

# Providing innovative mobility management rather than car parking spaces

Mobility plans in compliance with the City of Bremen's Mobility for New Buildings Bylaw Die Senatorin für Bau, Mobilität und Stadtentwicklung





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### What does the Mobility for New Buildings Bylaw regulate?

Every property generates traffic – both moving and parked. Bremen's Mobility for New Buildings Bylaw of 20 September 2022 (Brem.GBl.p. 476) supersedes the previous Parking Space Bylaw and is intended to promote sustainable mobility behaviour in the municipality of Bremen, particularly around new construction projects.

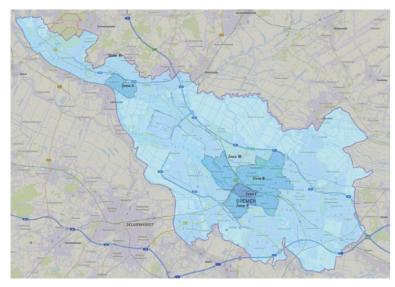


Figure 1: Overview map of the zones for determining mobility requirements.

A detailed, interactive map can be found at:
geoportal.bremen.de/geoportal > Fachdaten > Transport und Verkehr
> Gebietszonen Mobilitäts-Bau-Ortsgesetz

Mobility management

As of 1 October 2022, the Mobility for New Buildings Bylaw regulates the mandatory implementation of mobility management measures in the municipality of Bremen. It also continues to enable the construction or removal of motor vehicle parking spaces. It applies to new buildings and conversions of existing buildings and regulates the parking space requirements for cars and bicycles, insofar as these are not stipulated in development plans.

The number of car and bicycle parking spaces required for a property is determined by the type, size and number of residential units or the amount of commercial floor space together with the location of the property within the urban area. Together, they cover the typical mobility requirements of the property. The proportion of mobility management required is also determined by the location within the urban area, which is divided into three zones based on local traffic conditions.

- 1. Zone I comprises the inner city area,
- Zone II comprises the neighbourhoods close to the city centre (outside Zone 1) as well as the districts of Vegesack and Grohn, and
- 3. Zone III comprises the rest of the city and its out skirts, as well as the harbour area of Bremerhaven, which belongs to the city of Bremen.

More information on calculating mobility requirements can be found in the reference table in Annex 2 of the Mobility for New Buildings Bylaw (available in German here: http://tinyurl.com/MobBauOG-Bremen











# Mobility management, parking spaces and payment in lieu of providing parking spaces – what is mandatory and what is optional?

Mobility management measures are the top priority to fulfil parking requirements in the Mobility for New Buildings Bylaw. These are followed by the construction of car parking spaces and higher requirements for the number and quality of bicycle parking spaces. Above a certain scale, mobility management measures are mandatory for new construction and for conversions for (almost) all uses. The proportion of mobility requirements that must be met by mobility management depends on the location of the building in the urban area. It is:

- 75% in Zone I,
- 50% in Zone II and
- 25% in Zone III

of the calculated parking space requirement.

The remaining proportion of the mobility requirement can be met by building car parking spaces or by making a payment to the city in lieu of building the required car parking spaces. Flexible combinations, such as payment in lieu of some or all car parking spaces and the suspension of the obligation to provide car parking through additional mobility management measures, are also possible. An exception to this is the city centre area (Zone I), where car parking spaces may only be built in exceptional cases.

This makes it easier to build car-free and low-car neighbourhoods and gives investors and property developers more flexibility to develop mobility plans for their properties that meet the mobility needs of their users. The required bicycle parking spaces must, however, always be provided.

#### What is mobility management?

Mobility management is the goal-oriented and target group-specific influencing of individual mobility behaviour. Mobility management considers all modes of transport together and identifies environmentally friendly and future-ready solutions which allow citizens to make their journeys and satisfy their daily mobility needs.

More detailed information and training programmes on the topic of housing and mobility can be found here (in German): www.vcd.org/wohnen-und-mobilitaet.



#### Payment in lieu of building parking spaces

• Paragraph 10

Figure 2:

Mandatory mobility management and options for building parking spaces and/or making payments in lieu of building parking spaces in accordance with the Mobility for New Buildings Bylaw

## Mobility plans in compliance with the Mobility for New Buildings Bylaw

The aim of mobility plans and mobility management measures is to contribute to a reduction in the ownership and use of cars, thus reducing the demand for car parking.

