

Delivering Good Work: *Labour, employment and wellbeing in London's cargo bike sector*

Charlie Couve, Tiffany Lam and Ersilia Verlinghieri



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List of abbreviations

3PL - Third party logistics

B2B - Business to business

B2C - Business to customer

CO2 - Carbon dioxide

DfT - Department for Transport

EDI - Equity, diversity and inclusion

GLA - Greater London Authority

ILO - International Labour Organisation

IWGB - Independent Workers Union of Great Britain

NOx - Nitrogen oxides

PAYE - Pay as you earn

TfL - Transport for London

ULEZ - Ultra Low Emission Zone

VKM - Vehicle kilometres

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Executive summary

Cargo bikes have been gaining popularity as greener, healthier, and more efficient replacements for delivery vans in cities. A growing body of evidence demonstrates their benefits in reducing delivery times, traffic congestion, carbon emissions, air pollution and injury risk to other road users, compared to motorised vehicles.

As this new cargo bike logistics sector rapidly expands and transforms, there is a need for careful consideration of workers' experiences, physical and mental health, as well as overall wellbeing, so that growth in the sector corresponds with growth in good, green, gainful jobs.

Focusing on this aspect is necessary as:

- There is a well-documented steady 'race to the bottom' approach to employment in the wider logistics sector, characterised by precarious and low-paid work in harsh and unhealthy working conditions
- Cargo bike couriers, and delivery cyclists in general, tend to be overlooked in cycling research, policy, and planning
- Cargo bike couriers and delivery cyclists do physically demanding work that increases their exposure to traffic-related air pollution and road dangers, which adversely impacts their physical health and safety and overall wellbeing

This report shares unique insights on the experiences of cargo bike delivery workers in London and the improvements they would like to see in the sector. It highlights what good growth for the cycle logistics sector would look like based on an analysis of academic and grey literature, as well as 22 semi-structured interviews with 11 riders and 11 managers across 15 cargo bike companies in London, and two supplementary focus groups, conducted separately with riders and managers. Key findings and recommendations are summarised below.

Barriers to reaching potential

London's cargo bike logistics companies have diverse organisational and operational structures but express a shared commitment towards improving environmental sustainability. They aim to offer a service that efficiently replaces delivery vans and creates good, green, and healthy jobs, as well as opportunities for local businesses and communities. However, they encounter barriers to realising the sector's full potential, largely stemming from a lack of wider institutional support. This is especially the case for smaller companies that have greater potential to be assets for local communities and strengthen local economies. The withdrawal of government funding for purchasing cargo bikes has negatively impacted most companies, compounding existing challenges around financial viability, rider recruitment and retention, and diversity and inclusion.

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Gig economy practices

The variety of contract types for riders reflects broader trends in the employment market, such as increasing workforce casualisation and low pay. Riders express the need for flexible working conditions; however, the contractual options offered appear to result from companies' inability to provide secure work and remuneration reflective of the skills and labour required to perform the job. Managers make a concerted effort to distinguish the cargo bike sector from the food delivery gig economy. As such, they pay riders per hour, provide bikes, and often communicate directly with riders. However, riders' experiences of precarity, performance pressure, and reported threats of replaceability demonstrate there are more similarities with the gig economy than many would hope for.

Car-centric streets

Cargo bike riders face additional challenges when navigating a highly car-centric environment with cycling infrastructure that does not accommodate their spatial needs. This includes cycle lanes that are not wide enough for cargo bikes. Their relatively new presence on roads also means riders face aggression by drivers who do not see cargo bikes as legitimate road users. The absence of sheltered places to rest and public toilet facilities, as well as poor equipment provision, exacerbate these challenges.

Equity, diversity and inclusion

Accounts from female and nonbinary riders indicate that interactions with other road users are highly gendered, and more likely to involve physical or sexual harassment. The lack of public toilets and appropriate workplace facilities has a disproportionately negative impact on female and nonbinary riders. Together, these factors contribute to creating a gendered working environment with female and nonbinary people often denied a place in depot facilities, the public realm and workplace culture. This adversely affects workforce diversity and inclusion. Moreover, preliminary evidence demonstrates that migrant workers and people of colour have distinct experiences, including racist comments and police racial profiling whilst riding and delivering.

Despite the challenging environment, riders value the social aspects of the job and the sense of camaraderie. Informal encounters and digital group chats are key to exchanging useful information and maintaining solidarity. However, this does not translate to higher unionisation rates, which many riders believe would help improve their working conditions.

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Key tensions in the sector

Our analysis identified four key tensions in the cargo bike logistics sector. These describe the contradictions between managers' visions for good work and good growth, and the reality of riders' lived experiences:

- The rhetorical commitment from companies to be distinct from the gig economy can often be at odds with riders' experiences of precarious work
- A disconnect between the visions companies have for their growth, and their demonstrated ability to create functional management and organisational structures
- To facilitate companies' success, burdens are often shifted onto riders, such as the expectation that riders will personally invest in equipment required for the job (e.g., phones, battery packs, waterproof clothing) or ride quickly to meet the app's and customer's expected arrival times
- A narrow focus on health as cardiovascular fitness and muscular strength, and a similarly narrow definition of wellbeing as merely the absence of harm, ignores the physically demanding nature of cargo bike deliveries and frequent experiences of road danger. These can lead to repeated stress injuries, and adversely impact riders' mental health and general wellbeing

These tensions indicate a need to address structural issues around labour practices and processes, including regulation, to improve riders' working conditions, health and wellbeing.

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Key recommendations

The following recommendations outline five key actions that cargo bike companies and policymakers can take to support good growth and fair work in the cargo bike logistics sector:

1. Ensure that riders have well paid and secure work. Fundamental employment rights, such as sick pay and access to union representation, should be introduced across all companies.
2. Develop mechanisms in both local and national government to nurture and support the cargo bike sector. This should consider fiscal and other types of support, for instance helping to identify low-cost or underutilised land for new depots.
3. Promote greater collaboration across the sector through the development of an industry alliance that includes cargo bike companies as well as policymakers. The alliance should prioritise a consistent approach to rider training and health and safety, including taking immediate action to tackle street harassment.
4. Provide adequate infrastructure to enable cargo bike operations and improve riders' wellbeing e.g., an extensive network of wide and protected cycle lanes; charging facilities; adequate parking; toilet facilities, places for rest.
5. Take action to advance equity, diversity and inclusion at all levels.



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1. Introduction

Decarbonising transport is essential to tackling the climate emergency and improving air quality in our cities. Transport produces 24% of the UK's greenhouse gas emissions, making it the largest emitting sector.¹ Road vehicles account for the majority (91%) of emissions from domestic transport, with logistics vehicles representing a significant proportion of this (35%).² Similarly, transport contributes substantially to toxic air pollution and subsequent health burdens to the population, producing 33% of Nitrogen Oxides (NOx) emissions and 14% of Particulate Matter (PM_{2.5}) emissions.³

Vans have been a rapidly growing source of road traffic, with van vehicle kilometres (VKM) increasing by 106% between 1994-2019,⁴ creating a substantial additional source of emissions and road danger. Between 2021-2022 there was a 25% increase in van traffic, largely driven by the surge in online shopping deliveries since the COVID-19 pandemic.⁵

Cargo bikes have been gaining popularity as greener, healthier, and more efficient replacements for delivery vans in cities. A growing body of evidence demonstrates the benefits of cargo bikes in reducing delivery times, traffic congestion, carbon emissions, air pollution and injury risk to other road users, compared to motorised vehicles.⁶ Shifting more vans to cargo bikes for deliveries in cities and towns can accelerate the decarbonisation of urban freight, whilst creating new green jobs, therefore helping to achieve the twin goals of decarbonising transport and 'building back better' from COVID-19.⁷

Historically, the UK has managed profound industrial shifts poorly, and this time must be different. A just transition to zero- or low-carbon transport is needed to ensure that new green jobs are good jobs that provide security, a living wage, and a safe, equitable and inclusive working environment. Delivering a just transition must be prioritised, so that workers who are most affected – that is, workers in industries that require rapid transformation to decarbonise, like freight – are involved every step of the way.

The colossal shift of power from organised labour to global capital since the 1980s has left workers disempowered, worse off and disillusioned.⁸ This has been compounded by increasingly widespread precarious work, with 3.7 million people in the UK (11% of the workforce) found to be in insecure work in 2019.⁹ The number of people working in the gig economy has also tripled in England and Wales over the past five years, with 15% of working adults working on gig economy platforms at least once a week.¹⁰ The COVID-19 pandemic has also highlighted the bi-directional relationship between poor health and economic inactivity.¹¹

Rising inflation, the deepening Cost of Living Crisis, and economic recession have triggered waves of industrial action across the UK. The summer of 2022 has been described as the 'hot strike summer,' as rail workers, criminal barristers, BT workers, Royal Mail postal workers, airline

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workers, further and higher education staff, and teachers went on strike over issues related to pay, pensions, working conditions, and job losses. Strike action has continued into the autumn and winter, leading to the ‘December of discontent,’ with paramedics, nurses, rail workers, and other public sector workers set to strike.¹²

This is the backdrop of our research – greater visibility of unions, ongoing industrial action in various sectors, and a wider public debate about whether ‘work is working’ for most people. Our research aims to understand the experiences of cargo bike delivery workers – both riders and managers – and amplify their voices, so that their perspectives can inform:

- Better working conditions and new green, good jobs in the cargo bike logistics sector
- Measures and policies to improve safety, health, and wellbeing in the sector
- Initiatives to increase equity, diversity, and inclusion in the sector
- Cycling policy and infrastructure planning

More specifically, our research objectives are:

- Develop an understanding of the various experiences of cargo bike delivery riders with a particular focus around employment and wellbeing
- Identify the relationships between existing employment practices and ambitions for growth
- Co-create a set of actions that cargo bike logistics companies, government bodies, and other actors can take to ensure the sector continues to grow in a just and equitable way

The hope is that our research and recommendations will build on TfL’s Cargo Bike Operator Code of Conduct, which has been applied during the Bikes for Business project, a substantial trial of cargo bikes for commercial use in London.¹³ It offers a greater focus on improving health and wellbeing, safety and working conditions in the cargo bike logistics sector, whilst supporting greater uptake of cargo bike deliveries in London and beyond.

Delivery cyclists make up a growing and sizeable proportion of overall people cycling in cities worldwide. This is largely due to the rise of gig economy food and grocery delivery platforms (e.g., Just Eat, Deliveroo, Zapp), as well as the increase in cargo bike deliveries. However, delivery cyclists tend to be overlooked in cycling research, policy, and planning, which has focused on cycling as a mode of transport – and mainly the work commute – rather than cycling as work. Delivery cyclists are at the intersection of precarious streets and precarious work, given that their work tends to be low-paid and insecure and car-centric streets are the bulk of their ‘workplace.’

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While there is a growing body of research on the working conditions of gig economy food and grocery delivery cyclists – mainly on issues around bogus self-employment and algorithmic management – there is a lack of research on the experiences of cargo bike couriers. Most research on cargo bikes focuses on their economic and environmental benefits. Therefore, our research fills a crucial gap in cycling and logistics research, policy and infrastructure planning and highlights why cargo bike delivery workers merit more attention.

Although there is little demographic data on gig economy and cargo bike delivery workers, preliminary research from the Active Travel Academy in 2021 suggests that cargo bike delivery workers are distinct from gig economy food and grocery delivery cyclists in several ways. Firstly, the former are more likely to have prior cycling experience and self-identify as ‘cyclists.’ They are also more likely to be younger, white men who enjoy and/or are motivated by the fitness and environmental benefits of cargo bike delivery work. The lack of gender and ethnic diversity in workforce of cargo bike logistics companies can make it difficult to recruit and retain women, non-binary people, and people of colour.¹⁴ Furthermore, cargo bikes, including e-cargo bikes, are larger and heavier than standard and electric cycles, with implications for working conditions in the sector and cycling infrastructure.

This report shines a light on the experiences of cargo bike delivery workers in London and the improvements they would like to see in the sector. Through a literature review on cargo bikes, labour and other issues experienced by gig economy delivery cyclists, as well as interviews and focus groups with cargo bike couriers and managers of cargo bike logistics companies, we share unique insights on the sector and what good growth could look like. We conclude with evidence-based recommendations that are grouped by policy area, with actions for different actors (e.g., cargo bike logistics companies, national government).



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2. Methodology

2.1 Research approach

Our research aimed to capture the experiences, practices, needs and concerns of workers in the cargo bike sector. Our methodology has been inspired by Workers' Inquiry, an approach that foregrounds the perspectives of workers in producing knowledge about work and labour processes.¹⁵ It also has an explicitly action-oriented motivation to help improve working conditions, for example by initiating or revitalising trade unionism and workplace organising.¹⁶

We centred our research on the voices of cargo bike delivery riders, with whom we engaged through interviews and focus groups (see below). As researchers and outsiders to the workplace under question, we have been careful to reflect on our positionality and create spaces for discussion where riders could feel listened to and understood. As members of a precarious workforce in academia, and as ex-riders¹⁷, we have been able to empathise and build solidarity¹⁸ with riders as they shared their experiences. Our diverse experiences and knowledge enriched our ability to have an open dialogue with riders and make sense of the data.¹⁹

The cargo bike logistics sector is relatively nascent and has significant potential to help decarbonise urban freight, if scaled successfully. As such, it was important to gather the experiences and perspectives of managers of cargo bike logistics companies to understand their employment practices, visions for the company and the implications for workers when seeking to scale the company.

In selecting our participants, we have been constantly reflective of the ethical implications of our research practice. When researching individuals' experiences of labour and employment, it is likely there will be discussion of sensitive topics, personal or private experiences, and potential criticism of employers. Disclosure of sensitive or identifiable features could jeopardise workers' relationship with their employer, adversely impacting their employment, or publicly 'out' them.

To avoid this, we contacted riders independently from their managers. Moreover, all participants and interview transcripts were anonymised. This included the removal of all references to their employers, along with any other information that rendered them identifiable. All participants were then assigned pseudonyms, which are used to refer to them in this report.

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2.2 Data collection and analysis

After a review of academic and grey literature, we conducted a total of 22 semi-structured interviews, with 11 riders and 11 managers across 15 cargo bike companies in London, each lasting between 45-60 minutes. Subsequently, we organised two supplementary focus groups, one with riders and another with managers, to have a more in-depth discussion of preliminary findings from the interviews and develop potential recommendations.

Participants were recruited through a variety of means. [MP Smarter Travel](#), our project partner, plays an advocacy role for the cargo bike logistics sector in London and facilitated introductions between the research team and several managers and riders. Other participants were directly approached through the company's contact details and others were recruited through researchers' existing links to the sector. The cargo bike sector lacks diversity, which we expand on later in this report. Nevertheless, we endeavoured to interview participants that would reflect various experiences of being 'on the road' and 'in the workplace' by recruiting riders of different genders, ages, and ethnicities.

All participants were given an overview of the research and informed of their right to withdraw from the research at any time. Participants signed consent forms before the interviews or focus groups, giving permission for audio recording and the use of their data in the research. Opportunities to ask questions were offered at the start and end of each interview and focus group. Participants were offered a £25 or £50 voucher for their participation in interviews and focus groups, respectively.

The interviews and focus groups were audio-recorded, transcribed, pseudonymised and thematically coded, using a mixture of deductive and inductive coding. Each of the first three transcripts was 'cross-checked' by two researchers to ensure agreement and consistency of approach throughout the interview coding process. Our analysis has also been informed by conversations with several sector stakeholders (including representatives from Transport for London (TfL) and the Greater London Authority (GLA)) and our collaboration with Matty Ferguson, a University of Westminster student and bike mechanic.

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3. The changing nature of labour and urban logistics

This section summarises broad trends in the UK's labour market, with a particular focus on the delivery and logistics sector. It outlines existing research and policy around cargo bike logistics and situates it in the wider transformation of employment and the rise of the gig economy.

