The Local Impact of Industrial Development:
Manufacturing in Suburban Melbourne

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A thesis submitted for the degree of Doctor of Philosophy,
School of Global Studies, Social Science and Planning, RMIT University
Declaration

Except where due acknowledgement has been made, this work is that of the candidate alone. It has not been submitted previously, in whole or in part, to qualify for any other academic award. The content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program. Any editorial work paid, or unpaid, carried out by a third party is acknowledged. Ethics procedures and guidelines have been followed.

Anthony G. Kent, 3 May, 2010
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I dedicate this thesis to the memory of my parents Brian and Wilma. Their intellectual and emotional influence and unconditional love live on.
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Glossary and Acronyms

ABWI - Australian Bottled Water Institute
ABS - Australian Bureau of Statistics
ACC - Area Consultative Committee
AQF - Australian Qualifications Framework
ANZIC - Australian and New Zealand Industry Classifications
AMIEU - Australian and New Zealand Meat Industry Employees Union
AMWU - Australian Manufacturing Workers’ Union
AWA - Australian Workplace Agreement
DOP - Denominazione di Origine Protetta or Protected Designation of Origin
EBA - Enterprise Bargaining Agreement
ESL - English as a Second Language
FBT - Food, Beverages and Tobacco
GFC - Global Financial Crisis
HACCP - Hazard Analysis and Critical Control Points
HOFEX - Hong Kong Convention and Exhibition Centre
IRP - Internal Regional Product
LGA - Local Government Area
L&RED - Local and Regional Economic Development
Melbourne SD - Melbourne Statistical Division
NESB - Non-English Speaking Background
NACC - Northern Melbourne Area Consultative Committee
NEITL - Northern Industry, Education and Training Link
NMIT - Northern Melbourne Institute of Technology
NUW - National Union of Workers
PFG - Plenty Food Group
QA - Quality Assurance
Section 457 Visa - Permits Australian employers to sponsor overseas workers
R&D - Research and Development
RMIT - Royal Melbourne Institute of Technology University
SKILLED - An Australia-wide employment agency
SLA - Statistical Local Area
SME - Small to Medium Enterprise
SQF - Safe Quality Food Standard
TAFE - Technical and Further Education
TFC - Textiles, Footwear and Clothing
TNC - Transnational Corporation
VECC - Victorian Employers Chamber of Commerce
Abstract

This thesis is an investigation of the impact of industrial development on a local community in Melbourne, Australia. The research is set in the City of Whittlesea, an outer manufacturing suburb with a rapidly expanding population. The sector chosen as a case study to evaluate the local impact is food and beverage manufacturing. It has seen considerable job growth and an increase in its location quotient in comparison with the sector located in other parts of Melbourne.

An overarching idea in this research is that the connections of industry to a local community (and hence the flow-on effects of industrial development) are strongest when they depend upon local knowledge and networks. To explore this idea, the research considered two key explanations put forward to explain local economic impacts of development: the industrial cluster model and the local labour market model. Relating these two approaches to the underlying idea of the research led to the hypothesis that the strongest local knowledge and connections between industry and a local community are likely to be found in the labour market, as in that dimension the scope for non-local contacts is considerably less. In essence, local knowledge essentially resides, not in local firm-to-firm or institutional interaction, but within the local workforce.

The methodology used to test these ideas produced qualitative and quantitative data via semi-structured interviews with 19 firm managers and separately explored the geography and operation of the labour market.

The hypothesis that the local labour market has the stronger connections between industry and a local community than the operations of an industrial cluster was confirmed by the research.

The thesis concludes by considering limitations associated with the methodological approach (especially the definition of ‘local’ used in the study) and relates that insight to broader methodological concerns of economic geography. It also observes that local economic development policy needs to pay much greater attention to the labour market circumstances in places like Whittlesea.
Chapter One. Introduction

The idea that socio-economic disadvantage in cities is increasingly localised and that solutions to disadvantage similarly have local solutions has become a common theme in academic and policy circles. These solutions emphasise the role of networks of communication between local actors – usually, firm managers, economic institutions and local and regional government bodies – where the product of exchange is information and knowledge. However, a sustained demonstration of what these networks look like and indeed whether they are present has proven a methodological and theoretical challenge. In spite of the persuasive arguments of the industrial cluster model, empirical validation of these claims has been found wanting.

In terms of geographical context, outer suburban locations provide a special case. On the one hand, their distance from the Central Business District means that the range of higher level producer services is difficult to access. On the other hand, these locations represent a series of distinct but overlapping labour markets where a degree of specialisation is evident, as shown, for example, by the measurement of location quotients of particular industries. These outer suburbs are the sites of both population growth and jobs growth. This thesis looks behind the obvious local benefit of increased employment for a more in-depth understanding of the local economic impact of industrial development. In doing so, it engages at various levels with the overlapping characteristics of ethnicity, family links, skill levels, housing affordability and employment outcomes, all of which are no more apparent than in the northern suburbs of Melbourne. Where these characteristics come together is through local networks. The thesis, then, is concerned with an alternative explanation to the idea of networks representing connections between firms, and between firms and local institutions such as economic development bodies.

The thesis is comprised of ten chapters. Chapter Two presents the literature review. It presents ways that researchers in Australia and elsewhere have explored the local connections of industrial development and so shapes the central concern of the research. It does this by examining: the contemporary literature on industrial clusters, which has laid the foundation for much thinking on firm and local institutional interconnectivity; the empirical evidence regarding this approach, where it is shown how this has led to a ‘labour market turn’ within the literature and, contemporary ideas on the operation and nature of local labour markets in
order to re-think and re-emphasise labour as the main conduit of local connectivity. From this basis, a conceptual framework for the research agenda and hypothesis for the thesis is established.

Chapter Three presents the methodology that will show how the hypothesis is to be examined. The basic methodology is comparative, of the two views of the local impact of industrial development. The basic approach is both qualitative, in the form of semi-structured interviews with firm managers and other key actors and quantitative through compilation of tables and figures derived from interview information and 1996, 2001 and 2006 Census data. The chapter establishes the fundamental steps before the research can be undertaken; examines technical issues in data assembly; examines in detail the type of data used and, outlines the actual interview process.

Chapter Four presents the context for the research. The first section briefly shows how the idea of intra-urban inequality has become a very important policy and research consideration in Australia. The second section shows the place of Whittlesea in these considerations, by outlining its character, with a particular emphasis on its local economy. The final section turns to the food and beverage manufacturing sector, first by briefly portraying its overall status in Australia and then by focussing on its character within the City of Whittlesea, including a description of the Plenty Food Group, a local economic development body whose objective is to promote local inter-firm interaction.

Chapter Five is the first of five results chapters which examine different aspects of firms’ operations in order to identify local impacts. This chapter examines and attempts to understand the significance of the industrial cluster model in the locational decisions of firms. It asks why is this particular industry group in this particular location?

Chapter Six tests the proposition inherent in the industrial cluster model that the industrial system is a local configuration, where local connections are found. It comprehensively ‘takes apart’ the industrial system by examining, one by one, those significant components that have been put forward in the model as providing a local impact. The geography of suppliers and business services (human services, foodstuffs and ingredients, packaging and other production materials), markets or customers and competitors is examined.
Chapter Seven focuses on the significance of local networks in the ideas generation process of case study firms.

Chapter Eight turns attention to the labour market and its local impact. Four key approaches are taken: analysis of longitudinal Census data on changes in self-containment and occupations, self-containment based on the assessment by firm managers, the preference for local labour and the recruitment process.

Chapter Nine examines the local economic impact of industrial policy and institutions, in the form of regional and local economic development bodies, the local research and teaching institute, trade unions and training institutions.

Chapter Ten concludes the thesis by discussing and reflecting upon the implications of the key findings. After the introduction, the second section presents the main finding. The chapter then proceeds as follows. The results are schematised against the theory; the implications of the research in terms of the local impact of first, industry links and second, the labour market are examined; methodological issues are considered in light of the thesis results; the implications for industrial policy and institutional responses are drawn out; the implications for local economic development are considered and, a future research agenda and associated issues are sketched. The chapter ends with brief concluding comments.

This thesis was part of an RMIT University interdepartmental research network, ‘Re-imagining the Australian Suburb’. The overarching objective of the project was to investigate the potential for significantly improved sustainability outcomes in greenfield development at the urban fringe, through enhanced relations between governments, industry, the community and experts. A subset of the project was a local governance and community building stream. Within the geographical setting of the City of Whittlesea, this stream addressed the key areas of local governance, urban design, provision of transport infrastructure and local employment generation. This thesis is concerned with the latter of these areas.
Chapter 2. Literature Review, Conceptual Framework and Hypothesis

2.1 Introduction

This chapter presents ways that researchers have explored the local connections of industrial development and so shapes the central concern of the research. The chapter is in four parts. First, the contemporary literature on industrial clusters, which has laid the foundation for much thinking on firm and local institutional interconnectivity, is surveyed with attention in particular to the strength of the ‘local dimension’ of industrial clusters. Second, a close examination of the empirical evidence regarding this approach is conducted and it is shown how this has led to a ‘labour-market turn’ in the literature. Taking its cue from this development, the third section examines contemporary ideas on the operation and nature of local labour markets in order to re-think and re-emphasise labour as the main conduit of local connectivity. Finally, a conceptual framework for the research agenda and hypothesis for the thesis is established.

2.2 Contemporary literature on the impact of industry on local communities

2.2.1 The industrial cluster model

A well-developed and pervasive theme in geography and planning has centred on the connectivity between co-located firms in a local area. The origins of this line of thinking lie with the early work of Alfred Marshall (Marshall, 1920), expressed in the idea of ‘industrial atmosphere’, which drew its inspiration from the cutlery industry of Sheffield, UK in the nineteenth century. There are two contemporary trends that have revived the appeal of the Marshall model. The first is that, since the 1970s, while many industrial regions have declined, other ‘new industrial spaces’ (Scott, 1988a) have emerged, providing jobs and new products for the global market. The argument is that the basis of this success was a unique characteristic to create and sustain local networks of ideas and innovation in what came to be labelled ‘flexible’ production systems. The hallmark of the latter is small-batch, non-standardised products (Russo, 1985; Saxenian, 1994). The second is that these local constellations of similar firms have arisen in spite of the general trend of geographical ‘ubiquitification’ of trade, finance, services and production. In other words, although at one level, economic activity is increasingly globalised, a local dynamic is still important (Maskell
and Malmberg, 1999). Hence we have what might be termed the ‘ubiquity paradox’. The literature links the ‘global’ and ‘the local’ in an almost symbiotic relationship: a vibrant, interactive local economy engenders links to the global market place through ideas and trade.

The involvement of local firms in local economies has been expressed via a number of similar perspectives: industrial systems (Malmberg, 1996), learning regions (Morgan, 1997), New Industrial Districts (Park and Markusen, 1995) or clusters (Porter, 1990). These systems or processes display more than just economic relations; they are built around ‘untraded’ interdependencies, embedded through social activity as well as through financial or technical exchange (Granovetter, 1992; Storper and Scott, 1995). The importance of these new ways of understanding the local impact of industrial change is confirmed in the idea that the attraction and vitality of these processes represent a shift away from the more traditional agglomeration factors, where cost-reduction is the overriding consideration:

There is now broad agreement that the main parameters of competition cannot be fully captured within a traditional framework based on relative cost advantages. Sustained competitiveness has more to do with capabilities leading to dynamic improvement than with achieving static efficiency (Malmberg, 1996: 395).

The ‘dynamic improvement’ meant by Malmberg, relies upon knowledge and information (Malmberg and Maskell, 2002). Recognising the role that knowledge plays in production opens up a new way of understanding the local expression of industrial development:

The processes of localized learning are closely related to the benefits of spatial proximity between interacting parties. Localized learning may, thus, refer to the enhanced knowledge creation that takes place when several co-located firms undertake similar and related activities…benefit[ting] from regular and direct face-to-face contact (Malmberg and Maskell, 2005: 4).

In this view, geographical proximity allows localised knowledge spillovers – defined as ‘…knowledge externalities bounded in space’ (Breschi and Lissoni, 2001: 975) - between innovative firms and research institutes and to others. These can in fact include ‘traded’ interdependencies such as consultancy, training and patent agreements (Saxenian, 1985; Feldman, 1999; Döring and Schnellenbach, 2006). By such means, companies operating near
important knowledge sources introduce innovations at a faster rate than rival firms located elsewhere (Jaffe et al, 1993).

Notions of ‘knowledge’ vary in the literature. At one extreme, knowledge distribution in a local area can be identified by the adoption of patents by local firms created through research activity (Jaffe et al, 1993). However, a fundamental reason for the importance of some industrial knowledge in a local area is its tacit quality (Maskell, 2001; Boschma, 2005):

The tacit dimension of knowledge exists in the background of our consciousness … [it] can only be shared effectively between two or more people when they also share a common social context: shared values, language and culture (Gertler, 2003: 78).

Thus it is argued that there are many tasks that involve skills and insights than cannot be written down on paper. Acquiring such knowledge often requires personal demonstrating, experience, practice and imitating and is therefore related to the idea of ‘learning by doing’ (Pinch et al, 2003: 375).

Tacit knowledge is generally regarded as dependent on face-to-face contact, ergo, close spatial proximity. In fact:

The more tacit the knowledge involved, the greater the dependence of spatial proximity between those taking part in its creation or exchange; the more codified the knowledge, the easier to communicate across spatial distance (Malmberg and Maskell, 2005: 4).

This method of ‘knowledge transfer’, of ‘learning by doing’, leads to valued workplace knowledge. It is a case of ‘getting the hang of it.’ ‘Outsiders’, in both a social and a geographical sense, may find tacit knowledge difficult to grasp or access, precisely because of its tacit quality and location. This is doubly so, as the custodians of tacit knowledge operate within a community of trust: they trust their fellows to keep their knowledge within the ‘family’, and they know that breach of this trust would result in exclusion (Maskell, 2001). Therefore, the local area surrounding the custodians of tacit knowledge may enjoy a competitive advantage over other geographical areas.
When industrial connections are referred to in the literature, they can be either horizontal or related (within the same sector), or vertical or supporting (encompassing the broader industrial system). Such networks are believed to promote innovation, which in turn enables competitiveness, including at the global scale, so that clusters of firms have a positive economic effect on a local area:

A firm facing a particular problem turns to a supplier, a customer, a competitor or some other related actor to get help in specifying the problem and defining the terms for its solution. From this it follows that the level of analysis for understanding the processes of industrial innovation and change is some notion of an industrial system or network of actors carrying out similar and related economic activity (Malmberg, 2003: 146).

Porter (1990) is perhaps the most well known exponent of the idea of an ‘all-inclusive’, industrial system approach to local industrial impacts, expressed in the ‘diamond’ model. Suppliers and business services or ‘related and supporting industries’, are one ‘corner’ of the diamond of national competitiveness. The Porter model displays related and supporting industries as generating innovation and the communication of ideas. Establishing such linkages ‘...is facilitated by having the essential activities and senior management of suppliers nearby ...benefits are enhanced if suppliers are located in proximity to firms, shortening the communication lines’ (Porter, 1990: 103). Although pitched primarily at nations, with implications for national industry policy, Porter too, saw a local dimension as expressed in ‘demand conditions’ or customers and markets and the demanding standards encouraged by competition:

...A concentration of rivals, customers, and suppliers will promote efficiencies and specialization. More important, however, is the influence of geographic concentration on improvement and innovation. Rivals located close together will tend to be jealous and emotional competitors (Porter, 1990: 157).

The ‘influence of geographic concentration’ has been detected by researchers in local norms, values, a shared culture and world-view. The nomenclature varies, with local groups and processes referred to as ‘epistemic communities’ (Lissoni, 2001), ‘innovative milieux’ (Camagni, 1995) or ‘socially-embedded’ (Granovetter, 1985). A variant of that approach acknowledges the importance of business associations, universities, local government
economic development units and other bodies. This ‘institutional turn’ in analysis is generally associated with Amin and Thrift (1994), who identified four factors that measure ‘institutional thickness’: first, ‘a strong institutional presence, that is, a plethora of institutions of different kinds’; second, ‘high levels of interaction amongst the institutions in the local area’; third, ‘the development, as a result of these high levels of interaction, of …collective representation of what are normally sectional and individual interests’ and fourth, ‘the development amongst participants in the set of institutions of mutual awareness that they are involved in a common enterprise’ (Amin and Thrift, 1994: 14).

Recognising the importance of tacit knowledge and institutional thickness opens up an important perspective on the way that industry shapes local communities. However, the strength of the impact will indeed depend upon the ‘the thickness’ of these institutions and the way knowledge is shared.

**An alternative industrial perspective: ‘global pipelines’ and ‘local buzz’**

An alternative perspective on the way that industry shapes local communities has been presented by Bathelt et al (2004) and Bathelt and Schuldt (2008). In introducing the concept of ‘global pipelines’ of innovation, Bathelt et al (2004: 46) observe, ‘New and valuable knowledge will always be created in other parts of the world and firms who can build pipelines to such sites of global excellence gain competitive advantage…’ This view has been connected to cluster thinking by suggesting that theoretically, ‘pipelined’ knowledge, derived from, for example, trade fairs, leads back to the local cluster, where:

...the information that one cluster firm can acquire through its pipelines will spill over to other firms in the cluster through ‘local buzz’...the information and communication ecology created by face-to-face contacts, co-presence and co-location of people and firms within the same industry and place or region (Batheldt, et al, 2004: 38, 46).

This argument, perhaps, allays an ongoing concern in the literature – that if a cluster is too localised in its outlook and activities, it becomes ‘static’ – certainly a concern for Porter (2000) in his more recent work. The ‘global pipeline’ model provides a way of potentially re-invigorating a ‘static’ local economy. However, much work needs to be done to understand...
this process and the empirical evidence is that local spread of ideas is quite limited and uneven, even in an archetypal industrial cluster such as found in the Third Italy region (Morrison, 2008). Figure 2.1 displays a schema of local industrial impacts based on the industrial cluster approach.

**Figure 2.1. ‘The local’ as explained by the industrial cluster model**

Adapted from Markusen, 1996.
In Figure 2.1 we see that within the ‘circle’ of a local area, industrial activity and institutional supports such as local governance, development entities, research institutes and the firms themselves generate network-based knowledge creation and exchange. The key external contribution is that of the global pipeline. This perspective provides one set of aspects to explore when attempting to identify and understand the local impact of industrial development.

2.2.2 Rethinking the part of clusters in local development

While the suggested positive impact of co-located firms has been enthusiastically acknowledged, less attention has been paid to disparity in outcomes based on geography and the extreme unevenness in empirical investigations of the effects of clusters. These criticisms span a variety of approaches and are in many ways interrelated.

What is the actual local geography?

For all the emphasis on local impacts and connections, uncertainty and conjecture continues to develop on whether ‘clusters’ should be defined by their geography or their (potentially dispersed) organisation (Malberg, 2003). As Porter himself has more recently argued, ‘The geographic scope of a cluster can range from a single city or state to a country or even a group of neighbouring countries’ (Porter, 2000: 254). Other recent research shows that ‘knowledge-networks’, previously lionised for their local impact, are often relational over space (Capello and Faggian, 2005). That is, the ‘proximity’ of ideas and collective vision corresponds, not to co-location, but to virtual or international communities (Boschma, 2005).

Contributing to the increasing ‘fuzziness’ of cluster geography and conceptualisation is criticism of the empirical quality of research purporting to actually show local inter-firm linkages (Malmberg, 1997; Malmberg and Maskell, 2002). While this does not apply to all research (see for example, Baptista and Swann, 1998; Capello and Faggian, 2005), even here, such findings rely to a considerable degree on proxy measures or correlations. The empirical ledger seems to have swung in favour of a lack of local linkages associated with the cluster idea (Martin and Sunley, 2003; Gordon and McCann, 2005). Such ambivalent results also extend to recent work on European food and beverage small and medium enterprises (SMEs). Vaz et al (2006: 106) found that over half of 323 surveyed firms were in fact ‘multiple
innovators’ but ‘…this is due to relations external to the regions.’ More troubling still, a reappraisal of the long-term viability of clusters has been underway for some time (Staber, 1997; Bianchi, 1998; Brenner and Gildner, 2006).

**Is there spillover to a local area?**

Another important counter-theme is based on the question of whether development within a region is mistaken for development of a region. That is, the ‘spillover’ effect of geographically specific, successful clusters to the broader community has been questioned (Lovering, 1999; Martin and Sunley, 2003). Part of the problem is again an empirical one; cluster studies concerned primarily with identification of links do not rigorously look beyond the operation and resilience of the cluster itself to evaluate the depth of linkages (both actual business linkages and broader multiplier effects) with the surrounding community – in spite of the fact that they are assumed, and form a crucial rationale for, the entire industrial cluster ‘project’.

As for empirical investigations that do attempt to measure the spillover effect, a series of studies of cities in Europe indicated that while they had each developed their own new-found enterprises, which exhibited to some extent, ‘Porter-type’ cluster characteristics, what they also all had in common was a stubbornly high level of unemployment amongst the local population (lab.3000 and RMIT University, 2004). The Vaz et al (2006: 107) study cited previously found that ‘…multiple innovators are located in the set of regions that on average had lower values of IRP per capita…In contrast, lower performance focused innovators are located in the richest regions…’ Also recently, McDonald et al (2007), in an attempt to identify ‘Porter-type’ characteristics of clusters, examined Department of Trade and Industry figures on over 100 clusters in the UK. They found that clusters with deep collaborative networks and well-established local supply chains did not correlate with employment growth and international competitiveness and that ‘…industrial sector factors seem to be more important than depth and stage of development’ (p.47).

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1 IRP – ‘Internal Regional Product’. IRP is similar to Gross Domestic Product, however it is applied to internal regions within nations (S.Vaz, pers.comm.).
What is the depth of technology used or shared?

The depth of technology which successful industrial clusters will display is a little ambiguous and raises similar concerns regarding the extent of local impacts. Technology depth is particularly an issue when the research has looked beyond the activities of clusters outside of the strictly ‘symbolic analyst’ (Reich, 1992), knowledge-intensive sectors linking research and information technology and communications. Russo (1985), for example, examined inter-firm links in the ceramic tile industry of the Third Italy region, where he found the ‘vague suggestions’ of ceramic tile producers led to ‘…research developed largely outside the ceramic tile firms’ (Russo, 1985: 332). But herein lies the problem: of what enduring benefit is such low-level innovation to the instigators, given subsequent ‘value-added’ research occurred beyond the firm? A similar problem is expressed differently with Capello and Faggian (2005), who examined ‘more traditional sectors’ such as food manufacturing. Here, they showed how knowledge is spread and so ‘…generates stable cooperation between firms and their local suppliers and customers, an efficient local labour market with internal mobility of employees and spin-offs from local firms…’ (p. 77). However, this process typically applies with ‘…culturally similar people and institutions’ (p75). But how realistic is it that such prescriptions will be all-inclusive? Even within a local area, *atypical* ‘people and institutions’ will be present – will the benefits also spread to, and involve them? Even with ‘lowbrow’ innovation, then, the benefits throughout the local community may not be felt.

What is the influence on locational decisions?

Given that the literature paints a positive picture of the formation and operation of industrial clusters, it is curious that firms are rarely asked specifically about the reasons for their location. Rather, firms are asked what they see as the advantages of their present location, not why they located there in the first place. Therefore, the idea that cluster characteristics may have influenced a locational decision has remained essentially unanswered. In many cases, the presence of similar firms, agglomerative benefits and knowledge networks as a reason for location is merely assumed - much as it is assumed that networks are formed. A somewhat more direct approach (although still suffering from an *ex post facto* analysis) is that of Gordon and McCann (2000). They targeted firms with strongly ‘Porter-like’ characteristics, that is, ‘…the successful British sectoral clusters recognised by Porter (1990), notably in luxury consumer goods and services, finance, information, general business services and health care
goods’ (Gordon and McCann, 2000: 521-522). What is particularly significant is that they
found the traditional benefits of agglomeration as a locational benefit still held sway over
inter-firm information exchange. Accessibility, cost and availability of labour and premises,
as well as access to customers, were perceived by firms as more important than inter-firm
factors such as proximity to suppliers, competitors and general or business services.

Stam (2007), using more direct questioning, also explored locational decisions and concluded
that ‘Little is known about…the spatial development of fast-growing entrepreneurial firms.’
This study, on Dutch firms, found that most start-up entrepreneurs chose to locate ‘…near
where they live or used to work…’, with one main reason being that ‘…entrepreneurs
discover opportunities in markets with which they are familiar…’ (p.37) (more specific
geography was not provided). Although the observation on the attraction of familiar markets
has a ‘Porter-like’ ring to it, the firm conclusion is that ‘Contrary to what is found in the
literature on industrial clusters and embeddedness, interorganizational networks hardly play a
role in explaining the spatial organization of entrepreneurial firms’ (Stam, 2007: 46).

