

ANNEX Deliverable 3
Demonstrations Design and Implementation
and
Case Descriptions

CONTRACT N° : GRD2/2000/30307

ACRONYM : ARTS

TITLE : Actions on the integration of Rural Transport Services

Project Co-ordinator: Equipo de Técnicos en Transporte y Territorio (ETT)

Contractors:

USC: Santiago de Compostela University (E)
TTR: Transport and Travel Research Ltd (UK)
ILS: Institut für Landes- und Stadtentwicklungsforschung des Landes Nordrhein-Westfalen (D)
JP-T: JP- Transplan Ltd (FIN)
BOKU-ITS: University for Bodenkultur Vienna – Institute for Transport Studies (A)
SOT : SYSTRA-SOTECNI S.p.A (I)
TAS: The Tas Partnership Ltd (UK)
TLTC: Bealtaine Limited (IRL)
FORTH: Foundation for research and technology Hellas (EL)
TRIV: Trivector AB (S)

Assistants to Contractors:

XUN: Xunta de Galicia. Consellería de Política Territorial, Obras Públicas y Vivienda. Dirección Xeral de Transportes (E).
BUTE: University of Budapest (H)
SMC: Soluziona Management Consulting, S.A. (E)
KUN: Kungsag Volan L.S (H)
NAW: The National Assembly for Wales (UK)
ISLH: Provincial State Office of Eastern Finland (FIN)
SANG: Sangritana (I)
THC: The Highlands Council (UK)
UG: Údarás na Gaeltachta (IRL)
HER: Prefecture of Heraklio (EL)
GOT: Gotlands kommun (S)
AMOR: Forschungsgesellschaft Mobilitaet FGM. Austrian Mobility Research, (A)

PARTNER RESPONSIBLE : FORTH

BOKU (Evaluation Framework)

WORKPACKAGE: WP4 (WP5)

DOCUMENT TITLE: ANNEX Deliverable 3

DATE OF ISSUE OF THIS REPORT: 30/4/2003

PROJECT START DATE : Dec. 2001

DURATION : 36 Months



**Project funded by the European Community
under the 'Competitive and Sustainable
Growth' Programme (1998-2002)**

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1. National report Austria – ALMA Demonstration

1.1. General Description of the Demo

The Austrian demonstration is a demand responsive transport (DRT) system organised by volunteers of a private non-profit association in Klaus (Upper Austria). For this new DRT service the association chose the name *Dorfmobil* which consists of the words

Dorf = village and

mobil = mobile, as well as *Auto(mobil)* = car.

The main objective of the system is to give residents the means of reaching basic shops and services (grocery, doctor, post office,...) and public transport (PT) stops regardless of whether or not they have a car available.

1.2. Description of the Area

The demonstration is taking place in the municipality of “Klaus an der Pyhrnbahn” (Klaus) which is situated in a mountainous region in the south of Upper Austria. The Klaus municipality consists of three villages: Klaus, Steyrling and Kniewas. Because of the disperse settlement structure people have to travel quite long distances, up to 8 km, to reach basic supply or PT stops. This causes problems for people without a car.

1.2.1 Map



Figure 1: Location of the demonstration area

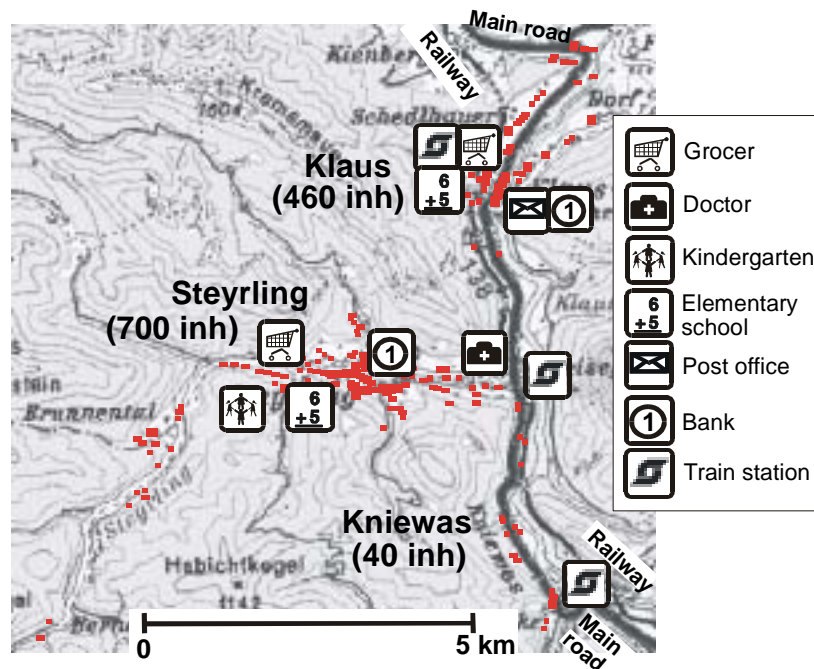


Figure 2: Map of the demonstration area

1.2.2 Characteristics

The demonstration area covers the municipality of Klaus. The region is very mountainous with peaks up to 2515 m and is rich in forests. Klaus is situated at an altitude of 466 m and covers an area of 108 sq.km. It is sparsely populated with 11 inhabitants per sq.km. About 1200 persons live in three villages Klaus (460 inh), Steyrling (700 inh) and Kniewas (40 inh). Klaus and Kniewas are situated in a valley of the river Steyr and Steyrling is situated in the valley of Steyrling brook.

The main road and the railway from Linz to Graz go through Klaus and Kniewas. East of the villages a highway is in construction which will be completed in September 2003. It will be an important international north-south connection through Austria. A dead-end road leads to Steyrling. There are just few buses to Steyrling and the bus route ends at a central point (Figure 4), so people without cars have difficulties reaching PT.

Because of the poor job situation in Klaus most of the working population are commuters to nearby towns. Since 1950 this has resulted in high migration to more central areas. In recent years people have tried to stimulate soft tourism. At the moment Klaus has a capacity of about 60 guest beds, mainly in Steyrling. Most of the tourists come for hiking, fishing and canoeing. There are tourists in winter as well because the neighbouring village Hinterstoder is a famous place for skiing. In winter there is a bus connection from Klaus to Hinterstoder for skiing tourism.

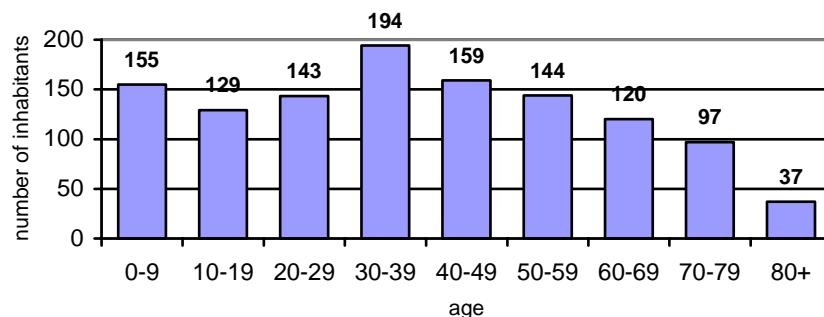


Figure 3: Age structure of the population of Klaus [NATIONAL CENSUS 2001]

1.3. Description of Services

1.3.1 Service Map

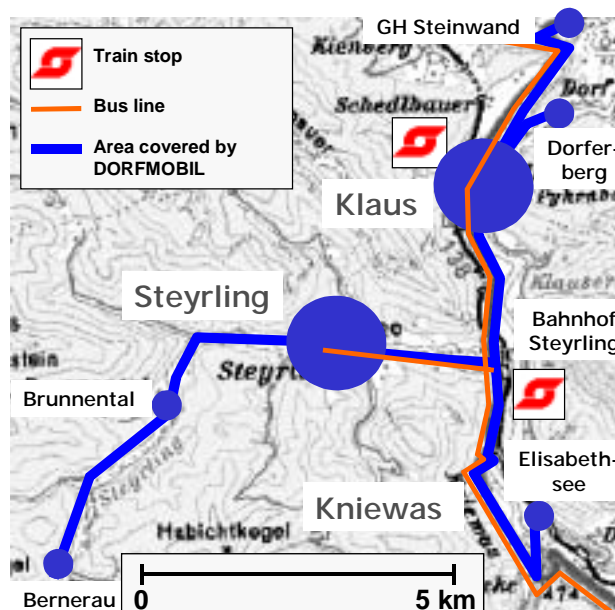


Figure 4: Map of PT services in the demonstration area

1.3.2 Characteristics of Services

The Dorfmobile covers the settlement area of Klaus. The service operates on working days from Monday to Friday from 6:00 a.m. to 7:00 p.m. A ride has to be pre-booked by phone at least half an hour before it is wanted. The average duration of a trip will be about 10 minutes. The Dorfmobile does not operate when a bus is available at the same time (within half an hour) to avoid competition with traditional PT. The Dorfmobile offers a door-to-door service. At the moment it is not clear if the provincial government will co-finance a door-to-door service after the demonstration year. Door-to-door service is more regarded as individual transport than PT in the PT-funding guidelines of the provincial government. So existing bus stops are included as meeting points. They are equipped with information boards where the service is described (working hours, phone number,...) After the test period of ALMA the meeting points could change into stops if necessary.

1.3.3 Vehicle in Use

The DRT service is done with a new van which was bought in October 2002. It has a capacity of 6 seats (5 passengers and the driver). The driver on duty keeps the car, the reservations book and the mobile phone at his house.

1.3.4 Fares

The fare for a ride is EUR 1,50 per person, which is declared as financial share. Members of the non-profit association pay EUR 20,- for their membership per year. They get 10 tickets free and they have the right to buy a monthly ticket for EUR 20,-. Euro 1.50 per person and ride was decided by the association to grant a cheap PT service whereas calculations have shown that Euro 2.50 or 3.00 would be necessary to cover the running costs and to stay within the total budget of Euro 22,350.-.

1.4. Stakeholders

Table 1: Stakeholders

CATEGORY	NAME
USERS	People with no car availability
	People who are not willing or unable to drive
OPERATOR	Members of a private association
PUBLIC AUTHORITIES	Municipality of Klaus
	Provincial government of Upper Austria
OTHER GROUPS	BOKU
	EC

1.4.1 Operator

The operator is a private non-profit association. It was founded by 12 members in July 2002. Every resident of and visitor to Klaus is invited to become a member. Active members are responsible for the organisation of the Dorfmobil, as well as for the financial and organisational aspects of the service. They meet when necessary to take decisions. Once a month a meeting for all drivers takes place where problems etc. can be discussed.

1.4.2 Public Authorities

In Austria the legal framework for PT is under federal competence, though the organisational competencies for regional and local transportation are held by the provincial government. The provincial government of Upper Austria is involved in the organisation of the Dorfmobil. The provincial government agreed to finance two thirds of the demonstration costs for the first year and has helped overcome legal barriers. The press and TV was informed by the provincial government.

The private association is also supported by the municipality. All political parties decided to support the Dorfmobil. The association is allowed to use the technical infrastructure of the municipality: computer, fax,...

No special contracts with public authorities were necessary. The demonstration year is seen as a test year also by the provincial government.

1.4.2.1 School transportation

The transportation of pupils to elementary school is carried out by school buses with higher capacity. In Austria school busses are only publicly financed in areas with 5 pupils or more. Fewer than 5 pupils live in Brunnental (Steyrting). At the moment parents take their children by car to the nearest bus stop which is 4 to 8 km away. Now pupils can use the Dorfmobil to get to the bus stop. Although the Dorfmobil is not included in the subsidies of the school transportation system paying the trips by Dorfmobil is still cheaper for the parents than driving themselves.

1.4.3 Others

Part of the expenses of the Dorfmobil are covered by sponsors. BOKU completed the planning and preparation of the demonstration in co-operation with the private association.

1.4.4 Users

The Dorfmobil can be used by anyone who wants to do so: by persons with no car availability (elderly persons, women, children etc.) as well as by people who are (at the moment) unwilling or unable to drive a car (tourists etc.)

1.5. Special Categories

1.5.1 On-demand services

The booking is done by phone. The driver on duty has the Dorfmobil mobile phone. When the ride is reserved he notes the time, meeting point and destination. In some cases he/she will also note the name and the phone number of the passenger. The latest possible time the customer can request the Dorfmobil is half an hour before the ride is wanted. But if it is needed before 6:30 a.m. it is necessary to book the day before. If several passengers want a ride at the same time the driver reaches an agreement with them, and those making trips to a train or a bus connection have priority.

1.5.2 Volunteer schemes

Volunteers drive the vehicle of the private association. All drivers are residents of the municipality of Klaus. The president of the association made a list of people who were eligible to drive the Dorfmobil (housewives, retired people). BOKU called these people in October 2002. Some of them were already very well informed, others had heard nothing about the Dorfmobil before. Fifteen potential drivers were invited to a first meeting where they were given detailed information. Twelve decided to become a Dorfmobil-drivers.

The compensation for drivers is a fixed rate of about Euro 1,50 per hour. But the maximum they can be paid is Euro 22 per day.

The association took out full insurance which includes all damages by the car, passenger insurance and insurance for the drivers, so there is no financial risk for the drivers themselves. In such a special non-profit PT scheme taxation is not clear. We have, therefore, contacted a tax adviser who will solve this problem.

1.6. Annex

1.6.1 Opening festival



Figure 5 and 6 : At the opening festival in Klaus on December 15th 2002

1.6.2 The first passenger



Figure 7- 9: The trip of the first passenger



Figure 10: Dorfmobil-sticker

<p>Dorfmobil KSK</p> <p>Tel: 0664 / 43 456 47</p> <p>Rufen Sie an! Das Dorfmobil holt Sie ab!</p> <p>Montag - Freitag (werktags) 6:00 - 19:00 Uhr</p> <p>Kostenbeitrag: € 1,50 pro Fahrt</p>	<p>Verein Dorfmobil KSK</p> 
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Figure 11 : Dorfmobil-ticket

2. National report Finland – LEPPAVIRTA Demonstration

2.1. General Description of the Demo

Demand-activated transport services – connecting the centre of Leppavirta centre with all other parts of the municipality - were started on the 3rd of June 2002. The services are open for everybody, but most of the passengers will probably be elderly people living in minor villages or individual houses in the countryside. These transport services are tailor-made to complement the other public transport services – mainly fixed route buses and special school transport. Vehicles used are a minibus and taxis controlled by a travel dispatch centre operating in the regional capital city – Kuopio.

2.2. 2. Description of the Area

2.2.1 Map

The area of demonstration includes Leppavirta municipality in Eastern Finland (Fig. 1).

All services are situated in the centre of Leppavirta; only a few shops exist in the other parts of the municipality (Fig. 2).

2.2.2 Characteristics

The total area of Leppavirta is 1,519 km² of which 380 km² consists of lakes with 2,200 km of shorelines. The planned area of the municipality includes 8 km² and the rest is mainly hilly forests with some 6 km² of productive fields.

Because of its extremely beautiful landscape, Leppavirta is an attractive tourist resort especially in summer. There are many summer cottages, a common phenomenon in Finland and also many sporting facilities both for both summer and winter sports.

There are 11,100 inhabitants (as of the year 2000) in the municipality, settled in three population centres or living rural areas; in central Leppavirta there are 4,750 inhabitants, in Sorsakoski 1,100 and in Oravikoski 320. Some 18 % of inhabitants are under 15 years old and 19 % over 64, the remaining 63 % is thus between 15-64.

The total labour force was 4,725 in 1999, of which 17 % was unemployed. A small proportion, 14 % of those employed, worked outside the municipality. There were 3,223 jobs in Leppavirta in 1999, of which 18 % were in primary production (agriculture and forestry), 36 % in industry and 46 % in services.

Leppavirta centre is situated near to the main road connecting the regional capital Kuopio (52 km to north) and an industrial city Varkaus (24 km to south).

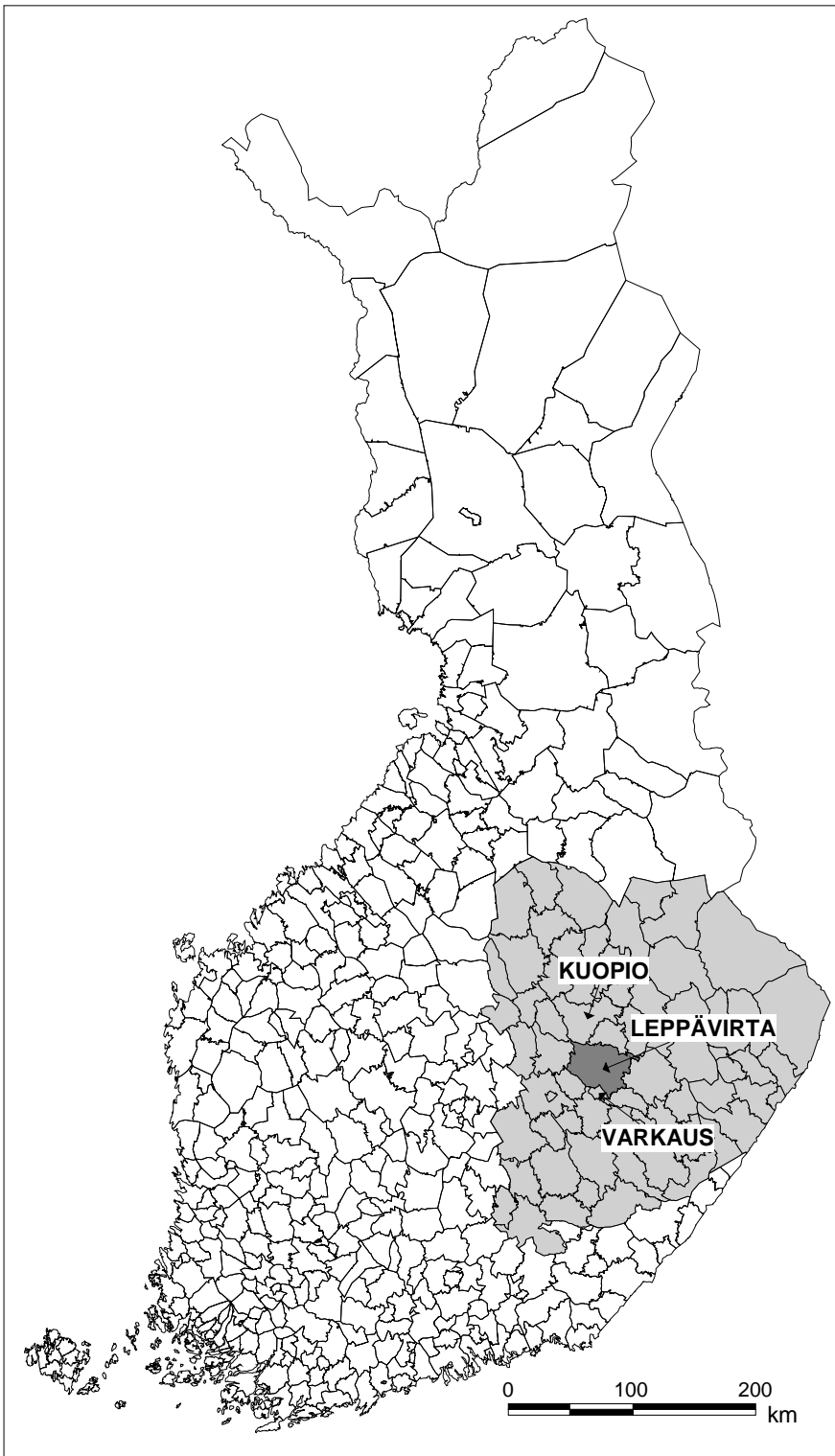
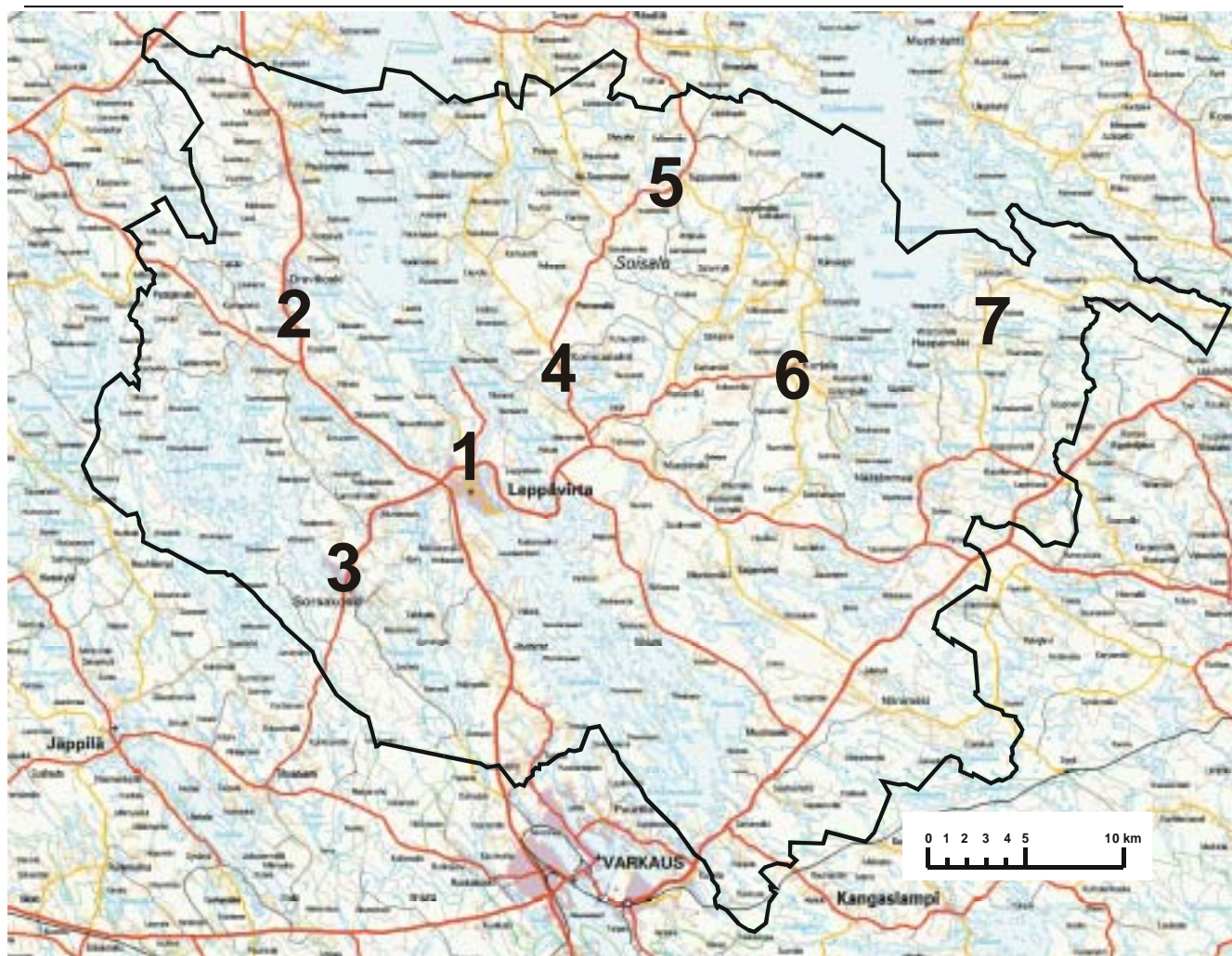


Figure 1. Leppavirta municipality in the Eastern Finland



ID	Name of the village/ population centre	Services
1	Leppävirta	Health Care Centre Administration of the Municipality Post Office Banks Shops
2	Oravikoski	Shop
3	Sorsakoski	Shops (2)
4	Konnuslahti	Shop
5	Tuppurinmäki	Shop
6	Kurjala	Shop
7	Haapamäki	Shop

Figure 2. Services are concentrated in the centre of Leppävirta

2.3. Description of Services

2.3.1 Service Map

The municipality is divided into ten areas (see Fig. 3); areas from 1 to 5 are served with a minibus and areas from H to V with taxis, all controlled by a dispatch centre situated in Kuopio (see Fig. 1).

Figure 3. Leppavirta municipality is divided into ten service areas

2.3.2 Characteristics of Services

Demonstration services have different timetables for weekdays, which are schooldays and for those which are not. No services exist during weekends. The main idea is to transport people between Leppavirta centre and the outlying villages. In addition to that minibus services are provided inside Leppavirta centre (Fig. 4). Taxis operate mainly outside schooldays, only area K has a service during schooldays (Fig. 5).

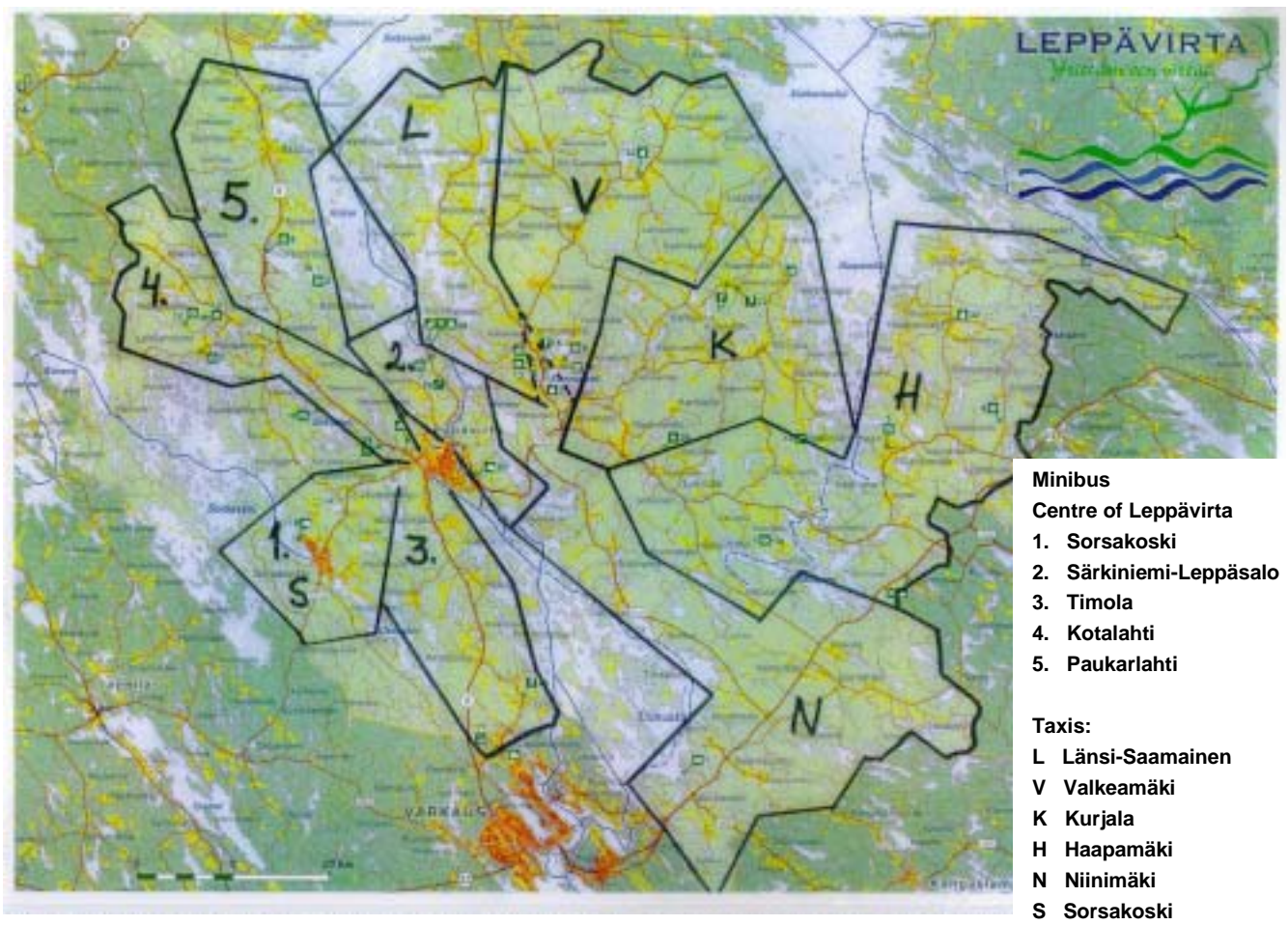




Figure 4. Timetable of minibus services

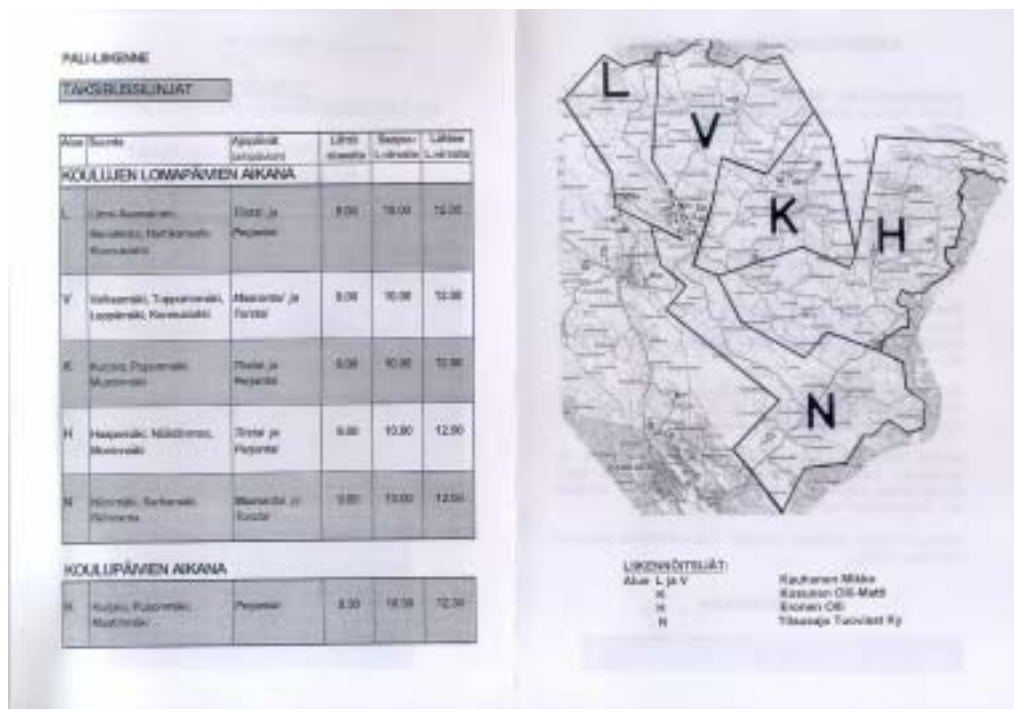


Figure 5. Timetable of taxi services

Services are from door-to-door, but the minibus routes start and end according to the timetable at the Church park where it is possible to get on the bus without booking a place. In addition, the Sorsakoski route has a stop at Seurala with a fixed timetable and the minibus also stops at the bus station. The Centre route has a fixed stopping time at the health centre.

2.3.3 Vehicle(s) in Use

The minibus has 14 seats and room for a wheelchair or baby carriages (Fig. 6). Taxis have 8 seats (Fig. 7). All vehicles are relatively new.



Figure 6. Minibus in Leppavirta



Figure 7. A taxi used in Leppavirta demonstration

2.3.4 Fares

In principle passengers have to pay normal bus fare (Table 1). However, this does not hold true for passengers who have obtained the right for free trips to and from school or from the social services authorities.

Table 1. Bus fares in Finland from 1.1. 2003

Length of trip (km)	Price for an adult person, in one direction (€)
6	2,30
9	2,50
12	2,80
16	3,50
20	3,80
25	4,40

2.4. Stakeholders

Operators, public authorities and users are the main stakeholders in the Leppavirta demonstration.

2.4.1 Operator(s)

Soisalon Tilausajo ja Vuokraus Oy operates the minibus services.

Taxi operators are the following: Mikko Kauhanen in areas L and V, Olli-Matti Kosunen in area K, Olli Eronen in area H and Tilausajo Tuoviset Ky in area N.

The travel dispatch centre is operated by a company owned by municipalities and the Social Insurance Institution (KELA).

There are many bus services along the main road connecting Leppavirta to Kuopio and Varkaus (Fig. 8). On weekdays there is a good bus service between Sorsakoski and Leppavirta centre. The other villages have only had bus services in the wintertime.

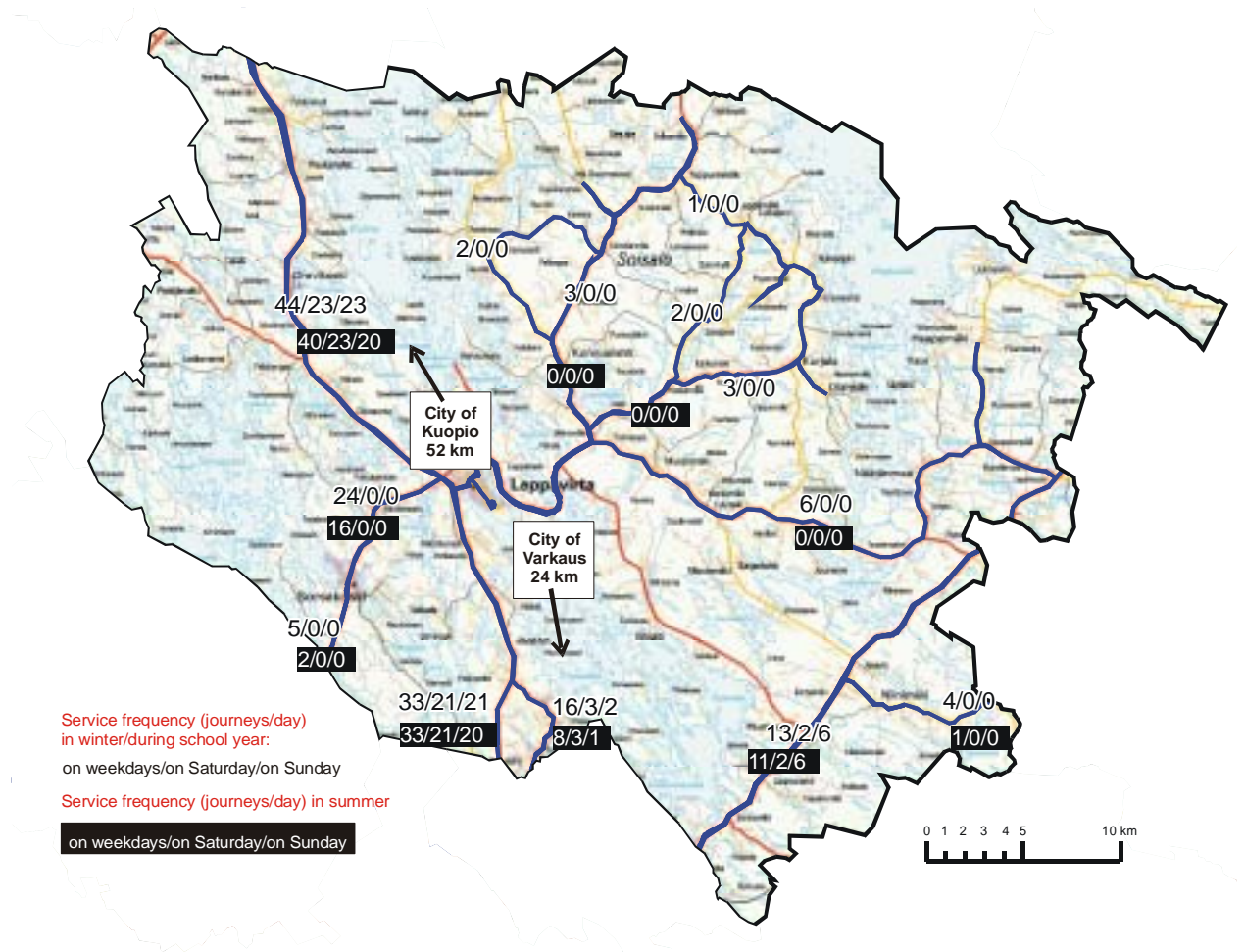


Figure 8. Bus routes and service frequencies of regular scheduled services (autumn 2001)

2.4.2 Public Authorities

In Leppävirta municipality one director is responsible for transport services and the coordination of school and social services transport with those of the open services. He works together with a passenger transport group, where other municipal sectors are represented. Experts from the Provincial State Office of Eastern Finland (ISLH) participated actively in the planning phase of the demonstration.

The municipality made the final plan and chose the operators through tendering. The minibus services and taxi services had separate tendering procedures. Tendering was based on the fixed plan and requirements for the size and equipment of vehicles. All contracts were agreed for two years with a possibility for minor modifications after a year.

2.4.2.1 School transportation

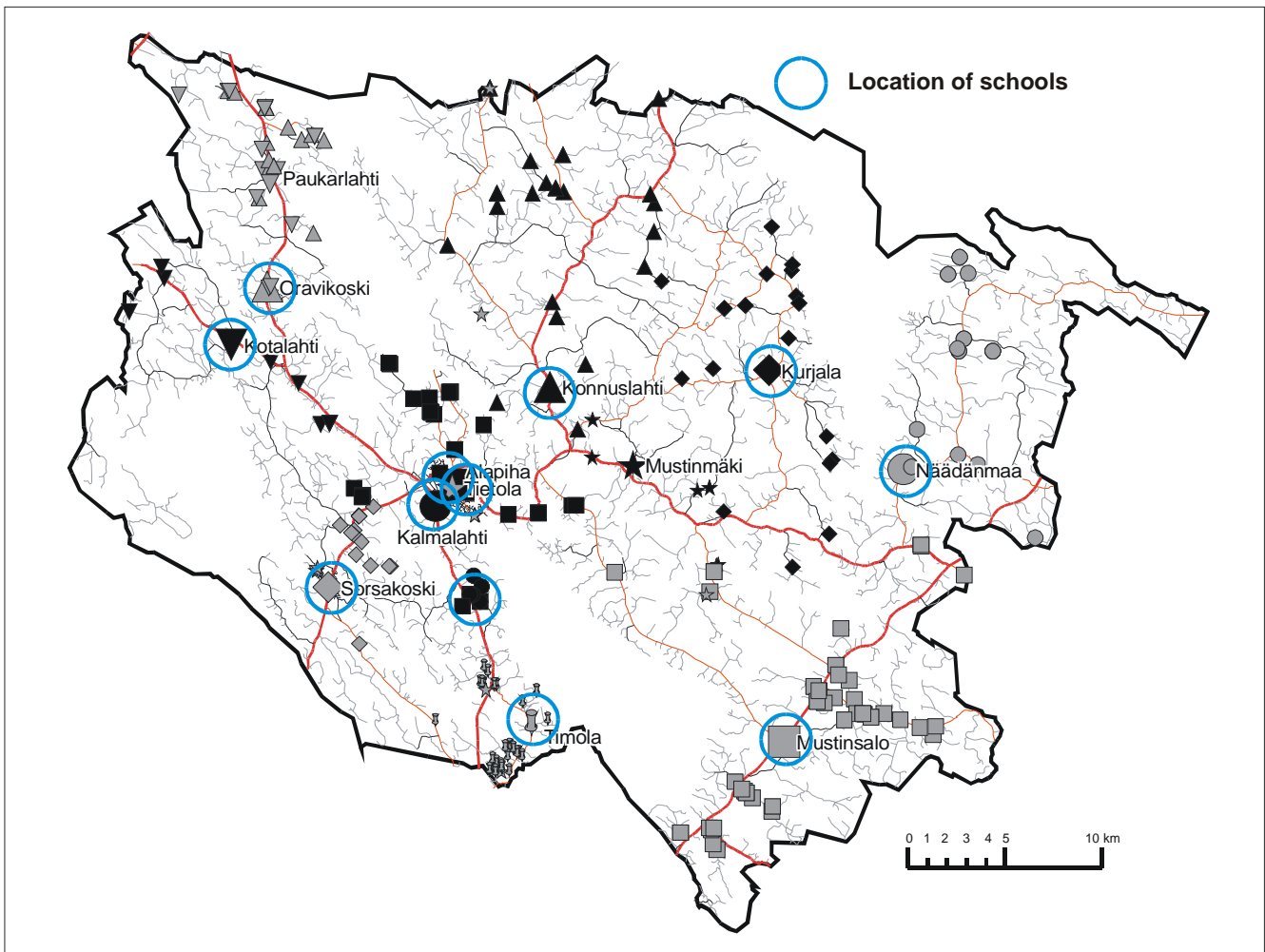


Figure 9. Locations of the primary schools and the pupils with free transport

Pupils with long journeys (over five kilometres) to their schools have the right to free transport. In 2000, 272 Leppävirta pupils were transported to primary schools in various villages (Fig. 9) and 254 pupils to the middle school in Leppävirta centre as well as 12 pupils to the special school. These transport services are planned by the municipal school administration and purchased by them through tendering procedures. The demonstration is mainly aimed at personal business trips to Leppävirta centre, so there was no need to combine demonstration services with school transport except in the area 2.

