



A PICTURE OF HEALTH

**MODELLING THE IMPACT OF HOSPITAL
RECONFIGURATION ON CROSS BOUNDARY PATIENT
FLOWS FOR EMERGENCY INPATIENT CARE BETWEEN
LANARKSHIRE, GLASGOW AND FORTH VALLEY**

20 April 2006

WEST OF SCOTLAND REGIONAL PLANNING GROUP

MODELLING THE IMPACT OF HOSPITAL RECONFIGURATION ON CROSS-BOUNDARY PATIENT FLOWS FOR EMERGENCY INPATIENT CARE BETWEEN LANARKSHIRE, GLASGOW AND FORTH VALLEY

Introduction

1. In May 2005, Professor David Kerr presented his report “Building a Health Service Fit for the Future” to Scottish Ministers. The Scottish Executive’s response, “Delivering for Health”, which was published in November 2005, developed the framework for the way services need to change and set out how Health Boards should implement the changes to deliver safe, quick and sustainable healthcare which responds to the changing needs of the population.
2. NHS Lanarkshire’s proposals, reflecting the findings of its own work as well as of the Kerr Report and “Delivering for Health” were published in January 2006 in a consultation document entitled “A Picture of Health”. This covers the whole health system, including proposals to strengthen health improvement, build up the capacity of local health services including GP services, services for older people, people with long term conditions and those with mental health problems, as well as modernising hospital services across Lanarkshire.
3. This paper deals with one aspect of the proposals to modernise the general hospital services i.e. the impact of potential changes in patient flows. It discusses a range of scenarios relating to the location and function of hospitals in the West of Scotland, as a result of the changes proposed by NHS Lanarkshire which are currently out to public consultation. This work will help to inform decisions in relation to NHS Lanarkshire’s proposals for hospital reconfiguration.
4. The key changes for the purposes of this paper, are the proposals that to improve care:-
 - one of Lanarkshire’s three general hospitals would concentrate its inpatient services on planned care; and
 - two of the three hospitals would provide emergency inpatient care and consultant led Accident and Emergency services for all of Lanarkshire
5. All of the hospitals mentioned in this paper will continue to provide expert care for the majority of people who currently attend their local Accident and Emergency Department. These are typically for the treatment of minor limb injuries, sprains, wounds requiring dressings or stitches, minor burns, particles in the eye and minor injuries to the ears or nose. In addition, certain of these hospitals (including Wishaw and either Hairmyres or Monklands) will provide facilities and expert staff to deal with people suffering from more major injuries or illnesses, including those requiring emergency inpatient admission to a hospital bed.
6. This paper was prepared for the Chief Executives on the Regional Planning Group, and will influence plans for hospital developments in Lanarkshire, Glasgow and Forth Valley. There is no significant impact from these changes on patient flows between Lanarkshire and Ayrshire.

7. The principal changes considered in this paper are:-
- Glasgow's plans already agreed by the Scottish Executive following consultation, to change services at Victoria Infirmary and Stobhill Hospital, with patients requiring emergency inpatient admission in the future going to either the new South Glasgow Hospital on the Southern General Hospital site (from Victoria) or an expanded Glasgow Royal Infirmary (from Victoria and Stobhill)
 - Lanarkshire's proposals, currently out to public consultation, for changes leading to patients requiring emergency inpatient admission in the future going to either Monklands or Hairmyres, along with Wishaw
 - Forth Valley's plan already agreed by the Scottish Executive following consultation, for a new hospital to be built at Larbert, replacing acute facilities at both Stirling and Falkirk. Larbert is closer for most people living in the Cumbernauld and Kilsyth areas of Lanarkshire than Wishaw, Hairmyres or Glasgow Royal Infirmary.

Current Assumptions

8. Whereas future sites offering emergency inpatient admissions will be fewer in number, hospitals offering the higher patient volume minor injury and illness services will be retained and within Lanarkshire increased in number. This means either no change, or increased local provision for outpatient, minor injury and illness, diagnostic testing, day procedures and 23-hour bed provision. This together represents over 80% of current patient activity at the hospitals where inpatient emergency provision is either planned to change or under consideration. Appendix 1 maps the current hospitals in this part of the Region.
9. So far each Board has broadly assumed that the impact of hospital reconfiguration will be contained i.e. any displacement of emergency inpatient admissions will be accommodated within the next nearest emergency inpatient hospital within its own (Health Board) boundary.
10. Current planning by each Health Board has so far assumed timescales for the hospital changes envisaged spanning the period 2009-2013. These are always going to be subject to change and further refinement as detailed planning and procurement progress and contingency planning will be undertaken once decisions are known, to take account of any differences in timing:-
- early 2009 - Ambulatory Care and Diagnostic Centre developments completed at Stobhill Hospital and Victoria Infirmary
 - late 2009 - Monklands or Hairmyres change to planned care
 - late 2009 - New Larbert Hospital begins phased commissioning
 - 2012 - New South Glasgow Hospital completed
 - 2013 - Redevelopment of Glasgow Royal Infirmary completed.

Challenging Current Assumptions

11. The Kerr Report, and the Scottish Executive's endorsement in 'Delivering for Health', are placing a duty on Health Boards to plan future hospital services on a regional basis, not in isolation. The advent of 'A Picture of Health' for Lanarkshire and more detailed analysis of current trends are potentially challenging some of the current planning assumptions. The growing importance of the need to plan services which are demonstrably patient focussed, and with greater public involvement, have heightened concerns over transport and geographical access.
12. Proposed changes to either Monklands or Hairmyres are significant, have the potential to impact on Glasgow and/or Forth Valley, and this work has allowed us to consider these changes in the context of the extant strategies of both Greater Glasgow and Forth Valley.
13. We are also aware that NHS Greater Glasgow and Clyde are further ahead in taking forward their planning assumptions with regard to the future provision of acute services. The potential implications of this modelling paper is that NHS Greater Glasgow and Clyde's planning assumptions will, at least, be subject to major review

Hospital Catchment Populations

14. In emergency situations, patients tend to go to their most convenient Accident and Emergency department. This is most often the closest geographically (although not always), may be the hospital patients are familiar with and in the area most commonly referred to by their GP. They may be unfamiliar with alternatives when changes happen to their 'local' hospital, or be uncertain how to get to the nearest alternative if it means travelling on unfamiliar roads. This will need to be positively addressed by the NHS, to achieve a reasonable balance in hospital provision.
15. The concept of catchment areas when planning hospital provision is useful, and views need to be taken about the extent to which variables such as GP referral patterns and ambulance services are able to be directed and how much Health Board boundaries or travelling time will dictate catchment areas. However, developments in the Scottish Ambulance Service in recent years including paramedic assessment, stabilisation (and, in some cases, treatment) of acutely unwell patients by highly trained ambulance personnel has reduced the importance of distance to the nearest hospital. Increasing capacity of the "blue light" ambulance service, the emergence of a dedicated inter hospital ambulance service and increasing compliance with the 8 minute response time target, all of which are planned over the period in question, will further reduce patient risk and the clinical significance of distance between hospitals.
16. Directing some patients requiring emergency admission or assessment to alternative hospitals which may not be the closest geographically will be justified where
 - the extra distance in travelling time is clinically insignificant i.e. will have no adverse effect on the patient outcome
 - it enables balanced provision across neighbouring hospitals which makes best and most efficient use of all hospital resources i.e. the right services will be available when the patient arrives
17. This paper seeks to analyse the principal factors involved and to present options for redrawing the current catchment areas.

Distances/Sources of Emergency Admissions

18. West Central Scotland is well provided with emergency hospitals, compared with other parts of Scotland and with many parts of the UK as a whole (see Appendix 1). It has been calculated by NHS National Services Scotland that for Lanarkshire's population, average travelling time by private transport to an emergency inpatient hospital following the proposed changes at either Monklands or Hairmyres, will still be within 30 minutes for 92.9% of the population compared with the current 96.5% (see Appendices 2 and 3). Travelling times for Glasgow's population are even shorter.
19. Almost all emergency inpatient admissions reach hospital by car or ambulance, rather than by train or bus. A detailed analysis was therefore carried out to determine travel distances, average driving times and routes from locations at postcode level, to the various hospitals. This analysis covered the present catchment areas served by Monklands Hospital, Hairmyres Hospital and the Victoria Infirmary, using Microsoft/AA Auto route software. These are scheduled in Appendices 4, 5 and 6
20. Various journeys were also driven between townships and hospitals under controlled conditions and at different times of the day, as a means of sense checking the AA Auto route timings. This produced a slightly different outcome for certain journeys (see Appendix 7).
21. What this showed was that all existing and alternative hospitals could be reached within 30 minutes. It also showed that the driving time differences between more than one alternative hospital for certain populations could be quite small and clinically insignificant e.g. driving times from G72 8 – East Kilbride, to Monklands, Wishaw and Glasgow Royal Infirmary range from 18-26 minutes – they are all within 8 minutes of one another.
22. Although NHS National Services Scotland sought to develop software to map populations to hospitals, it was found to be more complex than originally intended. It was therefore agreed to map actual current source or origin of emergency admissions (see Appendices 8, 9 and 10 for admissions to Monklands, Hairmyres and Wishaw). These were further analysed in ways consistent with the Unscheduled Care Collaborative and separated into emergency inpatient admissions
 - brought by ambulance
 - referred by GP
 - referred by NHS 24/Out of Hours Services
 - self referred (i.e. the patient made their own way to hospital without contacting NHS first)
 - others
23. In determining new catchment areas, it is believed that the patients brought in by the first three routes (ambulance, GP and NHS 24/Out Of Hours Services) are more able to be directed to an alternative hospital than those who refer themselves without prior contact with the services. This latter group, which together with 'other' (non-defined) patients, total between one-third and half of all emergency admissions, represent a higher risk of turning up at a different alternative hospital.

The agreement and communications about any new catchment areas to the public is going to be an important issue and one which will also be influenced by actual or

perceived availability of public transport (for ease of access for visitors etc). A separate, but related, exercise is underway looking at public transport links and the actions necessary to strengthen them in the light of the changes under consideration. This is part of the Transport Impact Assessment.

