

# Consumer attitudes to greener solutions for last-mile goods delivery

Findings from survey with Northern Transport Voices research community

August 2023



# Transport for the North (TfN)'s Transport Decarbonisation Strategy (Dec 2021) and Freight and Logistics Strategy (Nov 2022) set out the need to decarbonise freight and logistics, including last-mile goods delivery, which is currently predominantly carried out by light goods vehicles/vans.

- In Great Britain van traffic has doubled since the 1990s, driven by growth in online shopping
- Vans represented 11% of carbon emissions from surface transport in the North in 2018
- The Covid-19 pandemic has accelerated trends towards online shopping and home deliveries
- The transition to electric van fleets is already underway for many freight operators, however alternative solutions for last-mile delivery have the potential to reduce other negative impacts of van traffic for local communities – road congestion, air pollution, noise, and road damage
- Some of these solutions include the use of pick-up & drop-off points, and the use of (e)cargo bikes (alongside the practice of micro-consolidation of goods)



# There is currently limited understanding of consumers' attitudes to alternative green solutions for last mile delivery, particularly when this requires consumers to change their behaviour (such as with the use of pick-up & drop-off points).



TfN used its online research community, called Northern Transport Voices, to explore consumer attitudes to greener last-mile delivery solutions



The online research community comprises over 500 members, and its profile broadly aligns with the demographic profile of the population in the North of England



Members of the community were invited to complete a **survey comprising 20 questions**, with incentives offered to encourage uptake. Fieldwork took place between **6 February – 8 March 2023**. A total of **256 responses** were received



