

Urban Greenways User research in Dublin

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27 June 2019



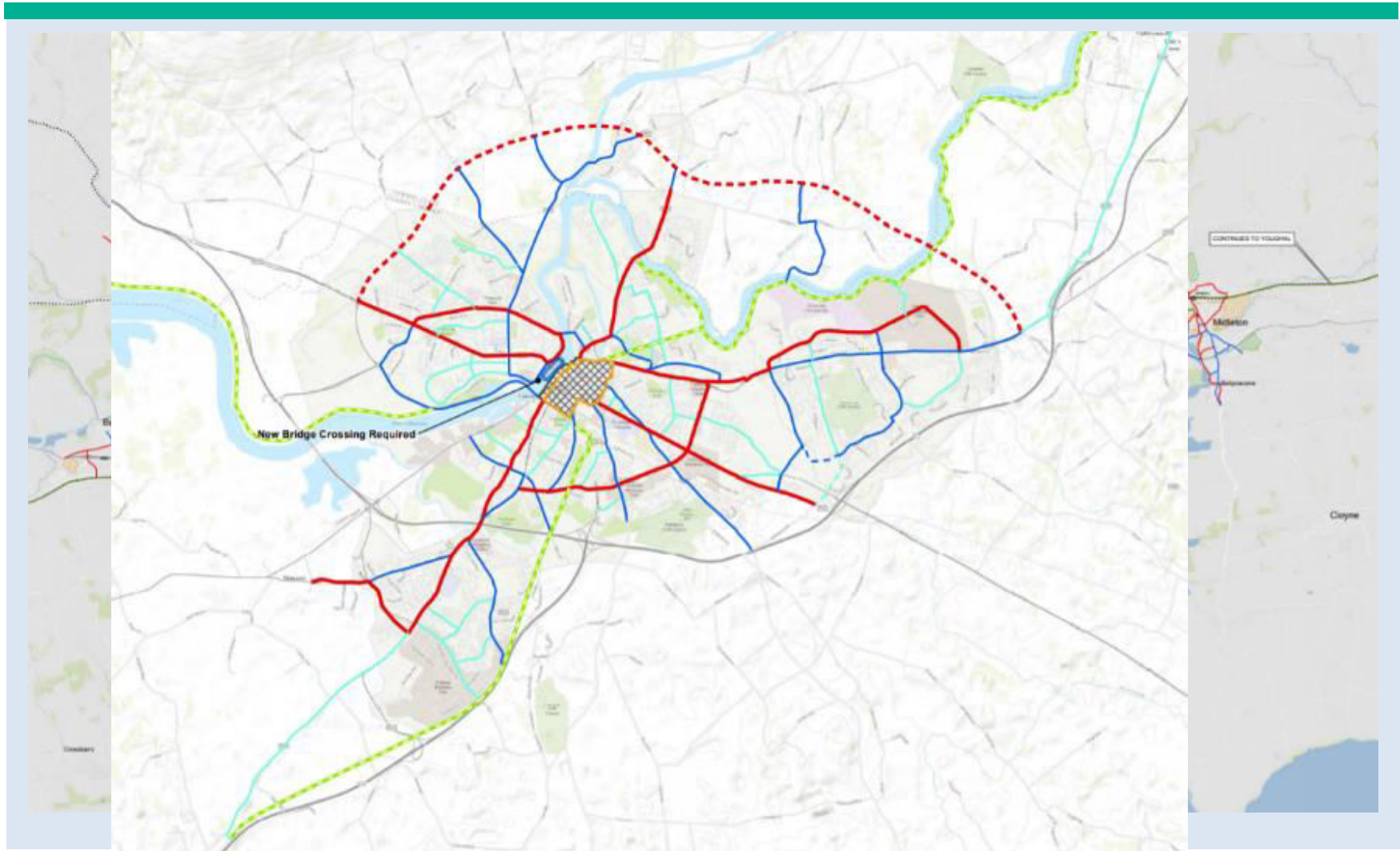
National Greenway Strategy

Urban Greenways

“ The National Transport Authority has developed cycling networks for the Greater Dublin Area and the Regional Cities.....These networks include a number of Greenways, which are, in the main, focused on achieving an increase in the numbers commuting to work and education”.