- Work across all sectors in the UK is increasingly characterised by precarity, low-pay and uneven 'flexibility'
- These trends are acute in the logistics sector, with gig-economy employment models characterising bike and van deliveries
- Union activity in the delivery and logistics sector is growing, however legal claims in the UK are rarely decided in favour of workers
- Van deliveries create many negative impacts on cities
- Cargo bike logistics has significant potential to replace van trips and bring a variety of benefits to cities, however attention must be paid to employment practices in the sector
- Lack of financial support, subsidisation of automobility, and inappropriate infrastructure are significant barriers for the sector to thrive
- London has a highly competitive cargo bike sector, with a variety of company set-ups and contract types used

3.1 Changing nature of work in the UK

Since the 2008 financial crisis, the UK labour market has seen a growing precarisation of the workforce and an increase in low-paid jobs; two trends that have disproportionately involved women and people of colour.²⁰ Two-thirds of the jobs created since 2008 have been 'non-standard' employment, which includes self-employment, zero-hours contracts, and agency work.²¹ Precarious workers account for 9.7% of the UK's total workforce²² and low pay is also a significant feature of the UK economy, with 17% of workers earning below the real Living Wage.²³

Precarity is defined and measured in various ways and can be used to define an individual's work and/or life situation, but is characterised by vulnerability and an 'inability to predict' in a highly contingent context.²⁴ The number of precarious workers in the UK economy grew during the COVID-19 pandemic, highlighting and intensifying existing gender and

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racial inequalities in the labour market.²⁵ Similarly, workers on non-standard employment contracts experienced a significant drop in income compared to salaried workers during the pandemic, with reduced and/or harder to access income support measures.²⁶

These trends combined with a growing ‘platformisation’ of work has driven a rapid emergence of the ‘gig economy’.²⁷ Gig economy platforms purport to offer workers flexibility and agency, using pseudo-empowering marketing materials that frame workers as entrepreneurial and in control. In reality, platforms rely on an abundance of precarious, underemployed, and often migrant workers that enables them to drive wages down and increase competition between workers.²⁸ As a result, ‘flexibility’ is often not empowering but rather involuntary and beneficial solely for the platforms.²⁹

Gig economy platforms reduce their labour costs by designating workers as ‘independent contractors’ or ‘self-employed’, therefore bypassing the requirement to provide paid leave, sick leave, insurance, and other fundamental employment benefits.³⁰ Gig economy workers are typically paid for each ‘task’ they complete, rather than their time.³¹ Because work is mediated through a digital app, workers may not necessarily know their managers or colleagues and lack a fixed place to meet each other. This creates a fragmented and disconnected workforce and work experience³² and reduces the opportunities for workers to build solidarity and organise.³³

It is estimated that over 4m people in the UK work a gig economy job at least once a week, a stark rise from 2.4m in 2016. Ride-hailing and delivery work have dramatically increased, from 1.9% of the working population in the sector in 2016 to 8.9% in 2021.³⁴ Gig economy workers reported an uptick in work during the pandemic, which increased their exposure to COVID-19 and further exacerbated the already significant detrimental health impacts of precarity. Risking infection was perceived as an economic necessity; 54% of delivery drivers reported the reason for taking on more hours was due to fear of losing future work, highlighting their precarious situation and the uneven nature of ‘flexibility’.³⁵

3.2 Changing nature of logistics

3.2.1 Logistics and the ‘last mile’

Logistics can be understood as the storage and movement of materials or goods from their original supplier to the final customer.³⁶ This research focuses on the final component of this supply chain, or the ‘last mile’ where goods are delivered from businesses to customers (B2C) or from businesses to other businesses (B2B), often in urban areas. In cities where space is a highly valuable resource, conventional ‘last mile’ urban freight deliveries are the most expensive, inefficient and emission intensive part of the delivery process.³⁷

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Demand for online shopping and home deliveries intensified as conventional high street shopping behaviour reduced during the COVID-19 pandemic and associated lockdown measures.³⁸ These changes have endured as lockdown measures have eased, signalling a shift in consumer expectations as well as labour relations in the sector. In May 2019, e-commerce accounted for 19% of total retail sales. By May 2020, this figure increased to 33%, and to 37.1% by January 2021.³⁹ The COVID-19 pandemic highlighted the importance of last-mile logistics and urban freight infrastructure, as well as the labour that keeps it running. Logistics workers were categorised as ‘key workers’ due to their crucial role in maintaining supply chains and economic activity.⁴⁰

As the demand for deliveries has increased, the nature of logistics has also been transformed. There is now a normative expectation that commercial delivery services offer a cheap and rapid movement of goods.⁴¹ This has resulted in an intensification of deliveries, where ‘speed’ has become the fundamental structuring logic that drives competition between companies who increasingly offer faster delivery times.⁴² The impacts this has on the urban fabric and on working conditions are elaborated in the following sections.

For the purpose of this report, urban freight encompasses commercial deliveries of parcels (last-mile), bulky goods, groceries, and prepared food, that are made by any type of vehicle (van, pedal bike, motorbike etc.).



Photo: Shutterstock

3.2.2 The damaging impacts of motorised freight

Between 2020 and 2021 in the UK, the intensification of consumer retail behaviour and home deliveries was matched by an 82% increase in diesel vans registrations, and a doubling of petrol vans registrations.⁴³ Prior to the pandemic, freight accounted for 15% of road transport vehicle kilometres (VVKM) but a disproportionate 34% of total NOx, 27% of particulate matter, and 25% of CO2 emissions in London.⁴⁴ Although the trends in delivery demand observed during the pandemic have slowed, a report by the Centre for London predicts that the number of parcels delivered in the capital will double by 2030.⁴⁵

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Petrol and diesel vans create various negative externalities, and continued growth in the sector threatens London's net-zero policy agenda and continues to worsen the city's air pollution. Diesel vans create an estimated £2.46bn worth of environmental and social costs in London alone each year, with costs externalised onto businesses and consumers.⁴⁶ Most of these costs will not be reduced by simply electrifying the fleet,⁴⁷ as the large and inefficient spatial footprint of vans has detrimental impacts on place quality, pedestrian wellbeing, and road safety.^{48 49}

3.2.3 Changes in logistical labour and impacts on workers' wellbeing

The intensification, speed, and competitive pricing in the last-mile delivery sector affects labour conditions. There is a well-documented 'race to the bottom' approach to employment in the sector as firms seek to reduce expenditure on labour and monetise the delivery process. Working conditions are increasingly characterised by low-wages, algorithmic management, time-pressurised working conditions, and precarity, often driven by outsourcing, subcontracting, and, as mentioned, the increasing reliance on gig-work arrangements.^{50 51}

The use of algorithmic management has enabled innovations in gig-economy working conditions, where 'self-employed' riders and drivers must use their personal phone and vehicle to access work. This creates a paradoxical situation where workers absorb initial and maintenance costs to access work, and their own possessions are used to simultaneously surveil and manage them and reduce the labour costs for employers.⁵² This 'individualisation' of labour is also matched by a 'deskilling' of labour as conventional tasks such as navigation and interaction with management are controlled by an app.⁵³

The algorithmic management of labour, with the objective of maximising efficiency through speed, means delivery workers must absorb time pressures through their behaviours, such as taking more road risks.⁵⁴ Not only does this intensify delivery workers' exposure to and experiences of road risk, but it also increases danger for all road users. A study by researchers at University College London found delivery riders experience multiple near-misses during a shift and that material aspects of their work (e.g. distracting app notifications and carrying a bulky backpack), reduce their ability to see and concentrate on riding safely.⁵⁵ Similarly, another study of food delivery riders in Edinburgh describes how 'independent contractor' status forces them to 'internalise' the physical, mental and financial risks created by the precarious and performance-oriented mode of work.⁵⁶

The Independent Workers' Union of Great Britain (IWGB) Couriers' and Logistics Branch have argued that the contractual arrangements of platform food delivery workers misrepresent the reality of their work and deny them basic employment rights (e.g. sick pay, holiday pay, pension).⁵⁷ 87.1% of Deliveroo riders surveyed by the IWGB regarded the 'independent contractor' status as an inaccurate representation of their job and felt

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that the platform used bogus self-employment to take advantage of them.⁵⁸ For example, Deliveroo riders are not paid for the time they spend waiting for food to be prepared and have to pay out-of-pocket for vehicle maintenance.⁵⁹ The Bureau of Investigative Journalism analysed Deliveroo riders' invoices and found 41% achieved an average salary of less than £8.72 per hour, with 56% paid less than £10 an hour.⁶⁰

The use of bogus self-employment extends to other delivery workers too, as highlighted by the death of a DPD courier in 2018 who was unable to take time off to attend hospital appointments.⁶¹ Amazon UK uses 'independent contractors' to fulfil orders instead of employing in-house delivery drivers. These drivers report significant pay fluctuations ranging from less than £12 per hour to a company reported average of £14.60 per hour.⁶² 80% of drivers report dangerous driving due to intense performance pressures, and 92% report no opportunity to take a break.⁶³ Drivers also describe how low pay is exacerbated by significant seasonal variability in shifts offered, lack of basic employment benefits, and the fact that they must cover vehicle costs themselves,⁶⁴ making them vulnerable to exogenous events such as fuel price increases and cold weather. Amazon Flex was given a '0' rating in the Fair Work Foundation's Fairwork Ratings 2021.⁶⁵

Women, LGBTQ+ people and people of colour doing gig economy delivery work experience additional challenges. Previous research conducted by one of this report's authors found that harassment and aggressive driver behaviour were issues disproportionately experienced by female and nonbinary delivery riders. A survey of riders by the IWGB found riders of colour disproportionately experience harassment and abuse whilst at work, with 43% of riders of colour reporting experiencing physical violence once a month, and 61% reporting verbal abuse at least once a week.⁶⁶ This intensification of road and other work-related risks due to sociodemographic characteristics can be understood as a form of 'intersectional precarity'.⁶⁷

3.2.4 Workers' agency

Despite the central role that logistics workers play in global and local supply chains, they rarely exercise their potentially disruptive power to improve their poor working conditions.⁶⁸ This can be explained by physical fragmentation along the supply chain; high levels of subcontracting and agency work; surveillance techniques; precarious employment with the threat of dismissal; low rates of union membership; and digital, app-based mediation of the employment relationship.⁶⁹

Despite this, research by the International Labour Organisation (ILO) illustrates a growing trend of labour protest in platform delivery and logistics work that includes ride hailing, food delivery, and other courier services. The report documents at least 1,271 protest events globally between January 2017 – July 2020, mostly focused on poor pay, health and safety, and bogus employment status.⁷⁰ In the UK there have been many actions taken by couriers and food delivery workers, primarily organised by the IWGB.

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There have been some notable successful cases. In 2021 Uber were taken to court and required to reclassify their UK drivers as ‘employees’, setting a precedent for corporate misclassification of workers, and highlighting the incompatibility of enforced worker flexibility with basic employment rights and labour law.⁷¹ Similarly, a European Parliament ‘Platform Work Directive’ is in development and there have been several instances of gig economy companies fined or regulations introduced by national governments in Europe to improve working conditions for workers.^{72 73}

Recently, there have been notable strikes by Stuart delivery couriers in Sheffield⁷⁴, and a series of wildcat strikes by workers from several food platform cargo bike logistics companies in Leeds and Derby.^{75 76} While this research was taking place, riders at the cargo bike company Pedal Me requested formal union recognition with the IWGB. In all cases, having physical spaces to meet was crucial in facilitating worker solidarity and organisation.^{77 78}

The growth of strike and other collective action taken by platform workers across the globe should not be romanticised. The IWGB’s legal attempts to reclassify Deliveroo riders as ‘employees’ have failed repeatedly.⁷⁹ As we will show in the following sections, much more needs to be done to improve working conditions in the urban logistics sector and prioritise workers’ health and wellbeing.



Photo: Steve Eason, flickr

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3.3 The promise of cargo bikes

Cargo bikes have emerged as disruptors in the urban freight sector, offering a low-cost, low-carbon, and more efficient alternative that can alleviate many issues caused by conventional van deliveries.⁸⁰ The positive societal and environmental impacts of cargo bikes are well-established, with evidenced benefits like reduced emissions, energy consumption and congestion, as well as enhanced wellbeing, place quality, and road safety.⁸¹

Previous research in London by Possible found that cargo bikes can deliver goods at a rate of 1.61 times faster than a conventional van, whilst making significant reductions in CO₂ and NO_x emissions.⁸² Moreover, cargo bikes have significant transformational potential: if scaled up to replace 10% of VKM currently undertaken by vans in London, cargo bikes could save 133,300tn CO₂ and 190,000kg of NO_x per year, as well as freeing-up 384,000 sqm of public space occupied by vans in London and significantly reducing congestion.⁸³ The 10% figure is likely to be a conservative estimate, with reports of the potential for cargo bikes to replace up to 51.3% of current van trips.⁸⁴

Across Europe, cargo bike sales are growing at an estimated rate of 60% a year.⁸⁵ The commercial cargo bike sector is expected to generate €2.5bn in revenue, employ 170,000 people and contribute CO₂ savings of 302,000tn. In the UK, 4,000 cargo bikes were sold in 2020 with about 2,000 for commercial use⁸⁶, with sales growing by 37% between May 2021 and May 2022.⁸⁷

While many of the findings in this report will be relevant to cargo bikes for personal use, particularly around improving cycle infrastructure, this study focuses on the use of cargo bikes for urban freight. This is also described as ‘cycle logistics’ or ‘cycle freight’, which describes the commercial transportation of goods between A and B using an often electrically-assisted cargo cycle (cargo bike).⁸⁸

Previous research from 2015 describes cycle logistics as a sector comprising many small businesses operating independently but in intense competition, with a reliance on flexible employment.⁸⁹ It also suggests that significant growth in the sector lies in being contracted by large parcel and logistics companies. This report expands on these points and examines the dynamics between employment practices in the sector and variegated processes of scaling.

As the cargo bike sector scales and grows in an effort to achieve its potential, firms and policymakers must be mindful of the wider logistics landscape that it is entering and competing with. Sections 3.1 and 3.2 documented how the fundamental logics that structure the logistics sector, including speed, intensification, and competition, are interwoven with harmful employment practices and detrimental impacts on workers’ wellbeing.

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We cannot assume that simply because of the green connotations and demonstrable environmental benefits of cargo bikes, that the sector is insulated from these wider political-economic structures and structuring logics that create such poor working conditions. Established companies that rely on bicycles for food deliveries, such as Deliveroo and Uber Eats, demonstrate appalling employment practices,⁹⁰ and illustrate how cycle logistics are not inherently equitable. As the cargo bike sector rapidly develops, it offers an opportunity to innovate logistics, not just from a material and infrastructural point of view, but also in terms of labour relations and the creation of good, green jobs.

3.4 Cargo bike policies and frameworks

The Department for Transport's (DfT) 'Decarbonising Transport' plan focuses on electrification of vehicles as well as modal shift.⁹¹ Decarbonising the last mile of delivery is a fundamental part of decarbonising freight, with cargo bikes playing a significant role particularly in urban areas. Cargo bikes also feature in Transport for London's (TfL) 'Freight and Servicing Action Plan' as a key aspect of reducing lorry and van traffic in London.⁹²

There are several reports offering businesses guidance on how to electrify deliveries or integrate cargo bikes into their fleet. DfT and the Energy Saving Trust released the report 'Electrifying last mile deliveries' in 2020, offering businesses a 'decision process' guidance on improving the sustainability of their delivery process.⁹³ TfL expands on this with an eight-part 'Cycle Freight Toolkit' that includes useful case studies and templates for cargo bike operators and for businesses considering purchasing a cargo bike.⁹⁴ Tool 4, 'Code of conduct', offers a set of requirements that cargo bike operators should follow 'to ensure a high-quality and reputable service', including measures around rider behaviour, health and safety precautions, security, and customer service.⁹⁵ Although useful, the toolkit omits the lived experiences of riders in terms of their wellbeing, health and safety, and work and employment conditions.



Photo: Tomter (<https://tomter.net/>) / Team London Bridge (<https://teamlondonbridge.co.uk/>).

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In 2023, TfL will release an updated version of their cargo bike guidelines. These outline how cargo bike logistics will be integrated into TfL's monitoring and modelling practices and consider how TfL and local authorities can enable space and infrastructure for cargo bikes. The guidelines will also look at best practice around minimum safety standards, including rider safety, bike safety, and operator responsibility, as well as how modal shift can be encouraged through communication and procurement.

A recent report published by the thinktank Green Alliance focuses on the potential for cargo bikes to replace van trips made by tradespeople in the UK. It identifies users' experiences and perceptions of cargo bikes, identifying capability, opportunity, and motivational barriers to take up cargo bikes, and makes key action-oriented recommendations for government to support uptake around raising awareness of cargo bike capability, financial support, and loan opportunities, and improving infrastructure.⁹⁶

Just Economics also recently published a costing model to compare the social and environmental costs of diesel vans, electric vans and e-cargo bikes.⁹⁷ The report identifies the cost of cargo bike deliveries as a major barrier to adoption, as cargo bike deliveries are more expensive than diesel van deliveries on a like-for-like basis. This cost-differential is driven by the externalisation of social, environmental and employment costs by van cargo bike logistics companies. The report makes recommendations focusing on regulation, subsidisation, and governance of the delivery sector.

Between 2021-2022, the DfT and the Energy Saving Trust made a total of £700,000 in cargo bike subsidies available to businesses and traders.⁹⁸ Organisations were invited to apply for a 40% subsidy on the total cost of a cargo bike, limited to £2500 for a two-wheel vehicle and £4,500 for a three-wheel vehicle. Additionally, between 2019-2022 £2.6m in cargo bike funding was made available to local authorities.

As part of the Ultra-Low Emission Zone (ULEZ) expansion in 2023, TfL recently announced a £110m vehicle scrappage scheme that will provide grants to low-income or disabled vehicle owners with non-ULEZ compliant cars (£2000) or motorcycles (£1000) to switch to cleaner vehicle alternatives.⁹⁹ Cargo bikes will be included in this scrappage scheme to incentivise modal shift from motorised vehicles to cargo bikes.

This opens the door for greater discussion around regulation in the rapidly growing sector. Some managers interviewed by Just Economics argued that regulations would increase legitimacy for the sector and thus the potential client base, particularly in industries locked into conventional van deliveries.¹⁰⁰

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3.5 Overview of London's cargo bike logistics sector

3.5.1 Types of companies and set-ups

This section briefly outlines London's cargo bike logistics sector.