The following slides summarise the key survey findings

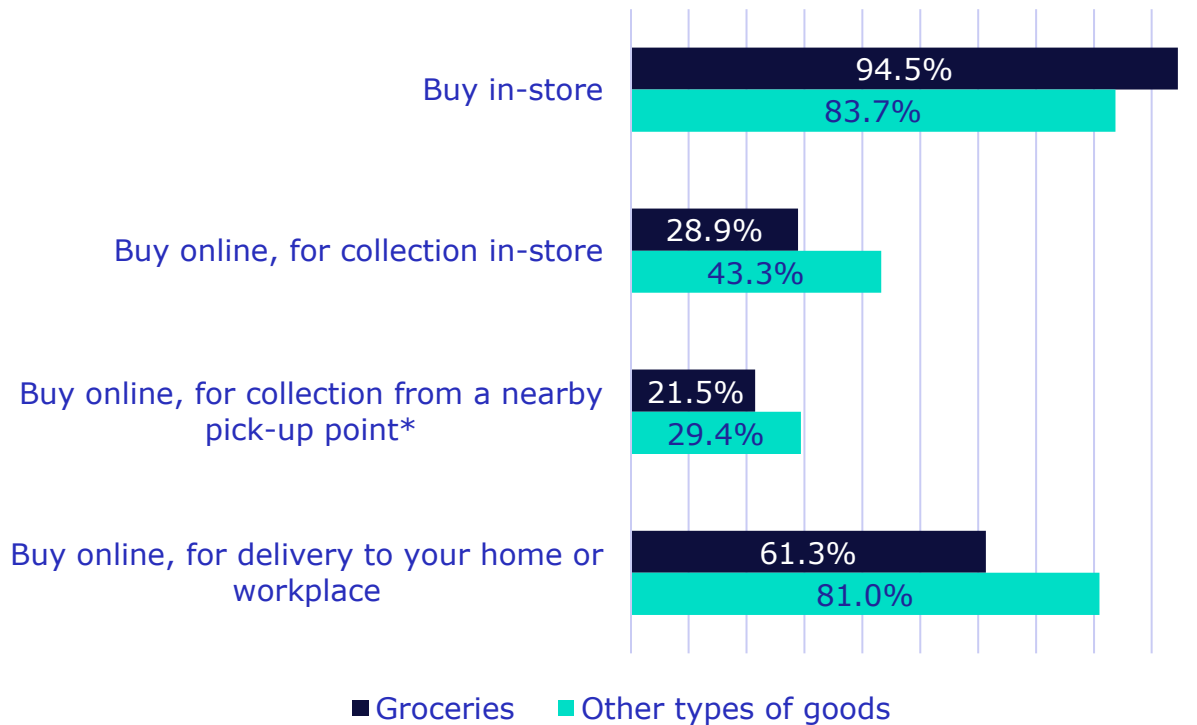




# Shopping behaviours and delivery preferences

# Online shopping with home delivery is catching up with in-store shopping (for non-groceries)

**Proportion of respondents making purchases at least once every 3 months, by shopping method and category of goods**

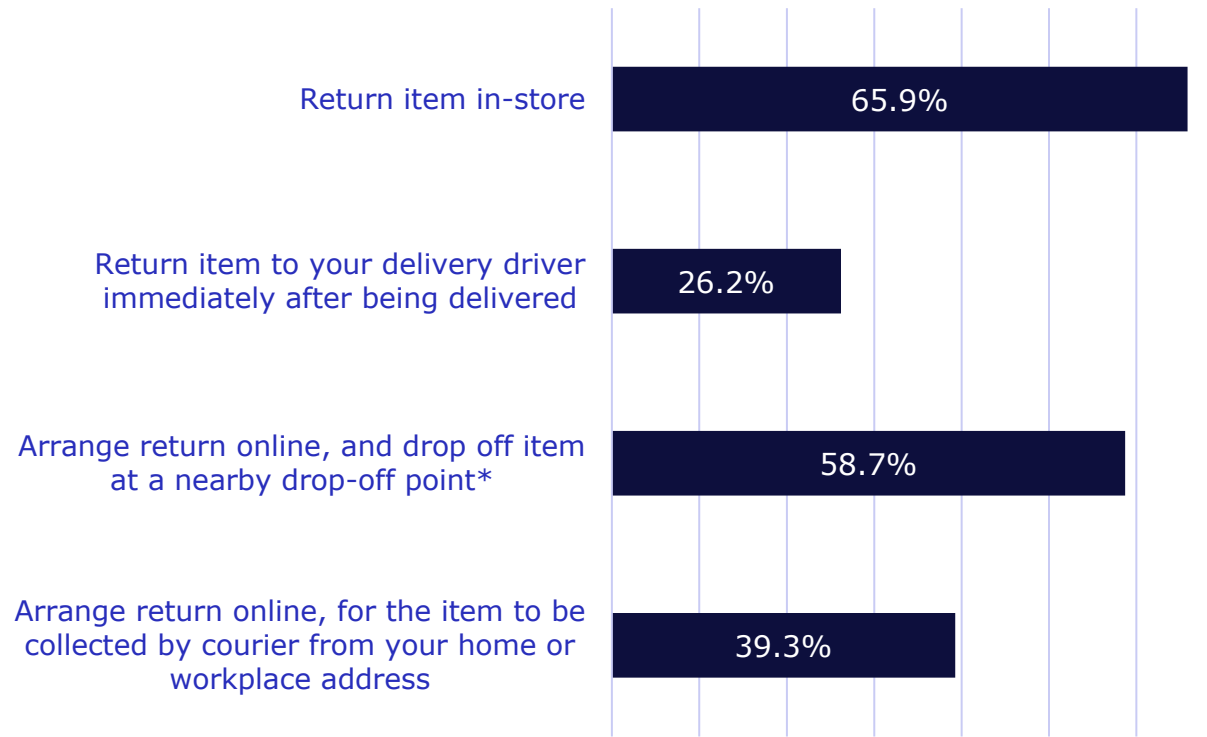


- For other types of goods (excluding groceries), according to this survey, the prevalence of online shopping for delivery to home/workplace is almost on par with shopping in-store
- Online shopping, for collection from local pick-up points (such as corner shops or parcel lockers) is still the least prevalent shopping method, but appears to have been tested out by at least a fifth of respondents
- As with home delivery, collection from local pick-up points is also more popular for other types of goods, compared to groceries

\*e.g. Post Office, corner shop, or self-service parcel locker  
Number of responses=256

# Using drop-off points is a popular method for returning unwanted items

## Proportion of respondents returning purchases at least once, by return method

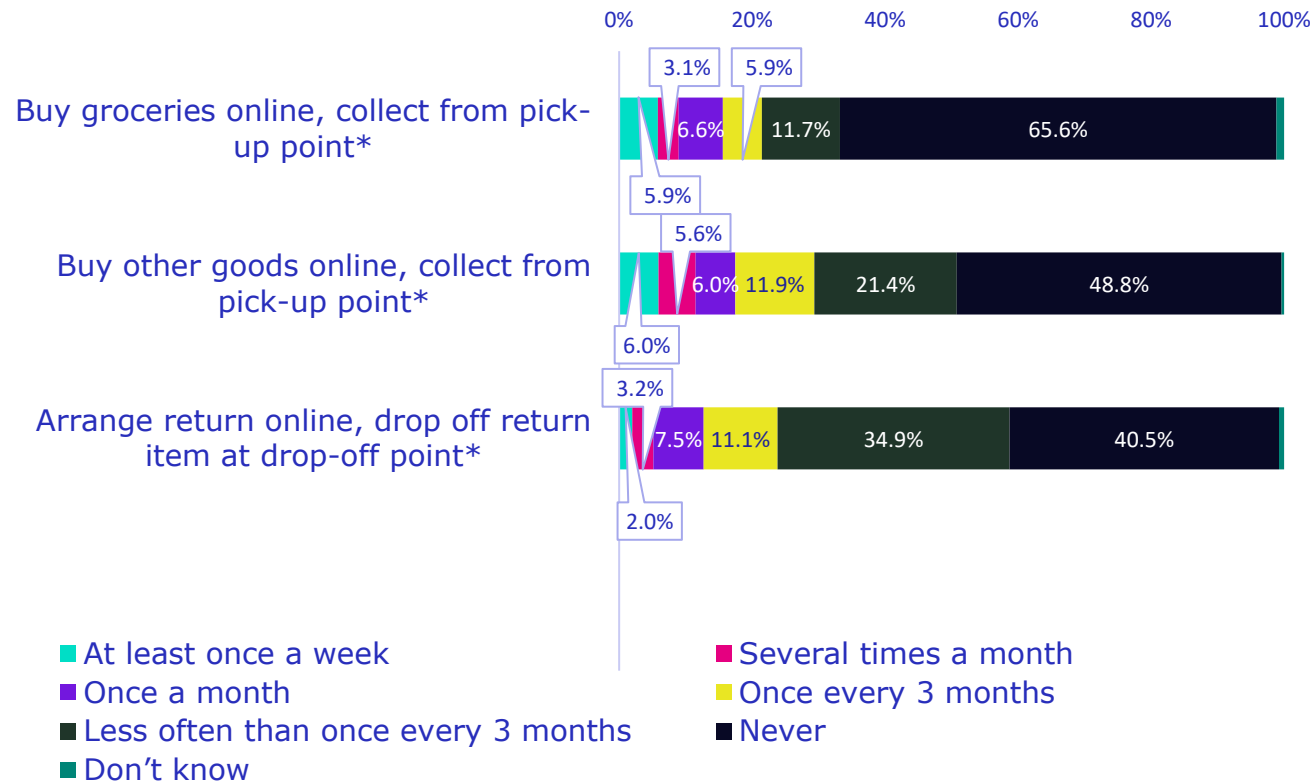


\*e.g. Post Office, corner shop, or self-service parcel locker  
Number of responses=252

- When it comes to returning unwanted or unsuitable purchases, consumers' choices can depend on the return options provided by retailers, however dropping off return items at a local drop-off point (defined here as including Post Offices, corner shops and parcel lockers) appears to be a popular option
- Dropping off return items at a local drop-off point appears to be the second most prevalent return method, behind returning items in-store, but ahead of having return items collected from home address, or returning them to driver immediately after delivery