Are particular kinds of firms involved?

Conjecture over the actual local impact of clusters has also been expressed via the recognition
that not each and every type of firm is expected to participate in, or benefit from, the models
of local networks outlined above. Malmberg’s survey of empirical studies (Malmberg, 1996)
concurs with the observations of other authors (Russo, 1985; Bianchi, 1998; Raco, 1999;
Freel, 2003) that ‘Most models of industrial districts and innovative milieux are, explicitly or
implicitly, preoccupied with small- or medium-sized “entrepreneurial” and “place-based”
firms’ (Malmberg, 1996: 399). Why is this so? The ‘logic’ is that the smaller the firm, the
more likely it will lack certain services and inputs for which it must draw externally, so its
need for external connections is likely to be greater. These perspectives seem to assume that
SMEs in a given area are ‘naturally’ inclined to benefit, without a coherent analysis of the
skills and motivation actually available to them to participate in the networks that are expected
to deliver such benefits. Further, there is an assumed mutually beneficial, and beneficent,
relationship between SMEs, suppliers and subcontractors on the one hand, and large, often
transnational corporations (TNCs) on the other (Hudson, 1999; Hadjimichalis, 2006). The
emphasis on SMEs overlooks the part that a large firm with its surrounding network of
suppliers could have on a local economy, the community and SMEs. Large firms forge
unequal relations with smaller firms by their sheer market power. This has a special relevance in the Australian context where large and particularly transnational firms are significant.

Australia: particular issues

The history of the industrial development of Australia and its regions and communities reinforces the concerns raised internationally. Australia is an isolated market of geographically isolated, dominant, urban centres. It has relied on export commodities as the basis of its economy. These are generally extracted in isolated, ‘one-industry’ rural towns, not, of course, in urban areas. This is in stark contrast to the European Union, where formations such as the so-called ‘blue banana’ pattern of economic activity have spread across many urban areas in a number of nations (Wegener, 1995). Australia lacks the long history and industrial-military power that has propelled the development of well-known clusters in Italy and California. While it is true that both the Third Italy region and Silicon Valley were ‘greenfield’ sites, analysis of their genesis clearly shows, in the case of the former, a long historical background as seen, for example, in the availability of surplus agricultural labour supposedly more amenable to intermittent manufacturing work – that is, ‘flexible labour’ (Scott, 1988b) and in the case of the latter, a broader ‘industrial military complex’ that propelled development (Saxenian, 1994).

Such traditions are simply absent from the Australian scene. Rather, no understanding of Australian economic geography is possible without acknowledging the influence of TNCs. TNC involvement in the Australian economy in terms of both production and investment has been at a high level since the 1950s (Fagan and Webber, 1999). From an early point, TNCs in Australia made what might seem to be ‘irrational’ decisions on location, isolated from other manufacturers. Due to their sheer size and profitability, they did not seem to require the usual benefits accorded by agglomeration with other local manufacturers (Logan, 1966). Then the 1980s saw considerable investment directed towards further concentration through company takeovers and foreign expansion - rather than innovation. Furthermore, TNCs in this sector catered for Australian markets with a tradition of tariff protection rather than targeting an increasingly competitive global marketplace.

All these factors would seem to conspire against the development of cluster connections as a local influence in Australia. Nonetheless, Australian industrial policy adopts the counter-
intuitive approach of promoting clusters (DSE, 2002; DIIRD, 2003; Roberts and Enright, 2004; McDougall and O’Connor, 2005) in line with the OECD and Europe, where arguably the cluster approach has greater credence (Roelandt and den Hertog, 1999; Bergman et al, 2001). The Victorian State government’s economic development department has developed a clusters strategic framework which fully accepts the main claims of the industrial cluster approach:

As Victoria faces the challenge of remaining competitive in a changing global economy, clusters have the potential to help drive innovation, boost exports and productivity, generate high-quality jobs and attract investment. Clusters also encourage collaborative activities and networking: in doing so, clusters multiply the number of ideas being generated… (DIIRG, 2003: n.p.).

This enthusiasm is reflected in the State’s metropolitan strategy, Melbourne 2030: ‘Opportunities will be protected for internationally competitive industry clusters…’ (DSE, 2005: n.p.).

What is not so surprising is that the Australian research has produced equivocal, or negative, findings regarding evidence of localised, inter-firm and local institutional collaboration. It mostly examines groupings of Local Government Areas (LGAs) or entire metropolitan areas as the canvas for local interaction. Sector-based studies include information technology and telecommunications (Mohannak and Turpin, 2002; Searle and Pritchard, 2005), machinery and equipment manufacturing (McDougall and O’Connor, 2005), manufacturing in general (Ratio Consultants Pty Ltd, 2003) and multi-media firms (Searle and De Valence, 2005). A study by Martinez-Fernandez et al (2005) of the software, mining technology and tourism industries, while not specifying the geography of the operations under investigation, found that ‘The use of external services was not a standard operational procedure in…the development of innovation products…’ (p5). In other words, innovation was developed in-house. More area-specific studies include hi-tech firms in North Ryde, Sydney (Freestone, 1996) and skilled manufacturing workers in the northern suburbs of Adelaide (Spoehr and Wilson, 2007).

Examination of institutional actors in the work by Beer and Cooper (2007) found similar overall results. In examining the relationship between a local university and a local economic
advisory body in an area of Adelaide going through significant manufacturing job loss, they found ‘…the relationship between the university and regional actors is confounded by differences in focus and communication styles’ (p1064). Turning to a study directly concerned with food manufacturing clusters in Australia, Brown and Gennoff (2001), who are clearly sympathetic to the Porter model, interviewed 100 firms in the northern suburbs of Adelaide, South Australia. Some of these firms (number unspecified) appear to have outsourced functions, ‘…in some instances contributing to the region’s engineering and industrial fabric, reinforce[ing] alliance formation between companies and underpin[ing] localised knowledge spillovers’ (p. 93) although unfortunately they only give one concrete example. However, they also report those companies, including SMEs, with in-house engineering, ‘…exhibit the greatest propensity toward local research and development…’ (p.94). In this case, lack of empirical clarity and this latter statement lead to the conclusion that local inter-firm knowledge networks are weak.

A minority of Australian studies, however, are an exception to the overall trend. An extensive study by Maude (2003) reported that local and regional government and non-governmental economic development bodies across Australia believed the development of local or regional networks was one of their more effective activities. Haughton and Browett (1995) examined wine-growing in the McLaren Vale (South Australia) region. Activity reminiscent of the Porter model of innovation through localised collaboration and competition was clearly evident. However, these practices had been in place in one form or another since the nineteenth century, and as such, were hardly a new approach to production.

Overview

The research reviewed above has raised doubts about the strength of linkages within industrial clusters and between industrial clusters and the local area. Not only are there concerns about the way that cluster forces operate, there are issues about the potential local benefits. It is as if the idea of a strong local impact based on the activity of local firms is continually unravelling, rather than being confirmed or refined, leading us to question whether we need to look from another direction to ascertain the local impact of industrial development. We do then have to ask: where do these empirical and theoretical concerns leave the cluster idea? Having surveyed the literature on the way that industry development should have a local impact, and understanding what is in fact the case, it is difficult not to share the frustration of the scholars
themselves, who in essence now seem to be asking the question, what exactly is ‘local’ about industrial clusters? For one of more prominent scholars in the field,

One basic and obvious point here is: people are. While goods, money and certain types of information can indeed travel the world with little friction, people can’t…Bringing people into cluster research means, among other things, allowing more explicitly for the functioning of labour markets and the role of human skills (…including educational systems, housing markets, service facilities, health care, insurance and pension systems, rules and norms, etc.) to occupy a more central position in the analytical framework…[g]iven that we have failed to show empirically that there is intense interaction going on between firms… (Malmberg, 2003: 156).

And indeed, to examine such labour markets directs attention to ‘…the hundreds and thousands of not so spectacular spatial clusters where we find substantial numbers of similar and related firms that normally experience limited local interaction among themselves’ (Malmberg, 2003: 156).

To some extent, the role labour plays in shaping local outcomes can be seen by re-thinking some of the material on industrial clusters and networks outlined above. So, for example, the way that the ‘global pipeline’ can be tapped and the importance attached to knowledge all point to a potential key role for labour in the local context. An ‘institutional weakness’ may be a lack of labour training, and a lack of background in industrial skills (especially for recently settled migrants from non-industrialised nations). Similarly, the ‘global pipeline’ might be tapped more energetically where the local labour market has such industrial skills to take advantage of it. In these ways, a deeper understanding of the role of labour can be seen as an enrichment of the cluster idea.

However, simply grafting labour on to the industrial cluster model may be mistaken. For example, the literature already tends to assume, rather than show, that knowledge dissemination and creation is likely to spread not only among firm managers and the highly skilled, but right across the workforce, an approach strongly criticised by Hudson (1999:60):
…the importance of knowledge and the processes through which it is produced brings with it a baggage of strong claims about new and enriching and empowering forms of work. The alienated and deskilled mass worker is apparently now no more that a subject of history.

In other words, there is an assumption that labour will be swept up in the benefits accruing from cluster behaviour and will, in fact, engage the knowledge-generating process; the average everyday job will become ‘a thing of the past’. Practical observation of the ‘hundreds and thousands of not so spectacular spatial clusters where we find substantial numbers of similar and related firms’ (Malmberg, 2003: 156) suggests this outcome is unlikely.

Hence, we do need some new perspectives to see that the local impact of industry will be felt through labour links. The breadth of thinking on the need to re-assess the industrial cluster model, and the potential offered by closer attention to labour, suggests that it is important to shift the research focus to develop deeper insight on the way that processes that surround labour can expose the local impact of industrial development.

2.3 Understanding the local influence of labour

Perhaps the firmest foundation upon which to build an approach using labour as a key local influence is the idea that in the world of ‘ubiquities’ noted earlier, where trade, transport and the separation of conception and execution of production have, more so than previously, expanded the geography of production, labour remains relatively place-bound (Hanson and Pratt, 1992; Jonas, 1996; Peck, 1996; Martin, 2000; Malmberg, 2003; Jenkins, 2004). A second foundation lies in the understanding of the complexity of labour-industry links, often expressed through local institutions, services and communities. Rather than viewing the local labour market as little more than a ‘…perfectly competitive and equilibrating submarket: like any other market’ (Martin and Sunley, 2003: 461), it is important to recognise:

…that local labour markets by their very nature are a special market form, consisting of complex social relations and institutional arrangements, and characterized by ‘stickiness’ and hysteresis effects in the way that local employers and employees adjust to the impact of demand, supply technological change, and other shocks (Martin, 2000: 461).
Labour, then, is very different. Labour is ‘sticky’ in a geographical sense, and complex, conceptually and in its operation.

**The local geography of labour**

Martin (2000) has made explicit the way that geography is incorporated into the labour dimension of industrial development:

...geography acts as a form of ‘balkanization’, or discontinuity, in the labour market, imparting strong, though not fixed, local boundaries. On the demand side, the local labour market can be defined as the ‘labour supply shed’ or ‘worker recruitment space’ of local employers. On the supply side, a local labour market is the geographical area in which workers can change jobs without changing their residence: the ‘employment field’ or ‘job search space’ of workers. Clearly, the more that the ‘employment field’ of workers and the ‘labour supply shed’ of employers spatially coincide, the more easily defined and more self-contained the local labour market will be (Martin, 2000: 458).

We can see then that labour forges a local ‘anchor’, a connection that previously was emphasised as emerging via inter-firm connectivity, knowledge flows and other non-labour aspects of agglomeration. These localisation effects are enriched, as not only does a geographic ‘fix’ of suitability between worker and employer requirements prevail, there is a similarly strong local connection between workplace and housing opportunities, which of course opens up a strong path into local impacts of the industry. In fact, ‘...the operation of employment and housing processes tends to be mutually reinforcing, producing distinct spatialities of socioeconomic advantage and disadvantage within local labour markets’ (Martin 2000: 461). Expressed another way in earlier work,

Where people work and what jobs they do critically affect their housing requirements. Similarly, where people live and how much it costs them, influences both the supply of a suitable workforce, and hence employment location, and the level of wages they will demand’ (Randolph, 1991: 18).
This is a clear indication why labour is undoubtedly the least ubiquitous ‘element’ of the industrial system.

**The social context at the local level**

Put another way, not only is the workforce, relatively speaking, ‘embedded in space’, it is ‘socially embedded’:

> Here, processes and patterns of employment, wage determination, labour segmentation, discrimination, and inequality are linked to the formal and informal practices of socially constituted institutions, not just firms but also labour unions, business associations, and local regulatory organizations (such as private and public employment and training agencies) (Martin 2000: 461-464).

Scott, in similar terms, observes:

> The labour markets that take shape around any given agglomeration of producers are liable with the passage of time to acquire a patina of place-specific colour in that they become a locus of peculiar traditions, sensibilities, and norms that hang, as Marshall…put it, like an atmosphere over the local community (Scott, 2006: 7).

While the idea of ‘social embeddedness’ reflects the ‘industrial atmosphere’ approach of the cluster literature, the difference is that it has far stronger empirical back-up and a clearer theoretical framework. ‘Socially constituted institutions’ were well illustrated in Pratt and Hanson’s (1992) seminal study based on data collected in the late 1980s in Worcester, UK. They found that, ‘Employers proved to be astute social geographers…I n recruiting workers, employers rely on strategies, such as advertisements in local newspapers and word of mouth, to ensure a localized labor force…’ (Hanson and Pratt, 1992: 373). As for what employers look for in a workforce, quoting a cleaning service firm manager, ‘We are looking for cheap labor, unskilled labor. There are certain advantages to unskilled labor; it’s a simple job, it just takes a lot of common sense’ (p.382). Cheap - and local; quoting a manager, sector unidentified: ‘The closer the better; they’re happier; there’s less strain…I think they’re more productive if they live closer’ (p.383). The dominant method of labour recruitment was word of mouth:
…using the personal contacts – friends, neighbours, kin, previous co-workers – of present employees to recruit new workers promotes the spatial clustering of employee residences and strengthens workplace-neighbourhood linkages…[and] often yields a highly localized work force…personal networks were seen as a positive strategy because they yielded a work force that was stable, productive, congenial, conflict-free…(Hanson and Pratt, 1992: 387).

Hanson and Pratt (1992) add ‘…job opportunities are more than just dots on a map; they are to a considerable extent socially constructed through the interactions embodying everyday life’ (p.404). For its part, then, labour is seen as an actor negotiating the range of local institutions and mores in order to gain and keep employment, and once gained, hopefully advance. As more recently observed:

…labour market structures relate to institutional behaviours within the labour market, which includes the local provision of access to training, job opportunities, and support networks such as child care facilities… the presence of household interdependencies, personal networks and the presence of family structures…(Jenkins 2004: 165,167).

Of course the issue of access strongly implies transport provision, management and infrastructure. The broader idea of ‘social exclusion’, of which limitations on labour market participation are a subset, is also attracting increasing attention (Cebollada, 2009).

A further dimension to the recruiting practices of employers of low-skilled labour is provided in another large, seminal study by Blackburn and Mann (1979), who found that essentially subjective criteria, such as evaluations of predisposition for responsibility, discipline and cooperativeness (what the authors summarise as ‘quality’), predominated over the level of educational attainment or qualifications. These findings undermine the claims in the cluster literature that knowledge workers play a central role in the production networks between firms.
Social regulation of labour at the local level

Acknowledging the social constructs that surround the links between labour supply, labour demand and industry has led a number of authors to understand the local impact and operation of labour markets through regulation theory. The underlying idea of regulation theory is the imperative to maintain capital accumulation, which regulationists describe as an ‘accumulation regime’ (Boyer and Saillard, 2002). Another way of putting this is as a ‘mode of regulation’, which refers to ‘…the multiple social, cultural and institutional supports which come together to sustain and promote economic growth’ (Goodwin, 2001:74). For those interested in labour, ‘regulation’ is not merely legal regulation, or economic regulation, in the sense that job vacancies are filled in a mechanistic way, as if skill-matching was the only factor. Instead, labour markets are social regulated (Peck, 1996). A wide range of social factors and attitudes, informed by the broader social characteristics of gender, race and ‘world-view’ take centre stage. But as for the scale at which this occurs:

…labour regulation will be especially locally embedded. Due to the social nature of its production and reproduction, labor is the most placebound…The production and reproduction of labor-power depend on the supportive effects of certain key social institutions (such as family structures, schools, and recreational organizations) and consequently, require a substantial degree of stability. The social institutions underpinning the regulation of labour markets tend themselves to take on distinctively local forms. The labour market is indeed one of the most socially – and, in this sense, locally – embedded of economic systems (Peck 1996: 148).

However, the ‘power of labour’ should not be taken for granted. Particularly in times of restructuring and crisis, labour loses the influence it had, through, for example, trade union activity and representation. And indeed, such crises undermine the local focus of labour markets when restructuring of an industry geographically spreads employment opportunities, as occurred with workers finding new employment after the collapse of the Melbourne-based Ansett Airlines in the late 1990s (Weller, 2008). Therefore, while the proposition still stands that in an age of ubiquities, the labour market, more than any other element of the industrial system, ‘sticks to the local’, it does not do so necessarily. From another angle, Atkinson and Kintrea (2001), cited in Gordon and Turok (2005), found in their study of Scottish urban
centres ‘… tentative evidence that people in poor areas have more localized social networks that may limit their knowledge of and links into wider job opportunities…’ (Gordon and Turok, 2005: 256).

Recent Australian work, either based on, or including, Melbourne, also provides a sobering perspective on the ‘power of labour’. It shows strong links between occupational category, income level and housing affordability, so that there are some strong local anchors for residential decisions – not all of them resulting in positive outcomes (Yates et al, 2006). Baum et al (2008), similarly to Atkinson and Kintrea (2001), found that ‘…individuals who have narrower social networks have a higher risk of underutilisation than those with wider social networks…’ (Baum et al, 2008: 205). This outcome is contextualised by other Melbourne work on local self-containment: increasing polarisation between many middle and outer suburban labour markets on the one hand and inner urban areas on the other, would seem to be the trend (O’Connor and Healy, 2002). The idea that transport options and availability directly impact on labour market participation has, as with international scholars, drawn the attention of Australian researchers (Dodson et al, 2004; Hurni, 2006; Currie et al, 2009).

Therefore, we see in Australia the trend towards ‘balkanisation’ referred to by Martin (2000), or in more mosaic terms, the ‘patina of place-specific colour’ observed by Scott (2006). Some local areas will have advantageous labour links capable of enhancing and taking advantage of opportunities such as knowledge; some will have links that reinforce inward-looking behaviour. We need to be aware, then, that if we are to pay more attention to labour as a way of understanding local impacts, the impact itself may be positive or negative. Just as some constraints are felt in the working of industrial linkages and networks, so too, local networks of labour may not always deliver advantages to local workers and their communities.

**Overview**

The three strands of labour reviewed above, geography, social context and social regulation, show that labour markets are complex and multifaceted networks, but most importantly, in their association with industry they are quintessentially local. Here then is a potentially valuable way to understand the impact of industry upon local communities. In short, an understanding of the multi-dimensional aspects of labour, as expressed locally, might provide
a richer insight on the way industry shapes a community than that which has emerged from the industrial network and the industrial cluster model reviewed above.

2.4 Understanding local impacts of industrial development: towards a new research agenda

As can be seen in the research reviewed, there are two key approaches to understanding the influence of industrial development upon local communities. The first focuses on firm-to-firm interaction and the association with local institutions, expressed in the research heritage that explores the development and operation of industrial clusters. The second focuses on the interaction between firms and the local labour market, which involves labour-firm and intralabour market connections. What both have in common is the idea that the impact of industrial development is felt through linkages. To that extent, in both theoretical and policy approaches, the emphasis is different from earlier theories that place more centrally the reduction of costs (location theory), the status of firms (growth pole theory, central place theory, agglomeration theory) or technology (see Stimson et al, 2006), rather than the nature and operation of human networks.

The different ideas emerging around the way labour markets interact with industry provides an opportunity for a more sensitive research insight. Figure 2.2 presents an approach to such a research agenda. It takes account of the central ideas, displays the expectations inherent in the hypothesis and indicates which chapters in the thesis address which areas.
Figure 2.2. The impact of industrial development: a research agenda

Research agenda to examine industry in a community

Industrial interdependencies analysed by

(1) Firms
- Location decisions (Ch 5)
- Firm to firm (Ch 6)
- Ideas (Ch 7)

(2) Local policy and institutional context (Ch 9)
- L&REDB *
- Local research and teaching institutes

Strong?

Global, national, regional or metropolitan

Weak?

Local

Labour influence analysed by

(1) Journey-to-work data (Ch 8)
- Recruitment shed (employers)
- Job search shed (employees)

(2) Firm (Ch 8)
- Self containment
- Geography of recruitment
- Philosophy of recruitment

(3) Local policy and institutional context (Ch 9)
- LREDB (labour market policies)
- Trade unions
- Trainers (ESL)
- Trainers (workplace skills)
- Local research and teaching

Strong?

* Local and Regional Economic Development Bodies
The core idea of the current thesis emerges, then, from these two contemporary ‘linkage’ approaches to industrial impacts. It is developed from a series of ideas:

(1) The links between industry and a local community span a broad spectrum of activities. Those activities (ideas, goods, services and people) have a wide array of mobility.

(2) These links have local, regional, national and international sources.

(3) Connections to a community are strongest when they depend upon local knowledge and networks.

(4) As labour is likely to have the strongest local focus, the thesis hypothesis is that

*The strongest local knowledge and connections between industry and a local community are likely to be found in the labour market, as in that dimension the scope for non-local contacts is considerably less. In essence, the strongest local knowledge essentially resides, not in local firm-to-firm or institutional interaction, but within the local workforce.*

The following chapter outlines a methodology to address this hypothesis.
Chapter 3. Research Design

3.1 Introduction

The hypothesis of this thesis is that local effects are more likely to be felt via the workings of a local labour market than via the industrial linkages associated with industrial cluster research. The purpose of this chapter is to explain how this hypothesis will be examined. The basic methodology is comparative, of two views of the local impact of industrial development. The first section establishes the fundamental steps before the research can be undertaken. The second examines technical issues in data assembly. The third examines in detail the type of data used. The fourth details the actual interview process. The chapter concludes with a summary.

3.2 The building blocks of the research

Confidentiality and ethics

All research undertaken by PhD students of RMIT University must conform to the ethical principles of the University. This applies to research that involves participants in any way, including interviews. The research was classified at ‘Risk Level 2’ as it involved interviews with individuals. It was approved by the Faculty Ethics Sub-Committee on 15th December 2006. Respondents were anonymous; this was made clear at interview and recorded in the ethics application. In the thesis, respondents are identified by code. For example, ‘Fruits 160’ is a firm for which the primary activity is fruit processing and which has 160 employees. By coding in this way, a snapshot of the sub-sector and firm size is provided throughout the text. This also allows identification of correlations, if any, of responses with variables of firm size and sector which are displayed at Appendix B. Further examples are ‘Trainer A’, ‘Trainer B’, etc, as the type of codes for local trainers and ‘AMWU/Fruits 160’ for the union/firm.
Identifying ‘the local’

Questions of scale and definitions of ‘the local’ in industrial development are a central concern to the research. There has been considerable debate on this issue. As Malmberg (1996) notes in his review of the cluster literature, ‘…there are disagreements over the scale and scope of agglomerative forces: at what spatial scale – from the local to the national – do agglomerative forces apply [?]…’. (p.p 393, 399). In an attempt to deal with the dilemma of ‘the elusive concept of localization economies’, Malmberg and Maskell (2002: 429) ‘must explain the existence of the [industrial] cluster on the one hand and its internal organisation on the other’. Broadly, this is the approach taken in this thesis.

However, to firm up spatial definitions, the research also turns to Weller (2008), who identified three conventional territorial definitions: the catchments which employers are prepared to use when hiring staff; journey-to-work boundaries; and administratively-defined neighbourhoods. These three definitions have advantages and disadvantages for different research questions. Administratively-defined areas have the advantage of consistency over time, and provision of a range of information. They can be clumsy however, and in some cases too large for the research task at hand. Boundaries using journey-to-work information which are defined in transport planning zones, although they may go to the heart of this research, change over time, and may not relate closely to the boundaries used for other socio-economic information. A compromise is to use administratively-derived boundaries, triangulated for relevance and significance by assembling the corresponding journey-to-work data. That is the approach that is used here. Therefore, the definition of ‘the local’ is an administratively-defined area.