Sizing the Hospitals

24. Alternative scenarios involving the removal of each of the changing hospitals (Victoria Infirmary, Stobhill Hospital, Monklands and Hairmyres Hospitals) in turn from the analysis allowed us to determine the optimal alternative hospital. As a first stage, the emergency admissions were converted to bed numbers by using current models of care and length of stay (6-7 days total average stay) and an optimum bed occupancy level of 85%.
25. Each of the Health Boards has, or is in the process of modelling bed provision to take account of increased efficiency from patient pathway improvements such as more rapid diagnosis/assessment and better discharge arrangements. For Larbert, Forth Valley are explicitly aiming to reduce the length of emergency stays by community hospitals playing an active part in patient's rehabilitation. The assumption is made that any Lanarkshire residents who are admitted to Larbert would be repatriated to Lanarkshire for rehabilitation.
26. There are a number of current cross boundary patient flows which occur for various historical reasons which are not planned to change and have not been taken into account in this paper. The analysis below and in the attached data and maps, therefore, deals with the net change from the current or planned positions.
27. It has also been assumed for this paper that the emergency inpatient admissions are for secondary, not tertiary, treatment and are therefore moveable between the hospitals. Data relating to Lanarkshire admissions to Glasgow Royal Infirmary needs further analysis, but currently represents only a small number of beds.
28. The scenarios deal with emergency inpatient admissions and consequential bed requirements only. Other supporting diagnostic and treatment services will require to be sized accordingly. There is NO evidence that these changes will impact on referral patterns for planned care services, with the exception of medical investigations with symptoms for which emergency admissions in the future are very likely.
29. Planning for 3-7 years hence, on the basis of current numbers of emergency inpatient beds (as in Lanarkshire and Glasgow) assumes that any rise in demand for demographic or other reasons is offset by more efficient models of care. On the other hand, the combination of more systematic and focussed care and case management for older people with long term conditions, more rapid diagnosis and assessment, the advent of redesigned emergency medical complexes, further improvement in discharge planning and the targeted use of step down beds in local hospitals, all have the potential to reduce emergency bed requirements. In the absence of detailed modelling at this stage, however, current bed numbers have been used. More detailed planning will be carried out at the "business case" stage.
30. At present, Wishaw, Monklands and Hairmyres Hospitals have approximately 634, 529 and 490 beds respectively. Of these, some 1300 beds are required to be provided on the emergency hospital sites, the remainder for planned care. It is proposed to

reconfigure these beds across two emergency inpatient hospitals and one planned care hospital. An earlier and less detailed assessment of potential catchment populations, taking into account travel times from main townships, suggested that one of the two emergency inpatient hospitals (proposed to be Wishaw) would accommodate 55% of the emergency beds, with the remaining 45% at either Monklands or Wishaw. Current assessments of the capital and revenue costs of each option are based on Lanarkshire's acute hospital beds being re-provided entirely within Lanarkshire. The following scenarios require that to be reviewed.

The Results

31. Two principle scenarios are covered in this paper, each with a number of sub-options according to planning assumptions explicitly identified:-

Scenario 1

Monklands becomes the planned care site, with Victoria and Stobhill changing predominantly to ambulatory care and diagnostics, and the impact of the new Larbert Hospital.

Scenario 2

Hairmyres becomes the planned care site, with Victoria and Stobhill changing predominantly to ambulatory care and diagnostics, and the impact of the new Larbert Hospital.

32. Using actual driving times from the Survey (supplemented by AA Auto route) as the principle determinant of the "optimum" alternative site, the following analyses are shown:-
- a) - the "optimum" alternative site is the next closest, or is no more than 5 minutes further than the nearest "out of Health Board area" hospital
 - b) - the "optimum" alternative site is the next closest, or is no more than 10 minutes further than the nearest "out of Health Board area" hospital

Using the sources of emergency admission listed in para 21 above, the following further analyses are shown for each of (a) and (b) above:-

- admissions and bed requirements only for those "self referred" and "others", with all remaining admissions (ambulance, GP, or NHS24/Out Of Hours) referred being directed to the nearest emergency inpatient hospital within the same Health Board area
- all emergency inpatient admissions

33. The data used is based on the most recent complete years available, 2004/5 for Lanarkshire and 2003/4 for Glasgow (see Appendices 11, 12 and 13).
34. Appendix 14 maps the NHS Lanarkshire resident admissions to Stobhill Hospital and Glasgow Royal Infirmary in 2004/5.

Scenario 1

35. The following table shows potential bed movement across current Health Board boundaries to reflect emergency inpatient flows as a consequence of the changes proposed at Monklands, Victoria and Stobhill. It does not detail the other bed changes planned within the same Health Board boundary.

Table 1

	(a) nearest ≤ 5 minutes longer than alternative HB provider		(b) nearest ≤ 10 minutes longer than alternative HB provider	
	self-referrals (beds)	all patients (beds)	self-referrals (beds)	all patients (beds)
<u>NHSL Residents</u>				
Monklands	-94	-173	-26	-55
Larbert (total)	+46	+75	+44	+73
- from Monklands	+27	+56	+25	+54
- from Glasgow	+19	+19	+19	+19
Glasgow Royal (total)	+50	+98	-18	-18
- from Monklands	+67	+117	+1	+1
- to Larbert	-19	-19	-19	-19
<u>NHSGG Residents</u>				
Victoria (new SGH)	-37	-37	-20	-20
Hairmyres - from Victoria	-37	+37	+20	+20

36. The range of impacts on Glasgow Royal Infirmary and Larbert under Scenario 1 are

GRI worst case +98 beds assuming all admissions flow in line with proximity and access analysis, with none being directed internally. This could be reduced to 61 by rearranging the flows from the Victoria catchment to Hairmyres

best case -18 beds assuming NHSL direct patients to Wishaw, Hairmyres and Larbert if their extended journey (further than GRI) is no longer than 10 minutes

Larbert worst case +75 beds assuming all admissions (mainly from Cumbernauld and Kilsyth) flow in line with proximity and access analysis, with none being directed internally

best case +25 beds assuming NHSL direct all patients except self referrals to Wishaw or Hairmyres or GRI

Scenario 2

37. The following table shows bed movement across current HB boundaries to reflect in patient flows as a consequence of the changes proposed at Hairmyres and Victoria Infirmary. It does not detail the other bed changes planned within the same Health Board boundary.

Table 2

	(a) nearest ≤ 5 minutes longer than alternative HB provider		(b) nearest ≤ 10 minutes longer than alternative HB provider	
	self-referrals (beds)	all patients (beds)	self-referrals (beds)	all patients (beds)
<u>NHSL Residents</u>				
Hairmyres	-37	-68	0	0
Glasgow Royal (total)	+18	+49	-19	-19
- from Hairmyres	+37	+68	0	0
- to Larbert	-19	-19	-19	-19
Larbert	+19	+19	+19	+19
<u>NHSGG Residents</u>				
Hairmyres	-6	-10	-6	-10
Glasgow Royal - from Hairmyres	+6	+10	+6	+10

38. Under Scenario 2, current flows to Monklands could remain undisturbed, while 19 beds may transfer from Stobhill and the Western Infirmary to Larbert, which is likely to be seen as more convenient than Glasgow Royal Infirmary when Stobhill changes and the Western Infirmary closes. There is also a risk that the impact of building a new hospital at Larbert could attract some patients from the Cumbernauld and Kilsyth areas, for which provision will still be provided at Monklands. It would be difficult to model this risk, which could be affected by such factors as the positive publicity around the opening of a new emergency hospital at a time when construction work may be disrupting operations at their existing hospital (Monklands).

Balancing Bed Provision

39. Amongst the other implications of redrawing catchment populations in this way, is the need to balance provision between the two inpatient emergency hospitals within Lanarkshire and the two within Glasgow. Catchment areas will be defined and agreed with GPs and the Scottish Ambulance Service, but each of the two Lanarkshire scenarios have quite different challenges.

40. With Hairmyres as the planned hospital, a reasonably balanced redistribution of emergency admissions to Wishaw and Monklands could be achieved (53%/47%). With Monklands as the planned site, a larger majority of displaced emergency inpatient admissions might naturally look to Wishaw in terms of proximity and access. This would not be sustainable, and could be ameliorated by slightly skewing catchment boundaries within Lanarkshire, providing for a higher proportion of complex elective admissions at Hairmyres. This might include renal medicine and communicable diseases. Further work on this is underway, but maps at Appendix 15 and 16 illustrate new catchment areas which would deliver the necessary balance. Such an adjustment could achieve a balance of about 60% of emergency beds at Wishaw and 40% at Hairmyres.

Risk Analysis

41. Under each Scenario in table 2, the range of risks affecting the various hospitals is estimated as follows, in terms of emergency inpatient beds. In other words, this table illustrates the range of possible changes in bed numbers at the various hospitals from earlier predictions, as a result of the NHS Lanarkshire options.

Table 3

	Monklands as planned site (Scenario 1)		Hairmyres as planned site (Scenario 2)	
	10 minutes (beds)	5 minutes (beds)	10 minutes (beds)	5 minutes (beds)
Glasgow Royal Infirmary	-18	+98	-13	+59
South Glasgow	-20	-37	nil	nil
Larbert	+44	+75	+19	+19
Wishaw/Hairmyres	-6	-136		
Wishaw/Monklands			-6	-78

42. It should be possible to minimise cross boundary flow appropriately and remain within tolerable travelling times for current NHS Lanarkshire patients by:-
- securing agreement of GPs, NHS24 and the Scottish Ambulance Service to the revised catchment areas proposed
 - providing good quality and accessible alternative hospital provision within 30 minutes driving time, and positive marketing of the new catchment areas/hospitals through extensive publicity campaigns.
 - repatriating longer stay admissions from Larbert (and Glasgow) to a Lanarkshire hospital, where this is convenient for patient and family.
43. For planning purposes, it is suggested that cross boundary patient flow is calculated on the basis of all of the actions at para 42 being taken, with the aim of achieving:-
- 95% of “directable” patients and 50% of self referrals/others within the affected areas admitted to the alternative hospital within the same Health Board, (except for Larbert under Scenario 1)

- 95% of all emergency patients from Cumbernauld and Kilsyth admitted to the new Larbert Hospital under Scenario 1
- repatriation of Lanarkshire residents admitted to Larbert under Scenario 1, for longer term rehabilitation where necessary

Applying these criteria would generate the following bed requirements to deal with the cross boundary flow as a consequence of the changes in this paper. The + means that more beds might be required at a particular hospital and the – means that fewer would be required.

Table 4

New Provision	Scenario 1	Scenario 2
	(beds)	(beds)
<u>Glasgow Royal Infirmary</u>		
- from Monklands		
5% x 50	+3	
50% x 67	+34	
- to Larbert		
95% x 19	<u>-18</u>	-18
	<u>+19</u>	
- from Hairmyres		
5% x 31		+2
50% x 37		+19
95% x 10		<u>+9</u>
		<u>+12</u>
<u>South Glasgow Hospital</u>		
- to Hairmyres		
50% x 37	<u>-19</u>	
<u>Larbert</u>		
- from Glasgow Royal		
95% x 19	+18	<u>+18</u>
- from Monklands		
95% x 56	<u>+53</u>	
	<u>+71</u>	
<u>Wishaw/ Hairmyres</u>		
- Monklands to Glasgow Royal	-37	
- Hairmyres from South Glasgow	+19	
- Monklands to Larbert	<u>-53</u>	
	<u>-71</u>	
<u>Wishaw/Monklands</u>		
- Hairmyres to Glasgow Royal		<u>-30</u>

Conclusion

44. This is a complex set of circumstances and the ambition of the Regional Planning Group to give weight to proximity and patient access regardless of current Health Board boundaries is sensible. While proximity and access alone cannot be the sole determinant of future hospital catchments, (given the historical legacy of current locations and the need for balanced provision), it is remarkable how much balance can be achieved with relatively little deviation from the shortest driving times.
45. There is also the question of relative distance. We are not dealing here with the kinds of travel times and distances that are found in rural areas such as the Highlands or the Borders. All of the revised catchment areas suggested in this paper involve total private transport journeys of less than 30 minutes, in most cases considerably less. This fact, together with the paramedic developments and capabilities of a modern ambulance service and the lack of evidence of higher risk to patients supports the feasibility of the new catchment areas.
46. In essence, this analysis shows that the risk of increasing cross boundary flow is less than at first anticipated, and is most significant not on Glasgow, but on Larbert, should Monklands be designated the planned hospital. This is because of its relative proximity to Cumbernauld and Kilsyth. Even then, the flow is small and marginal representing less than 7% of Forth Valley overall acute beds, 6% of Lanarkshire's and 3% of Glasgow's.
47. Further detailed planning will not be put in hand until NHS Lanarkshire has finally determined its way forward. We can, however, test the understanding and support of the public (in the case of Lanarkshire), GPs and the Scottish Ambulance Service for the analysis and implications set out in this paper.