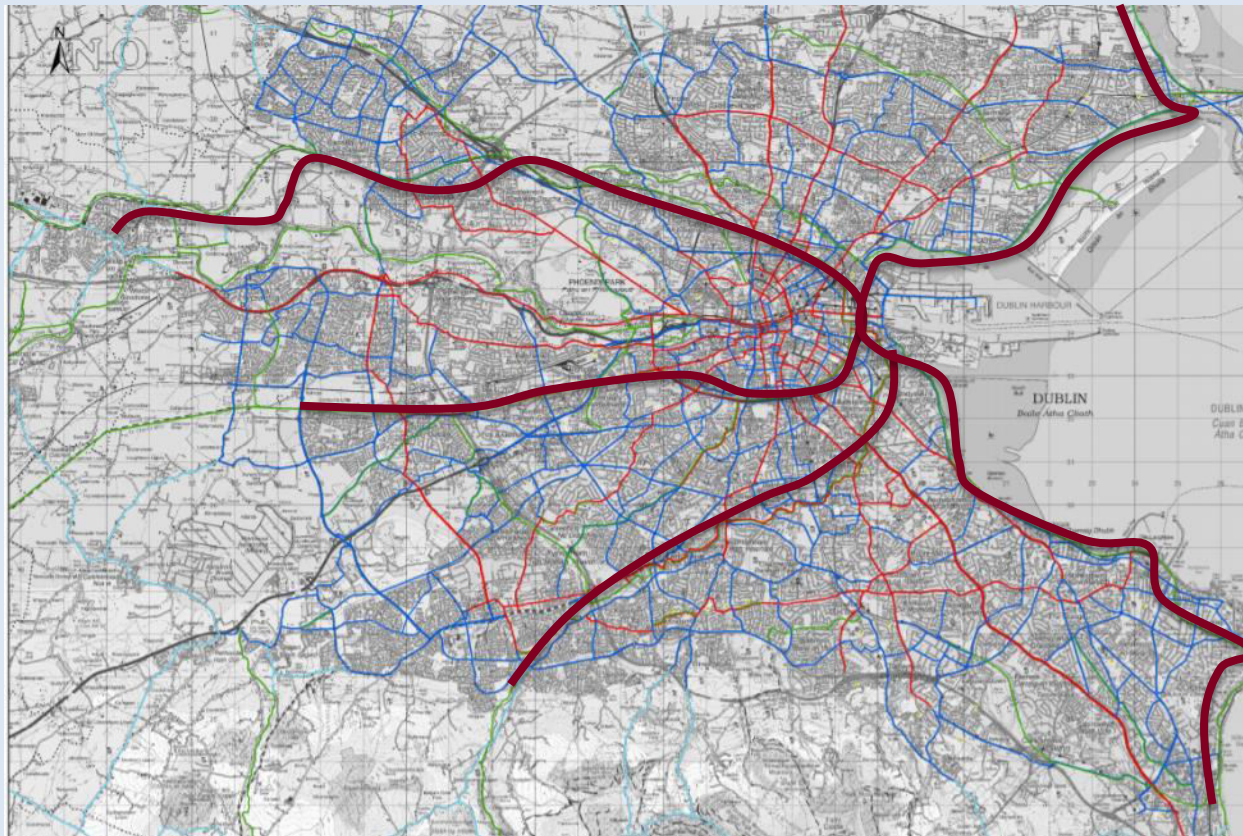


Greenways in Urban Cycle Network Plans

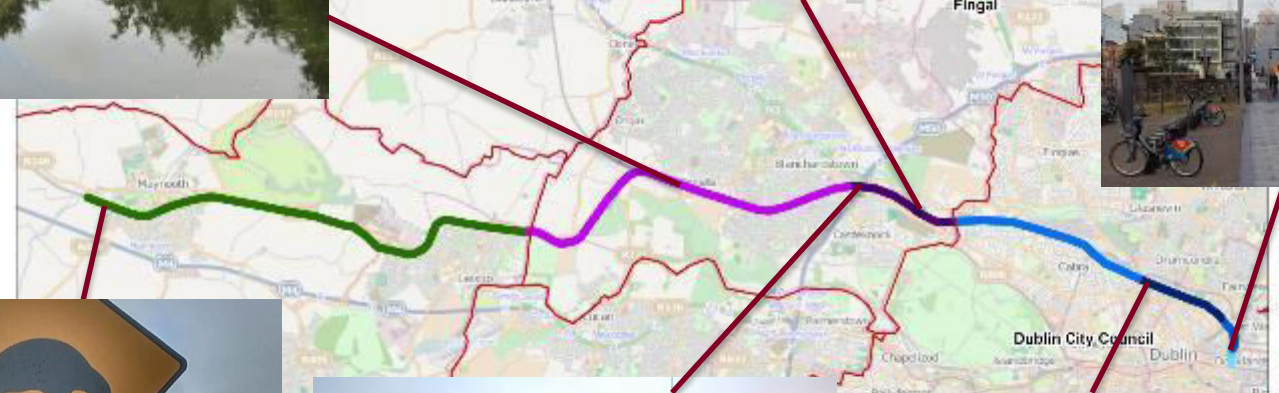


Greater Dublin Area Cycle Network Greenways

- The GDA Cycle Network Plan
 - 325km Primary routes
 - 400km Secondary routes
 - 200 km Greenway routes
- 48% of the km the Local Authorities are actively developing are Greenways - 78km
- Mix of local routes and strategic routes



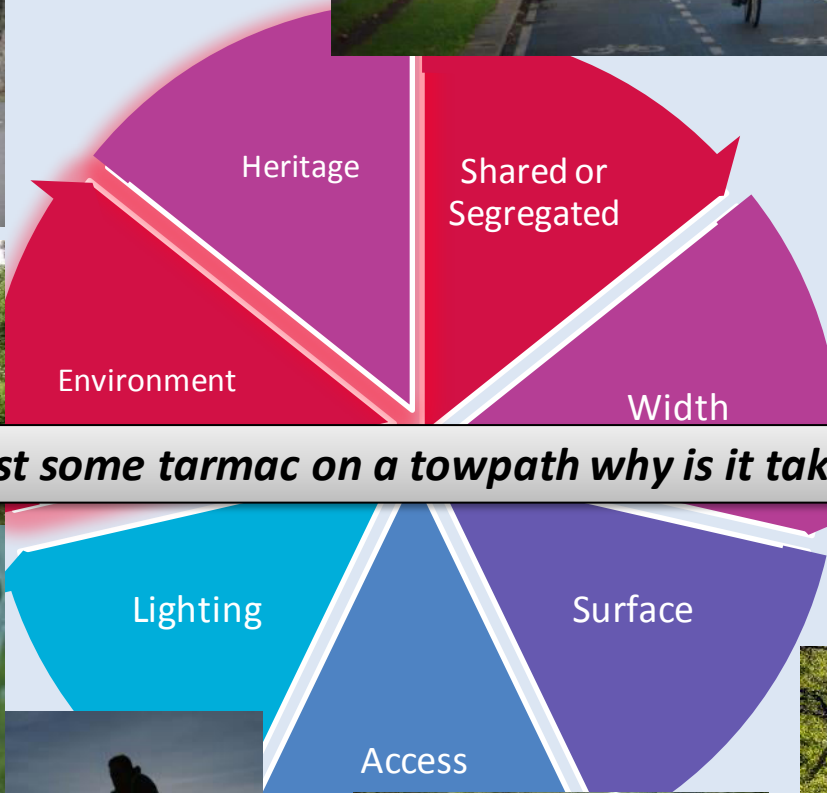
Significant variation in Urban Greenway context and character



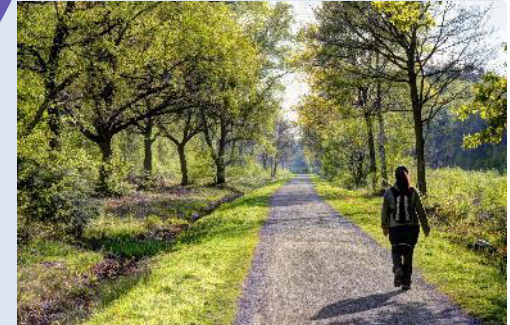
- Green Route Network Cycle routes developed predominately for **tourist, recreational and leisure** purposes but can **also address everyday trip demand**.
- “Cycle Trails” is identified as a link type and reference is made to pedestrians and cyclists sharing space, but a primary recreation function.
- Shared facilities are **disliked by** both pedestrians and cyclists and result in reduced Quality of Service for both modes.
- Shared facilities might be appropriate in low-density towns and cities, and suburban or **recreational** areas
- Where shared facilities
 - Pedestrians should always have priority, reinforced by signage
 - Sufficient width to facilitate evasive action and/or avoidance of potential conflict



Design Considerations and Stakeholders



"It is just some tarmac on a towpath why is it taking so long..."



