





# BYPAD REPORT CITY OF ÚSTÍ NAD LABEM 2010





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1.	What is BYPAD	3
2.	City of Ústí nad Labem	6
2.8.	Cycling	11
2.8.1.	Cycling infrastructure in the city	11
2.8.2.	User Survey	13
2.8.3.	Services for cyclists	14
2.8.4.	Informace pro cyklisty	Chyba! Záložka není definována.
2.8.5.	Možnosti přepravy kol v prostředcích MHD	Chyba! Záložka není definována.
2.8.6.	Nehodovost cyklistů & prevence	18
3. <b>definc</b>	Strategické rozvojové dokumenty/projekty města ve vzta	ahu k cyklistice <b>Chyba! Záložka není</b>
3.1.	Strategie rozvoje města Ústí nad Labem do roku 201	519
3.2.	Integrovaný plán rozvoje města (IPRM)	Chyba! Záložka není definována.
3.3.	Realizační plán Programu aktivní politiky	Chyba! Záložka není definována.
3.4.	Archimedes Civitas	Chyba! Záložka není definována.
4.	Proces BYPAD auditu	22
4.1.	Výsledky	Chyba! Záložka není definována.
4.2.	Prioritizace opatření	Chyba! Záložka není definována.
5.	Přílohy	Chyba! Záložka není definována.
6		Chyba! Záložka není definována.

### 1. What is BYPAD

BYPAD (Bicycle Policy Audit) is an instrument that allows cities and regions to evaluate and improve the quality of their local cycling policy.

#### 1.1. The Aim of the BYPAD Audit

The aim of a BYPAD audit is to develop a quality management tool which indicates the quality level of cycling policy in cities/towns or regions and prepares a quality plan/action plan to develop this cycling policy. BYPAD regards cycling policy as a dynamic process where different components must fit together in order to get a well-balanced sustainable cycling policy.

BYPAD offers cities/towns or regions an objective monitoring tool for following up improvements of their cycling policy through the conduct an audit. Repeated applications of BYPAD give cities/ towns/ regions the basis for setting out and monitoring the development of their cycling policy. For many cities the BYPAD audit is the door opener to start up improvement actions for local cycling policy.





#### 1.2. Structure of a BYPAD Audit

There are 9 modules in total within the BYPAD audit, which consider the planning of cycling policy, actions in practice and the evaluation of the planning and actions.

Each BYPAD audit is moderated by a qualified BYPAD auditor. Before administering the main questionnaire the BYPAD auditor receives background information about the cycling policy and facts and figures about practical cycle infrastructure and bicycle use through a standard checklist. The background information covers:

- History of cycling policy
- Cycling support measures implemented
- Current cycling plans of strategies designed to increase bicycle use

The auditor is responsible for encouraging the relevant stakeholders in each location to complete a BYPAD questionnaire. Relevant stakeholders include:

- Politicians
- Officials
- User groups

Having completed the questionnaire on an individual basis, some or all of these stakeholders would be brought together by the BYPAD auditor to discuss and analyse the results in the context of the BYPAD assessment methodology. The assessment methodology is based around allocation of a score to each of 9 modules within the BYPAD questionnaire.





The entire BYPAD quality management chain consists of the following 9 modules which all together ensure a balanced cycling policy:

- 1. User Needs
- 2. Leadership & co-ordination
- 3. Policy on paper
- 4. Personnel & means
- 5. Infrastructure & safety
- 6. Information & education
- 7. Promotion & partnerships
- 8. Complementary actions
- 9. Evaluation & effects

The first 4 modules are combined under the heading of 'planning' and modules 5-8 are combined under the heading of 'actions'.

For every module a separate quality score is generated according to the following 4 levels from what is termed the 'ladder of development', where level four is the most developed:

- Level 1: Ad hoc oriented approach
- Level 2: Isolated approach
- Level 3: System-oriented approach
- Level 4: Integrated approach

More information is available about the BYPAD modules and levels of development in the BYPAD Manual <sup>1</sup>.

Taken together the scores reflect the quality of the current cycling policy in a town, city or region. As a result of a BYPAD audit process, a city/ town/ region receives scores for each of the 9 modules and for its cycling policy as a whole and, most importantly given that this is part of a continuous improvement process, the end result of the process is a BYPAD action plan, which provides detailed guidance on how the site can improve the development and implementation of its cycling policy.

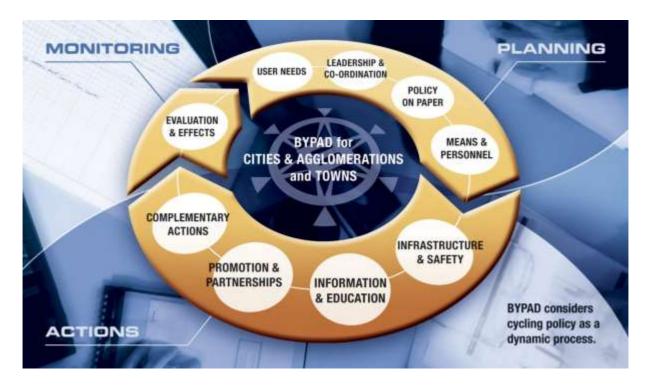
BYPAD has already been carried out by over 101 cities and 18 regions in 21 countries to increase quality, ensure quality, certify quality and compare quality. BYPAD also defines quality standards by collecting information on different aspects of cycling policy in a standardised manner. Based on experiences in many cities, a set of quality standards can be created. This helps cities/towns and regions to reset their ambitions and goals with regard to becoming a better cycling city.

<sup>&</sup>lt;sup>1</sup> The BYPAD Manual is available at <a href="http://bypad.org/docs/BYPAD-Manual.pdf">http://bypad.org/docs/BYPAD-Manual.pdf</a>





**Picture 1 - BYPAD Modules** 



# 2. City of Ústí nad Labem

The city of Usti nad Labem is a unique strategic position. It lies at the confluence of the rivers Elbe and Bílina, 98 km northwest of Prague and 25 km from the border with Germany. On the south side adjacent to the Bohemian Mountains to the north of the Ore Mountains. It is located deep in the Elbe valley and surrounding hillsides. The total area of the town is 94 km<sup>2</sup>.

Picture 2 - Location of the city of Ústí nad Labem in the Czech Republic









Ústí nad Labem is divided into four urban districts, 22 boroughs, 26 cadastral areas and 89 basic residential units. On the 1<sup>st</sup> January 2009, the city had 95 289 inhabitants, including 48 870 women and 46 419 men. The average age was 39,8 years.

The city is one of the largest and most important centers of northern Bohemia, offering a complete range of service sectors. Major shopping centers in the city supply with a wide range of quality and affordable products residents of Ústí nad Labem as well as the surrounding cities. Financial institutions and public administration offices are concentrated in the city. Dense network of school facilities located in Ústí nad Labem offers, beside many preschools and primary schools, total of 21 state and private secondary schools, vocational schools of various types and a University of Jan Evangelista Purkyně.

Ústí nad Labem has a role of an administrative centre for the regional government with the seat of the Regional Office of the Ústí Region, Ústí nad Labem Municipality, district authorities and other offices. The administrative district of the city with extended powers coveres 23 municipalities on the area of 40 445 ha with 120 197 inhabitants (on 1<sup>st</sup> January 2009). Ústí nad Labem is the centre of the Ústí region and it belongs to the NUTS II Northwest Region.

