3CE335P4 – EURUFU

EUROPEAN RURAL FUTURES

O.3.1.6 Regional Mobility and Transport situation in project regions

Work package	3
Action	3.1
Author	PP02 – FH Erfurt IVR, with contributions from all PP Jörn Berding, Attila Lüttmerding, Dominik Bitter
Version	V1

O.3.1.6 Regional Mobility and Transport situation in project regions

Index

1. Introduction

1.1 The report

This is the comprehensive report on the current regional situation regarding the EURUFU-key topic of mobility and transport in the eight project regions (output 3.1.6).

The analysis about this EURUFU-key topic was organized and carried out by PP2 - FH Erfurt. In order to gather the relevant information regarding the regional mobility and transport offers from a strength-weakness-threats-opportunities-point of view with special attention to the impact of demographic change, a questionnaire (see annex) was developed to be completed by the partners for their designated project regions.
The structure of the questionnaire was organized according to the main aspects listed in the following that were identified as relevant to explore in the context of rural areas, demographic change, mobility and transport offers:

- Mobility and demographic change
- Public transport
- Individual transport
- Multimodal transport (combination of transport modes)
- Car sharing / Car-pooling
- Non-motorized transport development. Cycling and walking
- Supplementation of local transport by tourism related demand
- Other topics

Together these aspects have a high significance for an inclusive coverage of the current situation, which furthermore helps laying the basis for the successive working steps of the EURUFU-project in the context of this key topic.

The situation of the eight project regions regarding the relevant aspects asked for in the questionnaire are described in chapters 2 to 9.
Summing up the information gathered at the end in chapter 10 there is a compilation of issues and problems that the eight project regions all have in common (due to the local/regional conditions and prerequisites obviously to a different extent).

1.2 The project regions

The eight project regions are as listed in the following, their location within the Central European project area is displayed in the corresponding map below:

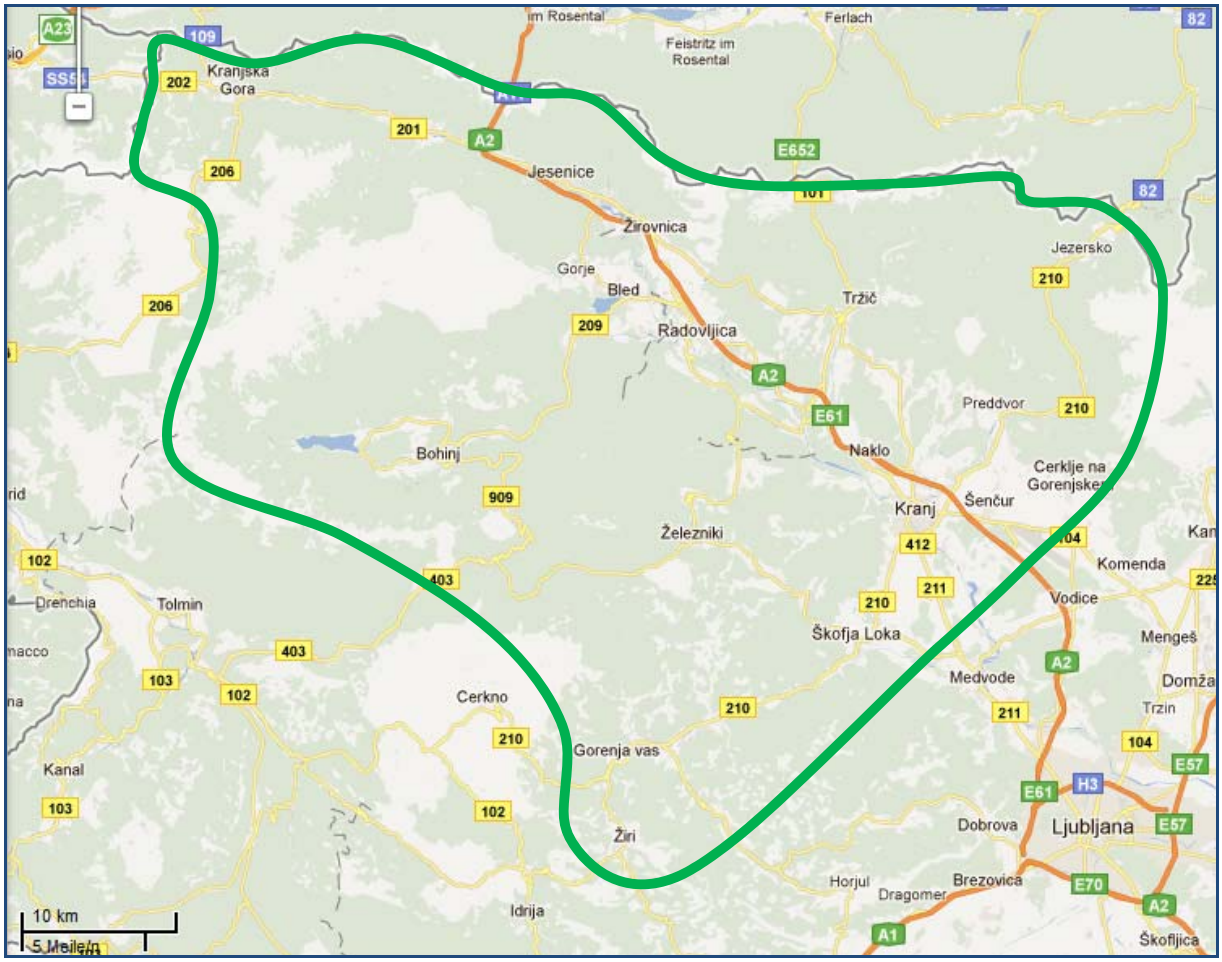
- Gorenjska (North-West Slovenia), Slovenia
- Lungau, Austria
- Upper Styria West, Austria
- Kyffhäuserkreis, Germany
- Province of Asti, Italy
- Ústí Region, Czech Republic
- Brzeg Dolny and surroundings (Wołów County), Poland
- Microregion of Mór, Hungary

Map 1: The project regions in Central Europe (based on www.central2013.eu)

2. Gorenjska, Slovenia

Population: 202.500, Area: 2.137 km², Density: 95 inh./km²
Main settlements:

- Kranj (52.000 inh.)
- Škofja Loka (23.000 inh.)
- Radovljica (19.000 inh.)
- Jesenice (18.000 inh.)



Map 2: Gorenjska (based on Google Maps)

2.1 Mobility and demographic change

With a small growth compared to the years before the car possession reached 517 cars per 1.000 inhabitants in the year 2009.
While in the statistical region 25,8% of the inhabitants have a workplace outside of its borders, within the region the great majority of the working places are located/concentrated in the municipalities Kranj, Naklo and Bled. Thus the other settlements could rather be seen as ''sleeping'' municipalities[1]. These aspects together indeed are a reason for the relatively

[1] Municipalities with the highest outward-commuting rates of the working people are Jezersko - 86%, Žirovnica - 82%, Gorje - 82%, while the lowest rates of outward-commuting for working still reaches up to ca. 40-50%: Žiri - 39%, Železniki - 47%, Kranj - 47%.

strong commuting on behalf of the regional working population while the region Gorenjska itself is a “sleeping region” for the population (also revealed by its 4th rank among the 12 Slovenian statistical regions on the proportion of inactive working population).
Regarding the regional mobility offers facing demographic change, it has to be stated in general that in the statistical region of Gorenjska the population is ageing in the majority of the municipalities (15 municipalities with ageing, 3 municipalities with stagnation).

Regarding the accessibility and barrier free equipment of urban infrastructure and public transport, the municipalities (ramps in most cases where necessary, parking spaces especially dedicated for persons with disabilities, traffic lights with acoustic signalling in some cases etc.) and the local (only existing in Kranj, Jesenice and Škofja Loka) and regional bus transport (personal assistance by drivers if necessary) are relatively well prepared for the demands of elderly or persons with impairment.
In comparison the local/regional train system is up to now not at all accessible for persons with reduced mobility as wheelchair users, persons with rollator walker etc.. Wheelchair users on the train line between Jesenice and Bohinjska Bistrica can only enter the train when they are lifted through the cargo door. Platforms for wheelchair users are not usable on seven of eight train stations in total. They are too narrow and have steps with a height difference of up to 10 cm. There is only one station with accessible platforms, but it has no infrastructure that enables disabled people to go directly to and from the train station to the city (Radovljica). There is one underpass under the train station in Jesenice that cannot be used by disabled persons. They have to use the service corridor on level with the tracks. In this case they are aided by train-station personnel. Not all train stations have personnel. When there is no personnel at the station, there is no audio message announcing incoming trains.
Only some local trains are equipped to handle disabled passengers on wheelchairs. These trains have accessible toilettes and audio and video messages for the current and next train station. People using an electric wheelchair have no chance to enter any train, as there is no equipment on any station to lift heavy electric wheelchairs.

From the point of view of inhabitants and representatives of the municipalities who answered the project partner’s questions, a good reachability of regional short-, mid- and long-term-services is ensured above all by car use, especially from smaller and remote villages which are plentiful. The reachability of short-term services by public transport is difficult (except where municipal buses are operating - in three cities only: Kranj, Jesenice and Škofja Loka). Mid-term and long-term services are well reachable by public transport, in the case that no changing between bus and/or train is necessary (waiting times or long distances between bus and train stations).

Main aspects of SWOT:

- Majority of working places concentrated in three municipalities, relatively strong commuting, “sleeping region”
- Situation of local/regional railway infrastructure (platforms, trains, information etc.) to enable access and usability for persons with reduced mobility very unsatisfying, offering many options for improvements
- Reachability of short-, mid- and long-term-services mainly depending on car use (due to lack of widespread public transport offers), local buses only in three municipalities

2.2 Public transport

As positive aspects of the public transport offers in the region it can be referred to the travelling speed of trains (if there is no waiting time for an opposite train, as all the railroads in the region have only one track). Negative is the often bad maintenance of train stations, most critical are Kranj, Jesenice and Žirovnica.
The ticket prices for the trains are favourable and there are different discounts: A 33% reduction for young persons under the age of 26 and discounts for elderly and disabled persons.
There are numerous (regional) bus stops. Municipal bus systems have been established in Kranj, Jesenice and Škofja Loka. The bus station in Škofja Loka is vibrant and well maintained. In general the using of municipal buses is also favourable but there are few bus subsidies (mostly student monthly passes, issued for the duration of summer). There are no discounts for elderly users, discounts for disabled persons were even cancelled recently.
The information material of the public transport system could generally be improved regarding the location, accessibility and understanding: Equipment with and positioning of signposting with name of the stop and timetables at bus and train stops; information concerning tariffs at the stops (it is given actually at the ticket counters, by bus drivers and train personnel and on the internet); information on how to reach bus stations from train stations and vice versa; compliance of fixed information and that information available on the internet; information not only in Slovenian, adding information in further languages, Braille etc.).
More flexible forms of regional transport offers are represented by organised bus and taxi services of private companies.

Main aspects of SWOT:

- Ticket prices for train use quite favourable, discounts for different groups of society
- Withdrawing of price discounts for bus users with disabilities
- All the railroads in the region have only one track, bad maintenance of train stations
- Poor connection of villages in rural areas and train stations
- Public transport user information could be improved regarding location, accessibility and understanding

2.3 Individual transport

The problems caused by heavy truck and car traffic are noise, air pollution, affecting the feeling of movement safety for cyclists and pedestrians, especially where sidewalks are too narrow or not existing. In four of the surveyed municipalities there is a high truck and car traffic: Bled, Bohinj, Železniki and Šenčur, in the last one there is also too much noise pollution from the nearby airport.
Regarding the road safety situation it can be stated from the road risk maps for the period 2006-2008 that the highways and expressways are the safest roads in Gorenjska, while the regional roads are the most dangerous, especially those with accompanying cycling infrastructure (Bled, Bohinj, Kranj). There are especially dedicated cycling roads with

infrequent car use[2]. The project partners from the region see options for an improvement of the road safety situation mainly in less car use and an improvement of cycling (e.g. of missing and new cycling connections) and public transport infrastructure which could be supported by the establishment of local NGOs promoting sustainable transport.

For E-cars the current situation is as follows: There are charging stations in all bigger towns in equal distribution between seven municipalities with even one station also in a rural area of the region. There is also information promoting this infrastructure on the internet and in tourist information centres, but not at the stations themselves which makes it a bit difficult to find them. Until now there are only very few users as the main challenge is the high cost of the E-cars.

