A SURVEY OF THE NEW TOWNS OF THE LONDON AREA

by

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ABSTRACT

This thesis is an account of the history, legislation, growth and structure of the New Towns of the London area. It includes an examination of the planning principles involved in the internal design of the towns, and an appraisal of the broader implications of the new towns as a facet of the policy of the decentralization of population from London.

PREFACE

Town planning is an ancient art, but it is only in the twentieth century that it has become recognised as a field in which the disciplines of architecture, engineering, sociology, geography, law, statistics, agriculture, surveying and estate management are blended to their best advantage. It is not suggested that a town planner should be a master of all these subjects; the ideal planning process is an outcome of team work by people from all these disciplines.

The planning process is divided into two stages. Firstly there is the determination of broad policies, the decision of politicians, and secondly, the preparation and carrying through of plans in conformity with these policies - the function of town planners.

This second stage has three clear phases; the survey, the formulation of the plan, and the implementation of the plan. The survey is always the first step in the preparation of a plan. It consists of an examination of all the existing features of the planning area, its physical nature, relief, structure drainage, water resources, existing population, existing and prospective industrial development, communications and public utilities, and the agricultural quality of undeveloped land. From this body of information the plan can be formulated. First the major distribution and extent of land to be used for primary functions is determined, and then within this broad framework, the physical design can be undertaken. The plan must then be implemented by careful legislation, and thorough financial planning.

These three phases of the planning process are not clearly separated either in time or content. Planning is inevitably a slow and continuous process, particularly in old and well established urban centres. However in the case of the new towns of the London area, it is probably seen in its clearest and simplest form. Firstly a government decision was made to undertake the building of new towns to relieve population pressure in London. Through the process of survey, and in consultation with local government bodies, sites were selected which were considered suitable for development. Next, development corporations were set up and charged with surveying the chosen site thoroughly, and then preparing firstly an outline plan, and secondly detailed plans for residential neighbourhoods, industrial estates, commercial areas, parks, schools and so on. The implementation of these plans was effected through the machinery set up in the New Towns Act 1946, which also embodied the financial provisions necessary to undertake such schemes.

From this discussion of the planning process it is clearly seen that individuals with a certain academic background are more suited to some phases of the work than others. Thus economists, geographers, sociologists and statisticians are best qualified for the investigative aspects of planning, architects and engineers for problems of design, and lawyers and estate managers for the administrative process.

This thesis is written from the viewpoint of a geographer-planner. It is not intended to be a comprehensive study of the new

towns of the London area, since such a feat would clearly be beyond the scope of one writer. It is consequently limited to a discussion of the history, legislation, growth and internal structure of this group of new towns, and an appraisal of the broader implications of their significance as part of a national policy of population decentralization.

CHAPTER 1

HISTORICAL INTRODUCTION

Man has been planning and building New Towns since the earliest records of history. They have arisen for reasons of strategy, politics, colonial advancement, social welfare, philanthropy, and to ensure the preservation of older centres. The contemporary idea of building new towns has been welcomed as one of the most exciting features of urban development in Britain, but in fact it has been one of the most fertile grounds for the imaginations of thinkers, designers and reformers throughout the social history of man.

The limiting factor for the size of towns before the development of the transportation networks of the second half of the nineteenth century was the need to supply food to their inhabitants. Thus it is found that the commonly accepted ideas of preserving a green agricultural belt around towns, and limiting the growth of towns by housing surplus populations in new communities are rooted in antiquity. Cecil Stewart notes that in the Gazeteer of the Times Atlas there are listed "some seventy English Newtowns or Newtons, some thirty German Neustadts, twenty-four French Villeneuves, twenty-three Spanish Villanuevas, and fifteen Italian Villanuovas".[1]

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[1] Stewart, C. A Prospect of Cities. Longmans, Green and Co., London, 1952, p. 4.

One of oldest directions for town building is found in the commands to Moses for the construction of cities for the Levites.[1] The cities were visualized as set in the centre of pasture land which had to be preserved for all time. The green belt idea thus dates at least from the thirteenth century B.C.

The Greek City-State was also an early agency in giving rise to new towns. The original cities were set up in defensible positions some distance from the sea, as the core of the "polis", which included both town and country. As the cities grew stronger and more powerful and coastal raiding was suppressed, trading developed, and with it the need for ports. The first new towns of the city states were therefore founded as defensible harbour sites, often on rocky promontories, and peopled from the central cities.[2] The city of Miletus in Ionia for instance was one of the most active in founding other centres, whilst preserving its own coherent internal arrangement. By establishing a large number of colonial cities it became the head of an early and powerful confederacy in the fifth century B.C., stretching as far as Selinus on the southwest coast of Sicily. Miletus is of note because after it was sacked in 479 B.C. it was rebuilt by Hippodamus, on what is thought to be the first rectilinear plan in history. Following this, other cities rebuilt under the aegis of Miletus tended to follow the same rectilinear form of construction, and so this form became dispersed at an early date.

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[1] Numbers XXXV v. 1-5.

[2] Freeman. K. Greek City States. London, 1950.

The idea of limiting the population of cities has been recorded as far back as Spartan times, but it was Plato[1] who suggested the first absolute figure for optimum size, which was 5,040 families, excluding slaves. This number is the product of multiplying all numbers from one to seven, and so is divisible by every number up to ten, and also by twelve. Plato thought it a good number from the administrative point of view, since the populace could be readily divided up into groups of any size for different activities. His ideal location was ten to twelve miles from the sea with no other city near it, and with sufficient local resources to support it, but not too great an abundance, since this would promote a large foreign trade and cause too many foreigners to take up residence, and so disturb its social balance. He suggested that the city be divided into twelve neighbourhoods, and that subdivision of land amongst the inhabitants was to be arranged so that each citizen was to receive an equal share of fertile land in the centre and poor land on the margins.

Aristotle[2] also gave some thought to the siting and design of ideal cities. He was less idealistic than Plato and conceived a city situated on the coast to promote health and trade, and near a river to ensure a constant water supply. He visualized a combination of Hippodamus's grid plan with irregular streets so as to confuse enemies in times of attack. It is thought that Aristotle owed some of his ideas on cities to Hippodamus, whose work he recorded in the Politics.

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[1]Plato. The Laws. Book Five.

[2]Rosenau. H. The Ideal City. Routledge and Kegan Paul Ltd., London, 1959, p. 13.

The Roman concept of a new town was primarily a fortress from which colonization was effected, their policy being annexation first, and the subjugation of the native population second. In Britain the Romans founded the first true towns, since at the time of the invasion there was probably little more than tribal organisation in the country. The towns were usually built to a rectangular plan, the surrounding walls forming the main fortifications, and the internal layout a chess board pattern of military precision. Many of the Roman forts of Britain grew into towns, and some, such as Chester, Lincoln, Colchester, Canterbury, London and Chichester retain their importance today.

The most notable new towns of the Middle Ages were the "bastides"[1], built in the latter half of the thirteenth and fourteenth centuries in France. These towns were also at first primarily fortresses, sited for strategic reasons and designed to be defended. They were generally fairly small, and walled and ditched. The street pattern was rectilineal, the major ones opening out to fortified gates in the wall. The centre of the bastide was laid out as a market square, usually dominated by a church and town hall. Examples of such towns are Cadillac, Montpazier, St. Clar, and Vianne. In England at the same time Edward I was having castles built at strategic points to contain the Welsh. Castles were introduced into England with the Norman Conquest as a necessity to hold down the newly conquered and usually hostile population. However, eventually their functions extended far beyond that of a fortress, and they became centres of

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[1]Stewart. C. A Prospect of Cities. Longmans Green & Co., London, 1952, Ch. 5.

local government and administration through the aegis of their Lords. The activities of Edward I in building castles at such strategic places as Beaumaris, Criccieth, Conway, Harlech, Caernarvon and Flint, and the deliberate policy of encouraging the growth of towns at such places as Flint and Rhuddlan, also for strategic reasons, gave Britain her Medieval new towns.

The federal motive in planning new towns in the middle ages was strong not only for strategic reasons, but also for mutual benefit in trade and commerce. Bruges became the centre of twenty-four associated towns between the twelfth and fourteenth centuries. The same federal motives brought into being the powerful Hanseatic and Lombard leagues in the thirteenth century. The founding of new towns had the dual purpose of mutual interdependent support and provided the means for preserving the internal organic structure of the parent cities.

These same motives persisted throughout the Renaissance and prompted Leonardo da Vinci's scheme for ten satellite towns for Milan. The Renaissance also brought to light the writings of Vetruvius, introducing the town plans of an ideal classical city to a civilization anxious to assimilate the culture of the classical past. The influence of these plans[1] on such designers as Alberti, Martini, Scamozzi and Vasari was marked in their productions of geometrically perfect plans of ideal cities, based on polygons, stars or circles. One such city that was built, was Palma Nuova, laid out in 1593 by Scamozzi in the form of a star with a fortified tower in the middle replacing Vetruvius' idea of a temple or Alberti's idea of a palace.

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[1] Rosenau. H. The Ideal City. Routledge & Kegan Paul Ltd., London, 1959, Ch. 3.

A more famous Renaissance contribution to the concept of the ideal city was put forward by Sir Thomas More[1] by means of a comparative satirical description of an ideal state, Utopia, and Britain at that time. More's Utopia strongly foreshadows the garden city pattern postulated by Howard. He imagined a state with fifty-four towns strictly limited in size, at least twenty miles apart, with one central city two miles square. The inhabitants of the towns were to be familiar with farming, and the farmers were to visit the town each month. He makes a strong point of the populace of the towns having easy contact with the country, in particular the children.

A spate of literary utopias followed the publication of More's book.[2] Bacon (1561-1626), Hobbes (1588-1679), Filmer (d.1653) and Rousseau (1712-1778) to name a few, each contributed their ideas of an ideal state. Cecil Stewart[3] comments "When one looks back from the vantage point of a twentieth century observer, one realises that the Utopians failed because they did not take sufficiently into account the ordinary human failings. Their tragedy was not that they were irrational, for they were much too rational; they tried to create a setting for sane people in a world that was becoming less concerned with sanity and more concerned with sanitation. It was not without significance that the eighteenth century saw the invention of the first water closet, the widespread use of the handkerchief and the general adoption of the fork to supplement the knife and spoon. The Utopias that were to come in the end were all sanitary

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[1] More. Sir Thomas. Utopia. First published 1516.

[2] Encyclopaedia Britannica. 13th edition, 1959, Vol. 22.

[3] Stewart, C. A Prospect of Cities. Longmans, Green & Co., London, 1952, p. 112.

Utopias of spartan simplicity; Buckingham's Victoria, Owen's New Lanark, Salt's Saltaire and the rest, were all dominated by ideas of equalitarianism and efficient plumbing."

The beginning of the Enclosures in Britain in the late seventeenth century began a new era of urbanism. More food was being produced by fewer people, and this coupled with industrial invention, invited rural people to move into towns. Thus began the great age of industrial expansion. The horrors and triumphs of the industrial revolution have been well documented,[1] and there is little need to enlarge upon them at this point. It is sufficient to see that the result was that the nineteenth century utopia became a tool of social reform, rather than an ideal city or a paradise on earth.

Some of the most spectacular reformers at this time came, surprisingly enough, from the ranks of industrialists, the very group who were blamed for the propagation of urban squalor. The utopians worked in isolation, and were strongly opposed in their work by the majority of their countrymen.

Robert Owen (1771-1858),[2] a Scottish cotton spinner, put forward a "Plan for relieving Public Distress, and Removing Discontent, by giving permanent, productive Employment to the Poor and Working Classes, under Arrangements which will essentially improve their Character, and ameliorate their Condition, diminish the Expenses of Production and Consumption, and create Markets co-extensive with Production." He envisaged a society of agricultural villages with populations from 800 to 1200, situated so that

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[1] For example: Hiorns. F.R. Town Building in History. Harrap & Co. Ltd., London, 1956.
Engels. F. The Condition of the Working Class in England in 1844.

[2] Owen. R. A New View of Society and Other Writings. London, 1827.

everybody could enjoy the country and the town. He believed that the provision of favourable working and living conditions paid dividends both to society and to industrialists. He successfully tested his theory by setting up an industrial village at New Lanark, where he reduced working hours, introduced welfare schemes and abolished the employment of young children. The scheme was primarily based on education, an "Institution for the formation of Character" being opened, which was a day school for children, and a night school for adults. Despite these practical successes, however, Owen's theoretical approaches were widely rejected largely because he suggested communal lodgings, with private residences for families with children up to the age of three years old, but communal living for children over this age.

The influence of Owen was marked, however, in the writings of contemporary social reformers. Jeremy Bentham, with whom he was personally acquainted, drew up a scheme for an "Industry House establishment"[1] which was to accommodate 2000 people.

Following Owen came James Silk Buckingham (1786-1855) whose writings[2] had a more direct influence upon the later Garden City theories. He drew up a plan for a city, Victoria, which was to be a mile square and built in the country, and made up of buildings decreasing in height from the centre outwards, and arranged in concentric quadrangles. The inner buildings were to be public, and the outer ones, private houses. The inhabitants of Victoria were

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[1] Rosenau. H. The Ideal City. Routledge & Kegan Paul Ltd., London, 1959, p. 132.

[2] Buckingham, James Silk. National Evils and Practical Remedies, with the Plan of a Model Town. London, 1849.

to all be shareholders in the Model Town Association, which was to own all the land and buildings. Obnoxious industries were to be set aside from the site to preserve the health and comforts of the inhabitants. This formal plan reflects Buckingham's travels in Italy and France, his social ideas were those of Owen, and his ideas of communal ownership possibly sprang from Marx.

The idea of a consciously planned community as an asset to industry, however, became more common, the impetus coming from individual benevolence and enterprise of private individuals. Karl Marx labelled his contemporary social thinkers who based their hopes for the future upon such people "Utopian Socialists", a phrase which has persisted with an unfortunately derogatory implication for a movement which was to have profound results.

In 1852, Sir Titus Salt[1] built a model village in connection with his woollen mills on the banks of the Yorkshire Aire, near Bradford. In 1879, Bournville,[2] a garden village, then four miles from Birmingham, was founded by the Cadbury Brothers to house their factory and employees. An interesting feature of this scheme was that Cadbury did not intend the housing in the village to be solely for his employees. At first houses and building plots were let or sold to private persons, but this led to development contrary to the wish of the founder, so in 1900 the Bournville Village trust was established under the control of the Chief Commissioners

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[1] Stewart. C. A Prospect of Cities. Longmans Green & Co., London, 1952.

[2] Bournville Village Trust. When we Build Again. Allen and Unwin, 1941.

to provide for a continuation of an orderly form of development. Similarly Port Sunlight[1] was built on the banks of the Mersey by the Lever Brothers in 1888, when it was decided to move the soap works from Warrington. In 1904, New Earswick near York was founded by Joseph Rowntree and on the outskirts of Hull a model village was built by Reckitt and Sons.

[1]For Plan see Brown. A.J. and Sherrad. H.M. Town and Country Planning. Melbourne University Press, 1951, p. 281.

CHAPTER 2

EBENEZER HOWARD AND THE GARDEN CITY MOVEMENT

The tentative gropings of the nineteenth century reformers and philanthropists were eventually clarified into a workable synthesis by the activities of Ebenezer Howard, an inventor, and a one-time shorthand writer in the House of Commons. In 1898 he published a book, entitled "Tomorrow: a Peaceful Path to Real Reform", re-issued with slight revisions in 1902, under the title "Garden Cities of Tomorrow", which put forward in simple straightforward terms the ideas which led to the founding of Letchworth and Welwyn Garden City and laid the pattern for the subsequent building of New Towns in Britain. "Garden Cities of Tomorrow", Lewis Mumford[1] observes "has done more than any other single book to guide the modern town planning movement and to alter its objectives."

Howard's book starts with a description, aided by quotations from public speakers, the contemporary press and writers of the evils consequent upon the growth of great cities. He outlines the attraction which draw people to cities comparing a city to a magnet, and each person to a needle. He then takes this now famous metaphor one step further, and likens the country also to a magnet offering

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[1] Mumford, L. "The Garden City Idea and Modern Planning." Introductory essay in 1946 edition of Garden Cities of Tomorrow, by Ebenezer Howard, p. 29.

beauty of nature, fresh air, sunshine, low rents but offset by lack of society and conveniences, long hours and low wages. He sees neither the town nor the country as completely desirable, the assets of both need to be combined, "the two magnets must be made one.... Town and Country must be married."[1] Thus emerges his third magnet, the Town-Country magnet combining the best of the town and the best of the country, the Garden City.

Howard then proceeded to describe his method of establishing a perfect Garden City. He envisages the purchase of about 6000 acres by mortgage debenture vested in the names of four responsible persons, as secutiry for the debenture holders and in trust for the people of the Garden City. Ground rents for the land were to be paid by the occupiers to the trustees to be used for public undertakings such as roads, schools and parks.

Near the middle of the 6000 acres the town was to be built in a circular form, 1240 yards in radius, and covering about 1000 acres. The suggested plan was based on a series of concentric avenues, cut by six radial boulevards each 120 feet wide to give six wedge shaped neighbourhoods or "wards". In the centre was to be a five acre circular garden surrounded by public buildings, in turn surrounded by a 145 acre central park. Around the perimeter of this park was to run a glass arcade, to form both a shopping promenade and to tempt people out to view the park in inclement weather. Outside this circular "Crystal Palace" were to be built houses in concentric rings to accommodate 30,000 people. 2000 more were

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[1]Howard E. Garden Cities of Tomorrow. Faber and Faber, 1946, p. 48.

to be housed in the surrounding agricultural belt. The city building plots were to average 20' x 130' with a minimum size of 20' x 100'. One of the circular avenues, half way between the central park and the edge of the town was to become a "Grand Avenue", 120' wide and housing schools, playgrounds, churches and gardens. By this means no inhabitant of the town would be more than 240 yards from the nearest park. The outer ring of the town was to be the factory area and was to be completely circled by a branch railway, with sidings and loading facilities, so that no congestion of heavy traffic would occur in the centre of the town, and road maintenance would not be so costly. The industries and trains were to be powered by electricity to prevent smoke pollution.

The 5,000 acres of agricultural land outside the town were to be rented to the highest bidders, preference being given to existing tenants. The marketing of produce from the farms in the town would increase the intensity of farming, and sewage from the town would be used to enrich the land. Thus revenue from rents for the agricultural land could be expected to increase as the town developed.

Howard worked out the financial and administrative aspects of the Garden City very thoroughly. The revenue of the town was to be derived from rents which were to be used first to pay the interest on capital borrowed for the initial purchase of the land, then to pay off the capital, to pay for public works, and eventually to provide welfare schemes for the needy.

Howard finally worked out a system of "Social Cities". When the first Garden City reached its maximum polulation of 32,000, he

suggested that additional new towns should be founded in a ring around the original central city. He proposed a circular rapid-transit railway to link these satellite towns, with connecting links to the central city, and perhaps optimistically, calculated that the distance from any satellite town to the heart of the primary city need only be 3¼ miles. He then showed that if this principle were applied to London the migration of population to the new towns would cause land and property values in the metropolis to fall enormously. The depopulation and the consequent fall in rents would lead to the natural evacuation of slums and substandard property, and so force landowners to rebuild central London in a desirable and attractive manner. A system of Social Cities would thus serve the dual purpose of providing pleasant places to live and work, and cause spontaneous urban renewal in the older centres.

Howard acknowledges[1] the work of Edward Gibbon Wakefield, Alfred Marshall, Thomas Spence, Herbert Spencer and James Silk Buckingham in the field of social reform, but the amount of guidance he received from them in developing his theories appears to have been small. His own ideas have now stood clear and valuable for over fifty years and still attract attention from planners all over the world. However, he has often been misunderstood, as Osborn[2] has pointed out, through the activities of building speculators who labelled any type of suburban housing developments "Garden Cities",

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[1]Howard. op. cit. p.119 et seq.

[2]Osborn. F.J. Green Belt Cities. Faber and Faber Ltd., London, 1946, p. 39.

or "Garden City houses", thus causing the term to fall into disrepute.

