



THE URBANISATION OF CRAWLEY

From New Town to Urban Sprawl

By Peter Jordan, BA (Oxon), C.Eng

The Urbanisation of Crawley



Brenda Smith has been a member of Crawley Borough council since 1978.

Her husband, Jim, has been a member of the council since 1968.

Brenda was leader of the Labour Group for five years and has been Mayor twice.

Jim was Mayor four times, and also a West Sussex County Councillor for 12 years.

Foreword

By Brenda Smith

I am pleased to commend this paper as a serious study of the development of Crawley and the impact that a second runway at Gatwick would have on our town.

My husband, Jim, and I came to Crawley in the 1950's and have therefore seen it grow. In many ways it has been a success story, with continual high levels of employment and prosperity, and with the successful integration of various ethnic groups.

Indeed Jim and I as Crawley Borough councillors have been closely involved in planning the development and growth of the Town from the estimated 65,000 to its present day 110,000. We have a genuine and ongoing commitment to the community of Crawley - the place we have called home for many decades. We moved to Crawley from London to benefit ourselves and our children, now grandchildren and great grandchildren with a green, unpolluted environment. We have travelled extensively and value a single runway two terminal airport in our Borough.

Gatwick airport is wholly in my ward so I could be called the Borough - and County - Councillor for Gatwick. The airport – at its present size – brings many benefits to Crawley, not least jobs (although too many of them are unskilled and low paid). But it also brings noise, pollution and traffic problems. We do not wish to become over-dependent on one industry – think coal or ship-building.

It is for those reasons that I have always strongly opposed a second runway which would ultimately make Gatwick twice as big as Heathrow, with the airport boundary a mere hundred yards from the residential area of my ward.

Peter Jordan is a scientist, and this paper is written in a scientific style – short, analytic and accurate. If I were writing it, it would be ten times as long, full of reminiscences and emotion! So I congratulate Peter on this straightforward and readable contribution to GACC's series of studies on the proposed runway.

Brenda Smith
25th April 2016.

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A study in unintended consequences

Peter Jordan, BA (Oxon), C.Eng

Abstract

In 1947, the post-war government, seeking to solve the problems of urban decay in London, and urgently needing to solve housing problems left by the war, launched the New Town of Crawley

This paper summarises the development of this concept from 1947 to the present, during which time the original plan has expanded from 60,000 inhabitants to 110,000 inhabitants, prosperity has increased, families have fragmented and car ownership has grown beyond all expectations.

The paper summarises the present problems facing Crawley and examines how these problems would be affected by the proposal to build a second runway at Gatwick.



Crawley Hight Street, circa 1947

Crawley New Town – A self-contained country town

In 1947, the post-war government faced several urgent problems. London, particularly in the East End, had lost many houses to bombing; many of those that remained were dilapidated and sub-standard, and Britain was close to bankruptcy. A fresh start in green fields beyond what is now London's "Green Belt" was seen as a quick, relatively cheap solution to the resulting housing problem, alongside repair and rebuilding work inside the London boundary.

Suitable sites for "New Towns" were sought and Crawley was one. It had a heavy clay soil that was not very suitable for agriculture but satisfactory for building, it had a rail link to Central London and Brighton, and stood at the crossing of east-west and north-south routes that were adequate for the traffic of the time. It stood well to the south of the London conurbation, outside the green belt.

The original concept

SIZE

Since the New Town was to be self-contained, it would need a number of light industrial employers to ensure a diverse choice of employment. It was decided that 15,000 workers was the minimum to make this diversity viable. This fixed the initial size of the light industrial employment base.

A further 15,000 workers would be expected to be employed in retail and service jobs.

Adding the dependants of these workers, a total population of 60,000 was chosen as the minimum viable population of a self-contained New Town. The plan called for fairly rapid establishment of a town of 60,000, drawing inhabitants from the bombed-out or more deprived areas of London, followed by a slower expansion to 80,000.

LAYOUT

Industrial Estate

The plan called for one main industrial estate placed where it had good level access to the railway, which would allow sidings to run into factories. This led to a site in the north of the New Town, nearest to the Airport.

Town Centre

The new retail and administrative town centre was deliberately placed next to the historic High Street to allow the historic town centre shops to prosper without being absorbed.



Neighbourhoods

The residential areas were planned as partially self-contained areas, each with a primary school, shops, community centres, doctors and other health services and churches. Emphasis was placed on avoiding residents, especially children, needing to cross major roads. The town was planned with main radial and ring roads, the neighbourhoods being placed between these routes.

Routes giving access to the interiors of the neighbourhoods, and residential roads, were narrow with limited space for parking.

