
**April 2019**

Dublin City Council
Assessed by:
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## Executive Summary

### Objective

The following health and safety concerns were reported at Mountpleasant Avenue Upper, such as excessive traffic and mounting of the narrow pavement by vehicles on Mountpleasant Avenue Upper. Our objectives were to provide traffic safety measures and to help to eliminate rat-running traffic in the area.

In order to create a more sustainable city, and support the Dublin City Council development plan, and in accordance with national policy, places emphasis on the need for a modal shift from private motorised modes of transport towards public transport, cycling and walking.

### Solution

The Traffic Advisory Group recommended on the June 2018 South East Area Committee Meeting the following trial: A No Straight Ahead Signage (Except Cyclists) to Mountpleasant Avenue Upper from Mountpleasant Avenue Lower and, No Right Turn (Except Cyclists) to Mountpleasant Avenue Upper from Richmond Hill. Vehicles cannot enter from Mountpleasant Avenue Lower and Richmond Hill to Mountpleasant Avenue Upper. As a results the traffic would have to divert to the main arterial roads in the Area.

### Project outcome

The elimination of through traffic from Mountpleasant Avenue Lower to Mountpleasant Avenue Upper has significantly reduced the risk to pedestrians and cyclists.
There was a complete elimination of vehicles traveling from Mountpleasant Avenue Lower to Mountpleasant Avenue Upper.
There were no vehicles observed to be mounting the footpath on Mountpleasant Avenue Upper and with reduced volume of vehicles from Canal Road into Mountpleasant Avenue Lower. These improvements have encouraged more people to choose to walk or cycle by making the experience safer and more pleasant. Safer, more attractive and vibrant streets benefit everyone by generating more sustainable liveable communities.

Some of the vehicle trips which previously used Mountpleasant Avenue Lower and Upper have dispersed onto a number of other streets in the vicinity of the scheme. As some traffic was diverted to Richmond Hill, the implementation of new traffic measures will be recommended in the area.

There are now lower volume of vehicles travelling from Canal Road and Grove Road and Rathmines Road Lower in the morning and evening peak. There is a large decrease in outbound traffic that was rat-running from Canal Road and Grove Road into Mountpleasant Avenue Lower. During morning peak, there is a similar amount of vehicles travelling from Mountpleasant Avenue Upper inbound to Mountpleasant Avenue Lower, and turning left to Richmond Hill. During evening peak there is less vehicles driving from Mountpleasant Avenue Upper to Mountpleasant Avenue Lower and from Mountpleasant Avenue Upper to Richmond Hill. With the introduction of the scheme the numbers of cyclists will continue to increase in the area.

**It is Dublin City Councils professional recommendation the changes should be made permanent with a view to providing enhanced safety measures in this area.**

This report will be discussed at the South East Area Committee of 13th May 2019.

**Contents**

## Introduction

### Background

Dublin City Council has over a number of years received 11 service requests from members of the public and 4 motions from elected public representatives highlighting the impact of traffic volumes on Mountpleasant Avenue Upper. The following health and safety concerns were reported, such as excessive traffic and mounting of the narrow pavement by vehicles on these roads. The Traffic Advisory Group of Dublin City Council reviewed all the issues raised by the Councillors of the South East Area and local Residents. As a result, it was found that due to the narrowness of the carriageway and the heavy flow of traffic, oncoming vehicles were illegally driving on the footpath on Mountpleasant Avenue Upper.

Based on the above, the Traffic Advisory Group recommended on the June 2018 South East Area Committee Meeting the following trial: A No Straight Ahead Signage (Except Cyclists) to Mountpleasant Avenue Upper from Mountpleasant Avenue Lower and, No Right Turn **(**Except Cyclists**)** to Mountpleasant Avenue Upper from Richmond Hill. The aim of this study is to provide a report on the outcome of the implementation of the trial on Mountpleasant Avenue Upper and to reduce rat running traffic in the area.

### Policy Background

Some of the key policy documents are listed below.

### Dublin City Council Development Plan 2016 – 2022

The Development Plan for Dublin City Council includes a number of objectives and policies which are of relevance to the scheme. The following specific objectives and policies of the Development Plan are of greatest relevance to the scheme.

**Objectives:**

- To tackle the adverse environmental and road safety impacts of traffic in the city through measures such as: The implementation of traffic calming measures including the restriction of rat-runs in appropriate areas in accordance with best practice and following advice contained in the Design Manual for Urban Roads and Streets.

**Policies:**

- To improve the pedestrian environment and promote the development of a network of pedestrian routes which link residential areas with recreational, educational and employment destinations to create a pedestrian environment that is safe and accessible to all.
- To increase capacity for public transport, cycling and walking, where required, in order to achieve sustainable transportation policy objectives

### Dublin City Council Corporate Plan 2015-2019

Significantly improve pedestrian and walking facilities in the city

Place the pedestrian at the highest level of priority in transportation planning followed by cycling, public transport, goods and other vehicles

**Traffic Management Guidelines – Department of Transport**

The following excerpts from the Traffic Management Guidelines highlight the necessity to develop a road improvement scheme in order to enhance the public realm.
“Streets are (or ought to be) living spaces, an integral part of the community and the focus of many activities that link together people’s lives. The way in which streets are managed and used promotes or discourages a sense of community and makes them an attractive or unattractive place to live…This imbalance must be reversed if urban communities are to revive and prosper. Planners and engineers must take the lead in this process. The introduction of a road hierarchy and the management of traffic onto appropriate roads is a fundamental step in this process.”
“There are many examples where the road design and speed of traffic has discouraged pedestrian and cycle movement because of concerns over safety. It has also led to the creation of areas that are too similar and lack their own sense of local identity.”

**Design Manual for Urban Roads & Streets (DMURS) Department of Transport 2013**

The following recommendations of the Design Manual for Urban Roads and Streets were taken into account when developing the design for the scheme.
The creation of vibrant and active places requires pedestrian activity. This in turn requires walkable street networks that can be easily navigated and are well connected.
The limited use of vehicular cul-de-sacs may be considered in Neighbourhoods and Suburbs where there is a particular concern regarding through traffic.
Within existing networks, pressure is often applied from local communities to create vehicular cul-de-sacs. Designers should approach such requests with caution, as street closures will often simply shift the problem elsewhere. One-way streets have also been widely implemented, retrospectively, in order to filter vehicle permeability and relieve traffic congestion. The use of one-way systems for traffic management should also be approached with caution by designers as they: Promote faster speeds as drivers are likely to drive faster when no risk is perceived from oncoming traffic.
To encourage more sustainable travel patterns and safer streets, designers must place pedestrians at the top of the user hierarchy (see Figure 1). Walking is the most sustainable form of transport. The need for more walkable communities is also an issue of social equity as it is the poorest and most vulnerable in society, including children, the elderly and the disabled for whom car travel is less of an option. Designing for cyclists must also be given a high priority. Trips by bicycle have the potential to replace motor vehicles as an alternative means of transport for short to medium range trips.

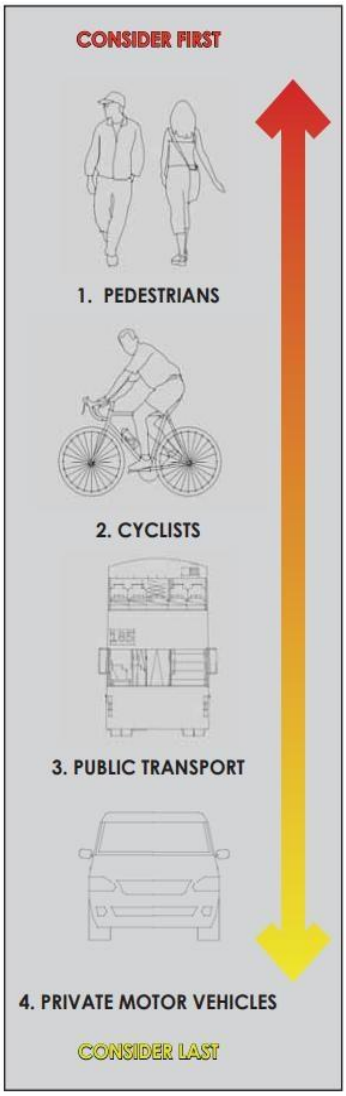


Figure 1

## Time Line of the Trial for Mountpleasant Avenue Upper

| Stage 1 | Stage 2 | Stage 3 | Stage4 |
|---|---|---|---|
| Measure the volume of vehicles prior to implementation of the signage on Tuesday 9th October 2018 between (07.00 to 19.00) at the locations A, B, C, D, E ,F (see below) | The installation of the Two No Entry Signs at the junction of Mountpleasant Avenue Upper/ Richmond Hill was implemented on the 29th of October 2018. | Measure the volume of vehicles after implementation of the trial on the Tuesday 26th February 2019. | A report and recommendation for the South East Area Committee Meeting presented for May 2019. |

Traffic counts during the period of the trial were performance before and after at the following location:

Site A – Canal Rd / Mountpleasant Ave (T – junction)
Site B – Mountpleasant Ave / Richmond Hill (t junction)
Site C – Richmond Hill / Rathmines Rd Lower (t junction)
Site D – Mountpleasant Ave / Castlewood Ave (crossroads)
Site E* - Parnell Road / Harold's Cross Road (crossroads)
Site F* - Mespil Road / Sussex Terrace (T-junction)

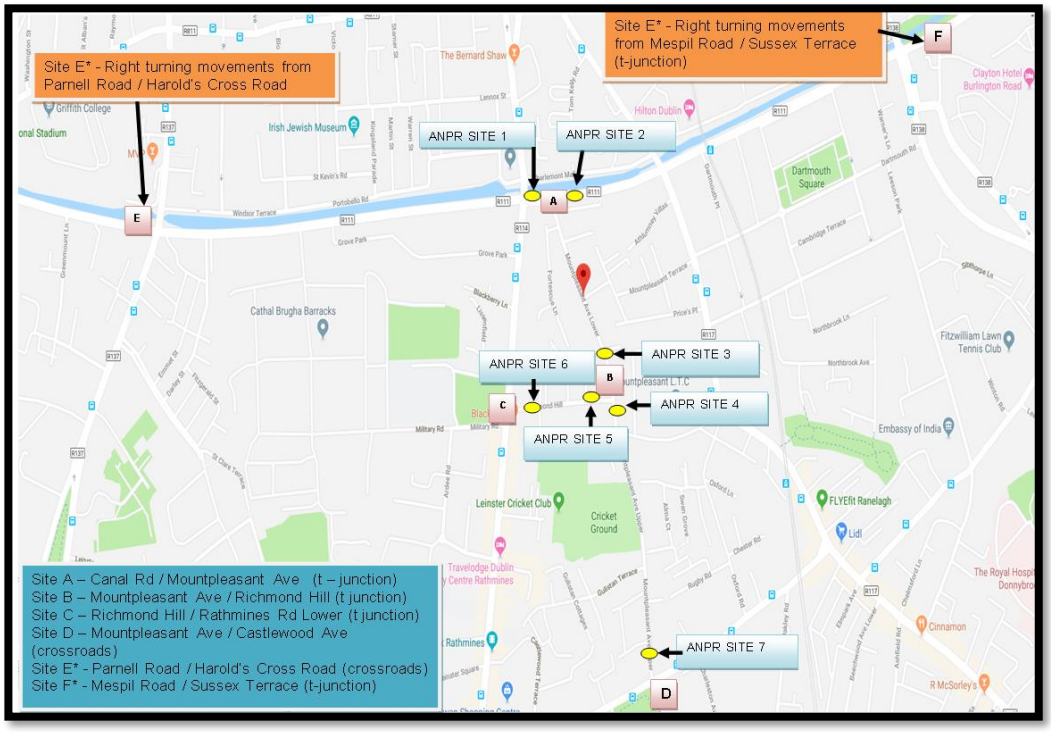



Figure 2. Site Map

## Evaluation of the Trial at Mountpleasant Avenue Upper

- Regular site inspections were made by the Area Engineers of the Traffic Advisory Group before and after the implementation of the trial.
- Data collection Traffic volumes of vehicles prior/after implementation at locations related within the pilot scheme
- Dublin Bus route 14, 140, 65B, 83,15A at Rathmines Road Lower and 18 Bus on Castlewood Avenue were monitored during this period.
- Speed detection surveys have been conducted before and after the introduction of the trial at Mountpleasant Avenue Upper and Lower, Richmond Hill, Alma Terrace and Bannaville.
- Feedback from the public was obtained by the Traffic Advisory Group via email to mountpleasantavenueuppertrial@dublincity.ie from the 29th October 2018 to the 12th March 2019.
- An Attitudinal Survey was carried out by independent consultant on behalf of Dublin City Council. Refer to the attached Appendix.

