Foundation for Integrated Transport

Shropshire Rural Buses

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"As to additional services in the evenings and at weekends, no one expects this to happen again in their lifetime."
Clerk to Hopesay Parish Council

"Young adults attending higher education also have issues with limited services. From personal experience my son could be waiting in coffee bars for hours due to infrequency of buses."
Worthen with Shelve Parish Council

"Councillors do feel the lack of a regular bus service is a huge disadvantage for rural areas, in particular for older people who cannot drive and those on low incomes who cannot live in villages such as ours because there is no public transport to get them to work."
Culmington Parish Council

"Links to essential community services need improvement. Broseley currently has no direct bus link to either Princess Royal Hospital, Telford, or Royal Shrewsbury Hospital. Neither is there a direct link to Shrewsbury Sixth Form College, the college attended by many 16-18 year olds living in Broseley."
Broseley Town Council

"Therefore, even though Ruyton has an ageing population, who would probably like to make use of an improved service rather than drive almost everywhere, there is little chance of this happening in the current financial situation."
Ruyton XI Towns Parish Council

"I am clerk to four parish councils and they are all in agreement that there needs to be more rural services. These need to be guaranteed to run."
Uffington Parish Council

Foreword

When the Foundation for Integrated Transport (FIT) was set up, one of its key goals was to raise the profile of rural transport campaigning. It is really shameful that while people's access to a service as basic to our society as transport is being removed hardly a finger has been lifted by the vast majority of organisations that purport to campaign for a better society.

The bus is the only truly inclusive mode of transport – available to virtually everyone, not requiring traffic skills, physical fitness or wealth, able to go almost anywhere, suitable for short or long journeys, not prone to congestion or environmental damage. All other modes of transport (driving, taxis, walking, cycling, rail etc.), whatever their merits, fail one or more of these tests. We therefore believe that the provision of a high quality bus network should be a first call on available transport resources, rather than the optional extra it is at present, where services that can't pay their way commercially are removed en masse.

Transport is pre-eminently a human rights issue -- people without access to transport can't function properly in the society we have built. We have come to tolerate a degree of discrimination against non-motorists far beyond what in recent years has increasingly come to be seen as unacceptable for, say, disabled people or sexual minorities.

But transport is also an environmental issue (because of the air pollution, noise and climate change emissions of a car dependent society). It is also an economic issue (because people need transport to contribute to our economy whether by earning or spending, and because of the huge volume of resources needed to support mass car ownership). And it is also a health issue (because of air pollution, the danger caused by large numbers of fast moving vehicles, the discouragement of physical activity through walking or cycling, and the damage of social isolation). There has never been a greater need for a broad based campaign which could bring together all these strands by fixing our local transport.

This report provides the material needed by such a campaign. Shropshire is typical of many parts of the UK – while heavily rural it is within commuting or day trip distance of a major metropolis (Birmingham), it is dotted with towns and villages large enough to support decent public transport, and it has many attractions for visitors who might come by public transport from Birmingham and other big cities – or anywhere else for that matter. This report shows how the transport system is failing the people of Shropshire in a big way. It also shows that the problems are not inevitable in that other quite similar areas in other countries are much better served. We need as a matter of urgency to make the cultural shift so that this country can share in the benefits.

Is it too much to ask for a system where everyone living in a town or village, or a suburb of a large town, or on a main route, can travel at any time of day from early morning to late evening, Sundays included, while even people in smaller communities can rely on having services that provide for journeys to/from the basic needs of work, education, shopping and healthcare? And where visitors can use public transport to access the county's natural beauty and heritage in an environmentally friendly way?

Local authorities should be given a statutory duty to provide such a level of service (together, of course, with access to funding that would enable them to do so). But we strongly suspect that one problem is that many of them wouldn't actually know how to do this. We hope that the lessons from other countries in this report will kickstart a learning process which will fill this gap.

Simon Norton, Chair, FIT

Towards the end of the preparation of this report for publication and after Simon wrote the preface we received news of his death. All of us at the Foundation for Integrated Transport and those involved with preparing this report wish to put on record our thanks for his contributions to our work and to this report. Simon had the very rare and very important ability to see the big picture and the way things could be in the transport world coupled with an amazing grasp of detail. He will be hugely missed.

Executive Summary

1. On 4th October 2017 The Foundation for Integrated Transport commissioned Professor John Whitelegg to carry out a research project on the future of rural bus services in Shropshire. The research was designed so that it would demonstrate by reference to three mainland European case studies that high quality rural buses (frequency, connectivity and integration) were in existence in other countries and that with more effort applied to the design, planning, organisation and funding of rural buses in a typical English shire county, this level of quality could be achieved in England.

2. A summary of the project's objectives was sent out to over 150 town and parish councils in Shropshire with a request for comments on bus services in those localities and an invitation to make specific suggestions for improvements. The responses are summarised in the report and include suggestions for direct services to rail stations, improved links with Shropshire's two main hospitals, more evening and weekend services and changes in timetabling to allow more time at a destination before catching a return bus.

3. Research was carried out on the provision of rural public transport services in Switzerland, Germany and Sweden and all three case study areas revealed a pattern of integrated bus and local rail services that is unheard of in the UK. Sparsely populated rural areas in all 3 countries have 10 or more buses each day and these facilitate connections with the equivalent of our market towns and onward links by rail to the main urban centres. In all 3 countries a great deal of effort is devoted to bus to bus and bus to train connections and a regional transport authority delivers an overall connected and integrated service with adequate public funds to maintain rural community viability.

4. In Switzerland there is a specific integrating concept known as "pulse timetabling" that facilitates bus to bus and bus to train connections at hubs.

5. There are some very clear lessons from these three case study areas that point to the need for a serious upgrade in the ways we manage rural public transport in England:

- There is no logistical or organisational problem in designing and delivering high quality integrated public transport in rural areas

- High quality public transport services require an overall planning and coordination mechanism like the Verkehrsverbund in Germany and the regional transport authority in Sweden. This is not possible in a fragmented, privatised and deregulated environment

- High quality public transport may require additional financial support from national, regional and local government.

6. The report reviews the responses from town and parish councils to produce a check list of bus service improvements that take us nearer to what is already in place in other countries. Filling gaps and integrating bus and rail will require changes in the way that councils consider rural public transport. Shropshire Council cannot alter national legislation or national funding but it can reallocate budgets to produce incremental improvements in bus services that deliver the improvements identified in town and parish council responses.

7. Two examples of bus service improvements are given together with an estimate of the costs that would be incurred. These costs do not take into account fare income and do not assume that the service would necessarily be a subsidised service. They do, however, indicate that it is possible to embark on a completely new bus strategy for Shropshire and one based on listening to town and parish councils, identifying priorities and delivering service improvements on a year on year basis.

8. The report concludes with a very simple and important observation. There is no such thing as a "rural transport problem" and it is in fact very easy indeed to provide high quality rural public transport in a way that supports vibrant, healthy, economically successful rural communities and contributes to keeping young people in those communities. This is what happens in Switzerland, Germany and Sweden and there is no reason at all why it cannot happen in England. There is a very real need to pose a rather fundamental question at all levels of government and to all political parties and all councillors and MPs "What is the reason why rural residents in England should have a poor quality public transport service when high quality is routinely delivered in Switzerland, Germany and Sweden"?

9. There is a need for wider system change at the national level. This system change will require a regulatory and legislative change as well as a change in the level of funding. The Swedish approach to designing, co-ordinating and funding rural public transport is a legislative requirement in the way bus and rail services are organised (Ringqvist, 2016) and there is a need for similar legislative change in the UK. The level of funding for rural public transport will have to increase but it would not be correct to regard the whole rural transport nexus as something that can be solved by "more money". The main thing that has to happen is that rural public transport is seen as a vital component in maintaining the social and economic viability of rural communities and is charged (as in Sweden) with promoting broader sustainable development objectives. The perceived problem of rural public transport in England cannot be solved by providing more money and linking that money to a defective model of planning, design, coordination and integration.

This report refers to data on bus usage, costs and timetables available at the time of writing (January 2018). However it is felt that any discrepancy with data prevailing at the time of publication is unlikely to materially change the conclusions.

1. Introduction

1.1 On 4th October 2017 The Foundation for Integrated Transport commissioned Professor John Whitelegg, to carry out a research project on the future of rural bus services in Shropshire. The research was designed so that it would demonstrate by reference to three mainland EU case studies that high quality rural buses (frequency, connectivity and integration) were in existence in many parts of mainland Europe and that with more effort applied to the design, organisation and funding of rural buses in a typical English shire county, this level of quality could be achieved in England.

1.2 The research has been organised and progressed in 5 distinct work packages:

WP1 A review of current levels of bus provision in Shropshire identifying gaps in service delivery in space and time and for journey purposes.

WP2 A review of bus service provision in rural Switzerland (the region around Dornach and Arlesheim), rural Sweden (the region around Järna) and rural Southern Germany (the region around Staufen and Münstertal in the Black Forest).

WP3 What lessons can be learned from the 3 case study areas focussing on measures of accessibility, funding and political accountability.

WP4 What would bus services look like in rural Shropshire if we transferred the lessons from the 3 case study areas to this typical English county?

WP5 What would have to change in terms of finance, political powers and democratic accountability to bring about the upgrade of rural bus services in Shropshire to the level enjoyed by rural residents in Switzerland, Sweden and Germany?

2. The Overall Context

2.1 Buses in England are struggling. Successive rounds of cuts in funding to local authorities have resulted in budget cuts for subsidised bus services and this has borne down disproportionately, but not exclusively, on rural areas. Campaign for Better Transport has monitored the funding situation and cuts in bus services and run a campaign in support of buses:

Buses in Crisis, 2017

"When you cut off bus routes, you cut off opportunities. Many people are severed from jobs and education, friends and family, shops and public services - including vital medical services."

"In early 2017 we made over 100 Freedom of Information requests to local councils to get a full picture of recent bus cuts; the findings are deeply concerning. Funding for buses across England and Wales has been cut by 33% since 2010, and by nearly £30 million in just the last year. Over 500 routes were reduced or completely withdrawn in 2016/17."

Source:
http://www.bettertransport.org.uk/buses-crisis-2017

2.2 In July 2016 Shropshire Council published its Bus Strategy, 2016-2021 (Appendix 1). This document made it very clear indeed that bus funding was a very low priority in Shropshire and likely to be cut by 75%:

"Current revenue spend on the subsidised network is circa £1.8m per annum. There is the potential requirement to reduce this, in line with wider Council budget plans, by up to 75% over the next four years."

The scale of the already inadequate funding of buses in Shropshire (£5.78 per person per annum) and the likelihood of a 75% cut should be compared with the Council's enthusiasm for spending £30 million of its own funds on 4 kms of new road in Shrewsbury, the North West Relief Road. The Council has confirmed that it has a very large financial deficit and cuts must be made to deal with that deficit but new road building is "safe" and not affected by these cuts.

