Re-introduce Broomhill cycling provision

Why should the cycling provisions be improved on crow road ?

1. Currently no cycling provision in Broomhill – as can be seen in the pictures the previously painted cycle lanes are now non-existent.

2. Painted cycle lanes are not an appropriate way to separate motor traffic from bicycles on Crow Road. This guidance has changed since the cycle lanes were last painted.

3. Crow Road is identified as a 'priority route' in the Glasgow City council "GLASGOW'S ACTIVE TRAVEL STRATEGY AND ACTION PLAN 2022-2031"[4]

4. Persistent blocking of cycle lanes

5. Persistent blocking of Bus Stops

Details:

1. Currently no cycling provision in Broomhill – as can be seen in the pictures the previously painted cycle lanes are now non-existent.

from google maps, I suspect they haven't been repainted since 2015.[1]

August 2015 (left) vs October 2015 (right) on google street view

2. Painted cycle lanes are not an appropriate way to separate motor traffic from bicycles on Crow Road. This guidance has changed since the cycle lanes were last painted.

Motor Traffic Speed (85th percentile)	Two-way traffic flow (pcu per day)	Two-way traffic flow (pcu per hour)	Mixed Traffic Street	Detached or Remote Cycle Track	Cycle Track at Carriageway Level	Stepped or Footway Level Cycle Track	Light Segregation	Cycle Lane
0 to 30 kph	0 to 2000	0 to 200	●●●	●●●	●●●	●●●	●●●	●●●
	2000 to 4000	200 to 400	●●	●●●	●●●	●●●	●●●	●●●
	4000+	400+	●	●●●	●●●	●●●	●●●	●●
30 kph to 50 kph	0 to 1000	0 to 100	●●●	●●●	●●●	●●●	●●●	●●●
	1000 to 2000	100 to 200	●●	●●●	●●●	●●●	●●●	●●
	2000 to 4000	200 to 400	●	●●●	●●●	●●●	●●●	●●
	4000+	400+	●	●●●	●●●	●●	●●	●
50 kph to 65 kph	0 to 1000	0 to 100	●●	●●●	●●	●●	●●	●●
	1000 to 2000	100 to 200	●	●●●	●●	●●	●●	●
	2000+	200+	x	●●●	●●	●●	●	●
65 kph to 80 kph	0 to 1000	0 to 100	●	●●●	●●	●●	●●	●
	1000+	100+	x	●●●	●	●	●	●
80 kph to 95 kph	0 to 1000	0 to 100	●	●●●	●	●	●	●
	1000+	100+	x	●●●	●	●	x	x
95 kph to 110 kph	All	All	x	●●●	●	●	x	x

In relation to Design Principle – Safety

●●● **High Level of Service:** Suitable for most users.

●● **Medium Level of Service:** May not be suitable for some users, particularly novice users. Designer should consider the lack of attractiveness of the facility to these users and how this can be overcome or mitigated.

● **Low Level of Service:** Not suitable for a range of users, including novice and intermediate users. Should be avoided unless the risk to these users is conveyed to the Overseeing Organisation by the designer and accepted by the Overseeing Organisation. See Section 2.4.

