

SITE1.3 Transport access

Objective

Our objective is to promote sustainable mobility in various forms for the building users and to ensure that sustainable traffic infrastructure is created.

Benefits

Sustainable, intelligent traffic infrastructure allows users to choose the most appropriate means of transport for their individual needs. If a wide variety of mobility provisions are offered, it can be assumed that the use of motorised private transportation, and hence the associated amount of pollution and other negative effects will be reduced. Furthermore, user satisfaction with the site and the building will increase, affordable mobility will expand and more people are encouraged to take up healthy, active modes of travel like walking and cycling.

Contribution to overriding sustainability goals



CONTRIBUTION TO SUSTAINABLE DEVELOPMENT CONTRIBUTION TO THE GERMAN GOALS (SDGS) OF UNITED NATIONS (UN) SUSTAINABILITY STRATEGY Reduce mortality from non-communicable 3.4 3.2.a/b Air pollution diseases and promote mental health Mobility 11.2.b Reduce illnesses and death from hazardous 13.1.a Significant 3.9 Climate protection chemicals and pollution Develop sustainable, resilient and inclusive 9.1 infrastructures Upgrade all industries and infrastructures for 9.4 sustainability Promote universal social, economic and 10.2 political inclusion Affordable and sustainable transport sys-11.2 tems Reduce the environmental impact of cities 11.6 11.7 Provide access to safe and inclusive green and public spaces Implement policies for inclusion, resource 11.b efficiency and disaster risk reduction Integrate climate change measures into 13.2 policies and planning Moderate



Outlook

Mobility is currently undergoing radical change (e.g. electric vehicles). Current and future developments are being monitored and deliberated.

Share of total score

				SHARE	WEIGHTING FACTOR
Office	Education	Residential	Hotel	1.1%	2
Consumer market		Shopping cen	tre		
Department stores		Logistics			
Production					
Assem	oly buildings				



Mobility is intrinsically linked to the building and its infrastructure, both as a starting point and an end point. One of the primary concerns besides a location that is easy to travel to is the quality of the transport links using alternative modes of transport.

A qualitative-quantitative method is used to evaluate the proximity and type for the indicators motorised private transportation, public transport, cyclists, pedestrian traffic and the barrier-free design of bus stops.

Innovative mobility elements can be achieved using the innovation area indicator. The number of points available therefore adds up to more than 100 points; however, no more than 100 points can be awarded in total. Depending on the use, the content of the indicators can be applied accordingly.

Measurement of the distance: If there is a considerable obstruction (river, motorway, rails, etc.) between the building and the target object, the real distance (walking/driving path) must be used.

NO.	INDICATOR	POINTS
1	Motorised private transportation	
1.1	Surrounding area:	Max. 15
	Access to a trunk road	+5
	Access to a highway	+5
	Access to a main road	+5
1.2	Building-related	
	The parking spaces allocated to the building are integrated into a higher-level	10
	parking concept	
2	Public transport	
2.1	Stops	
	Direct distance 350 m	5
2.2	Access to the nearest railway station	Max. 5
	≤ 20 minutes	1
	≤ 15 minutes	2.5
	≤ 10 minutes	5
2.3	Public transport frequency	Max. 5
	Every 15 minutes max.	1
	Every 10 minutes max.	2.5
	Every 5 minutes max.	5
2.4	Building-related	Max. 10
	 Access to passenger information (permanent notice or digital display) 	+5
	A map of the surrounding area is displayed, showing the location of bus stops and how far away they are in minutes; alternatively, signposting is provided	+5



3	Cyclists	
3.1	Bicycle paths (500 m)	Max. 5
	Partially mixed with vehicular traffic	2.5
	Not mixed with vehicular traffic/shared space or bicycle lane	5
3.2	Access	Max. 5
	Regional access and continuity	2.5
	National access (> 10 km) and continuity	5
3.3	Building-related	
	Access road within the boundaries of the property leading directly to the	5
	building/parking facilities	
4	Pedestrian traffic	
4.1	Pedestrian path network (radius of 350 m from the main entrance)	2–5
	Up to 50% of walking possibilities covered	2
	More than 80% of walking possibilities covered	3
	All walking possibilities covered	5
4.2	Crossing possibilities	3–5
	Direct crossing is possible for at least 80% of paths	3
	 Direct crossing is possible without any restriction 	5
4.3	Signage	Max. 5
	Extensive signage	3
	Extensive signage and extensive navigation maps	5
5	Barrier-free design of stops	
5.1	Barrier-free access to nearby public transport stops	5–10
	Height differences and clearances ≤ 3 cm, access points marked, weather	
	protection	
	Covers up to 80% of access points	5
	Covers all access points	10
5.2	Barrier-free design of the path to the building and the area surrounding it	
	No visual obstructions, tactile guiding elements, dips, area is not crossed by cyclists	10

Site quality SITE1.3 / Transport access REPORTING AND SYNERGIES



As in 1–5

+5

Re 1–5 INNOVATION AREA

Explanation: The evaluation examines whether innovative mobility elements have been introduced, which are tailored to the specific conditions of the building and compensate for difficulties in terms of transport access and mobility infrastructure. If additional mobility elements such as shuttle, company bicycles or company tickets are offered to the building users, or other effective means of achieving the same objectives are placed at their disposal, such as district-based mobility management, company mobility management (car and bike sharing and their integration with the public transport network) and innovative developments in the surrounding public transport network, points can be awarded in accordance with the evaluation scheme in indicators 1–5.

For each innovative mobility element



SUSTAINABILITY REPORTING AND SYNERGIES

Sustainability reporting

The elements listed below are good key performance indicators (KPIs) to report.

