



LAST MILE

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Analysis of the technical state-of-the-art of regional public transport systems and particularly flexible systems in the region of East Tyrol – Austria

Final report

Regional Management East Tyrol
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1. Introduction

The aim of the „State-of-the-Art analysis of the regional public transport system and, particularly of flexible systems in the region of EAST TYROL” is to analyse the current transport system of East Tyrol/Austria, focusing on public transport as well as flexible transport in order to identify the existing situation of mobility and flexible solutions of the „last mile“ issue.

The LAST MILE project sets a concrete focus on the problematic accessibility of the last link of the travel chain from origin to destination (the so called "last mile") and collects and analyses solutions to cover this bottleneck with sustainable modes of transport.

This analysis faces the challenge of implementing effective strategies for sustainable transport to overcome the last mile in remote tourism destinations.

2. Structural data of the region

1.1 Region characterization

The Nuts 3 region Osttirol counts 33 municipalities and is a district in the eastern part of the federal state Tyrol. The administrative county is called Lienz with the identically named region capital city. The region is embedded in the middle of the Alps and thus has an alpine and rural landscape. Osttirol has 2 main valleys (Isel Valley and Puster Valley) and several peripherally located side valleys (Deferegggen Valley, Virgen Valley, Kalser Valley, Tiroler Gail Valley). A special feature of East Tyrol is the geographic separation from the rest of the federal state Tyrol. East Tyrol is the largest district of Tyrol and the fourth largest district in Austria.

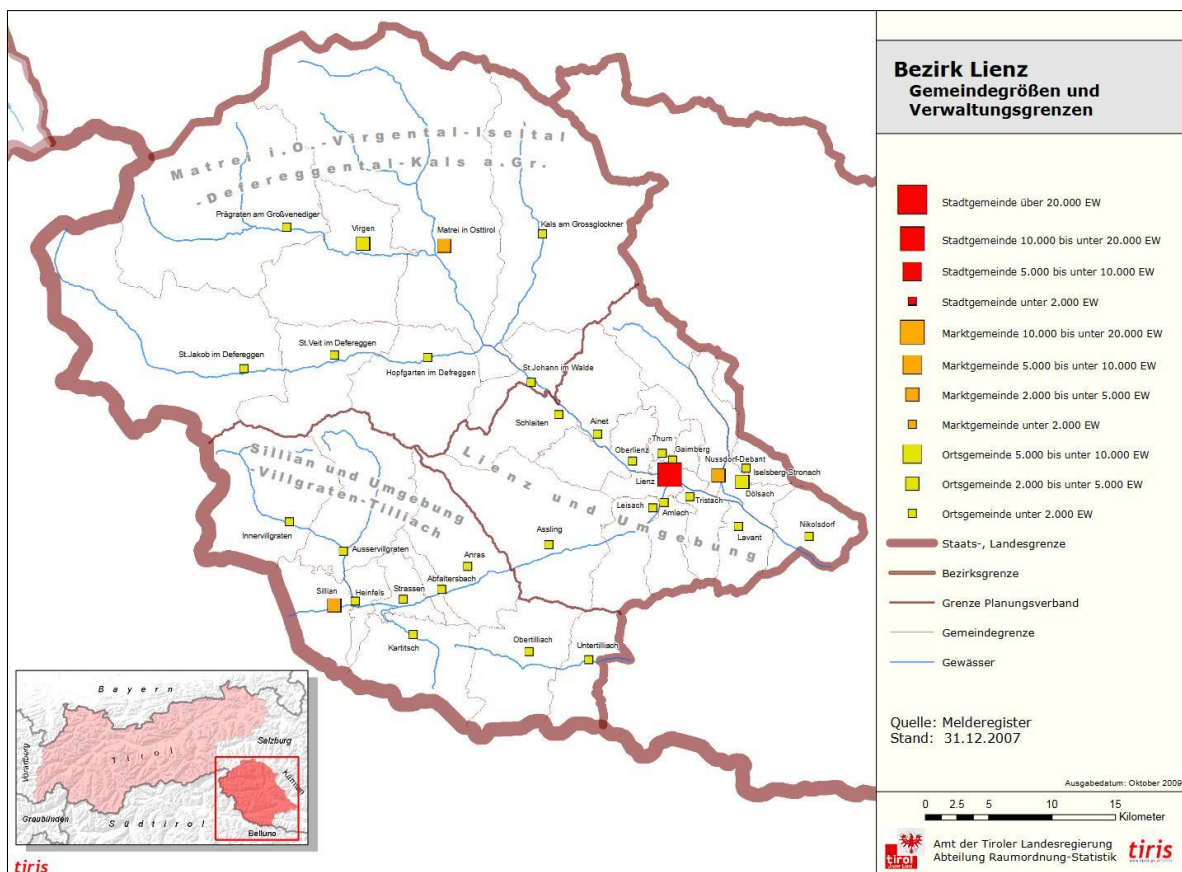


Figure 1: East Tyrol and its municipalities. (Source: Amt der Tiroler Landesregierung. 2007.)

1.2 Population

Osttirol has an area of approx. 2.020 km² and has a total of 49.026 inhabitants (population census 2015). The ratio between area and population varies greatly in the region. The valley floor around the region's capital Lienz has many more inhabitants than the peripherally located municipalities in the valleys. The population density is approx. 25 inhabitants per km².

The following figure shows the development of the population vom 1961 to 2015 in comparison to the overall population of the federal state Tyrol. The population in East Tyrol has a decreasing development since 2011. Moreover, the region is struggling with brain drain.

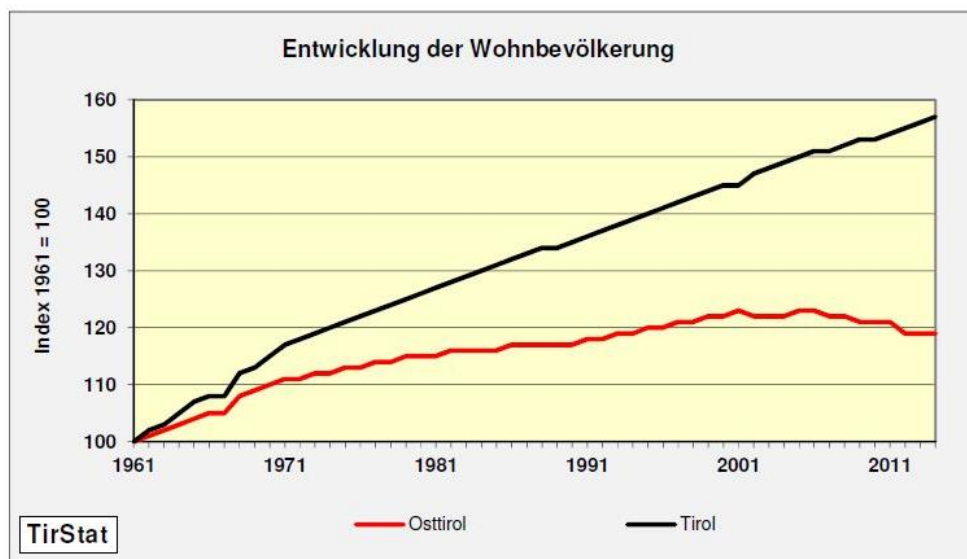


Figure 2: Development of population (source: Amt der Tiroler Landesregierung (2017): p. 4)

The highest percentage of the age distribution is the group aged 15 – 64 years (more than 65%). Nearly 20% of all inhabitants are more than 65 years old.

