



Plan to improve Public Transport in the region of Pallars Jussà

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Documents

Reports and annexes





Direcció facultativa

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Introduction and background

The National Mobility Guidelines is the instrument that partly implements the Law 9/2003 of mobility, in which is included the Passengers' Transport Plan of Catalonia 2008-2012 (hereinafter PTPC). The PTPC was approved by the Government on 7 January 2009 and it is the sectoral plan that defines the guidelines and public transport services by train and road in the interurban area of Catalonia. It sets 2012 as the year to achieve a series of goals to improve mobility in Catalonia through a plan of services supply and a management plan for Public Transport.

The PTPC defines the criteria for applying the set of actions to be developed for planning the public transport network in Catalonia. It acts as a "plan of plans" and sets out the guidelines to be used for developing other planning instruments, which have to adapt their proposals to the criteria and parameters established.

The PTPC objectives are listed below:

- Coordinate bus and rail services, as well as establishing the integrated public transport network in Catalonia.
- Streamline the public transport services and adapt the means of transports to the territory, as well as improve resources efficiency.
- Increase Public Transport in the modal split of mobility.
- Improve the commercial speed.
- · Reduction of transport externalities.
- Increase and improve public transport supply.
- Improve the information system addressed to all users of public transport.
- Increase the integrated fare to the consortia of Lleida, Girona, Tarragona and Bages and design the fare integration in all Catalonia in 2012.
- Improve the quality and efficiency of public transport in Catalonia.

In addition, the PTPC establishes the need to write a series of regional plans to improve public transport as a whole, which have to establish more detailed proposals in a regional level.

With the support of the General Direction of Transport and Mobility and as a result of this background, comes therefore the Plan to improve public transport in Alt Urgell, which analyzes and diagnoses the current status of the road network in a regional level and establishes the criteria and proposals to improve it.

2 Objectives

The objectives of this improvement plan are to:

- Analyze the current passenger transport network by road according to the stakeholders, to the current bus lines, to the generators and attraction mobility centres, and to the connection between municipalities in the county and other regional capitals.
- Determine the demand currently offered by the regular transport network and of the potential market.
- Determine the currently deficiencies and dysfunctions between supply and demand.
- Know the new infrastructures and planned or in progress actions that may affect mobility in public transport in the region.
- Identify the access and exit routes in the area, to optimize the capacity of the road network.
- Identify and establish criteria and proposals to improve the existing public transport network by road consisting of:
 - Promote the current regular public transport supply, extending its routes, as well as the frequency and hours of service.
 - Creation of new regular transport services.
 - o Study of the creation of on demand transport services.
 - Time coordination of public transport services by road and with rail services.
 - Exploitation of school transport services or the creation of services with reservation of seats for students within the regular services.
- Provide a public transport service to all municipalities of the region.
- Improve public transport connections between municipalities of the region and its capital.
- Improve connections with Health Centres and main hospitals, with usual business centres and regular markets, and with city highlights.

3 Metodology

The methodology of the work was divided into four stages, in order to achieve the objectives previously identified.

In the first stage all the information was gathered, in the second stage the analysis and diagnosis of the current situation of public transport in the region was performed, in the third stage it has been define the criteria and proposed lines of improvements, and finally in the last stage, once the final proposals for improvement were established, an economic assessment was made.

The first stage consisted of collecting the following information:

- Demographic and socioeconomic data of region.
- Facilities in the region.
- Network of regular passenger transport by road (routes, schedules, travellers, costs, collections, etc.) and on demand transport network
- Rail network.
- Network of school transport.
- Requests for improvements carried out by organizations and individuals, which are included in the Regional Services or in the General Direction of Transport and Mobility.

Furthermore this information has been supplemented with a fieldwork that consisted of the following actions:

- Interviews with the main government agencies in the region, such as the Regional Council and the main City Councils (the four municipalities with the largest number of inhabitants), and surveys to other municipalities, where issues that affect mobility and the public transport system has been addressed, especially by road.
- Interviews with the main concessionaires of regular passenger transport by road.
- Surveys to the regular users of public transport and on demand transport by road to analyse the current situation of public transport in the region.

The second stage of diagnosis of the current situation has gathered the following aspects:

- Diagram of public transport in service.
- Analysis of services supply following the analysis methodology established in the PTPC based on:

- 1. Daily mobility and estimation of the total daily mobility, from the Survey of daily mobility in Catalonia in 2006 (hereinafter EMQ2006)
- 2. The trips modal split.
- 3. The rail services supply of the region and the nearby regions: daily traffic, number of direct services, operators, lines, travel time, location of stations in the urban area.
- 4. The bus services supply: daily expeditions, number of direct services, operators, lines, travel time, location of stops.
- Identification of activity cores without transport service, with an insufficient transport supply or with an inadequate schedule or with no coordination.
- Lack of coordination between the different transport systems: urban/interurban and bus/train (from other regions).
- Analysis of the lines cost-effectiveness.

The third stage, which includes the different proposals, can be summarized in the following aspects:

- Changes to the regular services network (creation of new lines and routes or schedule changes), following the services typology of the PTPC.
- Analysis of the schools transport network for the compulsory and non-compulsory education system and proposals to improve its efficiency and coordination and/or integration into the regular services network.
- Proposals for the creation of on demand transport services.

The fourth and final stage consists of an economic evaluation of the proposals.

4 Description of the study area

4.1 Territorial Framework

The geographic area of this study covers the Pallars Jussà region, from which will be examined in detail the territory and the socioeconomic characteristics.



Mapa 1. Geographic scope of study.

Pallars Jussà is a Catalan region geographically located in the Pyrenees, part of the province of Lleida and of the functional territorial field of Alt Pirineu i Aran. The capital and largest city is Tremp with 6.228 inhabitants, while other important towns are La Pobla de Segur, Isona and Conca Dellà.

Pallars Jussà is the sixth largest region in surface area in Catalonia with 1.343 km² and covers 14 municipalities. However, it has 13.840 inhabitants with a population density of 10,3 inhab/km², which is a lower population compare to other regions with a similar size.

The region borders the regions of Alta Ribagorça, Pallars Sobirà, Alt Urgell, La Noguera and also the autonomous community of Aragon.

84.90% of the surface area of Pallars Jussà corresponds to forest area, 13.78% to cultivation area and 1.32% to urban land.

4.2 Demographics

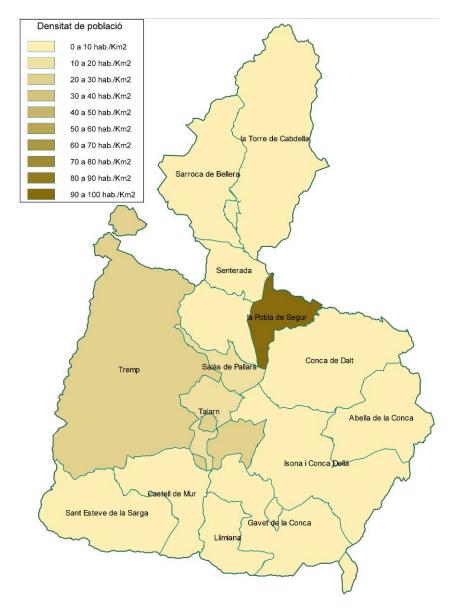
4.2.1 Population distribution

The Pallars Jussà has a population of 13.840 inhabitants (IDESCAT2009) divided into 14 municipalities. Its capital is Tremp, with 6.228 inhabitants, accounting for 45% of the region population.

Following the ranking of Catalan municipalities proposed by the Passengers' Transport Plan of Catalonia (PTPC), Pallars Jussà consists of:

- ➤ 1 first class centre, group B (core with more than 10.000 inhabitants or region capital): Tremp.
- > 3 main municipalities (between 500 and 2.000 inhabitants): Torre de Cabdella, Isona i Conca Dellà, and La Pobla de Segur.
- > 10 municipalities with less than 500 inhabitants.

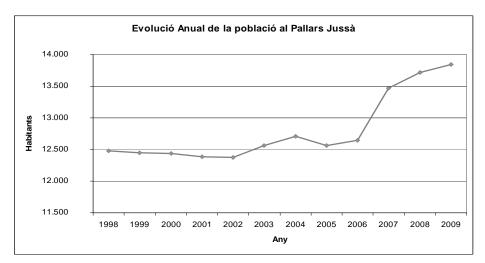
It is one of the Catalan regions with less population density, which is mainly concentrated in the corridor Tremp-La Pobla de Segur. The main cores outside this corridor have a low population, as shown in the following picture.



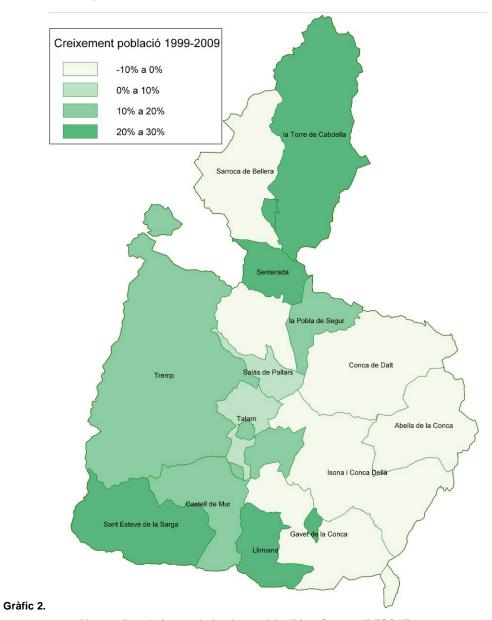
Mapa 2. Population density of the municipalities of Pallars Jussà. Source: IDESCAT

4.2.2 Population evolution

In the last decade the population of Pallars Jussà has grown 11.15% with a lower growth rate than Catalonia, which stood at 22%.



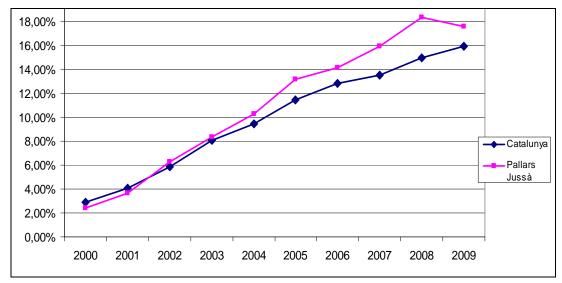
Gràfic 1. Population evolution in Pallars Jussà from 1998 to 2009. Source: IDESCAT



Mapa 3. Population evolution in municipalities. Source: IDESCAT

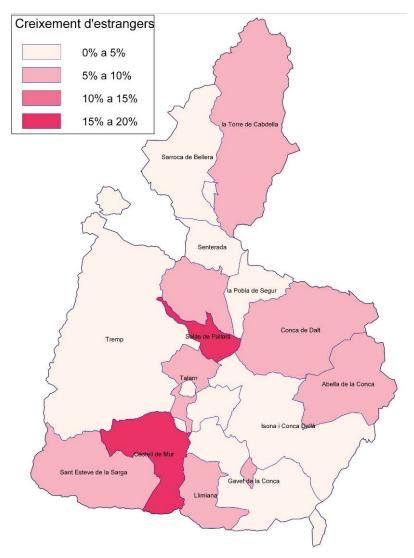
4.2.3 Immigration

In the past decade immigration has had a significant importance. The percentage of foreign population on the total population of the region has increased from 2% to 14% between 2000 and 2009.



