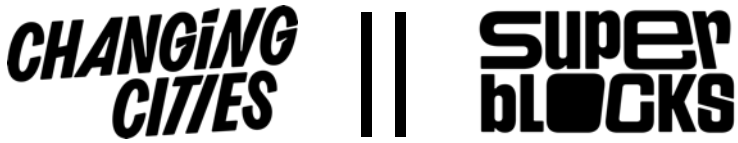

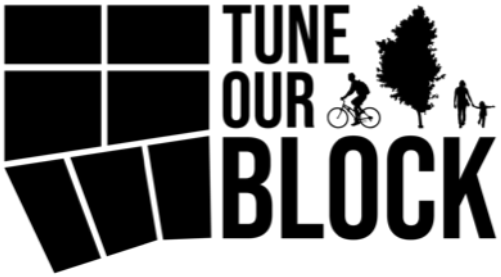

"Fachgruppe Standards für die Mobilitätswende (FGSM)"

Recommendations for superblocks

English version

ESu 2023

2023 Edition, version 1.1 (English)

What are superblocks?

Superblocks are urban neighbourhoods characterised by a high quality of life, good climate resilience, safe infrastructure for walking, cycling and public transport, and no through car traffic.

Who drew up the recommendations?

The "Recommendations for superblocks 2023" were developed by the "Fachgruppe Standards für die Mobilitätswende, FGSM". This expert group at Changing Cities e.V. brings together a wide range of experts in the field of sustainable mobility transition. These recommendations were publicly discussed in a consultation phase from 15 May to 9 July 2023. More than 300 expert comments were incorporated or rejected with clear justification. Open issues were clarified in an online conference on 8 September 2023 and incorporated into the final version by an editorial team. The current version 1.1 was approved by the Board of Changing Cities e.V. on 30 October 2023 and published at the national Superblocks conference in Darmstadt in early November 2023.
The recommendations were co-created within the 'TuneOurBlock' project. To make them accessible internationally, they have been translated into English. Some statements in this document apply specifically to German law and may not be completely transferable to other countries' legal frameworks. They have been labelled as such instead of being excluded from this document as they may still function as interesting reference points.

Who can use the recommendations?

In Germany, regulations for transport infrastructure are mainly developed by the Road and Transportation Research Association (FGSV) (e.g. RASt, EFA, E Klima). Its publications describe established standards and are in some cases recognised as binding by the relevant authorities. The FGSM, which is completely independent of the FGSV, sees its work as a supplement to standardisation topics that the FGSV does not yet sufficiently cover. The recommendations made here can equally be used by administrations, urban planners and citizens' initiatives.

Which institutions support the recommendations?

With the publication of version 1.1, the FGSM invites all professional urban development and transport associations to support the recommendations and to contribute to their dissemination. Municipalities and planning offices are invited to use the recommendations in their planning. A suggestion to ministries is to link the funding of measures to a consideration of the recommendations. The FGSM will report on developments.

Edition notice

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Contents

1. Summary

A superblock is an urban neighbourhood with a high quality of life, good climate resilience, safe infrastructure for walking, cycling and public transport, and no through car traffic. A superblock is created according to the following design principles:

a) The reduction of through car traffic is achieved through structural and traffic management measures (e.g. street reconfigurations, diagonal filters) that complement each other in such a way that taking a short cut through the neighbourhood by car becomes impractical. → Chapter 3.1.1

b) Walking, cycling and public transport are made safer and more attractive by reducing motor vehicle traffic and improving routes. → Chapter 3.1.2

c) A significant proportion of the motor vehicle traffic will disappear as a result of a change in the choice of transport modes, thus relieving congestion throughout the city. This effect will be enhanced by the implementation of superblocks in adjacent neighbourhoods. → Chapter 3.1.3

d) The quality of the public space and the climate resilience of the neighbourhood are significantly improved by redesigning, unsealing and greening the street space. → Chapter 3.2.1

e) Superblocks are brought to fruition by the local authority in partnership with local residents and activists. → Chapter 3.2.4

f) The main roads around a superblock are designed primarily for the safety and fluidity of the eco-mobility network and commercial traffic. Green elements and speed limits also protect residents from the noise of traffic and air pollution. → Chapter 3.3.1

g) The implementation of a superblock starts with simple measures that can be implemented quickly and then transition into a continuous process of urban development. → Chapter 3.3.3

2. Aims and principles

'Superilles' in Barcelona, 'low traffic neighbourhoods' in London, 'Supergrätzl' in Vienna or the Parisian 'Ville du quart d'heure' all represent urban innovations that support quality of life, safe mobility, climate protection and climate resilience.[1] Since 2019, Changing Cities activists have been transferring these planning concepts to Germany.[2]

In Berlin, more than 65 initiatives are now active and have coined the term "Kiezblocks".[3] In Hamburg the term used is “Superbüttel”, in Cologne “Veedelsblock”, in Leipzig “Superblock”, in Darmstadt “Heinerblocks” and in Freiburg “Freiblocks”. All these concepts combine local expertise with internationally proven planning principles. That is why we refer to them all as 'superblocks'.

Nevertheless, the inertia to be found in car-centric transport planning becomes all too apparent in the implementation. The idea of the superblock is in danger of becoming an empty phrase.[4] For this reason, the "Fachgruppe Standards für die Mobilitätswende" (FGSM), which is based at Changing Cities e.V., has set itself the task of describing the 'state of the art' for superblocks. Concurrently, we seek to reinforce the capacity for innovation. To this end, we have devised open standards that delineate the concept of the superblock, safeguard it from arbitrary appropriation, and yet permit its continued evolution.