x **Should not be used**

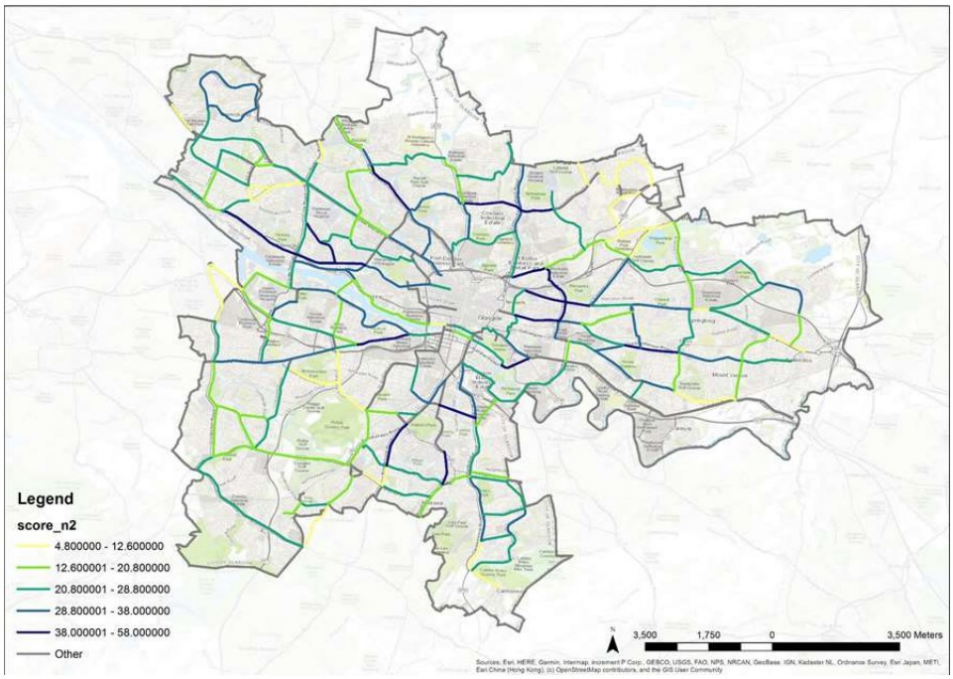
Table 3.2: When to separate cycle users from motor traffic

Page 51 3.0 Cycle Links Cycling by Design 2021

a. Speed and flow of traffic on Crow road:
    i. Annual average daily flow of 6000 vehicles on clarence drive.[2]
    ii. Can assume at least 2/3rd's of the traffic is also flowing along crow road and so assume a flow of 4000 vehicles along crow road (we could ask council to verify assumption)
    iii. Traffic speed signed as 30mph (48km/hr) – cars likely travelling faster than this (again could ask council to verify this). We can assume 85th percentile travel at speed limit, doesn't affect analysis if they are travelling faster

b. Based on cycling by design[3] a cycle lane on a road with two way traffic flow > 4000 pcu / day and a speed between 30 & 50 km/hr represents a "low level of service"
    i. Low level of service means:
    "Not suitable for a range of users, including novice and intermediate users. Should be avoided unless the risk to these users is conveyed to the Overseeing Organisation by the designer and accepted by the Overseeing Organisation. See Section 2.4."

3. *Crow Road is identified as a 'priority route' in the Glasgow City council "*GLASGOW'S ACTIVE TRAVEL STRATEGY AND ACTION PLAN 2022-2031"[4]



Glasgow City Strategic cycling network with priority routes shown in dark blue

Zoomed in section just showing area surrounding Broomhill

4. *Persistent blocking of cycle lanes*


At Broomhill cross (left) Outside Annexe site (right)

Entrance to Marlborough Avenue

More details can be found in Appendix including images from past showing same issues occurring.

5. *Persistent blocking of Bus Stops*


Blocking the Bus stop results in the bus stopping in the middle of the road rather than at the raised kerbs to aid residents with mobility problems.

Again more details are at the end of the document.

Proposed Community Council suggestion for improvement:

Emergency Temporary works:

1. **<u>Protect cyclists with parked cars</u>**
   Re-position parked cars to protect the cycle lane from traffic flow as per best practice in cycling by design 2021. This will not narrow roadway as space on roadway is already taken up by cycle lane.