Gràfic 3. Immigration evolution in Pallars Jussà and in Catalonia. Source: IDESCAT

The increase in the number of immigrants is steadily and pronounced throughout the period studied, in parallel to the Catalan average.



Mapa 5. Immigration growth in all municipalities in the region of Pallars Jussà. Source: IDESCAT

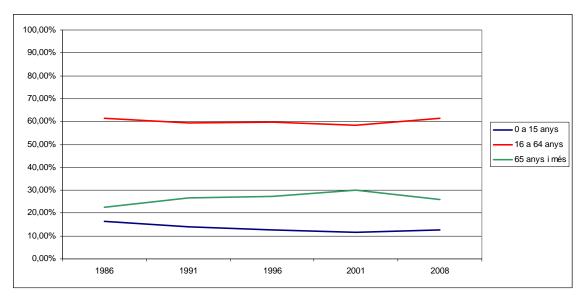
As can be seen, the most populated municipalities concentrate a much higher percentage of immigrant population.

4.2.4 Age structure

The aging index in Pallars Jussà during the past 23 years has remained over the Catalan, being in the range of 40 to 70 points higher. Therefore, it is a population in constant process of aging.

The population age structure of the region is the traditional regressive pyramid of developed countries. It has a narrow base with less population from 0 to 14 years than with 70 or more years. This indicates a low birth rate and a high life expectancy. The age group between 25 and 45 years is the dominant, and a slight improvement of births is noticed, mainly because of foreign birth-rate.

The following graphic shows the evolution of each age group in the population of Pallars Jussà in the past 20 years:

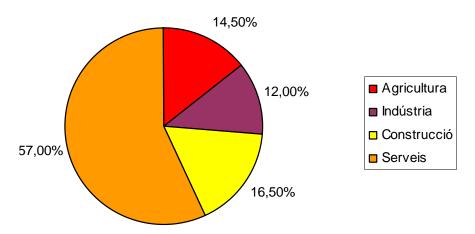


Gràfic 4. Population evolution in Pallars Jussà by age groups. Source: IDESCAT

4.3 Socioeconomics

4.3.1 Economic activities

The economic structure of Pallars Jussà has a very important service sector similar to the Catalan average (68% of the GDP). The most distinguishing feature of its economy is the construction sector, which represents 17% of the GDP of Pallars Jussà, compared to the industry sector, which is only 12% of the GDP compared to the 22% in Catalonia. Moreover, the primary sector has an important role with 15% of the GDP in the region, well above the 1,3% of the GDP in Catalonia.



Gràfic 5. Sector weight on the total GDP of Pallars Jussà in 2008. Source: IDESCAT Gràfic 6.

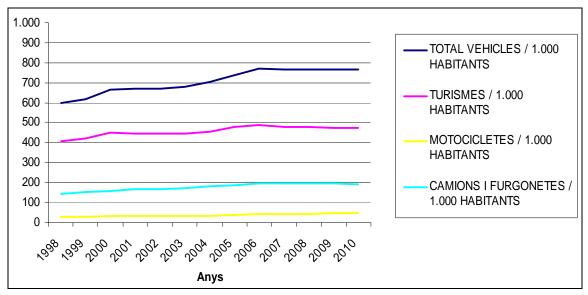
4.3.2 Tourism sector

Unlike other regions of the Pyrenees, Pallars Jussà tourism is not the main economic source. Even though it is a touristy point especially for adventure sports on the weekends and the summer period, it does not attract so many people so as to be considered of interest for analysing within this specific plan, which mainly focuses on the analysis of the daily mobility.

4.3.3 Motorisation

The importance of private vehicles has been evaluated using data from the evolution of the motorisation rate (number of vehicles per 1,000 inhabitants).

The evolution of the fleet of cars from 1998 to 2009 experienced a slight growth, from about 599 to about 767 vehicles per 1,000 inhabitants, while increasing all types of transport.



Gràfic 7. Evolution of the annual motorisation rate in Pallars Jussà. Source: IDESCAT

Regarding the type of vehicle, the fleet of cars is the highest with 62% of all motor vehicles, followed by trucks and vans with 25.4%, and finally the motorcycles with 6%.

There are differences between the important municipalities and the others in the region. The least populated municipalities, such as Abella de la Conca and Sarroca de Bellera, have a high rate of car ownership. This is due to a worse communication and poorer public transport that small towns have, compare to the important municipalities.

4.4 Facilities

This chapter presents the characteristics of the main attractors and generators centres of mobility in Pallars Jussà that focus on schools, health centres and weekly markets of the municipalities.

In a region with a so low density not all centres have the basic services. For this reason, it is essential for some people to move to the main municipalities in order to have access to healthcare, education, business services and sports facilities.

4.4.1 Health centres

The health centre of reference in Pallars Jussà is the Regional Hospital located in Tremp, which covers the regions of Pallars Jussà and Pallars Sobirà. In addition, Tremp has a Medical Centre as well as La Pobla de Segur, which provide service to all the municipalities in Pallars Jussà.

Most municipalities in Pallars Jussà have clinics, so that the doctors in the Medical Centres of reference move one day a week to provide a local service to see the mild cases. Besides, La Pobla de Segur has also a geriatric centre.

4.4.2 Educational centres

Schools are points of generation and attraction of a very significant amount of trips. Their students are potential users of public transport and, consequently, their situation will be analysed in detail.

The types of centres considered when making this study were:

- Nurseries.
- Kindergarten and primary schools.
- Special schools.
- Music schools.
- Secondary Education Institutes and/or high school.
- Vocational training centres.

Universities have not been included in the list because there is none in Pallars Jussà. The universities of reference are in Barcelona and Lleida.

Pallars Jussà has 6 nursery schools, 6 kindergartens and primary schools, 1 music schools and 2 secondary schools. In addition, Tremp also has an important range of vocational training centres.

4.4.3 Markets and commercial facilities

The main shopping centres in Pallars Jussà are located in Tremp and La Pobla de Segur.

Local markets are also important generators of mobility flows, and potential users of public transport. The main reference market in the region is in Tremp, which is held weekly on Mondays. Other important markets are the weekly markets of La Pobla de Segur, and Isona i la Conca Dellà taking place on Wednesdays and Saturdays respectively.

4.4.4 Cultural and sports facilities

The municipalities in which much of the cultural and sports facilities are concentrated in Pallars Jussà are Tremp, La Pobla de Segur and La Torre de Cabdella.

4.5 Road and rail network

4.5.1 Road network

The region is crossed by a main artery, where most of its population is concentrated, the regional road C-13, which runs the Pallars Jussà from south to north. Other tracks to note are:

- The state road N-260 which connects Tremp with Sort (capital of the region of Pallars Sobirà).
- The local road L-522 that connects Tremp with El Pont de Suert (capital of the region of Alta Ribagorça).
- The regional road C-1412b that connects Tremp with Isona and reches Ponts (Noguera).
- The L-511 road that goes from Isona to Coll de Nargó (Pallars Sobirà)

A capillary network of secondary roads and tracks make possible the communication between all urban centres and the main arterial roads.

See Map 2 of the road network of Pallars Jussà in section 8. Maps of the improvement plan.

4.5.2 Rail network

The rail network which will benefit the residents of Pallars Jussà is the line Lleida – La Pobla de Segur of FGC (*Ferrocarrils de la Generalitatde Catalunya*), which connects the municipalities of Llimiana, Tremp, Salàs de Pallars and La Pobla de Segur. During the drafting of this study its services have been altered due to budget cuts in the current economic crisis.



Mapa 6. Diagram of the rail line La Pobla de Segur – Lleida of FGC. Source: FGC website

5 Analysis and diagnosis of mobility

5.1 General information about mobility

Based on data from the EMQ2006 the main features of the personal and occupational mobility in the study region can be known.

The analysis of the population mobility set the following main objectives:

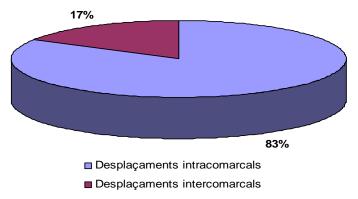
- Know the mobility flows developed in the territory: the origins and destinations, the
 modal split on working days in order to determine the number of daily trips, the market
 share of public transport and the expected demand.
- Know the influence area of the region capital and of other municipalities, which is important in the regional mobility.

In Pallars Jussà, 50,717 daily trips are made from Mondays to Fridays, and 47,222 daily trips at the weekends and on holidays. This represents an average of about 3.7 trips per day.

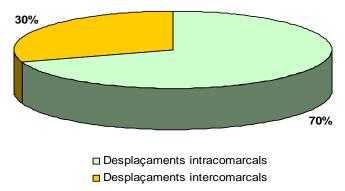
5.1.1 Global mobility

From the analysis of mobility flows with origin and destination in Pallars Jussà, the following data is collected:

- On working days there are a total of 42,312 intra-regional trips per day and at the weekend and on holidays 32,865 trips a day.
- There are 8,405 daily inter-regional trips from Monday to Friday and 14,357 at the weekends and on holidays.



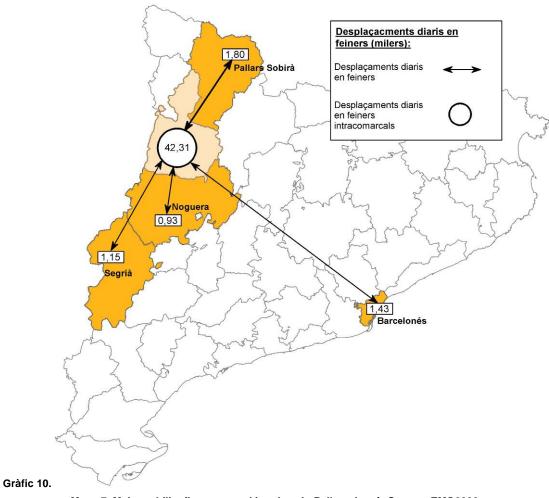
Gràfic 8. Daily intra-regional and inter-regional trips on working days in Pallars Jussà. Source: EMQ2006



Gràfic 9. Daily intra-regional and inter-regional trips at the weekends and on holidays in Pallars Jussà. Source: EMQ2006

5.1.2 Inter-regional mobility

The main inter-regional mobility relationship of Pallars Jussà on working days is with Pallars Sobirà (3.6% of trips) and the regions of Barcelonès (2.80%), Solsonès (2.30 %), La Noguera (1.80%) and Segrià (1.10%). At the weekend and on holidays is with Barcelonès (8.9%), Pallars Sobirà (5.1%), Vallès Oriental (5.2%), Segrià (2.8%) and Vallès Occidental (1.6 %).