2.4.2.2 Social Sector transportation

Social and health sector provides various transport services for their customers, partly together with school transport. There are quite different groups to be served and consequently different solutions:

- Municipalities are obliged to arrange 18 trips (one direction) per month for disabled people. In May 2001 there were 85 disabled persons in Leppävirta who could take advantage of this service. Before the demonstration they used taxis. The demonstration aims to offer its new services to these people as well.

- Leppavirta municipality provides meals for elderly and disabled people. In Leppavirta centre there were 57 persons in May 2001 who had meals transported to their homes and another 20 outside the centre were served (in 1999). These meals were transported partly by their own service personnel and partly by taxis.
- Except in special cases, parents take their children to day care centres, of which there are two in Leppavirta, which are the responsibility of the municipality, so that meals must also be transported, as above, to these day care centres.
- As from 2001 the municipality is obliged to arrange transport for children attending pre-school if the journey is over one kilometre.
- Elderly people are mainly transported by taxis to day care activity centres. Some 70 people were regularly using these services but many of them were living quite near and therefore did not need transport services. The aim is to use the minibus to serve some of these groups.
- Customers for the activity centre for people with special needs mainly use buses (five), two were transported by taxis and one could use a school transport (taxi).

2.4.3 Others

All stakeholders who were active in the planning and who are directly involved in the operation of the services have been mentioned above.

2.4.4 Users

The aim of the demonstration is mainly to provide services between Leppavirta centre and outer villages. Therefore it is expected that most of the users will be elderly people living in these villages. In addition, demonstration services will be used for some school transport (area 2) and some social services transport. Because the demonstration services are open to anybody, it is possible that other kinds of customers will also appear.

2.5. Special Categories

2.5.1 On-demand services

Customers are asked to reserve their trips a day before by telephone. The latest accepted time for reservations is half an hour before the start of a scheduled trip.

If a taxi service gets more than eight requests, only the first eight ones will be served. If the minibus finds too much passengers at bus stops, those who have requested the trip beforehand are privileged. The aim is to pick all passengers within five minutes of the agreed time.

The travel dispatch centre started in Kuopio in 1998. It is operated by a company owned by municipalities and the Social Insurance Institution (KELA). It has received funding from the Ministry of Transport and Communications, the Ministry of Social Affairs and Health and the Provincial State Office of Eastern Finland. It serves the needs of eight municipalities and KELA. The centre takes the requests from customers by telephone, plans the taxi and minibus routes and communicates this information to the drivers. It operates on weekdays between 7.00 and 17.00 hours. All taxi drivers have a Nokia communicator and the minibus is equipped with an onboard data terminal.

3. National report Greece – MESSARA Demonstration

3.1. General Description of the Demo

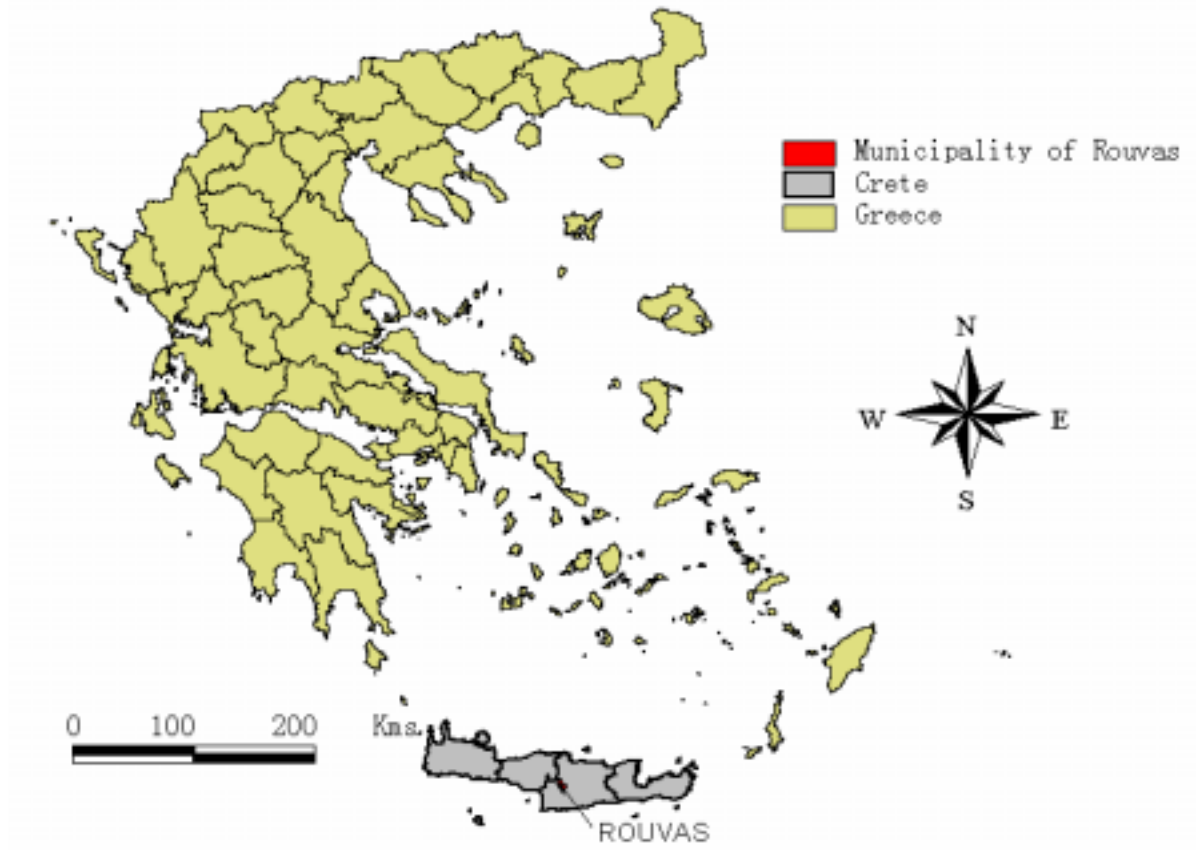
The Messara Valley demonstration action takes place in the Municipality of Rouvas on the island of Crete. The demonstration combines transportation of students with regular passengers and is operated by the municipal government. In addition to students of primary and secondary schools, the main users are elderly inhabitants who do not have a car. They use the service for access to the main village of Gergeri and activities like shopping or visiting the Day Care Centre. Three times a week there is service to the Health Centre located in another municipality.

An 18-seat mini-bus is used and the services are free. The regional government and the municipality finance the demonstration. The objective of the Municipality is to learn how to operate the combined transport of regular passengers and students so that it may eventually undertake the transportation of all students. This will allow it to bid for the public funds available for school transportation.

3.2. Description of the Area

3.2.1 Map of the area

The Municipality of Rouvas is located on the northern edge of Messara Valley on the island of Crete. Crete forms the southernmost part of Europe.



Graph 1 Location of Demonstration area in Greece

Administratively the municipality belongs to the Prefecture of Heraklion. The Prefecture of Heraklion is the common name for three entities: the geographical area with fixed borders, the elected government body and the administrative structure that represents the central administration at local level.

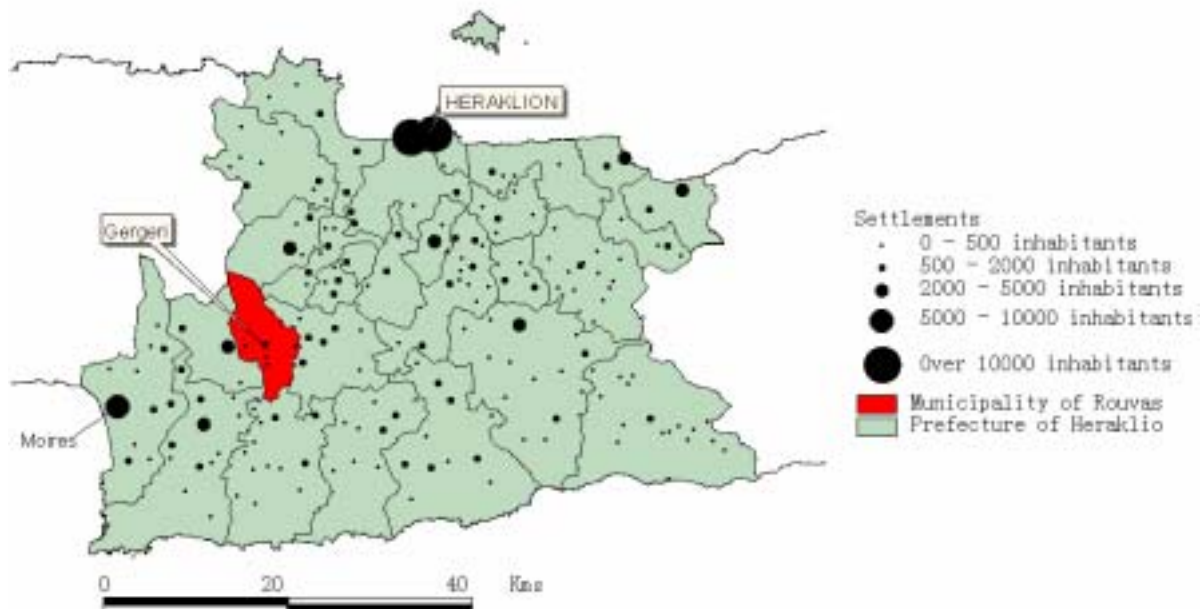


Graph 2 Location of Demonstration area in Crete

3.2.2 Characteristics

The prefecture of Heraklion is the most populous in Crete.

Almost 65% of the population of the prefecture lives in the city of Heraklion, the fourth largest city in Greece; the next biggest population centre in the Prefecture is the town of Moires with a population of about 6.000. The population of the municipality is about the 1% of the total population of the Prefecture.



Graph 3 Population density in Prefecture of Heraklion

The municipality is mainly mountainous with about 25% of the area on hilly or level terrain. It covers an area of 62,7 square kilometres with a population of 2.324 inhabitants. The density is 37 inhabitants per square kilometre.

Around 65% of the population is concentrated in the settlement of Gergeri with the rest living in 4 smaller villages.



Graph 4 Settlements in the Municipality of Rouvas

Settlement	Population	Percentage of the total
Gergeri	1.506	64,8%
Metochia	200	8,6%
Apomarma	85	3,7%
Nivritos	255	11,0%
Panasos	260	11,2%
Dispersed population	18	0,7%
	2.324	100,0%

Table 1 Settlement population in the Municipality of Rouvas

The economy is based on agriculture and the prevailing crops are olives and grapes. The plots of land parcels are small and the level of ownership is high; very few of the inhabitants are employed as agricultural workers.

Rearing livestock is another important economic activity contributing to the local economy.

There are a few small-scale olive presses and wine production is limited to what is needed for home consumption.

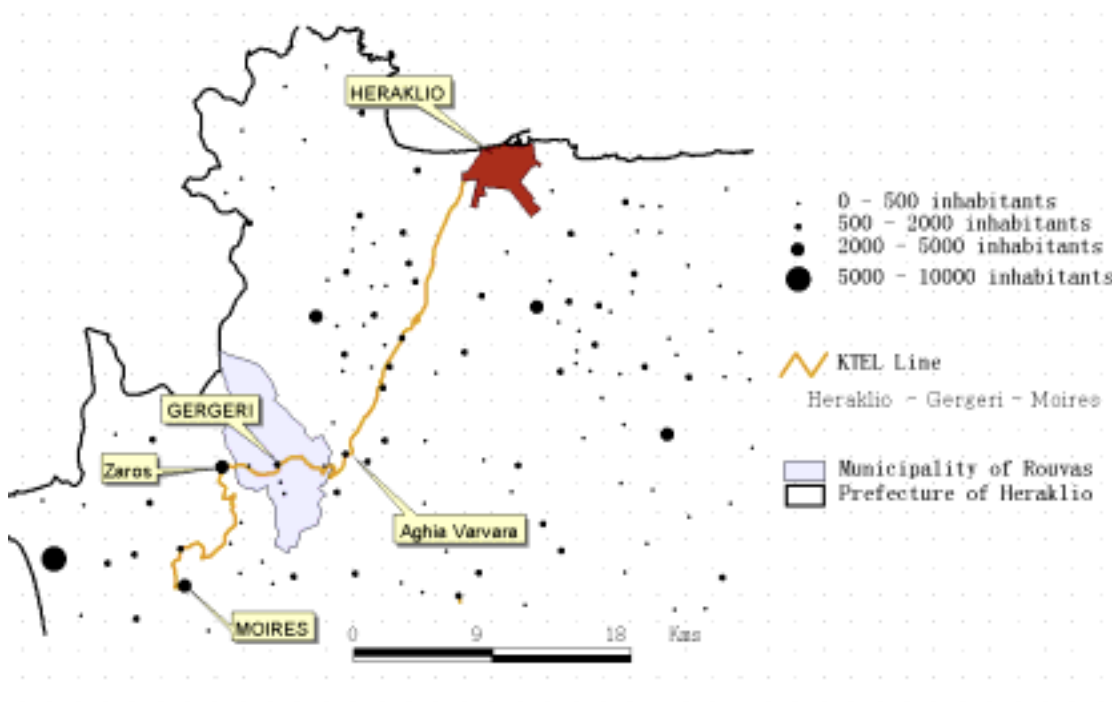
There is a municipally-owned mineral water bottling plant in Gergeri with 25 employees.

A small part of the economically active population is employed in the services sector mainly as owners of small shops or businesses: bakeries, butchers, grocery stores, agricultural supplies and small general supplies stores. The Municipality is an important employer for clerical jobs, street cleaning, garbage collecting and drivers.

Although tourism plays a major role in the economy of the whole Island of Crete as a whole, its impact on the area of the demonstration is minimal.

There is one road that traverses the municipality, which is narrow but paved and reasonably well maintained. The road connecting the villages of Metochia and Apomarama with Gergeri is not in good condition. No other roads are paved and are mainly used for access to fields, olive groves and farms.

There is only one type of Public Transport service available in the area: the bus line from Heraklio to Moires with stops at Panasos, Gergeri and Nivritos.



Graph 5 Bus line operated by KTEL

The outward service from Heraklion runs 3 times a day on weekdays:

6:30 a.m.	1:30 p.m.	6:00 p.m.	↓	Heraklion	↑	8:15 a.m.	3:15 p.m.
7:15 a.m.	2:15 p.m.	6:45 p.m.		Gergeri		7:30 a.m.	2:30 p.m.
7:45 a.m.	2:45 p.m.	7:15 p.m.		Moires		7:00 a.m.	2:00 p.m.

Table 2 Public bus service timetable

On weekends there is only one bus departing from Heraklio at 8:30 a.m. and one from Gergeri at 1:30 p.m.

The villages of Metochia and Apomarma have no service whatsoever.

The line is operated by KTEL, which is the only provider of bus services in the prefecture of Heraklion.

Two taxis are licensed to operate inside the municipality. By law they can transport passengers to destinations outside of the municipality but it is not permitted to carry fare-paying passengers on the return leg of the trip. Only metered trips are permitted and charging individual passengers for the whole or part of the trip is prohibited. In reality though, taxis in rural areas operate on a shared basis. They are usually hired by 2-3 passengers for the trip from Gergeri to Heraklion in the morning. Taxis wait in Heraklio while the passengers visit family members, do shopping or complete other tasks and

arrange the return trip on the evening. Passengers using this type of arrangements passengers are charged individually at a rate less than the total metered distance of the trip but substantially higher than the return fare on the public bus.

All available services and existing shops are in the town of Gergeri. The educational facilities consist of a kindergarten, a primary school and a lower secondary school. Students 12 –15 years old attend the lower secondary school. Shopping possibilities include 2 groceries stores and an agricultural supplies store. There is a bank branch office with one clerk.

Apart from a single pharmacy, no other health facilities are available. The nearest Health Centre is located in the nearby town of Aghia Varvara and this destination has, therefore, been included in the demonstration.

A Day Care Activity Centre is operated by the Municipal Social Services and it is one of the few sources of recreation and social activity for the elderly living in the Municipality. Currently all of the visitors to the Centre live in Gergeri, since it is very hard for older people living elsewhere in the Municipality to visit on PT. This is expected to change when the demonstration starts.

There are no services of any kind or shops in the other 4 settlements of the Municipality of Rouvas with the exception of small grocery stores where a limited amount of foodstuffs is available.

An important trip motivator in the area is the city of Moires with a post office and some administration offices such as the local office of the Internal Revenue Service. There is an upper technical secondary school in Moires attended by a few students from Rouvas. Most of the upper secondary school students (aged 15 - 17) travel to Aghia Varvara where the secondary school offers all classes.

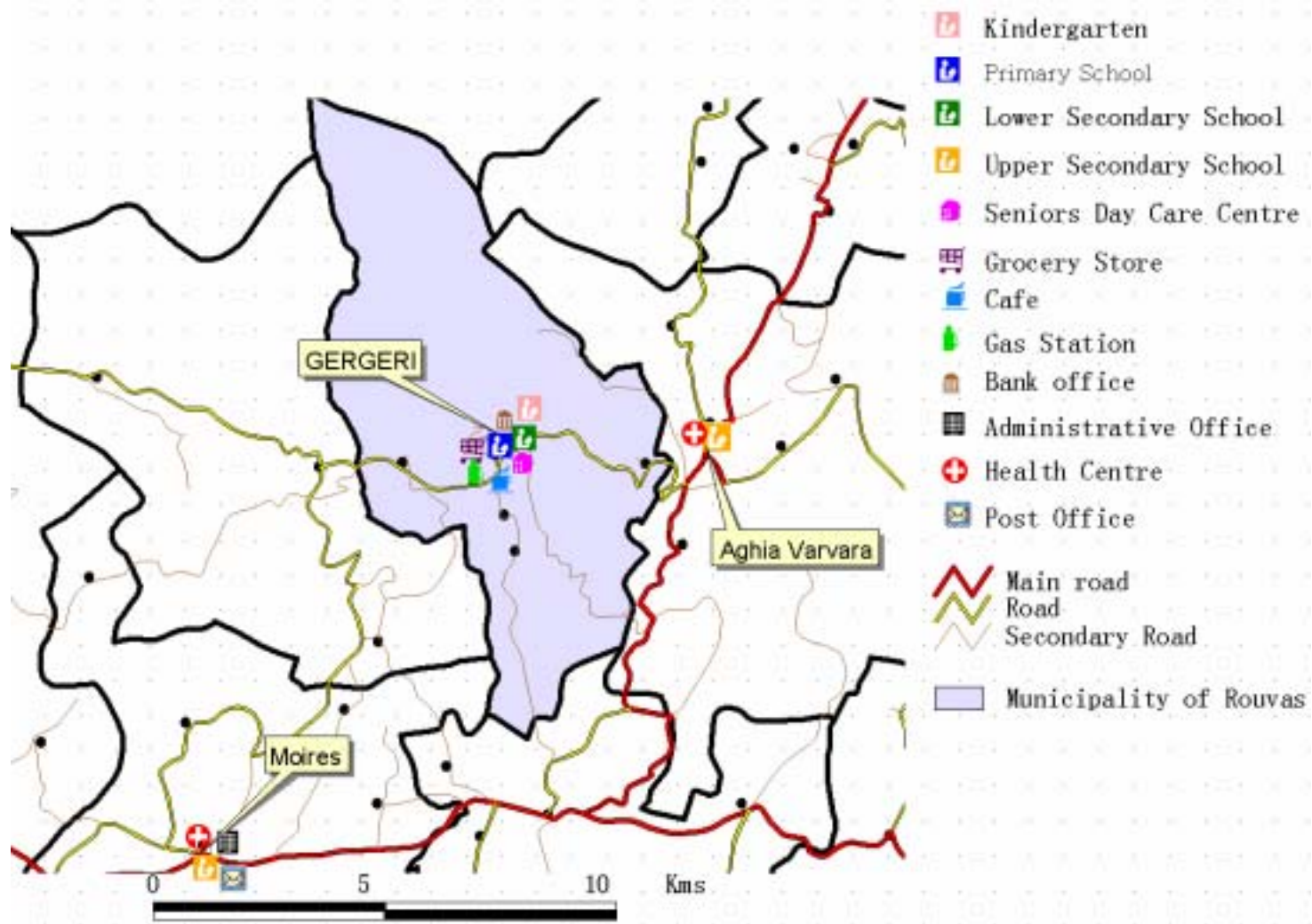


Table 3 Services in the Demonstration area

3.3. Description of Services

3.3.1 Characteristics of Services

The services offered in the demonstration connect all settlements of the Municipality of Rouvas to the main village of Gergeri.

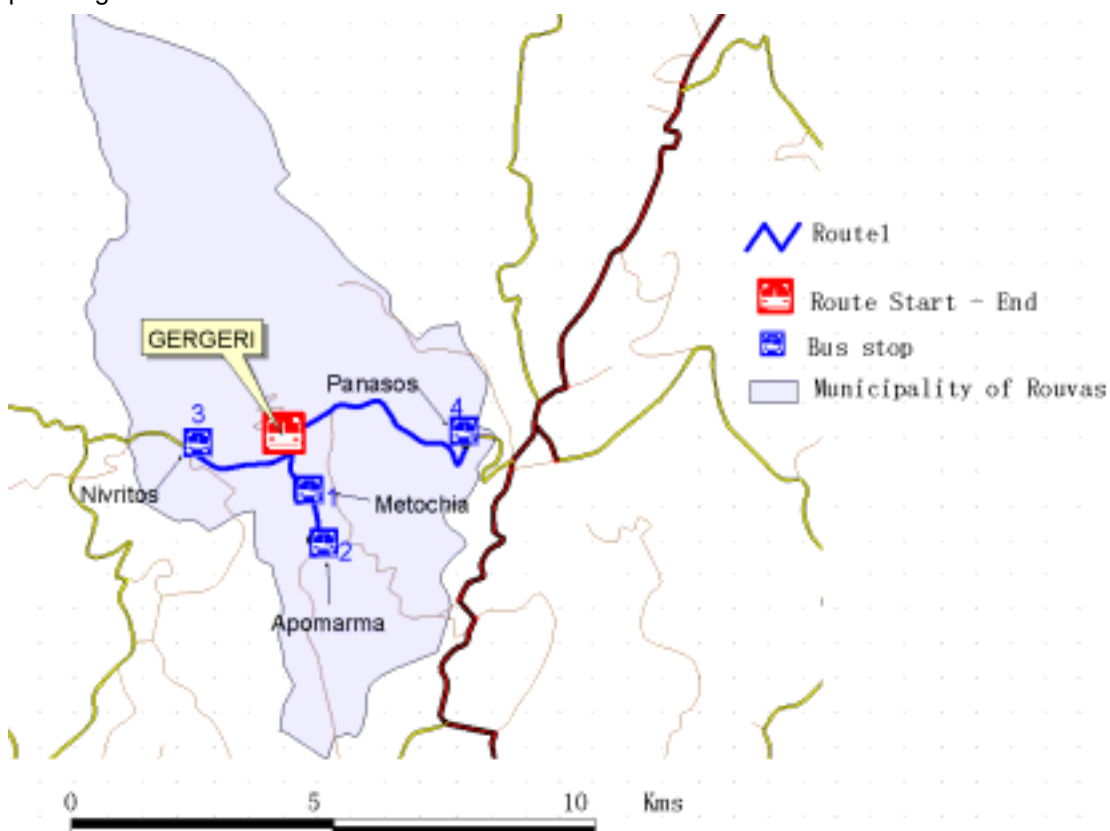
The basic function is transportation of kindergarten (age 5), elementary school (age 6 –11) and lower secondary school (age 12 –14) pupils between the schools and the surrounding places where they live.

At the same time other passengers can use the empty seats on the bus. Until now most of these students were transported to school in their parents' private vehicles. A few of them, living in the settlement of Panasos, used the public bus on its morning run from Heraklion to Moires via Gergeri.

The Municipality lacks any Health Facilities. Residents have to travel outside the area even for routine medical tests. There exist two Health Centres nearby, one in Moires and the other in Aghia Varvara. The latter is the nearest and is a frequent destination for trips outside the demonstration area especially for the older population.

A special condition applies to the return trips from school to home. Kindergarten has a shorter daily schedule than the other schools. For this reason a special run for kindergarten children has been organised at mid-day.

The final run of the bus is to return the rest of the students home together with other regular passengers.



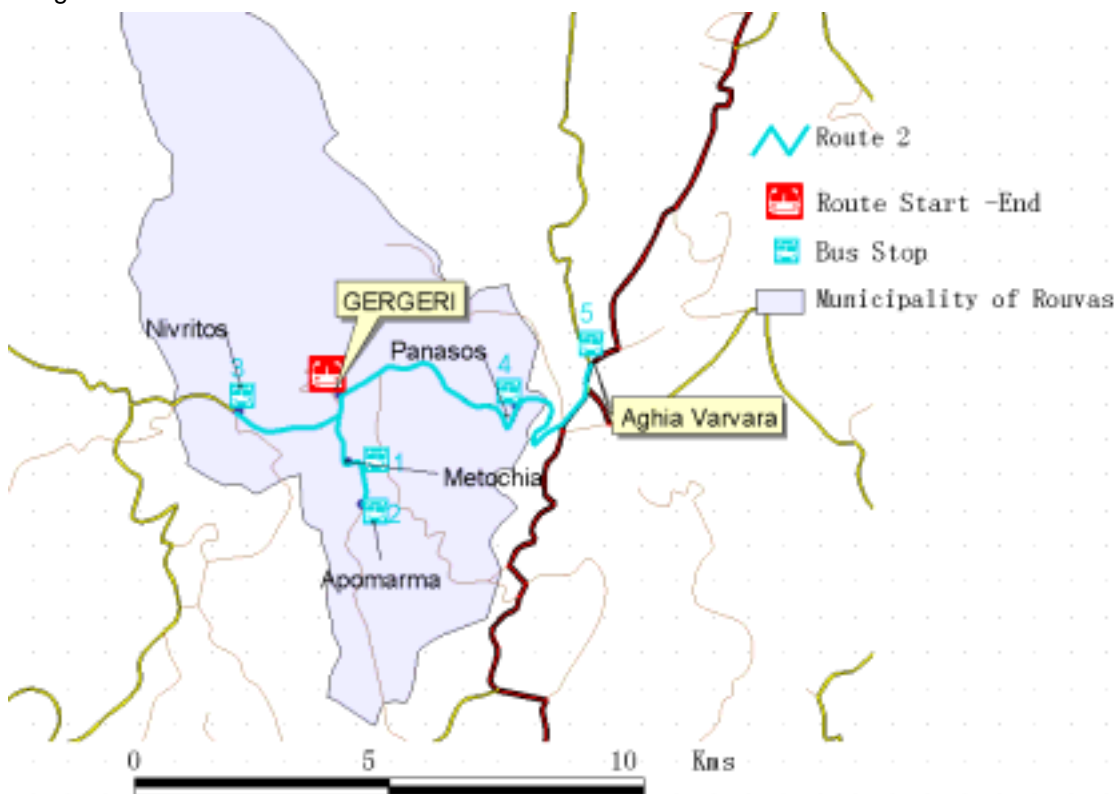
Graph 6 Route 1

The mini-bus in service is garaged in the town of Gergeri; therefore all routes start from there.

	Time	Total distance travelled (km)
Gergeri	7:10	0
Metochia	7:15	0,9
Apomarma	7:20	2,0
Gergeri	7:30	4,0
Nivritos	7:35	6,5
Gergeri	7:40	9,0
Panasos	7:50	13,5
Gergeri	8:00	18

Table 4 Timetable Route 1

On the second bus run of the day passengers are collected from all settlements including the town of Gergeri and are transported to the nearby settlement of Aghia Varvara where they can visit the Health Centre. Naturally they are some passengers who use the service to travel from home into Gergeri.



Graph 7 Route 2

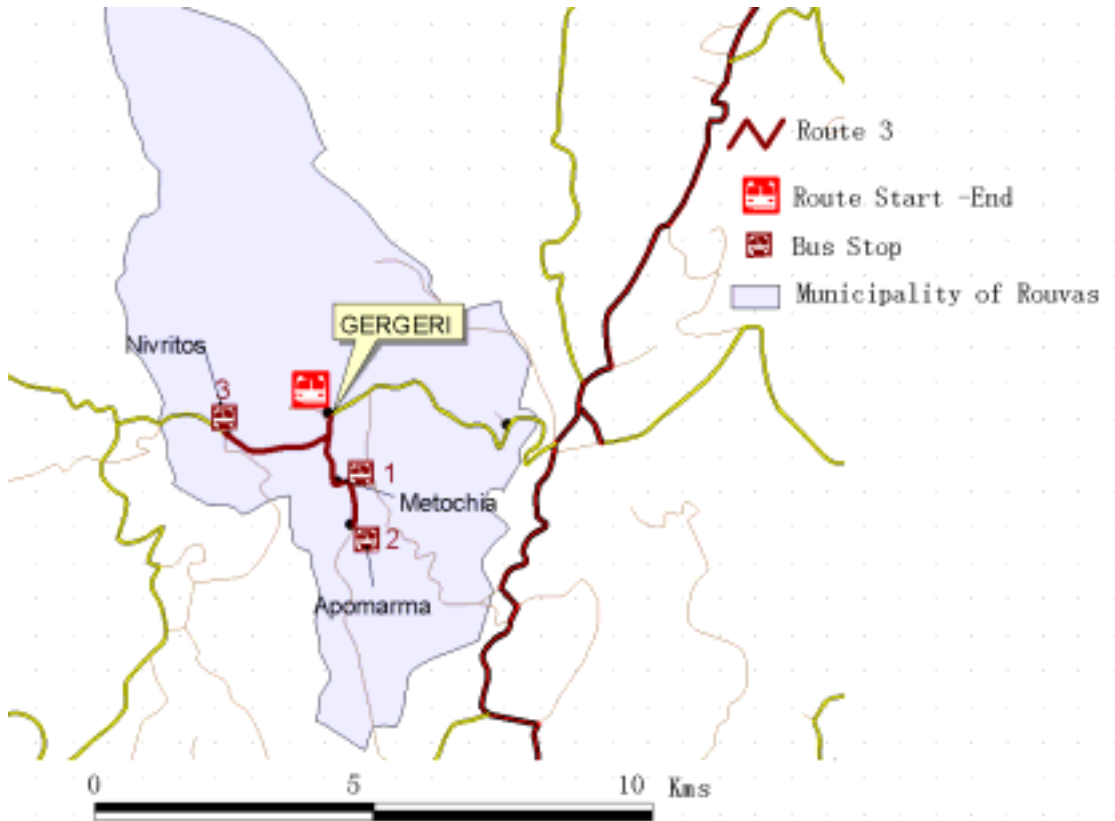
The bus has a stopover of 1h. 40 mins at the town of Aghia Varvara so as the passengers can visit the Health Centre or other services.

	Time	Total distance travelled (km)
Gergeri	8:10	0
Metochia	8:15	0,9
Apomarma	8:20	2,0
Gergeri	8:30	4,0
Nivritos	8:35	6,5
Gergeri	8:40	9,0
Panasos	8:50	13,5
Aghia Varvara	9:00	19
Aghia Varvara	11:00	19
Panasos	11:10	24,5
Gergeri	11:20	29
Nivritos	11:25	31,5
Gergeri	11:30	34
Metochia	11:35	34,9
Apomarma	11:40	36
Gergeri	11:50	38

Table 5 Timetable Route 2

The third run of the day is used for the return trip of kindergarten pupils.

Kindergarten finishes at 12:00 and the children are picked up immediately for the trip back home. It happens that this year, one of the settlements has no children of kindergarten age living there.

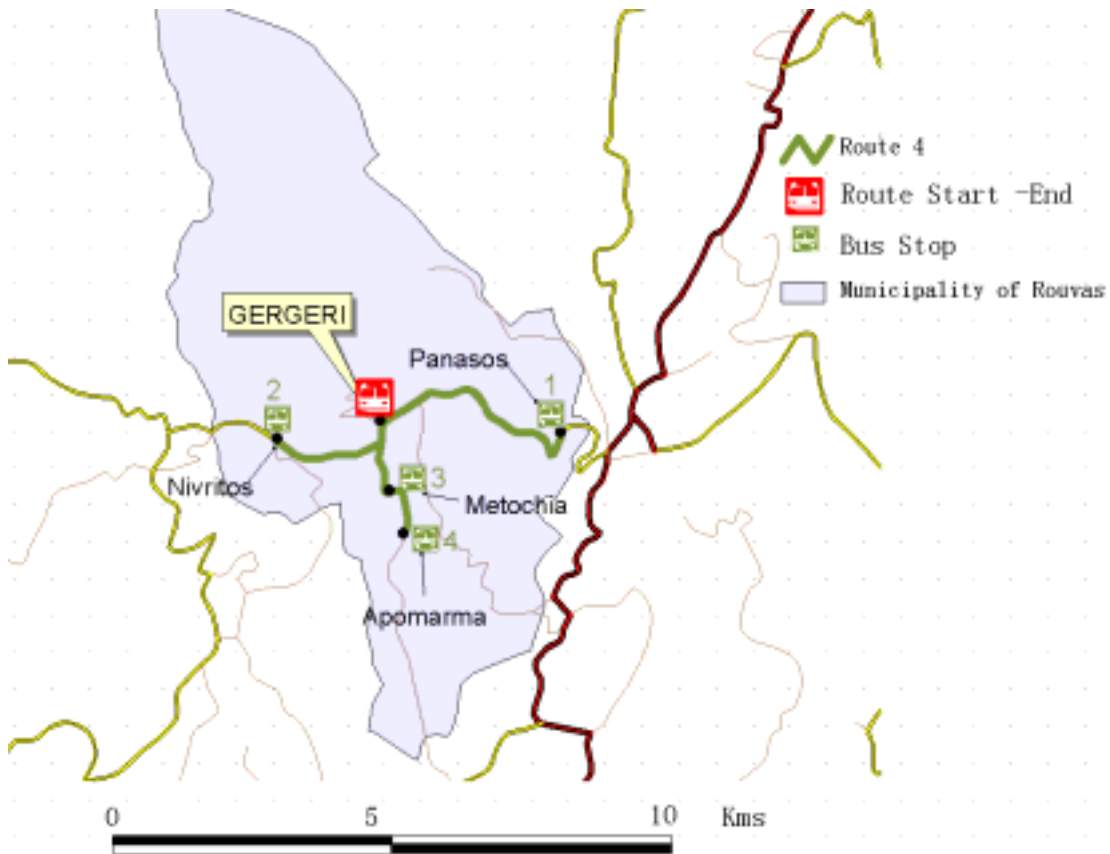


Graph 8 Route 3

	Time	Total distance travelled (km)
Gergeri	12:00	0
Metochia	12:05	0,9
Apomarma	12:10	2,0
Gergeri	12:20	4,0
Nivritos	12:25	6,5
Gergeri	12:30	9,0
Panasos	-	-
Gergeri	-	-

Timetable Route 3

The last service of the day is the return home of elementary and secondary school students.



Graph 9 Route 4

Route 4 is operated in the reverse order of that of Route 1.

	Time	Total distance travelled (km)
Gergeri	13:30	0
Panasos	13:40	4,5
Gergeri	13:50	9
Nivritos	13:55	11,5
Gergeri	14:00	14
Metochia	14:05	14,9
Apomarma	14:10	16
Gergeri	14:20	18

Table 6 Timetable Route 4

Other passengers may also travel home on this run.

3.3.2 Vehicle(s) in Use

The vehicle that is used an 18-seat mini-bus.

3.3.3 Fares

No fares are charged. The Municipality absorbs all the costs.

3.4. Stakeholders

The following stakeholders are involved in the demonstrations:

3.4.1 Operator(s)

The exclusive operator is the Municipality of Rouvas. The driver is a municipal employee and the vehicle is owned by the Municipality. The vehicle was donated to the Municipality by the state in 1996 when the administrative map of the country was redrawn. Before that time municipalities were organised as very small entities; it was common that each settlement was a municipality itself and received fund directly from the central government, but lacked any substantial powers. In the mid-90's smaller municipalities were merged into larger entities in terms of both area and population. The municipalities that emerged were endowed with far more administrative and fiscal competencies and for the first time were allowed to offer passenger transportation services. Initially the buses were to be used only for the transportation of municipal employees from peripheral settlements to the seat of the municipal council.

A new transportation law, enacted in 2002, has liberalised passenger road transport in Greece and widened the transportation capabilities of municipalities. Councils can offer transportation services to those areas inside their municipal borders that are not served by commercial operators. Furthermore, the municipal authority to offer student transportation is stated without ambiguities. The new legal framework made it possible for the Municipality of Rouvas to participate in ARTS.

The main objective of the municipal council is to demonstrate and test its ability to offer organised passenger transport to two groups: students and regular passengers.

The demonstration is funded primarily by the Prefecture of Heraklion (Regional Government). The Municipality contributes a small amount. Student transport plays a key role for the future financing and viability of the services. Presently the contract for the transport of the students living in the municipality has been awarded to KTEL, which is the only operator offering passenger transport. If the municipality proves that it is in position to undertake transport reliably, it will be able to compete for the contract for school transportation funds.

3.4.2 Public Authorities

The Prefecture of Heraklion has contributed to the funding of the demonstration and the transportation department of the prefecture has issued the necessary permits for the operation of the services. The Prefecture council, which is an elected body, took the initiative to participate in ARTS and to fund the demonstration in the Municipality of Rouvas with the objective to strengthening the capability of municipalities to offer transportation services within their own borders.