The success of Howard's work stems from his happy knack of steering a practicable course between the concepts of the ideal city, and patronising social reform. He saw that some form of communal ownership of land was necessary, but that social freedom was equally necessary to make a garden city workable. He did not forsee a national system of communism, or for that matter of land ownership, but a system where the rents and natural advantages of any locality should accrue to, and benefit that locality.

The publication of Howard's book attracted some public attention, and he was able to find a number of able supporters. He toured the country lecturing, and in 1899 formed a Garden City Association with the objective of putting his ideas into practice. By 1902 a pioneer company had started looking for a possible site of four to six thousand acres, roughly circular in shape close to a main railway, and near to London or some other large centre.[1] In September 1903, the First Garden City Ltd. was formed to purchase 3,822 acres of land at Letchworth in Hertfordshire, after a considerable search for land in other parts of the country. The authorized capital of the company was £300,000, but in the first year only £100,000 was subscribed. The purchase of the original site cost £152,751 alone, so money had to be raised from mortgages, entailing heavy interest charges and administrative costs before any

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[1] Purdom, C.B. The Building of Satellite Towns. Dent, London, New edition 1949 (first published 1925), p. 53 et seq. (Most of the following information about the development of Letchworth and Welwyn is derived from this source).

development could be started. It was eventually twenty years before any of the shareholders received any interest, which was guaranteed at 5% per annum. There was no government support or subsidy for the scheme, and the local Rural District Council took little interest. The progress of development was consequently slow.

The site of Letchworth was considerably smaller than originally suggested, and was bisected by the NE-SW, London to Cambridge railway, so it became obvious from the beginning that Howard's ideas as to the disposition of land uses had to be modified. Raymond Unwin and Barry Parker were called in to design the garden city. Provision had to be made for 30,000 people, with factory sites, residential areas, shopping, schools and parks. The agricultural green belt had to be severely cut down from Howard's suggested proportion because of the shortage of land.

The town centre was sited south-west of the railway and was designed in a formal pattern. A main square was laid out with an axial Broadway running almost due north and south into it, and the area to the north of the square became the shopping district. The indistrial area was sited parallel to the railway on the south-east side, opening out towards the east.

The method used to develop the housing areas was to provide water, drainage and other public services, lay out the building plots and then lease them to builders. The first building was started in the existing hamlets of Willian, Letchworth and Norton where there were existing roads, and proceeded inwards towards the centre. This was later found to be a mistake since the centre did not fill up

as rapidly as intended, and the experiment proved costly in terms of services such as roads, drainage and water at a time when the Company could not easily afford them. The control of land use was effected by means of lease covenants, usually for 999 years, except for shops which were permitted 99 year leases.

The government showed no interest in the Letchworth scheme after the First World War, although at this time municipal housing started to become important. Howard however, was undismayed. In 1919 an estate of 1458 acres was put up for sale three miles north of Hatfield on the London York railway, and Howard, hurriedly borrowing sufficient down-payment (£4 to 5,000) from personal friends bought it for £51,000. Later adjoining land was bought bringing the total to 2,378 acres. Thus was the second Garden City launched. Again a public company was formed, Welwyn Garden City Ltd., being registered in 1920 with an authorized capital of £250,000. The site was only 20 miles north-west of London and on the same main road and railway system as Letchworth, and only 13 miles distant from it. The company ran into similar difficulties of borrowing money, and was forced to offer 7% dividends, but the slump following the post-war boom made the situation desperate at times.

The town was originally planned to have a population of 40,000 with the possibility of increasing this figure. The site was cut into four parts by the main NE-SW London to York railway, and two branch lines. The town was designed by the Company's Architect's Department, headed by Louis de Soissons. The industrial section was laid

out to the east of the main railway, and around the Hertford junction. The central area was planned as a formal scheme to the west of the railway and linked to the north and south by a grand parkway paralleling the main railways. Cul-de-sacs, quadrangles and closes were successfully incorporated as features of the design of the residential areas. The problem of attracting shops into the new town proved almost impossible, and was eventually solved by forming a limited liability subsidiary of Welwyn Garden City Ltd., the Welwyn Stores Ltd., in 1921, and giving the stores a right to all shopping sites in the town for the first ten years of its existence.

In May 1948 Welwyn was designated a New Town under the New Towns Act 1946.

The importance of Letchworth and Welwyn Garden City in the subsequent development of New Towns in Britain cannot be overemphasised. They pioneered use and density zoning, planned population size, inviolable green belts and unified urban land ownership, four features which have become completely accepted as a basis for planning new towns today. Moreover, during their development a body of experience was built up which proved invaluable in framing the legislation and anticipating the difficulties in post-war new town development. Whatever judgment may be formed about the physical amenities or social structure of Letchworth and Welwyn, they stand as a clear, working testimony to the ideals of their founder.

CHAPTER 3

EVENTS LEADING TO THE 1946 NEW TOWNS ACT

The Period Between the Wars

"Change is consummated in many cases after much argument and much agitation, and men do not observe that almost everything has been silently effected by causes to which few people paid any heed."[1]

After the founding of Letchworth and Welwyn, no new towns were started in Britain until almost thirty years later. One of the major events in retarding the development of the movement was the Locomotive Act (1896) passed two years before the publication of Howard's book, and its coincidence with the beginnings of the electrification of the railways in the Home Counties. This meant that long distance commuting became a comparatively rapid procedure, and encouraged the building of dormitory suburbs for London as far away as the south and east coasts.

Permissive legislation for the building of garden cities has existed since 1919. It was first introduced into the Housing (Additional Powers) Act (1919). This gave powers for the acquisition of land by a local authority, or a group of two or more local authorities, or an authorized association with sufficient capital, to develop a garden city, garden suburb or garden village. Similar provisions were written

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[1] Quoted by Howard in his Introduction to Garden Cities of Tomorrow.

into the Housing Act 1921, and the Planning Acts of 1925 and 1932, but regrettably no use was even made of them.

The idea of stemming urban sprawl by building new towns was not entirely forgotten during the inter-war period, although scant government or public attention was paid to the repeated recommendations for the adoption of this policy that appeared. In 1920 a government committee under the leadership of Neville Chamberlain (the Unhealthy Areas Committee[1]), recommended the building of garden cities either round an existing nucleus or on new sites, aided by a state loan in the early stages to enable the scheme to get under way rapidly. As a result legislation to enable garden city associations to be granted government loans was included in the 1921 Housing Act, and through this provision Welwyn Garden City received its first Treasury loan in 1923.

In 1927 Chamberlain, then Minister of Health, created a Greater London Planning Committee, which had Raymond Unwin as technical advisor, During the ten years of its existence, the committee did little effective work, but it is worth recording that in a report on decentralization it was stated "the satellite town or garden city seems to offer the most complete and effective ultimate type of decentralization towards which to work....."[2].

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[1] Interim Report of the Committee to Consider and Advise on the Principles to be followed in the Dealing with Unhealthy Areas. Ministry of Health, H.M.S.O., London, 1920.

[2] Second Report of the Greater London Regional Planning Committee. London, 1933, p.109.

In 1934, the Marley Report[1] was published. Again it advocated "the fullest adoption of that type of development usually associated with the idea of a Garden City" again no positive action was forthcoming. Instead, the increasing economic depression of the 1930's in the north of England and South Wales merely intensified the drift of industries and people to the Midlands and London area. The magnitude of the process eventually became a matter of national concern, and in 1937, the Prime Minister, Neville Chamberlain, appointed a Royal Commission to investigate the matter.

The Report of the Commission (the Barlow Report[2]) was published in 1939. Its terms of reference were "to inquire into the causes which have influenced the present geographical distribution of the industrial population of Great Britain and the probable direction of any change in that distribution in the future; to consider what social economic or strategical disadvantage arise from the concentration of industries or of the industrial population in large towns or in particular areas of the country; and to report what remedial measures, if any, should be taken in the national interest." The Commission therefore examined the problems under three headings, the causes of the present pattern of industrial location, the social, economic and strategical disadvantages of the pattern, and the possible steps which should be taken to alleviate the situation. The recommendations were clear. A central authority for planning, independent of any government department was proposed, with the objectives of securing the redevelop-

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[1] Garden Cities and Satellite Towns: Report of the Departmental Committee. Ministry of Health, H.M.S.O., London, 1935.

[2] Report of the Royal Commission on the Distribution of the Industrial Population. H.M.S.O., London, 1939. Cmd. 6153.

ment of urban areas, the decentralization or dispersal of industries and their employees, and the encouragement of a reasonable balance of industrial development throughout the country. In cases where decentralization was thought desirable the methods advocated to effect this were garden cities or garden suburbs, satellite towns, trading estates, and the further development of existing small towns or regional centres. The Commission also recommended that without excluding the activities of private enterprise, financial assistance should be available to municipalities from Government funds to undertake such developments, so far as desirable on a regional basis.

The minority report, which included that of Patrick Abercrombie, felt that these recommendations were not sufficiently positive, and strongly recommended the formation of a new Ministry to control the locational establishment of industry, to work out a national outline of development, and to authorize financial assistance for the various methods for securing the dispersal of population.

The Barlow report came to a somewhat uncertain end, the conclusions of the members of the Commission were obviously not in complete agreement about the future control of land use. However, the problems, and their social and economic evils were well expressed and despite the coalition government's preoccupation with the war, or probably because of the strategic lessons rapidly being learnt, two committees were set up by Lord Reith, then Minister of Works and Planning to examine the two problems of Compensation and Betterment, and Land Utilization in Rural Areas.

The report of the Expert Committee on Compensation and

Betterment[1], headed by Mr. Justice Uthwatt, showed conclusively that without a solution to this problem, adequate public control of land would be impossible, unless all the land of Great Britain were nationalized. One proposal was for the State to acquire the development rights of all undeveloped land. If this were effected the value of rural land would become the value for rural purposes only, and a person wishing to develop it for other purposes would need to buy from the State the rights to development. There could thus be no Claims for compensation, and betterment created by development of the land would accrue to the State. Another proposal was to tax the increases in site value, not only in developed areas, but also in rural areas as and when such lands were developed and site value increased. The first proposal was eventually incorporated into the 1947 Town and Country Planning Act, but later, largely because of administrative difficulties, had to be abandoned.

The Scott Report[2] on Land Utilization in Rural Areas, like the Barlow Report stressed the necessity for a central government planning authority. It also made a large number of recommendations about the control of urban sprawl and rural land use, pointing out that satellite towns and other similar developments should "be sited wherever practicable away from the better farm land" and that the "Ministry of Agriculture be consulted from the inception of the planning schemes."

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[1] Uthwatt Report. Report of the Expert Committee on Compensation and Betterment. H.M.S.O., London, 1942. Cmd. 6386.

[2] Scott Report. Report of the Committee on Land Utilization in Rural Areas. H.M.S.O., London, 1942. Cmd. 6378

The importance of the Barlow, Uthwatt and Scott Reports lies in their comprehensive exposure of the planning problems of Britain, coming at a time when extensive war damage was directing the thoughts of the public towards rebuilding. They were launched into a political climate of concern about the total future of Britain, and so found a wide and responsive audience, and were in a large part responsible in precipitating the passage of the post war planning legislation.

Events After 1940

The first effect of the Barlow Report was the acceptance by the wartime coalition government of the proposal for a central planning authority. In 1943 the Ministry of Town and Country Planning was established, inheriting the planning functions of the Ministry of Health, along with further planning responsibility in the provisions of the 1943 Town and Country Planning Act.

The destruction of many parts of central London during the blitz promoted the preparation of plans for its rebuilding. The first of these was the County of London Plan[1], prepared by the County Architect J.R. Forshaw and Professor Patrick Abercrombie and published in 1943. Complementary to this was the plan for Greater London[2], also prepared by Abercrombie and published in 1944. This plan covered an area of 2,599 square miles, extending roughly 30

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[1] Forshaw, J.R. and Abercrombie, P. The County of London Plan. Macmillan, 1943.

[2] Abercrombie, F. Greater London Plan 1944. H.M.S.O., London, 1945.

miles from the Administrative County boundary, a region with an estimated population of 6¼ million, excluding the County. It assumed, following the recommendations of the Barlow Report, that no new industries should be permitted in London or the Home Counties. It also assumed that residential densities of population in redeveloped areas of the County should not be more than 100 to 136 persons per acre, giving an "overspill population" of 618,000 to 817,750. In addition to this it was estimated that there would be 415,000 persons to be rehoused from congested areas outside the County area, bringing the total overspill population to at least 1,033,000 persons. A third assumption was that the total population of the Greater London Area would not be permitted to increase, again following the recommendations of the Barlow Report.

The plan suggested the recognition of four concentric rings of development, based largely on the existing structure of the London region. The inner urban ring included the whole of the County of London, and was regarded as an area from which the decentralization of population would occur. Outside this was the suburban ring which required neither decentralization nor further building. Outside this again was proposed a green belt ring, to be permanently safeguarded against building, and any existing settlements to be severely limited in any attempts to expand. Beyond the green belt was seen an Outer County ring, which was to be regarded as a receptor area for the overspill population (see map p. 38).

The housing of the overspill population was to be accomplished in three ways, by infilling areas in towns outside the built up London

area, by expanding towns outside the green belt, and by building a series of ten new towns. It was hoped that almost half a million people would be rehoused in these towns.

DECENTRALISATION TO NEW SATELLITE TOWNS[1]

Town or Site		Estimated Mid-1938 Population	Proposed Regional Decentralisation	Proposed Population
BERKS.	White Waltham	-	57,200	60,000
ESSEX.	Chipping Ongar	3,000	54,300	60,000
	Harlow	3,000	54,300	60,000
	Margaretting	-	28,550	30,000
HERTS.	Stevenage	7,000	50,500	60,000
	Redbourn	-	57,200	60,000
	Stapleford	-	23,700	25,000
KENT	Meopham	-	38,100	40,000
SURREY	Crowhurst	-	57,200	60,000
	Holmwood	-	57,200	60,000
TOTALS			478,250	515,000

Abercrombie stipulated that new towns should be well served, but not intersected by main roads and railways, and should have good transportation connections with London. He suggested that the people from the south of London should be decentralised to towns in the south, east Londoners to those in the east, and so on, to facilitate

[1] Abercrombie. op.cit. p.200.

easy contact with the home area. He regarded 60,000 as the most suitable population for a new town, and worked out a detailed scheme for Chipping Ongar on this basis, dividing it neatly into six residential neighbourhoods of 10,000 each.

The Greater London Plan was basic in that it outlined plans for reconstruction, housing and dispersal all in one scheme, and showed that the only way in which the problems of urban growth, control and decongestion could be solved was on a regional basis.

The war time coalition government took no positive action to implement these bold proposals at this time. Its immediate pre-occupation was to rehouse the homeless quickly, often in a manner which could only be excused on grounds of extreme urgency.

In July 1945, the Labour party came to power, The building of satellite towns in the London region had been spoken party policy since 1918. By October of that year, Lewis Silkin, then Minister of Town and Country Planning, had appointed a New Towns Committee under the chairmanship of Lord Reith "to consider the general questions of the establishment, development, organisation and administration that will arise in the promotion of New Towns in furtherance of a policy of planned decentralization from congested urban areas; in accordance therewith to suggest guiding principles on which such towns should be established and developed as self contained and well balanced communities for work and living."

The First Interim Report[1] was published in March 1946. It proposed that new towns should have population of between 20,000

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[1] First Interim Report of the New Towns Committee. H.M.S.O., London, March 1946. Cmd. 6759.

and 60,000, since below the minimum size they would cease to be practical economic units for industry, and as size increases, so can social and educational facilities. Above a certain size it was thought that an agreeable balance between housing and industry becomes hard to maintain, and internal daily travelling distances too great. The report suggested compulsory government purchase for the area selected, including a three-quarter mile wide green belt. It investigated eight possible types of agency to develop new towns, and decided that a government sponsored corporation, financed by the exchequer, was the most suitable. It was recommended further that each scheme for a new town should be treated entirely separately, that the agency for each should be responsible for planning and development, but should have no other responsibilities, and should be given sufficient powers to carry out its work without too much administrative control.

The Second Interim Report[1], published a month later, dealt with the acquisition, ownership, development, finance and government of new towns, Compulsory purchase orders were recommended both for developed and undeveloped land within a site. The population limit should be set at an early date, and strictly adhered to, and the site acquired should be sufficient for that number, and for a green belt. It was suggested that the developing corporation hold the freehold of the land and lease it for not more than 99 years, and that it should have powers to undertake development as wide as those

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[1] Second Interim Report of the New Towns Committee. H.M.S.O., London, April 1946. Cmd. 6794.

of any ordinary land owner. It was recommended that the towns should endeavour to attract diverse and balanced industries, and to develop varied population groups. The rate of development of a new town should be fairly rapid; 1,000 to 1,250 houses per year was suggested. It was also firmly pointed out that the investment in new towns should not be regarded as an addition to the aggregate of national expenditure on rebuilding, but as an alternative distribution of part of it. The towns should be financed by a state loan, with no payment of interest being expected until the town is sufficiently self supporting to meet it. When the population reaches 5,000 it was recommended that it should be incorporated as an Urban District, and if necessary local government boundaries should be adjusted accordingly.

The Final Report of the New Towns Committee[1] appeared in July 1946. It dealt with the principles of planning, factors affecting the preparation of a new town plan and the method of execution of a plan. Most of the planning concepts and standards laid down were already incorporated into town planning theory in Britain, for instance, those concerned with the design of residential neighbourhoods, schools, hospitals, and community centres.

In the meantime however, the New Towns Bill had been presented to Parliament on April 17th, 1946, before the Final Report of the Committee was made, and became law on August 1st, 1946.

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[1] Final Report of the New Towns Committee. H.M.S.O., London, July 1946. Cmd. 6876.

The Legislation

The terms of the New Towns Act 1946 followed fairly closely the recommendations of the Reith Committees. New towns were to be established by means of Development Corporations set up by the Ministry of Town and Country Planning, their objects and powers being "to secure the laying out and development of a new town..... and for that purpose every such corporation shall have power to acquire, hold, manage and dispose of land and other property, to carry out building and other operations, to provide water, electricity, gas, sewerage and other services, to carry on any business or undertaking in or for the purpose of the new town, and generally to do anything necessary or expedient for the purpose of the new town or for purpose incidental thereto."[1]

Under the terms of the Act the site of a new town is to be determined by the Minister of Town and Country Planning, who after consultations with all the local authorities involved, may issue a designation order that the site, which may include the area of an existing town, be a new town. At the same time the proposed population shall be stated, together with a map and a statement indicating the size and general character of the proposed new town. Objections can be made to the designation order, and a public enquiry must be held to consider them. The Act contains no provisions for the alteration of existing local government boundaries; these can only be changed under the Local Government (Boundary Commission) Act 1945.

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[1] New Towns Act 1946. Sec. 2(2).

The development corporation is an ad hoc authority appointed by the Minister of Town and Country Planning after consultations with the existing local authorities of the area in which the town is to be sited. It is made up of six to nine members, including a chairman and vice-chairman, all of whom are salaried.

The powers of the development corporations have already been outlined. In their financial arrangements they are more restricted. They may only borrow money from the Treasury, and have no other powers of borrowing whatsoever. For capital expenditure the development corporation may receive advances from the Minister with the approval of the Treasury from the Consolidated Fund. £50 million was set aside for this purpose in 1946, and in each of the New Towns Acts of 1952, 53, 55 and 58, this allocation was increased and now stands at £300 million. Advances are repayable over a period of 60 years at the Public Works Loans boards rate. The Minister may make grants towards the expenditure of a development corporation which is not of a capital nature. The new town corporations are also eligible for certain moneys under the terms of other Acts, such as the Town and Country Planning Act 1946 and the Housing (Financial and Miscellaneous Provisions) Act 1946, as are any other local authority.

The section of the Act concerned with the winding up of development corporations when their work is finished was repealed and replaced by the New Towns Act 1959. This Act provides for the setting up of a Commission for the New Towns, which, when it has become apparent that the development corporation of a new town has fulfilled

the purposes for which it was set up, will become in effect the trustee of the New Town. The development corporation will be dissolved, and the Commission will take over the financial management of the town. It will have power "to hold land without licence in mortmain, and will be incorporated for the purposes of taking over, holding, managing and turning to account the property previously vested in the development corporation."[1] Other aspects of local government will of course be handled by the town council, as in a normal municipality. The Commission is subject to direction given them by the Minister of Housing and Local Government (formerly Town and Country Planning) and must also have the permission of the Treasury to make contributions towards the cost of public works.