Population of important cities and tourism centers

The region's capital Lienz has the highest population in the region with 12.044 inhabitants in 2017, which is greater than all the surrounding municipalities. The capital city Lienz has very dynamic developments, especially in economy. There is also a strong population and settlement development.

Matrei has the highest population in the Isel Valley with 4.682 inhabitants. The municipality is the center of National Park Hohe Tauern.

Sillian has the highest population in the Puster Valley with 2.022 inhabitants. This municipality is very close to the border to South Tyrol.

1.3 Area (land use patterns)

The area of East Tyrol encompasses 2.019,29 km² and has a settlement area of 175,7 km² (8,7% of total area). This is because of the alpine landscape and quite high rate of nature conservation areas (30,5% of total area).

The settlement area is divided into residential area, mixed area, industrial area and special area (meaning an area with special zoning for specific planning purpose) (see figure below). The agricultural area encompasses 397 hectare.

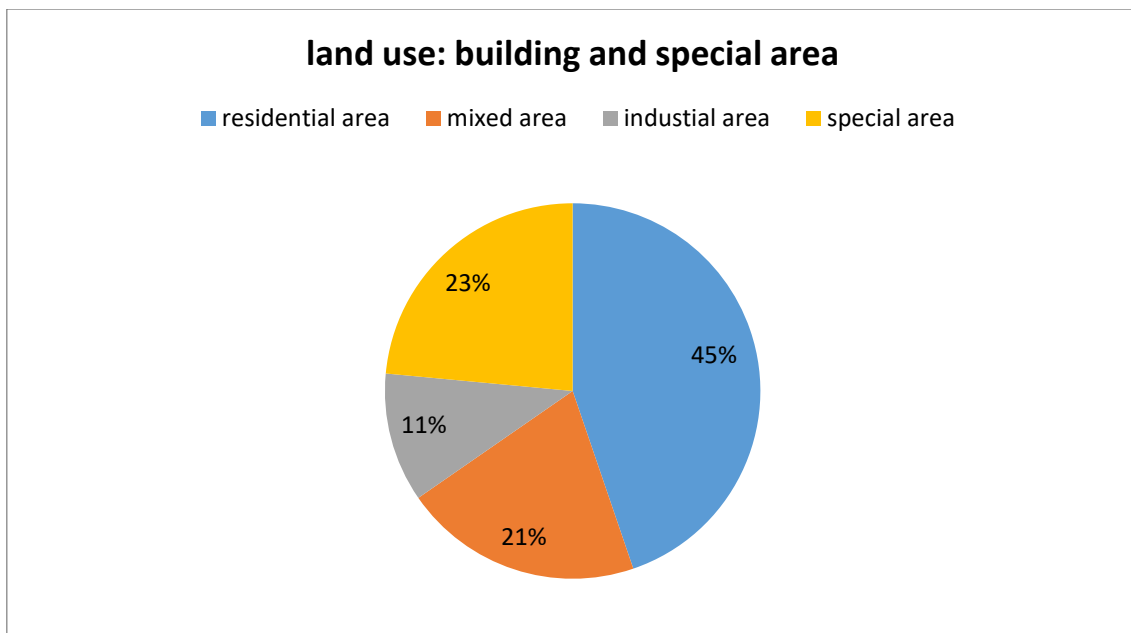


Figure 3: Land use pattern: building and special areas in East Tyrol (source: Amt der Tiroler Landesregierung (2017): p. 1f)

1.4 Point of interest

East Tyrol has a wide range of touristic points of interest. A hot spot is definitely the area of the natural park "National Park Hohe Tauern" with is one of the largest national parks in Austria. Also the highest mountain and Top of Austria is located in the region (Kals). Due to the alpine and cultural landscape, the region is a popular hiking and mountaineering area in summer. Tourists have a variety of natural trails and important natural sights. The region has lots of ski areas and numerous winter sports activities are offered.

1.5 Economy

The main economy sectors are industry, trade and tourism. Industry and trade each provide 28% of all jobs in the commercial economy and thus account for more than half of all services. Further 21% contribute to tourism (source: Tiroler Tageszeitung n.d.).

The production site in East Tyrol has an industrial core in the metal and electrical sector, with a relatively low qualification level in the region. The challenge here is to create new and more highly qualified jobs. Beside small and medium-sized businesses, several large firms are important employers in the region. Important economic impulses in the district come from the wood industry, metal and mechanical engineering as well as from gastronomy and tourism. (source: Regional Management East Tyrol n.d.)

2 Tourism Data

2.1 Identification of tourism hotspots in rural areas



Figure 4: Identification of tourism hot spots in East Tyrol (source: Orthophoto © ESRI 2016)

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The hot spots were chosen based on the provision of data sets from Osttirol Werbung GmbH. 35 hot spots have been selected, whose web links had the most frequent accesses (calls) during the period from 01.11.2015 to 31.10.2016. Subsequently, for the purpose of this study, these points of interest have been limited to hot spots without sustainable transport available as well as those with underused sustainable transport.

