

SHARED MOBILITY IN A POST PANDEMIC WORLD - WHAT CHANGES ARE HERE TO STAY?

Insight

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Co-authored by

Dr. Matthias Kempf, Berylls Strategy Advisors

Niklas Rehmert, Berylls Strategy Advisors



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Contact Information

Dr. Matthias Kempf

Partner

Berylls Strategy Advisors

matthias.kempf@berylls.com

Niklas Rehmert

Senior Associate

Berylls Strategy Advisors

niklas.rehmert@berylls.com

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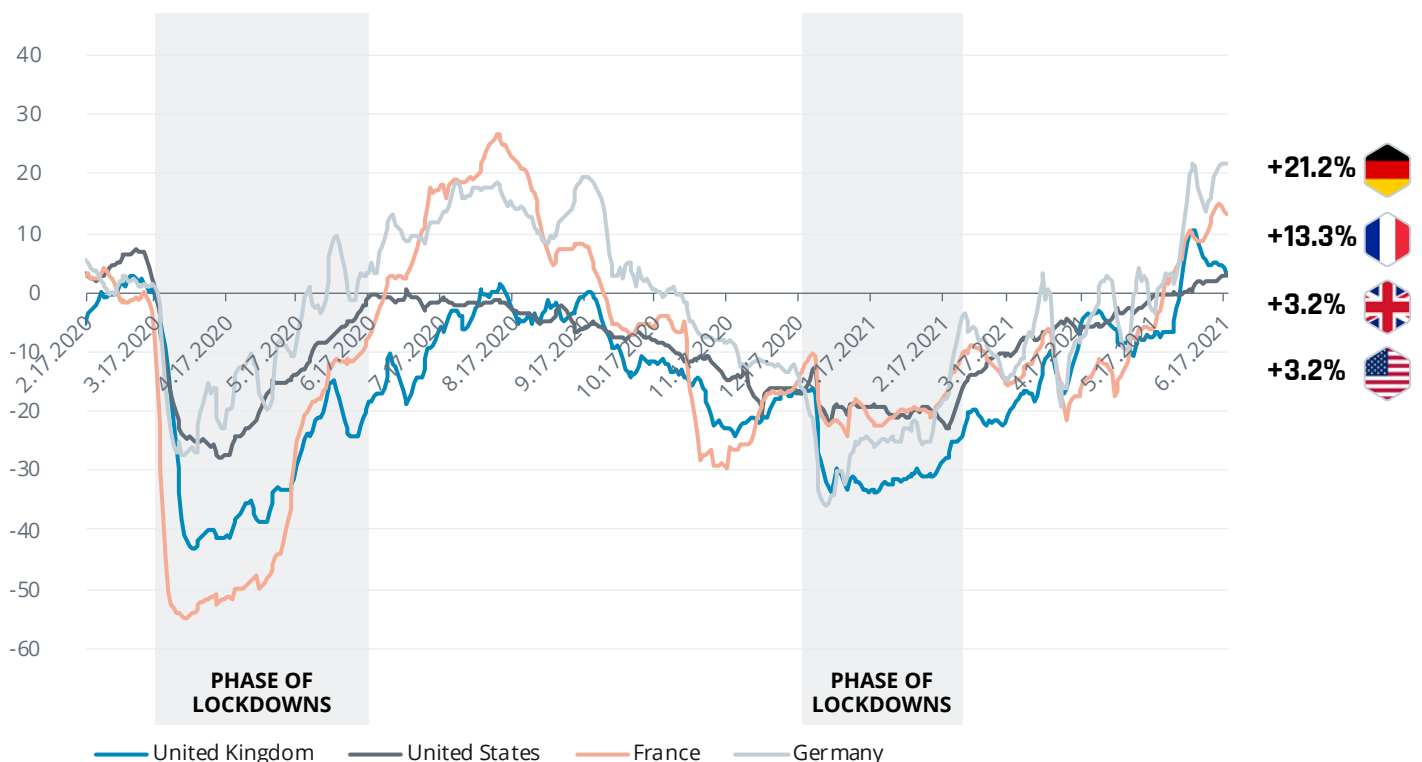
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SHARED MOBILITY IN A POST PANDEMIC WORLD - WHAT CHANGES ARE HERE TO STAY?

The way that we move within cities and globally has changed drastically due to COVID-19 and the associated lockdown restrictions. During the first lockdown, countries such as Germany and France experienced drops in movement frequency of -40% and -50% respectively compared to a January 2021 baseline (Figure 1). As countries slowly begin to return to increases in movement frequency, we are beginning to ask ourselves: What changes in mobility were merely temporary adaptations and what impacts are here to stay?