The New Town Act 1946, appears to give the development sorporations almost unlimited power. However as an administrative tool, it has been severely critizcised for its limitations. In 1950 Sir Ernest Gowers, then Chairman of the Harlow Development Corporation, wrote somewhat bitterly "Although the Corporation is given by statute the task of building the New Town, it is subject to all existing authorities who have any control over the various activities that go to building a town.....

The County Council are responsible for roads and surface water drainage, education and certain health services. The District Council's building by-laws must be observed, and that Council have

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[1] New Towns Act 1959. Sec. 2 (1).

statutory powers in respect of sewerage, open spaces, and sometimes water. The Parish Council are the street lighting authority. The Ministry of Health (now the Ministry of Housing and Local Government) exercise supervision over the planning and cost of houses and their approval is required of all water and sewerage schemes. The Board of Trade control the location of industry. The Ministeries of Labour and Works have their hand on labour and materials."[1]

[1]Harlow Development Corporation. Reports of the Development Corporations for the period ended 31st March, 1950. H.M.S.O., London, 1950.

CHAPTER 4

THE NEW TOWNS

General

The distribution of the fifteen new towns in Britain is shown on the accompanying map. Twelve of them, in England and Wales, are being constructed by New Town Development Corporations appointed by the Minister of Housing and Local Government, and the other three by similar corporations appointed by the Secretary of State for Scotland. Eight of these towns were established primarily to help accommodate overspill population from London, and are consequently situated in a circle around London, 20 to 30 miles from the centre in a manner suggested in Abercrombie's plan. This group of new towns will be discussed in more detail at a later stage in this thesis.

Of the three new towns in Scotland, two, East Kilbride and Cumbernauld, were started to assist in the relief of congestion in the City of Glasgow, in the same manner as those of the London region. The total overspill population of Glasgow has been estimated as 300,000[1] and it has been suggested that a further two new towns, in the region of Bishopton-Hougston and at Kilmarnock, are necessary to fully overcome the problem.

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[1] Stevenson, F.R. "Glasgow Overspill." Architect's Journal, Jan. 28th and Feb. 18th 1960.


LOCATION OF NEW TOWNS IN GREAT BRITAIN
GLENROTHES
CUMBERNAULD
GLASGOW
EAST KILBRIDE
NEWCASTLE
PETERLEE
NEWTON AYCLIFFE
MANCHESTER
LIVERPOOL
BIRMINGHAM
CORBY
STEVENAGE
HATFIELD
WELWYN
HEMEL HEMPSTEAD
HARLOW
CWMBRAN
BASILDON
CARDIFF
LONDON
BRACKNELL
CRAWLEY
SCALE
0 20 40 60 80 MLS.

The remaining five new towns were designated as a remedy for specific local problems. At Corby, Northamptonshire and at Glenrothes, Fifeshire, housing and community facilities were needed as a result of the planned expansion of primary industries. At the time of designation Corby was a rapidly mushrooming town of 15,000 persons dominated by the steel mills of Stewarts and Lloyds Ltd. The Development Corporation was charged with channelling the growth in an orderly manner, to a maximum of 40,000 people, and to give consideration to the provision of employment for those not employed in the steel works. Glenrothes is situated on the northern edge of the Fife Coalfield and was established with the main purpose of providing a balanced community consisting partly of miners and their families moving into the area to provide a labour force for the expanding coal industry and partly of employees of the new industries which it was hoped to introduce to give the community a mixed economic basis.

The new town of Peterlee, named after the famous miner's leader who died in 1935, was established with the idea of bringing social cohesion and diversity of employment into part of County Durham within the North East Development Area. It is proposed to be a centralizing force in an area of scattered impoverished communities, and will eventually become a town of 30,000 people. Cwmbran, Monmouthshire, was also established in a region which suffered from gross unemployment, and social distress in the depression of the 1920's and 1930's. However the introduction of new industries, particularly those concerned with steel, in immediately prewar years, and their expansion during the war, gave rise to

an entirely opposite set of problems, the necessity to provide housing and social facilities in a vigorous industrial area. The solution was found in the designation of the new town.

Newton Aycliffe, situated alongside the A1 main road, six miles north of Darlington, was built to accommodate workers in the Aycliffe Trading Estate, a war time Royal Ordnance Factory.

The Location of the New Towns of the London Area

The accompanying map shows the proposals made by Sir Patrick Abercrombie in the Greater London Plan for new town sites in the region around London compared with the sites eventually designated under the New Towns Act 1946.

Of the ten sites suggested by Abercrombie only two, Harlow and Stevenage, were chosen by the Ministry of Town and Country Planning. It is perhaps worth examining the reasons given by the Ministry[1] why the other proposals were abandoned. Two of the proposed sites, White Waltham in Berkshire, and Meopham in Kent, were rejected largely because they would have taken valuable agricultural land out of production. In addition the building of White Waltham would have rendered the adjacent airfield useless. Four of the proposed sites were thought to be too close to existing settlements, and would find survival as separate communities difficult. These were Redbourn, being thought to be too close to Hemel Hempstead, St. Albans, and Harpenden; Stapleford to

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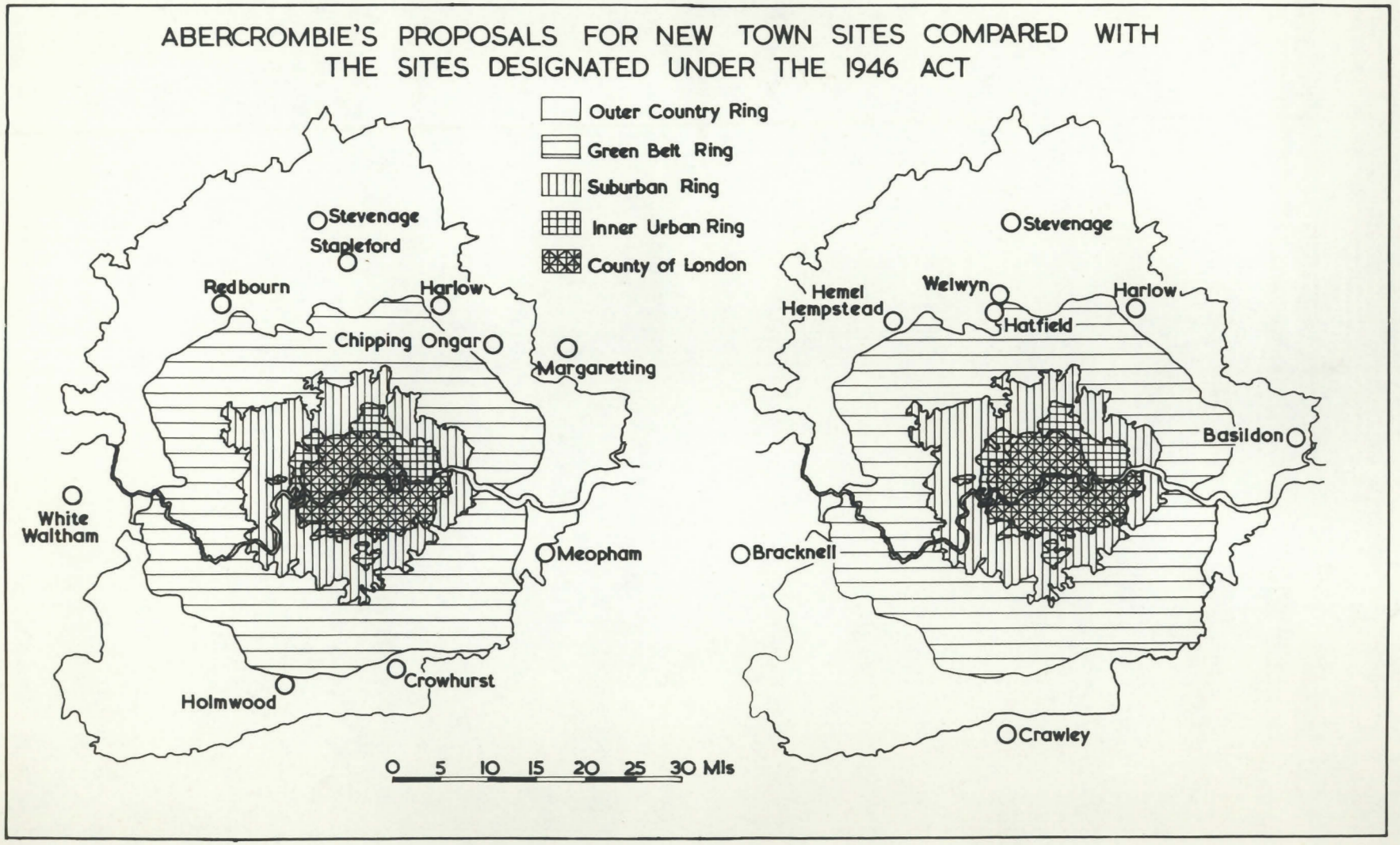
[1] "Town and Country Planning 1943-1951." Progress report by the Minister of Local Government and Planning on the work of the Ministry of Town and Country Planning. H.M.S.O., London, 1951. Cmd. 8204. p. 125.


ABERCROMBIE'S PROPOSALS FOR NEW TOWN SITES COMPARED WITH THE SITES DESIGNATED UNDER THE 1946 ACT
Outer Country Ring
Green Belt Ring
Suburban Ring
Inner Urban Ring
County of London
Stevenage
Stapleford
Redbourn
Harlow
Chipping Ongar
Margaretting
White Waltham
Meopham
Crowhurst
Holmwood
0 5 10 15 20 25 30 Mls
Stevenage
Hemel Hempstead
Welwyn
Hatfield
Harlow
Basildon
Bracknell
Crawley

Hertford; Margaretting to Chelmsford, and Holmwood to Dorking. Holmwood had the further disadvantage of being a site in an area of beautiful countryside considered worth preserving. Ongar was disqualified because its development would have involved the building of a costly railway spur, a problem which also applied to Redbourn. Crowhurst was thought to be unlikely to attract industry and too close to Crawley which had been suggested as an alternative to Holmwood.

In the light of these reasons given for the rejection of most of the sites suggested by Abercrombie, it becomes difficult to explain the sites eventually chosen by the Ministry of Town and Country Planning. Two of the sites, Crawley and Welwyn Garden City, have adjacent airfields, Gatwick and Panshanger respectively. A large area of Bracknell is taken up by an inviolable R.A.F. Staff College. Harlow is situated in the middle of Class I, good quality land, described as "Good general purpose farmland, well drained; soils of good depth, workable for much of the year."[1] The relationship of the new towns to other urban centres can be seen from the map. All lie on main railway lines and A class major roads out of London. Three, Hatfield, Welwyn Garden City and Stevenage, are on the same system, the main line railway to the north, and the A1 road. All the towns are within 30 miles of Central London, and some, notably Bracknell, Hemel Hempstead and Hatfield, are within close proximity to other urban centres of considerable size. Six of the towns are north of the Thames, and two to the south. The original idea of ringing

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[1] Land Classification Map Sheet 2. (National Planning Maps) published by the Ordinance Survey.

London with new towns appears to have been dropped. A general theory of new town location in the London region, apart from the association with major traffic routes, appears to exist no longer.

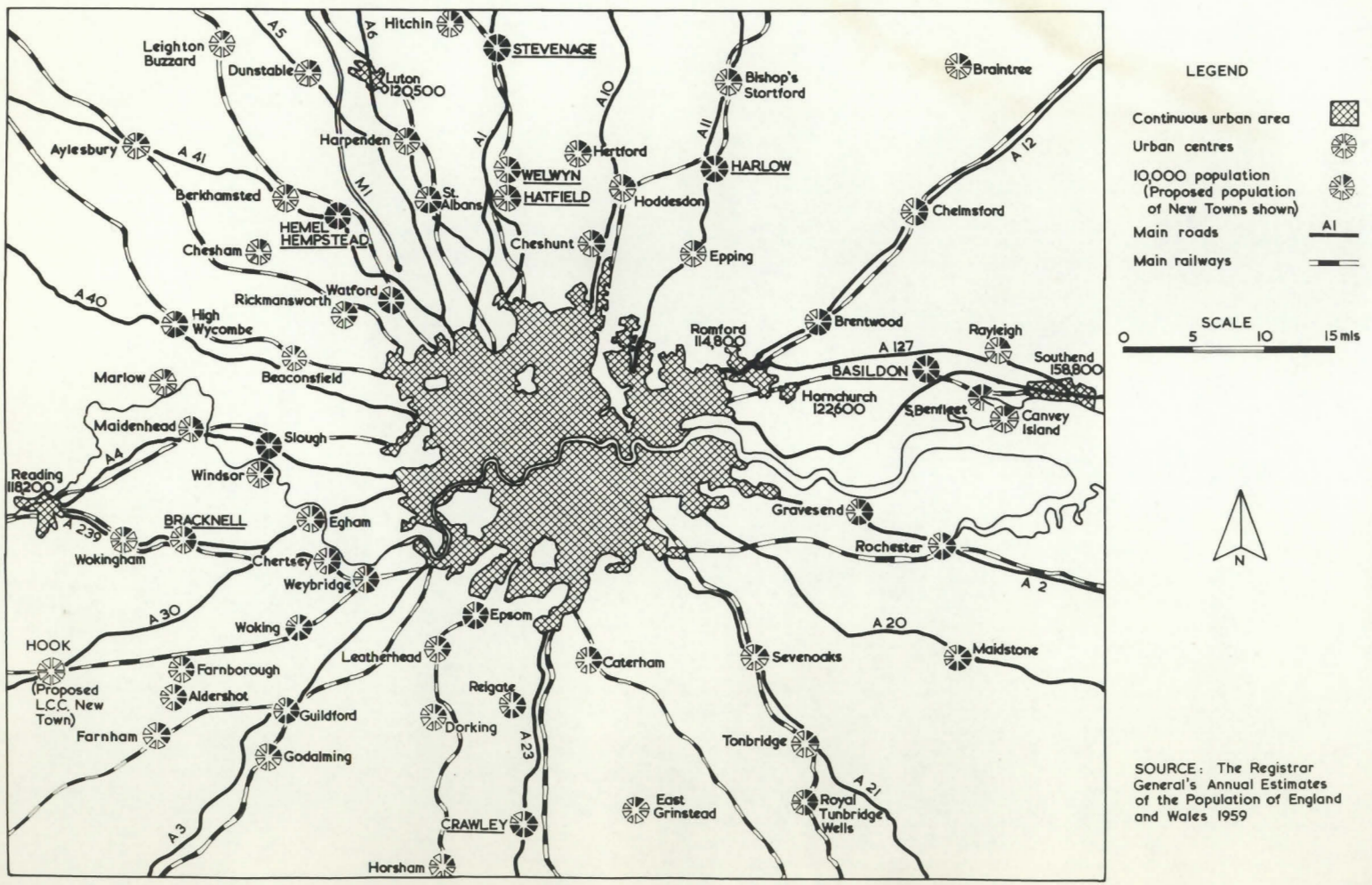
The New Town Plans

The Master Plans of the New Towns of the London Region have been governed by three factors, the structure, relief and drainage of the designated area; the existing road and railway pattern of the area; and the degree and location of existing developments.

Each of the towns will now be considered briefly from these aspects in an attempt to show how the general plan of each town has evolved. In some instances the degree of physical control has been high, in some the amount of existing development has played the most important tole. In Harlow for instance this latter factor was unimportant, while in Hemel Hempstead both relief and existing development exercised the most rigid controls.

For each of the towns maps have been prepared showing the relief and drainage, and the general disposition of land uses on the same scale, so that they might readily be compared. In addition, the maps for all the towns have been prepared at the same scale so that the differences in the areas of the towns may be fully brought out.

THE LOCATION OF NEW TOWNS IN RELATION TO LONDON AND OTHER URBAN CENTRES



SOURCE: The Registrar General's Annual Estimates of the Population of England and Wales 1959

Basildon

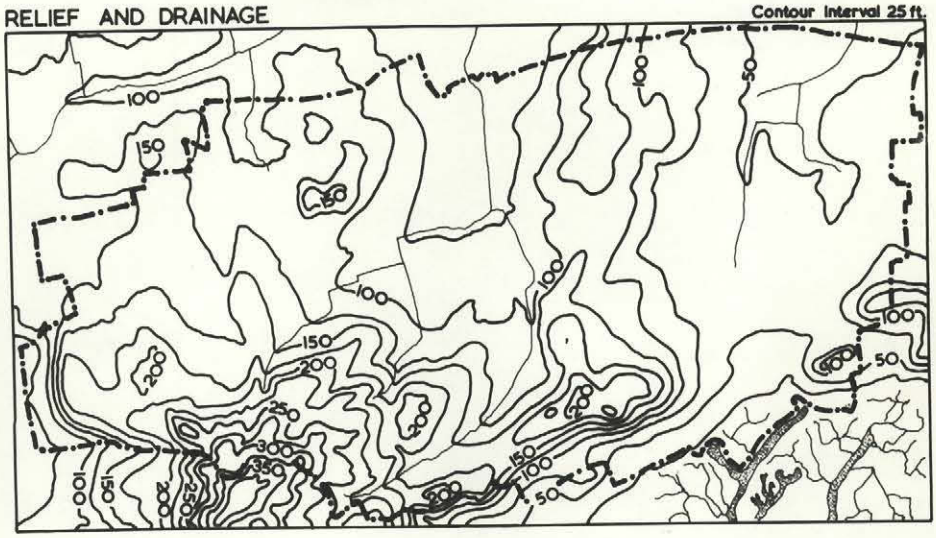
The site of the New Town of Basildon lies just north of the Thames estuary, mid way between London and Southend on Sea. It is roughly rectangular in shape, 6 miles from east to west, and 3 miles from north to south. It is made up of an east-west trough draining off to the River Crouch, and bordered on its southern margin by a series of gravel capped hills rising to a maximum height of just under 400 ft., but averaging around 200 ft. A small area of the south east part of the town drains south to the tidal mud flats of the Thames estuary. The whole of the area is underlain by thick heavy London Clay, the hills to the south having withstood erosion because of the protection afforded by caps of Bagshot gravel. The origin of the trough in which the town is being built is imperfectly known, but it may have been due to water erosion during the Pleistocene.

The important physical features which emerge however, are that most of the site is underlain by heavy clays which make drainage and excavation difficult, and that the presence of the Langdon Hills in the south causes the natural drainage of most of the area to be towards the north, and not to the south as might be expected from a site so close to the Thames.

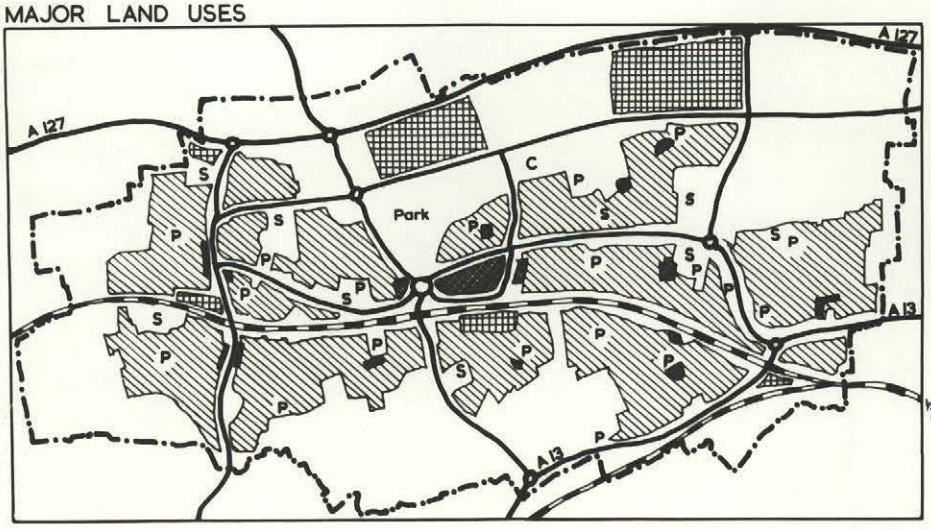
Until towards the end of the nineteenth century Basildon was part of the mixed agricultural area of Southern Essex. Two main events then occurred which were to have a profound effect upon its subsequent history. First, in 1888 the Fenchurch St. to Shoeburyness railway was built, which now bisects the townsite, and second: there followed a depression in farming which led to the

BASILDON

RELIEF AND DRAINAGE



MAJOR LAND USES



SOURCE: Basildon Development Corporation Master Plan 1955

area being divided up and sold off to Londoners looking for sites for country cottages. The first major influx of such people occurred after the First World War when there was a serious housing shortage, and many veterans acquired small holdings in the country. During the Second World War, many families took up permanent residence in what had formerly been temporary houses, when accommodation in London was at a premium. There thus evolved what has been termed a rural slum, an area of partly developed building plots, poorly laid out, with at least 5,000 sub-standard houses, 78 miles of unmade roads, liable to flood or to become impassable in wet weather, and very few sewers or other public utilities. Most of the settlement was concentrated at Laindon and Pitsea, straggling villages at the west and east ends of the designated area.

