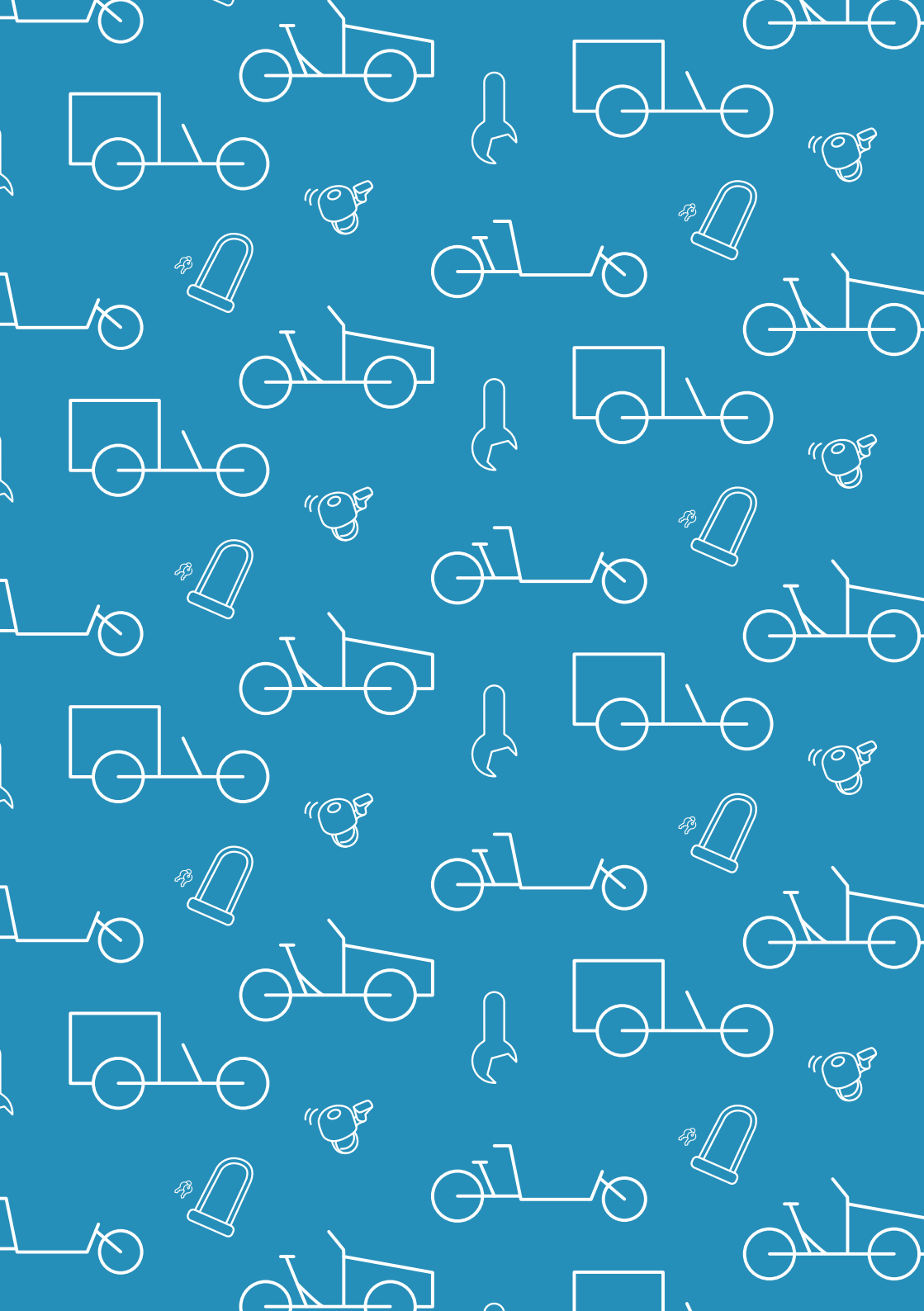


The Cargo Bike Friendly City

A comprehensive guide
to accommodating cargo
bikes in cities



The Cargo Bike Friendly City Guide

2021

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Page 4 - The City of Mechelen