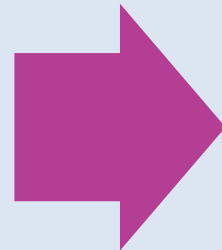
Research

Video Surveys of 18
urban greenway
locations

7676

Users

Speeds and
Interactions

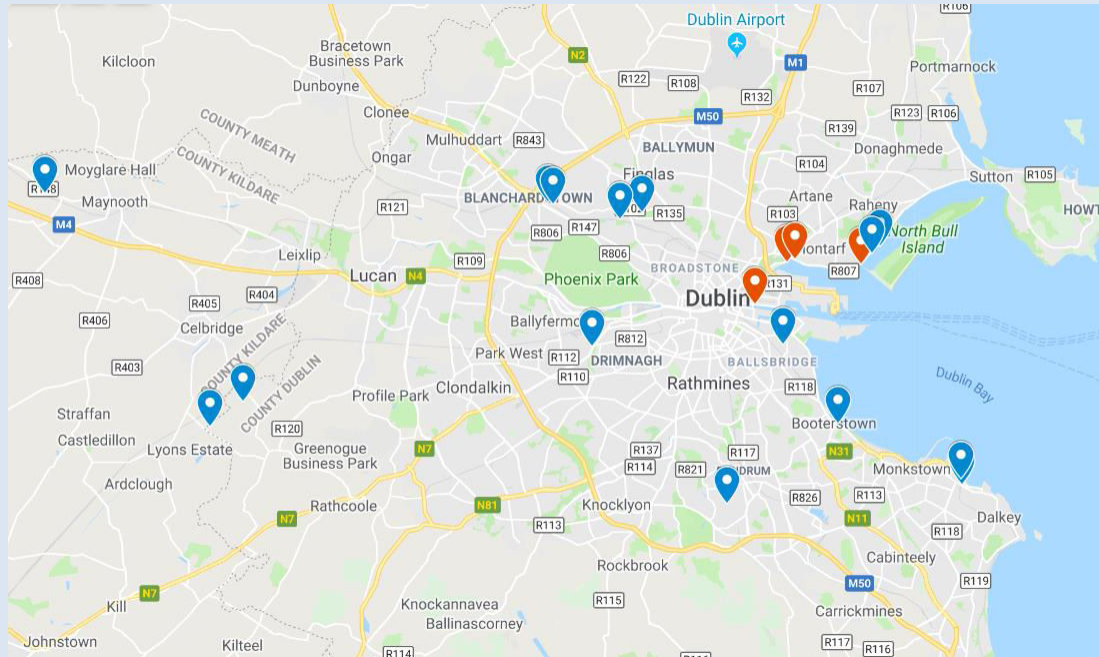


In Situ User
Experience surveys 6
locations

258 respondents

Quantitative Research

- 18 locations, 29 Video Surveys



Sites	Pedestrians	Cyclists
All 18	2319	5357
Shared Pedestrian and Cyclists facility (14)	774	1684
Segregated facility (4)	1545	3673

Classifying Conflicts

Level	Conflict Classification
1	Precautionary Action
2	Controlled Action
3	Near Miss
4	Very Near Miss
5	Collision

Pedestrian/ Cycle Conflicts

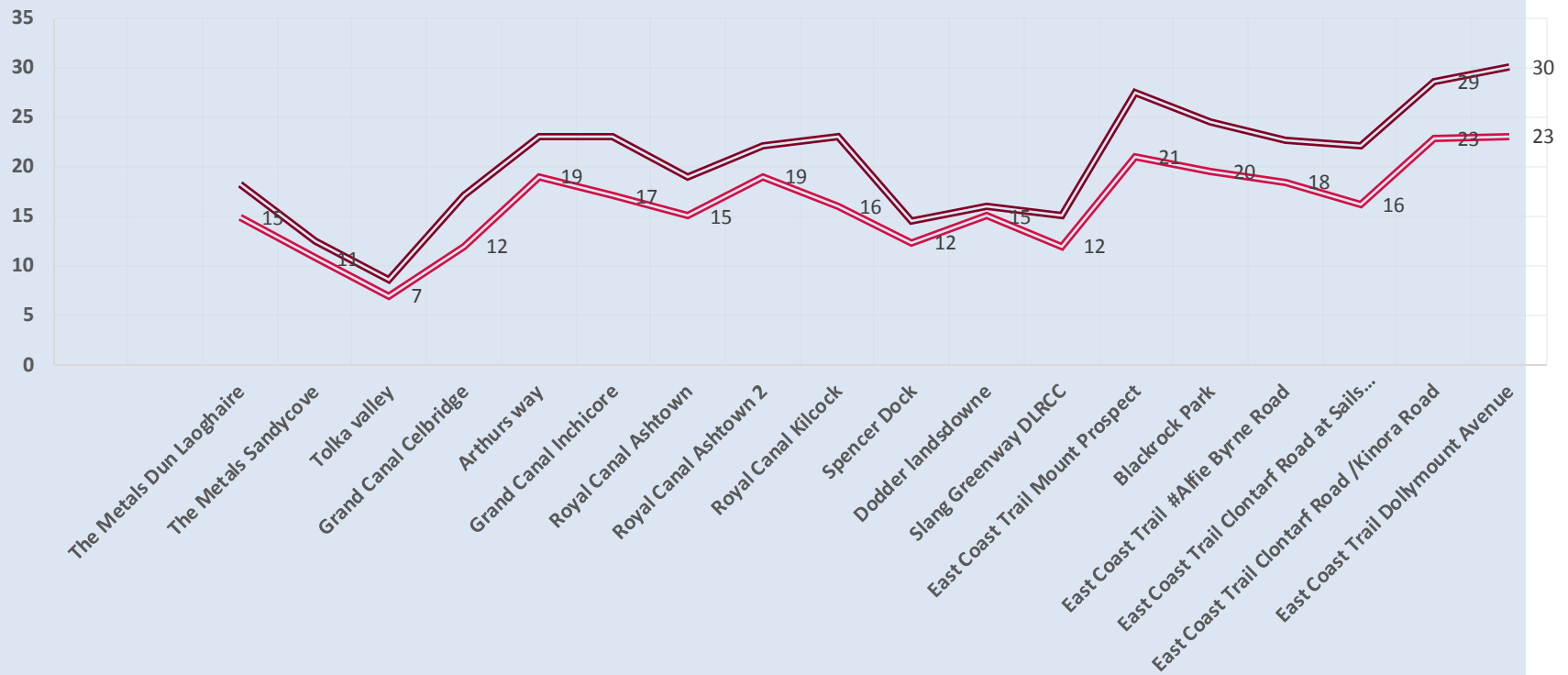
- Across all sites only 20 of 7676 (0.0026%) users had an observable 'conflict' with each other.
- 80% of those happened at 1 site, which is segregated but acts as shared
323 peds + 1000 cyclists am peak
- All interactions were level 1 conflicts
Precautionary action – users changed course or speed in anticipation of infringement
- Of the other 2 conflicts, 1 was cyclist/cyclist interaction, 1 pedestrian/cyclist interaction.