The city is a member of several micro-regional associations: Euroregion Elbe/Labe (a voluntary association of municipalities), Confederacy of municipalities Milada Lake (a voluntary association of municipalities), DELITEUS Tourism Association (an association of legal and natural persons), the North Association of Municipalities (association of legal entities), Association of Towns and Municipalities of the Czech Republic and National Network of Healthy Cities.

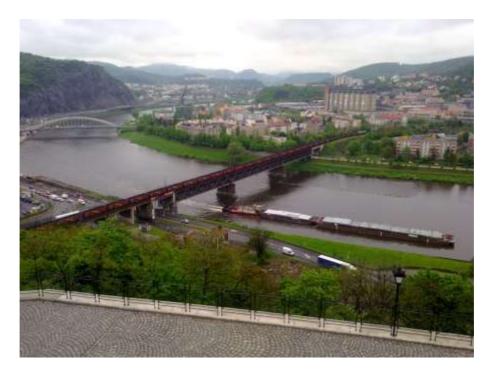
# 3. Transport

City of Ústí nad Labem is an important transport joint – major national and international road, rail and water routes intersect here. Many traffic surveys were realised in the city, including survey on transport infrastructure and on operation of public transportation, but a survey on cycle transport have still beem missing.









#### 3.1. Road Transport

The city is linked to the international road E 442 (Liberec, Děčín, Ústí nad Labem, Dresden) and first class roads I/8, I/30 and I/13. The city is directly connected to the D8 motorway (Berlin - Prague) in the western part of the city. The highway is not completed yeat and is missing 16 km long section through the Bohemian Higlands due to ecological issues. The unfinished highway causes complications in traffic organisation and is temporarily solved by bypasses leading around the missing section.

#### 3.2. Rail transport

Ústí nad Labem is an important railway junction of four railway stations (Main station, West station, Střekov and Noth station), through which leads major international connections to Vienna, Berlin, Budapest, Belgrade or Sofia (Balt-Orient). The international backbone route is the national railway line no. 090 (I. rail transit corridor from the state border - Děčín – Ústí nad Labem - Prague - Breclav – the state border), which is part of the IV. Trans-European multimodal corridor. Currently, the line is under reconstruction and modernization to fullfill parameters corresponding with higher speed of trains and should improve quality of people and goods transport. In the city, inter-regional rail transport, regional urban transport and city public transport will be linked. All Eurocity (EC) and Intercity (IC) trains of European importance stop in the station Ústí nad Labem Main station, which is a major transport terminal for public transport in the Ústí region with about 6 200 passengers transported per day.

#### 3.3. Water transport

Ústí nad Labem is situated on an important European waterway. Elbe waterway is connected to the network of western European waterways, allowing access to Germany, the Benelux, northern France





and major sea ports. Elbe waterway is part of the IV. Trans-European multimodal corridor. Ústí nad Labem offers variety of services for free time activities on the river.

#### 3.4. Air transport

Ústí nad Labem currently operates an airport for small sport aircrafts. The nearest airport for transport planes is located in Prague and in Dresden.

#### 3.5. Public transport

Almost all of the parts of Ústí nad Labem are currently covered by public transport services, which is in the city provided via buses and trolleybuses.

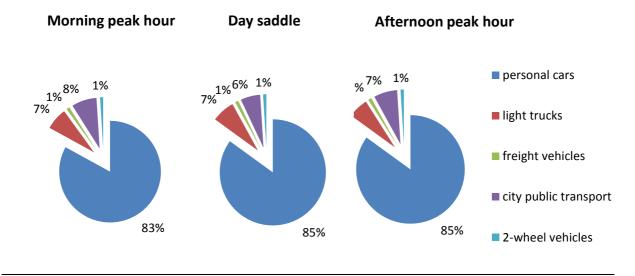
Trolleybus lines serve most of the major inner-city areas; bus services have rather complementary function and operate mainly in the outskirts. City public transport realised 2 890 vehicle-kilometres per average working day. Ústí nad Labem is connected to the surrounding towns and cities by regional buses, while more remote areas are connected by rail services. The public transport is not yet incorporated into an integrated transport system (ITS).

#### 3.6. Modal split

From the traffic surveys, from data on transport infrastructure in the city and from information on the operation of public transportation in central areas, indicators describing the current transport situation were identified.

Length of the road network in the city is 10 530 km, from which 2 970 km are local collective roads and 7 560 km are service roads and tertiary roads. Various regulatory measures are applied on the local roads, such as entrance prohibition, entrance for transport services only, one-way roads, etc. 19 intersections in the city (6 of them are in the city centre) are traffic light controlled. The transport capacity on the average working day is 42,7 thousand vehicle-kilometres.

Chart 1 - Modal split in the city centre

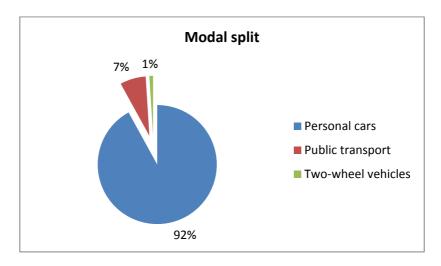






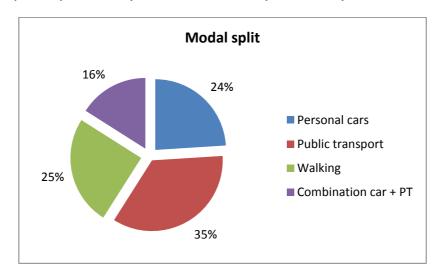
On the entire area of the city, the share of individual modes of passenger transport within the city traffic flow was calculated. The figures are presented in the following chart.

Chart 2 - Modal split - Modes of transport



Determination of the number of trips realised in the city centre was based on data on population in this area, data on transit traffic and data on transport and mobility of its inhabitants. The share of trips in the modal split is presented in the following chart.

Chart 3 - Modal split - Trips realised by various modes of transport in the city centre







#### 3.7. Cycle transport

#### 3.7.1. Cycling infrastructure in the city

The elevation profile of the city is very hilly and rather challenging for cyclists, which is one of the reasons why a cycling infrastructure have not previously been incorporated into the city's transport system.

The major cycle route in Ústí nad Labem passes on the right bank of the Elbe river. The Elbe cycle route (Greenway trail) follows to Germany as Elberadweg cycle route. It is part of the Europen cycling network EuroVelo, which connects all the European countries by 12 cycle routes. The Elbe cycle route is part of the EuroVelo no. 7 leading to Norway through Finland, Sweden, Germany, Czech Republic (Děčín, Prague, Tábor, České Budějovice), Austria, Italy and Malta. The Elbe route is marked as the cycle route no. 2, registered by the Czech Tourist Club. In Ústí nad Labem, no other cycle route is linked with the Elbe route.

The cycle route no.3090 is located on the left bank of the river, by the railway bridge, follows towards the Větruše castle, to Hostovice and leaves the city by III. class road towards Podlešín. Another cycle route situated on the left bank of the river, behind the railway tracks and parallel with the water flow, is the route no. 3091 leading from Vaňov against the water current. Eastern part of the city reaches the cycle route no. 3009B, which is located by the Milada lake.

Czech Tourist Club recorded two more cycle routes in the city, which are not marked. The cycle route no. 3074 begins at the intersection in Klíše, over the Střížovický hill to Střížovice, Všebořice, Habrovice, Bánov and further north towards Telnice. Cycle route no. 3084 enters the city from Žežice, continues to Dobětice, passes the ZOO and follows to the street Důlce under the Marianský hill.