Page 7 - The City of Dubrovnik

Page 10 - familienrad.at

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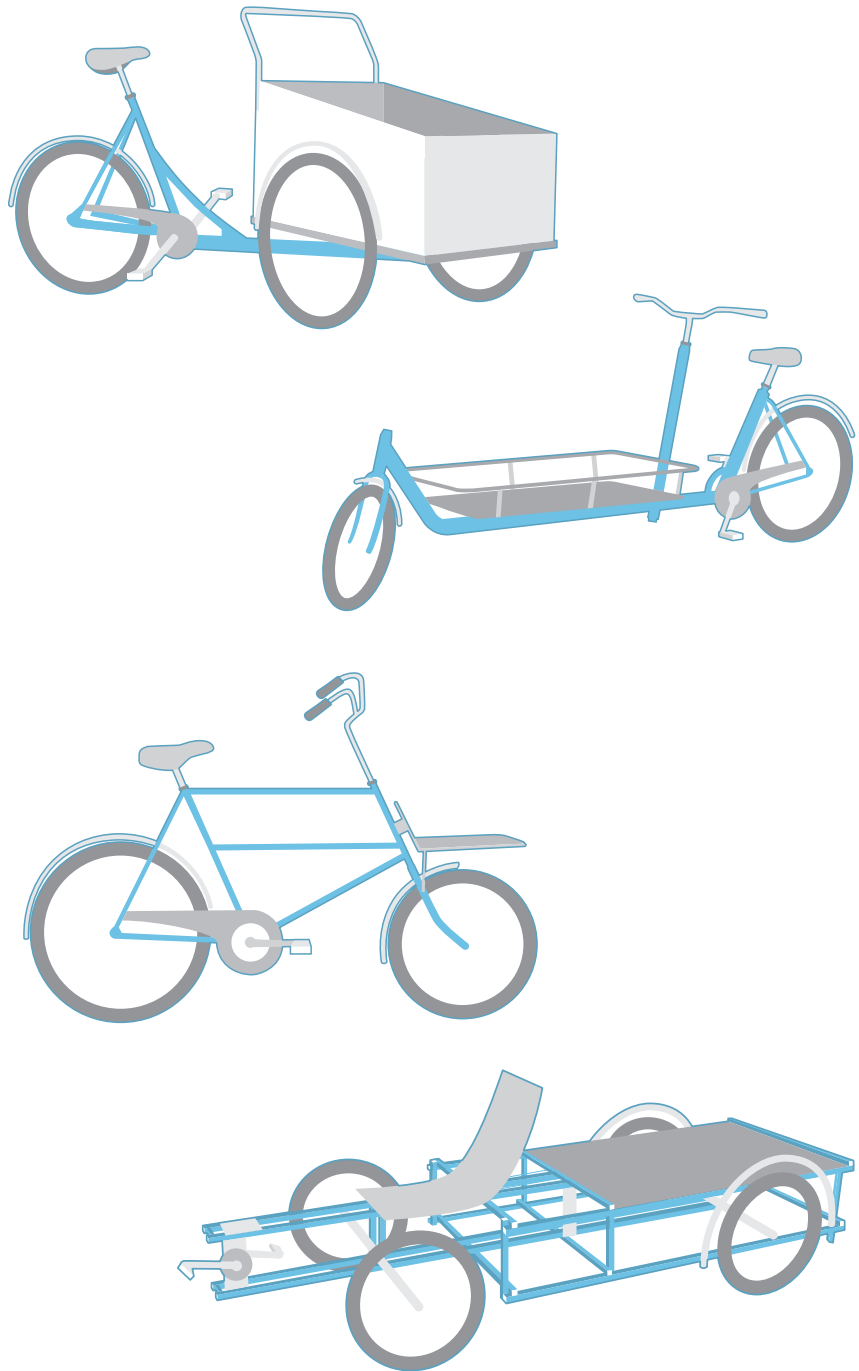
About Us

City Changer Cargo Bike (CCCB) builds on the limitless potential of cargo bikes, promoting their usage among public, private, and commercial users. Through support of the Horizon2020 programme, CCCB brings together a team of 20 partners from Norway to Greece, the United Kingdom to Bulgaria. Learning from best practice across Europe, the initiative will raise awareness and support the uptake of cargo bikes and cargo bike initiatives. In doing so we will foster exciting developments that, among other things, offer more sustainable logistics operations, improve public spaces, engage citizens, and reduce traffic congestion.

