,736,516	Harts Barber shop, 1a Finglas rd	42.1	12	
AQ34	714,868,734,720	Soup 2, North King st / Church st	57.1	13.8	
AQ51	714,813,734,240	Church st / Inn's quay junction	62	13.2	
AQ55	714,934,735,443	Broadstone depot, 196 Phib road	37	11.7	
AQ84	714,955,736,106	98 Phibsborough road	40.2	11.6	
AQ108	715,094,736,577	2 Iona road, glasnevin	42.6	12.1	
AQ123	714,979,735,962	Woodstock, Phibsborough road	44.5	12.2	
AQ145	714,983,735,786	St Peter's Court	40.5	11.8	
AQ384	714,980,735,923	Doyles corner, Kennedy's food stor	52.5	12.9	
EU Air Quality Limit Value Objective			40	25	
WHO Air Quality Limit Value Objective			10	5	

Table 2. Projected emissions in 2028. Red dots indicate where levels are above EU levels

Receptor	Receptor Location	Address	Annual Mean Conc		
			NO2	PM2.5	
AQ5	715,066,736,570	Botanic house, 22 Botanic rd	41,2	11.5	
AQ6	715,013,736,516	Harts Barber shop, 1a Finglas rd	40.1	11.4	
AQ34	714,868,734,720	Soup 2, North King st / Church st	58.1	13	
AQ51	714,813,734,240	Church st / Inn's quay junction	56.7	12.5	
AQ55	714,934,735,443	Broadstone depot, 196 Phib road	32.4	11.2	
AQ84	714,955,736,106	98 Phibsborough road	37.8	11.3	
AQ108	715,094,736,577	2 Iona road, glasnevin	40,8	11.4	
AQ123	714,979,735,962	Woodstock, Phibsborough road	41.7	11.7	
AQ145	714,983,735,786	St Peter's Court	36	11.3	
AQ384	714,980,735,923	Doyles corner, Kennedy's food sto	50.1	12.5	
Air Quality Limit Value Objective			40	25	
WHO Air Quality Limit Value Objective			10	5	

Table 3. Projected emissions 2028. Red spots indicate where levels are above the WHO levels

Receptor	Receptor Location	Address	Annual Mean Cond		
			NO2	PM2.5	
AQ5	715,066,736,570	Botanic house, 22 Botanic rd	41.2	11.5	
AQ6	715,013,736,516	Harts Barber shop, 1a Finglas rd	40.1	11.4	
AQ34	714,868,734,720	Soup 2, North King st / Church st	58.1	- 13	
AQ51	714,813,734,240	Church st / Inn's quay junction	56.7	12.5	
AQ55	714,934,735,443	Broadstone depot, 196 Phib road	32.4	11.2	
AQ84	714,955,736,106	98 Phibsborough road	37.8	11.3	
AQ108	715,094,736,577	2 Iona road, glasnevin	40.8	11.4	
AQ123	714,979,735,962	Woodstock, Phibsborough road	41.7	11.7	
AQ145	714,983,735,786	St Peter's Court	36	11.3	
AQ384	714,980,735,923	Doyles corner, Kennedy's food stor	50.1	12.5	
Air Qualit	y Limit Value Object	live	40	25	
WHO Air Quality Limit Value Objective			10		

As an addendum to this point with regard to public health, the report does not take into account the increase in noise pollution from heavier cars, which is predominantly caused by tyres hitting the road, as opposed to engine or tailpipe noise. Noise pollution has significant adverse impacts on public health including cardiovascular and cognition impacts and will increase with increased private car traffic regardless of whether there is a transition to electric vehicles.³⁸

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³⁸ https://www.who.int/europe/health-topics/noise#tab=tab_1

Chapter 2. General observations on the route and the design

Outdated road design and traffic demand management

The scheme is a continuation of what has been designed for the past 40 to 50 years: ensuring the fastest way to go for people who come from afar from point A to point B, following the traditional 'predict and provide' model. The intent is to facilitate just commuters: for example, the decision to divert people cycling away from the centre of Phibsboro is one based on a consideration for commuter transport only and for people driving to get to their destination as fast as possible.

The report Traffic Management Guidelines,³⁹ highlights the need to break this vicious 'predict-and-provide' cycle. It also highlights the need to manage travel demand to reduce the dominance of cars in sensitive areas such as town centres.