Chart 4 – Current cycle routes in Ústí nad Labem

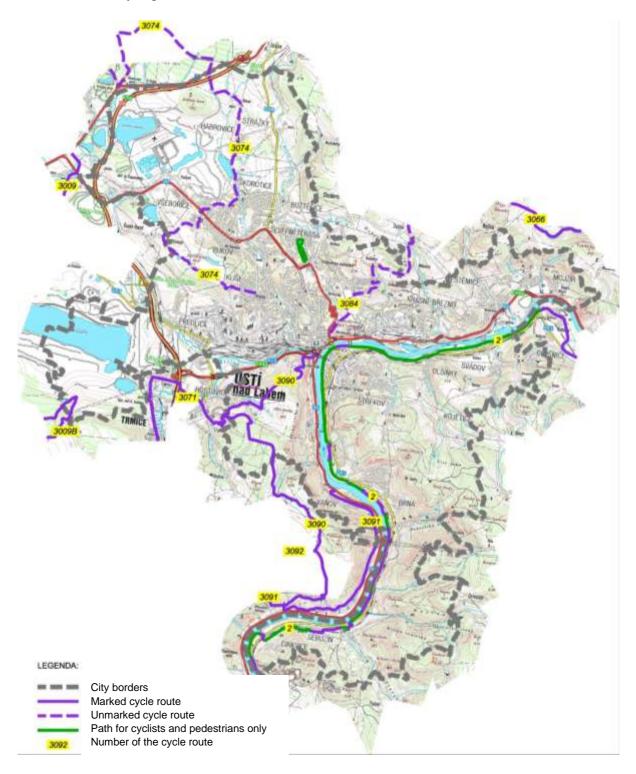
Class	Number	Route	Note
I	2	Dolní Žleb – Děčín Velké Březno – Ústí nad Labem – Libochovany – Litoměřice – Roudnice nad Labem – Štětí – Mělník – Kralupy nad Vltavou – Řež - Praha	The Elbe route continues from Mělník as a cycle route no.24
IV	3009B	Habří - Jedovina	
IV	3074	Ústí nad Labem – Habrovice - Liboňov	unmarked
IV	3084	Mnichov – Žežice – Ústí nad Labem	unmarked
IV	3090	Ústí nad Labem, Větruše – Hostovice – Podlešín - Chvalov – Dolní Zálezly	
IV	3091	Vaňov – Dolní Zálezly – Dubice – Radejčín	

The Elbe cycle route consists of several cycle paths situated in the city (marked green on the map). Other routes dedicated to cyclists and pedestrians only are located in the park in the residential area Severní Terasa.





Picture 4 - Current cycling network in Ústí nad Labem



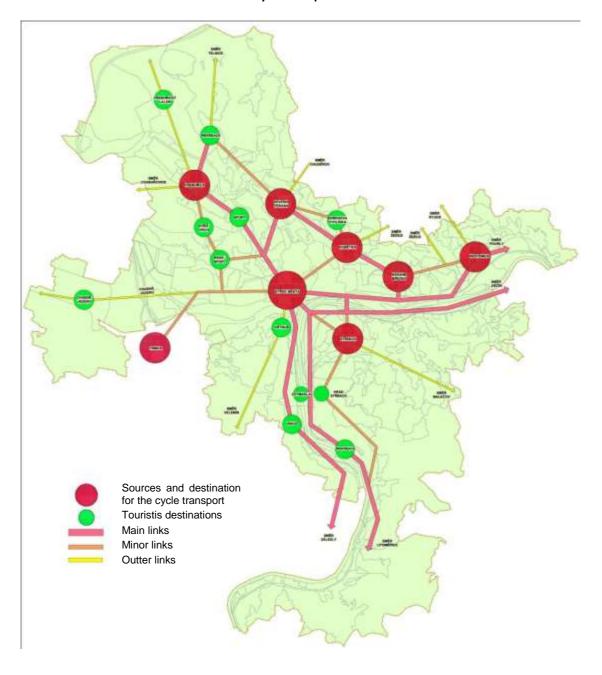




#### 3.7.2. User Survey

Surveys on the use of the current cycling infrastructure are not conducted regularly. Based on the research study<sup>2</sup>, sources and destinations of the cycle transport in the area were identified. Data were farther gathered from realised field surveys, from knowledge of the area, landscape, population, work opportunities and touristic, cultural and recreational attractions in the city.

Picture 5 - Sources and destinations of the cycle transport in Ústí nad Labem



<sup>&</sup>lt;sup>2</sup> Cycle routes in Ústí nad Labem, research study, Project office Budínský, 2001





In 2009, counting of cyclists on the Elbe route was realised by the company Partnerství during the summer holidays on four spots in the Ústí region – in Ústí nad Labem, Děčín, Litoměřice and Nymburk. It was conducted by the Eco-counter tool, which detects differences in temperature of a body and of surroundings, while two sensors monitor a direction of motion.

Between 13<sup>th</sup> – 29<sup>th</sup> July 2009, the Eco-counter detected in Ústí nad Labem in the section between the Mariánký bridge and the Děčínská street total of 6 300 transits. The maximum amount of 830 cyclists was counted on Monday 13<sup>th</sup> July. The average number of cyclists on a working day was 400, while on a weekend only 270 cyclists. The difference was caused by significant weather changes during those days. The hourly profiles showed that the predominant use of the cycle route is for recreational purposes.

Table 1 – Number of cyclists counted by the Eco-counter in the Ústí region

City	Period	Maximum	Minimum	Average on working days	Average on weekends
Ústí nad Labem	13.7 29.7.	830	91	400	270
Děčín	25.6 12.7.	1001	179	350	700
Litoměřice	31.7 12.8.	717	253	500	450
Nymburk	14.8 27.8.	1739	720	1160	1360

Source: Partnership company

#### 3.7.3. Services for cyclists

There are 65 bicycle stands located throughout the city. Most of them have been installed by the Municipality recently, although some of them can be difficult to identify – such as a bicycle stand placed on the Mírové square presented on the picture.