2.1. More than just traffic

Cities face the urgent challenge of limiting the causes of global warming (mitigation) and adapting to its consequences (adaptation). Greenhouse gas emissions must be reduced to net zero, while resilience to extreme weather conditions must be increased. Combining this transformation with safe mobility and a high quality of life for all is the key challenge for the coming years.[5]

The design of urban areas according to the superblock principle therefore pursues the following aims:[6]

a) **Road safety:** The number of people seriously injured or killed on the roads should be continuously reduced to zero, in particular through the implementation of legal, technical and structural measures to adjust the speed of vehicles during driving and turning manoeuvres.[7]

b) **Climate protection:** CO_2 emissions should be reduced to net zero by 2045.[8] In the transport sector, this means that car traffic should not be shifted, but reduced to a

1 Rueda-Palenzuela 2019; Polonyi 2021
2 rad-xhain 2019; radpankow 2020
3 Changing Cities 2020
4 Schubert 2022
5 Dasgupta et al. 2022
6 Bauer/Stein 2022
7 Stülpnagel/Binnig 2022
8 Federal Climate Protection Act (KSG), Sec. 3

tolerable level by changing the choice of transport. The remaining motor vehicle traffic must also be CO_2 neutral.[9]

c) **Climate adaptation:** Areas should be adapted so that life in densely populated urban areas can continue under the conditions of climate change. The introduction of large-scale unsealing and shade-giving planting will prevent the formation of heat islands and promote resilience to heavy rainfall and biodiversity in the city.

d) **Mobility:** Mobility provides the opportunity to participate in economic and social life. The transport needed for this must take into account the needs of densely populated inner cities, suburbs and rural areas. In concrete terms, this means shortening daily distances through infrastructure planning (mixing residential, commercial and working areas) and strengthening the transport infrastructure of the eco-mobility network (walking, cycling, public transport, long-distance rail). Given the limited availability of land and resources, this goes hand in hand with reducing and limiting car infrastructure.

e) **Quality of life and environmental equity:** Slowing climate change, building resilience to extreme weather events, and ensuring safe mobility for all communities are already essential quality of life factors. Superblock design also addresses other environmental equity factors, in particular reducing noise pollution, minimising particulate matter and other air pollutants, promoting active travel, and strengthening social cohesion and neighbourhood relations.[10] Studies have shown that this leads to significant improvements in health, life expectancy and quality of life.[11]

2.2. Principles of transport science

Decisions by public authorities on the development of transport infrastructure set the framework for individual mobility decisions and thus for the quantitative development of traffic flows. This relationship has been recognised for decades in transport research under the keyword "induced demand".[12]

The expansion of transport capacity, be it an airport, a railway line, a motorway, a tram line, a cycle path or a zebra crossing, changes the supply and thus influences the individual choice of the best route for the respective mobility occasion. Transport infrastructure not only influences short-term decisions, but also generates commitments that will shape urban development for decades to come. Similarly, non-transport policies, such as changes in land-use planning, home office regulations or the laying of fibre optic cables, have a significant impact on the length and frequency of journeys.

Public infrastructure decisions therefore set the framework within which individual transport choices are made in the long term. If an infrastructure is expanded, it will be used for additional traffic. If an infrastructure is dismantled, much of the existing traffic is lost. This

9 Road and Transportation Research Association (FGSV) E Klima 2022

10 SenMVKU 2023

11 Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMUB) 2016

12 Aichinger/Lennard 2022

effect has been known for over 20 years as 'traffic evaporation' and is supported by studies.[13]

Mobility in superblocks is therefore designed according to the following priorities:

a) All routes in the superblock are optimised for local pedestrian and cycle traffic, and accessibility and priority for public transport.

b) Accessibility for police and emergency services, blue badge holders / persons with disabilities, goods deliveries, refuse collection, tradesmen, care services and other commercial traffic will be maintained or improved.[14]

c) Accessibility for private cars and car sharing is generally guaranteed, but the routing and the area available for public parking should be limited in favour of the other priorities.

d) Non-local motor vehicle traffic will only be routed on the main road network. So-called 'rat runs' through the secondary road network will be effectively prevented.

All transport improvements will be prioritised to meet the needs of vulnerable groups such as children, the elderly and others.

A number of case studies show that it is not only residents who benefit: contrary to intuitive assumptions, there are positive effects for the retail sector[15] and people with below-average incomes[16]. Motor vehicle traffic in the superblocks is significantly reduced (around 30%), with only a minimal increase on the surrounding main roads (around 1%).[17]

If implemented on a large scale, network effects can be expected that could reduce congestion on major roads by up to 20%, as journeys are shifted to other,[18] now more attractive, modes, especially walking and cycling, and more local services are used. Planners regularly underestimate the impact of congestion.[19]

By changing the choice of transport, previously car-dominated areas in the superblock will gradually be transformed. The quality of the area will be comprehensively improved by strengthening the blue-green infrastructure (unsealing, infiltration, greening), quality of stay, pedestrian and cycle infrastructure and traffic calming. These improvements can be achieved both on the side streets of the superblock and on the surrounding main streets.