Cyclists Speeds

CYCLIST SPEEDS

85 percentile speed km/hr Median Speed km/h Poly. (85 percentile speed km/hr)



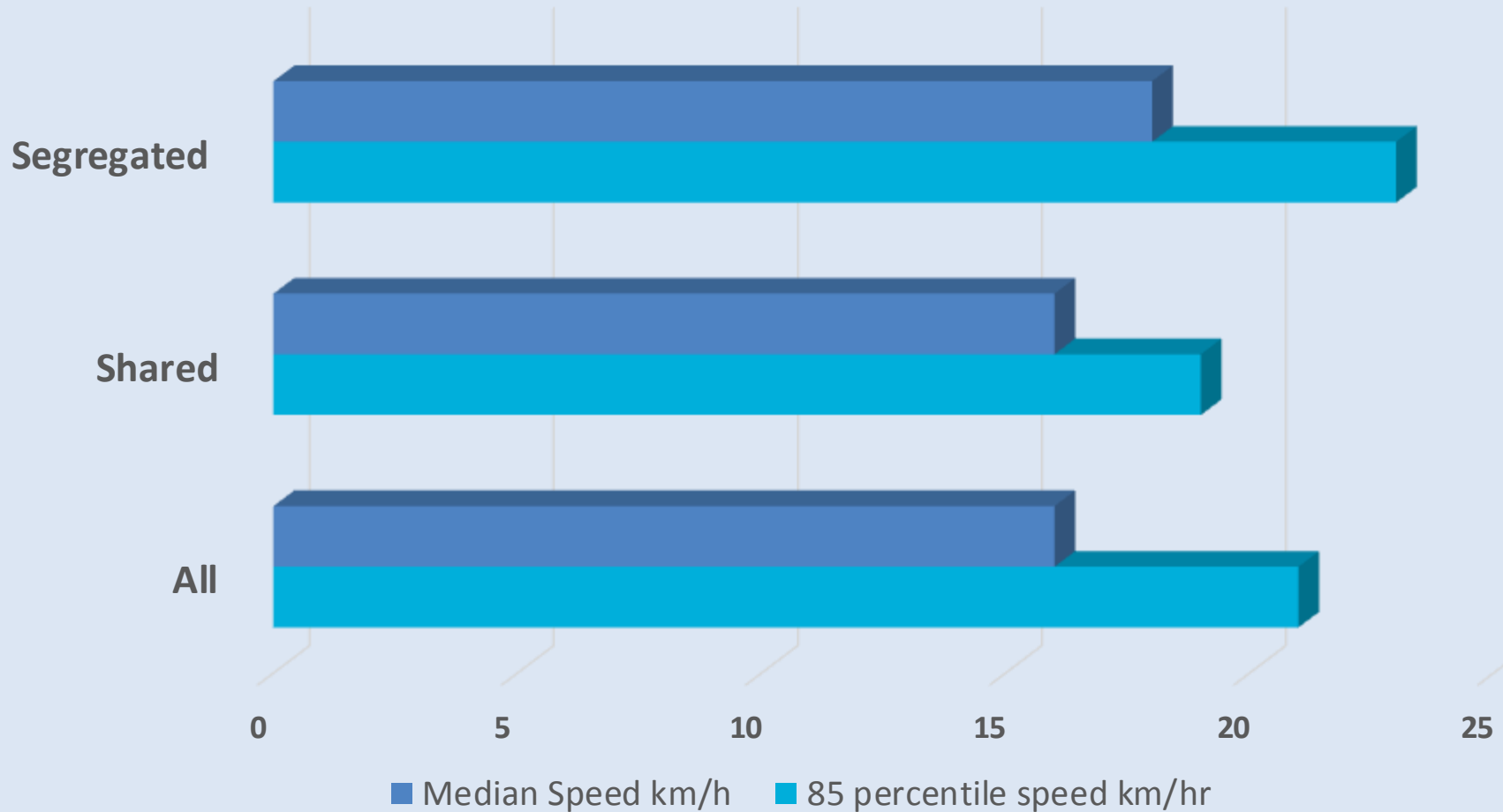
Speeds

- Across all sites average median speeds weekday 17kph, Saturday 16kph
- Average 85th %tile 21kph
- 2 locations with unsealed surfaces speeds were above the average median and 85% speeds
- East Coast Trail average median (20 kph) and 85%tile speed (26kph)
- Cycle speed through short shared areas at junctions in East Coast Trail higher than on segregated links however cyclists reduced speeds when pedestrians were present



Cyclists Speeds

Cycle Speeds per type of facility

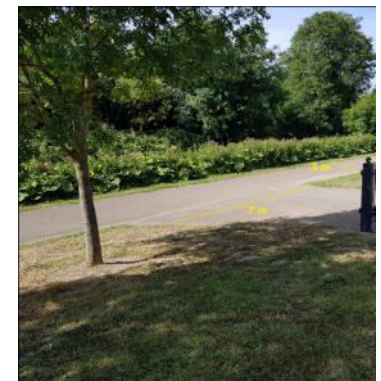


Qualitative Research

- 258 interviews with cyclists and pedestrian
 - Feelings of satisfaction and safety
 - Comparative satisfaction with different types of facilities
 - What improvements could be made.
- To capture incidents of collisions and near collisions
- 2 sites at Ashtown along Royal Canal 5km from city centre
- 4 sites Clontarf East Coast Trail location 2-6km from city centre

