

Table 24 Green Belt Proposals in the North West

<i>Green Belt</i>	<i>Main Purpose</i>	<i>Sketch Plan Approved as a Basis for Interim-Development Control</i>	<i>Formal Submission</i>	<i>Inquiry Held</i>	<i>Remarks</i>
1. Merseyside and South East Lancashire*	To contain the northern parts of the two conurbations, prevent the coalescence of peripheral towns and stop the building up of the corridor linking the conurbations.	July, 1956	September, 1960	July/August, 1961	Interim modifications have been proposed by the Minister of Housing and Local Government to Merseyside section, primarily to meet Liverpool's housing needs.
2. North Cheshire . . .	To contain the southern part of the Manchester conurbation and to prevent merging of peripheral towns.	July, 1956	August, 1961	Postponed	Action also deferred on two related town maps and consequential amendments to several existing town maps.
3. West Cheshire . . .	To contain the growth of South Merseyside (including the Wirral) and Chester, and to prevent Chester merging with towns to the north.	July, 1956	August, 1961	Postponed	Flintshire County Council have submitted related proposals.
4. South Cheshire . . .	To prevent northward growth of Potteries and merging of towns such as Alsager and Kidsgrove.	August, 1958	October, 1961	September, 1962	Only small areas involved, but related to informal proposals of Staffordshire County Council.
5. North West Derbyshire.	To contain eastward growth of Manchester and to preserve identities of Glossop and New Mills.	November, 1956	31st January, 1964	No arrangement made	Only small areas involved, but related to North Cheshire proposals at 2 above.

* Also related to proposals of Bury, Bolton and Oldham County Borough Councils.

THE FUTURE OF THE GREEN BELTS

7. Decisions on these green belt proposals cannot be deferred indefinitely; otherwise neither the public nor the local authorities in the North West will know to what extent they can be relied on as a basis for future planning and action. On the other hand, green belts represent one of the most powerful instruments available for the shaping of urban growth; and it is important that they should be judged against the wider background of regional economic and physical planning policies. Only if this is done can green belt boundaries be established of a kind which can be realistically defended for the foreseeable future.

8. In the North West it is clear that, despite the provision already made for the accommodation of overspill from the conurbations, further large-

scale needs will almost certainly arise before 1981. The extent and nature of the provision made to meet them must depend on whatever policies are adopted in relation to the future growth and distribution of population and employment within the region. Until a full strategy for the future development of the North West has been formulated, it would be premature to reach a final decision on the boundaries of green belts.¹ But in the context of such a strategy, green belts can be expected to have a vital part to play in shaping the massive growth likely to take place in the North West over the next twenty years or more, and in ensuring the availability of attractive countryside within easy reach of the towns. The form of future strategy for the North West is discussed in the final chapter of this report.

By the same token, it would be premature to reach a decision on the South Cheshire green belt proposals until decisions have been taken on the future scale and pattern of growth within the Potteries.

13 Water supplies and sewage disposal: the Region's needs

Industrial and population growth in the North West on the scale which seems probable over the period up to 1981 will add considerably to existing demands on water supplies in the region. and on facilities for the disposal of sewage and industrial effluents. The inadequacy of present water supplies in certain parts of the North West has attracted considerable publicity in recent years, largely because of the controversial nature of some of the proposals which have been made for exploiting new sources. At the same time it is well known that some rivers in the region are seriously polluted by sewage and effluents. However, neither of these factors should prove an insuperable obstacle to further extensive development in the North West.

WATER

2. The greatest additional demand for water will arise in the Mersey division, where there is little or no possibility of developing substantial extra local resources. It follows that it will be necessary in coming years to transfer large quantities of water to this part of the region from elsewhere.

3. Possible sources for the additional supplies required include the rivers of Cumberland, Westmorland, North Lancashire and the Cambrian mountains of North Wales. Some ground water is available, but as no single source could be developed to yield a large quantity of water, the exploitation of these resources is unlikely to offer a practical solution. It is possible that ways and means may eventually be found of producing pure water from the sea at a cost which would be economic in this country, but there appears to be little prospect that this will happen in the near future.

4. Although only a provisional assessment of the water resources of the North West and neighbouring areas has so far been made, it seems clear that sufficient water could be made available to meet the needs of the region up to 1981 and well beyond. The problem to be faced is not likely to be an absolute shortage of water resources, but one of reconciling as far as possible the provision of supplies at a reasonable economic cost with the preservation of the amenities of the Lake District and other areas of great natural beauty. No attempt is made in this Report to reach a conclusion on the relative weight to be attached to these two considerations.

5. It is possible that one or other of the schemes which have been proposed for building barrages across Morecambe Bay and the Solway Firth might enable enormous quantities of water to be impounded for use in the North West. Detailed investigations are at present being undertaken into the potential of these two schemes for water supply and into their likely cost. It seems unlikely that either would give rise to serious objections on amenity or land-use grounds. But a preliminary examination of the Morecambe Bay scheme suggests that, even when proper allowance has been made for the other benefits which would be created by the construction of a barrage, it would only offer the prospect of a satisfactory economic return if the likely cost proved to be as low as the most optimistic estimates so far put forward.

6. While it is possible, therefore, that the Morecambe Bay or Solway Firth proposals may provide a solution to the long-term water needs of the North West, it cannot be assumed at this stage that other means of meeting those needs will not be required. A comprehensive long-term plan for water resources in the North West

needs to be prepared, based on investigation of the feasibility of developing various potential sources and taking into account all relevant factors, including effects on land use and amenity. The preparation of a plan of this kind and the carrying out of necessary surveys are now matters for the River Authorities and the Water Resources Board set up under the Water Resources Act, 1963. There is, however, an urgent need for some additional water supplies to be made available in the region in the near future and provision for these will have to be made in advance of such a long-term plan.

7. It is important that future planning of the water resources of the North West should be closely integrated within the broad framework of regional planning policies. Local availability of supplies will need to be borne in mind in planning future developments in the region. At the same time river authorities and water undertakers will need to know well in advance about the likely scale and distribution of future demand. It does not appear, however, from the data at present available that water resources will be a

major limiting factor in the choice of sites for future development in the region.

SEWERAGE AND SEWAGE DISPOSAL

8. If future population increases in the North West were distributed fairly uniformly throughout the different river catchment areas, it is unlikely that any significant increase in existing pollution problems would arise in the period up to 1981. Further population growth within parts of the region which are already densely populated is, however, likely to produce difficulties in certain catchment areas, more particularly in the Mersey basin and the catchment areas of the rivers Douglas, Darwen and Calder. Moreover, any major new town developments wherever they are sited, will clearly necessitate new sewage disposal works. Substantial expenditure is therefore likely to be needed in the North West in the period up to 1981 on additional works to provide for the purification of additional sewage and trade wastes and to deal with serious existing pollution problems. But the information at present available does not suggest that any major engineering difficulty is likely to arise.

14 Other aspects of environment

The problem of outworn housing in the North West is part of a much wider problem of obsolescence and dereliction. This Chapter deals briefly with some of the other more important aspects of it, but concludes by stressing some of the region's compensating amenities.

TOWN CENTRE RENEWAL

2. Most of the larger town centres in the North West are in need of drastic renewal, and this is one of the key environmental problems of the region with serious social as well as economic implications. Although it has not been found possible to quantify the problem or to make detailed comparisons between the North West and other regions or between various places within the region, it is clear that the main need for renewal is within the inner areas of the conurbations, in the mid-South Lancashire towns, the towns on the northern side of the Manchester conurbation, and the main centres of North East Lancashire. Moreover, the results of the 1961 Census of Distribution make some tentative comparisons possible between the state of shopping facilities in the North West as a whole and of those in other regions. Since shopping facilities represent a key element in town centre facilities generally, these figures provide some guide to the general state of town centres in the North West compared with other regions.

3. The Census of Distribution showed in fact that of all regions in Great Britain the North West had the lowest number of population per shopping establishment, the lowest value of total retail sales per establishment, and the lowest value of total retail sales per person employed behind the counter (Table 38 of the Statistical

Appendix illustrates the position). Bearing in mind the fact that the region has the highest density of population in the country, and the general trend towards larger establishments, economies in manpower, and more intensive use of floorspace, these figures suggest that in the North West there is a greater relative need for the modernization and reorganisation of shopping facilities than in the country as a whole.

4. This is linked with the need to renew a wide range of other town centre facilities important to the life of the community. Indeed, the renewal of these other facilities, which are usually non-profit making in character depends in a large measure upon the success of related plans for providing better shops.

5. Vigorous action is being taken by local authorities throughout the region; renewal schemes for over 100 town centres, three-quarters of them in or around the conurbations are either in progress or in preparation. The most striking of these are the comprehensive long-term schemes being worked out by expert teams of planners for the centres of Liverpool and Manchester. In addition to these and other redevelopment plans within the conurbations, schemes are afoot for all the other main industrial towns in the region and nearly all include arrangements for the segregation of vehicles and pedestrians.

6. But the very scale on which renewal is being planned and the large number of different schemes which are in preparation carry with them certain dangers. Some local authorities in the North West have drawn attention to the risk that the unco-ordinated provision of new shopping facilities may lead to a wasteful use of resources. Local authorities preparing town centre renewal schemes do not always seek an expert assessment of likely trade, and only rarely is it possible for them to make a realistic appraisal

of the role of their own centre in relation to those of others in the region.

7. It would be wrong to try to eliminate competition between shopping centres or to control developments according to a rigid plan which purported to dictate the future hierarchy of centres within the region. Some competition between centres is desirable to stimulate efficiency and some flexibility is necessary in planning to meet changing patterns of demand. Every renewal scheme should, however, be conceived against the background of a knowledge of broad trends and prospects within the region. For this purpose local authorities must have expert advice on matters such as the catchment areas of their own and other centres, the implications of other renewal schemes, the broad structure of retail sales within the region, and the possible effects of future changes in the volume and distribution of purchasing power. Unless this is done, town centre renewal in the North West cannot be expected to proceed satisfactorily.

8. In the present state of knowledge no reliable predictions or recommendations can be made about the future growth and pattern of retail sales in the region. However, the Department of Town and Country Planning at Manchester University have recently published a valuable report which contains the results of some pioneering work in this field.¹ The preparation of the background information needed as a basis for sensible decisions on renewal schemes will take some time, but this Manchester University report has pointed the way in the techniques which it employs for the analysis of catchment areas and the use made of basic data such as the results of the Censuses of Distribution and the Family Expenditure surveys. Further work needs to be put in hand so that a comprehensive picture of trends and prospects can be built up. The results should be of great value both to local authorities in the preparation of renewal schemes and to the Ministry of Housing and Local Government in assessing them.

DERELICT LAND

9. Like most of the older industrial regions of Britain, the North West is scarred by large tracts of derelict land. This is land which has been so damaged by industrial or other development

that it is an eyesore and incapable of further use without special treatment (for example disused spoil heaps, mineral excavations, areas of subsidence and abandoned industrial installations).

10. There is a substantial amount of such land in the region which was rendered derelict before the introduction of the comprehensive arrangements for planning control provided in the Town and Country Planning Act 1947. There are no current figures which precisely measure the present amount of derelict land in different parts of the country, and consequently the Minister of Housing and Local Government asked local authorities in England and Wales in September 1964 to survey derelict land in their areas and inform him by 31st March, 1965, and thereafter annually, of the results of their surveys. When the first returns have been analysed, they should provide an up-to-date assessment of the total amount of dereliction and of the proportion requiring treatment; and will show how much was treated in 1964; and what proposals authorities have for treatment schemes in 1965. Subsequent returns should enable the net change in derelict land to be assessed.

11. A certain amount of information is already available from returns made by local authorities to the Ministry of Housing and Local Government in 1954 and from subsequent reviews of local development plans. From these sources it appears that there are now about 15,500 acres of derelict land in the North West. (This figure may require substantial amendment once the new returns have been analysed.) The greatest concentrations are found in areas such as the South Lancashire coalfield which are associated with long-established mining and manufacturing industries.

12. Under the system of development control introduced by the Town and Country Planning Act 1947, local planning authorities are enabled to attach conditions to planning permissions for development which require the owner of the land to take steps to prevent it from remaining in a derelict condition once the development is complete. Thus conditions may be attached to planning permissions for such types of development as mineral excavation and tipping designed to secure the restoration of land for further use or, where this is not practicable, the improvement

¹ "Regional Shopping Centres—a planning report on North West England."

of the land by landscaping. Local planning authorities also have powers for enforcing compliance with such conditions.

13. Whilst planning control thus checks much dereliction at source, the creation of a certain amount is nevertheless inescapable. For example, nothing can be done under present arrangements to prevent the voluntary abandonment of old industrial installations; and substantial areas of land are used for tipping by the National Coal Board and private industry under the provisions of the Town and Country Planning General Development Order 1963, which exempt them from the need to get specific planning permission. Some of this land will eventually add to the present total of dereliction when development ceases.

14. Some derelict sites require treatment more urgently than others—for instance, there is a greater need to deal with spoil heaps in or near residential areas than with disused mineral excavations in the countryside. It is probable, however, that much of the existing total of derelict land in the North West is of such a kind and is so situated as to justify treatment on social grounds. Furthermore, in a region which is subject to heavy demands for land for housing development, it would be worth examining some of the larger areas of dereliction (such as those in the Leigh—Atherton—Tyldesley area) to see if they could provide extra land for open space, playing fields and housing. But the financial return to be gained from the use of reclaimed land is often not high enough to justify the costs of reclamation commercially. The task of dealing with dereliction therefore falls in the main to the local authorities.

