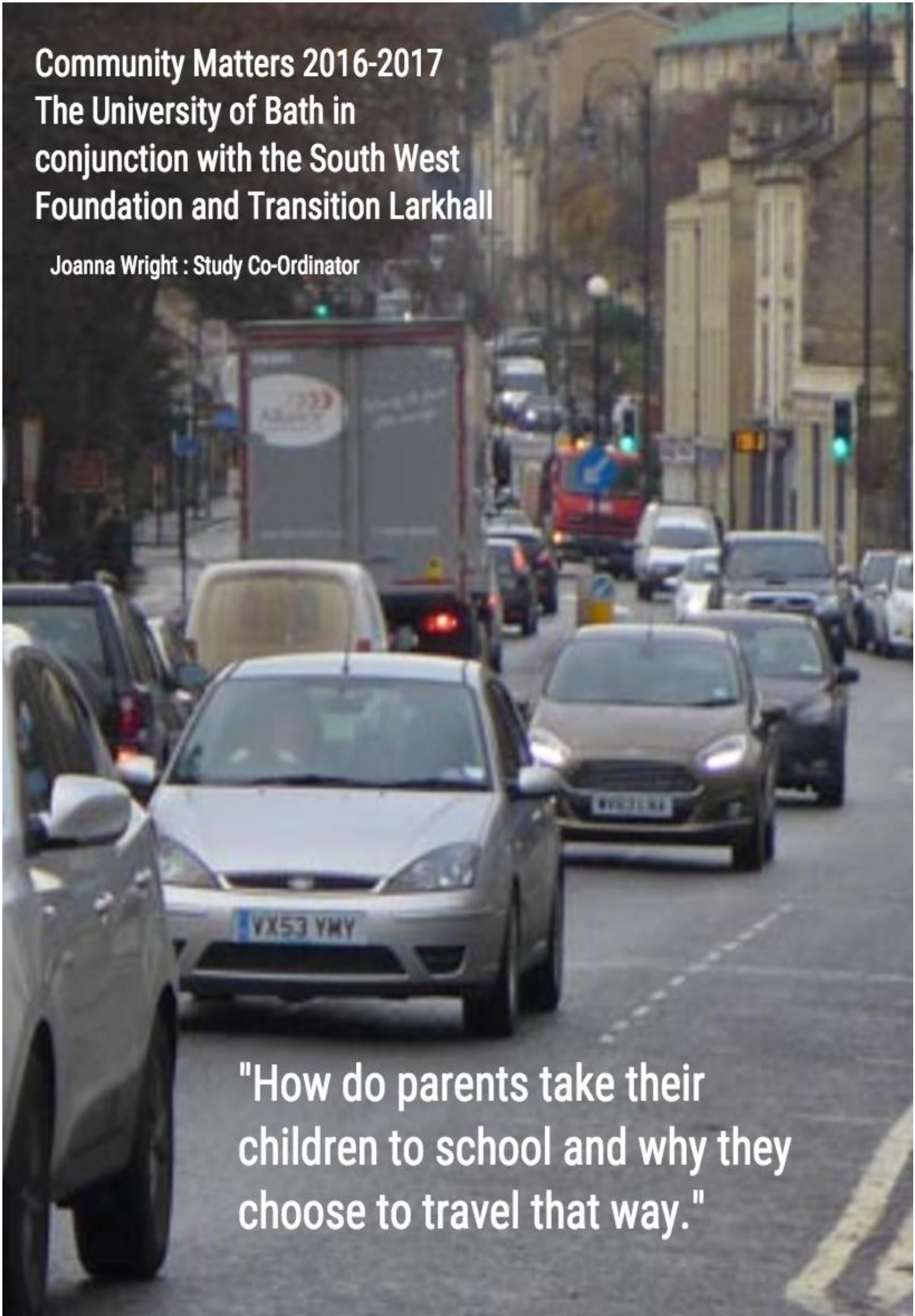

Community Matters 2016-2017
The University of Bath in conjunction with the South West Foundation and Transition Larkhall
Joanna Wright : Study Co-Ordinator
VX53 YMY
"How do parents take their children to school and why they choose to travel that way."

We do not live
beneath the sky.
We live within it.

Contents

Project Title:

How do parents take their children to school and why do they choose to travel this way?

Aims of the Research Project:

To understand transport movement on the east of Bath and what residents think about it.

Community Matters Programme was developed by the **University of Bath's Public Engagement Unit** in conjunction with the **South West Foundation**, a charity experienced in facilitating and supporting research in local communities. The Community Matters Programme asked local organisations to put forward ideas for research projects to address local issues. The five selected organisations were then matched with researchers from the University of Bath, working alongside them to design and deliver the research. The Programme is an innovative way of working that combines the University's research expertise with the organisations' grassroots knowledge and experience.

Transition Larkhall, dedicated to combatting climate change and the crisis of resource depletion through ethical, social, cultural, economic, environmental and community action is one of the five selected local organistations and has been paired with Dr Ian Walker FHEA | Associate Dean for Research, Faculty of Humanities and Social Sciences, who specialises in Psychology with an emphasis on transport use.

This project was a year-long study investigating amongst other things how parents take their children to school and why they choose to travel that way. Joanna Wright at Transition Larkhall is Study Co-ordinator, and has been awarded a Visiting Research Fellowship at the University of Bath for this study. Many other Transition Larkhall supporters as well as other members of the local community worked on this project and undertook necessary data collection and research on the impact of the school run in Larkhall. Ros Hough also awarded a Visiting Research Fellowship, Emma Hooper and Bryn Jones contributed a large amount to this study.

Contributions to this project were made by:

Dr Ian Walker **FHEA**	Associate Dean (Research), Faculty of Humanities and Social Sciences, University of Bath
Joanna Wright:	Principal Researcher Transition Larkhall
Ros Hough:	Assistant Researcher Transition Larkhall
Emma Hooper:	Assistant Researcher Transition Larkhall
Miranda Bonham Carter:	Assistant Researcher Transition Larkhall
Bryn Jones:	Assistant Researcher Transition Larkhall
Shannen Twomey:	Film Maker Bath Spa University
Sarah Warren	Volunteer Transition Larkhall
Chris Wright:	Volunteer Transition Larkhall
Jane Shaw	Volunteer Transition Larkhall
Kathy Cooke	Volunteer Transition Larkhall
Katherine Holden	Volunteer Transition Larkhall
Bill Shaw	Volunteer Transition Larkhall
Sheila Bourlet	Volunteer Transition Larkhall
Fiona Powell	Volunteer Bathampton Meadows Alliance
Jerry Vernon	Volunteer Transition Larkhall
Fiona Williams	Volunteer Transition Larkhall
Phil de Sousa	Volunteer Transition Larkhall
Di Francis	Volunteer Transition Larkhall
Charlie Williams	Volunteer Transition Larkhall
Sian Hunger	Volunteer Transition Larkhall
Paul Raithby	Volunteer Transition Larkhall
Kathy Jordan	Volunteer Transition Larkhall
Cllr Rob Appleyard	Volunteer Transition Larkhall
Cllr Lin Patterson	Volunteer Transition Larkhall
Rebecca Read	Volunteer University of Bath
Alexis Pavlou	Volunteer
Alison Smith	Volunteer
June Bailey	Volunteer
Lisa Davies	Volunteer
Beinn Wright	voice for film
Evan Wright	voice for film
Jimmy Watkins	voice for film
Nell Watkins	voice for film
Leila Campion-Dye	voice for film
Nell Corse	voice for film
Jean Owens	Dorothy House Hospice
Tom Humphries	Donation of toy cars
Stephen Dent	Donation of toy cars
Angela Kitson	Donation of toy cars
Dione	Donation of toy cars

34 anonymous residents on the east of Bath

Outline of Quantitative Data

Under the guidance of Dr Ian Walker, Transition Larkhall gathered quantitative data to see if there was significant increases in traffic during the school term times.

A qualitative project to find out if residents on the east of Bath thought that traffic was a problem also took place alongside this data gathering (see documentation from page 12 in this report).

Initially, traffic data was provisionally gathered over four consecutive Mondays throughout October and November 2016 to see if Transition Larkhalls' concern over term time traffic was actually real.

The top of Deadmill Lane, Bath (BA1 8DE) was chosen as a site for data collection. Between 7am and 10am on four consecutive Mondays, the number of vehicles passing were recorded by Joanna Wright, Ros Hough and Kathy Cooke.

These four Mondays were chosen because the 17/10/2016 was a date when all schools (state and private) were at school. Followed by the 24/10/2016 when all schools state and private were on half-term. Followed by 31/10/2016 when only state schools were at school and finished with 7/11/2016 when all schools state and private were at school.

Date and Time	Gloucester Road (Down) towards London Rd	Gloucester road (up) towards A46	Dead Mill Lane (Down) Into Larkhall	Deadmill Lane (Up) towards A46
17.10.2016 All schools at school	288	118	1130	33
24.10.2016 All Schools half-term	124	87	340	36
31.10.2016 Private schools, Beechen Cliff and Hayesfield half -term	197	123	606	25
7.11.2016 All schools at school	250	135	978	31

As can be seen by the above data the number of vehicles is drastically reduced when all schools (state and private) are on holiday. Further the amount of traffic does increase when only state schools return and private schools are on holiday, thus showing that the number of children travelling into Bath to private schools

considerably increases traffic into Larkhall during term time between the hours of 7am and 10am.