## Criteria Results - Summary Situation at Mountpleasant Avenue Upper with the implementation of the trial

i. Have safety concerns for pedestrians and cyclists on Mountpleasant Avenue Upper been improved /worsened?

Improved.

ii. Have safety concerns for pedestrians and cyclists on Mountpleasant Avenue Lower been improved /worsened?

Improved.

iii. Have safety concerns for pedestrians and cyclists on any other roads affected by the pilot scheme been improved / worsened?

It was observed before trial that vehicles travelling inbound on Richmond Hill were mounting the north side footpath during evening peak. This was observed to be occurring before, during and after the trial.

Cycling has improved outbound on Mountpleasant Avenue Upper due to installation of bollards.

iv. Has rat running been removed from Mountpleasant Avenue Upper?

Yes.

v. Has rat running been removed from Mountpleasant Avenue Lower?

There is huge decrease in traffic volumes from the Canal Road and Grove Road to Mountpleasant Avenue Lower during morning and evening peak.
Traffic volumes have slightly increased by 4% from Richmond Hill to Mountpleasant Avenue Lower during morning and evening peak.

## Criteria Results – Detailed

i. Have safety concerns for pedestrians and cyclists on Mountpleasant Avenue Upper been improved /worsened?

**The safety concerns for all road users on Mountpleasant Avenue Upper been have improved significantly.** No vehicles are mounting the footpath on Mountpleasant Avenue Upper. The 30 Km/h speed limit were introduced in the area during the trial. This greatly improves pedestrian safety

**Outbound morning peak of 7.00 am to 10.00 am**

Prior to the trial, 100 vehicles entered Mountpleasant Avenue Upper from Mountpleasant Avenue Lower.
After the trial, 3 vehicles enter the road from Mountpleasant Avenue Lower doing an illegal entry. This was a reduction of 97% of vehicles entering from Mountpleasant Avenue Lower to Mountpleasant Avenue Upper.
There is an enforcement issue, as it should be 100% reduction, this matter will be raised at the Traffic Advisory Group meeting with the Gardaí for enforcement.

After the trial there is a 19% increase in cyclists entering from Mountpleasant Avenue Lower to Mountpleasant Avenue Upper.
After the trial there is a 116% increase in cyclists from Richmond Hill turning right onto Mountpleasant Avenue Upper.
After the trial there is a 233% increase in cyclists turning right from Mountpleasant Avenue Lower into Richmond Hill.
This illustrates an increase in cycling activity in the area.

**Outbound evening peak of 16.00 pm to 19.00 pm**

Prior to the trial, 418 vehicles entered from Mountpleasant Avenue Lower to Mountpleasant Avenue Upper.
After the trial, 6 vehicles entered Mountpleasant Avenue Upper from Mountpleasant Avenue Lower doing an illegal entry.
There is a large reduction of 99% of vehicles entering from Mountpleasant Avenue Lower to Mountpleasant Avenue Upper in the evening peak. Again, this is an enforcement issue, as it should be 100% reduction. This matter will be also raised at the Traffic Advisory Group meeting with the Gardaí.

After the trial there is a huge 266% increase in cyclists from Richmond Hill turning right into Mountpleasant Avenue Upper. This illustrates an increase in cycling activity in the area.

**Inbound morning peak of 7.00 am to 10.00 am**

After the trial, there is a similar amount of vehicles travelling from Mountpleasant Avenue Upper inbound to Mountpleasant Avenue Lower, and turning left to Richmond Hill.
There is a 6% increase in vehicles from Richmond Hill to Mountpleasant Avenue Lower.

After the trial, there is a similar amount of cyclist travelling from Mountpleasant Avenue Upper to Mountpleasant Avenue Lower
There is a 19% increase in cyclists from Mountpleasant Avenue turning left to Richmond Hill. This illustrates an increase in cycling activity in the area.

**Inbound evening peak of 16.00 pm to 19.00 pm**

After the trial, during evening peak there is 14% less vehicles driving from Mountpleasant Avenue Upper to Mountpleasant Avenue Lower.
After the trial, during evening peak there is 9% less vehicles driving from Mountpleasant Avenue Upper to Richmond Hill.
After trial, there is a 21% increase in vehicles going from Richmond Hill to Mountpleasant Avenue Lower.

After the trial, there is a 15% increase in cyclists from Mountpleasant Avenue Upper to Mountpleasant Avenue Lower,
There is no change in volume of cyclists going from Richmond Hill to Mountpleasant Avenue Lower.

ii. Have safety concerns for pedestrians and cyclists on Mountpleasant Avenue Lower been improved /worsened?

**Safety concerns for all road users on Mountpleasant Avenue Lower been have improved significantly.**

**Outbound morning peak of 7.00 am to 10.00 am**
Prior to the trial, 163 vehicles entered Mountpleasant Avenue Lower from Canal Road and Grove Road.
After the trial, 114 vehicles entered the road from Canal Road and Grove Road. This is a reduction of 30% of vehicles entering from Canal Road.
There was a similar amount of cyclists entering from the Canal Road before and after trial.

**Outbound evening peak of 16.00 pm to 19.00 pm**
After the trial there is 57% reduction of vehicles travelling from Grove Road into Mountpleasant Avenue Lower.
There is 36% reduction of vehicles travelling from Canal Road into Mountpleasant Avenue Lower.

**Inbound morning peak of 7.00 am to 10.00 am**
There is similar amount of vehicles travelling from Mountpleasant Avenue Lower to Canal Road.

There is slightly more cyclists entering the Canal Road from Mountpleasant Avenue Lower. (4% increase in cyclists)

**Inbound evening peak of 16.00 pm to 19.00 pm**
There is 8% reduction of vehicles travelling from Mountpleasant Avenue Lower to Grove Road.

There is 9% increase of vehicles travelling from Mountpleasant Avenue Lower to Canal Road.

There is 36% increase in cyclists entering the Canal Road from Mountpleasant Avenue Lower. This illustrate an increase in cycling activity in the area.

iii. Have safety concerns for pedestrians and cyclists on any other roads affected by the pilot scheme been improved / worsened?

**No, it was observed before the trial that vehicles travelling inbound were mounting the north side footpath on Richmond Hill during evening peak. This was still observed before, after and during the trial. Therefore, in order to protect pedestrians, vulnerable road users, traffic measures are recommended for Richmond Hill**. (Please refer to Plan of Action for Roads in the Vicinity below).

Dublin City Council reduced the volume of vehicles travelling from Rathmines Road into Richmond Hill during morning and evening peak. After the trial,It was noted that there is a 51% decrease in vehicles from Rathmines Road Lower outbound into Richmond Hill. (These vehicles used to rat-run to Mountpleasant Avenue Upper)

There are lower volume of vehicles travelling from Canal Road and Grove Road and Rathmines Road Lower in the morning and evening peak.

In order to create a more sustainable city, in accordance to the development plan and national policy, places emphasis on the need for a modal shift from motorised private modes of transport towards public transport, cycling and walking. To help it along, we can change the way traffic moves around an area so that walking, cycling or using public transport becomes quicker, more convenient and more pleasant than driving. The scheme has brought to the area a reduction in traffic and increase in cycling in the area.

Dublin City Council pursues a sequential approach to securing modal shift from private vehicles modes of transport to more sustainable modes including walking, cycling and public transport. It promotes the development of a network of active, attractive and safe streets and public spaces which are memorable, and include, where appropriate, seating, and which encourage walking as the preferred means of movement between buildings and activities in the city.
Dublin City Council place a stronger emphasis on sustainable forms of transport such as walking, cycling and public transport, particularly for short trips and journeys to work and school.
Restricting through-traffic and calming traffic generally to the city centre, and to give increased levels of priority for pedestrians, cyclists and public transport, along with associated improvements to public realm. Achieving a reduction in pollution and greenhouse gas generation, so helping to mitigate climate change.

Dublin City Council tackle these issues holistically so as to facilitate continued economic activity while reducing vehicular congestion and improving air quality, so having a positive impact on health.

iv. Has rat running been removed from Mountpleasant Avenue Upper?

**During the morning peak 7.00 am to 10.00 am**

Prior to the implementation of the trial, during the morning peak a total 195 vehicles travelled from Mountpleasant Avenue Lower and Richmond Hill to Mountpleasant Avenue Upper. After the trial, only 3 vehicles travelled from Mountpleasant Avenue Lower and Richmond Hill to Mountpleasant Avenue Upper.

There is a 50% reduction in vehicles turning right from Mountpleasant Avenue Upper to Belgrave Square North.
There is a 78% reduction in vehicles going from Mountpleasant Avenue Upper to Belgrave Square East.
There is an 89% reduction vehicles turning left from Mountpleasant Avenue Upper to Ranelagh.
**Yes, this shows there has been a large reduction in rat running traffic outbound from the Canal Road and Grove Road / City Centre to Charleston Road.**

**During the evening peak 16.00 pm to 19.00 pm**
Prior to the implementation of the trial, during the evening peak, a total 642 vehicles travelled from Mountpleasant Avenue Lower and Richmond Hill to Mountpleasant Avenue Upper. After trial, only 7 vehicles were illegally entering into Mountpleasant Avenue Upper.

There is a 94% reduction of traffic exiting Mountpleasant Avenue Upper to Belgrave Square East.
There is a 76% reduction of traffic turning right from Mountpleasant Avenue Upper to Belgrave Square North
There is a 91% reduction of traffic turning left from Mountpleasant Avenue Upper to Charleston Road.
**Yes, this clearly shows there has been a large reduction in rat running traffic outbound from the Canal Road and Grove Road / City Centre.**

v Has rat running been removed from Mountpleasant Avenue Lower?