With the only commercial operator reducing services to remote areas and to those outside the tourism intensive zones, the prime concern has been that residents of these areas would be left without any PT services at all. The idea is that this particular ARTS demonstration will become an example for other municipalities, encouraging them to organise their own transport services, since all own at least one vehicle that now is under-utilised. If municipalities become small-scale operators then they will be in position to undertake some school transportation and compete for the funds available from the state.

The Regional Educational Office is responsible for the organisation of school transport in the Prefecture of Heraklion. Each year organises the bidding for the school transportation and awards the contracts. Currently there is only one bidder, KTEL, which is the sole operator in the region.

Parents, students and the Regional Educational Office are all dissatisfied with the services offered. Common complaints concern the timing of the services which forces students to wake up very early and return home late, and means long waiting times at stops and long journey times because the operator combines many short routes into one, and finally, overcrowded buses. The operator organises the services from the urban centre of Heraklion without adequate knowledge of the local conditions.

3.4.2.1 School transportation

The provision of School transportation was the main reason that the Municipality of Rouvas organised the demonstration with the aid of the Prefecture, the Prefecture Transportation Department and the Regional Education Office.

The students transported attend kindergarten, primary school and lower elementary schools located in Gergeri. There are 80 students living in the four settlements outside Gergeri:

	Kindergarten	Primary	Lower Secondary
Metochia	3	6	6
Apomarma	1	4	
Nivritos		8	5
Panasos		5	5

Table 7 Students attending school in Gergeri

Before ARTS, these students were transported in their parents' cars. Neighbours also arranged to take turns driving and transport more students. Some students from the villages of Nivritos and Panasos would use the regular bus service from Heraklion or Moires. This service timetable was not convenient for students since they had to wake early in the morning and return late in the afternoon. While all schools start at 8:00 a.m. the Kindergarten finishes at 11:45, the other classes are over at 13:30 p.m. This difference in school hours makes Route 4 of the service necessary.

Students living in the Municipality attend upper secondary school in Aghia Varvara and Moires and they are transported on the school services under contract to KTEL. In addition, students attend private tuition classes in subjects such as music and languages in the nearby village of Aghia Varvara. These classes are held in the afternoon and students have to use either the regular bus service, taxis or be transported by their parents.

3.4.2.2 Social Sector transportation

There is a Seniors Day Care Activity Centre located in Gergeri and operated by the Social Services of the Municipality. Before ARTS only older people living in Gergeri were using the facilities and received support from social workers. The demonstration will allow to older residents of the peripheral villages to have access to the services. Alternatively social workers can use the services to visit older and disabled people who are homebound.

3.4.3 Others

Parents associations for elementary and lower secondary school and individual parents are concerned about the conditions of school transportation and the safety of their children. Currently

they have to transport their children twice a day. Those families without a car depend on neighbours or public transport. Older students attending additional courses may need to be transported four times a day.

Safety conditions are not optimal on the public buses, which are overcrowded.

Parents, their associations and teachers have an interest in the demonstration being successful as this would enable the Municipality to become the permanent provider of transportation for students. All of them believe that is easier to solve any problems at the local level where have easy access to the municipal council.

3.5. Users

Users of the service are:

- Students attending kindergarten, primary and lower secondary school (ages 5 –14)
- Regular passengers

The majority of regular passengers are elderly residents, of whom hardly any have a car. The main trip purposes for this group are visits to the Health Centre in Aghia Varvara and to the Seniors' Day Care Centre in Gergeri, basic shopping and visiting relatives.

3.6. Annex

Graph 10 Students arriving at Lower Secondary School



Graph 11 Leaving Elementary School

4. National report Hungary – DEVELOPMENT Demonstration

4.1. General Description of the Demo

The aim of the Hungarian project, DEVELOPMENT is to develop school transportation service and related information system. The transportation of pupils and students is still an unsolved and serious problem in our country, particularly in rural areas. Pupils attending school away from their homes usually travel to school by regular public transport or by car, if any is available.

In order to help develop school transportation, two regular school buses have been implemented between Kecskemét and two nearby settlements, Matkó and Szarkás. DEVELOPMENT started on the 2nd of September, 2002 and will end on 13rd of June. It is hoped that this initiative will give an example for other municipalities and help pupils and students from rural areas get high-level education without moving to cities.

4.2. Description of the Area

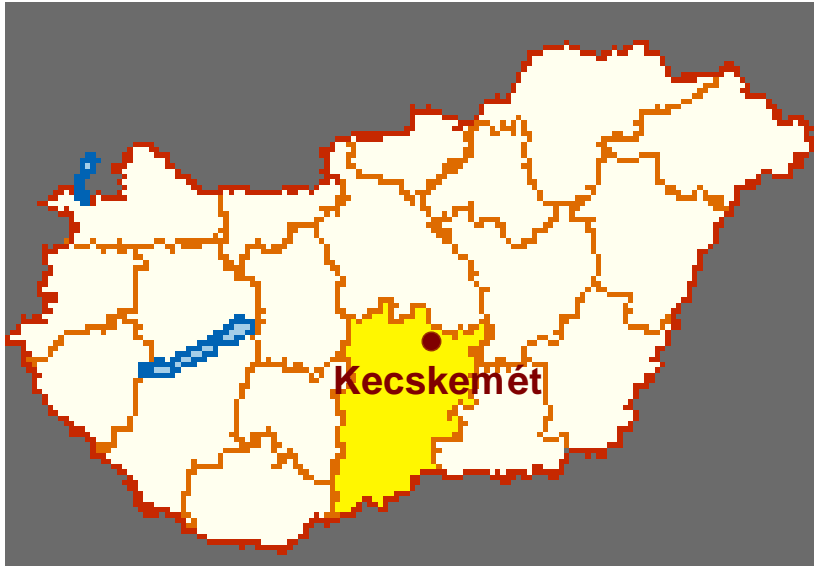
The focus of the demonstration area is Kecskemét, the centre of Bács-Kiskun county. There are some small nearby settlements that belong to the administrative area of Kecskemét. The demonstration includes two of these settlements, Matkópuszta (or Matkó) and Szarkás as well as Kecskemét itself.

Matkó has its own independent territory with defined border, but is also part of the administrative area of Kecskemét. Matkó does not have its own mayor, but has representatives on the Municipality Council of Kecskemét. Szarkás has the same administrative status as Matkó, it has independent territory with a defined border but is part of the administrative area of Kecskemét.

Again, Szarkás does not have its own mayor, but it has representatives on the Municipal Council of Kecskemét.

4.2.1 Maps

Map 1 shows the location of demo area in Hungary. Kecskemét, the center of Bács-Kiskun county is situated 86 kilometers from Budapest, between river Tisza and river Danube on the Great Hungarian Plain.



Map 1: Location of the demo region in Hungary



Map 2 demonstrates the region, Bács-Kiskun County.

Map 2: The Demo region Bács-Kiskun county

Map 3 presents the whole demonstration area: Kecskemét. The nearby settlements, Matkó and Szarkás belong to the administrative area are marked with a pink line. The borders of built-up areas are marked with red lines.



Map 3: The demonstration area, Kecskemét

4.2.2 Characteristics

- Area
The territory of the Kecskemét administrative area covers approximately 32,136 ha (3,189 hectares of built-up areas 28,947 hectares of peripheral countryside).
- Population
Matkó: 800 inhabitants
Szarkás: 1,000 inhabitants
All Kecskemét: 108,000 inhabitants
- Terrain
Kecskemét is situated on the Great Hungarian Plain, the area is flat.
- The condition of road network
The condition of road network is similar to the average in Hungary. The international road, already partly motorway, crossing the area between the river Danube and the river Tisza runs over an old roadway connecting Western-Europe and Asia Minor. There are important roads to connect Transdanubia and 'Tisza-túl' in the northern and southern parts of the county. The railway line between Budapest and Szeged calls at Kecskemét and Kiskunfélegyháza as well. The route of the international express trains crossing Hungary in north-western-south-eastern direction leads to Belgrade through Kunszentmiklós, Fülöpszállás and Kiskunhalas.
- Main economic activities
The original main economic activities of the region are agriculture and food processing industries. Since the changes in political and economic systems, some industrial companies have settled in the region, mostly in cities.
- Unemployment ratio
The unemployment ratio is 8% in Bács-Kiskun county.

4.3. Description of Service

4.3.1 Service maps



Map 4: School bus in Matkó



Map 5: School bus in Szarkás



Map 6: Elementary school visited by pupils from Matkó



Map 7: Elementary school visited by pupils from Szarkás

4.3.2 Characteristics of Services

- Timetable

School buses operate every school-day, five days a week during the school year, in the morning and in the afternoon. Matkó-Kecskemét: at 7:15 to Kecskemét, at 13:30 to Matkó. Szarkás-Kecskemét: at 7:25 to Kecskemét to Szarkás at 15:30.

The duration of service trip is 15 minutes between Matkó and Kecskemét and 20 minutes between Szarkás and Kecskemét.

- Stops

In Matkó there are three school bus stops (1st stop: along the route, on the service road, about 1 kilometer before the border of the built-up area, 2nd stop: just at the border of the built-up area, 3rd stop: at the centre of Matkó) while in Szarkás there is one stop. In Kecskemét school buses stop only at elementary schools stops.

4.3.3 Vehicles in use

School buses are Ikarus 415 (see appendix), seat capacity: 45.

4.3.4 Fares

The municipality pays for monthly tickets of pupils for whom the service is free of charge, while the municipality pays one third of the full price. The teacher in charge buys and distributes the tickets to pupils every month.

4.4. Stakeholders

CATEGORY	NAME
USERS	Residents
	Pupils
OPERATORS	Kunság Volán Ltd.
PUBLIC AUTHORITIES	Municipality of Kecskemét (involved the authorized representatives of the parts of its administrative area (for example: Matkó) which need school transport and NGO called Local patriots of Kecskemét)
OTHER GROUPS	Advisory Groups of Parents of Primary schools which have school-bus transport The Advisory Groups support the work of the authority; their objectives are the same.

Table 1: Stakeholders

4.4.1 Operator

The operator of the school buses is Kunság Volán LS. This company also operates regular local and long-distance buses, too. There are 30 local bus lines in Kecskemét operated by the company, including buses to nearby settlements and long-distance buses such as Budapest.

In Hungary regional transportation companies are not usually publicly managed but the state or regional government, but the main owner is the state. Local and regional bus lines are operated by regional companies, while long-distance routes are traditionally, shared between them. This means that there is no competition because of the lack of private operators competing for passengers. (Expect for a few cases, this situation obtains nationwide.)

4.4.2 Public Authority

There is one authority involved in the demo, the Municipality of Kecskemét. The two settlements, Matkó and Szarkás belong to its administrative area and elect authorized representatives to the Municipal Council.

The Municipality plays an important role in the demo, because it provides free season tickets for the pupils using the school buses.

4.4.2.1 School transportation

School buses serve two elementary schools in Kecskemét and one special elementary school in Szarkás. Pupils from Matkó and Szarkás are taken to different elementary schools in the southern part of Kecskemét. Some children (approximately 8 people) from Kecskemét are taken to Szarkás Gordon method elementary school.

The Municipality of Kecskemét closed schools in small settlements and, because regular private transport is inappropriate for school transportation, they have to provide a school bus service.

There is only one company in the public bus sector in this area, thus there was no available alternative to Kunság Volán.

The municipality pays for the pupils' season tickets because elementary education is free and obligatory in Hungary and children have the right to get to school free of charge.

Although this service is school transportation and buses run on different routes from any of the regular bus lines, there are limited opportunities for regular passengers to travel on school buses. They are mainly elderly people and their presence does not disturb the pupils' journeys. There is always a teacher aboard to take care of the school children.

4.4.3 Users

The main users of school bus service are, naturally, pupils, aged 6 to 14.

From Szarkás to Kecskemét 25 pupils and 5 regular passengers take the school buses regularly, from Kecskemét to Szarkás 8 pupils and from Matkó to Kecskemét 50 pupils.

4.5. Annex



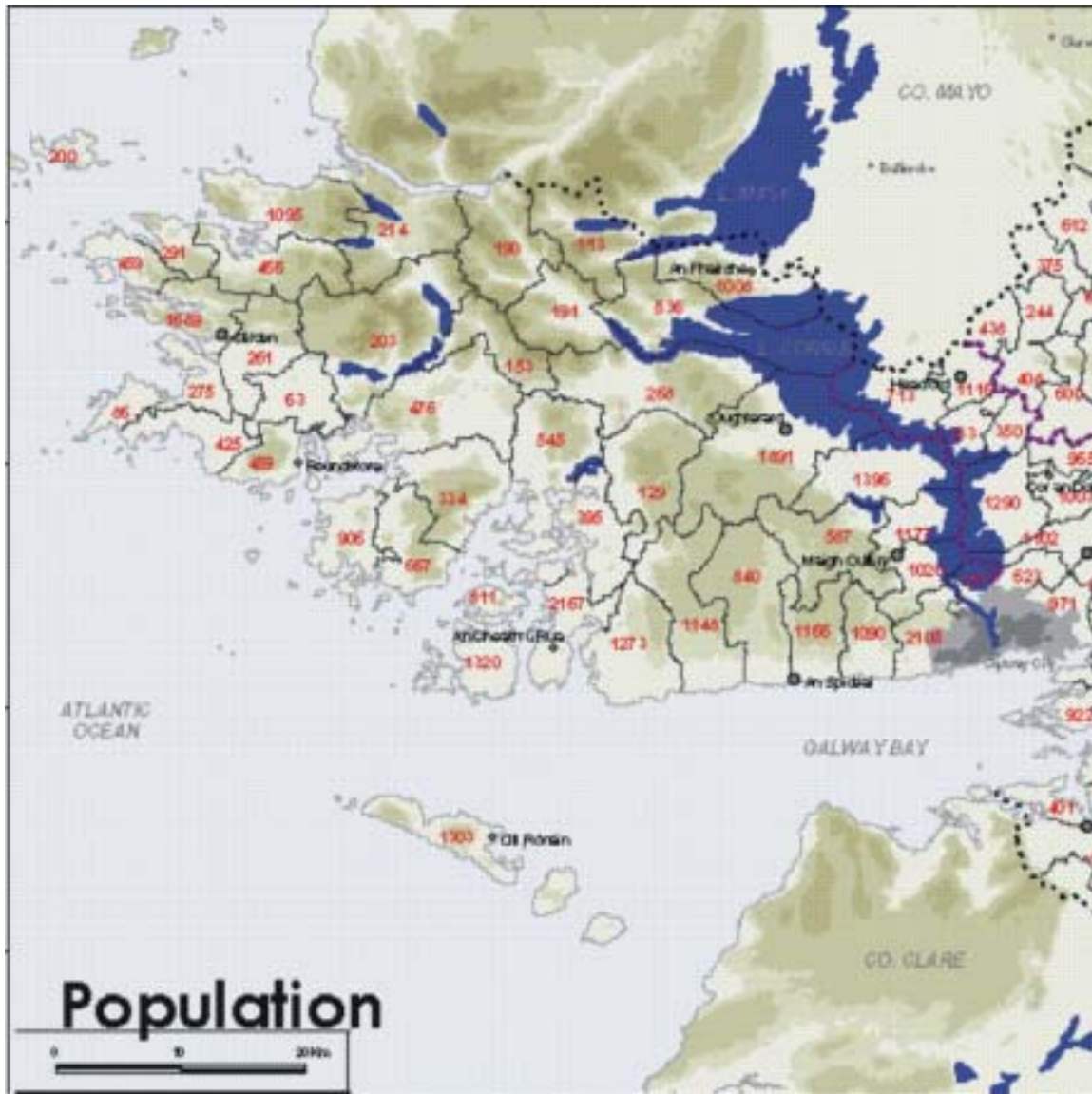




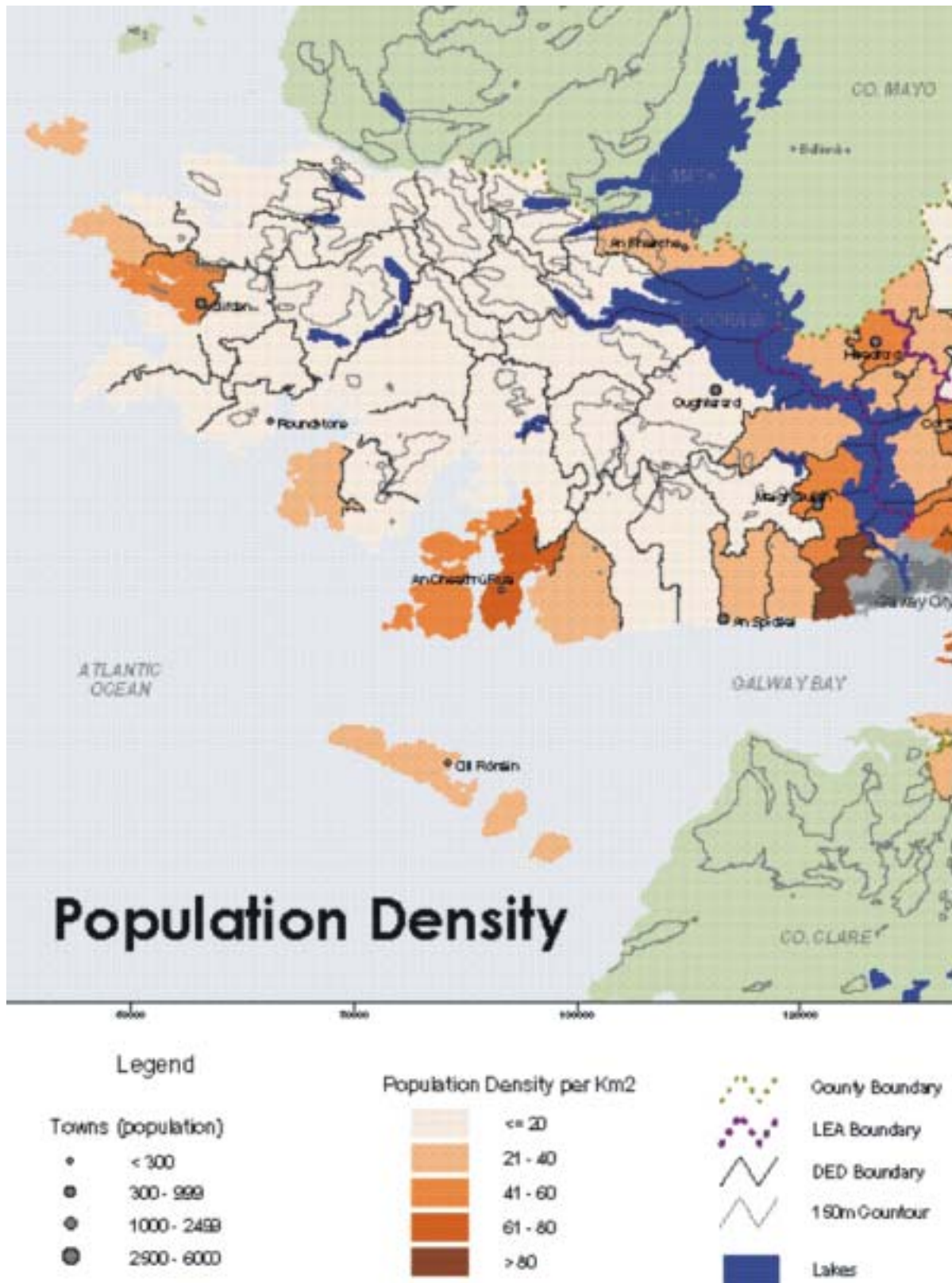
5.1.2 Characteristics

The operational area for the proposed project is Conamara, which comprises the Western Part of Co. Galway and the Aran Islands. Located in the West of Galway County, Conamara is a large region that is world-renowned for its unique landscape and cultural heritage and includes the largest Gaeltacht (Irish speaking region) in Ireland. Due to its particular landscape, with a high density of mountains and reliance on fishing and small-scale farming activities, settlements have traditionally developed predominantly along the coastal region in the South and North West of Conamara. The County's four main inhabited islands (3 Aran Islands & Inishbofin) are also located off the Conamara coast.

This area is mostly an agricultural area of small towns and communities within a landscape of hills and lakes bordered by the Atlantic Ocean to the West, Killary Harbour to the North, Galway Bay to the South and Loughs Corrib and Mask to the East. The main centres of population are Clifden, Clonbur, Carraroe, Roundstone and Kilronan with populations between 500 and 2000 inhabitants. The area covered by the demonstration includes 17 DEDs (census district electoral divisions) in the Conamara Local Electoral Area with a population of 12,126 inhabitants. The population figures are taken from the 2002 Census. The total area is approximately 1,500 km² with an average population density of 8 inhabitants per km². The area contains 20 villages, 1 town and 4 off shore islands.



Graph 13 Conamara Population per DED

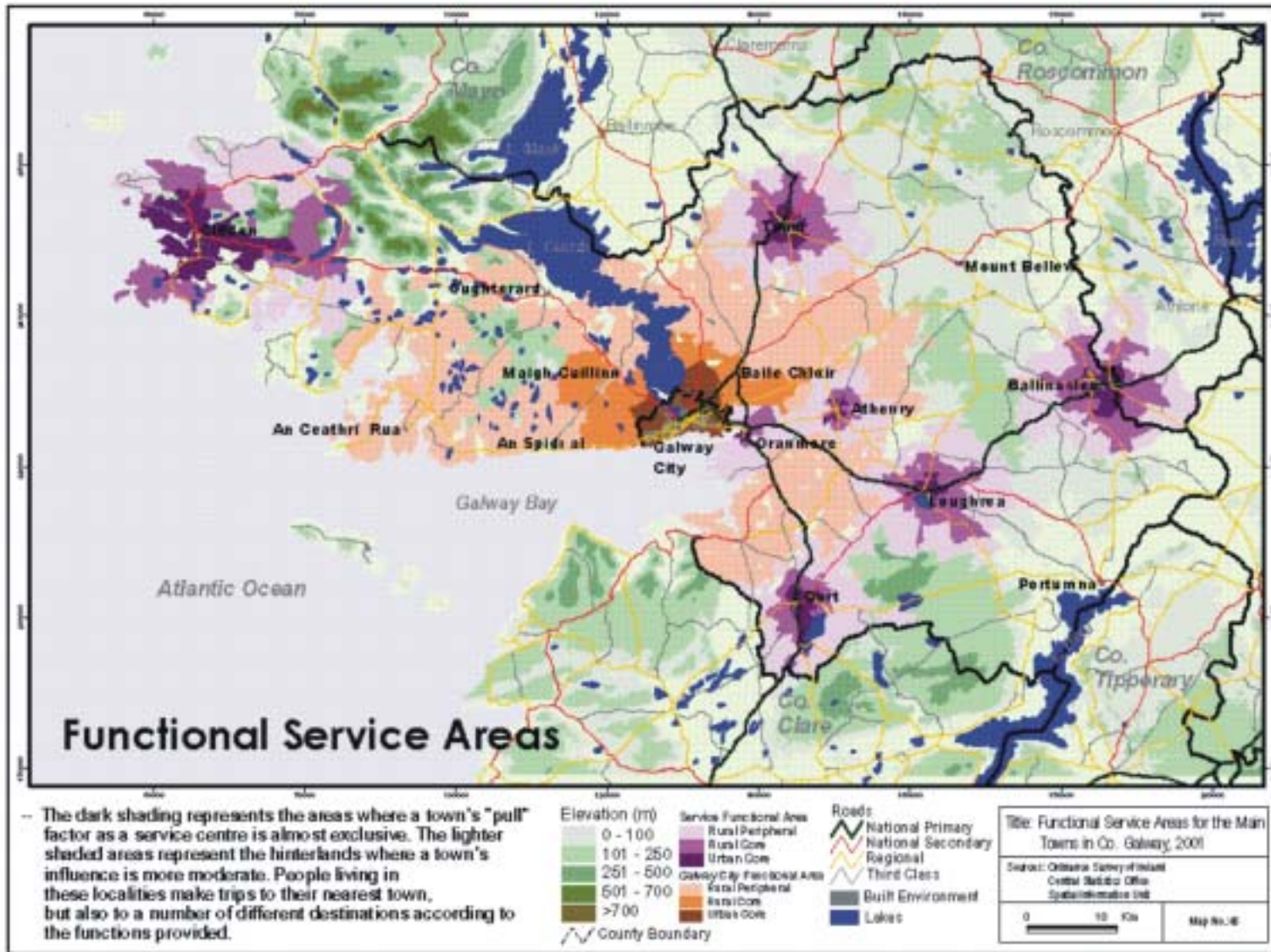


Graph 14 Conamara Population density

The main economic activities in the area are public services, retail, professional services, tourism related activities, farming and fishing with the development of light industry, marine resources, the media industry and the I.T. sector on the increase. These industries are more related to the areas

close to Galway City where transport is less of a problem. These industries and employment prospects decline sharply outside a 30 km radius of Galway City. This obviously has a negative effect on the population structure, results in problems accessing services and reduces employment, educational and training opportunities.

Galway City dominates the county in terms of population accounting for 57,241 out a total of 188,854. Major healthcare, local authority and educational services are based in Galway City. The two main centres of population located in the Bealach area are significant distances from Galway City, Clifden being 80km and An Cheathrú Rua 55km.



Graph 15 Trip attractors in Conamara

The whole of County Galway has been designated as disadvantaged using the Rank Factor Score matrix of deprivation developed by Trutz Haase for the Combat Poverty Agency. According to the results of the 1996 census, the last period for which there are figures for local areas, the non-Gaeltacht part of County Galway exhibited an overall deprivation score (RFS) of 5.5 in comparison with a national figure of 4.6 indicating that the county situation had not improved at a time when the national picture was improving.

The table below relates to an average of all the rural areas in County Galway including Conamara. The location, size, diversity and dispersal of the population in Conamara present significant challenges to communities, local authorities and Government in relation to service provision and in particular to the design and delivery of transport services.

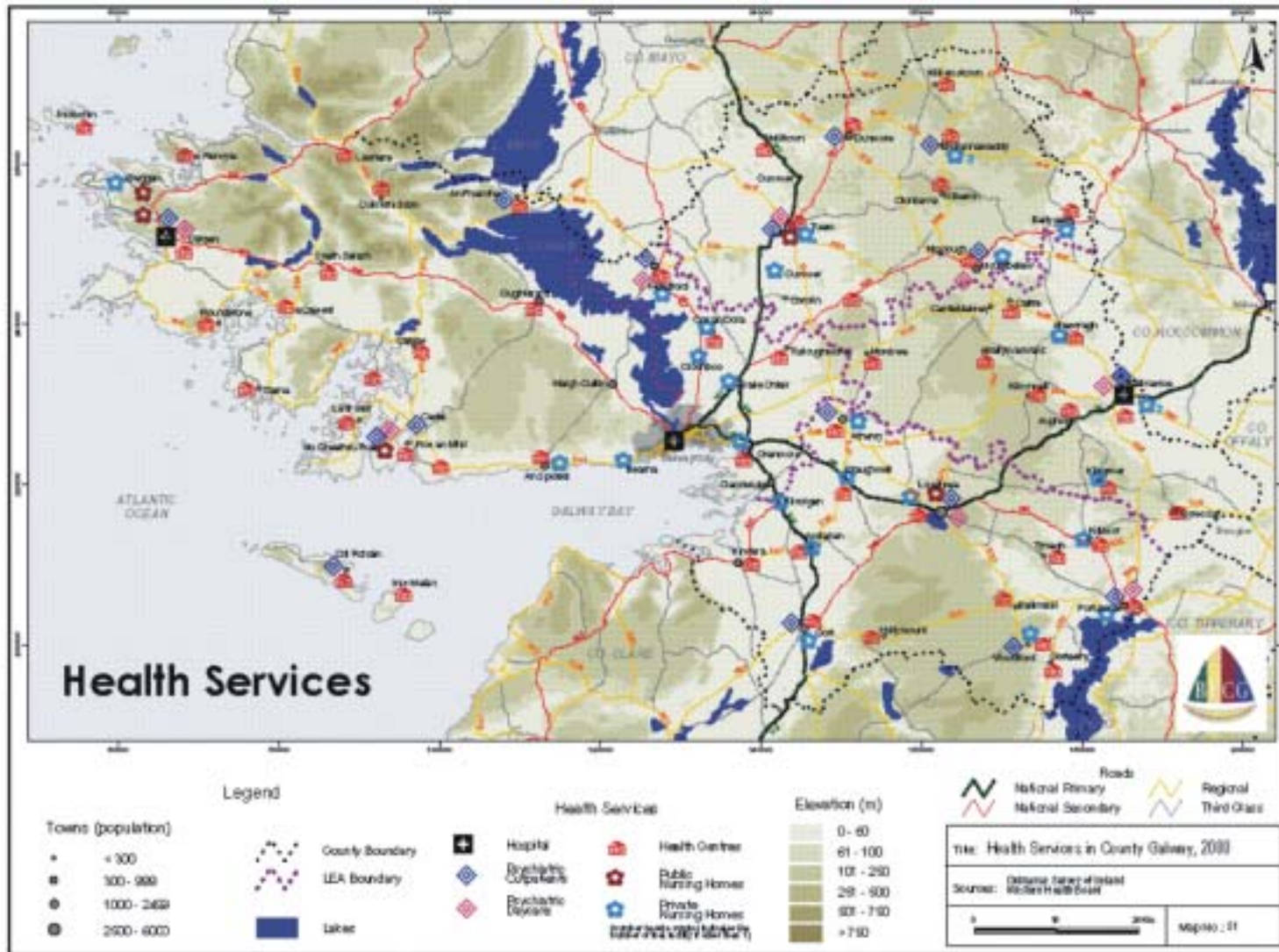
Socio-Economic Profile of Rural Galway (Source: 1996 Census except where stated)

	Rural Galway	State
Population (2002 Census)	106,691	3,629,860
Rural Population density (per km ²)	18.06	21.81
% population aged over 65	15,043 (14.1%)	11.4%
- % male	50,785 (47.6%)	42.8%
- % female	55,906 (52.4%)	57.2%
% population aged 14 or under	26,672 (25%)	23.7%
% Unemployed	5,868 (5.5%)	
% Retired	7,468 (7.0%)	
% Home duties	17,391 (16.3%)	
% of population with third level education	-	12.7%
% of population with access to a car (1991 Census)	77,137 (72.3%)	66.0%

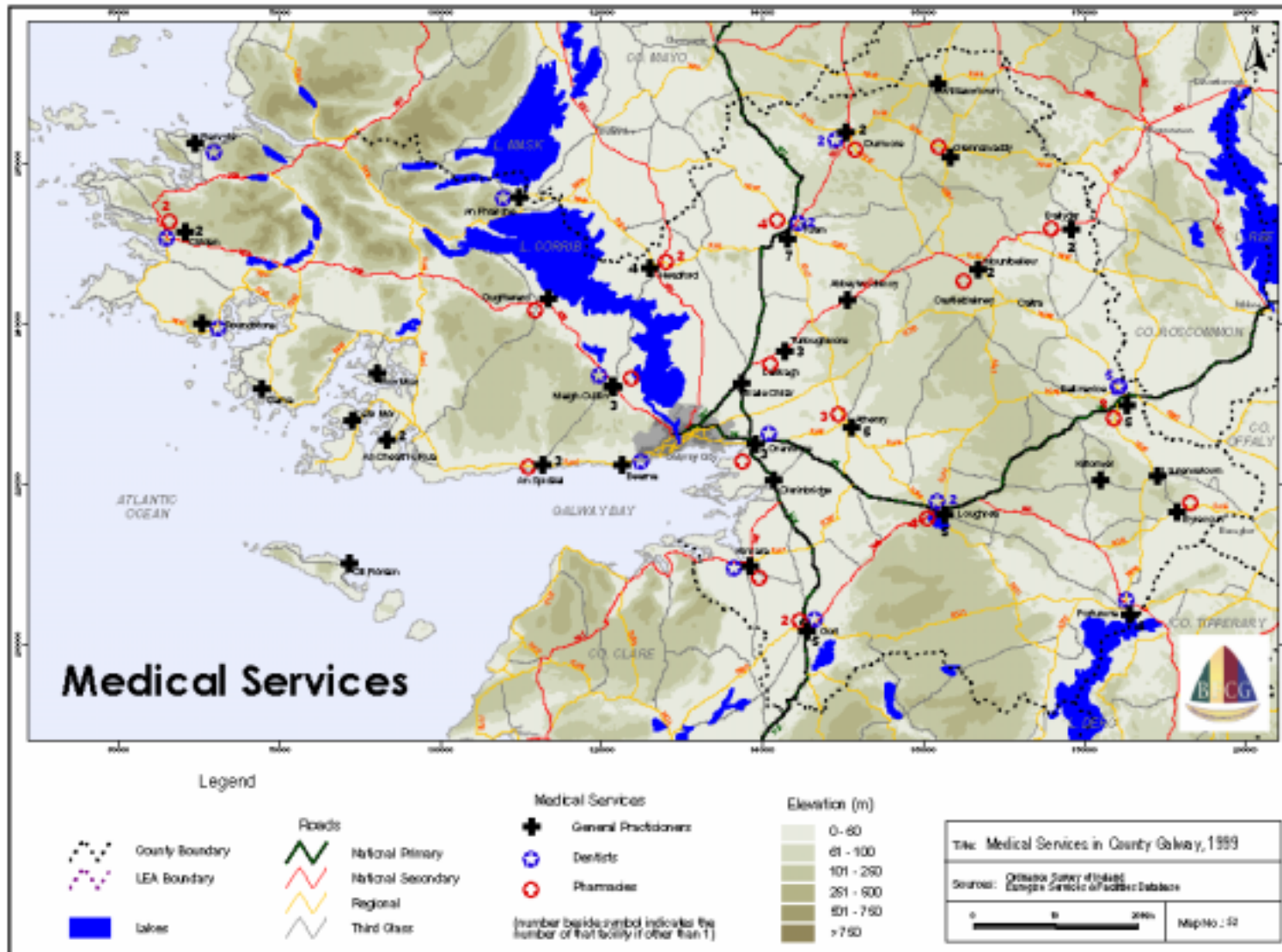
There is a limited range of services, including shops, banks, post offices, credit unions, medical centres, day care facilities, schools and hotels located in the area. There are a number of small shops and schools in smaller communities with day care centres, doctor surgeries and travelling banks operating on a part time basis. Many of the main services, for example banks and hospitals are located in the main centre of population, Clifden.

▪ Health

- There is a district hospital
- There are a number of health and day care centres
- There is a nursing home

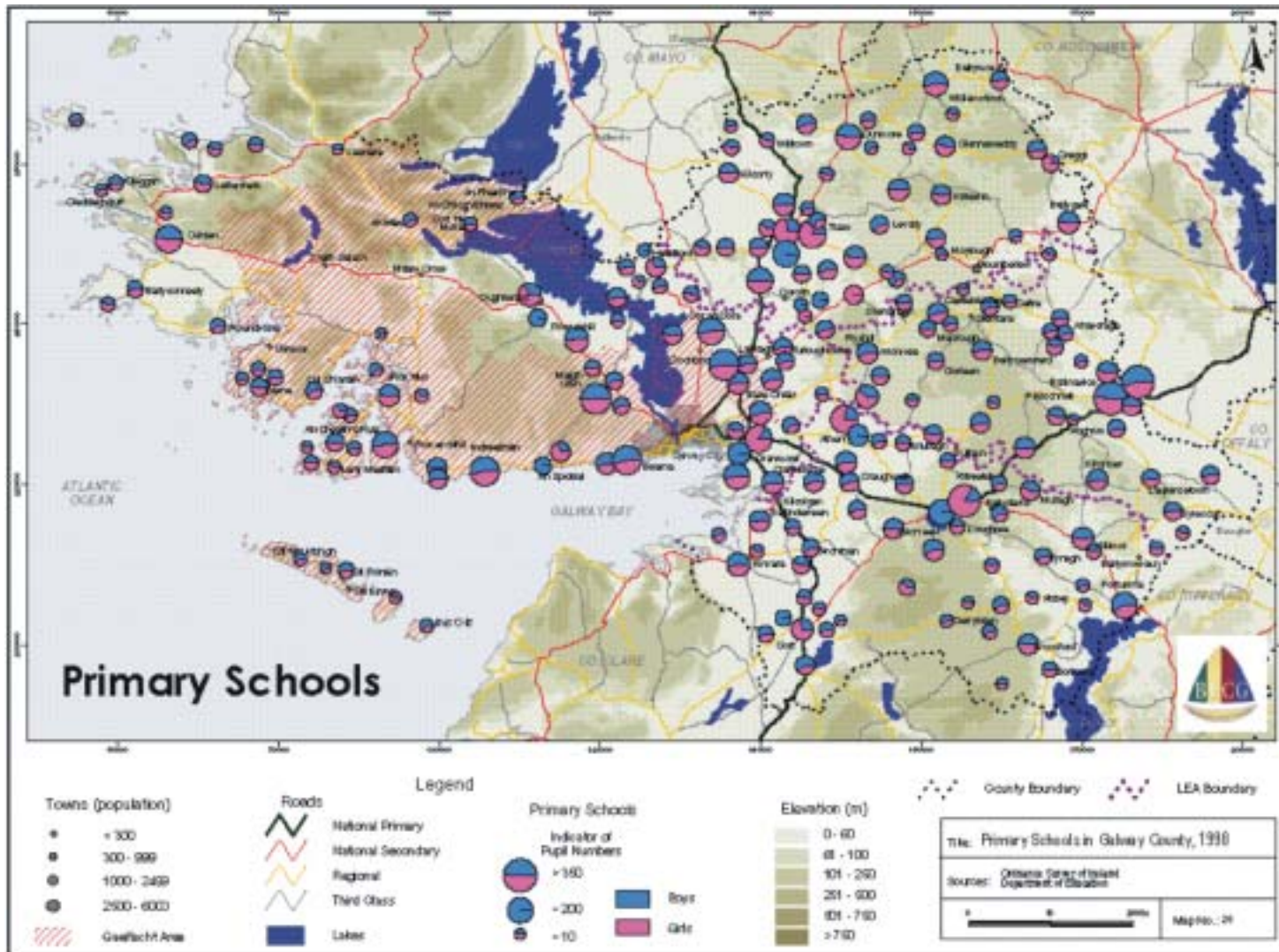


Graph 16 Health Services available in Conamara

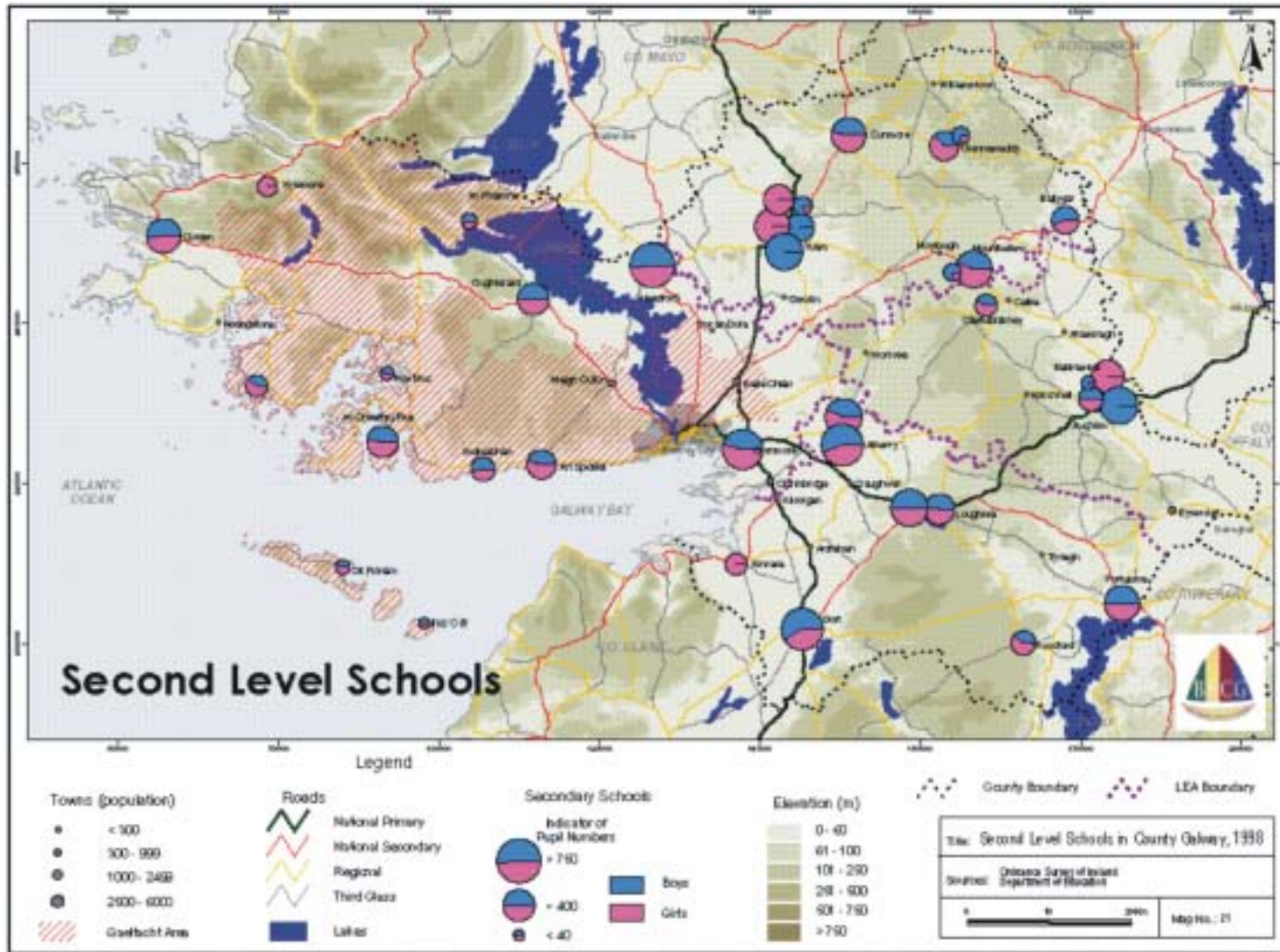


Graph 17 Medical Services available in Conamara

- **Education**
- There are 30 Primary Schools
- There are 6 Secondary Schools
- There are 2 Third Level Outreach Centres



Graph 18 Location of primary schools



Graph 19 Location of secondary schools

- **Financial Services**
 - There is one bank.
 - There are two credit unions



Graph 20 Location of Financial Institutions

- **Childcare**
 - There are a number of naonrai (pre schools) in the Gaeltacht
 - There are a few full time crèches
- **Public and Recreation Facilities**
 - There are 8 libraries
 - There is one (private but open to the public) swimming pool

Transport systems

There is one national secondary route and many regional and local roads of varying quality. There are 1,042 privately owned public transport vehicles (i.e. taxis, hackneys and private buses) operating in County Galway.