15. Local authorities have a wide range of statutory powers available which enable them to deal with derelict land in order to promote the general well-being of their districts. In most cases the costs of reclamation work carried out by local authorities have to be met from their normal financial resources. There are, however, two specific grants available for this work. Under the provisions of section 5 of the Local Employment Act 1960, the Minister of Housing and Local Government may pay grants of 85 per cent of the approved net cost of appropriate schemes to local authorities in development districts. In addition, under the provisions of the National Parks and Access to the Countryside Act 1949 the Minister

of Housing and Local Government may pay grants of 75 per cent of the cost of appropriate schemes to authorities in areas of outstanding natural beauty, and the Minister of Land and Natural Resources may make similar payments to authorities in national parks. At the present time in addition to the development districts of Merseyside and Furness, there are national parks or areas of outstanding beauty in the Peak District and Northern Lancashire. One or other of the two specific grants might therefore be available in these areas which contain about one tenth of the present estimated total of derelict land in the North West, but some part of their derelict land may not qualify for grant or may not require treatment.

16. Lancashire County Council and county boroughs in Lancashire have made proposals in their development plans for the treatment of about 3,700 acres of derelict land in the period 1960-1971. In the last 10 years or so Lancashire County Council have treated about 1,000 acres 350 of which were reclaimed for further use and 650 acres of which were improved by tree-planting. They propose to reclaim by 1968 another 660 acres for further use, and to improve by tree-planting 100 acres a year. The National Coal Board have made a small financial contribution towards the Council's programme of tree-planting, and have recently entered into discussion with the Council about arrangements for a comprehensive survey of spoil heaps as a basis for schemes of improvement to be carried out either by the Council or the Board. The Minister of Housing and Local Government has granted in all loan sanctions totalling about £440,000 in respect of schemes of reclamation completed or now being carried out by Lancashire County Council. In addition, schemes in the region's development districts covering 147 acres of derelict land, and likely to attract grants of about £76,000, have recently been approved under section 5 of the Local Employment Act.

17. On the basis of existing information, therefore, the present position may be summed up as follows:

- (i) there may be at present about 15,500 acres of derelict land in the region not subject to planning conditions requiring after-treatment: a substantial proportion of this is likely to justify some form of treatment on social grounds;

- (ii) the amount of derelict land in the region is subject to continual addition;
- (iii) about one tenth of the derelict land in the region lies within areas in which specific Exchequer assistance for treating derelict land is available; and
- (iv) it is known that local authorities in the region are now treating derelict land at a rate of not less than 300 acres a year.

18. However, despite the vigorous efforts of certain local authorities, especially Lancashire County Council, little real impact is at present being made on the problem of dereliction over the region as a whole. Partly no doubt this is because Exchequer assistance is not generally available. Some local authorities in the North West have indeed strongly expressed the view that present arrangements for grant are inadequate, that clearance of derelict land should be regarded as a national responsibility calling at least for a general Exchequer subsidy and that unless more generous assistance is made available the region's dereliction problem will not be eliminated within the best part of a century.

19. But finance is not the only obstacle to more rapid progress. Some of the derelict land in the region could be treated at quite a modest cost, but some local authorities seem to lack a sense of urgency in dealing with dereliction in their areas. Since the efforts of an energetic authority can largely be nullified if its neighbours take no action, there seems much to be said for regarding dereliction as a regional problem, to be tackled by a concerted regional campaign.

DRABNESS, UNTIDINESS AND NEGLECT

20. Dereliction undoubtedly contributes to the general impression of drabness, untidiness and neglect which strikes visitors to many of the urban areas of the North West. But it is not the only cause. There is a large number of vacant and partially used sites in the towns of the region which are not derelict in the real sense of the word, but are simply in an untidy or neglected state. The amenities of many residential and other areas are depressed by failure to maintain the exterior decoration of buildings or to keep ancillary features like fences and walls in proper repair. And there is a general lack of trees. The cumulative effect of many small items of neglect can seriously depress day-to-day living conditions

and can lead to a natural tendency to let things slide, so that already poor conditions are allowed to deteriorate further.

21. Much useful work has been done in the last few years by the Civic Trust for the North West and its affiliated societies in tackling this problem, and it is clear that both local authorities and voluntary bodies have a vital part to play in the future in fostering public interest in the improvement of general environmental standards, particularly in the worst areas. However, more still needs to be discovered about the whole question of dereliction and untidiness, its many aspects, and its effect on the environment. Intensive sample surveys are to be carried out within selected areas of the region with a view to categorising dereliction and untidiness more exactly and thus enabling better consideration to be given to questions such as the cost of restoration and the most appropriate agencies for carrying it out. Lancashire County Council and St. Helens Corporation have agreed to assist in carrying out these surveys.

22. In relation to the particular problems of ageing residential areas where the property is basically sound, the renewal design study being undertaken by the Ministry of Housing and Local Government at Deplish, Rochdale, should provide useful information. This is a study undertaken by a joint team consisting primarily of architects but having the services of town planners, engineers, sociologists, quantity surveyors, and research and estate officers. The main object of the study is to learn more of possible ways and means of improving such areas without substantial redevelopment. It therefore differs from the pilot study initiated at Bolton, which is concerned with the problem involved in the general redevelopment of "twilight" residential areas, where the state of the property or a mixture of uses call for much more than modernisation.

AIR POLLUTION

23. Air pollution has been considered in the context of environmental problems since it is not only an unhealthy and unpleasant thing in itself, but it can also seriously affect the environment, make poor living conditions much worse, and generally discourage efforts to improve matters. In the North West it has undoubtedly had this effect, and smoke control

programmes have a vital part to play in the general rehabilitation of the older industrial areas.

24. Air pollution in the North West has been a problem primarily centred on the two conurbations and the towns of Burnley, Blackburn and Preston and there is a marked correlation between the worst areas of pollution and areas of exceptionally high death rates. In some of the towns of North and South East Lancashire pollution has been aggravated by climatic conditions engendered by the prevailing damp westerly airstream. When a wind blows from the west, as it most frequently does, a combination of natural cloud and fumes frequently drifts towards the Pennine slopes and lodges over these towns, thus polluting their air and depriving them of sunlight.

25. Some local authorities in the North West have taken vigorous action to deal with atmospheric pollution. By March, 1964, "black area" authorities had made smoke control orders covering roughly 20.5 per cent of their premises. In the course of 1964, however, there was a decline in the making of smoke control orders, both in the North West and in the country as a whole.

26. The causes for this decline are not altogether clear. The explanation may lie in actual and impending shortages of gas coke resulting from the run-down in coal-carbonization in the gas-industry. Where these shortages occur, the implementation of smoke control must depend upon the installation of gas, electric or oil appliances, or of closed and openable stoves capable of burning other solid smokeless fuels. The installation of appliances of these kinds is considerably more expensive than the comparatively simple conversion of an open grate so that soft gas coke will burn in it.

27. To meet this situation, revised arrangements were introduced in 1963 for the payment of grants on smokeless fuel appliances. The production of reactive open grate fuels is increasing and it is estimated that within two years supplies of open fire fuels should be adequate to meet the expected demand, although consumers may sometimes have to buy the more expensive reactive fuels instead of the cheaper gas coke. It seems reasonable to hope, therefore, that better progress towards the control of air pollution in the North West will soon be made. It is

particularly desirable that co-ordination in smoke control programmes should be achieved so that efforts to reduce pollution in one local authority area are not offset by lack of action in neighbouring areas.

BROAD CONCLUSIONS

28. Slums, general obsolescence, dereliction and neglect all add up to a formidable problem of environmental renewal extending over a wide area of the region. It is plain that this problem cannot be disposed of in a few years and the question which arises is whether it is feasible to break the back of it in say 10 to 15 years or whether the turn of another century will find Lancashire still struggling under the grim heritage of the industrial revolution. For unless the general pace of renewal can be considerably increased, this prospect, with all its implications, must be faced.

COMPENSATING ATTRACTIONS

29. It would however be wrong to conclude this chapter on such a pessimistic note. The problems of the region have been described and emphasised because they are what call for action. But it is only right to balance the impression created by dwelling for a moment on some of the brighter aspects of the environment of the North West. Great though the problems of industrial Lancashire are, there are more compensating amenities than many people are aware of, not least the proximity of some of the finest and largest sandy beaches in the country and the accessibility of the Peak District, Yorkshire Dales, Snowdonia and Lake District National Parks, areas which will become increasingly easy to reach with the development of the road network and the spread of car ownership. Already, in little over half an hour's journey from Manchester one can be wandering over the Pennine moorlands, or surveying the Cheshire Plain from a hill top, and the development of M6 means that trips to the Lake District can be readily made within a single day. Although Lancashire itself is scarred by the industrial revolution, it does of course contain not only part of the Lake District itself, but also the Lancaster Fells and the rich farming lands of the South West Lancashire plain. Even within some of the main industrial areas a journey of only a mile may take one from drabness into unspoiled country landscape.

Part Six

Conclusions

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15 The Region summed up

POPULATION

Demographic trends clearly reflect the sharp change in the fortunes of the North West region which took place early in this century and which was hastened by the First World War. Throughout the nineteenth century the North West's share in the population of the country as a whole went up sharply, from 8 per cent in 1801 to 14 per cent in 1901. Since then, however, it has gradually fallen back, to less than 13 per cent in 1964. The population of the North West has gone on increasing since the turn of the century, but population growth in the country as a whole has been faster.

2. Migration away from the region has played a part in depressing its rate of population growth. It was heaviest in the 1920's, when on average over 15,000 more people a year were leaving the North West than were moving into it. The rate of net outward movement fell to about half this level in the thirties, but until the last few years there was little evidence of any further fall. Since the beginning of the 'sixties, however, there have been signs that net migration from the North West may be coming to an end. Migration has affected the North West much less seriously over the past half century than it has Scotland, Wales and the Northern region. Between 1951 and 1964 the net outward movement from the North West amounted in all to about 120,000 people or under 2 per cent of the region's present population. At the same time the region's population actually increased by over 280,000 or considerably more than twice as much as the migration loss.

3. Net migration is merely the balance resulting from very much larger gross movements of population between regions; and it is sometimes claimed that the North West loses qualitatively

from migration, because it is mainly younger, more enterprising and skilled people who leave the region, and they are not adequately replaced. This may be true so far as certain parts of the region are concerned, particularly those, like North East Lancashire, from which population has been drifting away for many years. But other parts of the North West have been gaining population as a result of migration and there is no conclusive evidence that the region as a whole has been suffering from any serious loss of this kind. Certainly, in terms of numbers a net outflow of about 120,000 people over thirteen years scarcely represents a major problem. It may be a symptom of some weakness in the region's economy, but is hardly a cause of it. And since the North West has a serious housing problem, some small outflow of population may even be beneficial from the region's point of view.

4. In any case, a slow rate of natural increase has been much the more important reason why population growth in the North West in recent years has been at a rate well below the national average. Death rates have been a good deal higher than in England and Wales generally. Indeed, when the figures have been adjusted to take account of the effects of the age, sex and marital structure of the region's population, death rates in the North West in the period 1951-62 are shown to have been on average almost 20 per cent higher than nationally. The probable explanation is that the vast majority of people in the North West live in urban areas. Moreover, many of them have over the years suffered from poor housing conditions and from serious pollution of the atmosphere. The main diseases from which death rates have been particularly high in the North West have been bronchitis, certain forms of cancer, influenza and

heart conditions, and these are all diseases for which death rates are high in conurbations and large towns throughout the country. But more research could well be undertaken into this very fundamental disadvantage from which the North West suffers, particularly as there are signs that death rates in the region are tending to move even further from the national average.

5. Within the region there has been a clear, but gradual, shift in population patterns in the post-war period. Population has been declining in the older industrial towns on the Pennine slopes to the north and east of Manchester, and in the centre of the Manchester conurbation itself. This decline has mainly been the result of outward migration, but in North East Lancashire, where the rate of decline has been highest, the abnormal age structure of the population has meant that deaths have exceeded births, so that natural decrease has reinforced the effects of migration. Migration has also caused a slight decline in the population of Furness. On the other hand, the areas of most rapid population growth have been the southern fringes of the Manchester and Merseyside conurbations, the coastal towns of the Fylde, and certain urban areas such as Preston, Wigan and Warrington on the main North-South communications route. There has also been a considerable increase in the population of the northern part of the Merseyside conurbation, despite a strong tendency for people to move southwards out into the Wirral and adjoining parts of Cheshire.

6. Looking ahead, the population of the North West is likely to increase substantially between now and the end of the century. Even if net outward migration continues on the scale of recent years, there will probably be at least 800,000 more people living in the region in 1981 than there were in 1964. And if migration came to an end, room might have to be found for 130,000 more than that. Much of this population growth is expected to originate on Merseyside, where birth rates are well above the national (and regional) level.

EMPLOYMENT

7. The ability of the North West's economy to provide sufficient new jobs to support population growth on this kind of scale will clearly be one of the most important influences on the rate of migration in future. Between 1953 and 1963 the

rate of employment growth in the North West was well below the national average. Only 51,000 more employees were at work in the region in 1963 than ten years earlier. In Scotland alone of the other regions of Great Britain did employment increase more slowly. But since at the same time there was a slight fall in the population of working age in the North West, the region generally did not suffer from the high unemployment and heavy outward migration which might otherwise have occurred.

MANUFACTURING

8. Several of the North West's traditional industries have again been reducing the size of their labour forces in recent years—particularly coal-mining, shipbuilding, port operations and above all the textile industry. The loss of nearly 140,000 jobs in textiles was by far the biggest single factor explaining why manufacturing employment fell by 4 per cent in the region between 1953 and 1963, while it was increasing nationally by over 7½ per cent. Despite this fall, manufacturing continues to be much more important in the North West than in Britain generally, providing 46 per cent of the region's total employment as compared with only 38 per cent in the country as a whole.