# 6% of respondents collect items and 2% return items from pick-up/drop-off points every week

## Frequency of purchasing/returning items via pick-up/drop-off point

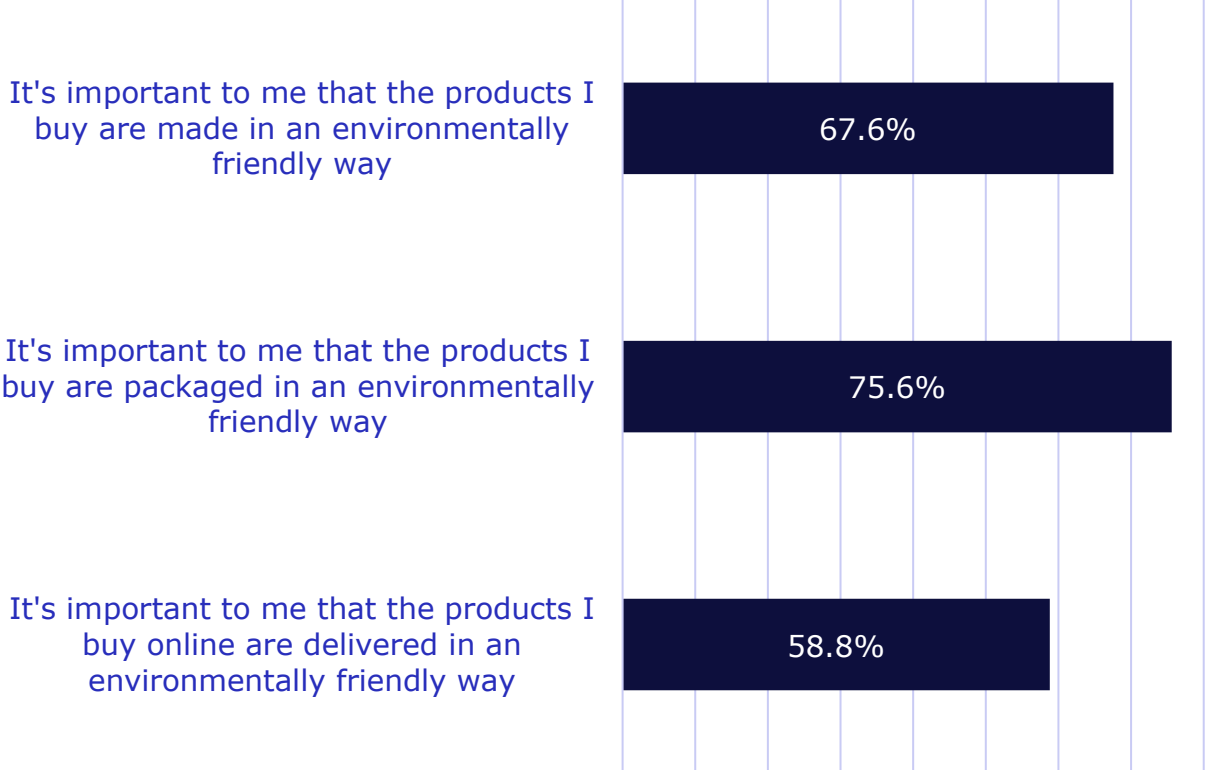


- A small share of the respondent group are regular users of pick-up and drop-off points – around 6% buy groceries and other goods online and collect them from a pick-up point at least once a week, while 2% return items via a parcel drop-off point at least once a week

\*e.g. Post Office, corner shop, or self-service parcel locker  
Number of responses=256 to 252

# Environmental impact of delivery option important for 60% of respondents, but not as important as impact of manufacturing & packaging

Proportion of respondents that 'Strongly agree' or 'Agree' with the following statements



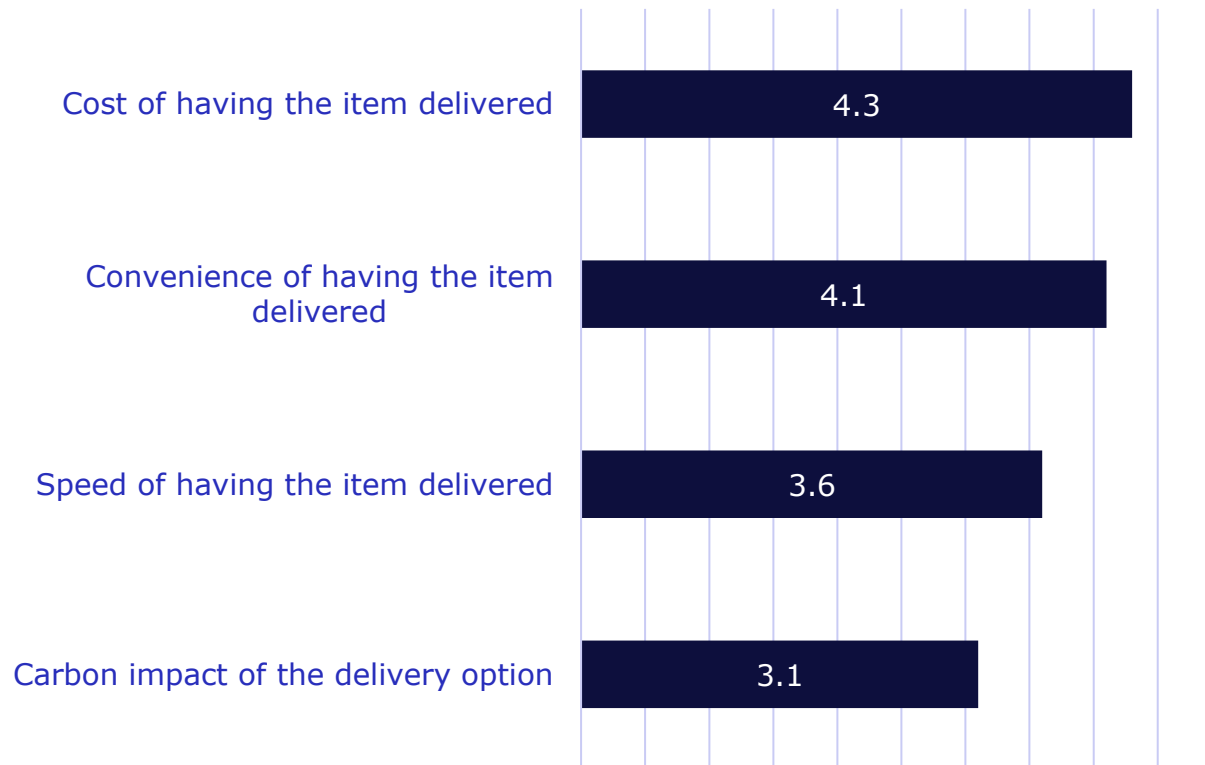
- The environmental impact or sustainability of the delivery option for goods purchased online is important to nearly 60% of respondents
- However, the environmental impact of the delivery option is somewhat less important to consumers compared to the environmental impact of how the goods are manufactured, and how they are packaged

Number of responses=250



# Carbon impact of the delivery option is a lower priority compared to cost, convenience and speed

**Average score – “To what extent do the following factors have an influence on your choice of delivery options for goods you buy online?”**



- Carbon impact received an average score of 3.1 out of 5 for the extent to which it influences consumers' choice of delivery option, ranking below cost of the delivery option (4.3), the convenience of the delivery option (4.1) and the speed of the delivery option (3.6)