Picture 6 - A bicycle stand on the Mírové square







Table 2 - Bicycle stands located in Ústí nad Labem

No.	Location	Street	District	No. of bike slots	Locks
1	Restaurant U Lesana	Pražská	Vaňov	3	no
	Rest area - poplar alley	cycle path	Sebuzín	8	no
	Rest area - ship port	cycle path	Církvice	3	no
	Restaurant Vrak	cycle path	Střekov	3	no
	Football stadium Tavern u Vodníka	cycle path cycle path	Svádov Svádov	6	no no
	Rest area - former ferry	cycle path	Svádov	8	no
	Forum shopping centre - PT station	Kostelní náměstí	Ústí nad Labem	6	no
	Forum shopping centre - the Labe entrance	U Kostela	Ústí nad Labem	6	no
	Forum shopping centre - Saint Vojtěch Church	U Kostela	Ústí nad Labem	3	no
11	Regional office	Velká Hradební	Ústí nad Labem	3	yes
12	Hotel Vladimir	Masarykova	Ústí nad Labem	2	no
13	Kaufland shopping centre	Okružní	Ústí nad Labem	8	no
14	Health insurance	Štefánikova	Klíše	2	no
	Restaurant Replay To El Paso	Ostrčilova	Klíše	2	no
	University J.E.Purkyně	České mládeže	Ústí nad Labem	6	no
	Winter stadium	Masarykova	Bukov	5	no
	Restaurant Sauna club	Slunná	Všebořice	4	no
	Anosport store Shopping centre Všebořice, Tesco	Havířská Havířská	Všebořice Všebořice	3	no no
	Restarant Stodola	Mírová	Ústí nad Labem	4	
	District office Severní Terasa	Stavbařů	Ústí nad Labem	3	
	Sport facility Severní Terasa	Stavbara	Ústí nad Labem	4	no
	Market Albert	Krušnohorská	Ústí nad Labem	3	no
25	Restaurant Medusa	Mezní	Ústí nad Labem	2	no
26	Restaurant Milpa	Šrámkova	Dobětice	4	no
27	Restaurant Lesní zátiší	Sibiřská	Neštěmice	2	no
28	District office Neštěmice	U Radnice	Neštěmice	3	yes
	Rossmann Store	Krčínova	Krásné Březno	3	no
	Diskont Kik store	Krčínova	Krásné Březno	4	no
	ZOO	Drážďanská	Krásné Březno	5	yes
	Inpeko store Penny market	Janáčkova Neštěmická	Krásné Březno Krásné Březno	10	
	Cycle servis	Drážďanská	Krásné Březno	4	no
	District office Střekov	Národního odboje		3	yes
	Czech Mail	Žukovova	Střekov	3	no
	Playground Střekov	Truhlářova	Střekov	8	no
	Cemetery	U Krematoria	Střekov	3	no
39	Restarant Pod vyhlídkou	Kojetická	Střekov	4	no
40	Restaurant Malířský koutek	Malířský koutek	Střekov	3	no
41	Restaurant Labská bašta	Střekovské nábřeží	Střekov	6	no
	Penny market	Železničářská	Střekov	6	
	Restaurant Větruše	Fibichova	Ústí nad Labem	5	yes
	Library	Velká Hradební	Ústí nad Labem	5	yes
	House of culture Restaurant Pivovarská šenkovna	Velká Hradební Velká Hradební	Ústí nad Labem Ústí nad Labem	3	yes no
	Library	W. Churchilla	Ústí nad Labem	5	
	ZOO	Drážďanská	Krásné Březno		yes
	Ústí nad Labem Municipality	Velká Hradební	Ústí nad Labem		yes
	City stadium - platform	Masarykova	Klíše		yes
	City stadium - changing rooms	Masarykova	Klíše		yes
	Information centre UNL	Mírové nám.	Ústí nad Labem	3	yes
	Czech Mail	Masarykova	Ústí nad Labem		yes
	University J.E.Purkyně - FSE	Moskevská	Ústí nad Labem		yes
	University J.E.Purkyně - Kampus FUD	Pasteurova	Ústí nad Labem	5	yes
	University J.E.Purkyně - Kampus library	Pasteurova	Ústí nad Labem		yes
	University J.E.Purkyně - PF	České mládeže	Ústí nad Labem		yes
	T-Club sport centre Skatepark Bukov	Masarykova Skorotická	Klíše Bukov		yes
	Swimming pool Klíše	U Koupaliště	Klíše		yes yes
	Theatre	Varšavská	Střekov		yes
	Střekov castle	Na Zacházce	Střekov		yes
		Na Zacházce	Střekov		yes
63	Střekov castle	INA Zaciiazce			
	Střekov castle Scout club Krásné Březno	Drážďanská	Krásné Březno		yes





There are two public bike storage rooms located in the city – by the railway stations and in the Municipality building. Eight bike repair services, all of them associated with bicycle shops, are placed throughout the city. Three of them are situated within 1-2 km distance from the Elbe cycle route, two are located on the north of the city near the cycle route 3074, one is located in Krásné Březno and two are directly by the Elbe route. There is a bike park placed in Bukov.

"Cyclists welcomed" certificate refers to facilities suitable for cycling needs, such as restaurants, hotels, camping sites, touristic destinations etc. These facilities are maked by a white and green sign with a smiling bicycle. Facilities certified in Ústí nad Labem are the ZOO, the Information centre and several accommodations.

Picture 7 - Cyclists welcomed



Currently, the city with cooperation with the Civitas Archimedes project is developing the web portal for cyclists in the Ústí region. It will be providing information on cycling news in the city, cycling services, cycle points of interest in the area and especially various data on cycle routes in the region including detail describtion of the route, its surface, difficulty of the terrain, conditions of the infrastructure, warnings about dengarous spots, videos, pictures and interactive maps. The web portal will be finalised during the first half of the year 2011. The trail version is currently online available on the address <a href="http://cyklomapa.usti-nl.cdsw.cz/imapa.aspx">http://cyklomapa.usti-nl.cdsw.cz/imapa.aspx</a>.





Picture 8 - View of the web portal for cyclists in Ústí nad Labem



Cyclists in the city are provided by the Public Transport Company with cycle buses for the season each year between April and October. There are two cycle bus lines offered for transportation – line number 20 and 21, which lead through attractive locations for cyclists in the city:

- Line number 20 runs from Theatre in the city centre ti Zadní Telnice, Adolfov, Krásný Les and back through Telnice to Ústí nad Labem.
- Line number 21 runs from Nakléřov, Petrovice, Tisá, Libouchec and back to the Theater in the city centre.

Both lines operate on weekends, on holidays and on Wednesdays between 9:00 and 15:00 in two-hour intervals.



Picture 9 - Cycle bus in Ústí nad Labem



#### 3.7.4. Safety for cyclists in the city

A rate of cyclists involved in traffic accidents is monitored in the city but the data are not further utilised, cooperation with the local police is limited and details on traffic accidents are not available for processing.

Number of cyclists involved annually in traffic accidents is presented in the following table. Data were gathered from police statistics on roads of 1<sup>st</sup> to 3<sup>rd</sup> class, on highways and expressways. The table shows, that the rate of cyclists involved in traffic accidents is growing.

Table 3 - Cyclists involved in traffic accidents in Ústí nad Labem

Year	Number of traffic accidents in UNL	Traffic accidents involving cyclists	Percentage
2007	88 756	2 354	2,7%
2006	81 685	2 139	2,6%
2005	83 259	2 116	2,5%

Prevention and road safety education for cyclists is aimed primarily at children. It is held regularly throughout a year for all primary schools in the city on traffic courts. Other preventive activities organised by the City Police and by BESIP (within Ministry of Transport competence) are traffic training and competition for young cyclists.

Traffic educational events are annually attend by  $4\,500-7\,000$  children from primary schools and kindergartens. Over the period 2002-2008, these events were attended by  $47\,748$  children.





Picture 10 - Competition for young cyclists organised by the City Police in Ústí nad Labem



# 4. Strategic documents and projects related to cycling in Ústí nad Labem

# 4.1. Strategy for Urban Development of Ústí nad Labem for the year 2015 $^{\rm 3}$

Strategy for Urban Development of the city for the year 2015 is a general strategic documentation with particular importance for future improvements. It determines a clear framework for efficiently targeted decisions. It consists of the analytical part and of proposals. The analytical part characterises the city in a complex view in the current state and serves as a basis for specific proposals. The Strategy includes the SWOT analysis, which provides a comprehensive overview of strengths and weaknesses, opportunities and threats of the city.

Based on the major issues, following priorities were identified:

- Development of public transport and its relation to other modes of transport to enable more efficient accessibility of the city and its surroundings by public transport
- Increase attractiveness and reliability of public transport, improving the vehicle fleet, construction of bus stations, expansion bus stops, removing barriers, etc.
- Development of the city road infrastructure
- Improve road safety and implement modern transport systems

<sup>&</sup>lt;sup>3</sup> "Strategie rozvoje města Ústí nad Labem do roku 2015"





The Strategy for Urban Development of Ústí nad Labem includes assessment of the cycling potential in the city. It states, that Ústí lacks tradition in cycling due to its hilly landscape. Comparison of the city with an average city in the Ústí region is presented in the following table.