Mapa 7. Main mobility flows on working days in Pallars Jussà. Source: EMQ2006.

5.1.3 Intra-regional mobility

In Pallars Jussà each working day 42,312 internal trips are made between its municipalities. At the weekend and on holidays, this number is reduced to 32,865 trips.

The rate of self-contention in Pallars Jussà, which is the percentage of trips made inside the region, is 83.4% on working days and 69.6% at the weekends and on holidays.

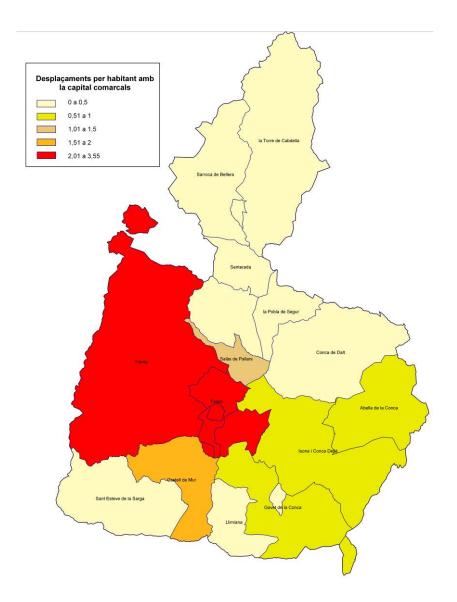
83.1% of the intra-regional trips (35 165 trips) are made inside each municipality, with a great weight of Tremp, the region's capital, together with important municipalities such as La Pobla de Segur and Isona i Conca Dellà.

5.1.4 Mobility with the capital of the region

Most intra-regional trips have its origin or destination in Tremp. Of the 42,311 intra-regional trips on working days, 5,456 are produced between Tremp and the other municipalities in the region; and 17,589 inside Tremp, which corresponds to 2.62 trips per inhabitant.

The municipalities with more trips to Tremp are La Pobla de Segur, Isona i Conca Dellà, and Talarn.

The closest municipalities to the region have a quite high ratio of trips per inhabitant to Tremp.



Mapa 8. Trips per inhabitant between municipalities of Pallars Jussà.

5.1.5 Modal split of intra-regional and inter-regional displacements

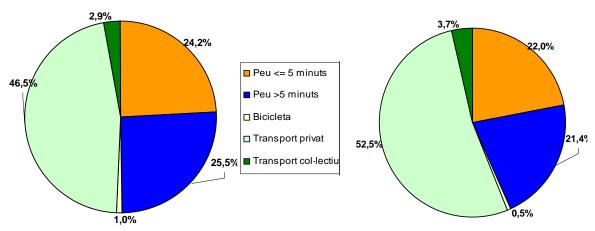
On working days, walking and cycling represents about 50% of the trips made, and at the weekend and on holiday 43%.

Trips by private vehicles make 47% of trips on working days and 53% at the weekends and on holidays.

The collective transport (public, school and others) represents only 3% of trips on working days and about 4% at the weekends and on holidays.

Modal split of daily trips on working days

Modal split of daily trips at the weekends and on holidays

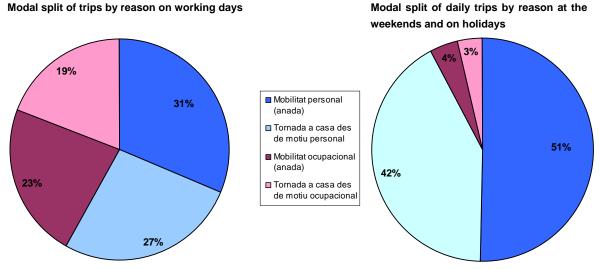


Gràfic 11. Modal split on working days and at the weekends and on holidays in Pallars Jussà.

5.1.5.3 Reasons for travel

The reasons are categorized into occupational mobility (outward journey to work and return) and personal (other non-work reasons).

On working days occupational mobility is only 42% of global mobility, with 58% of personal mobility. At the weekends and on holidays this situation is stressed, representing occupational mobility only 7% of trips and personal mobility 93%.



Gràfic 12. Reasons of intra-regional trips in Pallars Jussà.

5.2 Public transport services by road

This section analyzes the supply of public transport by regular road and on demand transport, including the lines directly managed by the General Direction of Transport and Mobility and by the Regional Council through the annual agreement signed between the Department of Territory and Sustainability and the Regional Council of Pallars Jussà.

It is differentiated the lines with routes in the interior of the region (intra-regional lines) and the lines to municipalities of other regions or out of Catalonia (inter-regional lines).

It is highlighted the implementation of on demand transport that tries to reach where no regular transport reaches, especially in less populated towns.

Also exhibited in this chapter the current situation of school transport services, urban transport service, transport service for disabled people and taxi services.

See Map 3 Supply of regular public transport by road in Pallars Jussà in chapter 8. Maps, where inter-regional lines with its itinerary and operator are. See also Annex II of the improvement plan, where all schedules are gathered.

5.2.1 Intra-regional lines

In Pallars Jussà there are no regular public transport lines, which runs exclusively inside the region.

5.2.2 Inter-regional lines

There are 4 regular public transport lines linking municipalities of Pallars Jussà with municipalities of other regions and with themselves.

B1	Barcelona – Eth Pont de Rei
B2	Esterri d'Àneu - Àger – Lleida
В3	Esterri d'Àneu - Camarasa – Lleida
B4	La Pobla de Segur – Barcelona

5.2.3 On demand transport

The PTPC 2008-12 includes among its lines of action, the implementation of on demand services in those municipalities with a low demand and where the network coverage is insufficient.

The on demand transport service offers a solution to a whole range of people, especially the elderly and young people without access to private vehicles, who are dependent on others who have cars.

The on demand transport services in Pallars Jussà are included in the Agreement signed between the Department of Territory and Sustainability and the Regional Council of Pallars Jussà. These services are operated by taxis and transport companies. Their routes and schedules are variable.

Listed below are the 17 on demand routes contained in the Agreement of 2012.

Línia D1	La Pobla de Segur - València d'Àneu
Línia D2	València d'Àneu - Tremp
Línia D3	Espluga de Serra - Tremp
Línia D4	Matasolana- Sant Miquel de la Vall -Tremp
Línia D5	La Clua - Tremp

Línia D6	Aransís - Tremp
Línia D7	Orcau - Tremp
Línia D8	Bòixols - Tremp
Línia D9	Vilella - Buira - Tremp
Línia D10	Lluçà - Tremp
Línia D11	Cabdella - Aguiró - Tremp
Línia D12	Rivert - Tremp
Línia D13	Pessonada - la Pobla de Segur
Línia D14	Hortoneda - la Pobla de Segur
Línia D15	Talarn - Tremp
Línia D16	Puigverd de Tremp - Tremp
Línia D17	Santa Engràcia - Tremp

5.2.4 Urban lines

There are no urban lines in the region.

5.2.5 School transport

There are 26 lines of school buses (TE) and almost all have seats available, but only some have 3 or more vacancies, which is the number from which it is evaluated the suitability of its use.

Lines that have a lower use rate could be used for new expeditions as if they were regular transport services, taking advantage of its available seats by other non-school users. It is, therefore, an open service for certain expeditions, giving priority to students who travel to centres near schools.

As has been done for the course 2011 - 2012, every year before starting school the Regional Council should assess the number of vacancies available and the possibility of offering them to other users. It should be studied for each case the possibility of combining the on demand transport with the school transport, offering an outward journey in the morning, a return journey at midday and a return journey in the afternoon in school days.

In any case will the school lines transport people along a route covered by a regular transport, since they would be competing with the regular transport operator.

See Map 5 Supply of school transport for the course 2011-12 in Pallars Jussà in chapter 8. Maps.

5.2.6 Transport for disabled people

Segons les dades facilitades pel Consell Comarcal del Pallars Jussà, actualment els serveis de transport per a les persones amb mobilitat reduïda de la comarca es fan mitjançant un o dos vehicles adaptats gestionats per l'àrea de serveis socials del mateix Consell Comarcal. Les destinacions més habituals són Tremp i La Pobla de Segur. Les necessitats de transport de les persones amb mobilitat reduïda del Pallars Jussà es consideren cobertes amb els serveis que actualment s'hi ofereixen.

According to data provided by the Regional Council of Pallars Jussà, transport services for disabled people in the region are currently made using one or two adapted vehicles managed by the social services department of the Regional Council. The most common destinations are Tremp and La Pobla de Segur. Transport needs of disabled people in Pallars Jussà are considered covered with the currently offered services.

5.2.7 Taxi services

Al Pallars Jussà existeixen 35 llicències de taxi. La Pobla de Segur concentra més del 37% de les llicències de taxi del Pallars Jussà amb 13 llicències. Destaca també Tremp amb 7 llicències. La resta de municipis tenen 2, 1 o cap llicència.

In Pallars Jussà there are 35 taxi licenses. La Pobla de Segur concentrates more than 37% of the taxi licenses in Pallars Jussà with 13 licenses. Tremp also stands out with 7 licenses. The other municipalities have 1, 2 or no license.

5.3 Public rail transport services

In December 2011, there are 4+4 daily expeditions between Lleida and La Pobla de Segur, from which 1+1 are on demand.

5.4 Coverage of the current network

In the following sections will be analysed in detail the coverage of public transport in each municipality, taking into account the different needs of its inhabitants:

- Health.
- Education.
- Shopping.
- Connection between their population centres.
- Connection to the capital of the region.
- Connection to other municipalities of reference outside the region.
- And, connection with other modes of public transport such as bus and rail services in their own region or neighbouring regions.

The criteria for selecting population centres for analysis is twofold:

Selection of the main core of each municipality.

• Selection based on the number of inhabitants of those population centres which, although not being the main core, have 25 or more people.

5.4.1 Coverage between the municipalities and its health centres of reference

The majority of the population centres have at least a weekly connection with the CAP (*Centre d'Atenció Primària*, a local medical centre), except for very small towns. It should be noted that the population centres of Cellers, Guàrdia de Tremp, Puigcercós, Palau de la Noguera, Talarn and Salàs de Pallars are properly connected, since they are part of regular lines.

34 of the 57 population centres analysed have at least one weekly adequate connection with the main hospital. There are towns which have no proper connection not even 1 day a week, therefore its public transport connections could be improved.

5.4.2 Coverage between the municipalities and its educational centres

5.4.2.1 Use of existing school transport services and regular services

It is considered that the students of secondary education who have to travel outside their municipality to access schools, are sufficiently covered with the school lines in the course 2011 - 2012, managed by the Regional Council of Pallars Jussà. These services are adapted to the starting and finishing time of schools.

5.4.2.2 Public transport coverage for non-compulsory education

One of the other objectives to be met with public transport is to give students over 16 years access to non-compulsory education centres as Batxillerat (high school) and vocational training centres, which are located in La Pobla de Segur and Tremp.

50 of 57 population centres do not have a good connection to their school of reference and in the school days. Only 7 population centres, which represent 66% of the total inhabitants of the region, have a proper connection with public transport to the school centres.