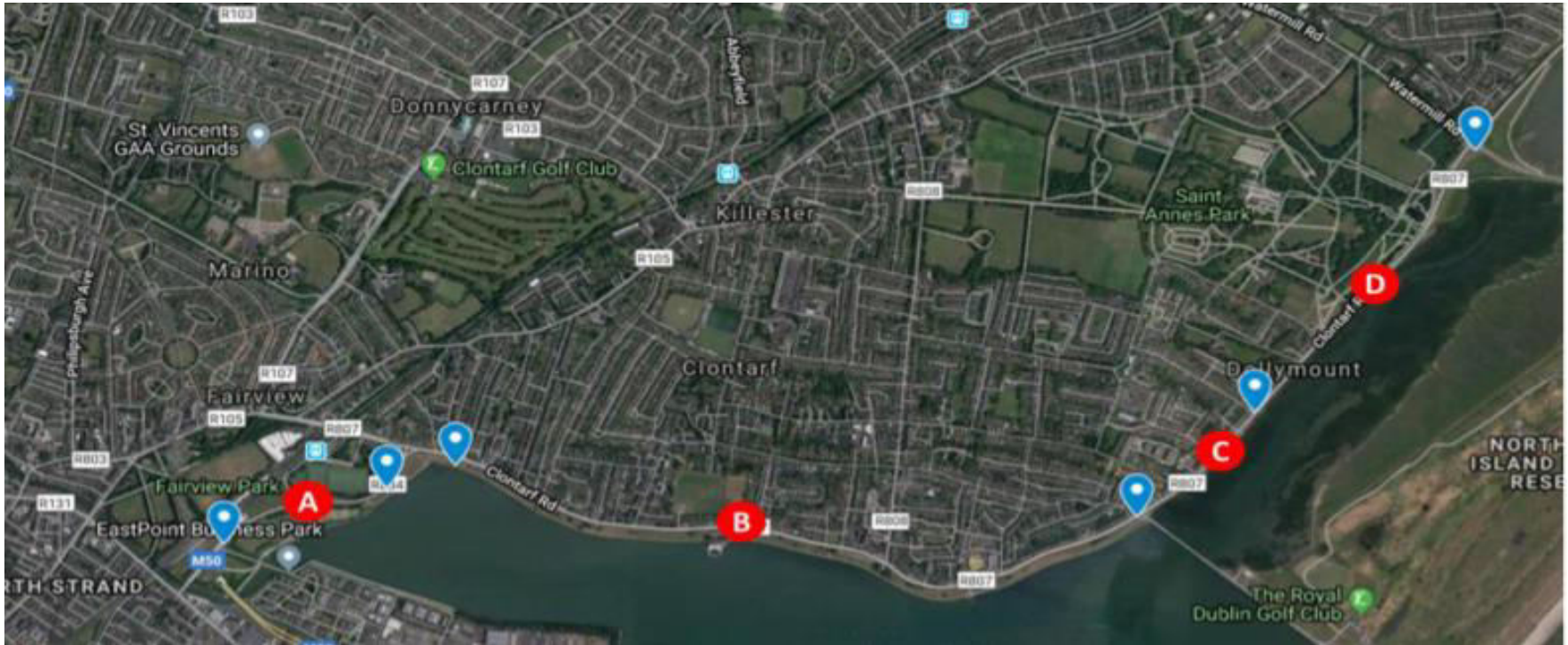


A – Shared on a hill
19peds/49 cyclists
am peak



B – Shared on the
flat 21 peds/46
cyclists

Clontarf Sites



A – Segregated
59 peds 772 cyclists
am peak



B Shared (white line)
323 peds 1003 cyclists
am peak



C – Segregated
43 peds 490 cyclists
am peak



D Short Shared (30m)
59 peds 424 cyclists
am peak

Mix of Ages, Gender and User Type

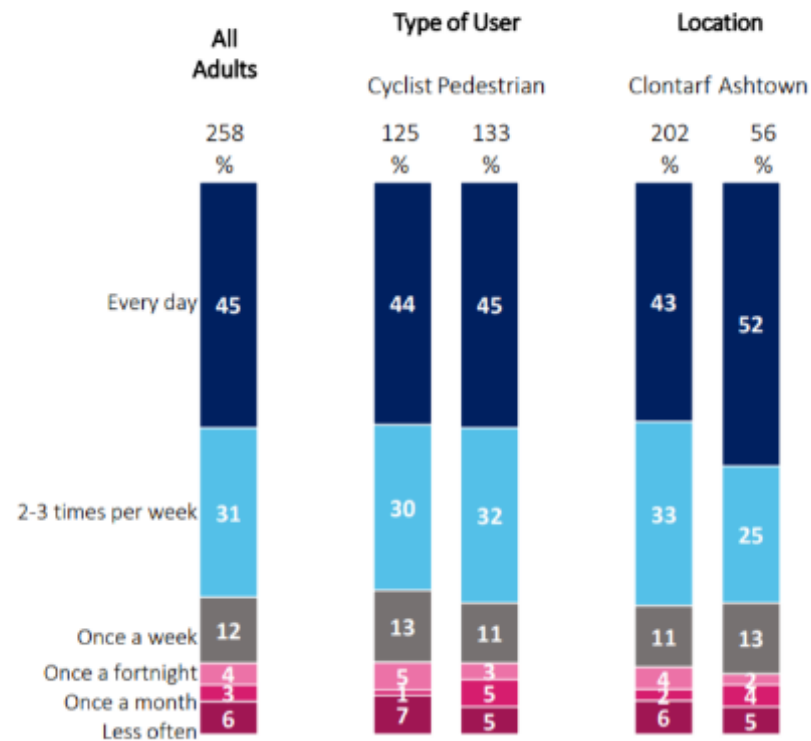


- Cyclists: 60 % male, 42% 45+ years, 53% travelling alone
- Pedestrian: 66% female, 58% 45+ years, 41% travelling alone

Frequent users

Frequency of using facility

Base: 258 pedestrians/cyclists



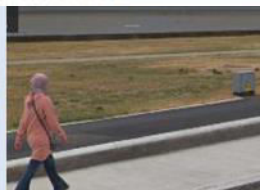
Satisfaction with different elements “at this particular location”



A - Segregated



B Shared (white line)



C - Segregated



D Short Shared (30m)

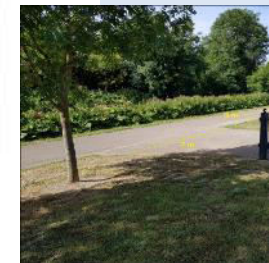
Satisfaction with different elements “at this particular location”