This 'traditional' road design is what has led to the current situation of ill health, congestion and inactivity crisis. Ireland is a car dependent country, and unless there is a major reallocation of space from the private car, our emissions targets will not be reached. A report just published by the OECD⁴⁰ points out the urgency of doing precisely this. This would include a radical reorganisation of road space especially in urban areas; scale up of "on-demand shared services" and enhanced use of "mobility hubs". This vision is shared by the government: 'Minister for Transport and Climate Eamon Ryan said transforming the sector would be achieved mainly by reallocating road space in favour of public transport and active travel — rather than the stick of congestion charges.' ⁴¹

Increasing road capacity is a false solution; the government's own report points this out: 'In some cases, providing additional road infrastructure in response to congestion is unlikely to solve the issue. More importantly, there is the likelihood that additional road capacity will induce additional car-based travel.'42

Frustratingly, the CBC3 increases traffic in a residential area and does not reallocate space away from private vehicles. It even proposes to widen a road in an urban village, 4 kilometres from the city centre, served soon by BusConnects, MetroLink, Luas and the Royal Canal Greenway. It also diverts one of the most efficient modes of transport, bicycles, away from a straight route to the village centre, depriving

³⁹ Traffic management guideline 2019, section 1.3, page 20

⁴⁰ https://www.oecd.org/publications/redesigning-ireland-s-transport-for-net-zero-b798a4c1-en.htm

https://www.irishtimes.com/environment/climate-crisis/2022/10/05/oecd-recommends-major-redesing prof-irish-transport-to-meet-climate-targets-and-improve-wellbeing/

⁴² Five cities Demand Management Study, page 9

businesses from any possibility to have loading bays, outdoors seating or increased footfall like on the now traffic free Capel St ⁴³. It does not respect the hierarchy of users either, and makes people on bikes take a much longer route via the Canal.

This is in breach of Dublin City Council's development Plan, which designates
Phibsboro Village as a "Key Urban Village": 'The development of high quality urban
environments in Key Urban Villages is essential so that they are places where people
want to live and so that they become attractive destinations which can be accessed
by walking, cycling and public transport.' 44

'To improve existing cycleways and bicycle priority measures and cycle parking infrastructure throughout the city and villages, and to create protected cycle lanes, where feasible.'

The applicant's proposal also does not adhere to the principle of ensuring that active travel modes should be as direct, convenient and more competitive than private car traffic. Roads that prioritise private car traffic over cycling (Contravening the Design Manual for Urban Roads and Streets Transport User Hierarchy). DMURS (Design Manual for Urban Streets) states that street design should follow a strict user hierarchy: 1) Pedestrians 2) Cyclists 3) Public transport 4) Private cars.

Finally, the mitigation measure mentioned in relation to air quality is a hypothetical transition to electric vehicles. However, the reallocation of road space to prioritise walking, cycling and public transport over private car traffic is a measure which follows best international practice, national guidelines and policy. The following guidelines and policies outline the need to prioritise active travel modes through network design, street design and reallocation of road space and in so doing achieve reduction in private car usage: National Sustainable Mobility Policy, the Design Manual for Urban Roads and Streets, the National Cycle Manual.

Poor quality walking and cycling infrastructure

The methodology used to measure the quality walking and cycling infrastructure is questionable. There is no reference to any literature or guidelines used, therefore leading to narrow cycle lanes qualified as high quality. For example, the proposed width of cycling infrastructure is simply not fit for purpose. Section 2.3 of the Written Report of Greater Dublin Area Cycle Network Plan, outlines the desired width of

⁴³ Dublin Development Plan (2022-2028), Chapter 7

⁴⁴

https://irishcycle.com/2022/07/12/groups-against-car-free-capel-street-continue-to-put-pressure-on-councillors/

⁴⁵ Dublin Development Plan (2022-2028), Chapter 8, Objective SMTO8

primary cycle routes as 2.5m. The width cycle infrastructure provided from the 2.1km from the Royal Canal to the R148 Ormond Quay Upper is only 1.25m save for only a brief stretch from Constitution Hill to Ormond Quay where it is 1.75m.

There is also no provision for wider footpaths in the proposal, despite Phibsborough being one of the most densely populated areas in the city. Footpaths are already over capacity, and the increase in population as a result of major redevelopment projects such as CrossGuns SHD, Phibsborough Shopping Centre and the former Des Kelly site will make the situation worse, making Phibsborough an area with poor walking provision, in breach of the Dublin Development Plan which emphasises on making urban villages attractive places for walking. ⁴⁶

Chapter 3. Biodiversity and Climate Change

This project is simply not compatible with climate action and the radical shift that is needed to limit global warming, restore habitats and limit the impact of climate breakdown.

Widening a road, rather than restricting private car traffic capacity in an urban centre will result in induced demand. Designing a route for people cycling which is an indirect route, and increasing the private car traffic in a populated area will not result in modal shift away from private car to active modes, a necessary action to reduce Ireland's transport emissions to achieve legally-binding carbon emissions reduction targets, as underpinned by the Climate Action and Low Carbon Development (Amendment) Act 2021. A publicly-funded project must attempt to achieve the most effective way of reducing emissions. Retaining or increasing private car traffic capacity will impact on both real and perceived road safety, which is one of the top barriers to the take up of cycling.