Executive Summary

This guide equips readers with inspiration to move cities towards cargo bike-friendly and inclusive cycling. Though there's nothing particularly new about them, cargo bikes are seeing newfound momentum, due to recent innovations in electric batteries and bike designs. Their relative ease, affordability, and accessibility make cargo bikes incredibly popular choices for families and businesses alike! This guide details key elements for actors to consider when planning an inclusive and thoughtful Cargo Bike City, from cycling infrastructure and amenities to municipal support.





What is a Cargo Bike?

Cargo bikes are bicycles that have been specifically designed to carry cargo, be it heavy or light, big or small. Cargo bikes take many forms, ranging from the traditional short john, to the three-wheel cargo-trike models, to custom built four-wheel frames with electric pedal assist motors for specific commercial needs. And while cargo bikes have been in use for more than a century, recent design and battery innovations have made contemporary models much more efficient and accessible.

Load capacity and prices of these bikes vary greatly as well, with lighter bikes priced at €1000-€2000 managing a load up to 80 kg while heavier bikes ranging anywhere from €2000-€12000 being capable of moving up to 350 kg. These bikes have the potential to tackle the environmental, logistics, traffic and social issues facing many European cities, all while providing a new perception of mobility, transport and quality of life.

Why Invest in Cargo Bikes?

The inherent ease, affordability, and accessibility of cargo bikes make them an increasingly popular choice for families, SMEs, not-for-profits, and international logistics companies across Europe. But cargo bikes represent more than an efficient urban logistics and mobility solution, they are triggering a new bicycle culture, fostering social enterprise concepts, engaging a diverse body of citizens, and transforming public spaces.

Cargo bikes not only caters to the road's most confident users, but also to Disabled cyclists, seniors and children. Cargo bike planning is inherently inclusive. Promoting cargo bike infrastructure, amenities and initiatives can be cost effective, low risk, visible, and rewarding. When it comes to cargo bikes, investments towards healthier more inclusive cities are affordable and sustainable.





Why Plan for Cargo Bikes?

Though the urban fabric of many cities is positively adapting to the two-wheeled bicycle, many facilities and infrastructural developments are tailored to confident riders - typically able-bodied adult men. To thoroughly plan for safe and efficient cycling, road design must prioritize the needs of the most vulnerable users. By planning for cyclists with Disabilities, cargo-bike riders, children and seniors, spaces become inherently more accessible to all users. Beyond cargo bikes, other transport modes such as tricycles, trailer bikes and wheelchair tandems benefit from inclusive planning as well.

With this in mind, streetscapes should be designed to accommodate a wider array of users by adapting the infrastructure and cycling amenities to be more inclusive. By holding bicycle infrastructure and facilities to a more inclusive standard, cities become equipped for a positive growth bicycle modal share and in turn benefit from social and health benefits.

INFRASTRUCTURE & AMENITIES

The development of cargo bike-friendly infrastructure is conducive to creating a safe and seamless network for all non-standard bicycle users. In the pursuit of fostering accessible cities, users should enjoy a high level of protected and separated infrastructure on a high-quality and well-maintained network that covers most of the city. Wide cycling lanes and comfortable slopes are key elements that make urban centers more accessible to all.

To promote the growth of cargo bikes, cities must provide holistically designed amenities. The cargo bike should enjoy a high level of ease-of-use, which entails furnishing cities with cargo bike-friendly parking. These should be available wherever they are needed – which can be commercial, educational, and mobility centres. Signage should be specific, uniform, and well-designed.

Bike Lane Width

Widening cycling paths and lanes to accommodate cargo-bikes and vulnerable cyclists is a central element in planning for infrastructural improvements. In general, it is recommendable that streets offer between 2.2 metre to 4.0 metre wide cycle lanes in each direction. This width bracket makes for comfortable and safe lanes for cargo bike users, ensuring that riders can pass one another at a safe and comfortable distance while also allowing room to avoid small obstructions (ie sticks, stones, potholes etc.). Within this range, the narrower end allows a conventional bicycle to pass a cargo bike, whereas the wider lanes allow cargo bikes to pass each other. Providing 'passable' bicycle lanes also reduces the tendency of faster bicycle riders to use the car lane.