Cycle track on footway side of on-street parking on Clarence Drive

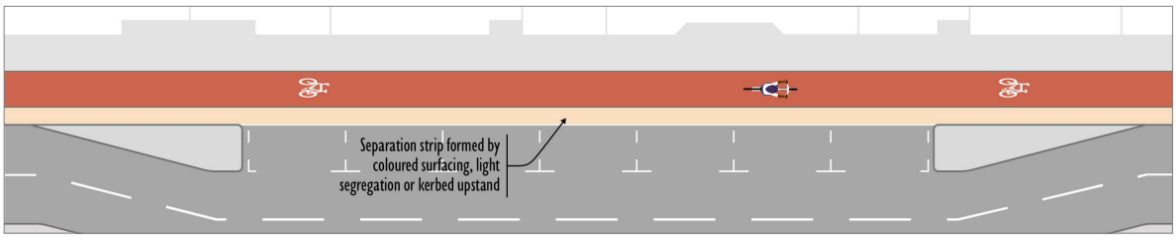


Figure 3.25: Cycle track on footway side of on-street parking

2. **<u>Introduce 'bus-boarders'</u>**

Introduce 'bus-boarders' to stop need for cyclists to travel around busses into traffic when busses are stopped as per guidance in designing streets[7]

"The bus should generally stop on the street and not in a lay-by"

Bus boarders in the same 'lane' as parked cars on Victoria road. Design (below[6] vs implementation (Top)

Before and after bus boarder installed on Highburgh Rd some time before 2012 which increased number of parking spaces and likely sped up busses.

3. **<u>Introduction of light segregation</u>**

Introduction of light segregation to reach a 'medium level of service' on all sections with and without parked cars to ensure there is appropriate traffic segregation and stop cars parking in re-located cycle lane. Making use of high segregation where low segregation would be difficult to see.

Impact of Scheme

Improvements to other road users

This will not only make cycling safer but also[8]:

1. Improve bus speed along crow road.
    - As busses do not pull into bus stop they will create a space in front of them during boarding which allows the bus to pull off quickly.
    - It takes time to manoeuvre into bus stops - this allows the bus to line up parallel to the kerb, largely without manoeuvres;

2. Breaks pedestrian crossings into two sections - so shorter crossings for pedestrians crossing the road
    - Pedestrian priority (zebra crossing) to get across cycle lane then less distance to cross the road making the crossing safer.

3. Removing clutter from pavements
    - Bus stop shelters removed from pavement, creating more space for pedestrian movement

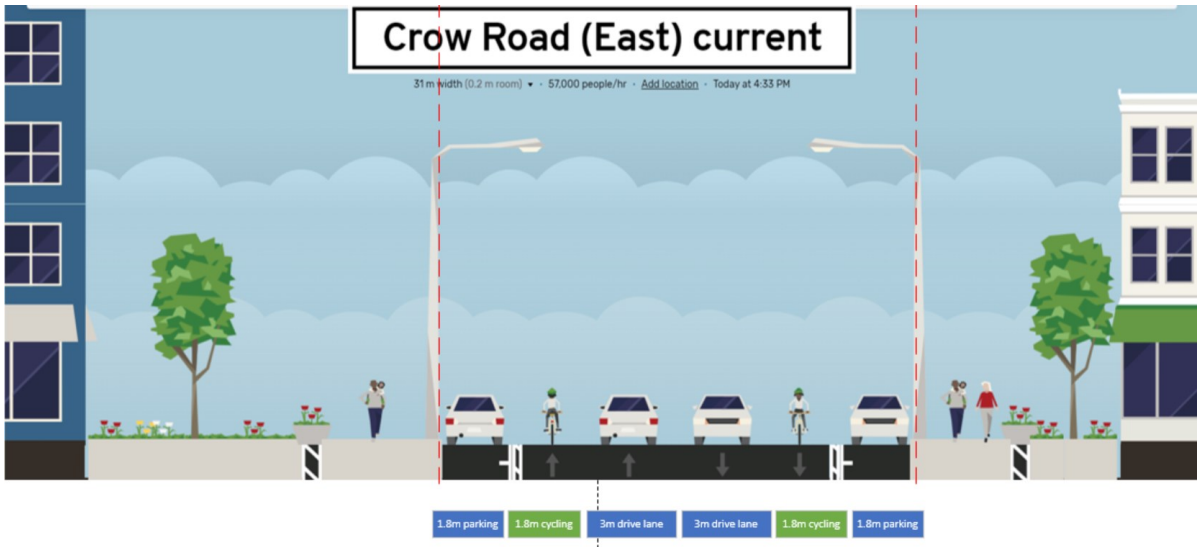
4. More parking spaces / space for loading and businesses
    - Space currently taken up by bus stop re-allocated to loading / short stay parking