Main aspects of SWOT:

- Missing cycling infrastructure in many parts favours car use as more comfortable means of transport
- Introduction of E-cars with corresponding infrastructure - in all bigger towns and even in a rural location - has begun, user information must be improved for a better usability

2.4 Multimodal transport (combination of transport modes)

The connection between the bus and train stations is generally not very comfortable in the region, apart from Jesenice and Žirovnica where there is a good connection between the bus and train stations. The changing times from buses to trains, buses to buses and trains to trains in the region is often too long (from 10 minutes to 1 hour), in Kranj it is too often required to change buses to reach the train station. In different towns the bus and train stations are too far away from each other and not well enough connected, resulting that in some cases there is too much distance to walk between the train and bus stations (Bohinjska Bistrica 500 m, Kranj 1 km and Bled 1,5 km). Villages in rural areas and existing train stations in the nearer towns are mostly not connected by bus lines.
Taking bikes on trains is possible with payment, except for foldable bikes. Taking bikes on buses is also possible (with payment, also for foldable bikes, only four bikes can be taken on board), but there is no special Bike&Ride-system and generally there are not enough bike parking facilities at bus and train stations (excluding Škofja Loka), neither in close distance to important buildings, shopping centres etc..
There is also no official Park&Ride, but normally there are enough parking spaces for cars close to bus and train stations. Cars can be taken on the train between Bohinjska Bistrica and Most na Soči.

Main aspects of SWOT:

- Current conditions and organization do favour or encourage users only to combine car and public transport, but not different modes of public transport (long waiting times and distances between stations)
- No special Bike&Ride-system, lack of parking options close to most connection points of public transport

[2] Tarvisio - Gozd-Martuljek, Bohinjska bistrica - Bohinjsko jezero - Bohinjska Češnjica, Trata-Kranj

2.5 Car sharing / Car-pooling

Although the regional project partners see a high number of potential users, there is no officially organized car sharing system in Slovenia yet (maybe due to doubts about the successfulness of such an offer). But there are informal car-pooling options which are organized by the users via internet sites (such as www.prevozi.org, in the future www.katrca.org) as this is left to personal choice and there is no public incentive. Commercial rent-a-car-services exist in bigger towns.

Main aspects of SWOT:

- Despite high user potential up to now in Slovenia there is no car-sharing system
- Functioning informal car-pooling

2.6 Non-motorized transport development. Cycling and walking

Cycling exists in all towns and cities, while in bigger towns it serves more often as a daily means of transport, in tourist towns this use is often complemented by recreational purposes. The usually flat terrain offers good cycling conditions and many daily distances are shorter than five kilometres (the distance in a city up to which a cyclist is normally faster than a car-driver). But there are also some especially dedicated cycling roads with infrequent car use[3].

Although the potential for cycling is high, in general there is still a lack of infrastructure, within cities and also concerning the connection of different towns and cities with each other. There are too few cycling tracks, in many places not existing, poorly designed and maintained. In Bohinjska Bistrica children riding to elementary school are forced by municipal authorities to leave the sidewalks, “which is according to law, but not according to prudence” (Local project partners). Considering the whole statistical area of Gorenjska, the highest share of cycling purposes is recreational, this is because there is too much motorized traffic, and to little cycling infrastructure. Generally cycling is increasing, as well as the profits from bike tourist businesses. E.g. there are bike rental shops, most common in tourist areas (as Bled and Bohinj with at least ten rental stations), where also hotels often have their own bikes for rent and where there is signposting for cycling infrastructure and cycle routes.

E-bikes are not popular yet and offered for hire only in tourist areas as Bled, Bohinj (about five rentals) and Kranj.

In town centres there are pedestrian zones and squares: The old quarter in Kranj, Bled by and around the lake, Šenčur, Jesenice, Železniki. Gorje and Žirovnica do not have pedestrian zones, but Gorje closes a street during school time.

In some rural areas, pedestrians have almost disappeared from the streets (Železniki and Šenčur) because of a high volume of cars and trucks, combined with narrow or no sidewalks, and the high speed of cars.

Established infrastructure: Zones with reduced speed (30km/h zones), speed barriers (humps), accessible sidewalks with lower kerbstones on one level with the pavement, access ramps (on sidewalks and in front of buildings).

[3] Tarvisio - Gozd-Martuljek, Bohinjska bistrica - Bohinjsko jezero - Bohinjska Češnjica, Trata-Kranj

A measure to promote walking (recreational/touristic purpose) is signage for walking routes; there are plans for expanding the pedestrian zone in Kranj.

Main aspects of SWOT:

- High potential for daily bicycle use complementing touristic and recreational purposes (dominant today in rural areas) vs. lack of infrastructure for cycling in many parts of the region
- E-bikes not very widespread and used yet, but rentals exist in some in tourist areas
- Difficult situation of pedestrians especially in rural areas caused by motorized traffic and lack of comfortable infrastructure

2.7 Supplementation of local transport by tourism related demand

Many hotels offer their own rent-a-bike-system, at least one hotel offers transport to and from the bus or train station. Some hotels have a label indicating their cyclist- or hiker-friendliness. Tourist agencies and hotels provide bike transfer/shuttles to areas good for cycling or to places of lodgement with vehicles allowing more bicycles to be taken on board, compared to public buses and trains – but this service is only offered in tourist areas.
Up to now there are no touristic tickets for public transport.
In some areas with higher altitude parking is cheaper than in the town centres in valleys which sometimes makes people drive their cars through woods and hills.
There is a great potential of experiencing the countryside of Gorenjska with a different means of transport than the car. The slower alternatives as walking and cycling are attractive, but require an adequate infrastructure.

Main aspects of SWOT:

- Bike transfer/shuttles to cycling areas or places of lodgement by tourist agencies and hotels with special buses (more space for bikes)

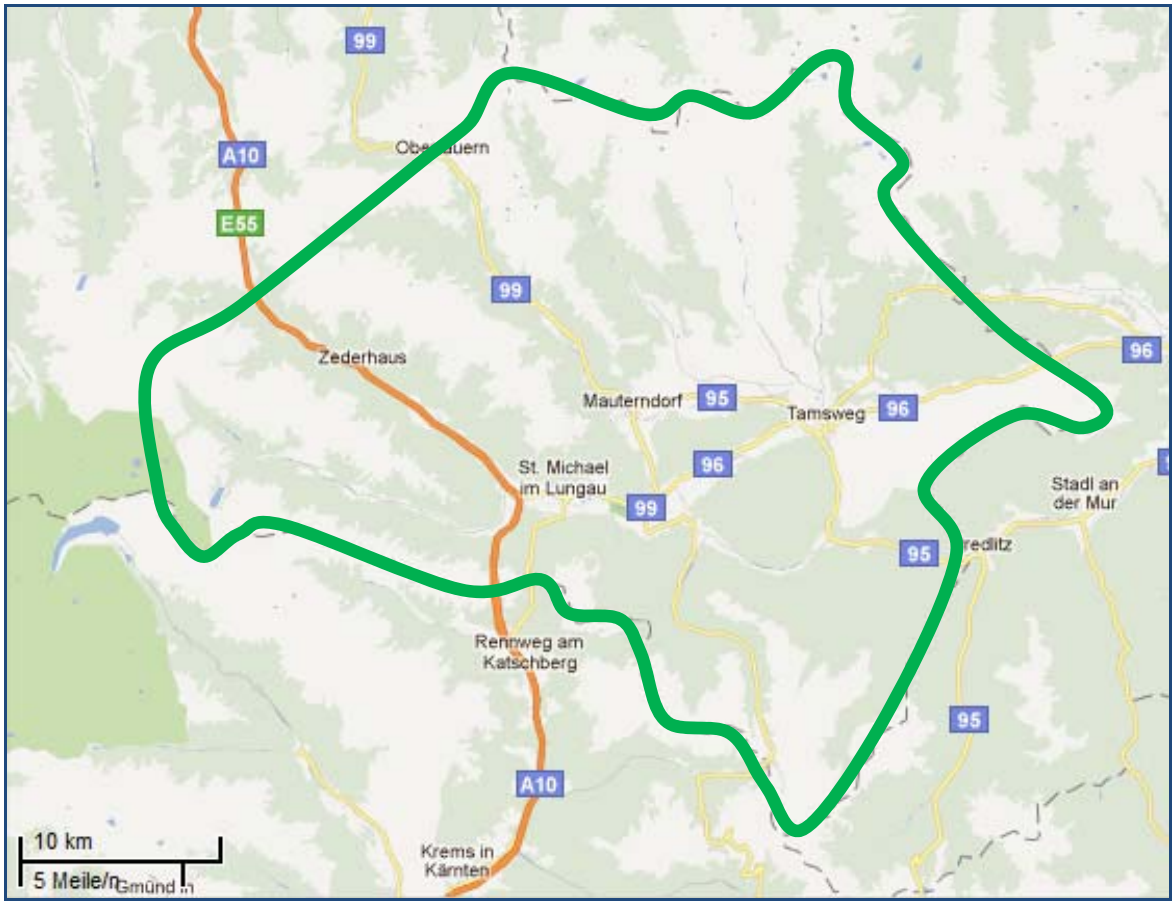
2.8 Other topics

The regional railroad system lacks a second track for the oncoming direction, which forces trains to wait. The main airport has no train connection. There are too few trains operating on the railroad between Jesenice and Ljubljana, the last train leaving for Ljubljana leaves too early, which encourages car use (an interesting note is that the last motorway section will be built in the Gorenjska region).

3. Lungau, Austria

Population: 20.900, Area: 1.004 km², Density: 21 inh./km²
Main settlements:

- Tamsweg (5.700 inh.)
- Sankt Michael im Lungau (3.500 inh.)
- Mariapfarr (2.400 inh.)
- Mauterndorf (1.700 inh.)



Map 3: Lungau (based on Google Maps)

3.1 Mobility and demographic change

In total there are 2.370 persons who commute from the Lungau and 1.010 who commute to the Lungau. All in all a high ratio, 65% of the local working population, has to commute, 38% of them commute within the Lungau and 27% to outside districts or provinces. The majority of them (80%) are no-daily commuters.
With a 90% of the commuters using a car and only 8% offers of public transport there is a strong concentration on individual transport. The car possession of 540 cars/1.000 inhabitants is a little higher than the Austrian average of 530 cars/1.000 inhabitants and the average of Salzburg (520 cars/1.000 inhabitants).
As a great challenge the local project partners see a reduction of the dominant individual transport by maintaining and expanding public transport offers (potentially accompanying an expansion of tourism) and also the creation of settlements with different functions like

living, working and supply with short- and mid-term-services to reach in short distances. This is problematic today as only 4 of 15 municipalities have an adequate supply with supermarkets, in other 5 municipalities there are partially long distances to reach a grocery while in 5 municipalities there is no supermarket.
In the centre of the Lungau there is a hospital, therefore the specialist medical care is good in the region. On the other hand the basic medical care is strongly concentrated in some urban centres, while the majority of the municipalities have no family doctor or drugstores, resulting in long distances to be overcome for reaching these services.

Main aspects of SWOT:

- High share of commuting among the local working population, strong concentration on individual transport
- Insufficient supply with short-term services and basic medical care in the majority of the municipalities
- Ensuring/enhancing current public transport offers in accordance with a positive development of tourism as an opportunity

3.2 Public transport

In general, from the point of view of the local project partners it is difficult to get to the Lungau by using public transport (train, bus). Some municipalities have less than 10 connections to the regions` central city Tamsweg and only 1 or 2 connections to Salzburg per day; there is no direct train connection to Salzburg. In general the use of public transport in the Lungau takes much more time than using the individual transport which limits the attractiveness and makes it difficult to replace cars. The price for a Lungau day ticket is 9€.
A positive approach to allow more people to use the public transport is the so called “Valley Bus”. It is an initiative to connect small, remote settlements and sites and offer public transport to popular tourist destinations. The goal is to provide a form of environmental friendly and flexible transport (also by electric buses or shuttle-buses) and to connect different public transport lines.
Apart from brochures and schedules there is also timetable information available on the internet where the user can fill in start, destination and time of departure to get information about the best transport link.

Main aspects of SWOT:

- Partially low frequency and connection of public transport
- “Valley Bus” to connect small, remote settlements and sites in a flexible and sustainable way, combining everyday and touristic purposes of use

3.3 Individual transport

As the region has a high volume of commuting there is a high traffic density to be noticed within the whole Lungau. The “Tauernautobahn” A10 in the west of the Lungau has a high traffic pressure especially during the summer, with traffic jams and the resulting strong environmental impacts. The road safety situation at the A10 was improved by a second

tunnel, but still the Lungau is one of Austria's most dangerous regions with 1,9 road deaths/10.000 habitants.
Already today the electric mobility has an important role in the whole region, more than 30 charging stations for cars (about 100 service and charging stations for e-bikes) are installed. The use of electric mobility is promoted by Electrodrive Lungau, e.g. there are events like the "Electronic-mobility day".

Main aspects of SWOT:

- Strong commuting results in a high traffic density in the whole region
- Electric mobility infrastructure advanced and promoted

3.4 Multimodal transport (combination of transport modes)

There was no information found for this topic.

3.5 Car sharing / Car-pooling

In the region the relatively large distances to go and a high dependency on cars were obstacles until now for establishing a car-sharing-system. Nevertheless there exist attempts in the Lungau to find solutions also for rural regions (www.tu-was.at). Now there are 3 electric cars integrated in a car sharing system[4].