Bike Lane Arrangement

Adapting and creating cargo bike-friendly infrastructure should not encroach on the flow of pedestrians. On wider streets, cycle lanes and paths can be created by rebalancing car parking, or narrowing and removing car lanes. On narrower or residential streets, actively restricting or slowing motorised vehicles through traffic calming and reduced speed limits (20–30 km/h) can allow for safer mixed traffic.

Along with an appropriate width, bicycle lanes should generally ensure that the routes are step-free, and clear of obstructions such as gutters. For narrow cycle lanes, dropped curbs or permeable separations are recommended in order to not force cargo bikes onto pedestrian areas or motorized vehicle lanes. If there is a need for construction on or around the bike lane, road and construction standards should underline that a cargo bike must be able to comfortably pass and continue their journey.



Cargo Bike Parking

Providing the infrastructure to move a cargo bike isn't effective if there is nowhere to safely secure the bike at the destination. Due to its high value compared to conventional bicycles, there is a particular need to provide secure parking for cargo bikes. A cargo bike's frame, especially with three or four-wheeled bikes, is also wider and lower to the ground than conventional bicycles, making them inconvenient to lock to conventional bicycle racks.

As a rule of thumb, cargo bike parking racks should respect the 5 Ss: **simple, secure, stable, spaced and signed.**

- Rack design should be simple in design and use.
- Potential users should be able to identify the rack and locate a secure anchor point without hesitation.
- The materials and design of the rack should be secure, within a minimum number of pieces (preferably only one!)
- The rack itself should be anchored into stable ground.
- Spacing between racks must also allow for convenient locking. Users shouldn't feel stuck between neighbouring bikes, racks, or other elements.
- Signage can help communicate when certain racks are design for cargo bikes in mind. "Thank you for parking your cargo bike here!" is a nice way to passively reinforce dedicated parking.



Cargo Bike Parking Location

The placement of cargo bike parking depends upon the user's expected duration of stay. For instance, a quick visit to a corner comes with different needs than parking overnight.

Short term cargo-bike parking should be located just steps away from the destination, no further than 15 metres. Safe and convenient loading zones for cargo bike couriers can also be established as short term parking curbs or in larger parking areas, accompanied by clearly marked signage.

Medium length parking at locations such as schools and workplaces should be up to a 25 m walk from the destination. Overnight and all day length parking at destinations such as train stations and apartment complexes - often designed as "bike rooms" - should ideally be covered, step-free, and located within a 50 metre walk.

Long term parking should ideally be no further than 50 metres from the destination and equipped with theft protection measures like lockers and security cameras. Charging points for electric bicycles, and repair stations may also be appreciated.



Street Furniture

Street furniture, whether noticeable or not, manages the ways in which the public interacts with and travels through the urban fabric. But when it comes to elements of the road such as gates, poles and curbs, street furniture can become a major inhibitor of a smooth cargo bike journey. Barriers such as gates and railings designed to restrict motorized vehicle access must ensure that they are maneuverable on a cargo bike. Pillars, bollards and kerbs should be spaced out to ensure a comfortable width for cargo bikes to ride through - minimum 1.5 metres.



POLICY SUPPORT

In striving for healthy, efficient, sustainable and inclusive cities, supporting actors such as mayors and municipalities can tap into the enormous potential of cargo bikes. Actors typically have four powers for influencing city life: regulation, taxation, information and procurement. Through these four powers, there are many ways in which mayors are able to encourage and foster the use of cargo bikes in their cities.



Regulation

A city's jurisdiction over local regulation can have considerable influence on city life. From social services to land use, public works to mobility, local regulations can be used to encourage cargo bikes and related initiatives. For instance, a growing chorus of mayors and city councils are using their regulative power to pilot street closures, handing previously autocentric spaces over to pedestrians and bicycle riders.