As a statistical specialist Dr Ian Walker, then stated that further data was required to ensure accuracy so in February 2017 Transition Larkhall gathered further information over two consecutive weeks.

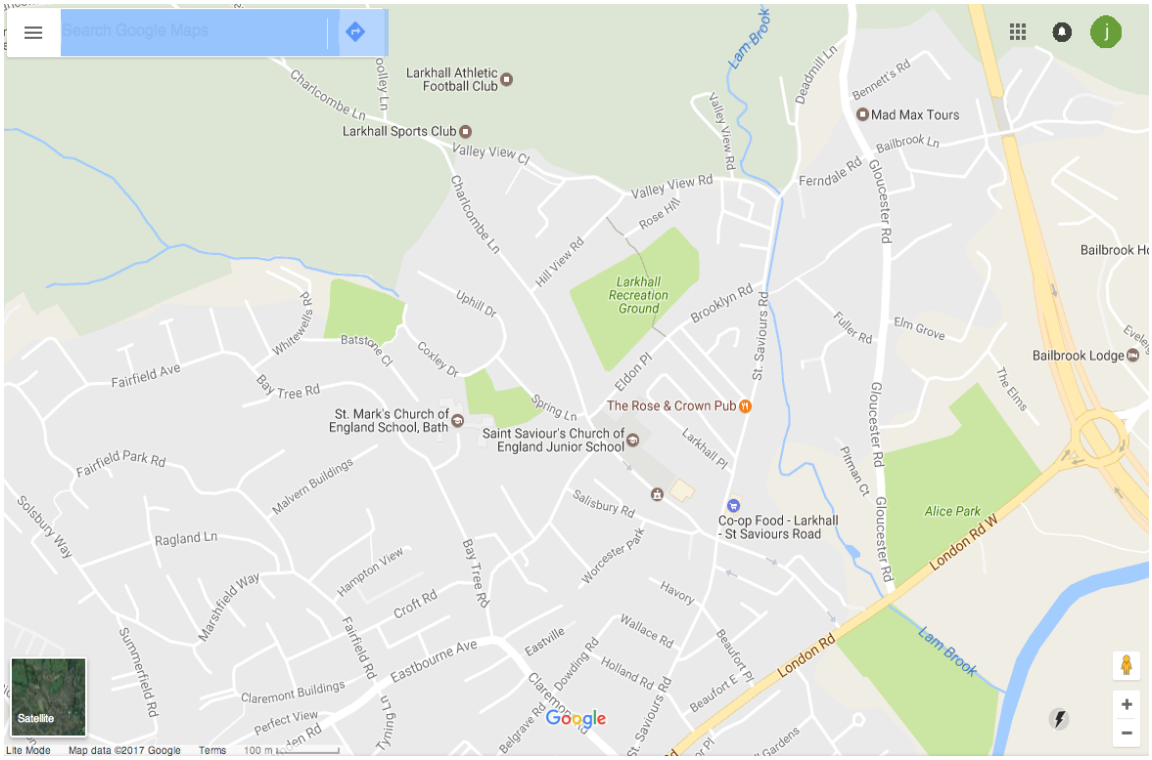
Twenty- one members of Transition Larkhall took part: Joanna Wright, Ros Hough, Chris Wright, Jane Shaw, Kathy Cook, Katherine Holden, Bill Shaw, Sheila Bourlet, Fiona Powell, Jerry Vernon, Fiona Williams, Phil de Souza, Bryn Jones, Di Francis, Charlie Williams, Sian Hunger, Paul Raithby, Kathy Jordan, Cllr Rob Appleyard, Cllr Lin Patterson, and Rebecca Read spent 126 hours between 13th February 2017 and 25th February 2017 counting approximately 39504 vehicles in the 3 separate locations in the Larkhall area.

The dates in February were carefully chosen, as one was a week when all schools state and private were at school. The other week, when all schools state and private were on holiday. Deadmill Lane was used again as a data collection site along with Ferndale Road and Hawarden Terrace (see map). Each volunteer was given a location to stand at for 3 hours, along with an organised counting sheet for them to mark vehicle movement in the Larkhall area. This data was then given to Joanna Wright to count. Over the two weeks all data sets were collected even though bad weather was encountered.

These data sets were then analysed by Dr Ian Walker who stated the following:

“The average level of traffic on term-time weekdays is higher than the average level of traffic in the other three situations, and this difference is statistically significant. This means term-time weekdays are very likely fundamentally different to the other three situations as there would only be a tiny chance of seeing numbers like these if they were not.”

Ros Hough counting traffic as vehicles turn from Gloucester Road down Deadmill Lane, Larkhall, Bath October 2016.



Map showing Larkhall area and the 3 locations volunteers stood for 3 hours between 13th February 2017 and 25th February 2017

Data gathered at location A: Deadmill Lane between 13th and 25th February 2017

Date and Time	Gloucester Road (Down) towards London Rd	Gloucester road (up) towards A46	Dead Mill Lane (Down) Into Larkhall	Deadmill Lane (Up) towards A46	Total in 3 hours
13 February 2017 All schools half term 7am to 10am	467	101	1049	46	1663
14 February 2017 All schools half term 7am to 10am	149	92	437	42	720
15 February 2017 All schools half term 7am to 10am	135	92	398	43	668
16 February 2017 All schools half term 7am to 10am	130	78	354	42	604
17 February 2017 All schools half term 7am to 10am	116	82	264	33	495
18 February 2017 All schools half term 10am to 1pm	145	99	244	43	531
18 February 2017 All schools half term 1pm to 4pm	130	125	257	44	556
20 February 2017 All schools at school 7am to 10am	276	104	937	31	1348
21 February 2017 All schools at school 7am to 10am	274	141	987	30	1432
22 February 2017 All schools at school 7am to 10am	265	150	940	29	1384
23 February 2017 All schools at school 7am to 10am	326	139	1106	39	1610
24 February 2017 All schools at school 7am to 10am	223	126	909	35	1293
25 February 2017 All schools at school 10am to 1pm	99	74	201	52	426
25 February 2017 All schools at school 1pm to 4pm	91	71	132	18	312
					13042

Data gathered at location B: Bailbrook Lane – Ferndale Road between 13th and 25th February 2017

Date and Time	Down Bailbrook Lane across and down Ferndale	Down Bail Brook Down Glouc	Down Bail Brook Up Glou	Up Glouc Up Bailbrook	Down Gloucester Road and down Ferndale Road	Down Gloucester Road to London Road	Up Glou Road & down Ferndale Rd	Up Ferndale Road and down Gloucester Road	Up Ferndale Road and up Bailbrook Lane	Up Ferndale Road and up Gloucester Road	Total In 3 hours
13 Feb 2017	85	24	15	15	138	352	81	54	10	27	801
14 Feb 2017	44	17	9	18	30	145	68	52	7	26	416
15 Feb 2017	49	20	9	16	29	121	74	37	10	33	398
16 Feb 2017	40	28	9	16	21	110	68	50	7	21	370
17 Feb 2017	42	27	3	29	23	112	53	44	9	21	343
18 Feb 2017 AM	47	18	2	15	43	110	123	91	11	16	476
18 Feb 2017 PM	32	17	7	13	46	89	78	66	15	25	388
20 Feb 2017	88	23	12	19	43	237	94	53	9	38	616
21 Feb 2017	83	31	12	31	60	229	83	50	12	32	623
22 Feb 2017	99	29	18	29	63	227	89	42	16	38	650
23 Feb 2017	70	36	11	23	61	292	94	44	13	42	686
24 Feb 2017	77	23	13	28	54	194	79	45	14	38	565
25 Feb 2017	45	18	6	18	32	82	82	92	20	17	412
25 Feb 2017	33	19	7	20	24	77	17	48	22	11	278
											7022

Data gathered at location C: Eastbourne Avenue –Hawarden Terrace between 13th and 25th February 2017

Date and Time	Up Eastbourne Ave Down Hawarden Terrace	Up Hawarden Terrace and up Eastbourne Avenue	Up Eastbourne Avenue	Up Hawarden Terrace and down Eastbourne Avenue	Down Eastbourne Avenue and then down Hawarden Terrace	Down Eastbourne Avenue	Total in 3 hours
13 February 2017 All schools half term 7am to 10am		925	192	94	100	306	1617
14 February 2017 All schools half term 7am to 10am		558	337	113	81	158	1247
15 February 2017 All schools half term 7am to 10am		481	304	81	90	153	1109
16 February 2017 All schools half term 7am to 10am		490	282	100	62	151	1085
17 February 2017 All schools half term 7am to 10am		334	254	83	70	119	860
18 February 2017 All schools half term 10am to 1pm	99	382	283	115	141	201	1221
18 February 2017 All schools half term 1pm to 4pm	55	340	245	83	151	230	1104
20 February 2017 All schools at school 7am to 10am	78	899	346	143	108	180	1754
21 February 2017 All schools at school 7am to 10am	93	950	308	160	112	148	1771
22 February 2017 All schools at school 7am to 10am	83	884	337	140	116	183	1743
23 February 2017 All schools at school 7am to 10am	73	1012	331	148	129	194	1887
24 February 2017 All schools at school 7am to 10am	82	875	349	148	139	196	1789
25 February 2017 All schools at school 10am to 1pm	94	419	285	92	144	238	1272
25 February 2017 All schools at school 1pm to 4pm	85	250	223	71	131	221	981
							19440

COMMUNITY MATTERS
Traffic Data

TRANSITION LARKHALL

A project investigating how parents take their children to school and why they choose to travel that way.