The five hot spots that offer insufficient mobility solutions are as follows:

Jagdhausalm – Region Defereggental – Calls 4.829

- Accessible by hiking trail from the Oberhausalm



Figure 5: Jagdhausalmen (source: <http://www.osttirol.com>)

SWOT-analysis

S	W
Naturalness, cultural heritage	No direct connection to destination – residents are allowed to drive by car
O	T
Shuttle services, private providers, etc.	Increased traffic volume, possible ecological damage

Zedlacher Paradies – Region National Park Hohe Tauern – Calls 3.438

- Nearest bus stop Matrei i. O. Ganz Waier Nr. 6175 – Regional bus line 4412 – Distance 3500 meters on 70 minutes along footpath

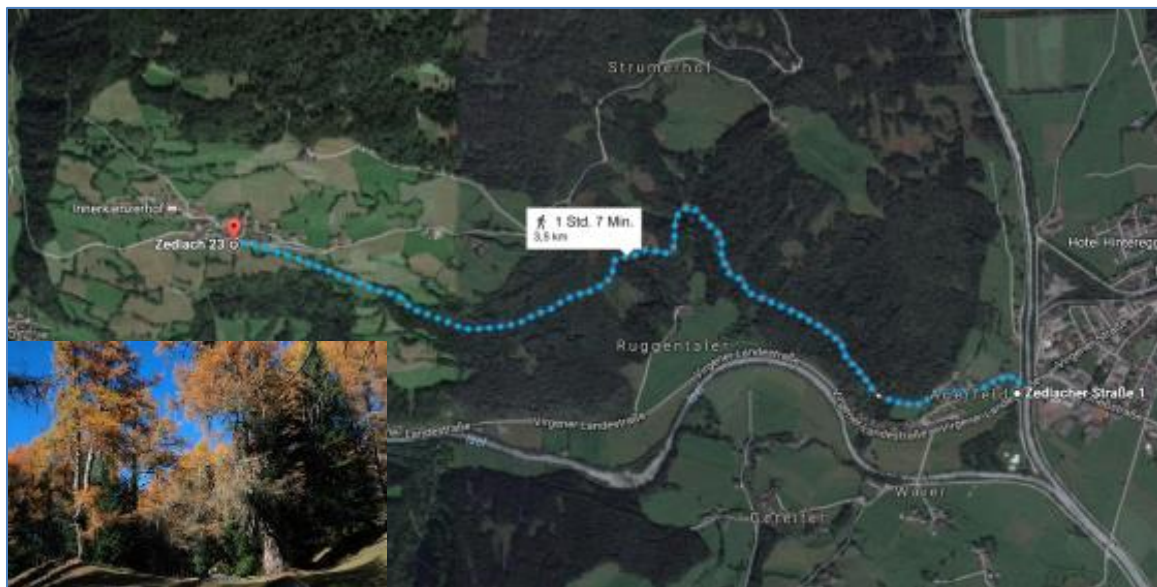


Figure 6: Zedlacher Paradies (source: Google Maps, <http://www.osttirol.com>)

SWOT-analysis

S	W
Infrastructure available, cultural landscape	Long distance to the hot spot from the nearest bus stop
O	T
Private providers of transport services, shuttle services	Possible increased traffic volume

Burgruine Rabenstein – Region National Park Hohe Tauern – Calls 2.109

- Nearest bus stop Virgen Mellitzbrücke Nr. 6177 – Regional bus line 4412 – Distance. 1200 meters on 25 minutes along footpath



Figure 7: Burgruine Rabenstein (source: Google Maps, <http://www.osttirol.com>)

SWOT-analysis

S	W
Bus stop available	Distance to the hot spot from the nearest bus stop
O	T
Private providers of transport services, shuttle services	Possible increased traffic volume

Koednitztal – Region National Park Hohe Tauern – Calls 2.378

- Taxi of private operator from center of municipality to Lucknerhaus



Figure 8: Koednitztal (source: Google Maps, <http://www.osttirol.com>)

SWOT-analysis

S	W
Taxi services and public transport available to Lucknerhaus	Distance to the hot spot from the nearest bus stop, general poor public transport connection
O	T
Private providers of transport services	Possible increased traffic volume

Oberstaller Alm – Region Hohe Tauern – Calls 6.118

- Nearest bus stop Innervillgraten „Maxer“ Nr. 6358 – Regional bus line 8513 – Distance 6500 meters on 100 minutes footpath

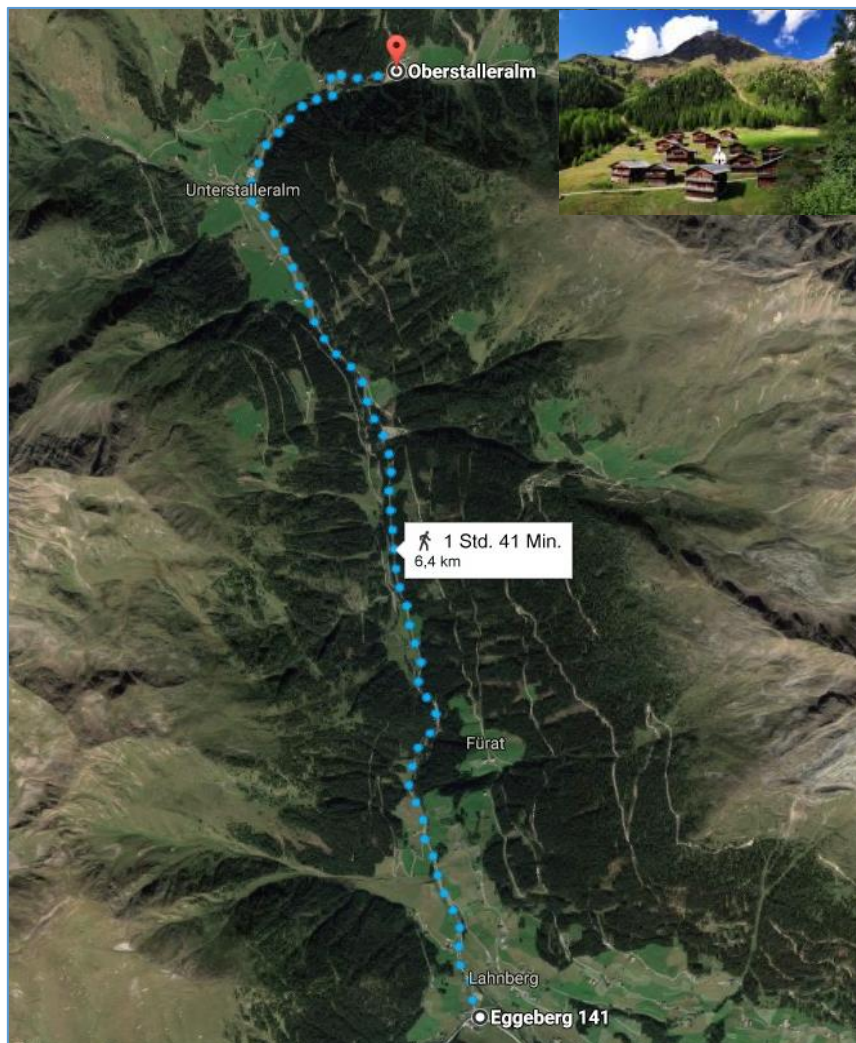


Figure 9: Oberstaller Alm (source: Google Maps, <http://www.osttirol.com>)