9. But quite apart from textiles, other sections of manufacturing in the North West have shown some signs of weakness. Out of the thirteen manufacturing Orders in the Standard Industrial Classification, only four increased their labour forces faster in the region than nationally between 1953 and 1963. And even of these four, two (the food industry and the bricks, pottery and glass group) fell behind the national growth rate after 1959, while a third (vehicles) grew rapidly in the North West only as a result of Government intervention which encouraged the motor industry to set up major new plants on Merseyside.

10. Statistics showing the number of employees in employment are available only for very broad sub-divisions of manufacturing, and a full analysis of the reasons for the North West's recent record of slow employment growth must await the provision of more detailed figures. It seems probable, however, that the region has suffered from structural disadvantages and that a comparatively high proportion of its manufacturing employment has been in sections which have either grown slowly, or actually declined,

over the country as a whole. It therefore looks as if future employment growth in manufacturing in the North West will be very dependent on the pace at which the region's industry proves able to diversify into more rapidly expanding types of production. Further research is needed into this whole question.

11. Substantial changes in fact occurred during the 'fifties in the structure of manufacturing employment in the North West. The influence of declining sections of manufacturing on the region's economy has become a good deal weaker. New firms which settled in the region between 1953 and 1963 are now providing about 50,000 jobs in a wide range of industries, most of them with good growth prospects. In particular, the North West has become a major centre of the motor industry and there are signs that this has begun to stimulate the development of component suppliers in the region.

12. But although the North West's manufacturing base now seems to be sounder than it was ten years ago, by no means all its structural disadvantages have yet disappeared. Employment in manufacturing in the region will probably continue for some time to grow more slowly than in Britain generally, and may even decline further.

PRIMARY INDUSTRIES

13. The primary industries—chiefly agriculture and coal mining—no longer provide a very significant proportion of the North West's total employment. By increasing their productivity, they have reduced their labour forces very rapidly in recent years and this process of contraction seems likely to continue. But the loss of jobs to the region in this section of its economy will be fairly small in total.

SERVICE INDUSTRIES

14. While employment has been declining both in manufacturing and the primary sector in the North West, nearly 140,000 more people had jobs in construction and the service industries in the region in 1963 than ten years earlier. By 1963, the service sector was providing 52 per cent of the region's total employment, compared with 56 per cent nationally. But even in construction and services, employment grew more slowly in the North West than nationally between 1953

and 1963—by just over 10 per cent, as against 15 per cent.

15. Again, part at least of the explanation for this slower rate of growth lies in the fact that the North West suffered from structural disadvantages in the service sector. In Great Britain as a whole, transport and communications was the only service group where the size of the labour force declined between 1953 and 1963: it was also the only form of service employment which was relatively more important in the North West than nationally. However, none of the expanding service industries grew so rapidly in the region as nationally over the decade, although there were some signs of an improvement after 1959. Further detailed study is needed before the prospects for future employment growth in services (especially office jobs) can be properly assessed, but there seems to be no reason to suppose that the number of people employed in this sector of the region's economy will not continue to increase steadily, in line with national and international trends.

EMPLOYMENT TRENDS WITHIN THE REGION

16. Within the region, the pattern of employment growth and decline in the post-war period has been broadly similar to the pattern of population change. Employment has increased most rapidly in the coastal areas of Lancaster/Morecambe, Southport/Ormskirk and especially the Fylde, but in absolute terms the numbers of workers in these three sub-regions remain fairly small. Merseyside has also had growth at a rate well above three times the regional average, but this has been insufficient to match the natural increase in the area's working population and there has been substantial outward migration and persistently high unemployment. Moreover, much of the increase in employment which has taken place on Merseyside has resulted from new projects carried out in the area by firms from other parts of the country.

17. Employment in a large part of the region, mainly to the north and east of Manchester, has been much affected by the decline of the cotton industry. But although the number of jobs available in this area actually decreased between 1953 and 1963, serious unemployment was not a persistent problem, since the size of the working population has also contracted. In North East Lancashire the loss of jobs over the decade was

as high as 10 per cent and even in 1963 the textile industry still provided almost 30 per cent of its remaining employment.

18. In the central and southern part of the region, including much of Cheshire, Wigan, Warrington, St. Helens and the southern half of the Manchester conurbation, employment increased moderately between 1953 and 1963. But in Furness there was little or no employment growth in this period and the area remains highly dependent on Vickers' shipyard and engineering works in Barrow.

PRODUCTIVITY AND INCOMES

19. There is some evidence that output per head in the North West is slightly below the national average, but it appears to have been increasing as rapidly as in Britain generally during the 1950's. Individual incomes and earnings in the region also seem on average to be rather lower than in the country as a whole.

20. However, in the early 'fifties a much higher proportion of the total population was at work in the North West than nationally, and family incomes seem to have been slightly higher than the national average. Over the past decade employment opportunities for women in particular have not expanded as rapidly in the region as in Britain generally, largely because of the contraction of the cotton industry which affected female employment much more severely than male employment. Consequently, although activity rates for both men and women remain higher than the national average, the North West's relative position in terms of household incomes has deteriorated. The average money income of families in the North West now appears to be a little below the level in the country as a whole, but there are few signs of any sluggishness in the growth of expenditure in the region.

EMPLOYMENT PROSPECTS

21. It is a slightly less precarious business to try to predict what increase can be expected to occur in the supply of labour in the North West over the years ahead, than to attempt a forecast of how rapidly employment opportunities and the demand for labour in the region are likely to expand. But both exercises cannot be other than highly speculative.

22. Provisional projections suggest that even if net outward migration comes to an end there is unlikely to be more than a small increase in the manpower resources available in the North West in the period up to 1971; but that towards the end of the 'seventies a more rapid increase would be likely. Renewed migration could even lead to a fall in the region's labour supply in the next few years and would considerably reduce the growth which would otherwise occur after 1971.

23. As for the demand for labour, if total employment continued to grow in the North West at the rate experienced in the period between 1959 and 1963, it is possible that sufficient extra jobs would be created to match virtually the whole of the natural increase in the region's labour supply up to 1971, but not enough to allow in addition for a reduction in unemployment. And in the 'seventies the natural increase in the region's labour force might again outstrip the growth in employment. If employment increased more slowly than this, for example at the rate experienced over the whole decade 1953-63, there would be a considerable shortfall of jobs in the North West even in the period up to 1971, unless there was net migration away from the region. Two other arithmetical projections of employment growth in the North West, based on rather more elaborate assumptions, yield widely different results; one suggests an increase of nearly 190,000 in the number of jobs available in the region in the period between 1963 and 1971, while the other indicates a loss of nearly 60,000 jobs in the region over the same period.

24. Purely arithmetical calculations of this kind need to be supplemented by detailed knowledge of industrial prospects in the North West and it may be desirable to carry out extensive consultations with firms in the region to discover more about their plans for the future. But since there have been signs in recent years that the balance in the region's economy between expanding and declining sectors has been gradually moving in favour of faster overall growth, there is little reason to suppose that over the North West as a whole the increase in the demand for labour in the years immediately ahead will fall short of the supply, unless some serious and unforeseen setback occurs. In some parts of the region, especially Merseyside, continued efforts will probably be required to try to ensure that

full use is made of the available labour resources; but in other areas increasing labour scarcity may arise.

TRANSPORT

25. The North West generally has derived considerable benefit from major transport improvement schemes which have been carried out in recent years. In particular, the M6 motorway now runs through the whole length of the region; the electrification of the main railway line to Birmingham and London is nearing completion; and substantial sums have been invested in providing Manchester and Liverpool with first-class airport facilities. There are still some remaining deficiencies in the region's links with the rest of Britain, but most of these will eventually be removed by the completion of further schemes included in the Ministry of Transport's announced programmes. The Lancashire-Yorkshire motorway, on which advance works are expected to begin within the next two years, is likely to have an especially important influence on the future development of the North West. It will pass through the northern part of the Manchester conurbation, close to a number of the old "cotton" towns, and for the first time will bring the two heavily populated areas of the North West and the industrial West Riding within easy reach of one another by road, thus creating an entirely new east-west axis in the national road network. The new towns which are to be created in the North West will all be well placed in relation to the existing and proposed motorway system and should have excellent road communications right from their inception.

26. Much the most difficult and expensive task in the transport field which remains to be tackled in the North West is that of easing congestion within the two conurbations. Whilst more urban roads will be needed, it is clear that the overall transport needs of the conurbations can only be met by an integrated system of roads and public transport. Such a system must be planned for each conurbation as a whole and as an integral part of planning for land use. Techniques are available for this to be done on a scientific basis and they are being applied in the land use/transport studies now being started in both conurbations. These studies are designed

to lead to the adoption of plans for the development of a comprehensive transport system for each conurbation.

27. As far as Merseyside is concerned special attention will have to be given to Liverpool's position as one of Britain's two leading ports for export cargoes. The efficiency of the port is likely to continue to be of great significance to the national economy. For the immediate future it appears that priority needs to be given to measures which will reduce delays within the port area itself, but it will be important in the longer-term to ensure that port traffic is not affected by congestion on roads leading through the conurbation. Since Merseyside's status as an industrial centre is also likely to increase, further improvements may well become necessary in its road links with the national motorway network.

28. Indeed, it is clear that the need for essential industrial and commercial traffic to flow freely between the main centres of industry and population throughout the whole country must continue to be the first consideration in allocating the resources available for road improvements. But there is, in addition, a growing problem of weekend and holiday traffic which already puts a heavy burden on the transport network of the North West. The proximity to the large centres of population in the region of some of the country's most attractive holiday and recreational areas, such as the Lake District, Snowdonia, the Fylde Coast and the Peak District, is a real benefit to those living and working in these often depressing towns. The well-established trend towards increased leisure, coupled with a rapidly increasing number of car owners, will enable more and more people to enjoy their natural desire to get away from the towns into the country or to the sea. This desire can all too easily become frustrated by difficulties of access due to congested roads, and to inadequate foresight in planning for a motorised age within the holiday areas themselves. Insofar as planning should provide for better living conditions for people, both in their work and their leisure, as well as for economic expansion, further provision will have to be made for their recreational traffic, and it must therefore become a factor in determining how resources for roads should be allocated.

29. The North West's principal airports will continue to be those at Manchester and Liverpool,

at the very least until the mid-1980's. Indeed, they may not reach their full capacities until even later and there should be no need for some time to come to consider the development of a third major airport in the region. Manchester and Liverpool airports are not ideally situated in relation to the region as a whole, but given the expenditure already incurred and planned for them it would be uneconomic to replace them by developing the former military airfield at Burtonwood. In any case they will become more easily accessible as the region's road system is improved and there may also be scope for the growth of feeder services from other parts of the region. Blackpool airport already provides useful services and has sufficient capacity to provide for growth in traffic demand in the northern part of the region.

HOUSING NEEDS

30. Even if net outward migration from the North West continues, the housing needs of the region in the period up to 1981 will be enormous—above all because a vast programme of slum clearance has still to be carried through. A revised estimate made locally shows that there are roughly 440,000 dwellings in the North West which are already unfit to be lived in or will become so by 1981—about one in every five in the region. In some areas, every other house may need to be replaced. A more generous standard of minimum needs would bring the number of obsolescent houses up to well over half a million, or about a quarter of the region's present stock. Though some of the other older industrial areas of the country face slum problems which are relatively as bad as this, in terms of sheer numbers the position in the North West is without parallel, except perhaps in the West Riding. Of the 2½ million poorest dwellings in the country, about 20 per cent are in the North West.

31. About three-quarters of the region's slums appear to be in the Mersey division and both conurbations have tremendous clearance problems. However, there is some evidence that the slum problems of a number of smaller towns in the region, especially in North East Lancashire, the Wigan-Warrington area and the old "cotton" belt to the north of Manchester, may be more serious than is locally estimated and in relative terms may be even worse than those in the inner areas of the two conurbations.

32. Existing housing shortages in the North West are also heavily concentrated in the Mersey division and are particularly serious on Merseyside. Altogether it is estimated that about 81,000 additional dwellings would be needed in the region to clear the present shortages.

33. The number of additional dwellings required in the North West in the period up to 1981 to meet the increase in the number of households resulting from population growth is likely to be about 280,000 if net outward migration comes to an end. If migration continues at recent rates, about 230,000 extra houses would probably be needed.

URBAN RENEWAL

34. The problem of outworn housing in the North West is part of a wider problem of obsolescence and dereliction in the older towns of the region. Most of the larger town centres in the North West are in need of drastic renewal and over one hundred comprehensive schemes for redevelopment are in progress or in preparation, about three-quarters of them for centres in or around the two conurbations. Renewal on this scale would add considerably to the future demands which will be made on the construction industry in the region. There is also a risk that it might lead to a wasteful use of resources. The provision of new shopping facilities is usually one of the key elements in any redevelopment scheme, since other town centre facilities which are important to the life of the community (for example, hotels, theatres and new open spaces) do not normally offer the prospect of a high enough economic return to be able to stand on their own. But the North West already has more shops per head of population than any other part of Britain and the average value of each shop's retail sales is lower than in any other region. It would therefore be valuable if further research could be put in hand, along lines already explored in a study by Manchester University, with the aim of showing what scale of new shopping facilities it would be reasonable to provide in the region and what the future catchment areas of different centres could be expected to be. The results of such research could provide valuable background guidance for those who have to reach decisions on renewal schemes, without being used as a basis for any attempt to

suppress healthy competition between different shopping centres.

DERELICT LAND

35. Despite the vigorous efforts of some local authorities, particularly Lancashire County Council, large areas of land in the North West remain in a derelict state and are unfit for further use without special treatment. Dereliction is an important element in the general impression of untidiness and neglect which strikes visitors to the region. The wastage of land seems especially tragic in the densely-populated parts of the region, where space for all kinds of uses is at a premium.