The idea of creating a new town in this area was first broached by the Essex County Council, and the Billericay Urban District Council, and was taken up by the Ministry as a solution to the planning problems of this area, and also as a means to provide an outlet for the over-spill population, in the first instance, from the east London boroughs of East Ham and West Ham.

The area of Basildon is 7,834 acres, and its population at the time of designation was about 25,000. It was originally proposed to expand this population to 50,000, but this figure was later increased to 80,000 and eventually to 100,000. The compulsory purchase of land involved many difficulties; there was an enormous number of land owners, many of whom could not be found, and many people living in the area who had only "squatters rights" to the land they

occupied. Many of the existing inhabitants were old age pensioners, eking out an existence by small holding, whose independence was threatened by compulsory purchase.

In addition to the Fenchurch St. - Shoeburyness railway line, there was a branch line from Tilbury, cutting across the south east corner of the site to join the main line at Pitsea. Parallel to this railway the site was also cut by the A13, the main road along the Thames estuary from London. The northern edge of the site is bounded by the A127, the dual carriageway Southend arterial road.

By 1951 the master plan had been worked out by the Corporations Staff under the direction of Mr. N. Tweddell, Chief Architect Planner, and Miss Sylvia Crowe was appointed consultant landscape architect. One of the earliest difficulties encountered was the problem of the drainage of the site. Originally it was intended to drain most of it northwards towards the River Crouch, but it was discovered that this would reduce the salinity of the river to such an extent that the oyster beds would be destroyed. Consequently the drainage had to be turned around against the natural slope of the land and made to flow into the Thames, and undertaking which proved costly and delayed other construction work.

The plan provided for the construction of a new town centre midway between the two existing villages, and north of the railway, in the relatively undeveloped part of the site, since neither of the existing village centres was sufficiently well developed to be worth modifying. The industrial areas were laid out parallel to the main Southend road, and not adjacent to the railway as might have been

BASILDON

A typical pre-New Town house

New terrace houses. Note the use of local flints in part of the frontage.

Part of the Town Centre showing two-level shopping

BASILDON

Terrace houses designed to permit ready access to front or back through archways. Pinmill.

Crescent of houses in Ghyllgrove neighbourhood.

Stores in the Town Centre. These are sited facing a busy traffic street.

A pedestrian shopping square in course of constuction.

expected, reflecting the greater importance of road transport in light industry today. A link road was built between the villages of Laindon and Pitsea, passing by the new town centre, and an industrial service road was built parallel to the Southend road. The rest of the area north of the main railway line was divided up into six residential neighbourhoods, and south of the railway into four. Each neighbourhood has a projected population of between 4,000 and 14,000, and the old villages are each to form one unit. The flatness of the site in the central area has been compensated for by the variety of the design of the housing. This has possibly resulted from the Corporations policy of employing outside architects to design some of the residential areas. The neighbourhood units closest to the town centre are now almost complete, and the Corporation is about to embark upon the second and most challenging phase of housing, that of redeveloping the areas including Laindon and Pitsea which contain so much sub-standard housing.

Bracknell

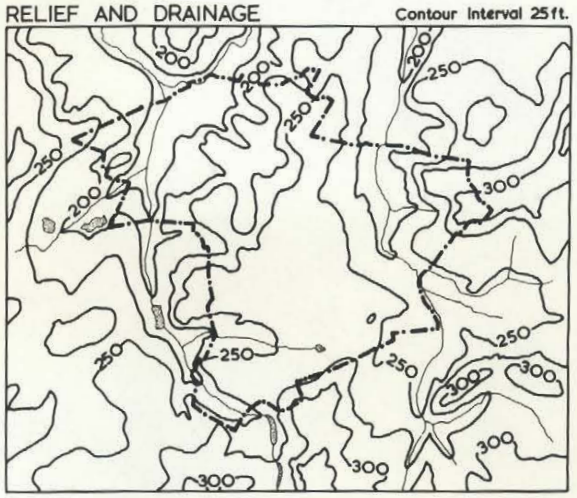
The site of Bracknell, chosen as a substitute for White Waltham, lies west of London, 11 miles south of the Thames in a beautiful area of undulating farmland in the north, with wooded knolls, merging into sandy heaths and woodland to the south. Geologically it lies at the junction of the London Clay and the sands and gravels of the Bracklesham, Barton and Bagshot beds which estend southwards towards Sandhurst. The area is drained to the north towards the Thames by the Bulbrook in the east and the Down Mill Stream in the west.

The area designated was 1,860 acres, a little over 100 acres of which was already taken by the Ramslade R.A.F. Staff College. The existing town of Bracknell had a population of 5,000 and it is planned to increase this to 25,000. The designated site was cut from east to west by the London - Wokingham - Reading railway, and north of this by the A329, the main London to Wokingham Road. This road was joined by the A322 from Bagshot coming in from the south east, and by the A3095, the road from Sandhurst to Maidenhead which cuts diagonally across the site from S.E. to N.W. The main shopping street was the main Wokingham Road.

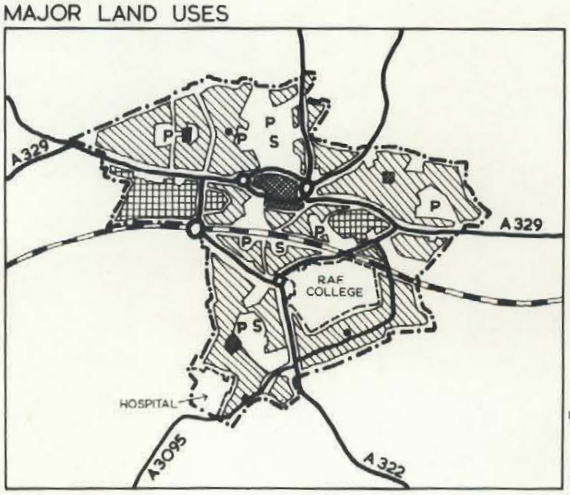
The Master Plan for the new town was devised by the Corporation's own staff under the direction of the Chief Architect, Mr. E.A. Ferriby. The plan was closely related to the existing land uses in the town. There were already in Bracknell two recognisable industrial areas, one in the west between the Wokingham road and the railway and one in the east between the London road and the

BRACKNELL

RELIEF AND DRAINAGE — Contour Interval 25ft.



MAJOR LAND USES



LEGEND

- Residential
- Shopping and Commercial
- Industrial
- Primary School — P
- Secondary School — S
- Railway
- Main Roads
- Neighbourhood Sub centre
- Boundary of Designated area

SCALE

½ ¼ 0 1 miles

SOURCE: Bracknell Development Corporation Master Plan 1954

BRACKNELL

The old High Street

A new shopping mall, leading through to the old High Street.

High income group houses.
Westbrook Gardens.

railway. These became the Eastern and Western Industrial Areas respectively. The old east-west High Street was a thriving shopping street, and consequently the new shopping centre was fused on to the north side of it, and enclosed by a ring road on the north side again, so that the old High Street can be by-passed (It is hoped that eventually a by-pass right round the northern edge of the town site will be constructed). The housing areas then fell naturally into four district neighbourhood units separated by the major roads, and each is being provided with the usual facilities. The design of houses in the new town is rather conservative, in that traditional house types and bricks have been used, but the utilization of the natural knolls and existing trees and shrubs in the laying out of housing areas has been excellent, particularly in those south of the railway.

One of the most interesting recent developments in Bracknell is the decision of the Meteorological Office to move into a site immediately to the east of the town centre. It is thought that 800 persons, most of them professional, will be employed at the office, and it will be interesting to see the social impact of such a group on sosmall a town.

Crawley

Crawley is situated beyond the London Basin, south of the North Downs, at the foot of the Wealden ridges. The site slopes downwards from south to north, and is drained by the Ifield Brook, Crawter's Brook and the Gatwick Stream, all flowing northwards to join the River Mole. The site rises steeply at its southern and eastern margins where the Wealden Clay, which underlies most of the site, gives way to the Hastings beds which form wooded ridges, sharply dissected by the north flowing streams. These ridges rise to a height of 450 ft. just beyond the boundary of the town, and form an impressive backdrop to the urban development.

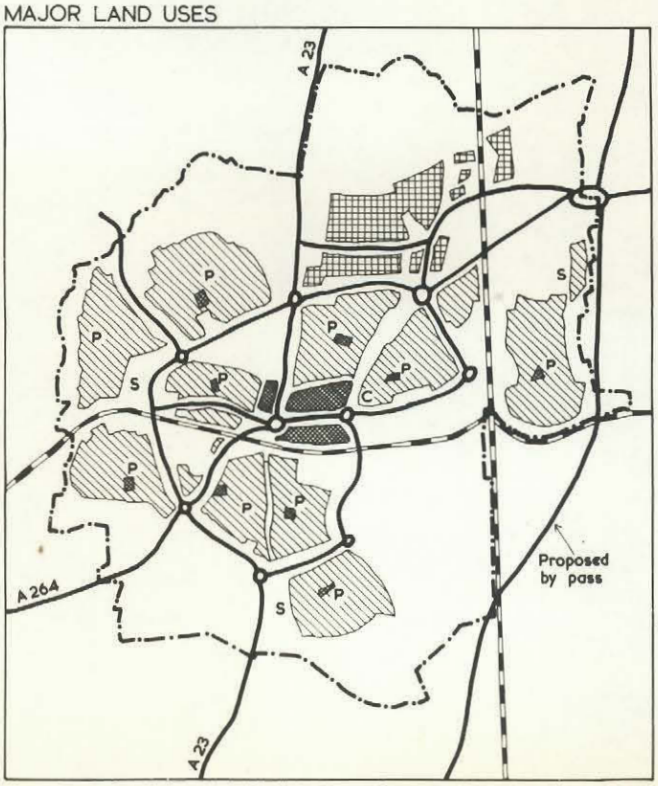
At the time of its designation Crawley was a small town on the A23, the main London to Brighton road, and was impressively by-passed by a loop road round the west side. The designated site was further cut by the north-south London to Brighton railway on its east side, which was crossed by the Horsham to East Grinstead branch line at the hamlet of Three Bridges. The A264 road also from East Grinstead to Horsham passed through the site from east to west.

The population of Crawley at the time of its designation was 10,000, and it is planned eventually to be 60,000. The Master Plan, prepared by Mr. Anthony Minoprio, consultant to the Corporation, was prepared by 1949. The existing Crawley by-pass was incorporated to form one portion of a ring road encircling the town centre and four residential neighbourhoods, separated from each other by radial roads. The industrial area was laid out beyond this circular ring between the London road and the railway, in the north east of the townsite. Outside the ring road, five other residential neighbourhoods were planned,

CRAWLEY

RELIEF AND DRAINAGE

MAJOR LAND USES



SOURCE: Crawley Development Corporation Master Plan

CRAWLEY

The town square

The Broadway, linking the old and new shopping centres

Matured terrace houses

again separated from each other by major radial roads. One of these, Pound Hill, lies to the east of the main railway. The new shopping centre was grafted on to the eastern side of the old High Street, and south of it, parallel to the railway, was made a service industry area and goods yard. The areas outside the residential neighbourhood within the site are reserved for industry.

It was feared at one time that the location of Crawley, south of London, and not within the London - Birmingham industrial axis might detract from its capabilities of attracting industry. These fears have been proved groundless. There are already 72 industrial firms in the town employing approximately 10,000 people, and at least seven more are in the process of moving.

Harlow

Harlow lies north east of London, south of that lower part of the Stort Valley which flows from east to west to join the River Lea. The river forms the northern boundary of the townsite, and is joined in the east by a north flowing stream, and in the west by the north flowing Cannons brook with its west flowing tributary, the Todd Brook. These streams and their tributaries have eroded the glacial tills and gravels of this area, in some places exposing the underlying London Clays to give a rolling topography of well treed fertile farmland. The Todd Brook Valley, and its tributaries have divided the major part of the townsite naturally into four physical areas, and the way that these have been utilized as sites for four central residential neighbourhoods can be seen from the accompanying map.

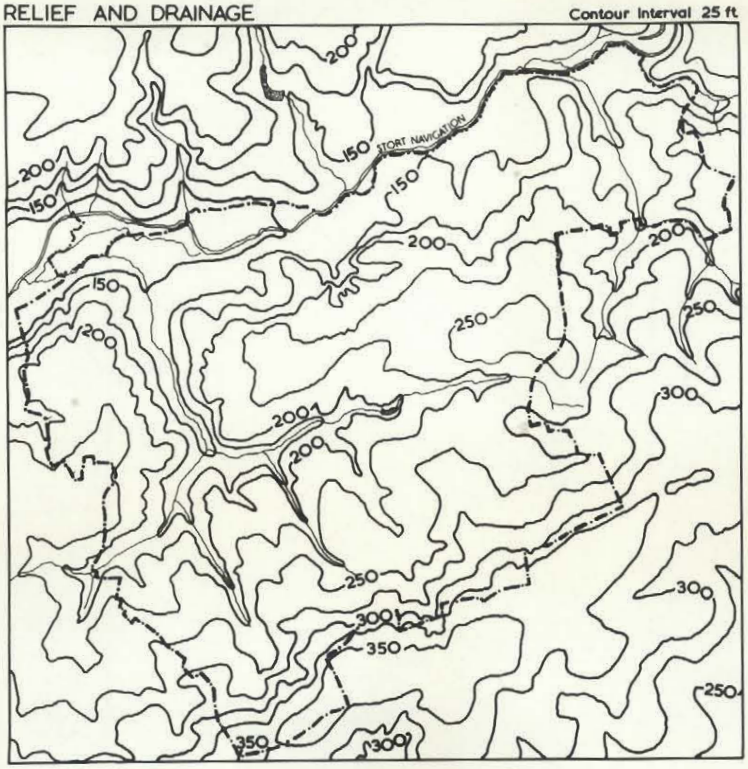
The area of the townsite is 6,320 acres, and at the time of designation had a population of only 4,500, mostly situated in the old villages of Harlow in the north east corner of the area, and Potter Street in the south east corner. Mr. Frederick Gibberd was appointed town planning consultant by the Ministry, and the plan was prepared by 1948, providing for a new town of 60,000, a figure which was later revised to 80,000.

The major existing cultural features of the area were the A11 road, running through the old villages of Harlow and Potter Street on the east side to Cambridge, and the canalized but little used River Stort, paralleled by the Cambridge railway following the northern edge of the town site. The main station, Harlow

HARLOW

RELIEF AND DRAINAGE

Contour Interval 25 ft.



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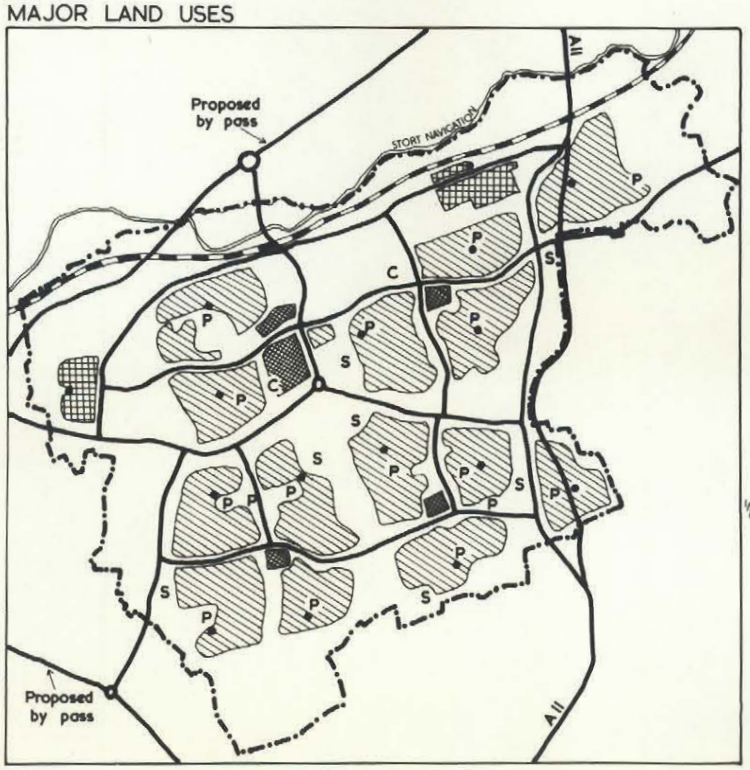


LEGEND

- Residential
- Shopping and Commercial
- Industrial
- Primary School — P
- Secondary School — S
- College — C
- Railway
- Main Roads
- Neighbourhood Sub centres
- Boundary of Designated area

SCALE

½ ¼ 0 1

miles

SOURCE The Harlow Guide 1958

HARLOW

The town square

St. Paul's Church, located within the central area.

A pedestrian shopping arcade

Houses built round a green. The sculpture is "The Donkey" by Willi Soukop.

Town, (formerly Burnt Mill) is near the centre of the part of the railway that runs through the site, and the Town Centre was built south of this. Industry is situated also on the base line afforded by the railway, in two estates, east and west, which will have easy access to the new London - Norwich motorway when it is built along the south side of the Stort Valley. The residential neighbourhoods were built on the higher ground, as already stated, and each was subdivided into three or four sub-neighbourhoods, each with a small shopping centre and primary school. Each neighbourhood also has a main centre of substantial size, and strategically located Secondary schools. The villages of Potter Street and Harlow are also being developed as separate neighbourhoods, and it is hoped eventually to preclude the use of the present A11, as a main highway, since it passes through the centres of these villages.

The pattern of development of Harlow, as seen on the map appears as an almost ideal town plan in terms of the current theory of the size and disposition of land uses. No sub-neighbourhood units are cut by main roads, each has its own facilities, and the plan appearance is good. The roads run down green wedges which penetrate into the heart of the town. However, it has been criticized on the grounds that the feeling of urbanity has been lost to open spaces and efficient roads. Perhaps time will show that this is desirable.

Hatfield

Hatfield is situated 18 miles north of London on the southern side of the Middle Lea Valley. The south part of the town site is made up of a gently curving chalk ridge, partly overlain by gravelly Reading beds and patches of glacial drift, which forms a spine running along the length of the town. This area is wooded and extremely pleasant. The north part of the site is not so interesting, lying upon a drift-floored lowland which slopes gently down to the east-flowing River Lea.