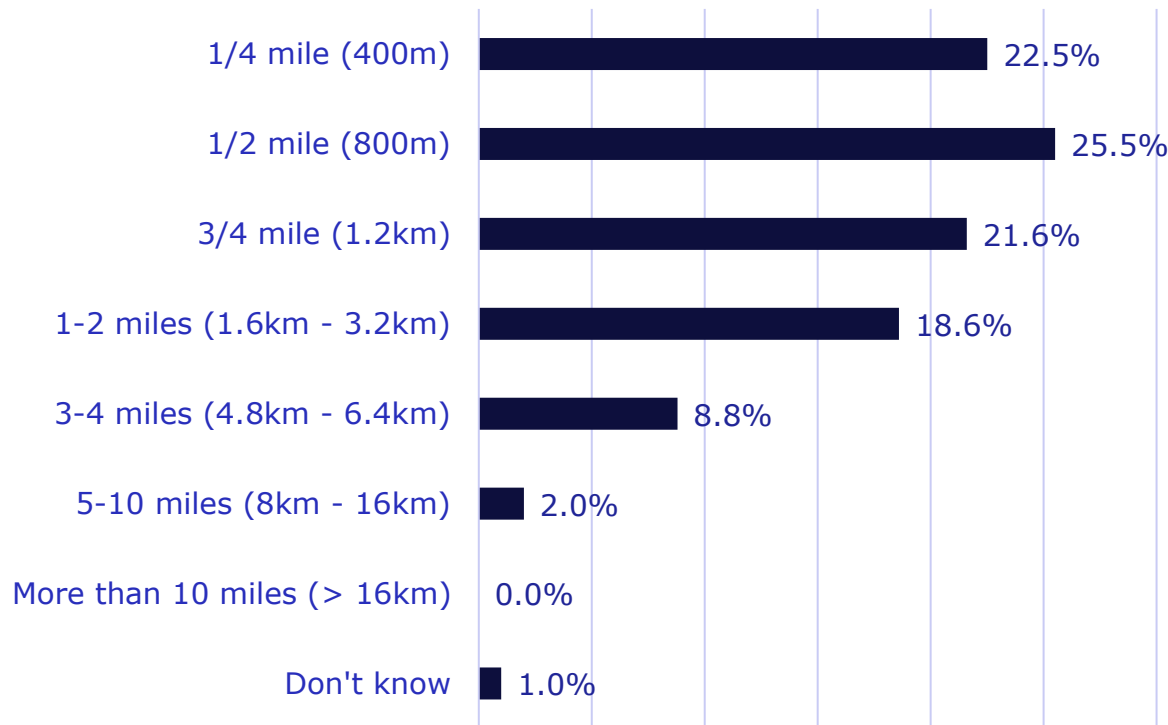
Number of responses=236 to 246



**Experience  
of using  
pick-up and  
drop-off  
points**

# Over 40% of respondents have used pick-up & drop-off points, mostly close to home or workplace

**Distance of pick-up/drop-off point from home or workplace address** (all respondents who had used one at least once in previous 3 months)

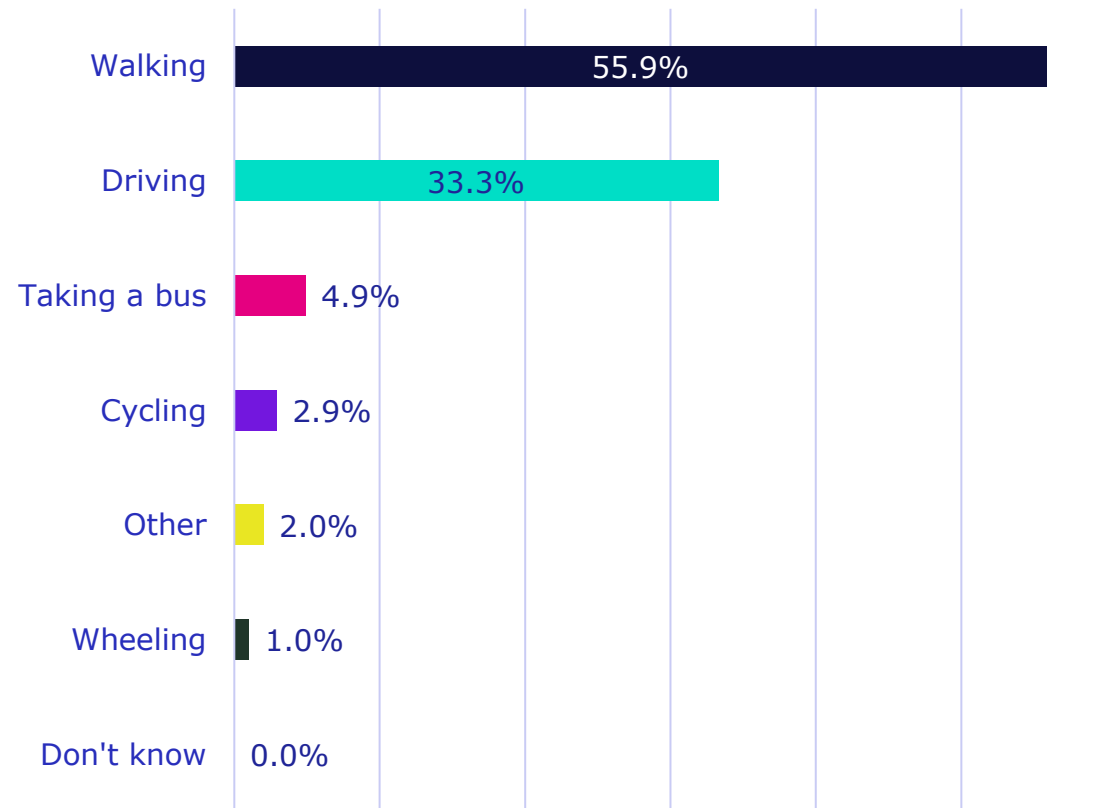


Number of responses=102

- 41.3% of respondents said that they used a local parcel pick-up or drop-off point (including Post Office, corner shop or self-service parcel locker) at least once in the last three months
- The share of respondents who used a pick-up/drop-off point at least once in last three months ranged from 45.3% for urban residents, 42.7% for sub-urban residents, and 31.7% for rural residents
- Overall, the pick-up/drop-off point was usually close to the respondents' home or workplace address (70% under 1 mile, and 88% up to 2 miles)