- Over 25 cargo bike companies operate in London, varying from very small set-ups to larger companies with branches in several cities
- Different contract types are used to employ riders with varying degrees of permanence, flexibility, and employment benefits
- The sector is highly competitive and as such, many firms increasingly specialise in service offered, types of deliveries, and client base

Although a nascent sector, London has seen a boom in cargo bike logistics in recent years, with over 25 companies in operation in 2022. As the sector grows, companies are exploring new operational set-ups, organisational structures, and employment practices. Conventional courier companies, such as [Absolutely](#), have integrated cargo bikes into their wider multi-modal fleet that includes motorbikes and vans. This is a result of growth-by-acquisition, for example with [Absolutely](#) merging with [3D Couriers¹⁰¹](#), one of the first London companies to use cargo bikes and, later, with [Go-Betweens¹⁰²](#).

Multinational courier companies, like FedEx and UPS, have also expanded into cargo bike deliveries, which comprise a small but growing proportion of their delivery fleet. Similarly, Amazon have been decarbonising their deliveries by electrifying their vans and increasing cargo bike deliveries, using a combination of their own vehicles and a subcontractor, [Delivery Mates](#). [Delivery Mates](#) works with vans, motorcycles and has the ambition of expanding to operate 300 cargo bikes in London.

Other companies offer predominantly cargo bike services, with [Pedal Me](#) and [Zedify](#) as established cargo bike companies that have been operating in London for several years. They have had time to develop larger cargo bike fleets. [Pedal Me](#) is a well-known company that has been operating exclusively with cargo bikes since 2017, and currently has a fleet of 105 Urban Arrow cargo bikes. Meanwhile Zedify originated in Cambridge and now operates in 10 UK cities, including London. Zedify has also developed a franchising model whereby independent depots can be established under the company's guidance.

A variety of new cargo bike companies emerged during the COVID-19 pandemic. As 'lateral entrants' to the cycle logistics landscape, they have built on the work and cargo bike visibility established by existing operators. These newer actors take various forms, from dedicated cargo bike companies, to companies that have developed their own fleet

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to deliver their product, such as [Freddie's Flowers](#). Because these new joiners do not have the same scale of client base that conventional courier companies might already have, they are designing innovative strategies to attract and retain new customers.



Photo: Bikes for Business

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3.5.2 Employment and contract types

There are various employment and contractual arrangements within the cargo bike logistics sector. Of the 15 cargo bike companies in London interviewed for this research, ten use ‘self-employed’ staff, seven use ‘employees’, and two use ‘workers’ or ‘dependent contractors’. These totals include three companies that put riders on a mixture of self-employment and employment contracts.

Table 1: Types of workers’ contracts in the cargo bike logistics sector.

Type of contract	Number of companies using this contract	Description ¹⁰³
Employee	7	Riders are directly contracted by the cargo bike company, which has significant control over them and their labour. The rider has a ‘Pay as you Earn’ (PAYE) employment contract that often includes a defined salary, annual leave, and defined working hours.
‘Limb-B’ Worker	2	This is a more casual arrangement than an ‘employee’. Riders are registered as self-employed but have a contract with the cargo bike company for which they work. Whilst not receiving the full package of employment rights that employees do, they still benefit from minimum wage, paid leave and breaks, workplace pension contributions, and the ability to organise via a trade union.
Self-employed	10	Riders provide a service directly to a company. On paper, riders can choose to work in a way they dictate (control), can substitute themselves for an alternative worker for the service they provide (substitution), and have the freedom to choose whether or not to perform the work asked (mutuality of obligation). Riders are not covered by employment law as technically, they are in ‘business for themselves’. ‘Bogus self-employment’ describes the incongruence between this self-employed status and the reality of the work - e.g., significant control, pay and dress-code obligations, inability to decline work. In reality, riders that fall under this classification reflect more of a Limb-B or employee relationship with the cargo bike company without many of the benefits.

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3.5.3 Clients and customers

The COVID-19 pandemic created a significant reorientation of the types of customers and deliveries in the logistics sector. As competition in the sector grows with the emergence of new actors, companies are finding customer and sectoral niches. Eco-fleet, based in West London, responded to the COVID-19 pandemic with a shift in their delivery types. As food retailers reduced operations, Eco-fleet specialised in medical deliveries between laboratories and pharmacies. Spedal, based in East-London, delivers for several zero-waste shops with a view to specialise in the circular economy. Similarly, Zhero, based in East London, specialises in the art and furniture sector, aiming to help green the supply chains of a historically unsustainable industry.

Interviews with managers and riders indicate three main approaches to cycle logistics. One approach, often taken by smaller cargo bike companies, focuses on deliveries for local, independent businesses. These tend to be recurring clients, with some on-demand work. Within this model, food has become a significant proportion of goods delivered and may include artisanal outlets such as bakeries, coffee roasteries, and delis, as well as food and meal subscription services with a combination of ‘business to business’ (B2B) and ‘business to customer’ (B2C) deliveries.

A second model adopted by some larger companies is to offer last-mile third-party-logistics (3PL). The cargo bike company, for example Zedify, is subcontracted by a logistics company such as FedEx or Amazon to carry out the ‘last-mile’ of parcel delivery. This requires a high density of parcels in a relatively small area.

Thirdly, on-demand and pre-booked services are a significant portion of the industry. Companies respond at short notice to individuals and businesses, often on an ad-hoc basis, and deliver a variety of goods depending on customer needs. In the case of Pedal Me, this also includes on-demand passenger transportation.

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4.1 Values and aspirations for the sector

This section explores the various aspects currently present in the sector, including the narratives that cargo bike companies use to establish themselves commercially and to define their value proposition around employment and operation. It also describes the intentions that companies have for their development and growth, and the barriers identified to achieving them.

- Companies regard themselves as significant transformational actors in terms of achieving sustainability objectives
- Cycling skills, customer service skills, common sense, speed, efficiency, and ‘determination’ are regarded as ideal characteristics when recruiting riders
- Companies are taking a variety of measures to improve their competitiveness in the market, however the reality of scaling-up may jeopardise companies’ values and visions
- Companies face a variety of issues, around recruitment, diversity, lack of financial support, and a wider cultural and systemic resistance to change

4.1.1 Narratives, values and cultures in the sector

Just as there are various company set-ups across the cargo bike logistics sector, there are also various company values and workplace cultures.

4.1.1a Improving environmental sustainability

The environmental impact of replacing van and car journeys with electric cargo bikes is well established.¹⁰⁴ Environmental sustainability is central to managers’ values and visions. As Harry suggests, “[our objective] is to make our cities greener. I think it’s [the founders’] aim to improve - less vans, less diesel vans, out there”. While managers cite different aspects of environmental sustainability, they shared the general objective of offering a cargo bike service that directly competes with van trips.

At the local level, a recurring theme is the ability of cargo bikes to improve air quality and reduce congestion. One manager describes how worsening air quality impacted their respiratory health, causing significant lung and breathing problems. They also note the visible effects of congestion on London. These two factors motivated them to start a cargo bike company and defined their “purpose, which is to help save emissions and to help reduce the traffic” (Lila). Managers also discuss the global impact that cargo bike companies play in reducing carbon dioxide emissions. As Sarah told us, a key motivation for founding the company is their role in a wider, planetary effort towards ‘saving carbon’:

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Knowing that the impact that every delivery makes is contributing to a bigger solution. So, I think that's like my driver every day really . . . every delivery is saving carbon.

(Sarah)

The implications of adopting a sustainability ethos are discussed further in section 4.2.2.

4.1.1b Responsibility to wider community

Managers also recognise that cargo bike companies cannot and should not exist in isolation to the wider urban fabric and the communities in which they operate, describing a sense of outwards responsibility. This emerged particularly in interviews with managers of the larger companies we engaged with. For example, Harry describes the responsibility that their company has in providing opportunities to and engaging with the local community:

[Our vision is to become] less of an entity that works in your area, and more something that contributes to your area as well . . . it's that set up where [we] don't just have a courier company, [we] also have events and [we] go out to other cycling events, [we] do various fundraising, [we] have community pop ups where people can bring in their bikes - that sort of stuff.

(Harry)

Similarly, another manager speaks to the responsibility that their company has to 'make the city a better place', not just through the environmental benefits of cargo bikes, but also through the presence, sentiment, and behaviour of riders out on the road:

We focus heavily on training so that our riders not only make people smile - people see us because of the nature of what we're doing is different, if we're carrying passengers or have trailers, it inevitably draws attention. But it's also making sure that we're really good road users and we treat road safety really seriously.

(Alice)

For another manager, making the 'city a better place' means also supporting small local and independent retailers, offering a delivery format that competes with big retailers' commitment to same or next-day delivery:

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Why not give that power to your independent florist, your independent wine shop? Allow them to be able to compete in that market space by giving their customers same-day delivery.

(Zad)

4.1.1c Equitable and ethical employment

The responsibility described by managers also extends to a sense of responsibility towards the riders who work at their companies. One notable example is a company aiming to create a directly positive social impact through employing young people and people experiencing homelessness in a job that has relatively low barriers to entry. Here, their values are manifested in their recruitment practices, as “a social enterprise ... a business that is a force for good, that employs and supports young people experiencing homelessness in to work” (Sarah).

Whilst other companies do not necessarily have the explicit objective of operating as a social enterprise in the same way, they nevertheless describe various mechanisms to try and create a more equitable and ethical employment opportunity. Several companies describe how they used the government ‘kick-starter’ fund to employ individuals who were claiming universal credit, offering opportunities to those not in work and also benefitting from a rider salary subsidy.

Companies also aim to reduce the disparities between different roles, particularly in terms of seniority, and create a more horizontal organisational structure. One method of achieving this, adopted by several companies, is through the ‘everyone rides’ policy where all employees are also riders. As Theo describes, this practice helps in creating an egalitarian environment where being a rider is not ‘less’ valuable or desirable than working in a management role:

I don't ever want to stop riding and having myself as a part of that business because I love it. And I think like, as a manager, it means, you know, it means that there's a level of empathy built between myself and, say, 'my staff' if I want to be hierarchical in that way.

(Theo)

Equity within the company is not just about job skills. As Alice, resonating with riders’ voices (see 4.3) highlights, it is also strongly related to ‘providing fair work’. Together with some other managers, they expressed the intent in establishing equitable pay structures and recognising the value of riders and their contributions to the company by ensuring fair pay:

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The rider role [is] kind of the most valued role, so the payment disparity isn't huge [at the company], so like the executive level salary isn't that much higher than the junior band level, for example. So, there's kind of an ethos of everybody being equal.

(Alice)

In a more radical approach, a smaller company, Neko, implements a profit-sharing model and a co-operative logic to eliminate the ‘superiority’ that managers conventionally have over riders (see Box 4C).

4.1.1d Valuing riders - the ideal rider characteristics

Different cargo bike companies have particular rider characteristics that they value and seek to recruit and employ.

Cycling skills, experience, and interest

Cycling-related characteristics include tangible elements such as cycling skills and bike control. None of the managers interviewed regard cargo bike riding experience as a necessary characteristic for potential riders, as this is something that can be learnt through training. However, several managers do require some cycling skills and general ‘experience’ on the road.

One manager interviewed describes the types of cycling skills they value in riders which serve as a proxy for a ‘natural’ ability to being able to ride a cargo bike:

Being a regular bike rider in a city and being a confident rider is more necessary... if you ride a mountain bike or a fixed wheel bike quite a lot of the time, then you automatically have some of the natural skills that allow you to control a load that is a lot heavier than you are.

(Marcus)

In contrast, other managers tend less to specify skills or abilities, but rather speak of more intangible aspects around cycling such as having ‘an interest’ or ‘enthusiasm’ around bikes and cycling. These are often entangled with narratives around ‘showing a passion for cycling and fitness’ - as Dom reported “[health and fitness is] something that I really want to sort of, you know, engrossed in the company” - , or in a narrative around “enthusiasm for the cargo bike side of the business, enthusiasm for riding, enthusiasm for sustainability” (Theo).

Often, managers believe such intangible skills and values should extend to how a rider might relate to others and contribute to the organisation, which is deemed key, especially because “when a business is this small, you want riders that are really going to fit with the team and help develop that culture” (Theo).

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Customer service skills

The managers quoted in the previous subsection all have cycling backgrounds of various forms. Meanwhile, managers with more corporate backgrounds, such as start-ups and consultancies, primarily value customer service and professionalism.

For example, for Wilson, “customer facing experience … it’s really important, it’s actually more important than being able to ride a cargo bike”. As riders are a living ‘representation of a brand’ in public space, customer service becomes a priority over riding skill.

Similarly, Sarah emphasises the importance of being ‘customer oriented’, reporting another intangible and ‘innate’ characteristic that should help create a positive customer experience:

Being friendly and customer service focussed is a huge thing - being a cargo bike operator we say like keeping calm and organised. You know, sometimes the role can be stressful, but actually having someone who has that innate sort of calmness to them is really important.

(Sarah)

Common sense and problem-solving ability

Practical judgement and the capacity to assess situations is also described by managers who consider ‘common sense’ and ‘problem solving’ as ideal rider characteristics which should be prioritised over riding. Whilst ‘common sense’ perhaps implies something basic, as Luke suggests, riding requires several competences, making cargo bike couriering a skilled job:

If you have experience as a courier, that's great. If you don't have any, that's absolutely fine. However, I'll say mainly [required skills are] common sense and communication. My dream will be that courier will be recognised as a skilful job ... Because yeah, finding addresses, carrying packages, loading, especially on the cargo bike ...

(Luke)

Marcus also describes the need for riders to be able to problem solve independently, focusing here on the specific bike frames they use and the different goods the bikes carry:

Within the loading there's the problem-solving exercise. We don't use boxes, so there's many different ways you can load many different weird shapes around the frame that we have. So, you basically need to be able to problem solve.

(Marcus)

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Speed and efficiency

Logistics is understood as a ‘fast-paced’ sector and riders do report pressures to perform fast and efficiently (see section 4.4.1). Many of the desired riders’ skills highlighted above, such as being fit, cycling competency, and problem-solving ability are arguably preconditions for also being a fast rider. However, only one manager explicitly describes speed and efficiency as a desired rider characteristic, if the company is to be commercially successful:

We need people to be fast getting in and out of buildings, fast on the road, excellent navigators, and great communicators, because that’s where you allocate jobs and that’s how everyone makes more money.

(Marcus)

Grit and determination

Cargo bike riding is a highly exposed job with most of the day spent outdoors including during unfavourable weather conditions. Whilst managers do not describe year-round reliability as a desired characteristic, there is an emphasis on being able to cope with the rain and winter months and be ‘thick skinned’ (Evan). Dom, who is also a rider, links the concern around retaining or ensuring staff reliability during winter, to riders’ commitment to continuing work, regardless of the length of shift or weather conditions, depicting a vivid picture of riders’ work in winter:

I’m already worried for winter because it does require a certain person to be able to get up, in and out in the dark and do our morning deliveries and you know and sort of battle the elements as well . . . I think it’s grit and determination, so [rider’s] quite a good example - a young 20 year old who had no real experience doing much beforehand . . . no cycling experience, nothing to do with any bike mechanics or understanding. He’s been going now for about two months, and he’s had some problems . . . but the main thing that has allowed me to keep him on board is his grit and determination. I know that when he’s out on the bike and he’s having a really long day, he’ll get through the day . . . because he’s got this grit and determination to get on and do the job.

(Dom)

Willingness to work despite weather conditions is also echoed by Wilson (who does not regularly ride a cargo bike), who emphasises and links the highly physical nature of cargo bike riding to being ‘outdoorsy’ and therefore a rider who is ‘not going to be bothered too much by the rain’.

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The managers' views provide insights on the complexity of, and skill required for riders' work. However, this is not always reflected in payment and working conditions (see Section 4.4). There is a high expectation that riders should have a baseline level of health, fitness, and grit, as well as problem solving and customer service skills. The extent to which some of these skills can be acquired through training is limited, with implications for the type of person who can work as a cargo bike rider. This can lend itself to an ableist working environment and culture of 'being tough' (Wilson).

4.1.2 Visions for companies' futures

The proliferation of cargo bike companies in London increases the imperative for companies to remain competitive in the sector.

4.1.2a Sustaining, growing, or scaling

Several managers described the intention for their company to widen their operations within London. This process of 'scaling up' requires expansion into new geographies and can take different forms and often is conditional to the company's capital availability. One approach is to sink costs into a new area by opening a new hub or depot in a new area of London, for instance having depots in north and south London (Lila). Another company plans to develop a network of micromobility hubs across London and diversify their functions to include providing goods storage, consolidation, and e-scooter battery exchange.

However, managers reported that opening new hubs comes with significant financial and logistical challenges (see following subsection). An alternative approach, currently operationalised by Pedal Me, is to maintain a single hub whilst decentralising bike locations by allowing riders to take cargo bikes home at the end of their shift. This makes things easier for riders after a long shift and improves business efficiency; as one manager describes: "you can start and finish shifts in a more dynamic way" (Theo).