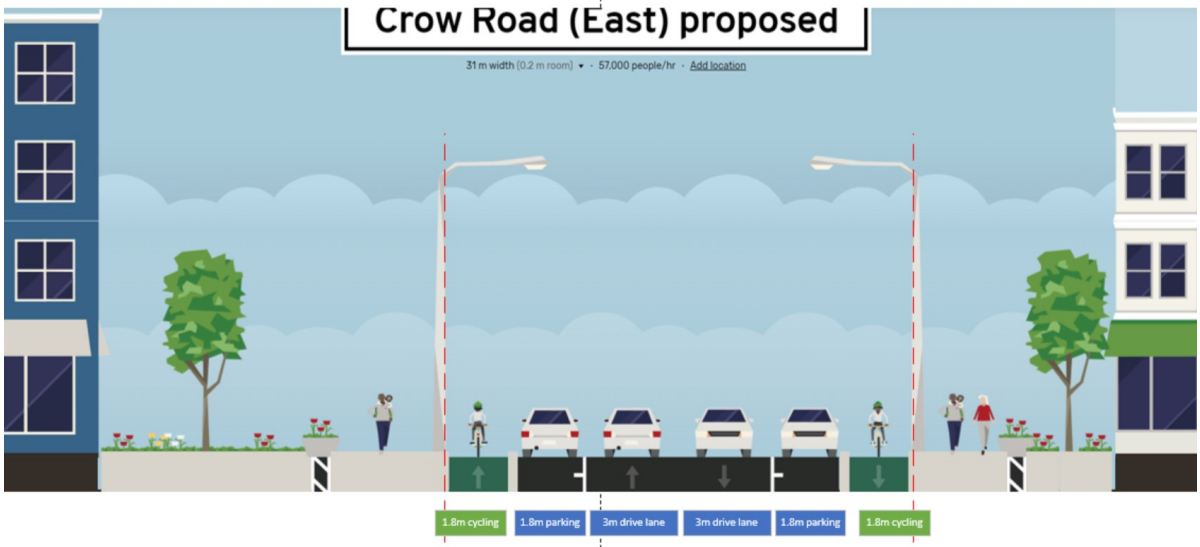
<u>Affect on traffic flow</u>

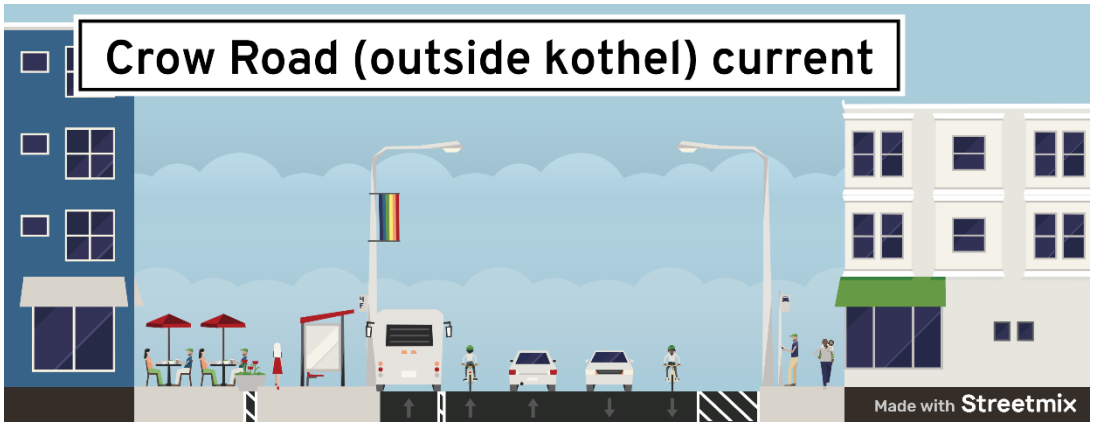
There is likely to be some affect on other modes of transport.