In terms of urban design, a superblock is typically characterised by block edge development. In suburban areas with low building densities, the design principles can be adapted. In these cases, through car traffic should still be reduced and made compatible.[20]

13 Nello-Deakin 2022; superblock concepts were already developed in the 1980s, see Smith/Appleyard 1981, page 29

14 Goodman et al. 2021; Abran 2023

15 Große/Böhmer 2019

16 Voce/Walker 2023

17 Thomas/Aldred 2023

18 Burgen 2019; Mueller et al. 2019

19 Cairns et al. 2002

20 Verein für nachhaltige Verkehrsentwicklung 2022

3. Standards for superblocks

The **Minimum Standard** is designed to be implemented quickly and as widely as possible. It can be seen as a 'Superblock light' and is the starting point for a comprehensive urban development process.

Once the minimum standard has been achieved, planning should move on to the **Regular Standard**. Projects that fall below the requirements of the Minimum Standard and the Regular Standard are ineffective and should not be called 'Superblock' or “Kiezblock”.

The **Gold Standard** should be applied in the long term. However, the greater effort involved should not take place at the expense of widespread implementation of the Minimum and Regular standards.

3.1. Minimum Standard

A superblock must meet the following requirements at a minimum:

3.1.1. Neighbourhood zones by using effective modal filters

The area of a superblock is typically surrounded by a ring of major roads. Vehicles can enter the superblock via defined junctions to access the properties of a neighbourhood zone and leave the superblock via the same route. There are no direct road connections for motor vehicle traffic between the neighbourhood zones, only for pedestrians, cyclists and public transport. In this way, the road space in the superblock is exclusively available for the eco-mobility network and local motorised traffic. Non-local motor vehicle traffic remains on the designated arterial roads.

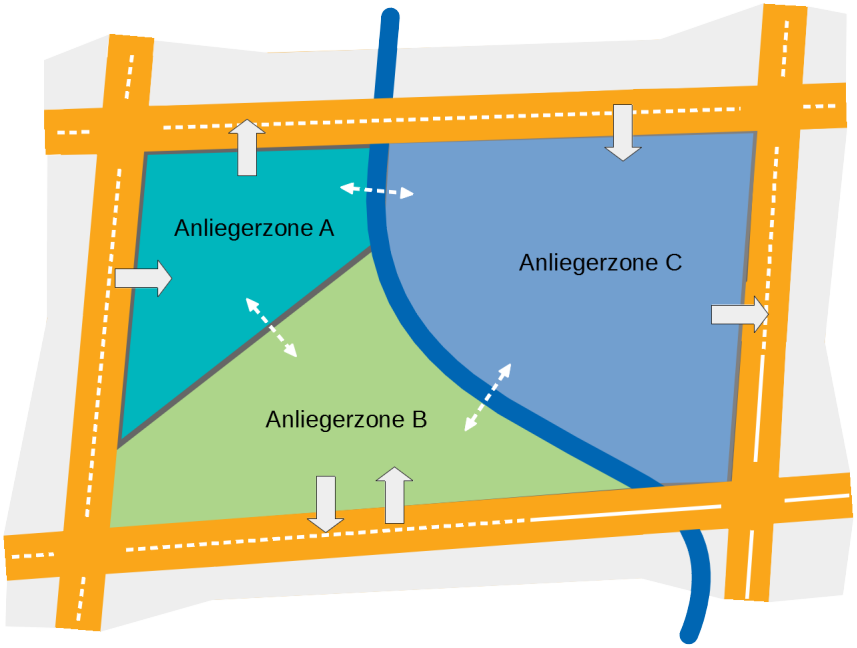

Fig. 1: Schematic representation of a superblock with three neighbourhood zones

Figure 1 shows the principle schematically: Four main roads (orange) enclose the district, a watercourse (blue) crosses the area. Depending on the topographical and urban planning conditions, three neighbourhood zones A, B and C are defined, into which vehicles can enter from the main roads (thick arrows). Direct routes between the neighbourhood zones are reserved for the eco-mobility network (dashed arrows).

Depending on the local situation, superblocks can consist of a single neighbourhood zone or many neighbourhood zones. The principle is always the same: it should be possible to drive into, but not through, each neighbourhood zone.

The boundaries of neighbourhood zones are ideally formed by existing urban structures, such as blocks of flats, parks, railway embankments or bodies of water. The routes between neighbourhood zones should be designed with modal filters to allow the eco-mobility network options to pass through and to filter out other motor vehicle traffic.

The following are recognised as effective modal filters:

a) **Street reconfiguration**
Road sections can be structurally converted for local user requirements, e.g. as green space, recreation area or school zone. In the case of Germany, this requires a partial withdrawal[21] according to the road traffic regulations to ensure exclusive use, e.g. by pedestrians, cyclists and public transport. The conversion acts as an 'area modal filter'. Temporary or limited exemptions for vehicles are possible, e.g. for local residents.

Fig. 2: This junction in Copenhagen has been structurally reconfigured to allow pedestrian and bicycle traffic to continue and motor vehicle traffic to turn right. The areas acquired are used for recreation. (Photo: H. Hagedorn)

b) **Linear modal filters**
The direction of travel for multi-lane motor vehicles at crossroads is clearly and structurally predetermined by elements running diagonally across the crossroads ('diagonal filters') or in a road by elements arranged transversely ('transverse filters'). Bollards, planters or the like can be used as elements. Combinations with pavement extensions are useful.