SWOT-analysis

S	W
Taxi services and public transport available	Distance to the hot spot from the nearest bus stop
O	T
Private providers of transport services, shuttle services	Possible increased traffic volume

Knappenloecher –Deferegggen Valley – Calls 1.974

- Access via a trail from the hut „Trojeralm“ in St. Jakob in Deferegggen



Figure 10: Knappenloecher (source: <http://www.osttirol.com>)

SWOT-analysis

S	W
Naturalness, cultural landscape	Infrastructure inadequately developed
O	T
Private providers of transport services	Environmentally relevant aspects

2.2 Touristic key figures of East Tyrol

The following table shows the overnight stays, arrivals, beds and occupancy rate (in days) in summer 2015 in East Tyrol. Commercial enterprises as well as private accommodations are considered.

Overnight stays	1.066.010
Arrivals	284.580
Beds	19.841
Occupancy rate	50 days

Table 1: Touristic key figures in summer 2015. (source: www.tirol.gv.at/statistik-budget/statistik/tourismus)

As the statistics of **overnight stays by countries of origin – summer 2015** shows, most of the guests come from the neighbouring countries of Germany and Italy. There is also a high proportion of guests from the Netherlands and Belgium. (See following chart).

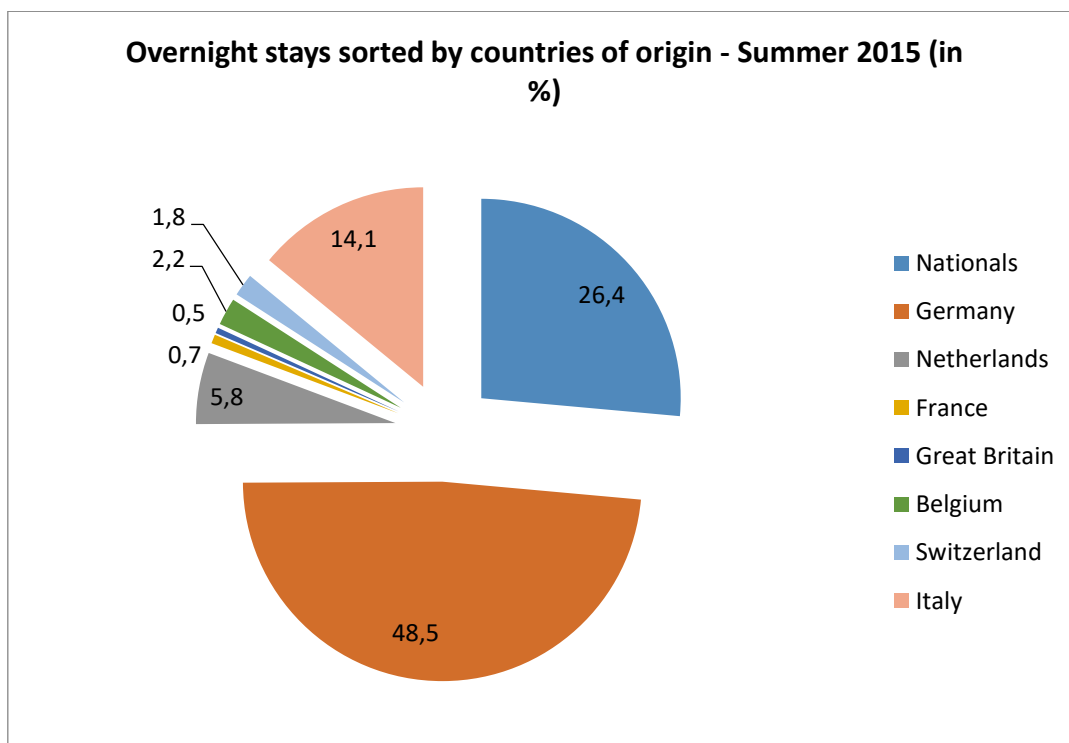


Figure 11: Overnight stays by countries of origin. Summer 2015 (source: www.tirol.gv.at/statistik-budget/statistik/tourismus)

Overnight stays, arrivals, beds and occupancy rate (in days) in winter 2015/2016 in East Tyrol are shown in the table below.

Overnight stays	879.213
Arrivals	176.578
Beds	18.528
Occupancy rate	47 days

Table 2: Touristic key figures in winter 2015/16 (source: www.tirol.gv.at/statistik-budget/statistik/tourismus)

As shown in the statistics of the **overnight stays by countries of origin – winter 2015/2016**, it becomes apparent that most of the guests come from Germany. The remarkable number of winter tourists from Russia is also striking. (See following chart).

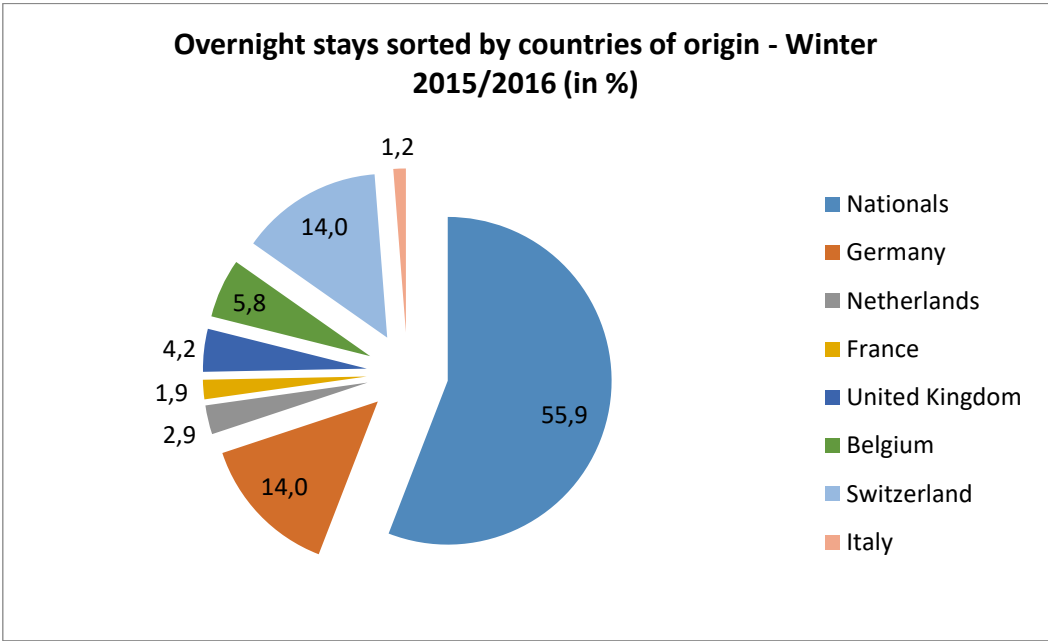


Figure 12: Overnight stays by countries of origin. Winter 2015/16. (source: www.tirol.gv.at/statistik-budget/statistik/tourismus)

With respect to the overnight stays in each municipality in East Tyrol, the number of overnight stays per inhabitant is in total 36,12 in municipalities without a touristic hot spot (16 municipalities in total), while municipalities with a hot spot (17 municipalities in total) have almost exactly doubled value of 72,47 overnight stays per inhabitant.