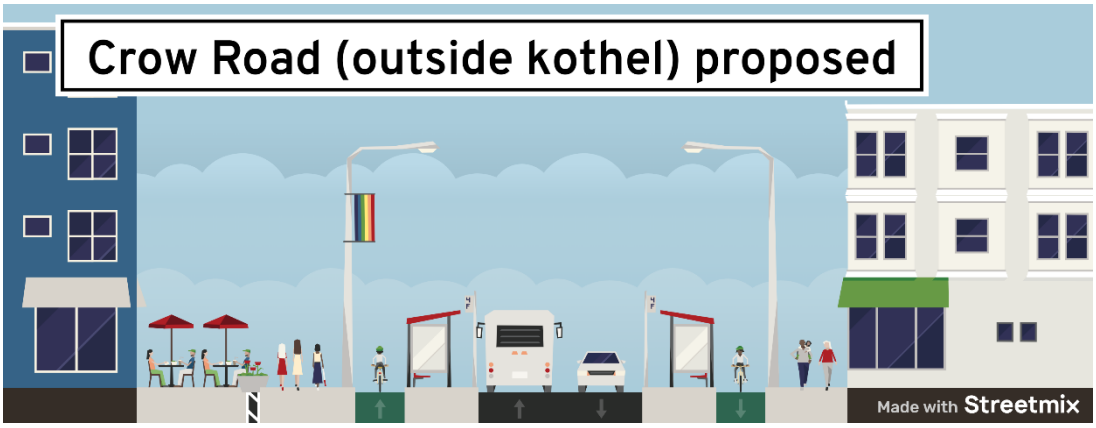
1. As we are in a climate emergency, this should be accepted to promote more transport via active methods (walking / wheeling / cycling) and public transport
2. There is a relatively small number of busses currently servicing this road so impact will be low
3. These changes have been implemented on clarence drive / Victoria road and soon on Byers Rd. – we could request data from council to quantify but anecdotally the impact is unnoticeable
4. Work to re-sequence traffic lights should take place in parallel to ensure traffic continues to flow. (perhaps even introduce the intelligent traffic lights which can detect busses)