For a good mobility plan and its mobility management measures, it is critical that services offered:

- meet the needs of the target group,
- are well integrated in the neighbourhood and are accessible,
- run for an appropriate period of time, and
- include effective target group-oriented communication.

The principle of **equivalence** is applied both to mobility plans and to their verification. The amount that can be paid to the city in lieu of building car parking spaces is the basis for the required investment in mobility management. The total amount to be spent on mobility management is 90% of the required in-lieu payment. As a rule, the calculation is provided as part of the building application. It, together with the mobility plan in written form must be submitted with the planning application. Assessment of the planned measures is carried out by the Transport Department of Bremen's Ministry for Building, Mobility and Urban Development.

## Are you looking for help with the design of bicycle parking facilities?



These can be found, for example, in **Leitfaden Fahrradabstellanlagen**, which contains guidelines for bicycle parking facilities (in German). This document, produced by the Hessian Ministry of Economics, Energy, Transport and Housing, offers comprehensive information on all aspects of bicycle (and cargo bike) parking (https://www.nahmobil-hessen.de/wp-content/uploads/2020/05/200504\_Leitfaden\_Fahrradabstellanlagen\_RZ\_web\_Doppelseiten.pdf)

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Alternately, the Working Group of Pedestrian and Bicycle-Friendly Cities, Municipalities and Districts in North Rhine Westphalia has produced Hinweise für Architekten und Bauherren zum Abstellen von Fahrrädern, which provides information (in German) for architects and building owners on bicycle parking (www.agfs-nrw.de/fachthemen/parken-und-abstellen/hinweise-zum-abstellen-von-fahrraedern)

Investors and mobility service providers have a general obligation to inform the Ministry for Building, Mobility and Urban Development on the status of the implementation of their mobility management measures, as well as their effects. If the measures are deemed insufficient or are not implemented to the full extent of the approved plan, the approval of the municipality can be revoked. In such a case, the in-lieu payment applicable at the time the payment was made must be paid in full to the municipality.

### Determining the mobility budget (step-by-step)

- The parking space requirement for cars and for bicycles is calculated on the basis of the reference table. For residential buildings with more than three flats, the calculation varies depending on the zone.
- 2. The calculated parking space requirement can be reduced in Zones I and II by 40% and in Zone III by 20%. This does not apply to residential buildings and car-related uses such as garages. The calculated number of bicycle parking spaces may not be reduced.
- 3. The obligation to put in place mobility management measures is determined based on the calculated parking space requirement. The minimum limit of the obligation in Zones I and II is four parking spaces and eight in Zone III, with the exception of building additions or conversions of existing buildings to residential use.
- 4. The mobility budget for mobility management can now be calculated: This replaces proportionately the construction of car parking spaces. Of the (reduced) parking requirement, 75% of the parking spaces in Zone I, 50% of the parking spaces in Zone II and 25% of the parking spaces in Zone III must be transferred to a mobility budget. For each parking space replaced by an in-lieu payment, the equivalent amount is set at 90% of the in-lieu payment as defined in Paragraph 10.
- 5. There are now three options for the remaining parking space requirement.
  - a. It can be used for actual construction,
- b. a (proportionate) in-lieu payment can be made to the city, or
- c. it can be transferred to a mobility budget.

This would correspond to car-free building. In Zone I, the construction of actual parking spaces is only possible in exceptional cases.

## Case examples following the Mobility for New Buildings Bylaw

The rules contained in the Mobility for New Buildings Bylaw may appear complex and confusing at first. The following calculation examples illustrate in a practical way the principle of determining the mobility management required as well as the required car and bicycle parking spaces.

#### Case example 1: New-build block of flats

A property developer wants to build a building with 10 residential units, each with 70m<sup>2</sup> of living space. The property is located in Zone II, as designated in the Mobility for New Buildings Bylaw.