The coverage with universities outside the region by public transport was also analyzed, as Pallars Jussà has no universities. The main destinations are the universities of Barcelona and Lleida. There are public transport expeditions by road for both on Sunday afternoon and return to Pallars Jussà on Friday afternoon or Saturday morning.

5.4.3 Coverage between municipalities and the main markets and shopping centres

5.4.3.1 Coverage between municipalities and the main weekly markets

Approximately half of the population centres with more than 25 people have a public transport connection to some of the main markets.

Any of the population centres of the municipality of Isona i Conca Dellà have a proper connection with the market of Tremp, because, despite being connected to lines of on demand transport, there are no connections to the market the days it is open.

5.4.3.2 Coverage between municipalities and the main shopping centres

A great part of the population centres have access by public transport at least one day a week to any of the most important shopping centres. However, there are no proper connection to Aulàs, Biscarri, Cabdella Central, Fecsa-Nerets Central, Conca de Dalt, Conques, Espui, Figuerola d'Orcau, Fontsagrada, Pobella, la Pobleta de Bellveí, Sant Joan de Vinya Frescal, Sant Martí de Canals, Senterada, la Torre de Cabdella i Vilamitjana.

5.4.4 Coverage of the municipalities with major sporting and cultural acilities district

The main destinations of Pallars Jussà municipalities are the sports facilities of the municipalities with more inhabitants, such as Tremp, La Pobla de Segur, Isona i Conca Dellà and La Torre de Cabdella.

5.4.5 Coverage of the municipalities' population centres

El 90% habitants del Pallars Jussà tenen alguna connexió en transport públic. D'aquests, 9.690 estan coberts amb transport regular, i 12.410 disposen d'algun servei a la demanda.

90% of the Pallars Jussà population have any connection by public transport. Of these, 9690 are covered with regular transport, and 12410 have an on demand service.

5.4.6 Coverage between the capital of the region and its other municipalities

The criteria for evaluating the connection of Pallars Jussà municipalities to its capital are the number of days a week that the service is provided and the schedule suitability.

CRITERIA	EVALUATION
28 adequate weekly time slots	Very adequate
11-27 adequate weekly time slots	Adequate
1-10 adequate weekly time slots	Improvable
None	Nonexistent

Table 1. Evaluation criteria of the population centres with its regional capital by public transport.

Analysing the return trips in Tremp and considering that a proper schedule is one in which a citizen can go out and come back in the morning and/or in the afternoon, it was evaluated how many time slots have return trips to and from Temple, as well as the days it is offered. It has been determined that 20 population centres have no connection to any suitable time slot, 25 show some time slots covered but a very low number, so it is considered that this connection is improvable, the remaining 12 population centres with more than 25 people have a very adequate or adequate connection to the capital of the region.

5.4.7 Coverage between municipalities of the region and cities outside

It will be assessed the connection with Barcelona, Lleida and Sort, capitals of the regions which have a higher mobility with Pallars Jussà.

The evaluation criteria are the following:

CRITERIA	EVALUATION
Availability in 4 time slots	Very adequate
Availability in 2 to 3 time slots	Adequate
Availability in 1 time slots	Improvable
Availability in any time slots	Nonexistent

Table 2. Evaluation criteria of the connection to other cities by public transport.

Only the population centres of the main municipalities in the region have an adequate or very adequate connection to Barcelona, Lleida and Sort (the capital of the neighbouring region of Pallars Sobirà). The other population centres with few inhabitants have a nonexistent connection. Therefore, their connection must be made coordinating the existing on demand transport service with the regular transport service.

As happens with Barcelona, the connection to Lleida is nonexistent for most population centres of Pallars Jussà. Only in those with more inhabitants, such as Cellers, Guàrdia de Tremp, Palau de Noguera, la Pobla de Segur, Puigcercós, Salàs de Pallars, Talarn and Tremp the connection is adequate. Therefore, it should be made a connection coordinating the on demand transport service with the regular transport services.

5.4.8 Bus – bus coordination

The coordination between regular public transport services by road, on demand and school transport is analysed.

Coordination of on demand transport and regular public transport by road

At the moment there is no coordination between on demand transport and regular transport services. Although there is a duplication of lines in some parts of its itinerary, their final destination is different and in most cases do not coincide in time.

To improve efficiency, the schedule of some of the on demand transport services and the schedule of regular transport services could be coordinated and, thus, the population centres without transport service can take advantage of the intra- and inter-regional regular services. Changing time between services should be the least possible.

On demand and school transport coordination

At the moment there is no coordination between on demand transport and school transport services. For this reason the duplicity of lines in similar schedules between these two services have been analyzed.

To improve efficiency, some of the school transport services with available seats and overlapping of route and schedule could be used by other users; and on demand transport services could be used by school users when they coincide with school time.

This action would considerably reduce the total number of kilometres done by all vehicles, provide the same service but with a lower operational cost, although users would have to

replace a direct service by a transfer service. Therefore, it should be achieved through transfers that involved the least possible time waiting at the stops of the coordination between services.

5.4.9 Bus – train coordination

The coordination of the regular transport and the rail service of the line La Pobla - Lleida has not been analysed because during the writing of this study it is being analysed by the General Direction of Transports and Mobility for its implementation in 2012.

Bus - Rail service coodination between La Pobla de Segur and Lleida

Parallel to this study, the public company of railways *Ferrocarrils de la Generalitat de Catalunya* (FGC) together with the General Direction of Transport and Mobility analyse the restructuring of the railway services of the line CA7, Lleida - La Pobla de Segur, and the bus services Esterri Àneu – La Pobla de Segur - Lleida.

The final proposal of this parallel study will be collected in this plan as an achieved action.

Bus – AVE (Lleida) coordination between the services Tremp – Lleida and the rail services Lleida – Madrid

Here it is evaluated the possibility of changing in the train station of Lleida from the bus services from Pallars Jussà to the high-speed train (HST hereafter) of the Barcelona – Madrid line.

The waiting time for the high speed line Lleida-Barcelona-Madrid will be classified as:

CRITERIA	EVALUATION
10 – 20 min	Adequate
20 – 30 min	Improvable
less than 10 min or more than 30 min	Inadequate

Table 3. Evaluation criteria of the waiting time for changing from the bus lines Lleida – Pallars Jussà to the AVE with destination and origin in Madrid.

Regarding the connection to Madrid, the priority of Pallars Jussà is to go in the morning and return in the afternoon. In the analysis of the reorganization of the bus line Esterri d'Àneu - La Pobla - Lleida, which is being developed parallel to the writing of this study, it will be included the possibility of coordinating them with some of the expeditions of the high speed train.

5.5 Evaluation of public transport

The aim of this chapter is to establish a methodology for a efficient and realistic assessment of the PT in the region.

This methodology should allow comparison between different scenarios and the scenario may be present and a future scenario in which the hypothesis is considered implementation of a series of proposals that will improve the current network. Thus, it is possible to evaluate the effectiveness of new proposals for rigorous, efficient and very visual.

5.5.1 Methodology

The methodology is based on the specific objectives of the service plan described in the second chapter of this document, as well as other characteristic parameters of public transport and the socio-economic structure of the study area as the population of each municipality or the schedule and number of expeditions.

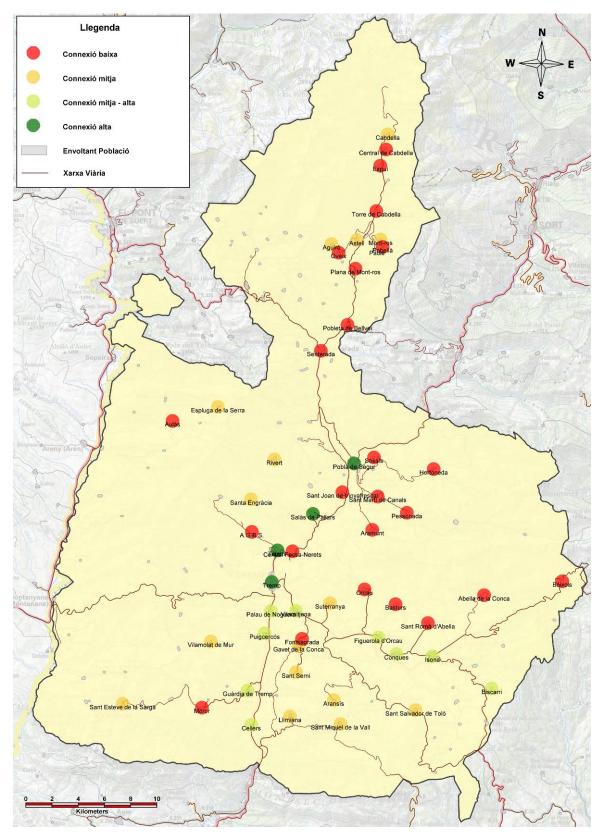
In general, it is to see if the interurban PT of Pallars Jussà meets the criteria considered most important in the area studied, which were weighted according to their importance through the analysis of mobility and observations transmitted by each municipality through surveys and interviews conducted as detailed in section *6.Fieldwork*.

The assessment of these criteria will be for all population centres with more than 25 inhabitants and for all municipal capitals, which represent a total of 56 population centres in Pallars Jussà.

The main parameter to take into account when assessing the PT service will be the ability to access a service or a specific place in suitable time slots and certain days.

5.5.2 Results

The results have been reflected in the following graphic:



Mapa 9. Valoració del nivell de servei actual del transport públic al Pallars Jussà. Font: Elaboració pròpia

From 67 population centres with more than 25 inhabitants, representing 95% of the total population of the region, are extracted the following conclusions:

 The population centres located in the main corridors, where the regular services pass through linking Pallars Jussà and Sobirà with Barcelona and Lleida, are the ones best connected in an intra- and inter-regional level. As is the case of Tremp, La Pobla de Segur, Salàs de Pallars and Talarn, which represent 68.9 % of Pallars Jussà's inhabitants.

A group of 3 population centres from Tremp (Palau de Noguera, Puigcercós and Vilamitjana), 4 from Isona i Conca Dellà (Isona, Biscarri, Conques and Figuerola d'Orcau) and 2 from Castell de Mur (Guàrdia de Tremp and Cellers), with 10.3% of the inhabitants of Pallars Jussà, receive an assessment of PT connection medium-high, which is very adequate in terms of territorial coverage and intra-regional level, and improvable in terms of inter-regional services.

This means that 80% of the inhabitants of Pallars Jussà have an adequate level of connection by PT according to their needs.

- 17 population centres, representing approximately 5.5% of the inhabitants of the region, have a medium connection, improvable in an inter-regional level of connectivity and in an inter-regional level especially, where all have a deficit.
- Finally, a group consisted of the remaining 25 population centres of the study, have a low connection assessment. Except for one specific case where a high level of territorial coverage have been achieved, most have no coverage. Regarding the level of connectivity of intra and inter-regional public transport service, which are 10.1% of the population of the region, have shortcomings or deficiencies.