A manually retractable bollard should be provided for emergency vehicles and

[21] "Partial withdrawal" is the general decree by which the dedication of a road is subsequently restricted to certain types of use, purposes of use or user groups. It is regulated by state law, e.g. "Straßen- und Wegegesetz des Landes Nordrhein-Westfalen" (§ 7 StrWG NRW).

automatic passage for public transport. The distance between two bollards should not exceed 175 cm to filter cars effectively.[22] Resulting dead ends should be as short as possible.[23] In accordance with German law, this measure is to be considered as a structural alteration of the road surface under the responsibility of the highway authority.

Fig. 3: Even a single diagonal filter can change the traffic flow in the entire superblock in favour of the eco-mobility network. In areas with heavy pedestrian traffic, bollards should be surrounded by tactile paving. (Photo: I. Lechner)

c) **Narrow one-way streets**

One-way streets are only effective if the width of the carriageway physically prevents oncoming traffic for multi-lane motor vehicles. Counterflow one-way streets reinforce the effect. Deviations from the carriageway, e.g. by alternating bicycle/vehicle parking and green spaces, encourage compliance with the appropriate speed. Bicycle traffic is always free in both directions. The measures must be legally justified and prescribed by road traffic regulations.

Fig. 4: A one-way street in Budapest with a narrow lane bordered by blue-green infrastructure, accessible crossings and rearranged parking spaces (photo: QIMBY)

[22] The distance must not be less than 150cm at bollards for senior-citizens' scooters and bicycles. If the direction of travel is diagonal to the row of bollards, a regular distance of 175cm must be maintained. For further details on technical implementation, see "SenUMVK 2023, fact sheet 3 Modal filters", Chapter 2; and DIN 18040-3, 4.2, 5.1.1 and 6.1.

[23] "Berliner Stadtreinigung" city cleaning services would like to limit reversing to 15m (BSR 2019, p. 14); The German Statutory Accident Insurance Association (DGUV) requires a maximum distance of 150m (DGUV 2016).

Street reconfiguration is the most effective measure, but it requires more effort. It enjoys a much higher level of public acceptance than linear modal filters.

Linear modal filters are the least intrusive, as they also provide short and clear routes for vehicles in the superblock. They have the best cost/benefit ratio for traffic calming and can be easily modified after evaluation.

One-way streets, like diagonal filters, restrict the direction of travel, lengthen and complicate routes for vehicles, but are ineffective against rule-breakers. They should therefore only be stipulated if the neighbourhood zones in the superblock cannot be fully formed by street reconfigurations and linear modal filters.

Simple 'resident-only' access restrictions or one-way streets with wide carriageways should be considered ineffective in planning considerations.

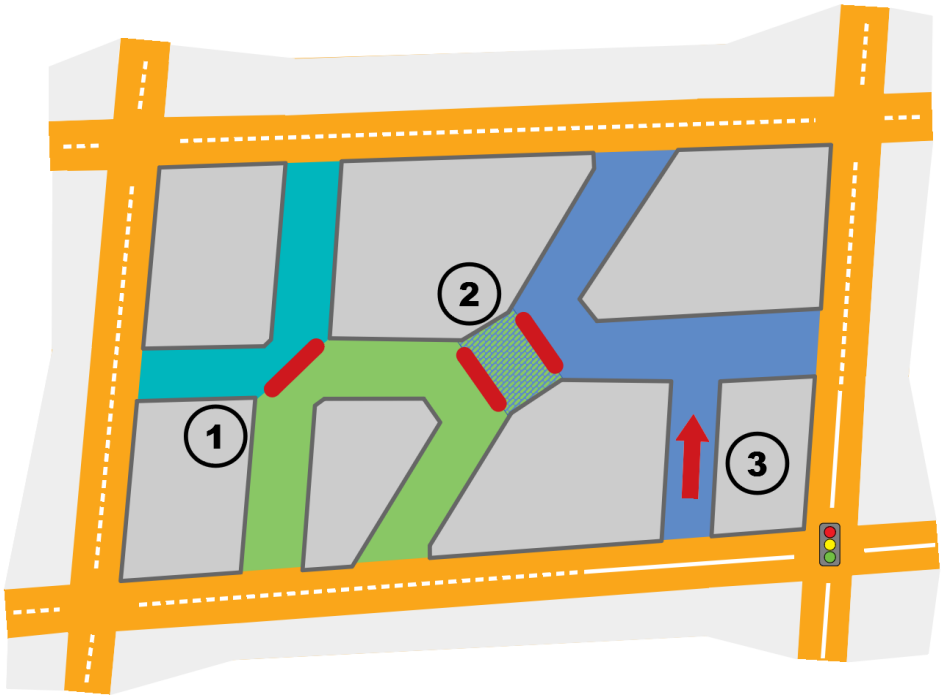

Fig. 5: How different modal filters work

Figure 5 shows the three types of modal filters and their effects in schematic form:

(1) A linear modal filter separates the turquoise and green residential zones. This reduces some through traffic, while pedestrians and cyclists benefit from free streets.

(2) A street reconfiguration separates the green and blue residential zones. A multifunctional urban space is created in between, for example for unsealing, greening and restaurants.

(3) The narrow one-way street, in conjunction with no left turns on the lower main street, ensures that the traffic light crossroads on the main street cannot be circumvented.