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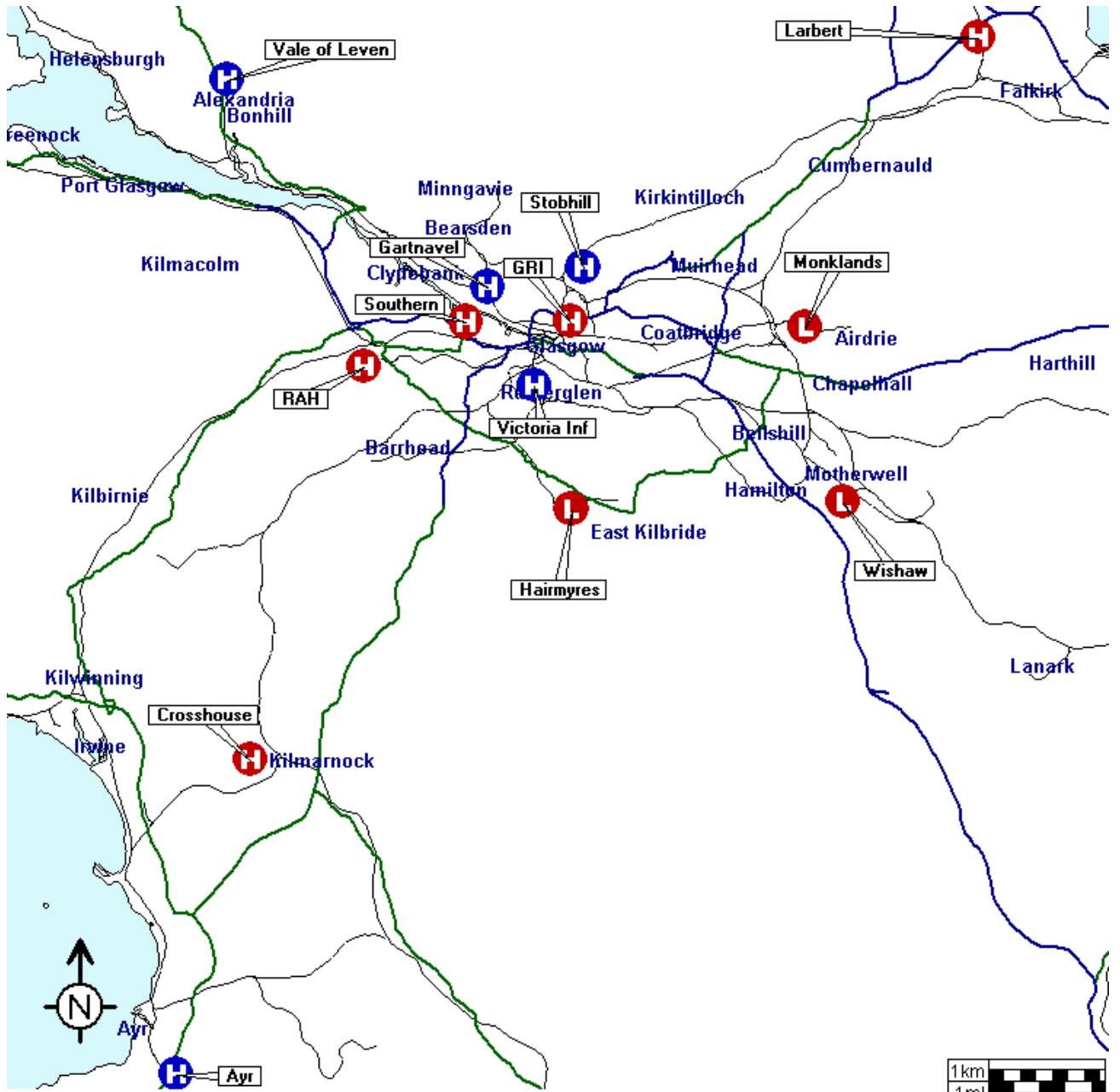
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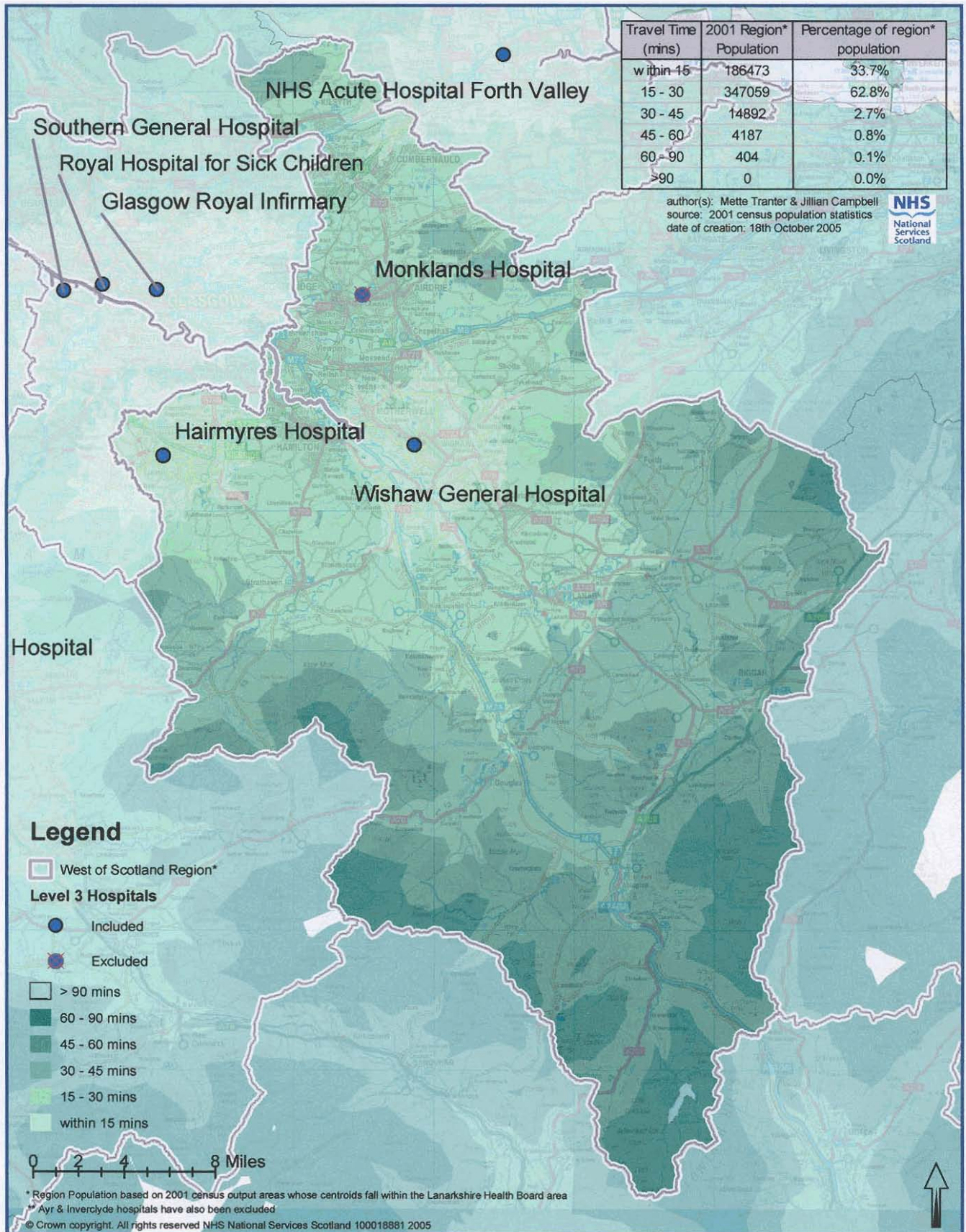
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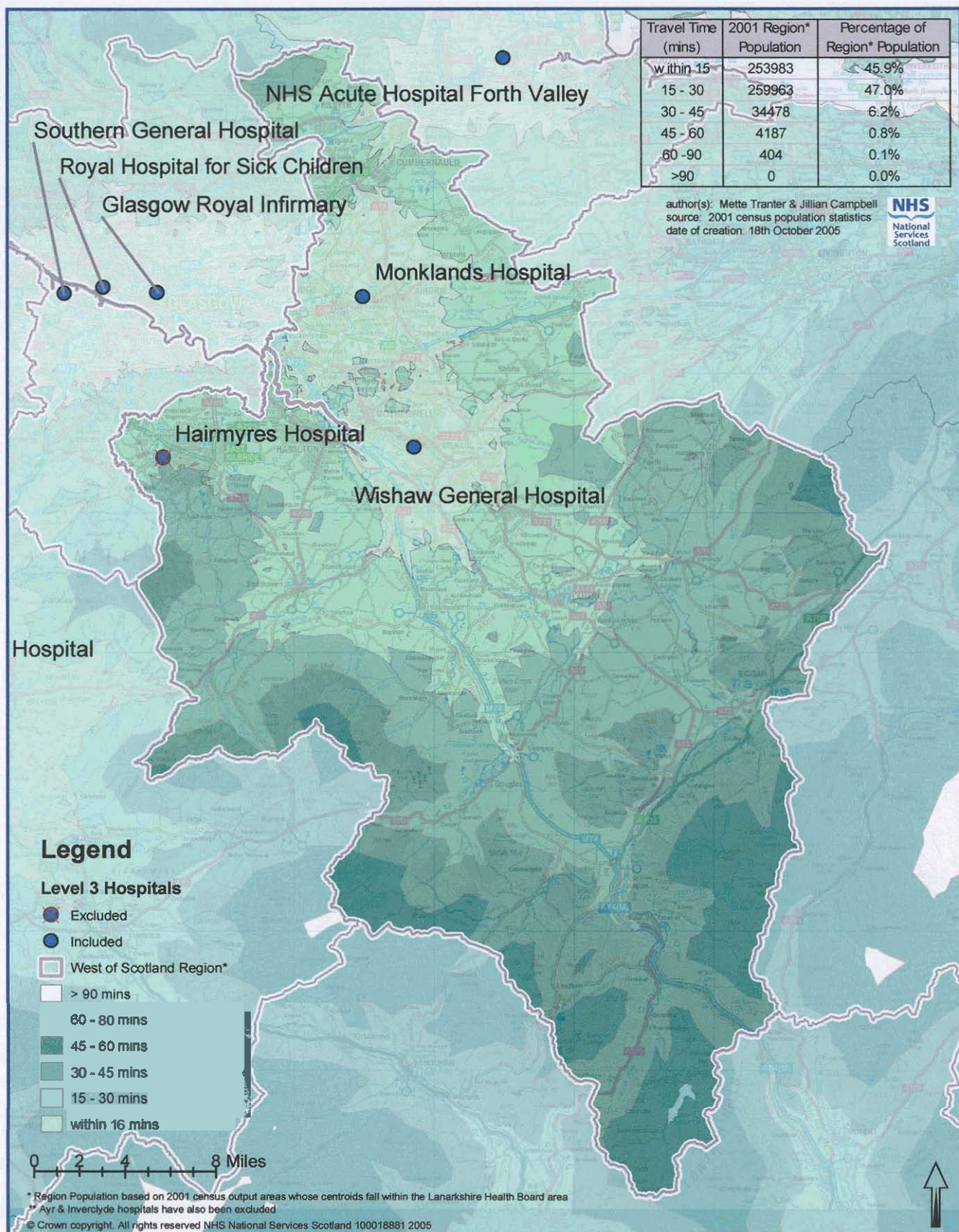
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Illustrative travel-time bands to Level 3 Hospitals in Lanarkshire Region* After ministerially agreed changes (outwith Lanarkshire* and illustrating effects of possible reprofiling of Monklands Hospital



Illustrative travel-time bands to Level 3 Hospitals in Lanarkshire Region* After ministerially agreed changes (outwith Lanarkshire)** and illustrating effects of possible reprofiling of Hairmyres Hospital



NHS Lanarkshire Proximity and Access Review - Monklands as Level 2 site
Alternatives and Optimum site for activity requiring Level 3 facilities

Postcode Sectors derived from 2004/2005 actual attendances at Monklands A&E. Excludes postcode sectors which fall into existing Hairmyres and Wishaw catchments areas.