Above average for Ashtown
 Below average for Ashtown



A –
Shared on
a hill



B –
Shared on
the flat

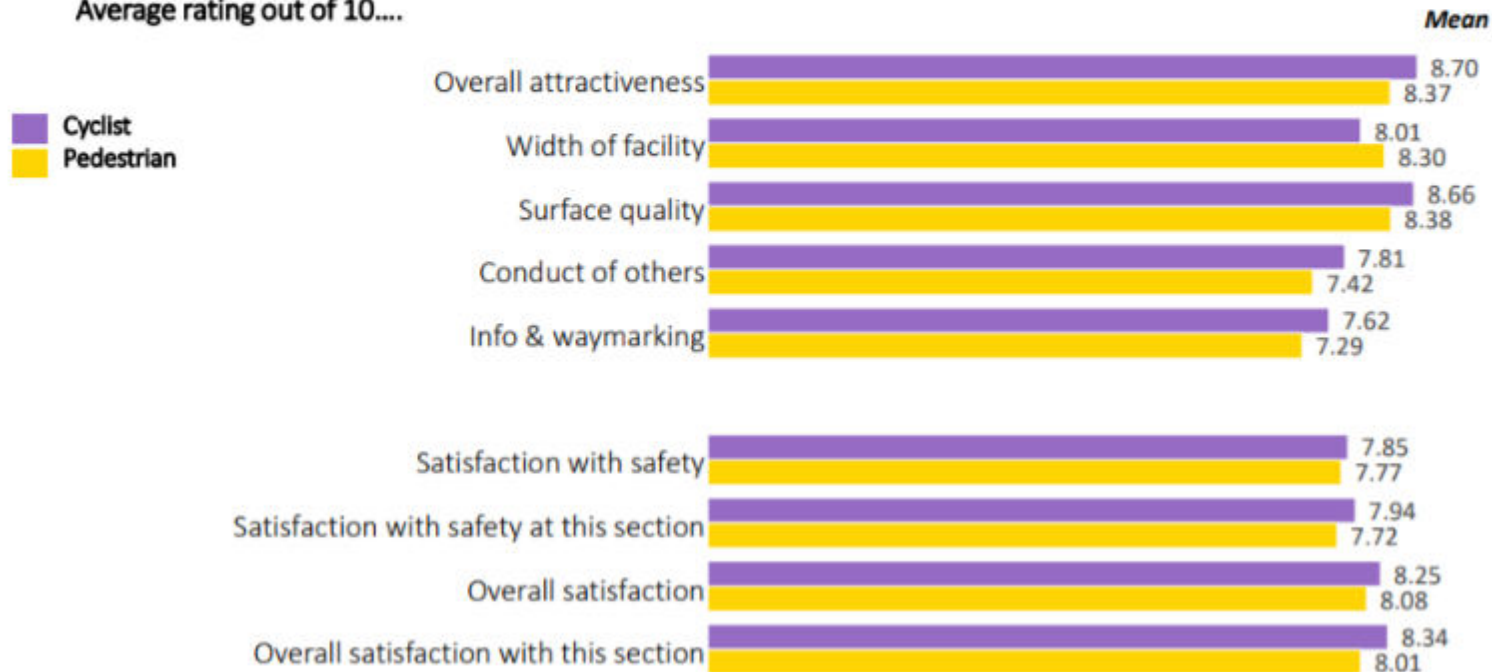
Satisfaction with facilities: Cyclists vs. Pedestrians



Satisfaction with facilities: Cyclists vs. Pedestrians

Base: 258 pedestrians/cyclists

Average rating out of 10....



Reasons for dissatisfaction at this location

Base: 36* pede

- Anti-social
- Cars cross
- Cycle lane
- Cyclists do
- Cyclists or
- Difficult to
- Grass very
- Have to w
- Homeless
- Lack of cl
- Lack of vis
- Marking r
- More suit
- Need seg
- Other
- Quad bike
- Restroom
- Slip shoul
- Speed of
- Surround
- Too narro
- Two entra
- Users mai
- Vehicles t

Respondent feedback

- Here are some of the verbatims given by our respondents on why they gave a lower satisfaction rating.

“

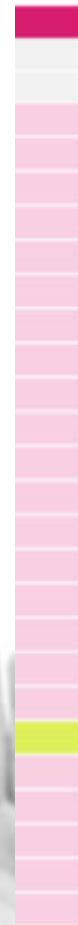
The idea is good, but it's not to the full satisfaction of us pedestrians. We find it difficult to pass when more than one person is on the path. If you have a dog and approach someone pushing a pram, you find someone needs to move onto the cycle path. But if they are cycling at speed, they don't have enough time to stop

“

The junction at the wooden bridge is very unclear who has right of way. Cyclists think they have right of way to keep going. It's very poorly organised. I think cyclists go too fast.

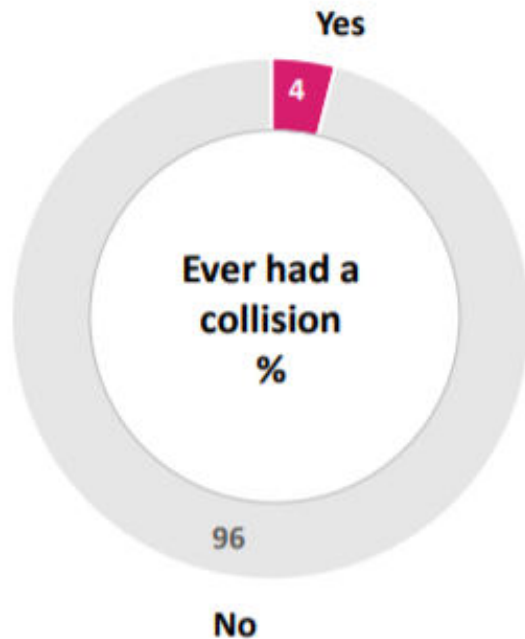
“

There are a number of places where the cycle path crossed entrances where cyclists should have priority.



