

NHS Lothian Pan Lothian Review Paediatric Services

"St John's 24/7 paediatric services are absolutely essential to the health and well- being of the West Lothian Community"

West Lothian SNP

The Submission to the Royal College of Paediatricians Review

West Lothian Scottish National Party



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Introduction

As elected representatives serving the communities of West Lothian we contend that the provision of 24/7 paediatric services at St John's Hospital in Livingston is absolutely essential to the health and well- being of the West Lothian Community.

West Lothian, Scotland's 9th largest council area, is amongst the fastest growing communities in Scotland, and with 20% of our population under 15, we have one of the youngest populations in the country.

West Lothian also faces considerable challenges to more effectively tackle the health inequalities that blight our lives. Currently 2188 children live in areas identified as being within the most disadvantaged 15% in Scotland as measured by the Scottish Indices of Multiple Deprivation.

Children's services at St John's are easily accessible and deliver an excellent quality of care, underpinned by strong ties with our local GP's and community health services.

We contend that the further integration of children's services into the emerging West Lothian Health and Care Partnership and the resultant strengthening of our local community links is the best way to ensure the sustainable future provision of best quality, local, 24/7 children's services for the benefit of our communities.



Hannah Bardell

Livingston

MP



Martyn Day Linlithgow & East Falkirk

MP



Cllr. Janet Campbell SNP Council Group

Health & Care



Fiona Hyslop Linlithgow

MSP



Angela Constance Almond Valley MSP

Executive Summary

1. West Lothian a Growing community

West Lothian is the ninth largest local authority in Scotland with a current population of 177,150, with 35,064 children under 15 within our community, which at 20% is significantly above both the Lothian and Scotland average. Projections for the next decade show an 11% increase in our 0-15 population and confirm that West Lothian population growth continues to outpace most other areas of Scotland.

2. St John's Easily Accessible Services

No West Lothian community is more than 16 miles from St John's hospital, with the average distance being just 7 miles. No West Lothian community is more than 25 minutes by car from St John's with the average travelling time by car just 15 minutes. No West Lothian community faces a travel time by public transport in excess of 1 hour with the average bus journey time to St John's is just 32 minutes.

St John's Children's services are local and therefore easily accessible, highly responsive to the needs of our community and provide for a patient pathway that delivers an excellent quality of care and significantly better patient outcomes for local children than would ever be possible under different service delivery arrangements.

We would stress that families, particularly from the most deprived areas, who may have to allow their child to remain in hospital in Edinburgh, without visitors because they have other children at home, and who cannot be left as they have to attend school etc. would be seriously disadvantaged. This would be seriously detrimental to both the child in hospital and to the family unit.

There is also a considerable population of travelling families at different times of the year, within West Lothian. Particularly in terms of child community health, these families are very often among the "hard to reach population". We would contend that removing 24/7 paediatrics from West Lothian would impact heavily on the children from this community – their families can be reluctant to engage with health professionals at any time. Forcing these families to make a journey to Edinburgh will make it even less likely for them to engage and would be seriously detrimental to the well-being of such children.

3. Joined Up Services to Tackle Health Inequalities

We believe that the integration of acute services at St John's Hospital, including Children's services, into the West Lothian Health and Care Partnership is an essential step towards shifting the balance of care from acute hospital settings into our communities and to further developing the early intervention and preventative initiatives that are so fundamental to the effective tackling of health inequalities and to delivering better health outcomes for our community.

We contend that St. John's Children's services have a vital role to play in delivering successful outcomes for the 20% of our population that is under 15, through the further strengthening of links with our hospital children's services, local GP's, community nurses and health visitors and that the delivery of such 'joined up services' is essential to the well-being of our community.

We believe this would mean that both the children's ward and Community Child Health services (CCHS) would become integrated and would view this as an opportunity to integrate the paediatricians who work for CCHS to play a supporting role in the paediatric team at St John's. We would also view this as the best opportunity we will have to better facilitate the recruitment and training of advanced paediatric nurse practitioners to work in these services in West Lothian

Future Proofing of Rapid and Responsive Clinical Care and Discharge

The ability of local GPs and Community Child Health Practitioners (CCHP) to admit a child to St John's provides both a better clinical outcome for the child and is more cost effective in the long run. Local GPs & CCHP will refer the child straight to the ward – child will be seen by a nurse, then by a paediatrician and either admitted if necessary or treated and sent straight home. If referred into Edinburgh, child will be admitted as a matter of course and may wait over 24 hours to see a paediatrician.