3. Shropshire

3.1 Shropshire is a rural area with a population of 311,400 (mid-2015 estimate). It has a population density of 0.96 people per hectare compared to the English average of 4.09. It has an urban population of 130,660 and a rural population of 175,469. Even though it has a very large, sparsely populated geography it has a large number of market towns and urban areas including:

Bishop's Castle
Bridgnorth
Broseley
Church Stretton
Craven Arms
Ellesmere
Ludlow
Market Drayton
Much Wenlock
Oswestry
Shifnal
Shrewsbury
Wem
Whitchurch

Shropshire is a car dependent area with 15.8% of the population having no car, 42.2% with one car and 11.2% with 3 or more cars. It also has a road traffic death and serious injury record that is "significantly worse than the England average" (Public Health England, 2017).

3.2 The inadequacies of bus service provision in Shropshire are often the subject of media attention and Bus User Group activity to improve the situation e.g. Bus Users Shropshire, Newsletter 16, Summer 2016

"Fears Shropshire's elderly will be cut off without bus"

"Elderly people in rural areas of the county could become isolated from surrounding towns and key services such as hospitals unless a new bus service is brought in, it has been claimed. Eric Davis, of Market Drayton Seniors' Enterprise, said buses provided an important lifeline for people who could not drive or who had a disability. He said such people could be cut off from hospitals, shops or courts in the nearest towns. The group is working with volunteer group."

"Petition over bid to axe Shifnal bus services"
Two main bus services serving Shifnal are set to be axed, it has been revealed. Arriva will stop running its 8 and 8a services, which cover return journeys between Telford and Wolverhampton and run through Shifnal. The company said the services, which also run through Cosford and Albrighton, are no longer profitable due to low passenger numbers. But residents have reacted angrily to the news, and are reportedly looking to launch a petition to maintain the service."

"Shifnal and Albrighton to lose bus services
Arriva have announced that they are withdrawing service 8 from Telford to Wolverhampton via Shifnal and Albrighton from 24 July. It provides an hourly service on Mondays to Saturdays. The company said the service is no longer profitable due to low passenger numbers. They have decided to keep service 8A between Telford and Shifnal and increase its frequency to maintain a bus every 30 minutes between the two towns."

Source:
http://www.bususers.org/news-events/news/june-newsletter-from-bus-users-shropshire/

On 11th May 2011 Shropshire Council announced cuts in bus funding of £350,000:

"Changes are to be made to a number of bus services in Shropshire, after Shropshire Council's new bus strategy was agreed this week"
(11 May 2011).

"In a move that will save the council around £350,000 per year, the council's Cabinet has agreed to reduce or end the subsidy paid to bus operators towards services that fall outside the objectives of the strategy."

"Cabinet also agreed to withdraw subsidy from a number of services which are deemed as being 'high cost' compared to the number of passengers that currently use the services. Some of these services are costing the council up to £21 per passenger journey."

Source:
http://shropshire.gov.uk/news/2011/05/changes-to-bus-services-agreed/

Shropshire has a network of bus routes that connect most market towns and large villages with Shrewsbury but not with each other and not at an acceptable frequency and not into the evenings and these have been mapped by Bus Users Shropshire and are reproduced with permission in Appendix 2 (North Shropshire) and Appendix 3 (South Shropshire).

3.3 This project has not set out to evaluate in any structured way the quality of this network in terms of connectivity, frequency and the availability of buses to specific destinations or at times of the day and days of the week that buses are running but we have consulted widely and summarised the result of this consultation in section in Table 1 opposite and in Appendices 4, 5 and 6.

4. Consultation Results

4.1 Details of the rural bus project were sent out to over 150 town and parish councils with a request for comments and observations on the bus services serving those communities and with a request to make specific suggestions for improvements and the "plugging of gaps". The results are shown in Table 1 on pages 9 and 10.

4.2 A very full response was received from Trevor Allison, Shropshire Ramblers Association who has a special interest in bus use to support tourism. His suggestions are in Appendix 4

4.3 A very full responses was received from Peter Gilbert, Bus Users Shropshire and this is reproduced in Appendix 5

4.4 A response was received from Professor Les Lumsdon and this is reproduced in Appendix 6

Table 1: Responses from Town and Parish Councils

Name of council	Response
Clun	There are good links between Knighton and Ludlow but nothing that links Knighton with Clun and Bishops Castle.
Child's Ercall PC	We currently have a limited community bus provided by NSWheelers to Market Drayton on a Wednesday and a daily service to Wellington.
Kinlet PC	We only have the 125 bus which everyone finds most satisfactory but it should be more frequent and run into the evenings.
Wem	Wem Town has 2 bus services the 511 Shrewsbury to Whitchurch which runs 14 times a day including Saturday operated by Arriva. 201 Town Service which runs Saturday, Monday, Tuesday, Thursday operated by Lakeside. The Town Council would like the 201 service expand to run every day and include the new estates in the town including Fismes Way, Windmill Meadow as this will enable the older people not to walk so far to catch this important bus. This service provides a vital link for those wishing to catch a train or onward bus to Shrewsbury and Whitchurch.
Hopesay Parish Council	In answer to your question, I imagine that if a regular/frequent direct service [Aston on Clun] to Ludlow returned, residents would use it. As to additional services in the evenings and at weekends, no one expects this to happen again in their lifetime. The best we can hope for is an increase in the frequency of the regular services and no further cuts.
Bishop's Castle	The lack of a service to and from our nearest rail station at Craven Arms is particularly egregious.
Culmington Parish Council	Culmington, a small village around 5 miles outside Ludlow, only has the Buzzard, a community bus, to rely on once a week. Councillors do feel the lack of a regular bus service is a huge disadvantage for rural areas, in particular for older people who cannot drive and those on low incomes who cannot live in villages such as ours because there is no public transport to get them to work. Councillors would very much like to see some reinstatement of a regular service even if it was only on a Monday and Friday.
Much Wenlock Town Council	Much Wenlock Town Council requires assurance of a dependable bus service from Much Wenlock to Bridgnorth and Shrewsbury because people, especially older people and students, are dependent on the service for shopping and hospital appointments. There should also be a direct regular service from Much Wenlock to Telford.
Ellesmere Town Council	No further cuts in bus funding, we need a direct bus to Wrexham (cross-border issue), we need a daily bus to Whitchurch, integrated bus and rail at Gobowen, improved links to the Orthopaedic Hospital, smaller buses running more frequently.
Worthen with Shelve	There is a need for more evening services and more buses per day on the 558 route and there is no direct bus from one side of the parish to the other.

Name of council	Response
Broseley Town Council	A very full response available on request.
Richards Castle Parish Council	We have one bus, the 492 Ludlow-Leominster service, which has been cut back in recent years. We would like to see an increase in frequency particularly on Saturdays. There is no Sunday service.
West Felton Parish Council	Links to the Orthopaedic Hospital in Oswestry, and also Shrewsbury and Telford hospitals, could prove vital and a direct bus to Gobowen train station.
Withington Parish Council	Integrate school services with services to the general public. Buses must link residents with GP surgeries. Bus schedules must take account of return services so residents can return home. We need buses to Wellington train station and for trips to hospitals and shops.
Ruyton XI Towns Parish Council	Even though Ruyton has an aging population, who would probably like to make use of an improved service rather than drive almost everywhere, there is little chance of this happening in the current financial situation. The only type of service that would ultimately work is a regular timetabled but demand responsive service, similar to the abandoned ShropshireLink dial-a-ride service; but it would have to be extremely well organised and run, and it would take several years to become 'accepted'.
Uffington Parish Council	There need to be more rural services and these need to be guaranteed to run. The timings need to be improved to provide connections at Shrewsbury bus station. It is unfair that when there are problems in Shrewsbury our rural buses are taken out of service to assist the town services.
Church Stretton Town Council	A very full response from Councillor Bob Welch, available on request.
Quatt Malvern Parish Council	With the possible closure or running down of local hospitals in Kidderminster and Bridgnorth, improved public transport to Telford and Shrewsbury would be helpful.
Berrington Parish Council **Longden Parish Council** **Leighton & Eaton Constantine Parish Council** **Uffington Parish Council**	I have had cause to write and complain to the bus companies on behalf of residents for three parishes this year where the buses have either failed to stop, once when the bus was full with no additional buses put on, once it just failed to stop for an elderly couple, and another where the service was diverted to support the town services where they run three or four times an hour.

4.5 The response rate from town and parish councils was disappointingly low and reminders were sent to the main town council non-responders (Bishop's Castle, Ludlow, Bridgnorth, and Oswestry). The reminders did not produce a response.

4.6 It is already clear from all those who did respond that there is a real concern for the future of bus services in Shropshire and these concerns have not been diminished by the Shropshire Council Bus Strategy published in July 2016.

4.7 The main points made in responses are unsurprising and it would not be difficult to bring about the suggested improvements if we had a well-directed local council with a strong appreciation of the co-benefits of regular, connected bus services working in a coordinated fashion. We return to this point in the concluding section of this report but it is already clear that there is a network that should be supported and funding for local bus services should not be cut. We understand that life is difficult for councils dealing with savage cuts but Shropshire Council has no difficulty in providing £30 million for one small road in Shrewsbury, the North West Relief Road, together with the associated revenue costs of preparing the detailed business case for this road when it has already indicated that a 75% cut in the £1.8 million budget for bus support is likely.

4.8 In the next 3 sections we look at bus service provision in 3 case study areas to reveal just what can be achieved when rural public transport is taken seriously and is supported by central and local government as a clear political priority.

5. Switzerland

5.1 Switzerland has the highest level of public transport use in Europe and this is the result of dense, coordinated networks that extend into deep rural areas and adopts the concept of "pulsing" (Petersen, P, 2016).

5.2 Pulsing is a system of timetable planning and coordination that makes sure all bus and local train modes can work together and passengers can switch effortlessly at defined hubs from one mode to another or one bus to another within a matter of minutes and simply by walking a very short distance. Pulsing works well in rural areas and offers clock-face timetables in areas of low population density with a high degree of reliability and certainty in reaching destinations.

5.3 Mees (2010) has captured the essence of pulsed public transport planning in his description of Sternenberg in the Canton of Zürich (population 351), Bauma (population 1,000) and Hinwil (population 5,000).

5.4 Sternenberg with a population of 349 compares well with many of Shropshire's villages. Unlike Shropshire's villages Sternenberg has "7 buses each weekday, 5 on normal weekends and 7 on summer Sundays and holidays. Each Sunday bus leaves at 24 minutes past the hour, connecting with trains arriving at 20 minutes past the hour. The bus calls at the church, dropping off hikers, then does a circuit of the main hamlets collecting locals before returning to Bauma to connect with an outward train. Once they board the bus the residents of Sternenberg don't need to worry about timetables. Each bus meets the train at Bauma which in turn connects at the regional hub of Winterthur with another train to Zürich and major centres across the canton. Each of these trains is met by connecting bus services at stations en route, providing access to every place with more than 300 residents or jobs" (Mees, 2010, page 4).

5.5 Bauma, with just over 1,000 residents, has "2 trains an hour every day of the year (0600-2400) which is a much higher level of service than that available to Ludlow with 11,000 residents. It also has an hourly all night bus service on Friday and Saturday" (Mees, 2010, page 4).

5.6 Ludlow (population 11,000), Craven Arms (population 2,289) and Church Stretton (population 4,700) have no connecting bus services that meet trains to take passengers to any of the many villages in the surrounding areas. Bishop's Castle has no connecting bus to its nearest railway station, Craven Arms.