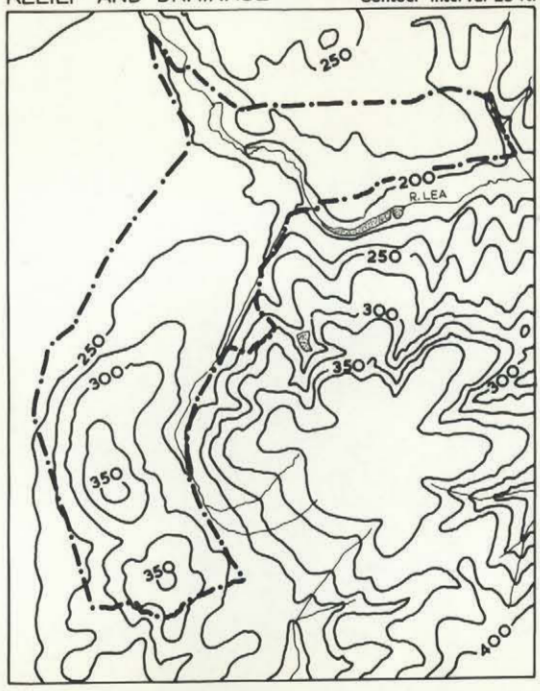
The ancient routeways through the valleys of the chalk escarpments have always dominated this region. The valley to the west of Hatfield contains the A1 - the Barnet By-pass and the main road to the north. The valley to the east contains the A1000, the old Great North Road, and the main railway to the north. Parallel to the Lea Valley in the north part of the site runs the unfinished North Orbital Road, and diagonally across the site ran the old Hertford - St. Albans Road.

The first task of the consultant planner, the Hon. Lionel Brett, was thus to ensure that Hatfield did not become a gigantic traffic island. To do this, it is planned to close the central part of the A1000. A road is being constructed across the southern part of the town to divert its traffic into the A1, and hence the major roads will be controlled to form a great letter C around the townsite. The residents of the town will then have unobstructed access to the beautiful Hatfield Park to the east.

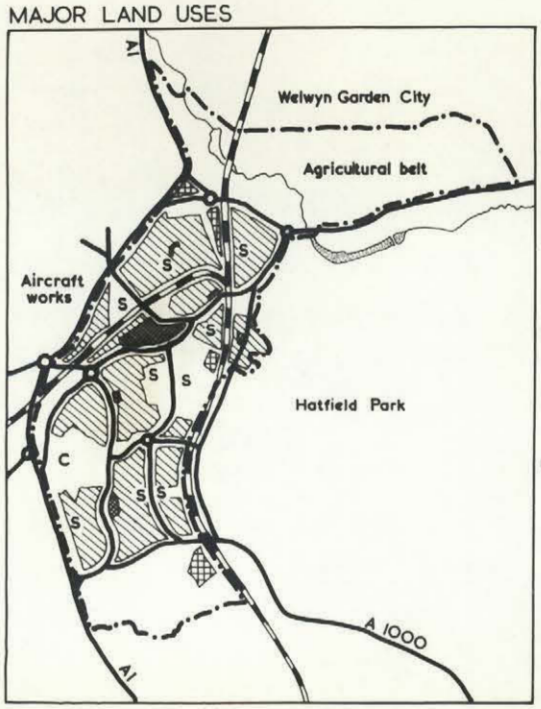
HATFIELD

RELIEF AND DRAINAGE

Contour Interval 25 ft.



MAJOR LAND USES



LEGEND

- Residential
- Shopping and Commercial
- Industrial
- School S
- College C
- Railway
- Main Roads
- Boundary of Designated area

SCALE

½ ¼ 0 1 mls.

SOURCE: Hatfield Development Corporation booklet 1957

HATFIELD

Shopping arcade, linking the old and new centres

Corporation housing, Bishop's Rise

Old Hatfield, on the eastern margin of the new town, was deemed too inconveniently located and to have a too closely knit village character to form the nucleus of a new town, consequently the new centre was located on the old St. Albans road, incorporating an existing straggling shopping area.

The population at the time of designation was 8,500, and it is proposed to expand this to 25,000. To distribute this in an area of 2,340 acres, it was necessary to plan for high densities, the net average being 32.9 persons per acre. The area was divided into seven neighbourhoods, including old Hatfield. The southern ridge was parallelled on each side by neighbourhood roads following the contours, and each small undulation in the ground has been developed to some purpose.

The maps of Hatfield shows almost no land zoned for industry. This is because Hatfield, unlike the other new towns, had before its designation enough industry within one mile of its town centre to support its whole projected population. The De Havilland Aircraft Company, situated on the opposite side of the A1, alone employs more than 10,000 people.

The relationship of Hatfield and Welwyn Garden City will be discussed in the section on Welwyn.

Hemel Hempstead

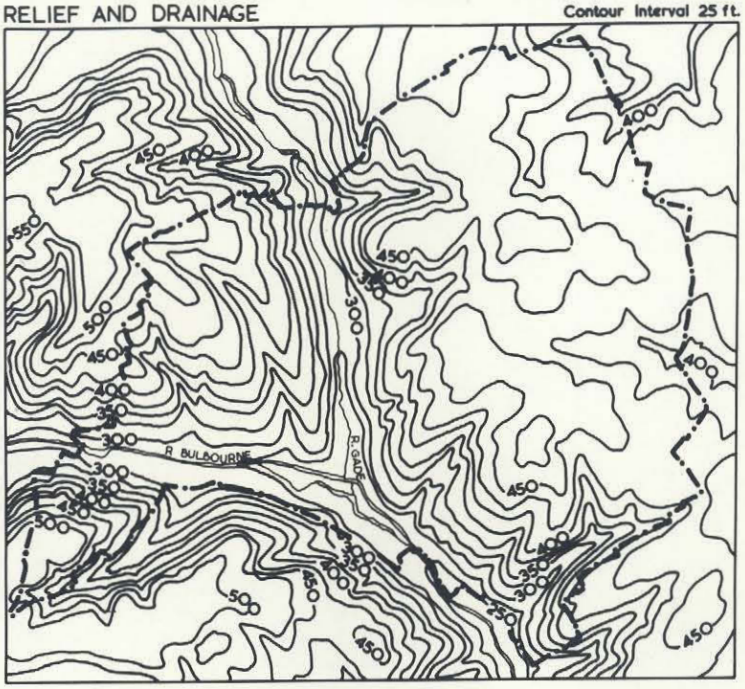
Hemel Hempstead lies in the heart of the Chilterns 24 miles north west of London. It is located at the junction of the valleys of the Rivers Bulbourne and Gade, two of the larger and deeper valleys carrying permanent streams which flow south east down the chalk dip slope to join the River Colne. The townsite is thus divided into three distinct upland areas. The eastern plateau rises to 450 ft., is fairly flat topped, and dissected on its western margins by steep sided dry valleys running down to the Gade. The area between the Gade and the Bulbourne is a dissected ridge aligned in a north west to south east direction, and reaching over 500 ft. in the north west. South of the Bulbourne is a small area included in the townsite which rises steeply up to 500 ft. These plateaux are in some cases capped with patches of clay with flints but tend to be windy, waterless and treeless.

The valley of the Gade, running in this section from north to south, bisects the townsite and this valley, and that of the Bulbourne, lead northwards to wind gaps across the scarp and afford routeways to the Midlands which have been used since earliest times. The Bulbourne Valley, which is often dry in its upper parts above Bourne End, is followed by the main railway to Rugby, the A41 road to Aylesbury and the Union Canal to Leighton Buzzard and the Midlands. The Gade Valley contains the main road from Hemel Hempstead to Leighton Buzzard, and also the branch railway which winds its way up one of the dry tributary valleys on the east side of the valley to Harpenden.

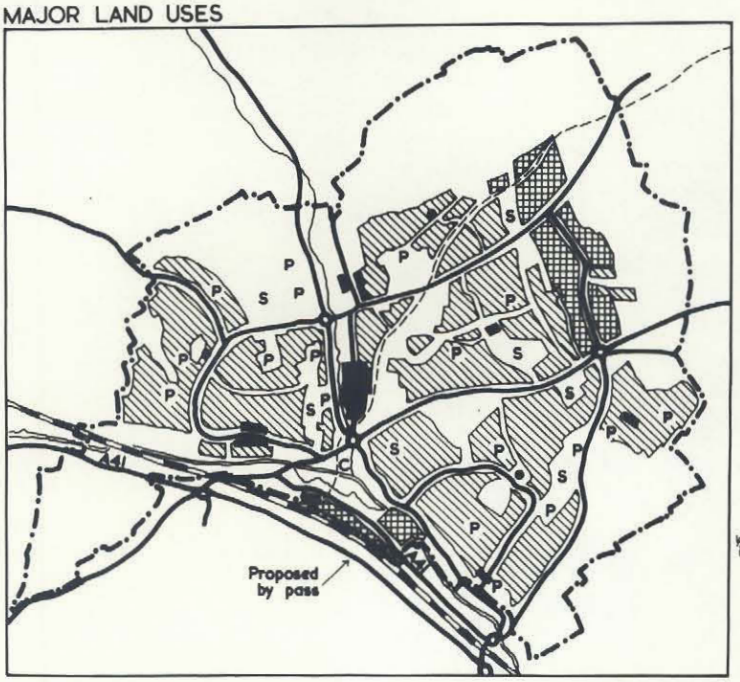
HEMEL HEMPSTEAD

RELIEF AND DRAINAGE

Contour Interval 25 ft.



MAJOR LAND USES



LEGEND

- Residential
- Shopping and Commercial
- Industrial
- Primary School P
- Secondary School S
- College C
- Railway
- Railway proposed to be closed
- Main roads
- Neighbourhood centres
- Boundary of Designated area

SCALE

½ ¼ 0 1

miles

SOURCE: The Master Plan for Hemel Hempstead 1951

Hemel Hempstead was an ancient well established borough, situated in the Gade Valley at its junction with the Bulbourne, with a population of 21,000 at the time of its designation. The area of the new town is 5,910 acres, and the planned population is 60,000. It has been suggested that this might be raised to 80,000. Mr. G. A. Jellicoe was appointed by the Minister of Town and Country Planning to prepare the outline plan, and thereafter was appointed general consultant planner to the town.

The bustling old town centre of Hemel Hempstead lay on either side of the main north-south road at its southern end. The main focal point of the communication network of the area was at the confluence of the rivers. Both these features have been retained, but the congestion will be lessened by the removal of the Harpenden branch line railway, the realignment of the Leighton Buzzard road to go up the west side of the river instead of the east, and the building of a by-pass to the south of the Bulbourne to take the through traffic of the A41. Shopping use has been retained on either side of Marlows, the old main street, but the whole has been redeveloped and extended towards the west in a series of courts and small streets. On the east side of Marlows the valley side rises up in a gradient of 1 : 10, and this has been cleverly utilized to form first floor access to the backs of stores, and a natural ramp to drive up into a three tier car park.

A fair amount of industry existed in the Bulbourne Valley, between the A41 and the railway, so consequently this area was retained as an industrial area. The site was too constricted for

HEMEL HEMPSTEAD

Marlowes - the main street

Sculpture on a store front

A parking building designed to utilize the natural slope of the ground as ramps

expansion however, so a new industrial area was laid out on the north eastern plateau. The major roads up to this plateau were planned to follow the easy gradients of the tributary dry valleys. Between these valleys, the residential neighbourhoods were laid out, four on the east side of the Gade Valley, and one south of the northern industrial area. Two further residential neighbourhoods were planned for the high ground between the two rivers, and no proposals have so far been made for the third upland area south of the Bulbourne.

Stevenage

Stevenage lies thirty miles north of London across the southern end of the broad Hitchin Gap through the Chilterns, on the dip slope of the chalk. A minor part of it is drained by a small stream flowing to the north, but the major part is drained to the south by a tributary of the River Beane which eventually joins the Lea system. Running from north to south through the townsite is the largely dry Fairlands valley which joins the gap stream in the south centre of the site. The townsite thus falls naturally into three upland chalk areas aligned in a north south direction; the western part, rising from the floor of the gap up to 400 ft. on the west margin; the central ridge between the main gap and the dry Fairlands valley; and an eastern ridge. The main gap is floored with glacial sands, gravels, silts and clays giving rise to extremely mixed, and rapidly varying soil conditions, and on the whole, to second class farm land.

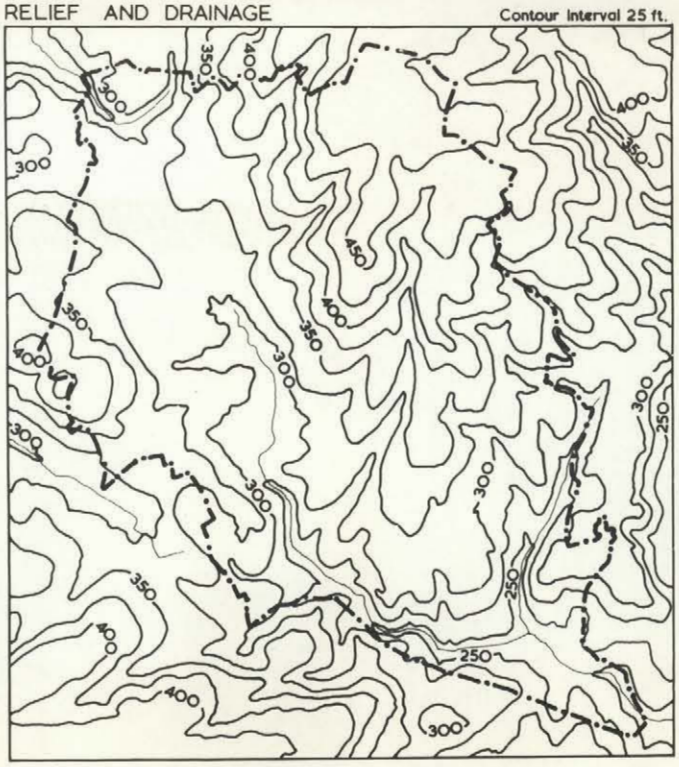
The area designated for the new town site was 6,100 acres, with an existing population of 7,000 people, living mostly in the old village of Stevenage on the east slope of the gap, which now forms one of the residential neighbourhoods to the north of the new town centre.

The Hitchin Gap is another of the historic routeways from London to the north. It carries the A1 road to the north, the A602 road to Hitchin, and the main railway line from King's Cross to the north of England.

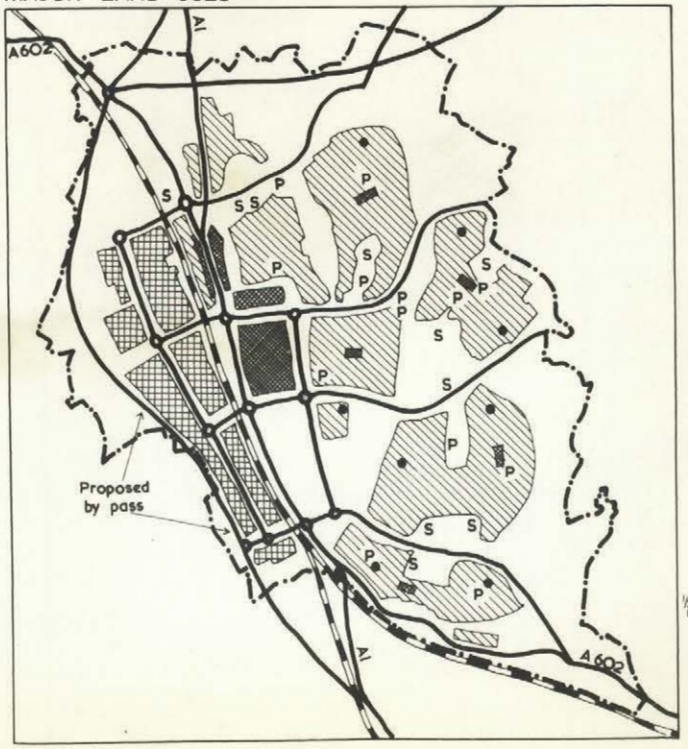
STEVENAGE

RELIEF AND DRAINAGE

Contour interval 25 ft.



MAJOR LAND USES



LEGEND

- Residential
- Shopping and Commercial
- Industrial
- Primary School — P
- Secondary School — S
- Railway
- Main roads
- Neighbourhood Sub centres
- Boundary of Designated area

SCALE

½ ¼ 0 1

miles

SOURCE: Stevenage Development Corporation booklet 1954

STEVENAGE

The town square

Corporation housing

It was inevitable that the town plan should fall into north-south strips. The area to the west of the main road and railway was laid out as an industrial estate. East of the main road and parallel to it, and south of the existing village, the completely new town centre was constructed. Around this were grouped six residential neighbourhoods (including the old village), sited on the chalk ridges, preserving the Fairlands Valley as a green belt.

Stevenage was the first new town. A draft plan was originally made in 1945 by the Ministry of Town and Country Planning who wished the town to be started quickly, and were invoking powers under the 1932 Planning Act to do so. However, the litigation regarding the acquisition of the site took so long that by the time it was accomplished the 1946 New Towns Act had been passed. A revised plan was made by the Corporation's staff under the direction of Mr. C. Holiday, and this was eventually adopted.

Stevenage is remarkable in that it is the only new town with a completely pedestrian shopping centre.

Welwyn Garden City

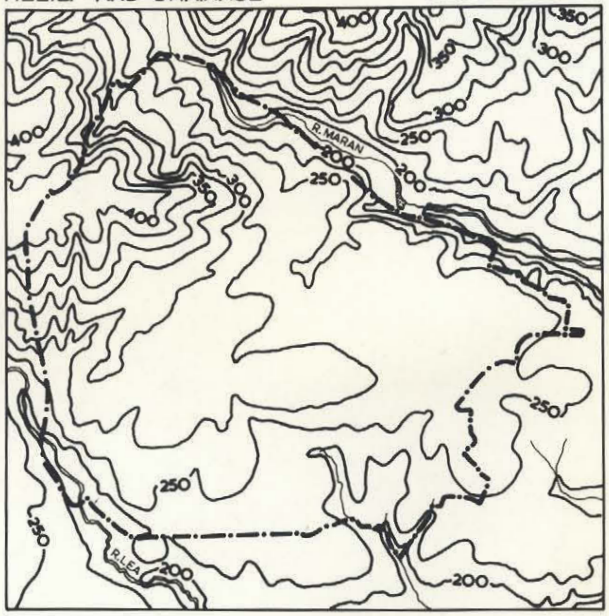
Welwyn Garden City is perhaps one of the most interesting of the new towns, started as it was under the leadership of Ebenezer Howard in 1920 as the second of the Garden City projects. Welwyn was designated as a new town on 20th May 1948, so that the rate of development could be speeded up to help accommodate workers in the surrounding area. The proposal that Welwyn should be developed under the New Towns Act was strongly opposed by the Garden City Company, who held that they could themselves complete the development begun, without government intervention. However the Ministry had come to the conclusion that Hatfield and Welwyn should be developed simultaneously, and the two sites were designated on the same day, and the two Development Corporations, though separate bodies, consist in fact, of the same people. The price paid by the Corporation for the land and property interests of the Welwyn Garden City Ltd., amounted to £2,800,000.

Welwyn lies on the north side of the Middle Lea Valley, opposite Hatfield. The site stretches across the interfluve between the Rivers Lea and Maran (or Mimram). Its lower south eastern part, about 200 ft. high, is underlain by glacial drift, whilst chalk forms a higher area in the north west, which rises to about 400 ft.

The area designated was 4,321 acres, and the town was planned for an ultimate population of 35,000 having been originally conceived in 1920 as a town for 50,000. The population at time

WELWYN GARDEN CITY

RELIEF AND DRAINAGE — Contour Interval 25 ft



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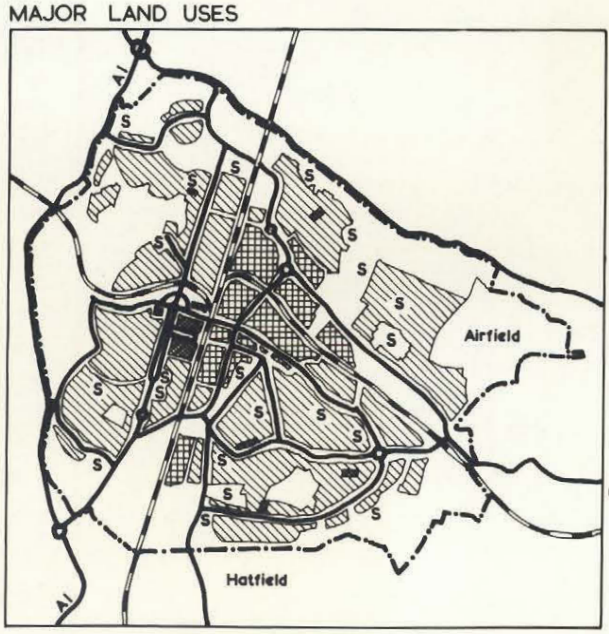
MAJOR LAND USES



LEGEND

- Residential
- Shopping and Commercial
- Industrial
- School — S
- Railway
- Main Roads
- Boundary of Designated area

SCALE

½ ¼ 0 1 mls.