Main aspects of SWOT:

- Relatively large distances, number of potential users and a high dependency on personal cars until now obstacles for establishing car sharing
- Approaches are made to find solutions: Car sharing with 3 E-cars

3.6 Non-motorized transport development. Cycling and walking

The use of bicycles in the region mainly has recreational or touristic purposes. There are well developed bike paths through the centre of the Lungau, also connecting the district with the Steiermark. But due to large distances between the settlements, the weather conditions (apart from summertime) etc. the bicycle had little importance in everyday mobility up to now. This situation could be changed to encourage more inhabitants to using a bike for daily transport purposes by the on-going promotion of the E-bike-using conditions, which are already well developed and attractive: Due to summer tourism there are many bicycle paths (attractive ways to the regional centres like Tamsweg or St. Michael) and rentals also for E-bikes (more than 30 possibilities to hire E-bikes, about 100 service and charging stations) and it is also possible to carry the bikes by bus.

[4] http://www.urbanbiking.de/elektrobike/schwarzwald-ruegen-mehr-die-schoensten-e-bike-regionen-fuer-urlaub-und-tour.581478.410636.htm?skip=1

Figure 1: E-Bikes in Lungau (www.lungau.travel, 2010)

Walking as means of daily mobility is limited by long distances which result from the settlements structure, but also from rural roads in general being too dangerous and unattractive to walk. An opportunity should be the creation of attractive pedestrian ways and compact settlement structure with the basic services reachable in short distances.

Main aspects of SWOT:

- Bicycles are no means of everyday mobility
- Lungau is very advanced in electric mobility; infrastructure and using conditions for E-bikes already well developed and attractive (rental, service-/charging stations, cycle paths etc.)
- Encouraging inhabitants to use (electric) bicycles, not only tourists as a good opportunity

3.7 Supplementation of local transport by tourism related demand

The Lungau is an E-bike region that offers a well-developed infrastructure for “E-bike holidays”: More than 300 E-bikes are available to be rented by guests and there is a homepage where information on interesting bike trips (www.lungau.at) can be found.
The 'Valley Bus' supports the regional public mobility situation, offering transport to popular destinations and furthermore to remote settlements which otherwise would have to be reached by car.

Main aspects of SWOT:

- Well developed and attractive E-bike infrastructure, exclusively for tourism up to now; system supported by the 'Valley Bus'
- Opportunity: Creating offers (e.g. cheaper rental) to encourage local inhabitants using E-bikes and thus benefit from the existing infrastructure, also to stabilize the system outside the touristic (summer) season

4. Upper Styria West, Austria

Population: 103.500, Area: 3.060 km², Density: 34 inh./km²
Main settlements:

- Knittelfeld (11.600 inh.)
- Judenburg (9.300 inh.)
- Zeltweg (7.300 inh.)
- Spielberg bei Knittelfeld (5.100 inh.)

Map 4: Upper Styria West (based on Google Maps)

4.1 Mobility and demographic change

The standards for individual traffic by car are good and there is a large road network with high accessibility to remote places. In whole Styria the motorization rate is at 548 cars per 1.000 inhabitants. One of the biggest current controversies is active regarding the expansion of the road B317 to a 4-lane motorway connecting Judenburg (motorway S36) and St. Veit an der Glan (S37) in Carinthia crossing high mountains and natural areas.
On the other hand the number of offered services in public transport is shrinking due to decreased budget in this sector by the state of Styria. A well operating public transport network exists in the region of so called Aichfeld around the main settlements of Knittelfeld and Judenburg. Whereas in other areas a lot of subsidies are needed to keep the last public transport offers working. Especially in the remote Murau district in the western part of the region the public transport offers were reduced year by year.
Most of the commuting activities happen from the remote municipalities to Judenburg, Knittelfeld and surroundings. Especially from the eastern part of the Murau district many people commute to the mentioned places. A small share of people from the districts of Knittelfeld and Judenburg commute to larger towns more eastern like Leoben, Bruck an der Mur, Kapfenberg or to the Styrian capital of Graz.

In Upper Styria West there are several approaches and projects to support public transport in more remote areas. The project “best age – ÖV Empfehlungsmarketing” helps and gives special guidance for elderly people to come along with public transport. The project “Lachtalbus” is a special service for tourists, while “E-Mobilität im Naturpark Grebenzen” is a rental system of E-bikes for tourists in the nature park Grebenzen. Then there is a project called “Der Pölstädter”, a special bus for commuters and “Murautakt – stündlich in die Stadt”, based on a special funding for ensuring a bus running every hour to remote Murau district.
Most of the important public facilities and medical services are situated in the urban agglomerations Judenburg, Knittelfeld and, to a lesser extent, in Murau. To reach specialized facilities, the inhabitants have to go to Graz. Supermarkets, family doctors and post offices are reachable in middle distances. Most of them are next to the administrative centres of the community. In the rural area, the connections to the facilities are rather bad. In central areas like around Knittelfeld and Judenburg the public transport system is fully developed.

Main aspects of SWOT:

- High rate of motorization
- Planning of motorway along the B317 road through sensitive mountainous area
- Public transport in remote areas highly subsidized
- Large difference in public transport offers. Western part (Murau) has weak public transport system
- Several small projects on improving public transport

4.2 Public transport

In the region there are 3 intercity train stations (Knittelfeld, Judenburg, Unzmarkt) which lead to good connections to trans-regional centres in Austria and beyond. To the district Murau there are 7 weekday daily regional trains from Unzmarkt with large number of intermediate stops. The public transport system in Aichfeld (around Judenburg and Knittelfeld) is very effective and has a high network density with 15 minutes frequency and affordable prices. Additionally there are several pilot projects referring to alternative and ecologic public transport systems.
On the other hand in the rural areas the public transport is ineffective due to long ways and low and decreasing population densities. In remote areas the network has a low density and there are long waiting times resp. low frequencies.
The availability of information material on public transport is very good. On each station one can see the corresponding schedules of the lines. In public transport information centres one can obtain all necessary information and brochures. All information for the users is also available on the internet.
Accessibility: The regional buses in Aichfeld and the regional trains are barrier free. Furthermore most of the stations in Aichfeld and information centres are relatively unproblematic accessible for people with special needs. Trans-regional trains and the buses outside of Aichfeld are not barrier free usable.

Special transport offers in Upper Styria West are ski-buses and taxis in the ski areas during the winter season, E-Bikes in the nature park “Zirbitzkogel Grebenzen” and the 'Valley Bus'

("Tälerbus"), an electric-call bus for tourists in Katsch-, Ranten- and Krakautal (district Murau).
There are private-public organized school buses, especially for children going to the kindergarten and pupils of primary-schools, which are financed partly by the municipalities.

Main aspects of SWOT:

- Good rail infrastructure and services
- Effective public transport system around Knittelfeld and Judenburg
- Ineffective public transport in remote areas, especially Murau district
- Good information policy and offers
- Barrier free buses in Aichfeld and barrier free regional trains, but not outside this area
- Electric 'Valley Bus' (touristic use) and private-public organized school buses

4.3 Individual transport

Along the B317 most of the villages suffer from heavy car and truck traffic. This road is a transregional transport axis from Vienna to Italy. Important to note is that most of the Vienna-Italy traffic runs over the interstate A2, so it does not pass Upper Styria West. But mentionable amounts of the Vienna-Italy truck traffic uses the route through the region because there is no toll for the part of Judenburg to Klagenfurt.
A planned expansion of B317 to S36 and S37 faces a strong resistance against the project by residents of the nature park Grebenzen, on the other hand there is a strong endorsement by other residents and companies of the districts Judenburg and Murau.
A basic problem in the region is the insufficient financial funding situation for the remediation measures of the existing road network.
In general the safety situation on Upper Styrian roads is relatively high, most mortal accidents happen as a result of drunken drivers, too high speed or risky overtaking manoeuvres. A hot spot is the B317 because of many commuters each day on this road. Furthermore there are some dangerous curves and crossroads.
The opportunity of E-car use is very limited, up to now there are only very few charging stations. Also there are no other appreciable promotion campaigns for E-Cars, apart from one pilot project running for tourists in the nature park "Zirbitzkogel Grebenzen".

Main aspects of SWOT:

- Region crossed by truck traffic from Vienna to Italy (to save toll fees)
- Insufficient funding for remediation of existing road network
- Situation/infrastructure/promotion for using E-cars very limited

4.4 Multimodal transport (combination of transport modes)

Most of the railway stations are already connected with the bus network, facilities for Bike&Ride do also exist. Park&Ride is also available, but the parking area on smaller stations is limited.
The main problem of the multimodal transport is the little use of public transport systems in rural areas. This is mainly due to the relatively poor improvement of rural space and the resulting long travel times.

Main aspects of SWOT:

- Facilities for a combination of public and individual transport modes exist, but are not much used especially in rural areas due to long travelling duration

4.5 Car sharing / Car-pooling

There are no appreciable car sharing models in Upper Styria West.

4.6 Non-motorized transport development. Cycling and walking

The region Upper Styria West has a very advanced network of cycling paths; bicycle use has a very high significance in the touristic offer, also the E-bike rental is possible in some tourist areas (nature park "Zirbitzkogel Grebenzen" and the Microregion "Die drei Täler", both in the district of Murau). In everyday mobility of the population bikes play no important role up to now. Potentials to foster the role of cycling are laying therefore in synergies between tourism and everyday mobility.
The carriage of bicycles in regional trains and also in the buses of the Aichfeld is possible, whereas it is difficult in intercity trains and regional buses. A challenge for the next years is to maintain and expand the cycling infrastructure and improve the barrier freedom of facilities along the cycling paths as far as possible.
The pavements and pedestrian areas are developed very well. There are no appreciable measures to promote walking for daily mobility.

Main aspects of SWOT:

- Advanced cycling infrastructure, cycling is a main element of the regional tourism offers

4.7 Supplementation of local transport by tourism related demand

Tourists can borrow E-Bikes for free in the nature park "Zirbitzkogel Grebenzen" (district of Murau).

Main aspects of SWOT:

- Free rental of E-Bikes for tourists, maybe extension to regional bike sharing system for the population

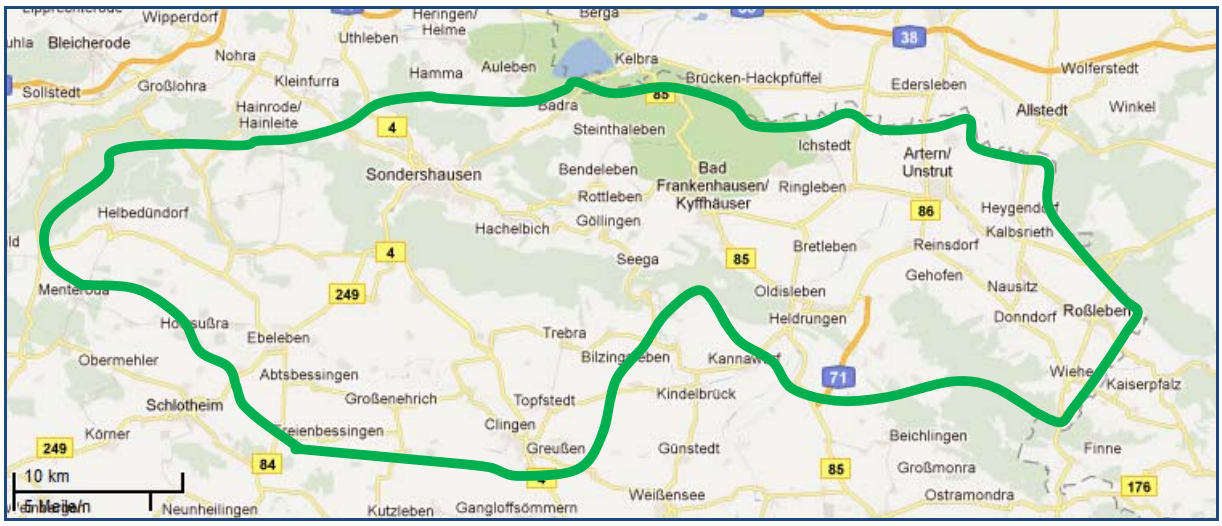
4.8 Other topics

While there is a decrease of the public transport offers in rural areas, an expansion of the road B317 to S36 and S37 is foreseen.
The construction of the "Koralm" tunnel provides a new route for intercity trains and freight trains around the Murtal and chances for a renaturalisation of the existing double track to a single track route through the Murtal.

5. Kyffhäuserkreis, Germany

Population: 81.500, Area: 1.035 km², Density: 79 inh./km²
Main settlements:

- Sondershausen (23.000 inh.)
- Bad Frankenhausen (9.000 inh.)
- Artern (5.700 inh.)
- Roßleben (5.500 inh.)
- Greußen (3.700 inh.)