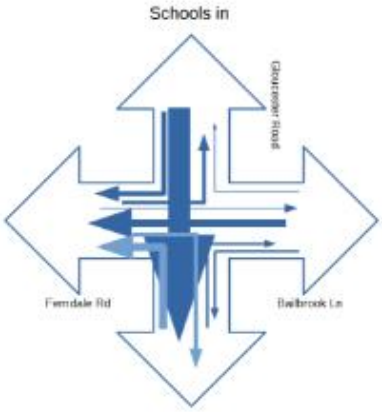
Between 13th February 2017 and 25th February 2017 twenty volunteers counted traffic moving in and around Larkhall. These dates were chosen for a week when all children, state and private, were at school and the other week when all children, state and private, were on holiday. Traffic counts were taken 7am to 10am on weekdays and 10am to 4pm on two Saturdays. These locations were chosen because they are the only alternative access points for through traffic to Bath avoiding the London Road.

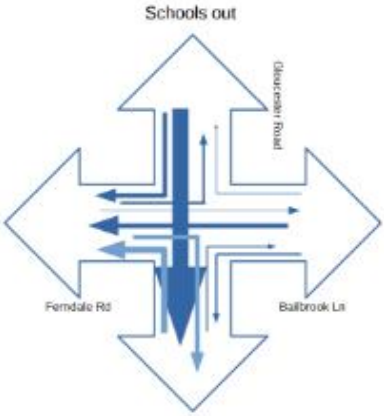
Data gathered from the Gloucester Road/ Deadmill Lane junction. Deadmill Lane is a small country lane, which is used as a short cut from the A46 for drivers avoiding the London Road and takes traffic into and through Larkhall.

On average **975.8** vehicles travel down Deadmill Lane when all schools are at school compared with **500.4** vehicles when all schools are on holiday. A decrease of **49%.**

Data gathered from the Gloucester Road/ Ferndale Road junction. Ferndale Road is a small residential street which is used as a short cut from Batheaston and the A46 avoiding the London Road and takes traffic into and through Larkhall.

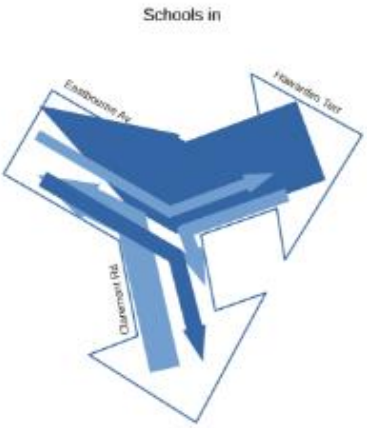
On average **227.4** vehicles travel down Ferndale Road when all schools are at school compared with **152** vehicles when all schools are on holiday. A decrease of **33%.**

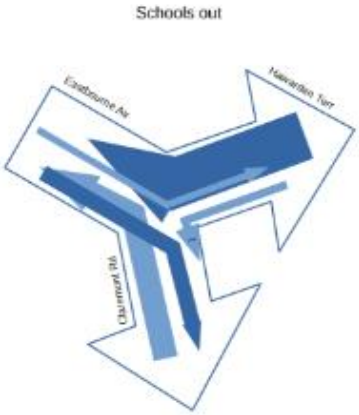




Data gathered from the Eastbourne Avenue/ Hawarden Terrace junction. Eastbourne Avenue is a hilly residential street on a bus route. This junction is used by through traffic from the above short cuts to access the rest of Bath, and is also used by residents from Fairfield Park, Larkhall and Camden.

On average **924** vehicles travel up Eastbourne Avenue when all schools are at school compared with **557.6** vehicles when all schools are on holiday. A decrease of **40%.**



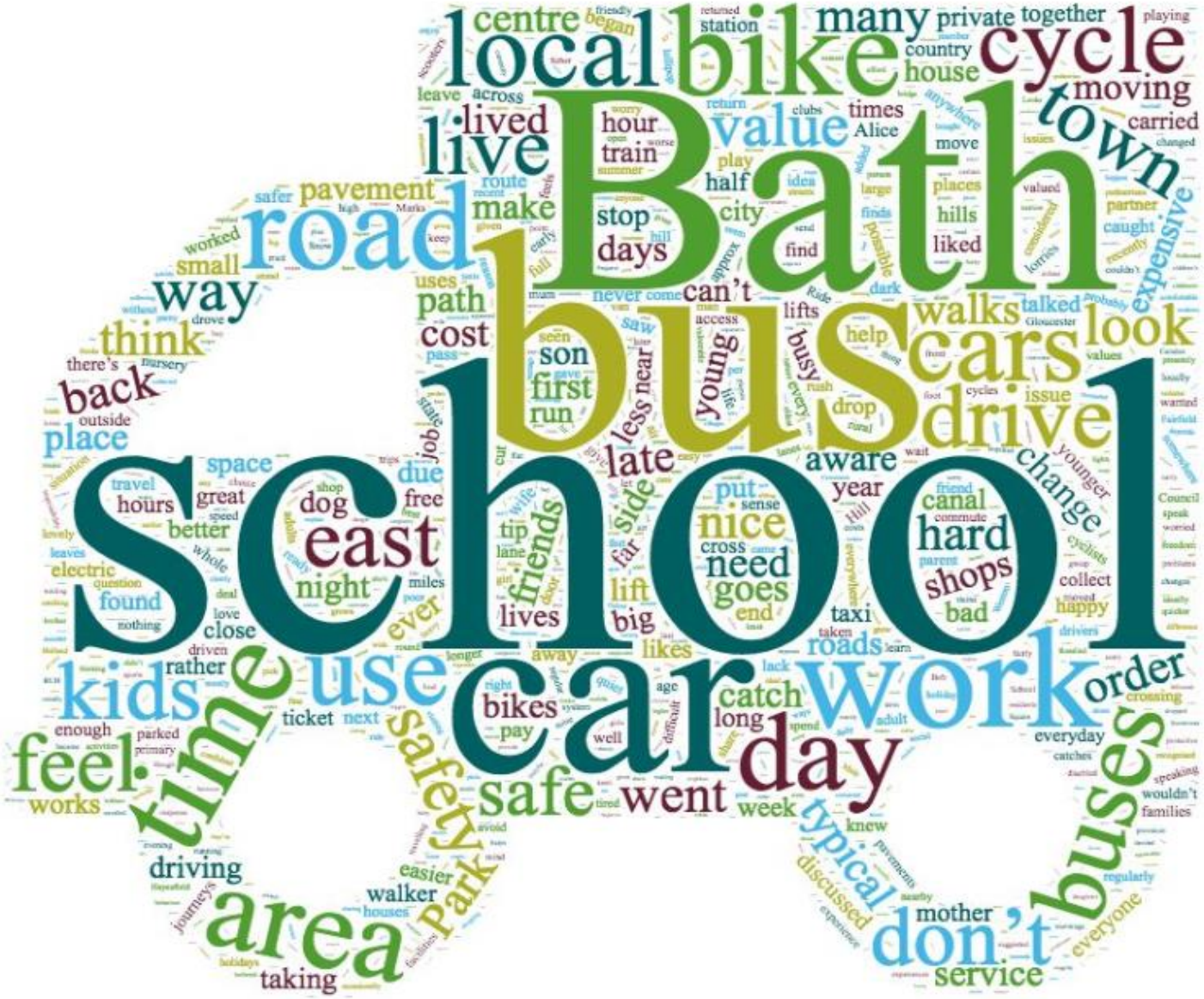


"The average level of traffic on term-time weekdays is higher than the average level of traffic in the other three situations, and this difference is statistically significant. This means term-time weekdays are very likely fundamentally different to the other three situations as there would only be a tiny chance of seeing numbers like these if they were not." Dr Ian Walker: Associate Dean, University of Bath

COMMUNITY MATTERS

TRANSITION LARKHALL

A project investigating how parents take their children to school and why they choose to travel that way.



Outline Qualitative Data

Under the guidance of Dr Ian Walker, Transition Larkhall devised a qualitative project to find out if residents on the east of Bath thought that traffic was a problem.
Alongside this research project quantitative data was also collected to see if there was significant increases in traffic during the school term times. (see page 5 for information on data).

Four members of Transition Larkhall: Joanna Wright, Ros Hough, Emma Hooper and Miranda Bonham-Carter constructed a list of questions to ask a selection of random residents to listen to residents opinions.

Residents had no prior knowledge that these conversations were about transport and travel. Conversations followed a set of 7 questions and took about an hour to conduct.