Table 4 - Trips to work realised by different modes of transport in Ústí region counted by Transport Research Centre (CDV) in 2001

Locality	Walking	Cycling	PT	Car	Other mode
Ústí nad Labem	13%	1%	57%	18%	11%
Ústí region	25%	4%	36%	23%	12%

Yet other cities abroad proved, that difficult landscape of the territory itself does not have to restrict development of cycling in the city. Ústí nad Labem offers potential in various attractive cycling destinations due to water flows in the area (the Elbe river, Bílina river, Klíšský creek, Ždirnický creek and Neštěmický creek) and beautiful natural surroundings suitable for both daily trips and recreational cycling.

Low use of bicycle transport for commuting purposes is caused mainly by lack of cycling infrastructure and by significant fragmentation of the city by road and rail corridors, which are difficult to overcome.

Despite the shortcomings, the city is continuously and systematically addressing cycling issues and realises efforts and investment funds towards improvements. One of the major activities is development of the Elbe cycle route on the right bank of the river. The route is completed in the section from Libochovany to Olšinky so far.

Other destinations, which lack cycling infrastructure and which have significant potential for cyclists are the following routes:

- Dolní Zálezly Vaňov city centre Krásné Březno Neštěmice Mojžíř Povrly (left bank of the Elbe river)
- City centre Trmice (parallel with the Bílina river)
- City centre Předlice Chabařovice (parallel with the Bíliny river and Ždirnický creek)
- City centre Klíše Bukov Všebořice Chlumec (parallel with the Klíšský creek)
- City centre Dobětice Stříbrníky Severní Terasa (through Dobětická street)

These routes could be used for daily trips as well as for recreational purposes and for transport to surrounding towns in the Ústí region.

# 4.2. Integrated Plan for Urban Development (IPRM) <sup>4</sup>

Integrated Plan for Urban Development is a set of interrelated actions in terms of time and content, which are aimed at achieving the common goal of the city. IPRM is a basic coordination framework, which follows the overall vision and strategy of the city. It serves as a tool to identify and seek solution for issues of the urban development in Ústí nad Labem with the use of Structural Funds in the program period of 2007 - 2013. Interconnection of individual projects is emphasised, as well as partnership between private and public spheres. The IPRM should include both as investment (hard) and non-investment (soft) projects.

<sup>&</sup>lt;sup>4</sup> "Integrovaný plán rozvoje města"





The document includes following assessment of the potential of cycle transport in the city:

Cycle routes are not integrated into the transport network due to their challenging altitude profile. Cycling has currently limited potential for integration into the system of urban transport and is utilised as a leisure activity. The only significant and frequently used cycle route is the Elbe route leading along the river, which is part of the international cycle route Dresden – Ústí nad Labem – Prague. Its importance is mainly in the field of tourism.

The SWOT analysis of the city concludes, that the main strength is presence of the Elbe route and the main weakness is inadequate interconnection of the transport network with cycle and pedestrian routes.

#### 4.3. Program of Active Policy in Ústí nad Labem

The document "Strategic Framework for the Program of Active Policy in Ústí nad Labem for the Year 2006, Including Development Projects" was the final document of the program, which concluded the Implementation Plan. The purpose of this document is to identify medium-term strategic goals and perspectives of the active policy of the city within the context of priorities and measures of fundamental program documents of the Czech Republic and to plan local development projects that contribute to the fulfilment and implementation of identified goals.

The first, strategic part of the document formulates the medium-term goals and perspectives of the active policy of the city. Ii is based primarily on conclusions of the document "Strategy for Urban Development of Ústí nad Labem for the year 2006", which were approved by city authorities in 2002 and updated by findings of the SWOT analysis carried out in December 2003 and by other development documents conducted in recent years.

The second part of the document identifies development of project plans of the city, its strategic views, priorities and programs of the European Union. The project goals were generated on the basis of technical discussions of various interest groups in the city and as a result of the planning processes of Ústí nad Labem Municipality and of other city authorities.

The third, implementation part of the document sets out the key success factors of the development projects in the city and proposes individual steps for project preparation and implementation in relation to the external financial resources.

Projects towards cycle transport development included in the program are:

- Cycle routes on the Stržovický Hill
- Cycle route Ústi nad Labem Děčín

These projects are financed by the SROP ("Společný Regionální Operační Program" – Common Regional Operation Programme).

#### 4.4. Civitas Archimedes

The BYPAD audit was conducted within the Civitas Archimedes project.

Civitas ARCHIMEDES is an effort to solve the problems of medium-sized European cities on terms of creating environmentally sustainable, safe and energy efficient transportation systems. The goal is to introduce innovative, comprehensive and ambitious strategy to ensure environmentally friendly,





energy efficient and sustainable urban transport and thereby reduce the negative impact on the environment. The project combines policy instruments and various operational, technical and organizational measures to achieve safer and more convenient transport solutions in the city. Participating cities are currently city of Aalborg (Denmark), Brighton & Hove (UK), Donostia - San Sebastián (Spain), lasi (Romania), Monza (Italy) and Usti nad Labem (CR).

Other measure dealing with cycling in Ústí nad Labem included in the Civitas Archimedes project is Cycle Transport Improvements.

## 5. BYPAD process

The BYPAD process was conducted with cooperation of the Department of Transport of the Ústí nad Labem Municipality. Data about the current state of cycling in the city were gathered and the city politicians, responsible authorities, officers and local cyclists were involved in the BYPAD team.

For the BYPAD audit, three major meetings of the BYPAD team were held regarding the following topics:

- 23<sup>rd</sup> September 2009 review of the current cycling policy, BYPAD goals and BYPAD process
- 18<sup>th</sup> November 2009 consensus meeting, proposals for cycle transport improvements
- 28<sup>th</sup> April 2010 development of action plans

BYPAD stands for BicYcle Policy AuDit. It is an instrument for cities and regions to evaluate and improve the quality of their local cycling policy. BYPAD analyses the strengths and weaknesses in current policy and provides clear indications for future improvement.

#### 5.1. The aim of the BYPAD audit

The aim of a BYPAD audit is to develop a quality management tool which indicates the quality level of cycling policy in cities/towns or regions and prepares a quality plan/action plan to develop this cycling policy. BYPAD regards cycling policy as a dynamic process where different components must fit together in order to get a well-balanced sustainable cycling policy.

BYPAD offers cities/towns or regions an objective monitoring tool for following up improvements of their cycling policy through the conduct an audit. Repeated applications of BYPAD give cities/ towns/ regions the basis for setting out and monitoring the development of their cycling policy. For many cities the BYPAD audit is the door opener to start up improvement actions for local cycling policy.

#### 5.2. Structure of the BYPAD audit

There are 9 modules in total within the BYPAD audit, which consider the planning of cycling policy, actions in practice and the evaluation of the planning and actions.