Activity requiring Level 3 facilities based on Unschedule Care Collaborative Programme flow groups 2, 3 & 4 (Acute Assessment and Medical and Surgical Admissions)

PC Sector	Small Area Location	Distance in Miles 'As the Crow Flies'					Distance in rounded driving miles					Driving time in minutes					Next "Best" Site Based On:-			
		to					to					to					Distance in Miles 'As the Crow Flies'	Distance in rounded driving miles	Driving time in minutes	Optimum Alternative site
		MK	WGH	HM	LAR	GRI	MK	WGH	HM	LAR	GRI	MK	WGH	HM	LAR	GRI				
ML6 OJS	ML2 ODP	G75 8RG	FK5 4SD	G4 OSF	ML6 OJS	ML2 ODP	G75 8RG	FK5 4SD	G4 OSF	ML6 OJS	ML2 ODP	G75 8RG	FK5 4SD	G4 OSF						
FK1 3	Cumbernauld	8.2	12.6	19.2	5.9	16.2	10.8	20.6	24.2	8.2	20.2	16	29	40	17	27	LAR	LAR	LAR	LAR
FK13 6	Cumbernauld	22.2	26.7	32.7	9.7	28	30.4	37.2	42.8	16.3	34.7	42	51	61	27	46	LAR	LAR	LAR	LAR
FK4 2	Cumbernauld	8.9	14.3	19.6	3.7	15.6	13.5	20.2	25.8	8.4	17.8	19	28	38	11	23	LAR	LAR	LAR	LAR
FK6 5	Kilsyth	10.8	18	19.8	6.3	14.1	18.5	25.3	30.9	8.7	22.8	26	35	45	13	30	LAR	LAR	LAR	LAR
G65 0	Kilsyth	8.7	15.8	17.3	7.6	11.8	16.5	23.2	25.2	9.9	17.1	25	33	42	15	27	LAR	LAR	LAR	LAR
G65 9	Kilsyth	8.8	16.5	16	9.9	9.9	12.3	22.7	23.3	11.6	15.2	24	30	37	20	23	LAR	LAR	LAR	LAR
G67 1	Cumbernauld	5.7	12.3	15.5	8	10.8	7.7	17.5	20.7	9.7	12.7	14	27	34	14	20	LAR	LAR	LAR	LAR
G67 2	Cumbernauld	5.7	12.3	15.8	7.7	11.3	7.3	17.1	21.5	9.7	13.4	13	26	36	14	22	LAR	LAR	LAR	LAR
G67 3	Cumbernauld	6.5	12.6	17.2	6.3	13.1	9.7	19.6	23.1	9.3	17	15	28	39	14	26	LAR	LAR	LAR	LAR
G67 4	Cumbernauld	4	10.8	13.8	9.8	9.5	6.1	17.5	19.2	11.8	11.2	12	24	30	16	15	GRI	GRI	GRI	GRI
G68 0	Cumbernauld	7.2	14	16.8	7.2	11.6	11.2	21.8	23.5	9.3	15.5	18	31	37	12	22	LAR	LAR	LAR	LAR
G68 9	Cumbernauld	5.4	12.3	13.8	10	9.1	9	19	20.7	11.9	12.7	18	29	35	17	20	GRI	LAR	LAR	LAR
G69 6	Bergeddie	4	8.9	8.1	15.3	5.3	6.8	12	13.7	18.7	6.2	15	21	26	25	8	GRI	GRI	GRI	GRI
G69 7	Bergeddie	3.8	8	7.9	15.8	5.7	5.6	11.9	13.6	19.2	8	13	21	26	27	11	GRI	GRI	GRI	GRI
G69 8	Gartcosh	3.7	10	10.3	13.1	6.3	5.8	13.7	15.4	15	8.3	12	19	25	19	10	GRI	GRI	GRI	GRI
G71 5	Viewpark	3.5	6.8	7.8	15.8	6.7	5.8	12.4	11.9	19.7	8.7	10	17	23	23	8	GRI	GRI	GRI	GRI
G71 6	Viewpark	4	6.7	7.3	16.5	6.7	5.6	9.3	11.9	20.4	9.5	14	20	25	28	13	WGH	WGH	GRI	WGH
G71 7	Uddingston/Bothwell	5.2	8.5	6.5	17	5.5	7.8	10	10.7	19.7	9.4	13	15	20	23	9	GRI	GRI	GRI	GRI
G71 8	Uddingston/Bothwell	4.9	5.7	6.8	17.6	7.7	5.8	7.7	9.5	23.1	12.2	13	17	21	28	14	WGH	WGH	GRI	WGH
ML1 4	Bellshill	3.7	3.3	10.1	15.5	10.6	5.9	4.6	16.2	20.8	13.8	12	12	28	29	15	WGH	WGH	WGH	WGH
ML4 1	Bellshill	2.7	4.9	9.3	15.3	9.1	3.8	6.7	11.6	21.5	10.5	10	16	24	27	12	WGH	WGH	GRI	WGH
ML4 2	Bellshill	4.1	4.1	8.3	16.7	9.2	6	5.3	10.5	12.7	13.4	13	13	23	30	15	WGH	WGH	WGH	WGH
ML4 3	Bellshill	3.4	5.3	8.2	15.8	8.8	3.9	6.6	11	21.6	11.2	11	15	22	28	13	WGH	WGH	GRI	WGH
ML5 1	Coatbridge	1.9	7.4	9.7	13.8	7.4	2.6	11.5	14.1	18.2	8.7	8	22	27	26	12	WGH/GRI	GRI	GRI	GRI
ML5 2	Coatbridge	2.2	8.9	11.1	12.3	7.7	3.5	12.7	15.3	16.6	10.3	9	23	29	23	14	GRI	GRI	GRI	GRI
ML5 3	Coatbridge	0.8	7	10.5	13.1	8.5	1.1	11	13.6	17.6	11.2	4	19	25	24	13	WGH	WGH	GRI	WGH
ML5 4	Coatbridge	1.5	6	9.9	13.8	8.7	2.1	10.1	12.7	21.3	10.3	9	19	25	28	13	WGH	WGH	GRI	WGH
ML5 5	Coatbridge	2.3	6.8	8.9	14.6	7.4	2.8	10.5	13	18.8	8.8	8	19	24	27	11	WGH	GRI	GRI	GRI
ML6 0	Airdrie	1.5	8.6	12.1	11.3	9.2	2.4	14.2	15	15.4	11.5	8	24	30	19	17	WGH	GRI	GRI	GRI
ML6 6	Airdrie	1	7.3	12.1	11.6	10.1	1.3	12.1	15	15.6	12.7	5	20	30	19	18	WGH	WGH	GRI	WGH
ML6 7	Airdrie	4	9	15.3	9.2	12.6	5.3	14.6	20.9	18.1	18.4	12	24	36	24	23	WGH	WGH	GRI	WGH
ML6 8	Airdrie	3.6	6.5	14.1	11.5	12.8	5	11	18.8	18.9	16.4	13	18	30	26	18	WGH	WGH	WGH/GRI	WGH
ML6 9	Airdrie	1.2	5.8	11.1	13.1	10	1.9	7.7	16.3	17.7	13.9	6	16	26	23	14	WGH	WGH	GRI	WGH
ML7 4	Shotts area	6.1	6.1	15.5	12.8	15.3	8.3	11.5	19.3	22.7	16.8	14	17	29	29	17	WGH	WGH	WGH/GRI	WGH
ML7 5	Shotts area	8.6	7.1	17.3	13.8	17.6	12.5	9.4	22.5	29.4	20.1	17	15	31	31	19	WGH	WGH	WGH	WGH

**NHS Lanarkshire Proximity and Access Review - Hairmyres as Level 2 site
Alternatives and Optimum site for activity requiring Level 3 facilities**

Postcode Sectors derived from 2004/2005 actual attendances at Hairmyres A&E. Excludes postcode sectors which fall into Monklands and Wishaw catchments areas.

Postcode Sectors with a Small Area Location of Glasgow represent current XBF activity to Hairmyres.

Activity requiring Level 3 facilities based on Unschedule Care Collaborative Programme flow groups 2, 3 & 4 (Acute Assessment and Medical and Surgical Admissions)