An administratively-defined ‘local’: the City of Whittlesea

The City of Whittlesea is a municipality within the metropolitan area of Melbourne (Figure 3.1). It is used by the national statistical agency as a basic unit for enumeration (ABS, 2010). It is an appropriate place to explore the local impact of industrial development, as it is a State government-designated residential growth area and has areas of State-significant industrial activity (DSE, 2005; DSE, 2010). This coupling, however, has some special features. Levels of unemployment have consistently been above the metropolitan average (ABS, 2007a, 2007b) and socio-economic disadvantage is a prominent part of the profile of the local
population, as shown in the discussion of the Whittlesea economy in the next chapter. Research has shown that the less skills a workforce has, the less distance will it be prepared, or be financially able, to travel to work (Morrison, 2008). In these circumstances, we would expect many to work and live in the same local area and therefore, the local impact of industry on the local population to be an issue.

Some of the other features of the location make it particularly suitable to ask questions about local industrial impacts. As Melbourne’s most northern municipality, Whittlesea is one of its most outer municipalities. This raises a question: has this possibly isolated position resulted in the development of stronger ties in a localised industrial system to meet all needs, as it were, of local industry? Or is it the case that established trends and path dependencies ensure the links of the industrial system are dispersed geographically, even from an ‘isolated’ location? Only the southern third of the LGA is built-up area, so expressed another way, due to its mostly ‘greenfield’ territory, can path dependencies be avoided and a stronger local economy develop ‘new industrial spaces’? The location provides another dimension to the exploration of these industrial linkage issues, as it has a significant research and teaching institute in the Bundoora campus of RMIT University (Figure 3.1). Hence, it provides the scope to test the linkages of industry and institutions which have figured prominently in the academic literature.
Figure 3.1. City of Whittlesea: metropolitan context
The fact that Whittlesea is a rapidly developing location, both in residential and economic terms, again invites investigation of local impacts of industrial development. There are new residents and new firms, making Whittlesea a location where potentially complex local impacts of these residents and firms are likely. What adds ‘spice’ to these underlying questions and again draws our attention to this location in particular is the proactive involvement of the local council in promoting, inter alia, a localised industrial system. Specifically, this is via council management and promotion of the Plenty Food Group (PFG) - a locally-based economic development body, aligned with a broader set of other economic development bodies at the regional level. On the basis of these characteristics, Whittlesea provides an ideal location to investigate the local impact of industrial development.

**Selecting an industry as a focus**

A major methodological task was to establish a suitable example of such industrial development. Which industry seems to draw together the characteristics of Whittlesea briefly described above, provides a genuine example of industrial development (rather than decline) and is a suitable vehicle to fairly assess the industrial cluster and labour market models of local impacts? After reviewing the 116 Australian and New Zealand Industry Classifications (ANZIC) sectors for which data were available, the food and beverage manufacturing sector was selected. It qualifies in the following ways, contextualised in the following chapter: rapid employment growth providing a potential source of jobs for new arrivals; a low-skilled sector which generally matches a low-skilled local population; no loss of local firms, as confirmed through interview data with Council representatives, firm managers and examination of the local newspaper during the study period; it is the subject of local industrial policy; it has a large proportion of SMEs, a category said to benefit from the development of local linkages and, there is the presence of food industry research at RMIT University’s Bundoora campus. In short, the sector certainly represents a case of SME industrial development at the local level, with the potential involvement of local players. Therefore, according to the logic of the industrial cluster model, as a successful cluster of firms, local inter-firm activity should be the basis of a measurable, positive local impact. For all these reasons, the focus of the research is the food and beverage sector.
Identifying an industrial cluster

Two approaches were taken to confirm that the industrial sector selected represented a cluster of firms in Whittlesea. First, location quotients based on employment statistics were used. This is an established practice in measuring industrial specialisation, in both international and Australian studies (Gibson et al, 2002; O'Connor and Healy, 2002; Capello and Faggian, 2005; McDougall and O’Connor, 2005). A location quotient represents the extent of over- or under-representation of an industry group in a given area relative to its broader geography in a metropolitan area (or the nation). To use O’Connor and Healy’s (2002) example, if one group such as new economy workers constitute 38 per cent of all jobs within Melbourne, but new-economy workers constitute 58 per cent of jobs within a particular area, the location quotient for new economy workers in that region is 58/38 = 1.5. The area then is over-represented in the local area relative to Melbourne overall. The second measure involved a visual presentation using MapInfo geo-coding of the locations of firms, which confirmed the actual geography of the firms in a small part of the municipality. In both cases, it was apparent that the food and beverage sector was clustered in Whittlesea.

Small and medium enterprises

There is no consistent, official definition of firm size categories. The ABS defines the size of businesses as micro – less than 5 employees, small - 5 to 19 employees, medium - 20-200 employees and large - 200 or more (ABS, 2001). The New Zealand Ministry of Economic Development has different definitions (NZMED, n.d.). If we were to apply the ABS criteria to the cluster under study, there would be only one large firm. However, the lack of a consistent definition allows for flexibility. In the interests of balance, it was decided to use the following categories and definitions:

- Medium: 20-49.
- Large: >50.

The categories were classified thus, relative to the spread of firm sizes in the industrial cluster being surveyed.
3.3 Technical issues in data assembly

*Industry and occupation classifications - amalgamations*

In order to make the presentation of data more manageable, ABS industry categories were amalgamated. The approach of O'Connor and Healy (2002) was adhered to as closely as practicable. Their study was also concerned with the local impact of industrial development in Melbourne. They collapsed 17 industry classifications into seven. The approach emphasised the emergence of ‘new economy’ occupations and the decline, or vulnerability, of ‘old economy’ occupations. Thus, for example, the ABS categories of finance, insurance, property and business services are ‘new economy’ jobs, whereas most manufacturing sectors are regarded as ‘old economy’. The ‘new economy’ refers to ‘…the greater emphasis upon research and development and greater use of information technology and telecommunications in modern production systems.’ (O'Connor and Healy, 2002: 3). These categories are displayed in detail in Appendix D. For occupations, the standard ABS categories were retained (Appendix E).

*Spatial units*

‘Local’ area - Municipality

‘Whittlesea’ or alternatively the ‘City of Whittlesea’ refers to the Local Government Area (LGA) of the same name. Where ‘local’ is used throughout the thesis, this is the City of Whittlesea.

Melbourne’s North

‘Melbourne’s North’ refers to a collection of LGAs in the northern part of Melbourne, excluding Whittlesea. In line with the view of the Northern Melbourne Area Consultative Committee, Northlink/NEIDL and research commissioned by them (Shepherd, 2003; NIEIR and Carmine Consulting, 2009), Melbourne’s North comprises the LGAs of Hume, Nillumbik, Darebin, Moreland, Yarra and Banyule (Figure 3.2 refers).
Ring and inner LGAs

In the analysis of the local impact of labour in Chapter 8, ABS Census data are employed to measure self-containment for Whittlesea generally and the food and beverage sector in particular. In order to contextualise changes in self-containment, trends for the LGAs immediately surrounding Whittlesea and centrally located LGAs are also examined. ‘Ring’ LGAs are therefore Hume, Nillumbik, Darebin, Banyule and Moreland. ‘Inner city’ LGAs are Yarra and Melbourne. The other categories are ‘Melbourne other’ and Brimbank, a western region LGA which was also found to be significant in understanding shifts in the residential location of workers in Whittlesea (Figure 3.2 refers). Journey-to-work figures outside of the Melbourne Statistical Division (Melbourne SD) were available for the food and beverage sector for 1996 and 2006 but only for 2006 for total employment figures. Therefore, 2006 excludes the ‘outside Melbourne’ category.

Rest of Melbourne

‘Rest of Melbourne’ refers to a location or locations within the Melbourne SD, with the exception of Whittlesea and Melbourne’s North. The ABS measure of the Melbourne SD was established in 2001 and for capital cities ‘…contain[s] the anticipated development of the city for a period of at least 20 years.’ (ABS, 2006: 226).

Where suburbs in the rest of Melbourne are noted in the thesis, their LGA is identified. All LGAs are displayed in Table 1, Appendix A.

National

‘National’ refers to activities in rural Victoria, interstate or on a national scale, with the exception of the above three categories.

Global

‘Global’ refers to activities that are overseas.

Figure 3.2, below, displays the key LGAs in the research.
Figure 3.2. Key LGAs in the research
Part-time work

The benchmark for defining part-time work in Australia is 35 hours per week (Burgess, 1997) and that is the definition that will be used in this thesis.

3.4 Data utilised

Research in economic geography continues to refine its methodological approach, but appears to accept that quantitative and qualitative approaches and inductive and deductive reasoning are more similar than have hitherto been assumed and should be seen as complementary rather than mutually exclusive and in conflict (Winchester, 2000; Markusen, 2003; Peck, 2003; Tickell et al, 2007). The broad methodological approach of this thesis accepts this ‘resolution’ of conflicting perspectives and uses both quantitative and qualitative approaches.

Secondary data

Census data is the mode of choice in recent studies that attempt to identify broad trends and characteristics of local economies in Australian cities (O'Connor et al, 2002; Fagan, et al, 2004) and it provides other important information at the local level. Data derived from the ABS Census are used to provide context information on the local economy (Chapter 4). Customised ABS Census data are used to contribute to analysis of the sector in question for 1996 and 2006 (Chapter 8). This provides information for all Whittlesea jobs and the location of work for Whittlesea residents, which contributes to analysis of the local labour market. Aggregated and disaggregated analysis allowed comparison between the sector the broader trends. Further, to make interpretation more straight-forward, percentages derived from Census data are rounded to the nearest whole number. Because of this, figures do not add up to 100% in every case, although for presentation purposes, the total will be given as 100%.

There were two key characteristics of the sector the research sought to interrogate through the customised Census data. The first question concerned trends in self-containment over time. The second question was occupational change over time for both jobs within Whittlesea and for Whittlesea residents holding those jobs. In this case, the intention was to gain an insight
into the relationship between local residents who work locally, and the jobs that were in fact available locally.

The general principle applied in the use of Census data was that, where available, a ten-year time-frame, that is, data from the 1996 and 2006 Census, would be adopted. However for technical reasons, this was not possible in all cases. The ABS changed occupational and industry classifications between 2001 and 2006. While *Community Profile* data, which provides information on residents’ occupation and industry, was available on the ABS website in the classifications used previously for the 1996, 2001 and 2006 Census, *Working Population Profile* data, which provides place of work, was only available for 2001 and 2006. Therefore, general information about Whittlesea’s local economy and community compares either the 2006 Census with either 1996 or 2006, depending on the compatibility of the data.

Census data have their limitations and data relating to the food and beverage sector are no exception. Census employment data are based on the question of the main job performed, but not *all* jobs performed. We do not, therefore, get an entirely accurate picture of the number of jobs in each sector. Furthermore, second jobs are almost certainly part-time jobs. National figures show that about two-thirds of part-time work in Australia is also casual work (Burgess, 1997). Casual work, in turn, is a significant component of employment in the sector. Also, data collection occurs in the month of August. This does not capture the peak periods of Christmas and Easter that are particularly applicable to a sector which employs casual labour at these times.

Moreover, non-customised Australian Census data are highly aggregated. For example, the ABS category that covers food and beverage manufacturing was, for the 2001 Census, ‘food, beverages and tobacco manufacturing’. For the 2006 Census, this category was (for our purposes unhelpfully) separated into ‘food product manufacturing’ and ‘beverage and tobacco product manufacturing’. Given the resources available, it was not possible to purchase customised data that would have excluded tobacco manufacturing. To avoid confusion, therefore, all tables referring to the food and beverage sector will be headed ‘food, beverages and tobacco manufacturing’, abbreviated to ‘FBT Sector’. When the Census data is discussed, this abbreviation will be used, although for practical purposes we will really only be considering food and beverage jobs. We can be confident that only a small number of
workers employed in tobacco manufacturing live in Melbourne, let alone Whittlesea, the northern region or any of the LGAs with which the research is concerned. This is because of the three tobacco manufacturers in Australia, only one, Philip Morris, manufacturers in Victoria, which is in Moorabbin in Melbourne’s south-eastern suburbs (The Cancer Council, 2010). In addition, Moorabbin lies within Kingston, an LGA with which the research is not concerned in particular. The Census data also does not provide data at the individual firm level. Given the importance of firms for the research, the major focus of the data assembly was a qualitative interview approach.

**Qualitative methods**

The original methodology considered was a questionnaire to distribute to firm managers. When this approach was discussed with the Convenor of the Plenty Food Group, he advised that a similar questionnaire (Dalrymple, 2007), which was sent to all 104 firms from both Whittlesea and Hume, received a 10% response rate - a reflection, he said, that managers were for whatever reason reluctant to complete questionnaires (see Chapter 9 for an overview of the questions and results of this small survey). Another indication that a qualitative approach would be valuable was that Australian surveys using quantitative methods dealing with similar issues obtained low response rates - although of course compensated for by the metropolitan scale at which the surveys were pitched (Mohannak and Turpin, 2002; Searle and De Valence, 2005). However, this thesis is concerned with a single industry of 47 firms within a quite specific area. It was considered that anything less than a 30 percent response rate, given the total number of possible responses, would result in too small a sample. The argument against questionnaires was strengthened because of the ambiguity of the concepts to be examined. ‘Tacit knowledge’, ‘ideas’, ‘linkages’ and ‘scale’ are either poorly defined, or perhaps - in the case of ‘tacit knowledge’ – by definition, difficult to express in a questionnaire. It was therefore important to allow for the scope and flexibility that an interview allows.

Hence, attention turned to semi-structured, in-depth interviews to provide qualitative data. While the flexibility this approach engenders may lead to a degree of unpredictability in

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2 Important Australian work surveying entire metropolitan regions resulted, understandably, in lower response rates. Mohannak and Turpin (2002) surveyed the entire Melbourne metropolitan area and received a 28% response rate. Searle and De Valence surveyed the entire Sydney metropolitan area and received around a 5% response rate. These figures were meaningful given the larger geographical area.
comparison with purely quantitative surveys, it has ‘…some degree of predetermined order but still ensures flexibility in the way issues are addressed by the informant’ (Dunn, 2000: 52). These data form the basis of the results Chapters 5 to 9. The approach adopted was shaped by some previous research. Interviews have been used to gain data on the relationship between businesses and their locality in London (Jones, 1998) and more recently for the locational decisions of ‘entrepreneurial firms’ in the Netherlands (Stam, 2007). Markusen (1996) interviewed firms, trade associations, trade unions and regional economy experts to establish the internal functioning of clusters. Similarly, investigations into the relationship between firms and their labour force used interviews. One example is Thompson et al (2001) who used interviews in seeking information about recruitment and selection, training and working and management practices. More recently, in Australia, Beer and Cooper (2007), in their study of the relationship between a local university and local economic advisory body in South Australia, conducted interviews using guidance questionnaires and presented results in both quantitative form and qualitative form in the shape of key interview excerpts. A case-study/semi-structured interview approach, in combination with an online survey, was also used recently in Australia with the investigation by Martinez-Fernandez et al (2005) of knowledge-intensive service activities in the software industry.

Semi-structured interviews can also be ‘mined’ for quantitative data, and this is a well-established technique in human geography (Winchester, 2000). Interviews were designed in line with other local area studies which provided both tabular and text results (Hanson and Pratt, 1992; McDougall and O’Connor, 2005; Yeung, 2007). The rationale behind this approach was to acquire straightforward quantitative data which were explained and elaborated on through interview text. In order to achieve this result, interviewees were asked about set themes, which resulted in tables and figures, but were then asked to elaborate. As almost all interviews were recorded and transcribed, or alternatively, detailed notes taken, particularly pertinent or typical statements were included in the text to illustrate and explain salient points.

The quantitative data presented in the results chapters are then aggregated data derived from the interviews, while disaggregated data are presented in Appendix B. This latter data display date of arrival, firm size, sub-sector and in some cases, provide more specific interview responses.
The interviews

Choice of interviewees and structure of interviews

All interviews were conducted in the second half of 2008 and recorded and transcribed, except where otherwise indicated below. Two firm managers did not want to be recorded, so notes were taken. Interviews were conducted at the office of the interviewee, again except where indicated otherwise below. Information gained from academics was more informal; there was one face-to-face interview, two phone interviews and one email interview.

Interviews: three approaches

Understanding the context

Initial interviews were conducted in order to obtain both background and specific information additional to that provided in previous published research on the local area and the industry. The first task was to gain a first-hand, up-to-date overview of the local economy. Interviews were conducted with the following Council staff: the Director of Economic Development, two strategic planners and the migrant liaison officer (who incidentally was from a Non-English Speaking Background (NESB), thus providing a cultural element relevant to some of the analysis of responses to issues surrounding labour). The multicultural officer was interviewed by telephone. Background information on the food and beverage sector in Melbourne was provided through interviews with a human resources consultant of ten years experience identified by the Convenor of the Plenty Food Group and an industry skills specialist, of 15 years experience, who had contributed to the development of skills classifications within the sector. The latter had recently testified before a parliamentary inquiry into the sector and this was how the interviewee was identified (Economic Development Committee, 2005). 3

Understanding the institutions

Subsequently, the research turned to obtaining knowledge of local institutions that operated in Whittlesea. For local training institutes, the criteria was that interviewees must have been working in the sector in Whittlesea within the last five years, by, for example, delivering

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3 The witness provided testimony on the state of labour hire practices in the food and beverage sector in Victoria, which is discussed further in Section 8.3.
workplace English language courses. This resulted in interviews with a Technical and Further Education (TAFE) industry trainer with 7 years experience (Trainer A), a private provider of 30 years experience (Trainer B) and a TAFE English language trainer with 28 years experience (Trainer C). These interviewees were identified through the business telephone directory. Trainer B also provided local cultural context.

These interviews were conducted at the interviewee’s office, with the exception of the first case, which was conducted in a local café. More direct information on the local sector, and the Plenty Food Group, was acquired through two interviews with the Group’s convenor and the coincidence of one firm manager also being on the Group’s steering committee. Organisers of the three trade unions with coverage of the sector were also interviewed. This group of interviewees were initially contacted by mail, email or telephone call through the contact details on the respective unions’ website.

Understanding the firms

The most direct information of all on the local impact of the industrial development of this sector was provided by firm managers themselves. A database of the local firms was provided by the Plenty Food Group. In turn, the Kompass Business Search Database (Kompass, 2007) and firm websites provided the names and contact details for firm owners or managers. All forty-seven firms identified were contacted by letter and an interview with the manager or owner was requested. The sum result of these measures was 19 interviews with firm managers, with the interview with the union representative at Poultry 290 providing information that was also relevant in the analysis of firm behaviour. A response rate of 43% was therefore accomplished. These proportions, as noted earlier, are above response rates of quantitative surveys – in themselves of great value and covering similar ground, but of a different approach.

As noted previously, interviews with managers were conducted in September, October and November of 2008. Thus, all interviews were conducted after the Census collection month of August and some interviews were conducted in November, which the PFG Convenor had confirmed as coming into the peak period. Table 3.1, below, shows that the sample is generally representative of all 47 firms in terms of size.

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4 TAFE delivers mostly vocational tertiary level education in Australia.
Table 3.1. Comparison of firm size: surveyed and unsurveyed firms

<table>
<thead>
<tr>
<th>No. of permanent employees</th>
<th>All firms</th>
<th>Surveyed firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (1 to 19)</td>
<td>22 (47%)</td>
<td>10 (50%)</td>
</tr>
<tr>
<td>Medium (20-49)</td>
<td>5 (11%)</td>
<td>3 (15%)</td>
</tr>
<tr>
<td>Large (50+)</td>
<td>14 (30%)</td>
<td>7 (35%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>6 (13%)</td>
<td>n.a.</td>
</tr>
<tr>
<td>Total firms</td>
<td>47 (100%)</td>
<td>20 (100%)</td>
</tr>
</tbody>
</table>

Source: Plenty Food Group and interviews.

Consistency of responses

Relevant or clear information on each and every set question was obtained in the vast majority of cases. Table 3.2 presents, for each interview theme, the number of relevant responses against the number of all firms surveyed and all firms in the cluster.

Table 3.2. Responses to interview themes

<table>
<thead>
<tr>
<th>Research theme</th>
<th>Relevant responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis of locational decision</td>
<td>18</td>
</tr>
<tr>
<td>Contact with other cluster firms</td>
<td>18</td>
</tr>
<tr>
<td>Geography of suppliers and business services</td>
<td>13</td>
</tr>
<tr>
<td>Geography of customers and markets</td>
<td>15</td>
</tr>
<tr>
<td>Geography of competitors</td>
<td>12</td>
</tr>
<tr>
<td>Geography of ideas</td>
<td>18</td>
</tr>
<tr>
<td>Residence of workforce</td>
<td>17</td>
</tr>
<tr>
<td>Preference for local labour</td>
<td>18</td>
</tr>
<tr>
<td>Method and geography of recruitment</td>
<td>20</td>
</tr>
<tr>
<td>Qualities looked for in staff</td>
<td>18</td>
</tr>
<tr>
<td>Assessment of Plenty Food Group</td>
<td>19</td>
</tr>
<tr>
<td>Total firms surveyed: 20</td>
<td></td>
</tr>
<tr>
<td>Total number of firms: 47</td>
<td></td>
</tr>
</tbody>
</table>

Source: Interviews with firm managers.

The fact that only two questions had a “weak” level of response meant that the survey results were adequate for the research issues at hand. Moreover, Table 1, Appendix B provides additional data and shows there is no clear correlation between non-responses and firm size,
date of arrival or sub-sector. Table 2, Appendix B, shows, for each research theme, the proportion of responses that identify a local connection. Hence, regardless of the varying number of useful responses, a clear picture is presented of the strength of local connections.

3.5. Structure of the interview instrument

There was a methodological issue in the interviewing process in that it was important to get some consistency in the way respondents understood the questions and also provide answers that could be coded for analysis. With that in mind, the interview guides (shown in Appendix C) were structured around five key themes deriving directly from the literature review and subsequently the research hypothesis. These formed the basis of each of the results chapters. Within each of these themes were nested sub-themes. Both themes and sub-themes provided quantitative data. Figure 3.3 displays the overall model for the research.
The hypothesis: The strongest local knowledge and connections between industry and a local community are likely to be found in the labour market, as in that dimension the scope for non-local contacts is considerably less. In essence, local knowledge essentially resides, not in local firm-to-firm or institutional interaction, but within the local workforce.

Figure 3.4 presents the methodological approach to addressing the research hypothesis.
Addressing the research problem involves a comparison between the cluster-related industrial system perspective and labour as a source of impact on the local economy. As can be seen in Figure 3.2, three of the themes, locational decisions, impact of local industrial policies and
institutional settings and the source of ideas could all, potentially, be expressed either through the industrial cluster or local labour market models. Connections with other firms and geography of the industrial system will be regarded as exclusively a matter for the cluster approach; recruitment practices and philosophy of recruitment are regarded as matters for the assessment of the local labour market model. How these themes were interpreted and applied in the interviews is outlined in the discussion below.

**Locational decisions**

A typology of locational decisions which guided the data assembly was developed from part of the literature reviewed earlier. A basic ‘divide’ in the literature is between the industrial cluster model suggesting that local inter-firm connectivity was a major attraction and the idea of this literature’s critics that more traditional factors are still the major locational factor. Prior to the interviews, it was decided to further refine this typology by separating out what were labelled ‘locality’ factors such as proximity to the owner’s home. This was done because ‘locality factors’ are non-industrial factors and are therefore subject to different forces. During the interview process itself, a fourth category, that could be labelled ‘sector-specific factors’, became apparent: factors that reflect the nature of the sector in general, but not necessarily the area in which the firm decided to locate. Table 3.3 displays the four key themes with their different components.
Table 3.3. Typology of locational decisions

<table>
<thead>
<tr>
<th>Traditional factors</th>
<th>Locality benefits</th>
<th>Local networks</th>
<th>Sector requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity to major arterial</td>
<td>Proximity to previous location</td>
<td>Personal/professional contact</td>
<td>Customised premises</td>
</tr>
<tr>
<td>Suitable land use zone</td>
<td>Proximity to home</td>
<td>Plenty Food Group</td>
<td></td>
</tr>
<tr>
<td>Land/building prices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space - general operational</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to metropolitan market</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Produce growing region</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local customers/community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local labour market</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The key purpose here was to distinguish the influence of what the interviews identified as ‘new’ factors that had gained attention in the cluster literature and which emphasise local inter-firm activity - labelled local networks - from the other factors.