Such a strategy requires a critical fleet size able to absorb the increased risk of bike theft or damage when bikes are not stored in a secure location, such as a depot. Companies can also scale up by expanding their client base to include mainstream actors in the logistics sector. As large retailers seek to improve their environmental credentials, they increasingly turn towards zero-emissions delivery options. Managers describe contracts they have secured or hope to secure with companies such as Amazon, Ocado, and Nike as these companies look for strategies to 'green' some of their practices.

London-based cargo bike logistics companies are also considering 'scaling-out' their operations into new geographies. One manager describes how they 'want to be able to see if we can replicate the model into other cities like Manchester because those cities need similar services

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as well.' (Zad). Other managers describe how they 'wouldn't be against the idea of expanding into other cities' (Theo) but recognise the challenges that come with this.

However, scaling out remains a complex process. As operating models have been developed in the very specific context of inner London, it is likely they will encounter and have to negotiate different challenges in new locations. One way of overcoming this is by developing a 'franchising' model, like Zedify, which operates in multiple cities without owning all the hubs. They are able to support the local operator with their branding, operational expertise, mechanical knowledge, and in-house logistics systems, without sinking costs into an unknown context.

Managers have various motivations for scaling their companies and the cargo bike logistics sector, from improving commercial activity to aiming to 'do good' in more places. At the same time, the solidarity economy and the de-growth agenda are gaining traction and challenging normative business models of growth and expansionism.¹⁰⁵ This sentiment is shared by several cargo bike managers who are not necessarily fixated on the idea of scaling but are instead committed to establishing and solidifying their presence in a specific location.

For example, when asked about visions for the company's future, Dom stresses the importance of cementing themselves in south London, where they are located, to "focus ... on local businesses, local small or large businesses that need their product distributed locally" (Dom).

Scaling is also avoided when it might compromise the company's ethos, as in the case of one company that draws on some logics of a co-operative business model, such as a profit-sharing system (see 4b). Luke describes how they would not be able to scale and maintain their profit-sharing model, and as such do not intend to grow their business much beyond its current form:

It is a very fine balance ... that model wouldn't work with 50 employees, you know? You end up with one sleeping somewhere for 3 hours nap... it only works in a small company, probably no more than ten people working together.

(Luke)

As section 4.4.4 discusses, the informality that is afforded by being a small business and the formality required to scale is a complex negotiation for managers.

4.1.2b Agency in the sustainable economy

Beyond environmental sustainability, several companies aspire to be embedded in a wider sustainable urban economy by forging relationships with different sectors. Particular focus is given here to the circular economy at different scales. For example, Spedal, a company based in

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East London, runs deliveries for circular economy related businesses in the area, particularly zero-waste shops, describing this type of work as ‘reverse logistics’. Instead of just transporting goods from A to B, Spedal delivers and returns the empty containers to minimise material waste.

Some companies are seeking to develop a ‘voice’ in the political discourse and governance of sustainability. The following quote recognises that although this is not a lucrative pursuit, the business’s commitment to ‘environmentalism’ spurs the manager to

Act as a facilitator . . . using [the business] and the platform that I've got as a business owner to enter into conversations that are facilitating local circular economies, reusing waste, working with both local authorities and other local businesses in developing networks about material reuse.

(Theo)

This idea of a courier company also acting as ‘a political voice that can campaign for change’ (Theo) extends to wider debates about the role of cargo bikes in the urban economy and urban environment. One company describes how they are trying to change cultural understandings of what cargo bikes are capable of by revolutionising sectors that rely on vans and trucks:

The fact that we're demonstrating what's possible by cargo bikes . . . makes a lot of people feel uncomfortable outside the industry . . . [it's] getting the big operators out of their motor-centric thinking into buying something completely different . . . having like a big construction name on the side of a cargo bike is just proof enough to other industries that this is something you can do . . . if it's a big company adopting it, that is worth a hell of a lot.

(Marcus)

As such, the possibility of scaling is tied to changing cultural and industry perceptions of cargo bike capabilities and values. This involves going beyond the comfort-zone of the ‘sustainable economy’ and entering new sectors where unsustainable means of transport are typically locked-in.

4.1.2c Introducing and integrating new technologies

As cargo bike companies venture into new sectors and scales, managers are also occupied with improving the efficiency of the logistics process and reducing additional costs, by employing a variety of new technologies and innovations.

Small scale and young companies utilise simple and free software for communication, navigation and dispatching, which come with their limitations (see section 4.4). When companies grow and seek to invest capital to streamline their business, a move away from apps like WhatsApp requires exploring alternative logistics management software.

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Theo describes this transition:

What we use currently is basically Google packages, Google Sheets, Google Maps sometimes another navigation app, Citymapper, Waze or whathaveyou. Yeah, a mix of that and WhatsApp... and then the idea is to move towards Air Table and OnFleet which is going to tie it all together... it is just more robust, less prone to error.

(Theo)

Improved technology can also help with transferability when scaling out, for example by transitioning from manual (human) dispatchers to automated dispatch software, reducing reliance on tacit knowledge of existing dispatchers (Alice). Similarly, there is a growing use of last-mile delivery ‘platforms’ within the sector to streamline dispatch, navigation and communication between relevant actors of the delivery process. Some companies are developing their own bespoke automated dispatch systems, whilst others are transitioning from a combination of free software to existing platforms such as Orkestra, Air Table and On Fleet.

This may contribute to improving efficiency, but it also raises questions around the impact of algorithmic management and automated dispatch systems on riders. Algorithmic management can reproduce and exacerbate inequalities, so it is crucial that these new technological systems are implemented conscientiously to mitigate risks, as also recently suggested by Fair Work.¹⁰⁶

In addition to technological improvements to improve efficiency, managers are also seeking to improve their bikes and cargo storage. Urban Arrows are a very common cargo bike model used in the sector and can be purchased with different loading attachments, most commonly a ‘box’. Pedal Me have a direct, ‘research and development relationship’ with Urban Arrow, through which they have specified and co-designed bespoke elements of the Urban Arrow, notably the front-loading rack which includes a seat and side rails, suitable for the services they offer. Two other companies are developing their own cargo bikes in-house after trialling and testing various models to understand particular design flaws. This will enable them to meet their own business needs and potentially enter the bike production market.



Photo: Tomter (<https://tomter.net/>) / Team London Bridge (<https://teamlondonbridge.co.uk/>).

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4.1.2d Improving employment conditions

Most managers envision growth, with a few referring to the need to improve employment conditions as a necessary consideration when scaling and growing the business. This includes being able to offer a range of contract options for riders to cater for different preferences around flexibility and regularity. For example, Sarah hopes that

Once we raise investment - have riders on payroll who wish to be on payroll ... part time contracts could work pretty well for some of the riders, and then for some they actually really prefer being freelance contracts.

(Sarah)

Similarly, Theo shares this sentiment whilst also aspiring to achieve “at least 50% of hours made up by PAYE staff” in the effort to be a responsible and ethical employer, and ensure greater reliability and investment from staff. In addition to this aspiration, Theo also describes additional perks they would like to be able to offer to staff, with the company’s sustainability ethos permeating the rules for riders’ holiday time:

A push towards a four-day working week on full time salary, [and] the idea that if people don't fly for that all their annual holidays, they get two days holiday extra.

(Theo)

4.1.3 Challenges faced by cargo bike companies

Cargo bike logistics companies face several challenges with regard to their ability to sustain their businesses and achieve their visions.

4.1.3a Personnel - recruitment, retention, reliability

A central challenge highlighted by managers concerns recruitment, retention, and reliability of riders. Approaches to and experiences of recruitment vary between companies. Those companies whose managers have existing relationships across the sector (e.g., managers who are ex-riders or ex-couriers) tend to recruit informally, relying on word-of-mouth or waiting for riders to approach them. Similarly, larger companies who have a good reputation also benefit from potential employees approaching them.

However, managers who have just entered the sector do not benefit from this word-of-mouth recruitment and report struggling with recruitment. As Evan described, “recruiting cargo bikes drivers is or riders it's not like any other recruitment process ... it was very difficult”. As a result, they often rely on paid for online recruitment platforms, with often low conversion rates (Owen).

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Additional challenges emerge when managers, as discussed in 4.1.1d, have high expectations of prerequisite characteristics for riders (e.g., commitment to health and fitness, willingness to ride in all weather conditions), who they say are ‘hard to find’ (Zad). ‘Urban Routes’ has emerged as a new type of actor in the sector to respond to recruitment challenges. Urban Routes operates a ‘job board’ recruitment model that introduces candidates and employers by matching potential applicants that meet specific criteria to employers’ job postings.

In addition to difficulties with recruitment, several managers struggle with retaining riders, beyond just seasonality. Some managers report issues with ‘high turnover’, where “people would come in and only work a little while and then they’d go off” (Zad). For Zad and Harry, such a ‘culture of churn’ is often typical in the logistics industry, and means it is hard for them to retain riders despite offering stable contract opportunities or favourable employment conditions in terms of pay rates relative to other companies.

Although employment in the UK is increasingly characterised by a transient workforce¹⁰⁷, this is particularly acute in the logistics and cycle logistics sector, as low pay is compounded by adverse weather conditions.

4.1.3b Diversity in the sector

Besides general recruitment issues, managers also discuss their concerns with gender diversity in the sector. Some companies do not employ any female staff at all and do not know how to increase diversity in the sector, as discussed by Harry:

As an industry, I think logistics is not most welcoming to women. And it's a mentality that we've got to kind of break, but I don't know how we get to ... Where to begin and how to encourage more women to do it and make them feel safe.

(Harry)

Other companies reported not having any Equity, Diversity, and Inclusion strategy (Theo) and even in companies where concessions are offered in terms of the physically demanding nature of the role, managers still struggle to attract female applicants for rider roles, as Lila recounts:

It has been extremely difficult hiring women for the position of a cargo bike rider. We give them longer training periods and we don't give them very heavy things ... But there are not a lot of uptakes.

(Lila)

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Likewise, several riders observed that their companies and the overall sector were mostly male. As well as issues around gender diversity, several managers and riders described how the sector is very ‘white’ with a notable lack of racial diversity. Elise reflects on the issue in the two cargo bike companies she worked for as a rider:

I would say with all of it they probably attract, they don't attract a wide enough variety of people though. So I just yeah that struck me quite strongly particularly I think, I don't know, both of them really are just very white companies.

(Elise)

Although managers across the sector recognise poor performance in terms of gender and racial diversity and share an ambition to improve this, they lack clarity on how to do so. So far, no practical steps have been taken or identified to increase the representation of women or people of colour in the sector. Section 6 makes recommendations to improve diversity in the sector.

4.1.3c Rising costs and withdrawal of government support

Inflation, rising costs and the retraction of government financial support pose further barriers to expanding the operations of cargo bike companies.¹⁰⁸ The rising costs of necessary resources for cargo bike logistics companies, such as land and energy, intersect with the negative effects of the withdrawal of government support, increasing the financial and operational difficulties companies face.

The continuous process of battery charging means electricity price increases have been felt particularly acutely by cargo bike companies. Although most companies interviewed use a renewable energy supplier, they are still exposed to energy price increases of around 40%, composing a significantly higher proportion of financial expenditure than before. Similarly, managers cite the costs of purchasing a new bike - that can reach up to £10K- as a significant obstacle to scaling up. Some companies are exploring leasing models for cargo bikes to reduce capital expenditure and the burden of maintenance (Lila).

Zad describes this cost as ‘prohibitive’ following the retraction of governmental financial support via the eCargo Bike Grant Fund that made over £2m worth of subsidies available to commercial cargo bike operators between 2019 - 2022:

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There used to be support from local government and national government in terms of giving us grants towards bikes – that's all kind of disappeared. Early on when we started, we got 25% of the cost of the bikes back, which was great. Coupled with getting your VAT back and everything, so we ended up getting about 40% back. That's all gone.

(Zad)

Whilst subsidies for low-emission vans continue to be supported by government rolling grants such as the DfT's 'Plug-in' grant, any cargo bike purchases after 2022 must be fully absorbed by companies with no public financial support.

The costs involved in maintaining depots also pose a challenge for both maintaining existing operations and scaling up. Ben reports having to shut down one of their two depots because of the high running costs of running it, with certain implications on the performance demands of riders, whilst Zad highlights the unaffordability of rent for new depots.

As Zad suggested, underused public land, owned and managed by local authorities, could offer an option for low-cost rent for zero emission logistics companies. However, reception from local authorities has been non-committal:

Hubs is another concern for us, we spoke to numerous local authorities saying, "Can you give us spots where we can store the bikes? In car parks, in disused shopping centres...?" And it's all, "Great idea, great idea," but it never materialises. And then we just kind of run out of patience and time.

(Zad)

These anecdotes demonstrate how withdrawal of government support from the sector has made business development much harder for cargo bike company owners and managers. Political commitment to a low-carbon transition must be operationalised through financial and resource support for low-carbon sectors.

4.1.3d Theft

Bike theft in London is a widespread problem which extends to cargo bikes and their components. Cargo bikes are worth between a few thousand pounds and £10,000, and their batteries have a resale value of several hundred pounds, making them an attractive object for theft. Dom describes a break-in to their depot where 12 batteries were stolen, and Sarah recounted an incident where the display computer for their cargo bike was taken, rendering the bike unusable. Theft is particularly damaging to small companies' operations, as in the case of Theo who reported 'a massive impact' after one of their six bikes were stolen.

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Whilst bike insurance products have diversified to include the theft and damage of cargo bikes, the impacts of a theft are still significant. Other types of insurance that conventional logistics companies must have, such as ‘goods in transit’ insurance, can create complications with further impacts on companies’ operational potential, as the next section describes.

4.1.3e Unrealised potential of cargo bikes

To realise the significant potential carbon emission savings that electric cargo bikes can generate, there must be a large-scale shift from combustion engine vans and lorries to cargo bikes. Whilst the cargo bike sector is firmly established in food and parcel delivery, there are other highly polluting sectors that still rely on ICEVs to move bulky and high-value goods. Marcus is a manager of a cargo bike company aiming to tap into these sectors, particularly construction and other sectors that are ‘locked in’ to using vans both operationally and financially:

I guess what's frustrating, I think, for both of us is the lack of belief in what cargo bikes can do. We have an automotive culture where vans do everything. And either people don't believe or don't want to believe for cultural reasons. So, they have a business that revolves around the motorcar, and they simply do not believe that it's possible to do a lot of the things they would do by bicycle. So, one of the biggest problems we have is communicating that message and the message that we have as a business ... that you don't need vans, you don't need vans to do a lot of the work. So, you know you have a solution, but even though people see it, people don't believe it and don't trust it.

(Marcus)

In addition to the cultural and practical obduracy to change described by Marcus, there are other barriers to expanding cargo bike operations into different sectors. Theo describes how the potential of cargo bikes is not currently supported at a commercial-insurance level, specifically in terms of the types of insurance available to them and their client base. His company works in the art, furniture, and design sectors, which can pose a problem with regard to a lack of appropriate goods in transit insurance:

There's insurance challenges to overcome, again because of the novelty of the cargo bike. Some people are not happy, you know, if you're moving a £10,000 piece of art, they want it to go in a van, they don't want it to go on a cargo bike ... goods in transit insurance is a challenge for cargo bike insurers... insurers just won't recognise the cargo bike as something that's carrying high value probably because most of the work that's done on cargo bikes isn't high value.

(Theo)

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Since this interview, this company has negotiated a bespoke policy with a fine art insurance broker, who offers cargo bike contents insurance up to a value of £25k, and van insurance up to £250k.

Transitions to sustainable technologies require a shift in cultural perceptions as well as in the wider regulatory and facilitative mechanisms in place. Insurance is one case where experimentation would be useful, for instance with the types of policies in place in other sectors and what this would enable with regard to cargo bike capacity.

4.1.3f Finding own work-life balance

On a personal level, managers describe the issues they face around work-life balance. In cases where managers are the founders of the companies, they have made personal financial, time and emotional investments into companies. This can impact the extent to which they are able to separate their work and company from their personal life.

In smaller companies where most staff are riders, and just one or two staff run operations and business development, managers describe the anxiety of having to straddle multiple facets of the business at once. Across companies of all sizes, the relentless and fast-moving nature of the sector increases the challenges faced by managers described in this section. As Marcus points out:

Within the industry, you do something and then you're on to the next thing and then you're on to the next and then you're on the next thing and you go to sleep and then you wake up the next day, and it's only if something really significant has happened that it really kind of carries over.

(Marcus)

The following sections examine the ways in which these issues affect riders.

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4.2 Riders' experiences in the cargo bike logistics sector

This section outlines key experiences recounted by riders and how these are shaped by specific socio-demographic characteristics.

- A variety of motivations to and benefits of working in the sector are described by riders, and these are broadly in line with the managers' narratives described in section 4.1
- The materiality of cargo bikes distinguishes the sector from other delivery and logistics sectors; however, the impacts and effects of this materiality are experienced differently by male, female, and non-binary riders
- Rider gender is a main differentiating factor of experiences both on the road and in the workplace
- Training provision varies from almost zero, to high-quality, extensive processes
- Social networks and dialogue between riders exist, however union awareness and membership are low.