In short, especially the last 2 population centres with worse assessment should be treated so as to improve its connectivity by public transport and, thus meet the users mobility needs. Mainly it should be insisted on the improvement of the intra-regional connection, adapting the existing on demand transport services and coordinating them with the existing regular services, which also would affect the improvement of connections out of the region.

In conclusion, the analysis shows that the overall level of service in Pallars Jussà is generally good but the inter-regional mobility can be improved in all population centres; and in certain specific cases improvements in the internal connections and the territorial coverage should be made.

6 Field work

6.1 Interviews to the main public organisms in the study area

For the preparation of this plan, the following public organisms of Pallars Jussà have been interviewed:

- Regional Council of Pallars Jussà
- City hall of Tremp
- City hall of La Pobla de Segur
- City hall of Isona i Conca Dellà

Below is the summary of these interviews:

6.1.1 Regional Council of Pallars Jussà

In this interview, the following suggestions were made:

In an intra-regional level:

- Adapt the schedule for mobility between the population centres of Figuerola and Sallés to Tremp.
- Use of the seats available in the school transport service by other users.
- Adapt the schedule of the regular lines from different municipalities to get to the regional hospital in Tremp.
- Creation of new services for those population centres that do not have or have no demand to Tremp and La Pobla de Segur.
- Schedule coordination of the road and rail transport services to Tremp.

In an inter-regional level:

- Increase the frequency with 1+1 daily expedition and reduce travel times of the rail service of the FGC line Lleida – La Pobla de Segur.
- Adapt the schedule of the current expeditions of the FGC line Lleida La Pobla de Segur to arrive in Tremp in the morning to work and return to Lleida in the afternoon.
- It has been pointed out the need to connect the train station of Lleida to public transport services (with new rail or road expeditions) and with an appropriate schedule in order to use the high speed train.

6.1.2 Tremp City hall

In this interview, the following suggestions were made:

In an intra-regional level:

- Use of school transport services with destination Tremp by users of other municipalities of Pallars Jussà.
- Improve public transport connection of the area of Terreta: Orrit, Sapeira, Aulàs, Castellet Espluga de Serra, Torogó, La Torre de Tamúrcia and Els Masos de Tamúrcia with the municipalities of the region of Alta Ribagorça: Pont de Suert and Arén. Especially for high school students.
- Creation of a new public transport addressed to workers, which communicates the municipalities of La Pobla de Segur and Tremp with their industrial areas of reference from Monday to Friday with 3+3 or 4+4 daily expeditions.

In an inter-regional level:

- Increase frequency with 1+1 daily expedition and reduce travel times of the FGC rail service Lleida – La Pobla de Segur.
- Schedules coordination of the public transport service by road between Tremp and Lleida, especially to connect to the high speed train with destination Barcelona.

6.1.3 City Hall of La Pobla de Segur

In this interview, the following suggestions were made:

In an intra-regional level:

- Ensure the connection of the municipalities of La Vall Fosca and La Vall del Bosia with the medical centre of La Pobla de Segur.
- Ensure students mobility to Tremp High School from La Pobla de Segur.
- Improve coordination time and increase the frequency of public transport services to two geriatric hospitals in La Pobla de Segur.
- Improve territorial coverage by creating a new bus stop for public transport services from La Pobla de Segur to Tremp to access to the regional hospital and adjust the schedule of the expeditions to the hospital opening hours.

In an inter-regional level:

- Increase the frequency with 1+1 new daily expeditions, at least for working days, reduce travel times of the FGC rail service Lleida - La Pobla de Segur or of the public transport by road.
- Coordinate schedules of public transport by road between La Pobla de Segur and Lleida, especially to connect to the high speed train with destination Barcelona and Madrid.
- Increase the frequency of public transport services by road between La Pobla de Segur and Barcelona.

Other observations in the interview were:

- Continue promoting the on demand transport through the annual renewal of the agreement between the regional council and the Department of Territory and Sustainability.
- Promote the construction of the new bus station, next to the railway station, which
 already has its written project. This new infrastructure would improve the connection
 between the bus, train and taxi service.
- · Reduce the price of public transport services.
- Help boost tourism in La Pobla de Segur, by improving the existing rail services, expanding its schedule to ensure a stay-over in La Pobla Segur.

6.1.4 City hall of Isona i Conca Dellà

In this interview, the following suggestions were made:

In an intra-regional level:

 Some population centres of Isona i Conca Dellà such as Llordà, Covet, Siall and Gramenet, where regular transport services by road make a stop, do not have the possibility to access on demand transport services, which go to Tremp. The City Council requests to extend the on demand transport system to other villages in the municipality of Isona i Conca Dellà because the current regular lines located on the road are very far from population centres.

In an inter-regional level:

- Improve the territorial coverage to connect with public transport services by road the line between Barcelona and La Pobla de Segur (passing by Isona i Conca Dellà), by replacing the existing stop in the outskirts of Isona to one in the centre.
- Coordinate schedules of public transport by road from Isona to Artesa de Segre in Lleida. In this municipality. Another option would be to coordinate schedules to go from Tremp to Lleida, providing that the frequencies are increased and the schedules made more appropriate.

6.2 Interview with the road transport concessionaires

Regular meetings with the concessionaire responsible for the regular transport of the region, ALSINA GRAELLS, SA, have been held during the drafting of the study, especially to deal with the restructuring of the service between Esterri d'Àneu and Lleida.

6.3 Surveys to municipalities

A survey on the basic mobility information was sent to every city hall in Pallars Jussà through the collaboration of the Regional Council.

These surveys have been a major source of information to make this plan for improving transport services. The information has been used to describe the characterization of the study

area (especially with regard to municipal facilities) and mobility between municipalities. It also has been used to gather the contributions and suggestions for improving the public transport network.

The response has been very positive since 100% of the municipalities have answered the survey providing specific data.

6.4 Surveys to users of the public transport

In 2011 surveys were made to public transport users in the region on the regular and on demand transport.

The 20 rated points in the survey were divided into 4 groups of assessment (vehicle, transportation services, stops and global view):

EVALUATED POINTS	
About the vehicle	
P1. Vehicle cleanliness	
P2. Comfort	
P3. Accessibility to the vehicle (Ease to get on	and off)
P4. Condition / Image of the vehicle lines (from	n 0=old to 10=modern)
P5. Security inside the vehicle	
About the service	
P6. Punctuality of the vehicle	
P7. The route of the line in kilometres (from 0=	to long to 10=very adequate)
P8. Travel time (from 0=slow journey to 10=qu	ick journey)
P9. Cost of travel (from 0=very expensive to 1	0=economical or inexpensive)
P10. Information on schedules and stops	
P11. Total number of trips offered (0= insufficie	nt to 10= sufficient/adequate)
P12. Schedule suitability to mobility needs (out	vard and return journey)
P13. Treatment received by the driver	
P14. Road safety when driving (The driver driver	es safely)
About the bus stops	
P15. Location of the stop from home (from 0=ve	ery far to 10=very near)
P16. Distance between stops (from 0=very far t	o 10=very near)
P17. Stops access (Ease to access on foot or w	rheelchair)
P18. Stops condition (cleanliness, maintenance	, comfort, lighting)
General assessment	
P19. Satisfaction with the company providing th	e service
P20. Overall satisfaction with the current public	transport system

Table 4. Evaluated items of the survey to public transport users

98 users have filled out the survey and have assessed the on demand transport with a grade average of 9.0 and with 7.8 the regular transport. The overall rating of public transport by road in the region of Pallars Jussà is 8.0.

Proposals for improving public transport services

7.1 Objectives and guidelines

To resolve shortcomings in the current public transport network in Pallars Jussà in this section a series of proposals following the objectives set by the national mobility guidelines and the Passengers' Transport Plan of Catalonia 2008-2012 (PTPC) will be described.

It is also taken into consideration the requests and contributions made by various governments and stakeholders:

- Regional Council of Pallars Jussà.
- City Hall of Tremp.
- City Hall of La Pobla de Segur.
- City Hall of Isona i Conca Dellà.
- The other city halls in Pallars Jussà

The implementation of these actions will allow to reach the following objectives:

- Prioritize the public transport network: strengthening the regular lines and coordinating them with the on demand and school transport service.
- Ensure connection with the Health Centres of reference.
- Ensure the connection to the main business activities in the region with reasonable schedules, especially to the weekly markets.
- Improve coordination bus train, bus bus, and bus on demand transport.
- Strengthening lines which have a very low frequency.
- Adapt the schedule of regular lines, trying to adapt them as far as possible to the students and workers.
- Improve coverage by putting new stops where the demand justifies it.
- Complement the use of school buses with the on demand transport.

7.2 Proposals for action

The 9 proposed actions are organized in 8 categories:

- Creation of a joint, complementary and coordinated offer of the interurban bus and train services to cover the mobility demand in the morning and in the afternoon, removing inefficient duplicities. (CO)
- Schedule coordination between the different public transport services (SC):
 Coordination of different bus and train services so that new routes to transfer can be created or to use more efficiently the different means of transport.
 - Extend all the interurban expeditions to the train station of Lleida and guarantee an outward journey in the morning to Barcelona and a return journey in the afternoon from Mondays to Fridays through the schedule coordination of the interurban bus service and AVANT (high speed train).
- 3. Extension of the territorial coverage (TC): measures aimed at extending public transport to municipalities and population centres of the region so far with little or no service.
 - New stop of the regular transport service at the Regional Hospital in Tremp.
- 4. Extending the service frequency (EF): actions to increase the number of expeditions of the lines, setting more comfortable and consistent schedules for users.
 - New expeditions for students and workers from Monday to Friday in the afternoon from Lleida to La Noguera and Alt Pireneu i Aran and provide connection to Barcelona on Sundays and holidays for students with a PT service by road from Esterri d'Àneu to the Catalan capital in the afternoon.
- 5. Improvement of PT fares (IF): actions to reduce current public transport fares.
 - Creation of a new title (T-10/60) for the corridor Lleida Esterri d'Àneu and equalise fares of the bus and train service of the route Lleida – La Pobla de Segur.
- 6. Improve user information (II)
 - Information campaign addressed to users of the PT of the corridor Pallars-Lleida.
- 7. Use of school transport services by other users (ST).
 - Use the available seats in the school transport in Pallars Jussà by other users.
- 8. Creation of new on demand transport services or improve existing (DT).

- Modify some of the existing services or create new ones to improve connectivity and accessibility to some population centres with few inhabitants.

7.3 Economic assessment of the proposals

As already mentioned, to define the proposals of this Plan were taken into account the requests and contributions made by the Regional Council of Pallars Jussà, the city halls of the municipalities in the region, the Transport Territorial Service of Lleida (STTL) and the operators of public transport in the region.