Inbound morning peak and evening peak from Mountpleasant Avenue Upper and Richmond Hill
At morning peak there is a 4% (39 additional vehicles) increase in inbound traffic from Mountpleasant Avenue Upper and Richmond Hill to Mountpleasant Avenue Lower.
It was noted that before and after same amount of vehicle travel from Mountpleasant Avenue Upper to Mountpleasant Avenue Lower.

At evening peak there is a 4% (15 additional vehicles) increase in inbound traffic from Mountpleasant Avenue Upper and Richmond Hill to Mountpleasant Avenue Lower.

There is an increase of 35 vehicles exiting inbound from Mountpleasant Avenue Lower inbound to Canal Road and Grove Road during morning peak.

There is an inbound increase of 17 vehicles exiting Mountpleasant Avenue Lower to Canal Road and inbound decrease of 11 vehicles exiting Mountpleasant Avenue Lower to Grove Road during evening peak.

Outbound morning peak, prior to the trial, 163 vehicles entered Mountpleasant Avenue Lower from Canal Road and Grove Road.
After the trial, 114 vehicles entered Mountpleasant Avenue Lower from Canal Road and Grove Road. This is a reduction of 30% of vehicles entering from Canal Road.
This shows there is a decrease in rat-running outbound on Mountpleasant Avenue Lower from Canal Road and Grove Road.

Outbound evening peak, after the trial there is 57% reduction of vehicles travelling from Grove Road into Mountpleasant Avenue Lower.
There is 36% reduction of vehicles travelling from Canal Road into Mountpleasant Avenue Lower.

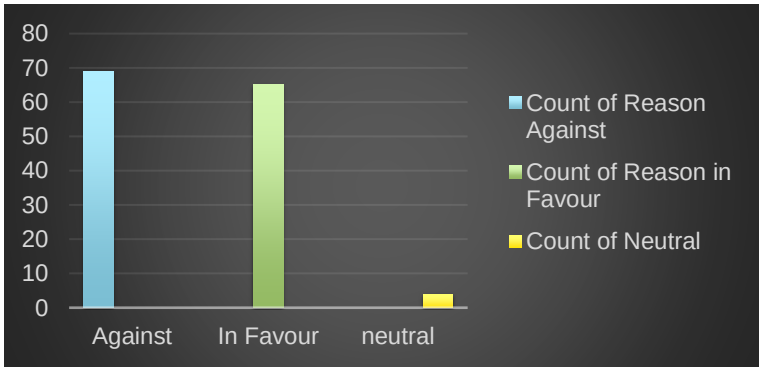
**Overall there is a slight increase in traffic in the inbound traffic on Mountpleasant Avenue Lower during morning peak and evening peak, but there is a large decrease in outbound traffic that was rat-running from Canal Road and Grove Road into Mountpleasant Avenue Lower.**

## Trial Feedback

A mechanism was put in place such that the public could provide comments on the scheme as it progressed and this feedback was accepted via post and email through mountpleasantavenueuppertrial@dublincity.ie from the 29th October 2018 to the 12thMarch 2019. 138 correspondences were received during the feedback period.
In addition DCC commissioned an independent survey of the 227 households in the area and a total of 97 respondents were received. The survey was carried out on the 7th to the 10th of March 2019. A breakdown of this feedback is given at the appendix below.

**Email feedback**

| Resident/Sender | Count of Reason Against | Count of Reason in Favour | Count of Neutral |
|---|---|---|---|
| Against | 69 | | |
| In Favour | | 65 | |
| neutral | | | 4 |
| **Grand Total** | **69** | **65** | **4** |




From 138 correspondences received 69 residents were against versus 65 in favour, 4 were neutral. 41 out of 69 that were against the scheme claimed that it would cause inconvenience.

## Breakdown of Feedback

**1. Safety for children's and cyclist.**

Feedback claimed that Mountpleasant Avenue Upper was much safer especially for children due to cars were not mounting the footpath and the reduction of traffic in the area.
**"Less traffic in this residential area and it appears to be safer for pedestrians and cyclists".** (Residents comments)

**“It has resulted in the reduction of serious safety issues stemming from the unsustainably large traffic volumes commuting on our narrow residential road, particularly at the dangerous pinch point at Richmond Place”.**(Resident comments)

## 2. Inconvenience

The pilot scheme was expected to cause a degree of inconvenience to some road users, in particular those who travelled by vehicles that used the residential roads of Mountpleasant Avenue Upper, Mountpleasant Avenue Lower, and Richmond Hill as a short cut.
With the removal of the shortcut, many private motor car users were effectively diverted onto the more appropriate Rathmines Road Lower. While we endeavor to reduce congestion, our priorities as set out above to promote sustainable transport.
Sustainable forms of transport such as public transport, walking, and cycling are strongly promoted in the Dublin City Council Corporate Plan which is supported by the public representatives, which takes a pro-active approach to influence travel behaviour and effective traffic management. These are seen as important elements of a progressive policy that can contribute to climate change mitigation and a more sustainable city.
Pro-active traffic management is an ongoing requirement, and Dublin City Council has sought to limit the growth of peak hour traffic within the canal cordon.

With the dispersion of private car trips to a number of other roads in the area, there has been overall a slight increase in traffic in the inbound traffic on Mountpleasant Avenue Lower during morning peak and evening peak, but there is a large decrease in outbound traffic that was rat-running from Canal Road and Grove Road into Mountpleasant Avenue Lower.

Dispersion of traffic to other streets is discussed in greater detail below (see Appendix).

## 3. Public Transport

Dublin City Council analysed the bus journey data before and after the Mountpleasant trial. A Journey Time Comparison Report for Dublin Bus routes Rathmines Road to Rathgar Road 14,140,65B,83,15A, and on 18 Bus on Castlewood Avenue (Ranelagh) to Rathgar Road. Observation were made inbound and outbound.

Overall the bus journey in AM peak for routes 14, 140, 65B, 83,15A inbound and outbound decreased in journey time. In the PM the 14, 140, 65B, 83,15A, the inbound journey decreased by 12 seconds whereas the outbound journey increased by 12 seconds.
For the 18 bus route inbound and outbound decreased in journey time in AM peak and PM peak.

Public transport is a high priority for Dublin City Council, only the 18 bus journey outbound in PM peak was affected, however it does not override the Health and Safety concerns discussed above. The city council’s designated the ITS Bus priority team to continue to monitor bus performance throughout the city.

## 4. Speed in the Area


Claims were made that with the introduction of the pilot scheme, speed will increase on the roads.

The following actions were taken during the period of the trial:
Firstly, the introduction of 30 km/h in the road:
Dublin City Council's Environment and Transportation Department, in conjunction with key stakeholders, have over the past few years commenced the rollout of a 30km/h speed limit across the city.
This deployment, which includes 30km/h periodic speed limits at certain schools, is being implemented in four phases and, to date, the lower speed limit has been introduced successful into many areas close to the city centre.

Phases 1, 2 & 3 of the 30km/h speed limit were introduced between 2017 and 2019. The Transportation Road Safety Policy, Strategy and Innovation have implemented 30 km/h in Mountpleasant Avenue Upper, Mountpleasant Avenue Lower and Richmond Hill in October 2018.

With the implementation of the speed limit it was noted that there was a safer and calmer environments for pedestrians, cyclists and motorists in the Mountpleasant area.

Secondly, speed detection surveys have been conducted before and after the introduction of the trial at selected locations. (Please see Table 1).

The resultant 85% percentile speed on Mountpleasant Avenue Lower and Bannaville did not exceed the speed limit 30 km/h.

The resultant 85% percentile speed on Mountpleasant Avenue Upper at the junction of Richmond Place before the trial was found to be 33 km/h, and with the implementation of the trial reduced to 25 km/h.

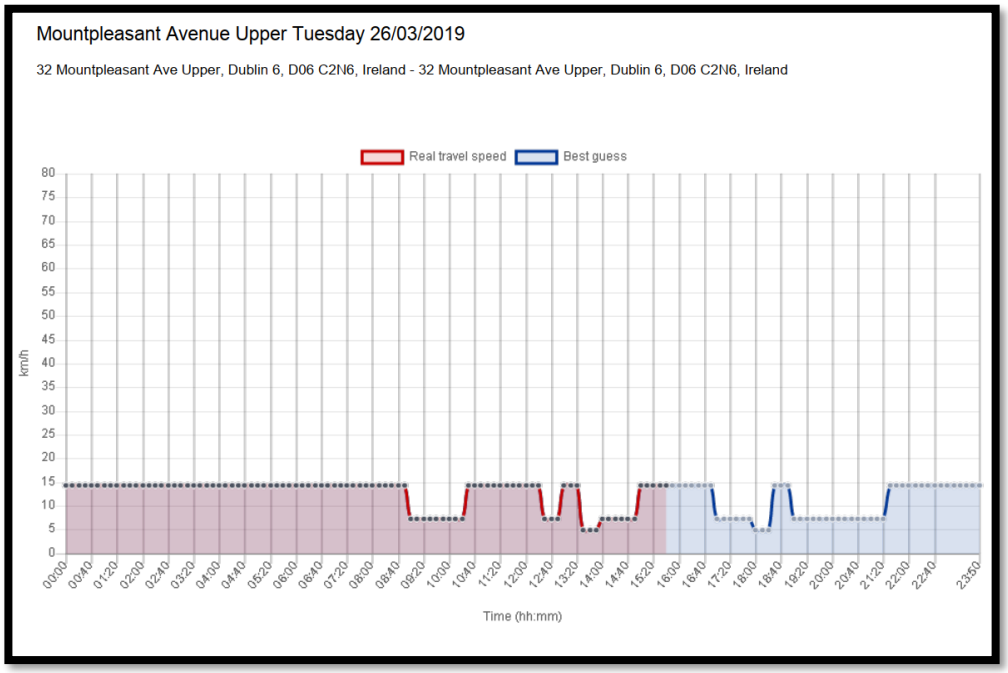
The resultant 85% percentile speed on Mountpleasant Avenue Upper at the junction of Alma Terrace was found to be 35 km/h, an increase of the speed in the road of 1 km/h. therefore, it is recommended to introduce a 3D line marking ramp which will act as a traffic calming measure at this location.

At Richmond Hill, the resultant 85% percentile speed was found 35 km/h. Therefore 30 km/h roundels painted are recommended to be put in place as a traffic calming measure at this location.