All 332 Taxis registered in the county are located in Galway City as this is the only taxi-metered area in the county. There are a 388 Hackneys (private hire taxis) with Galway County Council. The Hackneys licensed with Galway County Council are distributed throughout the county. While most of those in Conamara are located in Clifden, some are located in more rural areas and on the Aran Islands.

Bus Éireann (State operator) operates services along the coast road (R336) to Carraroe with 6 buses daily with 1 bus daily carrying on to Lettermullan. This bus serves all settlements along this route e.g. Lettermore, Carraroe. There are also 3 buses daily from Clifden to Galway City mainly along the N59 but diverting twice a week to serve Letterfrack and Kylemore and diverting three times a week to serve Roundstone. This service also serves Cashel twice weekly.

There are 3 public routes operated by private transport operators in the area, serving NW Conamara and South Conamara with services to Galway City at least once per day.

There are 19 private coach/minibus hire operators located in the area, most of whom are contracted to provide school transport services and some of whom are contracted to provide services for the Health Board. Five of these operators are providing services under contract to Bealach.

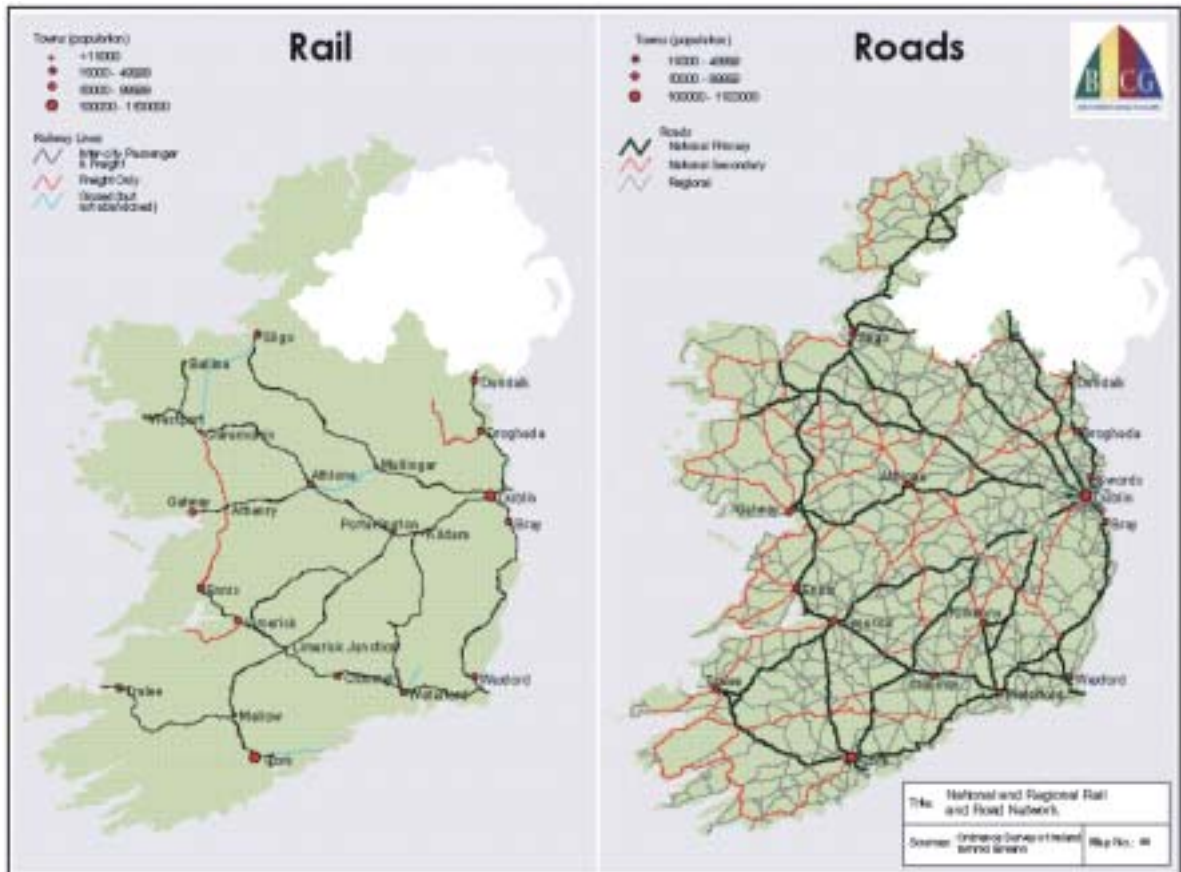
Seven voluntary groups/organisations provide local transport services for the health board as well as for their own members. Six of these are contracted to provide services for Bealach and the other will provide back up for the group in their area.

There are currently 11 operators running ferry services to islands along the Galway coastline. Ferries from Rossaveal, Galway serve the three Aran Islands, Inishmore, Inishmaan and Inisheer, and ferries from Cleggan serve Inishturk and Inishbofin. Some of these ferry services only run during the

summer periods from March to October. There are also a number of operators who provide services for the tourist trade sailing around the islands.

Air Services

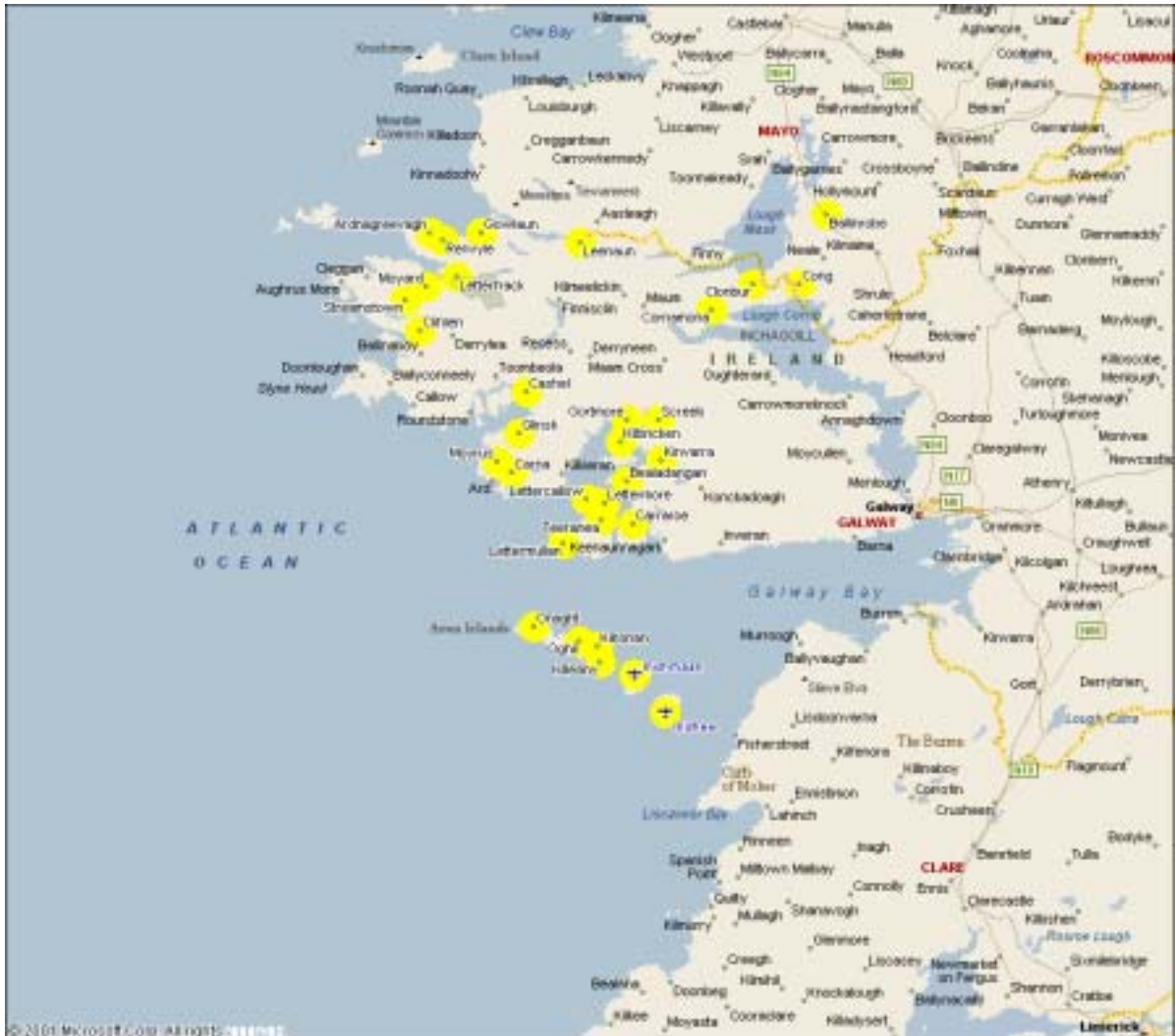
Conamara airport at Inverin is used by Aer Arann to provide flights to the Aran Islands every 30 minutes from May to August and 3 flights daily the remainder of the year. The flight time to the islands is 9 minutes. Aer Arann provides a bus service linking the airport to Galway City.



Graph 21 Ireland's Rail and Road network

5.2. Description of Services

5.2.1 Service Map



Graph 22 Conamara areas served by BEALACH

5.2.2 Characteristics of Services NW Conamara

Mondays only

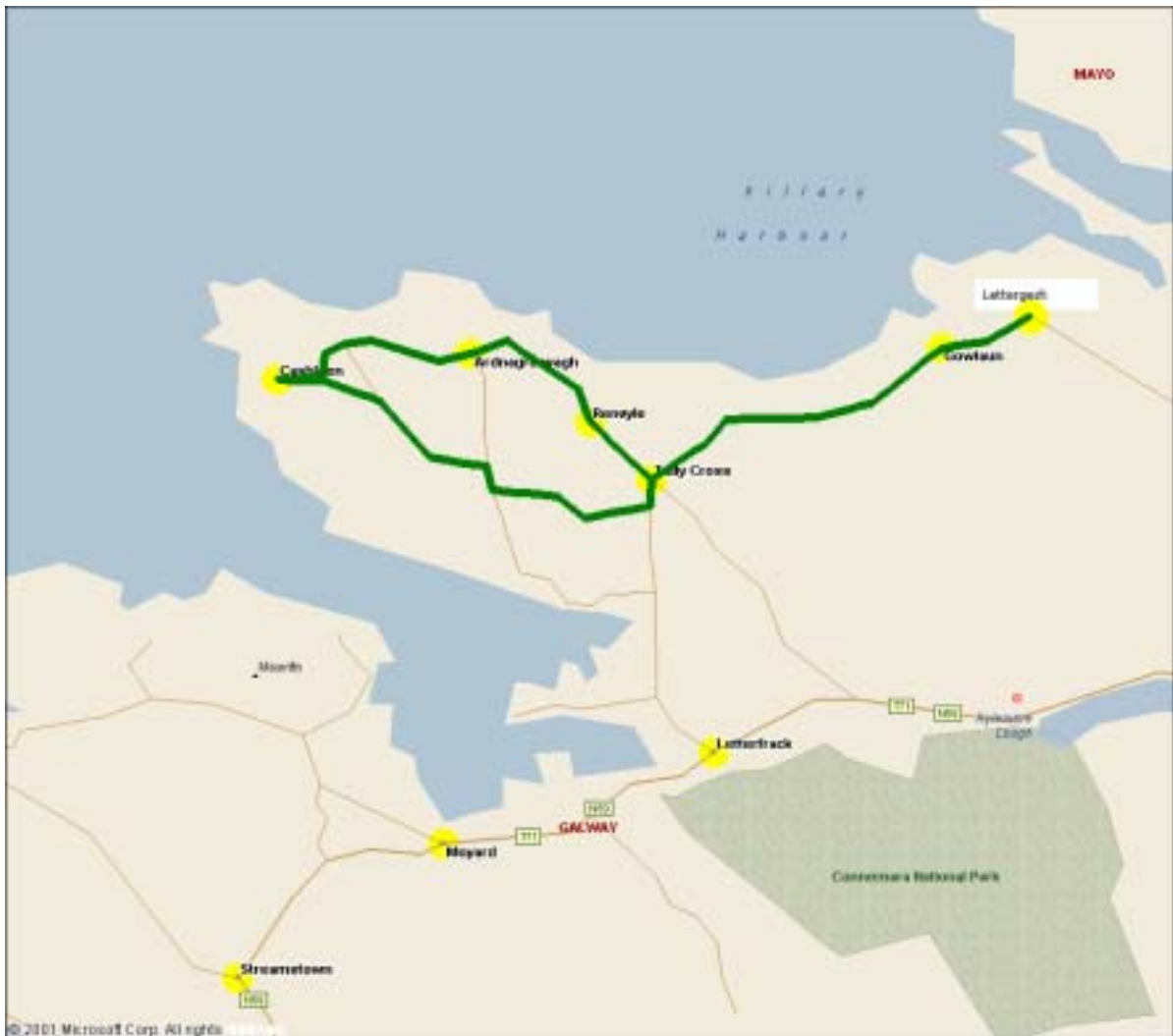
Leenaun to Clifden via Lettergesh, Tullycross and Letterfrack departing at 0930. Return from Clifden, departing at 1500.



Graph 24 Leenaun to Clifden Monday Route

Saturdays only

Lettergesh to Tullycross via Renvyle and Tully to connect with the Michael Nee service to Clifden and Galway departing Tullycross at 0835.



Graph 25 Lettergesh to Tullycross Saturday morning Route

Lettergesh to Letterfrack via Renvyle, Tully and Tullycross to connect with the Bus Éireann service to Clifden departing Letterfrack at 1150.



Graph 26 Lettergesh to Letterfrack Saturday noon Route

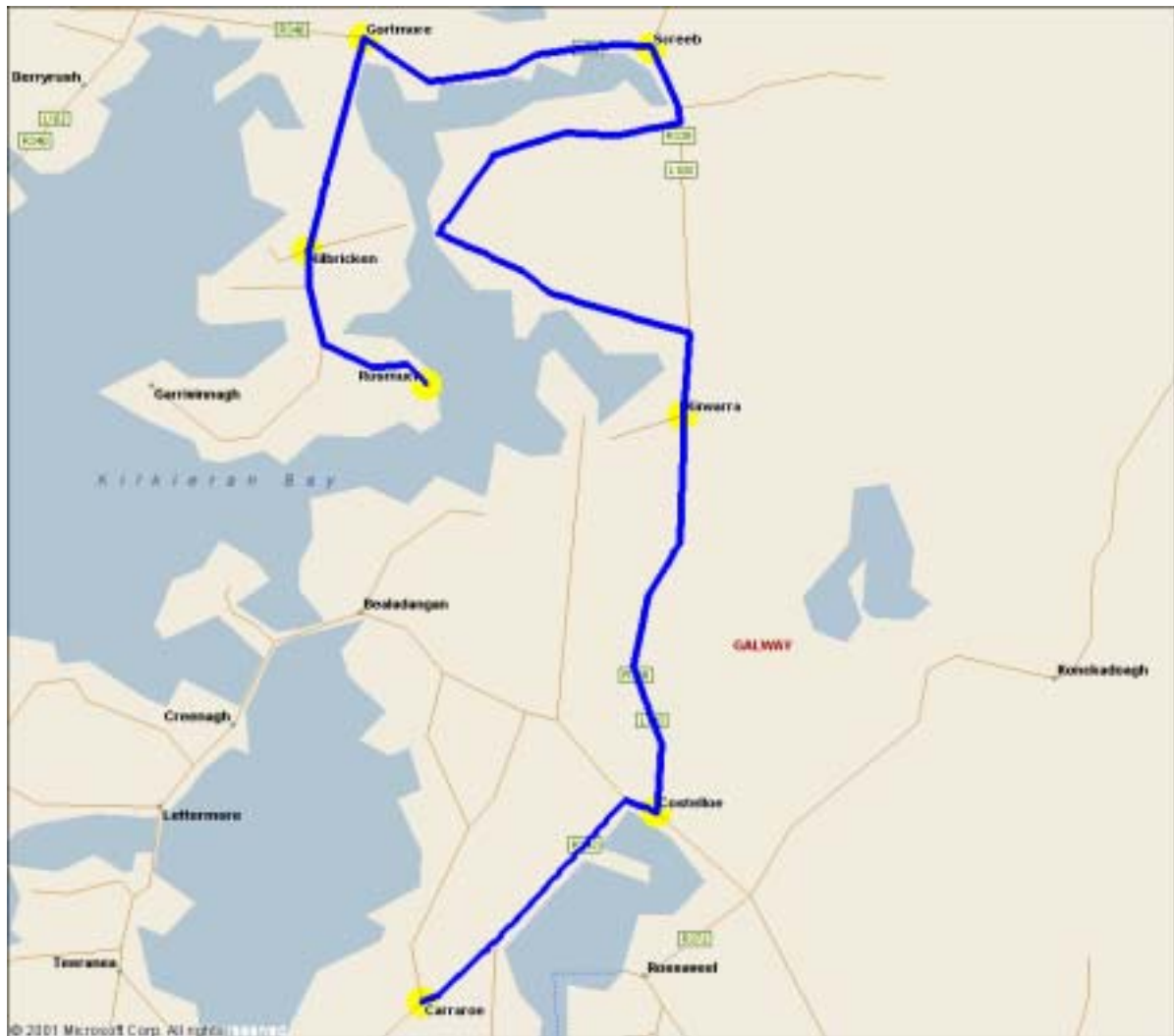
Return from Letterfrack via Tullycross, Tully and Renvyle to Lettergesh departing at 3.45pm connecting from the 3.05pm service departing Clifden.

Return from Tullycross via Tully and Renvyle to Lettergesh departing at 7.30pm connecting with the Michael Nee service from Galway and Clifden departing Galway at 5.30pm.

South Conamara

Tuesdays only

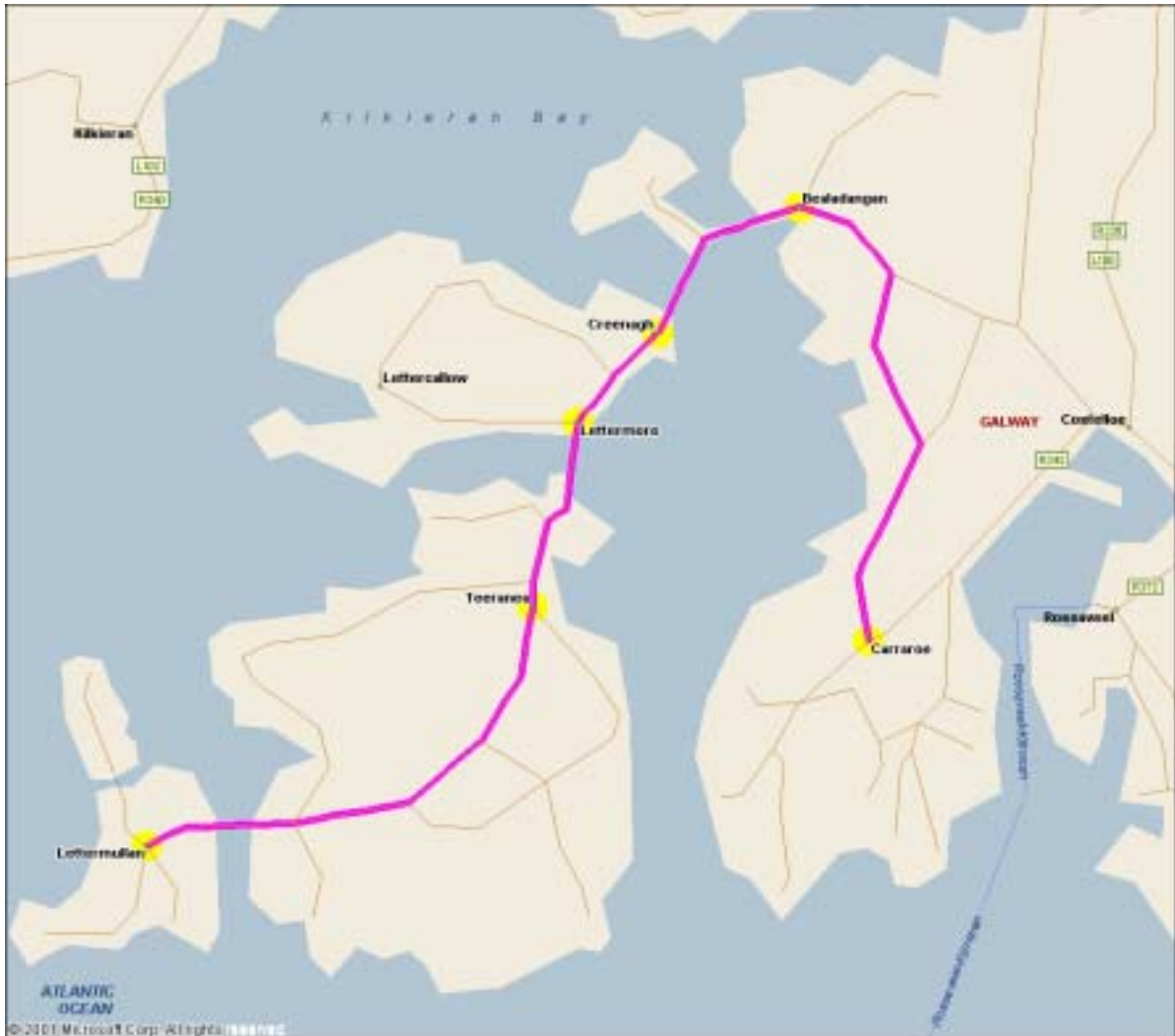
Ros Muc and Camus to Carraroe via Casla. Departing Ros Muc at 1000 with connection to the main Carraroe – Galway bus service at Casla at 1122; arrive in Carraroe at 1130. Return from Carraroe departing at 1330; arrive Ros Muc at 1500 and a second service departing from Casla at 1740 meeting the return bus from Galway; arrive Ros Muc at 1900.



Graph 27 Ros Muc and Camus to Carraroe Route

Wednesdays only

Leitirmullean to Carraroe departing at 1000 enabling connection to Galway city at 1110. Return departing Carraroe at 1300; arrive in Leitirmullean at 1405.



Graph 28 Leitirmullean to Carraroe

Fridays only

Glinsk to Carna via Moyrus, departing Glinsk at 1000; arrive Carna at 1045. Return from Carna at 1330; arrive Glinsk at 1415.

Muighnis to Carna, departing at 1130; arrive Carna at 1200. Return from Carna at 1500; arrive Muighnis at 1530.

Demand responsive service with very short local runs to Carraroe between 1100 and 1530.



Graph 29 Glinsk to Carna



Graph 31 DRT services in the Béal an Daingéan area

Saturdays only

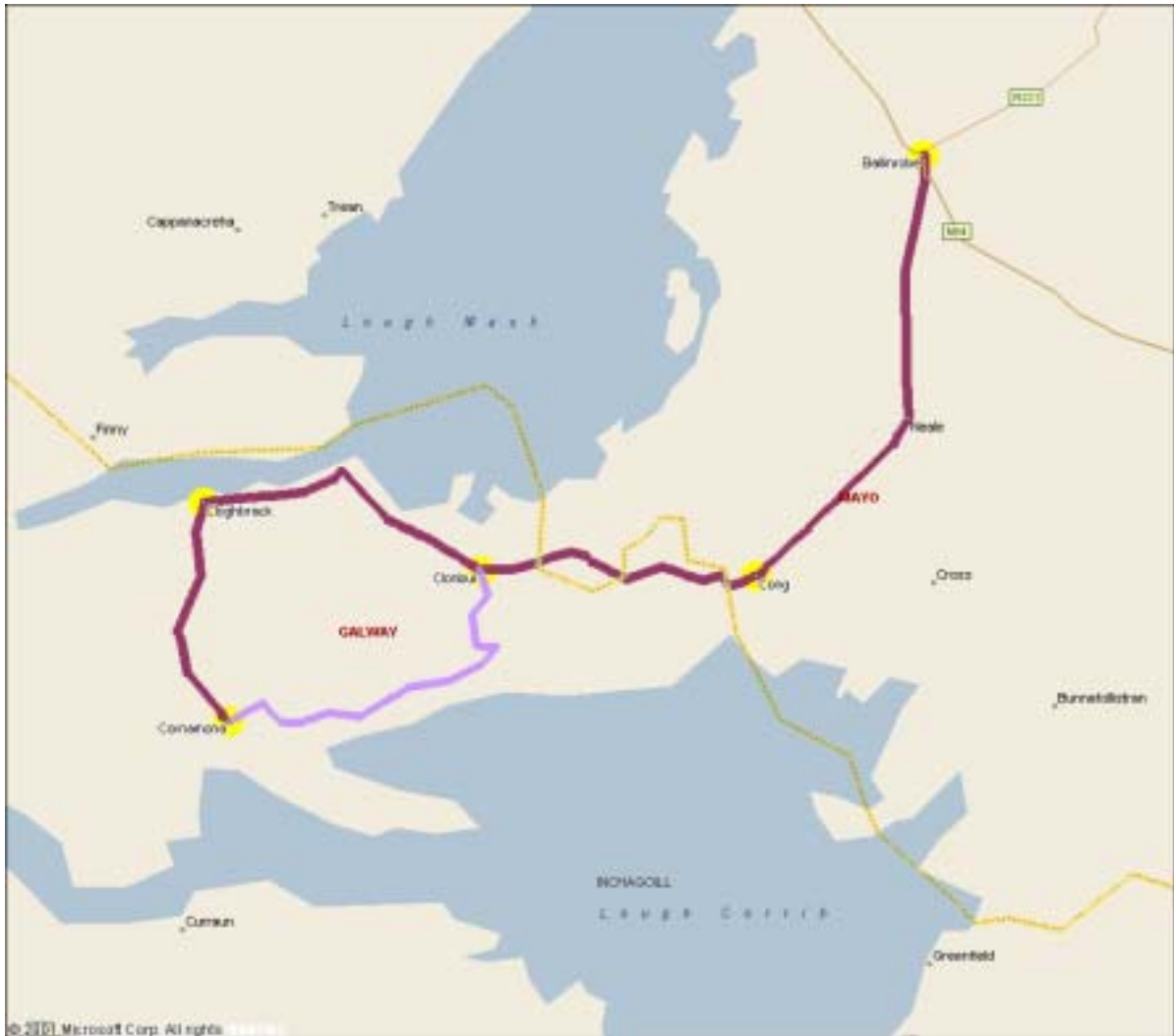
Ros Muc and Camus to Carraroe via Casla. Departing Ros Muc at 1000 with connection to the main Carraroe – Galway bus service at Casla at 1122; arrive in Carraroe at 1130. Return from Carraroe departing at 1330; arrive Ros Muc at 1500 and a second service departing from Casla at 1740 meeting the return bus from Galway; arrive Ros Muc at 1900.

Demand responsive service in the Leitir mullean area between 1000 and 1400.

Dúiche Sheoigheach

Thursdays only

Corr na Móna to Ballinrobe, via Clonbur and Cong, connecting with the service to Headford and Galway at 1025, departing Corr na Móna at 0930; arrive in Ballinrobe at 1045. Return departing Ballinrobe at 1430 to connect with return service from Galway and Headford in Cong at 1453; arrive Corr na Móna at 1545. Every other week this service will travel via Cloughbrack to Clonbur.



Graph 32 Corr na Móna to Ballinrobe Routes

Island services

Inis Mór:

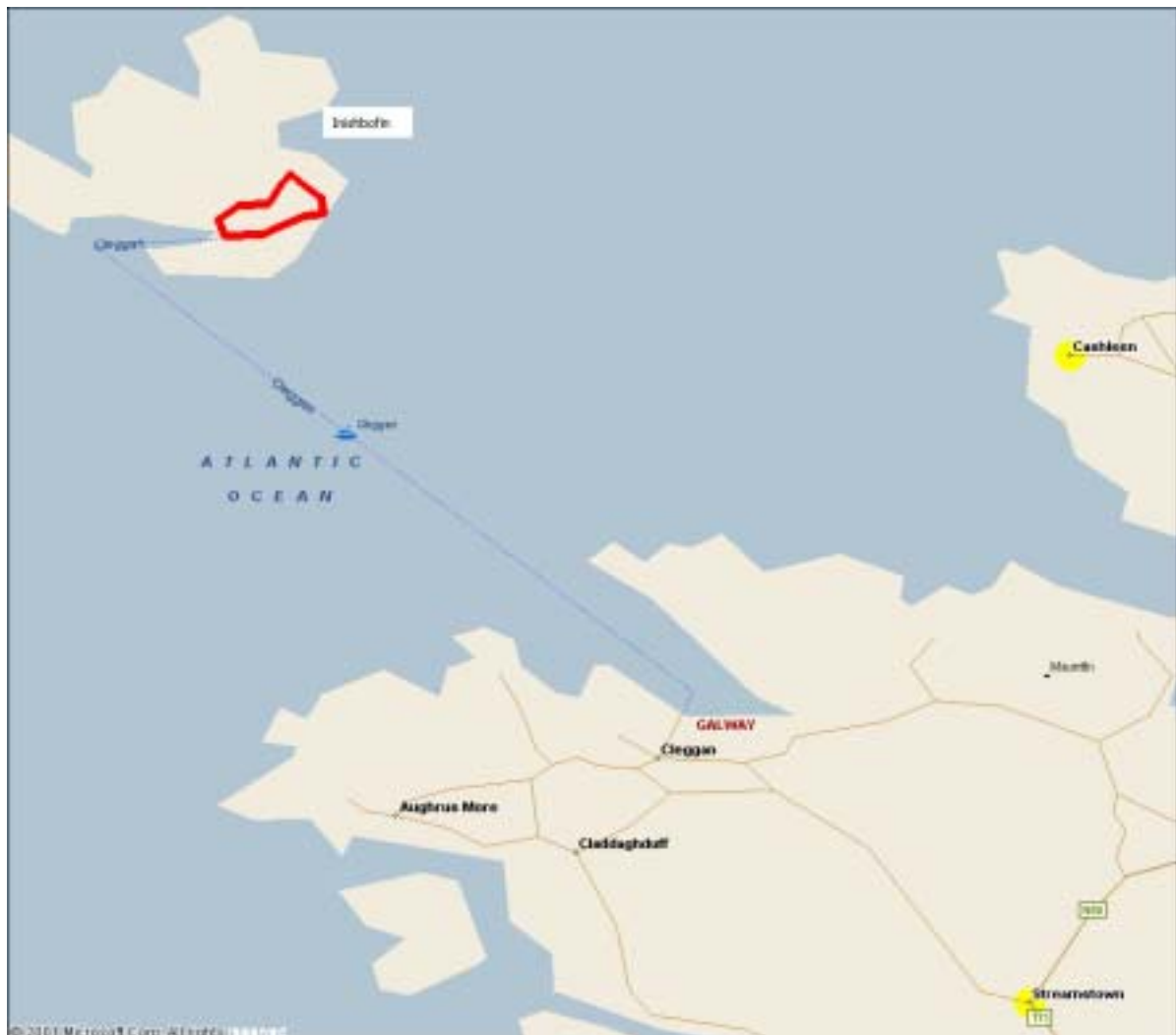
Service to be finalised.

Thursdays and Sundays only

Inishboffin:

Route 1: Cloonamore - East Village - Church Lough - Post Office and return

Route 2: Westquarter - Middlequarter Junction - Post Office and return



Graph 33 Services in Inishboffin

Inis Oirr:

Loop Route: Loch Mor - Furmina - Baile an Chaisleain - An Lorgain - Baile Thiar - Aras Eanna - An Lorgain and return.

Inis Meain:

Figure 8 Route: Dun Feabhra - Baile an Lisin - Baile an Teampaill - Cinn an Bhaile - Moinin na Ruaige (Post Office) - Ceathru an Lisin - Baile an Mhothair (Upper) - Baile an Mhothair (Upper) - Bothair an Museum - Moinin na Ruaige (Post Office).



Graph 34 Services in the Arran Islands

5.2.3 Vehicle(s) in Use

NW Conamara:

One 9 seater minibus with access for wheelchair users.

South Conamara:

Four 14 seater minibuses with access for wheelchair users.

One 18 seater minibus with access for wheelchair users.

One 8 seater minibus with access for wheelchair users.

Dúiche Sheoigheach

One 14 seater minibus without access for wheelchair users (to be adapted).

Island Services

Four (one on each island) 14 seater minibuses without access for wheelchair users.

5.2.4 Fares

Simple flat fares are being charged. These are at 1, 2 and 3 for single fares and 4 and 5 for return fares (see also timetables). Holders of Free Travel Passes issued by the national Department of Social & Family Affairs may travel free of charge. This Pass applies to people over 65 years of age and disabled people; approved companions are also able to travel free of charge.

Users purchase the tickets in advance from the TDC and from local outlets, mostly post offices.

5.3. Stakeholders

CATEGORY	NAME
USERS	<i>Older people</i>
	<i>Disabled people</i>
	<i>Young people (12-19)</i>
	<i>People working in the home</i>
OPERATORS	<i>Local voluntary organisations</i>
	<i>Local private bus and taxi operators</i>
	<i>Bealach (Travel Demand Centre)</i>
PUBLIC AUTHORITIES	<i>Department of Transport</i>
	<i>Údarás na Gaeltachta</i>
	<i>Galway County Development Board</i>
	<i>Western Health Board</i>
OTHER GROUPS	<i>Cumas Teo</i>
	<i>FORUM</i>
	<i>Cashel Community Council</i>
	<i>Local post offices and shops</i>

5.3.1 Operator(s)

There is no on-road competition for local passenger transport services in the area. The only competition is on the interurban services where there is competition between the State operator and a private operator on three routes. However, the local part of each of their routes is different and direct competition is only on part of the main road into Galway City.

There are 19 private coach/minibus hire operators located in the area, most of whom are contracted to provide school transport services and some of whom are contracted to provide services for the Health Board. Five of these operators are providing services under contract to Bealach.

Seven voluntary groups/organisations provide local transport services for the health board as well as for their own members. Six of these are contracted to provide services for Bealach and the other will provide back up for the group in their area.

The following table lists the operators providing services under contract to Bealach as part of the Demonstration Project. The table details the services provided by each operator and their fleet.