7.3.1 Cost estimate of proposals

The following table lists the proposed improvements with their estimated costs:

PROPOSAL CODE	LINE	KM/YEAR	HOURS/YEAR	ESTIMATED COST (€ANY)	
co	B1, B2, B3 i B4 and CA7 d'FGC			520.413,53 €	
SC + TC1	B1, B2, B3, B4 and CA7 from FGC	455.736,5	8.039,5		
EF	B1, B2, B3, B4 and CA7 from FGC	455.750,5		320.413,33 E	
IF	B1, B2, B3, B4 and CA7 from FGC				
II	B1, B2, B3, B4 and CA7 from FGC	-	-	To be assessed	
ST	TE1, TE5, TE9, TE10, TE11, TE14, TE15, TE23 and TE25	-	-	-	
DT	TD3, TD4, TD6, TD7, TD8, TD9, TD10, TD11, TD12 and TD14	To be assessed	To be assessed	To be assessed	
TC2	B1, B2, B3, B4 and CA7 from FGC	-	-	-	
	TOTAL	455.736 Km	8.040 h	520.413,53 €	

Table 5. Estimated cost of the proposals for action.

The annual cost of all the improvement proposals of the Plan is estimated at 520.413 €

7.3.2 Revenue estimate of the proposals

Below is detailed how the revenue of the proposals was estimated.

Estimation of passengers and revenue for proposals SC, TC, EF and IF

From the data provided by the Territorial Service of Lleida as costs that were calculated from the cost model of the DGTM updated by 2012.



Pàgina 9 Data: 18/04/2012

ANNEX 3

SERVEI ESTERRI D'ÀNEU-LA POBLA DE SEGUR-LLEIDA

ANY 2012

COSTOS ANUALS

km anuals	hores anuals	cos màxim calculat (sense IVA)	
432,766,82	7.607,35	493.112,05	

INGRESSOS ANUALS

Previsió viatgers mínims anuals	Previsió ingressos mínims (sense IVA)
22.000	40.487,59

TOTALS ANY 2012	
Cost màxim calculat (sense IVA)	493.112,05
Ingressos mínims estimats (sense IVA)	40.487,59
Dèficit màxim previst	452.624,46

ANY 2013

COSTOS ANUALS

km anuals	hores anuals	cos màxim calculat (sense IVA)
455.736,50	8.039,55	520.413,53

INGRESSOS ANUALS

Previsió viatgers mínims anuals	Previsió ingressos mínims (sense IVA)
22.000	40.487,59

TOTALS ANY 2013	
Cost màxim calculat (sense IVA)	520.413,53
Ingressos mínims estimats (sense IVA)	40.487,59
Dèficit màxim previst	479.925,94

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SG-13/07

Imatge 1. Annex 3 of the resolution of 26 March 2012 of the new public transport services by road of the Pallars-Lleida corridor. Source: Transport Territorial Service of Lleida.

The other proposals have no cost or revenue within this analysis. They will be evaluated once the proposals are on the point of implementation after having done a specific analysis and agree every specific action derived from it with all stakeholders.

7.3.3 Economic balance

The next table summarizes the resulting economic balance:

PROPOSAL	ESTIMATED COSTS OF PROPOSAL (§	ESTIMATED REVENUE OF PROPOSAL (€)	ESTIMATED DEFICIT OF PROPOSAL (€):	
СО				
SC + TC1	F20 442 F2 F	40 497 50 6	470 005 04 €	
EF	520.413,53 €	40.487,59 €	479.925,94 €	
IF				
II	To be assessed	To be assessed	-	
ST	-	-	-	
DT	•	-	-	
TC2	To be assessed	To be assessed	-	
TOTAL	TAL 520.413,53 € 40.487,59 €		479.925,94 €	

Table 6. Economic balance of the proposals of the service Plan of Pallars Jussà.

The Plan to improve PT in Pallars Jussà generates an estimated annual deficit of 479,925 €, without the 2 remaining proposals to end the economic analysis.

It should be noted that this budget will also be compensated for the use of almost all the proposals by PT users in the neighbouring region of Pallars Sobirà.

7.4 Future situation of PT in the region with the proposed actions

The situation of the population centres with more than 25 inhabitants of the region will significantly improve (54 of the 147 population centres in the region, which represent 95% of the inhabitants of Pallars Jussà). None of these population centres will have a low connection once all the proposals are implemented.

Only 6 of the 54 population centres analyzed have a medium level of connection, which previously had a low. They represent only 2,3% of the inhabitants in the region.

38 population centres will have a level of connection medium-high; and some, although not going to a higher level of connection, improve the overall grade. These centres correspond to 15.8% of the population of Pallars Jussà.

Finally, the last group of 10 population centres in population will have a high level of connection, which represent 76.8% of all inhabitants of the region.

The remaining 92 population centres, which represent 5% of the inhabitants of Pallars Jussà, despite not having been specifically analyzed in this study, will substantially improve their level of connection taking advantage of many of the actions proposed through the coordination of on demand and regular transport services or the use of school transport services with available seats.

7.5 Conclusions

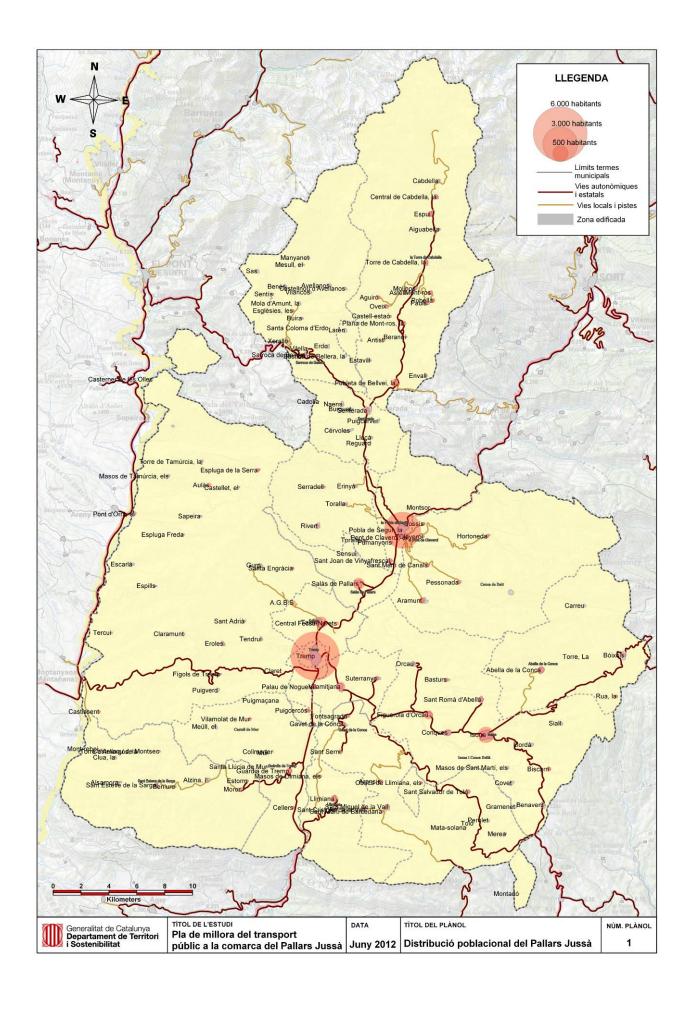
To improve PT services in the region of Pallars Jussà and provide solutions to the shortcomings, 9 proposals for action has been identified.

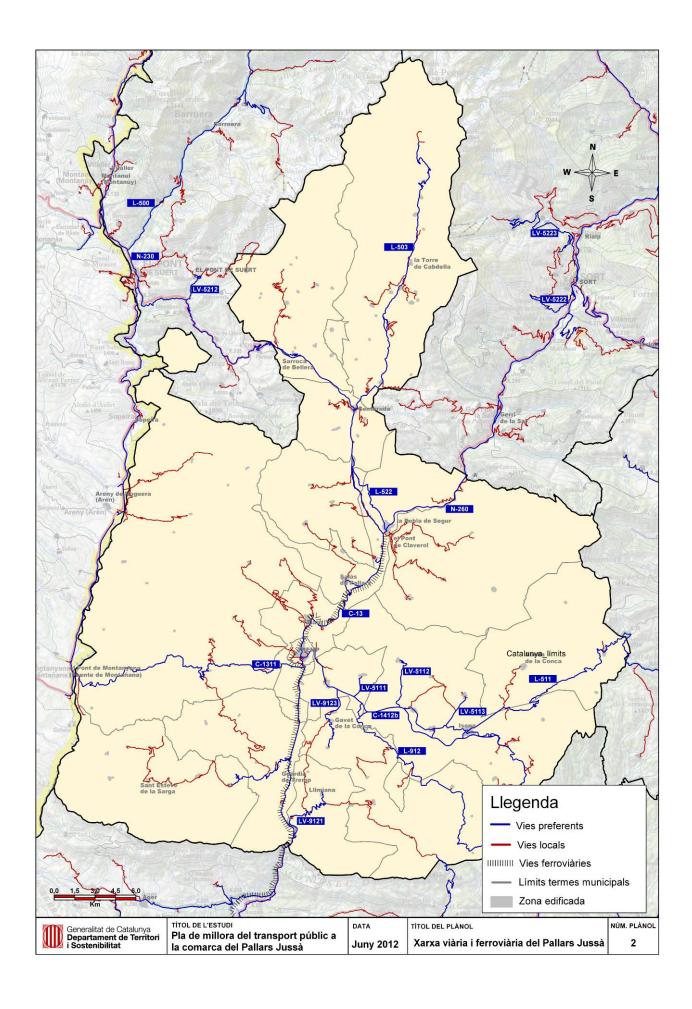
With its implementation the following objectives will be achieved, which coincide with those established at the beginning of this study:

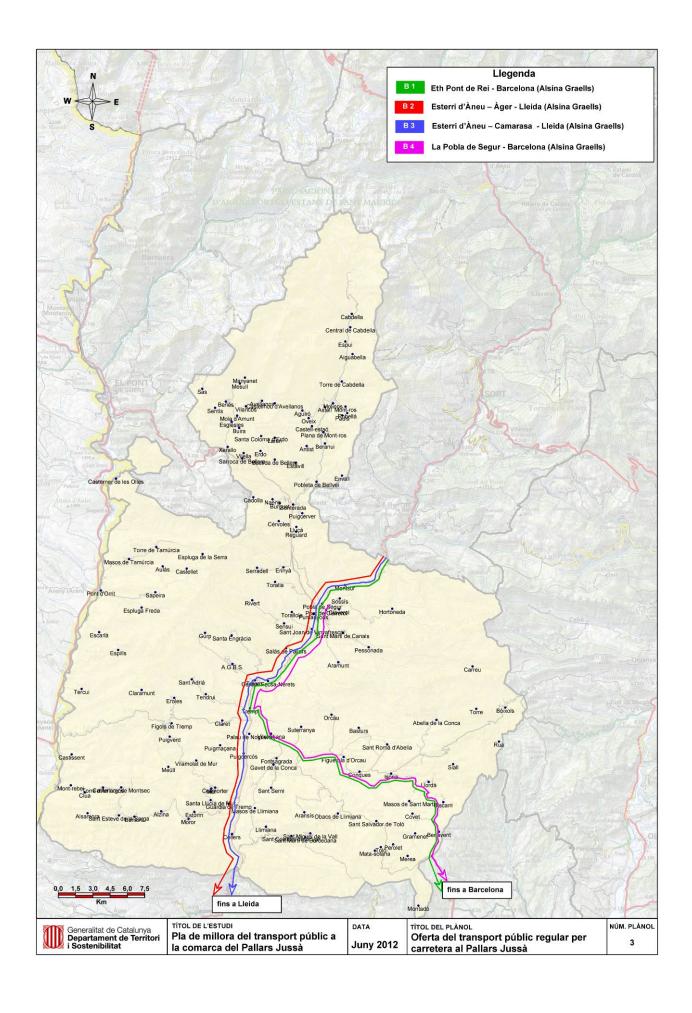
- Improvement of the joint offer of the PT services by road and rail from Monday to Friday and on weekends and on holidays in the corridor Pallars Lleida.
- **Improvement of PT fares** in the corridor Lleida -Esterri d'Àneu and equal rates of bus ticket and rail services.
- Improvement of the connections of municipalities of Pallars Jussà to Lleida, Barcelona, and the neighbouring regions of Pallars Sobirà and La Noguera.
- Improvement of the schedule coordination of the PT services in the train station of Lleida:
 - Extend all the interurban expeditions to the train station of Lleida to facilitate transfers with trains.
 - Guarantee an outward journey in the morning to Barcelona and a return journey in the afternoon from Mondays to Fridays through the schedule coordination of the interurban bus service and AVANT (high speed train).
- All municipalities will have a PT service on working days, and most of them also at the weekend and on holidays. These services may include regular transport services, on demand transport service or services which use the available seats of school transport.
- Use of school transport services with available seats and improvement of some on demand transport services to increase the connectivity of the population centres with poor PT connections.