We would contend that the provision of 24/7 paediatric care at St John's is best placed to treat the child as part of a family unit. The family is apart for a shorter period of time and the need for either searching for child care (for other children) at extremely short notice or having to allow your child to be transported to hospital without a family member present is eliminated.

4. Maternity Services

The Special Care Baby Unit (SCBU) is supported by the paediatricians delivering the cover for the children's ward. In 2014 40% of all Lothian births took place at St John's Hospital and the paediatric services provide vital support for the Special Care Baby Unit. A lack of 24/7 paediatric cover would have a seriously detrimental impact on SCBU and the maternity services we are able to provide locally. This would result in mothers being transported to Edinburgh in the 2nd stage of labour and neo-natal transfers to the SCBU in Edinburgh increasing the risks for both mother and baby which should most certainly be avoided when at all possible. It would also mean West Lothian women, who would naturally choose to deliver at St John's being referred to the RIE instead putting increased pressure on these services.

We contend therefore that it is essential for St. John's 24/7 Children's services to be maintained and sustained. We believe that a service model that is so well regarded locally and so clearly delivers excellent quality of care and significantly better outcomes for West Lothian children, is a considerable asset and absolutely essential to West Lothian's ability to maintain our growth and to support our community to flourish.

In summary, therefore, we contend that anything less than 24/7 children's services at St John's;

- Would reduce the level and quality of service children and families in West Lothian receive and continue to expect to receive.
- Would necessitate expensive service redesign that would adversely impact upon the quality of service and the outcomes achieved for West Lothian's families.
- Would result in a loss of local knowledge and connection to communities and local workforce which would be harmful to all.
- Would seriously inhibit the necessary integration of children's health and social care services.
- Would increase health inequalities as a result of service accessibility.
- Would increase health inequalities as a result of the added cost burden on the disproportionately high number of disadvantaged families in West Lothian who would have to pay more to travel to and from Edinburgh.
- Would impact on the safety of children as their families become distanced from services and are potentially 'hard to reach'.
- Would be based on evidence of success that is counter to and undermines the collective political goal of keeping people out of hospital unless absolutely necessary.

Case Studies

The following are real life case studies – some of many that could have been submittedwhich well illustrate the genuine benefit delivered through St Johns paediatric services.

Case Study One

In July 2015 a parent of 8 children contacted me via e mail expressing concern over the temporary closure of the Children's Ward at St. John's.

Her daughter suffers from ulcerative colitis and has been admitted to both St. John's Hospital Children's Ward and the Royal Hospital for Sick Children in the past. She is in OPD every 2-3 months and has had 6 admissions covering periods from 5-6 nights up to 3 weeks. Her health deteriorates rapidly and she becomes sick very quickly. She has had scopes and scans carried out at the Royal Hospital.

When her daughter is admitted to the Royal Hospital for Sick Children it is difficult in the extreme for the family to operate as one – it involves the father staying with the daughter and the mother staying with their other children. In brief, distance prevents the whole family from offering the emotional support that she needs to speed her recovery and has a detrimental effect on the family unit.

The family has stated that from experience they have found the Children's Ward at St. John's much more welcoming and supportive than the Royal Hospital. The family feel that the staff they have encountered at St. John's Hospital are very approachable and supportive and the care is very much personalised. They conclude that St. John's Hospital Children's Ward provides a much more supportive experience to patient and family than the RHSC where they feel a very different attitude prevails.

Case Study Two

A daughter required specialist treatment for a rheumatic heart disease which meant she attended Yorkhill Hospital. She was transferred to the Children's Ward at St. John's Hospital for locally based recuperative care. The family have two other children and are Livingston residents. Her husband works in Edinburgh, her other two children attend school in Livingston and she is unable to take time off work to be with her daughter to the exclusion of her other two children.