5.7 The railways stations at Ludlow, Craven Arms and Church Stretton also have no passenger lifts making all 3 stations impossible for the disabled to use and very difficult for the elderly residents of all 3 towns to use and directly contrary to many expressions of support for the disabled and legislation about equality and disabled access.

5.8 "An illustration of the system in operation can be had by travelling to Hinwil, a town of around 5,000 residents in the Zürich Oberland, the mountainous region in the far east of the Canton. S-Bahn line 14 leaves Hinwil station at 8 and 38 minutes past the hour, from 5.38am to 11.38pm every day of the year; longer trains run at busy times. Five minutes down the line, each train arrives at the regional junction of Wetzikon, which has two 'island' platforms. A minute later, the S5 express service from Rapperswil pulls in on the opposite side of the platform. After passengers are exchanged, the express departs for Zürich, followed by the stopping-all-stations S14. A minute later, a third service departs: the S3, which uses the platform vacated by the express but follows a different route to Zürich, via the sub-regional centre of Pfäffikon. On the opposite island platform, the same procedure occurs in reverse, allowing transfers in all directions. In the station forecourt, half a dozen bus routes perform a similar manoeuvre. Some of these service the town of Wetzikon, while others fan out across the countryside to neighbouring rail corridors. Connections are possible between all three train lines and all six bus routes, in all directions. Once the bus has left, Wetzikon station is quiet until the cycle begins again. Until 2006, this meant a gap of half an hour, but in that year a second express service was added, doubling train frequencies to 15 minutes; three of the bus routes serving more urban areas were upgraded to match the increased frequency of the trains. The all-directions transferring available at Wetzikon is confined to major junctions, but timetables are still coordinated at other interchange points. If timed transfers cannot be ensured in all directions, they are guaranteed for the most popular connections, generally to or from Zürich or Winterthur. So... each bus from Bauma to Sternenberg is timed to leave four minutes after the arrival of the S26 train from Winterthur" (Mees, 2010, page 136).

5.9 The area around Dornach in Switzerland (population 6,611) and the bus links (67 and 111) to Gempen (population 763), Seewen (population 1,025) and Liestal (population 13,572) are examples of rural bus services connecting villages with each other and with connections to the main regional centre, Basel and sub-regional centre Liestal. The geography of this area is very similar to the geographies in Shropshire. The timetables can be seen here:

http://www.fahrplanfelder.ch/fileadmin/fap_pdf_fields/2018/50.067.pdf

https://www.postauto.ch/en/excursion-tips/gempen-oristal-route

5.10 The 67/111 bus service starts at 05:48 and the last bus is 23:53. There are 26 trips on a weekday (Monday-Friday) and 23 trips on a Saturday and Sunday.

5.11 This level of provision 7 days a week and frequent connections with dozens of small villages is normal in Switzerland and totally absent in Shropshire.

6. Germany

6.1 A German resident living within an approximate 50km radius of Freiburg-im-Breisgau (population 222,203) in Southern Germany has a dense network of local trains, buses, trams and “Anruf-Sammel-Taxi” (AST) services that provide for most journey purposes at most times of the day. It is possible for rural residents in small towns and villages e.g. Staufen (population 7,685), Münstertal (population 5,217), Sulzburg, (population 2,714) and Grunern (population 890) to reach Freiburg very easily by highly connected, integrated services. It is also possible to return to these small towns and villages after an evening event in Freiburg and if the last train from Freiburg to Bad Krozingen arrives after the last train has left Bad Krozingen for Staufen or Münstertal there is the AST service to provide the final leg of the journey. The passenger phones the AST number before leaving Freiburg and on arrival in Bad Krozingen a taxi is waiting to take the passenger to the final destination. The passenger does not pay a full taxi fare but a nominal fee of 5-10 Euros and the taxi is provided as part of an organised, integrated public transport offer.

6.2 The AST is a small part of an overall public transport offer but it guarantees the whole trip from origin to destination and transforms the image and the reality of public transport so that it is no longer the last resort of those who for whatever reason do not have access to a car or want to use a car that they do have. It is now a high quality alternative to the personally-owned car and guarantees door-to-door travel.

6.3 The rural corridor from Bad Krozingen to Staufen and Münstertal is served by a newly electrified single track line and new rolling stock. The comparison with the double track Hereford-Shrewsbury-Wem-Nantwich line is startling. The route through Shropshire uses 30 year old diesel trains, often overcrowded and with no connecting bus services at the majority of stations.

6.4 All bus and train services are provided by SWEG (Südwestdeutsche-Verkehrs-Aktiengesellschaft) and under the overall control and coordination of the public body “Regio Verkehrsbund Freiburg” www.rvf.de

6.5 The full timetable for all bus and train routes, including full details of the AST service, can be found on the SWEG web site: http://www.sweg.de/html/media/muenstertal.html

6.6 The SWEG trains (Südwestdeutsche-Verkehrs-Aktiengesellschaft) are zero carbon, non-polluting, extremely comfortable, with very large windows. The photograph on the preceding page shows this train just outside Staufen station with Staufen castle in the background.

6.7 The stations on this line (Bad Krozingen-Staufen-Münstertal) have also been rebuilt. The photograph opposite shows the new train at the new Münstertal station which is the terminus of this line.

6.8 The bus also meets the train at Münstertal (something which does not happen at many stations on the rail route through Shropshire). The photograph oposite shows the "cheek-to-cheek" bus-train arrangement at Münstertal.

6.9 The SWEG trains run at very regular intervals. There are 29 services each weekday from Bad Krozingen to Münstertal.

6.10 Grunern, near Staufen, is a small village with 890 residents. This size of settlement is typical of many villages in Shropshire. It has bus connections from Staufen station (the buses meet the trains) and there are 16 buses every weekday, Monday-Friday, in both directions. The first bus from Staufen is at 0532 and the last at 2014.

6.11 The delivery of highly integrated and coordinated bus, rail and tram services in the Freiburg region and more generally in Germany, Austria and Switzerland is in no small part the result of one over-arching publicly accountable, regional transport authority, the Verkehrsverbund (Pucher and Kurth, 1995).

6.12 Buehler and Pucher (2011) summarises the collaboration between public transport operators and the different levels of local government administration throughout the region. The political direction and coordination is provided by the ZRF (Zweckverband Regio-Nahverkehn Freiburg) and the operators come together in the RVF (Regio-Verkehrsverbund Freiburg):

"Services, fares, and subsidies for the entire Freiburg region are coordinated by a regional public transport association (ZRF), which serves 625,000 residents in 75 towns. ZRF sets the overall public transport policy in the region and develops and updates the regional public transport plan for 187 different bus and rail operators, 90 different lines, and 3,050 km of routes. It is also responsible for receiving funding from federal, state and local governments and then distributing those funds among public transport operators to cover investment and operating expenses."

The ZRF and RVF work in very close co-operation with each other and are known collectively as the "Verkehrsverbund" (personal communication, Ralph Buehler, 10th December 2017).

6.13 The Verkehrsverbünde, VVs (plural), receive a subsidy from city and state governments (see Table 2 on page 16) and provide public services across the full range of geographies (central city, edge of city, suburbs, rural areas). The percentage of total costs met by fare revenue is still high e.g. 80% in Munich and 72% in Hamburg. All these VVs operate over substantial geographical areas including rural towns and villages and sparsely populated rural areas. A key underlying principle for all VVs is to provide totally integrated services across all geographies and to co-ordinate fares marketing, ticketing and information.

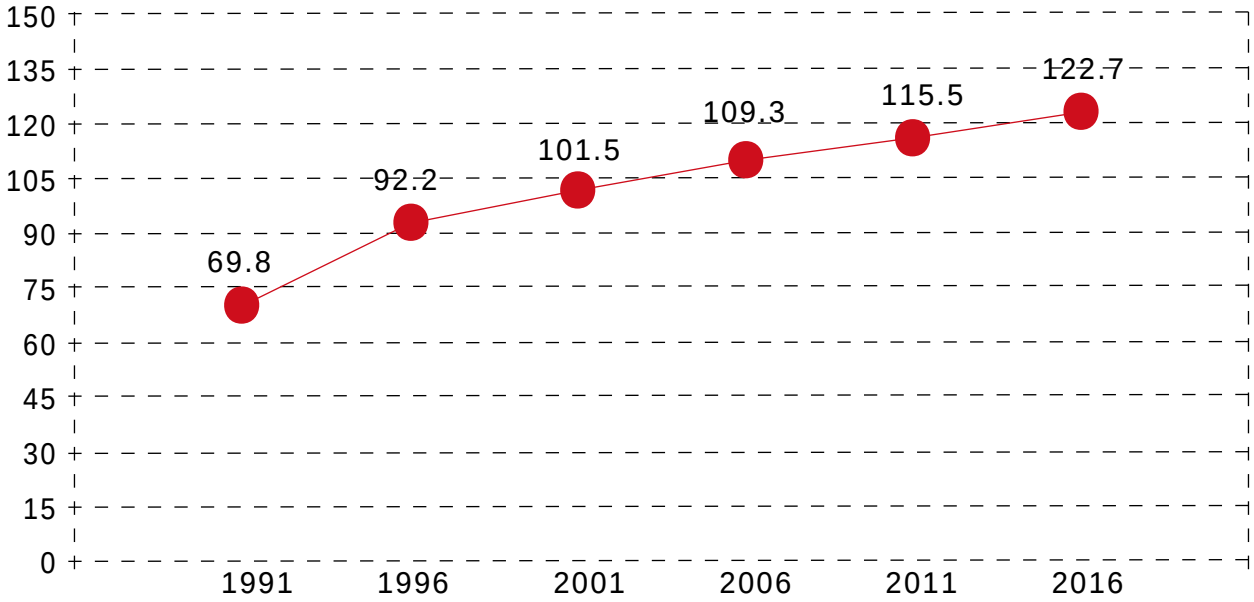
6.14 The use of public transport in the RVF area has grown from 69.8 million in 1991 to 122.7 million in the period 1991 – 2016 and this is shown in Figure 1 on page 16.

6.15 The contrast with public transport provision in Shropshire and the RVF area could not be starker. In Shropshire there is no coordination at all. Trains and buses are not required to provide connections of any kind and tickets are not interchangeable (e.g. a bus ticket cannot be used on a train and vice versa). No democratic body has the power to require buses and trains to meet (e.g. no buses call at Church Stretton train station) and there is no democratic control or influence over ticket prices, frequency, days of running (e.g. Sundays) and times of first bus and last bus. The result is a totally uncoordinated collection of services and an overall poor quality of provision for the user and a lack of interest in those residents who do not have access to a car or for whatever reason cannot drive or are simply too old, too young or too poor.

Table 2
Percentage of operating costs covered by fares in 1990 and 2016:
Source: Buehler, R, Zimmerman, M, Lukacs, K (2015)

	Verkehrsverbund		Core City
	1990	2016	2016
HVV (Hamburg)	62	72	90
MVV (Munich)	58	80	100
VOR (Vienna)	63	55	69
VBB (Berlin)	n.a.	55	74
ZVV (Zürich)	57	65	71
VRR (Rhine-Ruhr)	35	52	n.a.