**Ideas**

Insight into the way firms participated in innovation is central to the industrial cluster model. As we saw in Chapter 2, notions of innovation in the literature vary. They can mean sophisticated patent-level inventions; they can mean tacit knowledge exchange barely perceptible to the outsider. In interviews, the term ‘ideas’ was used. Ideas are understood as a new product or method, or resolution of a problem. The new approach need not be implemented for it to be ‘an idea’. Rather it needed to be seen as a contribution to the bank of knowledge which may be drawn upon and implemented later. Therefore it refers to potential as well as actual changes. This approach broadly follows the definition of Vaz et al (2006) in
their recent study of ideas and connections between European food manufacturing SMEs. They too started from the position that there was little consensus on how to define and measure innovation in general and ‘…its measurement is particularly problematic in low technology industries where it is generally recognized R&D activities and patent data will not provide good proxies for innovation’ (Vaz et al, 2006: 102-103). It also follows the recent Australian work of Martinez-Fendandez et al (2005), who in fact were concerned with knowledge-intensive industries. Their results showed an appreciation of innovation by managers as ‘generally characterised as incremental changes which mainly improved/additional functionality and/or a better performance to cost ratio’ (p. 5).

Again, in relation to ideas, geography is an issue. If an employee or owner brought ideas from a previous workplace, is this an example of an idea from outside of Whittlesea or of an internal innovation? Of course, in either case it is inconsequential in determining whether ideas were the result of local networks. Nonetheless, it needed clarification and it was decided that in such an instance, it was an internal idea. One respondent noted ‘European food books’ as the source of his ideas. Does this mean that the ideas come from overseas? In the end, this example could not be placed in a geographical category and it was considered appropriate to consider it an ‘other’ category. And what of ideas sourced from the internet? Should the internet be considered an example of a potential ‘global pipeline’? When Bathelt and Shuldt (2008) discuss global pipelines, what they generally have in mind is international trade fairs. They do make mention of ‘internet thinking studios’ as a practice that would ‘…enable transnational arrangements in economic production…’ (p.855). But as will be seen in Chapter 7, the internet was used not as a communication tool but to ‘surf’ for plant and equipment. Therefore, when the internet is considered in the context of ideas, there seemed little alternative but to avoid designating it a geography – therefore, it is also placed in the ‘other’ category. However as will be seen in the section below on method of recruitment, it is treated differently in a different interview context.

**The industrial system**

The basic idea here was to establish the underlying geography of the firms’ linkages, in particular to isolate the share of those that were local, Melbourne’s North, rest of Melbourne, national and global, as defined in Section 3.3, above. As with other areas of the research,
establishing this geography potentially throws up some dilemmas in classification of answers. If a firm’s key customer was a national supermarket chain, which has a store in the local area, does this mean it has a local impact? The answer, given the conceptual framework of the thesis, is ‘no’. This is because there is nothing unique about the location of the local branch of the supermarket in Whittlesea, as there are branches in numerous locations around Australia. However, as will be seen in the results Chapter 6, this was not an issue. This is because of the two respondents who indicated that their customers were local, neither indicated these were either a supermarket or other food distribution chain such as a bakery.

Like ‘ideas’, the concept of ‘contact with other firms’ is kept open-ended. Indeed, the obvious relationship between contact and ideas so favoured in the industrial cluster model requires flexibility, as contact, like ideas, can be tacit, incremental and low-level – in short, beyond codified measures such as a contract or a legally recognised partnership. The literature is very clear on this point: codified relationships and codified knowledge are of not as much interest in the functioning of the ideal type industrial cluster as informal, tacit links.

Labour

Method and geography of recruitment

The hypothesis the thesis serves to explore is the strength of ‘the local’ in labour connections. It does this by applying five measures: changes in self-containment over time, locals’ share of different occupational grades over time; managers’ assessment of self-containment of the workforce; their preference for local labour; and, the recruitment process. In regard to this latter aspect, the research is influenced by a strong theme in the literature that identified two main approaches to recruitment. These are formal and network methods. It was anticipated that formal or network methods were not necessarily ascribed to a particular geography. That is, they could be either local or non-local. Given the conceptual framework of the thesis, a local impact is understood only where it involves local networks. In other words, a local but formal method is not considered a significant local impact. Details of these two aspects are displayed in Table 3.4.
### Table 3.4. Typology of methods of recruitment

<table>
<thead>
<tr>
<th>Formal methods</th>
<th>Network methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper advertisement</td>
<td>Manager's contacts</td>
</tr>
<tr>
<td>Employment consultant</td>
<td>Local economic development body</td>
</tr>
<tr>
<td>Recruitment agency</td>
<td>People applying off the street</td>
</tr>
<tr>
<td>Labour hire firm</td>
<td>Telephone ‘cold calling’</td>
</tr>
<tr>
<td>Internet</td>
<td>Word of mouth from the workplace</td>
</tr>
<tr>
<td>Working visas</td>
<td></td>
</tr>
</tbody>
</table>

Classifying responses on the geography of recruitment also throws up some dilemmas. If for example, ‘the internet’ is the method of recruitment, its ‘geography’ cannot be tied down; although it seems reasonable to regard this source as a non-local one. Therefore, the geography of the internet is treated differently in the context of recruitment in comparison with its interpretation in the context of ‘ideas’ in the section above. Similarly, advertisement in a State-wide daily newspaper, if taken literally, means ‘State-wide’, although it too includes Whittlesea, it seems sensible to regard this as a non local-source. In pursuing such avenues, the employer is indicating that there is no specific desire to attract workers from the local area – otherwise, for example, only a local rather than State-wide newspaper would be used for advertising. Therefore, in considering the location of recruitment, both will be understood as non-local.

The response ‘word-of-mouth from the workplace’ also raises the issue of the identification of the geography of labour market contacts. Just because someone is recruited as a result of the influence of an existing member of the workforce does not necessarily mean that the new recruit is from Whittlesea. For the purposes of the research, it is assumed that if the network is instigated in Whittlesea, then it will be classified as evidence of a ‘local network’. Of similar concern is whether a job-seeker knocking on the door of the factory, or a telephone ‘cold-caller’ is to be regarded as participating in a ‘local network’, although there is no
information on his or hers’ residential location. Two firms advised this was one method by which they gained new employees (although they could not give figures for how many). Without the benefit of interviewing such individuals, we simply do not know. Nor is there any research that has been found that might illuminate this matter. However, it seems reasonable to assume that as walking long distances or even driving from industrial estate to industrial estate is a more onerous task than simply making a phone call, the former category is more likely to represent contacts with local residents than not, and for the latter category vice-versa. Admittedly, this is an imperfect and somewhat arbitrary conclusion, but is one nonetheless considered reasonable.

Similarly, if an employment agency from Whittlesea was used, it is regarded as a local, formal method, even though it cannot be established, without research beyond the scope and resources of the present study, whether recruits of an agency of this type are local. Working visa arrangements are more straightforward; they necessarily involve recruitment from a foreign source. Table 3.5 displays the geographical categories used.

<table>
<thead>
<tr>
<th>Whittlesea (Local)</th>
<th>Outside Whittlesea (Non-local)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local newspaper</td>
<td>State wide newspaper</td>
</tr>
<tr>
<td>Plenty Food Group</td>
<td>Internet</td>
</tr>
<tr>
<td>Cold calling from the street</td>
<td>Visa arrangements 457, Temporary Work Visas</td>
</tr>
<tr>
<td>Word of mouth, workplace</td>
<td>Cold calling telephone</td>
</tr>
</tbody>
</table>

**Policy and institutional environment**

A set of questions were prepared on what could be labelled the ‘policy’ dimensions of the research. This took a step away from the firms and involved an assessment of some institutions (although firms were asked about their contacts with the Plenty Food Group). Assessment of the impact of the local research and teaching facility, a key feature of the industrial cluster model, proved a methodological challenge. There is a clear example of the
potential of such a local impact for the food and beverage sector, as within the boundaries of the City of Whittlesea lies the Bundoora campus of RMIT University, which pursues teaching and research in the area of food science technology. In addition, the PFG website does specifically encourage members to contact the Food Science department of the university ‘…to assist you with your food research and development needs…’ (PFG, 2008: n.p.). Very clearly then, there is a *prima facie* case for investigating the local impact of the university in the industrial setting of the food and beverage sector. The original research design sought evaluation of this relationship in two ways: by identifying collaborative research between industry and the academy and by tracing the employment locations of graduates. The second strategy was not pursued because the University did not keep coherent records of the location of graduates (pers. comm., Academic C). Information on research collaboration is pursued via informal discussions with teaching or research staff listed on the Faculty website. This approach results in four interviews designed to establish the strength of contact between the respondents and the local sector.

Assessment of the *Plenty Food Group* is based on interview responses of firm managers to the theme of what influence the group had on firm operations. In addition, data is collected from the Group’s extensive website and interviews with the Convenor of the Group and local industry trainers.

Assessment of the local impact of training organisations working at some level in the local area is based on the extent of the catchment area, whether or not the respondent considers the level of resources adequate to the demand, and the actual incidence of engagement with local residents who are food and beverage workers.

In regard to trade unions, a preliminary point is that nationwide and State-wide agreements negotiated by trade unions and which are legally binding down to the individual workplace level are of course common-place. However, the specific interest of this research is in evaluating the impact of trade unions in a local sector. Therefore, assessment of trade unions follows a similar path to that of evaluation of other institutions: what is the geographical area of responsibility and what is the incidence of local engagement in the form of actual union membership in the workplace, their number and the presence or otherwise of shop stewards?
3.6 Summary

In this chapter, the research design for the thesis has been outlined. The key points are that:

- The methodology defines key concepts used in the thesis. For example, ‘local’ refers to an administrative area, namely the City of Whittlesea and an ‘industrial cluster’ is identified by location quotient and geo-coded mapping.

- In terms of location, the choice of case study is justified by the potential of Whittlesea to provide a meaningful site where the idea of the local impact of industrial development can be measured.

- In terms of industrial sector, food and beverage manufacturing provides a case of industrial development, the characteristics of which are suggestive of a strong local impact.

- Secondary quantitative data, in the form of Census data, are used in two ways: to establish context (Chapter 4) and as one avenue to directly addressing the hypothesis (Chapter 8).

- Primary qualitative data, in the form of semi-structured interviews with firm managers and other local actors, is also used in two ways: direct questions provided quantitative data; elaboration and explanation of these data was provided through selected choice of interview quotes (Chapters 5 to 9).

- A degree of arbitrariness must be accepted in studies of this kind. This applies to a range of concepts and measures such as: ‘the local’, choice of interview themes and sub-themes and defining an ‘idea’. Notwithstanding the fact that much ambiguity on definitions stems from the literature itself, decisions on such matters have been based, as far as possible, on what seems the intent of ideas expressed in that literature.

In the following chapter, first, the context for the research is provided through general descriptions of the local economic and social characteristics of the case study area and the chosen industrial sector. The chapter then turns to a more detailed description of the sector in the local area – that is, food and beverage manufacturing in the City of Whittlesea.
Chapter 4. Context: The Local Economy of Whittlesea and the Food and Beverage Sector

4.1 Introduction

In this chapter, the context for the thesis research is presented. The chapter is comprised of three main sections. The first briefly shows how the idea of intra-urban inequality has become a very important policy and research consideration in Australia and so provides the broad motivation for the research. The second shows the place of Whittlesea in these considerations, by outlining its character, with a particular emphasis on its local economy. The final section turns to the food and beverage manufacturing sector, first by briefly portraying its overall status in Australia and then by focussing on its character within the City of Whittlesea, including a description of the Plenty Food Group.

4.2 Intra-urban inequality in Australia

The last 30 years have seen significant changes in the geography, working conditions and sectoral composition of the Australian labour force (Fagan and Webber, 1999). These have involved restructuring of economic management by both corporations operating in Australia and the Australian state as overseer of the economy. This shift has been interpreted as the end of the ‘Australian settlement’, described as:

…an historical accretion of state action assembled since the early 20th century and built around state policies of protectionism, the centralised regulation of labour market conditions and controlled immigration… [with] inherent redistribution mechanisms, for example, towards unionised workers, on to protected sectors and industries…(McGuirk and O’Neill, 2003: 12-13).

For Australian cities, the dismantling of the settlement has meant:

…[an] expos[ure] to forces of economic and political restructuring that are beginning to make for noticeable differences in the established spatial order…a
growing centralization of wealth combined with the selective dispersion of poverty to structurally vulnerable suburbs (Badcock, 2000: 211).

Changes in the ‘established spatial order’ have been examined in detail by several authors (Fagan and Webber, 1999; O’Connor et al, 2001; Baum, 2008). Local communities most affected are those in the ‘second wave’ of manufacturing suburbs, where industries developed in the 1960s, connected to what were then fringe locations and are now ‘middle ring’ suburbs (Logan, 1966; Fagan, 2000; Randolph and Holloway, 2005). Unemployment in these areas reached well into double figures in the early 1990s and in 2006 was still above metropolitan averages (McDonald, 1995; Dodson and Berry 2003; ABS, 2007a, 2007b). Increasingly, the dormitory function of these suburban locations has lessened over time and a broader range of economic activity can now be found (O’Connor and Healy, 2002). Some now act as employment locations for workers living in the new fringe suburbs. However, the extent of local diversity should not be overestimated; these shifts are yet to result in the ‘Edge City’ phenomenon identified in the United States by Garreau (1991), where what would appear to Australians as scaled down Central Activity Districts have emerged (Freestone and Murphy, 1998). We see instead that a degree of employment specialisation is retained, with Australian cities comprising a number of distinct yet overlapping local labour markets (McDonald, 1995; Freestone and Murphy, 1998) with housing market-labour market interrelationships providing a pivotal anchor (O’Connor and Healy, 2002).

Underlining the impacts of this process has been the growth of part-time and casual work (Borland et al, 2001; Campbell et al, 2005). Census data on casual employment is not available at the local government area level, but as noted previously, national figures are that about two-thirds of part-time work in Australia is also casual work. Each ‘wave’ of recession and unemployment in Australia would seem to result in a ‘recovery’, of new jobs that are more likely to be casual (Watson et al, 2003). The term ‘precarious employment’ has been applied to this form of employment (Weller and Webber, 2000). Manufacturing has not been immune from this trend. In Australia, this sector is traditionally the stronghold of overseas migrants, particularly those from a non-English speaking background. In the past, manufacturing jobs have been secure jobs, by virtue of the simple fact that they have generally been permanent, with a range of conditions and entitlements not available to casual workers. This situation has now changed (Fagan et al, 2004).
The overall outcome can be understood via the association between what have come to be called ‘old economy’ industries and their links with local population skill profiles. It is these links that account for high unemployment levels in some parts of metropolitan areas (Badcock, 1994; Badcock, 1997; Burke and Hayward, 2001). The effect is exacerbated by a lack of connections with the ‘quaternary or informational sector…substantially linked with economic globalization’s expansion of command and control functions in transnational corporations, and the concomitant growth of producer services complexes around those functions’ (Freestone and Murphy, 1998: 287). Such functions have a tendency to cluster geographically, ensuring that the spread of benefits they may bring is distributed unevenly in a metropolitan area. The geography of these two contrasting economies, ‘old economy’ on the one hand, and ‘globally linked’ on the other, has been represented in a typology of urban communities, which have varying characteristics and fortunes. Table 4.1 displays these varying outcomes, which are based on in-depth analysis of Census data by Baum et al (1999).

Table 4.1. Communities of the post industrial city

<table>
<thead>
<tr>
<th>Community</th>
<th>General locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantaged global economies</td>
<td>Around the CBD and inner city, old higher status middle suburbs</td>
</tr>
<tr>
<td>Advantaged suburban economies</td>
<td>Edges around the first category of areas, or further out towards fringe areas</td>
</tr>
<tr>
<td>Disadvantaged old manufacturing economies</td>
<td>Middle and outer suburbs</td>
</tr>
<tr>
<td>Marginal suburban communities</td>
<td>Outer and fringe suburbs of more affordable housing</td>
</tr>
<tr>
<td>Outer disadvantaged communities</td>
<td>Ex-urban</td>
</tr>
</tbody>
</table>

4.3 Whittlesea’s status in a metropolitan area’s economic geography

The Baum et al (1999) typology displayed in Table 4.1 identifies Whittlesea as a marginal suburban community – an outer or fringe suburb of affordable housing. In work based on analysis of 2006 Census data, Baum (2008) presents a bleaker picture for Whittlesea’s key industrial suburbs of Lalor and Thomastown. These are categorised as ‘Band One’, ‘…at the wrong end of social and economic transitions’, which have ‘far and away’ the highest means for indicators for low income and unemployment (Baum, 2008: 10, 18).

Whittlesea is one of four fringe urban growth areas designated in the State government’s metropolitan strategic plan and one of five LGAs with industrial land designated in the Victorian Planning Provisions as being of state significance, or in other words, to be protected as such and developed in the future (DSE, 2010). Greenfield sites are either being developed, or are planned, for residential and employment purposes. More than two-thirds of the municipality is still non-urban land use. Over the next twenty years, the current population of 124,000 is anticipated to grow by 100,000 (DSE, 2005; DSE, 2010). Transport connections include a suburban rail link to the CBD from the southern part of the municipality, as well as major arterial roads, and the Western Ring Road, linking the municipality to the west and national highways to Sydney and Adelaide, the airport, the seaport, and to the east to residential areas (see Figure 3.2).

According to an extensive report based on analysis of 2001 Census data, ‘The northern region has a genuine advantage in the strength of the manufacturing sector that cannot be overstated…Stakeholders must work cooperatively and continue to push for the importance of manufacturing’ (Shepherd, 2003: 11). The report notes ‘The competitive advantage of the outer regions such as…Whittlesea are availability of land, scale of infrastructure and transport linkages’, however, ‘sections…have more exposure to low skills…and therefore must work hard at developing industry policy designed to actively engage training for those who need skill development’ (Shepherd, 2003: 25, 65). A more recent report has a different emphasis and argues ‘knowledge work’ is the key to the region’s future: ‘The region’s economy is in the process of evolving from a manufacturing past to a knowledge economy that includes retention of high-tech manufacturing’ (NIEIR and Carmine Consulting, 2009).
Whittlesea’s population growth rate is well above the metropolitan average, a reflection, of course, of the ongoing development of greenfield sites (Table 4.2).

Table 4.2. Population Increase: Whittlesea and Melbourne SD, 1996 – 2006

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2006</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whittlesea</td>
<td>101,894</td>
<td>124,645</td>
<td>22%</td>
</tr>
<tr>
<td>Melbourne SD</td>
<td>3,138,147</td>
<td>3,592,591</td>
<td>14%</td>
</tr>
</tbody>
</table>


Approximately one-third of Whittlesea residents from 140 countries are born overseas. Between 2001 and 2006, Whittlesea was the fourth most prevalent destination for new overseas migrants in Melbourne. Less than one-third of these reported they had good proficiency in English (City of Whittlesea, 2007). Table 4.3 shows that for the population overall, rates of low proficiency in English are significantly higher than the metropolitan average and this has changed little over a ten-year period.

Table 4.3. Low proficiency in English: Whittlesea residents and all Melbourne SD residents, 1996 - 2006 *

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whittlesea</td>
<td>23%</td>
<td>21%</td>
</tr>
<tr>
<td>Melbourne</td>
<td>16%</td>
<td>14%</td>
</tr>
</tbody>
</table>

* The ABS definition of ‘low proficiency’ is speaks English 'not well' or 'not at all' (ABS, 2006).


The median weekly income of Whittlesea residents is significantly below the metropolitan average (Table 4.4).
Table 4.4. Median weekly incomes: Whittlesea residents and Melbourne, SD, 2006-7 *

<table>
<thead>
<tr>
<th></th>
<th>Whittlesea</th>
<th>Melbourne</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>$406</td>
<td>$481</td>
</tr>
<tr>
<td>Household</td>
<td>$1,043</td>
<td>$1,079</td>
</tr>
<tr>
<td>Family</td>
<td>$1,102</td>
<td>$1,242</td>
</tr>
</tbody>
</table>

* Weekly income is the income before tax, superannuation, health insurance, or other deductions are made and includes: family allowance, parenting payment, pensions, unemployment benefits, student allowances, maintenance (child support), superannuation, wages, salary, overtime, dividends, rents received, interest received, business or farm income (less operation expenses) and worker's compensation received.


However, the one area where it could be argued that disadvantage does not apply to Whittlesea is in the case of home ownership (Table 4.5).

Table 4.5. Tenure type: Whittlesea Residents, 2006

<table>
<thead>
<tr>
<th>Tenure type</th>
<th>Fully owned</th>
<th>Being purchased</th>
<th>Public rental</th>
<th>Private rental</th>
<th>Tenure type not stated</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whittlesea</td>
<td>38%</td>
<td>41%</td>
<td>2%</td>
<td>16%</td>
<td>3%</td>
<td>100%</td>
</tr>
<tr>
<td>Melbourne SD</td>
<td>35%</td>
<td>36%</td>
<td>3%</td>
<td>23%</td>
<td>3%</td>
<td>100%</td>
</tr>
</tbody>
</table>

a. State or territory housing authority, housing co-operative/community/church group

Source: City of Whittlesea, 2007.

It should be pointed out, however, that even the ‘advantage’ of mortgage commitment is, in combination with increased fuel prices, putting considerable stress on some outer suburban communities (Dodson and Sipe, 2006).

Between 1996 and 2006, unemployment in Whittlesea fell, while remaining slightly above the metropolitan-wide figure (Table 4.6).  

---

5 The effect of the Global Financial Crisis (GFC) of 2008 on unemployment in Whittlesea can be measured by reference to survey figures produced by the Victorian Local Government Association (VLGA, 2010a). This data
Table 4.6. Unemployment: Whittlesea and Melbourne Statistical District (SD), 1996 - 2006

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whittlesea</td>
<td>10.17%</td>
<td>5.85%</td>
</tr>
<tr>
<td>Melbourne</td>
<td>9.04%</td>
<td>5.32%</td>
</tr>
</tbody>
</table>

*Source:* ABS, 2006a, 2006b.

Job growth has been strong – as shown in Table 4.7, above the metropolitan average.

Table 4.7. Number of jobs: Whittlesea and Melbourne SD, 1996 – 2006

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2006</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whittlesea</td>
<td>23,316</td>
<td>32,188</td>
<td>38%</td>
</tr>
<tr>
<td>Melbourne SD</td>
<td>1,391,637</td>
<td>1,685,964</td>
<td>21%</td>
</tr>
</tbody>
</table>


However, the proportion of part-time work in terms of jobs of local residents, has increased at a rate higher than the metropolitan average (Table 4.8) - with the implication noted in Section 4.2, above, that part-time jobs are more likely than not to be casual jobs. This trend includes the manufacturing sector, where the proportion of jobs within Whittlesea has also increased.

shows that for 2007 and 2008, unemployment in Whittlesea ranged from 4.6% to 5.2%, which compares with a range of 4.3% and 4.8% for metropolitan Melbourne as a whole. Therefore, the GFC did not significantly change the general downward trend of the rate of unemployment.
Table 4.8. Rates of part-time work: Whittlesea and Melbourne SD, total workforce and manufacturing, 2001 - 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Total workforce a</th>
<th>Manufacturing b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whittlesea CP c</td>
<td>Whittlesea WPP d</td>
</tr>
<tr>
<td>2001</td>
<td>27% 31%</td>
<td>11%</td>
</tr>
<tr>
<td>2006</td>
<td>29% 31%</td>
<td>16%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Whittlesea CP c</th>
<th>Whittlesea WPP d</th>
<th>Melbourne CP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>11%</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>2006</td>
<td>16%</td>
<td>16%</td>
<td>14%</td>
</tr>
</tbody>
</table>

a. Figures exclude comparatively small number of responses where hours were not stated.
b. Figures exclude comparatively small number of responses where hours were not stated.
c. CP = Community Profile – ABS category for data on residents
d. WPP = Working Population Profile – ABS category for data on local workforce


In combination, the features described above are reflected in a troubling Census-based Index of Disadvantage, which incorporates indicators including low income, low educational attainment, the number of low-skilled jobs as well as unemployment. At the 2006 Census, out of a ranking of 100, Whittlesea was 34th (1 being the most disadvantaged) for the state of Victoria (ABS, 2008).

**Trends in employment by occupation and industry**

The outcomes discussed above are also shaped by the changes that have been felt in the type of jobs undertaken by Whittlesea residents. Figures 4.1 and 4.2 display Census data over time. As can be seen in Figure 4.1, between 2001 and 2006, there has been a shift in the jobs by industry that Whittlesea residents hold, away from manufacturing and towards mass goods and services. This shift reflects a local need to service the expanding population of Whittlesea, but very clearly, manufacturing is still a major employer.
Figure 4.1. Number of Whittlesea residents’ jobs by industry, 2001 - 2006 * #

* 2001 total excludes ‘Non-classifiable economic units’ (n = 272) and ‘not stated’ (n = 1,064). 2006 total excludes ‘other’ = 460 and ‘Unclassified/not stated’ n = 1688
# ‘Mass goods and services’ collapses the categories of electricity, gas and water supply; government administration and defence; education; health and community services; personal and other services

Figure 4.2. Number of Whittlesea residents’ jobs by occupation, 2001 - 2006 *

* Excludes ‘inadequately described’ and ‘not stated’ which in 1996 amounted to 125 responses and in 2006, 1,336.