It was decided to mix “workers’” houses with “managers’” houses in the same neighbourhoods. Only the latter were built with garages. A number of isolated garage blocks were built, available for rent. These have proved unpopular with residents due to their separation from houses, which encouraged crime and vandalism.

THE WIDER AREA

To the north of Crawley is Gatwick Airport, separated from the town by a ½-mile wide strip of green land (originally designated a “strategic gap” in which all building was to be prevented). The New Towns Commission was promised that Gatwick (originally an airfield with grass runways) would not be developed into a major airport.

Further north is the Redhill-Reigate conurbation. Between this and the airport is the medium-sized town of Horley.

To the west is the country town of Horsham. To the east is East Grinstead. The road to East Grinstead links a string of residential settlements with a village character including Copthorne and Crawley Down.

To the south is the High Weald Area of Outstanding Natural Beauty.



The Situation Today

POPULATION AND SIZE

Crawley has grown to a Borough with a population of about 110,000. Its boundaries have expanded to accommodate that growth, but at present it is almost filling its boundaries. This most unusual feature of a country town gives Crawley some unique problems.

One effect of boundary expansion is that Gatwick Airport is now entirely within the Crawley boundary.

EMPLOYMENT

Crawley has a very low unemployment rate. A recent figure is 1.4%. This is because it has a large surplus of jobs. There is some concern among employers that wages are rising as a result. It is probable that this is a moderate disincentive to businesses considering moving into Crawley. The Industrial Estate has expanded to fill the available land, and major offices have been built on its northeast corner, which would be demolished if a 2nd runway were built.

Gatwick is now the world’s busiest single-runway airport and provides substantial local employment, including employment on the industrial estate in airport-related enterprises such as caterers and shippers. At present Gatwick is an important employer

but not the dominant employer. 30% of the approximately 25,000 direct airport employees live in Crawley; about 7,550 people. The approximate total number of jobs in Crawley is 90,000, 30,000 of which are filled by inward commuters.

HOUSING AND LAND

Crawley has a severe shortage of housing, especially affordable housing. Because it is built up to its boundaries, there is little scope to solve this problem.

Crawley Borough Council has reviewed land use to identify sites for housing, with disappointing results.

At present, some office accommodation in the town centre is being converted to apartments, mostly small and basic. This may eventually add a population of 3,000 inhabitants to the town centre.

The land between Crawley and Gatwick Airport (originally designated as a “strategic gap”) is “safeguarded” on the instructions of a previous government so that it is available for the expansion of the Airport if any government should so determine. This land is not available for building. If it were released it could be used for expansion of the Industrial Estate and for some housing in areas not severely affected by airport noise.

TRAFFIC

Inward commuting to Crawley is estimated at 30,000 commuters, almost all by car.¹

Since 1947, the transport situation has completely changed. Typical families now own 2-3 cars in a town that was planned on the assumption that only people in managerial jobs would have cars. Workers were assumed to walk, bicycle or use the bus to get to work. Their wives were assumed to shop on foot in the neighbourhood shopping arcades.

The industrial estate is heavily dependent on deliveries and shipping by road.

Traffic entering or leaving the town does so via the Crawley Avenue link to the M23 and onward to East Grinstead, or via the A23 north or southbound, or on the A264 to Horsham.

All A-roads are too small for this traffic, and the Crawley Avenue link to the M23 and to East Grinstead is obstructed by busy roundabouts.

The M23 northbound exit towards Gatwick Airport is obstructed by queueing traffic at peak periods.



THE WIDER AREA

It is desirable to preserve a rural belt between Crawley and the surrounding towns. Joint planning is urgently needed by Crawley and its eastern and western neighbours to preserve rural spaces between and around communities, ensure that areas with a village character are not swallowed up, and that the whole conurbation is well supported with infrastructure, particularly properly planned roads.

Rural space is being eroded to the east, where there are proposals for a major expansion of Copthorne, Crawley Down and East Grinstead.

In the west, Horsham District Council's actions are ambiguous. It has already permitted building immediately adjacent to Crawley on the A264. HDC's view is that they value a rural belt, but they appear happy for that rural belt to be adjacent to Horsham while allowing building adjacent to Crawley.

Any further building near adjacent to Crawley's western boundary would require Crawley to install new sewage and other services and to consider a western bypass road to link the A264 to the A23 just south of Gatwick Airport. This in turn would threaten the rural character of Ifield Village Conservation Area in the north-west of Crawley.