Urban inhabitants movement behaviour lies at the heart of mobility, with demand for movement acting as a driving force of how mobility eco-systems are formed. It remains uncertain how people will move within urban environments and on inter-urban routes after lockdown restrictions are removed and it will also be interesting to see how mobility stakeholders including mobility service providers and cities will react to these changes.

Figure 1:
Average Movement Data
 in % compared to Jan-Feb 2020 baseline



Source = Google COVID-19 Community Mobility Reports

This Berylls insight analyses the trends & impacts from three perspectives:

- Mobility Consumers
- City Administrations
- Mobility Service Providers

To shed light on these stakeholder groups, Berylls conducted a representative online survey among adults (18-65y) in the largest mobility market in Europe, London, in June 2021.

1. MOBILITY CONSUMERS

The first question we were particularly interested in was: which lasting impact does Covid-19 have on the future of commuting? The travel behaviour of mobility consumers can be broken down by journey purpose. The two most common journey purposes include 'leisure' and 'shopping'¹, which following the easing of travel restrictions are expected to rapidly recover to pre-COVID levels. Yet, how the third most important journey purpose 'commuting' will recover remains open. We were particularly interested in this one, as it determines to a large extent the perception of the gravity of the mobility issues of a city.

The results of our survey show that before the pandemic, 62% of London citizens used to commute to work every day, while only 9% worked from home, resulting in an average of 4 commuting days per week. During the pandemic, London experienced a 60% reduction in commuting travel behaviour (to 1.7 days/week), with 50% of regular commuters ('5-days a week') switching to a working from home model ('Not at all').

Looking forward to a post-pandemic world, while several companies including Facebook and EY have announced fully remote working models. Yet only 10% of participants expect to participate in these models – almost the same number as before. However, only 35% of full-time commuters expect to return to the pre-Covid work mode, while 51% expect a much higher share of part-time home office.



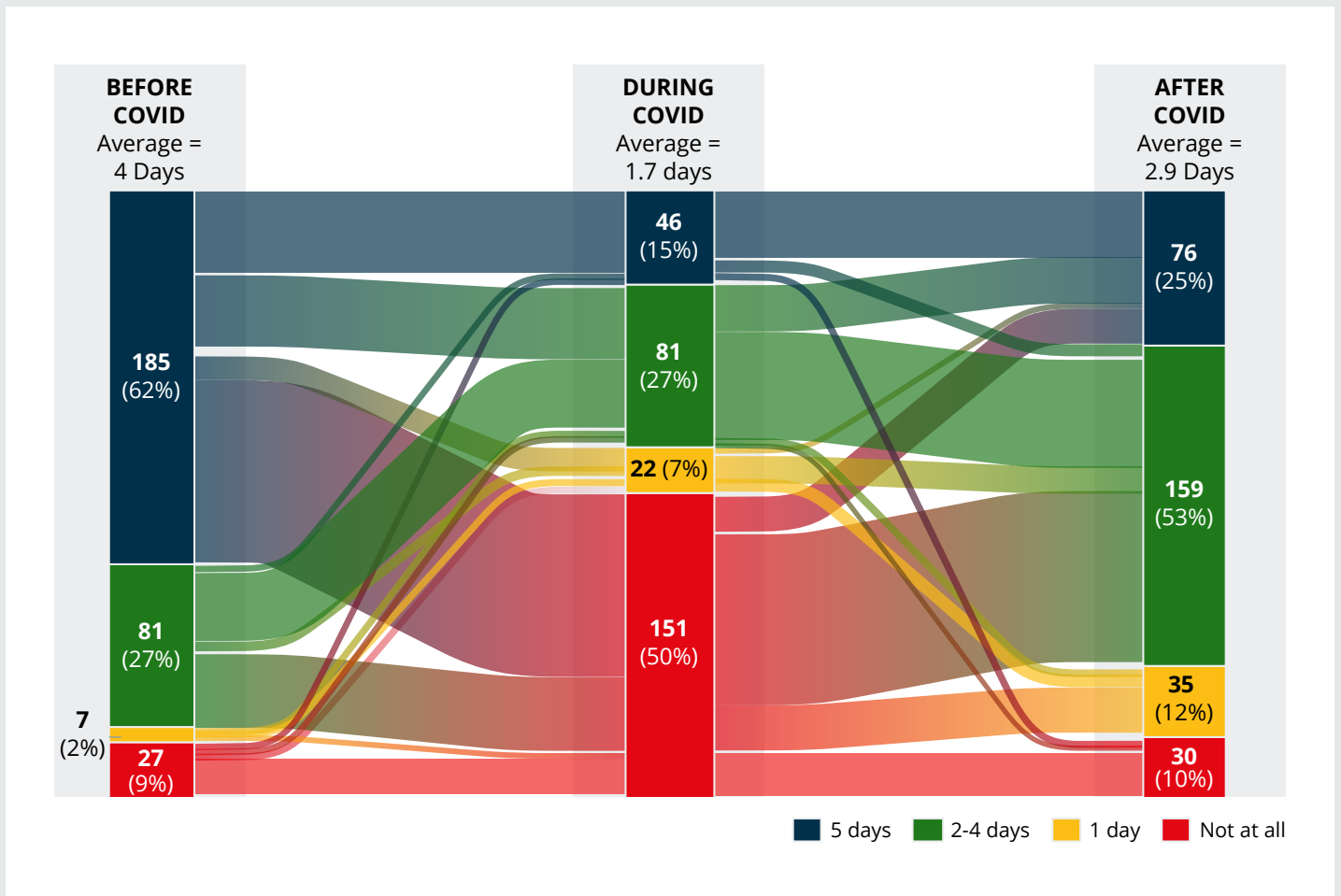
Hybrid working models, including '2-4 days' at the office per week, will gain much in popularity, resulting in 2.9 office days per person per week. The transition of the '5-day' office workweek to '2-4 day' hybrid working week would represent a 28% overall reduction in commuting trips in London.