NO.	KEY PERFORMANCE INDICATORS (KPIS)	UNIT
KPI 1	Number of access links to roads for motorised private transportation	[number]
KPI 2	Number of nearby public transport stops (< 350 m), stations (< 10 minutes)	[number]
KPI 3	Number of nearby cycle paths (< 500 m)	[number]
KPI 4	Number of nearby pedestrian path networks that cover all walking possibilities	[number]
KPI 5	Fully barrier-free public transport stops	Yes/no
KPI 6	Number of innovative mobility elements	[number]

Synergies with DGNB system applications

 DGNB DISTRICT: Indicators 1–4 and 6 correspond to the content of criteria TEC3.1 and TEC3.2 (mobility infrastructure for motorised/non-motorised transportation) from the schemes for urban districts and business districts.



APPENDIX A – DETAILED DESCRIPTION

I. Relevance

The objective is to conserve resources and increase user comfort by means of a sustainable mobility infrastructure for traffic.

The following benefits for companies, municipalities and/or users can therefore be achieved:

- Easy accessibility for everyone, not limited to a specific means of transportation
- Increase in environmental quality, i.e. reduction in the environmental impacts of individual motorised transportation
- Better quality of life
- Improved accessibility, especially for pedestrians and cyclists, as well as road users with restricted mobility

II. Additional explanation

Mobility is currently an important site factor. The presence of different modes of transport and prioritising time efficiency and convenience when integrating them into the transport network result in a high level of acceptance and use by the building's users.

The concept of mobility is defined as an integrated approach to motorised and non-motorised transportation with the objective of giving equal priority to both, from the design phase to the implementation phase, right through to the use phase.

III. Method

The mobility infrastructure (in conjunction with TEC3.1) supports facilities for electric vehicles and car sharing and measures to encourage cycling and pedestrian traffic.

Indicator 1: Motorised private transportation

The building must be accessible by motorised private transportation; the type of roads depends on the site and the scheme. Parking spaces for employees, visitors and other users are also necessary. It is advantageous if the parking spaces allocated to the building are integrated into a higher-level parking concept.

Indicator 2: Public transport

- A well-developed public transport network within easy reach of the site and served at regular intervals by (different forms of) transport ensures that the building is accessible and means that the number of people arriving in motorised private transportation can be reduced.
- The building's contribution is evaluated by assessing the accessibility of passenger information, routing and signposting.



- The situation is similar for the cycle path network: It should allow for access from outside the region, be separate from vehicular traffic and be continuous as far as possible.
- The building's contribution is evaluated based on the access route: The evaluation examines whether there is an access route directly to the building/bicycle parking facilities that is easy to cycle along.

Indicator 4: Pedestrian traffic

The mobility infrastructure elements should be designed so as to encourage people to travel on foot. These include a fully developed pedestrian path network, safe crossing possibilities that take the most direct route where possible, and signage displaying directions.

Indicator 5: Barrier-free design of bus stops

Using barrier-free design for the adjacent public transport stops and for access to the building and areas in the immediate vicinity ensures that the travel to and from the building is easy for everyone.

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APPENDIX B – DOCUMENTATION

I. Required documentation

Examples of possible evidence include the following items. The documentation submitted for the evaluation of individual indicators should comprehensively and clearly demonstrate compliance with the relevant requirements.

DESCRIPTION	SHORT CODE
Documentation of the (planned) stops on an overall plan with mapping of the distances and, if necessary, photos	А
Description and calculation of the service frequency of the individual stops and routes; the service frequency must be proved by means of suitable documents (e.g. timetables); alternatively, documents from transport companies/operators on the planned service frequency	В
Documentation of the stops on an overall plan with meaningful photos which demonstrate the quality of the individual stops	С
Overall site plan with a description of the relevant elements	D
Overall plan of the planning area showing the roads and streets	E
Proof by means of suitable planning documents	F
Proof in the form of photo documentation, clear representation in the site plan	G
Documents from transport companies/operators on planned services	Н
Proof in the form of screenshots, printouts or written confirmation by the facility manager	Ι
Overall plan with routing and signage locations; if necessary, photo documentation of the implementation of the measures	К
Documentation of signage in the form of suitable documents (e.g. plans, photo documentation, etc.)	L
Rough estimation of journey times, or travelling times for public transport	М
Timetables	Ν

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INDICATORS	PRE- CERTIFI- CATE	CERTIFI- CATE
1. Motorised private transportation	D, E	D, E
2. Public transport	A, B, C	A, B, C, G, H, I, M, N
3. Cyclists	D, E, F, K	D, E, F, K
4. Pedestrian traffic	D, E, F, K, L	D, E, F, K, L
5. Barrier-free design of stops	F, G	F, G
Innovation area (innovative mobility elements)	F, G	F, G

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I. Version

Change log based on version 2018

PAGE	EXPLANATION	DATE
701	General: scheme "assembly buildings" has been added	16.09.2021
702	Evaluation: Measurement of the distance in case of obstructions	16.09.2021

II. Literature

- Sustainable Development Goals icons, United Nations/globalgoals.org.
- EN 13816. Local public transport quality standard. Berlin: Beuth publisher, July 2002. <u>https://de.scribd.com/document/324645289/En-13816-Standard-Service-Quality-Definition-Targeting-and-Measurement</u>
- Collection of Cycle Concepts 2012, Danish Cycling Embassy, 2012. <u>http://www.cycling-embassy.dk/wp-content/uploads/2013/12/Collection-of-Cycle-Concepts-2012.pdf</u>