Their daughter needed open heart surgery to repair a damaged mitral valve. This initial diagnosis was made at St John's Hospital, Livingston. She was admitted to Yorkhill in July 2015 and although the surgery went well, she developed a bleed during the operation that meant she was in ICU for some time. Following her return to the ward she developed endocarditis (an infection in the heart) and stayed in hospital for 11 weeks receiving treatment for this condition.

In mid-August 2015 she was transferred to St John's Hospital Children's Ward in Livingston on the day that it re-opened allowing her to be nearer to home. Had the ward been open before then she may have been able to be transferred earlier and be closer to home for longer. She was eventually discharged in early September and monitored closely between the Royal Hospital for Sick Children, St John's Hospital and Glasgow children's hospitals.

On the 20th October she experienced a stroke while at home. She was subsequently readmitted to the Glasgow cardiac ward where it has been discovered that she still has the infection and she will remain an inpatient for at least another 3 months.

The family feel that they have been extremely lucky on both occasions to have secured a room in the Ronald McDonald service. The family speak highly of the care provided to their daughter and to themselves.

The problem that their daughter's treatment highlights is the extensive strain put on families who have a child being treated outside the locality and which is all pervasive, impacting not only their family life but on all other aspects of their lives as well. The emotional and financial stress is significant. Having their daughter relocated to St. John's Hospital Children's Ward reduced this pressure considerably.

In brief, whilst their daughter was being treated in Glasgow, the family travelled the M8 twice a day if not more. In effect they were maintaining two households and two completely separate lifestyles.

Their daughter's extended stay in Glasgow exhausted their financial reserves. They were spending an additional £150-£200 per week on travel and food so that the family could be together as a family as often as possible.

The relocation to Livingston for treatment gave them a much needed breathing space to enable them to reclaim their lives, recoup financially but more importantly allow them to provide the kind of support that their daughter needed. Relocation to Livingston was a positive stimulus to their daughter's recuperation. It highlights the need for maintaining the paediatric service in Livingston. If paediatrics is transferred from Livingston to another Lothian hospital, families such as this would have to contend with an excessively long period of time in which relocation would mean merely travelling to another distant hospital.

Angela Constance MSP

St John's 24/7 paediatric services are absolutely essential to the health and well- being of the West Lothian Community"

West Lothian - A Growing Community

West Lothian is a mix of both urban and small rural communities with a diverse mix of social and economic backgrounds. This includes some large towns such as Whitburn and Linlithgow, with some such as Livingston and Bathgate that have experienced significant growth in recent years, and also a number of smaller communities in traditional ex-mining villages.

West Lothian has undergone significant change in the last ten years in demography, physical environment and its economy. Two thirds of West Lothian's 428km2 is predominantly used for agriculture, with a tenth taken up by urban development. In the east-central band is a large shale oil field, whilst the area in the west is dominated by Scotland's central coalfield.

West Lothian is the ninth largest local authority in Scotland with a current population of 177,150, with 35,064 children under 15 within our community. We are amongst the fastest growing areas in Scotland, with the continued population growth now driven more by the 'natural change' rate (more births than deaths in West Lothian), which reflects our growing younger population, which at 20% is significantly above both the Lothian and Scotland average. Projections for the next decade show an 11% increase in our 0-15 population and confirm that West Lothian population growth continues to outpace most other areas of Scotland.

Thousands of new build houses are already planned for Livingston, East Calder, Winchburgh and Armadale and more will be added to this list. It is anticipated that this will attract a very large number of additional families with young children.

West Lothian provides for our growing younger population with;

- 66 primary schools
- 11 secondary schools
- 12 nurseries and early years centres
- 5 special schools
- 4 Partnership centres providing a wide range of public services including health and care services
- 11 libraries, 3 arts venues and 45 community facilities (halls, centres, community wings and youth project accommodation)
- 3 country parks, 111 parks and 34 sports pavilions
- 24 GP practices
- St John's Hospital

West Lothian – Tackling Inequalities

West Lothian has pockets of serious deprivation within areas of Livingston and Bathgate and in communities to the west including Addiewell, Armadale, Stoneyburn and Whitburn with some 10,354 residents, including 2,188 children under 15, living in areas recognized as being within the 15% most deprived areas of Scotland. Indeed an indicator of the considerable health inequalities West Lothian is seeking to tackle is that adult male life expectancy varies significantly downwards in these areas, with a male child born in Whitburn projected to live 10 years less that a child born in our more affluent areas just 10 miles away.