# Nearly half of those who drove to a parcel pick-up/drop-off point were travelling less than 1 mile

## Mode of travel to pick-up/drop-off point from home or workplace address

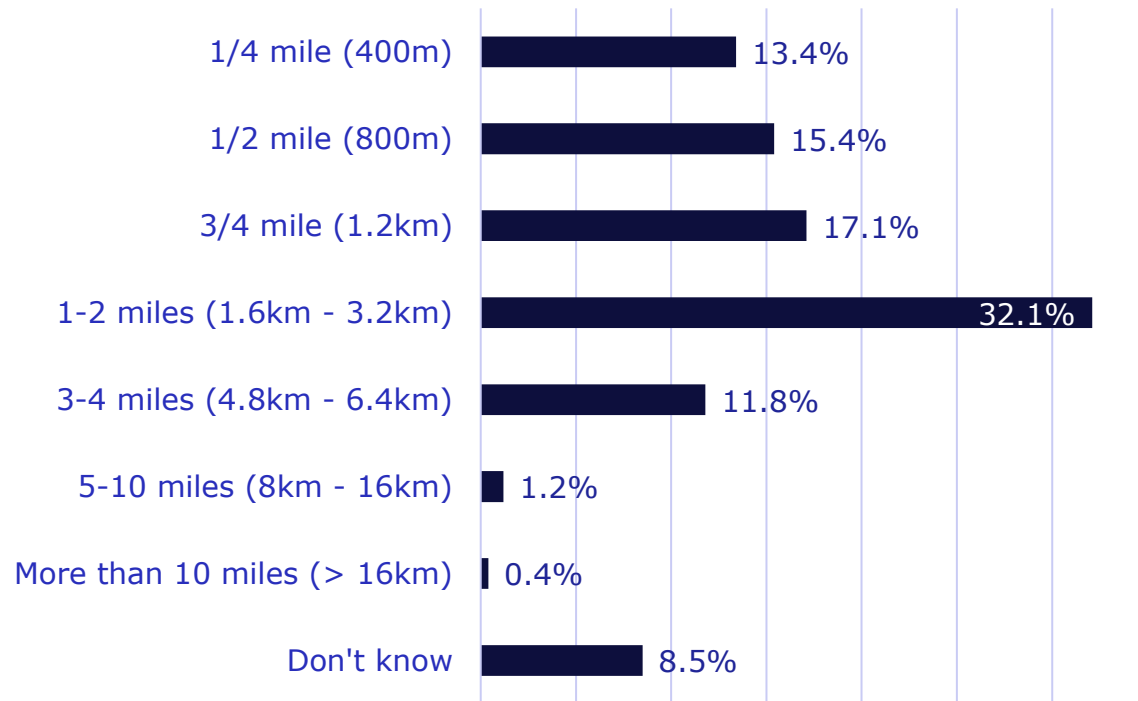


Number of responses=102

- Walking was the most common mode of getting to the pick-up/drop-off point for the respondents that had used one, although a third of respondents used a private car to get there, and a minority took a bus (5%) or cycled (3%)
- Rural residents were most likely to drive (over half, compared to a third of suburban, and quarter of urban residents)
- Nearly half (48%) of those who drove to a pick-up/drop-off point were travelling a distance of less than 1 mile
- Shift towards active travel (or public transport for longer distances) for consumers to get to pick-up/drop-off points needs to be encouraged, to ensure these sites offer a greener and more neighbourhood-friendly solution than front-door delivery by van

# Consumers prefer pick-up & drop-off points to be close – but many would be willing to travel further than they have previously

## Maximum distance respondents would be willing to travel to pick-up/drop-off point from home or workplace address

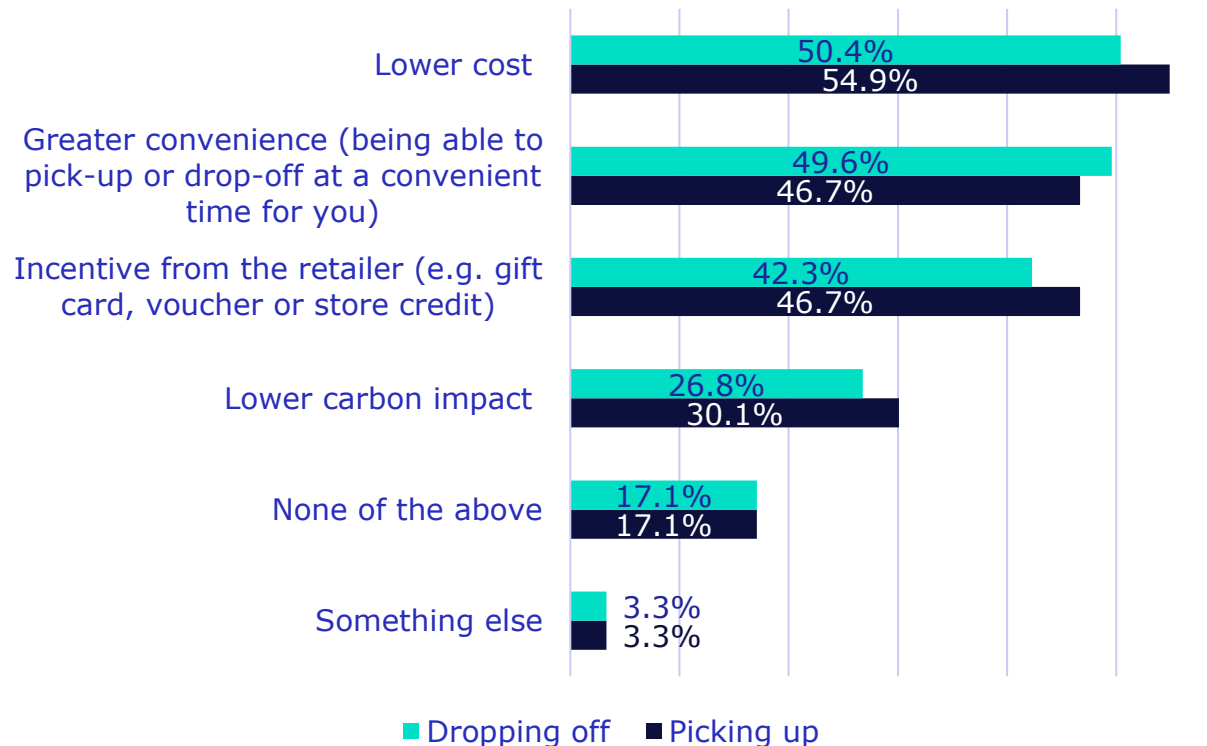


Number of responses=246

- 46% of respondents said that the maximum distance they would be willing to travel to a pick-up/drop-off point is under 1 mile, while a further 32% would be willing to travel up to 2 miles. Only a small number of respondents were willing to travel further than 5 miles (most of whom were rural residents)
- For the majority (over half) of those who had previously used pick-up/drop-off points, the maximum distances they would be willing to travel were higher than the distances they had travelled on previous occasions – indicating that consumers may be open to travelling slightly further to collect/drop-off parcels than they have travelled in the past