The statistics of the **overnight stays by month** in the calendar year 2016 show that an increase in the number of overnight stays has been recorded, especially in the summer months of July and August as well as in the months of January, February and March. (See following chart).

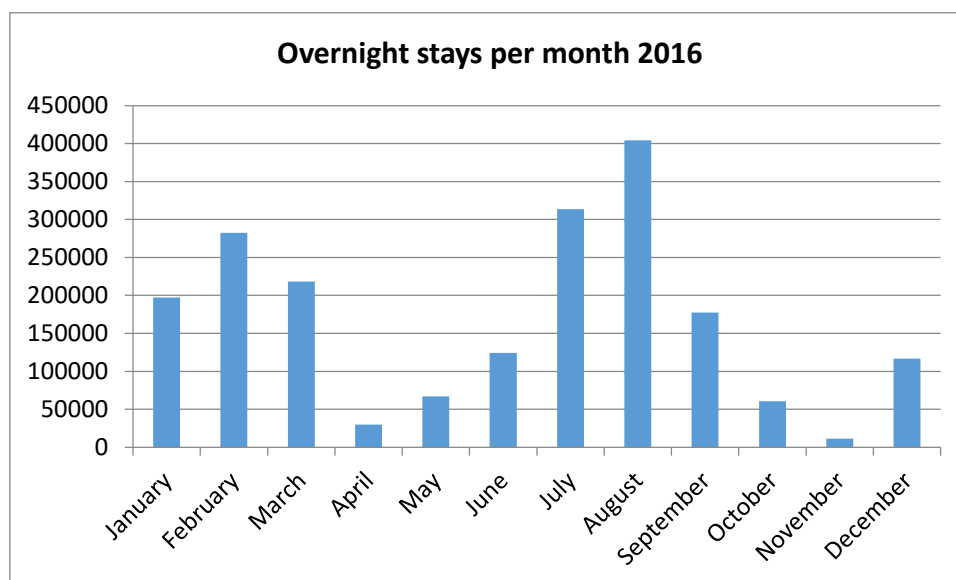


Figure 13: Overnight stays per month. 2016. (source: www.tirol.gv.at/statistik-budget/statistik/tourismus)

Number of beds per category in summer 2015 is shown in the following table. It is divided into commercial enterprises and private accommodation.

commercial enterprise					private accommodation			
*****/****	***	**/*	Commercial apartment	Commercial beds in total	No farmstead	farmstead	Private in total	Private apartment
2.948	3.758	2.293	1.398	10.397	1.266	865	2.131	4.903

Table 3: Number of beds per category. Summer 2015 (source: www.tirol.gv.at/statistik-budget/statistik/tourismus)

Number of beds per category in winter 2015/16 is shown in the following table.

commercial enterprise					private accommodation			
*****/****	***	**/*	Commercial apartment	Commercial beds in total	No farmstead	farmstead	Private in total	Private apartment
2.972	3.928	2.248	1.537	10.685	1.159	851	2.010	4.690

Table 4: Number of beds per category. Winter 2015/16 (source: www.tirol.gv.at/statistik-budget/statistik/tourismus)

As can be seen from the tables above, there are marginally more beds in summer (19.841) than in winter (18.528).

2.3 Transportation offers for tourists

Bike rental and accompanying shuttle service, e-car-sharing (Flugs in Lienz city centre), hiking bus (National Park Hohe Tauern), leisure bus, taxis to the cabins and huts, hailed shared taxi (defMobil, Virger Mobil, Assling Mobil). Most of the information for those services is available online (source: www.osttirol.com, websites of each municipality).

Current folders and brochures of the tourism association Osttirol as well as offers of packages are available. The "Osttiroler guest shuttle" takes guests directly from Salzburg airport to their holiday destination in East Tyrol. Pre-ordering is necessary.

There are also special offers for bicycle tourists.

2.4 Key stakeholders

Key stakeholders in the region are:

- Regional Management East Tyrol
- Tourist association: Tourismusverband Osttirol
- Transport association: Verkehrsverbund Tirol
- All municipalities in East Tyrol
- National Park "Hohe Tauern"
- Entrepreneurs in tourism and gastronomy
- Entrepreneurs for sport articles (bike rental)
- E-Carsharing provider: Regionalenergie Osttirol
- Austria Alpine Association: Österreichischer Alpenverein
- Economy association of the district: Wirtschaftskammer Lienz

2.5 Tourism information systems

The regional tourist centre is located in the capital Lienz. Furthermore, many municipalities offer information in municipally owned tourist offices or at hot spots.

The tourist association East Tyrol (www.osttirol.com) as well as the National Park Hohe Tauern (www.hohetauern.at) each maintain their own central tourist homepage. Every hot spot as well as accommodation possibility is represented via internet. Further info points are webpages of the ski areas. Most webpages are available in German, English and Italian.

2.6 Modal split

The modal split in East Tyrol is predominantly by private car. A current statistic data of modal split is not available for the district. A statistic from 2012 shows the modal split of East Tyrol (see following tables).

Modal Split East Tyrol		
	Ø way in km	ratio in %
Public transport	32,48	3,15
foot	1,22	15,35
bicycle	3,29	21,95
Motorized private transport	12,34	59,55

Table 5: Modal Split East Tyrol. 2012.

Modal split of capital city Lienz:

Modal Split Lienz		
	Ø way in km	ratio in %
Public transport	45,99	0,5
foot	1,33	17,7
bicycle	2,86	37,4
Motorized private transport	10,09	44,4

Table 6: Modal Split city of Lienz. 2012.