We very much value local service provision and recognise that improving access to health services across our communities is fundamental to successfully tackling the serious health inequalities which are endemic within these communities.

West Lothian – Joined Up Services

West Lothian therefore has been at the forefront of the development of local "partnership centres" to facilitate the delivery of a range of public services to our communities. For example, the Fauldhouse Partnership Centre, serving the 5000 strong ex mining village of Fauldhouse hosts sports and leisure facilities, a library, community meeting rooms but also 2 GP practices, a pharmacy and a dental practice – the first dental practice ever within the village.

Further provision of partnership centres is planned with Blackburn, East Calder and Linlithgow already in the pipeline as we strive to improve local access to our vital public services and the West Lothian Health & Care Partnership will be at the forefront of our drive to shift the balance of care into locally accessible community facilities as we strive to deliver better outcomes across our diverse range of communities.

St John's – Easily accessible to our communities

Services at St John's however will still continue to play a critical role within West Lothian and will remain absolutely essential to the well-being of our community. The maternity unit at St John's, for example, delivered 2745 births in 2014 - some 40% of all births in Lothian that year.

It is important to note that no West Lothian community is more than 16 miles from St John's hospital, with the average distance being just 7 miles. No West Lothian community is more than 25 minutes by car from St John's with the average travelling time by car just 15 minutes. The hospital is also served through an extensive local bus network. No West Lothian community faces a travel time by public transport in excess of 1 hour and the average bus journey time is just 32 minutes.

West Lothian – Prime Location but....

West Lothian is located in the central belt of Scotland, bordered by seven neighbouring authorities. West Lothian is less than 30 miles from the country's two largest cities; Edinburgh and Glasgow and although served by excellent rail links to the centre of both cities has, unfortunately, significant congestion issues at peak times with road transportation links. So, between the hours of 7am and 9.30am and 3.30pm and 6.30 pm road access to Edinburgh and to the Royal Infirmary site at Little France, via the Edinburgh City Bypass, is exceptionally difficult.

In stark contrast to travel times to St John's the average distance from West Lothian to Little France is 25 miles – almost 4 times the average to St John's – with some 15 West Lothian communities being above this average and 4 communities facing distances of 30 miles and above. The average journey time by car from West Lothian to Little France is measured at 39 minutes. It is important to note that at peak times, accounting for some 23% of the day, these average journey times can easily be doubled. It is also important to note that many of the most deprived areas of West Lothian, the areas with the lowest car ownership (2011 figures indicate 43% with no car) and so the most dependent upon public transport, are in the west of West Lothian and so the furthest from Little France.

Examples of such travel times include;

- Addiewell to Little France by bus.
 - Service 36 hourly or service 800 every 30 minutes to St John's and then change to service 40/X40 which is hourly with the last bus at 18.00hrs. The journey time alone is estimated at 1hr 25mins.
- Armadale to Little France by bus.
 Service 21 or service 800 both every 30 minutes to St John's and then change to service 40/X40 which is hourly with the last bus at 18.00hrs. The journey time alone is estimated at 1hr 45mins.
- Whitburn to Little France by bus Service 22 every 30 minutes to St John's and then change to the service 40/X 40 which is hourly with the last bus at 18.00hrs. The journey time alone is estimated at 1hr 55mins.
- After 18.00hrs there is no direct bus service from West Lothian to Little France so travel options are significantly reduced.
- Taxi from Addiewell to Little Francesingle £42.00 return £84.00
- Taxi from Fauldhouse to Little Francesingle £46.00 return £92.00

It must be stressed that for many, the costs involved in travelling by bus from West Lothian to Little France will be difficult to afford on a regular basis, for example to visit a child in hospital. The time required to make such journeys would also make visiting extremely difficult and stressful. The costs for even a single taxi journey are simply unaffordable.