PC Sector	Small Area Location	Distance in Miles 'As the Crow Flies'					Distance in rounded driving miles					Driving time in minutes					Next "Best" Site Based On:-			
		to					to					to					Distance in Miles 'As the Crow Flies'	Distance in rounded driving miles	Driving time in minutes	Optimum Alternative site
		HM G75 8RG	WGH ML2 ODP	MK ML6 OJS	LAR FK5 4SD	GRI G4 OSF	HM G75 8RG	WGH ML2 ODP	MK ML6 OJS	LAR FK5 4SD	GRI G4 OSF	HM G75 8RG	WGH ML2 ODP	MK ML6 OJS	LAR FK5 4SD	GRI G4 OSF				
G72 0	Blantyre	4.5	6.5	7.4	20.1	8.1	6.3	10.2	9.5	24.1	13.2	13	22	19	32	18	WGH	MK	GRI	MK
G72 9	Blantyre	4.8	6.9	6.6	19.1	6.9	6.8	12.3	8.6	22.5	11.6	15	20	16	27	13	MK	MK	GRI	MK
G72 8	East Kilbride	3.8	8.8	7.6	19.5	5.4	7.1	14	11.9	23.8	8	15	26	24	34	18	GRI	GRI	GRI	GRI
G73 4	East Kilbride	3.3	10.8	9.1	20.6	4.1	7	15.4	13.3	25.2	4.8	14	26	24	34	12	GRI	GRI	GRI	GRI
G73 5	East Kilbride	3	10	8.7	20.5	4.7	5.8	15	12.9	24.8	6.4	9	25	22	32	14	GRI	GRI	GRI	GRI
G74 1	East Kilbride	1.2	9.7	10.1	22.5	7.2	2	13.3	12.5	27.8	9.7	5	27	24	37	20	GRI	GRI	GRI	MK
G71 7	Uddingston/Bothwell	6.4	8.5	5.2	17	4.9	10.7	10	7.8	19.7	8.7	20	15	13	23	9	GRI	MK	GRI	MK
G71 8	Uddingston/Bothwell	6.7	5.7	4.9	17.7	7.7	9.5	7.7	5.8	23.1	12.2	21	17	13	28	14	MK	MK	MK	MK
G74 2	East Kilbride	3	7.9	9.5	21.7	8.3	4.2	11.7	11.8	26.4	15.5	11	22	22	35	21	WGH	WGH	GRI	WGH
G74 3	East Kilbride	2.9	8.2	8.6	21.1	7	4	12.4	11.6	26.9	9.2	11	27	24	37	20	GRI	GRI	GRI	MK
G74 4	East Kilbride	1.9	9.4	9.4	21.5	6.4	3	12.3	11.6	26.1	8.5	8	25	22	33	16	GRI	GRI	GRI	GRI
G74 5	East Kilbride	1.1	11.8	11.8	23.8	6.9	1.9	19.6	15.3	29.4	8.1	5	34	31	41	18	GRI	GRI	GRI	GRI
G75 0	East Kilbride	3.5	9.5	11.8	24.7	10.3	5.6	12.7	16	32.2	13.3	12	26	28	43	26	WGH	WGH	WGH/GRI	WGH
G75 8	East Kilbride	0.7	11.1	11.8	24	7.8	1.9	16	15.3	29.4	9.7	5	32	31	43	20	GRI	GRI	GRI	GRI
G75 9	East Kilbride	2.9	10.8	12.6	25.2	10.1	4.7	14.2	17.5	33.7	12.5	11	28	30	45	26	GRI	GRI	GRI	WGH
G76 8	East Kilbride	2.4	12.8	12	23.3	5.9	3.6	19.5	22.8	29.2	11.4	7	32	30	39	16	GRI	GRI	GRI	GRI
G76 9	East Kilbride	1.8	11.1	10.3	22.2	5.4	3.1	17.6	13.8	27.3	7.5	8	28	26	36	18	GRI	GRI	GRI	GRI
ML10 6	Strathaven	8.9	10.8	15.8	28.2	15.8	13.2	14.7	21.9	38.1	27.1	23	25	31	45	31	WGH	WGH	WGH	WGH
ML3 0	Hamilton	6.4	4.8	5.9	18.5	8.8	8	6.4	7.8	24	13	19	17	16	31	17	WGH	WGH	WGH/GRI	WGH
ML3 6	Hamilton	6.9	4.1	6.4	18.8	9.9	8.5	5.2	7.6	23.8	12.8	19	12	13	28	14	WGH	WGH	WGH	WGH
ML3 7	Hamilton	7.4	4	8.6	21.1	11.6	10.3	8	11.3	27.4	16.5	19	18	20	34	20	WGH	WGH	WGH	WGH
ML3 8	Hamilton	5.2	5.9	2.7	21.5	10	7.2	8.1	3.6	27.6	16.7	15	19	10	35	21	MK	MK	MK	MK
ML3 9	Hamilton	5.4	5.6	7.1	19.6	8.9	6.9	7.5	9.4	24.7	14.6	16	18	18	33	19	WGH	WGH	WGH/MK	WGH
ML9 1	Larkhall/Stonehouse	9.3	3.2	9	21	13.3	12.8	6.9	13	29.1	18.2	26	18	22	36	22	WGH	WGH	WGH	WGH
ML9 2	Larkhall/Stonehouse	10	2.2	8.7	20	13.6	14.5	5.8	11.7	27.8	16.9	26	12	18	32	18	WGH	WGH	WGH	WGH
ML9 3	Larkhall/Stonehouse	11	5.1	11.6	23.2	15.6	17.6	7.5	14.7	30.8	19.9	27	13	19	33	19	WGH	WGH	WGH	WGH

**NHS GREATER GLASGOW - VICTORIA INFIRMARY AS LEVEL 2 SERVICE PROVISION
PROXIMITY AND ACCESS REVIEW
SOUTH EAST CATCHMENT AREA - ALTERNATIVE SITES FOR A&E ATTENDANCES & EMERGENCY ADMISSIONS**

Postcode Sector	Small Area Location	Distance in Miles 'As the Crow Flies'				Distance in rounded driving miles				Driving time in minutes				Next "Best" Site Based On :-			
		to				to				to				Distance in Miles 'As the Crow Flies'	Distance in rounded driving miles	Driving time in minutes	Optimum Alternative site
		VIC G42 9TY	SGH G51 4TF	GRI G4 0SF	HAIRMYRES G75 8RG	VIC G42 9TY	SGH G51 4TF	GRI G4 0SF	HAIRMYRES G75 8RG	VIC G42 9TY	SGH G51 4TF	GRI G4 0SF	HAIRMYRES G75 8RG				
G42 0	Polmadie/Toryglen	1.0	4.5	2.4	4.9	1.7	6	4	7.1	4	12	11	14	GRI	GRI	GRI	GRI
G42 7	N Govanhill	0.8	3.2	1.9	5.7	1.4	6	4	7.6	5	10	10	18	GRI	GRI	GRI/SGH	GRI
G42 8	Crosshill	0.4	3.2	2.2	5.3	1.1	5	4	7.3	4	9	11	15	GRI	GRI	SGH	GRI
G42 9	Battlefield	0.4	3.5	2.8	4.9	0.6	7	5	6.8	2	13	13	14	GRI	GRI	GRI/SGH	GRI
G44 3	Cathcart	1.6	4.3	4.0	3.7	2.6	6	5	5.5	7	12	14	13	HAIR	GRI	SGH	GRI
G44 4	Kingspark	0.8	4.0	3.0	4.4	1.3	7	5	6.0	3	11	11	11	GRI	GRI	GRI/SGH/HAIR	GRI
G44 5	Croftfoot/Linn Park	1.3	4.6	3.5	3.9	1.8	7	5	5.4	4	12	12	10	GRI	GRI	HAIR	GRI
G45 0	E Castlemilk	2.5	2.2	4.2	3.0	3.5	9	7	5.6	10	17	17	12	SGH	HAIR	HAIR	HAIR
G45 9	W Castlemilk	2.1	5.6	4.1	3.0	3.6	12	8	4.5	9	20	20	8	HAIR	HAIR	HAIR	HAIR
G46 6	Giffnock	2.4	4.3	4.8	4.0	3.1	8	7	5.3	10	10	15	12	HAIR	HAIR	SGH	HAIR
G5 0	Hutchesontown	1.3	3.7	1.5	5.8	2.3	6	4	7.9	7	12	10	18	GRI	GRI	GRI	GRI
G5 9	Gorbals	1.5	3.0	1.1	6.4	2.3	4	3	8.1	6	7	7	16	GRI	GRI	GRI/SGH	GRI
G72 7	N Cambuslang	4.9	7.3	4.6	5.0	5.8	9	7	8.1	16	16	13	18	GRI	GRI	GRI	GRI
G72 8	S Cambuslang	4.8	7.3	4.7	3.8	6.5	9	7	7.1	15	17	14	15	HAIR	GRI	GRI	GRI
G73 1	N Rutherglen	2.1	4.9	2.5	5.0	3.1	7	4	8.1	8	12	10	17	GRI	GRI	GRI	GRI
G73 2	W Rutherglen	1.9	5.0	2.9	4.3	2.7	7	5	7.3	7	13	11	15	GRI	GRI	GRI	GRI
G73 3	E Rutherglen	2.6	5.7	3.3	4.3	3.3	8	5	7.6	9	15	12	16	GRI	GRI	GRI	GRI
G73 4	S-W Rutherglen	2.7	5.8	3.9	3.3	3.6	8	6	7.0	9	16	13	14	HAIR	GRI	GRI	GRI
G73 5	S-E Rutherglen	3.5	6.4	4.2	3.1	4.9	9	6	5.8	11	15	13	9	HAIR	HAIR	HAIR	HAIR
G76 0	Eaglesham	7.9	8.2	8.4	4.0	11.4	12	12	6.0	22	18	23	12	HAIR	HAIR	HAIR	HAIR
G76 7	Clarkston	3.0	5.3	5.5	3.3	4.3	9	9	4.6	11	12	17	10	HAIR	HAIR	HAIR	HAIR
G76 8	Busby	3.3	5.7	5.5	2.4	5.7	9	9	3.6	11	12	17	7	HAIR	HAIR	HAIR	HAIR
G76 9	Carmunnock	3.4	6.2	5.2	1.8	5.2	11	7	3.1	12	15	16	8	HAIR	HAIR	HAIR	HAIR
G77 5	Broom/Kirkhill/Mearns	4.5	6.0	6.9	3.8	5.7	10	10	5.6	16	15	20	13	HAIR	HAIR	HAIR	HAIR

PATIENT JOURNEYS SURVEY

Introduction

A sequence of 27 journeys was undertaken on Thursday, 9 March 2006 between 10:15AM & 4:28PM and 3:15PM & 9:33PM. “Rush hour” periods were avoided.

AA Milemaster Route Planner for Britain 1999 was used for route planning and estimated distances and journey times.

- Motorways
- Major roads
- Minor roads
- One limitation of the software was that the specific locations of the acute hospitals were not available for selection, so the points nearest to these were selected. What were considered to be reasonable adjustments were then made.
- Journeys were rounded up to the nearest whole number

An additional 6 journeys were then undertaken on Wednesday, 15 March 2006. The additional journeys took place between 10:20AM and 8:42PM. Four of these journeys involved alternate routes to those undertaken on 9 March.

Microsoft AutoRoute 2006 was used for route planning and estimated distances and journey times.

- Preferred routes criteria were set to default position i.e. mid-scale setting (dislike-like scale). The criteria were:
 - Motorway & LTD access roads
 - Major roads
 - Minor roads
 - Toll roads
 - Ferries

Summary of Results

The results of the survey are summarised in the following tables.