The questions were organised to gain an understanding of how residents felt about where they lived without feeling like they had to discuss a set topic. This question was followed by asking them "what they valued and did not value" to once again see what issues residents felt were the problem in their local area, without prioritising transport or setting transport issues up as a topic to discuss. The third question asked about a typical morning; so that we could find out how they moved around and what transport options they chose.

This research method allowed residents to express their frustrations and concerns about the where they lived and articulate what their main concerns and frustrations actually were, without the researcher imposing the research agenda upon them.
It was not until question 4 that the resident was told the conversation was about transport.

Notes of the responses of residents were made along with direct quotes, this was then transcribed. Every participant was anonymised and given a copy of the transcript.

In total 34 residents were involved in a conversation to between September 2016 and May 2017.

COMMUNITY MATTERS: A project investigating how parents take their children to school and why they choose to travel that way.

TRANSITION LARKHALL

traffic affects our children and elderly people

it's a real rat run, it puts me off letting my children walk

it is a local community and by using a rat run, what you are saving is 10 minutes of driving and it is affecting the local community badly

it is a long relentless hill for them to walk to school and it is easier for the girls if they are driven

I race from work to school to collect them, there is no space

I drive them to school because they have a full on day, school life is a lot, I try to make it easier, I see it like a work day, they have a lot of homework, so I make it as easy as I can

having kids made me learn to drive

to be in so many places at once with 3 children, it's cheaper to take the car

time calls, emails 25 hours a day, whatever can give, does give, if I can drive and do it in 10 minutes, that's a winner, most people have good intentions, but the reality is they don't stick to them

I drive my daughter I call it the taxi of mum and dad, being a parent, part of that is being over protective

I find it frightening along the London Rd, the possibility of getting run over and pollution

if buses were cheaper and more regular we might use it

it is expensive to travel on a bus each day

sometimes I have waited for over 20 minutes for a bus and nothing comes

I always drive to the RUH. I work shifts and the time of day and days of week vary and I can't rely on public transport to get me from Larkhall to the RUH or get me back

paying for my car, for petrol, car tax, road tax, insurance, why pay this and then go on a bus?

COMMUNITY MATTERS
Residents Response

TRANSITION LARKHALL

A project investigating how parents take their children to school and why they choose to travel that way.

Between September 2016 and May 2017 four volunteers spoke to 34 residents about how it feels to live on the East of the Bath. Residents had no prior knowledge that these conversations were about transport and travel. The full transcripts (annoymised) are available. Below are the questions asked, summaries of responses, and quotes from transcripts.

1.How do you feel about living in the area (east of Bath)?

OVERALL OBSERVATION

Everyone loves the east of Bath, it's close to a city with all the amenities, yet feels very rural because of the countryside.

Quote from resident:

"the east side of Bath is the best place to live, in Bath or in the rest of the country, as it is close to the city amenities and yet in the countryside".

2.We are talking to people in this area to see if there is anything that you either really value or see as a problem where you live?

OVERALL OBSERVATION

Traffic is a problem, parking is a problem, rat runs are a problem, there is a lack of public transport, a lack of cycle infrastructure, poor air quality, a feeling of a lack of safety when walking, darkness due to new street lighting. Selling of drugs locally is a problem mentioned by 2 respondents. Boredom for young people as there is very little for them to do.

Quote from resident:

"my biggest bug bear, traffic and travel. JW10 carried on by discussing the pressure of traffic on the residential streets and how it was very difficult to have alternatives to your car".

3. Can you talk me through your typical morning ?

OVERALL OBSERVATION

Responsibility for someone other than yourself makes it more likely that you will use a car. Bad weather, darkness, hills all make it more likely that you will use a car. Young people are unable to drive cars so are forced to use public transport, unless they have parents willing to drive them. Old people have more time and have free bus travel so tend to use public transport more.

Quote from resident:

"JW2 cycles to the center of Bath, sometimes he walks and considers whether to go along the London Road which is horrid or over the top via Camden, but sometimes the hills are just too much at the end of a day so JW2 might catch the bus. Sometimes he will cycle home collect the car and then get his daughter and wife from her job and daughter from nursery. Time is often a factor especially as the nursery shuts at 6pm or if his wife works late, who would like to see their daughter before bed –time".

4.One of the things we are interested in is transport – can you tell me how you get around ?

OVERALL OBSERVATION

20 out of 34 respondents predominately use cars to get around. Few use buses, some cycle, but it is seen as dangerous, and everybody does some kind of walking. People gave reasons why they use the car: these include: as a way of saving time, getting out of bad weather, dealing with hills, carrying equipment, ferry children, coping with tiredness, because of poor public transport, poor cycle infrastructure, the cost of public transport.

"Time, calls, emails 25 hours a day, what ever can give, does give, if I can drive and do it in 10 minutes, that's a winner, most people have good intentions, but the reality is they don't".

JW16 **spoke about her mum giving her lifts "if she's not busy" or "if timing is tight" and how "you can't always rely on the buses" and how if you need to get into town quickly "it will take half an hour to walk".**

5.I noticed on your form that you have children. How do they get around? OR Do you have any observations about how local children get around?

OVERALL OBSERVATION

For many parents, their perception of what they want their children to do and what their children actually do are not the same. Children mainly travel by car, for various reasons. Public transport is expensive, and bad experiences of public transport can deter parents from putting their children on buses. Parents worry about children's safety, both on the roads and late at night. A parent needs to be in control of time and when using public transport they can feel out of control. The geography of Bath hills causes problems. Having more than one child also creates problems as different ages move at different paces which is not time efficient. The view of good parenting is that you will drive your child and parents saw this as caring. Parents liked to think that their children walked, cycled and/or used public transport but when you come down to day-to-day living on the whole children were driven.

"Having kids made me learn to drive".
"to be in so many different places at once with 3 children – its cheaper too, to take the car".
"I think they get shovelled around in cars".
"Younger people are a lot lazier than what we were brought up".
"I don't see children riding bikes, not for years, I do see kids on scooters, probably because roads aren't safe, it's a nightmare".
"it's too long a walk at night, no buses and it is just not possible at night".
"The private school run is hideously motor intensive".

6.Tasks: Here are some pictures of children out and about in various different street settings please can you take a look at them and rank them in order of safe?

OVERALL OBSERVATION

Concerns over large volume on traffic on roads, how fast everything is moving and how cars are unaware of how they affect other road users and non-road users, aggressive driving and reckless driving. The lack of public transport and how walking or cycling late at night is enjoyable due to less traffic. School buses are seen as a good thing, so are pedestrian crossings and wide pavements. The London Road is seen as noisy, polluting, dangerous, congested, unfriendly to cyclists and walkers. How parents wanted the best education for their children and how homes are unaffordable in Bath so are willing to commute. How it is absurd that we are still using technology from a 100 years ago for the car and how expensive train travel is in the UK. How problematic public transport is with small children and so is walking with them. Concern for children on roads or playing on or near roads as they are thought to be less observant. How few children are seen playing outside and how overprotective of children Western culture has become. Concern about rat runs and lack of parking and noise of vehicles. How little provision there is for cycling and how hard it is to store bikes when there is more than one bike in a family.

"I probably had more freedom in those days, there is less freedom now".
"I feel for them, they have so many bloody clubs, he gets tired, drama on a Saturday, football on a Sunday. He thought that the act of driving his children helped them and stopped them from being so tired".
"how awful it was the noise and vibrations – the constant traffic jams outside your front door, he felt where he lived now was worlds apart and how you can't compare city living with countryside living".
"it wasn't the big road that was the problem as there was a crossing, but all the smaller roads, used as rat runs, roads that ran out of pavements and when to know how to cross the road".
"She said that the problem with taking children everywhere by car is that they won't develop road sense, and that the danger of being knocked over is in fact greater than that of "stranger danger".

7.What would your top tip to someone moving to the east of Bath be? OR If you could change one transport problem what would it be?

OVERALL OBSERVATION

Bath is unaffordable and a great many people are living on the edges of Bath because this is a cheaper option, however there are poor transport links on the east of Bath and thus a large number of cars are coming into Bath because of this problem. Some thought a link road was a good option to solve congestion along with a Park & Ride. Many felt that better public transport should be a priority for the Council and improvements to cycling infrastructure should be implemented along with better facilities for walking.

"Bikes and improve cycle lanes".
"Price, if public transport is cheaper, like buses and taxis, more people would use it, which would solve the congestion issue and there would be more buses which would be more regular and the Council would invest in it being regular and on time and frequent."LB spoke about how expensive it is for her to travel on bus each day".

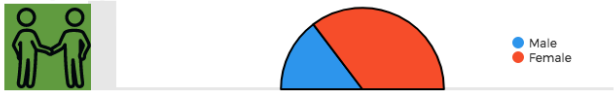
COMMUNITY MATTERS
Participants Sampling Results

TRANSITION LARKHALL

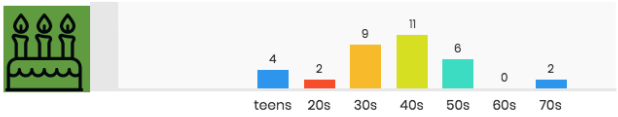
A project investigating how parents take their children to school and why they choose to travel that way.