Box 4A: Who are the riders we interviewed?

Motivations for becoming a rider

- Getting outside and interacting with people during/following COVID-19 lockdowns
- Exercising and getting/staying fit as a paid occupation
- Monetising interest in cycling - riding and mechanics
- Contributing towards sustainability - bikes replacing vans on the road
- Trying something different
- Having a flexible source of income

Perceived benefits of riding

- Improving fitness levels
- Being outside, which is good for wellbeing
- Developing camaraderie with other riders and increased sociability
- Getting to know the city and discovering new places

Riders' characteristics and prior employment

- Previous gig economy delivery workers - e.g., Deliveroo cyclists who suffered from changes to the algorithm that reduced work for push bike riders
- Previous push bike couriers in the 1990s and 2000s
- Later in life, following a previous occupation (age 45+)
- Full-time, main occupation
- Students and workers in creative sectors, looking to supplement income

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4.2.1 Negotiating the roads: the challenging materiality of cargo bikes

There are various types of cargo bikes in operation across London's cargo bike logistics sector, and all riders identify a significant difference between riding a cargo bike and a conventional bike. Cargo bikes are significantly larger and heavier than pedal bikes, with a carrying capacity of over 100kg. This requires riders to have certain capacities and knowledges to load, ride and navigate safely and efficiently.

At the same time, cargo bikes occupy a liminal position somewhere in-between bicycles, cars, and vans, and are yet to be established in the road user hierarchy. This can cause concerns. For example, in relation to other vehicles, Amal describes how the bulkiness and noisiness of the cargo bike attracted attention and made them hyper aware of public perceptions:

[The boxes] would be rattling a lot, especially on a poorly surfaced road so it draws a lot of attention ... they already have a large presence physically, so then the noise is just kind of an added thing ... the idea or the opinion of a cargo bike is still being kind of moulded ... I don't want to come across as a threatening figure because that's not what a bike should be.

(Amal)

Compared to push bikes and vans, cargo bikes afford different types of interactions with other road users and there are varying degrees of confidence and vulnerability amongst riders. Three main experiences are elaborated: assertive riding, vulnerability and attracting attention and harassment.

4.2.1a Assertive riding

The larger size of cargo bikes means some riders find it easier to establish their presence on the road and ride assertively. Many riders interviewed describe being more 'visible' to cars due to the bulkiness and physical presence of the cargo bike, or possibly as "[drivers] think if we hit a cargo bike, it's going to do quite a bit of damage to my car" (Pete).

This has implications in the way riders negotiate road space, for example, as "you're a lot less likely to be bullied when you're on a cargo bike because of the size... you can defend your space a lot better on a cargo bike" (Pete). In a road environment where riders' harassment by drivers is normalised¹⁰⁹, a cargo bike allows riders to assertively reclaim their rightful space on the road¹¹⁰, utilising their size and assertive riding as a deterrent to cars coming too close.

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4.2.1b Vulnerability

Carrying a heavy load on a cargo bike makes manoeuvres like getting off, balancing, and turning, much harder. Riders who did not receive adequate training recall feeling vulnerable on the road when suddenly loaded up with significant weight. Jeremy gives a vivid description of this experience:

The most difficult thing is honestly just the balancing of it, I don't know how you describe it. It's not so much the riding of it or the size of it. It's literally just balancing it. Especially from, like, a standing start or when you're going really slowly.

(Jeremy)

As others reported, these challenges are further confounded by adverse weather conditions, such as high wind and rain, which can decrease the bike's stability.

4.2.1c Attracting attention and harassment

Although increasingly common in London, cargo bikes are still a novel form of transport that can attract attention from the public. Some riders recount positive experiences, for instance Amal who describes how the cargo bike can stimulate interest in a sustainable transport mode by facilitating conversations with the public.

A lot of people are kind of like just intrigued. You get a lot of people coming up to you and wanting to know what it is or what you're selling... or other people are like, 'Oh, that could be really good. We could get rid of a van and have this'. And so, in that way it's good. You're like almost a walking advertisement for a different mode of transport.

(Amal)

On the other hand, most riders interviewed recounted negative experiences around unwanted attention or behaviour. For example, Elise describes how experiences of driver aggression on a cargo bike were intensified due to its size and physical presence:

Nearly every day... vehicles would, you know, put their foot down to get past you and nearly cause accidents with oncoming traffic. So that level of just aggression from other road users is mainly the thing that's put me off doing it longer.

(Elise)

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Pete expands on how cargo bikes seem to attract particularly aggressive reactions from drivers:

I think the guy was thinking I wasn't cycling quick enough in a 20mph zone. And as I pulled around the outside at some lights, he spat at me. He missed, but yeah, in the 40 years that I can remember cycling in London I've never had that before. You'll get the odd bit of verbal nonsense, but I've never been spat at.

(Pete)

Cargo bike riders also report widespread incidences of harassment, which are highly gendered. Whilst some male riders describe experiences of driver aggressions, every female and nonbinary rider interviewed recounted multiple experiences of driver aggressions and sexual harassment by other road users and pedestrians. For example, Sid shares their frustration with harassment faced by female and nonbinary riders:

I don't know what it is about being a female or non-binary courier, but that definitely leaves open some space for people just to like invade your privacy 'cos you're out about on the street... I got harassed for my number and email once, um, had some guy like inappropriately like punch me in the stomach... I know of different experiences of like women or non-binary people going to deliver in like a block of flats and a guy is actually trying to pull her in to the flat and stuff like that. So yeah... the overall wider problem of sexual harassment is probably one of the biggest issues.

(Sid)

Sexual harassment and other forms of gender-based violence in public spaces are a threat to women's and girls' safety in cities worldwide and affects their travel behaviour.¹¹¹ Two-thirds of women in London have experienced sexual harassment on the public transport network or in public spaces, and 40% have experienced unwanted sexual contact.¹¹² For some women and nonbinary people, cycling makes them feel safer from street harassment because they can escape more quickly from potential harassers.¹¹³

However, increased vulnerability to road danger can compound fears of street harassment, therefore making cycling seem less feasible for other women and nonbinary people.¹¹⁴ Women are more likely to experience close passes and near misses while cycling compared to men, which can be a barrier to cycling and working as a cycle courier.¹¹⁵ We will examine the gendered nature of the cargo bike logistics sector in the next section (see 4.3.4).

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4.2.2 Riders' interactions with physical and digital infrastructures

The materiality of cargo bikes and the use of digital apps for work requires cargo bike delivery riders to simultaneously engage with physical and digital infrastructures.

4.2.2a Cycle infrastructure and cargo bikes

Insufficient width of cycle lanes was raised by many cargo bike riders who physically cannot fit or feel they pose a danger or nuisance to other cyclists. For example, Elise describes how riding a trike in a cycle lane was not feasible, forcing them into the road:

Especially on the trike because I was taking up so much [space], like you couldn't really fit in a lot of the cycle lanes comfortably, so you were having to take a position in the road and people would get really angry at you for that because you're slow.

(Elise)

Although TfL's London Cycling Design Standards¹¹⁶ states that cycle lanes should have a minimum width of 2m, many lanes are narrower than this, therefore creating difficult situations for cargo bike riders. If cargo bikes are too large for cycle lanes, they must ride in the carriageway; however, as they are speed limited to around 16mph, this provokes particularly aggressive driver responses, especially in car-centric urban environments.

4.2.2b Navigating

Mapping applications are fundamental work tools for cargo bike delivery riders, but they do not consider bike width or size. The discordance between the materiality of the cargo bike and how navigation apps route cycle journeys, as Sid explains:

Google Maps does take you down streets that you're not meant to be down, like one-way streets. I do find that really dangerous. If you're on a bicycle ... you can kind of get away with it. Whereas if you're on a big cargo bike, you can't do that. So, yeah, specific to cargo bikes, it's just the size of it, really... and some cycle lanes you don't realise they've got some barriers you can't fit through. You just don't know unless you know the area.

(Sid)

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4.2.2c Existing logistics infrastructure

Large offices often require deliveries to be made in loading bays or goods entrances, which tend to be around the back of a building or tucked underground. Some loading bays are designed specifically for vans and lorries without consideration for cargo bikes.¹¹⁷ Both the physical infrastructure and the awareness of loading bay staff can severely impede riders' work to the point of cancelling the delivery, as Elise recounts:

There's this occasional nightmare day when you get sent to Isle of Dogs. And then you're actually meant to be somewhere in the shopping mall, and then you end up not being allowed to go in that way and having to go navigate to the car park and then go to the car park and are told, 'oh, you can't come down here with a bike'... in the end of the day the customer cancelling [the delivery] because you're not allowed bikes in the cargo area because it's always lorries and vans. And it's like, but you ordered a cargo bike!

(Elise)

4.2.3 Riders' safety and wellbeing

4.2.3a Training and support from managers

Training quality varies significantly across the companies interviewed, in terms of provision of training and the formality of training and assessment.

Managers and riders report a requirement to undertake Bikeability Level 3 before starting work. This is a national cycle training qualification that aims to equip riders to optimise their road positioning and navigate busy and complex roads. Although it is a free qualification and equips riders with fundamental cycle skills, the burden of achieving it falls onto the rider to complete in their own time. It also fails to address the specificities of a cargo bike.

Some companies offer essentially no training at all, as recounted by Jeremy:

Basically, I just got on it once they just asked me to try it. I literally just rode it up and down like the road that we're situated on for a few minutes. And that was it really.

(Jeremy)

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This lack of training can negatively impact how riders are treated by managers in the long-term. For instance, Amal describes how the rigorousness of training they received was not provided to all riders, particularly those joining during particularly busy periods:

And often there'd be frustration or like 'oh why is this person so slow'. But I would always think, like, when you're not preparing the people to work properly, you can't really be frustrated . . . people that were slow on the bike, instead of being trained properly or given some more guidance, [the manager] would kind of just be like, 'Oh, they're too slow'.

(Amal)

Managers mostly describe a relatively informal training provision, led by an experienced rider who demonstrates the basics of the cargo bike. Some managers, like Sarah, viewed this as sufficient:

We basically do a cargo bike training where they spend time with our experienced rider learning how to specifically use our cargo bikes so that's from, you know, how to lock it up to how to use all the gears to how the display works . . . and then we offer 1 to 1 sort of training rides right up until they're ready to take on a shift. So, we always say, okay, have the induction, learn how to use the cargo bike, then have a one-on-one session . . . then when you're comfortable, we'll start basically assigning you shifts.

(Sarah)

Mia works at a different company but received a similar training experience. She describes how she felt unequipped when encountering a difficult road situation:

I have no idea how to take a roundabout. And I got honked and there was so many people were screaming at me the first time. I didn't know about the line [markings]. I don't have my driving licence, so I obviously didn't know the road codes at all. And yeah, I learnt from just experience and being honked at.

(Mia)

The interviews highlight how basic training of just a few hours does not sufficiently equip riders to navigate London's complex road network.

At the other end of the spectrum, Pedal Me has a rigorous training and examination process that essentially serves as the company's interview process. The training aims to create "a high degree of competence" and acts as "the insurance policy for the company" (Pedal Me manager). The training is a five-day paid course that equips riders with essential skills such as riding

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with different loads, loading techniques, basic maintenance, assertive riding, conflict avoidance, and verbal and non-verbal communication on the bike. In our focus group with riders, riders from other companies praised the stringency of Pedal Me's training and assessment and agreed that high quality training across the board would benefit both companies and riders.

Offering riders high-quality, paid training demonstrates that the company is willing to invest in them. However, some riders pointed out that the training is only as good as the trainer and the team that developed the training. The gender gap in cycling and the male-dominated cargo bike logistics sector means that training programmes are likely to have been developed by men based on their own cycling experiences. Elise, a rider, questions whether training could better reflect that if:

The cargo bike industry [had] female figures higher up and involved in training, or at least having an impact on what it might be like to be a female cyclist as a cargo bike rider.

(Elise)

This means taking into account that drivers tend to closely pass female cyclists more than male cyclists, for example.

4.2.4. Working in a highly gendered environment

Riders' experiences on the road and in the workplace are highly gendered.

4.2.4a On road gendered experiences - safety and fear

Cargo bike riders spend a lot of time by themselves on the road and deliver items in often secluded or isolated situations. Female riders, such as Elise, describe how these situations can feel threatening:

It's also slightly scary being alone in hallways, with a, you know a strange guy . . . and it wasn't clear whether I should have done that or not, and I didn't feel there was time to ring [my manager]

(Elise)

Freedom from violence, harassment and intimidation is a fundamental component of equitable and inclusive public space¹¹⁸, but too often denied to female and non-binary people. These experiences are intensified for delivery workers, as the public realm is where they spend most of their working time:

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It's just when you're on those roads where there's no one around and there's like one van and you're just like (hmm) this is a little bit awkward like what's happening here, there's three of them in the van ... I'll just go around the block or, you know, wait for them to go away before I get off the trike.

(Flo)

The lack of diversity at the management level of cargo bike logistics companies means that the increased fear and vulnerability female and non-binary riders feel while working is not recognised or taken seriously. Elise describes here how her managers are not able to empathise with this sense of fear, and this translates into an absence of support:

I felt a bit like not heard ... basically it's a man's culture so they wouldn't know what that kind of fear of being alone on the bike in the streets on your own with the possibility of - it just hasn't ever occurred to them, that kind of insight into being, um yeah, afraid.

(Elise)



Photo: © Sustrans

4.2.4b On road gendered experiences - Lack of gender inclusive facilities and provisions

Given that riders spend most of their working day outside in public, toilet access is a key problem. Cuts to public services under austerity led to a significant decline in public toilets in London between 2000 - 2011¹¹⁹, a trend that has continued. Riders are left to rely on the discretion of pubs, cafes, and restaurants if they want to use the toilet. Sid describes how this discretion was not always exercised or the toilets available were inappropriate for their needs:

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Toilet dignity was a massive one... during COVID, like getting toilet access for any courier, but especially for women and non-binary people, was yeah quite degrading and quite difficult. There was some shifts where literally I think I was reduced to tears because I was just so like [laughs] I'm gonna wet myself... it's like you want to feel comfortable at work and like I think access to a toilet is probably a basic human right.

(Sid)

Menstruation has a particularly acute effect on cargo bike riders due to the intense physical and mental nature of the role and is exacerbated by the lack of adequate facilities. For instance, Flo recounts that her employer is flexible and does not expect her to work during her period. However, as she is self-employed, this results in a loss of earnings. Similarly, Mia describes how in a male-dominated working environment, menstruation is not recognised as an issue that may have a significant physical or emotional affect. Although her workplace offers sick pay, she argues that one or two paid days off per month for menstruation might encourage greater gender diversity within the sector.

4.2.4c Workplace gendered experiences

Not only are female and nonbinary people often denied safe space in depot facilities, on-road infrastructures, and workplace culture, but there are other unwelcoming aspects of working in a ‘man’s world’. Most of the managers interviewed recount holding workplace social events for riders. However, the male-dominated and highly masculinised sector means that social events are not gender inclusive. Social events recounted by riders include axe-throwing and a bike race against colleagues and other courier companies. Riders seemed aware that these activities were ‘very masculine’ (Amal), and Mia describes her concern about this ‘work hard - play hard’ culture present in her company:

They have all these parties, and the next day you’re expected to ride and it’s all jokes like ‘haha so hungover from yesterday’. That’s not funny. I mean, like, that’s dangerous for not just yourself but other people.

(Mia)

The masculinised culture that values toughness makes it difficult to ask for help, as Elise describes:

I think it is slightly frowned upon and shameful [to call for help]... there is a bit of a culture of, you know, get on with yourself attitude that I would say would lead to a lot of probably mistakes where people would rather try themselves and do it badly than ask. And I think that’s quite dangerous too.

(Elise)

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The lack of gender diversity in the cargo bike logistics sector reflects the lack of gender diversity in city cycling more generally. Cycling in London is a disproportionately white, male activity.¹²⁰ Research participants were very aware that some companies were ‘very white’ both in terms of their riders, and management and senior staff (Elise; Sid; Amal; Tom; Sarah). Preliminary evidence from our interviews suggests that riders of colour are more likely to experience feeling ‘out of place’ when doing certain deliveries, such as passports in affluent residential areas.

The experiences of people of colour and other underrepresented groups in the sector – and in cycling more broadly – are different and warrant further research. Time constraints of this research project prohibited more in-depth engagement with the experiences of riders of colour and migrant workers. Reaching both groups requires more thoughtful and targeted recruitment strategies, such as partnerships with community organisations that work with people of colour or migrants and more direct contacts with riders at a greater variety of companies.

4.2.5 Riders’ relationships and networks

Relationships between riders and managers and the impact this has on employment conditions are elaborated in section 4.3.3.

Riders describe the social aspect of the job as one of the more favourable aspects. Elise describes how she likes “the kind of camaraderie with the other riders and also the stories around it” when chatting to other riders out on the road. This is also described by Steven, who values these brief moments of encounter and interaction:

You say hi, sometimes if you’re sat stopped at the lights, have a little chat, ask about how their day’s going and it’s quite nice. Nice to hear about whether other people are busy.