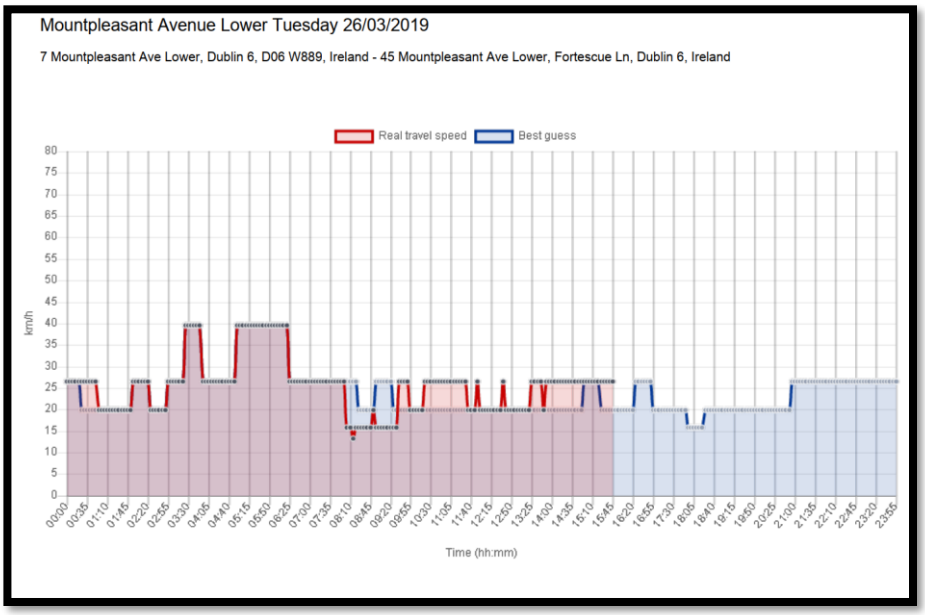
## Table 1 - Speed Survey Review:

| Ref: | Evaluation time before trial | Location | Speed before trial V85 [km/h] | Evaluation time after trial | Speed after trial V85 [km/h] | up or down [km/h] |
|---|---|---|---|---|---|---|
| 1.  | 18th July 2017 8:00 AM to 19th July 2017 8:00 Am | Mountpleasant Avenue Lower | 46 | 20th Mar 2019 07:00 AM to 21th Mar 2019 08:00 AM | 25 | -21 |
| 2.  | 25th Oct 2018 07:00 AM to 26th Oct 2018 08:00 AM | Bannaville | 33 | 20th Mar 2019 07:00 AM to 21th Mar 2019 08:00 AM | 27 | -6 |
| 3.  | 18th July 2017 8:00 AM to 19th July, 2017 8:00 AM | Mountpleasant Avenue Upper at the junction of Richmond Place | 43 | 21th Mar 2019, 07:00 AM to 22th Mar 2019 08:00 AM | 33 | -10 |
| 4.  | 22th Oct 2018 07:00 AM to 23th Oct 2018 08:00 AM | Mountpleasant Avenue Upper at the junction of Alma Terrace | 34 | 20th Mar 2019 07:00 AM to 21th Mar 2019 08:00 AM | 35 | +1 |
| 5.  | 5th Sept 2013 | Richmond Hill | 33 | 20th Mar 2019 07:00 AM to 21th Mar 2019 08:00 AM | 35 | +2 |

The area engineer requested an extra speed survey from the Transportation Road Safety Policy, Strategy and Innovation section, please see below the speed data collected.




At Mountpleasant Avenue Upper, vehicles were traveling at 15 km/h. No speed was found in the area.




At Mountpleasant Avenue Lower, vehicles were traveling at 25 km/h. speed violation was found during the time 03.30 a.m. to 06.25 a.m.
There is an enforcement issue and this matter will be raised at the Traffic Advisory Group meeting with the Gardaí for enforcement.
Richmond Hill data could not get collected due to the low volume of vehicles travelling in the area.

## 5. Cycling and Walking in the Area

In order to create a more sustainable city, the development plan, in accordance with national policy, places emphasis on the need for a modal shift from motorised private modes of transport towards public transport, cycling and walking.


### Pedestrians from all walks of life

Dublin City's streets should be welcoming places for everyone to walk, spend time in and engage in community life.

### People choose to walk, cycle and use public transport

Walking and cycling are the healthiest and most sustainable ways to travel, either for whole trips or as part of longer journeys on public transport. A successful transport system encourages and enables more people to walk and cycle more often. This will only happen if we reduce the volume and dominance of motor traffic and improve the experience of being on our streets.

### Clean air

Improving air quality delivers benefits for everyone and reduces unfair health inequalities.

**People feel safe**

The whole community should feel comfortable and safe on our streets at all times. People should not feel worried about road danger or experience threats to their personal safety.

**Not too noisy**

Reducing the noise impacts of motor traffic will directly benefit health, improve the ambience of street environments and encourage active travel and human interaction.

**Easy to cross**

Making streets easier to cross is important to encourage more walking and to connect communities. People prefer direct routes and being able to cross streets at their convenience. Physical barriers and fast moving or heavy traffic can make streets difficult to cross.

**Places to stop and rest**

A lack of resting places can limit mobility for certain groups of people. Ensuring there are places to stop and rest benefits everyone, including local businesses, as people will be more willing to visit, spend time in, or meet other people on our streets.

**Shade and shelter**

Providing shade and shelter from high winds, heavy rain and direct sun enables everybody to use our streets, whatever the weather.

**People feel relaxed**

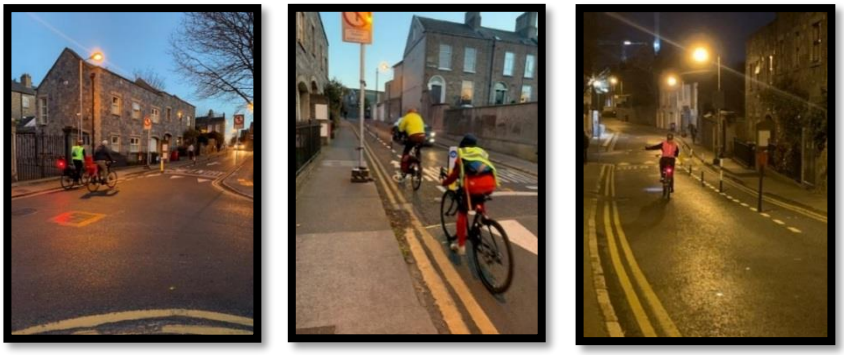
A wider range of people will choose to walk or cycle if our streets are not dominated by motorised traffic, and if pavements and cycle paths are not overcrowded, dirty, cluttered or in disrepair.

**Things to see and do**

People are more likely to use our streets when their journey is interesting and stimulating, with attractive views, buildings, planting and street art and where other people are using the street. They will be less dependent on cars if the shops and services they need are within short distances so they do not need to drive to get to them.

**It is an Objective of Dublin City Council:**

- To improve existing cycle-ways and bicycle priority measures throughout the city, and to create cycle lanes, where appropriate and feasible.
- To improve permeability for cyclists by reducing the speed limits to 30kph and allowing contraflow cycling on all single lane one way streets, and to provide a segregated contraflow cycle lane on all one way streets with two or more lanes, except where engineering report demonstrates risk is too high.



**Contraflow lane at Mountpleasant Avenue Upper with Mountpleasant Avenue Lower and Richmond Hill**

After the trial there is a 233% increase in cyclists turning right from Mountpleasant Avenue Lower into Richmond Hill. After the trial there is a huge 266% increase in cyclists from Richmond Hill turning right into Mountpleasant Avenue Upper. There is a 19% increase in cyclists from Mountpleasant Avenue turning left to Richmond Hill.
After trial, there is a 15% increase in cyclists from Mountpleasant Avenue Upper to Mountpleasant Avenue Lower. After the trial there is a 19% increase in cyclists entering from Mountpleasant Avenue Lower to Mountpleasant Avenue Upper. There is 36% increase in cyclists entering the Canal Road from Mountpleasant Avenue Lower.

With the introduction of the pilot scheme the numbers of cyclists will continue to increase in the area.

Walking is a healthy and sustainable form of transport that can improve levels of health in the community, provide activity and vibrancy on the street and in public spaces and reduce road traffic volumes. The following schools and other public facility are in the vicinity of Mountpleasant Avenue.

- Leeson Park School Of Music
- St Mary's College, Dublin
- Ladybug Creche & Montessori
- Master Ding Academy
- Kids Inc - Creche & Montessori,Ranelagh
- Ranelagh Multi-Denominational School
- IELO Internet English Learn Online
- Stage Screen Classes
- Sandford Park School
- Leinster Cricket Club

Feedback from attitudinal survey residents claim that:
**“It is safer for school children crossing in Mountpleasant Avenue Upper”**
**“As less traffic makes it safer”**
**“Much calmer on the road - cars have stopped mounting the footpaths”**
**“Reduction of trucks driving on footpaths”**

It is the Policy of Dublin City Council to place pedestrians are at the top of the movement hierarchy. Providing and maintaining a high-quality pedestrian environment is considered critical to promoting a culture of walking, and Dublin City Council will actively encourage walking as the foremost mode of transportation throughout the city.

## Improvement Plan of Action for Roads in the Vicinity

In order to protect pedestrians, the following traffic measure are recommended at Richmond Hill, Richmond Place and Mountpleasant Avenue:

- Install a Yield sign with the line markings at the junction of Richmond Hill with Mountpleasant Avenue Lower.
- The installations of flexible bollards on footpath at St Mary's Day Centre are recommended to stop observed illegal driving on footpath.
- In order to facilitate the flow of traffic at the junction of Richmond Hill with Rathmines Road Lower it is necessary to rescind 2 car parking spaces at this location and the installation of Double yellow lines is recommended on it.
- The Installation of lane indication arrows to turn left and right (M126) at the junction of Richmond Place with Mountpleasant Avenue Upper is recommended in order to advise driver that Mountpleasant Avenue upper still allow two way traffic movement.
- 30km/h roundels marking are recommended to be placed at the entrance and exit of Mountpleasant Avenue Upper / Lower and Richmond Hill in combination with slow road markings.
- In order to slow down vehicles, a 3D line marking ramp is recommended at the junction of Mountpleasant Avenue Upper with Alma Terrace.

**Traffic Calming Measures at junction of Richmond Hill / Mountpleasant Avenue Upper**

## Conclusion

Dublin City Council has received over a number of years 11 service requests from members of the public and 4 motions from the elected public representatives highlighting the impact of traffic volumes on Mountpleasant Avenue Upper.
The Traffic Advisory Group of Dublin City Council reviewed all the issues raised by the Councillors of the South East Area and local residents. As a result, it was found that due to the narrowness of the carriageway and the heavy flow of traffic, oncoming vehicles were illegally driving on the footpath on Mountpleasant Avenue Upper.

The traffic calming measures were implemented primarily to alleviate these health and safety concerns. The elimination of through traffic from Mountpleasant Avenue Lower to Mountpleasant Avenue Upper significantly reduced the risk to pedestrians and cyclists.
There were no vehicles observed to be mounting the footpath on Mountpleasant Avenue Upper and with reduced volume of vehicles (51% less from before the trial) from Canal Road into Mountpleasant Avenue Lower.

A consequence of the scheme was the ability to promote sustainable forms of transport such as cycling and walking as set out in the initiatives contained in the government's, 'Smarter Travel, A Sustainable Transport Future 2009-2020' and the policies and objectives of the Dublin City Development Plan 2016-2022.

The improvements have encouraged more people to choose to walk or cycle by making the experience safer and more pleasant. Safer, more attractive and vibrant streets benefit everyone by generating and sustaining communities and neighborhoods, with wide ranging economic, social and environmental consequences.

With the implementation of the traffic calming scheme, some of the private motorcar trips which previously used Mountpleasant Avenue lower and Upper have dispersed onto a number of other streets in the vicinity of the scheme.

Some of the private motorcar trips which previously used Mountpleasant Avenue Lower and Upper have dispersed onto a number of other streets in the vicinity of the scheme. As some traffic was diverted to Richmond Hill, the implementation of new traffic measures will be recommended in the area.