As commuting only comprises between 15-25% of total trips within London, the overall impact would be a 5% overall reduction in total trips per year. This may not be a large impact on the total mobility eco-system, but the reduction may nevertheless be perceived as significant, as commuting behaviour is not equally distributed throughout the day – thus causing an impact on public transport scheduling and congestion at peak morning and evening hours.

Figure 2:

How often do you commute per week?

18-65, n=300, Greater London



Source = Berylls

In addition to how often inhabitants travel, the choice of mode is expected to be affected. With the rise of social distancing policies 'transmission safety', became a significant driver in the modal choice of travellers and a shift towards the private car, as people began to choose which form of transport to take based on the physical proximity to other travellers or drivers. Yet, in the

light of successful vaccine roll-out campaigns across the globe, this fourth-factor safety is unlikely to keep its relevance. People are expected to move back to public- and shared-transport out of choice, but also necessity – travelling by car is just too expensive in the long run for large parts of the population.

2. CITY ADMINISTRATORS

In the second part of our survey, we were interested in how London citizens perceive the mobility policy and initiatives of their hometown. Like many large European cities, London has started to work on sustainability and CO2 reduction strategies, including sustainability manifestos and policies to control inner-city mobility.

This trend was significantly exasperated during COVID, with cities having a break from day-to-day infrastructure management. Most of these strategies directly address the issues of congestion and emissions and have one thing in common: the battle against private vehicle ownership and usage. Effective mobility strategies rely on a delicate balance of push and pull mechanisms, on the one hand disincentivising private vehicle ownership whilst providing mobility consumers with viable, cost-effective alternatives that are more aligned to the overarching sustainability objectives.

Many cities have formulated more or less concrete goals and measures in this regard, yet the battle against the private car is expected to create a “mobility gap” of 150-200bn km travelled in the next 10-15 years in Europe alone. This gap will most likely not be able to be filled by “traditional” public transportation. A changing mobility landscape in cities creates new paths for mobility start-ups and new players to step in the game – allowing them to team up with cities to create a holistic, multi-faceted, integrated multi-modal mobility offering for their citizens.

We expect this to be driven in two main areas:

- City-mandated Public-Private Partnerships: Cities are partnering with mobility providers to realise their mobility objectives – a trend that has started and even intensified during 2020. Public transit agencies have suffered from a tremendous reduction in passenger numbers and are integrating these new modes into their portfolio – like scooter sharing, or on-demand shuttle services. A perfect example of this can be seen with shared E-Scooters programmes in Paris and London.
- Infrastructure upgrades: Cities have used the COVID “break” to significantly invest in mobility infrastructure, intending to use the Covid-induced break to sustainably change urban mobility patterns. The most common measures across the largest European cities (London, Brussels, Paris, Milan) include reduction of street space (enlargement of walkways), enlargement and installation of new bike lanes and introduction of city driving bans

These mobility strategies can evoke mixed reactions from the public. Changes to the mobility eco-system and movement patterns of people within urban spaces can initially cause disruption and protest if not managed correctly. The Berylls Mobility Survey showed 88% of London inhabitants noticed city-driven changes to the mobility eco-system, with changes to cycle lanes and the PT schedule being the most prominent.