Number of participants

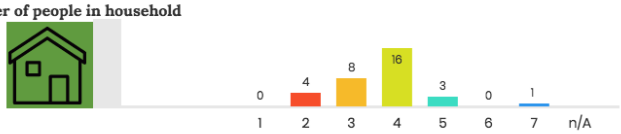
Gender of participants



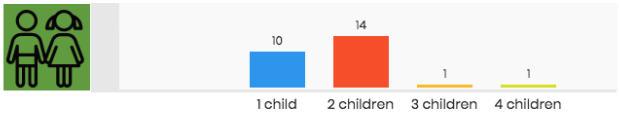
Age of participants



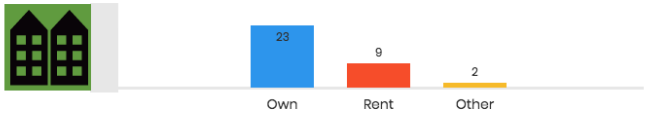
Number of people in household



Households with children under 16



Own or Rent

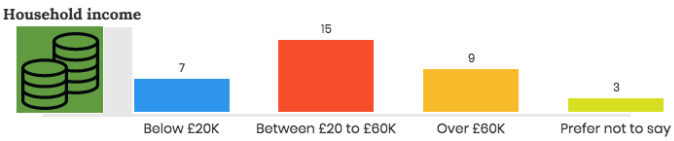


Access to a car

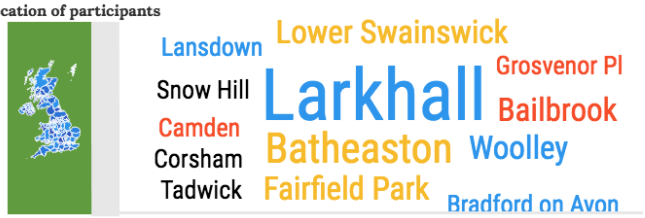
Access to a motor-bike

Access to a bicycle

Household income



Location of participants



Research outcomes and related issues

From the quantitative and qualitative research carried out by Transition Larkhall (TL) it is evident that term time traffic is "significantly higher" than traffic outside of term-time. In addition residents are genuinely bothered by traffic, raising concerns about congestion, pollution, safety and the cost and lack of public transport.
To understand the extent of these problems TL has carried out further research over the year around the issues highlighted by the anonymised residents on the east of Bath.

Bus Frequency (see page 19)
Many residents spoke about the lack and infrequency of buses on the east of Bath. One particular resident spoke about "better transport links on the west of Bath". TL researched the time table's of these two areas of Bath and as can be seen on page 19, NE Bath has considerably less buses per hour than western Bath by a ration of 3 to 1.

2 in 3 parents drive their children to their friend's homes, parks and sports. ICM survey.

School children waiting for a bus on the London Road, 7.40am September 2017. Many parents and school children on the east of Bath complain about the lack of buses and as can be seen in this photograph large numbers wait for a single bus and some are sometimes refused due to overcrowding.

Children and Traffic (see page 20)
The school run presents a problem for Bath. To try to understand what is taking place it became evident that it was important to locate data on school numbers in Bath. TL approached B&NES Council for this data and initially was only given information about state schools in Bath for 5 to 15 year olds. After various conversations with individuals working in private schools, TL was able to locate an individual in the Council who was collecting data on private schools. This data did not name individual private schools. TL was told that some private schools were only willing to share their data on school numbers and how their pupils got to school if the Council published an overall view of all public schools in Bath.
It became evident looking at this data that two important age groups were missing. 0 to 4 year olds and 16 to 18 year olds. This means that out of the 21,616 young people who live or go to school in Bath, 34% of that figure do not have any data on their movements, and one would assume they have not been considered in any local transport policy. This is a significant sector of the population who are not able to articulate or argue their needs.

" a typical parent drives 5000 miles a year on escorting journeys". ICM Survey

Bus Tickets (see page 21)
The cost of buses and the confusing range of tickets available was raised by residents. As can be seen on page 21 residents in Larkhall have a choice of 13 ticket types for children on First buses, plus other options on Faresaver. The confusion over companies is often a real hazard to young people who frequently go to school across Bath without carrying money. Young people in the Larkhall area often speak about how they missed a bus or a bus was full, but were unable to get on an alternative bus by another provider because their bus ticket only works for one particular bus company.
Parents spoke about how in some cases their children needed to catch several buses to get to school but as these buses are run by separate bus companies this journey became prohibitively expensive. They therefore drove their children to school to save money and the inconvenience of switching buses.
The cost of fares is a contributing factor to many parents decision to drive their children to school. A family of three whose children all attend a school on the west of the city would pay approximately £99 per month, which amounts to approximately £1000 per year. Driving children to school saves many families money. Poorer families who are unable to afford a private car pay a high price for public transport.

People in the highest household income group travel more than twice as far by car as people in the lowest income group.
Dept of Transport: Great Britain Road Use Statistics 2016

Number of Licenced Vehicles in Great Britain (see page 25)
Residents spoke about congestion and the sheer number of vehicles on the road and the increasing inability to park their car. It is quite clear that the number of vehicles on the road has increased over the last few decades. Memories of movement in childhood by adults over the age of 40 are very different to anyone under the age of 18. Parents are very concerned about road safety and the lack of provision for their children in terms of crossings and pavements. The number of licenced vehicles on our roads is one of the factors contributing to the decrease in children's independence.
Walking mobility by all age groups, but particularly the young and the vulnerable are exacerbated by urban road building for instance dual carriageways, making walking across urban areas more difficult, dangerous and often more time consuming.

School children walk up the London Road to a pedestrian crossing to walk back down the London Road to stand at the bus stop.
7.40am September 2017

Walking accounts for around a third of trips for children and a lower share for adults; overall 22% of trips are made by walking.
Dept of Transport: Great Britain Road Use Statistics 2016

What do Traffic fumes do to our children (see page 26)
It is evident from government at a national and local level that pollution on our roads is having a significant impact on the health of the nation. B&NES Council are in the process of a Bath Air Quality Action Plan Consultation.
Some would argue that the advent of electric cars will remove this problem from the roads and the air we breathe. However as Dr Ian Walker has argued the "UK has a billion pound health crisis arising from inactivity, shifting shorter journeys, those under two miles from cars to active travel modes such as walking or cycling is one of the best things any developed nation can do to tackle its health problems."
Electric cars do not deal with congestion. Presently in Los Angles cars amount to two thirds of the land use in the city. It is evident from TL's research that residents on the east of Bath like living here because it is close to the city and the countryside. Filling up green spaces with cars is not what residents want.
According to UK law "one road user has a Duty of care to another road user". It is therefore unacceptable that individuals under the age of 18 are breathing air from pollutants which are put into the atmosphere by adult road users: children should be recognised as both commuters and road users and considered in transport policy and the impact pollution has on their health, as a duty of care by local authorities.

To date: Project Outcomes
Dr Ian Walker and Dr Mick McCullen from the University of Bath are presently working on a related piece of work using real-time traffic data to estimate the impact of school terms and holidays on actual journey times within Bath. This automated monitoring should allow us to estimate the effect of these, and other events (e.g., road works), on the city's roads. Testing is on going until around the end of the year.

Electronic Information on this project is available at:

Information sheets on the Community Matters research are available to the public through hand-outs and online at: http://transitionlarkhall.uk/estimates/community-matters/

A short film has been made by Shannen Twomey, Bath Spa University about the numbers of cars entering Larkhall, this can be seen at:
http://transitionlarkhall.uk/estimates/community-matters/

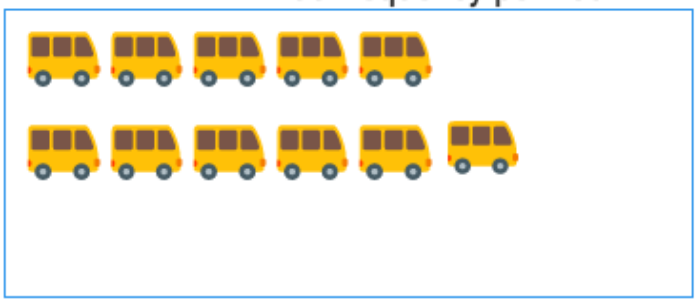
COMMUNITY MATTERS
Bus Frequency

TRANSITION LARKHALL

A project investigating how parents take their children to school and why they choose to travel that way.

From interviews with local residents, it was clear that there was a perception that the east of Bath has a limited bus service and that other areas of Bath have more transport options. To see if this was the case Transition Larkhall has researched the frequency of buses on the north east of Bath compared with the west of Bath.

NE Bath Bus frequency per hour



Western Bath Bus frequency per hour

BB is a pseudonym for a young woman in the Larkhall area.