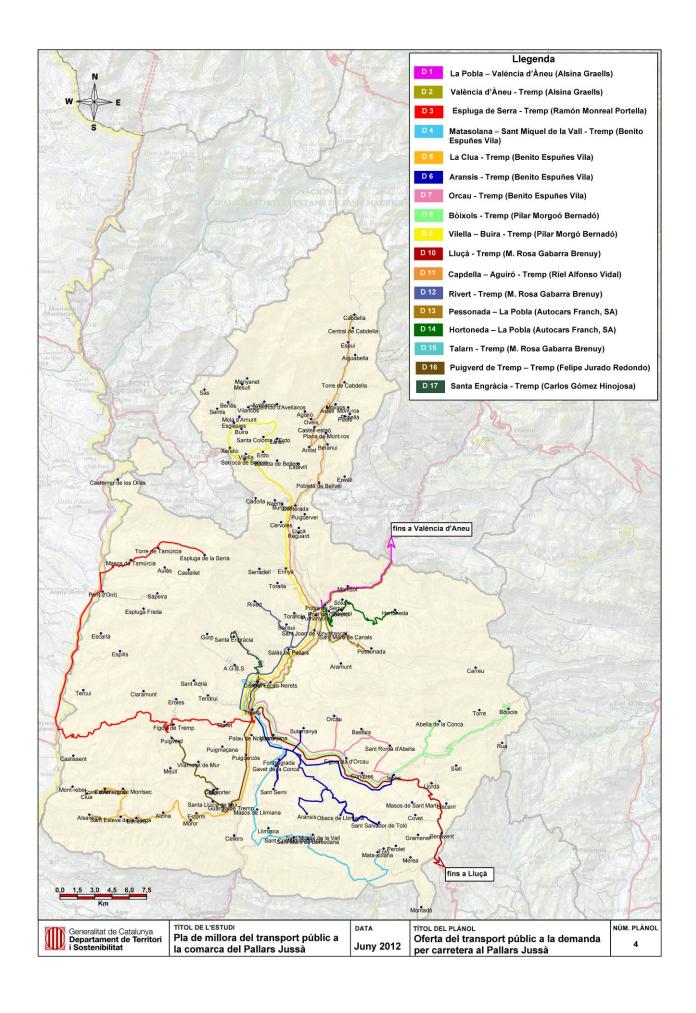
8 Maps

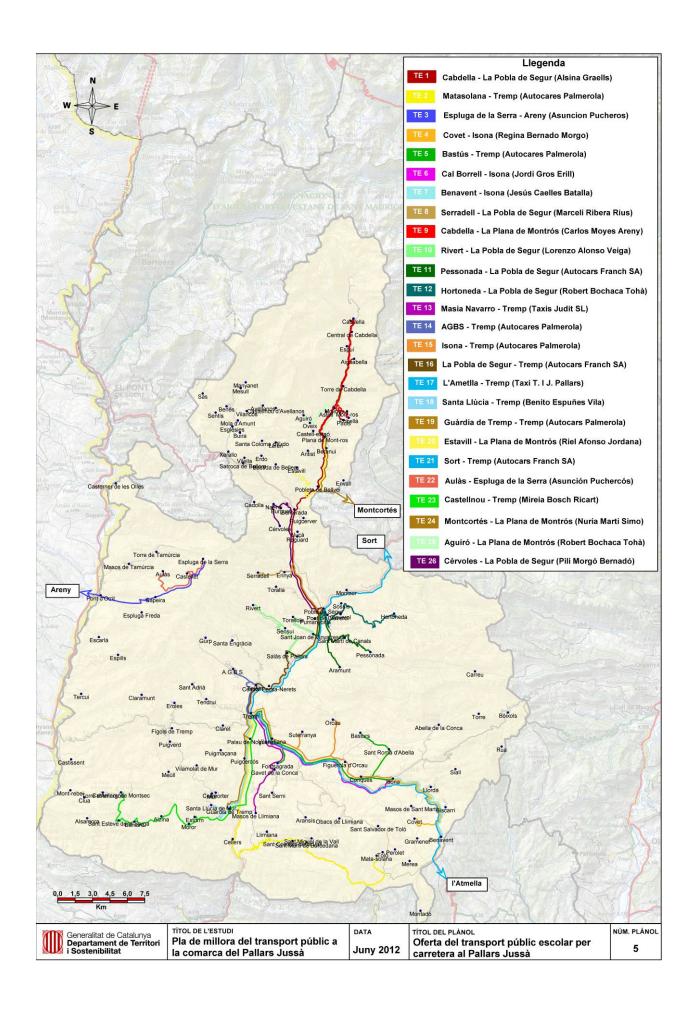
- Map 1. Population distribution of Pallars Jussà
- Map 2. Road and rail network of Pallars Jussà
- Map 3. PT supply by road in Pallars Jussà
- Map 4. On demand transport supply in Pallars Jussà
- Map 5. School transport supply in Pallars Jussà
- Map 6. Proposals of the improvement plan in Pallars Jussà.











9 Annexes

Annex I. Survey form for municipalities

To have up to date information on the supply of PT network, surveys have been carried out addressed to the operators of the region. These questionnaires are about schedule, ridership, daily expeditions, kilometres travelled, commercial speed, the vehicle fleet and other relevant information. Below is the survey form:





COMARCA: PALLARS JUSSÀ

ENQUESTA ALS AJUNTAMENTS PER A LA

"PLANIFICACIÓ DE MILLORES EN ELS SERVEIS DE TRANSPORT PÚBLIC DE VIATGERS PER CARRETERA"

MUNICIPI:

Persona (es) que ha (n) elaborat la resposta d'aquesta enquesta:

Nom i cognoms	Càrrec

		rqueu amb una x els requadres espais en buit o trieu l'op	☐ de les opcions e ció del desplegable		ostre municipi i		
DAD	DES BÀSIQ	UES DEL MUNICIPI					
CO	MERÇ						
1.	Mercat local Existència o no de mercat ambulant al propi municipi: ☐ SÍ ☐ NO Periodicitat: ☐ 1 dia a la setmana ☐ 2 dies a la setmana ☐ a diari Quin dia o quins dies es celebra: ☐ dl. ☐ dm. ☐ dc. ☐ dj. ☐ dv. ☐ ds. ☐ dg. Peculiaritats: ☐ Fruita i verdures ☐ Roba ☐ Altres articles:						
۷.	Indiqueu l'a	existència de mercats periòdics e ts del vostre municipi, la seva perio			n a desplaçar		
	Ordre de prioritat	Municipi	Dia o dies de la	setmana que es c	elebra		
	1		□ dl. □ dm. □	dc. □ dj. □ dv.	ds. dg.		
	2		□ dl. □ dm. □	dc. dj. dv.	ds. dg.		
3.	Indiqueu e	erfícies comercials s hipermercats, grans superfícies i municipi per fer les compres habitu			a anar els habitants		
	Ordre de prioritat	Nom establiment		Municipi			
	1						
	2						
	3						
SER		lucatius locals					
	Tipus de serveis eductius existents al propi municipi i en quin nombre: Llar d'infants:0						
5.	Si el vostre Centres de	ensenyament primari, Instituts i e municipi no disposa d'Escola d'e e formació professional o aquests ecessitats dels vostres alumnes:	ensenyament primari	ni d'Institut d'estu	dis secundaris o de		
Ordr Nom de l'Escola d'ensenyament primari / Institut / Centre de FP							

1						
			☐ Públic	Dilluns	h	h
			☐ Privat	Dimarts	h	h
				Dimecres	h	h
				Dijous	h	h
				Divendre	h	h
				s Dissabtes	h	h
2			☐ Públic	Dilluns	h	h
			☐ Privat	Dimarts	h	h
				Dimecres	h	h
				Dijous	h	h
				Divendre	h	h
				s Dissabtes	h	h
3			☐ Públic	Dilluns	h	h
			☐ Privat	Dimarts	h	h
			A-4	Dimecres	h	h
				Dijous	h	h
				Divendre	h	h
Universita	ts de referència			s Dissabtes	h	h
De quin/s el/s munici Ordre	nts de referència municipi/s depen pi/s on hi ha la/le: Nom de la Uni	eu per a cobrir s vostra/es univ		Dissabtes s dels vostres rència per ordi	alumnes univers	
De quin/s el/s munici Ordre prioritat	municipi/s depen pi/s on hi ha la/le:	eu per a cobrir s vostra/es univ	ersitats de refe	Dissabtes s dels vostres rència per ordi	alumnes universre de prioritat)	sitaris (in
De quin/s el/s munici Ordre prioritat	municipi/s depen pi/s on hi ha la/le:	eu per a cobrir s vostra/es univ	ersitats de refe	Dissabtes s dels vostres rència per ordi	alumnes universre de prioritat) Tipus	sitaris (in
De quin/s el/s munici Ordre prioritat	municipi/s depen pi/s on hi ha la/le:	eu per a cobrir s vostra/es univ	ersitats de refe	Dissabtes s dels vostres rència per ordi	alumnes universre de prioritat)	sitaris (in Privada Privada

Area bàsica de salut de referèr	ıcıa
---	------

Indiqueu a quina Àrea Bàsica de Salut pertany el vostre municipi:

Si el vostre municipi no disposa de CAP o aquest és insuficient de quin/s altre/s municipi/s depeneu per a cobrir les necessitats sanitàries bàsiques (indiqueu el/s municipi/s on hi ha la vostra el/s vostre/s CAP de referència per ordre de prioritat)

Ordre de prioritat	CAP	Municipi	
1			
2			

9. Centres hospitalaris de referència

Indiqueu (per ordre de prioritat) els centres hospitalaris en què més sovint es troben ingressats o als quals han d'anar regularment (rehabilitació, etc.) els habitants del vostre municipi:

Ordre de prioritat	Nom de l'Hospital	Municipi	
1			
2			
3			

ALTRES SERVEIS SOCIALS

10.	Centre de	dia	pera	a gent	gran a	I vostre municipi?	☐ Si	
-----	-----------	-----	------	--------	--------	--------------------	------	--

11. Casal d'avis al vostre municipi? ☐ SÍ ☐ NO

En cas de dependre d'altres municipis per a accedir a aquests serveis, indiqueu de quin municipi o municipis i per a quins serveis:

Municipi	Tipus de servei	
	☐ Centre de dia per a gent gran	☐ Casal d'avis
	☐ Centre de dia per a gent gran	☐ Casal d'avis

MOBILITAT

12. Destinacions més habituals

Cap a quines destinacions es desplacen més sovint els habitants del vostre municipi i per quin motiu, Independentment del mitjà de transport utilitzat (cotxe i/o transport públic)?