Test step		Explanation	Example
Step 1: Determine the theoretical requirement for parking spaces (Paragraphs 4 and 5 of the Mobility for New Buildings Bylaw)	Required bicycle parking spaces (Paragraph 4)	one per 30m² total living space (reference table, number 1.2)	10 x 70m² living area / 30m² living space = 23 bicycle parking spaces must be built
	Theoretical requirement for car parking spaces (Paragraph 4)	0.6 per flat (reference table, number 1.2)	0.6 x 10 flats = 6 theoretical car park- ing spaces (not for actual construction)
	Reduction (Paragraph 5)	There is no reduction in the parking space requirement for residential use (reference table, number 1).	
Step 2: Determine the obligation to fulfil mobility require- ments (Paragraph 3 of the Mobility for New Buildings Bylaw)	Is there an obligation to provide car and bicycle parking spaces and mobility management?	The parking space requirement is above the minimum limit of four (Paragraph 5, Section 3) This concerns a new building.	Yes, there is an obligation to fulfil the mobility requirement.
Step 3: Fulfil the mobility requirement according to Paragraph 6 of the Mobility for New Buildings Bylaw through: 1. mobility management measures 2. construction of parking spaces 3. payment in lieu of parking spaces	Mobility management measures (Paragraph 7 of the Mobility for New Buildings Bylaw)	Number of parking space equivalents allocated to mobility management (Paragraph 7, Section 1): in Zone II, at least half of the parking space equivalents (factor 0.50)	6 theoretical car parking spaces x 50% = 3 theoretical car parking spaces must be dedicated to investment in mobility management
		Equivalent amount for mobility management in accordance with Paragraph 10 and Annex 3 to Paragraph 7: €12,600 per parking space in Zone II, with at least 90% of the amount required under Paragraph 10 to be spent on mobility management.	3 x €12,600 x 0.9 = €34,020 budget for mobility plan (including communication plan) covering a period of at least five years
	Construction of car par- king spaces (Paragraph 8 of the Mobility for New Buildings Bylaw)	Calculated car parking spaces minus the share for mobility management	6 calculated car parking spaces - 3 = 3 car parking spaces to be built

The calculated parking requirement is 6 car parking spaces and 23 bicycle parking spaces. The property developer must fulfil 50% of this calculated car parking requirement through mobility management measures. This amounts to 3 calculated car parking spaces, which results in a budget for the mobility plan of €34,020. The The 23 bicycle parking spaces must be built.

However, this property developer wants to build carfree and invest 100% of the mobility requirement in mobility management measures for the residents. This results in a total budget of €68,040 for the mobility

plan. This is made up of the abovementioned €34,020 plus €34,020 for in-lieu payments for the 3 additional parking spaces (including a 10% discount for mobility management). The mobility management measures can consist of one or more mobility services.

built in a gap site between two existing buildings

An investor wants to build a building with 400m<sup>2</sup> of usable retail space and 10 residential units, each with 70m<sup>2</sup> of living space. The property is located in a gap between two existing buildings in Zone II.

Test step		Explanation	Example	
Step 1: Determine the theoretical requirement for parking spaces (Paragraphs 4 and 5 of the Mobility for New Buildings Bylaw)	Bicycle parking space requirement (Paragraph 4)	Reference table, number 1.2: one per 30m² total living space Reference table, number 3.1: one per 40m² of usable com- mercial space	10 x 70m² living space / 30m² living space = 23 required bicycle parking spaces for residential use 400m² commercial floor space / 40m² x 1 = 10 bicycle parking spaces required for commercial = 33 bicycle parking spaces must be provided	
	Theoretical car parking space requirement (Paragraph 4)	Reference table, number 1.2: 0.6 per flat Reference table, number 3.1: one per 40m² sales area	0.6 x 10 flats = 6 car parking spaces for residential use 400m² usable commercial space / 40m² x 1 = 10 theoretical car parking spaces for commercial = 16 theoretical car parking spaces (not for actual construction)	
	Reduction (Paragraph 5)	There is no reduction in the parking space requirement for residential use according to number 1 of the reference table. For other uses, there is a 40% reduction in Zones I and II.	= 6 theoretical car parking spaces for residential use = 10 - (10 x 0.4) = 6 theo- retical car parking spaces for commercial = 12 theoretical car parking spaces after the reduction	

Test step		Explanation	Example	
Step 2: Determine the obligation to fulfil mobility requirement (Paragraph 3 of the Mobility for New Buildings Bylaw)	Is there an obligation to provide car and bicycle parking spaces and mobility management?	The parking space requirement is above the minimum of 4 car parking spaces in (Paragraph 5, Section 3).  This concerns a new building.	Yes, there is an obligation to fulfil the mobility requirement.	
Step 3: Fulfil the mobility requirement according to Paragraph 6 of the Mobility for New Buildings Bylaw	Mobility management measures in accordance with Paragraph 7	Number of parking space equivalents allocated to mobility management (Paragraph 7, Section 1): in Zone II, at least half of the parking space equivalents (factor 0.50)	12 theoretical car parking spaces x 50% = 6 theoretical car parking spaces must be dedicated to investment in mobility management	
		Equivalent amount for mobility management in accordance with Paragraph 10 and Annex 3 to Paragraph 7: €7,900 per parking space for buildings built in gaps in Zone II, with at least 90% of the amount required under Paragraph 10 to be spent on mobility management.	6 x €7,900 x 0.9 = €42,660 budget for mobility plan (including communication plan) for a period of at least five years	
	Construction of car parking spaces (Paragraph 8)	Theoretical car parking spaces minus the share for mobility management	12 theoretical parking spaces - 6 = 6 car parking spaces to be constructed	