Name of operator	Service operated under contract to Bealach	Fleet information
Ballinakill Active Age Club Voluntary Group providing day care services and activities for older people	Mondays only Leenaun to Clifden via Lettergesh, Tullycross and Letterfrack and return. Saturdays only Lettergesh to Tullycross via Renvyle and Tully and return; Lettergesh to Letterfrack via Renvyle, Tully and Tullycross and return.	1 Renault Master 9 seater minibus with passenger lift.
Pléaráca Teo Voluntary Group providing arts and cultural services to local communities in South Conamara.	Saturdays only Ros Muc and Camus to Carraroe via Casla and return; and a second service from Casla to Ros Muc.	1 Ford Transit 14 seater minibus with a passenger lift
Muintearas Voluntary Group providing community development and community education services in South Conamara	Fridays only Demand responsive service in Leitirmór and Gorumna and in the Béal an Daingéan area. Saturdays only Demand responsive service in the Leitirmullean area.	1 Ford Transit 14 seater minibus with a passenger lift
Tom Geary Private operator.	Fridays only Glinsk to Carna via Moyrus, and return. Muighnis to Carna and return.	
Noel McDonagh Private operator.	Wednesdays only Leitirmullean to Carraroe and return.	
Colm Ó Mainín Private operator.	Tuesdays only Ros Muc and Camus to Carraroe via Casla and return; and a second service from Casla to Ros Muc.	14 seater minibus with passenger lift.
Carraroe Coach & Minibus Hire Private operator.	Fridays only Demand responsive service with very short local runs to Carraroe.	8 or a 14 seater minibus with a passenger lift
Holian Travel Private operator.	Thursdays only Corr na Móna to Ballinrobe, via Clonbur and Cong and return. Every other week this service travels via Cloughbrack to Clonbur.	14 seater minibus
Co-op on Inis Mor	To be finalised	14 seater minibus
Co-op on Inis Oirr	Loop Route: Loch Mor - Furmina - Baile an Chaisleain - An Lorgain - Baile Thiar - Aras Eanna - An Lorgain and return.	14 seater minibus
Co-op on Inis Meain	Figure 8 Route: Dun Feabhra - Baile an Lisin - Baile an Teampaill - Cinn an Bhaile - Moinin na Ruaige (Post Office) - Ceathru an Lisin - Baile an Mhothair (Upper) - Baile an Mhothair (Upper) - Bothair an Museum - Moinin na Ruaige (Post Office).	14 seater minibus
Co-op on Inishbofin	Route 1: Cloonamore - East Village - Church Lough - Post Office and return Route 2: Westquarter - Middlequarter Junction - Post Office and return	14 seater minibus

5.3.2 Public Authorities

The following table details the public authorities involved in Bealach and their roles in the demonstration project.

Name of public authority	Main function	Role in Bealach
Department of Transport	National department responsible for all road, rail and air transport in the State.	Provides financial support under the national Rural Transport Initiative.
Údarás na Gaeltachta	Regional development agency responsible for the social, economic and cultural development of the Irish speaking parts of the State.	Provides management support and limited financial support for the demonstration project. Also involved in the planning and development of services.
Galway County Development Board	Preparation of an integrated development plan for County Galway and the co-ordination of its implementation.	Provides management support and limited financial support for the demonstration project. Also involved in the planning and development of services.
Western Health Board	Responsible for all health related activities, including transport, in Counties Galway, Mayo and Roscommon.	Provides management support and limited financial support for the demonstration project. Also involved in the planning and development of services.

The tendering process involved the following procedures:

Direct mail shot to the voluntary groups and private operators in the service areas. Only those in each service area were invited to tender. The respondents were then rated firstly on whether they offered a vehicle accessible to wheelchair users and secondly on the price quoted. Negotiations then took place with the successful operator for each route and a contract was prepared and signed following agreement. Copies of the contracts are attached in the Appendix to this report.

5.3.2.1 School transport

School transport services are not included in Bealach.

5.3.2.2 Social Sector transport

There is one service, which combines the clients of a day care centre with a public service. This is the service operated on Mondays from Leenaun to Clifden in NW Conamara. The basis of the service is to enable older people to attend the day care centre and there are a limited number of places available to the general public.

5.3.3 Others

Cumas Teo is a local development agency responsible for social, economic and cultural development in the Irish speaking part of Conamara, specifically South Conamara, Dúiche Sheoigheach and the three Aran Islands (Inis Mor, Inis Oirr and Inis Meain). Cumas Teo has a dedicated member of staff working part time on the preparation, planning and management of the demonstration project. It is also making available a limited amount of financial support for the services operated in the demonstration project.

FORUM is a community development project responsible for actions in NW Conamara. Its Deputy Director is directly involved in the preparation, planning and management of the demonstration project. It is also involved in day care services for older people and disabled people.

Cashel Community Council is an elected local council, which is responsible for community development in an area, which is at the interface between the Irish speaking and English speaking areas of Conamara. It has made available office space for the location of Bealach's Travel Dispatch Centre. It also involved in the preparation, planning and management of the demonstration project. Local post offices and shops provide outlets for the tickets, which users of the services must purchase in advance, as well as making available timetable leaflets and displaying posters advertising the services in their area.

5.3.4 Users

The target groups for the services provided in the demonstration project are listed below. They reflect the priorities of the local community development groups and of national government departments which provide financial support for them.

- Older people
- Disabled people
- Young people (12-19)
- People working in the home

In terms of the objectives of the transport services being provided, the table below indicates the types of services and the opportunities made available to the users.

More local transport services	Ability to make use of free travel pass
	Enable access to local shops and facilities
	Reduce isolation
Potential for connecting to longer distance bus services	Enable access to regional centre and to national bus and train services
Operation of vehicles equipped with passenger lift	Accessibility for people with reduced mobility, including wheelchair users
Improve provision of public transport information	Ability to choose appropriate services

5.4. Special Categories

5.4.1 On-demand services

All services operated by Bealach have to be booked in advance. Where necessary the vehicle will divert to collect people from their home and return them to their home.

Booking procedures and policies:

- In order to make a booking, users have to call the TDC between 1000 and 1300. Bookings can also be made by letter, fax or e-mail. Users may make a regular booking for the same trip at a frequency chosen by themselves. They are then obliged to inform the TDC when they do not wish to travel.
- Minimum advance time for reservations is the morning prior to the day of the trip to be made.
- Policies concerning denial of service for reasons of capacity and policies about no-shows or late appointments have not yet been determined and such events have not yet occurred.

Travel Dispatch Centre:

- The TDC is located in the Health and Resource Centre at Cashel. Bealach employs the staff of the TDC with funding under the Rural Transport Initiative and ARTS.
- The services provided include a booking service for services operated under contract to Bealach and information service on all local public transport services. The personnel comprises one full time administrator/dispatcher with a dispatcher working on a sessional basis as back up to cover for holidays and illness. The hours of operation are from 0900 to 1700 with the booking line open from 1000 to 1300.
- In order to manage the dispatch and administrative functions of the TDC, a specialist software package has been installed. This software is linked with the mapping package and accounts package to provide a comprehensive system. The service operators receive by fax or e-mail a full passenger list for each service by 1600 on the day prior to the service.

5.5. Annex

Cashel Health & Resource Centre,
Cashel, Co. Galway.
095 31966

Details of local services**NW Conamara****Mondays only**

Leenaun to Clifden via Lettergesh, Tullycross and Letterfrack departing at 0930. Return from Clifden, departing at 1500.

Saturdays only

Lettergesh to Tullycross via Renvyle and Tully to connect with the Michael Nee service to Clifden and Galway departing Tullycross at 0835.

Lettergesh to Letterfrack via Renvyle, Tully and Tullycross to connect with the Bus Éireann service to Clifden departing Letterfrack at 1150.

Return from Letterfrack via Tullycross, Tully and Renvyle to Lettergesh departing at 3.45pm connecting from the 3.05pm service departing Clifden.

Return from Tullycross via Tully and Renvyle to Lettergesh departing at 7.30pm connecting with the Michael Nee service from Galway and Clifden departing Galway at 5.30pm.

Dúiche Sheoigheach**Thursdays only**

Corr na Móna to Ballinrobe, via An Fhairche and Conga, connecting with the service to Headford and Galway at 1025, departing Corr na Móna at 0930; arrive in Ballinrobe at 1045. Return departing Ballinrobe at 1430 to connect with return service from Galway and Headford in Conga at 1453; arrive Corr na Móna at 1545. Every other week this service will travel via An Chloch Bhreac to An Fhairche.

South Conamara

Wednesdays only

Leitir Mealláin to An Cheathrú Rua departing at 1000 enabling connection to Galway city at 1115. Return departing An Cheathrú Rua at 1300; arrive in Leitir Mealláin at 1405.

Fridays only

Glinisce to Carna via Muighros, departing Glinisce at 1000; arrive Carna at 1045. Return from Carna at 1330; arrive Glinisce at 1415.

Muighnis to Carna, departing at 1130; arrive Carna at 1200. Return from Carna at 1500; arrive Muighnis at 1530.

Demand responsive service with very short local runs to An Cheathrú Rua between 1000 and 1230 and between 1400 and 1630. This enables connections with the service to Galway city at 1115, returning at 1555.

Demand responsive service in Leitir Móir and Gorumna between 0830 and 1400 and in the Béal an Daingéan area between 1430 and 1700.

Ros Muc and Camus to An Cheathrú Rua via Casla. Departing Ros Muc at 1000 with connection to the main An Cheathrú Rua – Galway bus service at Casla at 1122; arrive in An Cheathrú Rua at 1130. Return from An Cheathrú Rua departing at 1330; arrive Ros Muc at 1500 and a second service to Casla departing from Ros Muc at 1600 and returning from Casla at 1740 meeting the return bus from Galway; arrive Ros Muc at 1900.

Saturdays only

Ros Muc and Camus to An Cheathrú Rua via Casla. Departing Ros Muc at 1000 with connection to the main An Cheathrú Rua – Galway bus service at Casla at 1122; arrive in An Cheathrú Rua at 1130. Return from An Cheathrú Rua departing at 1330; arrive Ros Muc at 1500 and a second service departing from Casla at 1925 meeting the return bus from Galway; arrive Ros Muc at 2045.

Demand responsive service in the Leitir Mealláin area between 1000 and 1400.

6. National report Spain – RUTO Demonstration

6.1. General description of the demo

The Ruto Demonstration is based on the integration of school and conventional bus services. The availability of well organised school transport services will provide other users with a twice daily service between the main townships of the area, where school centres are located.

Considering the nature of the economy in the area, which is based on farming activities, and the fact that people do not commute to go to work every day, the school timetable is perfectly suitable for trips to deal with administrative matters, medical care, shopping and other similar needs. This measure will both ensure the improvement of conventional transport services and increase the likelihood of transport operators obtaining better profits.

6.2. Characterization of the RUTO area

The Spanish demonstration RUTO (Rural Transport in the East of Ourense) will be implemented in a rural area within the autonomous region of Galicia.

Located in the Northwest corner of Spain and lying to the north of Portugal, Galicia has 29.434 sq kms, and almost three million inhabitants. This means a population density of about 93 inh/sq km for the region as a whole.

However, the distribution of the population is very unequal. The two more urban and dynamic western provinces (A Coruña and Pontevedra) account for 74% of the total population of the region. while, the interior provinces of Lugo and Ourense (see map 1) only account for 26%, and the characteristics of these provinces are becoming increasingly rural. (see table 1).

Table 1: Population of the 4 provinces of Galicia

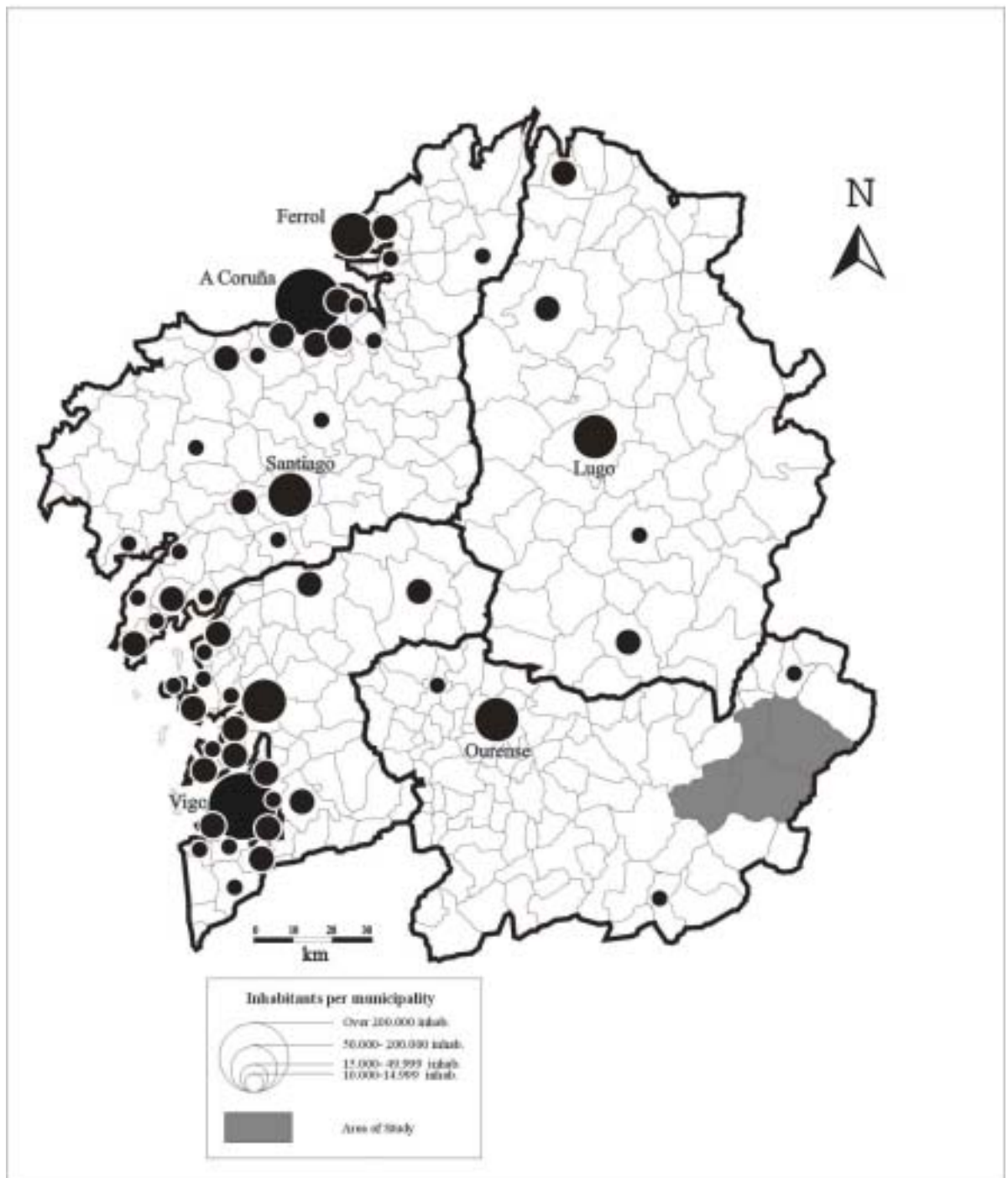
Province	Population
A Coruña	1.096.027
Lugo	357.648
Ourense	338.446
Pontevedra	903.759
Galicia	2.695.880

Source: Galician Institute of Statistics. 2001

The RUTO area comprises four municipalities (Viana do Bolo, Vilariño de Conso, O Bolo and A Veiga), located in the East of the province of Ourense.

The total population is 7.386 inhabitants, in an area measuring 852,3 sq km. This means an overall population density of 8,67 inh/sq km. The area, therefore, meets the EU definition of low-density areas (less than 10 inh/sq km).

Map 1. Population by municipalities in Galicia
(only higher than 10.000 inh.)



Since the 60s, the RUTO area has suffered; and is still suffering, from the continuous migration of the more active age groups to the provincial capital (Ourense) to Western Galicia or further afield.

The terrain is mountainous, with a number of rivers and reservoirs running from south to north along the main valleys. It is naturally isolated from the main political and socio-economic regional centres and this isolation is difficult to overcome because of the mountains and deficiencies in infrastructure.

Agriculture and farming are still the most important activities. The secondary sector is very weak, and there are only a few family builders. Services are concentrated in Viana do Bolo, which is the only settlement with commercial and service facilities of any importance. The rest of the RUTO area is composed of townships, villages and very small hamlets, where mobility is of key importance in obtaining a minimum quality of life for the local communities.

As mentioned above, the area of study consists of 4 municipalities, all with very low densities of population and none with as many as 15 inh/sq km. However, table 2 shows that a distinction can be made between Viana do Bolo and O Bolo, the more densely populated municipalities, and A Veiga and Vilariño de Conso.

Table 2: Population, extension and density of the 4 municipalities in RUTO

Municipality	Pop 2001 (inh)	Extension (sq km)	Density (inh/sq km)
Viana do Bolo	3893	270,4	14,40
O Bolo	1327	91,2	14,55
A Veiga	1367	290,5	4,71
Vilariño de Conso	799	200,2	3,99
TOTAL	7386	852,3	8,67

Source: Galician Institute of Statistics. 2001

6.2.1 Population and mobility by municipality

Viana do Bolo has just over half the population and includes the largest township, namely Viana itself which, with 1.528 inhabitants, is the only centre which can be even remotely described as urban.

The four municipalities are further subdivided into parishes and even smaller "population entities" or hamlets as shown in the following table. Of the 116 hamlets, only 9 have over 100 inhabitants.

Table 3: Parishes and hamlets in the 4 municipalities in RUTO

Municipality	No of parishes	No of hamlets	No hamlets >100 inh)
Viana do Bolo	35	50	3
O Bolo	18	28	4
A Veiga	21	21	0
Vilariño de Conso	10	17	2

Source: Galician Institute of Statistics. 2001

As is common in areas which have suffered from substantial migration a very high proportion of residents are elderly:

Table 4: Main age groups in the 4 municipalities in RUTO

Municipality	0-19 years	Adults 20-64	Elderly (65+)
	%	%	%
Viana do Bolo	18,3	52,1	29,6
O Bolo	11,3	45,3	43,4
A Veiga	10,5	43,8	45,7
Vilariño de Conso	14,5	51,2	34,3

Source: Galician Institute of Statistics. 2001

Although the age groups are not consistent across all municipalities, the high proportion of third age residents is apparent, and with only about half the population falling into the main economically active age groups (ie those most likely to own some form of vehicle) the need for public services is obvious. Furthermore, the older age groups are dominated by women who are even less likely to hold driving licenses and have access to private transport.

Map 2. The RUTO area. Parish divisions.



6.2.2 Economic activities

The RUTO area is primarily a rural economy based on farming. Most of the population is engaged in this type of activity, but at the level of subsistence farming rather than of commercial exploitation.

There are signs of incipient commercial activities but in terms of turnover and numbers of employees they are insignificant. Most of the business are small familiar affairs (eg shops) with no employees. There are however a few small and medium-sized enterprises (PYMES).

The unemployment rate varies from 19% in A Veiga to 40% in Vilariño. It is likely that some people engaged in subsistence farming may claim to be unemployed.

Table 5 : Main labour related rates. Total figures

TOTAL	O BOLO	A VEIGA	VILARIÑO	VIANA
	%	%	%	%
Activity rate	28	34	36	37
Occupation rate	23	28	21	29
Unemployment rate	19	19	40	24

Source: Galician Institute of Statistics (1996)

In conclusion, the population structure shows that there are more economically inactive residents than active ones (including the young, housewives and the elderly as well as those who are out of work).

6.2.3 Population and motorization as a mobility indicator

Car ownership levels are also relevant in determining public transport requirements. These are much lower in the RUTO municipalities than the average for both the province of Ourense and the Galicia region as a whole.

Table 6: Car ownership (per 1000 inh.) in the RUTO area, province of Ourense and Galicia.

Municipality	Motorization rate (per 1000 inh.)
Bolo, O.	460,44
Veiga, A.	420,63
Viana do Bolo.	474,96
Vilariño de Conso.	460,76
OURENSE	569,66
GALICIA	508,88

Source: Anuario Económico de España 2001. La Caixa.

6.2.4 Transport networks and infrastructures

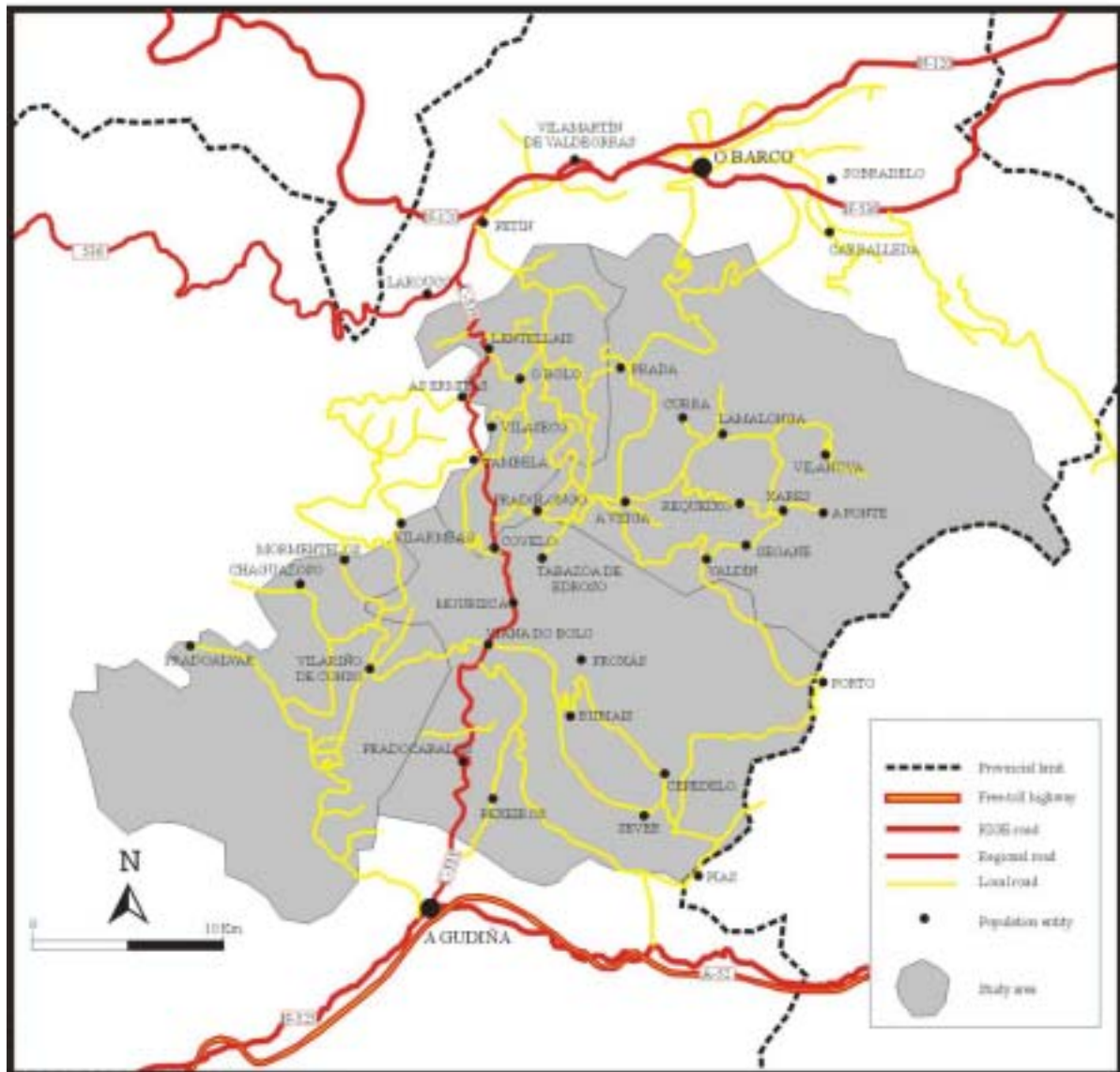
There is no railway passing through the area. The nearest stations are:

- the A Coruña-Ourense-Madrid line to the south at A Gudiña (21 kms south of Viana do Bolo).
- the Ponferrada-Ourense line to the north at O Barco (37kms north of A Veiga) and at A Rua (about 35 km north of Viana do Bolo).

The nearest motorway is the toll-free Rías Baixas expressway which runs from west to east joining the South of Galicia with Madrid, and passes close to A Gudiña to the south. It is closely parallel to the old national road the N525.

The other road linking the RUTO area with the provincial capital to the west and the rest of Spain to the east is the N-120, which runs well to the north of the area passing close to A Rúa and O Barco. The principal road running north south through the area, links the N120 at A Rúa with the N525 at A Gudiña. The C-533 constitutes the main link to the outside world and, although only a regional road, is in excellent condition and well-adapted to the demands of modern traffic. The remainder of the local network, serving the rural areas which are not connected by the C-533, consists of narrow, often poorly surfaced roads. But the situation has improved considerably over the last 15-20 years, as rural tracks have gradually been asphalted over.

Map 3. Transport and communication network.



6.2.5 Main trip attractors

Commercial and business centres:

Within the RUTO area, Viana do Bolo is the main commercial and business centre. Data from the Galician Institute of Statistics indicate that there are 60 licences for industrial activities, 90 for minor commercial activities and 37 for “bars” and restaurants. There are also 6 banks. But in reality, these licences are usually for family businesses with no employees and which often have only a very short life.

An additional source is the Ardán-Galicia 2000 report, which lists all enterprises with a turnover over 318.500 and lists the following such businesses in the RUTO area:

- Viana do Bolo - 1 supermarket, 1 manufacturing plant, 1 road freight transport company.
- A Veiga - 1 construction company, 1 petrol station, 1 hotel (for hunting and field sports)
- O Bolo 1 plumbing business

Education Centres:

There are four primary schools in the area, one in each municipality. There is also a secondary school in Viana do Bolo. Since secondary education is mandatory, the presence of this school is important for the area. There is also a travelling nursery school (for children aged 3-6 years) which provides services once a week. All of the above (nursery, primary and secondary schools) are state-owned. There is a private nursery located in Viana do Bolo, but it only accepts children from the township.

This situation means a sizeable level of school related traffic, since pupils need to travel into the main townships from the outlying settlements.

Table 7: Education centres

Name	Location/municipality	Ownership	Education level
CEIP do Bolo	O Bolo	State	Nursery Primary education
CEIP Eduardo Ávila Bustillo.	A Veiga	State	Nursery Primary education
CEIP de Vilariño de Conso.	Vilariño de Conso.	State	Child education Primary education
CEIP do Bibeí	Viana do Bolo	State	Nursery Primary
IES de Viana do Bolo	Viana do Bolo	State	Secondary: 1st & 2nd Stages. Former 3 ^o baccalaureate level Pre-university level Professional. Administrative 1st, 2nd & 3rd levels

Source: Information provided by Consellería de Educación. Xunta de Galicia. (2003)

Sanitary and health services:

There is a primary care Health Centre in the main village/township of each municipality. There are also residential homes for the elderly. Only one of these (in O Bolo) is state owned, the others are private but have an agreement with Xunta de Galicia (regional administration) to offer some state sponsored places. There is also a social centre in Viana do Bolo which acts as a community centre for the four municipalities.

Table 9: Sanitary and health services centre locations

Name	Location (place, parish, municipality)	Attention
Primary Health Centre of Saúde do Bolo	O Bolo, <i>O Bolo</i> , O Bolo .	Primary
Primary Health Centre of Saúde da Veiga	A Veiga, <i>A Veiga</i> , A Veiga .	Primary
Primary Health Centre of Saúde de Vilariño de Conso.	Vilariña de Conso, <i>Vilariño de Conso</i> , Vilariño de Conso .	Primary
Primary Health Centre of Saúde de Viana do Bolo.	Viana do Bolo, <i>Viana do Bolo</i> , Viana do Bolo .	Primary

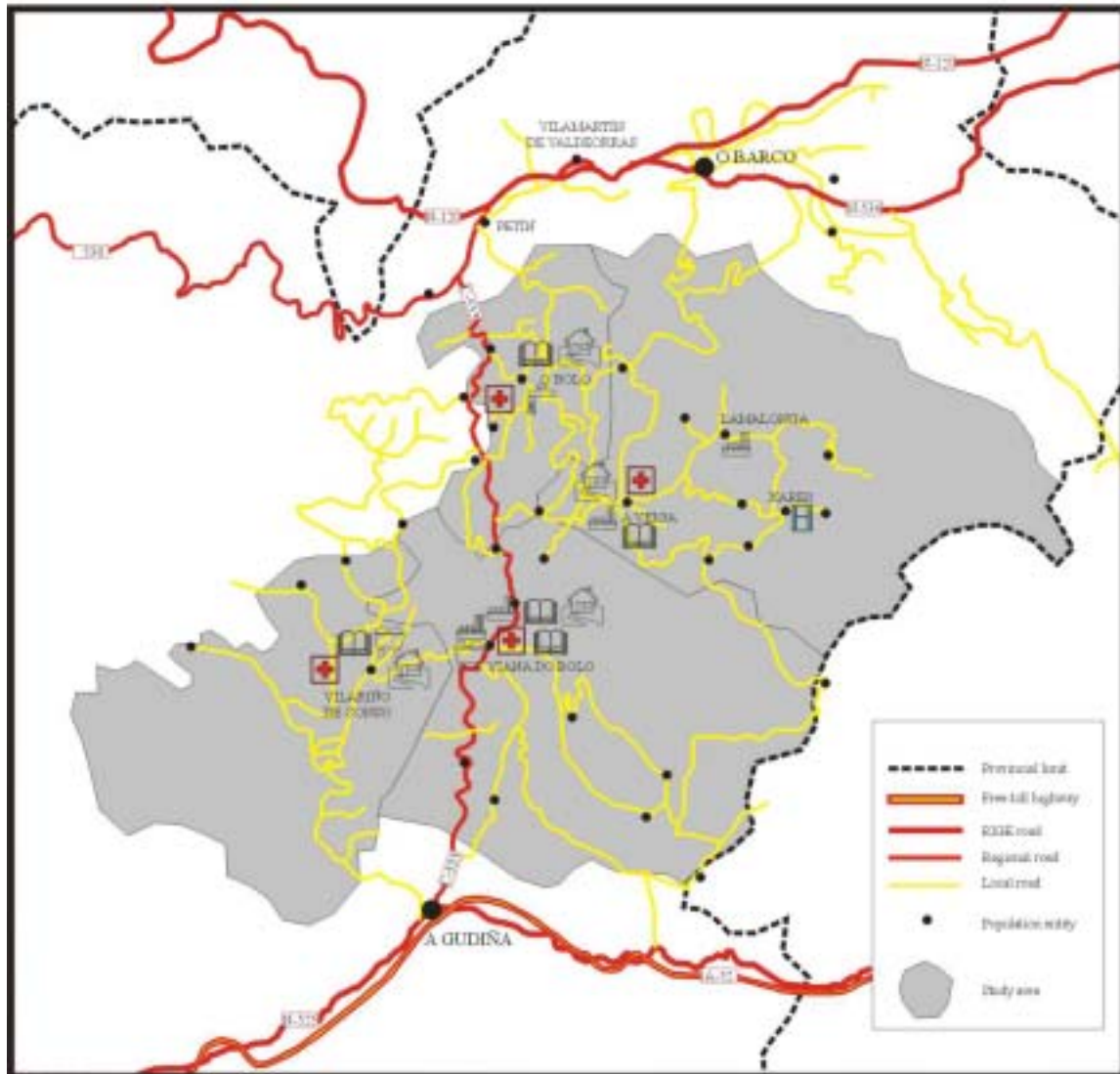
Source: Information provided by Consellería de Sanidade. Xunta de Galicia. (2003)

Table 10: Social services centre locations

Name	Location (place, parish, municipality)	Titularity	Capacity
Residential Home for the Elderly of O Bolo.	O Bolo, <i>O Bolo</i> , O Bolo .	Public	125 people
Residential Home for the Elderly of A Veiga.	A Veiga, <i>A Veiga</i> , A Veiga .	Private	54 people
Residential Home for the Elderly of Vilariño de Conso.	Vilariña de Conso, <i>Vilariño de Conso</i> , Vilariño de Conso .	Private	48 people
Residential Home for the Elderly of Viana do Bolo.	Viana do Bolo, <i>Viana do Bolo</i> , Viana do Bolo .	Private	50 people

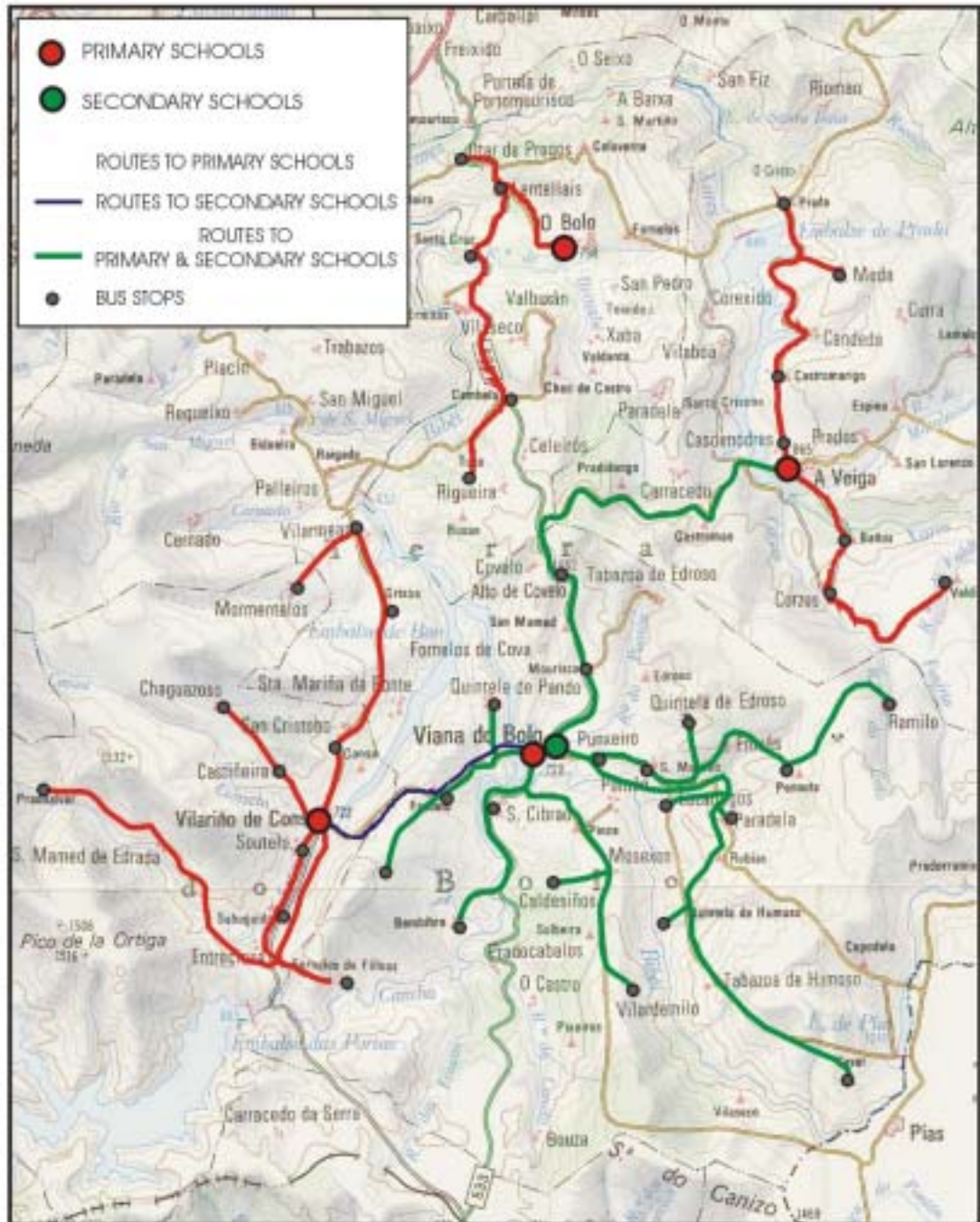
Source: Information as a courtesy of Consellería de Asuntos Sociais, Emprego e Relacións Laborais. Xunta de Galicia. (2003)

Map 4. Location of the main activity centers attracting mobility.



6.3. Description of services

6.3.1 Service Map



6.3.2 Characteristics of services

Routes usually end in the main township of each municipality at the primary schools. The only secondary school is in Viana do Bolo, so there are some routes starting from Vilariño de Conso and A Veiga that end here. Secondary students of O Bolo depend on another secondary school located outside of the RUTO area and are not included in the demonstration. The table below shows routes and the basic data relating to them.

Table 8 Routes included in RUTO and basic data

TRANSPORT COMPANY	ROUTES (STUDENTS)	VILARIÑO DE CONSO	TOTAL STUDENTS	BUS CAPACITY	FREE PLACES	KM
A. BIBEY	MORMENTELOS (3), VILARMEAU (1), GRIXOA (6), SAN CRISTOVO (3), VILARIÑO (9)	PRIMARY SCHOOL	22	55	33	28
A. BIBEY	CASTIÑEIRA(3), CHAGUAZOSO (7)	PRIMARY SCHOOL	10	15	5	22
A. BIBEY	PRADOALVAR(6), SOUTELO (2), SOUTOGRANDE (1), SABUGUIDO (2), FORNELOS DE FILLOAS (3)	PRIMARY SCHOOL	6	14	8	20
ATVISA		PRIMARY SCHOOL	8	14	6	26

TRANSPORT COMPANY	ROUTES (STUDENTS)	VIANA DO BOLO	TOTAL STUDENTS	BUS CAPACITY	FREE PLACES	KM
ATVISA	SAN CIBRAO(4), BEMBIBRE(3)	PRIMARY SCHOOL - SECONDARY SCHOOL	7	14	7	16
ATVISA	TERROSO(1), PUNXEIRO(4), SAN MARTIÑO(3), QUINTELA DE EDROSO(4), PERNOUTA(4), RAMILO(2)	PRIMARY SCHOOL - SECONDARY SCHOOL	18	25	7	40
A. BIBEY	VILARDEMILO(2), CALDESIÑOS(1)	PRIMARY SCHOOL - SECONDARY SCHOOL	3	15	12	24
ATVISA	A VEIGA (18), ALTO DO COVELO(2), MOURISCA(4), AFORAS DE VIANA(6)	PRIMARY SCHOOL - SECONDARY SCHOOL	30	55	25	40
ATVISA	VILARIÑO DE CONSO(24)	SECONDARY SCHOOL	24	55	31	20
ATVISA	FRADELO(5), ARDAXE(2), QUINTELA DO PANDO(3)	PRIMARY SCHOOL - SECONDARY SCHOOL	10	14	4	14
ATVISA	SEVER, UMOZO(3), RUBIAIS(1), LOUZAREGOS(2)	PRIMARY SCHOOL - SECONDARY SCHOOL	6	14	8	36

TRANSPORT COMPANY	ROUTES (STUDENTS)	A VEIGA	TOTAL STUDENTS	BUS CAPACITY	FREE PLACES	KM
ATVISA	CORZOS(2), VALDIN(2), BANOS(5), CASDENODRES(2), CASTROMARIGO(1), MEDA(2), PRADA(3)	PRIMARY SCHOOL	11	14	5	13
ATVISA		PRIMARY SCHOOL	8	14	6	22

TRANSPORT COMPANY	ROUTES (STUDENTS)	O BOLO	TOTAL STUDENTS	BUS CAPACITY	FREE PLACES	KM
ATVISA	LENTELLAIS (3), OUTARDEPREGOS (3), STA CRUZ (1), CAMBELA (4), BUXAN (3)	PRIMARY SCHOOL	12	15	3	44

TOTAL			175	333	160	365
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Timetable: The timetable for services included in RUTO are based on school needs. The morning service arrives at school centres by 9.30am while the afternoon services returning to the villages and settlements leave the main townships at 16.30. The services run from Monday through Friday. There are no services at weekends, on public holidays, or when the schools are closed.

Stops: The number of stops depends on the route and the territory covered, ranging from one to from six (see basic data table), excluding the terminal points where schools are located. Routes vary in length, from 13 km to 40 km; the average distance is 23.8 km and the total distance covered each morning or afternoon is 380 km.