Figure 4.2 shows that the largest area of growth by occupation for Whittlesea residents was in the category of intermediate clerical sales and service. If we focus on the key categories of manufacturing and the New Economy, for the 2006 Census, we find that 9,708, or 18% of jobs held by Whittlesea residents, were in manufacturing, compared with 13% for Melbourne as a whole. In contrast, 2,767 or 9% of Whittlesea residents held jobs in the New Economy sector compared with 18% for all Melburnians.
Turning to jobs within Whittlesea, in 2006, there were 7,294 in manufacturing. This represented 14% of all employment. In comparison, there were 1,558 New Economy jobs representing 5% of the total (ABS, 2007d). These figures indicate the key local features of the Whittlesea economy are consistent with the general discussion on the spatial structure of many outer suburbs: strong on manufacturing, weak on New Economy employment. What these figures also show is that for manufacturing, while the number of local positions (7,294) is less than the number of Whittlesea residents who work in manufacturing somewhere in Melbourne and beyond (9,708), for the New Economy sector, in proportional terms, the deficit is markedly so - local positions number 1,558 vis a vis those held by the local population at 2,767.

To delve deeper into the above data on manufacturing, Table 4.9 shows the place of residence for those working in manufacturing in Whittlesea in 2006 and the place of work for Whittlesea residents working in the sector.
Table 4.9 Location of work and residence for Whittlesea manufacturing workers

<table>
<thead>
<tr>
<th>Place of work - Whittlesea residents with manufacturing jobs</th>
<th>Place of residence - workers holding manufacturing jobs in Whittlesea</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006% a</td>
</tr>
<tr>
<td>Whittlesea</td>
<td>27</td>
</tr>
<tr>
<td>The surrounding ring</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total surrounding ring</td>
<td>51</td>
</tr>
<tr>
<td>Inner city</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total inner city</td>
<td></td>
</tr>
<tr>
<td>Other locations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other locations</td>
<td>16</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

a. n = 9,708
b. n = 7,244
c. Does not tally to 100 due to rounding figures

*Source:* ABS, Table Builder, data generated 18 November 2010

Table 4.9 shows that just above one quarter of Whittlesea residents worked in Whittlesea and just over half worked in the surrounding ring suburbs. Taken together, this means that over three-quarters of Whittlesea residents worked locally or in LGAs immediately adjacent. For those working within Whittlesea we find a weaker local connection: 36% of Whittlesea workers were Whittlesea residents although combined with the surrounding ring this still amounted to three quarters of Whittlesea workers.
The material reviewed above refers to the municipality in aggregate. As noted, however, a substantial part is rural fringe. Though parts of this area contain less well-off residents, much of the disadvantage discussed above is produced from the circumstances surrounding the residents of the established southern area of the municipality. This can be seen in the fact that the Whittlesea South West Statistical Local Area (SLA) level, which is generally contiguous with the suburbs of Thomastown and Lalor where many manufacturing workers live, was, using a scale of 100, ranked 12th (where 1 is the most disadvantaged ranking) of Victorian Statistical Local Areas on the Index of Disadvantage (ABS, 2008).

4.4 The Food and Beverage Manufacturing Sector in the City of Whittlesea

*General characteristics*

The food and beverage sector in Australia is dominated by large firms, many of which are transnational corporations (Fagan and Webber, 1999). As we saw in Chapter 2, in the 1980s and 1990s, resources were directed at mergers and takeovers, which could have arguably been more productively spent on the development of new products and processes. While this was a general trend, it was particularly so for the food and beverage sector. Another feature of the Australian sector is the power and influence of supermarket chains in determining products and processes, by, for example, purchasing policies determined by head office (Burch and Goss, 1999; Burch and Lawrence, 2005). Two firms in particular, Coles and Woolworths, have come to dominate the supermarket sector. As such, it is reasonable to refer to them as a ‘supermarket duopoly’.

Between the 2001 and 2006 Census, the food, beverage (and tobacco) category of industry in Melbourne continued to grow in employment, while manufacturing employment as a whole declined. Unsurprisingly then, its proportion of all manufacturing jobs in Melbourne also increased, from 11% to 15% (ABS, 2003g, 2007c). It is also, as measured by the level of technology and innovation, an ‘old economy’ sector. Its growth then is perhaps surprising, given the attention that the idea of a ‘New Economy’ has attracted.
**Whittlesea firms**

As will be seen, the industrial systems of Whittlesea firms are, as elsewhere, subject to some degree to the power and influence of the supermarket duopoly. But in contrast to the national picture, one of the several noteworthy features of the sector in Whittlesea was the weak presence of transnationals. Of the 47 firms in total, only one, Chiquita Mushrooms (which declined an interview) was a subsidiary of a TNC. \(^6\) Set in a metropolitan context, the sector is even more successful than elsewhere. Another LGA similar to Whittlesea in terms of the level of migrant population and structure of the local economy is Hume – which indeed lies directly adjacent (Figure 3.2 refers). In spite of the fact that Hume has a significantly larger industrial area, which includes far more vacant industrial land (Dodson and Berry, 2003), between 2001 and 2006 there was actually a decline in Food, Beverage and Tobacco (FBT) jobs there, from 1513 to 1404 or 7%. Whittlesea, in contrast, saw a substantial increase, from 821 to 1107 or 35% (ABS, 2003a, 2007d).

The growing strength of the local sector can also be seen in the data in Table 4.10, which displays the location quotient for food and beverage manufacturing for LGAs where the State Government has designated industrial areas of State significance (DSE, 2010).

Specifically, these areas are

- Dandenong South, City of Greater Dandenong
- Campbellfield and Somerton, City of Hume
- Laverton North, City of Wyndham
- Derrimut, City of Brimbank
- Thomastown, City of Whittlesea.

Figure 1, Appendix A shows these locations.

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\(^6\) In 2008, Chiquita relinquished its control and the firm was bought by Costa Exchange, an Australian company, thus ending, temporarily, the presence of any TNCs. In 2009, the local firm Golden Circle was purchased by H.J. Heinz, a US TNC.
Table 4.10. Location quotients: food, beverage and tobacco (FBT) manufacturing, LGAs with land of industrial significance, 2001 – 2006

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whittlesea</td>
<td>1.57</td>
<td>1.93</td>
</tr>
<tr>
<td>Hume</td>
<td>1.49</td>
<td>1.07</td>
</tr>
<tr>
<td>Wyndham</td>
<td>1.47</td>
<td>1.70</td>
</tr>
<tr>
<td>Brimbank</td>
<td>1.10</td>
<td>1.39</td>
</tr>
<tr>
<td>Gter. Dandenong</td>
<td>1.51</td>
<td>1.53</td>
</tr>
</tbody>
</table>


In Table 4.10 we can see the location quotient for the sector in Whittlesea strengthening between 2001 and 2006. Hence, when compared to other major industrial areas within the metropolitan area, this activity has seen stronger growth in employment. Table 4.11 provides further context by showing a breakdown of employment by gender.

Table 4.11. Employment by gender: FBT sector: Whittlesea jobs, Whittlesea residents in Whittlesea jobs, Melbourne SD jobs, 2006

<table>
<thead>
<tr>
<th></th>
<th>Whittlesea FBT jobs</th>
<th>Whittlesea residents in FBT jobs</th>
<th>Melbourne SD FBT jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>57%</td>
<td>53%</td>
<td>57%</td>
</tr>
<tr>
<td>Females</td>
<td>43%</td>
<td>47%</td>
<td>43%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>


As can be seen in Table 4.11, while the gender ratio of those holding jobs in Whittlesea and jobs for Melbourne overall is identical, data for Whittlesea residents who hold local jobs show a higher rate of female participation.

Table 4.12 displays data on firm size for all Whittlesea firms, surveyed and unsurveyed, for which employee numbers were available in the data provided by the Plenty Food Group.
Table 4.12. Firm size, food and beverage firms: Whittlesea, 2008

<table>
<thead>
<tr>
<th>Size</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-19</td>
<td>22</td>
<td>(44%)</td>
</tr>
<tr>
<td>20-50</td>
<td>5</td>
<td>(10%)</td>
</tr>
<tr>
<td>&gt;50</td>
<td>14</td>
<td>(28%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>9</td>
<td>(18%)</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

*Source: Plenty Food Group data, 2008.*

The average number of employees for Whittlesea firms for which data were available was 52.51. Whittlesea has not seen the closure of any firms during the conduct of the research, with one very unusual exception⁷. Data in Figure 4.3 below suggest that the positive shift detected in the location quotient may be associated with the addition of new firms since 2002, many of which, in turn, are small to medium enterprises. It displays the year firms became operational plotted against firm size for the 19 firm owner/managers interviewed. At face value, the trend line shows a decline in the average size of firms, as measured by number of employees, arriving over time. The trend becomes stronger after 1995 and more so after 2000. Of course, we would expect that that firms grow over time and this is an alternative explanation for the trend line in Figure 4.3.

⁷ Matisse Small Goods was in fact a Maryborough (rural Victoria) based company which for reasons that are unclear used a premises in Whittlesea for training its workforce. Thus it was nominally a ‘Whittlesea’ firm and was on the Plenty Food Group’s list of local companies. Matisse moved to the Maryborough site only to go into receivership in 2008 before operations could begin (ABC News, 2008).
The increasing significance of the sector within local manufacturing cannot be denied, and underscores the local significance of the activity. In 2001, 10% of Whittlesea manufacturing jobs were in FBT category. In 2006, the proportion had almost doubled to 17%, so that it was now the main employer in manufacturing (ABS, 2003a; 2007d). By way of comparison, the metropolitan-wide proportions were 11% in 2001 and 15% in 2006 (ABS, 2003g; 2007c).

As was noted in the general socio-economic activity above, much of the activity in Whittlesea is located in its southern half. This also applies to the food and beverage sector, as can be seen in Figure 4.4 which displays geo-coding of the location of the 47 firms.

Source: Interviews with firm managers, 2008.

* One firm could only identify ‘the 1960s’ as the date of establishment and another ‘the early 1980s’. These have been allocated the dates ‘1965’ and 1983’ respectively.
Figure 4.4. Geo-coded location of Whittlesea food and beverage manufacturing firms, 2008
Trade union coverage

Trade union coverage of the food and beverage sector is organised according to the type of product. There are three main unions:

- The Australian Manufacturing Workers Union (AMWU) covers ‘wet’ products such as sauces, vegetable and fruit processing, juices, prepared meals, pastry, pasta and confectionery.
- The National Union of Workers (NUW) covers ‘dry’ food manufacturing such as flour and sugar milling, cereals and biscuit making.
- The Australian Meat Industry Employees Union (AMIEU) covers abattoir workers, butchers and other areas of primary meat and chicken processing.

Casual labour and employment agreements

Of the 20 firms interviewed (including the union representative at Poultry 290), 12 confirmed that they used casual labour. Regarding employment agreements, 15 firms provided relevant information – ten used Award agreements, three used Enterprise Bargaining Agreements (EBAs) and one firm used an Australian Workplace Agreement (AWA).^8^  

4.5 Industrial development policy and institutional features

There are a number of examples of institutional and policy development that are either directly or indirectly related to the food and beverage sector in the City of Whittlesea. These include a local university (RMIT University, Bundoora, established 1995), two regional economic development umbrella organisations (the Northern Melbourne Area Consultative Committee [NACC], established 1995, Northlink/Northern Industry, Education and Training

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^8^ In Australia, an Award is a legal document that sets out the pay and conditions under which workers are employed. It is negotiated by the relevant union with employers in the Industrial Relations Commission and applies to a whole industry. An EBA is also negotiated by unions but is enterprise-specific (HSU, 2010). An AWA was an agreement between an individual worker or group of workers and their employer and did not require the involvement of unions. AWAs were abolished by the incoming national Labor government in 2009 (Australian Government Workplace Authority, 2009).
Link [NIETL]), established 1995) and local government involvement, via facilitation of the

Plenty Food Group.

The NACC is the result of a broader national program of Area Consultative Committees (ACCs) which were introduced by the national Labor government in 1994, as one measure to address unemployment which had risen significantly during the recession of the early 1990s (Garlick, 1997; Jenkins, 2006). The primary purpose of ACCs throughout Australia is to advise the Commonwealth Government on regional and economic development issues and to recommend projects to be funded. After a review by the Commonwealth in 2008, ACCs were amalgamated with neighbouring bodies ‘…to ensure that the boundaries of non-metropolitan ACCs continue to reflect areas of common interest’ (Regional Development Australia, 2007: n.p.). The NACC was merged with the North-West Melbourne Area Consultative Committee. An example of the activity of the NACC is the commissioning of academics from RMIT and Latrobe Universities to research a range of issues in Melbourne’s North (NACC, 2006).

NEITL was established in the 1980s and was later merged with Northlink, a similar organisation (Wilson et al, 2007). Also established by the Commonwealth, its purpose was, similarly, to address unemployment, resulting in this case from the removal of tariff barriers to previously protected industries. Northlink/NEITL is more directed at drawing on local resources to achieve objectives, by, for example, the establishment of working groups, rather than making recommendations to higher levels of government. An example of the work of Northlink/NEITL is the commissioning of private sector consultants to produce two well-researched reports on the economy of Melbourne’s North (Shepherd, 2003; NIEIR and Carmine Consulting, 2010).

These bodies have not been directly concerned with the food and beverage sector. Nonetheless, they have provided an environment in which the question of which sectors should be promoted, and where, has come to the fore. In the case of Whittlesea, that sector is food and beverage manufacturing. Hence, the Plenty Food Group was established in 2002 to develop it. It emerged as a result of discussions between the City of Whittlesea and local manufacturers. The genesis of the Group is discussed in more detail in Chapter 9.
The emergence of these institutions generally corresponds with the increase in the number of SMEs arriving, displayed in Figure 4.3, above, and is an issue we shall examine in the following chapter in relation to the arrival of firms, and in Chapter 9, in relation to policy. Another significant forthcoming development is the relocation of the Footscray Wholesale Fruit and Vegetable Market, now located in Melbourne’s inner west, to Epping North, a greenfield site on the northern outskirts of Whittlesea’s built up area (Figure 4.4 and Figure 1, Appendix A refers). The move should be completed by 2012 (Major Projects Victoria, 2009). This will transfer or provide opportunities in the order of 7,000 jobs. Whether the local sector will source raw produce from this new facility is uncertain; however, it will entail provision of transport infrastructure which may benefit the logistics of the manufacturing sector.

4.6 Summary

This chapter has provided context for the thesis research through a statistical ‘snapshot’ of Whittlesea. The main points that have been made are that:

- Intra-urban disparities in Australian cities have emerged as a significant policy and research concern.

- The City of Whittlesea’s place in this scenario is that of a disadvantaged area with a strong manufacturing base, a weak New Economy base, a high rate of NESB residents, strong population growth, strong job growth, but with a trend towards more part-time, and therefore most likely, casual employment and unemployment above the metropolitan average. These characteristics suggest that local labour market outcomes may have some distinctive elements.

- In terms of residents’ employment market characteristics, between 1996 and 2006, mass goods and services overtook manufacturing as the largest employer. This shift reflects a local need to service the expanding population of Whittlesea, but manufacturing remains a major employer.
The food and beverage manufacturing sector in Whittlesea is one of the strongest growth areas for employment in manufacturing, not only in Whittlesea, but as measured by the location quotient, metropolitan-wide.

The local sector has attracted the attention of Whittlesea City Council which manages the Plenty Food Group, whose objective is to enhance viability through inter-firm collaboration.

Another potential institutional strength in the local area is the presence of the Bundoora campus of RMIT University.

This chapter has shown that the City of Whittlesea is an appropriate place to compare in practice the industrial cluster and local labour market perspectives on local economic development. In the following five chapters, the results of the thesis research are presented.
Chapter 5. The Origin of an Industry in a Locality: Locational Decisions of Firms

5.1 Introduction

The following five chapters are concerned with identifying the local connections of industrial development. To what extent do local connections influence firm operations? Another way of asking this question is whether a collection of firms, significant in terms of jobs growth in a relatively disadvantaged area of Melbourne, is in fact any more than a collection, as it were, of adjacent ‘dots on the map’. Are these ‘dots’ linked in a coherent way, so that they form an industrial cluster as understood in the literature – a cluster defined by, and operating through, local industrial networks and therefore, having local impacts? Or, is it the labour market that displays links and local impacts? The present chapter begins this examination by asking why is this particular industry group in this particular location?

5.2 The industrial network as a reason for locating in Whittlesea?

As was seen in Chapter 4, given the coincidence of the arrival of a group of SMEs and the emergence of local institutional supports, it is possible that networking possibilities among other local firms in the sector could have been an influence on locational decisions, either in terms of making Whittlesea an attractive place to locate, or in providing links into the area by, for example, the dissemination of information. To explore this idea, Figure 5.1 presents the locational reasons in the categories outlined in the methodology. Eighteen firms provided relevant information.
Table 5.1. Basis of decision to locate to Whittlesea: number of citations by sub-category

<table>
<thead>
<tr>
<th>Firm</th>
<th>Local networks</th>
<th>Sector requirements</th>
<th>Locality benefits</th>
<th>Traditional factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beverages 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beverages 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confectionery 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antipasto 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beverages 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil 20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy 40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meats 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poultry 140</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits 160</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confectionery 180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meats 240</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


What is very clear from Table 5.1 is that traditional reasons (for example, proximity to a major arterial or appropriate land use zone) dominate; local networks play a very minor role. What is also obvious is that most firms had multiple reasons for the location decision and we will find multiple answers in the chapters that follow. Locational decisions are therefore complex.

It can also be seen that sector requirements, that is, the need for customised premises given the particular requirements of the sector, are an influence. Disaggregated data on responses to this question are provided in Table 3, Appendix B. They show no correlation between firm size, sub-sector or date of arrival, and type of locational factor.

Clearly, the detail of the responses displayed in Table 5.1 shows that there was little influence exerted by sector or local network factors as a reason for location. Traditional factors were of importance to firms, regardless of their characteristics. Interview transcripts will now be examined to explore these findings.
5.2.1 Traditional factors

The most common reason of a traditional theme was transport access:

We also supply nationally out of this plant. So we need to be close to the highway. So we’ve got some positives of being in this location…it wasn’t too far from the city, so we can distribute directly into Melbourne CBD and the southern region. [And now] it’s at the top end of the… [Hume Highway], before you hit the city, so it’s fantastic – so you don’t need to go through the city… (Fruits 160).

Because we have a train station here, and then we have the [Western] Ring Road at the back and in front already, there is a big road there, this is a very well located area here (Beverages 16).

The main advantage of our present location is the Western Ring Road and airport convenience due to trucking and air freighting of goods to interstate and overseas (Antipasto 12).

What this set of responses emphasises is the regional and metropolitan, rather than genuinely local, dimension of locational decisions, particularly given that road infrastructure, especially the Western Ring Road, spans several LGAs (see Figure 3.2).

A second, well-cited, reason was the need for a given amount of space, or more space than was available at a previous site, for the actual production process:

We were there for four years and outgrew those premises because it is sort of in Preston [Darebin LGA], inner city Thornbury [also Darebin]...the factory was a bit smaller and not as dynamic. Whereas if you want something a little bit better and maybe a little bit modern…either built for you or existing, you find that it’s in that Campbellfield [Hume LGA], Thomastown, City of Whittlesea sort of area (Bakery 35).

The business was only doing a smaller range of products then but it grew. We now supply a lot of hospitals, schools, universities, so we needed a much bigger premises than where we were… (Convenience 14).

A third common motivation was land or property prices:
So you tend to go outwards not inwards because [of] …property prices…a lot of food manufacturing used to be done in Fitzroy, Richmond, inner city suburbs and I think part of the progression has been well, you don't go to Toorak or to South Yarra, so you can’t go that way into the city so you've got to go north…and I think a lot of the manufacturing things like cheeses and little bakeries…started in that Richmond, Fitzroy area and of course they’ve just gone up further to Preston and probably continued out as they’ve grown… (Bakery 35). 9

Once more we see the ‘pull’ is regional rather than local – the space afforded by the northern regional area, but without a more specific geography being identified.

And a fourth sub-theme was a suitable land use zone:

As far as this area, there's a large industrial base area so that's the first attraction so you’re in the right area for industry, right zoning… (Oil 20).

[T]o be in a location which would not be hindered by residential encroachment [was important]…like any manufacturing organisation, you will have trucks in and out of the business and if you’re a resident you wouldn’t want to have 25-tonne trucks driving up and down your street (Fruits 160).

…we needed bigger premises, because we were having trouble with parking trucks in Fitzroy. You can imagine with neighbours, with flats, whinging about the noise, because we’re working early morning and around the clock basically (Bakery 90).

While all these responses identify attributes that happen to be located in, or in fact, ‘across’ the City of Whittlesea (for example, the Western Ring Road and available industrial land), it is notable that Whittlesea itself was not specifically identified.

9 Fitzroy and Richmond are inner suburbs of Melbourne in the LGA of Yarra, where manufacturing was once a major employer. Toorak (Stonnington LGA) and South Yarra (Stonnington and Melbourne LGAs) are two of the most exclusive residential suburbs in Melbourne, in the inner east of the metropolitan area.
Another of the more common responses was proximity to customers or the ‘local community’, but in the past tense:

…we were closer to our customer base, because my father-in-law at that time, most of his customers would have been northern suburbs up here, all the Italians hanging around these areas… (Oil 20).

The term ‘local community’ was used by Bakery 12, which reflects this firm’s dual function as a bakery-café:

I feel like we have built a local community here. We have regulars, almost all from the local area. Teachers, disabled groups, elderly groups, come regularly. We also do school lunches and parties.

In this particular response we see at least a hint of a local attraction in the form of local customers.

5.2.2 Locality factors

Two types of responses emerged under the category of locality factors. The most common was clearly ‘proximity to home’:

…when my grandfather first migrated to Australia he was living in North Melbourne [an inner suburb spread across the LGAs of Melbourne and Moonee Valley] and working in Thornbury, or Northcote [Darebin LGA], so I think he was always used to this side of it [the northern region of Melbourne] (Dairy 40).

The advantage of this location is that it is close to my home. I live in Ivanhoe [Darebin] and it’s quick via the [Western] Ring Road. There was industrial space in Heidelberg [Darebin] but the rent was too expensive... (Beverages 6).

When I open up a factory I draw a circle around my home and make sure that the place is within 20 minutes of where I live (Meats 240).
In these responses can be seen a first insight into a very particular labour market factor: connections between the plant and owners’ residential area.

The other form of ‘locality’ response was proximity to previous work location:

We chose the City of Whittlesea because Reservoir [Darebin] is obviously just down the road…we were in Reservoir from probably ’93 to ’97… *(Bakery 35).*

Everybody generates a level of bias when you live in a particular area for so long…my [old] property was only two kilometres due north from here… *(Dairy 9).*

These examples again lack a forthright statement on the attraction of Whittlesea in particular. *Meats 240,* for example, in relating his ‘circle round my home’ philosophy, allows for twenty minutes – almost certainly by car – 20 minutes on the Western Ring Road would provide access across several northern and western LGAs.

Hence, traditional factors are important, and their expression tends to relate to region-wide considerations.

### 5.2.3 Network factors

But what of information, ideas, knowledge-sharing and other forms of industrial collaboration? *Beverages 5* and *Beverages 15* were two firms surveyed that were located directly adjacent to each other and this was the result of collaboration, albeit it through a third party:

I started the firm myself in 1992, in Oakleigh [south-eastern suburbs, Monash LGA]. We eventually moved to Kyneton [rural Victoria]. The problem with Kyneton was that it was too far for trucks to come to our customers in Melbourne. I knew a relative of ‘Beverages 15’. They own this building but for a long time it was derelict. So we moved here in 1997. They let us use this building rent free, and we share drivers – save costs, do the same delivery *(Beverages 5).*
As noted previously, one firm located to Whittlesea with the assistance of the *Plenty Food Group*:

…we looked at areas like Preston [Darebin] and Coburg [Moreland LGA] and areas closer to home with a larger property and there are a lot of food businesses out here. So ideally, we were looking for a place that was already established as a food processor…one of the biggest reasons we came here was because, after finding a property which was suited to us like this one here, which was already established, I made phone calls to the City of Whittlesea and spoke to the Convener of the *Plenty Food Group*. Having a dedicated department for new businesses entering the area was extremely advantageous, got the ball rolling extremely fast…Unlike a lot of other councils, lot of red tape…they said ‘yep’ and within one week we had the permit and it went very smoothly, so it was really good (*Convenience 14*).