Figure 1
Numbers of people using public transport in the RVF area, 1991-2016 (millions):
Source: https://www.rvf.de/unternehmen-rvf/verkehrsverbund/portraet/



7. Sweden

7.1 Sweden has a well-developed rural transport system that finds no difficulty in connecting sparsely populated rural settlements with larger towns (the equivalent of Shrewsbury for example) and connecting buses with buses and buses with trains. Even more than Switzerland and Southern Germany, Sweden shows that the many excuses used to justify poor quality rural transport in the UK lack substance. It is possible to organise, fund and supply high quality rural public transport in areas with lower density of population and longer distances to access services than is the case in Shropshire.

7.2 The Swedish approach to organisation, coordination and integration in a defined geographical area is described by Johansson et al (2017).

7.3 Sweden has a population of 9.9 million (2016) and an average density of 24 people per km^2. The 4 largest cities (Stockholm, Gothenburg, Malmo and Uppsala) have a total population of 2.5 million and there are 40 towns with a population of less than 50,000 per town. This means that Sweden has a long history of providing for vast rural areas with several million residents and overall transport polices that recognise the importance of rural bus and rail services and the connections between both forms of transport.

7.4 Public transport in Sweden is organised in a way that is very close to the German Verkehrsverbund. Each region has a public transport authority that plans, coordinates and finances public transport in that region. These authorities have a duty to design and deliver an overall, coordinated public transport plan and they then recruit public transport providers to deliver those services and the providers deliver the integrated system that is specified in the contracts.

7.5 The public transport authority in Sweden is charged with the responsibility of delivering wider sustainable development focussing on the interests of the community as a whole (Ringqvist,2016).

7.6 The Swedish approach has been summarised as follows:

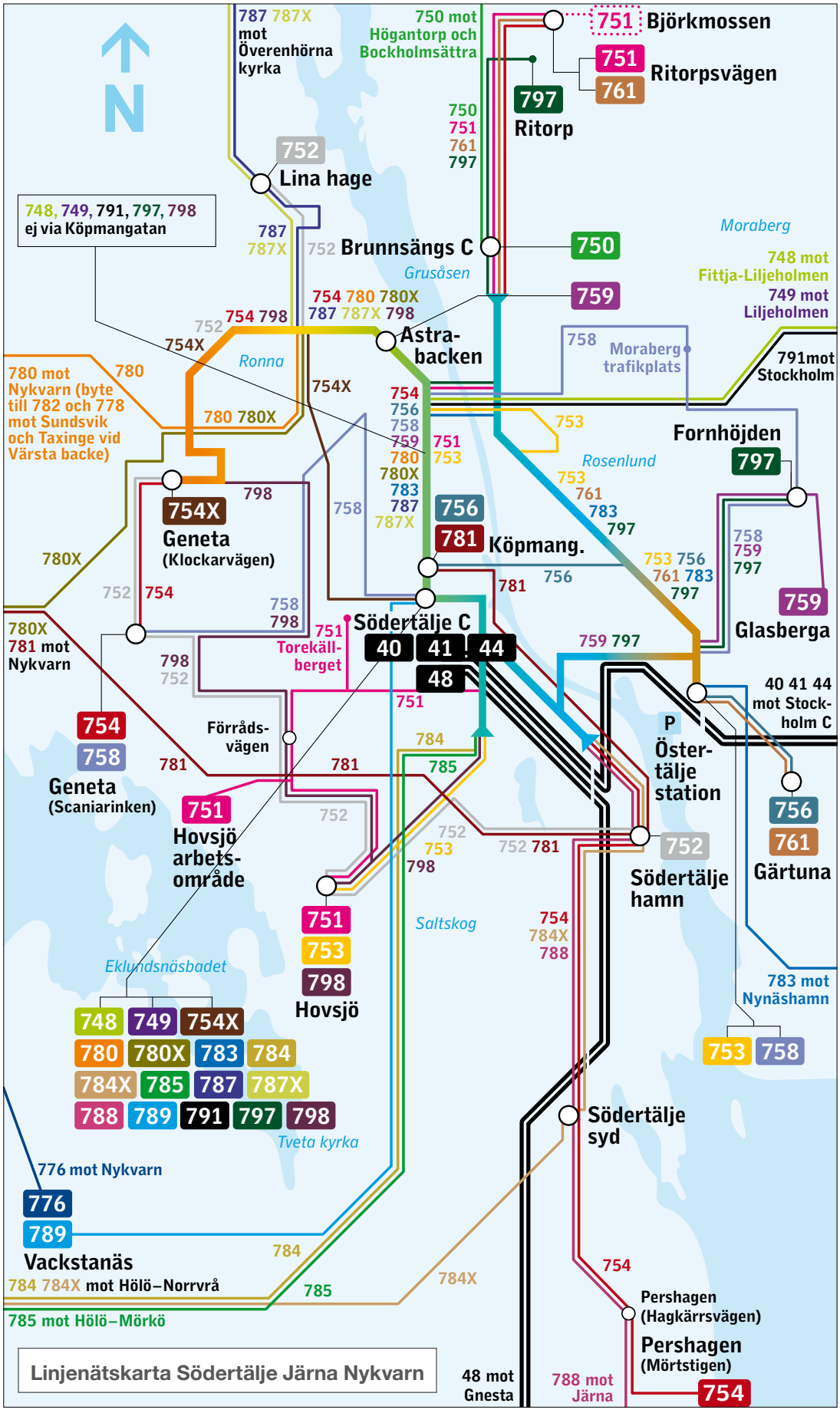
"Local and regional public transport in Sweden has been deregulated since 2012. However, commercial services are so far extremely rare. Instead, the vast majority of local and regional rail and bus services are provided by private operators under public contracts. The contracts are managed/coordinated by the regional public transport agencies (PTAs). Ticket systems for public transport, under the responsibility of the PTAs, are integrated. Thus, the systems are integrated within regions, but not necessarily between regions. Pricing strategies vary. In Stockholm county, a unified price was introduced 1-2 years ago, which means that you pay the same amount regardless the length of your trip."

Personal Communication, John Hultén, Director K2 Public Transport Research Organisation, 11th December 2017 www.k2centrum.se

7.7 The Swedish case study area we will consider is the region approximately 50 miles south of Stockholm in a very rural area. Its main centre is Södertälje with a population of 70,777 which is comparable with Shrewsbury's population total, 71,715. The regional transport authority for this area is the largest in Sweden, Storstockholms Lokaltrafik AB (Stockholm Public Transport Authority), and referred to as SL.

7.8 There are a large number of routes that serve sparsely populated rural areas and for the purposes of this report we will focus on the 784 and 785 bus routes. The two maps reproduced on pages 18 and 19 from the SL web site show all the bus services in this region (including the 784 and 785 centred on Järna in the lower map of the two reproduced here).

7.9 The 784 and 785 bus routes connect the sub-regional centre of Södertälje with outlying rural areas en route to Norrvrå and Morko. The route length to Norrvrå is 31kms and to Morko 52kms.


N
787 787X mot Överenhörna kyrka
750 mot Högantorp och Bockholmsättra
751 Björkmossen
751
761
Ritorpsvägen
797
Ritorp
750
751
761
797
752
Lina hage
748, 749, 791, 797, 798 ej via Köpmangatan
787
787X
752 Brunnsängs C
750
Moraberg
748 mot Fittja-Liljeholmen
Grusåsen
759
749 mot Liljeholmen
754 780 780X
787 787X 798
752
754 798
754X
Astra-backen
758
Moraberg trafikplats
791mot Stockholm
Ronna
780 mot Nykvarn (byte till 782 och 778 mot Sundsvik och Taxinge vid Värsta backe)
780
754X
780 780X
754
756
758
759 751
780 753
780X
783
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787X
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Fornhöjden
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Rosenlund
753
761
783
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798
754X
Geneta
(Klockarvägen)
758
756
781
Köpmang.
780X
753 756
761 783
797
758
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752 754
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798
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756
759
Glasberga
Södertälje C
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780X
781 mot Nykvarn
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Torekäll-berget
759 797
798
752
751
40 41 44 mot Stock-holm C
754
758
Förråds-vägen
784
781
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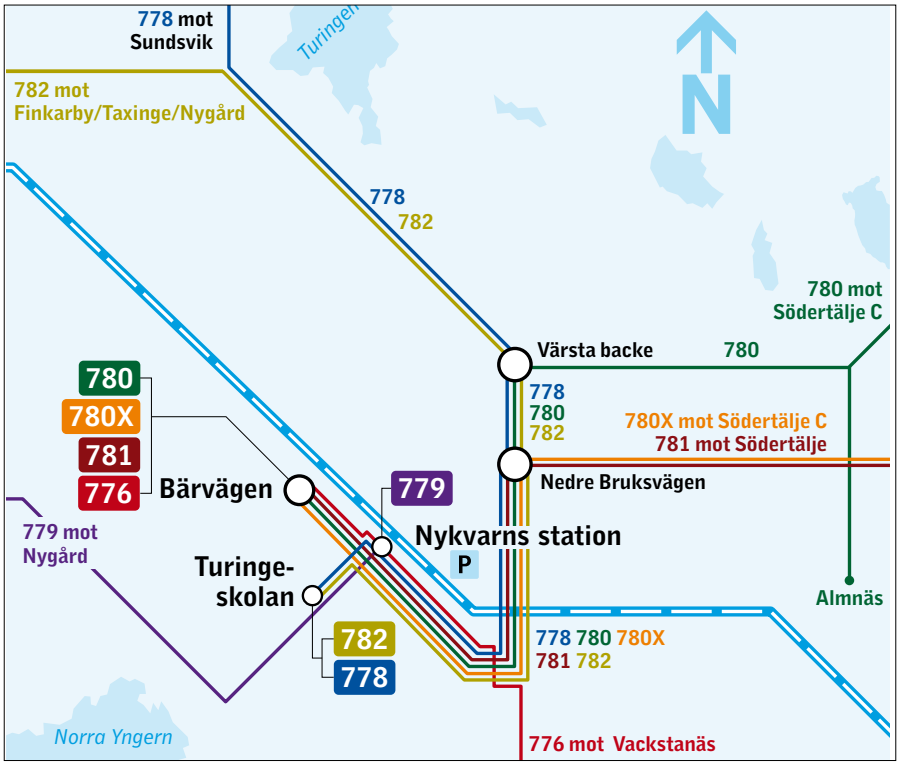
785
P
Öster-tälje station
Geneta
(Scaniarinken)
751
Hovsjö arbets-område
752
752
753
798
752 781
752
Södertälje hamn
756
761
Gärtuna
751
753
798
Hovsjö
Saltskog
754
784X
788
Eklundsnäsbadet
783 mot Nynäshamn
753
758
748
749
754X
780
780X
783
784
784X
785
787
787X
788
789
791
797
798
Tveta kyrka
Södertälje syd
776 mot Nykvarn
776
789
Vackstanäs
784
784X mot Hölö–Norrvrå
784X
754
785
Pershagen
(Hagkärrsvägen)
785 mot Hölö–Mörkö
Pershagen
(Mörtstigen)
754
Linjenätskarta Södertälje Järna Nykvarn
48 mot Gnesta
788 mot Järna