36. At present no concerted regional campaign is being mounted to deal with this problem. Partly, no doubt, this is because Exchequer finance for treating derelict land is available only in the cases of national parks, areas of outstanding natural beauty and development districts, and even schemes in development districts only qualify for a grant if it can be shown that they will directly contribute towards an improvement in employment prospects. While assistance from the National Exchequer for the improvement of the region's physical environment must be mainly devoted to the major problem of housing, there is no doubt that the problem of derelict land is an urgent and serious one.

37. The lack of faster progress in the North West seems partly to be due to a lack of a sense of urgency on the part of some local authorities. Since the efforts of an energetic authority can largely be nullified if its neighbours take no action, there seems much to be said for regarding the treatment of derelict land as a regional problem. There may be scope for the local authorities in the worst-affected areas of the

region to agree on a programme of treatment which would be spread over a period of years, would aim to deal with the worst cases first and would be financed by contributions from all the authorities taking part. The general appearance of the areas affected can often be improved by comparatively modest expenditure. Given the shortage of technically qualified people available for the job this approach (which has been successfully adopted by the authorities bordering the river Tyne) might produce quicker and more beneficial results for the region as a whole than could be achieved in any other way.

THE GENERAL ENVIRONMENT

38. In addition to the reclamation of derelict land, much more could also be done in undramatic and inexpensive ways to improve the general appearance of the towns in the North West. The Civic Trust for the North West and its affiliated societies have shown what can be done in a number of specific cases. And again some local authorities have extremely good records, whereas others do not. The outsider, while making every allowance for the undoubtedly serious handicaps under which many of the older towns labour, cannot help wondering on occasion whether they try to make the most of what they have.

39. It is also disappointing that progress in dealing with air pollution in the North West has slowed down in the last year or so. Given the climatic disadvantages from which much of the region suffers smoke control can play a particularly valuable part in improving general living conditions. There is therefore every reason why local authorities should press ahead with action under the Clean Air Act as rapidly as possible.

16 The future of the Region

The purpose of this report is not to make recommendations for policy, but to present and analyse the basic data from which future plans for the region must start. This chapter discusses some of the main factors which will have to be taken into account in drawing up such plans.

HOUSING

2. The need to improve its housing stock is the region's dominant problem. There is probably no other comparable part of Britain where the influence of bad housing is so all-pervasive and depressing and affects so many people. The first—and lasting—impression of a visitor to the region is one of astonishment that the housing conditions he sees around him can still exist in a relatively prosperous part of an advanced industrial country.

3. Slum clearance will be by far the biggest element in the region's housing needs over the next fifteen years or so and the task of dealing with the slums will fall almost exclusively to the local authorities. The scale of this task is large in relation to the local authorities' current housing output and the main emphasis for the future must be on the public sector building programme.

4. Recommendations about the rate at which housing should be improved in the region are outside the scope of this report. The decision taken must depend on how much of its resources the country can afford to devote to housing and what share of this will be needed for other regions. Looked at purely from the standpoint of the North West there is a clear need for a big increase over present building rates. To break the back of the problem in ten years would need a formidable effort, but measured against the

scale of post-war reconstruction in certain parts of Europe it should not be impossible to attain. It would, however, require not only substantial additional resources, but also radical changes in the structure and methods of the construction industries and in the organisation and management of public authority building programmes. For whatever the financial or physical resources made available, these could well prove serious limiting factors on the rate at which the problem could be solved.

5. The scale and nature of the region's housing problem are such that it should offer a uniquely favourable opportunity for the use of non-traditional building techniques on a very large scale. Some local authorities in the region—most notably Manchester and Liverpool City Councils—are tackling their housing problems energetically and there has been encouraging progress in establishing consortia of local authorities for housing purposes. But the job to be done in the North West is so large and complicated that if a decision in principle were taken to step up the rate of slum-clearance it would seem desirable to take a fresh and thorough look at the organisational problems involved and see what administrative and technical system would be best-fitted to achieve the desired result. Without some such examination there is a real risk that scarce resources—of money, materials and technical skills—might be misdirected on a large scale to the detriment of both the region and the country as a whole. The current re-examination of local government structure in the region by the Local Government Commission may have an important bearing on the ability of housing authorities to deal with the problems they have to face.

6. However, whatever the scale of increase in building rates which may prove practicable,

techniques of conservation and improvement have a vital part to play in extending the life of the many older dwellings in the region which are deficient but capable of satisfactory rehabilitation. The scale of the real slum problem is such that the region cannot afford to be wasteful of its existing stock of dwellings. If the life of many of them can be extended, this will help to relieve the enormous burden which will fall upon the construction industry in the next ten or fifteen years.

INDUSTRIAL DEVELOPMENT

7. In recent years the North West has shown a good deal of resilience in adapting its economic structure to changes in technology and market demand and in the fortunes of its staple industries. For the future the main need is to keep up the momentum of adaptation and to hasten the transfer of resources to those forms of economic activity which have the best prospects for future growth. The structural weaknesses in the region's economy have been reduced over the last ten years but some still remain, in both the manufacturing and service sectors, and unless these are overcome the growth in the region's prosperity could slow down.

8. The main impetus for this must come from those who own and direct existing firms in the region. The North West is fortunate in having a large and varied industrial base from which to diversify its activities. There is much less need for this region than for some of the other old industrial areas of Britain to look to the Government to divert activity from other parts of the country in order to provide its future employment growth. At the same time, the improvement in the region's structure does not yet seem so firmly established that it should in general be considered as a potential source of employment growth for areas of high unemployment in other regions.

9. Indeed, some help in attracting industry from outside the region will still be required. A considerable proportion of the future increase in the region's labour supply will arise on Merseyside; where, despite outward migration and substantial growth in employment, there has nonetheless been persistent unemployment for many years. Since the labour force nationally will be increasing only slowly in the next decade, it will be more than ever desirable that the manpower resources

available on Merseyside should be fully engaged in productive employment. But the analysis made in this report indicates that it is unlikely that employment growth generated within the region will be sufficient to achieve this. Experience in recent years has shown that the basic facilities on Merseyside itself—especially those of the port—and in the area round it are attractive to industry. Given a continuation of present efforts to encourage industry from other parts of the country to establish new units which will employ Merseyside labour there is no need for pessimism about the prospects for achieving a permanent solution to the area's unemployment problem.

10. In determining the area within which any special measures to encourage new industrial developments should be applied in future, consideration must be given to the increasing difficulty of finding suitable industrial sites within the present Merseyside development district, and to traffic conditions. Existing physical congestion might be seriously aggravated by the siting of new industrial projects in some parts of Merseyside, especially in the centre of the conurbation. There are signs that Merseyside workers are gradually becoming prepared to travel longer distances to work; many already find their jobs in Ellesmere Port which is outside the development district's boundaries. And as the populations of Skelmersdale and Runcorn new towns begin to build up, the area within which Merseyside labour will be seeking employment will become wider still.

REGIONAL STRATEGY

11. In the period up to 1981, shortage of land is likely to be almost entirely a problem affecting the Manchester and Merseyside conurbations. It will have two main aspects—the need to provide for planned overspill schemes which will largely be required for slum clearance purposes, and the need to provide land for people who move out of the conurbations on their own initiative and want to buy their homes and commute to work. Some important steps have already been taken to meet the conurbations' needs, including decisions to carry out four major schemes under the New Towns Act as well as a number of smaller developments. By and large this provision should be adequate to meet the demands of both conurbations at least until the

mid-1970's. Indeed, if past migration trends continue no further major public overspill schemes are likely to be needed for the Manchester conurbation until after 1981, although a modest amount of additional land for private enterprise housing may be required earlier, when the favoured southern suburbs reach the limit of the population they can accommodate. As for Merseyside, shortage of land both for public authority and private enterprise building is likely to become a major problem again in the late 'seventies, even if migration goes on at the same rate as in recent years. But if migration came to an end, both conurbations would run out of land sooner and would again be faced with enormous overspill problems by about the middle of the 'seventies. And after 1981, in any case, both will continue to generate a demand for more land.

12. Meanwhile, however, although individual areas have urgent problems, no key decisions have to be taken in the short-term. There is time for a long-term planning strategy for the region to be evolved which will provide a frame of reference for future decisions on specific cases. Such a strategy seems to be more than ordinarily necessary in the case of the North West because of the complexity of its overspill problems, the degree of urbanisation which already exists in the two conurbations and the industrial belt around and between them, and the large number of different local planning authorities affected. There is probably more risk of piecemeal decisions leading to poor overall development in the North West than in most other parts of the country.

13. Future strategy will need to be settled in the context of national policies affecting such matters as the distribution of industry, the housing programme and the use of land for agriculture and other purposes. From the standpoint of the region the main need is to evolve a planning strategy which will, so far as possible, support the twin objectives of providing better living conditions for the people of the region and stimulating faster economic growth. Policies for land use, urban renewal, transport, housing and industrial development must keep in step and every effort must be made to ensure that they complement and support each other throughout the region. Physical planning policy in the North West should take account of the prospects of securing sufficient industrial employment and

should recognise the desirability of encouraging industry to site new plants in locations which are likely to be favourable to future growth. Distribution of industry policy should take account of the complications involved in carrying through large overspill operations successfully. And large new developments should, wherever possible, be so placed as to take full advantage of the massive investment which is being made in improving the region's transport network. (In particular, it should be borne in mind that the Lancashire-Yorkshire motorway will in the 1970's introduce a strong new east-west dimension into the region's road network which has up to now been predominantly based on a North-South axis.)

14. It is important that, wherever possible, the heavy investment expenditure which will be required in order to meet future overspill needs in the North West should at the same time contribute towards the more rapid renewal of some of the region's older towns. The town development scheme at Widnes and the proposal for the expansion of Warrington to take overspill from the Manchester conurbation are examples of this approach. However, to graft large-scale expansion on to an existing town is a very complex and expensive planning operation, and many older towns in the North West would not be suitable for further expansion of any size, either because there is insufficient land in their immediate vicinity which could readily be developed or because they are in areas which are inherently rather unattractive as places to live in.

15. The recent decision to create a large new town in the Leyland/Chorley area will take advantage of the excellent opportunity which this location offers (particularly in view of the strategic position it will occupy in the motorway network) for a development which will provide attractive living conditions for a big incoming population and which at the same time will be well placed to stimulate faster economic growth in a part of Northern Lancashire where a great deal of renewal and regeneration is needed. There appears to be room in the Leyland/Chorley area to accommodate a population increase of something over 150,000; and if the new development is planned in relation to the renewal of existing towns like Preston and Blackburn as well as Leyland and Chorley themselves, the outcome could be a modern city complex with a population of about half a million. This would provide

a counterbalance to the two conurbations further south. The area as a whole already has a sizeable and varied economic base and the new town should prove very attractive to new projects since its communications, present and proposed, are exceptionally good. Both the M6 and the main London-Glasgow railway already pass through the Leyland/Chorley area, and by the early 1970's the Manchester-Preston motorway will have been completed and will provide rapid access also to the Lancashire-Yorkshire motorway.

16. However, if Leyland/Chorley and the other new town developments in the North West are to succeed, a careful watch will be required throughout the 'seventies to ensure that new employment opportunities become available in step with the rapid build-up in their populations. Several thousand new jobs a year will be required for Skelmersdale and Runcorn new towns at least until the late 1970's, while the Leyland/Chorley area's need for additional employment will be very large until well beyond 1980. Given these existing commitments, it hardly seems feasible to think for a good many years to come of building another new town at any considerable distance from the conurbations, where its population growth would have to be matched by the provision of jobs.

17. This is obviously not a matter on which it is possible to come to a firm conclusion so many years in advance. By the late 'seventies it might be possible to begin building a large new town in the South Cheshire or North Staffordshire areas, perhaps designed to draw population both from the North West and the Birmingham area and based on the expansion of Midlands industry, but this must depend partly on how regional planning for the West Midlands develops. Or the success of Leyland/Chorley might already be so assured by then that it would be reasonable to think of further development in the north of the region, for example a completely independent urban complex centred on Lancaster.

18. But at present it looks as if both public and private overspill needs in the North West for which provision has yet to be made in the period up to 1981 will have to be met by developments within daily travelling distance of existing industrial centres in the region. One possibility would be to push out into Northern Cheshire and develop settlements—either large or small—

which would at least initially be dormitory areas from which much of the working population would commute back into the conurbations to their jobs. Indeed, a good deal of private development has taken place there already, and plans are under way for settling planned overspill from Manchester in various districts within commuting distance of the city. But there would be great disadvantages in accepting further extensive development in North Cheshire. Much of the countryside is very attractive and quite apart from its high agricultural value it provides a valuable recreational area for the populations of the industrial towns.

19. An alternative would be to try to encourage people to move back into the towns to the north and east of Manchester which have been steadily losing population for a number of years. Some of these towns have recently been showing signs of economic revival and may suffer from chronic labour shortages if population losses continue. However, it is doubtful whether they really offer scope for large scale overspill schemes or private development. Some towns immediately to the north of Manchester are already contributing towards the conurbation's housing needs and there is probably room for further small schemes on similar lines to be arranged between the local authorities in future. But some of these towns suffer from climatic and other disadvantages and the amount of suitable land available for further development is very limited. It would therefore not seem wise to plan for a substantial reversal of well-established trends for people to move elsewhere.

20. A further possibility depends very much on the outcome of the study which is at present being undertaken into the feasibility and probable cost of a new crossing of the Dee Estuary. If this study shows that such a crossing could be built at a reasonable cost, it might well be possible to carry out a major new development on the western side of the estuary which could initially depend on employment in Merseyside, but which would be well situated to attract new industrial development at a later stage. A solution of this kind would be extremely attractive, particularly since it might contribute towards the economic growth of North East Wales, as well as meeting the long-term needs of the North West.