(Steven)

Riders also describe how they use informal groups and communication networks to exchange information with each other. Nadim describes how the WhatsApp groups he’s in talk about “problems with employers, or if people are looking to buy a bike or sell a bike or need a part, a particular part, or need advice on something.” Similarly, both Sid and Amal describe how within the company they work for, riders share information on navigational issues and encounters with other unsuitable infrastructure.

Despite the purported sense of camaraderie, in the focus group with riders, some more seasoned riders describe their dismay at the low rates of union membership amongst riders. Rory describes how a successful union campaign at their workplace improved their contractual arrangement and achieved a pay rise, but despite this, “people were really resistant to it..

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. [they] just don't wanna pay [the membership fee], they don't see the value in it." With union membership and activity across various industries growing in recent months¹²¹, there is potential for greater union involvement in the cargo bike sector to help improve working conditions across the board.

4.3 Tensions in the sector

Sections 4.1 and 4.2 outlined the findings from our engagement with managers and riders respectively. This section offers a discussion of these and presents additional findings, structured by four 'tensions' that draw out discordances between managers' visions and intentions, and riders' on-the-ground experiences.

- Managers endeavour to distinguish their businesses from the gig-economy, however some riders experience precarity and poor support, as they must absorb the commercial uncertainty faced by their employer
- Overall, there is significant sentiment to improve the sector, however financial, temporal, and institutional constraints often mean the experiences of riders do not reflect the aspirations of their employers
- Small companies rely on informal relationships and arrangements for daily functioning, however the extent to which these will facilitate equitable and fair structures if and when a company scale is uncertain
- Riders are expected to emotionally commit to the company's vision and ethos in the pursuit of shared success, however there is an expectation for them to individually absorb financial and temporal burdens
- Finally, the notion of 'wellbeing' focuses on fitness and strength, with riders' experiential, emotional and mental states often overlooked, creating a culture of 'toughness' that can affect workplace inclusivity

4.3.1 Distinction from the gig economy // commercial viability and stability

The managers we interviewed make a concerted effort to distance or distinguish their companies from the gig economy. This is evidenced in their policies, practices, company culture and approach to relationships with riders, as highlighted in 4.1 and summarised in Box 4B.

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Box 4B: Features in the sector that diverge from the ‘gig economy’

- Pay per hour rather than per drop
- Breaks encouraged and mostly paid
- Often direct communication with manager/controller (not mediated by an app)
- Smaller pools of riders within a company means regular work is often available
- Companies provide bikes
- Growing use of training
- Safety standards
- Support from mechanics
- Additional perks and benefits for riders (e.g., some receive gear, holiday pay, sick pay, etc.)

Cargo bike managers compare their companies to platforms such as Deliveroo, Just Eat and Uber to contrast working practices and worker expectations:

We’re not like a company like Just Eat... - riders have come to me and said ‘Am I allowed to go to the toilet? Do I even get a break? Am I paid for it?’ You know, these things. So, it’s, you know, the expectations in the industry are really low.

(Marcus)

Most riders interviewed also acknowledged the distinction from the gig economy, especially as some previously worked for platform delivery companies. One rider explains the main differences between working for ‘the apps’ and working in a small cargo bike delivery company:

You’re provided with a vehicle which is a main thing, you’re paid on the hourly rate, so you have a confirmed amount of income per hour. Even though your hours are not necessarily fixed, you have a minimum, you know, every day I’m going to have minimum £48... that’s the main thing is really just you kind of know how much you’re going to earn... and yeah, you’re within a company, so you kind of, you don’t have to source your own work. It’s kind of just all done for you.

(Amal)

The rider notes the provision of a bike and the regularity of work as distinguishing characteristics. Gig economy food delivery platforms require riders to provide their own bike, and usually pay riders per drop, which can create large fluctuations in hourly earnings that are vulnerable to breakdowns or mechanical issues.

However, although there is an effort across the sector (by some more rhetorically than practically) to move beyond practices prevalent in the

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'gig economy', riders reported experiences of precarity, uncertainty, and feeling devalued, as already emerged in 4.2. For instance, riders across contractual arrangements experience precarity when there is a lack of protective measures on their income, for example, due to businesses' seasonal fluctuations in customer demand.

Mia works with a company that offers riders a base rate plus financial incentives linked to the number of drops made. As evident in the quote below, this model of paying commission ultimately makes the rider's income dependent on the success of the business. If there are fewer clients or lower demand for the service, the riders' take-home salary will suffer. It also raises issues around performance and safety, which is addressed later in this section:

If you earn £1200 it's like well, that's nothing, you know, and the commission, no one cares because one month will be this and the next one could be that, because maybe one month the business is really bad and we are delivering ten boxes a day and it's like woah mate, you know, that's not nice.

(Mia)

Similar experiences were recounted by riders on a fixed hourly rate, who experience significant fluctuations in the number of and length of shifts assigned to them, as Sid explains in the following quote:

What I did notice is that although we did quite long shifts, you know some weeks you maybe only get one or two shifts and you're kind of like, okay, shit, this isn't a lot this week, you know, that really, really just varied as well. So, you could never be secure in that aspect.

(Sid)

Managers recognise how they are far from being able to ensure regularity of work, with one acknowledging:

There's a little bit of a problem with the lack of shift routine because we ask riders to flex and be flexible with the demands of the company. So sometimes hours drop, sometimes hours raise. And so that can be difficult for some people.

(Marcus)

Similar accounts highlight how, despite the rhetorical commitment across the sector to moving away from gig-economy practices, workers are still facing a highly precarious working environment, including precarity of hours and/or take-home pay, where they must absorb the commercial uncertainty faced by their employer.

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Riders also report a dissonance between the skilled nature of the job and the ways in which they feel seen, heard, and valued by managers. As illustrated in previous sections, being a cargo bike delivery rider is a skilled job that requires a particular set of knowledge, competencies and capabilities that grow and improve over time. Despite this, some riders report feeling devalued with the threat of replaceability used as a mechanism of control.

This feeling is recounted by both newer and more experienced riders, as the following two quotes demonstrate. One experienced rider drew parallels between his current employment and previous push-bike courier employment in the 90s, describing a common theme in conversations with managers:

I've threatened to quit a million times and like I'm really experienced, I'm good at my job and they'll go 'oh fine, we'll just replace you'. They don't care that they will have loads more issues with someone who is not as experienced as me. And they're like 'just do it we'll replace you'.

(Rory)

Lack of recognition and the threat of replaceability can create an exploitative environment where managers can incrementally increase expectations on riders' performance. Tom shares their experience of burnout and receiving little support or recognition from their manager, who maintained high performance expectations during times of intense work hours:

I do feel like they tend to burn riders out, they push and push and push. I had a bit of an incident, I was doing six days a week last year and yeah, I got a little bit... down with it all, to be honest, especially feeling like I wasn't particularly valued. Putting all that work in, do you know what I mean? So, you'd finish late, like 8.30, 9. And then [the manager] would be banging on about the fact that you were ten, 15 minutes late the next day. I was like hold on a second, the shift was advertised till 6, I didn't get in till 9.30, 10. You know, how far can you stretch someone on a regular basis? I've still got that issue with them now, although they seem to be addressing it more.

(Tom)

The previous quote alludes to an eventual recognition from managers, and there are cases where managers are endeavouring to tackle precarity, for example by ensuring better contract opportunities (see Box 4B). Several managers operate on a four-hour minimum shift to ensure that riders "aren't coming out for nothing, and they're not on call for nothing" (Theo). Another manager describes how they offer shifts in four-hour blocks, either in the morning or afternoon, or a full eight-hour day, citing that this increase in stability and regularity helps with rider retention (Owen).

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Similarly, some companies take a mixed-contract approach to employing riders to allow for the various preferences for flexibility and other non-work commitments. Lila describes how they offer several full-time rider positions and hourly employment (with the same employment benefits) which is more suited to students, with the option to become full-time once they can demonstrate good performance and commitment.

However, a mixed-contract approach poses difficulties around long-term feasibility and creates tensions between riders in an increasingly competitive sector. For instance, Theo describes the issues encountered when starting to introduce PAYE and minimum hours contracts for some riders:

It stands to reason from the cost of employing people, PAYE is what - a third more than if it's someone who's self-employed? Which for a small business is pretty major... So, I think it stands to reason that you've got to honour those PAYE hours over someone who is self-employed because they are ultimately self-employed. So that exposes them to more risk and that is a lack of rights on the individual... the push towards PAYE introduces a power dynamic into the business that I haven't fully started to start to grapple with.

(Theo)

This captures the tension in some companies between trying to improve job security and working conditions through offering PAYE contracts and enabling some riders to maintain the flexibility that they value, whilst fulfilling both in a competitive and fluctuating market. Sarah offers some reconciliation between these ideas:

We're trying to, you know, we're trying to reimagine this gig economy, I guess, as a force for good if we can, as I said, if we can offer flexible working shifts, but also regular sort of thing. You know, our goal is to have like consistent but flexible shifts.

(Sarah)

As a nascent sector, cargo bike logistics companies seem to be less resilient to fluctuations in business activity. This can compound challenges to improve job security and working conditions in the sector due to the higher overheads and investments required.

4.3.2 Organic emergence and scaling // poorly defined organisational structures

Many of the cargo bike companies interviewed started with just one or two bikes and their founder/s as the primary riders. As their service became more popular, they acquired more bikes and riders, and managed

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the operations and business development themselves. A benefit of emerging organically, or from ‘grassroots’ (Theo) is that companies can be flexible and dynamically respond to changes in the sector and the broader commercial landscape, for example, not getting locked into particular technologies, and strategically developing a client base that works with their geographical coverage. However, tensions can appear as companies emerge and grow in informal ways. They may lack fundamental management and organisational structures around communication, transparency, and professionalism.

4.3.2a Workplace relationships and work-life balance

Sarah describes how the organic emergence of their company enables intimate and friendly relationships between riders and managers:

It feels like you just work with a bunch of your friends sometimes. It's just so nice because we're an early-stage start-up. You don't feel like it's a strict company and I am quite an advocate for having that culture.

(Sarah)

On the other hand, some riders report that this type of ‘friendly’ workplace relationship means normative employer/employee boundaries can be ill-defined and work expectations can bleed into their personal life. Amal describes in the following quote how they would receive last-minute and out-of-hours requests from managers who had the expectation that riders would respond out of their contracted (and paid) time:

You'd get say a text the night before like, ‘Oh, can you work tomorrow?’ Or when you're out of hours, it's like, ‘Oh, can you do this?’ or ‘Oh, here's the information for tomorrow’ when you're not getting paid, you know, it just can be quite annoying... I guess to them they don't maybe realise that's a problem because they're working all day and that's their child almost, you know, so they're constantly like working 24 hours, where for someone like me who is studying like, no, like don't message me when I'm not working.

(Amal)

Managers have a level of awareness that ill-defined organisational structures impact on the work-life balance of riders, and of themselves too (see section 4.1.3f). For example, Theo reports how use of conventionally social-purpose apps such as WhatsApp can be ‘quite intrusive’, and, in interaction with a lack of defined and agreed methods and practices of communication creates a poor life balance.

Some managers recognise that last-minute requests are enveloped within the culture of commitment to the company (see Section 4.3.3), which can lead to unfair burdens placed on both riders and management

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staff, leading to burnout. This culture also emerges where companies are systematically under-staffed to save on costs, as acknowledged by managers themselves (Harry).

4.3.2b Channels for feedback

Without defined organisational structures and with blurred roles, companies may also lack formal channels for riders to provide feedback or raise issues with managers. This can put riders in a difficult position when they experience an issue, without knowing who to approach and how, as many interviewees, including a manager quoted below, reported:

[Communication] is definitely still an issue in terms of like the step between a rider communicating that - knowing who to talk to about it... the nature of what we're doing is very fast paced. So, for people who are team leaders are also on that team and have other responsibilities like sales or accounts or warehousing and stuff. So, the operations of the company can end up taking precedence over rider welfare... there's just constant things that fall short because we don't have this clear reporting system.

(Alice)

Although examples of reconciliation with riders' issues are reported, this is done in a relatively informal and reactionary way. For example, riders must wait until they burn out before conditions can be improved. A more proactive and open environment with better-defined mechanisms that facilitate feedback would be preferable.

4.3.2c Opportunities for development and progression

The Mayor's of London's Good Work Standard¹²² places significant emphasis on opportunities for progression and promotion within a company, as well as the opportunity to undertake training and develop skills to facilitate career progression. However, many riders raised concerns with regard to the lack of clarity around progression within the company beyond just riding cargo bikes.

As Tom describes below, lack of potential for progression affects rider retention, an issue that managers have also brought up (see section 4.1):

I've been doing it for three years now. Surely there should be some sort of payment for [experience and seniority]... it doesn't seem to be any recognition of that, and you lose a lot of very skilled riders because of that. They can't see any kind of progression... they're getting more efficient, and they are better each year, and they're not getting any reward for it. So, they tend to leave.

(Tom)

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Other companies improve in some regards by offering riders alternative roles and opportunities to progress and diversify their role within the company. Larger companies that are growing find that growth creates demand for new roles, unlocking more opportunities for riders to progress, from rider, to team leader, to diversified opportunities to specialise as mechanic or trainer (Marcus).

However, as the following quote describes, riders who have seen other riders progress to other roles within their companies raise concerns around the extent to which these promotion routes are transparent. Progression here seems to be decided and judged on a more informal basis that is not well communicated across the company, as Frank and others report:

People have moved on to different roles and sort of progressed their skills in the workplace. As in all workplaces it can be a little non-transparent about how you do that... there isn't like a sort of like a 'this is the ladder of progression' [or] career path... riding bikes is enjoyable but you know, it's always in the back of your mind that you can't do this for the rest of your life, you have to progress at some point.

(Frank)

4.3.2c Pay and financial transparency

As well as opportunities to take on different roles, some companies offer an improved pay rate to riders who meet particular performance criteria. However, again, riders take issue with the lack of transparency and communication. In the following quote Rufus describes an 'obfuscation' of the improved pay rate and how it impacted their relationships with other riders:

A year ago, I said I need to be paid more because I've proven I'm efficient and they get very good value for money out of me. I was received well, and they bought the wage rise - they called it a 'senior rider rate'. And they presented it to me, and I think it was about 5%. And I said, no, that's not acceptable, sorry. They came back and said 10%, that's what we can do. And that was halfway between what I was hoping for... so it was to be performance based, so if the rider can make ten drops an hour, they get that. I think all in with like clothing allowance and holiday allowance it's just below £13.50. I thought okay that's, that's cool to get to that level. And then it wasn't communicated to anyone else in the company... like their obfuscation I think was just disgraceful and left me with a pretty red face a few times and dissatisfied other couriers. It's not fair.

(Rufus)

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Box 4C: Good practice in pay transparency

Neko Home Delivery profit sharing model.

Neko Home Delivery operates a profit-sharing model that draws on similar financial structures to a workers' co-operative. Each week, Neko divides the total company earnings by the total number of hours worked to create a 'token' value. Riders' hours are multiplied by this 'token' to calculate a gross income, from which a percentage is taken out to contribute to a 'common expenses' pot that pays for shared expenses that are essential to the functioning of the business, such as insurance, equipment, bike parts, accessories, and social events. The percentage contributed decreases with time worked, creating a retention incentive for riders, and after 9 months, riders have the opportunity to become a 'designated member' of the company. This model is communicated to riders when they start working, creating a transparent profit-sharing model based on fairness that offers riders favourable hourly rates of on average between £15-18.

Companies experiencing growth focus primarily on the operational aspects of the business, whilst processes and systems for managing people and relationships become secondary. However, there are a number of formal mechanisms that should be in place to ensure riders feel valued and have a genuine and transparent relationship with their employer. This involves setting boundaries around day-to-day communication, as well as improving the communication structures - whether it be opportunities for progression or better pay, or defining mechanisms for feedback and input into decision-making.

As cargo bike companies grow and scale, it is crucial that mechanisms to improve communication are established, as they play a central role in rider retention and ensuring riders feel valued. Similarly, as they grow cargo bike companies are likely to benefit from more Human Resources support, as founders and others currently in managerial roles may lack that expertise.