The Berylls Mobility Survey (Figure 3 and 4) shows that there is overall strong support for the local mobility policy in London, yet there is an overall low awareness of the exact mobility policy that London is pursuing. The highest support is given to new cycle lanes (45%) and the introduction of low traffic zones (46%), while new mobility modes (36%) and general driving bans (30%) have slightly less support.

In the survey, we were able to distinguish between four different “mobility archetypes” of London citizens, which show distinctive patterns in their attitude and support for each of those measures:

- Mobility Enthusiast (18% of respondents):
- Mobility Supporter (17% of respondents):
- Mobility Sceptic (22% of respondents):
- Mobility Policy Illiterate (42% of respondents):



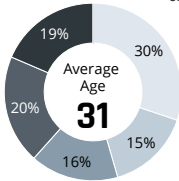
Figure 3:

Mobility Archetypes

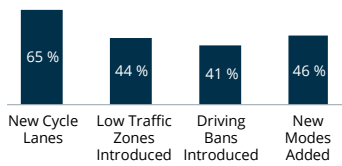
MOBILITY ENTHUSIAST



18%
of respondents



Mobility Policies Supported by Archetype



DESCRIPTION:

- » Early adopters of shared mobility
- » >60% comprised of under 35 years old
- » Drive for diversification of modal landscape and new infrastructure landscape (Cycle lanes)

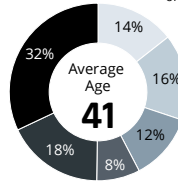
IMPLICATIONS (CITY):

- » Key advocates for mobility changes in the city
- » Target with pilot projects to gauge interest for policy changes

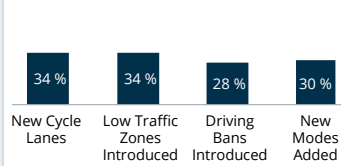
MOBILITY SKEPTIC



22%
of respondents



Mobility Policies Supported by Archetype



DESCRIPTION:

- » Inhabitants with a negative perception of the cities changes to the mobility landscape
- » Older demographics, who support individual initiatives overall skeptical of changes to landscape

- » Strong voices against and resistance to change

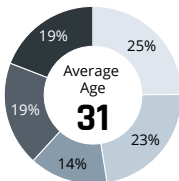
IMPLICATIONS (CITY):

- » Address concerns to ensure mobility policies do not fail in long-term
- » Targeted campaigns to ensure mobility needs are met

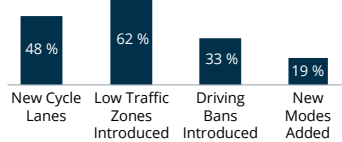
MOBILITY SUPPORTER



17%
of respondents



Mobility Policies Supported by Archetype



DESCRIPTION:

- » Overall supporters of mobility policy with a focus on low traffic zones
- » Frequent users of mobility services but no drive for mobility revolution, rather improvement of living quality in cities

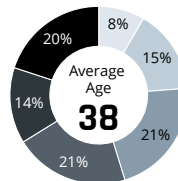
IMPLICATIONS (CITY):

- » Continue to engage through existing channels
- » Explore opportunities to convert into enthusiasts

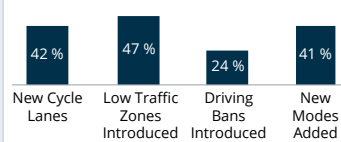
MOBILITY POLICY ILLITERATE



42%
of respondents



Mobility Policies Supported by Archetype



DESCRIPTION:

- » Largest archetype group with inhabitants unaware of the cities mobility policies
- » >80% support individual policies: primarily low traffic zones
- » Primarily between 25-44 age-range

IMPLICATIONS (CITY):

- » Target group to transform into mobility enthusiasts and supporters through targeted education and campaigns