Taxation & Subsidies

Though municipal taxation powers range from country to country, there can be opportunities to nudge market preferences towards desirable outcomes through individual and business tax policy. From congestion taxes to consumer tax credits that reward sustainable choices, municipalities play an important role in guiding and influencing tax policies from all levels of government. Subsidies, on the other hand, can provide more targeted support, directly funding desirable outcomes. As an example, subsidising the purchase or rental of cargo bikes for families and businesses could bridge the gap between the imagined use of a cargo bike, to a regular day-to-day use. Similarly, subsidising various try-before-you-buy schemes can be effective when encouraging the growth of cargo bike sales.

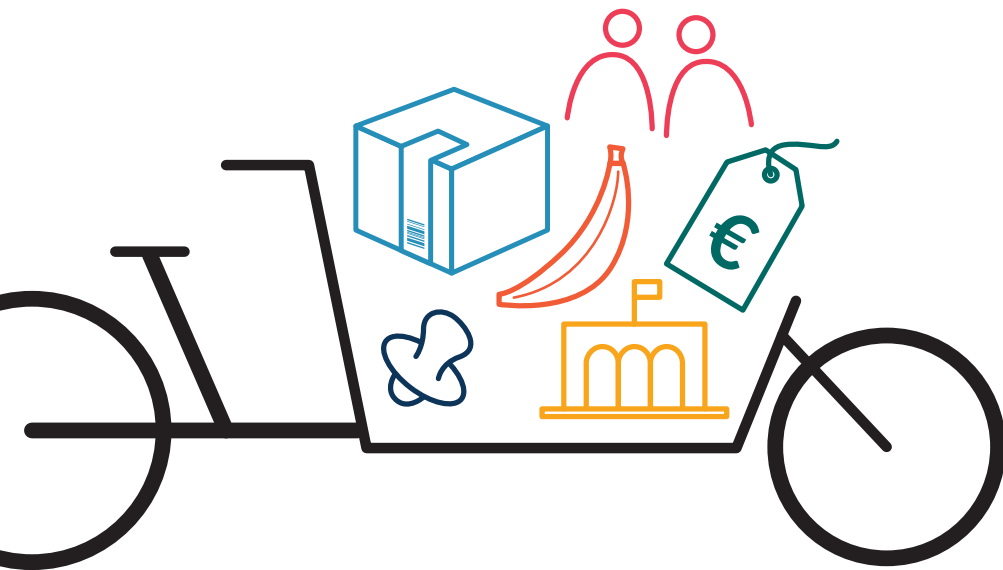
Image of the Cargo Bike

Normalizing the cargo bike as a realistic, efficient and healthy option is not simply achieved through municipal support and infrastructural changes. Cargo bike traffic can experience modal share growth when it is portrayed as a respected, accepted and normal form of transport. When children, seniors and Disabled commuters are positively represented riding cargo bikes on the street and in the media, urban dwellers can recognize themselves as potential cargo bike users too!



The Ideal Cargo Bike City

The cargo bike friendly city has the potential to benefit all. By accommodating these wider, more practical, bikes, sustainable mobility solutions all of a sudden become more accessible to people of all ages and abilities. Through a combined set of policy efforts, ranging from infrastructure upgrades to direct subsidies, City's can unlock the incredible potential of the cargo bike.



- ❑ Streets offer wide cycle lanes between 2.25 - 4.0 metres.
- ❑ Narrow cycle lanes are protected with dropped curbs or permeable separations.
- ❑ A 30km/h speed limit is enforced when cycle lanes are physically impossible.
- ❑ Steeper slopes are avoided and most cycle lanes remain within a 3% slope gradient.
- ❑ “Left turn boxes” have enough delineated space for multiple conventional bicycles and cargo bikes.
- ❑ Cargo bike parking is plentiful and designed according to the 5 Ss: simple, stable, secure, spaced and signed.
- ❑ Bike racks are securely anchored to the ground, and inclusive in design (i.e. anchor points at multiple heights).
- ❑ Parking that is not ground-level is accessible by a lift or a shallow ramp.
- ❑ Safe and convenient loading zones are established as parking curbs or in larger parking areas, accompanied by clearly marked signage.
- ❑ Barriers such as gates, railings, and bollards are spaced out to enough let cargo bikes through.