21. A final possibility is that substantial further population growth might be accommodated

within the area between the two conurbations, roughly bounded by Skelmersdale and Wigan in the North and by Runcorn and the Manchester Ship Canal in the South. This might be done either by allowing some further peripheral spread of the two conurbations or by planned expansions of certain other towns in the area between them which lie near the line of the M6 and have shown that they can support successful industrial growth. A good deal of new development has already taken place in this area, and more is planned in the new town schemes for Runcorn and Warrington and the town development scheme at Widnes, in addition to the normal growth of other communities.

22. To go much beyond this and to plan for considerable further development would be very difficult. Such a course would require very heavy additional investment in the road and public transport network to keep traffic congestion within tolerable limits. Moreover, much of the remaining undeveloped land is fragmented and physically unsuitable for development as a result of the presence of peat and mining subsidence. And a large part of the remainder is highly productive land which it has been a major objective of planning policy since the war to keep in agricultural use. There would also be a clear conflict with one of the main aims of current green belt policy—to prevent the coalescence of large built-up areas.

23. Nevertheless, this approach would have some

important advantages. It would reinforce well-established trends in terms of population and employment growth, which have emerged in the earlier chapters of this report. The area between the two conurbations is particularly well-placed in relation to the national network of road, rail, sea and air transport and is clearly capable of sustaining large-scale industrial development. The fact that the area in question is already highly urbanised is not necessarily an argument for restricting its further development.

24. In any case, although developments in other parts of the region will accommodate a substantial share of its future population growth, it has to be recognised that for as far ahead as can be foreseen a large majority of the people of the North West will continue to live in the heavily urbanised area comprising the two conurbations and the belt between them. One of the main tasks of planning for the future of the North West will be to improve the environment of this area. To this end, it is essential that the whole area should be planned as a unity in a way which will knit the developments already under way or planned into a comprehensive pattern. Positive planning might create a new kind of city region—with a balanced employment structure and easy access to attractive countryside and coastal districts outside it—and so enable the North West to regain in the late twentieth century the same relative position in the country as it enjoyed a hundred years ago.

Statistical Appendix

This Appendix brings together some of the detailed material which forms the background to the Study. A number of the tables are related to the figures illustrating the text. The first section contains the definitions of the economic planning regions of the country and of the sub-divisions of the North West economic planning region used in this Study; the second deals with population; the third with employment and the fourth with housing.

DEFINITION OF AREAS

2. For the purposes of economic planning eight regions have been established covering all areas of Great Britain outside South East England. The Study deals with the North West economic planning region which, in this connection, has been further sub-divided. These tables give the composition, and the estimated civilian populations, of each of these divisions in 1964.
3. *Table 1* gives the composition of the economic planning regions of Great Britain (see Figure 1). No decision has yet been taken on economic planning machinery for the South East.
4. *Table 2* shows the sub-divisions of the North West Region used in the Study, and *Tables 3, 4* and *5* give the composition of them (see Figure 6). In these and subsequent tables the divisions, sub-divisions and sub-regions of the North West are arranged in descending order of population size.
5. The main divisions of the North West are the Mersey division which embraces the conurbations of South East Lancashire and Merseyside and contains three quarters of the Region's population; and North Lancashire and South Cheshire.
6. The Mersey division has been broken down to three sub-divisions, and further, to fourteen sub-regions; North Lancashire to three sub-divisions and eight sub-regions. The composition of these is given in *Tables 3* and *4* respectively. *Table 5* gives the composition of the four sub-regions of South Cheshire.

POPULATION STATISTICS

7. The chief source of population statistics is the Census, which has been held every 10 years (with the exception of 1941) since 1801. The Registrar General's published estimates of *home population*, based on the Census, include, however, members of the British, Commonwealth, and foreign forces in the area, and it is more appropriate for economic planning purposes to use his specially prepared mid-year estimates of *civilian population*.
8. *Table 6* shows the distribution of population in 1951 and 1964 and the changes occurring between those dates, principally by natural change and migration, for the economic planning regions of Great Britain. *Tables 7, 8* and *9* deal, respectively, with the periods 1951-56, 1956-61 and 1961-64. The changes by migration over these three periods are expressed in terms of mean annual rates in *Table 10* (see Figures 5, 7 and 8).
9. Population changes 1951-64 within the divisions, sub-divisions and sub-regions of the North West economic planning region are similarly dealt with in *Tables 11* to *15* (see Figures 9, 10 and 11).
10. As the estimates used are for civilian population only, allowance has had to be made for reduction in the size of the armed forces over the period. In the absence of information on the destinations of demobilised personnel, the net gain to the civilian population of the country as a whole from this source has been allocated to areas *pro rata* to their populations. The

estimates of net migration have been calculated by deducting from the total population change the estimates of natural change and the allowances made for gains from the armed forces.

11. *Table 16* shows the growth of the population of the North West Region since 1801, and how the area's share of the total population of Great Britain has varied (see *Figure 4*).

12. *Table 17* provides an analysis of a cross section of the 1961 populations of the North-West and of England and Wales according to birthplace as given in the Census. The increases of population which occurred in these areas over the period 1951-61 are similarly analysed.

EMPLOYMENT STATISTICS

13. The methods by which Ministry of Labour compile employment statistics do not readily enable figures to be produced for areas other than Ministry of Labour regions. The estimates used in this Study relate throughout to Ministry of Labour regions as constituted in 1961 (see *Figure 12*): these are broadly equivalent to regions as used for the 1961 Census, but they are made up of Ministry of Labour local office areas whose boundaries do not generally correspond with those of local authority areas. In some parts of the country these regions differ materially from the economic planning regions, but in the case of the North West the Ministry of Labour North Western region differs only marginally from the North West economic planning region.

14. The estimated numbers of employees in employment are derived from samples of national insurance cards exchanged during June, July and August, and so are subject to sampling and estimation errors which can be substantial. In Industrial Orders where numbers are small, the errors can be proportionately high. Part-time and occasional workers, as well as school children and students who have jobs, are included as whole units and the estimates also include some persons not in employment at mid-year, who were not registered as unemployed in June, but who exchanged their national insurance cards in June, July and August. For Great Britain as a whole, these estimates account for 90 per cent of the total working population (i.e. people of working age who either work for pay or gain or who register themselves as unem-

ployed). The balance is made up of employers, persons working on their own account, members of Her Majesty's Forces and Women's Services, and the unemployed.

15. In some tables the total number of employed is analysed by the 24 Industrial Orders defined in the Standard Industrial Classification issued by the Central Statistical Office in 1958. This classification is based on industries and not on occupations, and administrative, technical, clerical and ancillary staff are included in the figures of employment for the industry concerned. The Ministry of Labour's data for years prior to 1959 is based on the 1948 version of the Standard Industrial Classification. For the purposes of the Study Ministry of Labour have adjusted this as far as is possible to produce estimates for 1953 and for the period 1953-59 which are reasonably comparable with those available for 1959 and later years.

16. The regional estimates do not take full account of cases where a person is employed in a different region from that in which his national insurance card is exchanged. Before 1955, no adjustments at all were made to regional estimates on this account, but since that date, allowance has been made for the greater proportion of these cases, and in order to provide reasonably comparable figures for years before 1955, approximate retrospective adjustments have been made to the figures.

17. Ministry of Labour's estimates of numbers employed in each of their regions of Great Britain at mid-year for the years 1953-63 are given in *Tables 18, 19* and *20*. *Table 19* deals with total employed; *Table 19* and *Table 20* cover males and females respectively (see *Figure 13*).

18. In *Table 21* the percentage changes in estimated numbers employed which occurred over the periods 1953-59 and 1959-63 for each Ministry of Labour region are analysed in terms of four broad categories—primary, manufacturing, construction and service industries. The composition of these categories, in terms of Industrial Orders, is seen in *Table 22 et seq.*

19. *Table 22* gives the estimated total numbers employed in each Industrial Order in Ministry of Labour North Western region for the years 1953, 1959 and 1963. Equivalent estimates are given for Great Britain as a whole. *Table 23* and *Table 24* cover males and females respectively.

20. The percentage changes which occurred over

the periods 1953-59 and 1959-63 in the numbers employed by Industrial Orders in the North Western region and in Great Britain are given in *Table 25*. Similar estimates are given for males in *Table 26* and for females in *Table 27*. The same information expressed in terms of mean annual compound rates of change is given in *Tables 28, 29 and 30*. These percentage changes can indicate the order of magnitude of the change only in a very broad way. They are given to one decimal place for industries in which the number employed in the North West exceeds 10,000, but they should be interpreted with the utmost caution.

21. The "activity rate" i.e. the proportion of the home population constituted by employees (employed and unemployed) for each Ministry of Labour region for the years 1953-63 is given in *Table 31*. "Activity rates" for males, including rates applicable to the male population aged 65 and over, are given in *Table 32*. The rates for females, including those applicable to the female population aged 60 and over, are given in *Table 33*. As these "activity rates" are calculated on Ministry of Labour estimates of employees they do not cover employers and self-employed.

22. *Table 34* provides a comparison of unemployment rates for total, male and female employees in the North Western region and for Great Britain as a whole for the years 1953-63 (see *Figure 14*).

23. *Table 35* analyses the estimated movement of national insurance cards of employees between the North West Region and other Ministry of Labour Regions over the period 1953-1963. *Table 35* provides estimates of the total inward and outward movements involved over the period for each of the Ministry of Labour Regions. For a number of reasons, the movement of cards is an imperfect reflection of migration. Only employees who have insurance cards in each of the two years being compared can be included in the estimates. Hence, migrants into Great Britain would not appear in the statistics in the year in which they entered the country: neither would those persons who moved to another part of the country to take their first job, nor those who moved on retiring from work. Established civil servants (who do not have cards) would also be excluded. In addition, an insurance card may be exchanged in a different region in successive years, though the employee continues to work

in the same locality. Alternatively, a person who merely transfers his job across a regional boundary without moving his home can be included as a migrant.

24. For Study purposes Ministry of Labour have prepared some approximate figures of total numbers employed in 1953 and 1963 for twelve sub-divisions of their North Western region. These sub-divisions (see *Figure 17*) are aggregations of Ministry of Labour local office areas and do not coincide with the sub-divisions or sub-regions of the North West economic planning region defined in *Tables 2-5*. The Ministry of Labour estimates are given in *Table 37* (see *Figure 18*). Although all the percentage changes given in the table for 1953-63 and 1959-63 are calculated, for the sake of uniformity, to one decimal place their accuracy cannot be relied upon to this extent for areas such as Lancaster-Morecambe, Southport-Ormskirk, Furness and High Peak where the numbers employed are relatively small.

25. *Table 38* gives the distribution of shops in relation to population and estimated sales per establishment and per person engaged. The information is derived from the Census of Distribution 1961 and is for standard regions of Great Britain.

HOUSING STATISTICS

26. *Table 39* provides some indicators to the age and condition of the Region's stock of dwellings. It gives locally derived estimates of the number of dwellings which, whether by reason of unfitness or a need to make way for re-development, will be ripe for demolition during the period 1964-81. These estimates, in effect, constitute opinions of what ought to be done: they are not the product of an actual clearance programme. Set alongside these estimates are various items of readily available data which are pointers to the scale of obsolescence. These cover the number of dwellings enumerated at the 1861 and 1881 Censuses, viz. dwellings which, if still in existence would be 100 years old now or by 1981; dwellings with no fixed bath and dwellings with a low rateable value.

27. *Table 40* identifies those local authority areas in the North West where more than 3.5 per cent of the population in private households were living in seriously over-crowded conditions

represented by an occupancy rate of more than 1½ persons per room at the time of the 1961 Census. The areas are listed in descending order of the proportion of the population in these conditions.

28. *Table 41* itemises by sub-divisions the diagnosis of the region's housing problem developed in Chapter 9.

29. *Table 42* is an explanatory note of the method used in the Study for calculating future increases in households and of the assumptions made regarding planned overspill.

NOTE: Figures have been rounded to the nearest final digit and, in some tables, there may be a slight discrepancy between the sum of the constituent items and the total as shown.