From	To	Estimated Distance		Estimated Time		Start Times	Best Actual Distance	Best Actual Time
		MAR ¹	AAM ²	MAR	AAM			
Uddingston	Glasgow RI	9.2	11	9	15	7:05PM	10	13
Glasgow RI	Hairmyres	9.1	15	19	26	7:20PM	9	21
Hairmyres	Bellshill	11.1	12	24	17	8:15PM	11	15
Viewpark	Glasgow RI	9	11	9	17	10:40AM	11	13
Glasgow RI	Bellshill	12.1	13	13	17	10:20AM	13	15
Bellshill	Wishaw	5.8	7	12	14	12:55PM	7	15
Wishaw	Uddingston	8.7	11	17	19	6:40PM	12	21
Uddingston	Hairmyres	11	11	21	18	1:45PM	11	22
Hairmyres	Viewpark	11.8	12	23	18	2:10PM	11	18
Viewpark	Wishaw	12.6	9	18	17	2:30PM	8	19
Wishaw	Monklands	9.5	11	20	18	6:00PM	10	22
Monklands	Hairmyres	14.3	16	27	24	3:30PM	15	29
Hairmyres	Wishaw	15.1	17	32	29	3:15PM	15	24

¹ MAR = Microsoft AutoRoute 2006

² AAM = AA Milemaster Route Planner for Britain 1999

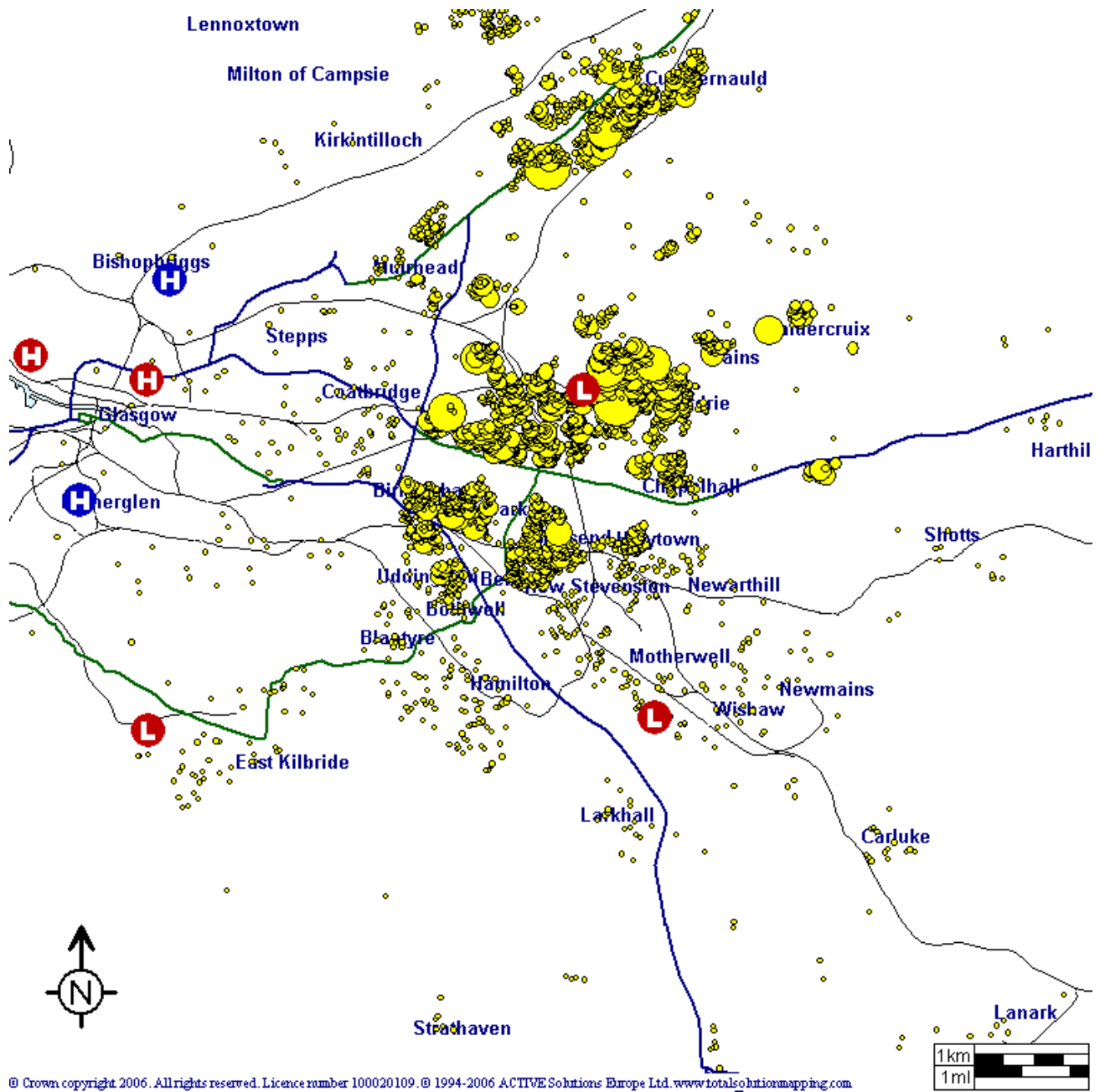
From	To	Best Actual Distance	NHSL Estimated Time	Best Actual Time	Difference Estimated & Actual Times
Wishaw	Monklands	10	20	22	-2
Monklands	Hairmyres	15	27	29	-2
Hairmyres	Wishaw	15	32	24	+8
Wishaw	Viewpark	8	18	19	-1
Wishaw	Uddingston	12	17	21	-4
Wishaw	Bellshill	7	12	15	-3
Hairmyres	Viewpark	11	23	18	+5
Hairmyres	Uddingston	11	21	22	-1
Hairmyres	Bellshill	11	24	15	+9
Glasgow RI	Viewpark	11	9	13	-4
Glasgow RI	Uddingston	10	9	13	-4
Glasgow RI	Bellshill	13	13	15	-2
Glasgow RI	Hairmyres	9	19	21	-2

Observations

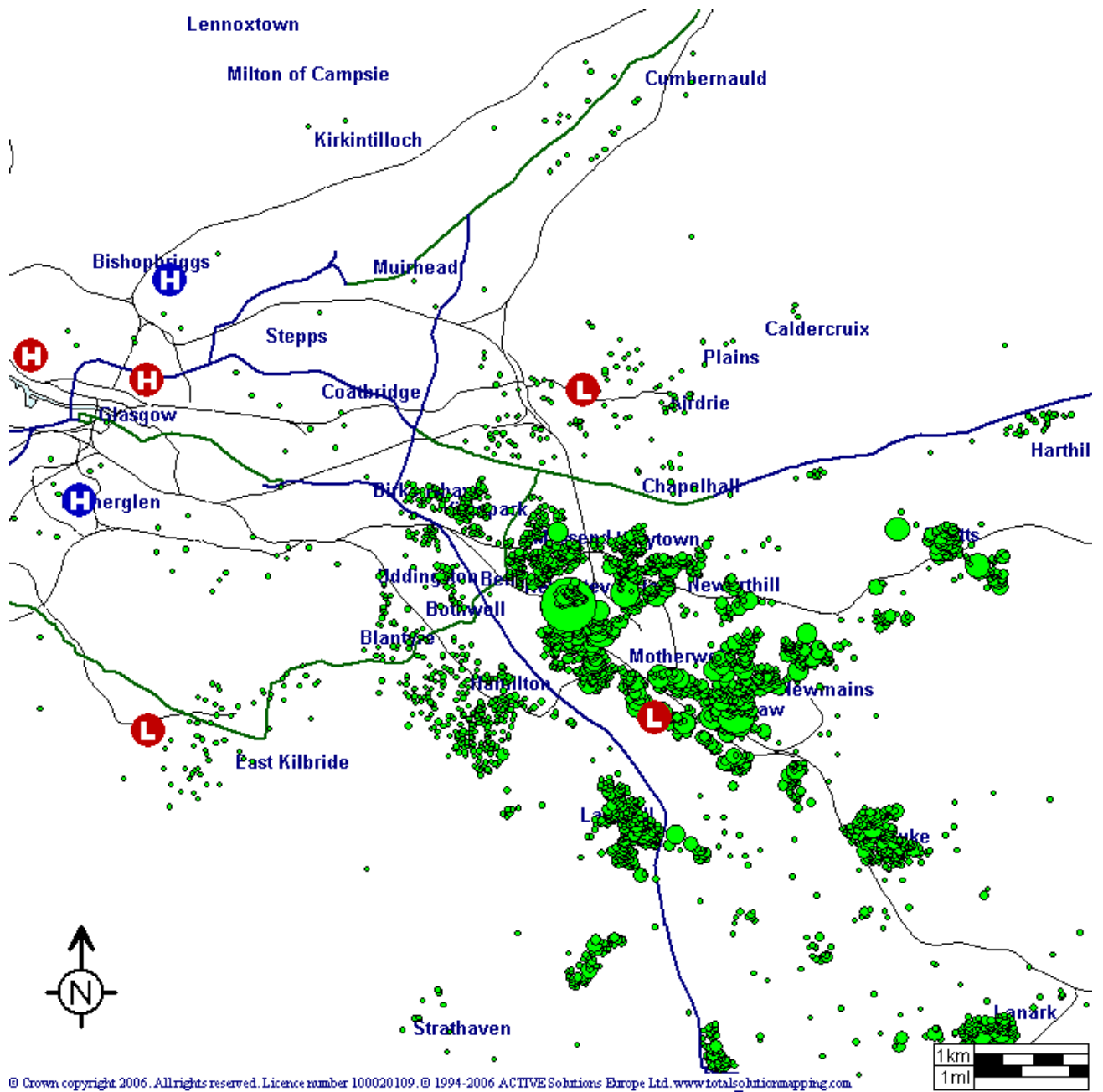
1. Route planning software is expected to plan the optimum route. However, in some cases the optimum journeys differed according to the software package used (preferred routes criteria were set to same default position). In addition, the application of local knowledge can positively affect distances and journey times.
2. Microsoft AutoRoute 2006 is reliable in terms of predicting estimated distances and journey times for routes it plans.
3. Microsoft AutoRoute 2006 is generally less reliable than AA Milemaster Route Planner for Britain 1999 in terms of planning optimum routes. The notable exception is the journey between Glasgow Royal Infirmary and Hairmyres Hospital.
4. All journeys involving motorway driving will incur delays at present due to road works and associated speed restrictions.
5. Where Actual journey times were significantly less than Estimated journey times, each of these journeys involved Hairmyres as an end point.
6. There does not appear to be an optimum period for undertaking patient journeys.

T Fitzpatrick
Change & Innovation Manager
16 March 2006

Emergency admissions to Monklands



Emergency admissions to Wishaw



NHS Lanarkshire Proximity and Access Review - Monklands as Level 2 site
Activity and Indicative Beds Required at Optimum Site

Postcode Sectors derived from 2004/2005 actual attendances at Monklands A&E. Excludes activity from postcode sectors which fall into existing Hairmyres and Wishaw catchments areas.