Map 5: Kyffhäuserkreis (based on Google Maps)

5.1 Mobility and demographic change

Within the region of Kyffhäuserkreis the car possession rate is 547 cars per 1.000 inhabitants, which is a little bit lower than the German average, but higher than EU-15 average of 500/1.000.
In 2010, the outward-commuting ratio was 44,3 % and the inward-commuting ratio was 19,9%. This fact shows a relatively strong outward commuting behaviour into neighbouring districts. Within the region, the main commuting activities are directed to the bigger cities and settlements such as Sondershausen and Artern. As there is no motorway yet in the district (opening in 2012/13) there are almost no commuter parking spaces.

Most of the railway (no elevators) and bus stations in the region Kyffhäuserkreis are not barrier-free (missing digital departing time display, loud speakers, toilets, etc.), which is a disadvantage for elderly and disabled people. Only 16 of 31 regional buses have low floors, in Sondershausen 6 of 7 buses have low floor. A similar situation regarding accessibility can be found in many public buildings. Especially in small towns and villages there is an insufficient situation. When there are new constructions of connection points as bus stops, the demands of barrier freedom should be considered (because this is also laying the basis for a financial support of the construction measures from the federal state of Thuringia acc. to the funding rules). In general the accessibility of urban infrastructure in many places is not

optimal for people with individual needs, and only in new constructions the aspect of Design for All are tried to be considered, thus there are no punctual adaptations.
The welfare organization AWO offers a bus service for elderly or disabled people from a place in the surroundings into the city of Sondershausen.
Most of the public services and shops are equally spread in local centres all over the region. The medical and dental care is close to the Thuringian average. The two hospitals in Bad Frankenhausen and Sondershausen ensure a stationary care in the eastern and western part of the district. Three specialized university hospitals can be found in distances from 70 to 100 km.
There is an approach of installing citizen shops, where inhabitants in rural regions can reach services and short term goods.

Main aspects of SWOT:

- High rate of motorization
- Insufficient situation of barrier-free public transport stations and public spaces
- Good medical infrastructure
- Approach to ensure availability of short term services and goods for inhabitants in rural regions (“citizen shops”)

5.2 Public transport

There are only two separate railway lines crossing the district in north-south direction. The trains are running hourly and nearly hourly. There is a closed rail section crossing the district in eastern-western direction, which needs sustainable renovation works for reactivation.
There is an insufficient barrier-free situation of train stations within the district. There are no elevators, no toilets for disabled users and no easily visible schedules.
There is a new fast bus line from Sondershausen to Artern, on which buses run nine times per day. The cheapest ticket for a bus ride within the district costs 1,50€. There is a special mobility ticket for unemployed, poor people and asylum seekers for 20€ per month. On weekends, it is valid for two persons. With the summer holiday-ticket for 22€, pupils can use all trains and most buses in Thuringia for six weeks.
Within the whole district, only the bus station in Sondershausen is barrier-free. Only every second regional bus is equipped with low floor and only few buses have an audial announcement system. The bus driver does not announce the next station verbally.
The standard regional buses become more and more unprofitable, as they are almost exclusively used by pupils, so the two bus companies already run call-a-bus services on several lines, with need to call 2 hours beforehand. But this service is increasingly criticized by bus companies as being difficult to plan. The introduction of citizen buses was not successful because of a lack of volunteer bus drivers.
The time schedules incl. prices for the bus lines can be found online. The pricing system is very complicated and there is no map of the complete bus network of the district available.

Main aspects of SWOT:

- Low rail network density
- Insufficient situation of barrier free bus- and train stations
- Little demand for buses and trains make them unprofitable

- Favourable offers for pupils and unemployed, poor people and asylum seekers
- The fast bus line improves the traffic connection in the east-west connection

5.3 Individual transport

There is a high traffic volume on the road B4 in the north-south direction. The maximum is reached around Sondershausen with 13.000 vehicles per day (incl. trucks). The truck traffic with 1.200 trucks per day around Sondershausen is relatively high compared to other roads. There is also a lot of traffic between Bad Frankenhausen and Artern along the L1172 in the east-west direction. There are about 5.000-7.000 vehicles per day.
There is a lot of traffic flowing through the spa town of Bad Frankenhausen. The situation could get worse after the completion of the motorway A71.
The number of road accidents decreased within the last decade, but it is still high (equalling the German average of 3.900 accidents with injured persons/Mio. inh. and 55 deaths/Mio. inh. per year). There are many motorbike accidents on the B85 around the Kyffhäuser hills between Bad Frankenhausen and Kelbra.
There is no infrastructure for the use of electric cars yet and there are no charging stations for E-cars. Plans for introducing E-cars or E-bikes for everyday mobility exist.

Main aspects of SWOT:

- High level of truck traffic around Sondershausen
- No infrastructure yet, but plans for introducing E-cars and E-bikes for everyday mobility

5.4 Multimodal transport (combination of transport modes)

The P&R-facilities at the stations of Heldrungen, Greußen and Sondershausen are free of cost. Also the other train stations in the district have enough parking space and they are accepted and used quite well. There are bike parking areas at stations, but without special installations.
In Sondershausen and Artern the train stations are located far from the bus station outside the city centres. There is also a bad interconnection between bus and train. In Sondershausen, only two of the Sondershausen-Artern buses start at the train station. A good situation can be found in Greußen and Heldrungen, where the train and bus stations are in close distance to each other.

Main aspects of SWOT:

- Enough public parking spaces at train stations for P&R, well used
- Sometimes unsatisfying interconnection of public transport, large distance between bus and train stations

5.5 Car sharing / Car-pooling

Currently, there are no forms of car sharing or car-pooling in the district.

5.6 Non-motorized transport development. Cycling and walking

The role of bicycle use is very weak. There are cycling paths in the cities and surroundings, but the topography makes it difficult for a wide range of the population to use the bike. Maybe E-bikes could help to improve the bike using.
There is a good cycling infrastructure regarding touristic routes, e.g. Unstrut-Werra Radweg, Helmeradweg and Wipperradweg. The situation of workaday, non-touristic cycling infrastructure is quite bad. There is only one bike rental in the district. Other bike rentals had to be closed, e.g. because of abandonment of railway routes. At the moment, there is no support for the use of electric bikes and there are no charging stations. Existing plans for introducing electric cars or bikes for workaday mobility may change the situation in the future.
There are no “punctual” neither systematic measures for the improvement of walking conditions in the district.

Main aspects of SWOT:

- Unfavourable topography and infrastructure for using bikes everyday
- Good cycling infrastructure regarding touristic routes

5.7 Supplementation of local transport by tourism related demand

The “Kyffhäuser-Bus” provides tours to touristic sights. It has to be called two hours beforehand like a call bus.
There are no touristic tickets and there is no discount for hotel or spa guests. There is no information on public transport on the touristic homepage of the district.

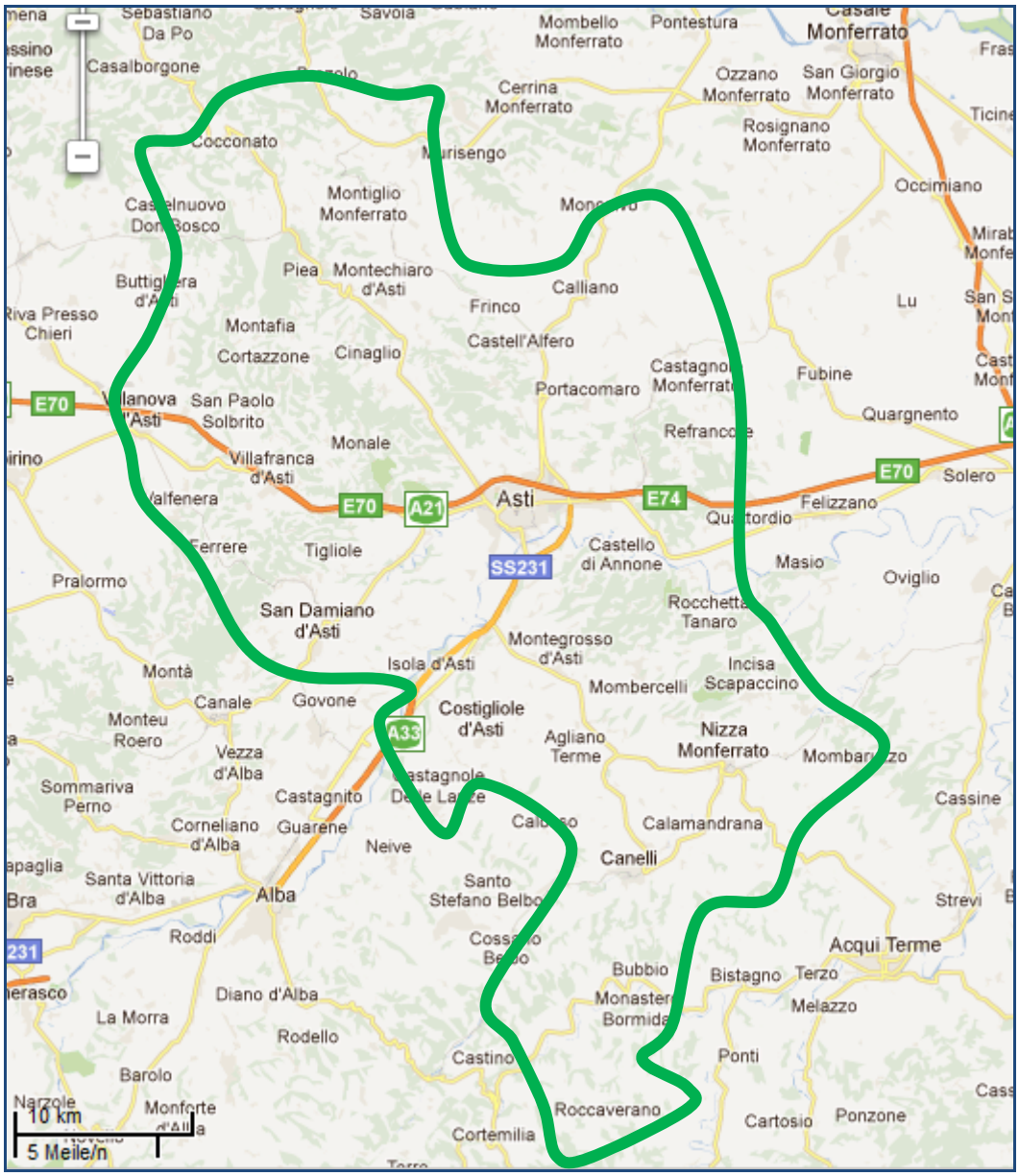
Main aspects of SWOT:

- No discount for tourists in using local transportation
- No information of public transport on the touristic homepage

6. Province of Asti, Italy

Population: 221.700, Area: 1.504 km², Density: 147 inh./km²
Main settlements:

- Asti (73.700 inh.)
- Canelli (10.300 inh.)
- Nizza Monferrato (10.100 inh.)
- San Damiano d'Asti (8.100 inh.)
- Costigliole d'Asti (6.000 inh.)



Map 6: Province of Asti (based on Google Maps)

6.1 Mobility and demographic change

Within the region of Asti the car possession reaches 625 cars per 1.000 inhabitants which is a little bit higher than the Italian average (600/1.000) and also higher than in many of the other project regions (EU-15 average is 500/1.000).
Regarding the commuting situation it can be stated that about 55.000 persons of the working population commute by train within the greater Piedmont Region; commuter parking spaces for car users only exist on the edges of Turin, the capital city of the Piedmont Region.
One big challenge is seen in parts of the rural areas becoming marginal areas. There are many public services, above all for small municipalities, which are not working. In general, the public transport and its offers (e.g. for carrying a bicycle on the train) have to become more attractive and competitive compared to the individual transport to be the preferred solution instead of car use.
Regarding the usability of public transport for elderly persons or with reduced mobility, there is assistance for the use of trains, but not for the local transport offers as buses. In comparison, the accessibility of urban infrastructure is improved faster.

The situation of the basic public services´ reachability is characterized by

- a service reachability in rural areas depending on the opportunities to organize systems of public transport and being related to the dwelling density
- hospitals being situated in the main cities of the region (in Asti there is one) and also a strong concentration of medical care in urban centres, family doctors delivering the basic medical care for the population in rural areas
- supermarkets in rural areas disappearing from villages with the size of about 600 inhabitants (an exception are touristic villages with a potentially higher (although seasonally based) demand).