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Table 1 Economic planning regions of Great Britain

<i>Composition of economic planning regions</i>	<i>1964 civilian population (thousands)</i>	<i>Composition of economic planning regions</i>	<i>1964 civilian population (thousands)</i>
(1)	(2)	(1)	(2)
All areas	52,319	East Midlands Region <i>continued</i>	
Scotland	5,180	Rutland	24
Northern Region	3,287	West Midland Region	4,913
Cumberland	296	Herefordshire	135
Durham	1,532	Shropshire	307
Northumberland	826	Staffordshire	1,796
Westmorland	67	Warwickshire	2,079
Yorkshire, North Riding	567	Worcestershire	596
Yorkshire and Humberside Region	4,672	South West Region	3,584
Lincolnshire: Parts of Lindsey excluding Lincoln C.B.	438	Cornwall	341
Yorkshire, East Riding	536	Devon	832
Yorkshire, West Riding	3,698	Dorset	322
North West Region	6,662	Gloucestershire	1,029
Cheshire	1,430	Somerset	619
Derbyshire (part) (<i>see Note 1</i>)	70	Wiltshire	441
Lancashire	5,162	South East England (<i>see Note 2</i>)	18,129
Wales and Monmouthshire	2,668	Bedfordshire	406
Anglesey	52	Berkshire	548
Breconshire	54	Buckinghamshire	523
Caernarvonshire	120	Cambridgeshire	198
Cardiganshire	53	Isle of Ely	90
Carmarthenshire	167	Essex	2,362
Denbighshire	177	Hampshire	1,388
Flintshire	154	Hertfordshire	892
Glamorgan	1,242	Huntingdonshire	85
Merionethshire	38	Kent	1,775
Monmouthshire	456	London	3,177
Montgomeryshire	44	Middlesex	2,237
Pembrokeshire	93	Norfolk	566
Radnorshire	18	Oxfordshire	326
East Midland Region	3,226	Peterborough, Soke of	78
Derbyshire (part) (<i>see Note 1</i>)	831	Suffolk, East	354
Leicestershire	701	Suffolk, West	132
Lincolnshire: Parts of Holland	105	Surrey	1,768
Lincolnshire: Parts of Kesteven and Lincoln C.B.	217	Sussex, East	692
Northamptonshire	416	Sussex, West	435
Nottinghamshire	932	Isle of Wight	95

NOTES

1. The area of Derbyshire falling within the North-West Region comprises Buxton M.B., Glossop M.B., New Mills U.D., Whaley Bridge U.D. and Chapel en le Frith R.D.
2. At time of going to press, no decision has yet been taken on economic planning machinery for the South East

Table 2 Divisions of the North West Region

<i>Area</i>	<i>1964 civilian population (thousands)</i>
(1)	(2)
All areas	6,662
Mersey (<i>see Table 3</i>)	4,981
South East Lancashire	2,660
Merseyside	1,697
Warrington-Wigan area	624
North Lancashire (<i>see Table 4</i>)	1,279
Ribble	764
Lancaster-Fylde	410
Furness	105
South Cheshire (<i>see Table 5</i>)	401

Table 3 Mersey

<i>Constituent areas</i>	<i>1964 civilian population (thousands)</i>	<i>Constituent areas</i>	<i>1964 civilian population (thousands)</i>
(1)	(2)	(1)	(2)
All areas	4,981·5	Altrincham sub-region	184·2
South East Lancashire	2,660·3	Alderley Edge U.D.	3·7
Manchester sub-region	1,226·2	Altrincham M.B.	41·2
Manchester C.B.	644·4	Bowden U.D.	4·7
Salford C.B.	150·3	Hale U.D.	16·1
Audenshaw U.D.	11·9	Knutsford U.D.	10·0
Denton U.D.	32·8	Lymm U.D.	8·0
Droylsden U.D.	25·5	Sale M.B.	53·4
Eccles M.B.	42·5	Wilmslow U.D.	26·7
Failsworth U.D.	21·5	Bucklow R.D.	20·5
Irlam U.D.	16·3	Bury sub-region	152·4
Middleton M.B.	58·4	Bury C.B.	62·1
Prestwich M.B.	34·0	Heywood M.B.	27·9
Stretford M.B.	60·3	Radcliffe M.B.	26·9
Swinton and Pendlebury M.B.	41·1	Ramsbottom U.D.	14·0
Urmston U.D.	43·1	Tottington U.D.	6·1
Worsley U.D.	44·1	Whitefield U.D.	15·5
Stockport sub-region	323·8	Rochdale sub-region	116·6
Stockport C.B.	142·5	Rochdale C.B.	86·2
Bredbury and Romiley U.D.	24·3	Littleborough U.D.	10·8
Cheadle and Gatley U.D.	51·6	Milnrow U.D.	8·4
Hazel Grove and Bramhall U.D.	32·3	Wardle U.D.	4·2
Hyde M.B.	35·4	Whitworth U.D.	7·0
Marple U.D.	19·9	Leigh sub-region	83·4
New Mills U.D.	8·7	Atherton U.D.	19·5
Whaley Bridge U.D.	5·3	Leigh M.B.	46·4
Disley R.D.	3·8	Tyldesley U.D.	17·5
Oldham sub-region	237·5	Stalybridge sub-region	64·0
Oldham C.B.	112·7	Dukinfield M.B.	17·3
Ashton-under-Lyne M.B.	49·3	Glossop M.B.	18·7
Chadderton U.D.	32·6	Longdendale U.D.	4·9
Crompton U.D.	14·0	Stalybridge M.B.	21·7
Lees U.D.	3·7	Tintwistle R.D.	1·5
Mossley M.B.	9·7	High Peak sub-region	37·6
Royton U.D.	15·6	Buxton M.B.	19·4
Bolton sub-region	234·6	Chapel en le Frith R.D.	18·2
Bolton C.B.	159·2		
Farnworth M.B.	26·8		
Horwich U.D.	16·1		
Kearsley U.D.	10·5		
Little Lever U.D.	5·6		
Turton U.D.	16·4		

Table 3 Mersey continued

<i>Constituent areas</i>	<i>1964 civilian population (thousands)</i>	<i>Constituent areas</i>	<i>1964 civilian population (thousands)</i>
(1)	(2)	(1)	(2)
Merseyside	1,696·8	Warrington-Wigan area	624·4
North Merseyside sub-region	1,277·1	Wigan sub-region	390·4
Bootle C.B.	83·0	St. Helens C.B.	105·3
Liverpool C.B.	728·9	Wigan C.B.	77·2
Southport C.B.	80·1	Abram U.D.	6·1
Crosby M.B.	59·9	Ashton-in-Makerfield U.D.	21·2
Formby U.D.	14·3	Aspull U.D.	6·9
Huyton-with-Roby U.D.	67·7	Billinge and Winstanley U.D.	8·3
Kirkby U.D.	57·3	Blackrod U.D.	4·1
Litherland U.D.	25·2	Golborne U.D.	23·4
Ormskirk U.D.	24·3	Haydock U.D.	12·4
Prescot U.D.	13·3	Hindley U.D.	20·7
Rainford U.D.	5·9	Ince-in-Makerfield U.D.	17·7
West Lancashire R.D.	61·9	Newton-le-Willows U.D.	21·9
Whiston R.D.	55·1	Orrell U.D.	11·4
		Skelmersdale U.D.	6·4
		Standish with Langtree U.D.	10·1
		Upholland U.D.	8·9
		Westhoughton U.D.	17·2
		Wigan R.D.	11·0
South Merseyside sub-region	419·7	Warrington sub-region	233·9
Birkenhead C.B.	143·5	Warrington C.B.	75·1
Wallasey C.B.	103·3	Runcorn U.D.	27·2
Bebington M.B.	54·1	Widnes M.B.	53·7
Ellesmere Port M.B.	48·2	Runcorn R.D.	41·9
Hoyle U.D.	32·6	Warrington R.D.	36·1
Neston U.D.	14·0		
Wirral U.D.	24·1		

Table 4 North Lancashire

<i>Constituent areas</i>	<i>1964 civilian population (thousands)</i>	<i>Constituent areas</i>	<i>1964 civilian population (thousands)</i>
(1)	(2)	(1)	(2)
All areas	1,279·0	Chorley sub-region	68·0
Ribble	764·4	Adlington U.D.	4·5
Blackburn sub-region	251·2	Chorley M.B.	31·1
Blackburn C.B.	103·6	Withnell U.D.	2·8
Accrington M.B.	38·5	Chorley R.D.	29·6
Church U.D.	5·8	Rossendale sub-region	54·6
Clayton-le-Moors U.D.	6·4	Bacup M.B.	16·9
Clitheroe M.B.	12·5	Haslingden M.B.	14·2
Darwen M.B.	29·1	Rawtenstall M.B.	23·5
Great Harwood U.D.	10·7	Lancaster-Fylde	409·9
Oswaldtwistle U.D.	12·5	Blackpool and Fylde sub-region	292·0
Rishton U.D.	5·4	Blackpool C.B.	150·7
Blackburn R.D.	17·1	Fleetwood M.B.	28·4
Clitheroe R.D.	9·6	Kirkham U.D.	6·0
Preston sub-region	220·8	Lytham St. Annes M.B.	36·5
Preston C.B.	110·4	Poulton-le-Fylde U.D.	14·7
Fulwood U.D.	17·1	Preesall U.D.	3·0
Leyland U.D.	20·7	Thornton Cleveleys U.D.	22·0
Longridge U.D.	5·1	Fylde R.D.	16·6
Walton-le-Dale U.D.	21·6	Garstang R.D.	15·4
Preston R.D.	46·0	Lancaster sub-region	117·3
Burnley sub-region	169·8	Carnforth U.D.	4·2
Burnley C.B.	79·3	Lancaster M.B.	47·8
Barrowford U.D.	4·7	Morecambe and Heysham M.B.	40·6
Brierfield U.D.	7·3	Lancaster R.D.	15·4
Colne M.B.	19·0	Lunesdale R.D.	9·2
Nelson M.B.	31·5	Furness	104·7
Padiham U.D.	10·1	Furness sub-region	104·7
Trawden U.D.	1·9	Barrow-in-Furness C.B.	65·2
Burnley R.D.	16·0	Dalton-in-Furness U.D.	10·4
		Grange U.D.	2·9
		Ulverston U.D.	10·4
		North Lonsdale R.D.	15·8

Table 5 South Cheshire

<i>Constituent areas</i>	<i>1964 civilian population (thousands)</i>	<i>Constituent areas</i>	<i>1964 civilian population (thousands)</i>
(1)	(2)	(1)	(2)
All areas	401.4		
Crewe sub-region	112.5	Macclesfield sub-region	102.0
Alsager U.D.	9.1	Bollington U.D.	5.7
Crewe M.B.	52.9	Congleton M.B.	17.4
Nantwich U.D.	11.0	Macclesfield M.B.	38.5
Sandbach U.D.	10.3	Congleton R.D.	15.2
Nantwich R.D.	29.1	Macclesfield R.D.	25.1
Chester sub-region	105.7	Northwich sub-region	81.2
Chester C.B.	59.5	Middlewich U.D.	7.5
Chester R.D.	30.9	Northwich U.D.	19.4
Tarvin R.D.	15.4	Winsford U.D.	14.1
		Northwich R.D.	40.2

Table 6 Civilian population changes
Great Britain 1951-64

(thousands)

Area	Distribution 1951		Changes 1951-64							Distribution 1964	
			Total		By births and deaths		Estimated gain from armed forces	Estimated net balance by migration			
	No.	Per cent	No.	Per cent	No.	Per cent	No.	No.	Per cent	No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Great Britain	48,333·3	100·0	3,985·7	8·2	3,306·9	6·8	410·5	268·3	0·6	52,319·0	100·0
Scotland	5,064·3	10·5	115·2	2·3	458·1	9·0	43·0	-386·0	-7·6	5,179·5	9·9
Northern Region	3,095·0	6·4	192·2	6·2	258·7	8·4	26·1	-92·6	-3·0	3,287·2	6·3
Yorkshire and Humberside Region	4,459·1	9·2	212·7	4·8	275·4	6·2	37·2	-99·8	-2·2	4,671·8	8·9
North West Region	6,380·0	13·2	281·9	4·4	349·4	5·5	53·2	-120·6	-1·9	6,661·9	12·7
Wales and Monmouthshire	2,569·0	5·3	98·7	3·8	118·1	4·6	21·4	-40·7	-1·6	2,667·7	5·1
East Midland Region	2,891·7	6·0	333·8	11·5	229·2	7·9	24·8	79·8	2·8	3,225·6	6·2
West Midland Region	4,383·0	9·1	529·8	12·1	396·1	9·0	37·7	96·0	2·2	4,912·8	9·4
South West Region	3,228·9	6·7	354·9	11·0	154·1	4·8	27·5	173·3	5·4	3,583·8	6·8
South East England	16,262·3	33·6	1,866·4	11·5	1,067·8	6·6	139·7	658·9	4·1	18,128·7	34·7

Table 7 Civilian population changes
Great Britain 1951-56

(thousands)

Area	Distribution 1951		Changes 1951-56							Distribution 1956	
			Total		By births and deaths		Estimated gain from armed forces	Estimated net balance by migration			
	No.	Per cent	No.	Per cent	No.	Per cent	No.	No.	Per cent	No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Great Britain	48,333.3	100.0	901.0	1.9	1,013.4	2.1	74.6	-187.0	-0.4	49,234.3	100.0
Scotland	5,064.3	10.5	19.0	0.4	153.3	3.0	5.6	-140.0	-2.8	5,083.3	10.3
Northern Region	3,095.0	6.4	47.4	1.5	89.9	2.9	4.9	-47.4	-1.5	3,142.4	6.4
Yorkshire and Humber- side Region	4,459.1	9.2	45.6	1.0	85.0	1.9	7.1	-46.6	-1.0	4,504.7	9.1
North West Region	6,380.0	13.2	51.6	0.8	101.7	1.6	10.1	-60.1	-0.9	6,431.6	13.1
Wales and Monmouth- shire	2,569.0	5.3	18.8	0.7	39.7	1.5	4.1	-24.9	-1.0	2,587.8	5.3
East Midland Region	2,891.7	6.0	88.2	3.1	71.4	2.5	4.6	12.2	0.4	2,980.0	6.0
West Midland Region	4,383.0	9.1	125.2	2.9	121.5	2.8	7.0	-3.3	—	4,508.2	9.2
South West Region	3,228.9	6.7	62.9	1.9	46.0	1.4	5.2	11.8	0.4	3,291.8	6.7
South East England	16,262.3	33.6	442.3	2.7	305.0	1.9	26.0	111.3	0.7	16,704.6	33.9

Table 8 Civilian population changes
Great Britain 1956-61

(thousands)