Activity requiring Level 3 facilities based on Unschedule Care Collaborative Programme flow groups 2, 3 & 4 (Acute Assessment and Medical and Surgical Admissions)

Indicative Beds required calculated using mean stay of 6.5 days and % occupancy of 85%

PC Sector	Small Area Location	Optimum Alternative site	Actual A&E activity requiring Level 3 site facilities								Indicative Beds required			
			Source of presentation at A&E								Total	Potential to be Directed	May not be Directed	Total
			Emergency Services	GP	NHS 24/ OOH	Potential to be Directed	Self Referral	Other	May not be Directed					
G71 6	Viewpark	WGH	117	112	32	261	214	55	269	530	5	6	11	
G71 8	Uddingston/Bothwell	WGH	62	34	22	118	99	19	118	236	2	2	5	
ML1 4	Bellshill	WGH	53	46	8	107	93	41	134	241	2	3	5	
ML4 1	Bellshill	WGH	88	64	40	192	180	58	238	430	4	5	9	
ML4 2	Bellshill	WGH	160	69	48	277	228	63	291	568	6	6	12	
ML4 3	Bellshill	WGH	64	31	24	119	100	25	125	244	2	3	5	
ML5 3	Coatbridge	WGH	120	64	41	225	296	62	358	583	5	8	12	
ML5 4	Coatbridge	WGH	256	133	103	492	588	159	747	1239	10	16	26	
ML6 6	Airdrie	WGH	198	94	60	352	529	134	663	1015	7	14	21	
ML6 7	Airdrie	WGH	166	136	48	350	475	131	606	956	7	13	20	
ML6 8	Airdrie	WGH	215	155	89	459	604	122	726	1185	10	15	25	
ML6 9	Airdrie	WGH	161	139	91	391	541	141	682	1073	8	14	22	
ML7 4	Shotts area	WGH	36	28	3	67	48	19	67	134	1	1	3	
ML7 5	Shotts area	WGH	7	7		14	18	9	27	41	0	1	1	
Wishaw Total			1703	1112	609	3424	4013	1038	5051	8475	72	106	178	

FK1 3	Cumbernauld	LAR	1	1	1	3	4	2	6	9	0	0	0
FK13 6	Cumbernauld	LAR	1			1		2	2	3	0	0	0
FK4 2	Cumbernauld	LAR	4			4	2		2	6	0	0	0
FK6 5	Kilsyth	LAR	2			2	2	2	4	6	0	0	0
G65 0	Kilsyth	LAR	51	25	15	91	57	25	82	173	2	2	4
G65 9	Kilsyth	LAR	52	20	17	89	56	25	81	170	2	2	4
G67 1	Cumbernauld	LAR	99	77	31	207	128	49	177	384	4	4	8
G67 2	Cumbernauld	LAR	212	142	82	436	262	103	365	801	9	8	17
G67 3	Cumbernauld	LAR	85	100	43	228	231	49	280	508	5	6	11
G68 0	Cumbernauld	LAR	43	37	24	104	76	24	100	204	2	2	4
G68 9	Cumbernauld	LAR	109	67	29	205	172	31	203	408	4	4	9
Larbert Total			659	469	242	1370	990	312	1302	2672	29	27	56

G67 4	Cumbernauld	GRI	109	103	43	255	191	48	239	494	5	5	10
G69 6	Bergeddie	GRI	8	6	2	16	19	1	20	36	0	0	1
G69 7	Bergeddie	GRI	39	31	17	87	98	31	129	216	2	3	5
G69 8	Gartcosh	GRI	16	12	5	33	39	8	47	80	1	1	2
G71 5	Viewpark	GRI	107	123	29	259	202	48	250	509	5	5	11
G71 7	Uddingston/Bothwell	GRI	67	56	20	143	100	32	132	275	3	3	6
ML5 1	Coatbridge	GRI	169	91	69	329	287	102	389	718	7	8	15
ML5 2	Coatbridge	GRI	188	106	71	365	445	99	544	909	8	11	19
ML5 5	Coatbridge	GRI	282	172	110	564	620	146	766	1330	12	16	28
ML6 0	Airdrie	GRI	182	101	69	352	547	117	664	1016	7	14	21
GRI Total			1167	801	435	2403	2548	632	3180	5583	50	67	117

NHS Lanarkshire Proximity and Access Review - Hairmyres as Level 2 site
Activity and Indicative Beds Required at Optimum Site

Postcode Sectors derived from 2004/2005 actual attendances at Hairmyres A&E. Excludes activity from postcode sectors which fall into Monklands and Wishaw catchments areas.

Activity requiring Level 3 facilities based on Unschedule Care Collaborative Programme flow groups 2, 3 & 4 (Acute Assessment and Medical and Surgical Admissions)

Indicative Beds required calculated using mean stay of 6.5 days and % occupancy of 85%

PC Sector	Small Area Location	Optimum Alternative site	Actual A&E activity requiring Level 3 site facilities							Indicative Beds required			
			Emergency Services	GP	Source of presentation at A&E			May not be Directed	Total	Potential to be Directed	May not be Directed	Total	
					NHS 24/ OOH	Potential to be Directed	Self Referral						Other
G74 2	East Kilbride	WGH	128	139	36	303	258	62	320	623	6	7	13
G75 0	East Kilbride	WGH	185	185	29	399	363	103	466	865	8	10	18
G75 9	East Kilbride	WGH	224	163	44	431	335	120	455	886	9	10	19
ML10 6	Strathaven	WGH	146	123	25	294	212	64	276	570	6	6	12
ML3 0	Hamilton	WGH	114	96	18	228	182	65	247	475	5	5	10
ML3 6	Hamilton	WGH	128	103	11	242	171	71	242	484	5	5	10
ML3 7	Hamilton	WGH	167	153	13	333	268	89	357	690	7	7	14
ML3 9	Hamilton	WGH	381	252	52	685	475	179	654	1339	14	14	28
ML9 1	Larkhall/Stonehouse	WGH	29	61	1	91	40	10	50	141	2	1	3
ML9 2	Larkhall/Stonehouse	WGH	19	48	1	68	33	8	41	109	1	1	2
ML9 3	Larkhall/Stonehouse	WGH	39	78	8	125	73	14	87	212	3	2	4
Wishaw Total			1560	1401	238	3199	2410	785	3195	6394	67	67	134

G32 9	Glasgow	MK			1	1		1	1	2	0	0	0
G71 7	Uddingston/Bothwell	MK	8	31		39	25	5	30	69	1	1	1
G71 8	Uddingston/Bothwell	MK	47	69	3	119	70	28	98	217	2	2	5
G72 0	Blantyre	MK	178	127	36	341	352	114	466	807	7	10	17
G72 7	Glasgow	MK	158	31	8	197	149	55	204	401	4	4	8
G72 9	Blantyre	MK	217	171	37	425	386	106	492	917	9	10	19
G74 1	East Kilbride	MK	102	64	16	182	163	48	211	393	4	4	8
G74 3	East Kilbride	MK	282	225	62	569	447	137	584	1153	12	12	24
ML3 8	Hamilton	MK	214	214	22	450	358	104	462	912	9	10	19
Monklands Total			1206	932	185	2323	1950	598	2548	4871	49	53	102

G72 8	East Kilbride	GRI	184	44	2	230	168	91	259	489	5	5	10
G73 4	East Kilbride	GRI	16	6	1	23	16	4	20	43	0	0	1
G73 5	East Kilbride	GRI	31	14	4	49	57	13	70	119	1	1	2
G74 4	East Kilbride	GRI	197	166	36	399	331	100	431	830	8	9	17
G74 5	East Kilbride	GRI	10	7	3	20	20	5	25	45	0	1	1
G75 8	East Kilbride	GRI	302	286	64	652	718	166	884	1536	14	19	32
G76 8	East Kilbride	GRI	38	10	2	50	53	25	78	128	1	2	3
G76 9	East Kilbride	GRI	22	3		25	15	6	21	46	1	0	1
GRI - NHSL residents Total			800	536	112	1448	1378	410	1788	3236	30	37	68