The calculated parking requirement is 12 car parking spaces and 33 bicycle parking spaces. The investor must fulfil 50% of this calculated car parking requirement through mobility management measures. After deducting the commercial car parking spaces, this amounts to 6 calculated car parking spaces, which results in a budget for the mobility plan of €42,660. The measures can consist of one or more mobility services. The remaining six calculated car parking spaces must be built. The 33 bicycle parking spaces must be built.

The investor decides to build the six required car parking spaces. S/he also independently installs a charging station with two charging points so that residents and retail customers can charge electric vehicles there. The charging station cannot be claimed as part of the mobility plan because it is available for private, as opposed to shared, vehicles. The developer has another four parking spaces equipped with empty ducts for electric cables in accordance with the federal Building Electric Mobility Infrastructure Act so that they can be retrofitted without great effort if demand for e-charging increases.

#### Planning mobility management – what measures are possible?

A wide range of mobility management measures can be from category 1 is mandatory. The measures must be

mixed and matched. The focus is on the shared benefit of the mobility services offered. Mobility management measures can be combined, but at least one measure

offered for at least 5 years and must be accompanied by a communication plan. The following table provides an overview of possible measures, which are categorised according to their impact on traffic. This list is not ex-

haustive. Other well-founded measures are possible in consultation with the transport department of the Ministry for Buidling, Mobility and Urban Development responsible for mobility management (see contact on page 15).

Category	Measure	Type of implementation	Permitted for projects (reference table)	Suggested for implementation if:
Category  1  Mobility services with the highest impact	Public transport passes	Transferable public transport tickets for residents and employees	For residential users and for othe projects	<ul> <li>Nearest public transport stop is a maximum of 300 metres from the property</li> <li>The user group does not have a public transport season ticket already (e.g. not suggested for student residences, as students generally have a semester ticket)</li> </ul>
		Permanent job tickets for employees	Only for other projects (numbers 2 to 10)	as students generally have a semester ticket)
	<b>BahnCard</b> (German national railway discount card, for long-distance travel)	25, 50 or 100% discount cards for employees	Only for other projects (numbers 2 to 10)	The user groups make occasional to frequent long-distance journeys.
	Car sharing	Installation of a car sharing station on the property**	All	<ul> <li>No car sharing service is currently available in the immediate vicinity. Existing car sharing station in the neighbourhood (max. walking distance 300 m) can be included in the mobility management plan if sufficient capacity is available there</li> <li>Car sharing parking spaces exist in a clearly visible, publicly accessible location (e.g. not in the lowest level of an underground car park and not in so-called "fear areas")</li> <li>Car sharing services with a mixed fleet (different vehicle and drive types) can cover a wider range of mobility needs</li> <li>** An appropriate number of car sharing spaces is based on the standard: 1 shared vehicle per 45 potential users from the property and the immediate neighbourhood</li> </ul>
		Operating cost subsidy for a car sharing scheme in the nearby area	All	• Location is in one where profitability is not to be expected immediately. However, the station should be able to finance itself within a maximum of 5 years
		Membership for residents or employees	All	<ul> <li>User group includes people with driving licences (e.g. in the case of residences for refugees or assisted living for people with disabilities, car sharing memberships do not make sense for all residents, but may make sense for employees)</li> <li>Car sharing station is within 300 metres of the property</li> <li>Contract amount is sufficient to finance memberships for at least 5 years</li> <li>The number of company cars/the vehicle fleet can be reduced as a result</li> </ul>
	Taxi	Taxi vouchers for residents or employees	All	<ul> <li>At locations where public transport connections (especially at certain times of the day) is patchy or longer distance away</li> <li>For target groups with limited mobility</li> </ul>
	Carpools	Permanent operation and incentives for carpooling	Only for other projects (numbers 2 to 10)	For use by commuters
		Premium parking spaces for carpools	Only for other projects (numbers 2 to 10)	
	Bicycle parking	Installation of additional bicycle parking spaces or cargo bike parking spaces	All	At locations with a particularly high demand for bicycle parking