For a larger firm citing local network factors, contact occurred through one of the firms with which it ultimately amalgamated:

It so happened that the lease on one of the facilities [which was taken over] was at the time, I believe, based out in Northcote [Darebin]. The landlord who also at that particular time owned this property here, and his knowledge of the aspirations to move to something larger, prompted him to approach our then CEO and have him entertain the notion of shifting into this facility… (*Confectionary 180*).

The relocation of another firm was influenced by perceived future benefits of collaboration, although this was related to the conventional benefits of agglomeration, rather than information:

…I wanted to obviously get into suburbia and the Cooper Street industrial estate, 10 I believe, with the futuristic activities in relation to the Footscray market 11 and

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10 The Cooper Street Industrial Estate lies on the northern edge of the built up area of Whittlesea at Epping North and was developed after the Thomastown industrial estate (see Figure 4.4).

11 ‘The Footscray Market’ is the Food and Vegetable Wholesale Market discussed in Section 4.5.
its expansion within its own activity will make Cooper Street no doubt a very, very dynamic place in the next 5 to 10 years, no question about it (Dairy 9).

Q: Do you think that that will have a kind of knock-on positive effect for your own business? You can’t actually sell cheese at the market can you?

No….[but] it is can be quantified more in terms of local mutual gains within the businesses themselves rather than the customer base…Very few of us will depend on the local activity, but it’s the support mechanisms that we’ll benefit from, such as, the transportation aspect… (Dairy 9).

This is the only respondent to make any mention of his own volition of the market relocation and to link it to, and explicitly express ideas on, clustering or agglomeration benefits, that is, ‘local mutual gains.’ This, however, was not the primary reason for his firm’s re-location: ‘...we were forced to; suburbia actually pushed us out, so we’re here now in the industrial estate.’ So in other words, it was a ‘push’ factor (of suburban encroachment, resulting in an ‘if you can’t beat them, join them’ decision) rather than a ‘pull’ factor (of anticipated attractions of clustering activities).

5.2.4 Sector influences

A fourth theme regarding locational decisions reflected requirements of the food and beverage sector in particular. These were manifested at the level of centralised, regulatory requirements, the related influence of supermarket chains and factory premises that were chosen as they were already set up as food or beverage processing facilities:

… you’ve got things like HASSUP ¹²…and you need QA, ¹³ you need bigger cool rooms and whatever so you need more land so that's the progression…Now people are forced to take that step [seek larger premises] because of legislation,

¹² ‘HASSUP’ - Hazard Analysis and Critical Control Point (HACCP) – an international food safety regulation system requiring, for example, that potentially hazardous foods be stored below 5°C throughout their storage life (Food Science Australia, 2005). The introduction of HACCP and other regulations seems to have occurred gradually from the 1980s (see Peters, 1998) and according to Ropkins and Beck (2000:18), ‘…by the mid-1990s a number of HACCP-based systems were being employed in Australia’.

¹³ QA – Quality Assurance officer, who administers the HACCP on site.
laws…and there are new things coming out from the supermarkets all the time now. You've got SQF2005\textsuperscript{14} and Woolworths have got the new Woolworths’ accreditation\textsuperscript{15}…You need to actually move to something that's been set up particularly for you, it’s got the most modern equipment. If your factory is old, five years old, ten years old, twenty years, you will not get accreditation and once again people are looking to move to greenfield sites where they can do it (\textit{Bakery 35}).

There were…acquisitions that were made…The business felt there might be an opportunity of saying let’s bring them all in together under the one roof…about 80 per cent of…[our] local business was made up of two [industrial] customers, one…was very prolific in the supermarkets under the cooking nuts range and probably had effectively almost a monopoly within that section of the supermarkets….What…[we] decided to effectively do is to eliminate the risk of losing those two sales because they were cash rich…[we] bought them out….snack nuts is a category that’s always been managed very much by the Coles brands and by the Woolworths brands within their stores…They’ve always pretty much tied up the market of it and the firm we took over was very successful in winning tenders to supply those particular contract ranges…So…[by acquiring] we did get the foot in the door…(\textit{Confectionery 180}).

And there is the case of \textit{Convenience 14} noted above, who ‘were looking for a place that was already established as a food processor’.

Other firms attracted by the suitability of premises for food or beverage processing did not refer to either centralised regulation or supermarkets. However, in these cases, there was still no reference, or merely a passing reference, to local factors:

…Patties came to us, because they had a bakery in Thomastown and the main one in Bairnsdale [rural Victoria] they were running. They did all their fresh [bakery products] up here and their frozen in Bairnsdale and they were running backwards

\textsuperscript{14} SQF – Safe Quality Food Standard.

\textsuperscript{15} Woolworths Vendor Quality Management Standard.
and forwards and said ‘we want to get out of fresh, would you be interested in buying it?’ So it suited us, we had a bigger premises, then we added pastries to our range…So we leased those premises and so we had bread, pies, cakes, the whole works you know, which was good for us, because it helped bring up our value…(Bakery 90).

Q: Why Whittlesea, was there a particular reason?

Oh, just because that’s where the bakery was, that’s where it was. That was the chance basically and really the position suited us, because it wasn’t far from the Ring Road…it was a bakery, it was existing….so it was all set up, we walked in, shifted some equipment from Fitzroy out to there and on we went (Bakery 90).

Another response was even less inclined to identify Whittlesea, in particular, as the driving force for relocation: ‘A suitable building for this type of operation became available; it’s as simple as that’ (Meats 60).

5.3. Summary

The responses tabulated and reviewed above show that local industrial or knowledge connections were not a consideration of note when firms were deciding location. Rather, most respondents offered a ‘bundle’ of reasons, often associated with premises and road access with local connections largely absent. Hence, these initial results suggest the underlying foundation of ‘the local’ as a focus for a food and beverage industry location seems weak. Rather, a theme which emerges from the research reported in this chapter is the importance of the regional setting of firm operations, with its land, roads and other ‘traditional’ characteristics. This is the geographical framework to which respondents refer. Whittlesea, as a local focus, is at best subsumed in that regional view. It is likely that focus will limit the local flow-on effects of the location, an aspect to be explored below. The presence of other firms or local economic development bodies rarely entered the minds of firm managers, and other aspects of institutional thickness, for example, a local research or training facility, did not enter their minds at all.
Chapter 6. The Geography of Firm to Firm Connections

6.1. Introduction

This chapter focuses more closely on the local impacts of industrial development by examining the day-to-day operation of firms, referred to as the *industrial system*. Networking, or other collaborative possibilities, rarely featured in the initial decision to locate. However, did knowledge and network issues subsequently remain inconsequential for firms once they had settled?

As we saw in Chapter 2, the cluster literature tends to see the industrial system as a local configuration, where local connections are found. In this chapter, the objective is to test that proposition. The task is to comprehensively ‘take apart’ the industrial system by examining, one by one, those significant components that have been put forward in the literature as providing a local impact. We examine the firms themselves, suppliers and business services (human services, foodstuffs and ingredients, packaging and other production materials), markets or customers and competitors.

6.2 Local intra-industry linkages

Eighteen of the 19 surveyed firms provided relevant information in the semi-structured interviews on their contacts with other firms. Figure 6.1 summarises these responses.
At face value, it would appear that a considerable number of firms do have interaction with others within the local area. Table 4, Appendix B, provides full information on the responses. To summarise the disaggregated findings here, of the nine firms reporting some form of contact with other local firms, six were of less than 20 employees. Conversely, of the nine reporting no contact, only three were small firms and five were medium or large firms. However, we need to examine actual interview responses to assess the significance of this result. These provide further insight, beyond the bald statistics, of the way firm managers really perceive and understand the presence of other co-located firms in the same manufacturing sub-sector.

**Category one**

Category one was those five firms that reported contact independently of the Plenty Food Group. That is, they were not members of the Group, nor did they engage in the Group’s activities:

We do buy one of [our neighbour’s] products…we’ve had dealings where I actually go over there and bounce things off them and they bounce things off me and which is really good…well, problem solving - you get a lot of that. We had a scenario where we were doing a particular product for many years. We were doing it the way we were told when we first purchased the business. Then we basically spoke about it across the road and they said, ‘no, do it this way its more practical’. We’re not basically competing in the same market, it doesn’t really matter. If we were competitors I guess it would be a different scenario (Confectionery 11).

Not formally [do we interact with other local firms] no. But, for example, our landlord is ‘Antipasto 12’ which is in Lipton Drive [within the Thomastown Industrial Estate] and just yesterday we did some networking and found a contact for exporting to Singapore. So if I have a need I will ask, I will definitely make a phone call and see what information I can get (Convenience 14).

There is a little guy around the corner but he specialises more in tallows so he's got a different sort of business…Look I know him, he comes around and I’ll talk to him, that's not a problem. But we don't really…there is no one, I'm pretty unique compared to everyone else so I don't really see I've got much of a problem… (Oil 20).

So local contact certainly exists, although it might be that the cluster, ‘ideal type’ interaction is not quite apparent here: it would seem to be a point of difference (‘we’re not basically competing in the same market’; ‘he’s got a different sort of business’). Furthermore, in spite of this reported contact, the general attitude of Oil 20, for example, towards other local firms was guarded:

Look you’re kind of a nice neighbour to your neighbours so that's fine, but there's not that much interaction that goes on. It tends to be that if somebody has got an idea, they’re worried about somebody else pinching their idea, or it gets out and the competition is going to know it, so you don't see too much of that going on… personally I don't have the time to be able to just go down the street and say ‘how
are you?’ and chat, I'm just too busy for things like that. There are some people that have got all the time in the world, good luck to them, but I don't have it (Oil 20).

Another firm had a similar, seemingly contradictory and ambivalent response. Again, contact had occurred but the overall position towards other firms was one of aloofness:

No we certainly have nothing to do with any of our competitors. However, we are on good terms with all our competitors. We do occasionally visit each other if you like. For example we may need some certain packaging that we’ve run out [of]; we know they use a similar type - we say ‘look can we have a box of this and we’ll replace it next week’, so that sort of thing certainly does happen with us, but no we don’t exchange information or anything like that (Dairy 40).

**Beverages 5**, discussed previously, presented a clear-cut example of local collaboration, as it shared transport facilities with its neighbouring firm. This was an isolated example, because **Beverages 5** reported no other local contact.

That five firms reported contact independent of the PFG might be a sign that the level of contact between firms is in a healthy state and is hardly a criticism of the Group. However, these contacts were ‘superficial’; they did not develop into the locally specific collaboration that is expected to funnel economic development into a local area. Therefore, the structured opportunity for contact that the PFG provides, where formal collaboration is more likely, was not taken up.

**Category two**

Category two was the two firms whose only reported contact was through the **Plenty Food Group**. **Fruits 160** was one of the larger firms in the cluster. This firm was also a committee member of the **PFG**. It had contact with other smaller firms through the sharing of resources:

You have chemicals that are being supplied to our company and you’ve got 20 other companies in the same region, supply us all on one day. So [the chemical
firm] doesn’t need to travel three or four times into the region. So that’s the sort of economies of scale we’re talking about. The same thing with refrigerated trucks. I mean, we have full truckloads over here, multiple full truckloads we have over here, but if we’ve got space on the back of a truck and Tuscani Beverages, \(^{16}\) for example, needs to supply five pallets into Brisbane, then the transport provider that we use, should be able to give Tuscani a competitive rate...We are a large organisation...We offered free marketing plans to any food company that wished to take it up...there were a number of organisations that took up the free marketing plan (Fruits 160).

**Dairy 9**, on the other hand, was both a member of the PFG committee, and a recipient of benefits from collaborating with larger firms in the Group:

...we all need raw materials and we negotiate accordingly within our group...we have some giants in our localised area such as [the] Original Juice Company, Chiquita Mushrooms and Inghams, etc, and these major players have pitched in...in getting best possible prices for many, many raw materials. Raw materials in particular...sugars, flours, detergents for sanitising etc, and small businesses like myself find ourselves overnight that my detergent costs went down by 50%...We came up with a potential buying power equivalent to, or slightly better in fact, than Fruits 160 which had a national agreement through their parent company and little [us] was all of a sudden buying our detergents at the same price... there’s many, many examples of that in all aspects of service as well as raw materials (Dairy 9).

We revisit the detail of these sorts of arrangements involving the Plenty Food Group in Chapter 9.

**Category three**

Category three was the two firms having contact based on the response of another firm where the latter did reciprocate by identifying the contact firm at interviews. Beverages 15, the neighbour of Beverages 5, did not acknowledge the latter when the theme of local linkages

\(^{16}\) Tuscani Beverages is a Hume-based member of the Plenty Food Group.
was raised. ‘We only talk to our HACCP people, the food compliance people, the ABWI. 17 They come around to our factory and give advice; we only deal with these people’. No broader local collaborative ethic or practice developed. This was also the case with Antipasto 12. These responses do not augur well for the cluster idea of productive local contact. They reinforce the casual, fleeting character of contact between local firms expressed elsewhere in the interviews.

**Category four**

The fourth category was of course the nine firms that reported no contact with other local firms. The majority of these did not provide any particular reason for the lack of contact. One firm did, and theirs was an antagonistic stance:

> Well we do have one [another poultry firm] across the road. They’ve come here just recently…odd place to come. I wonder about the mentality of the local council sometimes, I really do. Why allow another chicken firm in such close location to ourselves? *(Poultry 140).*

Another firm expressed a cautious approach to competitors in general:

> … the first thing I was told if you’re going to get any clients or anything like that, especially if you've got a Coles and Woolworths across the desk and you've got the prices of [your] opposition there, you need to know what to beat, you've got to find out what the Coles’ buyer’s got… *(Bakery 35).*

What is curious about the first response is that **Poultry 140** was a financial member of the PFG. This suggests that, at least in this case, the attempt to foster local collaboration, part of the PFG charter, has not resulted in a broader ethos of such collaboration. These general results are now explored via a review of responses on the separate types of vertical connections.

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17 ABWI - Australian Bottled Water Institute, the peak industry council and certifying organisation for water bottlers in Australasia.
6.3 Suppliers and business services

Thirteen firms provided relevant information on the source of their suppliers and business services. We have sufficient results to form a clear picture and these are displayed in Table 6.1. This displays aggregate data on the location of the key elements of the industrial system: raw materials, machinery, business services and production and packaging materials.

Table 6.1. Geography of suppliers and business services

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The results displayed in Table 6.1 make it clear that the ‘gravitational pull’ of local geography is weak – which means the local impact of this part of the operation of industrial development will be correspondingly weak. The geographical source of suppliers, services and inputs is dispersed well beyond the local area. Disaggregated data are provided in Table 5, Appendix B. To briefly summarise here, as has been the case so far, there is no discernible correlation between firm size or date of arrival with the location of these firms’ suppliers and business services. The general pattern is that raw materials are sourced from rural areas or from the other side of the metropolitan area; machinery is often purchased overseas; business services are sourced from the Central Business District; and, production and packaging material are sourced from parts of the northern region outside Whittlesea. This latter example is the only ‘saving grace’ in terms of evidence of an industrial system within the local vicinity:
production materials, packaging and in one case, raw materials are sourced from the neighbouring City of Hume - of course, a regional and not a local source, as defined by the methodology.

In the interviews, several themes emerged which help explain the lack of a local focus. Indeed, forces at work tended to encourage either in-house activity or dispersal, but not use of the local area.

The following shows forces encouraging in-house activity.

…packaging is all done in-house; you need to see it in line and whatever. We have tried in the past to do [outsource] products but…then [the packaging] people said ‘oh it’s costing me more’, or ‘I'm not making any money on that…’; then you find out that now he [the transport] doesn’t want to pick it up so you've got to freight it and that's cost me another 50 bucks…And then you find out that your people [the contractors] didn’t bake them properly one day so there's a recall, or the stuff came back and you’re getting abused and you think, fuck, I didn’t even make…fifty bucks…we were using food brokers and they kept saying ‘your price is no good, your price is no good, your price is no good’ and we said ‘we’re not making any money what's going on?’ Anyway we made a thing that I said ‘No. Look I'm going [direct] to buyers now, it just can’t be price, we might as well close the doors. [And the buyers said] ‘Mate your product is too small and your packaging is no good’. ‘So it’s not price?’ ‘No price is okay.’ So we weren't getting the right feedback (Bakery 35).

Another characteristic seemingly discouraging outsourcing was the small scale of an SME, which simply did not require an extensive array of services:

…the size and the structure of our small business, between my wife and me, she takes care of the administration aspect and I’m in the hands-on production, sales and marketing. The only outside ongoing and essential activity that all small businesses, including ours, needs on an ongoing basis is the elusive formula of marketing. By the nature of the size of the business, marketing always is a built-in
weakness to any small business. So that’s the only area that I always seek external input for the future (Dairy 9).

Other forces at work seemed to encourage outsourcing. One sub-theme was the ubiquitous influence of the supermarket duopoly, which was, according to the same respondent,

… a necessary evil. Clearly they have a lot of abusive power and they are not very shy to use it…we don’t negotiate with either Coles or Safeway directly. I make sure that is never the case…we do not lend ourselves to any manipulation or bully effect on our price structure. Through a food broker or a direct distributor, when we have a request to supply samples, we do what we do best, with Coles and Safeway we ask for an arm and three legs… (Dairy 9).

Clearly then, a core idea in the cluster literature, that of trust, does not extend to one of the sector’s major customers.

Also on the theme of trust was risk-reduction, or risk ‘transfer’, through the use of hired contractors paid according to the amount they sell:

We still do hot bread shops but we do that through drivers and distributors. So we sell the product to them and then they go out and source that, so we don't have to worry about whether you’re working or you don't get paid or whatever, we just invoice you for $2000 worth of goods…and it’s up to you to work out…So they’ve got to work out where they sell it and they’ve got to do the ground work…You’re motivated by making money so therefore you’re out there… we're better to go through independent people that are driven and maybe also have other products in their vans as well… (Bakery 35).

A further theme related to specialisation:

…we’ve got our own accountant, we’ve got our own general manager… [but] we don’t buy any cakes, we don’t make any cakes, we buy all that in… [It was a financial decision] mainly because we wanted to focus more on our main products…We buy this other stuff in at baker’s rates, because that’s what you
find: more specialisation in the industry, because you just can't make everything
\textbf{(Bakery 90)}.

More generally, there are some peculiarities of the sector and its reliance on raw food and beverage produce. This inevitably leads to sourcing rural areas or long-established produce growing areas in Melbourne’s metropolitan ‘green wedges’ of land conserved by the State government for non-urban uses. Hence, for \textbf{Poultry 140},

[We get poultry from] Victoria, primarily in the Mornington Peninsula. That’s where most of the chicken industry sources its birds… the reason for the concentration on the Mornington Peninsula, I understand, is because most of the feed mills are geographically strategically located. So to minimise feed cartage costs, that’s where most of them are located \textbf{(Poultry 140)}.

Another respondent pointed out the consequences for the source of material of environmental decline:

The biggest disadvantage of being on this side of town is that it’s not really a milk-producing region. It was back 30 years ago, it actually was a good area for milk production, but these days you don’t seem to get the rainfall or get the clover in the grass, to sustain good milking cows and get efficient milk production through cows… \textbf{(Dairy 40)}.

Further, quality and price override whatever inclination there is towards, or advantages of, local availability of raw materials:

…When it comes to things like for example tomatoes, well tomatoes can be grown anywhere but the pricing as well as the quality, you really can’t beat the Italians at the moment. The Chinese have a cheaper product but the quality is not there. The Australians have great quality but the price is not there. So we get a lot of product out of Italy \textbf{(Oil 20)}.

There is also reputation, with the legal backing of stringent agreements, which are beyond the control of local manufacturers:
There are certain things which only come from certain parts of the world…we source those sorts of products from there…Mediterranean foods…for example, there are cheeses which are recognized, like DOP 18 which means typical for a particular area and they get government stamps or government certification. That can only come from Italy where it is actually produced; balsamic vinegar only comes from Modena where Pavarotti died for example, that's the only spot (Oil 20).

A further theme is that of established market locations:

The sushi, in particular…most of the product comes from Japan Foods Trading based in Bulleen [eastern suburbs, Manningham LGA] so all our consumable items come from there. Things like chicken come from Dandenong [south-eastern suburbs, Greater Dandenong LGA]; things like fish come from South Melbourne [inner suburbs, Melbourne and Port Phillip LGAs] (Convenience 14).

Whittlesea’s rural area is of no attraction to a sector so reliant on raw agricultural produce, particularly given its environmental decline – but further, urban encroachment:

In 1980, I bought 100 acres in Epping at bargain price…just out here, twenty-one kilometres from GPO…Epping was a little forgotten denigrated town, most people didn’t even know where Epping was. It was not even considered as a suburb…Until about 1990…the population was building, so then the industrial attention actually took place…eight years ago we sold the farming interest, animals and milking equipment etc, and we buy the milk in…we were forced to, suburbia actually pushed us out, so we’re here now in the industrial estate (Dairy 9).

In terms of links with business services, again it was the case that there were ‘anchored’ locations of particular services in particular places, especially higher level producer services in the CBD and inner suburbs. This factor is reflected in particular in a reluctance to change from providers – in some cases, even after the firm had move from an inner location to

18 DOP: Denominazione di Origine Protetta or Protected Designation of Origin.
Whittlesea ‘… which ‘flowed on from previous businesses and they’ve been in town. East Melbourne is where most of my professional services come from.’ (Convenience 14).

Another firm simply claimed to be unable to find higher level producer services in Whittlesea:

It [our business services supplier] wouldn’t be located in Whittlesea…When you think about it, there’s not many companies within the City of Whittlesea that do suit our requirements when it comes to any of those things…like an advertising agency for example….they tend to cluster in groups elsewhere - like Richmond [Yarra LGA], Brunswick [Moreland], yeah, they tend to go more to certain areas and that’s where you’ll find them (Poultry 140).

Figure 6.2 presents a case study of a firm chosen as an example because it went into the greatest detail on the geography of its industrial system. It shows the complexities of the supply network for food and beverage manufacturing. It gives us the opportunity to see more clearly that inter-firm linkages have a very complex geography and extend well beyond the local area.
Figure 6.2. Industrial geography of a Whittlesea food manufacturer

Confectionery 180
(Whittlesea – Thomastown)

**Bulk Packaging**
Visy
(Hume – Campbellfield)
Amcor
(Darebin – Alphington, Heidelberg)
Carter Holt (Darebin – Reservoir)

**Retail packaging**
New Zealand, China

**Packaging plastic**
Victoria
NSW
Qld.

**Machinery**
Cooking equipment – second hand
Greater Dandenong - Clayton, Dandenong
Cooking equipment – new
United States, Spain
Packaging machinery
Germany, Italy, United Kingdom, Japan

**Nuts and seeds**
Walnuts – USA, China
Macadamias – Queensland
Peanuts – Queensland, China,
Cashews – India, Vietnam
Hazel nuts – Turkey
Edible seeds – China
Almonds – Robinvale, country Victoria

**Dried fruits**
Turkey, Iran

**Business Services**
‘Could be anybody …could be anywhere’

**Confectionery 180** is a larger firm and would be expected to have a more complex system of suppliers. Nonetheless, what Figure 6.2 shows seems to be backed up by the responses of other firms with less complex supply chains. Production of machinery and supplies of raw produce for the sector occur in long-established and in some cases distant locations and these choices reflect the peculiarities of the industry. That is, established production reputations and quality determine the geography of raw inputs and machinery, on some occasions, resulting in global sourcing. Here then is specialisation, but specialisation at a distance, not within the cluster itself. Hence, according to Confectionery 180, in regard to raw produce, ‘…we do go back to the country that is most successful in harvesting that particular variety and source from there.’ A similar situation prevails in regard to second-hand machinery: ‘Hard to find anything across this side of town for what it is that we’re involved in…’ In regards to new equipment, ‘…if we do speak to someone in Australia it’s usually suppliers or agents for new
equipment and it depends on what it is that we’re looking for as to which country tends to specialise in that type of equipment’. As for packaging machines, ‘…you can get them pretty much anywhere nowadays [except it would seem, within the City of Whittlesea]…We tend to get most of ours via agents that represent places like Bosch, so you tend to start looking at a lot of German equipment…’.

In regard to business services, the respondent was not specific, but strongly implied that like all suppliers, their geography is widely dispersed: ‘Again it could be anybody….the base of where they may be located as an agent for finding you that person could be anywhere…’

Clearly then, we have a number of factors relating to the character of the sector itself, including its reliance on raw produce, that will limit local impacts of its activity. The longer-term economic development of Whittlesea has not, to date, provided specialisation in areas such as machinery, which might enrich the effects of the sector’s industrial system. To that we can add the lack of established business services in Whittlesea, or the desire by firms to stay with established, non-local suppliers. This limits any flow on into a network of local suppliers and business services. However, as was noted in Chapter 4, and alluded to in some replies quoted in the previous chapter, we do have the coincidence of a significant migrant component in the ownership of the sector and the population in which that sector lies. Perhaps, then, markets and customers will reveal local relationships within the industrial system?