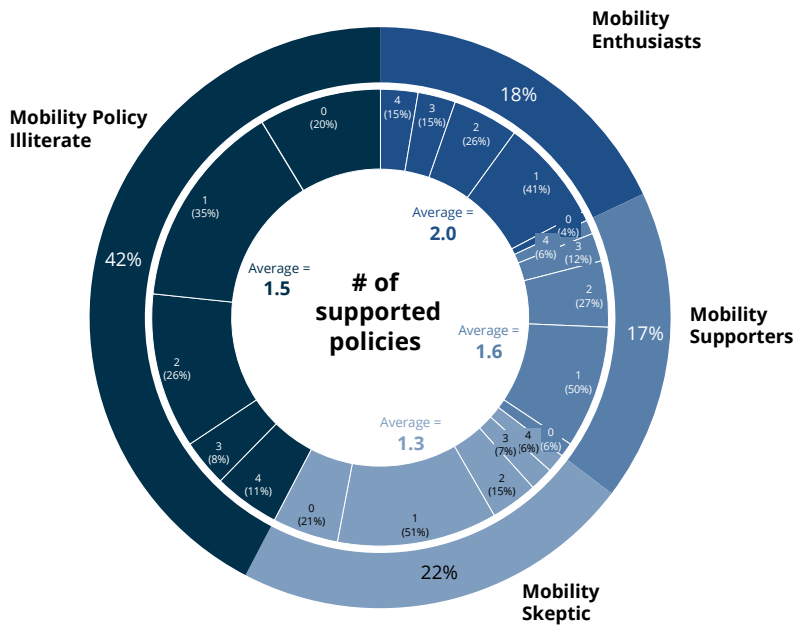
18-20 21-24 25-34 35-44 45-54 55-64

Source = Berylls

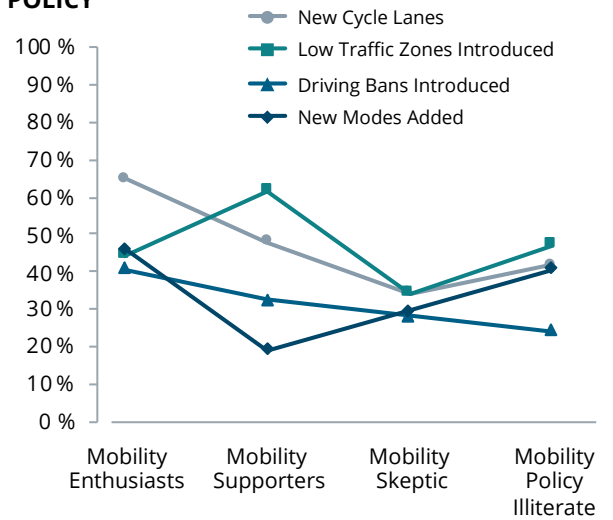


Figure 4:
Berylls Mobility Survey

ATTITUDE TOWARDS LONDON'S MOBILITY POLICY

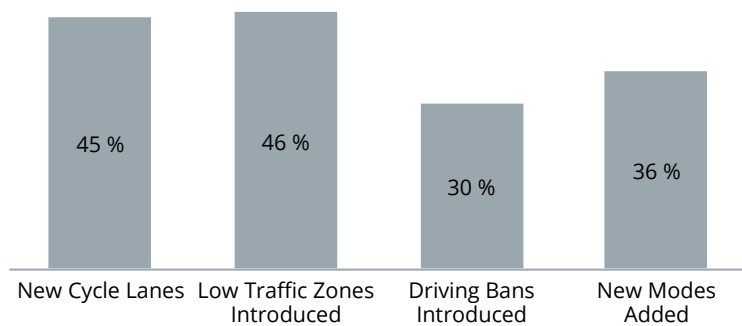


SUPPORT FOR DIFFERENT MOBILITY POLICIES BASED ON ATTITUDE TOWARDS MOBILITY POLICY

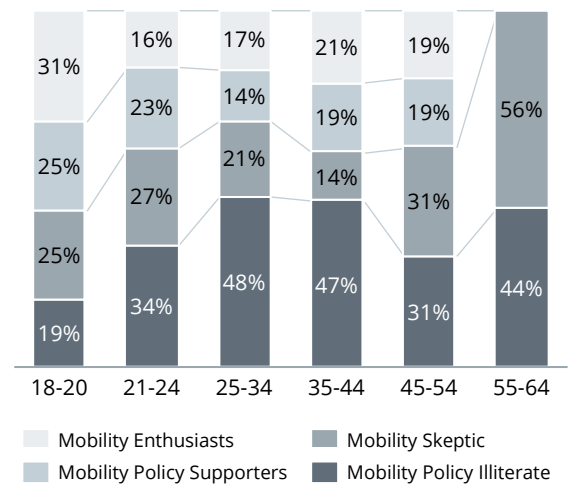


MOST POPULAR LONDON MOBILITY POLICIES

(% of respondents that support a policy)



MOBILITY POLICY ARCHETYPE ACROSS DIFFERENT AGE GROUPS



Source = Berylls

Mobility enthusiasts and supporters will continue to help cities drive a mobility revolution – but the key lies in converting those that have not actively engaged with the mobility policy landscape.