778 mot
Sundsvik
Turingen
782 mot
Finkarby/Taxinge/Nygård
778
782
780 mot
Södertälje C
Värsta backe
780
778
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782
780X mot Södertälje C
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Nedre Bruksvägen
780
780X
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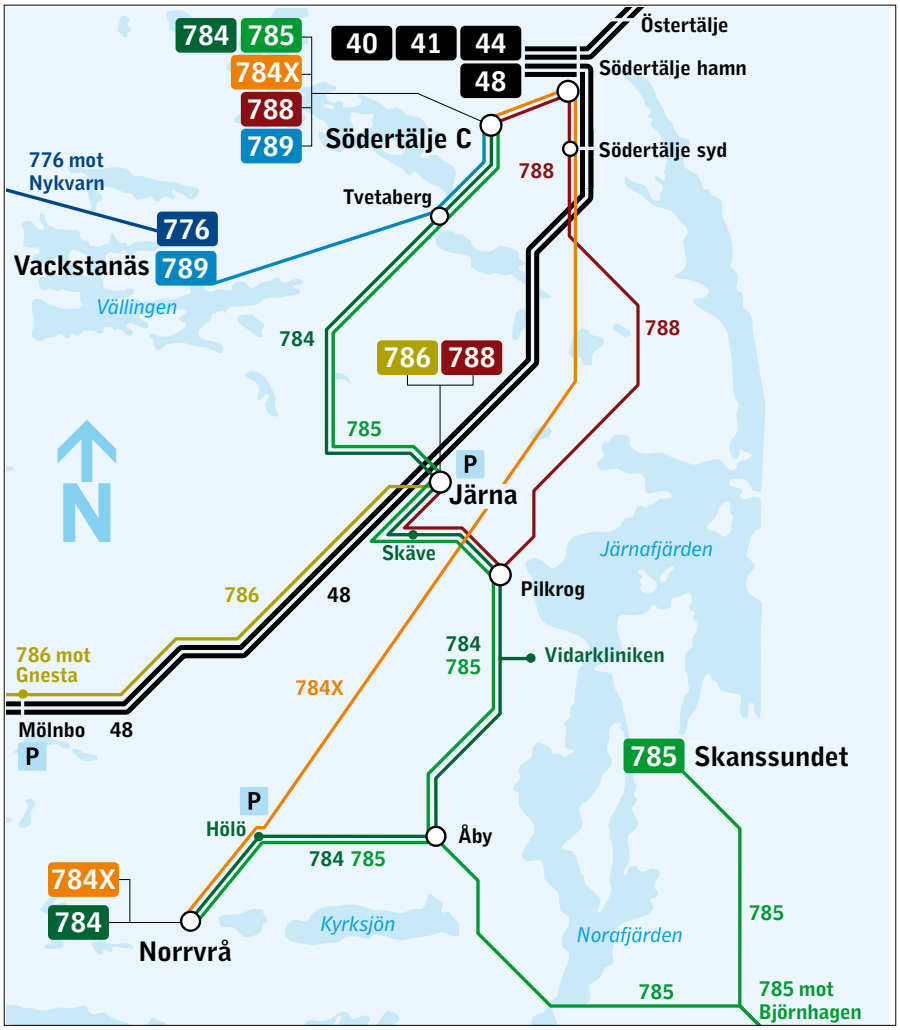
776
Bärvägen
779
Nykvarns station
P
779 mot
Nygård
Turinge-
skolan
782
778
Almnäs
778 780 780X
781 782
Norra Yngern
776 mot Vackstanäs


784
785
784X
788
789
40
41
44
48
Östertälje
Södertälje hamn
Södertälje C
Södertälje syd
788
776 mot
Nykvarn
Tvetaberg
776
Vackstanäs
789
Vällingen
784
786
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785
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Järna
Skäve
Järnafjärden
Pilkrog
786
48
784
785
Vidarkliniken
786 mot
Gnesta
784X
Mölnbo
48
P
785
Skanssundet
P
Hölö
Åby
784 785
784X
784
Norrvrå
Kyrksjön
Norafjärden
785
785
785 mot
Björnhagen

The service connects all the small settlements on this route with three train stations (Södertälje Hamm, Järna and Hölö). The bus calls directly at the stations and is timetabled to facilitate use of local trains. The local trains give access to Stockholm from Södertälje Centrum and also from Järna with connection at Södertälje Hamm to Stockholm and by trains to Gnesta.

7.10 There are 100 stops on the 784/785 service between Södertälje Centrum, Järna and Norrvrå and the full timetable can be seen on the SL web site: http://sl.se/ficktid/vinter/V78485.pdf

The majority of these 100 stops are at lay-bys and road junctions with minor roads leading to isolated farms and small groups of homes and all these locations are provided with direct access to trains stations and onward travel to Södertälje and to Stockholm.

7.11 On the Södertälje Centrum service to Järna and Norrvrå there are 19 services per weekday, 10 on Saturdays and 9 on Sundays and holidays and the first bus on a weekday leaves Södertälje Centrum at 0636 and the last bus at 2312 with a shortened service leaving at 0212.

8. What lessons can be learned from the three mainland European case studies?

8.1 There are a number of very clear lessons:

- There is no logistical or organisational problem in designing and delivering high quality integrated public transport in rural areas even if those areas are more sparsely populated and characterised by longer distances to health care facilities, education and employment than is the case in Shropshire.
- High quality public transport services require an overall planning and coordination mechanism like the Verkehrsverbund in Germany and the regional authority in Sweden. This is not possible in a fragmented, privatised and deregulated environment and it requires close co-operation between public transport providers (who are often private companies) and local democratic accountability.
- High quality public transport in rural areas requires detailed planning and delivery based on proven concepts of integration and modal transfer and the Swiss system of “pulse timetabling” bringing bus and rail together at hubs and facilitating transfers from bus to bus or train at that hub. This requires specialist public transport planning skills which are available in all three country case studies.
- High quality public transport may require additional financial support from national, regional and local government. The scale of that additional funding is dependent on the details of the highly integrated and coordinated network that should now be a policy objective.

8.2 It is clear that national, regional and local government in all 3 countries give a much higher priority to rural public transport both bus and rail, and to the importance of networks and coordination. It is not immediately obvious why rural public transport is not a political priority in England or Shropshire and it is self-evidently the case that ways must be found to change mindsets so that Shropshire, for example, can shift resources into public transport and use its lobbying potential with the Local Government Association, its 3 Conservative MPs and central government to bring about a step change in rural public transport that takes us nearer to what is taken for granted in Switzerland, Germany and Sweden.

9. What would bus services look like in rural Shropshire if we transferred the lessons from the three case study areas to this typical English county?

9.1 In this section of the report we bring together the responses of town and parish councils, the Shropshire bus user group and the everyday experiences of rural public transport in Germany, Switzerland and Sweden to provide an outline of what bus services would look like if we had a strong element of local democratic determination of public transport outcomes linked to an administrative and financial system that recognises the importance of rural public transport. At the moment we do not have these things in Shropshire but it is nevertheless important to paint a picture and construct a scenario of what things could look like.

9.2 In section 10 we return to the question of finance and how high quality rural public transport could be financed.

9.3 If we now merge the town and parish council responses with the reality of rural public transport in Switzerland, Germany and Sweden the shape of a high quality public transport network in Shropshire becomes clear even though a great deal more work is needed than is possible in this report to convert that emerging picture into timetables, routes, interchange and connectivity.

9.4 The main elements of this high quality scenario are as follows:

- Every train station in Shropshire would be served by buses that meet selected trains and provide connections to the nearest main settlement and to smaller villages and communities within a 10 mile radius, defined by town and parish councils. The Swiss system of pulse timetabling would be used to optimise the transfer potential in a way that exploits the hub concept to provide maximum connectivity at minimal cost
- Every settlement with a population of above an agreed threshold (e.g. 600) would have a bus service to link that settlement with its nearest train station and to a defined hub (pulse timetabling) that would facilitate transfers from bus to bus in addition to bus to train
- Gobowen train station will have direct buses to Oswestry and to the Robert Jones and Agnes Hunt Orthopaedic Hospital in Oswestry
- All bus services would be 7 days a week including train-bus connections and on weekdays the bus services would offer a 1 hour frequency
- All 14 towns listed in section 3.1 would have high quality connections to the Royal Shrewsbury Hospital and Princess Royal Hospital in Telford
- A direct bus service from Bishop's Castle to its nearest railway station at Craven Arms. The car journey from Bishop's Castle to Craven Arms takes 15 minutes. The journey by bus route 860 takes 28 minutes, whilst bus route 745 takes 53 minutes
  http://www.travelinemidlands.co.uk
- A direct bus service from Much Wenlock to Telford
- Clun (population 680) is in need of a direct bus to Shrewsbury. Currently there are 3 possibilities from Shrewsbury to Clun, two for the return trip and all take 1 hour 50 minutes and multiple changes
- A direct bus service between Ellesmere and Wrexham and Ellesmere and Whitchurch

- A direct bus service between Church Stretton and Much Wenlock and Church Stretton and Bishop's Castle

- Much improved service level and frequency from Much Wenlock to Bridgnorth, Shrewsbury and Telford

9.5 A number of missing links have been suggested by Trevor Allison and all of them would significantly improve quality of life for local residents if they were introduced. They are:

1. (Ludlow) – Craven Arms – Lydbury North – Bishop's Castle – Clun – Craven Arms – (Ludlow) circular

2. Ludlow – Cleobury North – Bridgnorth

3. Craven Arms – Corvedale – Much Wenlock (or Bridgnorth) and/or Church Stretton – Longville – Much Wenlock or a circular combination of the two

4. Ludlow – Richards Castle – Brimfield – Burford – Tenbury Wells

5. Ellesmere – Welshampton – Bronington – Whitchurch or Oswestry – St. Martin's – Overton – Bronington – Whitchurch to complement the inadequate Wrexham – Overton – Whitchurch service

6. Market Drayton – Hinstock – Newport

7. Market Drayton or Hodnet – Child's Ercall – Crudgington – Wellington

8. Newport – Sheriffhales – Shifnal – Tong – Albrighton

9. Bridgnorth – Claverley – Wombourne

10. Bridgnorth – Six Ashes – Kinver – (Stourbridge)

9.6 There is also a need to provide much improved services where these do not exist on Monday to Saturdays (with thanks to Peter Gilbert). These include Clun, Lydbury North, Clunton, Norbury, Cardington, Acton Burnell, Munslow, Brockton, Cleobury North, Stottesdon, Bitterley, Ditton Priors, Claverley, Weston Heath, Woore, Adderley, Ightfield, Whixall, Bagley.

10. What would have to change in terms of finance, political powers and democratic accountability to bring about the upgrade of rural bus services to the level enjoyed by rural residents in Switzerland, Germany and Sweden?

10.1 The rather obvious, but unhelpful, answer is clear. We should abandon the idea that private operators acting in an uncoordinated manner and very loosely supervised by a budget-cutting council with no professional expertise in 21st century timetabling methodology and no legal powers to require integration (e.g. buses calling at train stations) can in some way magically produce a high quality, integrated public transport system in rural England. This is impossible and failure is embedded in the current system and system change is now necessary.