A major concern therefore in respect of these travelling times and costs is the likely detrimental impact these would have on the accessibility of health services and in particular the accessibility for those from our most deprived areas to vital health services and the similarly detrimental impact on efforts to reduce health inequalities and to deliver better health outcomes for those amongst the most vulnerable in our community.

St John's 24/7 paediatric services - absolutely essential to the health and well- being of our Community

We would contend therefore that the provision of locally based children's services at St John's is absolutely essential to the continued well-being of the West Lothian Community. West Lothian has the highest % in Lothian of 0-15 year olds within our population at 20%, compared with just 15% for Edinburgh.

St John's provides easily accessible services to the West Lothian Community in stark contrast to the significant difficulties in accessing services from Little France - with the most deprived individuals in West Lothian being particularly badly affected by a requirement to access services there.

"St John's 24/7 paediatric services are absolutely essential to the health and well- being of the West Lothian Community."

St John's Children's Services – essential for our community

We contend that St John's 24/7 children's services are an absolutely essential part of the health and care provision for West Lothian.

St John's Children's services are local and therefore easily accessible, highly responsive to the needs of our community and provide for a patient pathway that delivers an excellent quality of care and significantly better patient outcomes for local children than would ever be possible under different service delivery arrangements.

St John's Children's Services – easily accessible, with strong local connections

There is no community in West Lothian more than 30 minutes by car from St John's hospital and with the hospital also served through an extensive local bus network, no community faces a travel time by public transport in excess of 1 hour.

Local GP's have excellent working relationships and strong professional links with the St John's service and are readily able to access Consultant Paediatricians and middle grade Doctors when seeking advice in respect of how best their patient's needs can be met.

Out of hours, the St John's Children's services provide open access and for parents to be able to walk into St John's where their children can be quickly seen and assessed by middle grade doctors and a consultant and appropriate treatment planned and speedily implemented with pressure upon A&E services significantly lessened.

St John's Children's Services-appropriate assessment, treatment and discharge

Local provision allows for West Lothian children to be assessed, treated and, where appropriate, referred onwards or discharged home with a care plan – agreed with their GP and supported by community nurses and health visitors- in place, instead of having to be admitted to hospital for unnecessary, stressful and expensive overnight stays.

St John's Children's services provide a model of care which delivers quicker and more appropriate assessment and treatment with significantly shorter hospital bed stays for patients and so significantly better outcomes for the children they care for.

It is a concern that the typical NHS Lothian patient statistics are gathered by measuring patients who are in a hospital bed at noon and midnight as this measure completely fails to take account of the reality of the care provided by the St John's children's services and provides a false measure of the level of activity within the service.

Indeed we would contend that a service that delivers, as St John's Children's service does, quicker and more appropriate assessment and treatment and considerably shorter hospital

stays for patients should be commended for this and not subject to claims of low activity levels on the back of a wholly inappropriate measurement tool.

St John's Children's Services-strong local links underpinning excellent care

St John's Children's services expertly and timeously provide for local children. Local GP's can see a child at their surgeries, discuss with St John's staff how best their patient should be treated and the child can then, if required, be seen and assessed at St John's within the hour. With GP's surgeries typically being held across West Lothian in the mornings and again late afternoon, 24/7 St John's children's services are essential to ensure that West Lothian children can actually access locally the health services they require.

Local 24/7 provision of Children's Services means West Lothian children have excellent quality of care available to them when they most need it and where they are best able to access it.

Local 24/7 provision of Children's Services means West Lothian children's medical needs can be responded to most appropriately and ensures the delivery an excellent quality of care and the best possible health outcomes for local children.

St John's Children's Services- supporting essential maternity provision.

Local 24/7 provision of Children's Services means the current support provided to St. John's maternity services which deliver circa 2700 births each year, compared to 6830 in Edinburgh (2014 figures) and to the Special Baby Care Unit would be maintained as this vital support is, of course, provided through the staff simultaneously delivering children's services.

It is not clear how the SCBU at the Simpsons Centre for Reproductive Health would be able to cope effectively with the additional cots required should 24/7 paediatric cover at St John's hospital be withdrawn.