There is usually one stop per settlement, located on the main road in small villages and at the school centres in the main townships. The only town with two stops is Viana do Bolo, because there are two schools centers, one each at primary and secondary levels.

Vehicles: Fourteen vehicles are used in total, all with 14 or more seats. 14 or 15 seater minibuses are used on 10 routes, on one routes the bus seats 25 and three routes use 55 seater buses. The total capacity on all routes combined is 333 seats and the total number of students at mandatory schooling levels in the current school period is 175 leaving a total of 160 spare seats for other passengers. The number of spare seats varies by route ranging from 3 to 33 seats (see basic data table above). According to current school transport laws, buses must not be more than 16 years old, and here the average number of years in service is under ten.

Fares: School fares for students at compulsory levels (6 to 16 years) are financed by the Regional Education Administration which contracts services with the transport company directly. Students from non-compulsory levels (16-18) usually have personal transport grants from the Education Administration (of about 360 per year). Other passengers will pay a single fare of 1 per trip. A 20-trips pass with a 20% discount (total price 16) will also be available.

6.4. Stakeholders

CATEGORY	NAME
<p>Users: as the measures in RUTO are based on the integration of regular and school services, users have been identified separately as regular users and students. Parent associations have been included as users users because they represent the interest of minors</p>	<p>Regular users, individuals who live in the demonstration area and some of whom already use regular PT services</p> <ul style="list-style-type: none"> - Users with current access to regular PT services - Users without current access to regular PT services
	<p>Students – students of primary (6-12 years old) and secondary (12-16 years old) compulsory levels who use the school services which will be included in the integrated transport scheme.</p>
<p>Operators: individuals or companies running current PT or school services in the area.</p>	<p>Transport companies operating regular PT services</p>
	<p>Transport companies operating School services</p>
<p>Public authorities: All public authorities and administrations involved in the area. Basically, split between administrations with transport competencies and those with territorial competencies</p>	<p>Regional transport administration: responsible for all the PT services running in a given a region.</p>
	<p>Regional Education administration: organises and finances the school transport services.</p>

6.4.1 Transport Operators

There are two transport companies participating in the RUTO demonstration. They were both involved in regular or school transport services in the area before RUTO was designed. As RUTO only concerns school services which already existed in the area, the companies involved are those operating these existing services.

ATVISA (Agrupación de Transporte de Viajeros, S.A)

ATVISA is a private transport company operating 12 of the routes included in RUTO (see basic data table 8 included in point 6.3.2). It is considered to be a medium-sized company, with 22 buses. It works only in this geographic area. Beside the school services, ATVISA also runs the main regular transport service of the area, being the most important concession between Barco de Valdeorras and Viana do Bolo (Barco de Valdeorras – Vilarmenao with annexes). This concession includes almost all the radial routes connecting the small villages in the municipalities of Viana do Bolo, Vilariño do Conso and A Veiga to the main township of Viana do Bolo.

AUTOS BIBEY S.L.

AUTOS BIBEY is a private transport company operating four of the RUTO routes, three of them to the primary school of Vilariño do Conso (see basic data table 8 included at point 6.3.2). This company, located in Viana do Bolo, is a small enterprise with just four buses. AUTOS BIBEY works basically in school transport and other discretionary services and does not offer regular PT services.

6.4.2 Public Authorities

There are two Public Authorities directly involved in RUTO: the Regional Transport Administration and the Regional Education Administration.

The **Regional Transport Administration** is in charge of all Public Transport services running within its regional territory and must, therefore, issue licences for school transport services which are considered by the Spanish Transport Act to be special purpose regular services.

The **Regional Education Administration** has to guarantee access to state schools for pupils at compulsory levels (6 to 16 years) in those areas where the schools are located in towns or villages other than those where the students live. Basically, there are two ways to provide these services: specific school transport services or personal aid to students when there is no possibility of access to school bus routes.

The Education Administration designs the routes of the services for each school depending on where the children live. Usually, they prepare a contract with the transport operator agent every year, although often this contract can be extended for several years, providing appropriate changes are made in the routes to answer the children's needs. Once the Education Administration has reached an agreement with the transport operator, a transport licence and authorization has to be obtained from the Regional Transport Administration.

There is no tradition of integration between regular transport services and school transport services. These have run separately up until now, generating a duplicated public transport network which,

especially in rural areas with low demand, further splits this already low demand and reduces the likelihood of being able to run profitable services. The most important factor preventing the coordination of regular and school services are related to financing.

The main success of RUTO has been to achieve agreement between the two administrations. The Education Authority has accepted the inclusion of some school transport routes in RUTO and the Transport Authority has issued special licences to allow the school route operators to pick up non-student passengers. These licences are temporary, applying from 8th of January until 20th June, when schools close. They also regulate the fares (free for students at compulsory levels who are already financed by the Education Authority) and 1 per single ticket for other passengers.

Most of the routes included in RUTO cover areas with no other regular public transport or with regular services run by the same operator (ATVISA) but with different timetables. Consequently, most of the routes have no competition with other transport operators. There are a couple of cases, however, where there is competition or where the implementation of RUTO has meant changes to the previous regular services, as set out in detail below.

- Route: Mormentelos – primary school in Vilariño do Conso. Transport operator: AUTOS BIBEY.

The school route departs from Mormentelos, located on a local road, and continues with stops to pick up students in the villages of Vilameao, Grixoa, San Cristovo e Vilariño. These villages are on the route of a regular PT concession operated by ATVISA, as opposed to AUTOS BIBEY who operate the school Mormentelos-Vilariño route. Consequently, there is competition for regular passengers between the towns of Vilarmenao and Vilariño do Conso. The solution has been to allow the school service to pick up regular passengers only in Mormentelos, because this village is not included in the regular concession. In the rest of the villages on the route, only students can be carried by the school transport service.

- Route: Sever-Umoso-Rubiais-Luzaregos-primary/secondary schools in Viana do Bolo. Transport Operator: ATVISA.

This route has the same itinerary as a regular service between Umoso and Viana do Bolo. Only the section between Sever and Umoso was not covered previously. Both regular and school trips are run by the same transport operator, ATVISA. During the demonstration, school and regular services will be integrated into a new service covering the complete route, from Sever to Viana do Bolo. This will run with the timetables of the school services, but maintaining one trip that was part of the previous regular service (departing from Viana do Bolo at 14.00).

6.4.2.1 School transportation

The RUTO demonstration is based on the integration of school and regular transport services. The routes included in the demo supply school transportation to the four state primary schools and to the state secondary school. There are no private centres in the area.

Education centres

Primary schools (CEIP): Each municipality (Viana do Bolo, Vilariño do Conso, A Veiga and O Bolo) has a primary school located in its main village/township covering the compulsory levels from 6 to 12 years. All four schools are state-owned and depend on the Regional Education Administration. All the children in each municipality attend the same school, located in the main township thereby generating a substantial school transport flow from outlying settlements.

Secondary school (IES): There is one state-owned secondary school in the area, located in Viana do Bolo, the largest main township. Secondary schools in Spain cover the compulsory education levels from 12 to 16 years (1st and 2nd stage secondary). They also offer courses at the non-compulsory education levels from (16 to 18 years) including the two years of baccalaureate required to attend university or two years of vocational training to obtain a medium grade diploma in various trades. The Viana do Bolo secondary school offers baccalaureate courses and vocational training for the administrative levels in the civil service.

The school is attended by the students of its municipality as well as those from Vilariño de Conso and A Veiga. Some routes from Vilariño de Conso and from A Veiga to Viana do Bolo are specifically for secondary students while in the municipality of Viana do Bolo all routes pick up both primary and secondary level students. As stated above, secondary students from the municipality of O Bolo attend a school outside the demonstration area.

Transport Funding

The Education Administration has to guarantee and pay for free school access for all students during the compulsory years, usually by organising dedicated school transport services. This means that the authority hires the whole bus for the trips to and from school, even though there are usually fewer children to transport than seats in the bus. As a result almost all the school buses in low demand areas have spare seats as is the case of those included in the RUTO demonstration.

Students at non-compulsory levels of education are not allowed to use these dedicated school transport services. Although the Education Administration is not required by law to finance school transport for these students, it tends to award most students travel grants (of about 360 per year). The problem is that in some cases there is no other public transport that connects the villages where the students live with Viana do Bolo. One of the objectives of RUTO was to supply a transport service for these non-compulsory students, but it has not been possible to achieve an agreement to make timetables of compulsory and non-compulsory schools equal.

The RUTO demonstration has not varied the previous situation in terms of route design, selection of operators or funding of the school transport services. Its objective has been to make the 160 odd spare seats on such transport available to other fee-paying passengers, especially in cases where no other regular PT exists. These seats can now be occupied by regular passengers who need to go to the main townships of the area.

7. National report Sweden – SAMKOM Demonstration

7.1. General description of the Demonstration

The demonstration of SAMKOM is taking place on the island of Gotland off the east coast of Sweden. SAMKOM is the name for the demonstration project within ARTS. On Gotland the local name of the service is **Plustrafik**.

7.1.1 Objectives and measures of the demonstration

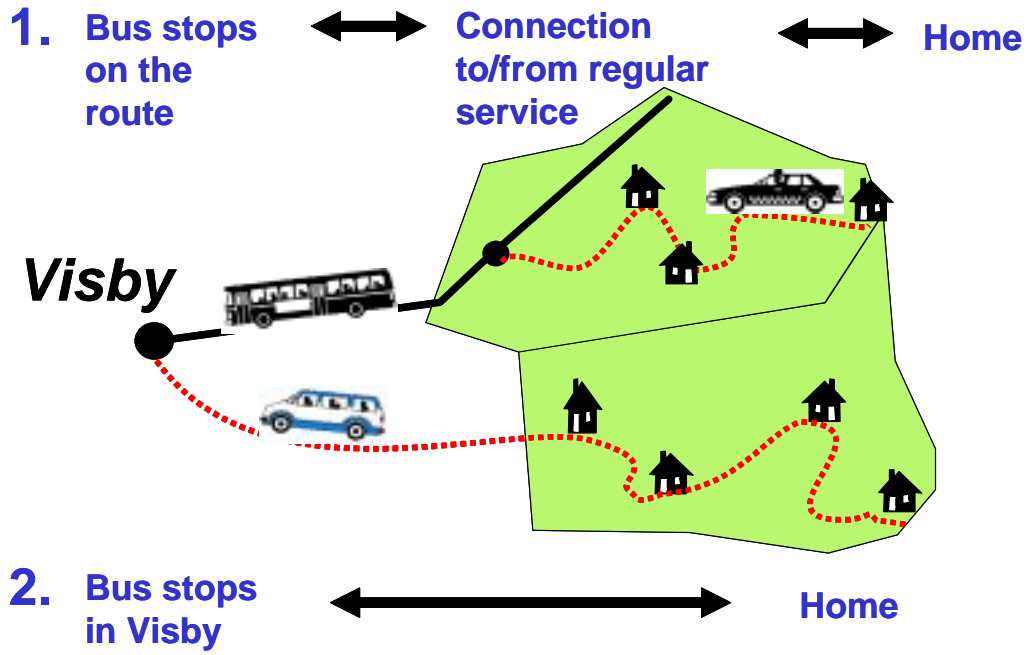
The main objective of the demonstration is to provide a high quality public transport service for the inhabitants in the rural areas on Gotland, i.e. those living outside the main city of Visby and other villages. In order to achieve an improvement in the service without an excessive increase in subsidies, the demonstration focuses on the integration of already existing and sometimes parallel services; on-demand, transport of the elderly /disabled (in this document labelled Special Transport Service) and health transport. Two main issues needed to be dealt with in order to integrate these groups:

1. ensuring that the vehicles of the demonstration are easily accessible for all groups
2. unifying the administration and budget of all services is within the same committee in the municipality as well as the transport rules/regulations for the different groups (fares, operational hours, etc)

7.1.2 Summarizing description of the service

The demonstration service is an on-demand service, co-ordinated with the regular public bus system and acting as a feeder service to regular buses. The island is divided into a number of districts, each of which has its individual timetable. The rural public transport service takes passengers to the nearest village with basic service (post office, medical care service etc). On some trips passengers can change in the village onto the regular bus line going to the main city of Visby. Some services go directly to Visby as in the district which is contingent with Visby where the service has daily trips and in the district with evening trips. The frequency of the service varies between the districts. Most have two departures a week (100% increase compared to former service). One district, though, has one departure/day and another focuses on the needs of young people by providing one trip a week on Friday evenings in addition to the two daytime trips each week.

The following diagram shows the methods of operation of the Plustrafik.

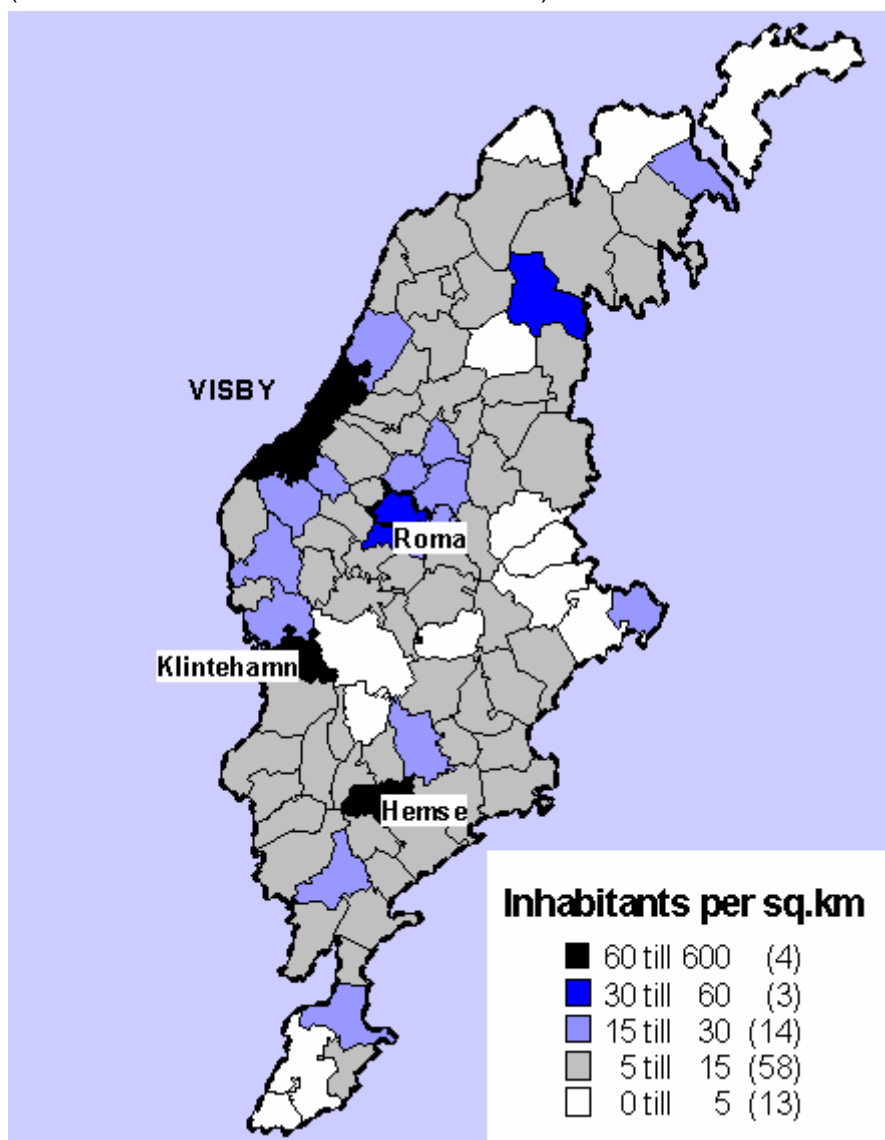


Graph 1 Methods of operation of the Plustrafik

7.2. Description of the area

Gotland is an island in the middle of the Baltic sea, 90 km from mainland Sweden. It is 175 km long and 50 km wide. Gotland has 57,500 inhabitants (22,000 in the main city of Visby). About two out of three Gotlanders live in the countryside or in villages like Slite, Fårösund and Hemse. The largest communities are: Visby, Hemse, Roma, Slite, Klintehamn, Fårösund.

The demonstration area covers the whole island except the city of Visby and the villages Hemse, Klintehamn and Roma. The area is about 3,100 sq.kms and the number of inhabitants in the demonstration area is about 31,500. The figure below shows the population density on the island (demonstration area outlined with broken line).



Graph 2 Population density in the demonstration area (demonstration area outlined with broken line)

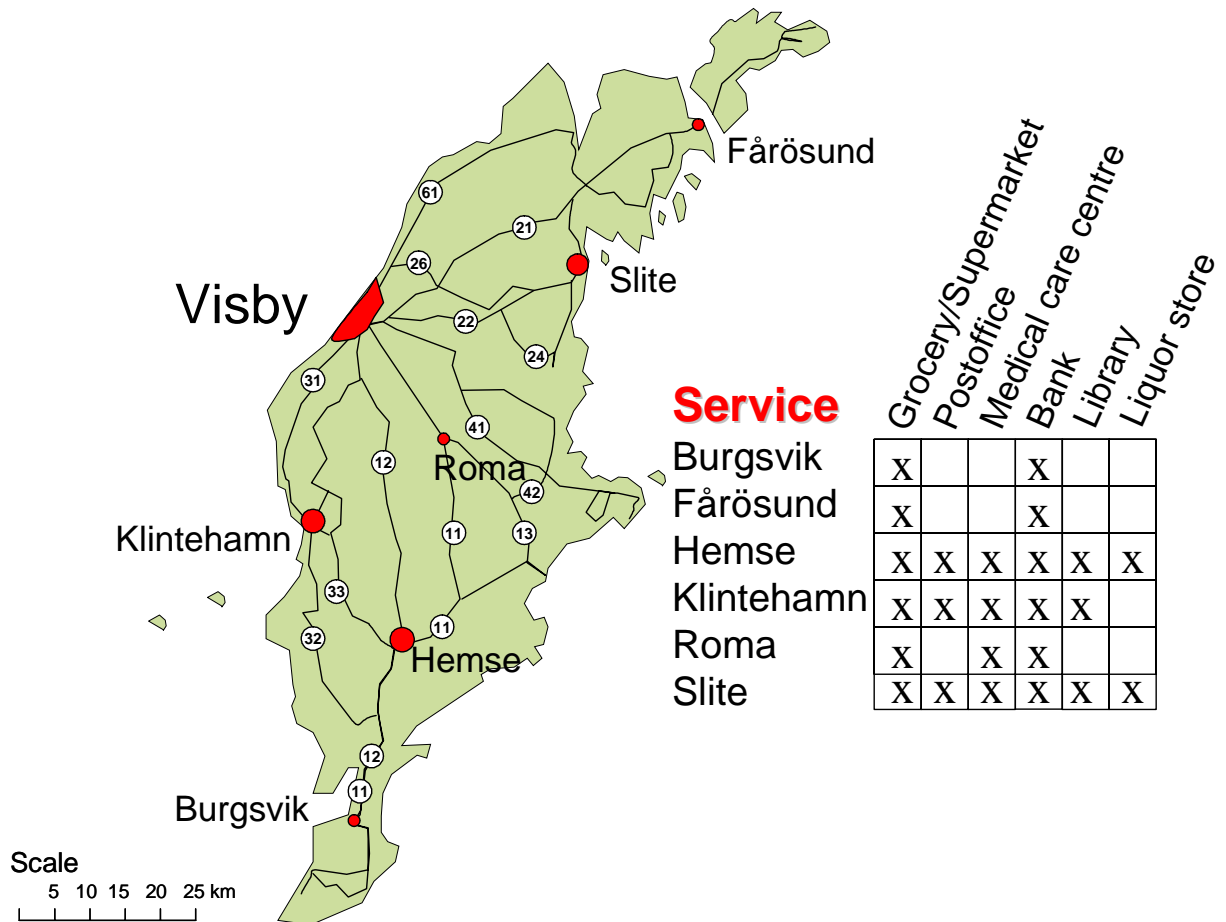
Sweden has three democratically elected levels of government: the Parliament at national level, the county council at regional level and the municipality at local level. They each have different areas of responsibility and different duties. County councils and municipalities have their own powers to levy taxes and their own decision-making powers.

In the case of Gotland there is no county council, but the duties of the county council lays with the municipality. Therefore the municipality of Gotland is responsible for municipality issues (local issues in the immediate environment of its citizens, such as primary and secondary schools, pre-school activity, care of the elderly, roads, water and sewerage issues and energy issues) and as well for county council issues (the main task here is responsibility for all healthcare - dental care included - and administrating the transport service for medical patients). In addition, the municipality is responsible for county public transport.

7.2.1 Demonstration map

The following map shows the island and its main villages. The city of Visby dominates in terms of population and services. The table at the right in the map shows the quality of basic services in the villages outside Visby. The Plustrafik service aims to carry rural areas residents to the services in the villages or in Visby.

In the map the routes of the main PT network is marked with the routes number.



Graph 3 Demonstration map: the main villages outside of Visby and their service. The routes of the main PT network is marked with the routes number

7.2.2 Characteristics

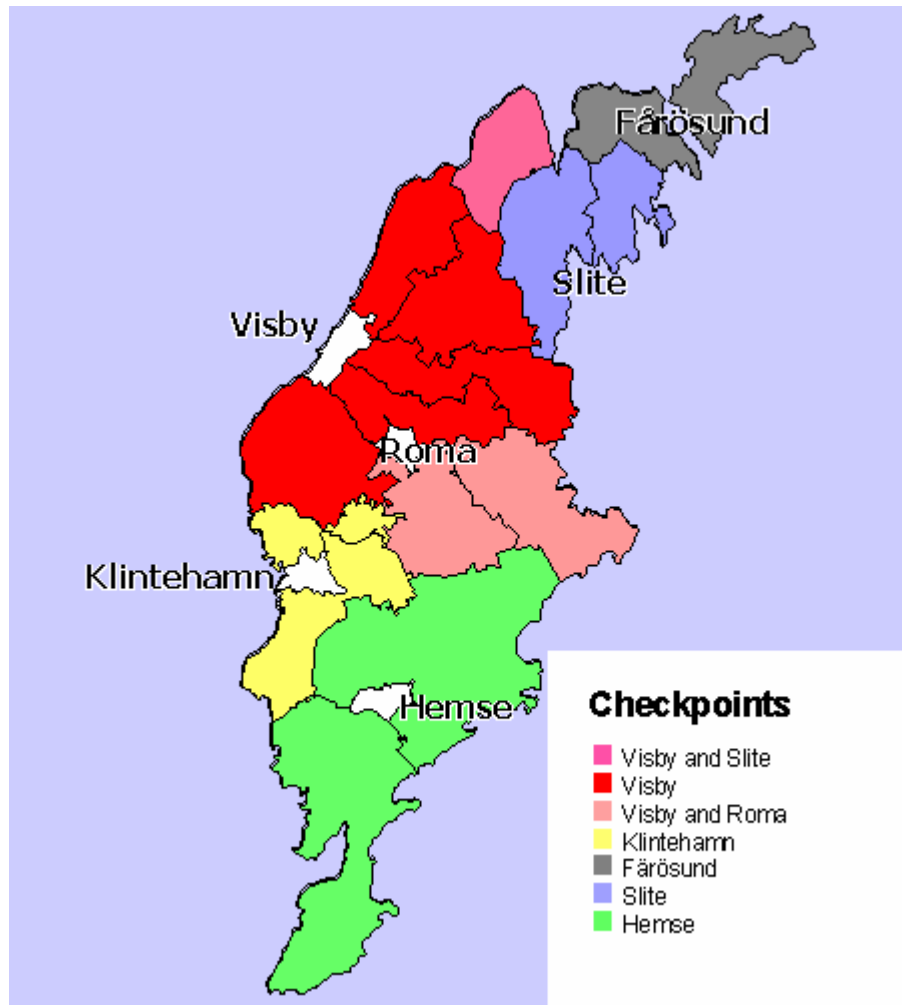
As a summary the main characteristics of the demonstration area are presented in the table below.

Table 8 Main characteristics of the demonstration area

Factor	Description/ Figure
Area (sq.kms)	3,100
Population	31,500
Age structure	0-6: 6.4% 7-15: 13.1% 16-18: 3.8% 19-64: 58.6% 65-74: 8.8% 75-84: 6.7% 85--: 2.6%
Terrain	The island is flat wit no mountainous areas, accept the steep coast line in the west
Condition of road network	All main roads where the regular PT is operating are coated with asphalt and in a good condition. The smaller road network in the rural areas is not in such good condition. Not all roads are asphalted and there is a lack of maintenance.
Main economic activities (for the entire island)	20% of the economically active population works in health and social services. Other governmental organisations and entities bodies are also important employers. Another 30% (15% each) work in wholesale and retail (including tourism) and in manufacturing. The island has proportionally the highest number of small enterprises in Sweden. About half the island's jobs are in Visby.
Tourism	One of the main economic activities on Gotland is tourism. About 700,000 tourists visit Gotland each year, mainly during the summer (June-August)
Unemployment ratio	2.6% in the demonstration area (7.2% on the island as a whole)

7.3. Description of services

7.3.1 Service Map



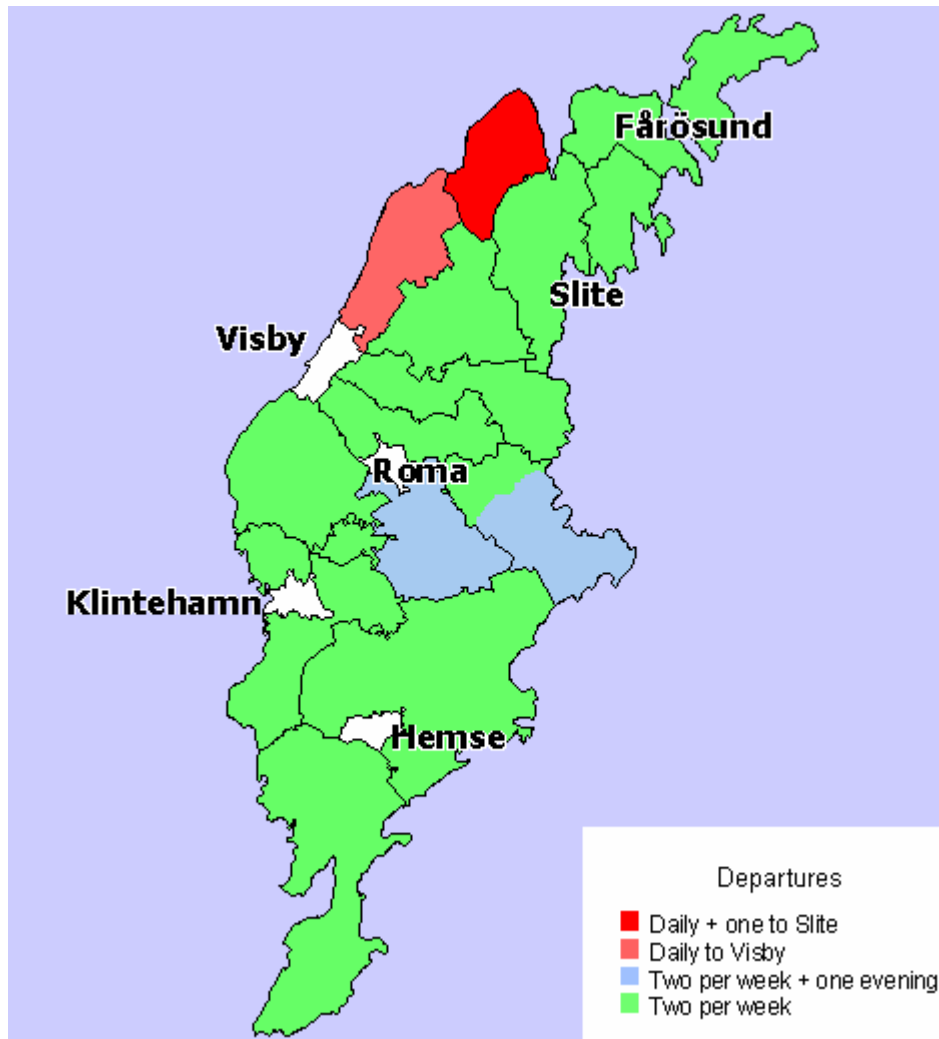
Graph 4 Plustrafiken consist of 15 districts. Colours are indicating the main village to which the service is running (Checkpoints). Black borders divide the districts.

The on-demand service is directed to six checkpoints (e.g. the main villages of the island). The checkpoints are Visby, Fårösund, Slite, Hemse, Klintehamn and Roma. Passengers may visit different services at these checkpoints. Once a week it is possible to take the bus to Visby and back to the district.

The TDC for the on-demand service is located in Visby.

7.3.2 Characteristics of services

7.3.2.1 Timetable



Graph 5 Plustrafiken makes it possible to go to the nearest village twice a week. In some areas (red on the map) there is one daily departure to Visby. The blue area has one extra departure on Friday evening (19.00) to Visby (leaving Visby at 23.00 to return home to the district).

The standard service timetable consists of two round trips per week. On one of these days, it is possible to stay longer in the nearest village or take the ordinary PT (bus) into Visby. On the other day the time in the village is shorter. An example of a district timetable is shown below.

Wednesday From Sproge arrival **Klintehamn 10.00** – dep **Klintehamn 12.00** to Sproge

Friday From Sproge arrival Klintehamn 9.45 – dep Klintehamn 9.50 to **Visby 10.30**

Dep **Visby 14.10** arr Klintehamn 14.45 – dep Klintehamn 14.50 to Sproge

On Wednesday the time in Klintehamn is 2 hours and on Fridays the time in Klintehamn is 5 hours and 5 minutes. The time in Visby on Fridays is 3 hours and 40 minutes.

7.3.2.2 Stops

The only stops are at the bus stations in the main villages. In the districts you will be picked up or left at your door. It is only possible to travel to the main village – no other local trips within a district are possible.

The service is of no use for tourists staying in Visby or a main village and wanting to visit the rural areas as it only works in one direction – from the district to the main village in the morning and back again in the afternoon. There are, however, many tourists living in lodges in the rural areas who want to visit the nearest village or Visby and they can certainly make use of the service.

In Visby there are local buses to hospitals and the main ferry terminal of the island.

7.3.3 Vehicle(s) in use

In the demo the services have increased significantly (100% more options) with less vehicles (7 vehicles), i.e. more effective use of the vehicles than before the demo (3 mini-buses and 15 taxis).

Plustrafiken was awarded to 7 private contractors after competitive bidding. The characteristics of the vehicles in use are shown in the following table.

Table 9 Vehicles in use

Vehicle	No of seats
1 Audi (car)	4
3 Volkswagen Mercedes Vito (van)	7-8
2 Iveco, Ford (bus)	19
1 Setra (bus)	45

7.3.4 Fares

The price for a single trip is the same as for a single trip on the island's regular buses. There are different prices for adults, retired people, youth and children. Other discounted tickets, such as monthly passes, etc., are not valid in Plustrafiken. Passengers who are entitled to special transport services also pay the normal fare.

Through ticketing is possible to the ordinary PT. simply pay for the whole trip when you pay the Plustrafiken driver and on the return trip you pay the whole fare to the bus driver.

The fare for special services for disabled and elderly people is 1,63 (SEK 15) plus the adult fare between 05.00 and 23.00. Between 23.00 and 05.00 there is a surcharge of 2,17 (SEK 20). For special medical trips there is a surcharge of 3,80 (SEK 35) to the ordinary public transport fee. The fare system is made up in a way so the cheapest way to travel is with the ordinary PT system and Plustrafiken.

Fares on Gotland is based on the distance travelled as indicated in the table (1 = 9.20 SEK).

Table 10 Fare for PT and social services at Gotland

Distance	Adult	Retired	Children
km	€	€	€
0-4	1,30	1,09	0,65
5-7	1,52	1,20	0,76
8-11	1,85	1,41	0,98
12-15	2,28	1,85	1,20
16-19	2,93	2,28	1,52
20-23	3,37	2,72	1,74
24-27	3,80	3,04	1,96
28-31	4,24	3,37	2,17
32-35	4,67	3,70	2,39
36-39	5,11	4,02	2,61
40-43	5,54	4,35	2,83
44-47	5,98	4,78	3,04
48-51	6,41	5,11	3,26
over 51 km	6,41	5,11	3,26

7.4. Stakeholders

7.4.1 Operator(s)

The Plustrafiken services are provided by 7 different operators (one vehicle each) contracted by the municipality. The regular (not on-demand) bus system is served by one of the biggest bus companies in Sweden; Swebus. Swebus is also contracted by the municipality.

7.4.2 Public Authorities

The main public authority involved in the SAMKOM demo is the municipality of Gotland. In general there is no single committee in the municipality responsible for administrating all transport issues, but the responsibility is divided upon different committees depending on the group travelling (e.g. school children, elderly, disabled). As already mentioned the municipality of Gotland also handles the tasks of a normal county council, i.e. the responsibility for all health-care in the county. In this connection, they also administer transport services for medical patients.

Public transport in Sweden is normally within the responsibility of the municipalities and the County Council in the county but is not actually managed by them, but by the County Public Transport Authority, which is owned by the County Council and the municipalities. In Gotland the circumstances are different as there is no county council. In Gotland one committee in the municipality has the responsibility for public transport, i.e. there is no County Public Transport Authority.

Even though the transport organisation is unique on Gotland (as the responsibility for administrating all transport issues is within the municipality) we have encountered organisational barriers such as lack of co-operation between the different committees and their transport responsibilities: such as general public transport services, medical transport services and school/Special transport services. The legal and financial frameworks are dissimilar as well, which further impedes the co-ordination of the transport services between the different groups.

One of the main tasks in the SAMKOM project, therefore, was to integrate the responsibilities of the different committees into a single committee. As a result, almost all transport issues are now handled within the transport committee, i.e. regular and on-demand public transport, special transport services and transport service for medical patients. School transport however, does not come under the same committee due to administrative problems.

There have been different stages in the integration process, but officers from the different committees are now sitting and working together, there is only one budget for all integrated transport issues, the fares are homogenous (one basic fare and surcharges for special services) and the TDC is the same for all transport services. There has been a strong support for the integration from the politicians in the municipality.

The municipality officers in the transport committee chose the demonstration area and the level of supply, worked out the integrated fare system and the legal framework and chose the operators through tendering.

7.4.2.1 Social Sector transportation

As set out in the previous section transport for the social services is an important part in the demonstration scheme.

Special officers in the transport committee administer the licensing of the special transport service permits (passes) for elderly and disabled. Residents of the island who are prevented by a disability from travelling on their own or on regular public transport are entitled to this permit. The permit allows you to order a vehicle to your home at any time of the day (you have to order the trip one day ahead) and there are no restrictions on the number of trips. Another type of social service transport is the medical transport service, i.e. trips for visiting medical institutions. The passenger pays part of the costs of the journey and the rest is paid by the municipality. On Gotland you have to choose the most inexpensive mode (bus or own car) and you have to visit the nearest medical institution if you want to have your trip subsidised. You are only allowed to order taxi if your medical condition prevents you travelling by any other mode. You order the trip in the same way as people with a special permit for the elderly and disabled.

As the services are administered by the transport committee and are considered to be part of the public transport system, the fare is homogenous with the regular public transport fare. The fare is the regular public transport fare + a surcharge (see chapter 3.4 – Fares), i.e. it is always cheaper to go by regular public transport (incl. on-demand Plustrafik).

7.4.3 Users

The Plustrafik service is open to everyone in the demonstration area. But as, in most districts, the service is not offered daily, it cannot be used for education or commuting trips. The Plustrafik service is primarily aimed at carrying rural area residents to the services in the villages or to Visby during the day, and thus the most frequent user groups are the elderly, the disabled and people working at home. In one district an additional user group comprises young people for whom the Plustrafik service is extended to include a Friday evening service into Visby.

7.5. Special Categories

7.5.1 On-demand services

7.5.1.1 Booking procedures and polices

Trips with Plustrafiken shall be ordered by phone (only) at the latest at 12.00 the day before departure. Once the vehicle is full, no further reservations can be accepted.

7.5.1.2 Travel Dispatch Centre (TDC)

The TDC is located in Visby. It is operated by "SOS alarmering" and is financed as a part of the Samkom project by the municipality.

The TDC is responsible for all orders for Plustrafiken trips, for special services for the elderly and handicapped as well as medical care trips to hospital. There are five persons at TDC which is open for calls 24 hours a day 7 days a week.

There is no special software for booking and planning the trips.

The communication between TDC and operator (driver) is by fax to the operator's office.

7.5.2 Volunteer schemes

There is no volunteers involved in the demo.

7.5.3 Technology

So far no special technology is used except the fax.

7.6. Annex



Graph 6 Discussion on a focus group meeting

Adress http://www.gotland.se/imcms/seriet/GetDoc?meta_id=2071

GOTLAND EN SPECIELL PLATS FÖRETAGSSERVICE LEDIGA JOBB BESÖKA MÖTAS

GOTLANDS KOMMUN

Plustrafiken

- Vad är plustrafik?
- Hur gör man?
- Hur läser man turlistan?
- Vad kostar det?
- Ladda hem turlistan (PDF)
- Kollektivtrafiken

Hur gör man?

I tidtabellen letar du reda på den socken du vill resa ifrån och ser vilken tårtort resan går till. Där framgår också vilka dagar du kan resa och om du kan resa vidare med den vanliga bussen till Visby. Åker du vidare med bussen till Visby hämtas du vid återkomsten från Visby, enligt tiden i tidtabellen för vidare färd med plustrafiken till din bostad.

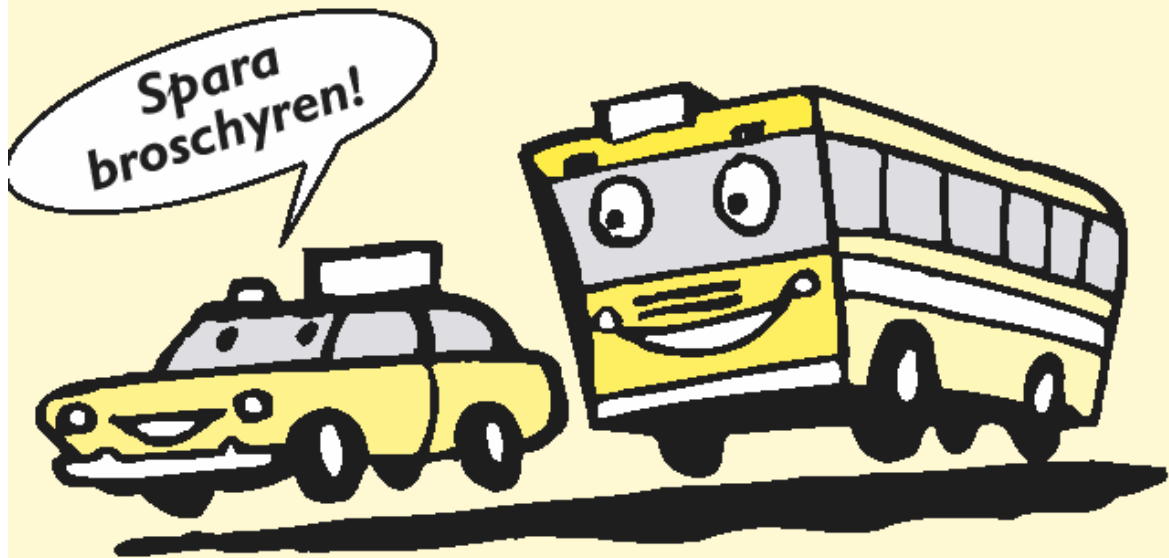
Turema från Fårösund, Klintehman och Hemse framgår också till Lasarettet. Anghna ankomst- och avgångstider är från Busstationen. Från Lasarettet går bussen 15 minuter

Graph 35 Presentation of the demo scheme (Plustrafik) in the Internet

TURLISTA OCH INFORMATION FRÅN GOTLANDS KOMMUN

Plustrafik Gotland

TAXI ELLER BUSS FRÅN OCH TILL 90 SOCKNAR PÅ GOTLAND. GÄLLER FRÅN 2002-08-19 TILLS VIDARE



VÄLKOMMEN TILL PLUSTRAFIKEN

Plustrafiken, det som tidigare kallades för kompletterings- trafik, är öppen för alla. Trafiken körs två dagar i veckan till någon av tätorterna Hemse, Klintehamn, Roma, Slite, Fårösund eller Visby. Turerna körs ej på helgdagar.