Traffic congestion in the Air Quality Management Area

CURRENT PROBLEMS WITHOUT EXPANSION OF GATWICK AIRPORT

To summarise the current problems:

1. A large surplus of jobs drives massive inward commuting and leads to concern about high wage levels.
2. There is a severe shortage of housing, especially affordable housing, forcing those who can't live in Crawley to commute.
3. Together, these factors cause major road congestion as workers commute into Crawley from surrounding towns.
4. An Air Quality Management Area (AQMA) has been declared covering the most congested commuting route including Crawley Avenue and adjacent main roads, and including residential areas. (Note: this results from slow-moving road traffic, not aircraft emissions).
5. The need to improve traffic flow raises pressure to build large and intrusive roads around Crawley's rural margins. Such roads will have little effect on the AQMA, but will drive further urbanisation and encourage chaotic expansion of Crawley out of its existing boundaries.

The effect of a 2nd runway at Gatwick Airport

The Airports Commission shortlisted 3 viable options for consideration: two options for a new or extended runway at Heathrow, and the option of a new wide-spaced runway to the south of the airport adjacent to Crawley.

The Commission firmly and unanimously recommended the option of a new (3rd) runway at Heathrow.

However, for political reasons, and because of doubt about whether Heathrow can be operated within the EU's air pollution limits, Gatwick's proposal is still under consideration by the government. Unfortunately, because its report focussed on its recommended option at Heathrow, the Commission did not mention Gatwick's air pollution (and other) problems, nor did it recommend measures to address these problems if Gatwick were chosen.

If a second runway were to be built at Gatwick, it would have major effects on Crawley, described in this section.

POPULATION AND SIZE

The population of Crawley cannot increase significantly within its current boundaries. Nonetheless, a permanent increase in the workforce required at Gatwick would have to be accommodated somewhere.

A temporary workforce would also need to be accommodated during the construction work.

EMPLOYMENT

Crawley has a very low unemployment rate. A second runway at Gatwick would add further jobs to the surplus, adding to the cost of labour.

HOUSING AND LAND

Building a 2nd runway on the green land (the "strategic gap") between the airport and Crawley would permanently remove all of the safeguarded land from use by Crawley. It would also take some land at present occupied by housing and some industrial sites.

This would worsen Crawley's shortage of housing and building land.

TRAFFIC

A 2nd runway at Gatwick would increase very substantially the estimated 30,000 inward commuters into Crawley.

The A23 would be re-routed into a very restricted corridor between the airport and Crawley Industrial Estate. This would effectively freeze the A23 in a position where the construction of a Crawley western bypass (joining the A264 to the A23) would result in further demolitions of housing and industrial premises.



A 2nd runway would simultaneously increase the need for a western bypass and remove the land needed to build it. Building it would therefore involve demolitions to the south of the new airport boundary in Ifield Village, Langley Green, and the County Oak trading estate.

All roads which are currently congested would become more congested.

GAL's plan to improve the M23 junction is unlikely to solve the current problems and meet the higher commuting demand unless the whole of the M23 is also widened to 4 lanes.

The M23 has no useful northwards connection except to the M25, which is already very congested; the M23/M25 junction is one of the most persistent hot-spots.

THE WIDER AREA

It is desirable to preserve a rural belt between Crawley and the surrounding towns to preserve rural spaces between and around communities, and to ensure that areas with a village character are not swallowed up. The current Local Plans of both Crawley Borough Council and Horsham District Council both call for rural gaps between towns.

However, new economic activity in Crawley would make expansion into neighbouring local authorities extremely likely. It is probable that Horsham, Crawley and East Grinstead would become a single conurbation.

Any such coalescence would require much better infrastructure, particularly properly planned roads, both for access and for through- and bypass-routes. Funding promised by Gatwick Airport Ltd is grossly inadequate to provide this. Thus a 2nd runway, while it is itself funded privately, would provoke a very large public expenditure by local authorities with little prospect that the expenditure would fully address the problems caused by the 2nd runway.

The placement of the 2nd runway would make new and improved through roads, especially the inadequate east-west route, both more necessary and more difficult to implement.

Disputed Figures

Many of the figures are disputed. This section explores some of these disputed figures, and proposes reasonable projections of future trends.

HOW MUCH NEW HOUSING?

Estimates of the numbers of new homes required if a 2nd runway is built depend on the estimate of new jobs.

The Airports Commission estimated that between 0 and 18,400 new homes would be needed to accommodate the expected increase of workers in the airport, in air-related jobs and in catalytic employment. They commented that even the higher figure does not "present insuperable challenges".