As sustaining local maternity services, which deliver some 40% of all Lothian's births, is universally agreed to be absolutely essential to the provision of pan Lothian maternity services, and the consultant input to this service is provided simultaneously with support for 24/7 children's servicers at St John's, we would contend that it must also be essential to sustain local 24/7 children's services.

St John's Children's Services- no acceptable alternatives

The alternative of forcing West Lothian children to bypass St John's Hospital and to be transported to Little France is totally unacceptable as this would seriously jeopardise the ability of many to access their health services, to receive the same quality of care currently provided locally and for their health needs to be adequately met. Indeed such a service redesign would inevitably put impossible demands on patient transport services, which are

already under considerable stress, and on paediatric provision and beds within the new Sick Kids Hospital.

St John's Children's Services – a future proof service model

The opportunities created by the integration of health and social care in Scotland and the creation of the West Lothian Health and Care Partnership provides scope to further develop integrated West Lothian children's services.

It is a matter of considerable regret that currently children's services sit outside the West Lothian Health and Care Partnership. This is a matter that a change in the political control of West Lothian Council will look to address as a key priority in 2017.

We believe that the integration of acute services at St John's Hospital, including Children's services, into the West Lothian Health and Care Partnership is an essential step towards shifting the balance of care from acute hospital settings into our communities and to further developing the early intervention and preventative initiatives that are so fundamental to the effective tackling of health inequalities and to delivering better health outcomes for our communities.

We contend that St. John's Children's services have a vital role to play in delivering successful outcomes for the 20% of our population that is under 15, through the further strengthening of links with our hospital children's services, local GP's, community nurses and health visitors and that the delivery of such 'joined up services' is essential to the well- being of our community.

The ability of local GPs and Community Child Health Practitioners (CCHP) to admit a child to St John's provides both a better clinical outcome for the child and is more cost effective in the long run. Local GPs & CCHP will refer the child straight to the ward – child will be seen by a nurse, then by a paediatrician and either admitted if necessary or treated and sent straight home. If referred into Edinburgh, child will be admitted, as a matter of course, and regularly will wait over 24 hours to see a paediatrician.

We would contend that the provision of 24/7 paediatric care at St John's is best placed to treat the child as part of a family unit. The family is apart for a shorter period of time and the need for either searching for child care (for other children) at extremely short notice or having to allow your child to be transported to hospital without a family member present is eliminated.

We contend that a staffing model that promotes better use of nurse practitioners, and indeed Advanced Nurse Practitioners, to work along with middle grade and consultant paediatricians offers the best option for ensuring the safe and sustainable 24/7 local service we require.

We contend that St. John's offers an exceptionally good environment for the training of junior doctors and that an urgent review of the current bizarre situation where junior doctors are sent to locations in Fife and the Scottish Borders, but not allowed to be placed in West Lothian, takes place.

We believe that decisions not to send junior doctors for training to St John's are indeed not based on the quality of training available at St. Johns but rather on calculations on how best to sustain services

in Fife and the Borders and on travel distances to Edinburgh from such locations. We do not consider it reasonable for West Lothian services to be considered expendable on such criteria and contend that junior doctors must again be allowed to come to St. John's.

St John's Children's Services – essential for the well-being of our community.

We contend therefore that it is essential for St. John's 24/7 Children's services to be maintained and sustained. We believe that a service model that is so well regarded locally and so clearly delivers excellent quality of care and significantly better outcomes for West Lothian children, is a considerable asset and absolutely essential to West Lothian's ability to maintain our growth and to support our community to flourish.