Area	Distribution 1956		Changes 1956-61							Distribution 1961	
			Total		By births and deaths		Estimated gain from armed forces	Estimated net balance by migration			
	No.	Per cent	No.	Per cent	No.	Per cent	No.	No.	Per cent	No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Great Britain	49,234·3	100·0	1,812·1	3·7	1,300·2	2·6	281·7	230·2	0·5	51,046·4	100·0
Scotland	5,083·3	10·3	72·1	1·4	185·3	3·6	28·7	-141·9	-2·8	5,155·4	10·1
Northern Region	3,142·4	6·4	92·1	2·9	103·7	3·3	18·0	-29·5	-0·9	3,234·5	6·3
Yorkshire and Humber- side Region	4,504·7	9·1	76·8	1·7	107·4	2·4	25·5	-56·1	-1·3	4,581·4	9·0
North West Region	6,431·6	13·1	110·0	1·7	133·7	2·1	36·6	-60·3	-0·9	6,541·6	12·8
Wales and Monmouth- shire	2,587·8	5·3	37·7	1·5	44·6	1·7	14·7	-21·7	-0·8	2,625·4	5·1
East Midland Region	2,980·0	6·0	140·6	4·7	88·3	3·0	17·1	35·1	1·2	3,120·5	6·1
West Midland Region	4,508·2	9·2	234·8	5·2	154·5	3·4	25·9	54·4	1·2	4,743·0	9·3
South West Region	3,291·8	6·7	169·5	5·2	60·1	1·8	19·0	90·5	2·8	3,461·3	6·8
South East England	16,704·6	33·9	878·6	5·3	422·7	2·5	96·2	359·7	2·2	17,583·2	34·4

Table 9 Civilian population changes
Great Britain 1961-64

(thousands)

Area	Distribution 1961		Changes 1961-64							Distribution 1964	
			Total		By births and deaths		Estimated gain from armed forces	Estimated net balance by migration			
	No.	Per cent	No.	Per cent	No.	Per cent	No.	No.	Per cent	No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Great Britain	51,046.4	100.0	1,272.6	2.5	993.3	1.9	54.1	225.1	0.5	52,319.0	100.0
Scotland	5,155.4	10.1	24.1	0.5	119.5	2.3	8.6	-104.1	-2.0	5,179.5	9.9
Northern Region	3,234.5	6.3	52.7	1.6	65.2	2.0	3.2	-15.7	-0.5	3,287.2	6.3
Yorkshire and Humber- side Region	4,581.4	9.0	90.4	2.0	83.0	1.8	4.5	2.9	0.1	4,671.8	8.9
North West Region	6,541.6	12.8	120.3	1.8	114.0	1.7	6.5	-0.2	—	6,661.9	12.7
Wales and Monmouth- shire	2,625.4	5.1	42.3	1.6	33.8	1.3	2.6	5.9	0.2	2,667.7	5.1
East Midland Region	3,120.5	6.1	105.1	3.4	69.5	2.2	3.1	32.5	1.0	3,225.6	6.2
West Midland Region	4,743.0	9.3	169.8	3.6	120.2	2.5	4.7	44.9	1.0	4,912.8	9.4
South West Region	3,461.3	6.8	122.5	3.5	48.0	1.4	3.4	71.0	2.1	3,583.8	6.8
South East England	17,583.2	34.4	545.5	3.1	340.1	1.9	17.4	187.9	1.1	18,128.7	34.7

Table 10 **Civilian population: mean annual changes by migration***Great Britain 1951-56, 1956-61 and 1961-64*

(thousands)

<i>Area</i>	<i>1951-56</i>		<i>1956-61</i>		<i>1961-64</i>	
	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>	<i>(7)</i>
Great Britain	-37.4	-0.08	46.0	0.09	75.1	0.15
Scotland	-28.0	-0.55	-28.4	-0.55	-34.7	-0.67
Northern Region	-9.5	-0.30	-5.9	-0.19	-5.2	-0.16
Yorkshire and Humberside Region	-9.3	-0.21	-11.2	-0.25	1.0	0.02
North West Region	-12.0	-0.19	-12.1	-0.19	-0.1	—
Wales and Monmouthshire	-5.0	-0.19	-4.3	-0.17	2.0	0.07
East Midland Region	2.4	0.08	7.0	0.23	10.8	0.34
West Midland Region	-0.7	-0.01	10.9	0.24	15.0	0.31
South West Region	2.4	0.07	18.1	0.54	23.7	0.67
South East England	22.3	0.14	71.9	0.42	62.6	0.35

Table 11 **Civilian population changes**
North West Region 1951-64

(thousands)

Area	Distribution 1951		Changes 1951-64							Distribution 1964	
	No.	Per cent	Total		By births and deaths		Estimated gain from armed forces	Estimated net balance by migration		No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
North West Region	6,380.0	100.0	281.9	4.4	349.4	5.5	53.2	-120.6	-1.9	6,661.9	100.0
Mersey	4,781.4	74.9	200.1	4.2	328.4	6.9	39.8	-168.1	-3.5	4,981.5	74.8
South East Lancashire.	2,601.1	40.8	59.2	2.3	122.8	4.7	21.5	-85.1	-3.3	2,660.3	39.9
Manchester sub-region	1,253.7	19.7	-27.5	-2.2	84.9	6.8	10.3	-122.8	-9.8	1,226.2	18.4
Stockport sub-region	270.3	4.2	53.5	19.8	12.3	4.5	2.3	38.9	14.4	323.8	4.8
Oldham sub-region	245.8	3.9	-8.3	-3.4	4.0	1.6	2.0	-14.3	-5.8	237.5	3.6
Bolton sub-region	236.3	3.7	-1.7	-0.7	5.1	2.2	1.9	-8.7	-3.7	234.6	3.5
Altrincham sub-region	142.0	2.2	42.2	29.7	8.7	6.2	1.3	32.2	22.7	184.2	2.8
Bury sub-region	144.2	2.3	8.3	5.7	2.1	1.4	1.2	5.0	3.5	152.4	2.3
Rochdale sub-region	119.0	1.9	-2.4	-2.0	1.2	1.0	1.0	-4.6	-3.9	116.6	1.7
Leigh sub-region	86.9	1.4	-3.4	-3.9	3.0	3.5	0.7	-7.2	-8.2	83.4	1.2
Stalybridge sub-region	64.8	1.0	-0.8	-1.2	0.4	0.6	0.5	-1.7	-2.7	64.0	1.0
High Peak sub-region	38.0	0.6	-0.5	-1.2	1.1	2.9	0.3	-1.9	-5.0	37.6	0.6
Merseyside	1,584.9	24.8	111.9	7.1	162.7	10.3	13.3	-64.1	-4.0	1,696.8	25.5
North Merseyside sub-region	1,207.8	18.9	69.3	5.7	132.9	11.0	10.1	-73.7	-6.1	1,277.1	19.2
South Merseyside sub-region	337.1	5.9	42.6	11.3	29.8	7.9	3.2	9.6	2.6	419.7	6.3
Warrington-Wigan area	595.4	9.3	29.0	4.9	42.9	7.2	5.0	-18.9	-3.2	624.4	9.4
Wigan sub-region	380.0	5.9	10.5	2.8	22.0	5.8	3.2	-14.7	-3.9	390.5	5.9
Warrington sub-region	215.4	3.4	18.5	8.6	20.9	9.7	1.8	-4.2	-1.9	233.9	3.5

North Lancashire	1,238.4	19.4	40.6	3.3	1.4	0.1	10.3	28.9	2.3	1,279.0	19.2
Ribble	763.6	12.0	0.8	0.1	8.6	1.1	6.3	-14.1	-1.8	764.4	11.5
Blackburn sub-region	256.3	4.0	-5.1	-2.0	-2.7	-1.0	2.1	-4.5	-1.8	251.2	3.8
Preston sub-region	203.7	3.2	17.1	8.4	11.7	5.8	1.7	3.7	1.8	220.8	3.3
Burnley sub-region	179.3	2.8	-9.5	-5.3	-2.3	-1.3	1.5	-8.7	-4.8	169.8	2.6
Chorley sub-region	66.4	1.0	1.6	2.4	2.1	3.2	0.5	-1.0	-1.7	68.0	1.0
Rosendale sub-region	57.9	0.9	-3.3	-5.7	-0.2	-0.4	0.5	-3.6	-6.2	54.6	0.8
Lancaster-Fylde	368.8	5.8	41.1	11.1	-9.2	-2.5	3.1	47.2	12.8	409.9	6.1
Blackpool and Fylde sub-region	258.3	4.0	34.4	13.3	-9.0	-3.5	2.2	41.2	16.0	292.7	4.3
Lancaster sub-region	110.5	1.7	6.7	6.1	-0.2	-0.2	0.9	6.0	5.4	117.3	1.8
Furness	106.0	1.7	-1.3	-1.3	2.0	1.9	0.9	-4.2	-4.0	104.7	1.6
South Cheshire	360.2	5.6	41.2	11.4	19.5	5.4	3.1	18.6	5.2	401.4	6.0
Crewe sub-region	103.5	1.6	9.0	8.6	5.1	4.9	0.9	3.0	2.9	112.5	1.7
Chester sub-region	91.7	1.4	13.0	14.1	6.7	7.3	0.8	5.5	6.0	105.7	1.6
Macclesfield sub-region	89.2	1.4	12.8	14.3	2.5	2.8	0.8	9.5	10.6	102.0	1.5
Northwich sub-region	74.8	1.2	6.4	8.7	5.2	7.0	0.6	0.6	0.9	81.2	1.2

Table 12 **Civilian population changes**
North West Region 1951-56

(thousands)

Area	Distribution 1951		Changes 1951-56							Distribution 1956	
			Total		By births and deaths		Estimated gain from armed forces	Estimated net balance by migration			
	No.	Per cent	No.	Per cent	No.	Per cent	No.	No.	Per cent	No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
North West Region	6,380.0	100.0	51.6	0.8	101.7	1.6	10.1	-60.1	-0.9	6,431.6	100.0
Mersey	4,781.4	74.9	40.7	0.9	99.3	2.1	7.6	-66.2	-1.4	4,822.1	75.0
South East Lancashire.	2,601.1	40.8	2.5	0.1	32.2	1.2	4.1	-33.8	-1.3	2,603.6	40.5
Manchester sub- region	1,253.7	19.7	-2.3	-0.2	26.4	2.1	2.0	-30.7	-2.4	1,251.4	19.5
Stockport sub-region	270.3	4.2	7.4	2.8	1.4	0.5	0.4	5.7	2.1	277.8	4.3
Oldham sub-region . .	245.8	3.9	-2.7	-1.1	0.7	0.3	0.4	-3.8	-1.5	243.2	3.8
Bolton sub-region . .	236.3	3.7	-2.9	-1.2	0.9	0.4	0.4	-4.1	-1.7	233.5	3.6
Altrincham sub-region	142.0	2.2	8.4	5.9	1.5	1.1	0.2	6.6	4.7	150.4	2.3
Bury sub-region . . .	144.2	2.3	-1.1	-0.8	-0.1	-0.1	0.2	-1.2	-0.8	143.1	2.2
Rochdale sub-region.	119.0	1.9	-1.7	-1.4	0.1	0.1	0.2	-2.0	-1.7	117.3	1.8
Leigh sub-region . . .	86.9	1.4	-1.6	-1.8	1.1	1.2	0.1	-2.7	-3.2	85.3	1.3
Stalybridge sub-region	64.8	1.0	-0.6	-0.9	-0.1	-0.1	0.1	-0.6	-1.0	64.2	1.0
High Peak sub-region	38.0	0.6	-0.6	-1.4	0.4	0.9	0.1	-1.0	-2.6	37.5	0.6
Merseyside	1,584.9	24.8	32.9	2.1	52.9	3.3	2.5	-22.4	-1.4	1,617.8	25.2
North Merseyside sub-region	1,207.8	18.9	22.1	1.8	43.4	3.6	1.9	-23.2	-1.9	1,229.9	19.1
South Merseyside sub-region	377.1	5.9	10.9	2.9	9.5	2.5	0.6	0.8	0.2	388.0	6.1
Warrington-Wigan area	595.4	9.3	5.3	0.9	14.3	2.4	0.9	-9.9	-1.7	600.7	9.3
Wigan sub-region . . .	380.0	5.9	0.2	0.1	7.4	1.9	0.6	-7.8	-2.0	380.2	5.9
Warrington sub- region	215.4	3.4	5.1	2.4	6.9	3.2	0.3	-2.2	-1.0	220.5	3.4

North Lancashire	1,238.4	19.4	-1.5	-0.1	-4.1	-0.3	2.0	0.6	—	1,236.9	19.2
Ribble	763.6	12.0	-5.2	-0.7	-0.5	-0.1	1.2	-5.8	-0.8	758.5	11.8
Blackburn sub-region	256.3	4.0	-2.7	-1.1	-2.1	-0.8	0.4	-1.0	-0.4	253.6	3.9
Preston sub-region	203.7	3.2	3.3	1.6	2.8	1.4	0.3	0.2	0.1	206.9	3.2
Burnley sub-region	179.3	2.8	-4.3	-2.4	-1.5	-0.8	0.3	-3.1	-1.7	175.0	2.7
Chorley sub-region	66.4	1.0	-0.5	-0.8	0.5	0.8	0.1	-1.1	-1.7	65.9	1.0
Rosendale sub-region	57.9	0.9	-0.8	-1.4	-0.2	-0.4	0.1	-0.7	-1.2	57.1	0.9
Lancaster-Fylde	368.8	5.8	5.0	1.4	-4.3	-1.2	0.6	8.7	2.4	373.9	5.8
Blackpool and Fylde sub-region	258.3	4.0	5.5	2.1	-3.9	-1.5	0.4	9.0	3.5	263.8	4.1
Lancaster sub-region	110.5	1.7	-0.5	-0.5	-0.4	-0.4	0.2	-0.3	-0.3	110.0	1.7
Furness	106.0	1.7	-1.4	-1.3	0.8	0.7	0.2	-2.4	-2.2	104.6	1.6
South Cheshire	360.2	5.6	12.4	3.5	6.4	1.8	0.5	5.5	1.5	372.6	5.8
Crewe sub-region	103.5	1.6	1.6	1.5	1.6	1.5	0.2	-0.2	-0.2	105.1	1.7
Chester sub-region	92.7	1.4	4.5	4.9	2.2	2.3	0.1	2.2	2.4	97.2	1.5
Macclesfield sub-region	89.2	1.4	2.2	2.5	0.2	0.2	0.1	1.9	2.1	91.4	1.4
Norwich sub-region	74.8	1.2	4.2	5.6	2.5	3.3	0.1	1.6	2.1	78.9	1.2