Modal split of East Tyrol without capital city Lienz:

Modal Split East Tyrol without the city of Lienz		
	Ø way in km	ratio in %
Public transport	18,98	5,8
foot	1,11	13
bicycle	3,72	6,5
Motorized private transport	14,59	74,7

Table 7: Modal Split East Tyrol without the city of Lienz. 2012.

2.7 Sustainable mobility solutions to cover the “last mile”

Hailed shared taxis are available in the Deferegggen Valley (“defMobil”), in the municipality Virgen (“Virger Mobil”) and in the municipality Assling (“Assling Mobil”). The Assling Mobil as well as the Virger Mobil cover needs for residents within the municipality borders and is partially not accessible for tourists. Taxi services are provided by various private operators or private taxi services.

3 Regional sustainable transport situation

3.1 Overall transport network and sustainable transport system



Figure 14: Road transport network East Tyrol. (source: Orthophoto © ESRI 2016)

The shortest road connection from North Tyrol is via Felbertauernstrasse B 108 and the Felbertauern tunnel into the province of Salzburg. From the traffic intersection Lienz, the Drautal road B 100 branches off into the Puster Valley in the direction of South Tyrol or the Drautal in the direction of Carinthia.

Transport network in East Tyrol: 296.4 km state road, 1.074.2 km local road network, 2.819.8 km other local roadways (source: Land Tirol Statistics 2017).

On average, the B 108 Felbertauernstraße is taken daily by approximately 7.500 motor vehicles and the B 100 Drautal road by approximately 6.800 motor vehicles (source: Land Tirol Traffic Statistics 2015).

Furthermore, the airfield „Lienz-Nikolsdorf“ is also accessible for small aircraft weighing up to 5.7 tonnes. This airfield is particularly accessible for private sports and hobby pilots, not for commercial aircrafts.

3.2 Sustainable transport

The public transport connection from Lienz to the state capital Innsbruck is ensured by daily regional (express) trains and express busses over the South Tyrolean region and the Brenner Pass. Other public transport connections to the state capital or other destinations in North Tyrol are via bus to Kitzbühel and further with regional train connections. The price for a one-way ticket is about 24 €.

The regional public transport into all valleys is operated through public bus services provided by the regional transport association Verkehrsverbund Tirol (VVT). For the capital city Lienz as well as the surrounding areas a city bus network is available. The most important connection points to the hot spots are the district capital Lienz as well as Matrei in Osttirol (district Huben), where the connections continue in the direction of Defereggental and Kalsertal. Other important connection hot spots in the Puster Valley are Sillian Marktplatz, train stop Tassenbach as well as the regional main railway station Lienz.

In 2015 e-carsharing (“Flugs”) was implemented with one location and one car in the inner city of Lienz. Additional e-cars for carsharing as well as further locations in the surrounding area of Lienz are planned.

There is a quite widely branched bike infrastructure within the side valleys available (see graphic below). Especially in the city of Lienz the bike infrastructure for everyday mobility is insufficient (e.g. missing bike paths, poor connections to surrounding municipalities).

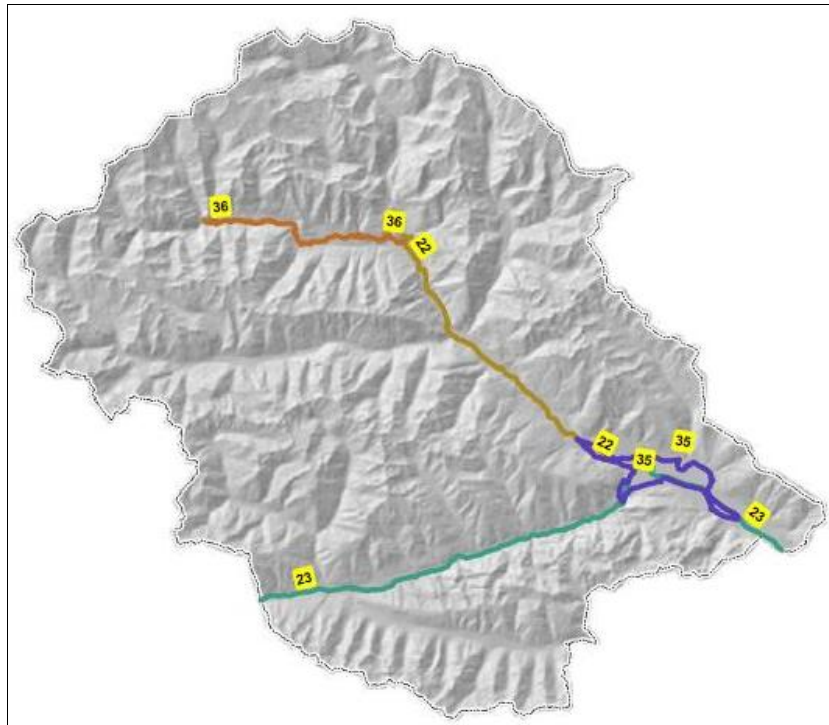


Figure 15: Bike routes East Tyrol (source: Amt der Tiroler Landesregierung. 2016)

3.3 Quality of sustainable transport

Due to framework conditions of East Tyrol (low population density, geographical location) the insufficient quality of public transport can not cover all transportation needs, especially to the side valleys and peripherally located municipalities and settlements.

The areas Virgental, Defereggental, Kals a. G., Iselsberg-Stronach, Villgratental, Lesachtal and the area close to the Eastern border (Nikolsdorf) is served by public transport connections.

During the summer and winter season, connections to all valleys and side valleys every day are provided. During the off-season, the remote areas and valleys are served only from Monday to Saturday. Currently, there are 20 lines for public transport available in the region of East Tyrol.

The average waiting time when changing lines is normally 5 min, but it can deviate greatly if a connection is used against the main load direction of the lines. Regarding the hot spots mentioned above, at the connection node in the area Sillian to the Villgratental, there is a waiting time of approx. 2 minutes (regional bus line 4421 and 8513 - change about 2 minutes) - otherwise the defined hot spots are directly accessible without changing (source: www.vvt.at).

The overall public transport network in East Tyrol comprises 1.353.911 km per year.

3.4 Organization and finance structure

Public transport and sustainable transport is funded usually one third by federal state level and the rest by municipalities, tourist associations or regional actors of tourism (i.e. ski area operator, national park). The railway is embedded into the national railway transport association ÖBB. In the case of school transport service, financial support is given by federal state level or finance authority. In the region the regional/national transport association is responsible for the organization of public transport lines. For some transport services, especially for those to the remote hot spots, the municipality or a private operator is responsible for organization.