The volume of traffic on the surrounding streets Rathmines Road Lower, Grove Road / Canal Road Charleston Road are more proportionate to their size and nature and the footpaths are generally less impeded than the footpaths of Mountpleasant Upper. Therefore the increased traffic on these roads has not impacted on pedestrian safety on these streets where conflicts among the various road users less are likely to occur.

With the introduction of the scheme the numbers of cyclists will continue to increase in the area.

**It is Dublin City Councils professional recommendation the changes should be made permanent with a view to providing enhanced safety measures in this area.**

This report will be discussed at the South East Area Committee of 13th May 2019.

# APPENDIX


April 2019

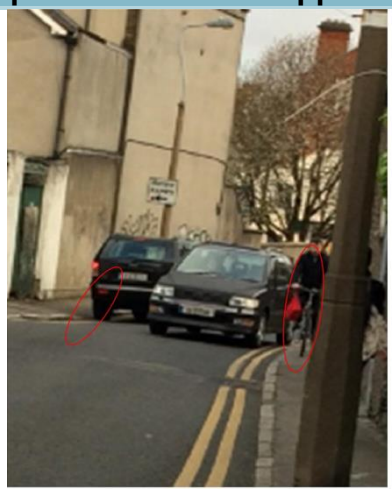
Dublin City Council
Assessed by:
Senior Executive Neil O'Donoghue South Area
Rossana Camargo Area Engineer South East Area

## Appendix

### 1. Situation at Mountpleasant Avenue Upper before the Trial

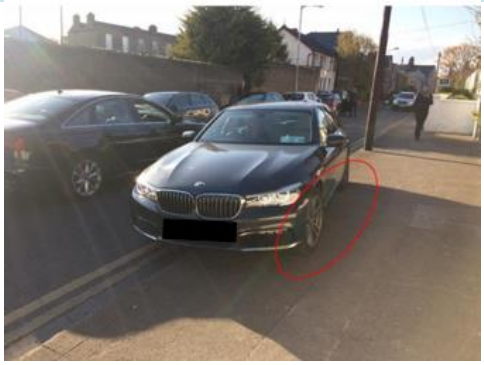
**Vehicles driving on the footpath at Mountpleasant Avenue Upper North**

Dangerous for pedestrians



Dangerous for cyclists

**Vehicles driving on the footpath at Mountpleasant Avenue Upper South**

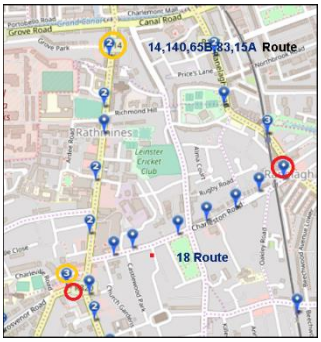



## 2. Situation at Mountpleasant Avenue Upper after the Trial

**Calmed area at Mountpleasant Avenue Upper and safety for cycling**

## 3. Data Collected during the trial

### A. Public Transport bus data




| Site | Bus Routes | Difference AM 7.00-10.00 | Difference PM 16.00-19.00 |
|---|---|---|---|
| Rathmines Rd /Grove Park to Rathmines Rd /Castlewood Ave outbound | 14,140,65B,83,15A | -5.6 sec/h | 12 sec/h |
| Rathmines Rd /Leinster Rd to Grove Park inbound | 14,140,65B,83,15A | -7.6 sec/h | -12 sec/h |
| Charleston Rd /Ranelagh Rd to Rathgar Rd /Garda Station outbound | 18 | -29 sec/h | 25 sec/h |
| Rathgar Rd /Rathmines Rd to Charleston Rd /Oakley Road inbound | 18 | -194 sec/h | -6 sec/h |

Dublin City analysed the bus journey data before and after the Mountpleasant trial.
The Journey Time Comparison Report for Dublin Bus routes on 14,140,65B,83,15A Buses from Rathmines Road to Rathgar Road, and on 18 Bus on Castlewood Avenue (Ranelagh) to Rathgar Road. Observation were made inbound and outbound.

**For routes 14, 140, 65B, 83,15A**

The average journey time for all bus routes outbound during AM peak decreased with an average of 5.6 seconds per hour.
The average journey time for all bus routes inbound during AM peak decreased with an average of 7.6 seconds per hour.

**For routes 18**

The average journey time for bus route outbound during AM peak decreased with an average of 29 seconds per hour.
The average journey time for bus route inbound during AM peak increased with an average of 25 seconds per hour.

**For routes 14, 140, 65B, 83,15A**

The average journey time for all bus routes outbound during PM peak increased with an average of 12 seconds per hour.
The average journey time for all bus routes inbound during PM peak decreased with an average of 12 seconds per hour.

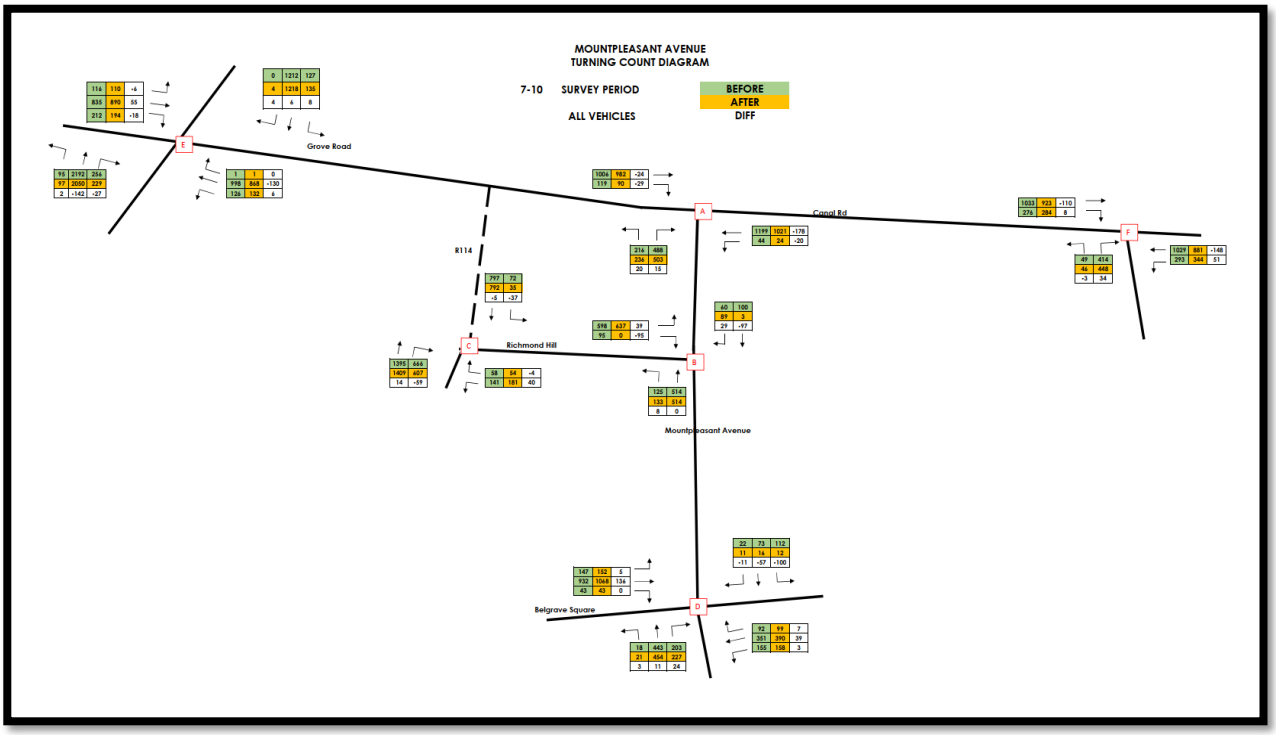
**For routes 18**

The average journey time for bus route outbound during PM peak increased with an average of 25 seconds per hour.

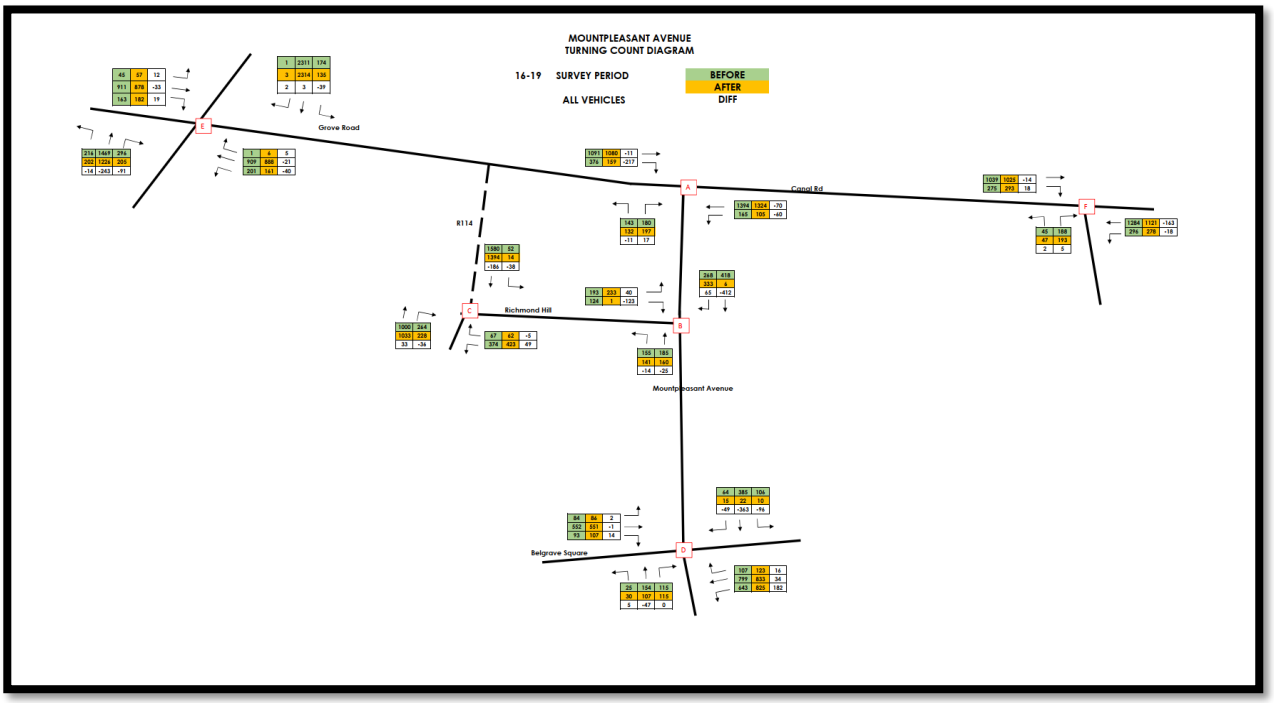
The average journey time for all bus route inbound during PM peak decreased with an average of 6 seconds per hour.