3.1.2. Routing of the eco-mobility network

The effect of modal filters on the flow of motor vehicle traffic automatically creates safe and comfortable routes for pedestrians and cyclists. The most important routes, especially those leading to public transport stops, should be identified and further optimised through simple measures such as:

a) Construction of pavement extensions or continuous roadway kerb raises (see Figure 6) with lowered kerbs and tactile elements, possibly preceded by temporary markings

b) Designated cycle lanes[24] with pedestrian crossings

c) Designated traffic-calmed areas (traffic sign 325.1 No. 12), where walking speed applies

d) Redesigned junctions with main roads, e.g. through extended cycle lanes or traffic light control without request buttons ("beggar's traffic lights")

e) Improved weather protection at public transport stops.

Fig. 6: Paving stones in Cologne for pedestrians crossing the street (photo: QIMBY)

3.1.3. Routing of motor vehicle traffic

Modal filters direct vehicles onto main roads. This can lead to detours that are negligible for average journeys. Only for very short distances can the detour be perceived as disruptive, creating a strong incentive to walk or cycle the same distance. This shift towards eco-mobility means, among other things, that a superblock has no demonstrable negative effect on traffic density on main roads.[25]

In order to make efficient use of road capacity and at the same time protect residents from emissions, the following measures are recommended:

a) Fine-tune modal filters, junctions and turning regulations to allow residents with cars to efficiently enter and exit the residential zone.

[24] Central streets in superblocks are well suited as bicycle roads; at the same time, they are often required for motor vehicle access to residential areas. As motor vehicle traffic in the superblock is already exclusively residential thanks to effective modal filters, strict residential signage can be dispensed in these cases. The bicycle road can then also be used by residents of neighbouring streets with motor vehicles.

[25] Thomas/Aldred 2023

b) Each residential zone should be connected to the trunk road network at least at two junctions. This allows for a loop-like development for motor vehicles and compensates for individual disruptions (e.g. construction sites).

c) Consolidation of motor vehicle traffic on the surrounding main roads by closing unnecessary junctions.

d) Early data transmission to all common navigation services to facilitate re-orientation in the first days after the installation of modal filters.

Figure 7 shows the positive route effects resulting from a comprehensive implementation with several superblocks. The more areas that are designed according to the superblock principle, the more inner-city connections offer safe and direct routes for the eco-mobility network. Each A-to-B-connection is possible for motor vehicles, but on average along a different, slightly longer route.

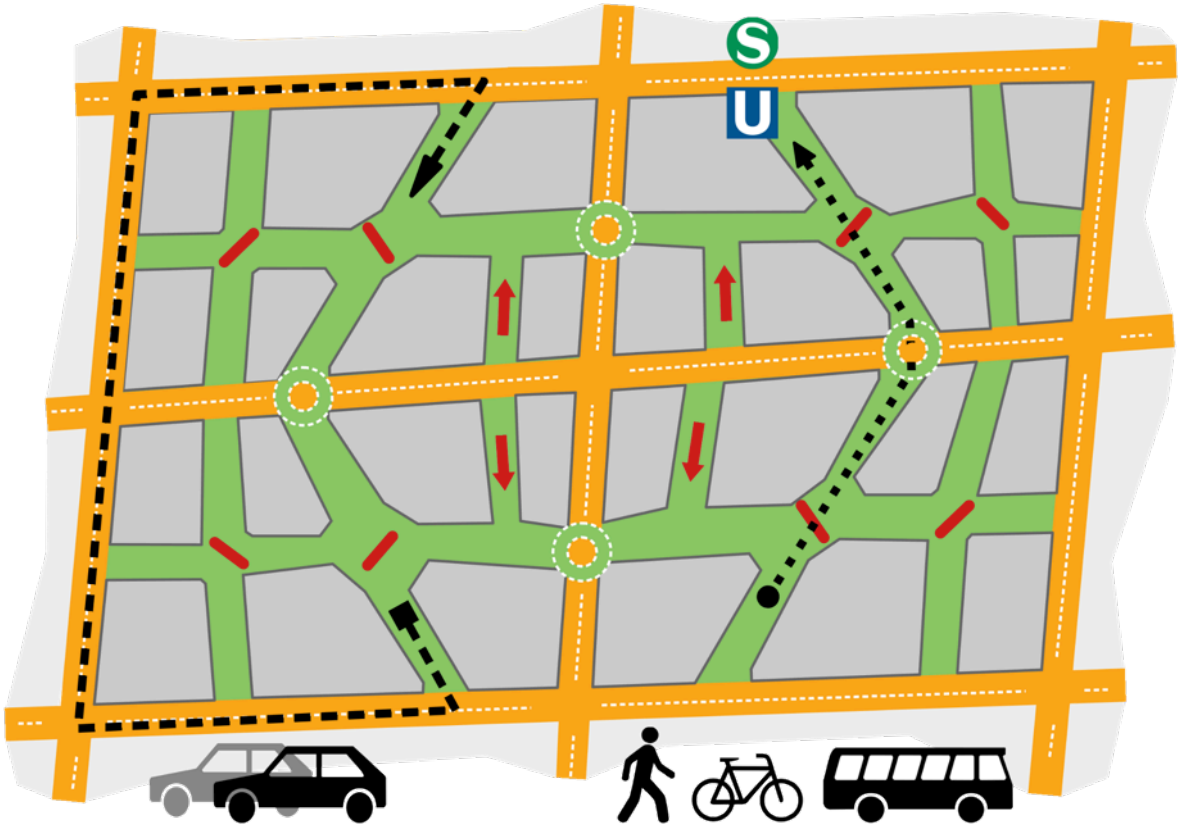

Fig. 7: Safe, direct routes for eco-mobility networks and urban-friendly routes for motor vehicle traffic in neighbouring superblocks