### 6.4 Markets and customers

The cluster literature argues that another strong source of contacts in an industrial system is what Porter (1990) terms ‘demand conditions’ or customers and markets. Fifteen firms provided relevant information about the location of their markets and customers and these results are presented in Table 6.2.
Table 6.2. Geography of customers and markets

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It can be seen from Table 6.2 that only two firms (Beverages 6, Bakery 12) identify a local aspect of their market. If we again cross-reference the responses by date of arrival (see Table 6, Appendix B), there is no correlation between firm variables and specific geographies of customers and markets. In explaining this market dispersal, again a number of themes emerge. The first has a certain irony to it. Responses suggest the local migrant community is reluctant to purchase cuisine (derived from their countries of origin), produced by firms whose owners come from the same ethnic background. In fact:

Most of our customers are basically the eastern suburbs. If we look at Melbourne… it’s the higher income, educated class that is our main consumers. We have niche products because if you look at stuffed peppers for arguments sake, [non-Anglo Saxon] Europeans wouldn’t really go out of their way to purchase it from a deli unless they’re time-poor. They would actually make it at home the traditional way. And I guess that is why it’s sold to the higher class who are time-poor’ (Confectionery 11).
We have customers in various locations in the south-eastern suburbs, because the clientele is white middle class for antipasto. The ‘wogs’ like us funny enough, the ‘wogs’ are not into specialty food like ours (Antipasto 11).

…we have a problem in so far as our product range is geared to the middle and higher-end restaurants… So we find that we don't have the right products for the delis and independent supermarkets. Our products tend to be better quality than what they’re looking for and hence the price is higher too. It also alienates to a certain extent our local clientele - independents [in the] retail market - because they’re looking for a cheaper product…most Italians that are here nowadays know it all…they all remember how they used to make oil back in the 1930s and 40s… it [our market] tends to be city and south-eastern suburbs, it tends to be where there's a more disposable income and that's where we have a lot of our client base. We hardly have any restaurants [as customers] in the northern suburbs at all. Disposable income is part of it; the other part is if you go down [to] the city and south-eastern [suburbs] you’re dealing with Anglo-Saxons who don't have a history of Italian food so they’re willing to give it a try. Around here, everyone has got an opinion as to how it is supposed to be done or what has to be done so I'm not going to waste my time going to that place (Oil 20).

Not localised demand, I can categorically tell you that. We are in the Northern suburbs but I can tell you categorically that our products do not sell very well … We have a very loyal, articulate, specific and well-paying customer base and these customers are yuppies, artists, the arty-farty, you name it (Dairy 9).

While these smaller, ‘boutique ethnic’ firms found their custom beyond the local area, so too did large firms with more ‘standardised’ products. Here, then, was a second theme. For Bakery 90, this was expressed through a metropolitan-wide bakery retail chain, although it had other customers spread across the metropolitan area such as schools, universities and sports stadia. For Confectionery 180, there was a hierarchy of customers, with the national supermarket chains leading the way: ‘We feature nationally within both supermarket chains plus obviously some of the others, but certainly Woolworths is our number one customer, Coles would be our number two customer…’ (Confectionery 180).
The respondent continued,

..and then…Streets [western suburbs] would probably at the moment be about our number three. Gut feeling says to me that Nestlé [Campbellfield, City of Hume] would be about four. Cadbury [south-eastern suburbs] would be around about five. And it tends to be industrial clients after that…19

We need, therefore, to understand that the nature and circumstances of customers for the local food and beverage sector, in terms of both type of customer and location, is diverse indeed, but the local ties are weak. Private consumers, supermarkets, chain stores and large industrial concerns are all customers for this sector and all of them, it would seem, are constituted at the broader spatial scale, across the metropolitan area and beyond.

A third theme was the expansion of markets in a general sense, without specific reference to the socio-economic background of customers.

…it [the city building they inherited] was quite a modern building but they [the previous owners] located themselves in a position which was very central to the city, because that's where most of their business was. As we ventured out and grew the business, we no longer stuck to the city as our core business, we went out as far as Frankston [an LGA in Melbourne’s south] on a daily basis, out to Mansfield and Yea [respectively, northern and eastern rural areas in Victoria]…so we delivered all around Melbourne. So it’s not imperative that we’re [based] in the CBD (Convenience 14).

This respondent also commented that now they had relocated to the northern area, they had not developed a customer base there – they simply retained their previous customers. Location in Whittlesea, therefore, enabled a continuation of connections to pre-existing markets, but that is all.

Examining in detail the responses of the two firms who identified local customers, Bakery 12 captured a significant local clientele, but this firm was unusual. It was, as we have noted, a café with a bakery attached. It was not unlike a retail firm with its own local catchment.

19 Streets is a confectionery company located in the western suburbs of Melbourne. Nestlé, located in Hume, makes a range of food and beverage products as does Cadbury-Schweppes, located in the south-eastern suburbs of Melbourne.
Beverages 6 reported that it had 15% of its market within Whittlesea, mostly for small factories and businesses. This is the only example of the location of customers driven by the ‘SME nature’ of the local economy.

6.5 Competitors

Twelve firms provided relevant information about their competitors and the data are displayed in Table 6.3.

Table 6.3. Geography of competitors

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Only one firm, Dairy 40, specifically identified a Whittlesea firm as a main competitor. Clearly then, local linkages of this kind, which in the cluster literature have been associated with competitive developments and innovations (‘Rivals located close together will tend to be jealous and emotional competitors’ [Porter, 1990: 157]), are not relevant in the Whittlesea context. If we cross-tabulate the data (see Table 7, Appendix B), there is no discernible correlation between the variables and responses. Smaller to medium firms are more likely to report they had ‘no competitors’. Just what to make of such a response is a question we turn to in examining the interview text. It is at odds with the cluster approach, which identifies SMEs as being most likely to be aware of, and to benefit from, competitive pressure. It
suggests that this group of food and beverage firms is unlikely to deliver local benefits from competitive pressure, à la the Porter (1990) model.

Several themes emerged through the interviews. The first was that some firms see a much larger enterprise as their main competitor, and these larger firms happen to be located outside of Whittlesea. Therefore, the imagery of a local dynamic engendered by a competitive environment of SMEs does not apply. As if to reinforce this point, the smaller firms had no sense of benefit or ‘knowledge spillover’. One of these firms, in fact, merely felt threatened:

Our main competitor is ‘XY’ [a large multinational beverages company based in Sydney]. XY is engaged in legal action with us. They sue anyone who has the word ‘X’ or ‘Y’ in their name. We of course are ‘XZ’. This has been very expensive for me, but we have won the Australian battle. We are still in litigation in the United States (Beverages 5).

Another SME, Beverages 4, advised its main competitors were Coca-Cola and Cadbury-Schweppes, both large TNCs. Although there was no evidence of a problematic relationship, it is a moot point whether a firm of four employees is in a position to benefit from competition with a firm that is so dissimilar in scale.

A second theme concerned the ubiquity of the product in question and therefore, a broad geographical spread of competitors. This was particularly the case with the meat and poultry producers:

I think when you talk in terms of a main competitor, really, there are a number of larger players in the national industry and they are really our competitors (Poultry 140).

Conversely, a third theme related to the specialised nature of products. This limited the possibility of the local competitive cluster effect. Hence, for Confectionery 11, the type of sushi produced led to competition with a firm in the inner area; the type of bread produced meant they were competing with a firm in the outer eastern area of Ferntree Gully. Convenience 14, which made unusual gluten-free products, could identify only one
competitor in Melbourne, in the south-eastern suburb of Frankston, and ‘most of our other competitors would be in New South Wales’.

A fourth theme was perhaps the most curious of all – those firms who claimed to have no competitors.

I can tell you categorically, I don’t have a competitor…By the nature of our success here, I’m not attracted to copy anybody; I never did and never will out there in the market. It’s an attitude thing. I challenge myself on an ongoing basis and now look, some concepts work, some don’t, that’s part of that wrestling match if you like, of sales and marketing… (Dairy 9).

No, we are very small see; it is not attractive to them to compete with us. We just contract to these people and the water we sell, not a great quantity, we sell a small amount. They don't feel any pinch to the competitor (Beverages 15). 20

Look I thought we did have a main competitor but we don't...because you’re dealing with food and anyone can deal with it, you don't have anything which is completely unique...[as if] you can charge whatever you like for it...So what tends to happen is you find that the competition is ever present out there, but there's no one in particular that you can say well that's my competitor or that's my competitor. I know I'm dealing in say the middle to top end and there are a few people that deal in that area...But there isn’t anyone that I can say, ‘oh yeah, that guy is a direct competitor and if we get him out of the way then we’ve got an open road’. It doesn’t work that way (Oil 20).

As Beverages 15 was ‘very small’, ‘they [competitors] don’t feel any pinch’. So here is another angle again – competition is not an issue (which in Porter’s terms would be a local advantage) because the firm is too small to ‘pinch’ competitors. In the case of Oil 20, the ubiquity of the product, ‘you’re dealing with food and anyone can deal with it’ led not to a spread of a competition but, according to the respondent, no competition. The ‘no competitors’ response may also be explained by ‘the unique approach…you put yourself in a

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20 This respondent was not a native English speaker.
corner with no competition’ (Dairy 9). Generalisation, then, is difficult, and is complicated further by the sense there was an element of complacency or bravado in such responses.

What of the single respondent who identified a local competitor? What dynamics were evident here? Dairy 40 - when encouraged - acknowledged competitors in Whittlesea, although exchange was limited, either literally, in terms of ‘copycat’ behaviour, or in terms of development of ideas. Thus, while rudimentary contact occurred, it fell well short of the competitive linkages that the Porter model suggests would underpin local development outcomes.

6.6 Summary

The results from this chapter demonstrate that the local connections between firms within the sector in Whittlesea are very limited. As far as the industrial system as a whole is concerned, as with locational decisions, we find that regional (the northern suburbs), national and international forces predominate. The industrial system lacks local connections and, therefore, a local impact. Even if we were to allow for the northern suburbs as being a ‘local area’, connections are with very large regional firms – for example, packaging firms such as Visy or Amcor. These are major national producers with a metropolitan-wide customer base, so that it could just as easily be the case that they were chosen because of their high profile and range of supplies, as for their proximity. When it comes to customers and markets, similarly, links were most commonly beyond Whittlesea. These were large industrial or supermarket customers that ensured volume of sales, or higher income groups on the other side of the metropolitan area - in spite of the fact that many products emerging from firms are ‘non-Anglo Saxon’, like much of the local population. This would seem to preclude any hint of a local connection between industry and local population characteristics – at least as customers - as a source of customer-driven innovation in the present day.

The type of relations within the industrial system, as described by firm managers, are then diverse and in some cases quite unexpected. While the incidental, casual contacts reported in this chapter are not surprising given the sheer proximity any industrial estate affords, the interviews were unable to detect whether they developed beyond just that – incidental, casual contacts. Moreover, it is clearly the case that interaction, such as it was, often was interpreted
by managers in qualified terms and conducted through a veil of (unbeneficial) competitiveness, even suspicion.

Clearly, the nature of the industrial system is influenced by the peculiarities of the food and beverage sector. There are just too many characteristics of the local sector which seem to conspire against the development of local connections. These include the specialisation or generality of products, environmental conditions and urban encroachment into the Whittlesea hinterland or the SME-large retailer connection. These characteristics seem to produce links that are, at the very least, regional and in many cases, metropolitan, and beyond. And a further challenge for the industrial cluster model is: how does the ‘local learning through competition’ process apply when some firms do not even acknowledge they have competitors?

Whatever the explanations, one thing is clear: there is no substantial local dimension to the industrial system. This, then, is the second major finding of the thesis. It confirms what was found in Chapter 5: broader spatial frameworks have more influence on firm operations than local connections or influences. Nevertheless, as we saw in Chapter 2, a ‘new’ form of relation, an ‘untraded interdependency’, sometimes with an almost indiscernible, tacit knowledge exchange component, is a key idea of the industrial cluster model. The key exchange, it is said, is not the ‘nuts-and-bolts’ production linkages of the industrial system, but is indeed, ideas-exchange and generation. Perhaps here can be found a local impact and it is to this question we turn in the following chapter.
Chapter 7. The Geography of Ideas

7.1 Introduction

In this chapter we focus on the significance of local networks in the ideas generation process of case study firms. Innovation and knowledge, it will be recalled, is regarded in the cluster literature as the potential local network connection *par excellence*. Is it the case that in regard to the thesis case study, local connections are apparent here, where our search for its presence has hitherto failed?

7.2 Sources of ideas for running the firm

Eighteen firms provided relevant information about the sources of their ideas for running their firm and those data are displayed in Table 7.1.

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*Source*: Interview with firms, 2008.
Figure 7.1 shows that in only two cases is there evidence of local linkages in the ideas-generating process. **Oil 20** received ideas from parents at his children’s school – not exactly an industrial link, but a local link nonetheless. **Confectionery 11** received ideas from an adjacent food firm. Other than this, there is simply no local dimension to innovation indicated by the firms, regardless of size, sub-sector or date of establishment (see Tables 8 and 9, Appendix B for disaggregated data). By firm size, a clear trend is difficult to establish, but it would appear that managers of small firms are more likely to rely on internal sources for innovation. Some firms seemed to have a more ‘sophisticated’ or methodological approach than others. Overseas conventions were cited by **Antipasto 12, Bakery 35, Bakery 90** and **Poultry 140**. As we shall see more fully in the interview transcripts, **Fruits 160** held ‘innovation days’ with suppliers and had an internal innovation committee of managers.

Table 7.2 focuses specifically on miscellaneous responses. It shows a diverse array of sources, confirming how local ties are not significant.

**Table 7.2. Sources of ideas for running the firm: miscellaneous**

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<th>Firm</th>
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<td>Local ethnic community - historical</td>
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<td>Local ethnic community – historical</td>
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*Source: Interviews with firms, 2008.*

These observations will now be elaborated upon in the actual transcripts of the interviews, by focusing on four key themes: ‘global pipelines/local buzz’, links within the industrial system, internal sources of innovation and centralised regulation as a driver of ideas.
7.3 Dimensions of ideas generation

*Global pipelines…and local buzz?*

As noted, four firms cited overseas conventions. From cross-referencing the data displayed in Appendix B, Table 4, it can be seen that one of these (*Antipasto 12*), had reported collaboration with another local sector firm. Unfortunately, the latter firm declined to be interviewed, so it is not known whether it gained a benefit from the ‘global pipeline’ potentially supplied by *Antipasto 12*. As the other three firms did not report any local contacts, we can only conclude that ideas gained at conventions were not spread locally – there was no link between ‘local buzz’ and ‘global pipelines’. While highly motivated to seek out new ideas internationally, these firms were, in essence, ‘going it alone’. The following selection of responses illustrates what motivates them in this course of action and the strong sense that new ideas and technology have not spread elsewhere.

Overseas travel [it] has to be…you can go on the web…But I think the web is so big you've got to narrow it down…So trade shows are really good for ‘touchy feely’ [that is, the product can be viewed in person], because I think the other thing is, too, when you buy a car you just don't buy it on the website. You go and actually have a look at it…the other thing is that by going to the trade show that then gives you a network of other people with food ideas…And they’re feeding you with the products and telling you what they’re doing in Europe… (*Bakery 35*).

Dad would travel overseas once a year. The technology’s from Europe. So he brought that here, and he was the only one, and probably is still…there are people who use bits and pieces of it, but we’re pretty much, on mainland Australia, still the only ones to use this method of processing. So yeah, we are pretty much innovators of our industry in that way (*Poultry 140*).  

*Links within the industrial system*

Six firms identified some aspect of the industrial system as a source of ideas. The question is whether ideas provided the local link that is absent elsewhere in the system.

*Fruits 160*, one of the larger firms, had an entrenched strategy to develop ideas with suppliers:
We have fairly large purchases from big organisations such as Amcor, Tetrapak or Brickwoods or Labelmakers, and as part of our supply and relationship with them, we have innovation days and they bring innovation to us as part of a proactive step. So we would certainly have an innovation day...once a year (Fruits 160).

However, these firms were located outside of Whittlesea. As noted, Oil 20 identified a local, non-industrial connection:

I'm always talking to other people that I know, not in the food business, but other people like through my kids at school whose fathers are in business as well, just seeing what they're going on about, what they're doing, what they're saying, things that are going on (Oil 20).

Therefore, local networking occurs but not in the sense generally anticipated in the literature, which is through relationships which are both local and clearly linked in some way to a related industry.

Confectionery 11 provides the only clear-cut case of local networking. As we recall from Section 6.2, this firm had ‘...connections with the food firm across the road.....I actually go over there and bounce things off them and they bounce things off me...’

There was no mention by any firms of the key, local networking institution in the Plenty Food Group as a source of ideas, in spite of the fact that, as we saw in Chapter 4, ‘information sessions’ were a regular feature.

Only one firm cited an industry association of any description:

We meet twice a year...We have our good days and bad days, but we meet and we have ideas. I can ring anyone up. Wouldn’t be so much the local guys, because they're more opposition, but I might ring up someone in Sydney or Perth, up in the country, country Victoria and overseas (Bakery 90). 21

21 The firm’s association, The Australian Society of Baking is based interstate.
Internal sources of innovation

A further indication that local networks were not a source of ideas was the common response of ‘internal’ sources: internal to the organisation and ‘internal’ to the individual, with managers attributing their ideas to their own ‘know-how’. Three firms reported internal organisational strategies at some level as a source of ideas: ‘There are small day-to-day incremental improvements in regard to productivity but no significant changes in recent times. In general, all levels of staff work together to keep the operation productive’ (Meats 60). ‘I look at the dessert menus of others. The pastry chefs get their ideas from their previous employer’ (Bakery 12).

The most sophisticated internal ideas-generating process was undoubtedly Fruits 160:

> Of course we do have an innovation group, an innovation steering committee that accepts ideas from across the entire organisation... an innovation steering group process which is made up of the exec team...it’s a four-step process and we accept innovation from any level of the organisation and there’s success in that (Fruits 160).

A far stronger theme, however, was the ingenuity of the owner-manager, either through bringing to the present firm ideas in previous employment, or simply the claim that the respondent invented new products and processes: ‘[Innovation stems from] my father’s past experience. He developed his ideas about food production while working for many years in the restaurant industry’ (Antipasto 11); ‘I think up the ideas, a drink to ease menstruation pain, a hangover cure’ (Beverages 5); ‘It [innovation] is internal… basically we’ve grown on my Dad’s theories along the way…so yeah you could say it’s in-house’ (Beverages 4). A manager of a smaller firm expressed great self-confidence in his own ability to innovate:

> …the machinery I can tell you where that came from, [respondent names himself] engineering extraordinaire. I actually commissioned and built the machines...[on] my premises here, because the machines that I use, they d[id] not exist [before]. So I have to develop them...you virtually have to manufacture the concept and the idea and by manufacturing the concept you virtually have to protect it as well...the equipment it is made to specific [respondent names himself] specifications which nobody else can get and that’s where...[my] unique approach...put[s]...[me] in a corner with no competition (Dairy 9).
This last response regarding ideas developed by the owner, apparently in isolation, emphasises the theme, seen with sources of innovation derived from ‘global pipelines’ and a dispersed industrial system, that when it comes to ideas, ‘the equipment is made…which nobody else can get’. In other words, in the responses that we have seen so far, there seems to be a natural tendency which obstructs the potential for local spillover effects in the form of sharing of ideas, a ‘copy-cat’ effect, or a competitive spirit which would contribute to local networks of knowledge.

**Centralised regulation as a driver of ideas**

A third theme emerged in response to questions on the source of ideas: the influence of centralised regulation and, in particular, the way the large-scale purchasers of the food and beverage sector, namely, the supermarket duopoly, shaped innovative activity in the local sector. The firm-supermarket relationship is a complex, even contradictory one. The precise way in which this set of links shapes innovation, and how it has a geographical dimension, is difficult to trace. But if it can be put simply, the supermarket chains are of course spread throughout the country, including Whittlesea. However, purchasing arrangements are generally centralised, and in this sense are a non-local influence. Clearly, this large-scale purchasing power shapes firms’ behaviour: ‘The supermarkets themselves probably are the ultimate custodian of most innovations and directional changes’ (*Confectionery 180*).

Another response goes into more detail:

… what is falling away is strip-shopping centres, there aren’t as many hot bread shops, there aren’t as many butchers, as many fruit shops, they’re all congregating in shopping centres [which] means that you've got to be able to supply Coles and Woolworths. Coles and Woolworths means you have to have HACCP and SQF2005 which means you probably have to have a Quality Assurance person …the building to service them…six-monthly audits, they cost you $2,000 to $3,000 an audit, so therefore you've got to be doing the turnover to justify that…(*Bakery 35*).

What is particularly interesting about this respondent’s view is that while the requirements of standardisation imposed by the large supermarket-driven regulations give an incentive to innovate on the one hand, on the other hand they take away another form of innovation - and this had a firm local connection:
[I]n the old days… they'd be able to have regional or ethnic-group-based products. That seems to be dying out a little bit at the moment. A bit of the McDonald’s philosophy: the hamburger is the same all over the world…[Coles and Woolworths are restricting our options] and what we’ve done is we’ve gone for bigger, faster machines…Why do the supermarkets sometimes deal with you? Because you've got the machine that nobody else can do…the product and they’re big and they can supply and they’ve got the quantity…there are a lot of people merging in the food industry because people are getting the bigger and faster machines…every company that I know is still endeavouring to get more conveyor belts in, depositors, something else, a robot to take the place of that machine (Bakery 35).

This theme of centralised regulation as a driver of innovation, in the form of either food or environmental regulations, was noted by others:

New machinery, more automation, that’s probably the biggest thing that’s changed here. More awareness of now we’ve got this asset, all the regulations with hygiene, washing hands, refrigeration, temperatures, all those things (Bakery 90).

The environment that food businesses operate in now, particularly with electricity and water scarcity…with prices going through the roof and obviously the drought has impacted on water usage and costs. 22 There are external and internal pressures on you to be efficient. The water supply authorities want you to use less water and we want to as well. So we’re not in a little vacuum where there are no external influences that we just permit the business to continue to operate (Poultry 140).

Centralised regulation of the kind applied by supermarket purchasing policies does spur new machinery purchase and in that sense it encourages innovation; it also shapes behaviour and it seems to encourage large-scale ‘Fordist’ production, contrary to the industrial cluster model. However, for the research issue at hand, the situation is by no means straightforward. Centralised regulation, _per se_, is a non-local influence. Indeed, the production, storage and handling expectations of the supermarkets are in fact national standards, and local producers have to meet that set of standards to participate. That can be seen as a ‘washing out’ of a potential local impact, as a homogenising tendency in production systems are a result of these

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22 The drought to which this respondent refers had by 2008 been going for 12 years and had affected most of the State of Victoria and other parts of Australia (Wahlquist, 2008).
purchasing strategies. As Bakery 35 observed, this influence discouraged ‘regional and ethnic-group-based products’.

**Ethnic community links as a driver of innovation**

This aspect, however, requires closer examination. We have so far examined several themes which by their operation seem to regulate the process of innovation and in so doing, deny it a local impact. However, a fourth theme which emerged in the interviews initially suggests a local dimension to ideas-generation. For this draws on the local character identified by Bakery 35 – namely the numerous ethnic communities which have resided in the City of Whittlesea for many years. Three firms identified this influence:

Look, initially I think it would have been a case of when my parents started, the ethnic community were really into sourcing things that were as naturally made as possible and made by people from their own ethnic area. So that created a very big impetus for the product. And then, as the business grew, commercial concerns were aware of another player in the market, and then there was that big decision [by the firm] to differentiate the product from every other product on the market by being the only ones in Australia at that stage to process without chemicals. And that’s just taken off ever since (Poultry 140).

The original owner wanted to get into something and he saw the need to produce oil that the people back in the old country were used to, because at that time it was basically all lard here and they were just starting to move from lard to vegetable oil…So he started supplying his countrymen or people from his region, that sort of thing, home town and it developed from there. Then there was change in direction… in so far as the business had myself and my brother-in-law come along…it was a good business for say a two- or three-man operation, which it was, but obviously you can’t feed 20 staff doing it that way. So we changed the direction somewhat in so far as maintaining our oil base and also going into food service, which is basically Mediterranean-concentrated as well, because we have a lot of relations back in Italy, because we know the food and we know that we’ve got contacts so it is very easy for us (Oil 20).
In both these cases we see how the geography of innovation moved from a base of local connections to a broader market. Paradoxically then, industrial growth has limited the local impact.