Have you ever had a collision

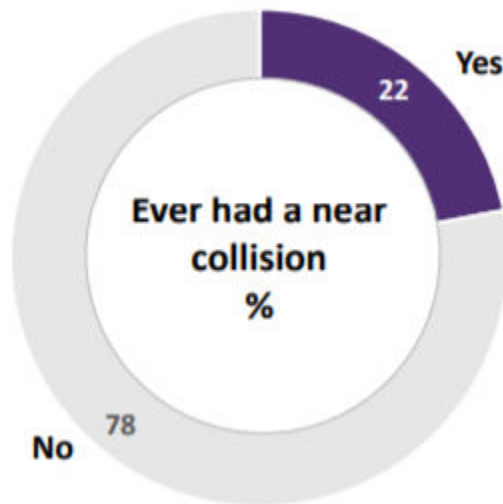
Not Probability



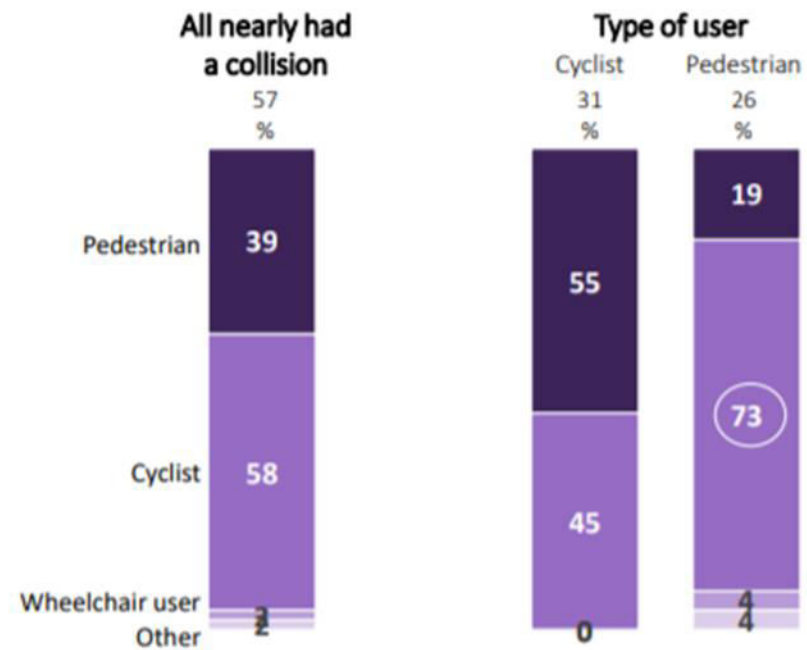
Who collided with

	All had a collision	Type of User	
		Cyclist	Pedestrian
<i>Base:</i>	10	7	3
	<i>No.</i>	<i>No.</i>	<i>No.</i>
Pedestrian	3	3	-
Cyclist	7	4	3

Near Collision

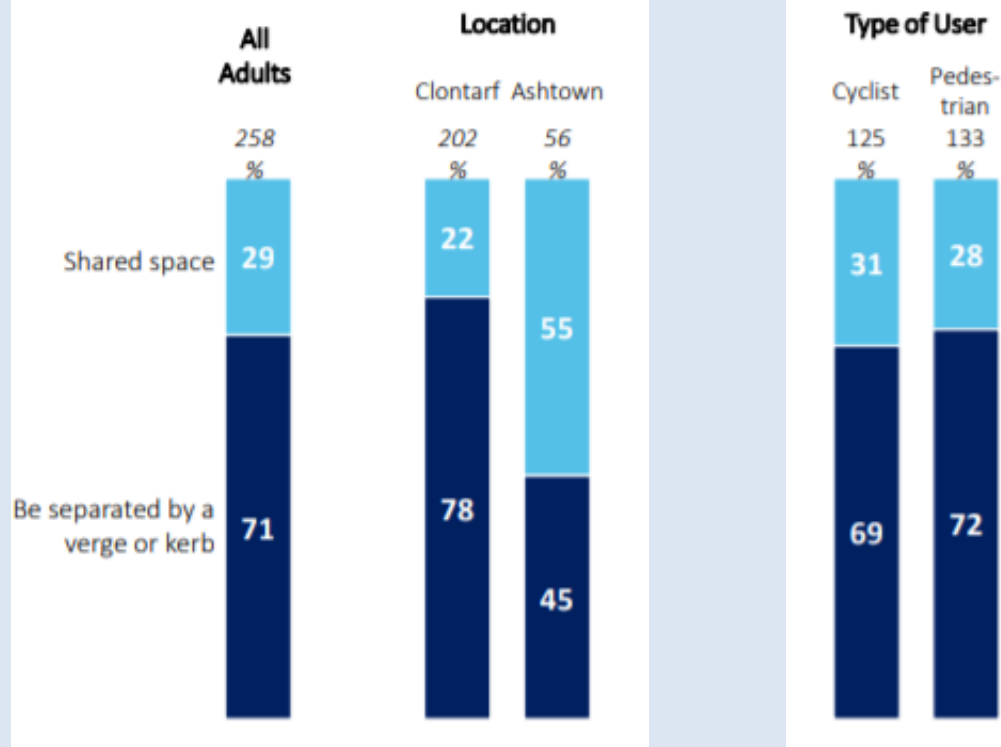


Who nearly collided with



Preference for Shared or Segregation by kerb or verge

Base: 258 pedestrians/cyclists



Reasons for Preference

Base: 258 pedestrians/cyclists

Cyclists who had a preference for sharing with Pedestrians

“It works”

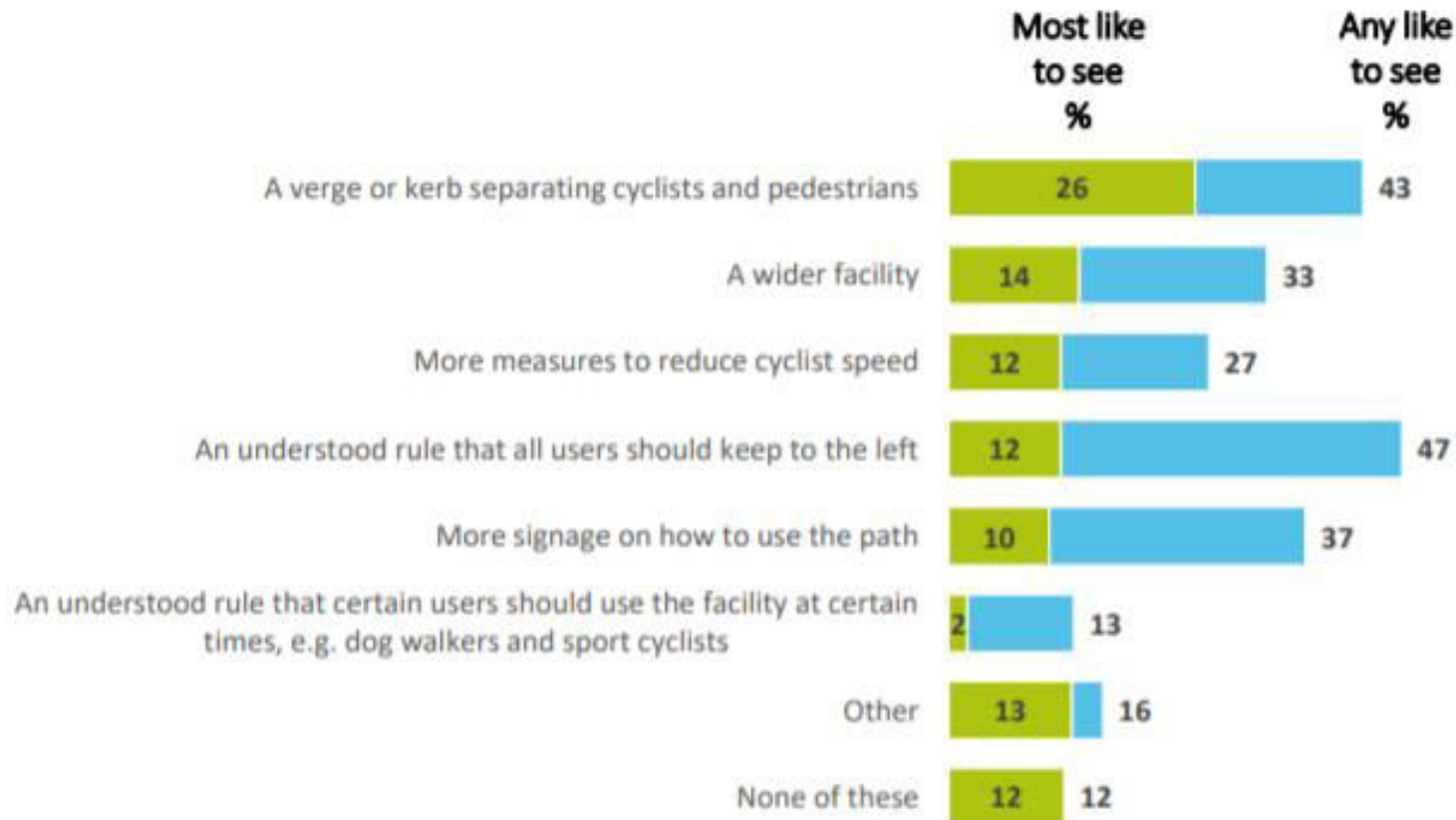
“I just don't think it necessary to separate us, it will be narrow”