# Potential lower carbon impact of pick-up/drop-off points is not sufficient on its own to encourage greater use of these points

Factors which would make respondents more likely to use a pick-up/drop-off point compared to front-door delivery/return collection



Number of responses=246

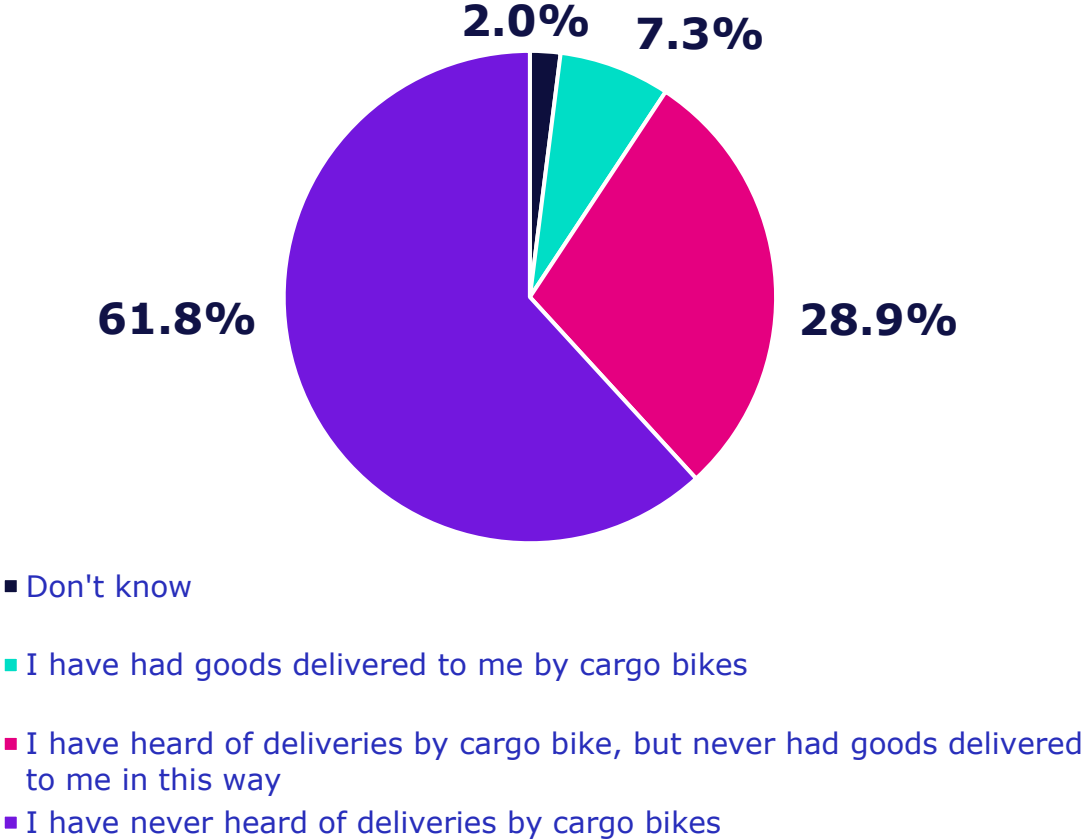
- Lower cost of delivery, or an incentive from the retailer, are the factors which would be most likely to encourage respondents to use pick-up/drop-off points, while convenience is also an important factor
- The potential for lower carbon impact was ranked lowest in terms of importance– less than 30% of respondents stated this factor would encourage them to use pick-up/drop-off points more
- Reduced costs or incentives for the consumer are most likely to encourage a more widespread use of parcel pick-up points and drop-off points