3.5 Usability and accessibility

Traveller information systems are provided by the national transport association (www.verkehrsauskunft.at) or the regional tourist information. Some municipalities also provide traveller information at municipality offices. Timetables are also available at all bus stops and hot spots. Ticket accessibility is quite open, there are different possibilities available. The most common form: buy on the spot and at information points, ticket machines, via-online. Forms of payment are in most cases cash and credit card.

Accessibility for people with restricted mobility is given for services which are embedded into transport association (bus and train) but not for services of private operators. Especially services into the valleys do not provide barrier-free accessibility.

4 Existing flexible transport services in tourism

4.1 defMobil

The three municipalities of the Deferegggen Valley have been operating a hailed shared taxi (called defMobil) since 2010. This service fills gaps within the existing public transport service and provides residents as well as tourists in the valley an improved range of mobility. The defMobil operates with a fixed time table and certain bus stops. The service can be used after pre-ordering for a appropriately priced ticket. Online applications for booking and different ticket options (single ticket, weekly, monthly, yearly ticket –for single person and for family) are not available. The operator is a local association of the three municipalities (St. Jakob, St. Veit and Hopfgarten).

The service ensures the connectivity to important transportation nodes (Huben). The defMobil has transported almost 37.500 passengers in the last 7 years. By December 2017 the defMobil will be embedded in the regional transport association. This service is seen as best practice for flexible transport services in Austria.

4.2 Virger and Assling Mobil

The municipalities Assling and Virgen offer their citizens a complementary municipality owned transport service. These services are designed as hailed shared taxis, which operate only on demand during the day (from 8 – 12 am and 13 – 17 pm). The operation area is limited within the municipality border. Depending on the municipality, the driving service costs between 1 and 2 € per run. Bus drivers are volunteers and the municipality does not need to honour private operators or drivers.

Virgen also offers the service to tourists for the same ticket price. The municipalities received financial support from the federal state level or national level for implementation but not for long-term operation.

4.3 Flugs e-carsharing

The city Lienz implemented the e-carsharing “Flugs” two years ago. The main objectives of the project are: introducing sharing instead of owning to replace the second car in the households of rural areas; to reduce cars by providing flexible mobility offers such as a shared car; to establish a customer-oriented service, while facilitating the trial operation of e-mobility and e-cars; to introduce green mobility as an alternative to combustion engine propulsion technology;

The stakeholders in the project implementation were: private association for energy, Regional Management East Tyrol, private persons interested in e-cars/e-carsharing and the city of Lienz (Mayor).

Flugs started with one e-car for sharing, meanwhile (2017) a second Flugs is in operation. Further e-cars for the city Lienz as well as the municipalities in the side valleys are planned. Users have to register for membership. The e-carsharing Flugs has high accessibility (spatially – car station is placed in a neuralgic zone; as to booking – easy online reservations via webpage or mobile phone). After registration, users receive a user card. Billing and booking works online. The service is well booked and is an alternative to the second private car. For users who live near the city Lienz it is a convenient service; for users who live in the valleys the access is quite complicated.

Tariff: 0,20 Cent/km and 2 €/h. Membership per year: 120 € (10 €/month).

A disadvantage is that the membership makes it inaccessible to tourists.

4.4 Seasonal bus service

In winter ski busses are available. They are integrated into regular public transport services or provided by municipalities, tourist associations and ski area operators. In most cases, the access is limited to passengers who do winter sports and so they don't need to pay for this service. The service operates according to fixed timetables and stops.

In summer a hiking bus is provided by the National Park Hohe Tauern to well-frequented touristic hot spots within the national park area. This service is integrated into the regular public transport service and is financed by the National Park Hohe Tauern association. It is designed as an extended public bus with fixed time tables and stops. The ticket prices are equivalent to prices of regular public transport services.

Private taxi operators also provide hiking bus/taxi service, but only for individual prices.

4.5 Night liner Lienz – Matrei and Lienz - Sillian

A night liner is provided at weekends in the night from Saturday to Sunday. The night bus operates between the city of Lienz and Matrei (Isel Valley) and from Nikolsdorf to Lienz and further to Sillian (Puster Valley). The bus ensures that young people get home well after going out in the city of Lienz, festivals or other events.

The Night liner Lienz – Matrei starts from Lienz at 9pm in the direction of Matrei and returns at 11pm from Matrei to Lienz. The last ride of the night liner starts at 3.30am in Lienz, heading to Matrei via surrounding municipalities of Lienz. The Night liner runs 4 times at two hourly intervals.

The Night liner Lienz – Sillian starts 2 times per night at 9.25pm and 1.55am from the city of Lienz to Sillian and returns to Lienz. The same Night liner also leaves from Lienz in the direction of the municipality of Nikolsdorf in two hourly intervals (4 times per night).

The night busses operate according to the same regular bus stops as during the day. The line is regularly operated as a service by the regional transport association. Tickets for night passengers, including all discounts are the same as during the day.

5 Plans and projects

5.1 Results of previous projects in the field of flexible transport

Flexible mobility solutions in rural areas have already been partly implemented by means of dial bus/hailed shared taxi (Assling Mobil, DefMobil, Virger Mobil). These previous successful projects for sustainable and flexible mobility have been described above (defMobil, Assling and Virger Mobil, Flugs, Night liner, hiking bus and ski bus). The overall strategy of these projects is to offer tourists as well as residents an adequate range of mobility. Good cooperation and communication between relevant actors within East Tyrol (municipalities, tourist associations, hotel businesses and the population) were necessary to implement mobility projects. The support from the federal state and politics was useful and gave important signals. Most projects operate successfully and are considered best practice. Therefore, the completion of existing offers or further developments must be delivered in bookable products.

Planned developments and upcoming projects

Expansion of local public transport services due to denser time tables into the main valleys (will be implemented by December 2017).

E-Mobility (Flugs e-carsharing) will be increased within the region East Tyrol (further locations for Flugs into municipalities – also remote locations).

It is planned that the train station of Lienz should be build up as a regional mobility centre for public transport. The project should start in 2018.

5.2 Existing mobility concepts

Mobility program of Tyrol (2013 to 2020): This period is necessary in order to achieve the necessary breadth through continual public relations efforts. An overall objective is to increase the rate of public transport to 3%. Additionally, the establishment of a funding scheme for flexible transport systems in rural areas is planned. Tyrol's mobility program consists of the subprojects: „Municipalities mobile“, „Schools mobile“, „Business mobile“, Bicycle transport concept and promotion of public transport in rural areas.

In addition, a development program of the federal state Tyrol provides general principles about on-demand-based public transport (establishment of solutions for sustainable mobility, development of public transport) (ZukunftsRaum Tirol, 2011, p. 63f, 102).