Possible design

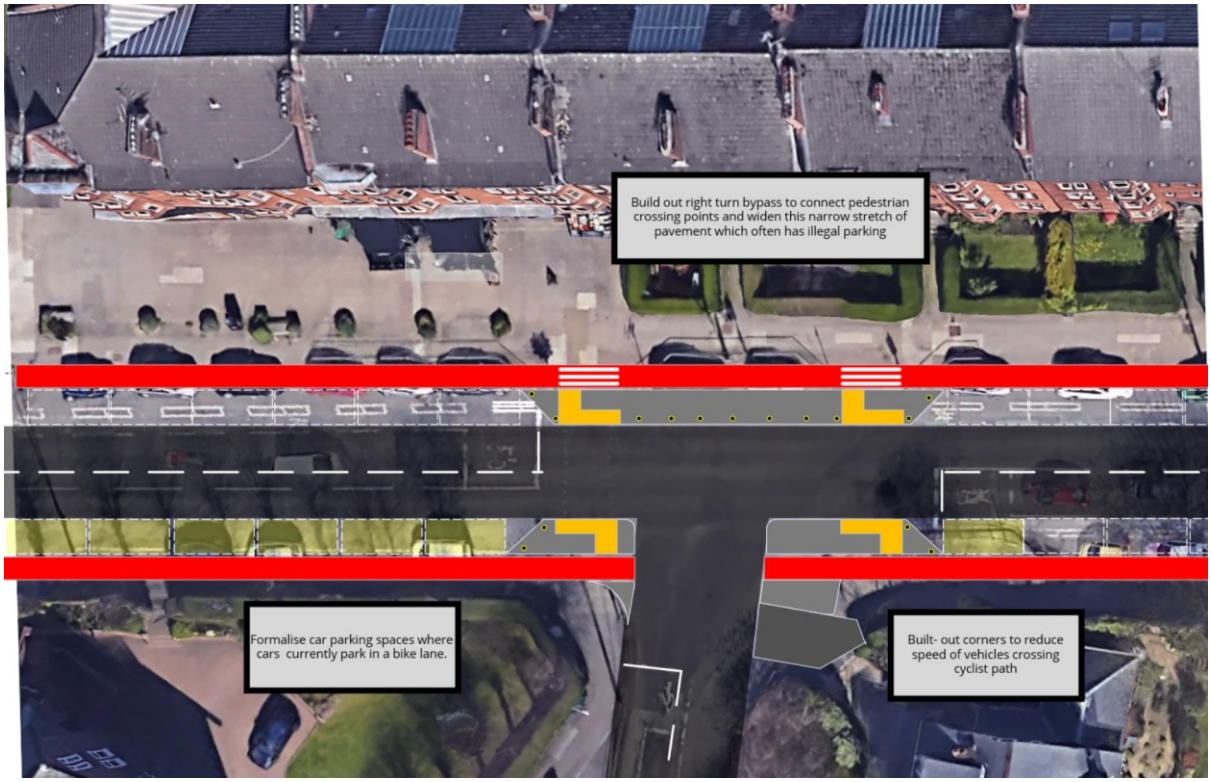


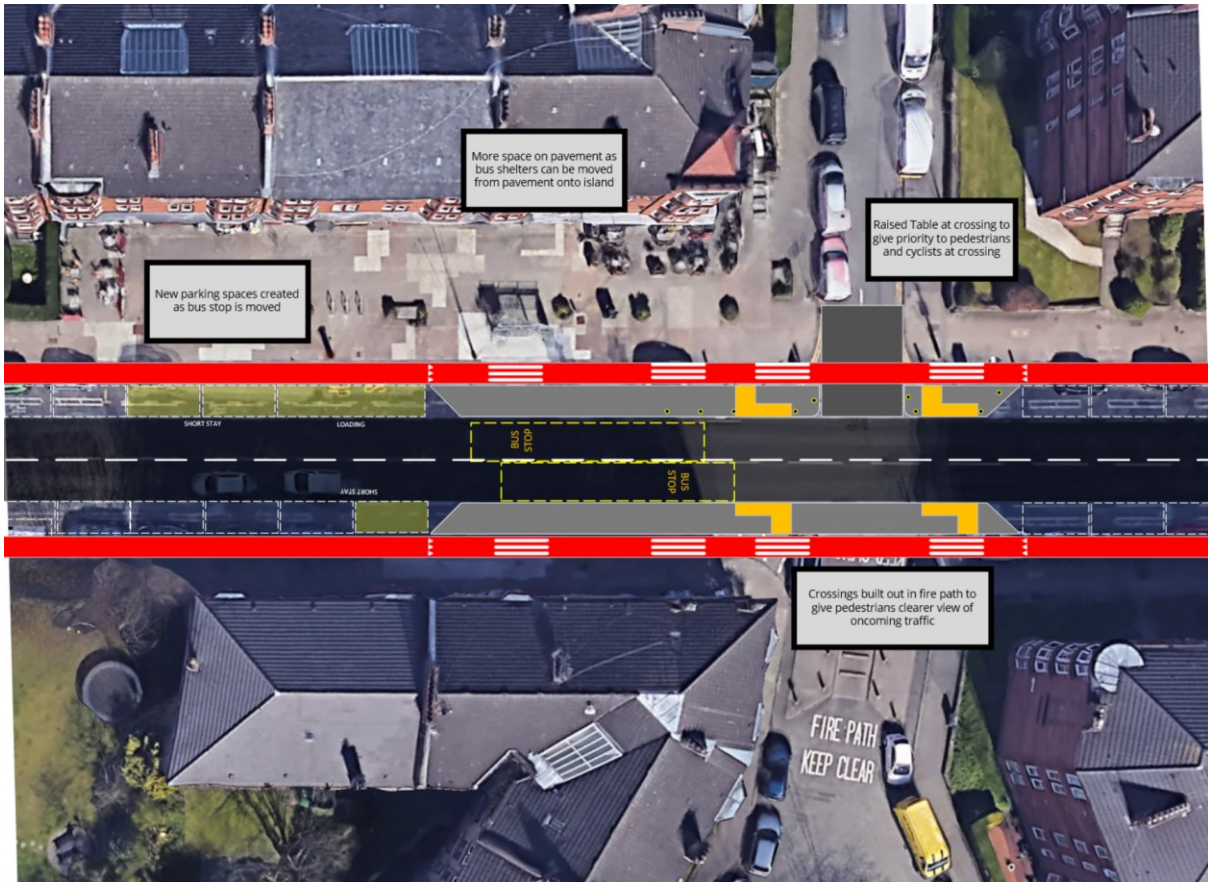






NOTE: large area created on left (Kothel) side of street for pedestrians to walk along the street and a bus stop shelter introduced on the right (pop wines) side of the street.




More space on pavement as bus shelters can be moved from pavement onto island
Raised Table at crossing to give priority to pedestrians and cyclists at crossing
New parking spaces created as bus stop is moved
SHORT STAY
LOADING
BUS STOP
BUS STOP
Crossings built out in fire path to give pedestrians clearer view of oncoming traffic
FIRE PATH
KEEP CLEAR


More space on pavement as bus shelters can be moved from pavement onto island
New parking spaces created as bus stop is moved
Some new spaces could be allocated for short stay or Loading
Segregation to stop car parking in bike filter lane
SHORT STAY
BUS STOP
Segregation using wands or similar to stop drivers parking in cycle lane
Bus Boarders to allow continuation of cycle lane
Built- out corners to reduce speed of vehicles crossing cyclist path

Future Works to meet Cycling by design standards:

1. Introduction of 20 mph speed limit on crow road as it is a residential and shopping area as per Glasgow City Council guidance[5]

2. Traffic calming and / or enforcement cameras to ensure cars travel at speed limit