As can be seen from the illustration, the route for motor vehicles runs largely along main roads, while the route for eco-mobility networks is not only shorter, but also more attractive, as it passes through quieter, more varied and usually greener urban areas. While the use of motor vehicles will still be possible and in some cases attractive (e.g. for the transport of heavy goods such as building materials), the choice of transport mode in adjacent

superblocks will shift significantly in favour of eco-mobility networks for a large number of daily mobility needs[26], which in turn will relieve congestion on main roads.[27]

3.1.4. Information and evaluation

Residents and other users of the area are informed about the measures at an early stage. The effectiveness of the measures is evaluated and improved in dialogue with the public after implementation. Primarily, forms of communication should be chosen that already work "in passing", such as:

a) Prominent placement of information at modal filter locations, two weeks before and after installation, e.g. simple banners or staffed information stands

b) A public site visit in the late afternoon, approximately two weeks after installation, to evaluate the experience

c) Online information about the overall urban concept, optimised for accessibility and mobile devices.

d) The administration and at least two local residents (e.g. neighbourhood office, initiative) should remain in close contact during implementation in order to be able to react quickly and flexibly to unforeseen events.

Fig 8: Positive example of low-threshold information for evaluation 'in passing' (photo: Lattekiez)

3.1.5. Legal basis and time required (in accordance with German law)

Different legal bases apply to the three types of effective modal filters:

(1) For the implementation of street reconfigurations, kerb extension is to be used as an instrument in accordance with state road legislation (e.g. Sec. 4 BerlStrG).[28]

(2) For the rapid introduction of linear modal filters and accompanying measures such as the extension of pavements and the raising of kerbs, the instrument of the

26 Hagedorn 2023

27 Aldred/Goodman 2020; Aldred et al. 2021

28 Berlin Senate Department for Urban Mobility, Transport, Climate Action and the Environment (SenUMVK) 2023, fact sheet no. 1 Legal basis, p. 6-10

structural redesign of the road surface is recommended in accordance with the road traffic act in the state of Berlin (e.g. Sec. 7 BerlStrG).[29]

(3) The implementation of one-way streets requires a traffic management order according to Sec. 45 Road Traffic Regulations (StVO). The associated narrowing of the carriageway is then carried out again as a structural redesign of the road surface in accordance with the state road traffic act, as explained in point 2.[30]

Experience shows that German administrations apply the regulations in very different ways. If the actors involved are sceptical about the mobility transition, the legal hurdles are often presented as insurmountable. The same problems can be solved pragmatically in the administration of a neighbouring municipality.[31] It can therefore be said: Where there is the political will, implementation is also legally possible.[32]

In principle, the comprehensive application of the minimum standard in all residential areas of a city is recommended. To achieve this within the short timeframe set by the climate targets, it is necessary to routinise the work process. Focusing on simple construction measures, using model considerations and concluding framework agreements for construction services can be expected to significantly shorten implementation times.

As some procedures (e.g. steps towards kerb extension) require minimum deadlines, at least three superblock projects should be pursued in parallel. With an implementation period of around nine months in Germany, a new superblock can be created each quarter in this way.

Successful implementation to the Minimum Standard should be followed immediately by development to the Regular Standard.

[29] ibid. p. 11-14; Partial retraction is not required for linear modal filters as long as both sides of the modal filter can be reached by motor vehicles by other means. There is case law on this: Higher Administrative Court of Saxony-Anhalt (OVG Sachsen-Anhalt) 2010 and Administrative Court of Gelsenkirchen (VG Gelsenkirchen) 2020

[30] SenUMVK 2023, fact sheet no. 1 Legal basis, p. 14-20

[31] radpankow 2022

[32] This applies in particular if supporting state legislation can be used, such as the Berlin Mobility Act (MobG BE), Sec. 56(1)

3.2. Regular Standard

A superblock should meet the following requirements in addition to the minimum standard:

3.2.1. Public street infrastructure

At least 25% of the usable kerb area should be used for:

a) Blue-green infrastructure (e.g. decentralised rainwater management, planting pits and root space for trees and street greenery)[33]

b) Quality of stay (e.g. town squares and streets with communication, play and seating areas, including outdoor dining)

c) Pedestrian infrastructure (see 3.2.2)

d) Cycling infrastructure (e.g. cycle racks, lockable cycle shelters)[34]

e) Traffic calming measures (e.g. lane shifts).

The length of usable kerb should be estimated as a sum for the whole superblock . A kerb is considered usable if the distance between the kerb and the lane to be kept clear is at least two metres. The lengths of the areas defined in Sec. 12(1) and (3) StVO (no stopping and no parking) are to be deducted from this.