10.2 It would not be sensible to rely on system change and do nothing until we have the same, or very similar, system in place in Shropshire as that already in place in the 3 countries described in this report. We can take action immediately and before the larger scale system changes materialise and begin the journey to a better future for rural public transport. This journey requires action and a change in political priorities in Shropshire and a change in the level of funding for rural buses.

10.3 In the case of political priorities it will be necessary to give high quality rural public transport a higher level of visibility and understanding than is currently the case. This can be done in several ways:

- Joining forces with the LGA and producing a LGA briefing document to be sent to all councillors. The document would explain what can be done in the current political, legal and financial climate and suggest some concrete actions;

- Organising a seminar for councillors in Shirehall to share best practice and present attendees with concrete examples and the financial implications of adopting some of those best practice examples. This would be conducted in a non-adversarial manner and with a well-regarded national expert as chair/facilitator.

10.4 In the case of finance it will be necessary for Shropshire Council to scrutinise its existing budget priorities and reallocate funds to rural public transport and to do that in each budget setting round to deliver improved rural public transport in Shropshire.

10.5 Shropshire Council, like all councils, is in difficulty as a result of budget cuts but this does not preclude innovation and priority setting with increased funding of rural public transport.

10.6 The 2016-17 revenue budget of Shropshire Council for its main service areas was £204,527,120. The "gross budget" was £568 million. The budget areas of relevance to bus service provision in Shropshire were:

Environmental maintenance (roads, vehicle maintenance, procurement of highways tenders)	**£26,881,500**
Highways and transport (in addition to the above and includes public transport)	**£3,976,630**
Passenger transport (in addition to the above)	**£643,540**
Economic Development	**£1,815,900**
Visitor Economy	**£1,653,620**
Public Health	**£6,963,120**

Source:
Shropshire Council cabinet agenda papers, 31st May 2017, Revenue and Capital Outturn 2016-17

10.7 Whilst it is not possible to attempt a full budget analysis of Shropshire Council's activities and priorities and even more difficult to suggest reallocation and virement it is nevertheless important to make the point that improved bus service provision is just as relevant to public health, economic development and the visitor economy as other sub-headings in these service area budgets. There is no doubt at all that there is scope for additional funding of rural buses in Shropshire.

10.8 The costs associated with running buses have been detailed by DfT Annual Bus Statistics (BUS0408a). The costs of running a bus (all costs including depreciation) are 319 pence per mile (England, non-metropolitan). For details see: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/666759/annual-bus-statistics-year-ending-march-2017.pdf

10.9 It is not possible in this report to carry out the significant amount of work that would be required to identify a bus network based on pulse timetabling and then to convert that into an estimate of cost and the degree to which fare box revenue would contribute to those costs. However it is possible and indeed necessary to inform decision-takers about the likely costs associated with additional bus miles in Shropshire and 2 examples are presented below:

Example 1:
Bishop's Castle to Craven Arms town centre and train station (there and back)

Distance is **10.86** miles (http://www.theaa.com/driving/mileage-calculator.jsp)

There and back is	**21.72** miles
6 services per weekday =	**30** per week
4 services on a Saturday =	**4**
Total for week is	**34**
Total mileage is 34 x 21.72 =	**738.49**
Cost per mile is (BUS0408a) England, non-metropolitan	**£3.19**
Total cost of this timetable per week is	**£2,355**

Example 2:
Market Drayton to Newport (there and back)

Distance is **11.51** miles (http://www.theaa.com/driving/mileage-calculator.jsp)

There and back is	**23.02** miles
6 services per weekday =	**30** per week
4 services on a Saturday =	**4**
Total for week is	**34**
Total mileage is 34 x 23.02 =	**782.68**
Cost per mile is (BUS0408a) England, non-metropolitan	**£3.19**
Total cost of this timetable per week is	**£2,496**

10.10 The weekly cost figure is based on national data from the DfT. It does not take into account regional variations or variations that would result from utilising vehicles of different sizes. These variations are unknown but can have the effect of reducing costs. Also it is only one side of the equation and does not take into account the potential for revenue streams to reduce subsidy or make the route attractive to commercial (non-subsidised) operators.

10.11 It is clear from the "smarter choices" literature (DfT, 2005) and the York Intelligent Travel project (Haq, Whitelegg, Cinderby and Johnson, 2004) that bus use can be increased by interventions based on better quality services, clear marketing and branding and systematic, evidence-based behavioural change measures. It is also well understood that to be effective Intelligent Travel type initiatives should be part of a continuing process rather than a one off intervention.

10.12 The York Intelligent Travel project was funded by DfT and carried out in co-operation with the City of York Council and bus operators and involved direct personal contact with over 5,000 residents, many of whom lived in car dependent, rural areas very similar to Shropshire e.g. Poppleton and Copmanthorpe – mainly rural, high-income areas with high levels of car ownership and use. The project was designed to compare intervention areas with non-intervention areas and bus use increased by 5 percentage points in the intervention areas compared to a 4 percentage point decrease in the control areas.

10.13 The main thing that would have to change in Shropshire and more generally in rural England is a change in mindset. Rural buses currently have a very low priority in the thinking and budgeting of councillors and this has to be challenged. If progress can be made in the way councillors set priorities in quality of life, public health, supporting those residents who by reason of age, health or income are not car owners then we will see some modest progress in the prioritisation of rural public transport.

10.14 There is still a need for wider system change at the national level. This system change will require a regulatory and legislative change as well as a change in the level of funding. The Swedish approach to designing, co-ordinating and funding rural public transport is a legislative requirement in the way bus and rail services are organised (Ringqvist, 2016) and there is a need for similar legislative change in the UK. The level of funding for rural public transport will have to increase but it would not be correct to regard the whole rural transport nexus as something that can be solved by "more money". The main thing that has to happen is that rural public transport is seen as a vital component in maintaining the social and economic viability of rural communities and is charged (as in Sweden) with promoting broader sustainable development objectives. The perceived problem of rural public transport in England cannot be solved by providing more money and linking that money to a defective model of planning, design, coordination and integration.

11. Conclusions and Next Steps

11.1 The first and in many ways most important conclusion is that there is no such thing as a "rural transport problem" and it is in fact very easy indeed to provide high quality rural public transport in a way that supports vibrant, healthy, economically successful rural communities and contributes to keeping young people in those communities. This is what happens in Switzerland, Germany and Sweden and there is no reason at all why it cannot happen in England. There is a very real need to pose a rather fundamental question at all levels of government and to all political parties "What is the reason why rural residents in England should have a poor quality public transport service when high quality is routinely delivered in Switzerland, Germany and Sweden?"

11.2 The second conclusion is that bus transport (rural and urban) has suffered from cuts in funding and this makes matters worse:

"In England outside London bus mileage has declined by 9.5% since 2005/06. This has been driven by a decrease of 45.3% in local authority supported mileage, in particular in non-metropolitan areas"

"Local authority supported mileage has declined by 13.8% when 206-16 is compared with 2016-17"

Source:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/666759/annual-bus-statistics-year-ending-march-2017.pdf

11.3 We do not underestimate the significance of these cuts and there is a need for a national campaign based on evidence and impact analysis that can help to change mindsets so that cuts in rural public transport can be halted and then reversed. This level of activity is already catered for in the work of Bus User Groups and Campaign for Better Transport.

11.4 We do not accept that local authorities like Shropshire Council are without options and choices when it comes to budgeting and cuts. Rural buses are in many ways an easy target for cuts because of the prevailing ideology that rural public transport is just too difficult and we are in any case a car-dependent area and the car is the appropriate transport choice for the geography of Shropshire. The value of the 3 country case studies in this report is to show that countries with higher rates of car ownership than Shropshire are perfectly capable of designing and delivering a high quality rural transport outcome because they value rural communities and rural public transport is seen as an important part of support for these communities. We do not yet have this mindset in England.

11.5 It is possible in Shropshire, and more generally in rural England, to embark on a new course which with modest funding and a year-on-year commitment to improve quality of life allocates funds to plug gaps in the bus network, link bus routes with stations and make sure communities can access health care. In para 10.9 we gave two concrete examples (with costings) of how this could be put into effect and the task now is to persuade councillors to think in very different ways about rural public transport, especially buses and make a start on improving quality of life and public health.

11.6 It is necessary to adopt a very different legislative and administrative approach to rural public transport, based on the Swedish model (Ringqvist, 2016).

Next steps

11.7 Some of these changes will take time. However, there are immediate things that can be done in Shropshire now to start the journey towards European-style public transport networks. These would involve using the powers in the Bus Services Act 2017, and also building on good practice in England.

11.8 The Bus Services Act gives new powers and duties to local authorities and bus operators. In particular, it includes powers for "enhanced partnerships", which can involve the local authority taking over bus service registration from the Traffic Commissioners, and can be used to create a general improvement plan for bus services in an

area. Campaign for Better Transport has produced a guide to using the Act - https://bettertransport.org.uk/sites/default/files/pdfs/bus-services-act-guidance.pdf. The act can be used to link buses more directly to economic development and land use planning. Shropshire County Council should conduct a review of the Act and the potential it gives the council to improve bus services.

11.9 To drive this review, the Council should appoint a bus champion. This should ideally be a senior elected member, but at the minimum it should be someone with full access to and the confidence of senior figures in the Council and the wider community.

11.10 One case study highlighted in Campaign for Better Transport's guide is Cornwall. Cornwall is, like Shropshire, a very rural area, and yet is using existing powers and to an extent anticipating those in the Act to create an integrated public transport network for the County https://www.cornwall.gov.uk/transport-and-streets/public-transport/ongoing-developments/one-network/ While some of these are tailored to Cornwall's specific circumstances, some of the principles and measures in the Cornwall programme are applicable in Shropshire and indeed in other rural areas in England:

- Using railway stations as public transport hubs: Cornwall has been developing its railway stations with good bus interchange and is now creating integrated timetables linking the local rail services with the buses. This report has noted that this is a feature of the systems in other countries, and Cornwall has shown it can be applied here too;

- Integrated ticketing. Cornwall is introducing a new single ticketing system, which can be used across all bus, rail and ferry services regardless of the company providing the transport, and is expanding the way passengers can buy tickets on buses - using a mobile phone app, credit card or debit card. Already contactless payments are available on First Kernow and Plymouth Citybus, and the Cornwall Local Enterprise Partnership has funded the installation of this technology for all the other smaller bus operators in the county;

- A single public transport brand for all Cornwall's public transport, timetabling and ticketing. There will be a single point where information can be accessed digitally with tools for route and journey planning, live traffic information and ticket prices. The Bus Services Act requires operators to provide much of this data.

Shropshire should look at the Cornwall programme and see how to learn from and transfer this work.

11.11 Shropshire could also apply the "Total Transport" approach. This would involve recognition that, partly as a result of the poor state of local bus services in Shropshire as in many other rural areas, there are many bespoke transport services commissioned by public bodies, especially for school and education travel and for non-emergency patient transport. Pooling the funding for these services would allow a better overall mainstream public transport services. This approach is used in the Netherlands and other countries. Total Transport pilots were run in many rural areas in England from 2015-17, and lessons are still being learned from these. However, a starting point would be for the council to audit the spending on transport services by all public bodies in the county, and to identify where pooling and joint commissioning might lead to better overall outcomes.