3. Redesign of junctions on crow roads to increase pedestrian and cyclist priority Based on transport Hierarchy[3] and increase the sense of place at the entrance to Broomhill.

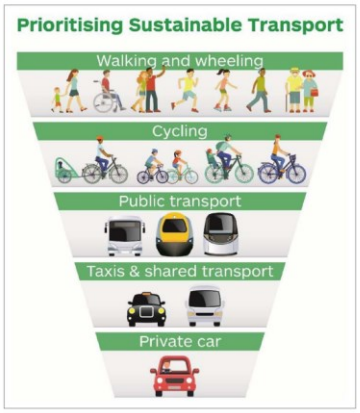


Figure 1.1: Sustainable Travel Hierarchy (National Transport Strategy 2)

4. *Permanent segregation of cyclists and motor traffic.*

References:

1. *https://roadtraffic.dft.gov.uk/local-authorities/3*

2. *Historical google street view*

3. *https://www.transport.gov.scot/media/50323/cycling-by-design-update-2019-final-document-15-september-2021-1.pdf*

4. https://www.glasgow.gov.uk/councillorsandcommittees/viewDoc.asp?c=P62AFQDNZLDNZ30GNT

5. https://www.glasgow.gov.uk/article/25328/20mph-Should-Be-Default-Speed-Limit-for-Glasgow-Says-Council-Committee

6. https://www.glasgow.gov.uk/CHttpHandler.ashx?id=44985&p=0

7. https://glasgow.gov.uk/CHttpHandler.ashx?id=13557&p=0

8. https://nacto.org/wp-content/uploads/2016/02/TfL-accessibile-bus-stop-design-guidance.pdf

Appendix: Extent of cars blocking cycle lanes and bus stop

1. *Persistent blocking of cycle lanes*

Outside Wee Paree


May 2021 (left) June 2021 (right)

August 2019(left) April 2017 (right)

October 2015 (left) September 2012 (right)

Outside Marlborough

July 2021 (left) October 2015 (right)


April 2018 (left) August 2019 (right)

Entrance to Marlborough Avenue


April 2021 (left) August 2019 (right)


May 2018 (left) April 2017 (right)

2. *Persistent blocking of Bus Stops*