NHS GREATER GLASGOW - VICTORIA INFIRMARY AS LEVEL 2 SERVICE PROVISION

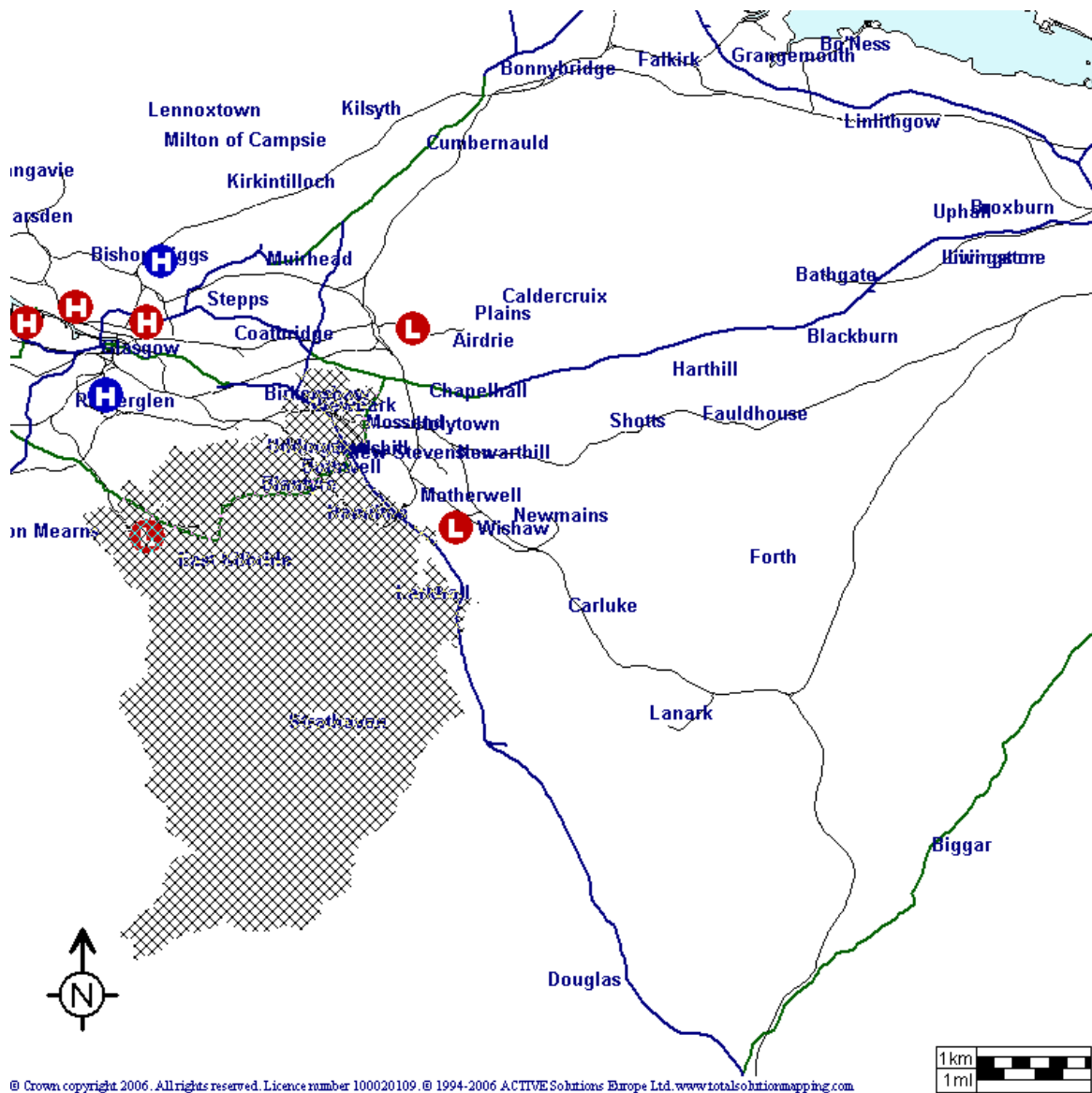
PROXIMITY AND ACCESS REVIEW

NHSGG SOUTH EAST CATCHMENT AREA (VICTORIA INFIRMARY) - ALTERNATIVE SITES FOR EMERGENCY ADMISSIONS

SECOND PASS ANALYSIS - SUBJECT TO REVIEW

Postcode Sector	Small Area Location	2003/04 Emergency Admissions All Adult Sites in NHS Scotland								Planned / Risk Test Alternative Site	EMERGENCY ACTIVITY TRANSFER PLANNED / RISK TEST ALTERNATIVE SITE				RISK TEST IP BED IMPLICATIONS POTENTIAL FLOWS TO HAIRMYRES			
		Victoria Infirmary	Hairmyres	Other Site	Total	Current % Distribution					New South	GRI	HAIRMYRES	Total	TARGET EMERG ALOS	TARGET BED OCC%	IP BED NUMBERS	
						Victoria Inf	Hairmyres	Other Site	Total									
G42 0	Polmadie/Toryglen	585	1	123	709	83%		17%	100%	New South	585			585	6.0	85%		
G42 7	N Govanhill	516	2	127	645	80%		20%	100%	New South	516			516				
G42 8	Crosshill	663	5	207	875	76%	1%	24%	100%	New South	663			663				
G42 9	Battlefield	463	2	107	572	81%		19%	100%	New South	463			463				
G44 3	Cathcart	473	6	127	606	78%	1%	21%	100%	New South	473			473				
G44 4	Kingspark	516	1	144	661	78%		22%	100%	New South	516			516				
G44 5	Croftfoot/Linn Park	535	3	158	696	77%		23%	100%	New South	535			535				
G45 0	E Castlemilk	463	15	115	593	78%	3%	19%	100%	HAIR			463	463				9
G45 9	W Castlemilk	1,045	35	202	1,282	82%	3%	16%	100%	HAIR			1,045	1,045				20
G46 6	Giffnock	414	3	167	584	71%	1%	29%	100%	New South	414			414				
G5 0	Hutchesontown	484	1	162	647	75%		25%	100%	New South	484			484				
G5 9	Gorbals	20	0	7	27	74%		26%	100%	New South	20			20				
G72 7	N Cambuslang	377	340	238	955	39%	36%	25%	100%	GRI			377	377				
G72 8	S Cambuslang	377	423	266	1,066	35%	40%	25%	100%	GRI			377	377				
G73 1	N Rutherglen	295	5	99	399	74%	1%	25%	100%	GRI			295	295				
G73 2	W Rutherglen	510	9	152	671	76%	1%	23%	100%	GRI			510	510				
G73 3	E Rutherglen	564	24	193	781	72%	3%	25%	100%	GRI			564	564				
G73 4	S-W Rutherglen	572	28	134	734	78%	4%	18%	100%	GRI			572	572				
G73 5	S-E Rutherglen	290	111	102	503	58%	22%	20%	100%	GRI			290	290				
G76 0	Eaglesham	113	139	70	322	35%	43%	22%	100%	HAIR			113	113				2
G76 7	Clarkston	276	28	109	413	67%	7%	26%	100%	New South	276			276				
G76 8	Busby	249	75	99	423	59%	18%	23%	100%	HAIR			249	249		5		
G76 9	Carmunock	55	51	13	119	46%	43%	11%	100%	HAIR			55	55		1		
G77 5	Broom/Kirkhill/Mearns	391	23	161	575	68%	4%	28%	100%	New South	391			391				
		10,246	1,330	3,282	14,858	69%	9%	22%	100%		5,336	2,985	1,925	10,246			37	
INCLUDES CHILDREN										INCLUDES ALL REFERRAL SOURCES GEMS - GP - SELF								
										TEST LOCAL GPs & SAS VIEW								

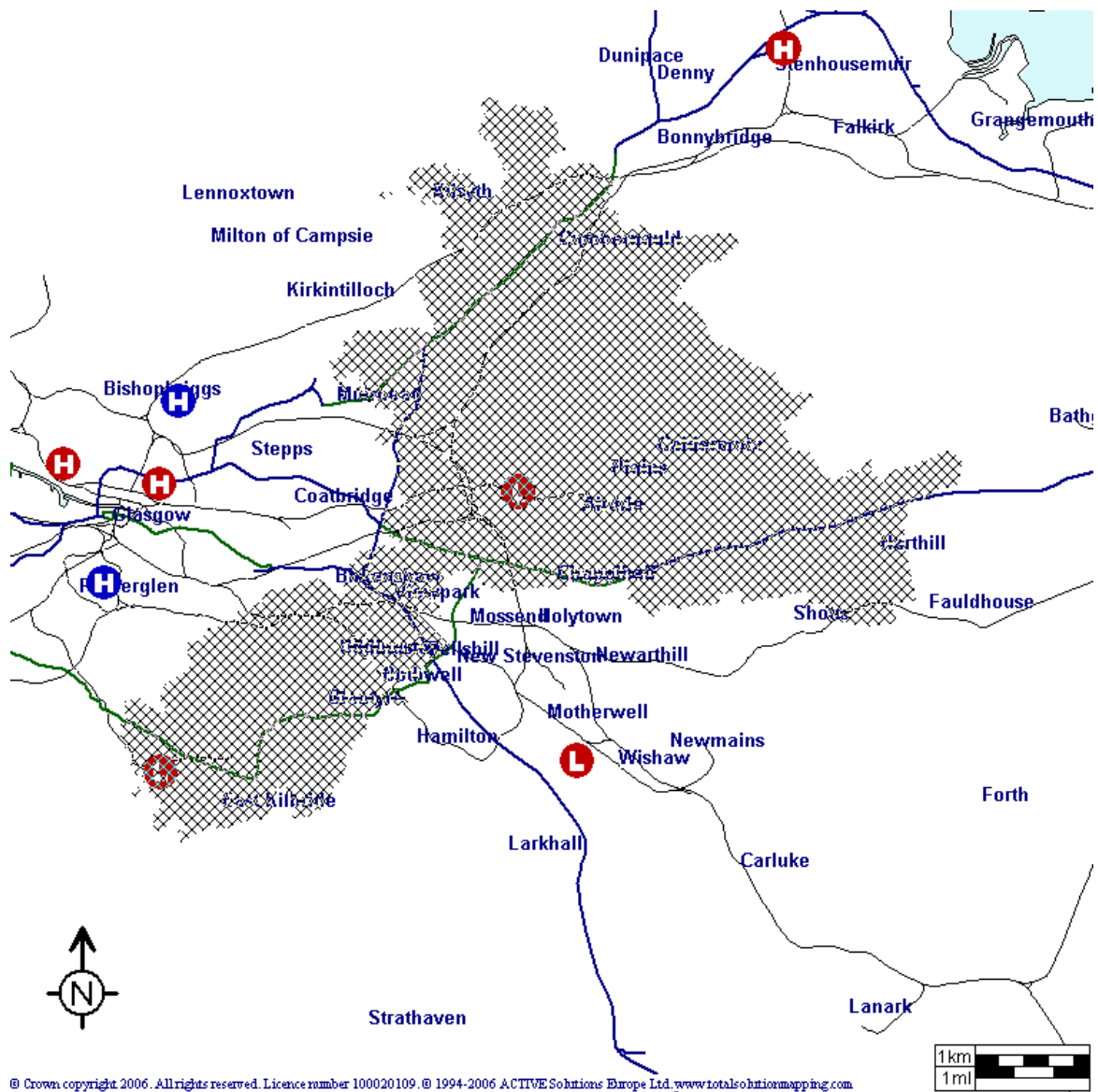
Hairmyres indicative new catchment area – Scenario 2



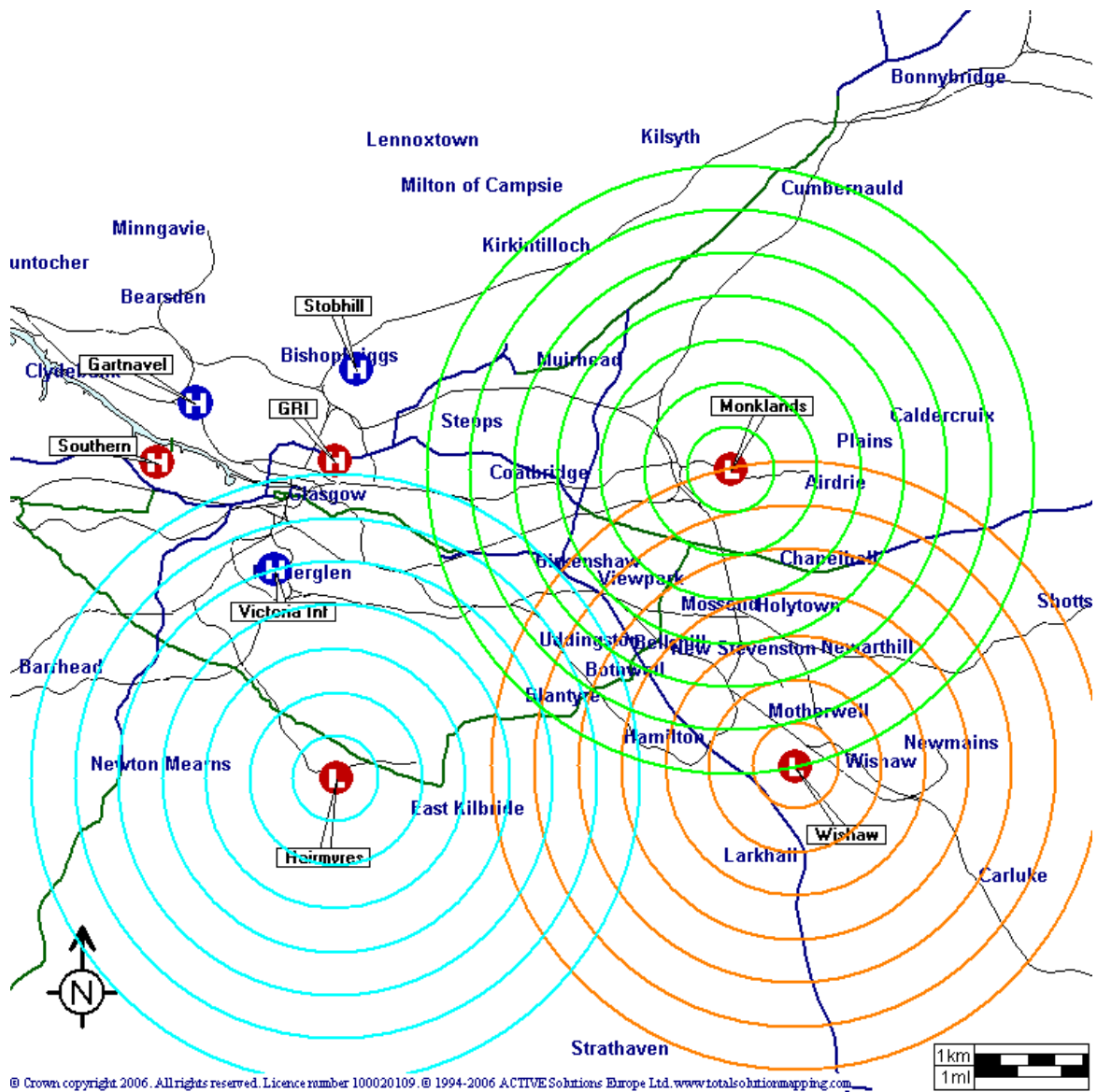
New catchment area represents existing Hairmyres catchment area plus Viewpark, Bothwell, Uddingston and Larkhall. New catchment essentially described as populations west of M74, west of A725 Bellshill bypass up to A8.

New Wishaw catchment area includes remainder of Lanarkshire with the exception of Cumbernauld and Kilsyth

Monklands indicative new catchment area – Scenario 1.



Monklands new catchment area consists largely of its existing catchment plus East Kilbride, Blantyre.



Each ring represents a distance of 1 mile.