	Destinació	Motiu/s del viatge		Destinació	Motiu/s del viatge
1			5		
2			6		
3			7		

4	3	8	
		-	

SERVEIS DE TRANSPORT

13. Serveis de taxi

Nombre de llicències de taxi del vostre municipi: 0

Quins serveis es fan més frequentment?

Ordre de prioritat	Servei	Ordre de prioritat	Servei
1		5	
2		6	
3		7	
4		8	

14. Millores què faríeu sobre la xarxa actual de transport d'autobusos

Indiqueu les millores sobre el servei actual que voldríeu aplicar.

Ordre de prioritat	Des de (municipi de sortida)	Fins a (municipi d'arribada)	Observacions (Quins canvis faríeu)
1			☐ Canviar l'hora de sortida:
			☐ Canviar I'hora d'arribada:
			☐ Coordinació amb altres serveis de transport
			públic: (ex. amb el tren o altres busos)
			☐ Reduir el temps del trajecte:
			☐ Substituir el dia del servei actual per un altre dia:
			□dl. □ dm. □dc. □dj. □dv. □ds. □dg.
			☐ Afegir un nou dia o diversos dies al servei actual:
			□dl. □ dm. □dc. □dj. □dv. □ds. □dg.
			Posar més expedicions diàries: 0
			☐ Incorporar noves parades:
			☐ Altres modificacions:
2			☐ Canviar l'hora de sortida:
			Canviar l'hora d'arribada:
			☐ Coordinació amb altres serveis de
			transport públic: (ex. amb el tren)
			☐ Reduir el temps del trajecte:
			☐ Substituir el dia del servei actual per un altre dia:
			□dl. □ dm. □dc. □dj. □dv. □ds. □dg.
			☐ Afegir un nou dia o diversos dies al servei actual:
			□dl. □ dm. □dc. □dj. □dv. □ds. □dg.
			☐ Posar més expedicions diàries: 0

	☐ Incorporar noves parades:
	☐ Altres modificacions:
3	☐ Canviar l'hora de sortida:
	☐ Canviar I'hora d'arribada:
	☐ Coordinació amb altres serveis de
	transport públic: (ex. amb el tren)
	☐ Reduir el temps del trajecte:
	☐ Substituir el dia del servei actual per un altre dia:
	□dl. □ dm. □dc. □dj. □dv. □ds. □dg.
	☐ Afegir un nou dia o diversos dies al servei actual:
	□dl. □ dm. □dc. □dj. □dv. □ds. □dg.
	Posar més expedicions diàries: 0
	☐ Incorporar noves parades:
	☐ Altres modificacions:
4	☐ Canviar l'hora de sortida:
	☐ Canviar I'hora d'arribada:
	☐ Coordinació amb altres serveis de
	transport públic: (ex. amb el tren)
	☐ Reduir el temps del trajecte:
	☐ Substituir el dia del servei actual per un altre dia:
	□dl. □ dm. □dc. □dj. □dv. □ds. □dg.
	☐ Afegir un nou dia o diversos dies al servei actual:
	□dl. □ dm. □dc. □dj. □dv. □ds. □dg.
	Donor más sympalicione diàrica: 0
	Posar més expedicions diàries: 0
	☐ Incorporar noves parades:

15. Nous serveis de transport d'autobusos

A quins altres **municipis de la comarca o fora de la comarca** on no teniu accés actualment amb transport públic creieu que s'hauria de poder accedir? (Citeu, per ordre, els tres que considereu més interessants).

Ordre de prioritat	Des de (municipi de sortida)	Fins a (municipi d'arribada)	Observacions (Quins suggeriments faríeu)	
1			☐ Hora de sortida primera expedició:	
			☐ Hora de sortida última expedició:	
			☐ Dies de la setmana:	
			□dl. □ dm. □dc. □dj. □dv. □ds. □dg.	
			☐ Nombre d'expedicions diàries: 0	
			☐ Parades intermèdies:	
			☐ Coordinació amb altres serveis	
			de transport públic:	
			☐ Altres suggeriments:	
2			☐ Hora de sortida primera expedició:	
			☐ Hora de sortida última expedició:	
			☐ Dies de la setmana:	
			□dl. □ dm. □dc. □dj. □dv. □ds. □dg.	
			☐ Nombre d'expedicions diàries: 0	
			☐ Parades intermèdies:	
			☐ Coordinació amb altres serveis	
			de transport públic:	

	Altres suggeriments:
3	☐ Hora de sortida primera expedició: ☐ Hora de sortida última expedició: ☐ Dies de la setmana: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
4	 Hora de sortida primera expedició: Hora de sortida última expedició: Dies de la setmana: □dl. □dm. □dc. □dj. □dv. □ds. □dg. Nombre d'expedicions diàries: 0 □ Parades intermèdies: □ Coordinació amb altres serveis de transport públio: □ Altres suggeriments:
16. Observacions is Afegiu si us plau, le: l'enquesta.	☐ Coordinació amb altres serveis de transport públic; ☐ Altres suggeriments;
2	

MOLTES GRÀCIES PER LA VOSTRA COL·LABORACIÓ!

7

3

Per resoldre qualsevol dubte o per rebre més informació podeu contactar amb el Sr. Oriol Henríquez al telèfon 93 495 82 94 o bé al correu electrònic oriol.henriquez@gencat.cat, del Servei de Coordinació i Gestió del Transport per Carretera.

Annex II. Survey form to users

To have the users' evaluation of the PT service in the region the following survey form was used:





ENQUESTA PER A LA VALORACIÓ DELS SERVEIS DE TRANSPORT PÚBLIC DE VIATGERS PER CARRETERA

Des de la Direcció General de Transports i Mobilitat del Departament de Territori i Sostenibilitat, amb la col·laboració del Consell Comarcal del Pallars Jussà, estem realitzant un estudi amb l'objectiu de conèixer l'opinió dels usuaris sobre els serveis de transport públic a la comarca. Amb aquesta finalitat s'ha elaborat una enquesta que és completament anònima i que té una durada d'uns 5 minuts. Li preguem que empleni les dades sol·licitades a continuació.

DADE	S GENERALS					
	tat: Feina domèstica Estudiant Jubilat Actiu ocupat	□ 30-49 □ 50-65 □ >6 3 Sense feina □ Altre:				
Muni	ínia: Municipi on ha pujat: Municipi on baixarà:					
	za enllaç amb una altre servei de transport: □ Altre autobús □ Tren □ 1					
	i ència □ diàriament □ setmanalment □ mensualmen	t □ esporàdicament				
viatge	□ Casa □ Treball □ Estudis □ Compres □ Mercat □ Esbario	o □ Metge □ Gestions □ Al	tres			
VALC	RACIÓ DEL SERVEI DE TRANSPORT PÚBLIC					
relacio	lació al servei que està emprant en aquests moments, si us plau, onats amb la seva qualitat. Marqui amb una X sobre la puntuació que a os mostren a continuació, a on un 0 vol dir que està totalment insati : et.	torga a cadascun dels aspecte	s			
Sobre el	vehicle					
P1.	Netedat del vehicle	0 1 2 3 4 5 6 7 8 9	10			
P2.	Comoditat / Confort del vehicle	0 1 2 3 4 5 6 7 8 9	10			
P3.	Accessibilitat al vehicle (Facilitat per baixar i pujar)	0 1 2 3 4 5 6 7 8 9	10			
P4.	L'estat / imatge dels vehicles de la línia (0=vell i antic a 10=modern i nou)	0 1 2 3 4 5 6 7 8 9	10			
P5.	Seguretat personal a dintre del vehicle (no el molesten durant el viatge)	0 1 2 3 4 5 6 7 8 9	10			
Sobre el	servei					
P6.	Puntualitat del vehicle	0 1 2 3 4 5 6 7 8 9	10			
P7.	Recorregut de la línia en kilòmetres (0=massa llarga a 10=molt correcte)	0 1 2 3 4 5 6 7 8 9	10			
P8.	Durada en temps del viatge (0=viatge molt lent a 10=viatge molt ràpid)	0 1 2 3 4 5 6 7 8 9	10			
P9.	Preu del viatge (0=molt car a 10=molt econòmic)	0 1 2 3 4 5 6 7 8 9	10			
P10.	Informació sobre els horaris i parades	0 1 2 3 4 5 6 7 8 9	10			
P11.	Nombre total de viatges ofertats (0=molt insuficients a 10=completament suficients)	0 1 2 3 4 5 6 7 8 9	10			
P12.	Adequació dels horaris a les seves necessitats de mobilitat (anades i tornades)	0 1 2 3 4 5 6 7 8 9	10			
P13.	Tracte rebut per part del conductor del vehicle	0 1 2 3 4 5 6 7 8 9	10			
P14.	Seguretat viària en la conducció (El conductor condueix de forma segura)	0 1 2 3 4 5 6 7 8 9	10			
Sobre le	s parades d'autobús					
P15.	Ubicació de la parada respecte el seu domicili (0 = molt lluny a 10 = molt propera)	0 1 2 3 4 5 6 7 8 9	10			
P16.	Distància de les parades entre sí (0 = massa lluny a 10 = molt properes)	0 1 2 3 4 5 6 7 8 9	10			
P17.	Accessibilitat a la parada (Facilitat per accedir-hi a peu o en cadira de rodes)	0 1 2 3 4 5 6 7 8 9	10			
P18.	Estat de la parada (neteja, manteniment, confort, il·luminació)	0 1 2 3 4 5 6 7 8 9	10			
Valoracio	ons globals					
P19.	Satisfacció amb la companyia o l'empresa que presta el servei que està utilitzant	0 1 2 3 4 5 6 7 8 9	10			
P20.	Satisfacció global amb el serveis de transport públic actuals	0 1 2 3 4 5 6 7 8 9	10			

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