**Experience  
of and  
attitudes  
towards  
cargo bike  
deliveries**

# Delivery by cargo bike is still relatively unfamiliar to consumers, particularly for delivering parcels

## Awareness of cargo bikes as a method of last-mile goods delivery



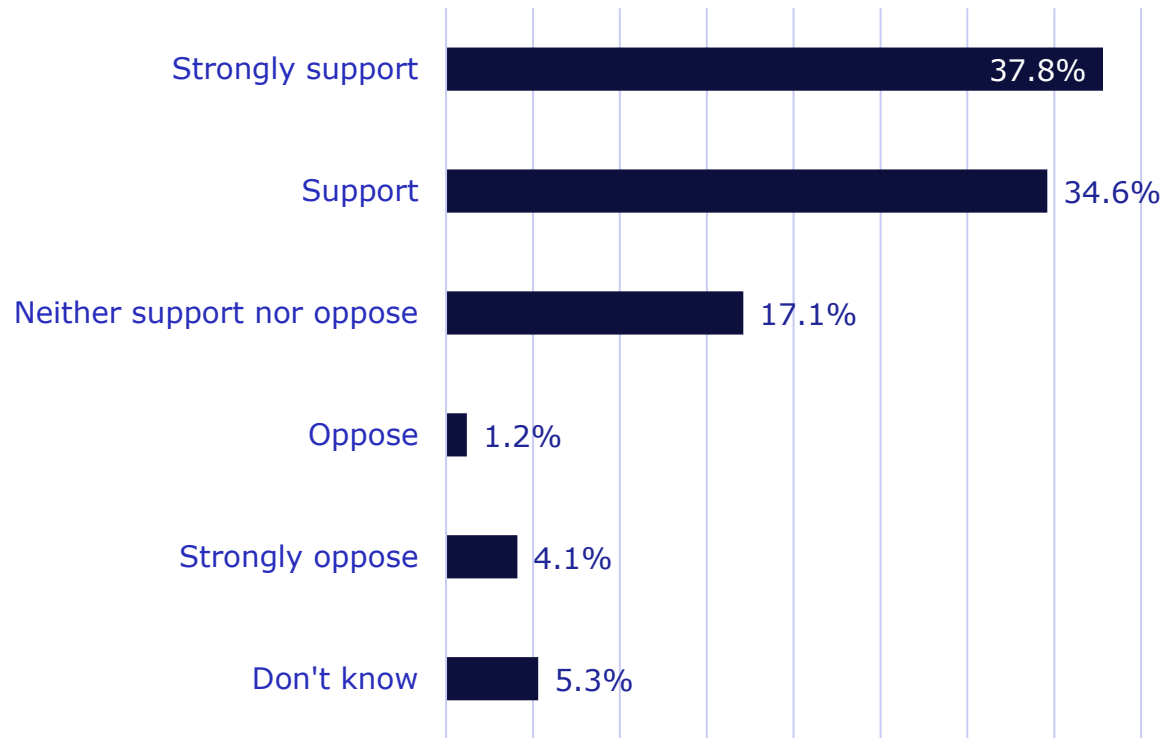
Number of responses=246

- Last mile delivery of goods via cargo bike is still a relatively unfamiliar concept to consumers – 62% of respondents said that they had never heard of delivery by cargo bikes
- Only 7.3% of the respondents had experience of receiving any type of goods by cargo bike (nearly all of these respondents were residents of urban or sub-urban areas)
- Around 66% of those who had experienced cargo bike deliveries had had **groceries** delivered in this way, while 61% had **takeaway food** delivered in this way, and around 50% had **parcels** delivered by cargo bike



# Strong support for cargo bike deliveries, across different types of places

**Extent to which respondents would support cargo bikes as a method of last-mile goods delivery in their local area**

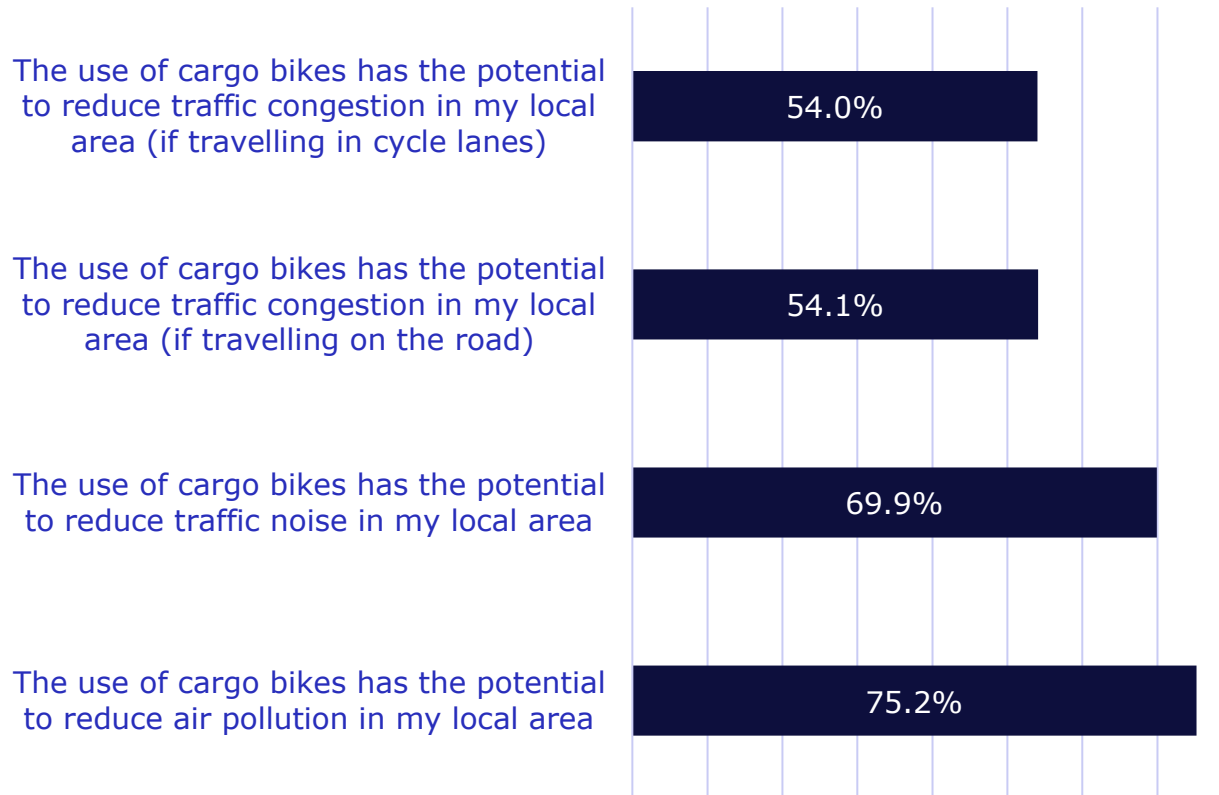


Number of responses=246

- Greater use of cargo bikes for last mile deliveries is a popular idea among the respondents – 72% said they would support the use of cargo bikes in their area
- Support for the use of cargo bikes was similar across different place types – respondents who stated that they live in a rural area were only slightly less supportive (68%) as those who said they live in an urban area (70%) or suburban area (74%)
- The strong level of support is perhaps not surprising, as cargo bike deliveries do not require consumers to change their behaviour as pick-up/drop-off points do, but still allow consumers to enjoy the benefits, such as less road congestion, less noise, and cleaner air (particularly in urban settings)