## B. Traffic Volumes on Surrounding Roads

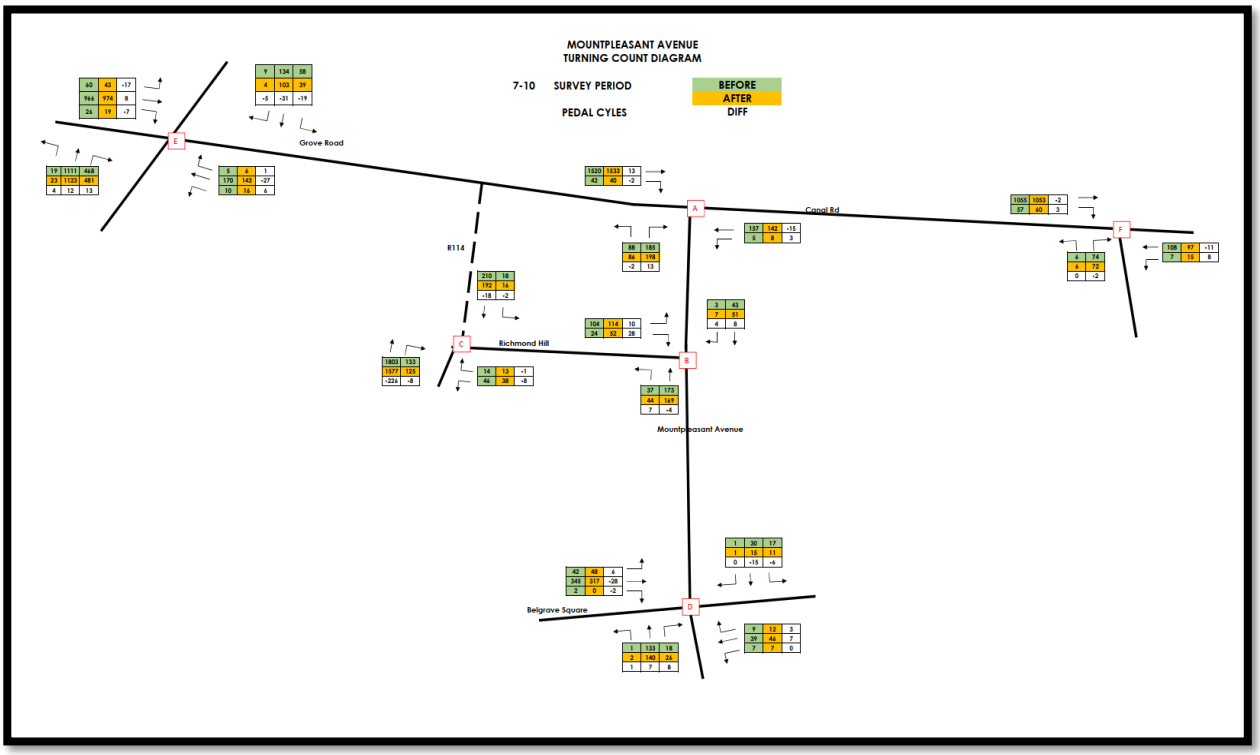
- **Mountpleasant Avenue turning count diagram AM peak (07.00 to 10.00) all vehicles**



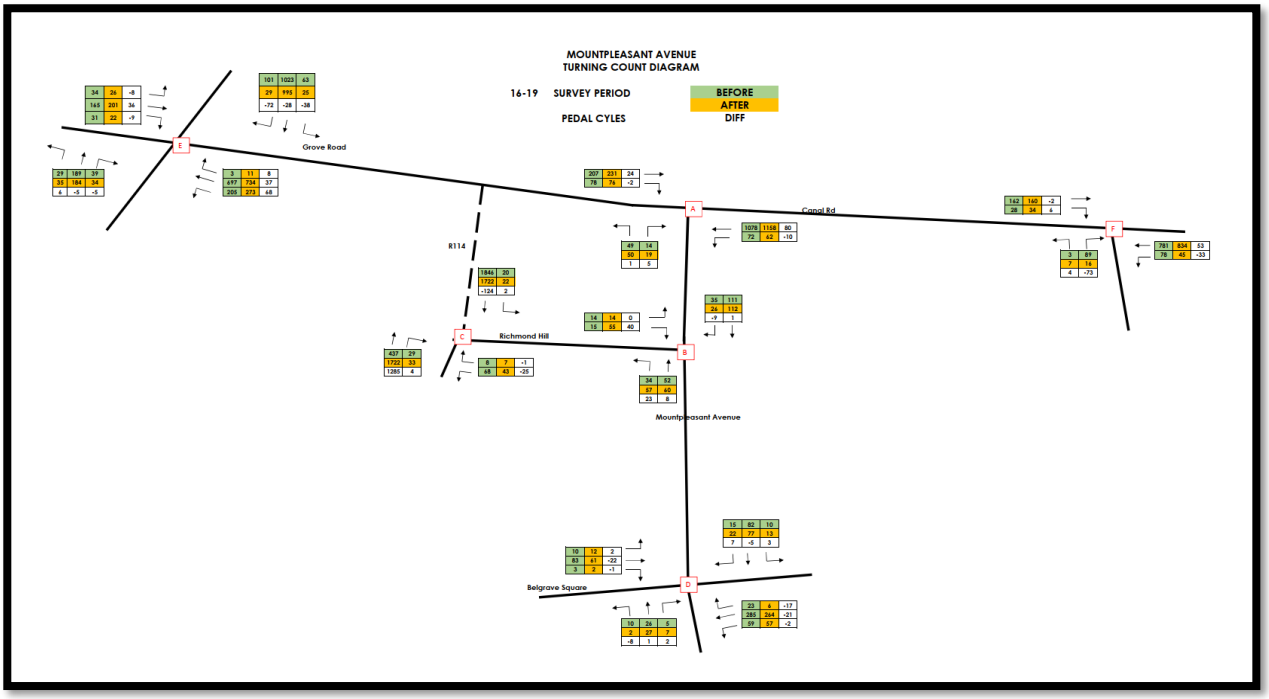

- **Mountpleasant Avenue turning count diagram PM peak (16.00 to 19.00) all vehicles**



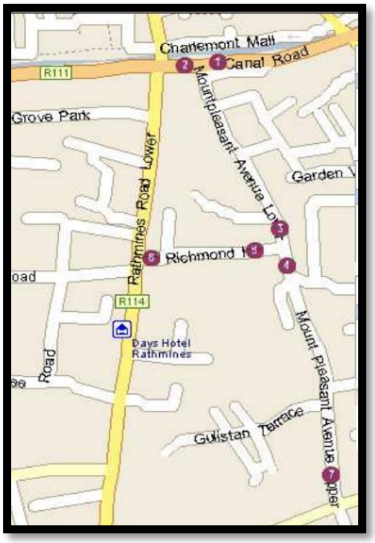
- **Mountpleasant Avenue turning count diagram AM peak (7.00 to 10.00) pedal cycles**




- **Mountpleasant Avenue Turning Count Diagram PM peak (16.00 to 19.00) pedal cycles**



- **ANPR sites 1 to 7 Registration Plate Observations**




Survey Dates: Tuesday 9th October and Tuesday 26th February 2019
Survey Times 07.00 to 19.00

From 1W to 7S only 7 vehicles were travelling
From 1W left turn Canal Road to Richmond Hill (rat-running), there is an increase in the morning peak of 6 vehicles and a decreases of -6 vehicles at in the evening
At Richmond Hill from 14 vehicles to 31 vehicles in the AM were travelling, in the evening the increase was from 48 to 63
From 1W to 7N it was a decreases of -7 vehicles and in the evening a decreases of -47 vehicles.
From 2E there was -47 decreases and -142 at the evening
From 6E to 7there was -61 in the morning and -86 at the evening

## C. Attitudinal Survey

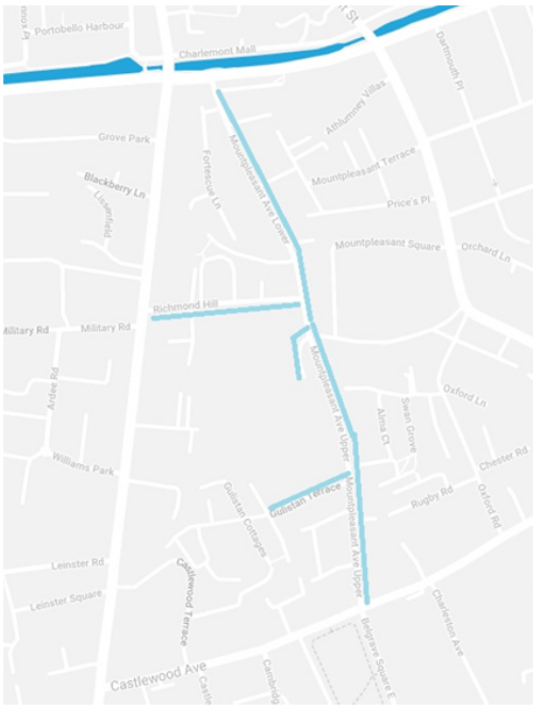
Dublin City Council engaged with Delve Research to carry out an independent attitudinal survey of residents in the area. Of the 227 households in the area a total of 97 respondents (shown below) responded to the random survey (face to face interviews).

# Background

- Total 97 respondents (households)
- Face-to-face interviews in defined residential area
- Fieldwork March 7th to 10th 2019
- All respondents resident in the area since at least March 2018

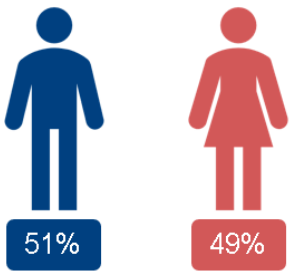
| Location | Representation |
|---|---|
| Mountpleasant Avenue Upper | 30% |
| Mountpleasant Avenue Lower | 25% |
| Richmond Hill | 25% |
| Richmond Place | 5% |
| Guliston Terrace | 15% |
| Total | 100% |

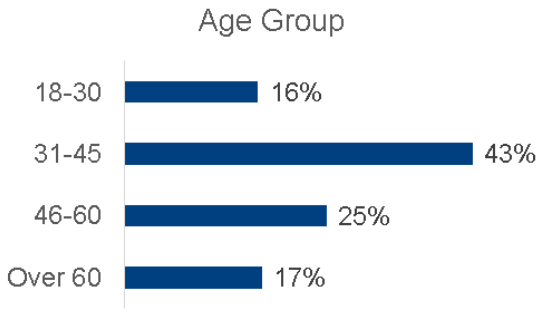
Responses weighted to represent population distribution in the area

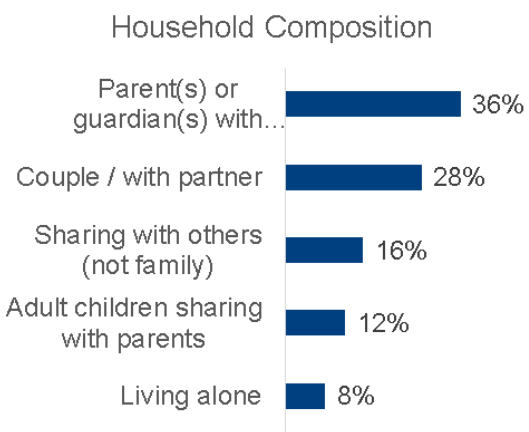


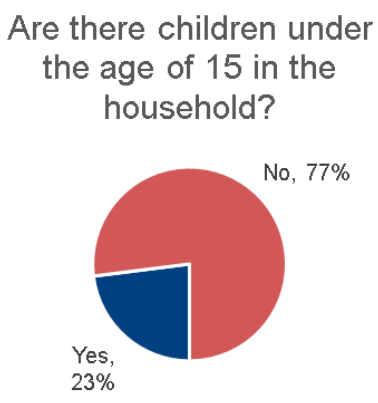

A summary of the findings of Delve Research are shown below.