To define and support sustainable methods of transport local regulators and cities must deeply understand consumer mobility behaviour. A drive to educate and involve the public in a cities mobility strategy needs to become a priority for cities and mobility players that wish to operate in this eco-system.

3. MOBILITY SERVICE PROVIDERS

The COVID pandemic and associated restrictions on movement were a significant blow to the mobility industry. Demand and subsequently supply crumbled, as movement in a large number of areas ground to a halt. In an industry where valuations and investments are largely based on future income potential, continued customer acquisition, and incentivised retention, a sudden dramatic decline in demand did not fit into the carefully crafted narrative. However, mobility companies with low-asset business models were more equipped to flexibly adapt to changing demand volumes but none could foresee the severity of the overall reduction in movement.



a. Ride-hailing

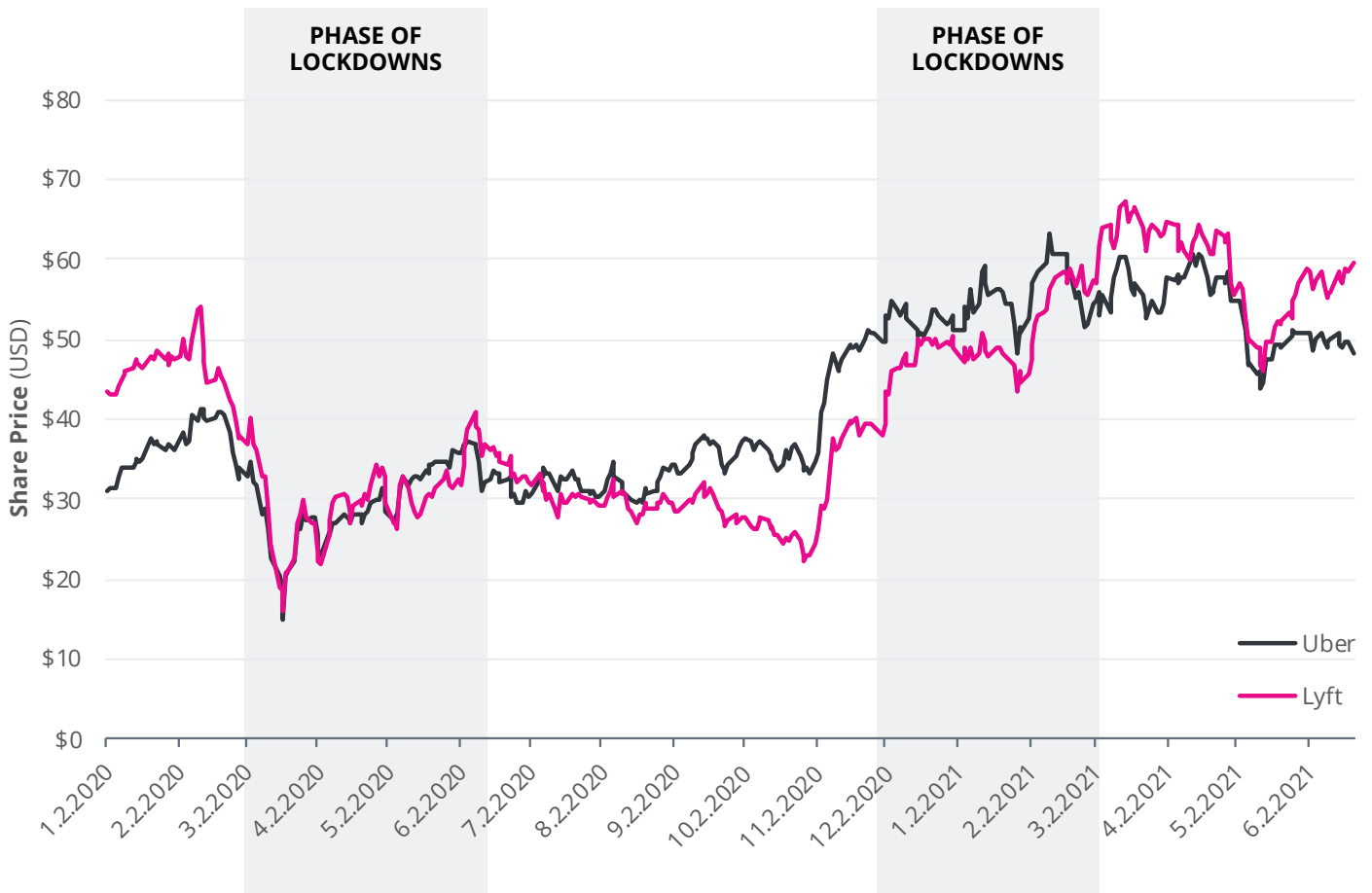
Uber and Lyft, the publicly listed ride-hailing pioneers of the industry suffered significant reductions in ride volume. Uber's ride volume dropped 80% during the pandemic², which quickly reflected in share prices crashing during the initial early phases of the pandemic (Figure 4). As life continues to return to normal, the share prices have risen to all-time highs, and ride volumes returned to 80% pre-COVID levels³.