"I asked BB how late it was that she caught buses.
BB said that there was a service from Bristol to Bath at 2am, which gets into Bath at 2.50am and then to get to Larkhall you have to walk. That is there is no public transport to the east of Bath after 11pm at night.
I asked BB if the No 3 ran once an hour, every hour through the night did she think people would use it?
"it would be incredible, especially for people in Fox Hill and Larkhall"
BB then went on to tell me how there are student buses in Bath that did run all night both up to the University of Bath and to Bath Spa University at Newton St Loe, so buses do cater for them. BB mentioned that "workers in Bars and stuff get taxis"
BB and I then discussed how there seemed to be better public transport links on the west of Bath than the east of Bath. BB said "Newbridge is served better by buses and they have the park and ride which will drop them off"
BB mentioned how she had friends in Newbridge and when they come back from Bristol late at night they get off the bus at Newbridge and she stays on that side of Bath "I stay with her (friend) and get up early in the morning and leave"
To get to her friends in Bristol it takes 3 buses. I asked BB what her friends made of a journey to Larkhall' their response was "you walk this, this is very long"
BB said how other people are very surprised. More often BB goes to other people's homes because of the journey. "

Between September 2016 and May 2017 four volunteers spoke to 34 residents about how it feels to live on the East of the Bath. Residents had no prior knowledge that these conversations were about transport and travel. The full transcripts (annoymised) are available.

17 -20 year old women make more trips by bus than any other age group.
RAC Foundation

Data as per March 2017

NE Bath Frequency (weekday, daytime after 8am)		**Western Bath Frequency** (weekday, daytime after 8am)	
London Road Services		Lower Bristol Road	
271 every hour		U5 every 10 minutes	
272 every hour		U6 every 30 minutes	
X31 20 minutes average		No 5 every 10 minutes	
3 15 minutes average		Average optimal frequency per hour	14
Average optimal frequency per hour	9		
		Upper Bristol Road	
Via Camden 6 6A 7 every 30-35 minutes		U5/U6 every 10 minutes	
Average optimal frequency per hour	2	19 every hour	
		37 every hour	
		38 every hour	
		39/X39 every 10-15 minutes	
		Average optimal frequency per hour	13
Total optimal frequency LARKHALL area	11 buses	Total optimal frequency Locksbrook/Lower Weston/East Twerton area	27 buses

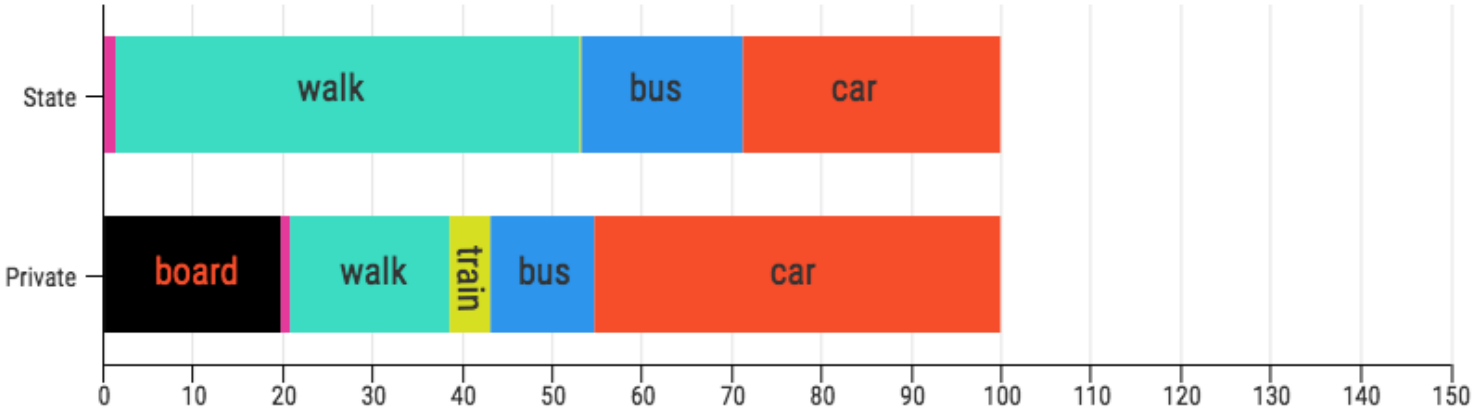
Community Matters
Children and Traffic

TRANSITION LARKHALL

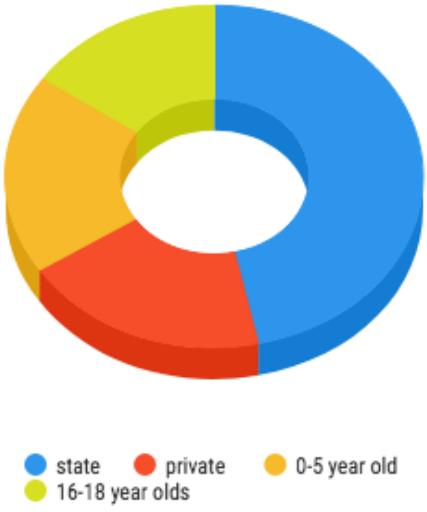
A project investigating how parent take their children to school and why they choose to travel that way.

- In 1971 80% of 7- 8 year olds were allowed to go school on their own.
- In 1990 that had reduced to 9% of 7-8 year olds allowed to go to school on their own.
- In 1990 it was estimated that escorting children to school took up 900 million hours.

"The increase in traffic has been encouraged over many decades by transport and land use policies that have fostered dependence on the private car. Many of the social, economic and environmental costs of these policies have become widely recognised, but their impact on the lives of children has until now been neglected." Mayer Hillman 1990



The above graph gives statistics on how children get to school in Bath and only includes private schools and children aged 5-15 years at state school. There is no available data for 0-5 year olds or 16-18 year olds.



In the city of Bath there are approximately:
4141 Private School children (B&NES data)
10,081 State School (aged 5-15 years) children (B&NES data)
4092 0-4 year olds (census 2011)
3302 16-18 year olds (census 2011)

There are approximately **21616** young people aged 18 or under who either live or attend school in Bath.

In percentage terms this means that there is little transport data, if any for 34.2% of people 18 and under.

Many young people attend a day care/school their parents consider to be the best available for them rather than the closest to them.

"the analysis suggests that the increase in the personal freedom and choice from widening car ownership has been gained at the cost of the loss of freedom and choice for children." Mayer Hillman

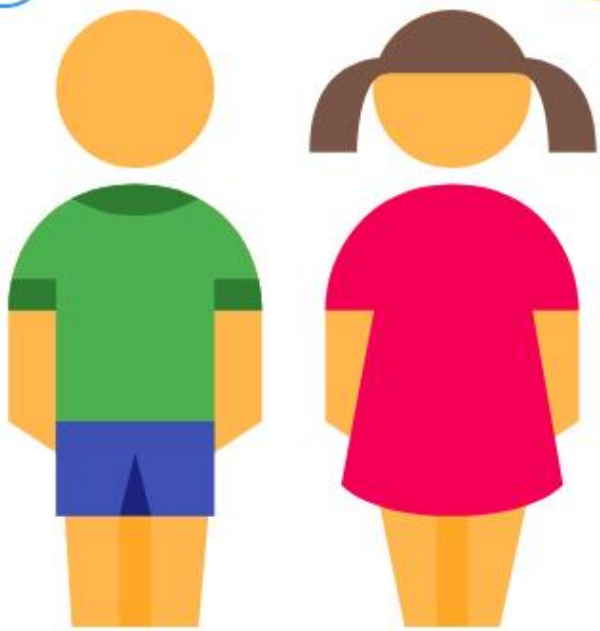
Community Matters
BUS TICKETS

TRANSITION LARKHALL

A project investigating how parent take their children to school and why they choose to travel that way.

- Child Single Hop-on £1.30
- Child Yearly Ticket £325.00
- Child Night Ticket £1.50
- Child Week Ticket Mobile £8.50
- Child Bath Rider Day Ticket £3.50
- Child Week Ticket Onboard £9.20
- Child 3 Stop Onboard £0.50
- Child 5 Single Trips Mobile Ticket £5.00
- Child Day Ticket Mobile £2.00
- Child Day Ticket Onboard £1.50
- Child Return Onboard £2.00
- Child Bath Rider Week Ticket £15.50
- Child Monthly Ticket Mobile Onboard £33.00

For a child aged between 5 and 15 years to catch a bus from Larkhall they have the option of 13 bus tickets from First Group Buses with FareSaver and Stagecoach offering further ticket options.