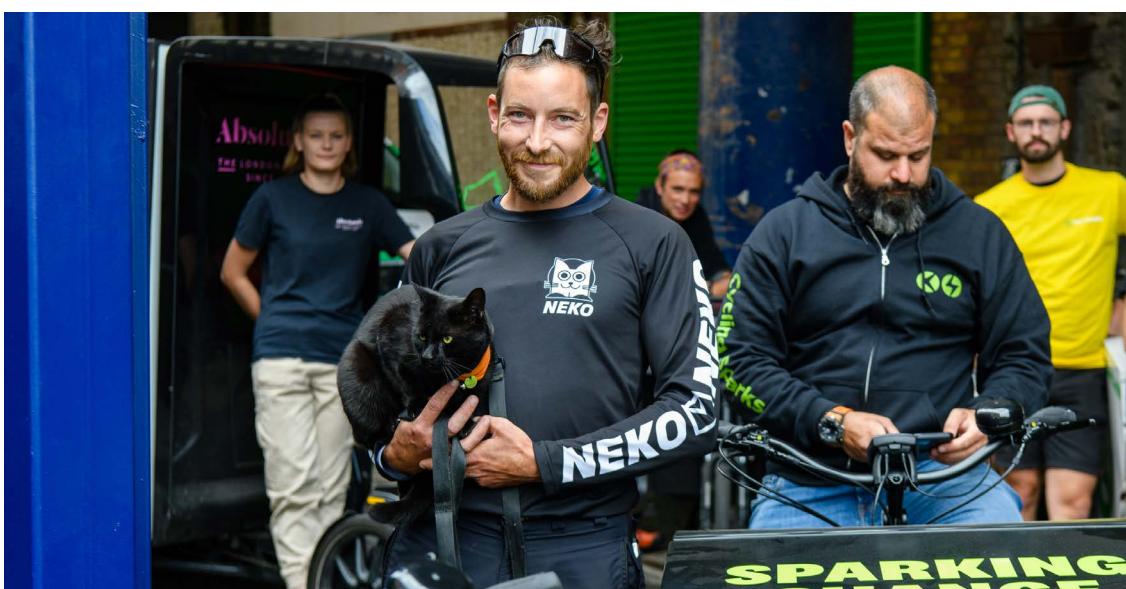


Photo: Tomter (<https://tomter.net/>) / Team London Bridge (<https://teamlondonbridge.co.uk/>).

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4.3.3 Commitment to the company // individualisation of responsibilities and burdens

Many managers we interviewed want riders to share the companies' vision and objectives, and those of the sector more broadly (see section 4.1.1d). This is particularly noticeable in smaller companies (with fewer resources) who are still developing an identity and culture. There can be an expectation on riders to offer personal commitment and sacrifice for the greater good of the company, for instance last minute requests to take shifts, working overtime, or accepting an inevitably precarious and insecure job.

As Lila indicates when asked about desired riders' characteristics, there can be an expectation for riders to have a commitment to the vision of the company (and sector) as an agent for positive change, particularly around environmental sustainability:

We have absolutely no criteria other than the fact that you're here. You're keen to work, you're keen to get trained, and you are willing to meet our purpose, which is to help save emissions and to help reduce the traffic. You just have to bring those two on board.

(Lila)

Sharing the company vision includes, for some, also embracing the 'unsecure' nature of the business. One manager recounts this 'understanding' that riders (must) have of the insecure nature of the start-up:

I've found that because it's a start up business and because we're all trying to work on things together, it makes it a bit . . . riders are more understanding towards what we're trying to achieve and they want to be part of something to start with.

(Domenic)

A union organiser similarly highlighted how riders are expected (and often do) to fully commit to their company/employer. This includes 'making sacrifices' and 'working hard' to ensure the company success:

I think at [the company] especially, it's kind of compounded by the fact that they're like quite a young start-up and everyone feels like, or everyone is kind of encouraged to feel like, you know, they're all in this effort together to like build the business. And so, everyone has to make sacrifices. Um, and if the business does well it's because they worked hard, a business is not doing well, it's because they've not worked hard.

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This mentality of personal commitment and being ‘in it together’ plays out differently for riders and managers, particularly those who are founders. Both riders and managers are expected to work hard for the greater good. However, for managers, this directly impacts their potential return on investment if the business becomes a successful commercial enterprise. Meanwhile, riders’ individual commitment and efforts also directly contribute to the commercial success of the company and the financial benefits for management, but riders struggle to achieve recognition and progress in the company. This illustrates a structural inequality at the heart of the labour relationship between managers and workers, in which the former appropriate the surplus value the latter creates.

4.3.3a Provision of equipment and gear

Commitment to the company can also translate into personal sacrifices and investments that riders are expected to make. One example of this is the responsibility of equipment provision and whether it sits with the individual or their employer.

Based on our interviews, some companies that are more established provide riders with all the necessary equipment, including a phone and appropriate clothing, plus weather-proof gear that can also be an opportunity for additional marketing.

Other companies that do not provide functional equipment recognise that it is a significant cost for riders and offer some financial support. This may take the form of a direct cash grant available to every rider once a year or including a ‘clothing allowance’ in a rider’s hourly wage. For example, one of the companies we interviewed offers riders a grant to supplement the equipment provided by the company:

A helmet, a winter coat, a summer coat, a winter vest, a summer vest, five T-shirts... a pair of socks, towel... a beanie hat and branded masks... We also give them a £50 allowance to buy any gear in addition to what we've given them. So, in case they want to buy a new pair of shoes, or they want to buy a particular helmet that they don't like ours, they can wear that or in the winter they want a particular glove or whatever.

(Lila)

Smaller companies with fewer financial resources may provide only simple branded items such as t-shirts and hats; riders describe these as useful in the summer, but insufficient for when weather conditions and seasons change. This means riders must internalise the cost of partial or complete lack of equipment provision, or of poor-quality provision inadequate for the job. They must invest in better quality ‘functional’ gear that is necessary to maintain a level of comfort whilst working, such as good quality waterproofs, winter gloves, and waterproof trousers, or a working phone, as the following quote highlights:

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In terms of clothing, yeah, we were expected to, like, dress ourselves. They did have some, like, light raincoats that we could have. But, um. Yeah, I mean, if it was winter, you're probably better off wearing your own thing.

(Sid)

Phones are fundamental tools for work, as they are used intensively for navigation and communication during shifts. They can be quickly degraded, as reported in interviews with riders. Some companies provide a work phone, but riders report their quality is too poor or there are not enough to go around. In these cases, riders must use their personal phone for navigation, communication, and delivery. In many other cases, despite phones being a fundamental and costly part of riders' kit, riders are expected to use their own phone as a condition of employment, mirroring the expectation that exists in the food platform delivery sector. Steve describes how reliance on their personal phone for work purposes exacerbates their precarious employment situation:

It made me think earlier about the phone, like it would be handy to have a work device. I guess just if I break that [personal phone] then I can't work the next day and have to go and sort a new phone before I can work again.

(Steve)

Steve also describes spending their own money on items that are necessary for the job, but subject to degradation over time.

In his 2019 book *Riding for Deliveroo*, Calum Cant describes how, when a rider must own the equipment required to complete their job, this is the employer outsourcing their 'fixed capital' to workers. The riders here own the 'means of subsistence' required to participate in the process of production. Owning a phone and purchasing weather-suitable equipment are costs that directly detract from riders' wages - they do not create value for the rider, but rather are necessary to access the job. It is a useful way for employers to reduce their outgoing costs by shifting them onto riders.

4.3.3b Performance and buffering

The notion of 'buffering' describes how delivery workers take actions to absorb the effects of exogenous events, such as heavy traffic or roadworks, to meet the app/customer's expected arrival time.¹²³ These highly personal actions are not formally recognised but are fundamental to the functioning of logistics systems. For example, Elise describes how they internalise the effects of the traffic by compressing their break time to both meet the expectation of the delivery clock and demonstrate their commitment to the employer:

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I always fell behind on the timing, it just always took me longer to navigate somewhere or to deal with the traffic than I wanted it to. So, I always felt like - there's a clock that shows you the estimation of when you're meant to arrive, and I was nearly always behind schedule with it. So, I just always felt that pushed my having a breakout of the window because I was trying to, like, do well for them.

(Elise).

In some cases, such commitment to the company's success manifests in extreme self-management and self-surveillance tactics, as highlighted by Steve talking about a colleague's break taking habits:

I trust the other riders ... one guy goes to the toilet so often that he actually has got to the point now where he'll deduct time off at the end of the day which I mean I think they've said not to worry about obviously... he's quite conscious of like how much time he's not riding for and not working for, which is nice to see that everyone's you know, because the negative impact of him lying about his hours isn't just him getting more money, it's coming out of everyone else's money.

(Steve)

The expectation on riders' performance varies between companies. Amal describes an expectation of self-sufficiency once out on the road and away from the depot but does not feel there is particular time pressure and as such has a relatively relaxed experience, being able to, "listen to music, you can relax, take a break when you want, get food when you want and there was never pressure". On the other hand, the following quote demonstrates how managers have an expectation that riders will 'buffer' by riding hard, fast, and being efficient in how they enter and exit buildings:

This is not a high margin industry - the business cannot afford for people to have a 'fun' time, it is work and work hard you must. Because if people aren't riding hard enough and fast enough, they're not earning the company enough money and that person then becomes a cost. If that person is a cost, then they have to go...at the end of the day, we need people to be fast getting in and out of buildings, fast on the road, excellent navigators, and great communicators, because that's where you allocate jobs and that's how everyone makes more money. So, if you're not those things then we have to look at whether or not this is a job for you.

(Marcus)

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Riders are expected to introduce logics of efficiency into all of their behaviours to make sure they are meeting the official delivery and pick up times. In companies where this performance pressure is reduced, riders report a more positive and less stressful experience when out on the road (Amal).

4.3.4 Narratives of health and fitness // a narrow conception of wellbeing

One widely recognised co-benefit associated with working in the cargo bike sector is improved physical fitness, regarded by managers as an ideal rider characteristics and riders as a motivation. However, as this section shows, like much public and corporate discourse around health, this framing is linked to a dangerous narrowing focus on wellbeing as the ‘absence of harm’.

While managers identify interest in fitness and passion for cycling as a highly desirable characteristic in riders and a proxy for commitment to the job and efficiency (see section 4.2.1d), riders, similarly cite improved fitness as motivation for and a perceived benefit of the job. As Steve said, “fitness is good, like I didn’t ever have like this level of base fitness in my life, which is, you know, quite handy really”.

However, some riders also highlight the detrimental impacts of riding on their bodies, which might outweigh the ‘cardiovascular fitness’ benefits gained. For example, lack of training in occupational health and ‘bike fit’ was identified by one rider as a main challenge of working as a cargo bike rider:

So, we’re not trained in what I’d call bike fit. That doesn’t mean like cardiovascular fitness. It means setting up the bike so that it’s comfortable for you and to prevent long term injuries. So, things like your seat post length and your saddle, angle of your handlebar positions and things like that... if you don’t know what you’re doing, you can end up being in back pain, arm pain, etcetera.

(Frank)

Similarly, riders express concerns with extended exposure to air pollution by working many hours a day in a job requiring high cardiovascular activity, which they feel intensifies the intake of pollutants:

I would also say overall feeling like slightly getting problems with my lungs, even just noticing a lot more coughing and you know, nose running and all those sort of things. And I didn’t know if it was down to basically more pollution or what, but I’ve been noticing that as a health problem, doing more and more time on the roads basically, in the centre of London.

(Elise)

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Although research has shown how the enhanced cardiovascular activity outweighs the effects of air pollution on rider health¹²⁴, there is a paradox. Whilst riders' labour helps dramatically reduce traffic-related air pollution and carbon emissions, they suffer first-hand the negative externalities of a car-centric city. This extends to several other aspects of riders' health.

A greater focus on wellbeing that considers emotional and mental health in addition to cardiovascular fitness, muscular strength, and physical health, can shed insight on riders' experiences. For example, it can highlight how being on the road for several hours, most of which entails sharing space with motorised vehicles, exposes riders to increased stress from adverse weather, close passes and traffic-related noise and air pollution, all of which can take a mental toll on riders, as discussed below by Mia:

It was so stressful when I started and people were insulting me... the stress, the weather like, gets really intense... And I think even like psychologically I think it'd be nice to have like how to deal with situations and how to not lose it on the road because it can get really dangerous, not just physically... you know, it can be traumatising sometimes what you experience on the road.

(Mia)

These psychological and traumatic experiences are not recognised by managers who generally omit the importance of rider wellbeing. One manager, however, mentions how isolation can affect riders and the measures they are taking to ameliorate this:

A lot of delivery roles can feel quite isolating. You're on your own for the day. And we all yeah, we're very aware of that. And that's why we think having, you know, a chat, you know, it sounds simple, but actually it makes the biggest difference because we notice the chat enables them to voice note us, or send a photo and like talk to us while they're on their shift.

(Sarah)

Because it requires physical activity and stamina, cargo bike delivery work can improve riders' health and fitness. However, it is important to note the potential adverse health and wellbeing impacts resulting from the physically demanding nature of the work and the stress associated with cycling on busy, car-centric roads. Fundamentally, a key shift is needed to reduce the health impacts on workers that we know will occur if physical and mental health are not at the centre of contracting and organisational practices, rather than allowing commercial considerations to be the primary driver of decisions e.g., contracting or organisational management practices.

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5. Conclusions

This report has explored the experiences of cargo bike delivery workers in London, highlighting riders' and managers' needs, hopes, and concerns. These insights shine a light on the strategies that must be adopted by both policy makers and cargo bike companies to improve working conditions and ensure that growth in the cargo bike logistics sector leads to a growth in good, green jobs.

Improving working conditions in the cargo bike logistics sector as it scales up is important because apart from its environmental, economic, and public realm benefits, it can help increase cycling more widely. Having more diverse cargo bike delivery riders contributes to more diversity in city cycling, challenging the normative middle-class, white, male cyclist. The sector can also help realise the 15-minute city, circular economy, and a just transition to low carbon urban mobility, all of which offer responses to the climate crisis, widening inequalities, and the ongoing recovery from COVID-19.

If the sector is to scale and achieve significant emissions reductions, companies must address issues around pay and progression, health and safety, and work culture. Riders are in low-paid work, which they feel undervalues their labour and fails to reflect the highly skilled and demanding nature of their job. A core part of their job requires navigating car-centric streets that marginalise non-motorised road users. The stress and difficulties of this are compounded by the lack of clear standards around riders' training, as well as the lack of adequate gear provision, or the expectation that riders will supply their own gear.

The informal work cultures and ad-hoc management practices prevalent across cargo bike companies, particularly smaller ones in the 'start-up' phase, can pose a barrier to creating a diverse and inclusive workforce. A narrow conception of wellbeing, coupled with implicit requirements that riders should have grit and determination, or be tough, create an unwelcoming environment, especially for female and non-binary riders, and riders of colour. The absence of transparent opportunities and processes for progression and professional development within companies make rider retention difficult.

As cargo bike logistics companies and the sector expand, managers face challenges around financial sustainability, linked to increasing inflation, rising prices and the withdrawal of financial support from the government, which can negatively affect riders' wellbeing. For example, companies that have not yet achieved commercial stability or longevity often shift burdens onto riders. In some cases, this happens more directly, like when riders have to provide their own equipment (e.g., waterproof jacket, gloves). This also happens indirectly, such as when routing apps fail, and riders are forced to ride faster to make up for lost time.

Our research suggests that companies should de-prioritise speed and centre their aspirational ethos of providing a reliable, low-carbon service

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and good work for local communities. To do so, small companies need financial support, e.g., grants and subsidies, so they can purchase more cargo bikes and associated equipment and create well-paid, secure, and gainful employment for more people. In addition, all companies and riders would benefit from cycling infrastructure and public realm improvements, such as public toilets, sheltered places to rest and battery charging facilities.

Companies and policymakers must also engage with the debate around regulation and accreditation. This is especially pertinent as large multinational corporations like Amazon carve more market share in the sector, which can risk exacerbating a race-to-the-bottom and outcompeting smaller companies that aspire to create more equitable workplaces and improve standards across the sector.

Democratic, fair, and equitable employment practices are being supported at a city policy level in London, which bodes well for the cargo bike logistics sector. The Mayor of London recently launched the London Ownership Hub, which will support businesses and individuals interested in employee ownership and democratic organisational structures to implement these ideas in their businesses.¹²⁵

There are also examples of alternative business models and practices that offer some optimism that the ambitions of managers to create good, green jobs are being operationalised, as shown by Neko Home Delivery. Examples include a profit-sharing model (Box 4C) and the co-operative food delivery platform [Wings](#), which seeks to compete with the likes of Deliveroo and Just Eat.

Our recommendations in the following section outline more tangible actions for different actors to improve working conditions in the cargo bike logistics sector.



Photo: Birdsong cargo bikes

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6. Recommendations

The following recommendations for ensuring good and green growth in the cargo bike sector have emerged from our research. These recommendations are structured around different policy areas and relevant actors are indicated to ensure clarity for implementation. Some recommendations cut across multiple policy areas. We conclude with a final reflection on broader, complementary actions we recommend to improve the future of urban freight and cycling in London and the UK.

Actors:

Cargo bike companies

Local authorities

TfL / GLA

DfT

Active Travel England

Central Government

IWGB and other unions

University of Westminster

Other organisations

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Good, fair work

The cargo bike sector plays a significant role in a transition to low carbon logistics. The following 10 recommendations will help ensure that new green jobs created in the sector are also good, fair and empowering jobs.