SOURCE: Welwyn Garden City Development Corporation booklet 1957

WELWYN GARDEN CITY

The Parkway - the main approach to the town

Parkway close

The entrance to Welwyn Stores Ltd.

of acquisition by the Corporation was 18,500. Mr. Louis de Soissons, the original architect of the scheme, was called in as consultant planner, and in general, the plan follows closely that already laid down at the inception of the scheme.

CHAPTER 5

THE INTERNAL STRUCTURE

New Town design is a distinctive style which has and will provide endless controversy amongst those interested in such matters. The towns all exhibit basic similarities in the disposition of land uses and architectural form. The reasons for this are twofold; firstly they were all conceived, and building commenced in the same short period of time, and secondly; they were all built to the same planning standards as outlined in the three New Towns Committee Reports and embodied in the subsequent legislation.

The new towns of the London ring are well on their way to being completed, so a fair appraisal of their internal structure can now be made. All have overcome the preliminary administrative problems, and in some cases local government boundaries have been adjusted. All are now the centres of Urban Districts, except Hatfield and Bracknell, which are still in Rural Districts. Hemel Hempstead is a Municipal Borough, a status it has enjoyed since long before it was designated a new town.

The new towns are also just beginning to pay their way as economic investments. The twelve new towns of England and Wales taken together now show a surplus on revenue accounts, and repayment of Treasury advances, which under the terms of the Act must be made within sixty years, has been started.

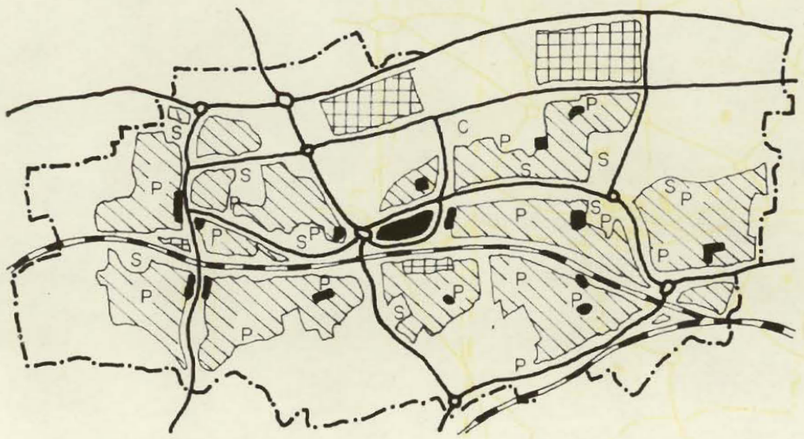
The time when the new towns will no longer be "new" is rapidly approaching. Machinery has been created, in the form of the New Town Commission to take care of the new town assets when the development corporations work is finished, and the towns can rightfully serve as normal urban centres. In the case of Crawley, this time is very close, but in Basildon for instance there is much work still to be done. A statistical summary of the progress of the new towns appears in Appendix I.

A comparison of the distribution of land uses in some of the new towns is shown on the accompanying maps. Similar sketches for Hatfield and Welwyn have not been included, because it was felt that they are not typical of an emergent new town planning idiom. This is because the basic design of Welwyn was made forty years ago, and thus is a prototype rather than a contemporary example: and Hatfield situated as it is, adjacent to Welwyn, in an area of already extensive industrialization is hardly representative of the group.

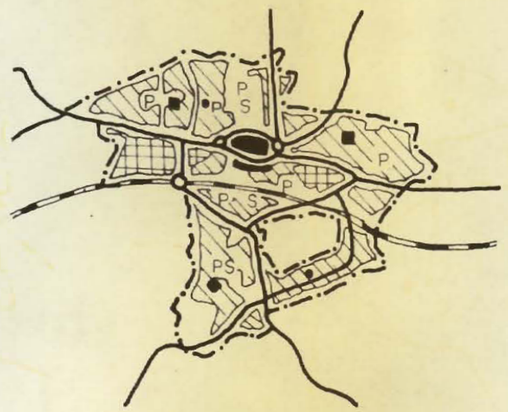
The maps show firstly, the clear way in which land uses are kept severely separate. Only in town centres does mixed usage occur, for instance, offices and flats occuring above stores. Industry has been sited adjacent to railways and trunk roads; residential areas have been grouped into neighbourhood units, each with its primary school and shopping centre; and the town centre of each has been built as close to the geometric centre of the designated area as other features permit. Major roads have

A COMPARISON OF THE DISTRIBUTION OF THE MAJOR LAND USES IN SOME OF THE NEW TOWNS

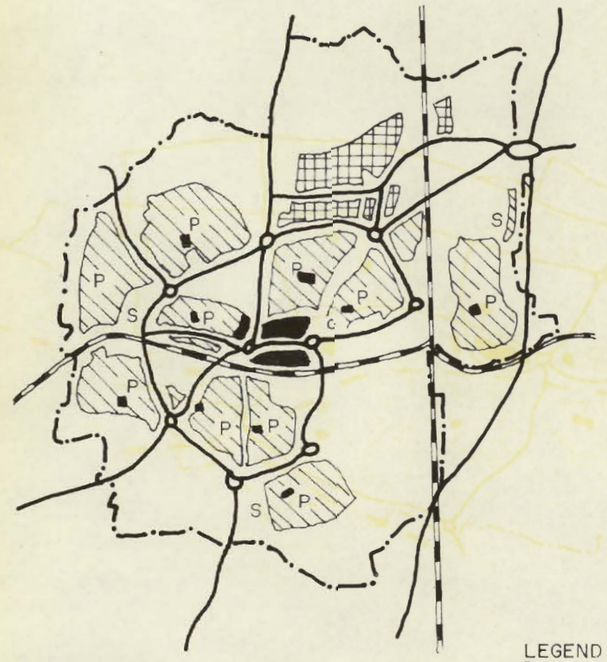
(a) Basildon



(b) Bracknell



(c) Crawley

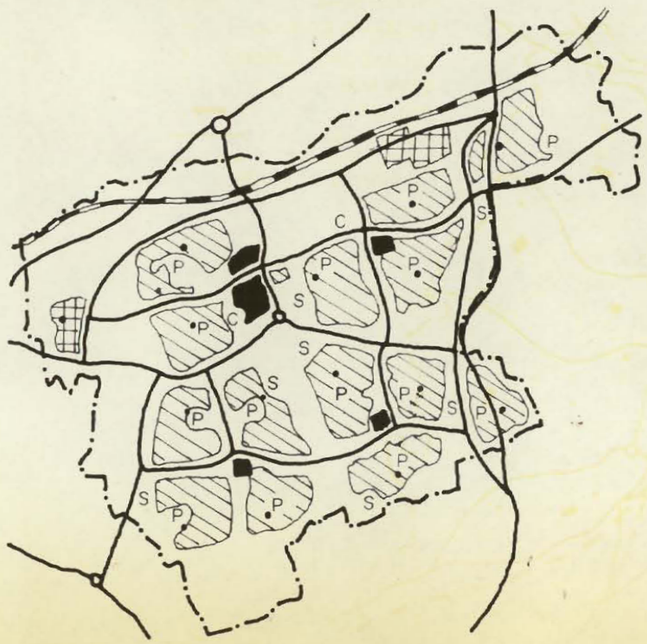


N

LEGEND

RESIDENTIAL	
SHOPPING AND COMMERCIAL	
INDUSTRIAL	
PRIMARY SCHOOL	P
SECONDARY SCHOOL	S
COLLEGE	C
RAILWAY	
MAIN ROAD	
BOUNDARY OF DESIGNATED AREA	

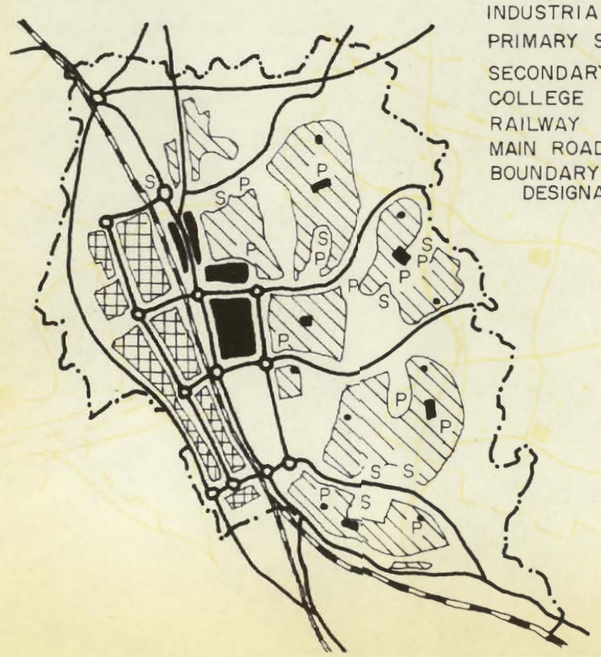
(d) Harlow



(e) Hemel Hempstead

0 1 2 3 4 MILES

(f) Stevenage



for the most part been used as dividing lines between the various types of development, and permit rapid and easy circulation to any part of the town. Many are bordered by "green wedges"; few, with the notable exception of the Marlowes, the High Street of Hemel Hempstead, serve as elements of unification. The features designed for bringing people together are small scale; the pedestrian shopping streets, the neighbourhood sub-centres, and the pedestrian closes around which houses are grouped.

The internal structure of the new towns, and the principles on which they developed will now be discussed in relation to each of the major land use categories.

Industry

The industrial estates of the new towns are located usually in the north or north east side of the town to avoid atmospheric pollution of the residential areas, or alongside railways if an industrial area was there before designation or if an existing industry was tied to railway transportation. In Harlow and Crawley an existing railway fortunately ran through the north east part of the designated area, so that both these provisions were met.

The laying out of at least part of the industrial estate was usually the first task of the corporation, since the provision of employment is basic to the survival of a town. In plan they often resemble the Trading Estates laid out in the 1930's by the Board of Trade. They are usually connected to the centre of the town, and to the main trunk roads passing by or through the town by broad open roads, and are subdivided into large plots with rear access loading facilities and plenty of room for expansion. The building frontages are usually long, low and pleasant, often bordered by fine lawns and flower beds, with an impressive front entrance around which the offices are grouped. Development corporations either build unit factories in which one or more or all the units can be leased to a manufacturer, or they permit some industries to build their own factories on leased land, or the corporation builds factories to the lessées specifications. If the corporation builds a factory it is usually so designed that if a tenant moved out, it could be readily converted to form a number of self contained factories, or adapted to accommodate another type of industrial plant.

The type of firms which have moved into the new towns of the London ring have largely been those concerned with light industry, such as the manufacture of electrical goods, light engineering, photo processors, manufacturers of scientific instruments, and food packers. An illustration is the list of industries in Stevenage.[1]

Laundry	Polythene wrapping
Food warehousing and packing	Guided flight apparatus
Cabinet making	Pens and pencils
Machine tools	Metal accessories and office equipment
Electronic computors	Electronic instruments
Collapsible metal tubes	Joinery works
G.P.O. Engineering Depot	Lifting gear
Printing	Aviation research and development
Tube bending	Fibre containers
Scientific Apparatus	Guided missile parts
Electronic instruments	D.S.I.R. Research Laboratories
Aviation equipment	School furniture and equipment
Photographic apparatus	Gas Works
Scientific equipment	Water Works
Cranes, hoists and automation machinery	Electricity Works

The problems of attracting industries[2] to the new towns at the beginning was handicapped firstly by the fact that the only firms which could be admitted were those from London, an understandable qualification; and secondly, a firm wishing to leave London had to show the Board of Trade, before being issued a clearance certificate, why it could not move to a development area, which is always the Board's first choice. In addition the new towns could not subsidise industrialists as they would be in a development area. Set against this however, they can offer the inducements of ready-built convenient factories, with good communications and

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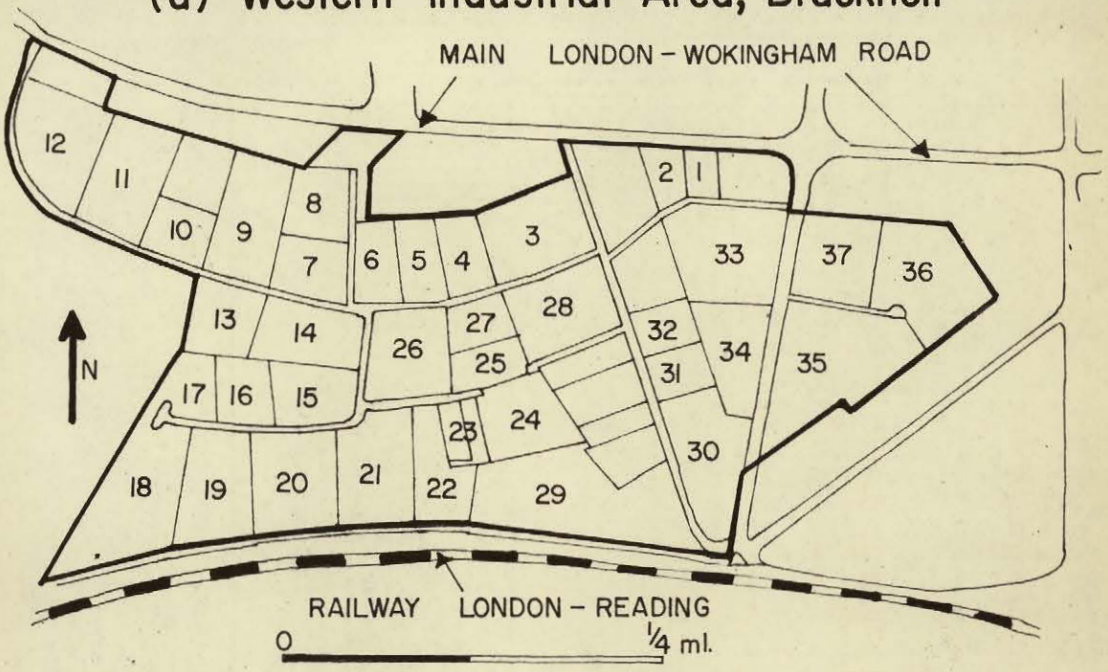
[1] Stevenage, the opportunity town. Stevenage Development Corporation booklet. No date.

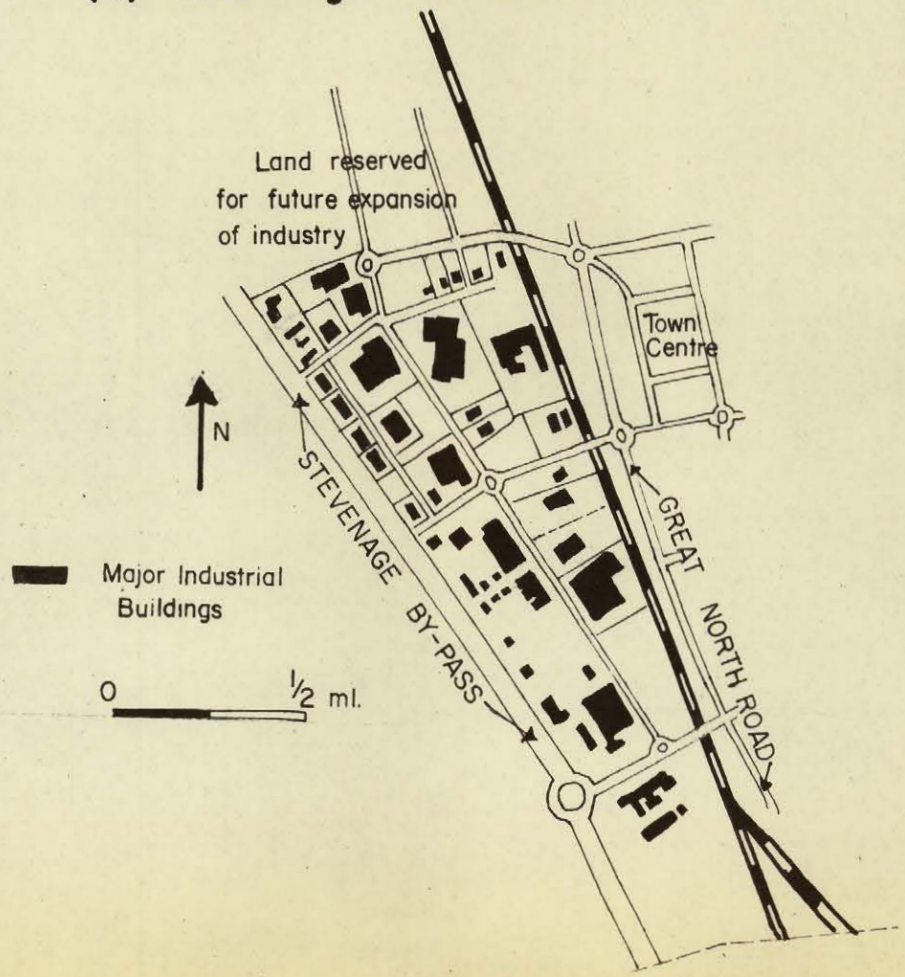
[2] Self, P. "The New Towns' Industrial Boom." Town and Country Planning, January 1955.

TWO EXAMPLES OF INDUSTRIAL ESTATES

(a) Western Industrial Area, Bracknell



(b) Stevenage Industrial Area



utilities laid on, and houses with immediate occupation to the employees of incoming firms.

One of the problems of employment which the new towns are going to have to combat in the future is that of finding jobs for non-skilled school leavers. Most of the industries employ a high proportion of skilled and semi-skilled workers, who moved to the town at the same time as the industry in which they are employed. Since they were willing to move they were usually in a youngish age group, often in the 25 to 45 years category, that is in the child producing age, and also unlikely to retire for many years. These facts, coupled with the nature of the industries means that the young people leaving school, which proportionately will be considerably larger than the national average, will have a hard time finding employment within the town. It has been estimated that at Stevenage[1] for instance the number of school leavers, which was only 400 in 1948 will rise in the next five years to 950 per year, and thereafter to about 1,600. A survey in Crawley made in the autumn of 1958 showed that the number of young people employed in the town was 4.1 percent, considerably lower than the national average of 6.9 percent.

After the initial difficulties were overcome, the new towns of the London area found little difficulty in attracting industries. All of them now are attracting sufficient to maintain a full house-building and development programme.

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[1] Stevenage Development Corporation. Reports of the Development Corporations for the period ending 31st March, 1959. p. 357.

ASPECTS OF NEW TOWN INDUSTRY

An approach to the industrial area, Crawley

The Welgar Shredded Wheat factory, Welwyn Garden City

The Kodak plant, Stevenage

A small group of shops in the western industrial area, Harlow

Factories in Bracknell and Crawley presently occupied by one firm, but are designed to be easily divided into many units if necessary

Residential Areas

The Residential areas of new towns are all based on the neighbourhood unit principle originally put forward by Howard, who called them "wards", and formalized by Clarence Perry.[1] The contemporary guidance for the design of neighbourhoods is outlined in the Dudley Report.[2] The report suggests that a neighbourhood unit should consist of approximately 10,000 people, grouped around two primary school units. "Such a unit would be large enough (i) to embrace a wide variety of experiences and tastes, and yet small enough (ii) to possess easy accessibility between its parts, and (iii) to provide occasion for aquaintance. A unit of this size would contain most of the communal facilities required for the full development of the life of the neighbourhood."

Mumford[3] places more emphasis upon the social implications of the neighbourhood theory. He selects the primary school unit as the basic criterion and determines the size of the neighbourhood "by the convenient walking distance for children between the farthest house and the school and playground in which a major part of their activities are focussed..... A neighbourhood should be an area within the scope and interest of a pre-adolescent child, such that daily life can have unity and significance for him as a representation of the larger social whole."

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[1] Perry Clarence. Neighbourhood and Community Planning. Regional Survey of New York and Its Environs, Vol. 7. New York, 1929.