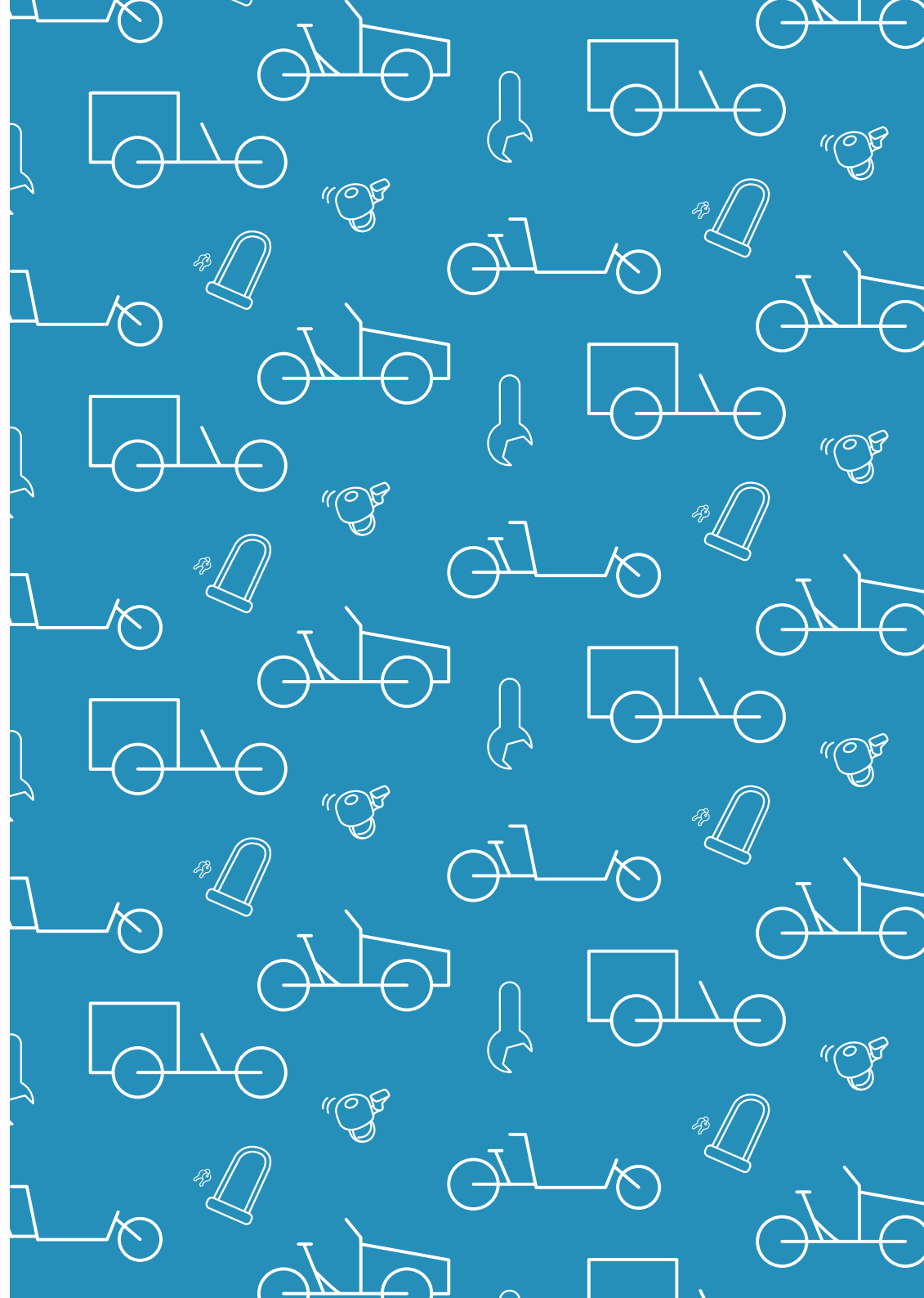
THE CIVITAS INITIATIVE
IS CO-FINANCED BY THE
EUROPEAN UNION



This project has received
funding from the European
Union's Horizon 2020 research
and innovation programme under
grant agreement No. 769086



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