Appendix One

Population statistics

Travel Distances and times

Areas of Deprivation

Figures provided by WestLothian Council

17

	Total	0 - 15
WEST LOTHIAN	177,150	35,064
Deprivation	Total	0 - 15
SIMD 15% most deprived in Scotland	10.354	2.188

Localities	Tatal	0 - 15	+Distance SJ to RIE (miles)	+Drive SJ to RIE (mins)	+Bus/Train SJ to RIE (mins)	+Distance SJ to FVRH (miles)	+Drive SJ to FVRH (mins)	+Bus/Train SJ to FVRH (mins)	Distance to SJ (miles)	Drive to SJ (mins)	Bus / Train to SJ (mins)	Distance to RIE (miles)	Drive to RIE (mins)	Bus / Train to RIE (mins)	Distance to FVRH	Drive to FVRH	Bus / Train to FVRH
Addiewell	Total 1,492	283	23	28	44				6	15	34	29	43	78			
Armadale	13,043	2.417	17	20	33				12	21	34	29	43	63			
Bathgate	21,222	4,322	19	20	33				6	18	25	25	38	58			
Blackburn	5,601	910	20	20	61				5	13	18	25	37	79			
Blackridge	2,133	370	17	24	35				15	24	50	32	46	85			
Breich, Harwood & Harburn	599	99	17	27	65				8	24	37	26	40	102			
Bridgend	896	117	18	21	68	11	8	33	8	17	27	26	38	95	19	25	60
Broxburn	11,998	2.553	13	20	42		0		5	17	33	18	34	75	15	25	00
Dechmont	1,081	309	13	20	71				3	8	15	21	34	86			
East Calder	4,793	1,085	18	24	16				4	11	32	18	33	48			
East Whitburn	1,418	321	17	22	76				10	14	25	27	36	101			
Ecclesmachan & Oatridge	802	171	18	24	70				5	13	19	23	37	89			
Fauldhouse	5,321	1,202	17	22	36				16	23	56	33	45	92			
Greenrigg	1,556	304	17	22	47				13	18	59	30	40	106			
Kirknewton	2,259	488	11	18	26				5	13	38	16	31	64			
Linlithgow	12,976	2,548	17	21	24	5	3	5	8	18	31	25	39	55	13	21	36
Livingston	53,218	10,682	20	27	46				2	6	8	22	33	54			
Longridge	709	115	17	22	57				12	20	45	29	42	102			
Midcalder	3,957	759	15	28	56				3	8	26	18	36	82			
Philpstoun & Threemiletown	653	184	18	19	57	9	3	34	8	18	47	26	37	104	17	21	81
Polbeth	2,149	337	18	28	58				3	11	25	21	39	83			
Pumpherston	1,554	287	20	27	44				3	8	17	23	35	61			
Seafield	1,373	210	23	29	55				4	10	14	27	39	69			
Stoneyburn	2,182	449	22	25	38				7	19	46	29	44	84			
Torphichen	756	153	18	21	42	5	0	52	9	21	41	27	42	83	14	21	93
Uphall	4,368	916	18	25	51				4	9	30	22	34	81			
Uphall Station	1,569	255	20	28	31				2	7	22	22	35	53			
West Calder	3,197	566	18	28	65				4	14	31	22	42	96			
Westfield & Bridgehouse	1,114	285	17	22	36	1	1	4	14	21	55	31	43	91	15	22	59
Whitburn	9,708	1,807	17	22	59				11	17	28	28	39	87			
Winchburgh	2,761	445	11	17	47	11	6	32	8	18	34	19	35	81	19	24	66
Average			18	23	48	7	4	27	7	15	32	25	39	80	16	22	66

Journey times calculated off peak using Google Maps Directions.

Datazone	Name	Population	0-15
S01006416	Bathgate Centre Station	926	130
<mark>S01006438</mark>	Bathgate Cochrane Street	601	76
<mark>S01006326</mark>	Whitburn Union Drive	950	215
S01006350	Blackburn North East	685	122
S01006455	Livingston Knightsridge Moncreiff Way	509	102
S01006402	Livingston Craigshill Streets East	701	172
S01006320	Whitburn Brown Street	975	218
S01006406	Livingston Deans Staffa & Jura	395	66
S01006304	Loganlea	822	218
S01006450	Livingston Knightsridge Furguson Way	669	201
S01006388	Livingston Craigshill Central	1064	166
S01006308	Stoneyburn East	620	125
S01006393	Armadale Mayfield	1437	377
			2188

Addiewell	218
Armadale	377
Bathgate	206
Blackburn	122
Livingston	707
Stoneyburn	125
Whitburn	433
	2188