In the words of the briefing papers supplied by officers for a Crawley Borough Council debate in January 2015, "The Airports Commission's conclusions on the likely housing numbers and their deliverability are questionable."²

The briefing paper identifies a number of unjustified assumptions about how these homes could be provided. In summary, Crawley has very little capacity to build more, and the surrounding authorities as far away as Brighton are all experiencing difficulty meeting their present housing needs, without a 2nd runway.

A startling misunderstanding by the Commission was the suggestion that the land “safeguarded” to build a 2nd runway could be used for housing. But this is the very land which will be taken by the new runway. In fact the proposed airport expansion will absorb the safeguarded land and more.

In the absence of any realistic options for building new homes, the effect of a new runway would be felt mainly in the form of increased commuting.

HOW MUCH NEW EMPLOYMENT AT A 2-RUNWAY AIRPORT?

Gatwick Airport Ltd. (GAL) has painted a very optimistic picture of the amount of new employment at a 2-runway airport. They have suggested that as many as 120,000 new jobs would be generated, taking into account new airport jobs, new aviation-related jobs, and the “catalytic effect”³ However, they later downplayed this estimate when they discovered the problems which would accompany a huge surge in regional employment.

Less optimistic sources predict that the 2nd runway will be largely unused because of larger aircraft, higher load factors and fuller use of capacity at London’s other airports. The inevitable rise in fuel prices will hold air movements close to their current levels.

In practice, the most likely scenario is a modest rise in air movements in the medium term, eventually limited by the need to conserve fuel and meet climate change rules.

The Airports Commission estimated that the number of new jobs arising from a 2nd runway would be between 500 and 23,700 by 2030. These jobs would be taken by people from as far away as Croydon. In addition the catalytic effect might produce another 49,000 to 90,000 jobs.⁴

HOW MUCH TRAFFIC CAN MOVE FROM ROAD TO RAIL?

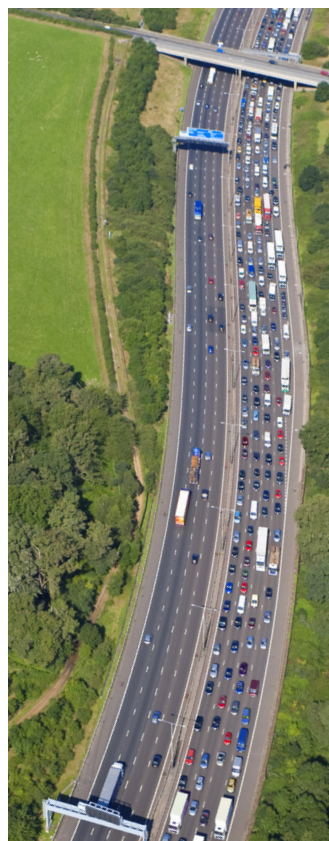
GAL has made much of its plans to encourage more air passengers to arrive by rail. Indeed, they have already improved the station concourse and have plans to improve the station itself.

However, this does not address the problems of increased road traffic caused by increased inward commuting.

It is important to distinguish between commuting from Crawley to London (mainly by rail from residential areas near Three Bridges station), and inward commuting to Crawley’s industrial areas, which is almost entirely by car.

It is unrealistic to expect a significant shift from commuting by road into the Crawley/Gatwick area to commuting by rail, because of the lack of convenient rail links. Only Gatwick airport itself could reasonably expect a small increase in commuting by rail.

There are currently plans to increase the capacity of the London/Brighton main line. However, the improvements are intended to carry the increased rail traffic expected without a new runway at Gatwick and to alleviate the daily misery of commuters into central London who are forced to stand for their whole journey.



TO SUMMARISE

Crawley and the surrounding towns already have severe problems of congestion on inadequate road and rail links. A 2nd runway could only make these problems worse, without any realistic plan to address them. The uncertainty is about how much worse.

The author



Peter Jordan

Peter is a retired engineer with an interest in business improvement, quality assurance and evidence-based decision-making.

Appointed as a UK expert to international working parties, he has contributed to a number of international standards that promote safety in the design of medical equipment. As a consultant, he has advised companies in Britain, Europe and the United States on how to make business decisions based on solid evidence. He is now determined to ensure that a decision on a Gatwick runway is also made on solid evidence and not on simplistic lobbying.

References

- ¹ Crawley Borough Local Plan 2015 – 2030, finalised December 2015. pub271853
- ² Crawley Borough Council Report to Cabinet. pub237653 clause 5.10
- ³ The “catalytic effect” refers to the possibility that businesses will be attracted to an area of enhanced business activity.
- ⁴ Crawley Borough Council Report to Cabinet pub237653 clause 5.6



A series of research papers on a second Gatwick runway