Category	Measure	Type of implementation	Permitted for projects (reference table)	Suggested for implementation if:
Category  Compared to the comp	Cargo bikes/cargo bike sharing	Station (including purchase of bikes)  Membership for residents or employees	All	<ul> <li>Users need to move goods (e.g., shopping or transporting children by bike). Particularly useful if the target group also includes those without driving licences</li> <li>Access for all households/other uses is guaranteed</li> </ul>
	Bike sharing	Station on property  Membership for residents or employees	All	<ul> <li>The facility is located in the bike sharing provider's business area</li> <li>The target group also includes people with limited bicycle availability (as an introduction to cycling or as a replacement bike/visitor bike)</li> <li>The "last mile" is a challenge in terms of connectivity</li> <li>Target group also includes those without driving licences</li> </ul>
Category  Generally only permissible in combination with measures from Category 1 and 2  Chainfr	BahnCard (German national rail- way discount card, for long-distance travel)	BahnCard 25 or 50 for residents	For residential users only	Occasional to frequent long-distance journeys are made by the user groups
	E-scooter and moped sharing	Station on property	All	<ul><li>Building is located in the business area of the mobility service providers</li><li>As a "last mile" supplementary service</li></ul>
		Membership for residents or employees	All	
	Bicycle repair shop	Set up and operation of a non-profit bicycle repair shop	All	<ul> <li>In combination with maintenance and hire of various bicycles (for larger residential projects)</li> <li>There is a shared, secure room with tools and space for repairs</li> <li>The operating plan is guaranteed</li> </ul>
	Additional modes of transport	Procurement and supply of bicycle trailers, two-wheeled shopping trolleys, handcarts, wheelbarrows, etc., for shared use	All	<ul> <li>Particularly suitable for a wide range of use needs (transport of various objects, etc.)</li> <li>Access to and support/maintenance of the means of transport is guaranteed</li> </ul>
	Parcel lockers	Installation of parcel lockers on the property to avoid delivery traffic	All	<ul> <li>There are larger residential projects (neighbourhood level)</li> <li>A supplementary concierge service makes sense</li> <li>Parcel lockers are located in a publicly accessible, well-lit location</li> <li>Particularly if a cross-provider facility is possible</li> </ul>
	Charging infrastructure for sharing services	Installation of charging infrastructure for car sharing, e-cargo bikes, e-bikes and pedelecss	All	<ul> <li>Overall mobility needs can be satisfied with electric support</li> <li>An introduction for users is provided</li> </ul>
Communication plan  Communication is everything! Inadequate or inappropriate communication reduces the reach and impact of the measure(s)		Creation of a communication plan and permanent signage on the property	All	<ul> <li>The reach and impact of the measures should be maximised – always!</li> <li>Different points in time should be covered:</li> </ul>
		Directly provided user information (e.g. when moving in, hiring, through a newsletter, etc.)	All	<ul> <li>before moving in/hiring (advertise the services offered)</li> <li>at the time of moving in/hiring</li> <li>while living/working there</li> </ul>
		Regular open communication events at least once a year	All	

The following measures/costs canNOT be counted towards a mobility plan:

- Construction costs of car parking spaces (exceptions may apply in connection with car sharing)
- Charging infrastructure for private vehicles (i.e., not for shared vehicles)
- Investments in cycling infrastructure in public space
- Subsidies for construction costs for mobility stations in public space or for neighbourhood garages for cars

rather than car parking spaces

Contracts for mobility management measures within a mobility plan can only be entered into with service providers that have a signed framework agreement with Bremen's Ministry for Building, Mobility and Urban Development. Such framework agreements include a general obligation to provide information to the authority as well as certain quality criteria. A list of these providers can be viewed at: bau.bremen.de > Mobilität > Mobilitätsmanagement > Mobilitätskonzepte nach MobBauOG

Are you a provider who would like to be included in this list? If so, please contact: mobilitaetskonzepte@bau.bremen.de.