Från de socknar som inte har plustrafik som går till Visby, utan till någon av ovanstående tätorter kan du vissa dagar åka vidare med kollektivtrafikens ordinarie linjebuss till Visby med uppehåll i Visby 3-4 timmar.

I tidtabellen letar du reda på den socken du vill resa ifrån och ser vilken tätort resan går till. Där framgår också vilka dagar du kan resa och om du kan resa vidare med den vanliga bussen till Visby. Åker du vidare med bussen till Visby hämtas du vid återkomsten från Visby, enligt tiden i tidtabellen för vidare färd med plustrafiken till din bostad.

Turerna från Fårösund, Klintehamn och Hemse framgår också till Lasarettet. Angivna ankomst- och avgångstider är från Busstationen. Från Lasarettet går bussen 15 minuter före angiven tid.

När du beställer resan får du också en preliminär tid då du hämtas med taxi. Vi reserverar oss för att turen kan vara fullbelagd. **Resor med Plustrafiken skall beställas senast kl. 12.00 dagen innan planerad resa på telefon 20 90 80.**

Priset för resan är lika med kollektivtrafikens enkelbiljett- taxa, (Länskort, förortskort, Visbykort, gymnasiekort eller skolkort gäller ej). Samtliga resenärer, även de som har färd- tjänststillstånd betalar för resan. Det är endast ledsagaren till en färdtjänstberättigad person som reser utan avgift. Om du reser vidare med ordinarie linjetrafik med buss betalar du hela resan till föraren i plustrafiken och uppvisar biljetten för busschauffören. När du reser från Visby med linjebuss löser du biljett på bussen för hela sträckan och visar upp den för föraren i plustrafiken när du åker vidare till din bostad.

UTÖKAD PLUSTRAFIK PÅ FÖRSÖK VARJE YARDAG OCH FREDAGSKVÄLL

Boende i socknarna Hangvar, Hall, Stenkyrka, Lummelunda, Martebo och Väskinde kommer på försök att få möjlighet att åka till Visby varje dag med Plustrafik. På så vis kan man på ett bättre sätt använda Plustrafik även för sjukresor till och från Lasarettet och Korpen och för vissa färdtjänstresor. Från socknarna på Östergarnslandet kommer man också på försök att kunna åka kvällsturer med Plustrafiken på fredagar. Det är genom EU-projektet ARTS som vi kan testa om Plustrafik är ett bra sätt att förbättra kollektivtrafiken på landsbygden. Alla andra socknar på landsbygden har Plustrafik två dagar i veckan.



Har du frågor angående plustrafiken är du välkommen att ringa 26 93 09 eller 26 32 18.

PLUSTRAFIK				ORDINARIE BUSLINJE TILL/FRÅN VISBY BUSSTATION							PLUSTRAFIK			
FRÅN	TILL	VECKODAG	ANKOMST	AV RESA	FRÅN	ANKOMST TILL VISBY	AV RESA FRÅN VISBY	TILL	ANKOMST	AV RESA	FRÅN	TILL		
Akebäck	→	Visby	Tisdag, Torsdag	11.00						13.30	Visby	→	Akebäck	
Ala	→	Roma	Tisdag	10.00						12.00	Roma	→	Ala	
Ala	→	Visby	Torsdag	10.30						13.30	Visby	→	Ala	
Ala	→	Visby	Fredag	19.00						23.00	Visby	→	Ala	
Alskog	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Alskog
Alskog	→	Hemse	Torsdag	09.30						11.30	Hemse	→	Alskog	
Alva	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	14.40	Hemse	→	Alva
Alva	→	Hemse	Fredag	09.30						11.30	Hemse	→	Alva	
Anga	→	Roma	Onsdag	10.00						12.00	Roma	→	Anga	
Anga	→	Visby	Fredag	10.30						13.30	Visby	→	Anga	
Anga	→	Visby	Fredag	19.00						23.00	Visby	→	Anga	
Ardre	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Ardre
Ardre	→	Hemse	Torsdag	09.30						11.30	Hemse	→	Ardre	
Atlingbo	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Atlingbo	
Bara	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Bara	
Barlingbo	→	Visby	Tisdag, Torsdag	11.00						13.30	Visby	→	Barlingbo	
Björke	→	Roma	Tisdag	10.00						12.00	Roma	→	Björke	
Björke	→	Visby	Torsdag	10.30						13.30	Visby	→	Björke	
Björke	→	Visby	Fredag	19.00						23.00	Visby	→	Björke	
Boge	→	Slite	Tisdag	09.00	09.05	Slite (2)	09.50	13.40	Slite (2)	14.20	14.25	Slite	→	Boge
Boge	→	Slite	Torsdag	10.30						12.00	Slite	→	Boge	
Bro	→	Visby	Onsdag, Fredag	09.00						12.00	Visby	→	Bro	
Bunge	→	Färösund	Onsdag	09.55						12.00	Färösund	→	Bunge	
Bunge	→	Färösund	Fredag	09.55	10.00	Färösund (2)	11.10	12.15	Färösund (2)	13.35	13.40	Färösund	→	Bunge
Burs	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Burs
Burs	→	Hemse	Torsdag	09.30						11.30	Hemse	→	Burs	
Buttle	→	Roma	Tisdag	10.00						12.00	Roma	→	Buttle	
Buttle	→	Visby	Torsdag	10.30						13.30	Visby	→	Buttle	
Buttle	→	Visby	Fredag	19.00						23.00	Visby	→	Buttle	
Bäl	→	Visby	Onsdag, Fredag	09.00						12.00	Visby	→	Bäl	
Dalhem	→	Visby	Tisdag, Torsdag	11.00						13.30	Visby	→	Dalhem	
Eke	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	14.40	Hemse	→	Eke
Eke	→	Hemse	Fredag	09.30						11.30	Hemse	→	Eke	
Ekeby	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Ekeby	
Eksta	→	Klintehamn	Fredag	09.45	09.50	Klintehamn (3)	10.30	14.10	Klintehamn (3)	14.45	14.50	Klintehamn	→	Eksta
Eksta	→	Klintehamn	Onsdag	10.00						12.00	Klintehamn	→	Eksta	
Endre	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Endre	
Eskelhem	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Eskelhem	
Etelhem	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Etelhem
Etelhem	→	Hemse	Torsdag	10.00						13.00	Hemse	→	Etelhem	
Fardhem	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Fardhem
Fardhem	→	Hemse	Torsdag	09.30						11.30	Hemse	→	Fardhem	
Fide	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	14.40	Hemse	→	Fide
Fide	→	Hemse	Fredag	09.30						11.30	Hemse	→	Fide	
Fleringe	→	Färösund	Onsdag	09.55						12.00	Färösund	→	Fleringe	
Fleringe	→	Färösund	Fredag	09.55	10.00	Färösund (2)	11.10	13.40	Färösund (2)	15.00	15.05	Färösund	→	Fleringe
Fole	→	Visby	Onsdag, Fredag	09.00						12.00	Visby	→	Fole	
Follingbo	→	Visby	Tisdag, Torsdag	11.00						13.30	Visby	→	Follingbo	
Fröjel	→	Klintehamn	Fredag	09.45	09.50	Klintehamn (3)	10.30	14.10	Klintehamn (3)	14.45	14.50	Klintehamn	→	Fröjel
Fröjel	→	Klintehamn	Onsdag	10.00						12.00	Klintehamn	→	Fröjel	

(1) LINJE 11 BURGSVIK-HEMSE-ROMA-VISBY. ÅTERRESA LINJE 12 VISBY-ROMA-HEMSE-BURGSVIK. (2) LINJE 21 FÄRÖSUND-LÄRBRÖ-SLITE-TINGSTÄDE-VISBY. ÅTERRESA LINJE 21

VISBY-TINGSTÄDE-SLITE-LÄRBRÖ-FÄRÖSUND (3) LINJE 31 KLINTEHAMN-TOPTA-VISBY. ÅTERRESA LINJE 31 VISBY-TOPTA-KLINTEHAMN (4) EJ VIBBLER. **Turerna körs ej på helgdagar.**

PLUSTRAFIK				ORDINARIE BUSSLINJE TILL/FRÅN VISBY BUSSTATION						PLUSTRAFIK				
FRÅN	TILL	VECKODAG	ANKOMST	AVRESA	FRÅN	ANKOMST TILL VISBY	AVRESA FRÅN VISBY	TILL	ANKOMST	AVRESA	FRÅN	TILL		
Färö	→	Färösund	Onsdag	09.50						11.55	Färösund	→	Färö	
Färö	→	Färösund	Fredag	09.50	10.00	Färösund (2)	11.10	12.15	Färösund (2)	13.35	Färösund	→	Färö	
Gammelgarn	→	Roma	Onsdag	10.00						12.00	Roma	→	Gammelgarn	
Gammelgarn	→	Visby	Fredag	10.30						13.30	Visby	→	Gammelgarn	
Gammelgarn	→	Visby	Fredag	19.00						23.00	Visby	→	Gammelgarn	
Gantherm	→	Roma	Onsdag	10.00						12.00	Roma	→	Gantherm	
Gantherm	→	Visby	Fredag	10.30						13.30	Visby	→	Gantherm	
Garda	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	Hemse	→	Garda	
Garda	→	Hemse	Torsdag	09.30						11.30	Hemse	→	Garda	
Gerum	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	Hemse	→	Gerum	
Gerum	→	Hemse	Torsdag	10.00						13.00	Hemse	→	Gerum	
Gothem	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Gothem	
Grötlingbo	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	Hemse	→	Grötlingbo	
Grötlingbo	→	Hemse	Fredag	09.30						11.30	Hemse	→	Grötlingbo	
Guldrupe	→	Roma	Tisdag	10.00						12.00	Roma	→	Guldrupe	
Guldrupe	→	Visby	Torsdag	10.30						13.30	Visby	→	Guldrupe	
Guldrupe	→	Visby	Fredag	19.00						23.00	Visby	→	Guldrupe	
Hablingbo	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	Hemse	→	Hablingbo	
Hablingbo	→	Hemse	Fredag	09.30						11.30	Hemse	→	Hablingbo	
Hall	→	Slite	Torsdag	10.30						12.30	Slite	→	Hall	
Hall	→	Visby	Alla vardagar	10.00						13.00	Visby	→	Hall	
Halla	→	Roma	Tisdag	10.00						12.00	Roma	→	Halla	
Halla	→	Visby	Torsdag	10.30						13.30	Visby	→	Halla	
Halla	→	Visby	Fredag	19.00						23.00	Visby	→	Halla	
Hamra	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	Hemse	→	Hamra	
Hamra	→	Hemse	Fredag	09.30						11.30	Hemse	→	Hamra	
Hangvar	→	Slite	Torsdag	10.30						12.30	Slite	→	Hangvar	
Hangvar	→	Visby	Alla vardagar	10.00						13.00	Visby	→	Hangvar	
Havdhem	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	Hemse	→	Havdhem	
Havdhem	→	Hemse	Fredag	09.30						11.30	Hemse	→	Havdhem	
Hejde	→	Klintehamn	Fredag	09.45	09.50	Klintehamn (3)	10.30	14.10	Klintehamn (3)	14.45	14.50	Klintehamn	→	Hejde
Hejde	→	Klintehamn	Onsdag	10.00						12.00	Klintehamn	→	Hejde	
Hejdeby	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Hejdeby	
Hejnum	→	Visby	Onsdag, Fredag	09.00						12.00	Visby	→	Hejnum	
Hellvi	→	Slite	Onsdag	09.55						12.00	Slite	→	Hellvi	
Hellvi	→	Slite	Fredag	09.00	09.05	Slite (2)	09.50	13.40	Slite (2)	14.20	14.25	Slite	→	Hellvi
Hogrån	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Hogrån	
Hörsne	→	Visby	Tisdag, Torsdag	11.00						13.30	Visby	→	Hörsne	
Kräkdingbo	→	Roma	Onsdag	10.00						12.00	Roma	→	Kräkdingbo	
Kräkdingbo	→	Visby	Fredag	10.30						13.30	Visby	→	Kräkdingbo	
Kräkdingbo	→	Visby	Fredag	19.00						23.00	Visby	→	Kräkdingbo	
Källunge	→	Visby	Tisdag, Torsdag	09.30						12.00	Visby	→	Källunge	
Lau	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Lau
Lau	→	Hemse	Torsdag	09.30						11.30	Hemse	→	Lau	
Levide	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Levide
Levide	→	Hemse	Torsdag	10.00						13.00	Hemse	→	Levide	
Linde	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Linde
Linde	→	Hemse	Torsdag	10.00						13.00	Hemse	→	Linde	
Ljugårn	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Ljugårn
Ljugårn	→	Hemse	Torsdag	09.30						11.30	Hemse	→	Ljugårn	

(1) LINJE 11 BURGSVIK-HEMSE-ROMA-VISBY. ÅTERRESA LINJE 12 VISBY-ROMA-HEMSE-BURGSVIK. (2) LINJE 21 FÄRÖSUND-LÄRBRÖ-SLITE-TINGSTÄDE-VISBY. ÅTERRESA LINJE 21

VISBY-TINGSTÄDE-SLITE-LÄRBRÖ-FÄRÖSUND (3) LINJE 31 KLINTEHAMN-TOFTA-VISBY. ÅTERRESA LINJE 31 VISBY-TOFTA-KLINTEHAMN (4) EJ VIBBLE. **Turerna körs ej på helgdagar.**

PLUSTRAFIK				ORDINARIE BUSSLINJE TILL/FRÅN VISBY BUSSTATION							PLUSTRAFIK			
FRÅN	TILL	VECKODAG	ANKOMST	AV RESA	FRÅN	ANKOMST TILL VISBY	AV RESA FRÅN VISBY	TILL	ANKOMST	AV RESA	FRÅN	TILL		
Løjsta	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Løjsta
Løjsta	→	Hemse	Torsdag	10.00							13.00	Hemse	→	Løjsta
Lokrume	→	Visby	Onsdag, Fredag	09.00							12.00	Visby	→	Lokrume
Lummelunda	→	Visby	Alla vardagar	10.00							13.00	Visby	→	Lummelunda
Lye	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Lye
Lye	→	Hemse	Torsdag	10.00							13.00	Hemse	→	Lye
Lärbro	→	Slite	Tisdag	09.00	09.05	Slite (2)	09.50	13.40	Slite (2)	14.20	14.25	Slite	→	Lärbro
Lärbro	→	Slite	Torsdag	10.30							12.30	Slite	→	Lärbro
Martebo	→	Visby	Alla vardagar	10.00							13.00	Visby	→	Martebo
Mästerby	→	Visby	Tisdag, Torsdag	09.30							12.00	Visby	→	Mästerby
Norrlanda	→	Roma	Onsdag	10.00							12.00	Roma	→	Norrlanda
Norrlanda	→	Visby	Fredag	10.30							13.30	Visby	→	Norrlanda
När	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	När
När	→	Hemse	Torsdag	09.30							11.30	Hemse	→	När
Näs	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	14.40	Hemse	→	Näs
Näs	→	Hemse	Fredag	09.30							11.30	Hemse	→	Näs
Othem	→	Slite	Tisdag	09.00	09.05	Slite (2)	09.50	13.40	Slite (2)	14.20	14.25	Slite	→	Othem
Othem	→	Slite	Torsdag	10.30							12.30	Slite	→	Othem
Röne	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Röne
Röne	→	Hemse	Torsdag	09.30							11.30	Hemse	→	Röne
Rute	→	Slite	Onsdag	09.55							12.00	Slite	→	Rute
Rute	→	Slite	Fredag	09.00	09.05	Slite (2)	09.50	13.40	Slite (2)	14.20	14.25	Slite	→	Rute
Sarda	→	Klintehamn	Fredag	10.00							12.00	Klintehamn	→	Sarda
Sarda	→	Klintehamn	Onsdag	09.45	09.50	Klintehamn (3)	10.30	14.10	Klintehamn (3)	14.45	14.50	Klintehamn	→	Sarda
Silte	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	14.40	Hemse	→	Silte
Silte	→	Hemse	Fredag	09.30							11.30	Hemse	→	Silte
Sjonhem	→	Roma	Tisdag	10.00							12.00	Roma	→	Sjonhem
Sjonhem	→	Visby	Torsdag	10.30							13.30	Visby	→	Sjonhem
Sjonhem	→	Visby	Fredag	19.00							23.00	Visby	→	Sjonhem
Sproge	→	Klintehamn	Fredag	09.45	09.50	Klintehamn (3)	10.30	14.10	Klintehamn (3)	14.45	14.50	Klintehamn	→	Sproge
Sproge	→	Klintehamn	Onsdag	10.00							12.00	Klintehamn	→	Sproge
Stenkumla	→	Visby	Tisdag, Torsdag	09.30							12.00	Visby	→	Stenkumla
Stenkyrka	→	Visby	Alla vardagar	10.00							13.00	Visby	→	Stenkyrka
Stänga	→	Hemse	Tisdag	09.25	09.30	Hemse (1)	10.35	14.20	Hemse (1)	15.20	15.25	Hemse	→	Stänga
Stänga	→	Hemse	Torsdag	10.00							13.00	Hemse	→	Stänga
Sundre	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	14.40	Hemse	→	Sundre
Sundre	→	Hemse	Fredag	09.30							11.30	Hemse	→	Sundre
Tingstade	→	Visby	Onsdag, Fredag	09.00							12.00	Visby	→	Tingstade
Tofta	→	Visby	Tisdag, Torsdag	09.30							12.00	Visby	→	Tofta
Träkumla	→	Visby	Tisdag, Torsdag	09.30							12.00	Visby	→	Träkumla
Vall	→	Visby	Tisdag, Torsdag	09.30							12.00	Visby	→	Vall
Vallstena	→	Visby	Tisdag, Torsdag	09.30							12.00	Visby	→	Vallstena
Vamlingbo	→	Hemse	Onsdag	09.25	09.30	Hemse (1)	10.35	13.35	Hemse (1)	14.35	14.40	Hemse	→	Vamlingbo
Vamlingbo	→	Hemse	Fredag	09.30							11.30	Hemse	→	Vamlingbo
Viklau	→	Roma	Tisdag	10.00							12.00	Roma	→	Viklau
Viklau	→	Visby	Torsdag	10.30							13.30	Visby	→	Viklau
Viklau	→	Visby	Fredag	19.00							23.00	Visby	→	Viklau
Värge	→	Roma	Tisdag	10.00							12.00	Roma	→	Värge
Värge	→	Visby	Torsdag	10.30							13.30	Visby	→	Värge

(1) LINJE 11 BURGSVIK-HEMSE-ROMA-VISBY. ÅTERRESA LINJE 12 VISBY-ROMA-HEMSE-BURGSVIK (2) LINJE 21 FÄRÖSUND-LÄRBRO-SLITE-TINGSTÄDE-VISBY. ÅTERRESA LINJE 21 VISBY-TINGSTÄDE-SLITE-LÄRBRO-FÄRÖSUND (3) LINJE 31 KLINTEHAMN-TOFTA-VISBY. ÅTERRESA LINJE 31 VISBY-TOFTA-KLINTEHAMN (4) E) VIBBLE. **Turerna körs ej på helgdagar.**

PLUSTRAFIK				ORDINARIE BUSSLINJE TILL/FRÅN VISBY BUSSTATION						PLUSTRAFIK				
FRÅN	TILL	VECKODAG	ANKOMST	AVRESA	FRÅN	ANKOMST TILL VISBY	AVRESA FRÅN VISBY	TILL	ANKOMST	AVRESA	FRÅN	TILL		
Vänge	→	Visby	Freddag	09:00						23:00	Visby	→	Vänge	
Väckvåde	→	Visby	Alla vardagar	09:00						23:00	Visby	→	Väckvåde	
Västergarn	→	Klönnehamn	Freddag	09:00						22:00	Klönnehamn	→	Västergarn	
Västergarn	→	Klönnehamn	Onsdag	09:45	09:30	Klönnehamn (1)	10:30	14:10	Klönnehamn (1)	14:45	14:30	Klönnehamn	→	Västergarn
Västerhaga (1)	→	Visby	Tisdag, Torisdag	09:30						22:00	Visby	→	Västerhaga	
Vite	→	Klönnehamn	Freddag	09:00						22:00	Klönnehamn	→	Vite	
Vite	→	Klönnehamn	Onsdag	09:45	09:30	Klönnehamn (1)	10:30	14:10	Klönnehamn (1)	14:45	14:30	Klönnehamn	→	Vite
Oja	→	Hemse	Onsdag	09:25	09:30	Hemse (1)	10:35	13:35	Hemse (1)	14:35	14:40	Hemse	→	Oja
Oja	→	Hemse	Freddag	09:30						11:30	Hemse	→	Oja	
Östergarn	→	Borna	Onsdag	09:00						12:00	Borna	→	Östergarn	
Östergarn	→	Visby	Freddag	09:30						13:30	Visby	→	Östergarn	
Östergarn	→	Visby	Freddag	09:00						23:00	Visby	→	Östergarn	

(1) LINJE 1: BORGARNA-HEMSE-KONA-VISBY. ÅTERRESA LINJE 12 VISBY-KONA-HEMSE-BORGARNA. (2) LINJE 21: FÄRÖRIND-LÄRBO-SLITE-TINGSTADE-VISBY. ÅTERRESA LINJE 21 VISBY-TINGSTADE-SLITE-LÄRBO-FÄRÖRIND. (3) LINJE 31: KLÖNNEHAMN-TOFTA-VISBY. ÅTERRESA LINJE 33 VISBY-TOFTA-KLÖNNEHAMN. (4) EJ VISBYE. **Turerna körs ej på helgdagar.**



Resor med Plusstrafiken beställs senast kl. 12:00 dagen innan resan på telefon 20 90 80. När du beställer resan får du också en preliminär tid då du hämtas. Vi reserverar oss för att turen kan vara fullbokad.

Plusstrafiken tar dig från 90 socknar till Gotlands tätorter, men det går också att åka oavsett väg. Här följer ett exempel: Mamma sätter barnen på bussen som går till Hemse, linje 12, på tisdagen klockan 14:20. Vid ankomsten till Hemse klockan 15:20 står den förbeställda taxin och väntar och kör barnen till mamma i Arde.



SÅ HÄR LÄSER MAN TURLISTAN FÖR PLUSTRAFIKEN

PLUSTRAFIK				ORDINARIE BUSSLINJE TILL/FRÅN VISBY BUSSTATION					PLUSTRAFIK			
FRÅN	TILL	VECKODAG	ANKOMST	AVRESA	FRÅN	ANKOMST TILL VISBY	AVRESA FRÅN VISBY	TILL	ANKOMST	AVRESA	FRÅN	TILL
Akebäck	→ Visby	Tisdag, Torisdag	11.00							13.30	Visby	→ Akebäck
Åla	→ Rorra	Tisdag	10.00							12.00	Rorra	→ Åla
Åla	→ Visby	Torsdag	10.30							13.30	Visby	→ Åla
Åla	→ Visby	Freddag	10.00							13.00	Visby	→ Åla
1 Åkeberg	→ 2 Åre	3 Åkeberg	4 09.25	5 09.30	6 Åre (1)	7 10.25	8 10.30	9 Åre (1)	10 10.30	11 10.25	12 Åre	13 Åkeberg
Åkeberg	→ Herse	Torsdag	09.30							11.30	Herse	→ Åkeberg
Åla	→ Herse	Onsdag	09.25	09.30	Herse (1)	10.35	13.25	Herse (1)	14.35	14.40	Herse	→ Åla
Åla	→ Herse	Freddag	09.30							11.30	Herse	→ Åla

PLUSTRAFIK

- 1 FRÅN**
Leta upp vilken socken du vill resa från. När du beställer resan får du också en preliminär tid då du hämtas.
- 2 TILL**
Till denna tätort går trafiken.
- 3 VECKODAG**
Dessa dagar kan du resa dock inte helgdagar.
- 4 ANKOMST**
Detta är cirka tider då du kommer fram till tätorten.
I det fall som turen kan gå vidare med buss, kör taxin även fram till busshälpplatsen.

ORDINARIE BUSSLINJE TILL/FRÅN VISBY BUSSTATION

- 5 AVRESA**
Tiden då bussen avgår till Visby.
- 6 FRÅN**
Den tätort varifrån ordinarie buss går till Visby. Siffran inom parentes anger numret på linjen.
- 7 ANKOMST TILL VISBY**
Den tid du ankommer till Visby Busstation.
- 8 AVRESA FRÅN VISBY**
Den tid då bussen avgår från Visby Busstation.
- 9 TILL**
Den tätort dit bussen går och där du byter till plustrafiken. Siffran inom parentes, se hänvisning under turlistan.
- 10 ANKOMST**
Den tid du ankommer till tätorten för byte med plustrafik till bostaden.

PLUSTRAFIK

- 11 AVRESA**
Den tid du avreser med plustrafiken till bostaden.
- 12 FRÅN**
Den ort du reser ifrån till bostaden.
- 13 TILL**
Den socken dit du skall resa.



8. National report WALES - Welsh Demonstration

8.1. General Description of the Demonstration

The Welsh demonstration involves the application of innovative transport telematics to the rural environment. The scheme will bring Real-Time Information (RTI) to residents of rural areas of Wales, via mobile telephones (SMS) and land-line enquiry services. This demonstration is part of a wider strategic rural RTI scheme being implemented across the county of Gwynedd.

The system, developed by ACIS, is known as 'Amserol' (the Welsh word for 'timely'). It provides Real-Time Information:

- on-street via displays at bus stops
- on-vehicle via scrolling displays on the bus
- on-line via the internet

The ARTS demonstration will enable residents of the most rural areas of Gwynedd to access Real-Time Information prior to setting out on their journey, simply by calling an enquiry number from their home telephone. It will also enable those with a mobile telephone to receive the same kind of information either prior to or during their journey, via an SMS message sent to them on request. The demonstration also includes the introduction of on-street RTI displays at two bus-rail interchanges, to facilitate integration between the two modes.

The demonstration will focus on local bus and rail routes which operate daily and provide travel to work journeys and journeys for other local functions, for the most part linking rural areas with nearby rural market towns.

The 'Amserol' system is part of an integrated package of measures aiming to improve the experience of travel by public transport for people in rural areas of Gwynedd. Bus service improvements are being made to increase frequencies and introduce more accessible vehicles. In addition, interchange facilities are being improved to enable passengers to transfer from one bus to another and from bus to rail.

8.2. Description of the Area

8.2.1 Area

The Welsh demonstration is situated in the County of Gwynedd in North West Wales (see Figure 1). Gwynedd stretches from the Irish Sea in the west to the Conwy Valley in the east and from Llandudno in the north to Dolgellau in the south. The County covers approximately 2,500 square kilometres in area or 12% of the land area of Wales (Gwynedd in Figures, 2001)

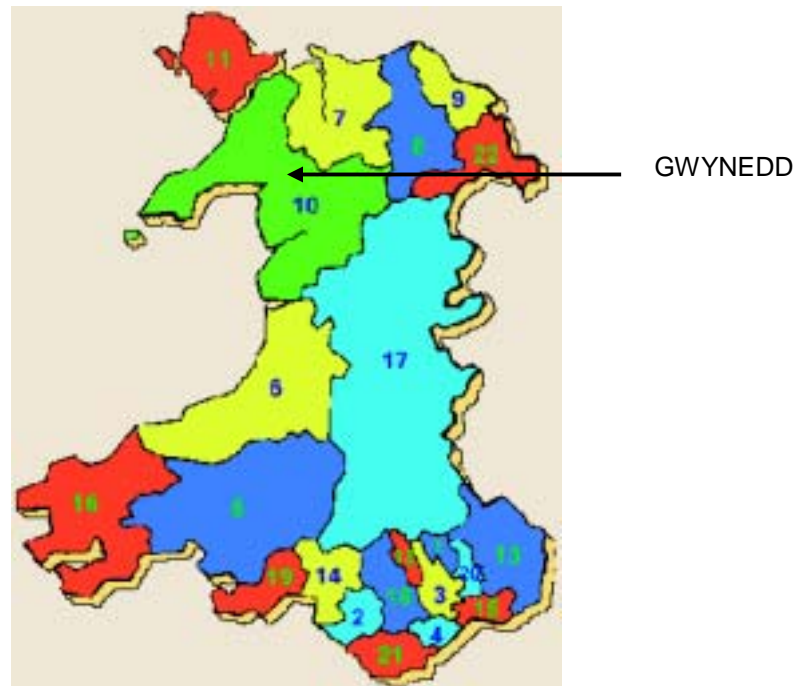


Figure 1 Location of Gwynedd in relation to rest of Wales

There are a number of small towns in the demonstration area, specifically Pwllheli, Caernarfon, Dolgellau and Blaenau Ffestiniog (see Figure 2).



Figure 2 Gwynedd's main towns

8.2.2 Population and age structure

Although the County covers more than 12% of the land in Wales, less than 0.5% of the Welsh population live in Gwynedd. The average population density in Gwynedd is 47 people per square mile or 18 people per square kilometre.

Gwynedd's population is older than the national average, with 22% of Gwynedd's population being of pensionable age. In almost half of all households in the County, the head of the household is aged 60 years or older. In addition, the population aged 65 and over is skewed towards females, with women outnumbering men by two to one, especially in the 75 years and over age categories. Ask this in a survey It is anticipated that elderly women are much less likely to own or drive a car than their male counterparts and are therefore more likely to be bus users.

There is a tendency for young people to migrate out of the county in search of higher education and job opportunities. The average proportion of the population of the four key towns in the demonstration area aged 16 – 24 is just 12%.

In Gwynedd, approximately 72% of the population aged 3 and over speak Welsh compared to a national average of 19%. In the demonstration area towns, 3 out of 4 residents speak Welsh. In a survey conducted for Gwynedd Council in April 2001, 3,400 people were asked which was the first language used in the home. The results revealed that 46% indicated that Welsh was the first language, with 45% stating that English was the first, and 6% saying both. This fact highlights the importance of providing Real-Time Information in both languages to ensure that all groups are included and to comply with the Welsh Language Act of 1993, which rules that all public information must be produced in both English and Welsh.

8.2.3 Terrain

The county of Gwynedd and the demonstration area are predominantly mountainous, with some coastal areas (see Figure 3).



Figure 3 *The Mountains of Wales*

8.2.4 Main economic activities

Much of the area is farmland, predominantly cattle and sheep farming. One of the area's main problems is the narrow economic base and dependence on declining and low-paying sectors, such as farming and tourism. The County of Gwynedd is classified by the EU as an Objective One Region with 79% of the land area being defined as 'severely disadvantaged'.

The gross average earnings in Gwynedd are the lowest in Wales - approx. 515 euros per month gross compared to 565 euros in Wales as a whole. It is estimated that around 12% of Gwynedd workers are employed in the tourism sector, while the percentage for Wales as a whole is around 7%. Women are three times more likely to work in the tourism industry than men, and employment in the industry is more likely to be part-time seasonal work than full-time.

Unemployment in Gwynedd stood at approximately 6.6% in January 2000, rising from 5.4% in July 1999. This reflects the seasonality of employment in the demonstration area.

8.2.5 Tourism

Gwynedd possesses a range of unique natural features that attract many tourists every year. One such feature is Snowdonia National Park, which covers almost 70% of the land within Gwynedd. It is estimated that Snowdonia receives 6.6 million visitor days per year. Much of the ARTS demonstration is located within the National Park. Outside of the Park, the county also has a large number of Areas of Outstanding Natural Beauty, National Nature Reserves, Sites of Special Scientific Interest, and Environmentally Sensitive Areas, as well as 88km of Heritage Coastline. The combination of these, together with a wealth of well-preserved historical buildings, such as Caernarfon Castle, and a range of other attractions means that the area is extremely popular with tourists.

8.2.6 Condition of road network

The key roads in the demonstration area are the A470, A487, A499 and the A497

In the absence of any motorways, the A470 is the main link road between the north and the south of Wales. One of the demonstration bus routes (the service 32 / 35) predominantly travels along the A470 between Dolgellau and Blaenau Ffestiniog. The A499 also runs north-south, connecting the towns of Caernarfon and Pwllheli and accommodating the bus service 12. An additional north-south route is the A487 which connects Caernarfon with Maentwrog, south of Blaenau Ffestiniog. There is only one key transit route in the demonstration area which runs east – west; this is the A497 from Pwllheli to Porthmadog. None of these roads are dual-carriageway routes, meaning that traffic on them may become very slow moving at busy times.

Beyond these 4 main roads, the roads in the demonstration area are winding, rural roads, often with steep gradients that are not suitable for bus access.

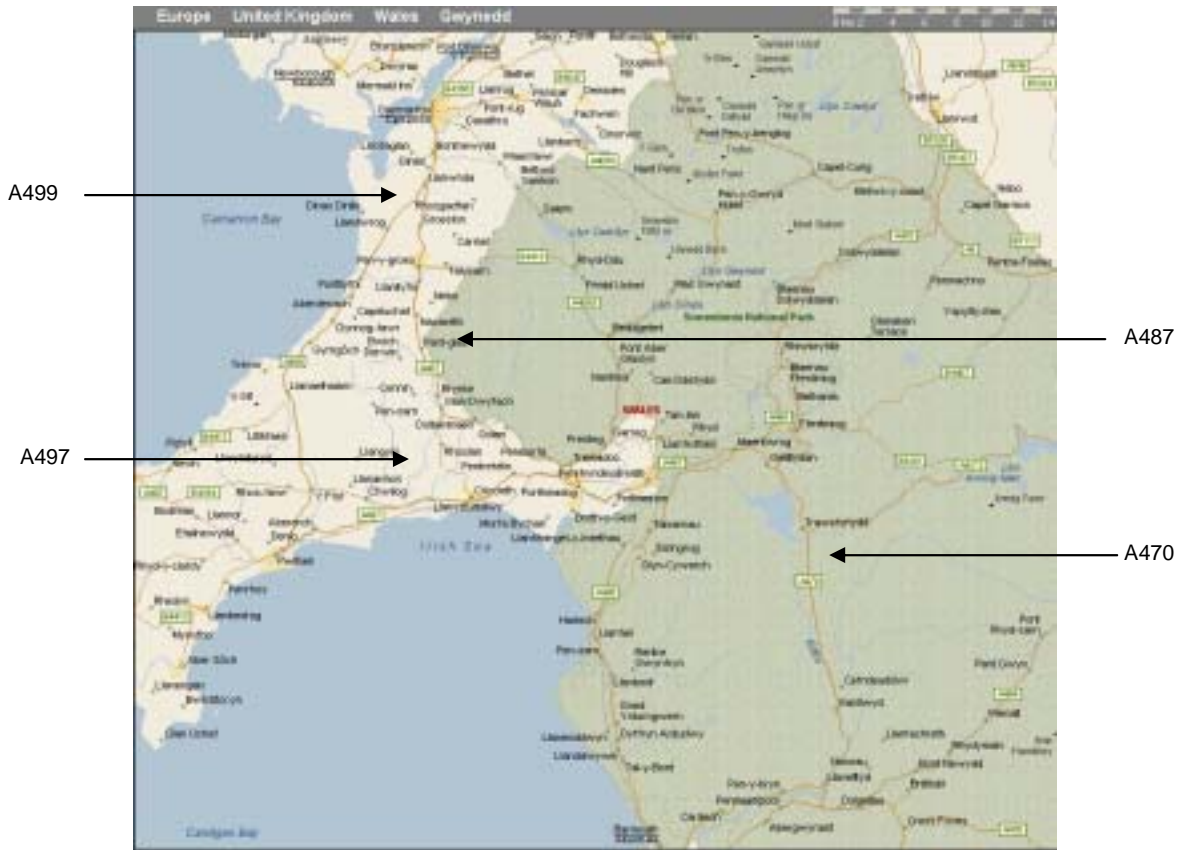


Figure 4 Main roads in demonstration area

8.3. Description of Services

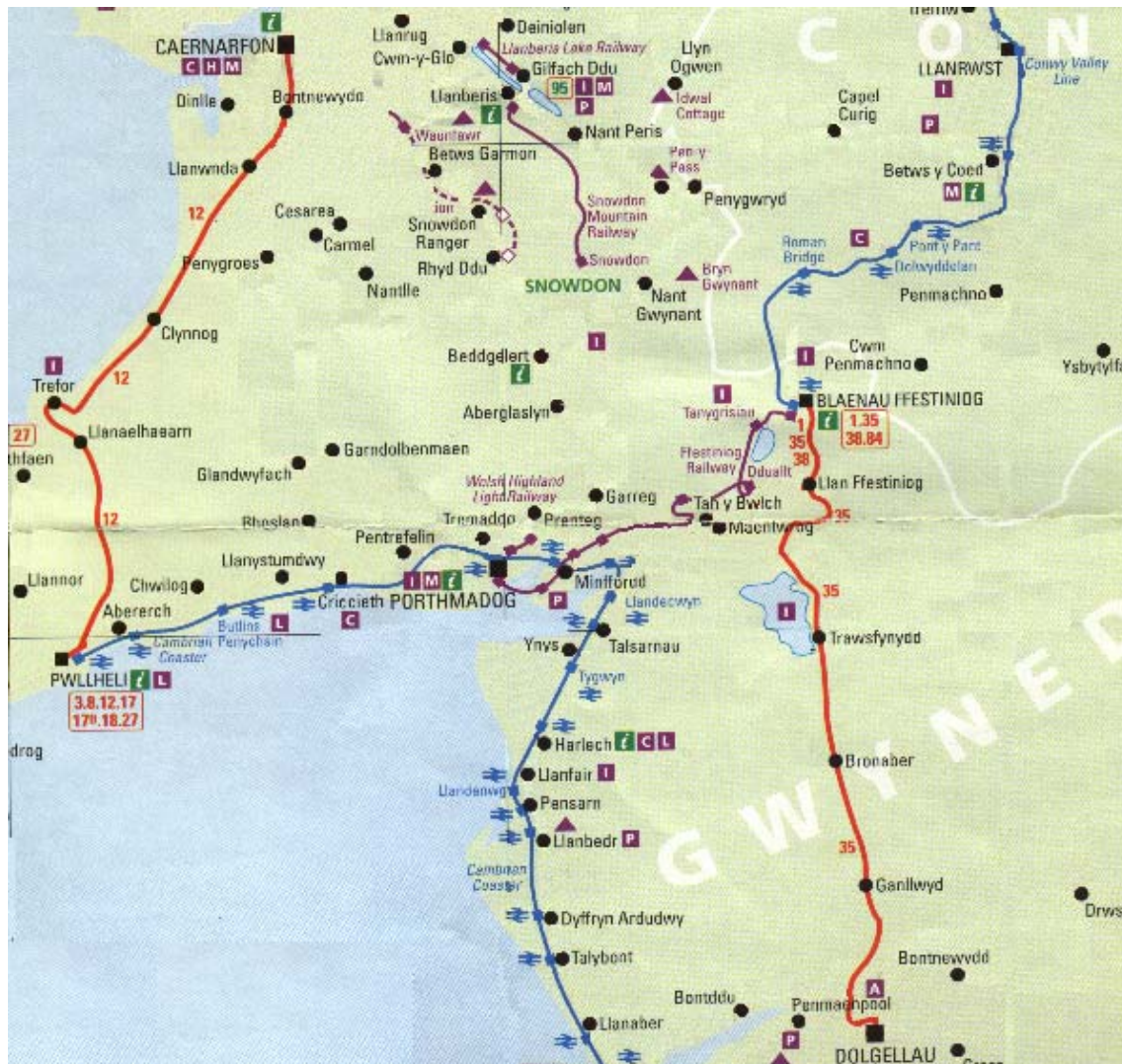


Figure 5 Bus Routes Selected for Inclusion within the Demonstration

8.4. Characteristics of Services

Two bus routes have been chosen for inclusion in the demonstration (see Figure 5). These routes have been chosen as they cover the most rural parts of the county. The services link residents of deep rural areas (with average population densities of 40 people per square km) to small towns at the end of each route.