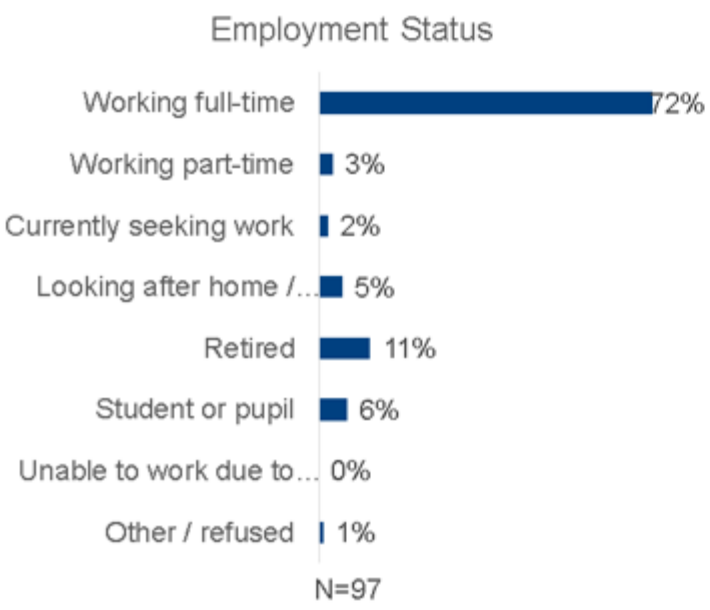
# Respondent Profile

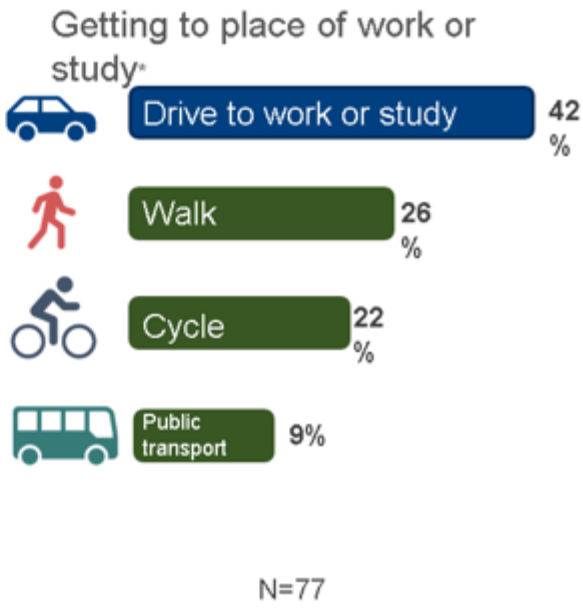


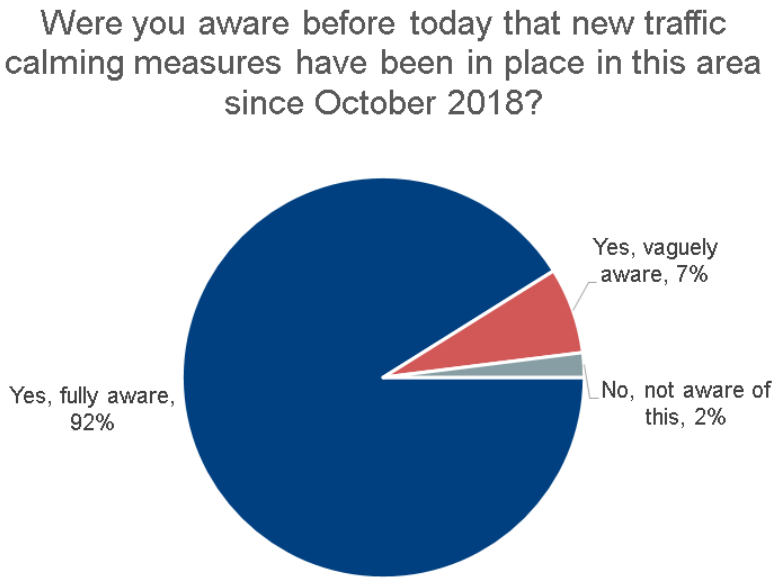



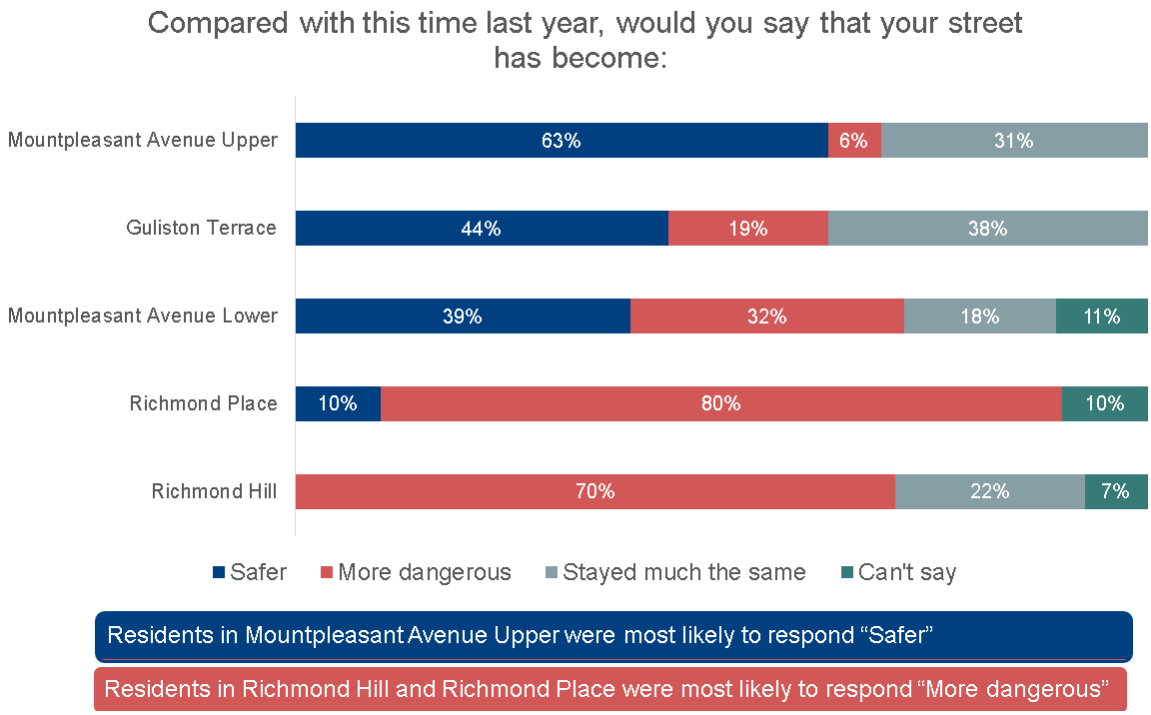



## Awareness of traffic calming measures



## Safety compared with 12 months ago

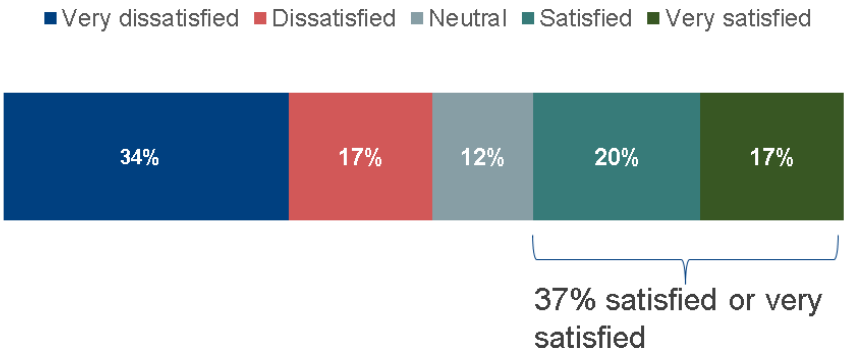



Residents in Mountpleasant Avenue Upper were most likely to respond "Safer"

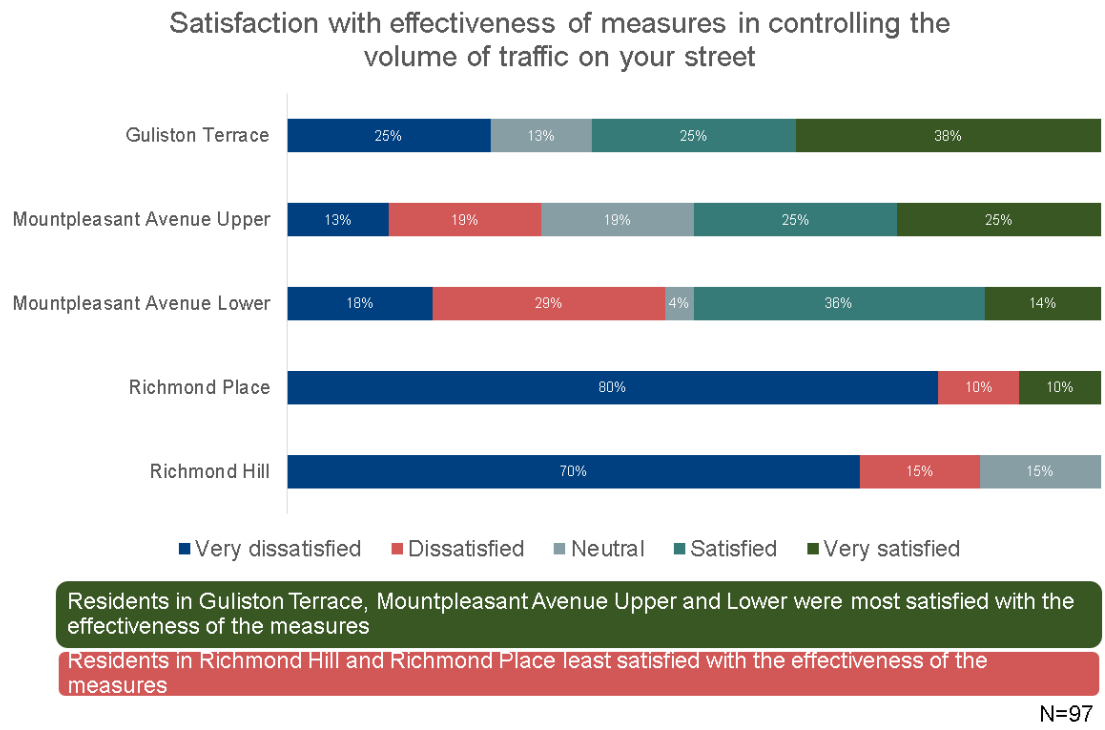
Residents in Richmond Hill and Richmond Place were most likely to respond "More dangerous"

## Effectiveness of traffic measures

In October 2018, Dublin City Council introduced traffic calming measures that consists of
No Straight Ahead Signage (Except Cyclists) to Mountpleasant Avenue Upper from Mountpleasant Avenue Lower and, No Right Turn (Except Cyclists) to Mountpleasant Avenue
Upper from Richmond Hill. How effective do you feel this has been in controlling the volume
of traffic on your street?