3.2.2. Conflict resolution within the eco-mobility network

Facilities should be designed to meet the needs of pedestrians. Conflicts with cyclists shall be resolved by, among other things:

a) Area allocation (e.g. safely guiding cyclists on the carriageway in the superblock, making cobblestones suitable for cycling by flattening them or using cut stones or asphalt[35], legally and intuitively allocating existing high kerbs for pedestrian use)

b) Prioritising important pedestrian routes with level pavements at crossroads and junctions (e.g. kerb crossings according to Sec. 9 BerlStrG in conjunction with Sec. 10 StVO)[36]

c) Construction of kerb extensions with additional crossing aids (e.g. coloured surfaces or zebra crossings) in areas with high bicycle traffic[37]

d) Improving accessibility (e.g. lowered kerbs, no paving that interferes with wheelchairs or walkers, crossing of cycle paths for the blind, minimum width of pavements)[38]

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33 Dickhaut 2022

34 Federal Ministry for Digital and Transport (BMDV) 2023

35 Green Party of Berlin-Mitte Mobility Working Group 2022

36 For blind pedestrians, it is important that they do not lose their bearings and that they can continue to count the crossings (for directions such as 'the 4th entrance is on the right'). Tactile signs are required. See also Dutch Cycling Embassy 2022

37 The 'Guidelines for the design and equipment of pedestrian crossings' (R-FGÜ) consider pedestrian crossings in 30 km/h zones to be ‘dispensable’. However, they are by no means prohibited (FGSV R-FGÜ 2001)

38 FGSV H BVA 2011

e) Public spaces with mixed traffic should generally also have a pedestrian-only area that can be safely used by visually impaired people at all times.

f) The minimum requirements for the barrier-free design of traffic areas must be met (in Germany: including DIN 18040-3, DIN 32984 and R-FGÜ).

3.2.3. Parking management

Motor vehicles may be parked on the remaining usable kerb space. The use of parking spaces will be prioritised for:

a) Parking spaces for residents with mobility impairments (according to the same criteria as already applied in the Minimum Standard)

b) Parking spaces for micromobility and car-sharing providers, preferably at charging points

c) Short term parking zones in each street for commercial and private vehicles

d) Charged motor vehicle parking.

If other usable roadsides are available, they can be offered for general parking (in Germany: in accordance with Sec. 12 (3a) to (4a) StVO). The expansion of charging infrastructure for private electric vehicles should primarily take place in private and commercial areas (e.g. neighbourhood garages, supermarket car parks, private properties). Surface parking on pavements should be prohibited. Diagonal and perpendicular parking should be avoided to reduce hazards when exiting parking spaces and obstructions caused by over-long vehicles.

3.2.4. Public participation

The creation of a superblock according to the Minimum Standard should be based on simple administrative decisions about which the public is merely informed (see Sec. 3.1.3). No additional justification is required if road safety and climate change require immediate action. However, for the detailed development of Regular Standard and Gold Standard measures, the local expertise of residents and other users, especially children and young people, should be sought. This will increase the quality and acceptability of the measures.

The recommendations presented here provide numerous options and examples for the Regular Standard and the Gold Standard. How they are selected, supplemented and designed should be a matter for public participation.

Local groups are often already active on various issues. These groups are the first point of contact for planning, design and evaluation. They should be identified at an early stage and actively approached and invited to participate. It is particularly important to involve groups that are not primarily concerned with transport but are otherwise committed to the positive development of the living environment, the mobility of children and the elderly, and climate and environmental equity.

Actions such as temporary summer pedestrian areas or play and neighbourhood streets [39] are well suited to allowing people to experience the street space in a new way on a trial basis, and to bringing together different user groups.

[39] SenUMVK 2011

If an opportunity for participation is offered, it should be implemented carefully, with ample scope for decision-making and balanced participation. Binding aims and requirements set by the federal and state governments, particularly in the areas of climate protection, mobility and social urban development, provide the framework.[40]

3.2.5. Legal basis and time required (in accordance with German law)

In Germany, most of the measures can be implemented at state level under the road traffic act. Other regulations in areas such as climate protection, mobility, urban development and air quality control can also be used.[41]

With sufficient human and financial resources and political will, the Regular Standard can be implemented within 18 to 24 months of achieving the Minimum Standard. With increasing practical experience and streamlined processes, this timeframe should be steadily reduced.

3.3. Gold Standard

Beyond the Minimum Standard and Regular Standard, a superblock can aim to fulfil the following:

3.3.1. Compatible main roads

Major roads adjacent to the superblock will be designed to be compatible with the objectives of the superblock by

a) Implementing a 30 km/h speed limit to improve road safety, traffic flow, air quality and noise reduction; 20 km/h may be considered for commercial streets

b) Prioritising public transport (e.g. absolute priority at traffic lights, bus lanes)

c) Improving infrastructure for pedestrians and cyclists (e.g. protected cycle lanes, automatic traffic signal control, raised crossings at junctions with adjacent superblock side streets)

d) Improving the quality of stay (e.g. green spaces and facades, noise-protected seating, drinking fountains).

Junctions at main roads with important routes between neighbouring superblocks (e.g. cycle routes) should be prioritised for redesign, for example as protected intersections or roundabouts following the Dutch model.[42]

3.3.2. Quality of life in the superblock

The measures outlined in the standard for point 3.2.1 are extended. A large part of the usable kerb area should be used for the priorities listed there:

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40 Schneidemesser 2020

41 Examples can be found in: SenUMVK 2023, Annex No. 1 fact sheet Neighbourhood blocks: Excerpts from laws and plans

42 Wagenbuur 2015; Separate and Safe Crossing for All (SQUADA) 2023

- Blue-green infrastructure
- Quality of stay
- Pedestrian and cycling infrastructure
- Traffic calming.

The remaining kerb space should be used for motor vehicles for specific purposes in accordance with Chapter 3.2.3, points a to c (for people with reduced mobility, shared vehicles, short term parking zones). However, point d (charged vehicle parking) is no longer applicable.