Main aspects of SWOT:

- High car possession (625 cars/1.000 inh.)
- High number of commuters using the train, in general poor situation for P&R
- Reachability of short- and mid-term service (supermarkets, family doctors etc.) in rural areas endangered

6.2 Public transport

In general there is a relatively good bus connection between the bigger regions` urban centres (Asti, Torino, Alessandria, Biella, Novara, Cuneo, Verbania, Vercelli) to smaller municipalities (about 10.000 inhabitants). Nevertheless, there are few connections (1-2 a day) to small villages and no transport alternatives foreseen. The prices to go e.g. from small municipalities in the surroundings of Asti to the city is quite high (2-3,50 euros).
In order to improve the current situation some efforts are made, e.g. in some villages there are studies on public transport “on demand”- so called *Demand Responsive Transports* and also a project that foresees the integration of a bicycle network with public transport services.
Timetables are constantly updated on-line and websites contain all relevant information about tariffs, routes, lines and stops. Regarding the availability of user information it is quite

positive to mention that in small villages, all important information material about time schedules etc. is send by post, which benefits elderly people and those with a limited access to the internet. Electronic user information about the city transport in real-time on the streets only exists in Turin.
The situation regarding accessibility is considered and treated as an important issue, e.g. all buses have platforms to ease the access for disabled people now.
In the neighbouring province of Alessandria the public transport company introduced a service called *"Eccobus"*, available on working days from 6 to 20 o´clock with the times from 10 to 11 and 15 to 16 o´clock excluded. The users can book a ride by phone, they inform about the place where to be picked up, the planned hour and destination. Through this service, a single bus picks up more different users, optimizing the efficiency. The price is the same as for a normal ride. From 2007 to 2009, on average 5.229 persons used this service per month with a total number of 587 rides with 8,92 passengers each.

Main aspects of SWOT:

- Relatively good bus connection between the regions` urban centres and smaller municipalities, worse situation for small municipalities
- Good availability of information for all users
- Barrier freedom of public transport gets high attention in the Piedmont region
- Initiatives to find new approaches in public transport corresponding with existing demand
- "Eccobus": Flexible bus-service for more different users, optimizing the efficiency in the neighbouring province of Alessandria, maybe an example to follow

6.3 Individual transport

In general, all urban centres and the roads and motorways leading to the big cities of the region suffer from high traffic density and traffic jams, especially during daily rush hours and on Friday evening when people return to their own towns.
Electric cars until today have no significance as means of (individual) transport (all in all in Italy there are about 1.300 electric cars used).

Main aspects of SWOT:

- Car use is dominant means of transport, going along with negative effects as traffic jams, air pollution etc.
- E-cars have no importance up to now

6.4 Multimodal transport (combination of transport modes)

The trains in the region allow for carrying a bike (buses do not), although this is not very commonly used. There is also a bike-sharing-system, but a big problem is the missing basic cycling infrastructure which could invite more persons to use a bike (lack of special lanes, at the moment there is no Bike&Ride-system).

Main aspects of SWOT:

- Park&Ride-infrastructure only in Turin,
  missing basic cycling infrastructure and no Bike&Ride-system in the region

- Bikes can be carried in regional trains

6.5 Car sharing / Car-pooling

Existing car sharing-offers are normally located near bus stops or train stations in order to create an easy access to this form of shared mobility.
Especially in rural areas the “car-pooling”-system is very common (instead of car sharing). There are different ways of organising car-pooling: Sometimes one or more persons share their individual car in particular for the way from home to work and back home with a regular interchange of their cars while other users contribute for the service. Sometimes car-poolers also buy a car for this specific purpose.

Main aspects of SWOT:

- Car sharing-offers exist (normally located near bus stops or train stations)
- Privately organized car-pooling is a common way of shared mobility among commuters in rural areas

6.6 Non-motorized transport development. Cycling and walking

Up to now (also due to a lack of cycling infrastructure, no bike carriage in buses etc.) there is little use of bikes in rural areas, compared to an increasing use in urban areas, where the bicycle is seen more and more as a good alternative especially in times of high traffic levels. Nevertheless the potential for an increased use of bicycles could be better utilized if integrated with other solution of transport. Thus there are stakeholders who are doing lobbying for the improvement of an integrated use of public transport and bikes, also in connection with promoting the use of bicycles for touristic purposes.
Regarding the conditions for walking it must be stated that rural roads are dangerous and at the moment measures are not foreseen to promote it in some ways. People still prefer to use their car instead of walking and even using buses because their frequency in some cities (such as Asti) is perceived as low (1 x each 20 minutes).

Main aspects of SWOT:

- Due to a lack of cycling infrastructure little use of bikes in rural areas, increasing use in urban areas and change of attitude towards bicycles as attractive alternative

6.7 Supplementation of local transport by tourism related demand

Some hotels offer free bicycles to tourists so that they can discover the hills and surroundings of Asti and its province without using a car.

Main aspects of SWOT:

- No general strategy, offers only punctual, (e.g. by hotels offering free bicycles to their guests)

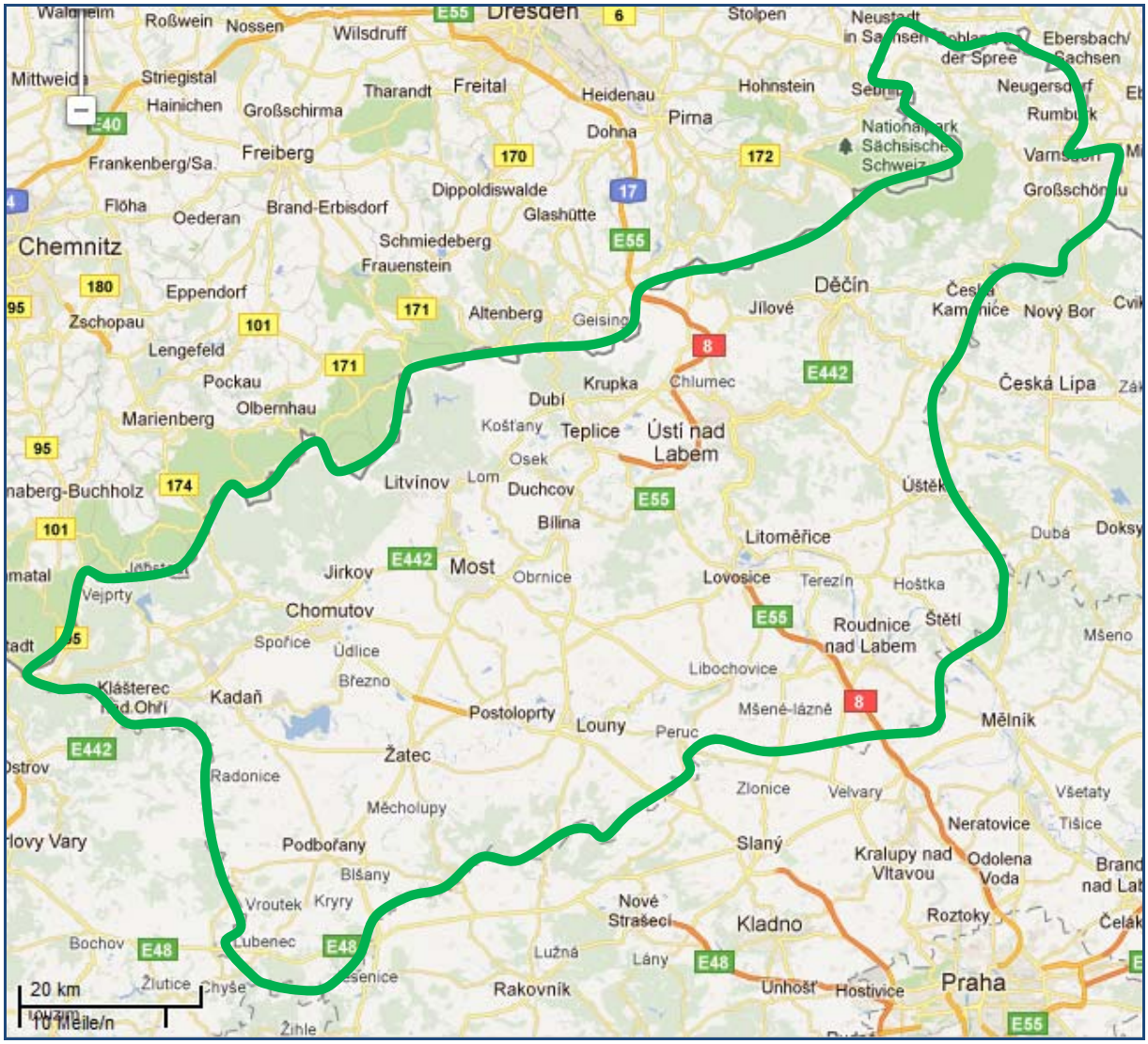
6.8 Other topics

Although there are also positive approaches already to be noticed as e.g. the high importance given to the accessibility of the regional public transport system, in the Piedmont region there is still a potential for establishing policies fostering above all sustainable ways of mobility and transport. This is caused partly by the weather (winters are often cold, so that people prefer to move with their own car), and also because some of the rural areas do not have services that encourage the mobility with public transport. Nevertheless, different good practices show that a new idea of mobility is developing, but the region still is in the “policy” and regulatory stage.

7. Ústí Region, Czech Republic

Population: 823.200, Area: 5.335 km², Density: 154 inh./km²
Main settlements:

- Ústí nad Labem (94.300 inh.)
- Most (67.800 inh.)
- Děčín (51.900 inh.)
- Teplice (51.000 inh.)
- Chomutov (50.000 inh.)
- Litvínov (27.100 inh.)



Map 7: Ústí Region (based on Google Maps)

7.1 Mobility and demographic change

Although in comparison to the other project regions the car possession is low, there was a remarkable increase from 308 cars/1.000 inhabitants in the year 2001 to 406 cars/1.000 inhabitants in 2009.

This development also reflects the modal split in the region, where the share of public transport use is dropping slightly and in the major regional cities it is even declining significantly while there is a rising share of individual car use. This potentially is also connected with over 50 % of the rural working population commuting outward their place of residence. There is a strong centralization pattern in commuting towards big-scale employers located in cities and coal-mining centres, but there is also a strong outward commuting to Prague.
The "public commuter infrastructure" is often underdeveloped, especially at stations and stops with usually no or limited service, poorly maintained structures and no or not sufficient P&R-facilities. On the other hand some stations exist, esp. on major railway connections, which were reconstructed in the last decade, with strong improvements of their general appearance and new (or improved) services and P&R-facilities.
Generally the most challenging aspect of the regional mobility is its financing. Both national and regional governments seek to save on public transport budgets, reducing some services and abandoning some railway lines. Thus the goal is to ensure comfortable, sustainable, cost-effective public transport services able to compete with individual transportation and affordable for low-income commuters. This demand includes also a reconstruction of major railways[5]. Important would also be finishing the highway construction from Prague to Ústí nad Labem (Lovosice – Řehlovice), improving major roads (esp. by connecting settlements) and connections to peripheral areas (esp. Šluknov region – e.g. by cross-border railway) and centres of neighbouring regions.
Opportunities to realize this could be funding of mobility improvements from the EU structural funds. A chance could also be an enhancement of the cross-border public transport connection to Germany to foster the access to the German labour market (esp. to Dresden, Chemnitz, etc.) and cross-border economic activities; high-speed railway connection to Prague and Germany.
Major transport infrastructure improvements in the last decade were

- the reconstruction of the Trans-European railway corridor, section Prague - Ústí nad Labem - Dresden, allowing convenient commuting by train to Prague (1 hour from Ústí nad Labem)
- the nearly completed construction of the Trans-European motorway corridor (E 55/D 8) between Prague and Dresden providing a convenient road connection of central parts of the region to Germany (Dresden)
- some improvements of the national highway R7 (including connections of divided highway sections and settlement bypasses construction) which has led to a better connection of major regional cities (e.g. Most, Chomutov, Louny) to Prague and Germany.

The only incomplete section of the motorway Lovosice – Řehlovice (part of section Prague – Ústí nad Labem) remains a major challenge for the regional mobility situation (at least for the individual transport).

Newly purchased buses in most cities are low-floor and so more comfortable for the users, especially for elderly and disabled people; in some rural areas only about 10 % of the bus fleet is low floor. There are lower ticket prices for elderly and disabled people.

[5] Esp. Ústí nad Labem - Teplice - Most - Chomutov - Klášterec nad Ohří; Děčín - Benešov nad Ploučnicí - Rumburk

Most long-term services are located in major cities which form an equally distributed pattern of regional centres; however there are some peripheral areas located in more distance to such centres, and/or less accessible because of natural conditions[6].
Mid-term and short-term services are distributed more equally to micro-regional centres and bigger settlements. But some peripheral areas lack these offers because of an insufficient market/number of clients or a low willingness of providers to locate in remote areas (such as Vejprty region/despite of attempts of local governments to attract it).