The “**Tyrolean Sustainability Strategy**” gives general measures for sustainable mobility in rural areas (development and improvement of sustainable mobility and public transport, avoidance of individual transport). (Tiroler Nachhaltigkeitsstrategie 2012, p. 111-123).

All these concepts have no binding character and no concrete influence on regional mobility projects.

An **action plan for e-mobility** was put forward by the federal state in January 2017. The e-mobility strategy for East Tyrol has been planned to ensure a coordinate changed to e-mobility in East Tyrol. Concrete objectives and measures give recommendations how to increase e-mobility in the public, the semi-public and the private sector. The horizon of implementation is set for 2030.

Several federal and European Union funding programs („klima:aktiv“, Climate Program of the Confederation, programs of the EU: Leader, Interreg,...) support projects for sustainable mobility.

6 Cooperation and communication

Form of cooperation and coordination

There is hardly any official cooperation between providers of public transport and private transport providers. Each project is based on individual negotiations between project partners.

Cooperation and coordination between the tourism association and providers of public transport is given, especially for seasonal transport services (ski bus, hiking bus). The tourism association is often financially involved in the transport service provided by the transport association or municipalities.

Which institutions / companies support sustainable mobility in the region?

Municipalities and volunteers, national funding programs, federal state funding programs, regional tourism association, regional transport association, National Park Hohe Tauern, private operators of gastronomy/accommodation in tourist hot spots, taxi services, private transport operators.

Communication and dissemination

Information (brochures, flyer, verbal information) is given to households and accommodations/hotels, online information, at tourist offices, municipalities' offices, info points of hot spots.

7 Need for action

To a large extent, the existing range of demand-oriented mobility solutions cannot meet all transportation needs of tourists or locals. Especially in rural settlement areas and hot spots in the side valleys the current mobility offer is not satisfactory and people need to use private cars (individual motorized traffic).

With regard to flexible mobility and thus overcoming the „last mile“, the following areas have been included in the SWOT analysis:

- Burgruine Rabenstein
- Zedlacher Paradies
- Koednitztal
- Oberstaller Alm
- Knappenloecher
- Jagdhausalm

These hot spots suffer from insufficient mobility offers.

In the vicinity of municipalities as in the case of remote excursion destinations, such as the Knappenlöcher and the Jagdhausalmen, facilities meeting daily mobility needs are not available.

Appropriate solutions are required. These could be achieved by an expanded range of „hailed shared taxis“, shuttle services and similar flexible transport systems. Financing would be possible through the support of the State of Tyrol as well as the Climate and Energy Fund program in cooperation with the regional tourist association and municipalities.

In addition to achieving environmental objectives through the use of flexible transport systems, the task of the regional transport policy is to ensure the mobility of the population and the guests in the long term. In this context, the respective transport offer (public transport, transport infrastructure, etc.) as well as the long-term financial viability must be ensured. It is useful to achieve improvements in transport, in addition to the necessary expansion of infrastructure in the area of transport by modifying mobility behaviour and economic studies. The voluntary switch to an environmentally-friendly means of transport as well as a reduction in transport distances entails the greatest potential for the reduction of traffic volumes in individual motorized transport.

Experience has shown that targeted public relations work can be of the greatest benefit in combination with well-established resources in the field of infrastructure and the improvement of public transport offers. Finally, it is necessary to raise awareness of the problem of the increasing mobility of the population at all levels and to establish where it is most exposed.

7.1 SWOT-Analysis

The following SWOT analysis resumes the strength and opportunities compared to the weaknesses and threats of the analysis of all the information gathered in this report. It shall lead to conclusions for the action plan development.

Strengths	<ul style="list-style-type: none">• Functioning pilot projects of FTS (Virger Mobil, Assling Mobil, Defmobil)• Main axes within the region are accessible every hour by public transport• Awareness of policy makers for FTS• High willingness of volunteers (Virger Mobil, Assling Mobil)• The National Park is an additional financial partner• The Regional Management East Tyrol links the stakeholders und brings them together• Very good interexchange with the regional authority• Awareness raising for public transport and the fact that using the private car is getting more expensive and is no longer affordable for people
Weaknesses	<ul style="list-style-type: none">• Frequency of public transport in the side valleys is insufficient• Many hot spots are only inadequately developed by the connection to the public transport network• Information dissemination concerning public transport to locals is inadequate; information regarding all mobility services hardly available → there is no central mobility centre giving information• Missing public relations for public/flexible transport• Frequency of public transport at the weekend is insufficient• No integrated clearing system for different types of sustainable transport• Due to the circumfluent regional and national borders the operating panel is too small (different ticket tariffs)

- Poor offers of public transport for commuters (especially for women)
- Lack of courage to increase parking fees to reduce individual car use
- Tourism: missing CO₂-friendly vacation offers for tourism
- Missing bike infrastructure for everyday mobility (especially in the city of Lienz and surrounding area)
- Shortage of public finance/ debt-distressed situation of municipalities (municipalities are partly financially dependent on the tourism association, regional government; municipalities need additional authorization from a higher level)
- Few figureheads/ testimonials for this issue although most municipalities support public/flexible transport systems
- Few professional service providers for public transport services in the side valleys → considering the long distances, it's not affordable for entrepreneurs
- Different costs for locals and tourists (locals frequently are disadvantaged regarding pricing)
- No sponsorship regarding funding from entrepreneurs
- Motorized individual transport is very high
- Poor cooperation and communication between relevant regional stakeholders

<p>Opportunities</p>	<ul style="list-style-type: none"> • Mobility has become affordable through new pricing → rethink mobility behaviour • Linking e-carsharing and public transport • Flexible routing by VVT / improvement of service-oriented offers • Declaration on preferring public transport • Trend towards economization (e-mobility) • Sustainable mobility is a topic of discussion in East Tyrol; the Regional Management East Tyrol is very well networked with stakeholders (government, car dealers, transport association, citizens, tourism association, National Park) • The National Park Hohe Tauern as additional financial partner • Increasing digitisation for technical applications • Cross boarder cooperation for flexible transport services could raise image in tourism (East Tyrol and South Tyrol). • Improvement of current framework conditions through higher density of public timetables. • Improved regional development could prevent brain drain.
<p>Threats</p>	<ul style="list-style-type: none"> • “What is the value of the rural areas to governments?” → missing political commitment • Lack of financial security in the sense of a basic financing (no basic funding from governments) • No long-term funding for FTS • Low population density • Missing awareness for sustainable transport

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