11.12 Beyond these first practical steps, the Council should seek partnerships with the wide range of organisations in and outside the county with an interest in securing European-style public transport services for the county. These partnerships can help develop the ideas in this report, and look at longer term options such as bus franchising, which is allowed under the Bus Services Act but which is subject to Government approval.

11.13 This report has shown that there are different governance structures for transport in other European countries that direct funding and attention towards creating high quality public transport networks. We have some structures like this in the UK, notably in London and increasingly the West Midlands and other city regions. Shropshire could be a test bed for applying such approaches to rural areas and see how a more joined up approach between public transport, development and planning can be applied in a rural area. The wider importance of this has been demonstrated by the Transport for New Homes report, which has shown how new housing is being developed in locations and layouts that are entrenching dependence on cars and without any public transport or indeed any consideration of transport at all. The combination of the lack of public transport and car dependent housing development will add to traffic, and to wider social and environmental problems, including in rural areas like Shropshire

11.14 This report has shown that in other countries rural areas like Shropshire have a high quality public transport network. The absence of such a network in Shropshire disadvantages the county in economic, social and environmental terms. It is possible to change this – local and national policymakers need to start now to do so.

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Appendix 1

In July 2016 Shropshire Council produced a Bus Strategy document, 2016-2021
https://shropshire.gov.uk/committee-services/documents/s12624/13%20Appendix%20A%20Shropshire%20Council%20Bus%20Strategy.pdf
The strategy document was widely criticised and this is John Whitelegg's response to the consultation on the bus strategy:

I have read the bus strategy document and it is very disappointing indeed. It is based on a severely flawed methodology that is driven by financial considerations and it makes no attempt to link bus service provision to health and welfare considerations, access to hospitals and clinics, access to work and education and delivering real gains for so-called protected groups defined by Equalities legislation, especially the elderly.

It is not in any sense of the word a "Strategy". A strategy would start with the basic characteristics of a rural area like Shropshire and seek to deliver real improvements in accessibility. It would prioritise spending on these improvements by demography and it would guarantee a network of bus routes and frequencies that serve the special charcateristics of the county and deliver economic gains in terms of access to jobs and training and support for the visitor economy. It does none of this.

A bus strategy would also refer to evidence around the same arguments to support new roads and roundabouts and quote the very impressive benefit cost ratios associated with bus spending. £1 spent on buses produces £3-£5 benefits.
A bus strategy would also provide an opportunity for Shropshire Council to deliver climate change policies. Every passenger journey switched from car to bus helps us all to achieve the objectives agreed at the Paris climate change conference and I see very little progress in Shropshire around reducing per capita greenhouse gas emissions.
A bus strategy would include clear costed plans to introduce electric buses and supply electricity to "fuel" these buses from renewable sources ad once again this is absent.

There is no mention of current passenger numbers or trends, no review of areas of housing or business growth, of how to make buses more attractive in relation to provision of information, speeding up journeys, supporting acceptable levels of frequency or liaison with operators. The council's failure to deal with the simple task of providing accurate information at bus stops is symptomatic of their lack of resourcing or understanding of the issue.

The strategy does not address capital expenditure or where future DfT grant monies might be sought, for example for improvements to bus stations, to introduce integrated ticketing, or for low carbon clean buses.

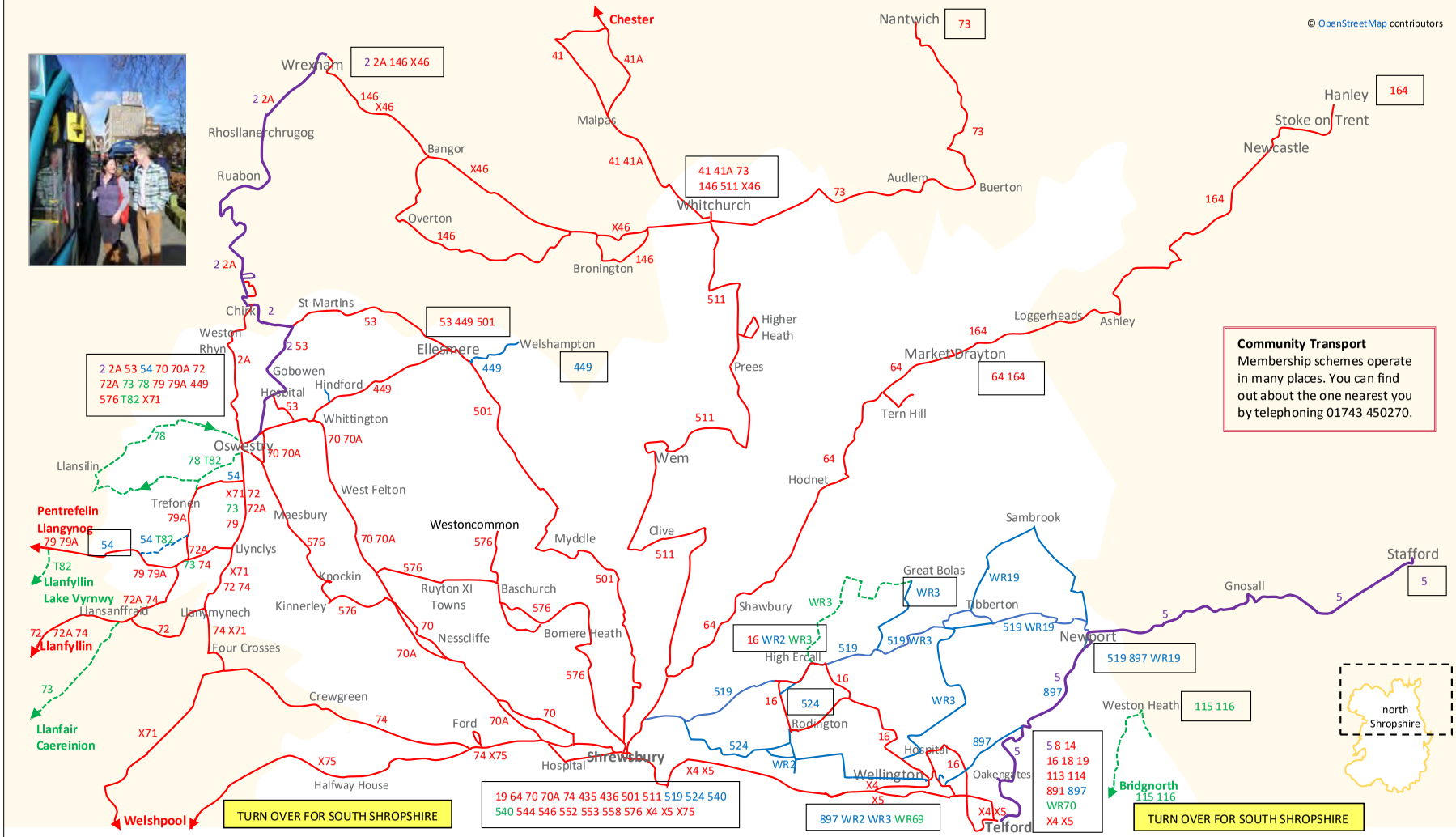
The strategy does not recognise the very poor quality bus station in Shrewsbury which is in urgent need of an upgrade or the lack of a bus station in Ludlow. It does not acknowledge that bus users put up with appalling unprotected conditions whether they are waiting for a bus on Corve St, Ludlow (no shelter at all) or Beaumont Road, Church Stretton (no shelter at all). The strategy demonstrates a significant lack of care for and interest in bus users.

The Strategy does not mention the existence or importance of bus services into Shropshire's many border towns - places like Bridgnorth, Ludlow, Whitchurch and Oswestry - which have services from other counties. There is no consideration of working with neighbouring councils to ensure these services continue.

The bus strategy is totally lacking in its understanding of sustainable transport and the need to boost walking, cycling and public transport use and to shift trips from cars to buses and so render unnecessary any further expenditure on roundabouts or new roads.

Any new housing development must be based on a high quality "Residential Travel Plan" that commits developers to providing bus services and supporting them financially and reducing car parking provision in new housing areas.

The strategy should make an unequivocal commitment to maintain financial support for buses as a priority and to adopt a "no more cuts" principle. It should provide shelters for all bus passengers at main stops in all towns, it should upgrade Shrewsbury bus station.



Community Transport
Membership schemes operate in many places. You can find out about the one nearest you by telephoning 01743 450270.

Produced by the volunteer team of

Bus Users Shropshire
Working for passengers

c/o Shrewsbury Coffeehouse, SY1 2AE. www.bususers.org
07580 564458 bususersshropshire@hotmail.co.uk

Route key
- Monday to Sunday
- Monday to Saturday
- Monday to Friday
- Monday to Friday school days only
- Days as indicated (see next panel)
- Route terminus 16 524