Main aspects of SWOT:

- High share of local working population commutes to work
- Public transport is not an attractive alternative due to poor conditions for commuting (e.g. only punctual P&R-facilities)
- Reduction of railway infrastructure by national/regional government
- Some remote areas with weak supply of short-term services

7.2 Public transport

Since there is a high population density in central parts of the region and municipal public transport companies' services are interconnected, the public transport network is relatively dense and frequent in these parts of the region. The regional public transport ticket allows using all public transport offers in the region and neighbouring parts of Germany. So the basic public transport system (ordered and financed by the regional government) generally ensures the reachability of work and services. There are different tariffs, e.g. a regional transport ticket Labe-Elbe valid for 1 day, 1 or 2-5 passengers and/or a bike on major public transport operators.
There is also a good quality of the supraregional train transport on the Trans-European railway corridor (Prague - Ústí nad Labem - Dresden) with new infrastructure and offering a relatively fast train service.
A negative aspect is the mostly out-dated infrastructure of the railway system (all railways except of above mentioned, numerous bus or train stations). There is no competition on the railway sector - so far there is just one operator on each route, the majority is operated by the ineffective and inflexible national railway company.
The basic bus transport service routes, trying to serve as many settlements as possible, has long commuting times, riders have to pay for their ticket depending on the travel distance. Almost all necessary information (schedules, prices, lines, operators) about public transport are conveniently available on the national public transport web site (www.idos.cz, sometimes the price is not displayed). Information brochures on public transport (schedules etc.) are not widely distributed, they can be usually obtained at major station counters (if available), but are usually not distributed on vehicles.

Most train cars in service in the region are old and not barrier-free, however currently reconstructed railway stations and stops are designed barrier-free. Therefore train using conditions for people with disabilities is still limited and slightly improving.
New buses introduced in the last decade (esp. on urban and suburban routes) often allow barrier-free accessibility (the regional government demands 10 % of bus fleet to be low

[6] Such peripheral areas are the Šluknov region, Vejprty region and Podbořany region.

floor), but the majority of buses used to serve in rural areas are not barrier-free. The regional government is planning to demand for 100 % low-floor bus fleets in future contracts for basic transport service.

Some operators offer public transport bus services without any subventions from the government, but it is mostly in case of longer distance routes (e.g. to Prague). Municipalities along currently unused local railways[7] plan to acquire these railways or contract some train service in order to preserve train service.

Main aspects of SWOT:

- Availability of information, mainly via internet and station counters, less on the vehicles
- Satisfying public transport system especially in the central parts of the region, interconnection of services of different municipal public transport companies
- Regional public transport ticket allows using all public transport offers in the region and neighbouring parts of Germany
- Long commuting times, especially using the regional buses
- Out-dated infrastructure of the railway system, no competition in the railway sector, but some long distance buses
- Current situation of barrier-free usability of buses, especially in rural areas, not satisfying, the regional government aims to improve current situation
- Municipalities make efforts to ensure public transport offers on their own

7.3 Individual transport

There is a high car/truck traffic pressure especially at national highways extending radial from Prague[8] and on roads connecting major cities[9].
Negative impacts of high car/truck traffic are especially significant along roads with insufficient capacities and roads stretching across settlements (such as the road Lovosice - Teplice, which now carries a part of traffic between Prague, the Ústí region and eastern Germany and should be replaced by a motorway).
Problems related to individual transport (such as a high level of noise emissions, air pollution, traffic jams, insufficient parking etc.) are remarkable at places where high traffic flows through densely urbanized areas and where road networks are out-dated. At such places problems could be mitigated by construction of bypass roads avoiding densely urbanized areas.
According to statistics in the last years there has taken place a serious improvement of the road safety situation with the lowest numbers of accidents, injured and killed persons in the last 2 decades since 1990 (partly as a result of introducing a point system/financial penalty for breaking traffic rules). But it remains a problem with high traffic flows through densely urbanized areas.
Regarding electric mobility there is currently a limited availability of electric cars on the market, while the demand for electric cars could also be reduced by the still high prices.

[7] e.g. Děčín-– Oldřichov u Duchcova, Čížkovice – Obrnice
[8] Prague - Lovosice - Ústí nad Labem; Prague - Louny - Chomutov/Most
[9] Ústí nad Labem, Teplice, Most, Litvínov, Chomutov

Actual plans of the Czech government foresee the creation of about 200 charging stations in the entire Czech Republic until 2013.

Main aspects of SWOT:

- High car/truck traffic pressure especially on national highways, roads connecting major cities and urban centres, partially insufficient capacities
- Serious improvement of the road safety situation in the last years
- Electric mobility has no significance up to now (in the whole country), plans for improving infrastructure in the next years

7.4 Multimodal transport (combination of transport modes)

The conditions for combining different transport modes are not very pleasant as there are mostly no or not sufficient P&R-facilities (some located at major railway stations in cities such as Ústí nad Labem) and almost no Bike&Ride-facilities because they have been dismantled in last decades (some just as a reminder of old times).
The existing public transport modes are gradually, but slowly harmonizing (lack of combined stops, long waiting times when changing), depending on the public transport network hierarchy. This is also a result of the competition of bus and train services which in some cases operate on the same or very similar routes.

Main aspects of SWOT:

- Conditions for combining different transport modes not pleasant (mostly no or insufficient P&R-/Bike&Ride-facilities)
- Competition of bus and train services as an obstacle for improving the situation (partially operating on the same or similar routes)

7.5 Car sharing / Car-pooling

While there is no official car sharing-system established, the car-pooling is a common mobility feature in the rural areas. There is no public organisation, it is mostly carried out by neighbours, familiar people or colleagues who commute to or from nearby places. The drivers who want to share their costs themselves look for people to take.

Main aspects of SWOT:

- No official car sharing, but privately organized car-pooling common in the rural areas

7.6 Non-motorized transport development. Cycling and walking

The use of bicycles has no importance as an everyday means of transport. So e.g. only about 2 % of commuters used bicycle for commuting in 2001, a figure which is probably about to drop by 2011 Census.
Apart from limits by natural conditions, especially mountains covering vast part of the region, a problem is the insufficient cycling infrastructure, especially a very low supply of car-free bicycle paths. Bicycle paths are mostly situated accompanying lower-class roads, which cyclists share with cars. Some exceptions are 4 “belt bicycle paths”, defined and developed

by the regional government, following rivers or mountain ranges, generally excluding car transport.
Bicycle carriage on buses and trains is limited by inappropriate buses and train cars (it is not possible to carry more than just a few bikes by train, except of very limited numbers of train cars designed for bicycle carriage usually in service on routes attractive for tourism). Bike rentals are mostly located just in major tourism areas (such as České Švýcarsko).
Up to now E-bikes are not much in use, but they could offer a great potential especially in the mountainous areas of the region where they could become an interesting mobility alternative. To reach this goal the infrastructure has to be improved (safety on bike- and pedestrian ways, service of charging stations) and still also the high prices are a challenge for low-income households.
The pedestrian infrastructure in rural areas is mostly insufficient, with missing sidewalks (in many areas causing a serious safety problem), rural roads are often in poor condition and still worsening the comfort of walking (cars splashing water from holes, walkers avoiding water on roads).
Special types of walking infrastructure are marked tourist paths which have a long tradition and a good quality. Their maintenance is supported by the regional government.
Measures to promote walkability are limited to a construction of new sidewalks/pedestrian ways and traffic calming (e.g. new crosswalks, speed bumps in front or on crosswalks, pedestrian platforms on crossroads).

Main aspects of SWOT:

- Bicycles have no importance as everyday means of transport
- Adequate infrastructure and bike service (e.g. carriage on public transport) insufficient or limited to touristic areas
- No measures taken or currently planned to change this situation (e.g. to improve infrastructure or promote cycling)
- E-bikes as promising option in the mountainous areas of the region
- Pedestrian infrastructure in rural areas mostly insufficient and uncomfortable

7.7 Supplementation of local transport by tourism related demand

Currently there are some tourist buses running regularly through major tourist areas (e.g. České Švýcarsko), enabling the access to local attractions and also a limited bicycle carriage. There are also some ski-buses in service between some major regional centres and local ski areas (but usually these are not designed for carrying skis, thus less comfortable).
The regional public transport ticket allows using all public transport offers in the region and neighbouring parts of Germany.

Main aspects of SWOT:

- Some tourist buses running regularly in major tourist area, ski buses
- Regional public transport ticket allows using all public transport offers until neighbouring parts of Germany

7.8 Other topics

The completion of the E 55/D 8 motorway section Lovosice - Řehlovice remains top priority for the regional government despite legal and fiscal problems. It is currently estimated that it will be completed until 2015.

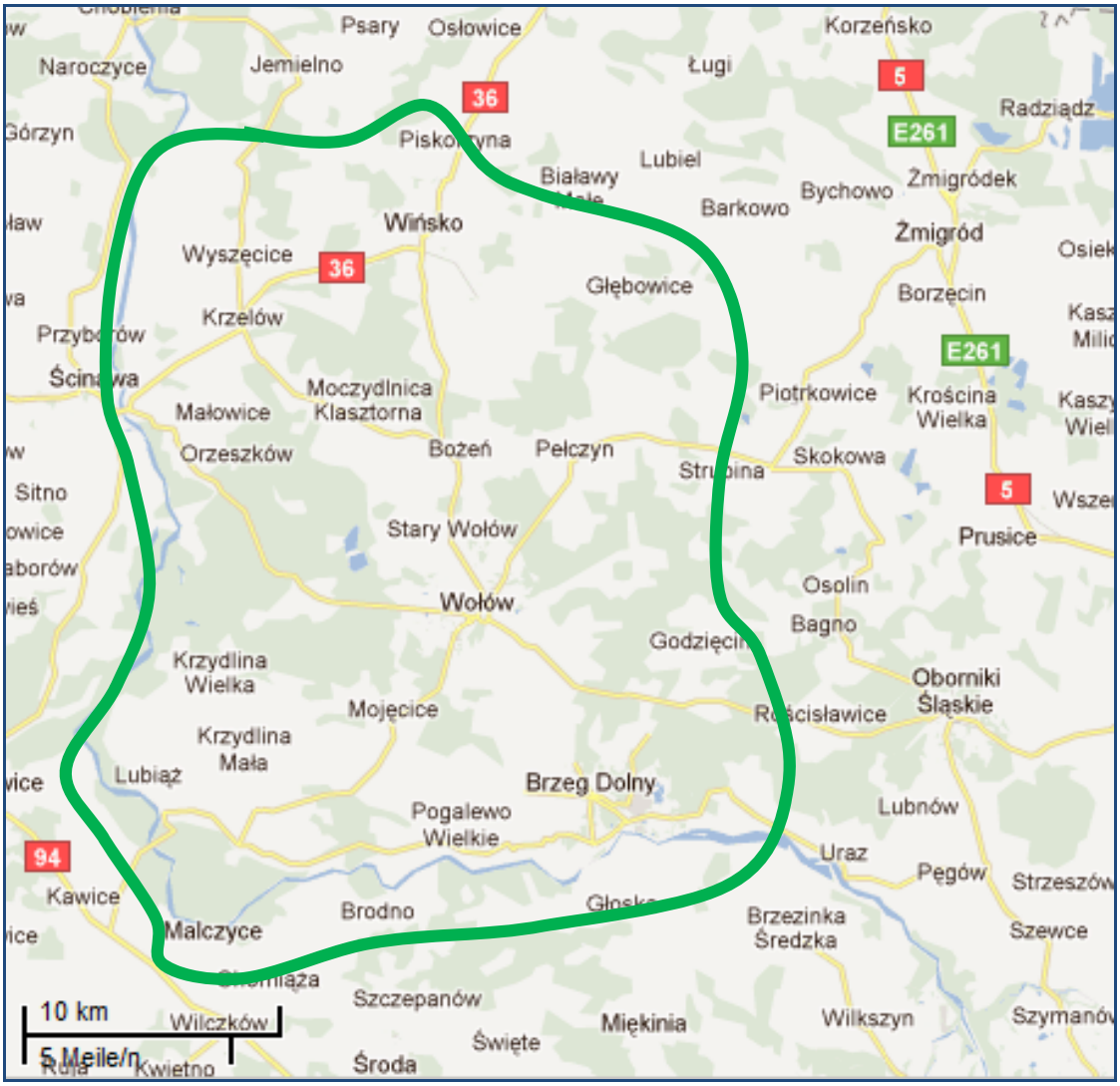
There is a rising concern both of national and regional governments to promote competition for basic transport service contracts (esp. on railways). There are examples of some private rail companies, providing subsidized (and sometimes even not subsidized) service on local railways and promoting quality of service.

In the last few years huge investments were made for the purchase of trains and reconstruction works on obsolete trains.

8. Brzeg Dolny and surroundings (Wołów County), Poland

Population: 47.300, Area: around 675 km², Density: 70 inh./km²
Main settlements (in Wołów County):

- Brzeg Dolny (12.800 inh.)
- Wołów (12.300 inh.)
- Wińsko (1.800 inh.)