Table 13 Civilian population changes
North West Region 1956-61

(thousands)

Area	Distribution 1956		Changes 1956-61							Distribution 1961	
			Total		By births and deaths		Estimated gain from armed forces	Estimated net balance by migration			
	No.	Per cent	No.	Per cent	No.	Per cent	No.	No.	Per cent	No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
North West Region	6,431.6	100.0	110.0	1.7	133.7	2.1	36.6	-60.3	-0.9	6,541.6	100.0
Mersey	4,822.1	75.0	70.8	1.5	127.2	2.6	27.5	-83.9	-1.7	4,892.9	74.8
South East Lancashire	2,603.6	40.5	18.1	0.7	45.9	1.8	14.8	-42.6	-1.6	2,621.7	40.1
Manchester sub-region	1,251.4	19.5	-19.3	-1.5	32.6	2.6	7.1	-59.1	-4.7	1,232.1	18.8
Stockport sub-region	277.8	4.3	27.0	9.7	5.0	1.8	1.6	20.5	7.4	304.8	4.7
Oldham sub-region	243.2	3.8	-5.8	-2.4	1.1	0.5	1.4	-8.3	-3.4	237.3	3.6
Bolton sub-region	233.5	3.6	-1.1	-0.5	1.6	0.7	1.3	-4.1	-1.7	232.3	3.5
Altrincham sub-region	150.4	2.4	21.9	14.6	3.5	2.3	0.9	17.6	11.7	172.3	2.6
Bury sub-region	143.1	2.2	1.9	1.3	0.4	0.2	0.8	0.7	0.5	144.9	2.2
Rochdale sub-region	117.3	1.8	-1.9	-1.6	0.1	0.1	0.7	-2.6	-2.3	115.5	1.8
Leigh sub-region	85.3	1.3	-3.0	-3.6	1.0	1.2	0.5	-4.5	-5.3	82.3	1.3
Stalybridge sub-region	64.2	1.0	-1.4	-2.2	0.1	0.2	0.4	-1.9	-3.0	62.8	1.0
High Peak sub-region	37.5	0.6	-0.1	-0.2	0.5	1.4	0.2	-0.8	-2.1	37.4	0.6
Merseyside	1,617.8	25.2	47.9	3.0	65.3	4.0	9.2	-26.7	-1.7	1,665.7	25.4
North Merseyside sub-region	1,229.9	19.1	27.6	2.2	53.9	4.4	7.0	-33.3	-2.7	1,257.5	19.2
South Merseyside sub-region	388.0	6.1	20.3	5.2	11.5	3.0	2.2	6.6	1.7	408.2	6.2
Warrington-Wigan area	600.7	9.3	4.8	0.8	16.0	2.7	3.4	-14.6	-2.4	605.5	9.3
Wigan sub-region	380.2	5.9	1.1	0.3	8.2	2.1	2.2	-9.3	-2.4	381.2	5.9
Warrington sub-region	220.5	3.4	3.7	1.7	7.8	3.5	1.3	-5.3	-2.4	224.2	3.4

North Lancashire	1,236.9	19.2	25.9	2.1	-0.8	-0.1	7.0	19.7	1.6	1,262.8	19.3
Ribble	758.5	11.8	1.1	0.1	2.3	0.3	4.3	-5.6	-0.7	759.5	11.6
Blackburn sub-region	253.6	4.0	-2.5	-1.0	-1.4	-0.6	1.4	-2.6	-1.0	251.1	3.8
Preston sub-region	206.9	3.2	8.1	3.9	4.4	2.1	1.2	2.5	1.2	215.0	3.3
Burnley sub-region	175.0	2.7	-3.8	-2.1	-1.2	-0.7	1.0	-3.6	-2.0	171.3	2.6
Chorley sub-region	65.9	1.0	0.9	1.3	0.7	1.1	0.4	-0.2	-0.4	66.7	1.0
Rossendale sub-region	57.1	0.9	-1.6	-2.9	-0.2	-0.4	0.3	-1.7	-3.1	55.4	0.9
Lancaster-Fylde	373.9	5.8	25.1	6.7	-3.7	-1.0	2.1	26.7	7.1	398.9	6.1
Blackpool and Fylde sub-region	263.8	4.1	21.0	8.0	-3.7	-1.4	1.5	23.2	8.8	284.8	4.4
Lancaster sub-region	110.0	1.7	4.1	3.7	—	—	0.6	3.4	3.1	114.1	1.7
Furness	104.6	1.6	-0.2	-0.2	0.6	0.6	0.6	-1.4	-1.3	104.4	1.6
South Cheshire	372.6	5.8	13.3	3.6	7.3	2.0	2.1	3.9	1.0	385.9	5.9
Crewe sub-region	105.1	1.7	3.6	3.4	1.9	1.8	0.6	1.1	1.0	108.6	1.7
Chester sub-region	97.2	1.5	4.1	4.2	2.7	2.7	0.6	0.9	0.9	101.3	1.5
Macclesfield sub-region	91.5	1.4	6.1	6.6	1.1	1.1	0.5	4.5	4.9	97.5	1.5
Northwich sub-region	78.9	1.2	-0.4	-0.5	1.7	2.2	0.5	-2.6	-3.2	78.5	1.2

Table 14 Civilian population changes
North West Region 1961-64

(thousands)

Area	Distribution 1961		Changes 1961-64							Distribution 1964	
			Total		By births and deaths		Estimated gain from armed forces	Estimated net balance by migration			
	No.	Per cent	No.	Per cent	No.	Per cent	No.	No.	Per cent	No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
North West Region	6,541.6	100.0	120.3	1.8	114.0	1.7	6.5	-0.2	---	6,661.9	100.0
Mersey	4,892.9	74.8	88.6	1.8	101.9	2.1	4.8	-18.1	-0.4	4,981.5	74.8
South East Lancashire.	2,621.7	40.1	38.6	1.5	44.7	1.7	2.6	-8.7	-0.3	2,660.3	39.9
Manchester sub-region	1,232.1	18.8	-5.9	-0.5	25.9	2.1	1.2	-33.0	-2.7	1,226.2	18.4
Stockport sub-region.	304.8	4.7	19.0	6.2	5.9	1.9	0.3	12.7	4.2	323.8	4.8
Oldham sub-region	237.3	3.6	0.1	—	2.1	0.9	0.2	-2.2	-0.9	237.5	3.6
Bolton sub-region	232.3	3.5	2.3	1.0	2.6	1.1	0.2	-0.6	-0.2	234.6	3.5
Altrincham sub-region	172.3	2.6	11.9	6.9	3.7	2.2	0.2	8.1	4.7	184.2	2.8
Bury sub-region	144.9	2.2	7.5	5.2	1.9	1.3	0.1	5.5	3.8	152.4	2.3
Rochdale sub-region.	115.5	1.8	1.1	1.0	1.0	0.9	0.1	—	0.1	116.6	1.7
Leigh sub-region	82.3	1.3	1.2	1.4	1.0	1.2	0.1	0.1	0.1	83.4	1.2
Stalybridge sub-region	62.8	1.0	1.2	2.0	0.4	0.6	0.1	0.8	1.3	64.0	1.0
High Peak sub-region	37.4	0.6	0.2	0.4	0.2	0.6	—	-0.1	-0.3	37.6	0.6
Merseyside	1,665.7	25.4	31.1	1.9	44.5	2.7	1.7	-15.0	-0.9	1,696.8	25.5
North Merseyside sub-region	1,257.5	19.2	19.7	1.6	35.6	2.8	1.3	-17.2	-1.4	1,277.1	19.2
South Merseyside sub-region	408.2	6.2	11.5	2.8	8.9	2.2	0.4	2.2	0.5	419.7	6.3
Warrington-Wigan area	605.5	9.3	18.9	3.1	12.7	2.1	0.6	5.6	0.9	624.4	9.4
Wigan sub-region	381.2	5.9	9.2	2.4	6.5	1.7	0.4	2.3	0.6	390.5	5.9
Warrington sub-region	224.2	3.4	9.7	4.3	6.1	2.7	0.2	3.3	1.5	233.9	3.5

North Lancashire	1,262.8	19.3	16.2	1.3	6.2	0.5	1.3	8.7	0.7	1,279.0	19.2
Ribble	759.5	11.6	4.9	0.7	6.8	0.9	0.8	-2.7	-0.3	764.4	11.5
Blackburn sub-region	251.1	3.8	0.2	0.1	0.8	0.3	0.3	-0.9	-0.4	251.2	3.8
Preston sub-region	215.0	3.3	5.8	2.7	4.5	2.1	0.2	1.0	0.5	220.8	3.3
Burnley sub-region	171.3	2.6	-1.4	-0.8	0.4	0.2	0.2	-2.0	-1.2	169.8	2.6
Chorley sub-region	66.7	1.0	1.3	1.9	0.9	1.4	0.1	0.3	0.4	68.0	1.0
Rossendale sub-region	55.4	0.9	-0.8	-1.5	0.2	0.4	0.1	-1.1	-2.0	54.6	0.8
Lancaster-Fylde	398.9	6.1	11.0	2.8	-1.2	-0.3	0.4	11.8	3.0	409.9	6.1
Blackpool and Fylde sub-region	284.8	4.4	7.8	2.7	-1.4	-0.5	0.3	8.9	3.1	292.7	4.3
Lancaster sub-region	114.1	1.7	3.2	2.8	0.2	0.2	0.1	2.9	2.5	117.3	1.8
Furness	104.4	1.6	0.2	0.2	0.6	0.6	0.1	-0.5	-0.5	104.7	1.6
South Cheshire	385.9	5.9	15.5	4.0	5.9	1.5	0.4	9.2	2.4	401.4	6.0
Crewe sub-region	108.6	1.7	3.8	3.5	1.7	1.6	0.1	2.0	1.8	112.5	1.7
Chester sub-region	101.3	1.5	4.5	4.4	1.9	1.9	0.1	2.4	2.4	105.7	1.6
Macclesfield sub-region	97.5	1.5	4.5	4.6	1.2	1.3	0.1	3.1	3.2	102.0	1.5
Northwich sub-region	78.5	1.2	2.7	3.5	1.0	1.3	0.1	1.6	2.1	81.2	1.2

Table 15 Civilian population: mean annual changes by migration

North West Region 1951-56, 1956-61 and 1961-64

(thousands)

Area	1951-56		1956-61		1961-64	
	No.	Per cent	No.	Per cent	No.	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)
North West Region	-12.0	-0.19	-12.1	-0.19	-0.1	—
Mersey	-13.2	-0.28	-16.8	-0.35	-6.0	-0.12
South East Lancashire	-6.8	-0.26	-8.5	-0.33	-2.9	-0.11
Manchester sub-region	-6.1	-0.49	-11.8	-0.95	-11.0	-0.90
Stockport sub-region	1.1	0.41	4.1	1.41	4.2	1.35
Oldham sub-region	-0.8	-0.31	-1.7	-0.69	-0.7	-0.31
Bolton sub-region	-0.8	-0.35	-0.8	-0.35	-0.2	-0.09
Altrincham sub-region	1.3	0.91	3.5	2.18	2.7	1.50
Bury sub-region	-0.2	-0.17	0.1	0.10	1.8	1.24
Rochdale sub-region	-0.4	-0.34	-0.5	-0.45	—	—
Leigh sub-region	-0.6	-0.64	-0.9	-1.08	—	0.04
Stalybridge sub-region	-0.1	-0.20	-0.4	-0.61	0.3	0.43
High Peak sub-region	-0.2	-0.51	-0.2	-0.42	—	-0.06
Merseyside	-4.5	-0.28	-5.3	-0.33	-5.0	-0.30
North Merseyside sub-region	-4.6	-0.38	-6.7	-0.54	-5.7	-0.45
South Merseyside sub-region	0.2	0.04	1.3	0.33	0.7	0.18
Warrington-Wigan area	-2.0	-0.33	-2.9	-0.48	1.9	0.31
Wigan sub-region	-1.6	-0.41	-1.9	-0.49	0.8	0.20
Warrington sub-region	-0.4	-0.20	-1.1	-0.48	1.1	0.49
North Lancashire	0.1	0.01	3.9	0.31	2.9	0.23
Ribblesdale	-1.2	-0.15	-1.1	-0.15	-0.9	-0.12
Blackburn sub-region	-0.2	-0.08	-0.5	-0.20	-0.3	-0.12
Preston sub-region	—	0.02	0.5	0.24	0.3	0.16
Burnley sub-region	-0.6	-0.35	-0.7	-0.41	-0.7	-0.39
Chorley sub-region	-0.2	-0.34	—	-0.07	0.1	0.12
Rossendale sub-region	-0.1	-0.24	-0.3	-0.62	-0.4	-0.65
Lancaster-Fylde	1.7	0.47	5.3	1.38	3.9	0.97
Blackpool and Fylde sub-region	1.8	0.69	4.6	1.69	3.0	1.03
Lancaster sub-region	-0.1	-0.05	0.7	0.61	1.0	0.83
Furness	-0.5	-0.45	-0.3	-0.27	-0.2	-0.15
South Cheshire	1.1	0.30	0.8	0.21	3.1	0.78
Crewe sub-region	—	-0.03	0.2	0.21	0.7	0.61
Chester sub-region	0.4	0.47	0.2	0.18	0.8	0.78
Macclesfield sub-region	0.4	0.42	0.9	0.95	1.0	1.05
Northwich sub-region	0.3	0.41	-0.5	-0.65	0.5	0.68