Origin	**Chippenham via Corsham & Rudloe**	**Eastert on via Melksham & Devises**	**Colerne & Marshfield 228**	**Tetbury, Yate, Wick, Sodbury**	**Bathford Batheaston**	**Larkhall Fairfield Park**	**Larkhall Fairfield Park 6A,**
Route	**X31**	**X72**	**228**	**620**	**3**	**6A, 7**	**6A, 7**
Operator	Faresaver	Faresaver	Faresaver	Stagecoach	First	First	First
Adult Single Onboard	£6 (Rudloe to Batheaston)			£13.70 (from Tetbury)	£2.50	£2.50	£2.50
Adult 3 stop hop Onboard					£1	£1	£1
Adult Return Onboard	£9 (Rudloe to Batheaston)			£22.50 from Tetbury			
Child Single Onboard				£9.20 from Tetbury	£1.30	£1.30	£1.30
Child 3 Stop hop onboard					£0.50	£0.50	£0.50
Child Return Onboard				£15 from Tetbury			
Student Single Onboard					£1.80	£1.80	£1.80
Student 3 Stop Hop Onboard					£0.70	£0.70	£0.70
Adult Day Ticket Mobile	£7	£7	£7	£7	£4	£4	£4
Adult Day Ticket Onboard	£7.50	£7.50	£7.50	£7.50	£4	£4	£4
X31 Day Crossover	£7.20						
Bath Rider Day	£4.50	£4.50	£4.50	£4.50	£4.50	£4.50	£4.50
Child Day Ticket Mobile	£4.50	£4.50	£4.50	£4.80	£2	£2	£2

Child Day Ticket Onboard	£4.80	£4.80	£4.80	£4.80	£1.50	£1.50	£1.50
Child/Student x31 Day Cross over	£4.50						
Child/Student Bath Rider Day	£3.50	£3.50	£3.50	£3.50	£3.50	£3.50	£3.50
Student Day Ticket Mobile					£3	£3	£3
Student Day Ticket Onboard					£3	£3	£3
Night Ticket					£3	£3	£3
Child Night Ticket					£1.50	£1.50	£1.50
Student Night Ticket					£2	£2	£2
Week Ticket Mobile	£22	£22	£22	£21	£17	£17	£17
Week Ticket Onboard	£23	£23	£23	£21	£18.50	£18.50	£18.50
X31 Week Crossover	£27.50						
Bath Rider Week	£20	£20	£20	£20	£20	£20	£20
Child Week Ticket Mobile	£15	£15	£15		£8..50	£8.50	£8.50
Child Week Ticket Onboard	£16	£16	£16		£9.20	£9.20	£9.20
Child/Student X31 Week Crossover	£20						
Child/Student Bath Rider Week	£15.50	£15.50	£15.50	£15.50	£15.50	£15.50	£15.50

Student Week Ticket Onboard					£13	£13	£13
Adult Monthly Mobile	£80	£80	£80		£66	£66	£66
Adult Monthly Onboard	£85	£85	£85	£80	£66	£66	£66
Child Monthly Mobile	£60	£60	360		£33	£33	£33
Child Monthly Onboard	£55	£55	£55		£33	£33	£33
Student Monthly Mobile					£46.20	£46.20	£46.20
Student Monthly Onboard					£46.20	£46.20	£46.20
5 single trips					£10	£10	£10
Child 5 Single Trips					£5	£5	£5
Student 5 Single Trips					£7	£7	£7
Group Bath Day					£8	£8	£8
Adult Yearly					£650.00	£650.00	£650.00
Child Yearly	£595.00	£595.00	£595.00		£25.00	£325.00	£325.00
Child Yearly Mobile	£550.00	£550.00	£550.00				
Student Yearly					£465.00	£465.00	£465.00

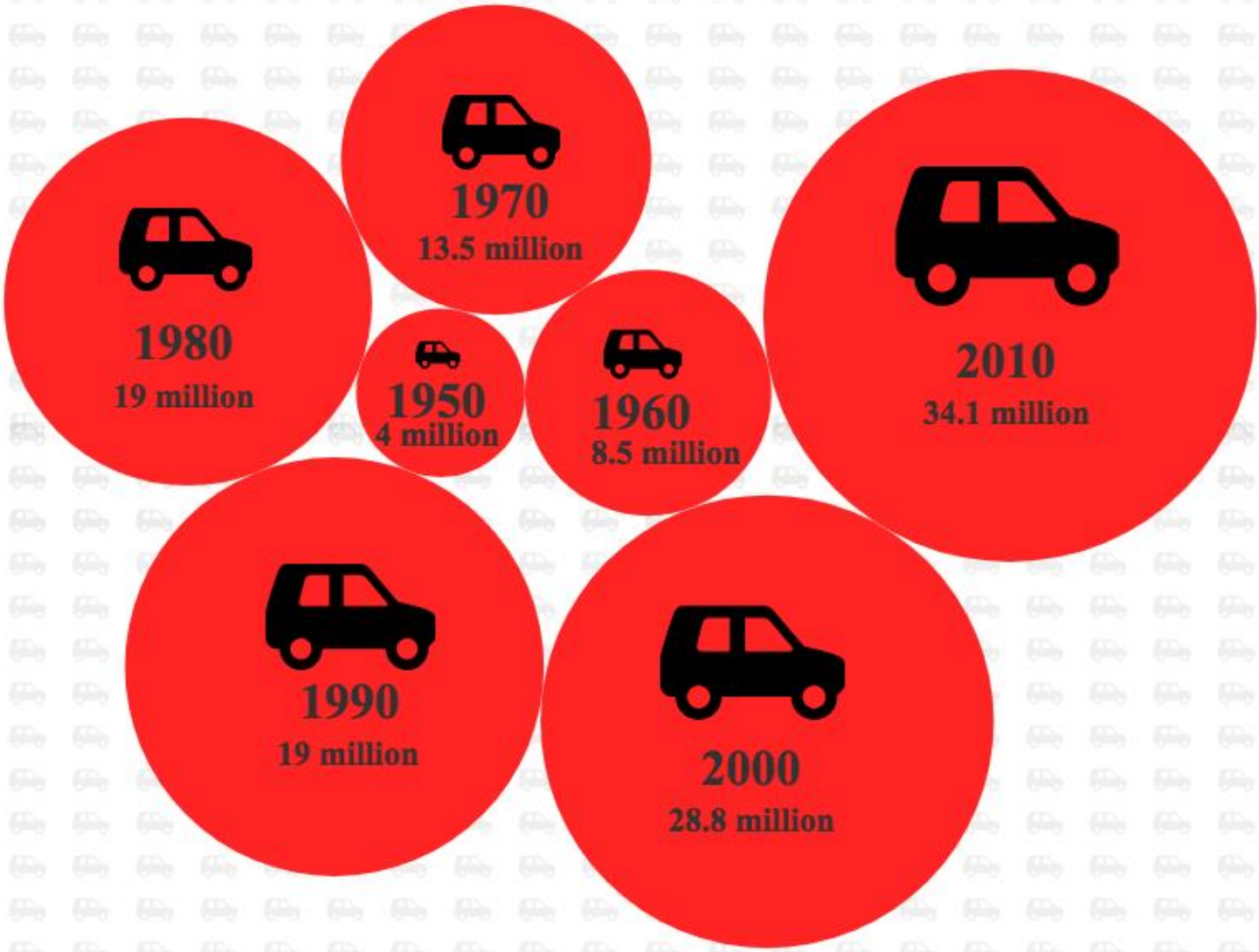
(**Bus ticket prices data collected September 2017**)

COMMUNITY MATTERS

TRANSITION LARKHALL

A project investigating how parents take their children to school and why they choose to travel that way.

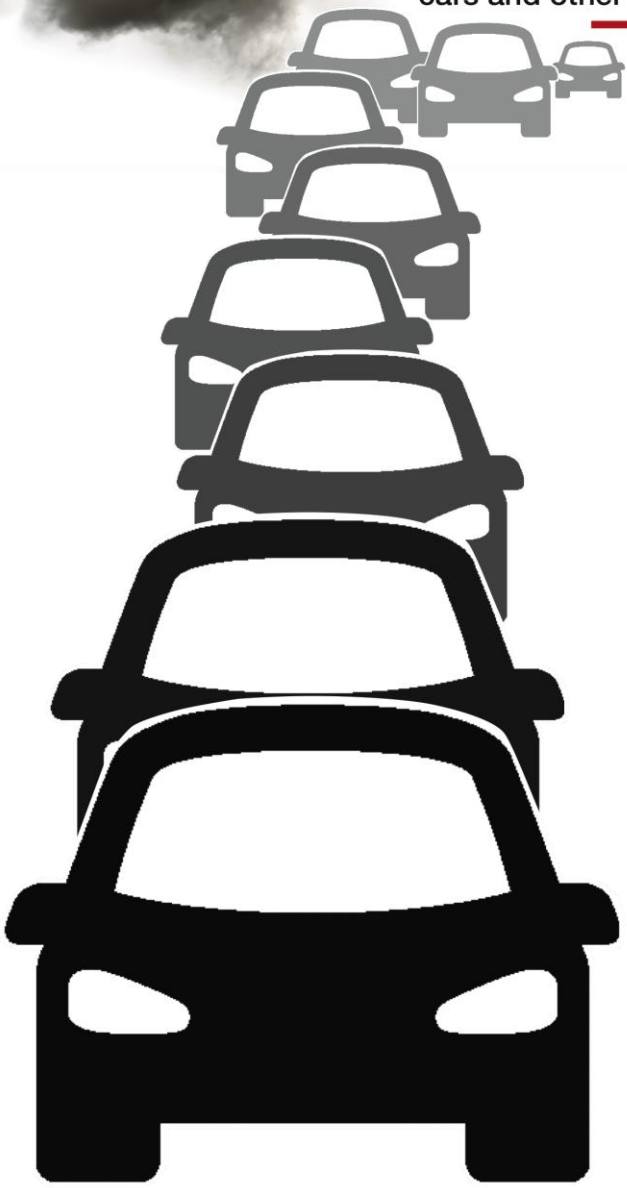
Number of Licenced Vehicles in Great Britain



Source: DfT; VEH0103 (2016)

WHAT DO TRAFFIC FUMES DO TO OUR CHILDREN?

Every year, we discover more about the harm being done to our children by the fumes that cars and other vehicles produce.