“takes up less green area”

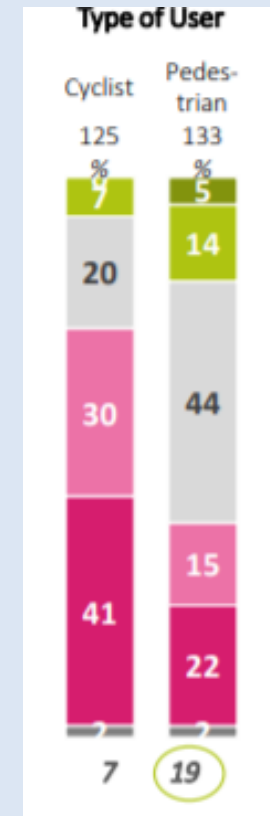
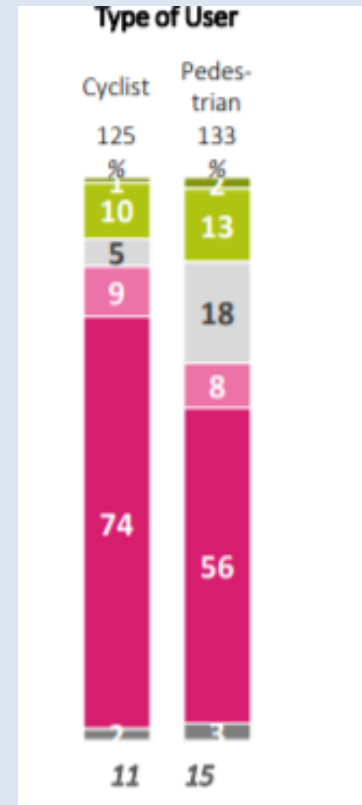
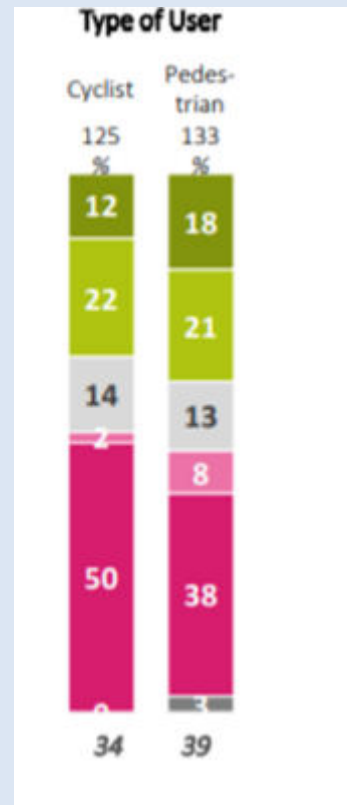
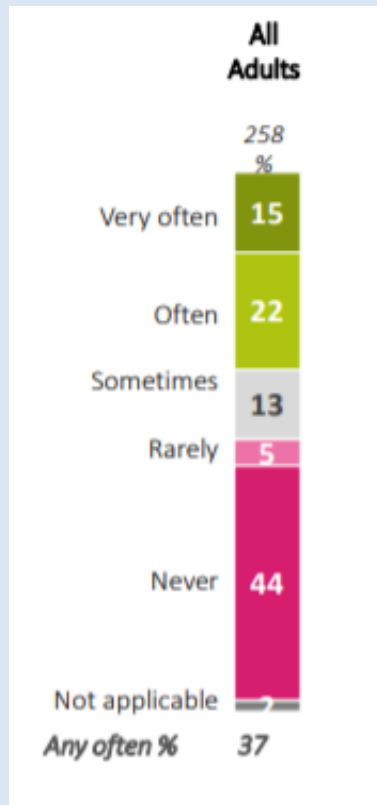
“If you're careful its fine for everyone”

“easier to provide the facility”

What would you most like to see?



Frequency when walking or cycling on this facility



**Listen to
Headphones**

Text or Scroll

Stop and Chat

Emerging Conclusions

- Level of observed interactions between 7373 cyclists and pedestrians extremely rare 0.026%
- Across all 18 Locations 5357 cyclists – average median speed 16kph, average 85%tile speed 21kph
- Cyclists travel a little faster on segregated facilities
- Cyclists don't slow just because surface material changes to concrete and shared area signage
- Cyclists slow speeds in presence of pedestrians in shared areas

Emerging Conclusions

- All locations achieved a satisfaction rating of approx. 80% +/- 5%
- Expressed preference for shared or segregated varies by location and correlates to user numbers
- The most popular improvement was “an understood rule that all users should keep to the left”, followed by segregation
- However segregation was the improvement people would most like to see
- 63% of pedestrians and 57% of cyclists interviewed stop and chat at least sometimes

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