Map 8: Brzeg Dolny and surroundings (based on Google Maps)

8.1 Mobility and demographic change

During the last decade there was a noticeable increase of car possession rising from 0,41 cars/inh. to 0,6 in 2009 up to 0,63 cars/inh. in 2010 (mostly imported, used cars).
Mainly due to the vicinity of the city of Wrocław (located in south-eastern direction) the outward commuting is much higher than the inward (no calculated data for commuting available).
The biggest challenge and opportunity for the Wołówski County (Poviat) in the next years is the construction of a bridge over the Oder river. This bridge will connect the county to the

agglomeration of Wrocław. This makes outward commuting easier and municipalities also hope to attract more investors. There are huge expectations connected with this construction, as the first talks about this bridge started over 15 years ago. But now since it is official (an agreement was signed in October 2011 with due time to November 2013), everyone's expectations are very high.
Regarding the barrier free usability of (especially older) public buildings (municipal offices, health facilities, banks etc.), most kindergartens and schools, railway and bus stations, the situation is not satisfying up to now. In some cases public buildings have (or are being modernised in this field) different forms of accessibility aid as platforms, elevators etc. Only if a new construction is under way, accessibility for all is included in the planning and construction.
The region has 2 cities (Brzeg Dolny and Wołów) and 97 villages. Shopping centres are located in the towns while the existing shops in rural areas have a very limited variety of goods and some villages do not even have this kind of shops. There are all in all 7 healthcare facilities (5 non-public) and 1 hospital which is subdivided in 2 buildings with a distance of 13 km in between (one located in Brzeg Dolny, one in Wołów – some services are offered in both houses, some only in one of them; there is a good road and railway connection between them). Al in all there are 80 (family) doctors and 15 dentists for the 47.300 inhabitants of the region.

Main aspects of SWOT:

- Significant increase of individual motorisation in the last decade
- Big infrastructure project to better connect the region with the important centre Wrocław
- Unsatisfying situation of barrier freedom of public buildings, schools, railway and bus stations
- Very limited availability and variety of goods and services in some villages in rural areas

8.2 Public transport

Recently an analysis was made of the determinants of connection between cities of the Wołówski County with neighbouring municipalities (Prusice, Oborniki Slaskie, Sroda Slaska, Miekinia) and cities located along the river Oder: Wrocław and Lubiąż. For each of the extracted direction there were two ways of connection distinguished: Use of public transport (rail and automotive) and use of individual transport (car).
The Wołowski County lacks a very well organised public transportation. Most public transport lines are of a high or medium level of communication in terms of the connections (number of realized connections determining the options of travelling at different times of day). At the same time those lines have a low level of connection in terms of quality (many transfer connections, not attractive for potential tourism). Very noticeable is the low availability of connections toward the municipalities' boundary to the north.
The Wołowski County has a good transport connection (road network and a train line) between its municipalities and also with the biggest cities in the region, but the standard of the infrastructure is weak and although being modernized still greatly deviating from "European" standards (e.g. high ratio of unsurfaced communal public roads). And again the situation is the worst in typical rural municipalities like Wińsko. The main factor defining the overall low level of public transportation is the still missing bridge over the Oder river in the

closest vicinity of Brzeg Dolny (there is only a ferry). But this will change within a few years, as a bridge will be realised by November 2013 and thus also improving the connectivity with means of public transport (buses).
Also the railway system is in urgent need of modernisation (lines, coaches, infrastructure as stations, platforms). A start was made by the purchase of 6 new commuter trains for the Wrocławski region and a line which runs through the Wołowski County and the station in Brzeg Dolny, the trains are accessible for all and have internet.
While the official schedule of railway connections can be found on the internet, there is no official schedule published on the internet for bus connections, only private sites publishing data found in other sources, thus such schedules are often not actual. Bus schedules are posted at bus stops. Only railways are publishing prices for the connections and only national ones. The only available data about the prices for bus connections is a cash-desk (as experience show also the best information source for railway connection) or a bus driver.
Generally the situation for people with disabilities, moving on wheelchair or elderly to use the public transportation without the help of others is extremely difficult.
Some private transportation companies have been set up in recent years helping with prices level and availability of connections (those companies often offer connections with small buses). But very strict legal rules and bureaucracy difficulties are strong obstacles for setting up such companies (also an issue at national scale). Moreover they have to face a low stability, a high competition and rising costs (gasoline).

Main aspects of SWOT:

- Lack of well organised public transport-system
- Quality of road and railway infrastructure not satisfying, improvement by modern commuter trains
- Construction of a bridge crossing the Oder river will improve connection towards southern direction
- Information about public transport (connections, prices) are ok for trains but very limited to obtain for buses
- Private flexible forms of supplementing public transport exist, but strong obstacles (strict legal rules and bureaucracy difficulties, competition, costs etc.)

8.3 Individual transport

The following table shows the most used roads in the Wołowski County (in 24 hours' time):

Road number	Localities	Length [km]	Vehicles total	Trucks	Buses
334	Krzelów-Moczydlnica	10,0	581	28	34
338	Wińsko – Wołów – Lubiąż - Kawice	39,7	**15.497**	1 045	29
339	Strupina - Wołów	15,7	4.382	77	29
340	Ścinawa – Wołów - Bukowice	21,3	**13.502**	706	88
341	Prawików – Brzeg Dolny - Uraz	23,3	**8.415**	379	34

Table 1: Road traffic volumes per day in Wołowski County

The town of Brzeg Dolny, due to the localization of chemical industry suffers most from high car/truck traffic.
Basic problems related to individual transport are the high number of accidents (considering the fact there is mostly traffic on local and district roads, few regional ones, with an average speed of 53 km/h), the lack of a bridge over the Oder (there is only the ferry) and a number of cars that is 10 and more years old (pollution, safety).
Up to now there is no support of the use of electric cars and also no infrastructure (charging stations) for E-cars installed.

Main aspects of SWOT:

- High number of accidents
- Number of cars that is 10 and more years old
- No promotion and infrastructure for electric mobility

8.4 Multimodal transport (combination of transport modes)

The existing options for doing P&R are well used in Brzeg Dolny: People leave their cars (there is a satisfactory availability of parking space) and travel by commuting trains to Wrocław. A P&R-facility does also exist in Wołow, but there is no sufficient parking space to satisfy the demand.

Generally the train – bus connection is not "coordinated" as waiting time for a transfer may reach 2-3 hours. There are bus stops at the train stations, but no bus stations widely spread in the wołowski county.

Main aspects of SWOT:

- P&R very common in Brzeg Dolny (to Wrocław) and high demand also in Wołow, but insufficient parking space
- Connectivity between train and bus can be improved (waiting times, bus stops etc.)

8.5 Car sharing / Car-pooling

There is no official car sharing-system in the region. No information on car-pooling.

8.6 Non-motorized transport development. Cycling and walking

The current role of bicycle use for daily transport can generally be described as weak (differs in other municipalities of the county). The conditions for bike transport for the people going to work need improvement.
The best situation can be found in Brzeg Dolny with several new cycling paths, here people use bikes to go to work more often than in other municipalities. Particularly in villages (also due to lack of financial resources for construction) there are only very few (non-touristic) bike lanes and sometimes also the topography makes it difficult for a wide range of the population to use the bike. E-bikes could help to let more persons use bikes, but the price of purchasing such equipment is the main obstacle.
Regarding touristic bicycle routes the situation is better (the main touristic and non-touristic) cycling paths are published on a website, but only in Polish), they are well marked in the area and also a rising of bicycle activities is noticeable. For renting bicycles the offer is small, often there is no information on the internet available.
Also in the sector of cycling so far there is no support of electric mobility. Municipalities are not ready to implement the use of E-bikes (not only for infrastructure issues, simply the money is needed in other fields of action).

Existing "inner" roads mostly have pavements while outer roads mainly lack pavement (however some of the closest villages surrounding Brzeg Dolny are also connected by pavement/bicycle route). Existing pavements in many cases are of very low standard (old, broken concrete flag-stones). Only if roads or streets are under renovation as a part of a "bigger plan" they (mostly) get improvement of the walking conditions like pavement.

Main aspects of SWOT:

- Situation of cycling infrastructure for every day mobility generally weak with slight differences of using conditions in the municipalities, best in Brezg Dolny
- No promotion and infrastructure for electric mobility, price of equipment and infrastructure still too high
- Existing conditions for walking in many cases bad (broken surfaces etc.)

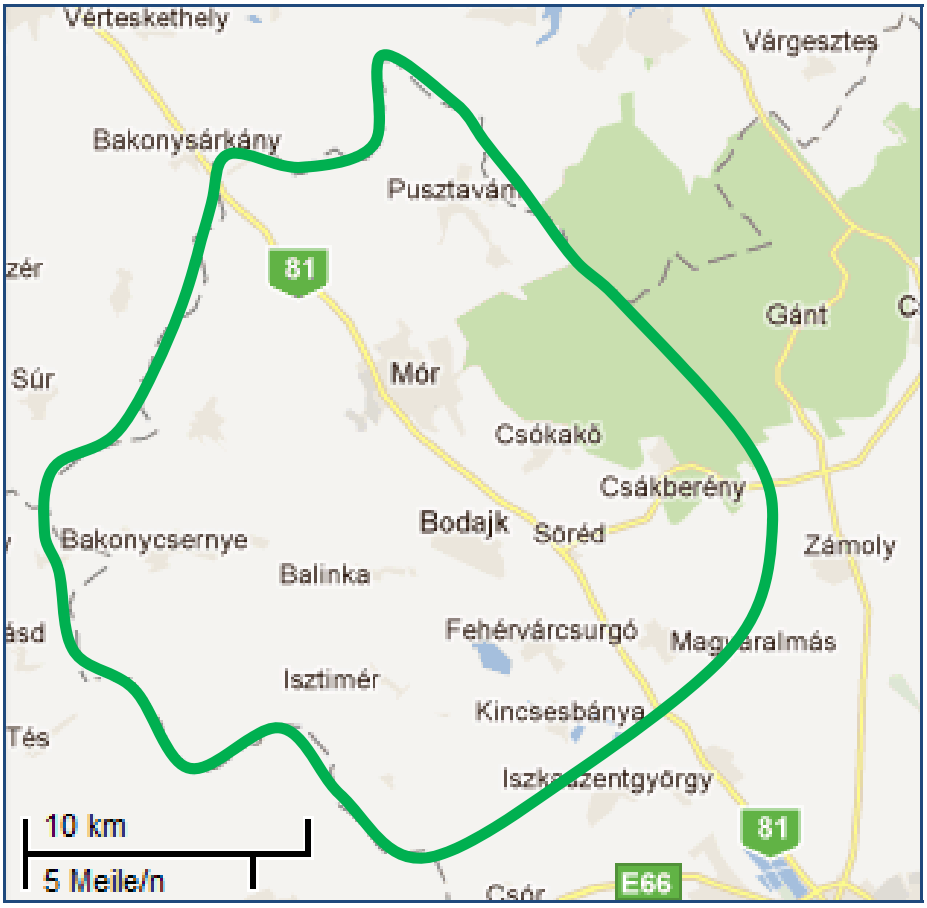
8.7 Supplementation of local transport by tourism related demand

There are no special touristic tickets and no information on public transport (or very little information) on the municipality's websites. Some agro tourism homesteads offer free bike rental but they do a very weak promotion of this.

9. Microregion of Mór, Hungary

Population: 34.900, Area: 418 km², Density: 83 inh./km²
Main settlements:

- Mór (14.700 inh.)
- Bodajk (4.100 inh.)
- Bakonycsernye (3.100 inh.)
- Pusztavám (2.500 inh.)



Map 9: Microregion of Mór (based on Google Maps)

9.1 Mobility and demographic change

Except of traffic running on one main railway line, in the last years the automobile transport has become dominating the mobility in the Mór Microregion. Regarding commuting to work, the large employers partially take care of the transportation of their workforce to the factories and offices. Main car traffic takes place along the road 81 which links Mór to the county's capital of Székesfehérvár in the south-east and which is of appropriate quality. Mór is the centre of the public bus transportation in the micro-region. Its vehicle-supply is appropriate and all settlement in the microregion are connected. Regarding public transport it can be said, that train lines are deficient (only Mór, Bodajk and Fehérvárcsurgó have a railway station, the lines are one-track and not electrified). In contrast bus transportation is well managed and low-floor buses are operated in the local transportation.

Due to quite dynamic economic development of Mór many employees from outside where drawn to the microregion. The distance of commuting reaches up to 30 km and a significant number of employees comes from abroad and travels home every weekend or month. Among the settlements of the microregion the rate of commuters is the lowest in Mór (17 %), whereas the rest of the population in this city works where they live, which demonstrates the economic power of Mór. The great majority of the population in the other settlements of the microregion commutes (expect Pusztavám, Kincsesbánya and Balinka). On one hand the target location of commuting is Mór and on the other hand the surrounding larger industrial centres like Székesfehérvár, Oroszlány, Kisbér. Commuting is typical towards Mór and Székesfehérvár, partly for work purpose (accordingly two or three shifts) and partly for studying purpose (6.00am-8.00am and 2.00pm-4.00pm).
In the microregion of Mór – considering the past and the long term trends – the population has been increasing up to 2010. It resulted in a favourable labour market situation before 2010. On the level of certain settlements the demographical process shows a more complex picture: A decreasing population in some of the settlements was leveled off by the population increase of Mór by 2010. In 2010 the decreasing population on the microregional level (affecting mainly the economically active age group) was coupled with the negative migration balance of 2009.