LUNG DAMAGE

Air pollution can damage the growth of children's lungs. The damage can last for the rest of their lives. It raises the risk of asthma and allergies.

BRAIN DAMAGE

For children who already have asthma, pollution can make it worse. It can damage the development of their brains. Air pollution can reduce children's intelligence, making it harder for them to learn.

MENTAL HEALTH ISSUES

It can change their behaviour and reduce their happiness. Air pollution has been linked to anxiety, depression and Attention Deficit Disorder.

HEART DISEASE AND CANCER

It raises the risk of heart disease later in their lives. It can cause cancer, both in children and when they become adults.

PREMATURE BIRTHS

Air pollution is linked to babies being born prematurely and small.

DID YOU KNOW?

Pollution inside your car can be much worse than pollution outside, because the fumes are concentrated in the small space.

23,500

early deaths a year are believed to be caused by diesel vehicles' excess nitrogen dioxide emissions.

WE CAN STOP IT by changing the way we travel

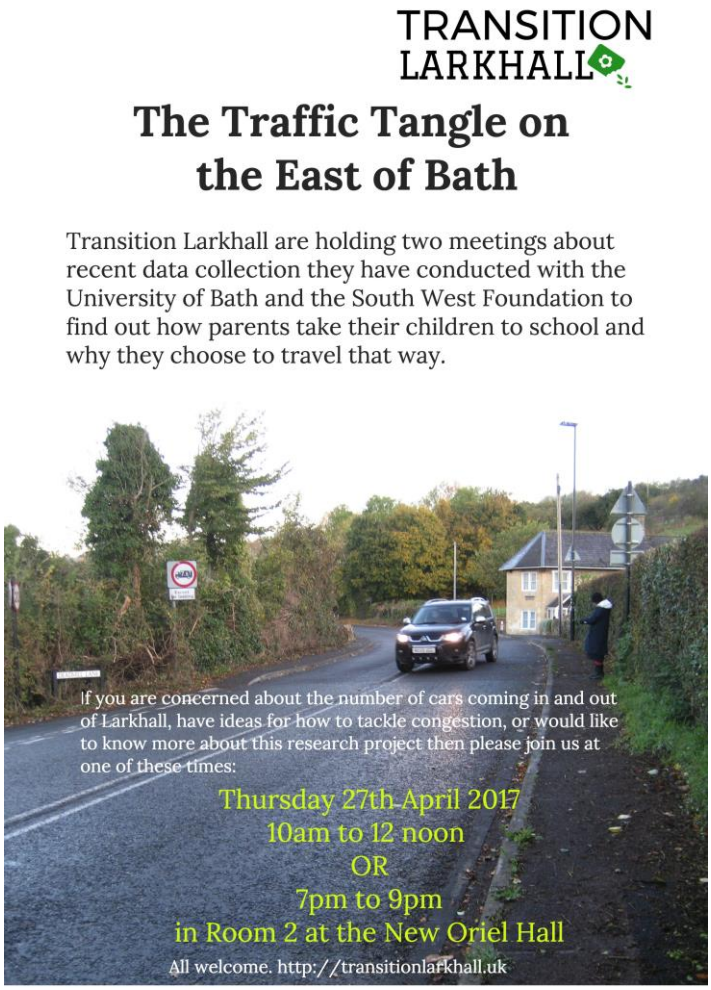
Walking and cycling are ideal.
Together we can protect our children from harm.
www.monbiot.com/2017/03/05/car-sick/

Public Meetings

In April 2017 Transition Larkhall organised two meetings at the New Oriel Hall that were open to all members of the public to hear about the Community Matters research project. Both meetings were well attended and at the end of each meeting attendees were asked to give their views on what they considered were transport problems in Bath and solutions that they might have form them.

Some problems mentioned were:

- Car drivers are mean to cyclists.
- London Road is too dangerous to cycle on.
- There are no through buses to the University of Bath or the RUH.
- School buses are insufficient, too expensive and too full to state schools.
- Buses are too expensive for families.
- Larkhall is an entry to Bath. It is small and residential, but traffic is unregulated.
- There is not sufficient pollution monitoring.
- Rat run traffic.
- There are no play spaces around homes because of too much traffic.
- People choose schools that are further away.
- People have no imagination about travelling any way other than by car.



Poster advertising the Transition Larkhall meetings in April 2017

Possible Solutions ?

- More transport choices.
- Better walking facilities: priority for pedestrians, more bridges.
- Better bike facilities: access to electric bikes, covered and secure on street storage.
- Better bus services: more buses especially to schools and hospitals.
- Less complex bus fares: one ticket across all bus companies all day for young people under the age of 18.
- Access only streets: stop rat runs via SatNavs.
- Number plate recognition controlled barriers in known rat run areas of Bath for residents.
- Encourage park and stride to all schools, state and private.
- Impose restrictions and fines on the school run for state and private schools.
- Impose fines on drivers under anti-idling legislation.
- Have active displays of pollution levels along the London Road.
- Create a culture where independent travel for children is supported by the community.
- Create a culture where adults are actively supported and encouraged to make fewer vehicle journeys.

transitionlarkhall.uk

References

Bohm, Steffan 2006 Against Automobility Blackwell Publishing

B&NES Data Private Schools

Campaign for Better Transport Improving local Transport helps the economy www.bettertransport.org.uk

Census Data: 2011 Crown Copyright

Daniels and Warnes 1980 Movement in Cities : Spatial Perspectives on Urban Transport and Travel Metheun

Davis, Adrian 2017 Health and Transport Making the Connections https://dradriandavis.wordpress.com/about/

Dant, Tim 2004 The Driver Car, Theory, Culture and Society Vol 21

Dowling, Robyn 1999 Cultures of mothering and car use in suburban Sydney: a preliminary investigation, Geoforum 31

Dowling, Robyn 2013 Shift – the way you move: reconstituting automobility, Continuum

Department for Transport 2016 Road Use Statistics for Great Britain 2016 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/514912/road-use-statistics.pdf

Gartman David 2004 Three Ages of the Automobile, The Cultural Logics of the Car, Theory, Culture & Society Vol 21

Hillman, Mayer 1990 One False Move: A study of Children's Independent Mobility, PSI Publishing

Hillman, Mayer 2006 Children' s Rights and Adults Wrongs Routledge

Ingold, Tim 2004 Culture on the Ground, the world perceived through the feet, Journal of Material Culture Vol 9 (3)

Ingold, Tim 2010 Footprints through the weather world: walking, breathing, knowing JRAI

Leibling, David 2008 Car Ownership in Great Britain, RAC Foundation

Living Streets https://www.livingstreets.org.uk/

Low, Seth M 2003 Embodied Space(s) Anthropological Theories of Body, Space and Culture, Space and Culture 2003

Madison, Pearce et al: 1996 The True Cost of Road Transport, Earthscan

Miller, Daniel 2001 Car Cultures Berg 2001

Monbiot, George 2017 What Traffic Fumes do to our children
http://www.monbiot.com/2017/03/05/car-sick/

Paterson, Matthew 2007 Automobile Politics, Cambridge

Philips, Daphne 1983 The Great Road to Bath, Countryside Books

Roberts, Paul 2004, The end of Oil Houghton Mifflin

Scott, Nick A 2013 Like a Fish Needs a Bicycle: Henri Lefebvre and the Liberation of Transportation, Space and Culture 16 (3)

Sperling, David, 2010 Two Billion Cars: Driving towards Sustainability, Oxford University Press

Steinbach, Rebecca 2011, Look who's walking: Social and environmental correlates of children's walking in London, Health and Place 18

Walker, Ian 20016 Electric Cars won't save our cities The Guardian 8/01/2016

Walker Ian: 2014 Grounded theory analysis of commuters discussing a workplace carbon-reduction target Transportation Research Part F

Walker Ian 2014 Old Habits Die Hard: Travel Habit formation and decay during an Office Relocation Environment and Behaviour Vol 47

Walker, Ian 2015 Users of different travel modes differ in journey satisfaction and habit strength but not environmental worldviews Transportation Research Part F

Urry, John 2004 Automobilities." Special issue of *Theory, Culture and Society 21* (co edited with Mike Featherstone and Nigel Thrift)

Urry, John 2009 After the Car Wiley Publishers

TRANSITION LARKHALL

The Transition Movement is a worldwide organisation founded in 2006, with the intention of developing grass root community projects that aim to increase self-sufficiency, to reduce the potential effects of peak oil, climate destruction, and economic instability.

Transition Larkhall was initiated in 2008 by local residents who wanted to improve the environment by acting locally. Transition Larkhall is dedicated to combating climate change and the crisis of resource depletion through local community action and initiatives.

The Alice Park Community Garden was the first Transition Larkhall project, it now flourishes as a semi-autonomous group with regular volunteer sessions and activities for both children and adults.
Transition Larkhall is an unincorporated association and holds four community meetings annually and has many members from the local community who are regularly emailed about local activities and initiatives.
Transition Larkhall's recent activities include promotion of local shopping, cycling, and energy conversation. Working with other local groups, it has supported the St Saviour's Infants Solar Schools Initiative and the Clean Air Campaign for Bath. Currently it is consulting about the possibility and need for a safer and more pleasant route to Alice Park from Larkhall Square.

transitionlarkhall.uk