Service 12

The service 12 runs from Caernarfon via Trefor to Pwllheli, a distance of approximately 32 km. The service is operated jointly by 'Berwyn' Coaches' and 'Clynnog & Trefor' under contract to Gwynedd Council. Services run approximately hourly on this route throughout the day (Monday to Saturday), with predominantly low-floor kneeling buses (Dennis Dart's) on services operating between 10.00 and 16.00 (see Annex 1). The journey lasts approximately 45 minutes.

Tourist attractions along the route include Glynllifon Country Park, the Lloyd George Museum and the Hafan y Mor Holiday Park, as well as the towns of Pwllheli and Caernarfon.

Patronage on this route is 72,650 per year (or 200 passengers per day). From Monday to Saturday, there are approximately 18 services per day in each direction, which equates to approximately 5 passengers per bus. The buses run between 07.00 and 23.30. The service on Sundays and Bank Holidays is much more restricted with only 4 buses operating in each direction per day between 11.30 and 18.45. There are 41 stops in total on the no. 12 route, not all of which will appear on the Voice / SMS server.

Service 12 has been improved and a quality partnership has been established between two previously competing companies. An hourly service with brand new low-floor buses has replaced two separate and competing hourly services with no ticket inter-availability. The roadside infrastructure has been improved, to ensure that all bus stops comply with the Disability Discrimination Act requirements. A number of shelters have also been provided.

Service 32 / 35

The service 32 / 35 runs from Dolgellau to Blaenau Ffestiniog, although a number of services require passengers to interchange at Tan y Bwlch (Oakley Arms) to complete their journey. There are 34 stops in total on this route – in common with the service 12, not all stops will appear on the SMS / Voice server. Details of the new timetable for this service may be found in Annex 2. The service is operated predominantly by 'Arriva Cymru' although certain services are operated by 'Express Motors'. The majority of vehicles on this service are now low-floor 'kneeling' buses (Dennis Dart).

The journey distance is approximately 35 km and takes approximately 45 minutes to complete, including up to 5 minutes for interchanging. The service frequency is approximately two-hourly, although it is more frequent for locations between Dolgellau and Blaenau Ffestiniog. The service operates between 06.50 and 1915.

Patronage on this service is approximately 45,000 passengers per year (or 125 passengers per day). There are approximately 15 services per day in each direction, which also equates to approximately 4 to 5 passengers per bus.

8.4.1 Bus Stops

There is a wide variety of stop types on both routes. Shelters vary from modern glass shelters in market towns to stone and wood shelters built to be in keeping with the surrounding buildings in rural areas such as Oakley Arms. Not all shelters have seating or rest bars.

Bus stops in some cases are little more than a pole and flag adjacent to hard standing in the grass verge. Schedule information in the form of printed timetables is not always available at stops. Specially designed disabled access tends to be only available in the larger towns although the use of adjustable height or 'kneeling' buses does allow smoother access for wheelchairs at some rural stops.

8.4.2 Vehicle(s) in Use

The vehicles in operation for most journeys on the service 12 are Dennis Dart / Plaxton, which are low-floor vehicles that are only a year old. These vehicles have 35 seats and space to accommodate a wheelchair. A Mercedes bus is utilised on the route during evenings and Sundays and at peak times.

The vehicles in use on the 32 / 35 route are the same Dennis Dart / Plaxton model, but they have been in service for an average of approximately 3 years.

8.4.3 Fares

A wide range of fares is available on the 2 demonstration bus routes. All fares in Gwynedd are based on distance travelled.

The cost of an adult single ticket from Caernarfon to Pwllheli on the service 12 costs £2.00 (approximately 3.25). Single journeys on the service 12 between the two end points of Caernarfon and Pwllheli cost from £0.50 to £1.60 (0.80 to 2.60). Return fares are also available on this route at approximately £0.50 more than the cost of a single ticket. A 'workers' return ticket is also offered on this service for a cost of between £0.90 and £2.25 (1.50 - 3.60), slightly cheaper than a regular return.

On the 32 / 35 route, an adult single ticket from Blaenau Ffestiniog to Dolgellau costs £2.20 (3.60), with the cheapest single fare for stops along the route being £0.70 (1.15).

Arriva Cymru, the main operator on the 32 / 35 service offer a range of 'Wanderer' tickets (see Table below)

	1-Day Ticket Price	3-Day Ticket Price	5-Day Ticket Price
Adult	£5.00	£10.00	£15.00
Child / OAP	£3.50	£7.00	£10.00
Family (1 adult + 2 children)	£8.00	£17.00	£25.00
Family (2 adults + 2 children)	£13.00	£27.00	£40.00

A bus pass is available to all OAPs in Wales for free travel anywhere in the country on the local bus network. There is no similar system in place for young people, apart from college passes which are available for off-peak use.

In terms of through ticketing, there are generic tickets available for use on all buses in Gwynedd, including those in the demonstration area. A Red Rover ticket costs £4.80 for an adult and £2.40 for a child (7.80 or 3.90). Passengers buy the rover ticket on the first bus they board and are able to use it all day on buses (not coaches or trains) in Gwynedd. In addition, the 'Freedom of Wales Flexi Pass' is available for travel after 09.00 on all trains (including the Ffestiniog steam railway) and buses in the Gwynedd area and beyond. Prices start at £19.50 (31.80) for a 1-Day Adult Flexi Pass and are available for adults, children, OAPs and families.

8.5. Stakeholders

There are 5 key stakeholders / stakeholder groups involved in the Welsh demonstration. These are:

STAKEHOLDER CATEGORY	NAME
USERS	<i>Bus users</i>
	<i>Non bus users</i>
	<i>Visitors to the area / tourists</i>
BUS OPERATORS	<i>Arriva Cymru</i>
	<i>Express Motors</i>
	<i>Clynnog & Trefor</i>
	<i>Berwyn</i>
TRAIN OPERATORS	<i>Central Trains</i>
	<i>First North Western</i>
PUBLIC AUTHORITIES	<i>Gwynedd Council</i>
	<i>National Assembly for Wales</i>
	<i>Relevant parish / ward councils</i>

8.5.1 Bus Operator(s)

There are four bus operators who are directly involved in the Welsh demonstration. 'Arriva Cymru' operate the majority of buses on route 32 / 35, with 'Express Motors' providing certain off-peak services. The buses on service 12 are operated by 'Clynnog and Trefor' and 'Berwyn'. The operators provide alternate services between Caernarfon and Pwllheli. Timetables for services 12 and the 32 / 35 may be found in Annexes 1 and 2.

Arriva Cymru, based in Llandudno, north Wales, is the largest bus operator in Gwynedd. Its total fleet consists of 220 vehicles, of which 38 are deployed in Gwynedd. Express Motors on the other hand is a much smaller local operator, based in the Caernarfon area. The services which Express Motors operate are, in general, those which Arriva Cymru consider unprofitable due to the time of day and number of passengers usually carried.

Clynnog & Trefor and Berwyn are both small, local bus operators based in Trefor – a small village located on the Service 12 bus route, mid way between Caernarfon and Pwllheli. Both companies have fleets of between 38 and 40 vehicles. Under contract to Gwynedd Council, these operators have entered into a 'quality partnership' for the operation of the service 12. In reality this means that they work in co-operation with rather than in competition with each other. The operators provide approximately the same number of services per day and alternate provision of certain early morning and late evening services.

Due to the rural nature of the county of Gwynedd and the demonstration area in particular, it is not possible to run bus services commercially. The vast majority of services are run under contract to Gwynedd Council – the administrative body for the county. In practice, the Council send invitations to tender to all local bus operators on their tender list. The invitation specifies the level of service required from the successful operator in terms of hours of operation, service frequency, standards of

driver training, revenue reporting requirements, etc. The operators are required to submit a tender price based on meeting the requirements of the tender. The Council will usually award the tender based on the cheapest price tender, although they are not obliged to do so. This process of competitive tendering ensures that operators do not need to compete for passengers on the street, resulting in a safer operating environment.

8.5.2 Train Operators

Central Trains and First North Western operate the trains which serve the demonstration area, particularly the proposed sites for Real-Time Information. Central Trains operate the service which runs from Porthmadog west to Pwllheli and east to Machynlleth, with First North Western operating the service from Blaenau Ffestiniog to Llandudno.

Both companies were contacted during the 'before' surveys to request permission to undertake interviews at the entrance to their stations. Apart from this contact, neither stakeholder has played a significant role in the project.

8.5.3 Public Authorities

Gwynedd County Borough Council is the local authority covering the whole of Gwynedd and with complete responsibility for transport. Unlike most of the other 21 Welsh local authorities, the Public Transport Unit of Gwynedd Council is located within the Planning and Economic Development Department, rather than in the Highways and Municipal Department or one of the larger directorates covering environmental matters. This has helped to ensure that the links between transport, land-use planning and economic development are strengthened. The Public Transport Unit is responsible for both day-to-day public transport matters and transport policy. They produce public transport information, administer the concessionary fares scheme and secure 'socially necessary' bus journeys. The Highways Department has responsibility for the production of local transport plans and bidding for Transport Grant monies. As a result, both Departments have been heavily involved in the development of the RTI system, although the Highways Department have tended to lead the process. The departments have worked well together in implementing the demonstration and there has been no apparent conflict between departments.

It was the Planning and Economic Department of Gwynedd Council which made the original suggestion for the system. The decision was made to apply for Transport Grant funding from the National Assembly for Wales for a Real-Time Information system. Expressions of interest were invited through the OJEC process and a number of applicants were selected to tender. The contract was awarded to ACIS following the formal tender process. The National Assembly for Wales provided the capital costs of the scheme, with Gwynedd Council covering the operational costs. The tender to provide the system required full bi-lingual provision and the standards specified related to accuracy of bus positioning, predictions of arrival times, etc.

The Planning and Economic Development Department identified the routes that they wished to be served by the RTI system, specified the locations of the RTI displays (i.e. at which stops they would be located), and provided the configuration data (bus route tracks, stop names, etc). They also provide revenue for maintenance of the RTI equipment. The Highways and Municipal Department

have to date provided the client project liaison, dealt with electrical supplies for the on-street equipment, worked to address the Welsh translation issues and undertaken general service installation, in conjunction with Symonds, the system engineers. The National Assembly for Wales has effectively decided on the charging regimes for the phone aspects of the service (i.e. calls for land-line users to access the information are charged at local call rate, with mobile phone users receiving free return SMS messages).

8.5.4 Users

Three key user groups were identified with regard to the Welsh demonstration: users, non-users; and visitors to the area. Users are defined as those people, usually resident in Gwynedd, who already use the bus for some or all of their journeys. Within the 'before' surveys, users were consulted about their views of the bus service prior to the improvements introduced as a result of the demonstration. Non-users are those people, usually resident in the county of Gwynedd, who currently make little or no use of the bus for journeys they make. This group were asked questions regarding why they don't travel by bus and whether the demonstration measures might encourage them to do so. Finally, visitors to the area were interviewed at key tourist attractions along the demonstration bus routes. They were questioned regarding how they had travelled to the tourist attraction, whether they had considered using public transport and whether they were aware of the new demonstration measures being implemented in the area.

8.6. Technology

The RTI phone system will be introduced to cater for both mobile and static phones, to ensure that no social groups are excluded and all people are in a position to benefit. Over time, Welsh language provision has improved among mobile phone companies but is still imperfect. This problem has been tackled during the project, to ensure that the system is fully dual language.

8.7. Operation of the Technology

8.7.1 The Mobile Phone Server

How the System Works

Those people in the demonstration area with an SMS (short messaging service) enabled mobile phone will be able to access this service. The operation of the system is as follows:

- User sends SMS message containing relevant parameters to advertised phone number
- Network Operator passes message to aggregator.
- Aggregator passes message to SMS Server.
- Server receives message, looks up departure information and formats return message.
- Outbound message passes back through aggregator to mobile operator and is delivered to user.

The message received back to the user's mobile phone will be in the form of a 'virtual RTI display' for the bus stop requested.

Typically a user can expect to wait less than 45 seconds from the transmission of the inbound message to the receipt of a departure board. This message would contain data that was less than 70 seconds old.

Figure 6 shows the architecture of the SMS server and the important areas in the message flow from the user to the system and back.

The SMS Server applications are written in VB, using an XML interface to the Real Time servers. The basic configuration is the "Central Database" which holds all information about operators, routes and timetables. This is currently generated in one of two formats, ATCO.cif and XL Spreadsheets.

Monitoring Progress

A number of parameters will be stored to facilitate analysis of the usage and trends of the SMS Server. These will include:

- Messages per week over the length of time the service has been available.
- Messages analysed by day of week.
- Messages analysed by time of day.
- Messages analysed by Departure boards requested.
- Number of different callers (CLI providers only).

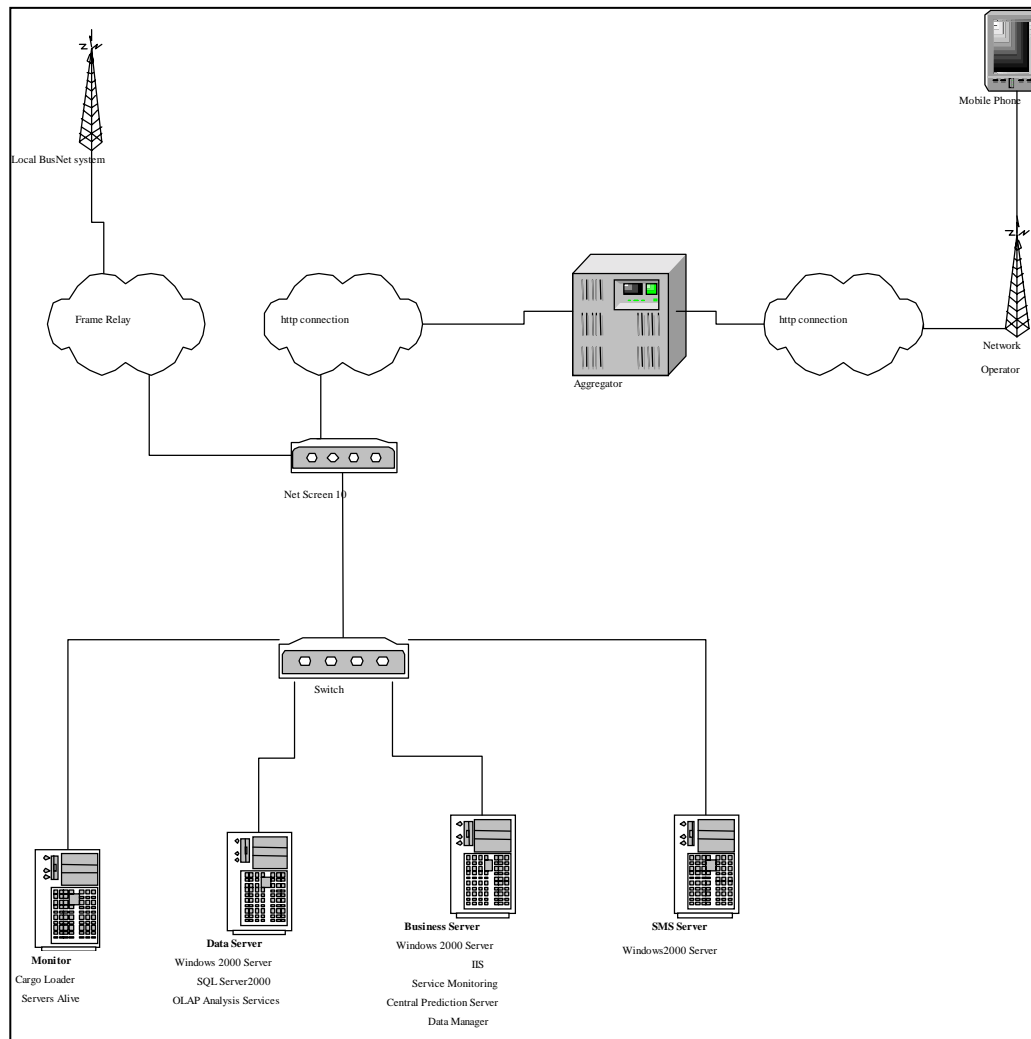


Figure 6 Schematic of the SMS Server

8.7.2 The Static Phone Server

How the System Works

The user dials the advertised number for the RTI service from a fixed line telephone. The phone server application picks up the incoming call and navigates the user through a number of menus, ending ultimately at a spoken “Departure Board” (Passenger Information Point (PIP)) Simulator that will announce departures for that stop. There are four ways of navigating through the menu structure:

Public Service and Area: - The user types the public service he wishes to catch; the search is refined if there is more than one service that matches the user’s requirement. The search is then further refined by asking the user which area he is interested in. The user is then provided with a list of stops on the selected service in the desired area, from which he selects his one particular stop.

Stop Reference: - Every stop has a unique reference number (URN). It is hoped that through advertising this number locally (in the bus stops) and on travel-related web sites, customers will use

this method the most. If the user knows this reference, they can enter it from a choice on the first level menu, avoiding the need to navigate through the full menu structure.

Favourites / Caller Known (CLI): - If the caller has not withheld his phone number, and navigates using any of the above methods, the system can offer to save this "favourite" against his phone number. When the same caller is recognised in the future, a shortcut can be offered to their favourite stop(s). As some callers' CLI will be the "switchboard" number of their office, a "password" function has been included, whereby the last four digits of the callers phone number / extension is required as additional security.

It is estimated that a call made via "Area" or "Public Service" methods will last between two and three minutes, including announcement of departure board and will be dependent on the number of stops on the public service and the amount of data on the departure board. It is estimated that a call made via "Stop Reference" or "Favourites" methods will similarly last for approximately one minute.

The list of stops available via the phone server is not necessarily all stops on the route, neither is it restricted to locations where a real Passenger Information Point (PIP) is installed in a bus stop.

Speech files have been recorded as a number of audio clips, both in English and Welsh, which are used in the announcements of the phone server. These include:

- configured bus stop names
- destination names
- route numbers, and
- other specific messages

The Phone server application is written using the ProNexus VBVoice 4.4 Professional toolkit. The basic configuration is the "Central Database" which holds all information about operators, routes and timetables. The system currently generates this data from one of two formats ATCO.cif and XL Spreadsheets. The schematic operation of the phone server is demonstrated in Figure 7.

The Phone Server will maintain it's own database of static information, updated with recent requests. This database will contain a list of configured systems, public services operated and a list of bus stops. Live (departure board) information is always requested from the ACIS Realtime servers. Data will be passed between the Phone Server and ACIS Real-time servers using XML requests. All audio clips will be held locally on the Phone Server.

Monitoring Progress

A number of parameters will be stored to facilitate analysis of the usage and trends of the phone server. These will be derived from the Phone Server application and BT supplied statistics. As an indication, the following trends will be analysed:

- Calls per week over the length of time the service has been available
- Number of calls analysed by day of week

- Calls analysed by time of day
- Calls analysed by Departure boards requested
- Number of different callers (CLI providers only)
- Average length of call
- Minimum number of lines free during any period
- Calls analysed by language

There are a number of delivery mechanisms available to provide statistics on usage, from paper based to spreadsheet to web-based, in graphical or tabular formats. Any web based reports would be password protected.

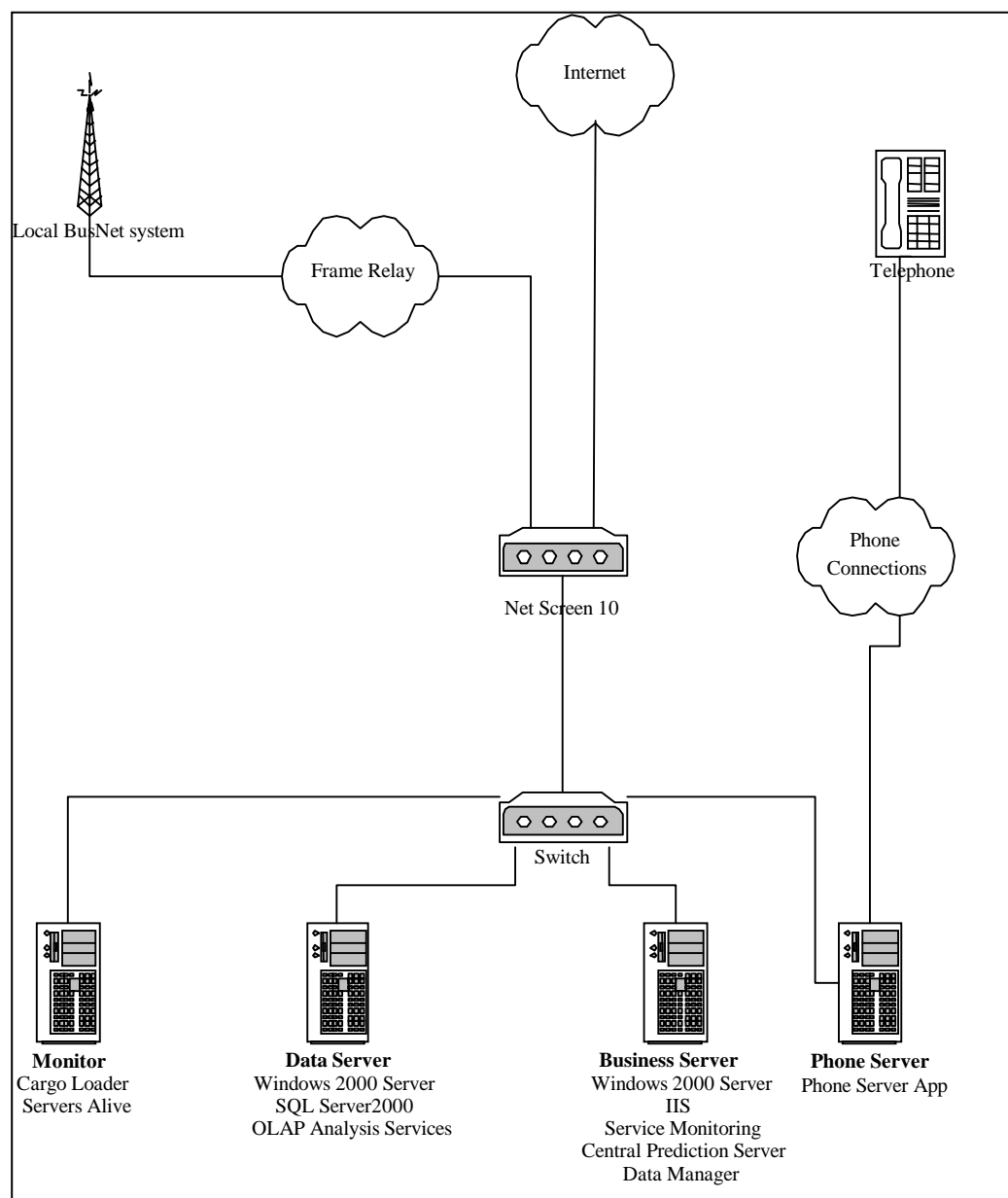


Figure 7 Schematic for Phone Server

8.7.3 Expected benefits for users and operators

The key benefits to those people who currently travel by public transport will be increased confidence in the bus service as a result of having access to accurate, timely bus information. The service should appear more reliable and enable people to make more informed decisions prior to setting out on and during their journey, based on the accuracy and timeliness of the information provided.

The operator benefits are that they will have more contented customers who are less likely to complain if their bus is running late as they will be aware of any delay in advance and updated on a regular basis. The introduction of Real-Time Information should also help to attract new customers to consider the bus rather than the car as a result of being able to access timely information. Potential

users will be able to make decisions regarding the mode to use on a trip-by-trip basis, based on the timely information provided by the RTI system. The individual operators have not been required to pay for the installation of the on-bus equipment necessary to operate the RTI system; as a result, they will benefit from happier existing users and ideally, an increased number of passengers choosing to travel using a more attractive bus service.

Comment:

We wonder, if the buses are delayed, how often and how much. Also we wonder if on time information is of any importance for captive users of PT who use the service frequently. Are they going to be happy knowing that the bus is late? Would this improve their situation more than when the bus is coming on time?

8.8. Annexes

8.8.1 Annex 1: Service 12 Timetable

What do "Col", "Sch", "NS", ... mean?

Mon – Sat	Col		Sch		NS		n				Sch			
CAERNARFON	-----	-----	0720	-----	0750	0835	0900	0940	1040	1140	1240	1340	1440	-----
safle/stop C														
Bontnewydd	-----	-----	0725	-----	0755	0840	0905	0945	1045	1145	1245	1345	1445	1545
Llanwnda	-----	-----	0728	-----	0758	0843	0908	0948	1048	1148	1248	1348	1448	1548
Parc Glynllifon	-----	-----	0732	-----	0802	0847	0912	0952	1052	1152	1252	1352	1452	1552
Pontllyfni	-----	-----	0735	-----	0805	0850	0915	0955	1055	1155	1255	1355	1455	1555
Clynnog	-----	-----	0738	-----	0808	0853	0918	0958	1058	1158	1258	1358	1458	1558
TREFOR siop/shop	0705	0705	0745	0815	0815	0900	0925	1005	1105	1205	1305	1405	1505	1605
Llanaelhaearn	0711	0711	0751	0821	0821	0906	-----	1011	1111	1211	1311	1411	1511	-----
Y Ffôr	0717	0717	0757	0827	0827	0912	-----	1017	1117	1217	1317	1417	1517	-----
Ysbyty Bryn Beryl			0800	0830	0830	0915	-----	1020	1120	1220	1320	1420	1520	-----
Chwilog	0722	0722					-----							-----
Hafan y Môr A497	0725	0725					-----							-----
Abererch	0730						-----							-----
PWLLHELI (safle/stand C)	0735	0735	0805	0835	0835	0920	-----	1025	1125	1225	1325	1425	1525	-----

	Col		NS		SO				
CAERNARFON	1640	-----	1710	1740	1900	1920	2045	-----	2215
safle/stop C									
Bontnewydd	1645	1645	1715	1745	1905	1925	2050	-----	2220
Llanwnda	1648	1648	1718	1748	1908	1928	2053	-----	2223
Parc Glynllifon	1652	1652	1722	1752	1912	1932	2057	-----	2227
Pontllyfni	1655	1655	1725	1755	1915	1935	2100	-----	2230
Clynnog	1658	1658	1728	1758	1918	1938	2103	-----	2233
TREFOR siop/shop	1705	1705	1735	1805	1925	1945	2110	2110	2240

Llanaelhaearn	1711	1711	1741	1811	1931	----	----	2116	2246
Y Ffôr	1717	1717	1747	1817	1937	----	----	2122	2252
Ysbyty Bryn Beryl	1720		1750	1820	1940	----	----	2125	2255
Chwilog		1722				----	----		
Hafan y Môr A497		1725				----	----		
Abererch		1730				----	----		
PWLLHELI (safle/stand C)	1725	1735	1755	1825	1945	----	----	2130	2300

Mon – Sat			Col	Sch	NS								n	n
PWLLHELI (safle/stand C)	-----	-----	0735	0740	-----	0810	0840	0940	1040	1140	1240	1340	1440	1550
Abererch	-----	-----			-----		-----	0945						
Hafan y Môr A497	-----	-----			-----		-----	0950						
Chwilog	-----	-----			-----		-----	0952						
Ysbyty Bryn Beryl	-----	-----	0740	0745	-----	0815	0845		1045	1145	1245	1345	1445	1555
Y Ffôr	-----	-----	0743	0748	-----	0818	0848	0958	1048	1148	1248	1348	1448	1558
Llanaelhaearn	-----	-----	0749	0754	-----	0824	0854	1004	1054	1154	1254	1354	1454	1604
TREFOR siop/shop	0655	0725	0755	0800	0805	0830	0900	1010	1100	1200	1300	1400	1500	1610
Clynnog	0701	0731	0801	0806	0811	0836	0906	1016	1106	1206	1306	1406	1506	1616
Pontllyfni	0705	0735	0805	0811	0815	0840	0910	1020	1110	1210	1310	1410	1510	1620
Parc Glynlifon	0708	0738	0808	0813	0818	0843	0913	1023	1113	1213	1313	1413	1513	1623
Llanwnda	0712	0742	0812	0817	0822	0847	0917	1027	1117	1217	1317	1417	1517	1627
Bontnewydd	0715	0745	0815	0820	0825	0850	0920	1030	1120	1220	1320	1420	1520	1630
CAERNARFON safle/stop C	0720	0750	-----	0825	-----	0855	0925	1035	1125	1225	1325	1425	1525	1635

	n	NS	NS	SO						
PWLLHELI (safle/stand C)	1640	1740	1800	1825	1830	1945	2130	2310		

Abererch						1950		
Hafan y Môr A497						1955		
Chwilog						1957		
Ysbyty Bryn Beryl	1645	1745	1805	1830	1835		2135	2315
Y Ffôr	1648	1748	1808	1833	1838	2003	2138	2318
Llanaelhaearn	1654	1754	1814	1839	1844	2009	2144	2324
TREFOR siop/shop	1700	1800	1820	1845	1850	2015	2150	2330
Clynnog	1706	1806	-----	-----	1856	2021	2156	-----
Pontllyfni	1710	1810	-----	-----	1900	2025	2200	-----
Parc Glynllifon	1713	1813	-----	-----	1903	2028	2203	-----
Llanwnda	1717	1817	-----	-----	1907	2032	2207	-----
Bontnewydd	1720	1820	-----	-----	1910	2035	2210	-----
CAERNARFON	1725	1825	-----	-----	1915	2040	2215	-----
safle/stop C								

Sundays & Public Holidays

CAERNARFON safle/stop C	----	1300	1530	1720	PWLLHELI (safle/stand C)	1200	1400	1615	1815
Bontnewydd	----	1305	1535	1725	Abererch			1620	1820
Llanwnda	----	1308	1538	1728	Hafan y Môr A497			1625	1825
Parc Glynllifon	----	1312	1542	1732	Chwilog			1627	1827
Pontllyfni	----	1315	1545	1735	Ysbyty Bryn Beryl	1205	1405		
Clynnog	----	1318	1548	1738	Y Ffôr	1208	1408	1633	1833
TREFOR siop/shop	1130	1325	1555	1745	Llanaelhaearn	1214	1414	1639	1839
Llanaelhaearn	1136	1331	1601	1751	TREFOR siop/shop	1220	1420	1645	1845
Y Ffôr	1142	1337	1607	1757	Clynnog	1226	1426	1651	----
Ysbyty Bryn Beryl		1340	1610	1800	Pontllyfni	1230	1430	1655	----
Chwilog	1148				Parc Glynllifon	1233	1433	1658	----
Hafan y Môr A497	1150				Llanwnda	1237	1437	1702	----
Abererch	1155				Bontnewydd	1240	1440	1705	----
PWLLHELI (safle/stand C)	1200	1348	1615	1805	CAERNARFON safle/stop C	1245	1445	1710	----

8.8.2 Annex 2 – Service 32 / 35 Timetable

	NS		Col										
	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA
Mon - Sat	32	32	502	35	32	32	35	32	35	32	35	32	35
BL.FFESTINIOG (safle/stop C)	----	----		0800	----	----	0920		1120		1310		1520
Manod gyf/opp Wynnes Arms	----	----		0805	----	----	0925		1125		1315		1525
Llan Ffestiniog Highgate	----	----		0808	----	----	0928		1128		1318		1528
Bontnewydd	----	----			----	----	0932						
TAN Y BWLCH Oakeley Arms	----	----	0815	0815	----	----		1035	1135	1235	1325	1435	1535
Gellilydan Y Bont	----	----	0820	0821	----	----	0937	1041	1141	1241	1331	1441	1541
Trawsfynydd Ffordd Yr Orsaf/Station Rd	----	----			----	----	0944			1248			1548
Trawsfynydd Fron Galed	----	----		0826	----	----		1046	1146		1336	1446	
TRAWSFYNYDD Cross Foxes	----	----		0827	----	----	0947	1047	1147	1251	1337	1447	1551
Bronaber	----	----	0831	0833	----	----	0953	1053	1153	1257	1343	1453	1557
Ganllwyd	----	----	0837	0839	----	----	0959	1059	1159	1303	1349	1459	1603
Ty'n Y Groes gyf/opp	----	----	0838	0840	----	----	1000	1100	1200	1304	1350	1500	1604
Llanelltyd gyf/opp Bro Cymer	----	----	0843	0845	----	----	1005	1105	1205	1309	1355	1505	1609
Coleg Meirion Dwyfor College	----	----	m	m	----	----	1008	1108	1208	1312	1358	1508	1612
DOLGELLAU Sgwar Eldon Square	----	----	0850	0850	----	----	1010	1110	1210	1314	1400	1510	1614

Mon - Sat		ARRIVA 32	ARRIVA 30	ARRIVA 32	ARRIVA 35	Express 32	ARRIVA 35	ARRIVA 32	Express 35
BL.FFESTINIOG (safle/stop C)	T4	----	----		1730		1825	----	2250
Manod gyf/opp Wynnes Arms		----	----		1735		1830	----	2252
Llan Ffestiniog Highgate		----	----		1738		1833	----	2255
Bontnewydd		----	----				1837	----	2259
TAN Y BWLCH Oakeley Arms		----	----	1700	1745	1838		----	
Gellilydan Y Bont		----	----	1706	1751	1844	1842	----	2303
Trawsfynydd Ffordd Yr Orsaf/Station Rd		----	----				1849	----	
Trawsfynydd Fron Galed		----	----	1711	1756	1849		----	2309
TRAWSFYNYDD Cross Foxes		----	----	1712	1757	1850	1852	----	2310
Bronaber		----	----	1718	1803	1856	1858	----	----
Ganllwyd		----	----	1724	1809	1902	1904	----	----
Ty'n Y Groes gyf/opp		----	----	1725	1810	1903	1905	----	----
Llanelltyd gyf/opp Bro Cymer		----	----	1730	1815	1908	1910	----	----
Coleg Meirion Dwyfor College		----	----	1733	1818	1911	1913	----	----
DOLGELLAU Sgwar Eldon Square		----	----	1735	1820	1913	1915		----

		NS												
Mon - Sat		ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA	ARRIVA
		35	35	32	35	32	32	35	32	35	32	35	35	32
DOLGELLAU	Sgwar Eldon Square	32	0650	----	0755	----	0915	1015	1115	1210	1315	1410	----	----
	Coleg Meirion Dwyfor College		0653	----	0758	----	0918	1018	1118	1213	1318	1413	----	----
	Llanelltyd Bro Cymer		0655	----	0800	----	0920	1020	1120	1215	1320	1415	----	----
	Ty'n Y Groes		0700	----	0805	----	0925	1025	1125	1220	1325	1420	----	----
	Ganllwyd		0701	----	0806	----	0926	1026	1126	1221	1326	1421	----	----
	Bronaber		0707	----	0812	----	0932	1032	1132	1227	1332	1427	----	----
TRAWSFYNYDD	Cross Foxes		0713	----	0818	----	0938	1038	1138	1233	1338	1433	----	----
	Trawsfynydd Fron Galed		0714	----	0819	----	0939		1139		1339	1434	----	----
	Trawsfynydd Ffordd Yr Orsaf/Station Rd			----	0822	----		1041		1236			----	----
	Gellilydan Y Bont		0719	----	0829	----	0944	1048	1144	1243	1344	1439	----	----
TAN Y BWLCH	Oakeley Arms	38	0725	----	0835	----	0950	1054	1150	1249	1350	1445	----	----
	Bontnewydd			----		----							----	----
	Llan Ffestiniog gyf/opp Highgate		0732	----	0842	----		1101		1256		1452	----	----
	Manod Wynnes Arms		0735	----	0845	----		1104		1259		1455	----	----
BL. FFESTINIOG	(safle/stop C)		0740	----	0850	----		1109		1304		1500	----	----

DOLGELLAU Sgwar Eldon Square	1535	----	1620	1620	----	1730	----	1920	----	----
Coleg Meirion Dwyfor College	1538	----	1623	1623	----	1733	----	1923	----	----
Llanelltyd Bro Cymer	1540	----	1625	1625	----	1735	----	1925	----	----
Ty'n Y Groes	1545	----	1630	1630	----	1740	----	1930	----	----
Ganllwyd	1546	----	1631	1631	----	1741	----	1931	----	----
Bronaber	1552	----	1637	1637	----	1747	----	1937	----	----
TRAWSFYNYDD Cross Foxes	1558	----		1643	----	1753	----	1943	----	2310
Trawsfynydd Fron Galed		----		1644	----	1754	----	1944	----	
Trawsfynydd Ffordd Yr Orsaf/Station Rd	1601	----			----		----		----	
Gellilydan Y Bont	1608	----	1645	1649	----	1759	----	1949	----	
TAN Y BWLCH Oakeley Arms	38	1614	----	1651	1655	----	1805	----	1955	----
Bontnewydd		----			----		----		----	2316
Llan Ffestiniog gyf/opp Highgate		----		1702	----	1812	----		----	2320
Manod Wynnes Arms		----		1705	----	1815	----		----	2323
BL. FFESTINIOG (safle/stop C)		----		1710	----	1820	----		----	2325