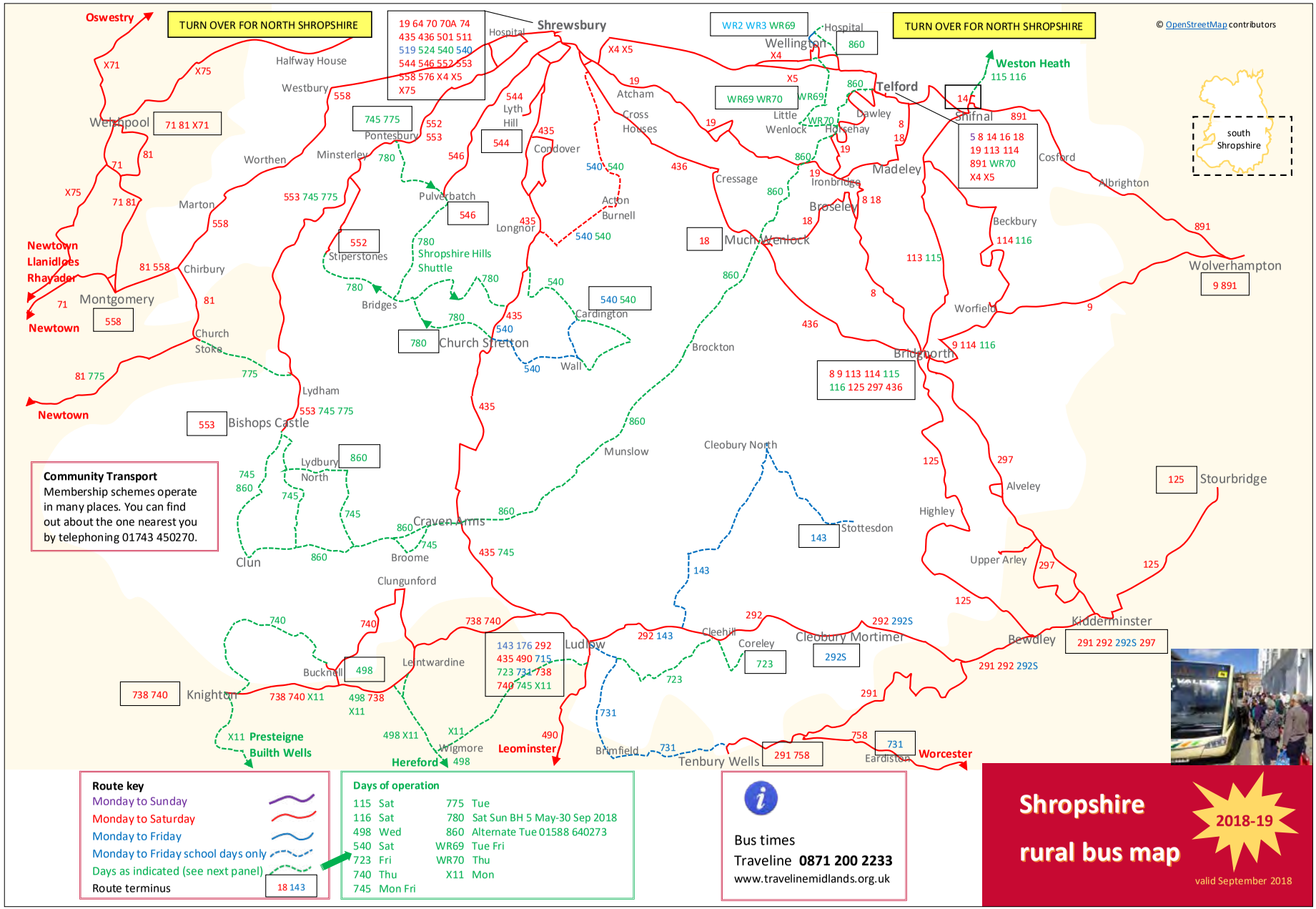
Days of operation

73	Wed Fri
78	Wed Fri
115	Sat
116	Sat
T82	Wed
WR3	Mon Thu

Bus times
Traveline **0871 200 2233**
www.travelinemidlands.org.uk

This map was designed and published by volunteers of Bus Users Shropshire. To the best of our knowledge it is accurate on date of publication. To keep up to date with changes why not register your email address with bususersshropshire@hotmail.co.uk.

The map was produced with financial support from the estate of the late Keith Gallop.


Oswestry
TURN OVER FOR NORTH SHROPSHIRE
19 64 70 70A 74
435 436 501 511
519 524 540 540
544 546 552 553
558 576 X4 X5
X75
Shrewsbury
Hospital
WR2 WR3 WR69
Wellington
Hospital
860
TURN OVER FOR NORTH SHROPSHIRE
© OpenStreetMap contributors
Weston Heath
115 116
Telford
WR69 WR70
WR69
WR70
Little Wenlock
Dawley
Hollinhay
Shifnal
891
5 8 14 16 18
19 113 114
891 WR70
X4 X5
Cosford
Albrighton
south Shropshire
Halfway House
Westbury
Welshpool
71 81 X71
Worthen
Minsterley
Pontesbury
745 775
552
553
544
Lyth Hill
435
Condover
Atcham
Cross Houses
Cressage
Madeley
Ironbridge
Broseley
Much Wenlock
Beckbury
114 116
Wolverhampton
9 891
Marton
Pulverbatch
546
553 745 775
Acton Burnell
Longnor
Shiperstones
552
Shropshire Hills Shuttle
Newtown
Llanidloes
Rhayader
Chirbury
Montgomery
558
Bridges
Cardington
540 540
Church Stretton
780
Church Stoke
Brockton
Worfield
Bridgnorth
8 9 113 114 115
116 125 297 436
Lydham
Bishops Castle
553
Wall
Munslow
Cleobury North
Lydbury North
860
Community Transport
Membership schemes operate in many places. You can find out about the one nearest you by telephoning 01743 450270.
Craven Arms
Broome
Clun
Stottesdon
143
Alveley
Highley
Upper Arley
Stourbridge
125
297
Clungunford
Ludlow
Cleehill
Coreley
723
Cleobury Mortimer
292S
Bewdley
Kidderminster
291 292 292S 297
Bucknell
498
Leintwardine
Knighton
738 740
738 740 X11
498 738 X11
Presteigne
Builth Wells
Hereford
Wigmore
Leominster
Brimfield
Tenbury Wells
291 758
Eardisley
Worcester
Route key
Monday to Sunday
Monday to Saturday
Monday to Friday
Monday to Friday school days only
Days as indicated (see next panel)
Route terminus
18 143
Days of operation
115 Sat
116 Sat
498 Wed
540 Sat
723 Fri
740 Thu
745 Mon Fri
775 Tue
780 Sat Sun BH 5 May-30 Sep 2018
860 Alternate Tue 01588 640273
WR69 Tue Fri
WR70 Thu
X11 Mon
Bus times
Traveline 0871 200 2233
www.travelinemidlands.org.uk
Shropshire rural bus map
2018-19
valid September 2018

Appendix 2

See page 30: Shropshire Bus Map NORTH

Appendix 3

See page 31: Shropshire Bus Map SOUTH

Appendix 4

Response from Trevor Allison, Footpath Secretary for the Shropshire Area of the Ramblers:

Dear Professor Whitelegg,

I have suddenly realised that I do not know whether your project just includes the current County of Shropshire or includes Telford & Wrekin as part of 'historic' Shropshire. This is somewhat relevant as some of the 'missing links' are 'cross-border' routes and have been axed when one of the Authorities withdrew funding and the other could not provide full financial support. I will annotate these with (CBR). As you are well aware there are virtually no Sunday or late evening services anywhere in rural Shropshire, and I do not have the detailed knowledge to suggest which might have possibilities, if only on 1 or 2 nights a week (i.e. Friday & Saturday) which used to be the case with a few of the routes.

Many of the routes I will suggest do not merit a regular interval service, only an early morning, mid-morning, lunch-time and tea-time service, to provide basic work, shopping, NHS and leisure access. The last 3 times should all be usable with a Concessionary bus pass, perhaps with a special concession for use just before 09.30 if necessary, as I arranged many years ago in Ruyton XI Towns, where the first bus on which they were usable was the 11.20, but there was an 09.20 service on which they are now valid, even if we occasionally have to remind the operator of this fact. The variation is still supported by the County Council as it is a sponsored service. So here goes:

1. Ludlow) – Craven Arms – Lydbury North – Bishop's Castle – Clun – Craven Arms – (Ludlow) circular
2. Ludlow – Cleobury North – Bridgnorth
3. Craven Arms – Corvedale – Much Wenlock (or Bridgnorth) and/or Church Stretton – Longville – Much Wenlock or a circular combination of the two
4. Ludlow – Richards Castle – Brimfield – Burford – Tenbury Wells (CBR)
5. Ellesmere – Welshampton – Bronington – Whitchurch (CBR) or Oswestry – St. Martin's – Overton – Bronington – Whitchurch (CBR) to complement the inadequate Wrexham – Overton – Whitchurch service
6. Market Drayton – Hinstock – Newport (CBR)
7. Market Drayton or Hodnet – Child's Ercall – Crudgington – Wellington (CBR)
8. Newport – Sheriffhales – Shifnal – Tong – Albrighton (CBR)
9. Bridgnorth – Claverley – Wombourne (CBR)
10. Bridgnorth – Six Ashes – Kinver – (Stourbridge) (CBR)

Appendix 5

Response from Peter Gilbert,
Bus Users Shropshire

Principles:

- Buses should not be 'afraid' of crossing authority borders. People's journey needs do not conform to administrative boundaries.
- Buses should adhere to a published timetable which enables people to plan their journeys. So called 'demand responsive' services deter speculative users (such as last minute decision makers and visitors to the area).
- Every community should have a minimum of four return buses a day on Monday to Saturday to their local centre for employment, retail, health and leisure. These should be timed to arrive at the local centre for early morning, mid-morning, afternoon and early evening visits to effectively meet those employment, retail, health and leisure requirements of potential passengers.
- Communities above a prescribed population (perhaps 2,000 inhabitants) should have additional service departures on weekdays and Saturdays, as well as a service of at least four return journeys on Sundays and bank holidays.
- The towns of Shropshire without a railway station should have fast, limited stop bus services to their regional centre (Shrewsbury, Telford, Wolverhampton or Stoke on Trent) every hour on Monday to Saturday. These should continue until mid-evening.
- Train stations should be visited by buses that pass within one mile of them. Bus timetables should provide good connections to and from trains.
- Bus services from communities should connect into and from train services and limited stop bus services.
- Train and bus services should operate to a 'clockface' timetable with departures that are easily remembered.
- Bus and train ticketing across the region should be interchangeable, whatever operator is involved.
- Fare structures should be simple, offer good value, and reward frequent use.
- Waiting areas for services should be clean, illuminated, sheltered and safe.
- Waiting area should contain up to date departure, arrival and fares information at a suitable height that is easy to understand. This information should also be available online.
- Passengers need to know when their service is delayed. Real time arrival and departure information should be available at the waiting point and online, and how to submit a comment of praise or complaint.
- Buses should be clean, illuminated, and safe. Drivers should speak English and receive training in customer service and dealing with the full diversity of people.

Comparing the current provision against these principles numerous gaps become obvious. These include:

- Absence of Monday to Saturday services from many communities. These include Clun, Lydbury North, Clunton, Norbury, Cardington, Acton Burnell, Munslow, Brockton, Cleobury North, Stottesdon, Bitterley, Ditton Priors, Claverley, Weston Heath, Woore, Adderley, Ightfield, Whixall, Bagley.
- Absence of services on Sundays and bank holidays across all areas except for one route.
- Service frequencies that do not adequately fit people's requirements with few early and late departures.

- Train times on some routes that are not clockface; bus service departures that are not clockface on certain routes.
- Bus services that do not visit nearby train stations, and timings that do not connect into/from trains.
- Fare structures that vary with the operator and that are not interchangeable across the region.
- Waiting places without shelter. Shelters that are dirty or disfigured with graffiti, unlit.
- Many waiting places are without information or have information that is incomplete or out of date. Only one operator has real time arrival information on line. Real time information is not available at any waiting point.
- On some routes there are dirty buses; there are drivers who are not able to understand English or who have poor customer service skills.

Appendix 6

Response from Les Lumsdon

1. Your primary research seems to be based on contact with parish and town councils. In my experience, the respondents from these organisations do not have experience of travelling by public transport in Shropshire and are unlikely to have data regarding passenger desires and frustrations. They are being drawn into this field of provision because the transport authority is seeking financial contributions from them to support services.

2. Conventional public transport theory reports that frequency, reliability and convenience of access are the key factors in stimulating use of buses, but this is associated with urban networks. In rural areas, there is a passenger expectation that frequencies will be lower, hourly or less. Thus, there is a far greater reliance on buses being reliable. In my experience this is not the case; buses breaking down, unhelpful driver behaviour and complete lack of information lead to unacceptable passenger tensions and withdrawal from use.

3. There is a need to combine school/college contracts with all day services in order to provide services which operate from market town to market town thus rebuilding confidence in a rural network. This is an approach that Shropshire Council currently does not adhere to but which is commonplace in the destination areas you are comparing Shropshire with in other countries.

4. In re building any rural public transport route or network it is important to ask, in language which is easily understood, what existing customers want, then look to ways to widen the market for the network that Peter envisages.

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The Foundation for Integrated Transport was formed in 2014 to make transport better for people and the environment.

We envisage a world with a human right to get around without reliance on cars, where people can travel with minimum impact on others and the environment, where barriers to transport justice are removed, and where trains and buses are integrated, and safe and attractive routes are provided for walking and cycling. We fund projects that will help to make this vision a reality.

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