[2] Dudley Report. Design of Dwellings. H.M.S.O., London, 1944, p. 59.

[3] Mumford, L. The Culture of Cities. Secker and Warburg, London, 1940, p. 472.

There have been many arguments presented showing that the physical neighbourhood concept does not in fact give rise to social neighbourliness. This is as maybe, - the fact does remain however, that as a physical planning unit it has an extremely valid significance. A neighbourhood unit of 5,000 to 10,000 people can support a primary school or two, a shopping centre, a church and possibly a community hall. Major roads carrying heavy traffic can be designed to run round it rather than through it, and a fair degree of safety and order can be ensured.

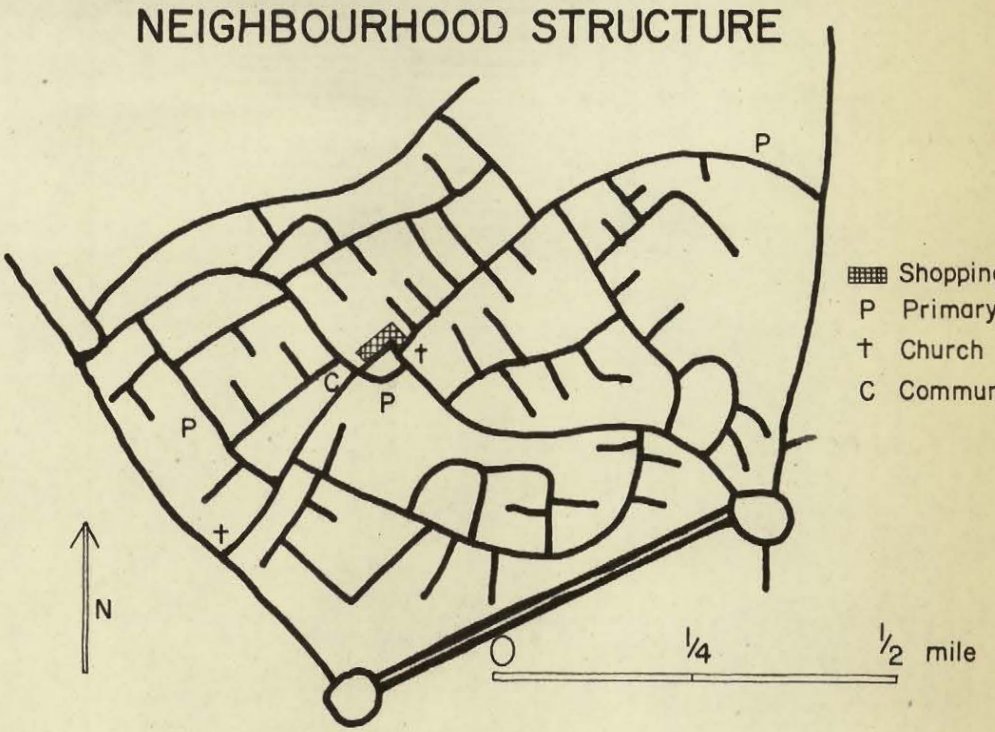
The size of neighbourhoods in the new towns varies considerably, as for example in Basildon, although in most cases they are between five and ten thousand.

THE TEN RESIDENTIAL NEIGHBOURHOODS OF BASILDON

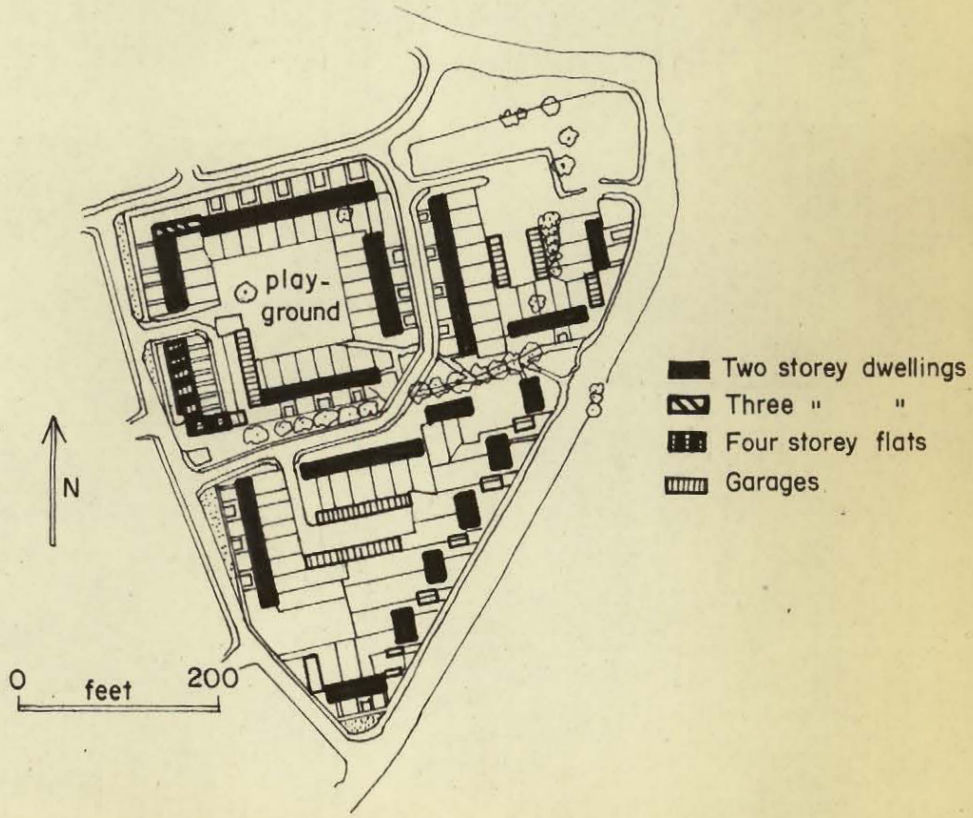
	Population	Net Residential Density per acre	Net Residential Acreage
Laindon	14,600	33	446
Langdon Hills	10,700	33	326
Lee Chapel N.	8,700	50	178
Lee Chapel S.	6,300	46	137
Kingswood	6,000	38	160
Vange	10,000	32	313
Barnstable	11,200	44	253
Fryerns	14,000	33	324
Pitsea	10,900	32	337
Ghyllgrove	3,900	61	63

Source: Basildon Development Corporation

TWO EXAMPLES OF RESIDENTIAL NEIGHBOURHOOD STRUCTURE



(a) Langley Green, Crawley



(b) Part of Kingswood, Basildon

In some towns, if the neighbourhoods are large or bisected by major roads they are sub-divided. In Harlow for instance each neighbourhood of 10,000 is broken down into three or four sub-neighbourhoods, each with a primary school and small shopping area. A central larger shopping area is placed centrally between the sub-neighbourhoods, and for major shopping there is the town centre.

In some of the towns a number of flats have been built, usually associated with the town centre. Harlow has two high rise blocks, one at either end of the town centre, and another, "The Lawn" in the Mark Hall neighbourhood. Surveys have shown that 90 - 95 percent of the population prefer to live in single family houses however, and most of the building has been in the form of two or three storey terraces and closes, with some four-storey maisonettes. In the early stages some attempt was made to mix higher and lower income-group houses, but this was not found too successful, and they are now usually separated. Some houses of one storey with no steps have been built to accommodate old people. The average density of new town housing development has been worked out to be 11-11½ per acre[1]; but in some neighbourhoods in some towns, for instance Hatfield, it comes to well over 30 houses per acre.

Most people rent houses or flats from the development corporations, who understandably, are the major property owners.

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[1] "Housing Density in New Towns." Town and Country Planning, March 1958.

The rents are often higher than in the well established urban centres, because the latter usually own older houses, built in less expensive times, whose rents can be partially used to subsidise rents on newer properties.

Some houses in the new towns are built and operated by the local Urban District or Rural District Council, in the same way that they would be in any other town or village.

Private land and home ownership is permitted in the new towns, so long as such development is in conformity with the town's master plan. By March 31st, 1959 for instance, Crawley corporation had sold 142 acres of land for this purpose, on which 1,468 freehold houses had been completed and sold. In Bracknell, the corporation actually builds houses for sale. These are good quality brick houses, with four bedrooms and a garage, which sell readily for £4,500.

Primary schools are usually located centrally in the neighbourhood, and since under the terms of the 1944 Education Act they require 7 acres for the building and playing fields, they often give the impression of being isolated in the middle of a green field. Secondary schools, which under the terms of the same Act require 17 acres are usually sited in green wedges between the neighbourhoods.

The neighbourhood shopping centre provides shops for day to day shopping. Associated with it is often a branch library, a public house, and a community centre. The absence of these latter facilities in the early days of the new towns was constantly criticised. Today however most of the towns have them.

The low density, spacious layout of the residential areas of the new towns has been the target for much of criticism directed against them. It has been variously labelled as "anti-urban" and "prairie-planning".[1] However, the number of people leaving the new towns is few. In Crawley[2], at 31st March 1959 with a population of almost 50,000, it was estimated that over the years only 186 families had disliked their new surroundings sufficiently to cause them to move away.

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[1]Richards, J.M. "Failure of the New Towns." Architectural Review, Vol.114, No.679, July 1953.

Cullen, G. "Prairie Planning in the New Towns." Architectural Review, Vol. 114, No. 679, July 1953.

[2]Crawley Development Corporation. Reports of the Development Corporations for the period ended 31st March 1959, H.M.S.O., London, p. 170.

EXAMPLES OF NEW TOWN HOUSING

High rise flats, Harlow

Semi-detached houses, Stevenage

Rectory Lane Crescent, Bracknell

A garden close, Welwyn Garden City

Houses for older people, Bracknell

Three storey maisonettes, Basildon.

SOME NEW TOWN NEIGHBOURHOOD FACILITIES

Neighbourhood library, Bush Fair, Harlow

Shopping centre, Bush Fair, Harlow

Broadfields primary school, Hemel Hempstead

Town Centres

The town centres are visually the most interesting and exciting parts of new towns. They are usually made up of a shopping area, often in the form of a square, with pedestrian malls leading from them, and with other buildings such as a bus station, town hall, library, county college, fire station, churches and other town-centre buildings associated with them.

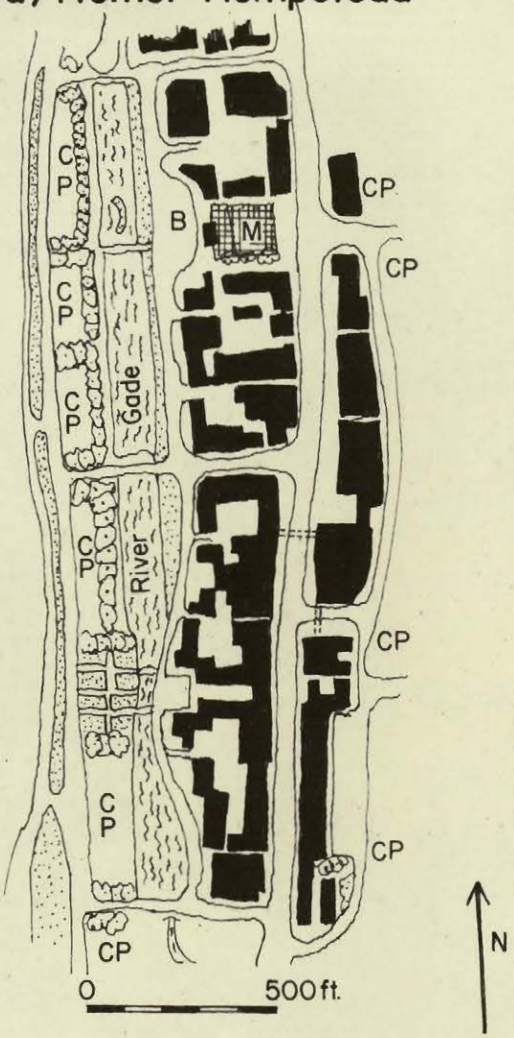
The shopping area is laid out by the development corporation, which provides shops in the ratio of one to every 100 to 150 persons. In some old towns the number of shops has been found to be as high as one to 40 or 50 persons, but since a single department or multiple store often fulfills the purpose of ten small shops, such a high rate was not thought practicable. It is interesting to note however that the responsibility for deciding how many shops there shall be, and where they shall be located has been shifted from the shoulders of the market to the shoulders of the planning authorities.

In Hemel Hempstead, Bracknell and Crawley, the new shopping centre has been built alongside the old main street. In Crawley and Bracknell the two are carefully linked by pedestrian ways lined with shops, in the latter case, the way being actually through a building.

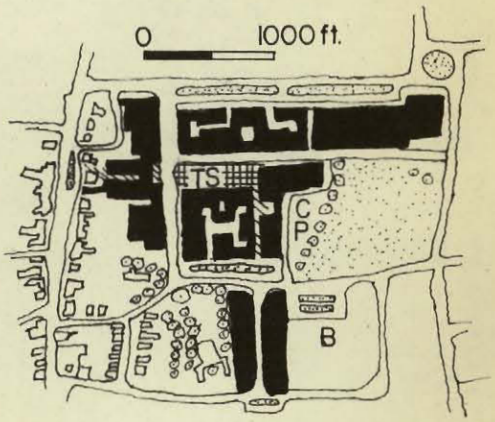
In looking at these centres, there seem to be successive stages in the development of the new town formula for shopping areas. This is illustrated by a comparison of Crawley, Harlow and Stevenage. Crawley has a central shopping square, which has traffic roads running along two adjacent sides, and pedestrian

SKETCH PLANS OF SOME NEW TOWN CENTRAL SHOPPING AREAS

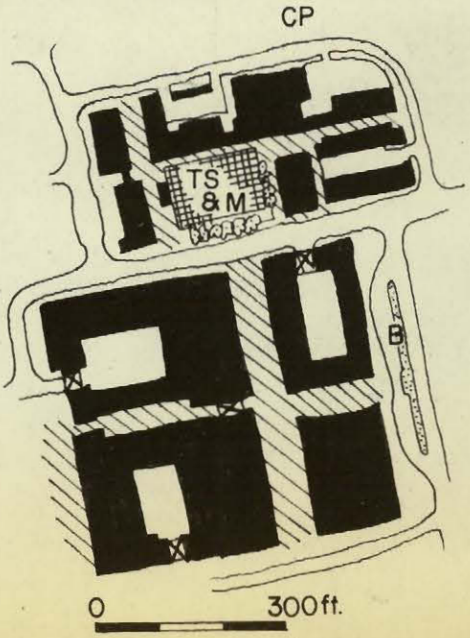
(a) Hemel Hempstead



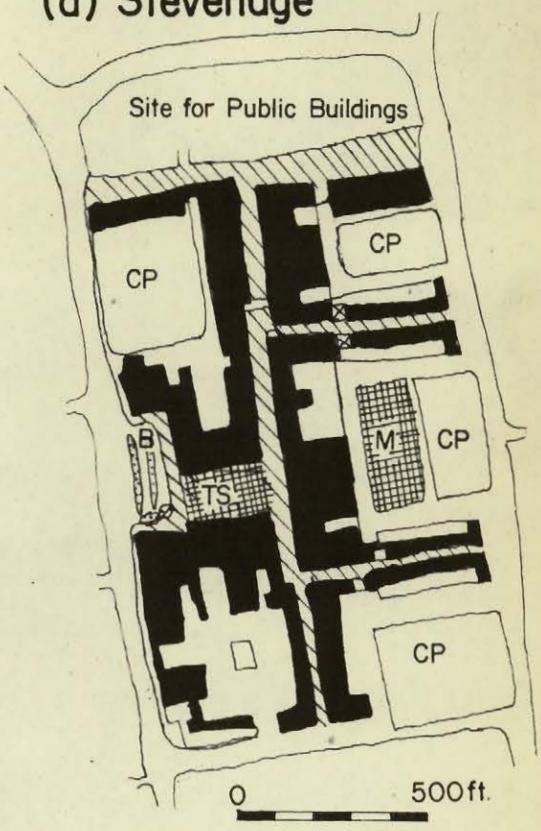
(b) Crawley



(c) Harlow



(d) Stevenage



N

New Buildings - mostly shops

Pre-designation Buildings

Pedestrian ways

TS Town Square

M Market Place

B Bus Station

CP Car Park

alleys running out from it. Adjacent to the square are shopping streets of conventional pattern but with divided carriageways. The whole offers a fair measure of insulation for the pedestrian but some of the conventional streets carry buses, which present their familiar nuisance of noise, smell and danger. In Harlow the layout is a stage further advanced: there is a large market square with a vehicular street on one side only. Pedestrian alleys open out of the square, and there is one wide pedestrian street containing all the large multiple stores. In Stevenage the pedestrian shopping area is complete. No vehicular traffic enters any part of it, the central square and complex system of alleys are the sole preserve of those on foot, bicycle or in a baby carriage.

One very marked feature of detriment to almost all the town centres with the possible exception of Hemel Hempstead is that they have very marked fronts and backs. Colour, decoration and variety of design all face inwards to the town square, and the outward facing backs of buildings are drab and utilitarian. This is architecturally serious, since it means that continuity between the town and town centre is broken. It is accentuated often by vast expanses of car parks or bus stations, so that the shopping centre becomes marooned in a sea of asphalt.

Office development associated with the new town centres has represented a more recent stage of their growth. As more school leavers become available for employment, the need for office employment opportunities has become greater and the corporations are therefore trying to induce more businesses to

build offices in their towns. The London County Council has been assisting by endeavouring to divert office expansion from the County, and some Government departments are transferring offices to the new towns. The Meteorological office has been transferred to Bracknell, the accounts branch of the Ministry of Transport and Civil Aviation to Hemel Hempstead, parts of the Ministries of Labour, Pensions, National Insurance and Inland Revenue, to Crawley. However, the new towns have not yet been as successful in attracting offices as they were in attracting industries. Harlow development corporation has reported "The lack of any concrete proposals from private firms for sizeable office developments following the considerable publicity which has been given to the decentralization of office development from London is disappointing."[1]

The building of other town centre facilities, such as administrative buildings and town halls is still in its infancy in most new towns.

Car parking is largely restricted to parking lots located around the periphery of the shopping area. Most of the towns found that in their earliest plans not enough space was allocated to this function, and many of them have had to increase their parking areas. Similarly in the residential areas, garages were provided originally at a rate of one per four houses; now the ratio is usually more like one to two houses.

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[1]Harlow Development Corporation. Reports of the Development Corporations for the period ended 31st March 1959, p. 245.

SOME ASPECTS OF NEW TOWN CENTRES

Howard's Gate, the approach to the shopping centre, Welwyn Garden City

Flats above shops, Crawley

Bank Court, a grouping of all the banks around one square, Hemel Hempstead

Shopping arcade, Basildon

SOME ASPECTS OF NEW TOWN CENTRES

Service entrances for small stores, Bracknell

Parking lot and the backs of stores Crawley

The raised platform and the clock tower in the town square, Stevenage

Outdoor pulpit of St. Paul's church and part of the County College, Harlow

SOME ASPECTS OF NEW TOWN CENTRES

Stairway to upper level shopping, Hatfield

The parish church of St. George closing a view down a shopping mall, Stevenage

Looking from the new to the old shopping centre, Bracknell

Large stores, Basildon

CHAPTER 6

THE BROADER ISSUES

The new towns represent part of a national policy of decentralization of population from congested areas. Their significance and value will now be discussed in relation to this overall framework from three aspects. Firstly their role in accommodating overspill population, in relation to their location and size will be appraised. Secondly, the issues of National land use planning in new town planning will be investigated; and thirdly, the alternative methods of solving the overspill problem will be considered in an attempt to put the new towns in their proper perspective.

Overspill Population and the Location and Size of New Towns

A judgement of the success of the new town policy in the London area can be made most fairly on the issues of their success in fulfilling the purposes for which they were set up. Many of these have already been mentioned, they will now be discussed in more detail.

Firstly it must be pointed out that the population of the Home Counties has increased since the war at a faster rate than any other part of the country[1]. The population of the County of London has

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[1] The Registrar General's Annual Estimates of the Population of England and Wales. H.M.S.O., London, (annually).

decreased, but employment in the County has increased, because although many industries have moved out, office building has increased enormously[1]. Net migration from the County has proceeded at a rate of 35,000 per year, or a total of almost a quarter of a million between 1951 and 1958.