# Consumers are optimistic about cargo bikes' potential to reduce air pollution and traffic noise

## Proportion of respondents that 'Strongly agree' or 'Agree' with the following statements

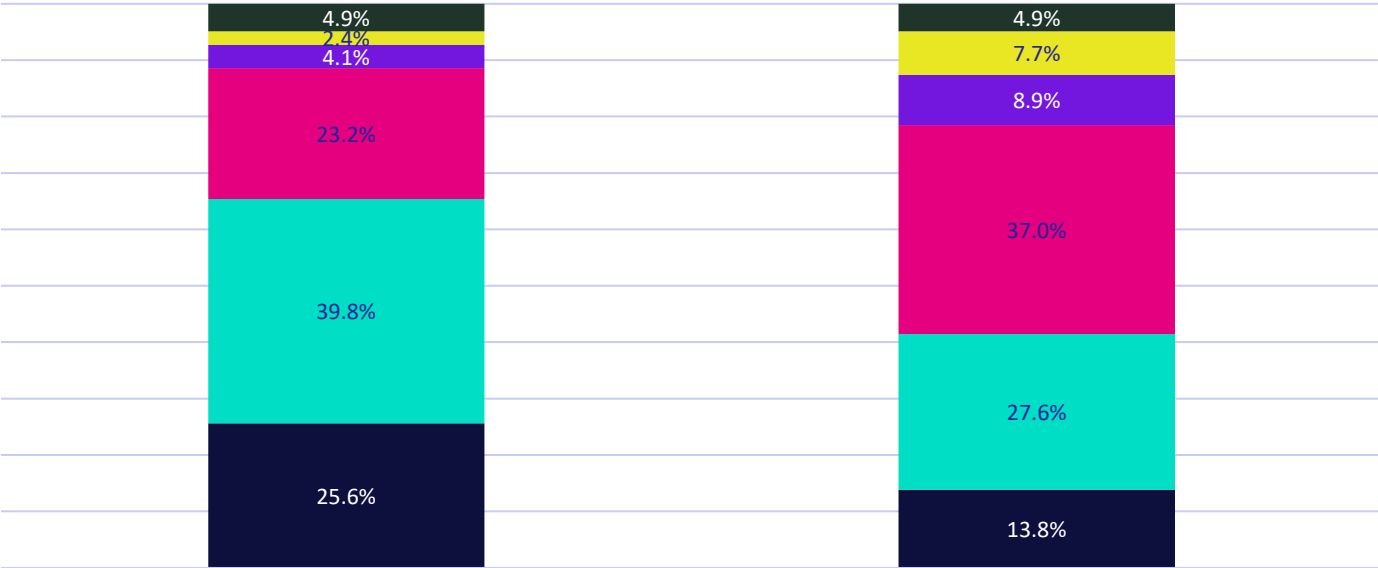


Number of responses=246

- Consumers are most optimistic about the potential of last-mile deliveries by cargo bike to reduce the level of **air pollution** in their area – 75% of respondents agree with this – while a slightly smaller proportion (70%) think that cargo bike deliveries have the potential to reduce **traffic noise** in their area
- In comparison, 54% believe that cargo bike deliveries have the potential to reduce **road congestion** in their area. Whether cargo bikes travel in dedicated cycle lanes, or whether they travel alongside general traffic on the road, does not appear to have a strong influence on the consumers' perception of the potential for this delivery method to reduce road congestion

# Consumers don't want cargo bike deliveries to cost more – but may tolerate slower delivery times

## Extent to which respondents agree with the following statements



Any difference in cost of delivery by cargo bike compared to other methods would be important to me

Any difference in speed of delivery by cargo bike compared to other methods would be important to me

■ Strongly agree      ■ Agree      ■ Neither agree nor disagree  
■ Disagree      ■ Strongly disagree      ■ Don't know

Number of responses=246

- 65% of respondents stated that any difference in cost of last-mile delivery by cargo bike (compared to other methods) would be important to them – suggesting that consumers’ openness to the use of cargo bike deliveries would reduce if the cost was higher compared to other methods. It would therefore be important that operators aim to minimise passing on any increase in cost of cargo bike delivery (versus van delivery) to the end-consumer
- Speed of delivery by cargo bike appears to be a somewhat less important factor to consumers than cost – suggesting that consumers may be prepared to accept slower delivery times via cargo bike (compared to using vans) as long as it means the price of delivery wouldn’t increase (compared to using vans)

# What people said... about greener solutions for last-mile goods deliveries

At the end of the survey, respondents were invited to add any other thoughts they wanted to share on the topic of greener solutions for last-mile goods deliveries. The feedback provided is illustrated here with selected direct quotes.

## General support

"These ideas are great and I would love to see them in operation everywhere"

"I am strongly in favour of sustainable and environmentally friendly solutions for the delivery of goods."

"The idea deserves nationwide recognition and help from the Government to help with getting this off the ground"

"It is something that should be considered a lot more and providing the cost of delivery is the same and there is minimum delay I think it is an excellent idea and I would certainly use it"

"I think there is so much more that can be done, as some online stores and delivery options use far too many vehicles and too much packaging"

## General opposition/ concerns

"Greener so called solutions will do nothing to save the world as the world will disappear naturally no matter what we are attempting to do"

"They must not add to the already unaffordable cost of Net Zero."

"Seems like we are trying to adopt 19th century solutions for 21st century problems."

"The vast majority of vehicles on the road are private cars, and making travel via public transport and active travel more convenient than driving would have a much greater impact on transport emissions than changes [to] last mile delivery methods"

# What people said... about pick-up/drop-off points

## Support for pick-up/drop-off points

"More pick up and drop off lockers need to be placed so it will encourage more people to not deliver directly to their house."

"Need to balance the costs and carbon impact of delivery versus costs and carbon impact of having to travel to collect from another location. I have chosen not to own a car (for a range of reasons, including environmental) so would wish to be able to collect locally, ideally within walking distance."

## Concerns about pick-up/drop-off points

"I am a disabled person and [it's] not always possible to use a car for shopping or dropping off returns, so it is vitally important to me to have deliveries to my home"

"If I go to the nearest shops I need to travel by train, supermarket by bus, as I have poor health the options open to me are poor as public transport is dire, so I need to stick to home deliveries as I am more or less a prisoner due to lack of transport"

"Ensure no one vulnerable misses out. Incentivising collection is great unless you're housebound and would have to pay more from your limited income. Also, how many people will actually walk or cycle to their collection point and how many will drive? If 25 people are driving from a-z and back again, that's more emissions than a van going from a-b-c-d-...-x-y-z in a loop. Just because the emissions are attributed to the customer rather than the delivery company doesn't mean they don't exist"

# What people said... about cargo bike deliveries

## Support for cargo bike deliveries

"As someone who has breathing difficulties, I often wish there were fewer particulate emitting vehicles on the roads in my area. I would like to see local businesses using green vehicles more, and the Council introducing measures to encourage this, e.g. cycle lanes."

"I think it's a great idea and the type of job that would appeal to me"

"I think a cargo bike is a great option and would work well in my area"

"Think the greener bike is a great idea"

## Concerns about cargo bike deliveries

"Living in a remote area, the last mile would probably be only one customer distance, between drops can be up to 2 miles, electric vehicles [would be] a better solution"

"It's a good idea, however I worry about the rider in poor weather conditions"

"As long as the safety of the riders is secure as far as possible it's a good concept. Always a risk of them being attacked, however, as they would be vulnerable on a bike type of transport"

"The type of terrain may be of significance - I live on a steep hill"

"Cargo bikes are a good idea, provided that it is not simply a ruse to save costs by employing riders on a pence per delivery basis....i.e. part of the gig economy."

"Removing vans and replacing them with a much lower cubic capacity will mean a lot more bikes on the roads, bringing with it increased risk to the life of the riders. There would have to be wholesale investment in cycle routes and lanes in the present infrastructure."

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