#### Side note on e-mobility

The German Federal Electric Mobility Infrastructure Act (GEIG) implements a requirement from the EU Buildings Directive for the installation of charging and electrical infrastructure for electric mobility in buildings. For new residential buildings with more than five car parking spaces, all car parking spaces must be equipped with charging infrastructure; for non-residential buildings with more than six parking spaces, one third must be equipped with charging infrastructure and at least one charging point must be installed. More information can be found (in German) on the website of the Federal Ministry of Transport here: www.gesetze-iminternet.de/geig/BJNR035400021.html







#### What must be contained in the mobility plan?

The Municipality of Bremen's Mobility for New Buildings Bylaw obligesproperty developers to submit

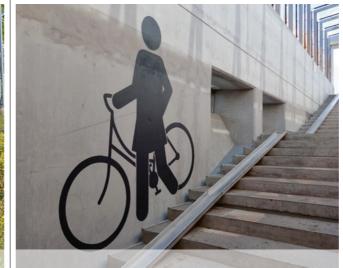
a mobility plan to the responsible authority. This can be drawn up informally but must contain the following components:

#### Checklist

- O Description of the building project including a description of the user groups/residents
- Planning documents for the location of mobility services (as far as possible) as well as car and bicycle parking spaces on the property/in the building
- O Breakdown of the parking space requirement as determined by the reference table and a breakdown of the fulfilment of the mobility requirement according to Paragraphs 6, 7 and 8 and the amount of the in-lieu payment (including the annex: Mobility plan, as per the Mobility for New Buildings Bylaw)
- Elaboration of the planned mobility services, including:
  - A description of the planned measures and an explanation of the users' access to the mobility services
  - Name(s) of the mobility service provider(s) (if available)
- Proof of costs, e.g., by submitting a contract for the planned sum with one or more mobility service providers or offers for procurement, etc.
  - Breakdown of how the in-lieu equivalent amount will be allocated to the individual mobility management measures
  - Planned run times for contracted mobility services
  - Possible adjustments in the case of non-use of the servicese
- O Description of the communication measures to be used to present the mobility services to the user groups









#### Side note: What is the impact of a mobility concept?

The aim of the mobility management measures is to reduce car use and private car ownership, thus also reducing the demand for parking spaces.

In April 2021, a study was published by team red Deutschland GmbH which evaluated the mobility measures within the framework of Bremen's Parking Space Bylaw. The effectiveness of mobility concepts in place was examined.

The most important effects identified concern the number of cars available in the households and the use of private cars and of environmentally friendly modes (including walking, cycling, public transport, car sharing and carpooling). The proportion of car-free households in the residential properties analysed is significantly higher than in the control group surveyed. Compared to the control group, the mobility behaviour of the users is also significantly more environmentally friendly: they use public transport more frequently and cycle more and drive less often than the control group.

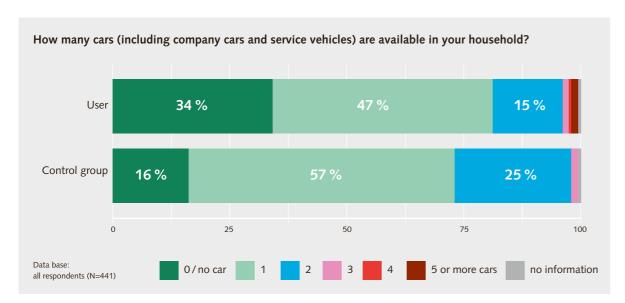


Figure 3: Results of a study on the Mobility for New Buildings Bylaw in Bremen, 2021 (source: team red Deutschland GmbH)

There were additional findings on the popularity of the services offered and on the provision of mobility services as compared to the construction of car parking spaces. In response to the question "In general, what do you think of the fact that alternative mobility options such as those offered in your residential complex are provided instead of car parking spaces?", 54% of users responded with "good" or "very good".

The mobility management measure of public transport season tickets was particularly popular among users. All measures were to be implemented over as long a period as possible and with accompanying communication to achieve the best possible results.

The study is available at: www.bauumwelt.bremen.de/mobilitaet/nachhaltigemobilitaet/mobilitaetsmanagement-1266123

Do you have questions about Paragraph 7 of the Mobility for New Buildings Bylaw? Do you need advice on appropriate measures for your property? A preliminary consultation on your mobility plan is possible and can be arranged by contacting the mobility management

#### Contact:

#### Free Hanseatic City of Bremen

The Ministry for Building, Mobility and Urban Development

Department for Strategic Transport Planning Contrescarpe 72 28195 Bremen

E-Mail: mobilitaetskonzepte@bau.bremen.de www.bau.bremen.de



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