By the end of 1958 about 175,000 persons had moved to the new towns, but of these, slightly less than one third had come from the County[2]. The qualification for procuring a house in the new towns has been either to have a job there, or to come from an overcrowded area. It has been estimated that since the new towns are nearing completion, probably not more than 40,000 additional persons will be accommodated from London. It would appear that to date, less than one quarter of the rehoused overspill population of the County has been accommodated in the new towns.

Of the people who have moved to the new towns, it is difficult to assess how many actually work there. Upon visiting the new towns one is struck by the enormous number of cars parked at the stations during a weekday, suggesting that their owners travel up to London daily to work. No account of the numbers of season tickets issued to London has been available from British Railways, but Appendix II is a table of the journey time and fares to London from the new town stations. It is odd to note in this respect that one government body is advocating decentralization, whilst another, British Railways issues advertisements such as "Only 100 minutes to Town from Clacton-on-Sea."

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[1] London Plan. Administrative County of London Development Plan. First Review 1960. County Planning Report, Vol. 1, p. 19, p. 36 et. seq.

[2] Op. cit. p. 94.

This problem poses the question as to whether the new towns were located in the right places to ensure that they would evolve as self-sufficient communities, and not as dormitory towns for Central London. In their industrial policy they have certainly been successful in attracting plenty of manufacturing firms, and office development, such as that at Bracknell, is starting to get under way. However, at this stage the orientation of the new towns is still primarily towards London, and it would appear that they may have been located too close to the parent city, and to other centres of population, as can be seen from the map on page 41. I would also suggest that the new towns are too small, that the same amount of money could have been used to build fewer, larger towns. The reasons for this are twofold. In the first place one cannot expect persons drawn from a large city to settle down easily in a small country town, larger towns would probably have attracted more people from congested areas. Secondly, a larger town would be able to provide more cultural services, and a greater diversity of employment which would have attracted a greater range of social groups. It would have made a new town more of a whole, and the constant feeling of the pull towards London would have been at least partially eliminated. The possibilities of such a town were explored by students at University College London[1], who chose a site halfway between London and Birmingham and designed

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[1] Bor, W. "Education for town planning." Architecture and Building, June 1960, p. 209.

a town for 300,000 inhabitants. This type of decentralization would probably prove more attractive to more people than much of that which has been propounded to date.

National Land Use Planning and the New Towns

Professor L. Dudley Stamp has estimated that 2 or 2 million acres of farmland will be required between 1950 and 1970 for urban development[1]. This is taking into account the re-development of existing urban land, and allowing for housing at the new town density standards of approximately 53 acres per 1000 people. An estimate by the Ministry of Local Government and Planning in 1951 suggested that 700,000 acres of farmland would be needed, 500,000 acres for town growth, 100,000 acres for mineral workings and 20,000 acres for roadworks, airfields, reservoirs and the like.

Either figure is startling to the agricultural conservationist, considering that the total existing and potential agricultural land in England and Wales in 1931-1939 was calculated at 32,262,000 acres[2]. In general the demands for urban development fall most heavily upon good agricultural land rather than on poor, derelict or disused land, even though its initial cost is greater. G.P. Wibberley has shown from a study of Development Plans that land assigned to urban development had a net agricultural output of £41 per acre against an

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[1] Stamp, L.D. "Planning and Agriculture". Journal of the Town Planning Institute, 36, March-April 1950, p.141-152.

[2] Stamp, L.D. The Land of Britain, - Its Use and Misuse. 2nd Edition, Longrams, 1950, p. 196.

average figure for all farms of £24 per acre. Much of this is presently market gardening land, which produces more cash per acre than any other type of farming[1].

The new towns of the London ring occupy 40,797 acres of land and will house a population of 456,000. Two of them, Harlow and Bracknell, are at least partially built on first class agricultural land. In the case of Bracknell part of the site chosen had to be abandoned because of the agricultural value.

Some of the effects of the new towns on agriculture were published in a report by the Ministry of Agriculture and Fisheries with reference to Stevenage, Harlow and Crawley.[2] They found that where more land was purchased than needed for immediate development, unrest amongst the farmers and neglect of the land occurred. At Crawley land was only acquired when it was needed for development, then it was taken in farm units thus avoiding cases of farmers struggling on with uneconomic pieces of land. In the other cases farm units were cut in size, and many farmers had to sell out the rest of their land and find new farms. In some cases at Stevenage however, the opportunity was taken to improve farm shapes by the amalgamation or rearrangement of the remnants which resulted in more economic units.

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[1] Best, R.H. The Major Land Uses of Great Britain. Studies in Rural Land Use No. 4., Wye College 1959, p.85.

[2] Planned Urban development and its effect on agriculture. Interim report by the Agricultural land service research group, Ministry of Agriculture and Fisheries. 1953.

There were few cropping changes in the farms around the new towns. Potatoes and other crops requiring heavy labour may have suffered from the drift of casual labour to the building sites. There had been little increase in dairying or market gardening, possibly because at that time the populations of the towns had not increased significantly, but probably because the sale of many goods is divorced from local demand, since it is organised on a national or regional basis, as for example with the Milk Marketing Board.

There was no attempt in the report however to measure the value of the land for agricultural purposes and to balance this against its value for urban development. At a public enquiry into the proposed development of land at Lymm in Cheshire to accommodate Manchester overspill population, the problem was attacked from this angle. It was found that the gross agricultural product of the 3,000 acres was £81.1 per acre per year, over three times the national average, and consequently the application to develop was rejected. Dr. G.P. Wibberley presented the economic argument in this case, and has since published a book in which he suggests that similar measurements should be made in considering all future urban development. "It appears desirable to set up some yardsticks embodying economic consideration as an aid to making rational land use decisions. It is not possible, or even desirable to develop a single formula which could be applied to all cases of land use competition because the nature of the problem will vary."[1]

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[1] Wibberley, G.P. Agriculture and Urban Growth, a study of the competition for rural land. Michael Joseph Ltd., 1959, p. 85.

Alternative Solutions

The building of new towns is not the only way in which the problem of population pressure in London has been combatted. The London County Council has also built "Out-County" housing estates, tried the experiment of very high density building in the central area, and made use of the more recent Expanded Towns policy. It is even investigating the possibilities of building its own new town at Hook in Hampshire.[1]

The London County Council has constructed thirteen out-county estates, which have provided accommodation for 150,000 people, and employment for about 10,000.[2] The Out-County estates were intended to be a little more than just vast housing estates. Some land was set aside for industry, schools, recreation centres, parks and public houses. Development of these latter facilities was slow at first but has now been completed. These satellites were all built in, or at the edge of the green belt, during the first post war decade. The principle of their siting, although deplored, was regarded as an inevitable stop-gap measure to alleviate the housing situation at that time.

The Out-County estates have not been a great success. They are not towns, and few have managed to withstand the pull of other centres and build up a life of their own. None of them have sufficient

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[1] London Plan. Administrative County of London Development Plan. First Review 1960. County Planning Report, Vol. 1, p. 100.

[2] Op. Cit., p. 94.

employment for their inhabitants because the County Council did not feel justified in providing large industrial areas whilst the government were pursuing a policy of sending decentralized industries to development areas. Further, tenants are selected on the basis of their housing need from County lists, without reference to whether they can find a job locally; and also since vacancies are filled automatically from the County, the children of established tenants have to move elsewhere to live when they grow up. It is therefore not surprising that there has been a rapid turnover of population, largely resulting from the disatisfaction of the long journey to work.

The London County Council is also trying the experiment of high density residential building. A notable example will be the redevelopment of the Barbican and Bunhill fields area, for mixed office, commercial, cultural and residential use.[1] It is also revising its development plan to make additional areas of high density building in the central area (up to 200 persons per acre.)[2]

The building of high density residential areas is not such a simple remedy as it seems however. In a study undertaken by the Town and Country Planning Association it was shown that the average cost of building 1000 flats at 40 flats an acre was £1.9 million, whereas in a new town 1000 dwellings could be built for £1.0 million[3]. Further, it has been found that the usable outdoor living space per person for blocks of flats spaced to ensure day-lighting is equivalent to the total garden space per person for high

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[1] op. cit. p. 166.

[2] op. cit. p. 32.

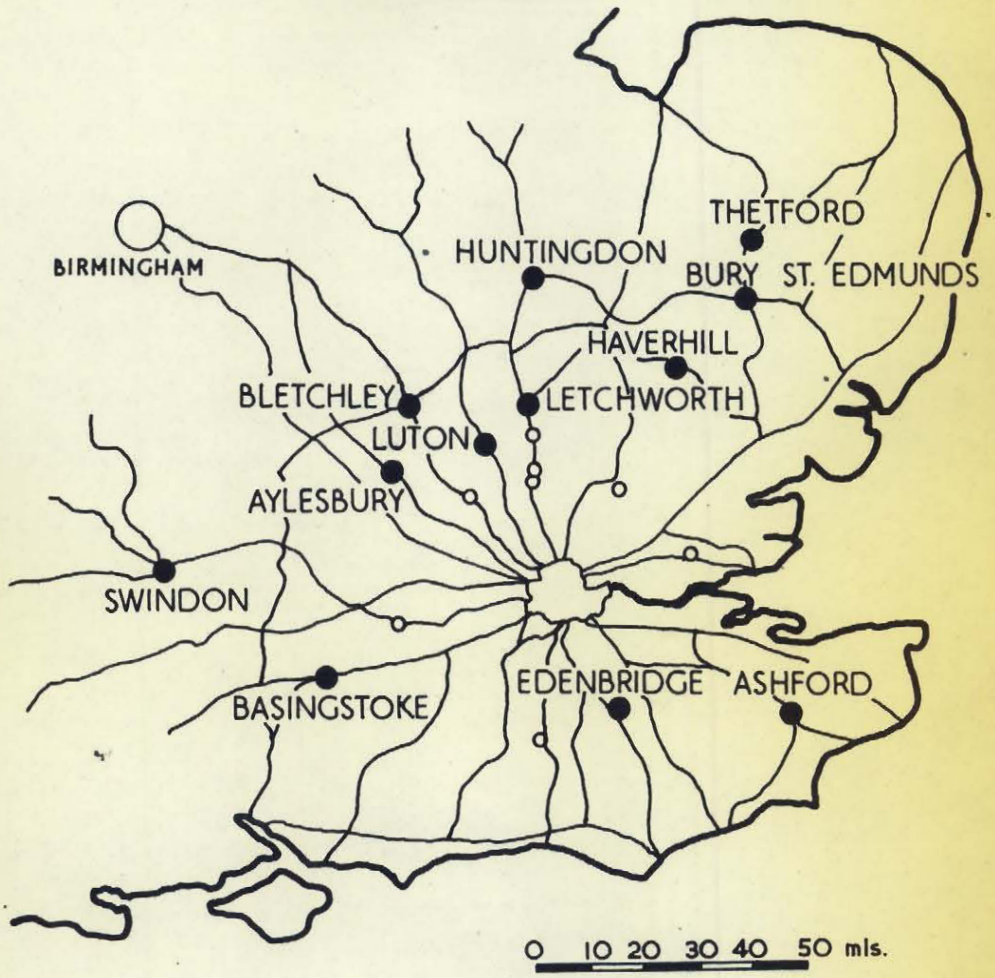
[3] "High Density or more Dispersal: A note on some comparative costs." Town and Country Planning, July, 1958.

density terrace housing. High-rise high density building is therefore a dubious prospect.

The third alternative to new towns is the development of Expanded Towns. This is effected under the terms of the Town Development Act 1952 which was designed to encourage and give financial aid to small towns willing to become receptors for over-spill population. Under the terms of the Act development agreements must be made between the exporting and reception areas, subject to the approval of the Ministry, and after consultations with all the authorities involved. The agreements will set out the nature and extent of the proposed development, whether the exporting or importing authority will do the necessary building, and the proportion of financial aid to be given by the exporter. The agreement is then submitted to the Minister, and if it is approved grants are made by the Exchequer to finance initial development costs such as sewerage and water schemes. It is expected that with the exception of running expenses and debt charges, the costs of all additional services can be met by the added income obtained from the expansion. It was clearly laid down in the Act that, regardless of who does the development, houses and any other assets shall be transferred to the local council immediately. This is to ensure that the expanded town does not function merely as a housing estate for a distant city.

During the first eight years of the operation of the Act, the London County Council has made agreements with twelve

THE EXPANDED TOWNS OF THE LONDON REGION



● EXPANDING TOWNS
o NEW TOWNS
— MAIN RAILWAYS

SOURCE: ADMISTRATIVE COUNTY OF LONDON DEVELOPMENT PLAN FIRST REVIEW 1960: COUNTY PLANNING REPORT

receiving authorities, the locations of which can be seen on the accompanying map, and is negotiating with three others.[1] The number of houses to be provided by the Council vary from 6,000 in Swindon to 1,000 in Huntingdon, and come to a grand total of 29,300 or accommodation for 157,000 persons. The housing areas are laid out following neighbourhood principles and are equipped with the usual facilities. New industrial sites are provided, and the expanded towns are attracting sufficient industry to maintain their programmes.

Town development of this nature has many advantages. It brings to small towns an influx of prosperity, diversity of employment, and enlargement of physical and social facilities. It provides an outlet for overspill population into an already securely developed community, often with historic associations. Compared with the new towns, the difference is largely one of legislation and degree. Basildon, at the time of its designation had 25,000 people and Hemel Hempstead 21,000; Haverhill and Thetford, two expanding towns, had only 5,000 population at the time their agreements were made. In view of the extraordinary difficulties in finding sites, and the initial costs of financing new towns as such, it seems probable that in the long run, expanded towns are the key to a

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[1] London Plan. Administrative County of London Development Plan. First Review 1960. County Planning Report Vol. 1., p. 94 et seq. and p. 28.

successful decentralization policy. However, it appears that unless the importing local authority is strong and vigorous, the machinery at present is not good enough to ensure full development under the Town Development Act, and it seems that some compromise solution embodying some aspects of the New Towns Act, with the Town Development Act would provide a better answer.

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In addition many maps, pamphlets, charts and statistics produced and supplied by the Development Corporations of the New Towns were used.

APPENDIX I

NEW TOWNS PROGRESS TO DECEMBER 1959

Name	Date of Designation	Area (acres)	Original	Population 31st Dec. 1959[1]	Homes and Flats Completed Dec 31st 1959			
					Proposed	Dev. Corp.	L.A.[2]	Others
Basildon	4th Jan 1949	7,818	25,000	52,000	100,000	8,000	983	436
Bracknell	17th June 1949	1,870	5,142	17,700	25,000	3,925	253	152
Crawley	9th June 1947	6,047	10,000	51,200	56,000	10,200	763	1,482
Harlow	25th Mar 1947	6,395	4,500	48,700	80,000	12,110	693	280
Hatfield	20th May 1948	2,340	8,500	18,000	25,000	2,421	923	70
Hemel Hempstead	4th Feb 1947	5,910	21,200	51,000	60,000	8,478	1,205	617
Stevenage	11th Nov 1946	6,100	7,000	38,000	60,000	8,696	563	175
Welwyn G.C.	20th May 1948	4,317	18,500	32,000	50,000	3,758	1,103	201
TOTALS		40,797	99,842	308,600	456,000	57,588	6,486	3,413

[1] Estimated

[2] Local Authorities

APPENDIX I (continued)

NEW TOWNS PROGRESS TO DECEMBER 1959

Name	Industries Before Designation			New Factories Completed			Offices (sq. ft.)[5]	
	No. of Occupiers	No. of Employees[1]	Size (sq.ft.)	No. of Occupiers	No. of Employees	Size (sq.ft.)	Completed	Under Construction
Basildon	20	not known	not known	59	6,705	1,512,678	2,234	29,456
Bracknell	7	179	48,250	24	5,137	942,497	22,232	150,000
Crawley	17	1,300	160,000	71	9,794	2,258,415	47,650	-
Harlow	6	333	not known	79	11,723	2,293,284	79,813	47,580
Hatfield	8[2]	1,500	100,000	15	551	136,320	-	-
Hemel Hempstead	36	6,200	not known	42[3]	6,300	1,533,912	71,424	71,745
Stevenage	5	2,600	371,000	29[4]	9,000	1,851,930	56,954	36,400
Welwyn G.C.	69	8,000	1,994,600	44	3,885	1,457,387	45,375	21,624
TOTALS	168	29,650	-	363	53,095	11,986,423	325,682	356,805

[1] Estimated.

[2] Excluding the de Haviland group and other industries outside the designated area.

[3] Plus 9 extensions.

[4] Includes D.S.I.R. Research Laboratories.

[5] At 30th September 1959.

APPENDIX I (continued)

NEW TOWNS PROGRESS TO DECEMBER 1959

Name	SHOPS: No. of original traders (approx)	SHOPS: New Shops Completed 31st Dec. 1959 (est) (In brackets: sq.ft. of floor area)	SCHOOLS: No. before Designation 31st Dec'59 (In brackets : number of school places)	SCHOOLS: New Schools Completed 31st Dec'59	SCHOOLS: Under Constr. 31st Dec'59	ESTIMATED CAPITAL EXPENDITURE BY DEVELOPMENT CORPORATION: Housing since Designation to 31st Dec '59	ESTIMATED CAPITAL EXPENDITURE BY DEVELOPMENT CORPORATION: Total (inc. housing) 31st Dec '59
Basildon	294	143 (129,000)	7 (2,600)	14 (7,060)	1 (560)	18,350,000	28,370,000
Bracknell	85	60 (113,699)	4 (1,260)	8 (4,200)	2 (480)	7,447,000	13,374,000
Crawley	145	263 (346,565)	8 (840)	22 (13,930)[1]	2 (1,200)	18,000,000	31,000,000
Harlow	90	234 (368,397)	5 (815)	16 (10,680)[2]	2(1, 360)[2]	21,450,000	36,290,000
Hatfield	104	99 (97,432)	4 (1,500)	9 (3,510)	1 (500)	4,500,000	6,900,000
Hemel Hempstead	368	266 (309,292)	11 (3,520)	19 (7,740)[3]	3 (1,440)	17,400,000	28,100,000
Stevenage	140	216 (337,123)	4 (780)	22 (9,180)	2 (920)	16,020,000	30,080,000
Welwyn G.C.	51	49 (98,920)	5 (2,040)	11 (4,060)	1 (600)	6,600,000	13,500,000
TOTALS	1,277	1,330(1,800,428)	48 (13,355)	12 (60,360)	14 (7,060)	109,767,000	187,614,000

[1] Includes Crawley Technical College.

[2] Excluding the Harlow College of Further Education, the first stage of which is completed, and the second under construction.

[3] Plus 3 extensions.

Source: Town and Country Planning Vol. XXVIII No. 1. Jan. 1960, pp. 22 to 27.

APPENDIX II

RAIL DISTANCES, TIMES AND FARES FROM THE NEW TOWN STATIONS TO LONDON

New Town	Name of Station	London Main Line Station	Rail Distance (mls)	Cost of Single 2nd Class Fare	Average Time of Journey (mins)
BASILDON	Pitsea	Fenchurch St.	26½	4s. 2d.	60
	Laindon	Fenchurch St.	22¾	3s. 8d.	51
BRACKNELL	Bracknell	Waterloo	32¼	6s. 3d.	57
CRAWLEY	Crawley	London Bridge	30¾	6s. 0d.	60
		Victoria			61
	Three Bridges	London Bridge	29¼		59
		Victoria			59
HARLOW	Harlow Town	Liverpool St.	24½	4s. 4d.	61
	Harlow Mill	Liverpool St.		4s. 9d.	56
HATFIELD	Hatfield	King's Cross	17¾	3s. 5d.	26
HEMEL HEMPSTEAD	Hemel Hempstead	Euston	24½	4s. 9d.	61
STEVENAGE	Stevenage	King's Cross	28½	5s. 6d.	48
WELWYN GARDEN CITY	Welwyn Garden City	King's Cross	20¼	4s. 0d.	32

Source : The ABC Railway Guide. July 1960.