Permanent parking of private motor vehicles on public roads within the superblock is not permitted under the Gold Standard. As compensation, new parking spaces can be created in underground or neighbourhood garages and rented out on a cost-covering basis. Charging facilities for electric vehicles can also be efficiently provided there. Priority should be given to the use of areas previously used for car infrastructure (petrol stations, large car parks, etc.). This will minimise traffic searching for parking spaces and optimise the interests of business traffic, road safety and quality of life.

Fig. 9: Visualisation of a street space with reallocation of usable kerbs (MLA+/Martin Aarts 2020)

3.3.3. Urban development

Urban development with the aim of small-scale mixed use in the sense of a 15-Minute-City[43] will be actively supported, for example, by:

a) Promoting local shops and businesses, e.g. through active commercial space management or customer-oriented transport planning[44]

b) Development of local infrastructure (kindergartens, schools, leisure facilities)

43 Berlin Senate Department for Urban Development, Building and Housing (SenSWB) 2023

44 Schneidemesser/Betzien 2021

c) Housing management, e.g. by promoting the housing life cycle, preserving the existing building stock and activating land potential

d) Scientific monitoring and measures to maintain the social structure of residents

e) Orientation towards active mobility, e.g. through signage, but also through the recognisable and distinguishable design of streets and squares

f) Traffic analyses to measure and strengthen traffic impacts (induced demand and traffic evaporation).[45]

3.3.4. Legal basis and time required (in accordance with German law)

The legal basis for the Gold Standard measures varies considerably. Some measures are part of the standard repertoire of road and traffic authorities. Other measures, such as a 30 km/h speed limit on main roads, require such a high level of justification that they are practically impossible to implement.[46] This is where initiatives to successfully change road legislation at the federal level are required.[47]

Many measures are legally possible but are subject to certain balancing and justification requirements. It is therefore advisable either to draw on the experience of pilot projects [48] or, if necessary, to launch one's own pilot projects. It is therefore not sensible to determine the time needed for implementation according to the Gold Standard. Rather, achieving this standard should be seen as an ongoing task of urban development.

This is supported by the fact that parallel societal goals (e.g. energy and heat transition in the neighbourhood, resilience to global crises) set processes in motion in the same direction. This was also pointed out by Salvador Rueda-Palenzuela in his early articles on superblocks or "superilles".[49]

4. Notes

These recommendations for superblocks were developed by the "Fachgruppe Standards für die Mobilitätswende (FGSM)" at Changing Cities e.V. within the TuneOurBlock project. As part of the “Tune Our Block” project, they have been translated into English in order to make them accessible internationally. All statements that apply specifically to German law have been labeled as such.

45 Possibly using (automated) counts carried out by civil society, e.g. tools.changing-cities.org or telraam.net/en/what-is-telraam

46 Klinger/Ernst 2022

47 Urban initiatives 2023

48 E.g. the pilot project for a comprehensive parking management system in the Graefekiez district of Berlin (Loukaridis 2022)

49 Rueda-Palenzuela 2019

4.1. Members of the FGSM

The members of the FGSM bring together expertise from engineering, social and natural sciences, the arts and other perspectives. The expert group is open to new members who are committed to the fundamental consensus of safe, climate-neutral and fair mobility.

- Eckhard Gauterin, Dipl.-Ing. in physical engineering
- Jakob Gemassmer, M.Sc., renewable energy systems
- Valentina Haas, B.A., campaigner
- Dipl.-Ing. Hans Hagedorn, urban planner (Editor-in-Chief)
- Marie Heidenreich, B.Sc., M.A.
- Dipl.-Des. Philipp Heinlein, designer
- Immo Janssen, B.Sc., mobility planner
- Elfi Jantzen, former borough councillor, FUSS e.V.
- "Dr Kiezblock" Florian Keiper, B.Eng., M.Sc.
- Dipl.-Geogr. Tobias Kraudzun, mobility researcher
- Inge Lechner, M.A. Art in Context, educator
- Dr.-Ing. Stefan Lehmkühler, spatial planner
- Dr Dirk von Schneidemesser, M.A., social and political scientist
- Dipl.-Komm. Ragnhild Sørensen

4.2. Use of the recommendations

This edition of the "Recommendations for superblocks" was approved by the Board of Changing Cities e.V. on 30 October 2023. This and other FGSM publications are available in their current version at **changing-cities.org/standards**. The content is freely available under the Creative Commons License (CC BY-ND 4.0), including for commercial use. If you redistribute the material, you must cite the FGSM as the source in online media with a link to the above website. If you modify or otherwise build upon the material, you may not redistribute the modified version of the material.[50]

4.3. Roadmap

These recommendations will continue to be developed. Contributions in the form of suggestions and textual and graphical material are welcome and may be incorporated into future editions following review by the FGSM. Preliminary considerations have been made for the following topics:

- Visual representations of a superblock according to the Regular Standard (for Chapter 3.3)
- Sociological and emotional factors in modal choice (for Chapter 2.2)
- Guidelines for good public participation in superblock planning (separate working paper as a to supplement to Chapter 3.2.4)
- Recommendations for traffic calming and speed limits below 30 km/h (Chapter 3.2)

[50] Further information about the licence: https://creativecommons.org/licenses/by-nd/4.0/

- An English version of the recommendations, possibly with country-specific additions, as a contribution to the European Superblock Community – this document being the first version.
- …

These recommendations for superblocks are kept lean in order to establish a common state of the art in practice. More detailed information on specific issues can be found in other FGSM publications and in the literature sources cited.

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