Each BYPAD audit is moderated by a qualified BYPAD auditor. Before administering the main questionnaire the BYPAD auditor receives background information about the cycling policy and facts





and figures about practical cycle infrastructure and bicycle use through a standard checklist. The background information covers:

- History of cycling policy
- Cycling support measures implemented
- Current cycling plans of strategies designed to increase bicycle use

The auditor is responsible for encouraging the relevant stakeholders in each location to complete a BYPAD questionnaire. Relevant stakeholders include:

- Politicians
- Officials
- User groups

Having completed the questionnaire on an individual basis, some or all of these stakeholders would be brought together by the BYPAD auditor to discuss and analyse the results in the context of the BYPAD assessment methodology. The assessment methodology is based around allocation of a score to each of 9 modules within the BYPAD questionnaire.

The entire BYPAD quality management chain consists of the following 9 modules which all together ensure a balanced cycling policy:

- 10. User Needs
- 11. Leadership & co-ordination
- 12. Policy on paper
- 13. Personnel & means
- 14. Infrastructure & safety
- 15. Information & education
- 16. Promotion & partnerships
- 17. Complementary actions
- 18. Evaluation & effects

The first 4 modules are combined under the heading of 'planning' and modules 5-8 are combined under the heading of 'actions'.

For every module a separate quality score is generated according to the following 4 levels from what is termed the 'ladder of development', where level four is the most developed:

- · Level 1: Ad hoc oriented approach
- Level 2: Isolated approach
- Level 3: System-oriented approach
- Level 4: Integrated approach

More information is available about the BYPAD modules and levels of development in the BYPAD manual <sup>5</sup>.

Taken together the scores reflect the quality of the current cycling policy in a town, city or region. As a result of a BYPAD audit process, a city/ town/ region receives scores for each of the 9 modules and for its cycling policy as a whole and, most importantly given that this is part of a continuous improvement process, the end result of the process is a BYPAD action plan, which provides detailed guidance on how the site can improve the development and implementation of its cycling policy.

BYPAD has already been carried out by over 101 cities and 18 regions in 21 countries to increase quality, ensure quality, certify quality and compare quality. BYPAD also defines quality standards by collecting information on different aspects of cycling policy in a standardised manner. Based on

<sup>&</sup>lt;sup>5</sup> The BYPAD Manual is available at <a href="http://bypad.org/docs/BYPAD-Manual.pdf">http://bypad.org/docs/BYPAD-Manual.pdf</a>





experiences in many cities, a set of quality standards can be created. This helps cities/towns and regions to reset their ambitions and goals with regard to becoming a better cycling city.

Current state of the cycling policy in the city was assessed on the basis of individual questioner processed by BYPAD participants. Each questioner was composed of 18 questions divided into 9 modules. The modules together create an overall view of the city cycling policy.

The BYPAD team members classified each point of the questioner in the scale from 0 to 4, where 0 is the least positive and 4 is the most positive in terms of satisfying the existing city conditions.

Picture 11- Classification levels



#### Level 1: Ad hoc oriented approach

Fire brigade principle: We get active if it's burning - as long as necessary, and only where necessary.

At this level there is some form of cycling policy, but it is minimal. Cycling policy is mainly limited to problem solving. Due to a narrow understanding of cycling policy, measures are restricted to focusing on infrastructure or road safety at specific locations. There is a minimum or low level of quality for the cycling policy, which is characterised by:

- Low and irregular budget allocations;
- Little (if any) political commitment
- Few officials (if any), low skills, no competence or commitment;
- Limited communication;
- Informal structures and agreements;
- The achieved quality is rather incidental and depending on individual efforts only.





If no single characteristics of level one are achieved, then there is no quality level whatsoever.

#### **Level 2: Isolated approach**

**Robinson Crusoe principle**: We do our job as a good as we can (but without reference to what others are doing).

There is a cycling policy, but it is neither embedded in the overall transport policy nor inter-coordinated with land use, health or environmental policy. At the second level there is already a cycling policy in place, but this policy is isolated from other policy fields such as mobility, spatial planning and environment. Good infrastructure is the main concern of the policy, al-though some supplementary activities are undertaken. The cycling policy is characterised by:

- Some use of mobility data and some knowledge of the cyclists' needs and priorities;
- There are some decisions on general principles, but few of binding or compulsory character;
- As cycling policy is not coordinated with other policy fields, decisions by other departments may be made which are counter-productive to promoting cycling;
- · Continuity in cycling policy is not guaranteed.

#### Level 3: System-orientated

We are pulling together: We strive to optimise the cycling system and co-operate with several partners.

Cycling policy is regarded as a system, which is integrated into the overall mobility policy. The political will to stimulate cycle use is expressed through making apolitical decision to create a sophisticated cycling policy, and the allocation of sufficient personnel and means. There is also political support from different responsible politicians. Cycling policy comprises of a wide range of different measures (e.g. infrastructure, mobility management, ser-vices, campaigns, information, education and infrastructure). Various partners contribute and co-operate with each other in the implementation of the cycling policy. The cycling policy is characterised by:

- Tendency for long-term planning, but still project-oriented;
- · User needs are systematically taken into account;
- There is high quality data available which forms a solid basis for the cy-cling policy;
- There is a substantial budget but it is not yet safeguarded for the long term;
- Joint projects are in place which creates formal partnerships between different actors (e.g. other departments, schools, employers, health organisations).

#### **Level 4: Integrated approach**

**Winning team**: Cycling policy is a permanent task. We are continuously improving and we co-operate with strategic partners.

Cycling policy is regarded as a continuous task with strong relationships with other policy fields (i.e. environment, health, employment, economy etc.). Measures to encourage cycle use are complemented by measures to curb car use. Quality indicators are recognised as policy instruments. Cy-cling policy is driven strongly by the politicians, and is expressed with good leadership, regular and sufficient allocations of personnel and means, and comprehensive cycling expertise within the local or regional authority. Quality indicators are recognised as policy instruments. Besides political support, systematic networking and strategic partnerships characterise the cycling policy. These help to produce synergetic effects through the ex-change of ideas, knowledge and experiences with external partners - both horizontally (i.e. with other cities, public bodies, public private partner-ships), and vertically (i.e. with higher authorities). The cycling policy is characterised by:





- The availability of high-quality data and a deep knowledge of user needs;
- High-quality measures based on agreed quality standards for each type of measure;
- Thinking in networks covering the whole urban/regional area;
- Systematic evaluation and monitoring of strategies, programmes and projects;
- Implementation of mechanisms that safeguard the continuity of the cy-cling policy;
- Substantial and regular budgets;
- Inter-sectoral approach;
- Systematic networking;
- Strategic partnerships.

#### 5.3. BYPAD Results

The overall BYPAD-score gives an indication of the quality of the actual cycling policy of the city. The scores are based on the assessment of the BYPAD team members and on the consensus on the evaluation level.

For calculating the overall BYPAD-score there must be given a weighting factor to each module. This way the action modules are getting a higher weight. The planning modules count for 35%, the action modules for 60% and the evaluation module for 5%.

The total BYPAD-score is the sum of the scores of all weighted modules.

$$\mathit{BYPAD-score} = \sum_{i}^{9} \mathit{Score}\_\mathsf{Module}_i \times \mathit{Weighting}\_\mathit{Factor}_i$$

Table 5- BYPAD scores, weighing factors

MODULE	WEIGHTING FACTORS	SCORE MODULES	Weighted BYPAD-score		
	Plannin	g (35 %)			
Module 1	0,05	1,50	0,075		
Module 2	0,1	1,75	0,175		
Module 3	0,1	1,50	0,15		
Module 4	0,1	1,25	0,125		
Action (60 %)					
Module 5	0,2	0,88	0,175		
Module 6	0,1	1,50	0,15		
Module 7	0,1	0,50	0,05		
Module 8	0,2	0,75	0,15		
Evaluation (5 %)					
Module 9	0,05	0,75	0,0375		
		BYPAD-score	1,1		





The total BYPAD score is 1,1, which is the level of 27,2%. The cycling policy of Ústí nad Labem has great potential for improvements. Cyclists are considered as a common user group, but the tight budget does not allow significant support of cycling and the cycling conditions are not improving.