N=97

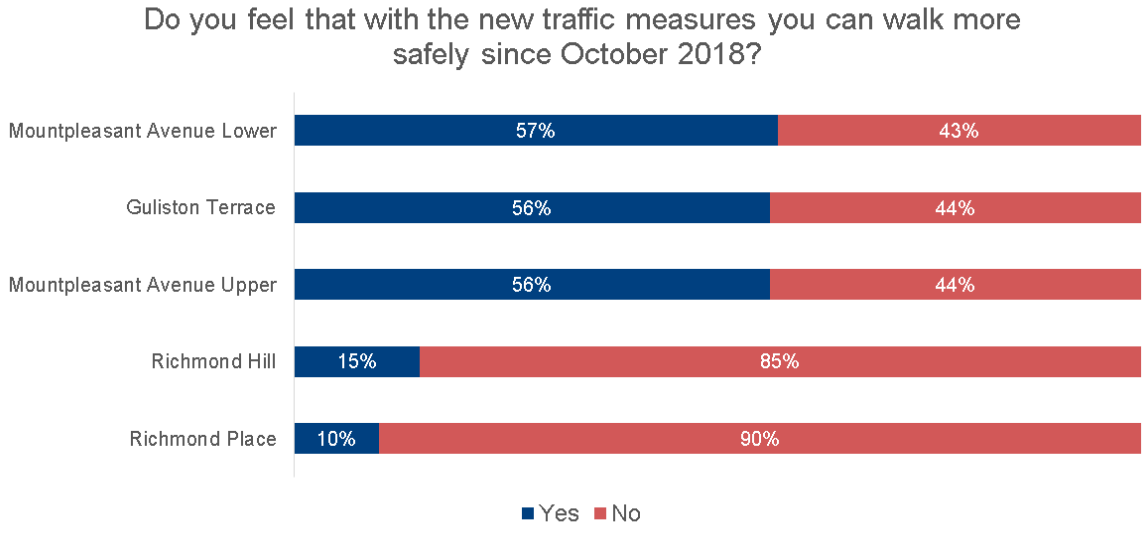



Residents in Guliston Terrace, Mountpleasant Avenue Upper and Lower were most satisfied with the effectiveness of the measures

Residents in Richmond Hill and Richmond Place least satisfied with the effectiveness of the measures

N=97

## Effect on Safety of Walking in the Area

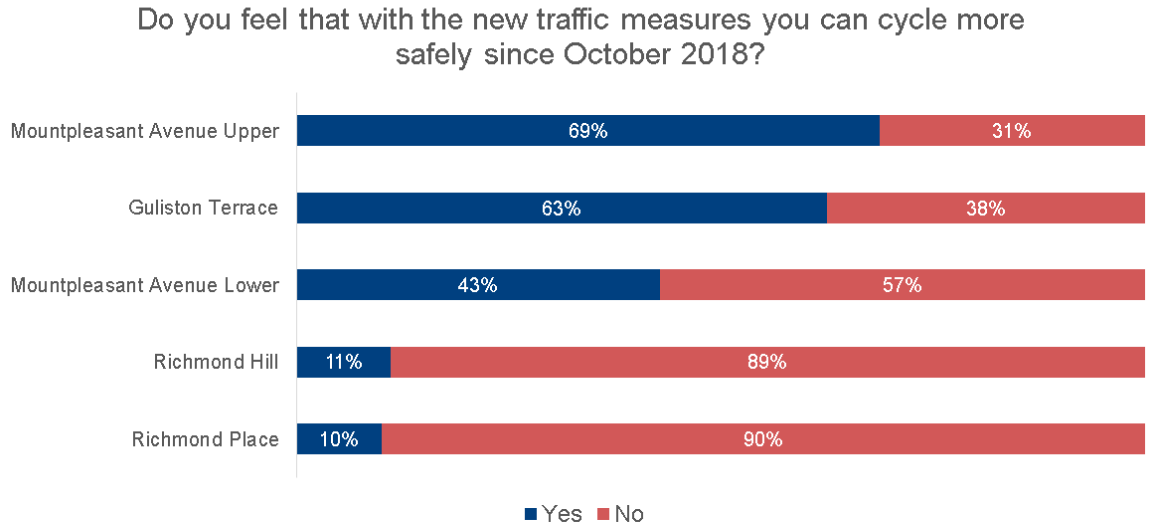



The majority of residents in Mountpleasant Avenue Upper, Mountpleasant Avenue Lower and Guliston Terrace felt that they could walk more safely with the new traffic measures

Residents in Richmond Hill and Richmond Place were least likely to feel that the new measures mean they can walk more safely

N=97

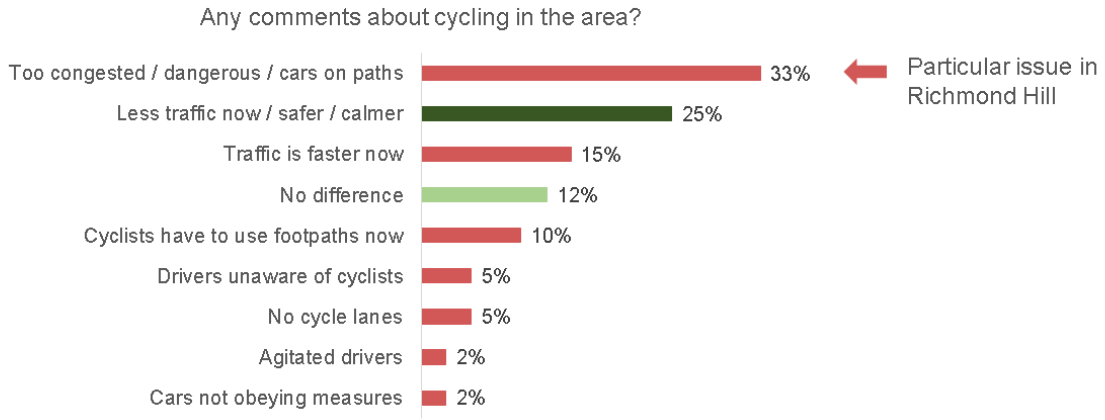
## Effect on Safety of Cycling in the Area




The majority of residents in Mountpleasant Avenue Upper and Guliston Terrace felt that cycling is safer because of the new traffic measures. 43% of respondents in Mountpleasant Avenue Lower felt that cycling was safer

Residents in Richmond Hill and Richmond Place were least likely to feel that the new measures mean they can cycle more safely

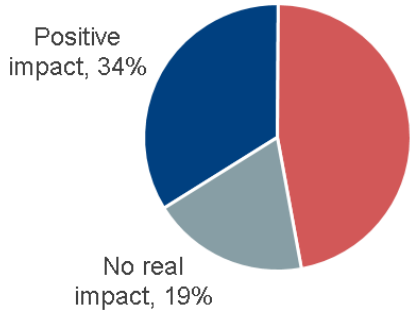
## Effect on Safety of Cycling in the Area




- *"Much safer and calmer"*
- *"No Space for cars and bikes, not enough room - bikes going on footpaths - very dangerous"*
- *"Much calmer now less road rage"*
- *"Cars still driving up that one way stretch all day"*

# Impact on you personally

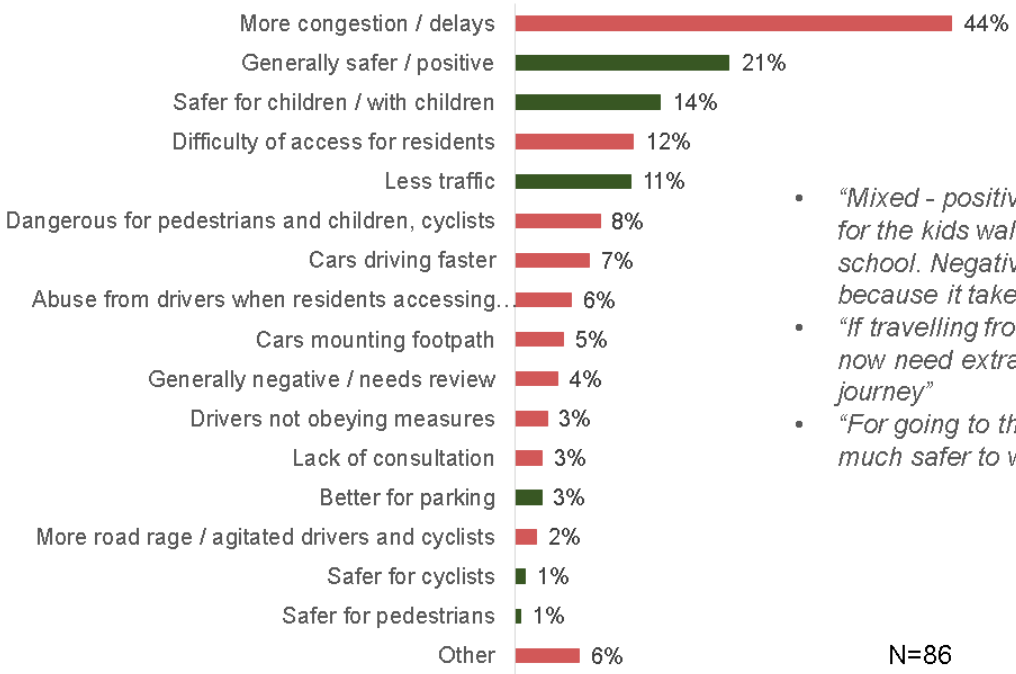
Has this measure had a positive impact on you personally, a negative impact, or no real impact?




"Positive impact" rises to 58% among parents with children

N=97

What are your reasons for this answer?




- *"Mixed - positive because its safer for the kids walking or cycling to school. Negative when driving because it takes longer now"*
- *"If travelling from the bridge you now need extra time on your journey"*
- *"For going to the park with baby much safer to walk now"*

N=86

# Impact on you personally – Sentiment Analysis

Positive sentiment

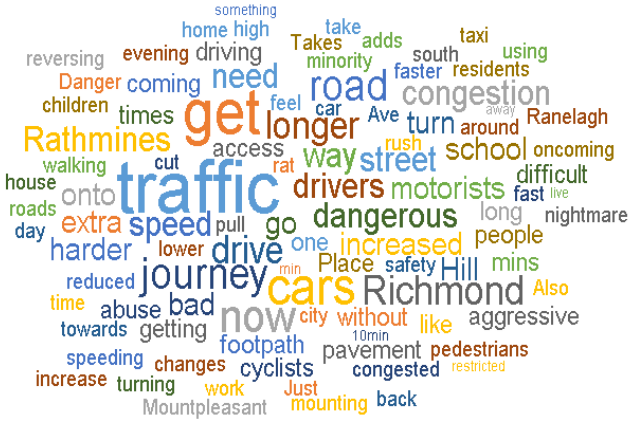
Negative sentiment

- Based on open text sentiment analysis combined with quantitative measures
- Visualisation is based on averages – there is positive and negative sentiment in all areas


# Impact on you personally - Reasons

## Positive impact


## Negative impact




Wordclouds are automatically generated, the size of words represents the frequency of mentions in open ended comments

N=86