Also, the Intergovernmental Panel on Climate Change (IPCC)'s last report is now indicating that time is for adaptation to climate change, as it is clearer that the 1.5 degree limit will not be respected and that the consequences of the warmer temperatures are already being felt.⁴⁷ In Ireland, climate change means warmer and wetter winters, more frequent heat waves during the summer, increased precipitation and an acceleration of storms that will lead to flash floods and impact the infrastructure as well as residents. As a coastal city, Dublin is especially vulnerable.

⁴⁶ Dublin Development Plan (2022-2028), Chapter 7

⁴⁷ https://climate-adapt.eea.europa.eu/en/knowledge//tools/urban-ast/step-0-2

The applicant's proposal is incompatible with mitigation and adaptation. For example, we know that highly paved surfaces are much warmer than shaded, tree planted ones, leading to heat islands, where temperatures can be dangerous for human health ⁴⁸ and increase air pollution ⁴⁹.

With heavy rains becoming the norm, and because Phibsborough is already overbuilt, more paved surfaces will lead to flooding and the effects should be mitigated through tree planting or rain gardens placed on the side of the road ⁵⁰. Water runoffs from heavy rains can not only overwhelm the drainage system but also lead to water mains pollution.

Because of the ambition to widen the road in the area, there simply is not any space for mitigation measures. The European Commission is clear on this: 'the development of infrastructure should (..) consider the impacts on risk elsewhere: for example, the potential contribution to flood risk resulting from increases in paved surfaces' ⁵¹.

The BusConnect project for Phibsborough includes road widening in the village, and paving over an area that is at the moment, a green lung for residents as well as a rich biodiversity shelter for bats, birds and amphibians as well as plants.

The biodiversity report, which is part of the application, goes in detail about the impact of the suggested bridge over the canal: 'The Proposed Scheme will overlap with the Royal Canal pNHA and the proposed Royal Canal pedestrian / cycle bridge will be built to cross the Royal Canal. During construction, one of the abutments will be built within the Royal Canal, resulting in the permanent loss, albeit of a relatively small area of aquatic territory as well as a temporary loss of 0.035ha of canal habitat and a limited extent of riparian corridor along one bank. It will also result in the potential fragmentation of habitat for species such as otter that are known to occur in the area. Therefore, the loss of territory, albeit limited, has the potential to result in Negative and Significant effects at a Local geographic scale.' ⁵²

The report details the mitigation measures proposed to lessen the impact of the scheme on wildlife and their habitats, citing in conclusion that the scheme will have 'no significant residual impact' overall.⁵³ It is worth noting that biodiversity and wildlife are at a critical point in Ireland, and therefore the goal should be to restore habitats for wildlife and not keep them in the state they are.

⁴⁸ https://www.epa.gov/heatislands

⁴⁹ https://www.climatecentral.org/climate-matters/urban-heat-islands

⁵⁰ https://cwp.org/reducing-stormwater-runoff/

⁵¹ Policy perspectives climate resilient infrastructure, OECD report, page 6

⁵² Chapter 12 - Biodiversity, page 58

⁵³ Chapter 12 - Biodiversity, page 112 to 118

The European Commission states that 'We cannot address biodiversity loss without tackling climate change, but it is equally impossible to tackle climate change without addressing biodiversity loss. Protecting and restoring ecosystems can help us reduce the extent of climate change and cope with its impact ⁵⁴'. Healthy ecosystems are more resilient to climate change, and every effort should be about restoring and enhancing green spaces. The scheme as it is proposed will destroy more habitats and will disturb more wildlife, which has diminished by 69% since 1970⁵⁵ worldwide. The scheme is also detrimental in terms of air pollution (see chapter 1 above), which also has a impact on wildlife⁵⁶, potentially leading to more species loss.

Conclusion: Overall, we believe that an area like Phibsborough, and the inner city in general, need transformative change to ensure communities are not impacted by dirty air and the coming effects of the climate breakdown. We made our concerns known twice to the NTA during the consultation stage. It is clear we have not been heard. This is a plan that will not only make people ill, but also a plan that proposes to continue infringing EU directives for years to come. We urge the NTA to revise their plan to ensure compliance and show communities living within the canals that they and their health matter.

Furthermore, the BusConnects plan for Phibsborough will see roads being widened and more land being paved over, which will make the area more susceptible to flooding, heat islands and air pollution. The space dedicated to the private car, which is the least efficient way of transporting people, is simply incompatible with climate mitigation and adaptation. By just removing one lane for cars or having a bus priority signalling from CrossGuns southbound, we would have space to plant trees, protect us against heat and heavy rains, to restore damaged habitats, to reduce noise and air pollution levels. Without this, Phibsborough will remain a highly polluted and highly trafficked place for years to come.

⁵⁴ https://ec.europa.eu/environment/nature/climatechange/index_en.htm

⁵⁵ https://livingplanet.panda.org/

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