Assessment of individual modules is presented in the following charts.

Chart 5 - Assessment of individual modules

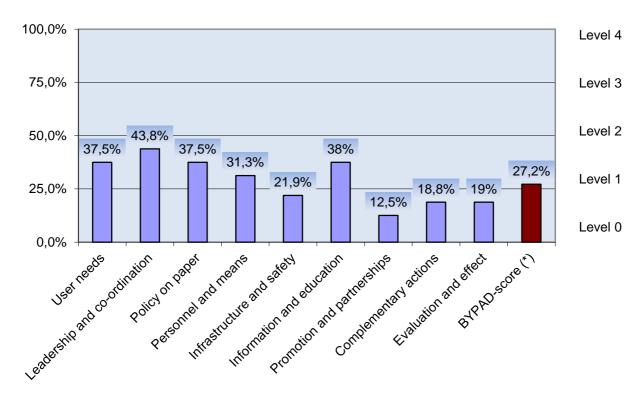
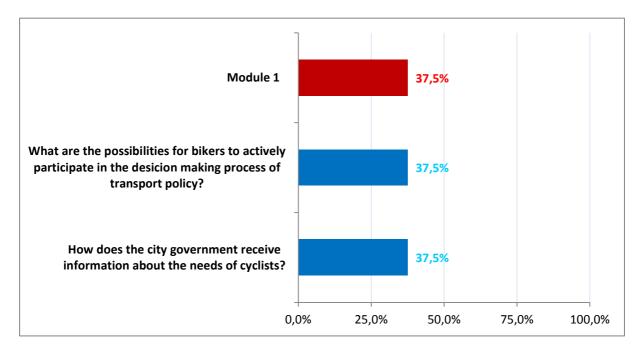






Chart 6 - Module 1, User needs



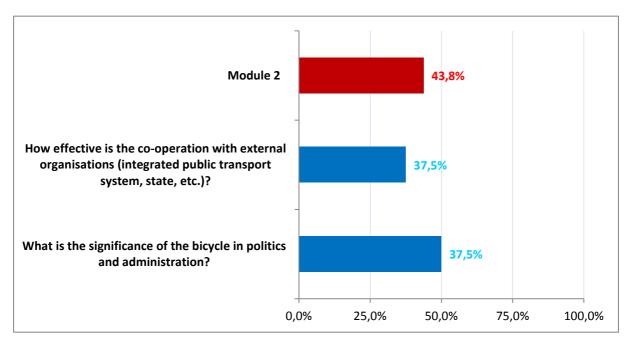
Currently, gathering of the user needs information is limited and utilised only for specific purposes; cyclists are not involved in the development of the local cycling policy.

- · Periodic counting of cyclists on major sections;
- Questionnaire surveys realised by city districts, on web sites and in newsletters;
- Cooperation with interested cycling groups;
- Regularly obtain data not only from the cyclists, but also from in-line skaters and other route users via questionnaires, regular meetings, etc.
- Cooperation with interest groups, facilities for children and youth; these groups are the most frequent bicycle users and local environmental experts, who can provide new ideas;
- Interconnection between administration and cycling groups;
- Round Table sessions;
- Public hearing on traffic constructions currently in the stage of preparation;
- Identification of the responsible person in the city in charge of projects, who will consider cyclists needs (Road Network Manager);
- Initiate public interest in cycling, support the interest and increase it;
- Participation of cycle group representatives on cycle development projects and proposals for cycle transport improvements.





Chart 7 - Module 2, Leadership and co-ordination

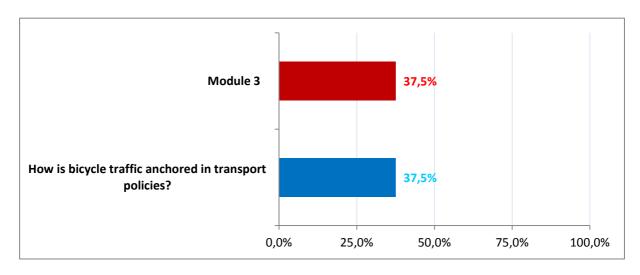


Cycling is healthy and ecological mode of transport and a free-time activity. Cooperation with external organisations is realised within specific projects. Transport in the Ústí region is not integrated into a coherent system.

- establish local coordinator of cycling activities and active and regular cooperation with the Public Transport company and with the Ústí nad Labem Municipality, Department of Transports;
- increase promotion of cycling in the city
- allow transport of bicycles in PT vehicles
- establish a cycle route through the city centre, or at least implement traffic signs for cyclists on current roads
- Identify implementation of an integrated transport system as a priority for the city



Chart 8 - Module 3, Policy on paper



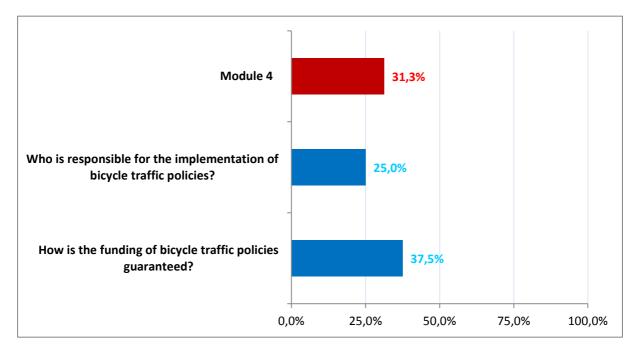
Cycle transport is included in the major development documents of the city and in its politics in terms of declaring support and referring to the difficult terrain of the area and low use of bicycles. Coherent policy for cycle transport development for Ústí nad Labem is missing.

- Formulate a complex cycling policy for the city
- Increase awareness of city authorities about cycling needs in Ústí nad Labem





Chart 9 - Module 4, Personnel and means

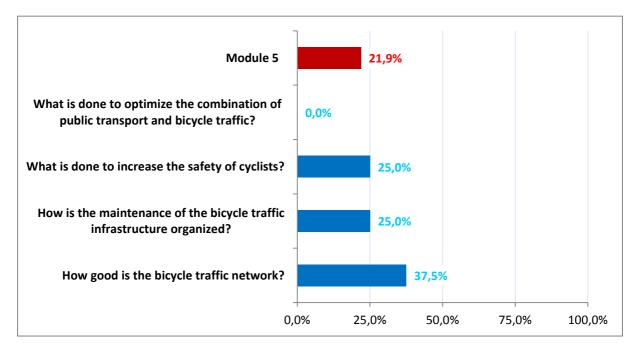


There is not a person appointed in charge of cycling in the city, issues are addressed ad-hoc. Financing of the cycle transport development is dependent on the tight budget of the Ústí nad Labem Municipality, the Department of Transport. Where possible, funding is provided by EU programs, SROP, etc.