Main aspects of SWOT:

- Car traffic dominates in the micro-region
- Inward-commuting to Mór. Low rate of outward-commuting, only 17% in the city of Mór
- Large employers partially take care of workforce transportation
- Dynamic economy (until 2010)
- High traffic between Mór and Székesfehérvár

9.2 Public transport

Bus transport in the microregion meets the needs of the inhabitants (each settlement can be reached by direct bus lines). The majority of the settlements has more than one bus station so not only Mór but also Tatabánya, Székesfehérvár, Esztergom and the settlements at Lake Balaton are connected. The connection of overland buses needs to be developed to improve the bus-transport. Bus stops, bus bays, bus stations, terminals and rounds need to be modernized and extended, the bus schedules have to be harmonized.
The Székesfehérvár-Győr railway line crosses the Mór microregion. Rail transport is not modern and not suitable for travelling long distances. There is no connection to Oroszlány in the north. Only Mór, Bodajk and Fehérvárcsurgó have a railway station in the microregion. There are 5 trains a day to Komárom and the same number to Székesfehérvár. The line is single-track and not electrified. In the other settlements of the region the connection between the microregional centre and the capital of the county is ensured by buses.
It is always included in the development plans of the microregion and the county to (re-)construct the missing railway track along Oroszlány - Pusztavám - Mór. One of the alternatives would utilize the abandoned track, whereas the other would prefer to establish a new track. The latter one is included in the general urbanistic plan of Oroszlány and Pusztavám and in the county's masterplan, too.
The role of public transport in commuting for working / studying purposes has significantly dicreased recently. This is due to the fact that the demands of the society are not properly

satisfied. Rail transport was relegated to the background. Despite the poor state of repair of the Székesfehérvár-Komárom railway line it would make sense to consider to launch an EMU (Electric Multiple Unit Trains) service. According to the experiences it always resulted in a rising number of passengers.
Information material on public transport is available on the relevant websites, on information panels and stations and stops and through live-voice announcements. As mentioned above low-floor buses are operating in the local transportation as appropriate autobuses were procured for providing equal treatment.
Alba Volán Zrt., the regional bus company, is seeking to launch, improve and use innovative solutions. Alba Volán Zrt. was the first in the country which launched an Electronic Chipcard from July 2006 in the outskirts of Székesfehérvár and Mór. Furthermore it is planned to integrate the traffic management and passenger information systems.

Main aspects of SWOT:

- All settlements are directly connected by low-floor buses
- Low quality of train connection
- Opportunity of reactivating Mór-Oroszlány rail
- Improvement of overland buses needed
- Reduced use and role of public transport
- First regional bus company with electronic chipcard in Hungary

9.3 Individual transport

The road number 81 across the microregion bypasses the inhabited parts of the settlements in most of the cases. In spite of this fact the traffic is heavy because the Transdanubian truck traffic on the way north-south and one part of the traffic of Lake Balaton uses this road, too. Modernizing the roads, widening the road number 81 is necessary because of the congestion and the risk of accidents. The microregion is accessible by two motorways – M7 and M1 –, but none of them within 30 minutes. The main road lines and especially the second main lines have to be developed for a better accessibility of the county and the microregion. Currently the road 81 is not safe at all. There are plenty of casualties and accidents.
Electric cars are not prevalent in the region.

Main aspects of SWOT:

- Heavy traffic on road 81
- Many accidents mainly on road 81
- Electric mobility has no significance in the region up to now

9.4 Multimodal transport (combination of transport modes)

Intramodal and intermodal changing options fail to meet expectations in terms of both locality and time. The technical standards and locations of relevant infrastructure and stations are not sufficient. The railway transport is built up at a very low level inside the public transport, it does not mean a real alternative for transport of goods and passengers.

It is essential to improve the schedules which should also be harmonized with the buses in the town and the outskirts. If P+R-facilities would be built this could develop the multimodal position of Mór since the railway station in Mór is far from the town centre.
Intervention is required on two levels: The appropriate – based on needs – harmonization between the rail and bus transport is very important on the microregional level and in terms of larger regional models (e.g. agglomeration public transport systems of the county seats) the microregion should be properly positioned in order to avoid its peripheral management. Multimodal transportation leads to decreasing costs and cancellation of parallelism. There are 3 main railway lines where intermodality has already been started: Budapest-Érd-Velencei-tó-Székesfehérvár-Veszprém line, Budaörs-Bicske and Tatabánya-Oroszlány on common multimodal planning in the Transdanubian Region.
A public transport system of good quality can be a real alternative to private transport.

Main aspects of SWOT:

- Bad multimodal connections between rail and bus
- No P&R-facilities in Mór

9.5 Car sharing / Car-pooling

Car sharing or car-pooling are not common in the area.

9.6 Non-motorized transport development. Cycling and walking

The greatest need for developing cycle tracks is in and towards the main tourism areas (Lake Balaton, Lake Velencei, River Danube). Some services could support the development of bicycle tourism: Opportunity of carriage in trains, boards, providing parking areas, rental centres. It is also considerable to utilise the abandoned railway track of Székesfehérvár-Bicske as a cycle track.

Main aspects of SWOT:

- Need for developing touristic cycle tracks

9.7 Supplementation of local transport by tourism related demand

No supplementation of local transport by tourism related demand was found.

9.8 Other topics

The air quaility is appropriate in the microregion except Mór, which is a contaminated town. The pollution is caused by industrial emission, periodically heating and transportation. The pollution caused by dust contributes to it as well.
There are some special transport needs which are generated by discovering the historical wine-region of Mór, the forests of Vértes and Bakony mountains, the hunting opportunities, aquifers and the Séd-Nádor water-system, historical sights of Mór, Castle of Fehérvárcsurgó. There is the need for the development of the train lines and its appliances which are low-utilized now or for establishing appropriate bicycle infrastructure and services. The

construction of the new Danube bridge in Komárom will foster the role of Mór as a logistic centre.

Main aspects of SWOT:

- Air contamination in the town of Mór
- New touristic sights could lead to new transport patterns
- New Danube bridge in Komárom in the north could lead to changing traffic flows

10. Summary: Common characteristics of the current mobility and transport situation in the project regions

- The **car possession** (as an indicator of individual motorization) differs between 406 cars/1.000 inh. (Ústí Region) and 630 cars/1.000 inh. (Brzeg Dolny and surroundings/Wołów County) (EU-15-average: 500/1.000).
- All in all **high ratios** of the local/regional working populations have to **commute** (workplaces outside of the regions' borders; within the regions the great majority of the working places are located/concentrated in the urban settlements).
- **Car use** is **dominant** in everyday mobility (appearing to be the most "comfortable" way to move in and out of most remote areas).
- **Car sharing-systems** in rural areas are **not** very **common**.
  In contrast informal **car-pooling** is a **common way of shared mobility** and has a relatively **high significance** in most rural areas, especially for commuting.
- The **public transport network** density differs on intraregional level and there are **difficulties** for **availability** and securing of public transport **in most rural settlements** (infrastructure, connections, frequency etc.).
- Existing **conditions** and current forms of organizing **multimodality** only favour/encourage to **combine car and public transport**, but not different modes of **public transport** due to an **unsatisfying interconnection** (long waiting times and distances between stations) or cycling and public transport (often adequate Bike&Ride-offers and the corresponding basic cycling infrastructure are missing).
- Some **remote areas** have a **weak/decreasing supply, availability and variety of short-term goods and services** and problems to maintain these basic offers.
- In **some** regions **positive approaches** exist **to connect small, remote settlements** and sites in a **flexible** and **sustainable way**[10] or to promote public transport[11].
- **Missing infrastructure** or **unsatisfying situation** (lack of cycling paths, unsafety on roads, in some cases also unfavourable topography) **for cycling** in everyday mobility (apart from some urban settlements in the regions) are challenges in almost all regions.
- Up to now most of the cycling purposes in rural areas are recreational or touristic (potentials are seen in synergies between tourism and everyday mobility, promotion and expansion of E-bikes).
- Bike rentals only exist in touristic areas.
- Apart from single examples (especially Lungau is very advanced) **electric mobility has no significance up to now**. In some regions plans exist for improving the infrastructure in the next years.
- The situation of the **barrier free infrastructure** (public transport, public space and buildings, information etc.) to enable access and usability for persons with reduced

[10] "Valley Bus" in Lungau; "Der Pölstädter", special bus for commuters, "Lachtalbus" as special service for tourists in Upper Styria West and "Murautakt – stündlich in die Stadt", special funding for ensuring a bus running every hour to remote Murau district, "E-Mobilität im Naturpark Grebenzen" is a rental system of E-bikes for tourists in the nature park Grebenzen; "Eccobus" in the Province of Alessandria/Asti, studies on so called *Demand Responsive Public Transport* in Asti

[11] "Best age – ÖV Empfehlungsmarketing", guidance for elder people to ease the use of public transport

mobility in rural areas is **often unsatisfying** and offers many options for improvement (it is partially better in urban environments).

- The **situation for pedestrians is quite difficult** especially in rural areas due to various obstacles as pressure by the motorized traffic, a lack of comfortable and secure infrastructure like safe sidewalks, distances to and reachability of services etc.

Annex

Questionnaire for Output 3.1.6 Regional Mobility and Transport situation in project regions

"Dear Partner!

Please fill in the following questionnaire according to the best of your knowledge. At first please **have a look** at all requested aspects, this may help **to get an overview** and to **avoid repeating answers**. Concerning each topic you should think about the **positive (strengths/opportunities)** and also the **negative (weaknesses/challenges) characteristics** of your region!

Please try to answer every question and provide an overview **as comprehensive as possible**. You may use bullet points to separate each idea.

In the frame of a workshop you may involve relevant **regional stakeholders** and other experts in the field in order to get the most comprehensive and realistic view on the situation of your region! In addition to your subjective opinion please also try to obtain **verified information** if possible.

Please also indicate **links to websites** where further information can be found."

Topics/Questions	Description/Answers
EURUFU-Project partner (Nr./Institution):	PP
EURUFU-Project region:	
1. Mobility and demographic change: Please describe…	
…the mobility **situation** (and its development in the last decade) according to the following indicators: • **Modal split** (share of total transport in % of car-, train/bus- (public transport), bicycle-use, walking) • **km per person** per year (by car, train, bus, bike, walk) • **car possession** per person	…
…the **commuting** situation in your region (e.g. within the region; relation inward-outward commuting; existing commuters parking spaces)	
…the current **situation**, biggest **challenges** and **opportunities** of the regional mobility offers facing demographic change in general.	

Topics/Questions	Description/Answers
…existing approaches of ensuring mobility of people with individual needs as e.g. **elderly and disabled** (e.g. assisted mobility, accessibility of urban infrastructure, etc.).	
…the **accessibility/reachability** of short- (e.g. supermarket), mid- (e.g. dentist) and long-term (e.g. specialized hospital) **services** by public and individual transport.	

2. Public transport Please describe…	
…the **strengths and weaknesses** of public transport in your region (e.g. network density, prices, frequency, equal opportunities of use for all social groups, etc.).	
…the availability regarding **information material** on public transport (e.g.: schedules, prices, lines, etc.)	
...the situation regarding accessibility (**barrier-free usability**) of buses and trains (vehicles, stations, information, etc.)	
…new/more **flexible forms** of public transport offers (e.g. “call-a-bus”, self-organized public-private “citizen buses”, companies operating own buses, combination with logistic services (postal services,…) and how they are organized?	
3. Individual transport Please describe…	
…which parts of your region suffer from high car/truck **traffic**?	
…**problems** related to individual transport.	
…the **road safety** situation.	
…the current situation, challenges and opportunities of **electric car** use (incl. promotion, “rent-an-E-Car”, charging stations, etc.).	

4. Multimodal transport (combination of transport modes) Please describe…	
…the situation, challenges and opportunities of **multimodal** transport in your region between: • individual and public transport modes (e.g.: P&R, Bike&Ride, etc.) • different public transport modes (e.g. bus ⇔ train)	

5. Car sharing / Car-pooling Please describe…	
…the current situation, existing forms and ways of organising, challenges and potentials for **car sharing** (e.g. rural availability, number of users, etc.).	

6. Non-motorized transport development. Cycling and walking. Please describe…	
…the role, challenges and potentials of **bicycle use** in your region (rural/urban parts) for daily transport and measures to promote it.	
…the situation of **cycling infrastructure** (bicycle paths, bike rental, bicycle carriage in buses/trains, etc.)	
…the situation, challenges and potentials of the use of **electric bicycles** (E-bikes/Pedelecs) as a “new alternative” means of transportation.	
…the role, challenges and potentials of **walking** for daily mobility (in rural/urban parts) and measures to promote it.	
7. Supplementation of local transport by tourism related demand Please describe…	
…the current situation, existing forms, challenges and potentials of **tourism** related mobility offers (e.g.: free E-Bikes, discounts for hotel guests in public transport, touristic tickets, etc.).	

8. Other topics Please describe…	
…mobility and transport related topics which are not covered by the previous topics, but are very important for the region	