Both Uber and Lyft have recently launched significant price increases across key mobility markets including the US and UK. Official statements from Uber have listed supply issues as the main drivers behind the price increases but regulatory developments, including the recent UK court ruling that Uber drivers are now entitled to holiday pay and minimum wage, are expected to place even further pressure on prices. Price increases have been a strategy that mobility companies have shied away from in the past, but may be an inevitable next step for the future.



Figure 5:

Uber and Lyft Share Price



Source: Yahoo Finance

As operations wound down, a number of mobility start-ups utilized the time to innovate and develop their business models. Ride-hailing applications such as Uber and Bolt added car rental to their product platforms. Uber mainly aimed at enabling drivers to access flexible vehicle solutions and Bolt more as a

car-sharing option. With users now being able to access bikes, scooters, rental cars and ride-hailing on Bolt's platform. These developments show that a move towards Mobility as a Service model is becoming ever closer.



Mobility as a Service

Mobility as a Service (MaaS) describes a service that enables users to plan, book, pay and track a journey. Multiple modes of transport are fully integrated into the platform, enabling the user to directly compare and

choose the most suitable mode of transport for a specific journey. MaaS often includes subscription services, allowing users to pay a monthly flat fee for all modes of transport.



b. Shared E-Scooters

Shared e-scooter providers struggled during the pandemic, with operators such as Lime and Bird laying off 13%⁴ and 30%⁵ of their staff and Lime reporting a 95%⁶ drop in ridership but they seem to be coming out of the pandemic hitting the ground running.

E-scooter demand crumbled as a result of people ceasing to move within urban environments. On the other hand, a continued focus on operational efficiency and close public-private partnerships has enabled players to innovate and grow footprints during these downtimes. As some customers continue to avoid crammed public transport, e-scooters provide a viable alternative for short-distance urban travel.

Recent cooperations between operators and cities including Paris and London show a glimpse of the future of cities actively regulating mobility landscapes. Operators such as Tier have understood that mobility companies need to go beyond greenwashing to attract eco-conscious customer segments. They have focused their entire business model around providing sustainable transport.



c. Intercity Travel

Fuelled by travel restrictions and calls for more sustainable long-distance travel, the long-distance mobility service provider industry has significantly grown. The aim is to provide more sustainable but comfortable alternatives to short-haul flights that have been receiving more scrutiny with an ongoing focus on sustainability.

Mobility providers such as Blacklane have launched inter-city long distance ride-hailing options to provide business travellers with an alternative to short-haul flights. Companies such as Flix Mobility have raised >500M EUR (Debt & equity) at a >2B EUR⁷ valuation to further expand their long-distance inter-city train and bus solutions.

Though COVID significantly affected mobility start-ups revenue streams, the industry does not seem to have lost pace and fire. Challenges remain to build sustainable business models that drive long-term customer retention through other means than continued incentivization. Shared mobility is beginning to enter the next industry life-cycle stage with COVID acting as a trigger for consolidation and shakeouts in the market. To master upcoming challenges a continued focus on efficiency and innovation will be required.



OUTRO

The pandemic and associated changes to movement patterns caused a significant temporary shift in the mobility ecosystem. Though the effects were overwhelmingly negative, the changes provide an opportunity for the industry to mature and become more innovative. The break-in high demand provided mobility players and cities with a chance to develop new strategies and refocus business models on the new normal.

We can expect some changes to disappear rapidly following the lifting of lockdown restrictions, but some will be here to stay. The transition of mobility will be towards a mature industry focused on sustainable revenue streams and business models coinciding with changing consumer demands. The most successful players will identify these opportunities and cease them, by designing services that are geared towards the interests of consumers and cities.

WHAT CAN BERYLLS DO FOR YOU?

Berylls Strategy Advisors is an international consultancy firm with offices in Germany, United Kingdom, Switzerland, South Korea, China, and the United States. Our mobility practice works with a diverse set of clients including mobility start-ups, OEMs, regulators, and suppliers to design and develop sustainable mobility strategies.