- It is desirable to allocate fixed minimal amount in the city budget for development of the cycling network and for cycle improvements (cycle lanes, cycle stands, etc.)
- Establish the city cycle coordinator with appropriate powers and access to relevant information
- Ensure smooth cooperation among the involved city departments



Chart 10 - Module 5, Infrastructure and safety



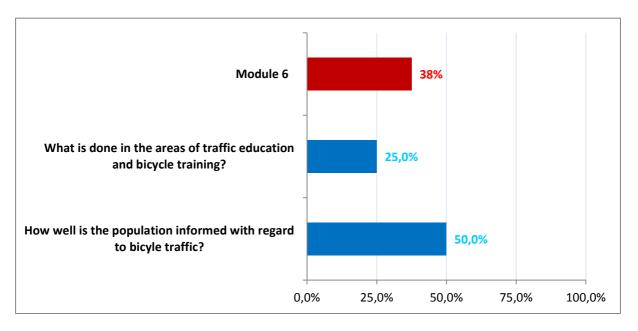
There is the only one main cycle route in the city - the Elbe route on the right bank of the river. The route is disrupted by stairs and elevations. It lacks basic facilities, although new bicycle stands have been placed on the route, as well as throughout the city centre by major offices and PT stations, during the year 2010. Public transport is rarely used by cyclists in the Ústí region. During summer, 2 cycle bus lines are in operation in the city. The city is not connected to the surrounding cycling infrastructure and cyclists are not guided through the city centre by cycling marks either. Maintenance of the cycle route is carried out within the regular maintenance of pavements and roads in the city, in winter there is no maintenance. The current state of the cycle infrastructure is deteriorating due to lack of maintenance, which may affect safety of cycle route users (holes in the surface, condition of road signs, overpasses, etc.). Measures for safety improvements (such as 30 km/h zones) are not sufficiently and systematically utilised.

- Gradually build cycle route on the left bank of the Elbe river and along the Bílina river, cycle lanes on major roads in the city (towards Klíše, Bukov, residential areas, etc)
- Equip the city by bicycle stands on strategic spots (offices, shopping areas, PT stations)
- Establish a system of detecting defects of the cycling infrastructure and ensure maintenance with respect to dangerous spots and accident spots
- Enable transport of bicycles in public transport vehicles
- Support development of services for cyclists





Chart 11 - Module 6, Information and education



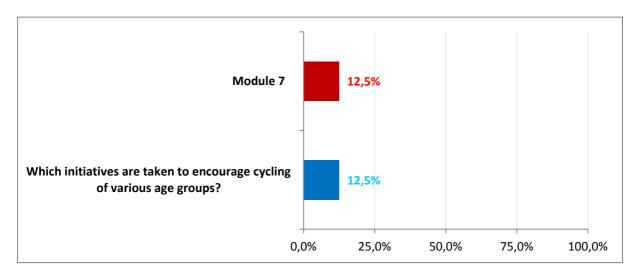
Traffic education is realised within primary school education on traffic courts in cooperation with the Municipal Police. There is a competition for young cyclists held annually in the city. Information is available on the website of the city and at other interested groups. However, cycle information are primarily aimed at recreational cycling (such as tips for cycle trips, touristic destinations, etc.).

- Develop a web portal for cyclists, including information on related services in the area and recommended cycle routes, where cyclists can share their experiences
- · Publish information materials focused also on daily commuting
- Organise involvement of cycle groups





Chart 12 - Module 7, Promotion and partnership

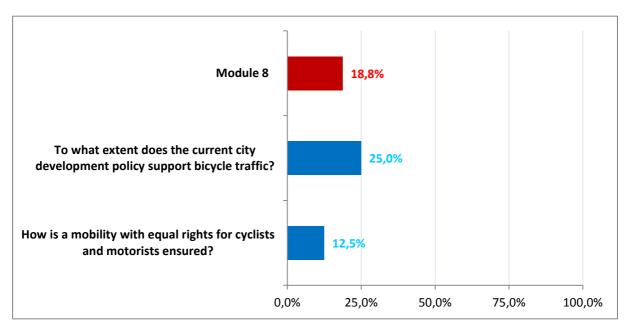


Currently, the cycling activities are focus almost exclusively on youth. Promoting of cycling is aimed at sport and recreation use. The basic cycling network and its safe link to the road network, city centre, schools, social facilities, cultural and touristic destinations is missing, which restricts the cycle transport from proper development and its daily utilization.

- Construct the basic cycle infrastructure
- Realise more cycling activities
- Promote cycling for daily use
- Involve broader group of citizens in offered cycling projects



Chart 13 - Module 8, Complementary actions



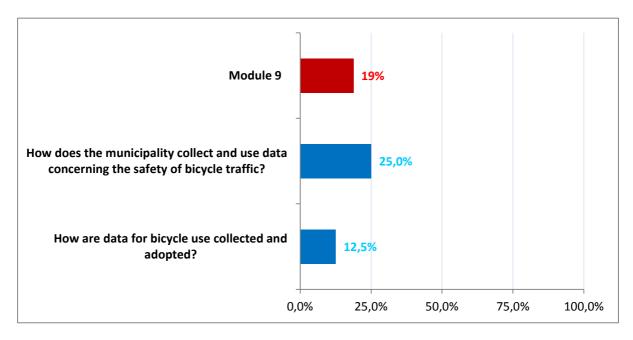
Mobility of cyclists is to some extent hindered by the absence of a complex cycling network and its missing links to the city transport system. Moreover, the traffic signs are currently inadequate for cycling (for example it is desirable to substitute the traffic signs "No entry to all vehicles" by the traffic signs "No entry to motor vehicles").

- Allow access for cyclists to the city centre
- Removal unsuitable traffic signs
- Involve experts (traffic engineers, architects) and professionals experience in cycling into finding cycle transport solutions in the city
- Link the transport infrastructure in the major traffic directions
- Establish responsible persons for coordination of cycling activities and their powers





Chart 14 - Module 9, Evaluation and effect



Surveys of the cycle transport use are random. Data on accidents are statistically detected, but they are not further utilised.

- Conduct surveys and fill-in questionnaires
- Realise mapping of accident sites, which should be solved addressed as a priority or at least addressed by temporal solution



#### 5.4. Implementation of solutions

It is possible to directly derive measures suitable for implementation from the BYPAD audit, which will lead towards cycle transport improvements as a whole. A great potential for improvements is in the cycle policy of Ústí nad Labem, which demands big efforts and financial resources. It is therefore necessary to prioritize cycling actions in the city. However, some measures can be implemented without high personal and financial requirements and can be realized within the ordinary operation of the city government.

General cycling policy of the city should:

- Enhance security and safety of cyclists and their surroundings when riding a bicycle;
- Facilitate development of mass cycle transport use on daily bases;
- Create space to build a dense network of cycle routes throughout the city area, linked to the surrounding towns and cities, with the help of SFDI funds, regional and city budget and the European Union;
- Provide citizens with sufficient opportunities to change their lifestyle contributing to their health;
- Contribute to lifestyle improvements and disease prevention by supporting daily cycling;
- Help to improve the environment n the city;
- Provide additional training to citizens, including additional information on free choice of transport mode, environmental protection, sustainable development, healthy lifestyle and new business opportunities related to cycling in the city;
- Contribute to the development of tourism in the area;
- Give the public an opportunity to participate actively in the implementation and updating of cycling policy and development information and services in the city.

The highest priority is given to appointing the local coordinator of cycling activities in the city, who will be responsible for implementation of action plans, and cycling related measures and for cycling policy fulfilment.

Other priorities are to ensure:

- Financing of the personnel and means
- Construction of the cycle infrastructure
- Safety of cyclists
- Realisation of measures within the module Promotion and partnership
- Complementary actions
- Evaluation of the results