Recommendation	Lead actor	Supporting actor
<p>GW1 Ensure riders are paid at least the London Living Wage (£11.95) and guaranteed <u>Living Hours</u>, as set out by the Living Wage Foundation (LWF):</p> <p>Decent notice periods for shifts. The LWF suggests ‘at least 4 weeks’ notice, with guaranteed payment if shifts are cancelled within this notice period’. Given that cycle logistics companies run operations on a much shorter timescale, this notice period can be tailored to meet the operational needs of each company.</p> <p>The right to a contract that reflects accurate hours worked.</p> <p>A guaranteed minimum of 16 hours a week (unless the worker requests otherwise).</p> <p>The Living Wage and Living Hours will be underpinned by a new Living Hours accreditation programme with dedicated support for employers, which cargo bike logistics companies should participate in.</p> <p>To be relevant to the cargo bike sector, riders on flexible hour contracts should receive a minimum call out fee equivalent to at least four hours paid work if they are required to work for less than a half day.</p>	Cargo bike companies	IWGB LWA GLA
GW2 Pay riders for breaks. Introduce overtime pay for riders who work more than 8 hours in a single day. Ensure riders receive paid sick leave (regardless of their contract type).	Cargo bike companies	

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Recommendation	Lead actor	Supporting actor
GW3 Contract riders who seek flexible employment as 'limb-b workers' to ensure they receive basic employment rights that are appropriate to this type of work.	Cargo bike companies	
GW4 Eliminate the commission-per-drop payment model, as this has been shown to be highly related to dangerous and reckless road behaviour. Instead, recognise riding as a skilled job and develop transparent and defined progression pathways that are communicated to the existing team and new recruits. Progression in the company should not be based on performance (speed), but reliability and experience/time working at the company.	Cargo bike companies	Central Government
GW5 Facilitate trade unions to access workplaces to support workers most in need of representation to ensure good working conditions and fair treatment.	Cargo bike companies IWGB Central Government	Local authorities GLA
GW6 Pursue cooperative engagement with cargo riders and their employers; work with unionised cargo bike riders and union representatives to increase awareness of and membership in the union.	IWGB	Cargo bike companies
GW7 Strive towards achieving 'Achievement' and 'Excellence' levels of the Mayor of London's Good Work Standard. This can be started with a simple self-assessment online form to understand the company's position in relation to the Standard's baseline.	Cargo bike companies	GLA
GW8 Consider how a profit-sharing model could be used to benefit employees and the business once financial sustainability targets are achieved.	Cargo bike companies	

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Recommendation	Lead actor	Supporting actor
<p>GW9 Consider the challenges and opportunities in new sectors, such as cargo bike logistics, when reforming employment and welfare policy. In particular, work towards tackling low-paid, precarious work by</p> <p>Ensuring workers get guaranteed hours (e.g., by dismissing zero-hours contracts)</p> <p>Cracking down on bogus self-employment to ensure workers receive the same basic rights as employees</p>	Central Government	Local authorities GLA
<p>GW10 Provide riders with suitable gear to work in all weather conditions. This should include a company phone, phone charger, quality gloves and waterproof attire.</p>	Cargo bike companies	

Scaling up the cargo bike logistics sector

Significant reductions in carbon emissions and air pollution can only be achieved if the cargo bike sector expands in cities and into new sectors. These five recommendations outline actions that can be taken by cargo bike companies and at a policy level to facilitate scaling and business development.

Recommendation	Lead actor	Supporting actor
<p>SU1 Form an industry alliance to advocate for collective goals, such as increasing uptake of e-cargo bikes for deliveries and investing in safer streets for cycling. This would also provide an opportunity for cargo bike companies to come together and share ideas and concerns. This alliance can be modelled on or developed from the existing UK Cycle Logistics Federation, which recently merged with the Bicycle Association. It could also advocate for services specific to cargo bikes that could benefit the industry, such as cargo bike contents insurance and tailored bike insurance.</p>	Cargo bike companies UKCLF Bicycle Association	TfL GLA

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Recommendation	Lead actor	Supporting actor
SU2 Develop an accredited Cargo Bike Operating Standard to offer a soft accreditation scheme for companies that provide high quality training, perform well as sustainable businesses, and operate an equitable model of employment. This should be developed in collaboration with a future industry alliance and could lead to the formation of an industry regulator to ensure fair employment and safe operating standards.	TfL GLA DfT	Cargo bike companies
SU3 Include compliance with equitable employment charters, such as the Mayor's Good Work Standard and Living Wage Foundation, in public procurement for logistics services.	Local authorities TfL GLA	
SU4 Assist cargo bike companies that are seeking to expand in securing underutilised or meanwhile space for bike storage and/or other required functions, e.g., mechanical workshop.	Local authorities TfL GLA	Cargo bike companies
SU5 Launch public information campaigns to communicate the capabilities of cargo bikes as a viable alternative to vans and cars, both for businesses and individuals. A recent example of this is the 'Cargo Revolution' marketing campaign.	Local authorities TfL GLA DfT Active Travel England	Cargo bike companies
SU6 Form an industry alliance to advocate for collective goals, such as increasing uptake of e-cargo bikes for deliveries and investing in safer streets for cycling. This would also provide an opportunity for cargo bike companies to come together and share ideas and concerns. This alliance can be modelled on or developed from the existing UK Cycle Logistics Federation, which recently merged with the Bicycle Association. It could also advocate for services specific to cargo bikes that could benefit the industry, such as cargo bike contents insurance and tailored bike insurance.	Cargo bike companies UKCLF Bicycle Association	TfL GLA

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Recommendation	Lead actor	Supporting actor
SU7 Develop an accredited Cargo Bike Operating Standard to offer a soft accreditation scheme for companies that provide high quality training, perform well as sustainable businesses, and operate an equitable model of employment. This should be developed in collaboration with a future industry alliance and could lead to the formation of an industry regulator to ensure fair employment and safe operating standards.	TfL GLA DfT	Cargo bike companies
SU8 Include compliance with equitable employment charters, such as the Mayor's Good Work Standard and Living Wage Foundation, in public procurement for logistics services.	Local authorities TfL GLA	
SU9 Assist cargo bike companies that are seeking to expand in securing underutilised or meanwhile space for bike storage and/or other required functions, e.g., mechanical workshop.	Local authorities TfL GLA	Cargo bike companies
SU10 Launch public information campaigns to communicate the capabilities of cargo bikes as a viable alternative to vans and cars, both for businesses and individuals. A recent example of this is the 'Cargo Revolution' marketing campaign.	Local authorities TfL GLA DfT Active Travel England	Cargo bike companies

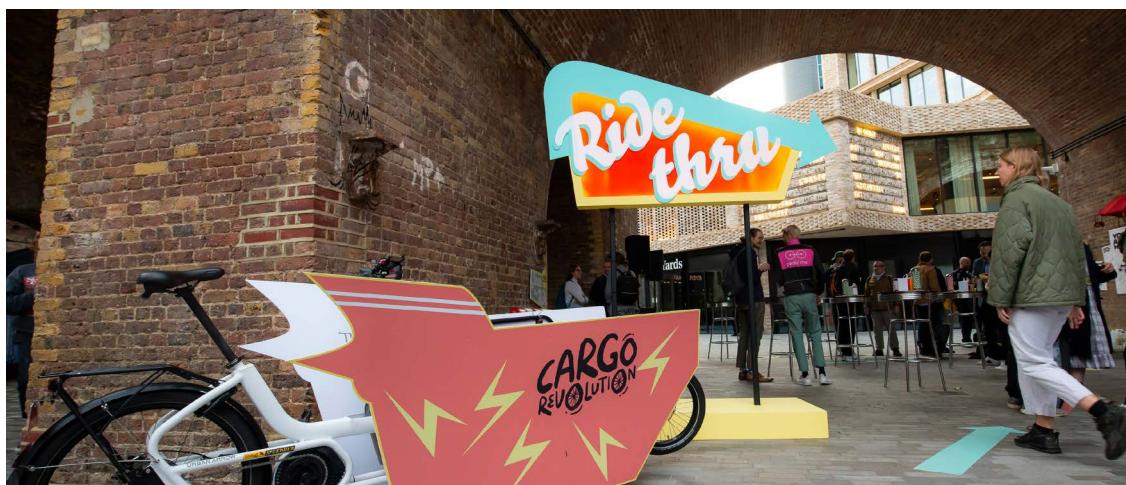


Photo: Cargo Revolution

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Recommendation	Lead actor	Supporting actor
HS1 Acknowledge, understand and incorporate mental health and wellbeing into H&S practices and policies in cargo bike companies. For example, this can include encouraging open dialogue about negative or stressful cycling experiences, which can promote a culture of reporting near misses, close passes and other road aggressions.	Cargo bike companies	
HS2 Encourage and facilitate riders to report near misses, close passes, and other road aggressions. Companies should then pass this on to local and transport authorities, as well as cycle campaign groups, who should take immediate action to address road aggression. This includes allocating enough resources to enforce the new Highway Code, which requires drivers to leave 1.5m of space when overtaking cyclists.	Cargo bike companies Local authorities TfL	London Cycling Campaign TfL
HS3 Provide riders with fully functional cargo bikes and access to regular professional mechanical checks and mechanical support for their vehicles.	Cargo bike companies	

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Recommendation	Lead actor	Supporting actor
<p>HS4</p> <p>Provide new riders with extensive training that reflects the complex and multifaceted nature of the job. This should include:</p> <ul style="list-style-type: none"> ● How to use work equipment and technology ● Loading and riding a cargo bike with a heavy load ● ‘Bike fit’ to ensure comfort and safety even with many hours of riding ● An understanding of where a cargo bike is relative to the road user hierarchy. ● Basic cycle maintenance and repair ● Road safety training ● How to manage encounters with other vehicles (e.g., right of way, assertive riding) ● How to manage aggressive and dangerous situations with other road users (e.g., street harassment) ● Workplace functioning and structure <p>Training should be followed by evaluation of riders' skills and competencies by pairing highly experienced riders with trainees. If necessary, trainee riders can be buddied up with a more experienced rider until they develop the confidence, skills, and competencies to work alone.</p>	Cargo bike companies	London Cycling Campaign Local authorities (cycling instructors)

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Recommendation		Lead actor	Supporting actor
HS5	Consider developing a cargo bike vocational qualification (training, mechanics) that can be offered and delivered in further education institutions.	Cargo bike companies TfL	City and Guilds Local authorities and educational institutions

Infrastructure

Infrastructure describes the material environment through which cargo bike riders navigate the city. It considers the unique physicality of cargo bikes, as well as riders' need to access supplementary services in public spaces away from the depot. Below are five recommendations to improve infrastructure so that it better supports cargo bike riders' needs.

Recommendation		Lead actor	Supporting actor
I1	Expand the network of wide, protected cycle lanes, and remove existing barriers for cargo-bikes and adapted cycles across London's cycling network (e.g., narrow bike lanes, stairs, chicanes).	TfL Local authorities	London Cycling Campaign
I2	Provide riders with appropriate facilities at the depot including appropriate toilets (in agreement with workforce), places to rest, phone and battery charging points and refreshments, such as warm drinks and healthy snacks.	Cargo bike companies	IWGB Local authorities
I3	Create couriers' hubs that provide sheltered public space for cycle couriers (whether on e-bikes, e-cargo bikes or push bikes) to stop and rest in between or during deliveries. At a minimum, these hubs should include benches, tables, toilets, water fountains, phone charging points and battery charging points.	TfL GLA Local authorities	Cargo bike companies

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Recommendation	Lead actor	Supporting actor
I4 Expand battery charging points in public spaces to benefit e-bike and e-cargo bike riders by offering rapid chargers, and introduce a battery swap scheme, modelled after existing ones in countries like Taiwan.	TfL GLA Local authorities	Cargo bike companies
I5 Collate information on the width of cycle lanes, one-way streets, and physical barriers to non-standard cycles, and seek to collaborate with a cycle mapping service to introduce appropriate navigation constraints for cargo bikes.	TfL GLA Local authorities	London Cycling Campaign Wheels for Wellbeing Sustrans

Equity, diversity and inclusion (EDI)

The following seven recommendations seek to improve equity, diversity and inclusion in the workforce, by improving working conditions for individuals from underrepresented groups working in the sector and making the sector more attractive to more diverse groups.

Recommendation	Lead actor	Supporting actor
EDI1 Adopt a clear EDI strategy to diversify the workforce at all company levels, including management. This can include reviewing approaches to recruitment and onboarding, delivering EDI training across the company, and ensuring there is an inclusive culture, for example.	Cargo bike companies	Local authorities IWGB GLA
EDI2 Ensure facilities offered at work are inclusive of all ages, abilities and genders and their needs.	Cargo bike companies	
EDI3 Investigate the unique challenges, experiences and needs of migrant riders and riders of colour, given the lack of research in this area. This can include further research as well as increased engagement with migrant riders and riders of colour.	IOUH Research institutions	London Cycling Campaign

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Recommendation	Lead actor	Supporting actor
EDI4 Provide financial support to households on lower incomes and small businesses to loan or purchase e-cargo bikes. Financial support measures can include the E-Move ¹²⁷ scheme introduced by the Welsh Government to offer free e-cargo bike loans to small businesses and organisations for three months, relaunching and expanding the Energy Saving Trust's Electric Cargo Bike Grant Fund, or vehicle scrappage schemes as introduced by the French Government, which offer people €4000 to replace their cars with e-bikes.	DfT	Energy Saving Trust
EDI5 Develop a sustainable industry kick-starter fund to subsidise new starter salaries for SME companies which are creating jobs that contribute to the UK's zero carbon transition.	Central Government	Cargo bike companies
EDI6 Expand cycle training offers to include training on how to ride a cargo bike. This will help upskill more London residents and equip people to pursue employment in the sector.	Local authorities	London Cycling Campaign
EDI7 Engage local colleges and sixth forms to offer cargo bike companies the opportunity to hold a stall or a talk at careers events, emphasising the vocational potential of the cycle logistics sector (rider, operations, mechanic). This can also be used as a vehicle for diversity-specific recruitment efforts in collaboration with companies, schools, and local authorities.	Cargo bike companies Local authorities	Local schools and colleges

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Technology and organisational and management practices

The following 7 recommendations relate to the impact that companies' internal communication and management practices have on riders' wellbeing. It also considers how different organisational structures may improve company transparency and rider bargaining power.

Recommendation	Lead actor	Supporting actor
T01 Develop and implement clear HR frameworks and policies, and ensure there is Human Resources expertise and capacity within cargo bike companies.	Cargo bike companies	
T02 Introduce appropriate and professional guidelines for internal communications by defining suitable hours for communication and moving away from personal communication platforms like WhatsApp, to workplace-appropriate platforms, such as Slack.	Cargo bike companies	GLA
T03 Follow Fairwork AI principles and ensure impacts are beneficial for riders when integrating new technologies and software. Seek riders ongoing feedback throughout the roll-out stage to ensure effects are not detrimental and relevant modifications can be made.	Cargo bike companies	
T04 Ensure data transparency by allowing riders to access their data and informing them of exactly how it is being used, where rider's activity data is being used for management purposes (e.g., to assess performance or affect job allocation).	Cargo bike companies	TfL GLA
T05 Ensure financial transparency across the company, including clear communication with all employees around company delivery charges and breakdown, business activity and pipeline, and pay structure.	Cargo bike companies	

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Recommendation	Lead actor	Supporting actor
T06 Define line management and employee responsibilities, so riders have clarity around reporting and raising issues. This should avoid an overly hierarchical structure, and rather strive towards horizontal organisational structures and practices.	Cargo bike companies	
T07 Consider adopting an ‘everybody rides’ policy to ensure all members of the team have an appreciation of what it’s like to be a rider.	Cargo bike companies	

In addition to the above recommendations that have emerged directly from the research, we propose the following complementary policies, some of which appear in more depth in the ‘Delivering Value’ report by Just Economics.¹²⁸

At an urban scale, we recommend measures to discourage driving and encourage more walking, wheeling, and cycling, such as:

- Making 20mph the default speed across London
- Expanding low-traffic neighbourhoods
- Expanding the network of wide, segregated cycle lanes;
- Removing existing barriers for cargo-bikes and adapted cycles across London’s cycling network (e.g., narrow bike lanes, stairs, chicanes)
- Introducing smart user charging
- Reclaiming parking spaces to create more parklets
- Improve signage and wayfinding across London’s cycling network to enable cargo bike and other cycle couriers to navigate without being reliant on mapping apps on their phones

Cycle training is an essential part of the long-term future of cycling and modal shift, as well as an important opportunity for developing green jobs. The recent announcement that TfL are cutting funding for cycling training has highlighted the mismatch between words and action on London’s Net Zero Carbon targets. Local authorities and TfL should enter into negotiation with the [IWGB Cycling Instructors’ branch](#) to secure funding of cycle training jobs, and ensure that cycling instructors are not trapped in low-paid and precarious work.

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Policy at a national level is also vital to support actions taken at the urban and local levels. This includes:

- Honouring and building on the Government's commitment of £3.8 billion multi-year investment in active travel. Active Travel England recently suggested that up to £18 billion investment is required to increase active travel.
- Creating a dedicated pavement fund to improve accessibility and quality of pavements, including a nationwide ban on pavement parking. Ensuring pavement access is important for cargo bike riders to load and unload goods, which requires improved pavements (with drop-kerbs) as well as improved cycle lanes.
- Complementing net-zero and active travel modal shift targets with targets to reduce car miles driven in urban areas and towns. So far, the Scottish Government is the only nation in the UK to have introduced such a target.



Photo: © Sustrans

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