If you would like to explore what the post COVID mobility eco-system holds in opportunities for your business, please get in touch with:

Matthias Kempf

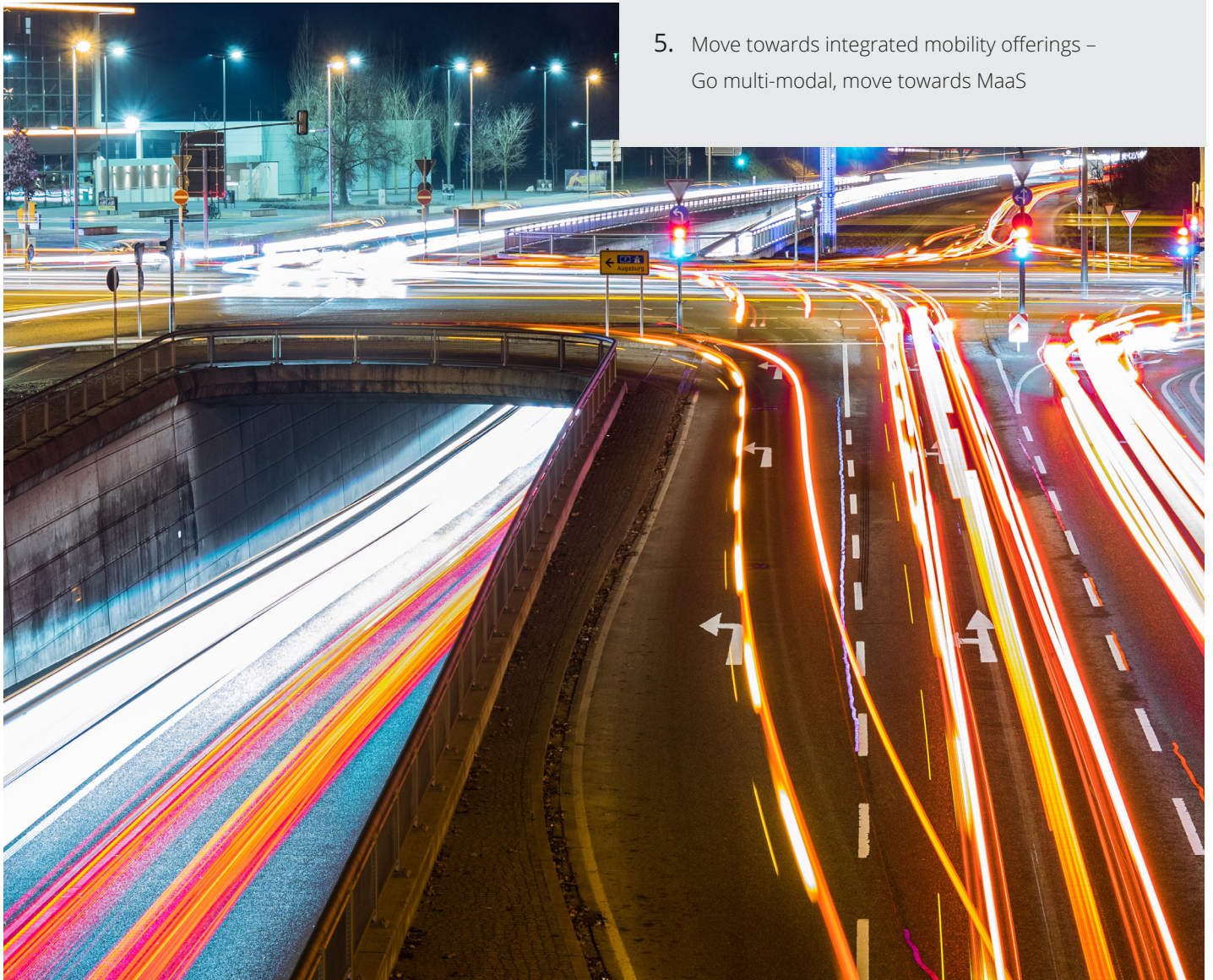
(Matthias.kempf@berylls.com)

Niklas Rehmert

(Niklas.rehmert@berylls.com)

BERYLLS 5 RECOMMENDATIONS ON HOW TO BENEFIT FROM THE POST-COVID ECO-SYSTEM

1. Place sustainability at the heart of your vision and mission
2. Design flexible urban mobility ecosystems – that can deal with varying commuter traffic (do not lose the drive to change if traffic is reduced) (stay strong)
3. Turn inhabitants into local mobility advocates by clearly communicating mobility goals and policies
4. Mobility players should work closely with regulators – public-private partnerships are key
5. Move towards integrated mobility offerings – Go multi-modal, move towards MaaS



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