Another firm had a similar history:

... [W]e...actually started an innovation that existed back home, to milk sheep and goats and then produce dairy products from alternative raw materials...20 years ago there was not one sheep or one goat milked in this country...Through the '70s and the '80s you had a lot of Mediterraneans settled [in Whittlesea] ... and the second generation that grew [up] in this area here probably and definitely contributed, or is responsible, for the activity of the Mediterranean business opportunity phenomenon that is taking place... (Dairy 9).

This group of responses fits with the idea discussed earlier – that the local influence has weakened over time. It will be recalled from Chapter 6 that this respondent identified his markets as ‘Not localised demand...We are in the Northern suburbs but I can tell you categorically that our products do not sell very well in the Northern or the Western suburbs...We have... well paying customer[s]’. These responses indicate then that in the early history of firms, the local ethnic community was an important driver for products, but that subsequently, the market became directed to Anglo-Saxon Australians residing in other parts of Melbourne.

7.4 Summary

These responses on ideas within the industrial system show, as with other aspects of firms operations, that it is at the regional scale and beyond and not the local scale, that linkages between firms operate. If anything, any evidence of a local relationship underpinning innovative behaviour has weakened rather than strengthened over time. Hence, as we saw in the interview transcripts, ‘early settlers’, such as Poultry 140 and Oil 20, and a more recent arrival in Dairy 9, make reference to the local ethnic community as being initially the driver of ideas. Other more recent arrivals, such as Beverages 5, Bakery 90, Antipasto 11, Beverages 4 and Beverages 6, all but one of which are SMEs, cite the internet (which was used to ‘surf’ for plant and equipment, but not as a communication tool), their own volition and to a lesser extent, international trade fairs as sources of innovation. In other words, innovative activity is not based on local interaction, despite the development of institutional supports. On the
contrary, the trend over time would appear to be that firms are becoming both more individualistic in their ‘innovative impulses’, more international or ‘virtual’ – and less ‘local’.

The results detailed in this chapter confirm that the local relationships in regard to ideas-generation are weak and this is the third key finding of the thesis. This is the case in regard to the industrial system, in spite of the assumption in much of the literature that ideas-generation and exchange are qualitatively different from more ‘traditional’ exchange relationships. They are, it has been suggested, more likely to be found in the local sphere, and arise and gain expression through local relationships. This chapter has also detailed the failure of ideas derived from overseas to ‘spillover’ into the local area. On the contrary, the innovation process is kept within the firm and this reflects the general approach of firm managers in that they prefer to be ‘left to their own devices’. Forms of innovation were interrelated: internal sources of innovation at both the level of the firm and literally within the heads of the managers and managers’ ethnic affiliation to both country of origin and local population – with the important proviso that these latter connections found expression in the past – not the present.

The spatial arrangements of innovation are then essentially at the individual, regional, national or international scales. There is no sustained culture or practice of local collaboration or mutually-beneficial innovation. It would seem, to recall Malmberg, that ‘…we have largely failed to show empirically that there is intense interaction going on between firms – whether traded or untraded – in regional clusters…’ (Malmberg 2003:156). He then continues,

…could it be that spatial clusters of similar and related industries exist not because they make up a localized industrialized system, but rather because they provide efficient labour markets for specialized skills? (Malmberg, 2003:156).

To identify local connections and influences in firm operations, it seems we must look at other characteristics. There is one crucial dimension to the industrial system, or in Porter’s terms, one ‘corner’ of the diamond, which we have kept ‘under wraps’ until this point. That dimension is the local labour market. So with Malmberg’s proposition to the fore, we now turn to an examination of this, to determine whether here can be identified local connections.
Chapter 8. The Geography of the Labour Market

8.1 Introduction

This chapter shifts the focus of the research by exploring the local labour market as a conduit for the local impacts of industrial development. Four approaches are adopted, through examination of: via ABS customised Census data, the local labour market dimension of Whittlesea for a ten-year period; the extent of self-containment based on the assessment by firm managers; the preference for local labour by firm managers; and finally, recruitment methods and philosophy.

8.2 Commuting and the geography of the labour market, 1996 to 2006

The following three tables illustrate the local labour market dimensions of Whittlesea in a regional context for the Census years of 1996 and 2006. At a broader level, all Whittlesea workers and sectors are examined; the food and beverage sector is examined specifically. Note that the LGA of Brimbank (shown in Figure 3.2), which is in the western region of Melbourne, is included in this part of the analysis for reasons that will be elaborated on below. Table 8.1 examines the location of work for residents of key LGAs.

Table 8.1. Self-containment: percentage of all jobs occupied by residents, key LGAs, 1996 and 2006

<table>
<thead>
<tr>
<th>LGA</th>
<th>1996 %</th>
<th>2006 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banyule</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Brimbank</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Darebin</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Hume</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>Melbourne</td>
<td>56</td>
<td>55</td>
</tr>
<tr>
<td>Moreland</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>Nillumbik</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Whittlesea</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Yarra</td>
<td>24</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Data generated 18 March 2005 and 28 February 2010 using data provided by ABS.

Table 8.1 shows that Whittlesea is the only LGA in the sample where the extent of self-containment for all jobs, as measured by residents who work locally, has actually increased. Tables 8.2 and 8.3 focus on the Food, Beverages and Tobacco (FBT) sector in Whittlesea.
Table 8.2. Self-containment: location of residence for Whittlesea workers, FBT sector and total employment, 1996 and 2006

<table>
<thead>
<tr>
<th>Location</th>
<th>FBT sector</th>
<th></th>
<th></th>
<th>Total employment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1996 %</td>
<td>2006 %</td>
<td></td>
<td>1996 %</td>
<td>2006 %</td>
<td></td>
</tr>
<tr>
<td>Whittlesea</td>
<td>41</td>
<td>40</td>
<td></td>
<td>47</td>
<td>44</td>
<td></td>
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<tr>
<td>The surrounding ring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hume</td>
<td>11</td>
<td>12</td>
<td></td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Darebin</td>
<td>11</td>
<td>8</td>
<td></td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Moreland</td>
<td>4</td>
<td>5</td>
<td></td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Banyule</td>
<td>6</td>
<td>5</td>
<td></td>
<td>11</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Nillumbik</td>
<td>3</td>
<td>3</td>
<td></td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Total surrounding ring</td>
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<td>33</td>
<td></td>
<td>38</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Inner city</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Yarra</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
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</tr>
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<td>Melbourne</td>
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<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total inner city</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other locations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brimbank</td>
<td>4</td>
<td>7</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Rest of Melbourne</td>
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</tr>
<tr>
<td>Other</td>
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<td>3</td>
<td></td>
<td>n.a.</td>
<td>n.a.</td>
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</tr>
<tr>
<td>Total other locations</td>
<td>21</td>
<td>25</td>
<td></td>
<td>14</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL

100    100    100    100

a. Does not include figures from outside of the Melbourne SD, as figures for all categories were not available.
b. 1996: n = 748
c. 2006: n = 1,107
d. 1996: n = 22,142. This figure excludes Whittlesea employees whose residence was outside of the Melbourne SD.
e. 2006: n = 32,116

Source: Generated 18 March 2005 and 30 September 2008 using data provided by ABS; ABS, 2007d.

The results of self-containment displayed in Table 8.2 provide a strong indication of the strength of the local connections of the labour market. For the FBT sector specifically, around 40% of employees are drawn from the local area (as defined for the research), and this has been steady over the ten-year period under review. The significance of this is underscored by the contribution of labour from a ring of adjoining municipalities. Parts of these are very close to the cluster of firms in this sector which lie across the southern part of Whittlesea. Viewing these as part of a wider local area lifts the self-containment percentage to 76% in 1996, which
falls slightly to 73% in 2006. Hence, over 70% of the jobs created by this industry in Whittlesea have a very direct impact on what is a narrowly circumscribed part of the Northern suburbs of Melbourne.

Taking the ring LGAs as a whole, a decline can be seen in share. We see a weakening of local work ties in the inner municipalities. By 2006, Darebin, in particular, saw a decline in the number of Whittlesea workers living there. Both Hume and Whittlesea held steady shares. This reflects, to some extent, the ‘gentrification’ of those LGAs that are closer to the CBD – where housing and rental prices have increased and higher-level producer services jobs have emerged. Coincidentally, most of the fall recorded in the ring LGAs was accounted for by a rise in the share of workers travelling from Brimbank in the south-west. This is an important result, as it probably relates to the use of the Western Ring Road that connects these two parts of suburban Melbourne. This was recognised as an important factor in the organisation of the industrial system and the location of the industry (as seen in previous chapters). Other connections between Whittlesea jobs and Brimbank are that unlike LGAs to Whittlesea’s south, Brimbank has not seen the same level of gentrification of the housing market and it remains a key location for newly-arrived migrants (City of Brimbank, 2010; VLGA, 2010b).

The significance of these results is underscored by a comparison with total employment for Whittlesea jobs, shown in the right hand group of columns of Table 8.2. Although the level of self-containment (41% in 1996; 40% in 2006) is lower for the sector vis-a-vis total employment (47% and 44%), the proportions for the sector have remained almost steady, while for Whittlesea overall have declined. Thus, the sector has resisted a broader trend towards the weakening of the first interpretation of self-containment shown in Table 3.2.

Another perspective can be gained by understanding the importance of municipalities as a work location for Whittlesea residents working in the sector, whether in Whittlesea or elsewhere. These data are displayed in Table 8.3.
Table 8.3. Self-containment: location of work for Whittlesea residents, FBT sector and total employment, 1996 and 2006

<table>
<thead>
<tr>
<th>Location</th>
<th>FBT sector</th>
<th>Total employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1996 %</td>
<td>2006 %</td>
</tr>
<tr>
<td>Whittlesea</td>
<td>26</td>
<td>35</td>
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<tr>
<td>The surrounding ring</td>
<td></td>
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<tr>
<td>Hume</td>
<td>17</td>
<td>14</td>
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<tr>
<td>Darebin</td>
<td>12</td>
<td>9</td>
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<tr>
<td>Moreland</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Banyule</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Nillumbik</td>
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<td>0</td>
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<tr>
<td>Total surrounding ring</td>
<td>42</td>
<td>33</td>
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<tr>
<td>Inner city</td>
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<tr>
<td>Yarra</td>
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<td>6</td>
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<td>Melbourne</td>
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<tr>
<td>Total inner city</td>
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<td>8</td>
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<tr>
<td>Other locations</td>
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<td></td>
</tr>
<tr>
<td>Brimbank</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Rest of Melbourne</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
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<td>8</td>
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<tr>
<td>Total other locations</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

a. 1996: n = 1,182  
b. 2006: n = 1,256  
c. 1996: n = 43,811  
d. 2006: n = 51,427

Source: Data generated 18 March 2005 and 30 September 2008 using data provided by the ABS; ABS, 2007d.

The results in Table 8.3 show that Whittlesea residents working in the FBT sector have moved job locations closer to their local area (an increase of 9% share) and look less to the adjoining ring, although two-thirds still work in these areas combined. A major change is the importance of the City of Yarra as a work destination. As can be seen in Table 8.3, in 1996, 13% of Whittlesea residents working in the FBT sector worked in the City of Yarra, and this had reduced to 6% ten years later. This is a reflection of the large number of employees at the Carlton and United Breweries factory there and, presumably, a significant decline in its workforce by 2006. In addition, some firms located in Yarra may have moved into Whittlesea
or the adjoining ring of municipalities over this period (although this was not picked up in the survey of 19 firms out of the 47 in total).

This set of observations suggest that circumstances in the housing market, perhaps associated with changes in housing affordability, have strengthened the geographical correspondence between housing and labour markets for employees in this industry - this would match the findings of the broader study by O’Connor and Healy (2002), noted in Chapter 2. There is also the role of the availability of new housing on growing estates in Whittlesea, although it is not clear whether process workers, who make up the bulk of FBT employment, would be able to afford this. However, it is possible that trades workers, who are categorised by the ABS as Skill Level 3, could. 23 The housing market factor then is reinforced by the greater local availability of FBT jobs – recalling from Chapter 4 that the location quotient has strengthened markedly between 2001 and 2006.

These results provide the strongest measures yet of local connections, suggesting that labour market ties are more important than industrial system ties as an impact on local conditions. This is reinforced by an analysis of the ties in separate levels of the labour market. The following examination, of another aspect of the customised Census data, provides several insights. In Table 8.4, changes in occupational levels of employees in firms in Whittlesea are shown.

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23 See Appendix E for a full description of this and other ABS occupational categories.
Table 8.4. FBT sector in Whittlesea: occupational change, all jobs, 1996 and 2006 *

<table>
<thead>
<tr>
<th>Skill level</th>
<th>Occupation</th>
<th>1996</th>
<th>2006</th>
<th>% change in share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Jobs</td>
<td>% of total jobs</td>
<td>No. of Jobs</td>
<td>% of total jobs</td>
</tr>
<tr>
<td>SL 1 a</td>
<td>Managers, Administrators, Professionals</td>
<td>76</td>
<td>11%</td>
<td>164</td>
</tr>
<tr>
<td>SL 2</td>
<td>Associate Professionals</td>
<td>16</td>
<td>2%</td>
<td>21</td>
</tr>
<tr>
<td>SL 3</td>
<td>Tradespersons &amp; Related, Advanced Clerical &amp; Service</td>
<td>127</td>
<td>18%</td>
<td>114</td>
</tr>
<tr>
<td>SL 4</td>
<td>Intermediate Production &amp; Transport Intermediate Clerical, Sales &amp; Service</td>
<td>177</td>
<td>25%</td>
<td>275</td>
</tr>
<tr>
<td>SL 5</td>
<td>Labourers &amp; Related, Elementary Clerical, Sales &amp; Service</td>
<td>325</td>
<td>45%</td>
<td>521</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>721</td>
<td>100%</td>
<td>1095</td>
</tr>
</tbody>
</table>

* Excludes responses where skill levels were not identified

Source: Generated 18 March 2005 and 30 September 2008 using data provided by the ABS.

Table 8.4 shows that in both years, there was a ‘bell’ pattern for skill levels in the Whittlesea FBT sector. In 1996, 70% of positions were within the two lowest-skilled categories. In 2006 this had increased to 73%. However, the two highest skilled categories had also increased in proportion, from 13% to 17%. Thus, by 2006, the ‘bell’ effect had moved slightly to an ‘hourglass’. Hence, SL 3, which is dominated by trades positions, saw a downwards shift of eight percent. There are two possible explanations for this decline. Outsourcing of trades services may mean that responses to Census questions no longer indicate ‘attachment’ to the FBT sector in particular. Another explanation is that something about the manner of
mechanisation has made such positions redundant. Admittedly, neither of these explanations emerged clearly in the interviews, so a full answer would need further research. Table 8.5 shows data on the status of residents working in the local sector.

Table 8.5. FBT sector in Whittlesea: occupational change, residents’ jobs, 1996 and 2006 *

<table>
<thead>
<tr>
<th>Skill level</th>
<th>Occupation</th>
<th>No of Jobs 1996</th>
<th>% all jobs held by residents</th>
<th>No of Jobs 2006</th>
<th>% of all jobs held by residents</th>
<th>% change in share</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL 1</td>
<td>Managers, Administrators, Professionals</td>
<td>23</td>
<td>30%</td>
<td>43</td>
<td>26%</td>
<td>-4%</td>
</tr>
<tr>
<td>SL 2</td>
<td>Associate Professionals</td>
<td>0</td>
<td>0%</td>
<td>7</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>SL 3</td>
<td>Tradespersons &amp; Related, Advanced Clerical &amp; Service</td>
<td>45</td>
<td>35%</td>
<td>42</td>
<td>36%</td>
<td>1%</td>
</tr>
<tr>
<td>SL 4</td>
<td>Intermediate Production &amp; Transport Intermediate Clerical, Sales &amp; Service</td>
<td>75</td>
<td>42%</td>
<td>113</td>
<td>41%</td>
<td>-1%</td>
</tr>
<tr>
<td>SL 5</td>
<td>Labourers &amp; Related, Elementary Clerical, Sales &amp; Service</td>
<td>166</td>
<td>51%</td>
<td>235</td>
<td>45%</td>
<td>-6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>309 n.a.</td>
<td></td>
<td>440 n.a.</td>
<td>n.a</td>
<td>n.a</td>
</tr>
</tbody>
</table>

* Excludes responses where skill levels were not identified

**Source:** Generated 18 March 2005 and 30 September 2008 using data provided by the ABS.

The proportion of locals occupying SL 1 positions (30% in 1996; 26% in 2006) is certainly a higher figure than the proportion of all jobs at SL 1 (Table 8.4). There is, nonetheless, the 4% decline for locals’ jobs at this level. What this suggests is that managers, administrators and
professionals employed in this industry in Whittlesea were less likely to live there, having sought out other residential locations. This is important, as this group’s rate of increase, at 4%, represents the highest rate of increase for all jobs in the local sector – the ‘growth’ jobs. Second, however, locals’ share of the lowest-skilled level positions also declined, from 51% to 45%. This may suggest that there has been some movement of Whittlesea residents with lower skills into other local industries - or to other areas (perhaps into Hume or Brimbank). And the locals’ share of SL 3 jobs has remained steady. As suggested above, it may be new housing estates attract trades workers to Whittlesea. This outcome is in fact problematic, as it is at this level that jobs are in decline. In general terms, what the above set of data shows is that the local Whittlesea labour market is overwhelmingly a low-skill market. The largest number of jobs and the largest share of jobs taken by Whittlesea residents are both in the low-skill category.

8.3 Food and beverage firms and the geography of the labour market: firm interviews

As noted in the description and discussion of the methodology, Census data have inherent limitations. In that chapter, it was pointed out that the timing of the Census failed to account for seasonal highs in employment. Nor does it count second jobs – that is, part-time work, of which casual work is a large component. Therefore, triangulation is called for. To that end, data were sought from firms on the location of their workers’ residences.
Figure 8.1 displays the responses of the sixteen firms that provided relevant information on the residential location of their labour force. As can be seen, the depth of understanding by owner-managers of the residential location of their workforce varied. Some respondents only seemed to be aware, or were willing to indulge whether or not their workforce lived in Whittlesea (hence, column one – more than >50%) or in Melbourne’s north. Hence possibly, for this response ‘Melbourne’s north’ may have also included Whittlesea. For example, Bakery 90 responded: ‘80% of our staff are from Whittlesea or Hume’ and Poultry 140 reported ‘you are not going to get anyone from the other side of town’, implying a spread into the ring of adjoining municipalities as was found in the Census data. However, four firms, in fact, reported that 100% of staff lived in Whittlesea (Dairy 9, Bakery 12, Convenience 14 and Dairy 40). One firm (Beverages 15) estimated at least 90% and the trade union organiser at Poultry 290 estimated 85%. One firm reported a range of suburbs spanning the northern and western suburbs.

Disaggregated data shows there were no significant differences in self-containment rates for firms when classified by date of arrival or sub-sector (Table 10, Appendix B). The responses
displayed in Figure 8.1 clearly indicate that the extent of labour market self-containment is far higher for surveyed firms than for those captured in the broader scope of the Census data. The rest of this chapter explores a series of background factors in firm behaviour and attitude that shapes that outcome.

**Preference for local labour**

Seventeen firms provided relevant information on the significance, or otherwise, of hiring from within the City of Whittlesea. Four types of responses were forthcoming and these are shown in Figure 8.2.

**Figure 8.2. Stated preference for labour: local and non-local**

![Bar chart showing preferences for local and non-local labor](chart)

*Source: Interviews with firms, 2008.*

Figure 8.2 shows an equal proportion of responses for a preference for ‘local labour’ and ‘uncommitted’. These responses did not differ for the different categories of firms, as shown in details provided in Table 11, Appendix B.
Bakery 12 was the only firm which actively avoided employing local people. For this manager, there were two reasons: lack of trust and an issue arising from familiarity:

You know them…people you know as equals are resentful when you start to give them orders. And we don’t advertise ourselves locally, either in the shop window or the local newspapers, because you get too many people who won’t show up for work (Bakery 12).

This response was unusual, just as Bakery 12 was unusual – a shopfront café with a bakery attached, which (paradoxically, perhaps, given the above comments), as shown in Chapter 6, saw the ‘local community’ as the basis of its clientele. The retail dimension of this firm may have created some special concerns in its perception of local labour. Certainly its attitude was very different from most of the other firms.

Most of the firms that were uncommitted to the local area as a source of labour indicated that location was not an issue. This is captured in the comment: ‘…the location’s irrelevant. It’s basically a case of sourcing who can meet our requirements…I don’t know where they’re all from these days’ (Poultry 140).

One manager who stated he was not committed to hiring from the local area nonetheless acknowledged that local supply was the key factor.

[While there’s] ‘…not really [a preference for Whittlesea labour] …it just so happens that people that are local are looking for work. We’ve got a heap of Indians and Sri Lankans and Pakistanis and it’s the United Nations… That’s one thing I really enjoy is the fact I'm giving people an opportunity that are new to Australia, the opportunity to get a job, buy a house and all that sort of stuff (Bakery 90).

For those firms with a clear preference for local labour, ease of access and potentially lower turnover was the main concern:

…if anyone was to ring us, say, further out…and let’s say it’s a driver’s job, he's not serious because the amount of time they waste coming out to our place, they’re obviously looking for a short-term position and they’ll move to something closer so usually they’re [who we employ are] local...(Oil 20).
I believe that when you do have local employment, they [employees] tend to last longer, whereas people who are outside what you may class, your zone, tend to get sick of travel sometimes, or traffic is frustrating (Dairy 40).

These responses provide a different perspective from that of the Census data displayed in Tables 8.2 and 8.3. In spite of the proximity of the major ring road which spans Melbourne’s North and West and facilitates car-based labour movement over longer distances, firm managers still have very short distances in mind as influences on commitment and reliability. The implication is that managers are concerned that they cannot keep staff, reinforcing the benefits of drawing upon the local area. This perceived friction of distance for labour is of far greater concern than it is for other aspects of the industrial system, examined in previous chapters.

The general perceptions expressed above were made more explicit by one firm:

Yes… [we prefer workers from Whittlesea] …I think that if we demonstrate that we have a close tie with the community over here, they’ll be a lot more understanding of the demands of a manufacturing environment. Because people who work over here have got friends over here and they talk over a barbeque, and our name will be looked on, not with disdain, but more – this is an organisation that employs our local people and we need to support them (Fruits 160).

This more sophisticated approach mirrors the organisational behaviour of Fruits 160 more generally - for example, that it held ‘innovation days’ with suppliers (Chapter 7) and as we will see, it played a central role in both the founding and operation of the Plenty Food Group (Chapter 9).

Recruitment methods

The use of local labour will depend in part on the approaches that firms adopt to recruitment. In this section, we examine the method and geography of recruitment to determine how it might feed into the local dimension in the labour force. The research identified four different types of responses:

- Formal methods located in Whittlesea that were instigated by the employer.
- Formal methods located beyond Whittlesea that were instigated by the employer.
Informal methods located in Whittlesea instigated by the employer.
Informal methods located in Whittlesea instigated by the workforce.

These results are displayed in Table 8.6.

**Table 8.6 Method and geography of recruitment**

<table>
<thead>
<tr>
<th>Firm</th>
<th>Formal – local area, employer</th>
<th>Formal – non-local area, employer</th>
<th>Informal local area, employer</th>
<th>Informal local area, workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beverages 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beverages 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antipasto 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confectionery 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antipasto 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beverages 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil 20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy 40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meats 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poultry 140</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits 160</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confectionery 180</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meats 240</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poultry 290</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Interviews with firms, 2008; interview with AMIEU/Poultry 290, 2008.*

Useful information was obtained from 20 firms (including the union delegate at Poultry 290). Disaggregated data, which show further breakdown of the categories, are provided in Table 12, Appendix B. Four indications are apparent from Table 8.6. First, as can be seen from all columns, there is an unexpected result: the smaller the firm, the more likely is the recruitment process to be non-local. Second, the larger the firm, the more likely is recruitment to be the result of the initiative of local individuals in the form of ‘door-knockers’ or ‘cold-callers’ (Column 4). It might be expected that the firms with large numbers of staff would be more eschew informal methods so that the recruitment process could be screened and streamlined via
informal methods. This was not the case. While almost all medium and large-sized firms used formal methods in their recruitment, six also had local network or ‘door-knock’ methods at their disposal. Of the ten small firms, six used exclusively formal methods (columns one and two). It would seem, then, that the larger the labour force, the more opportunities for networking. The third key observation is that informal network methods stem mostly from labour, not management (column three cf four). This is significant evidence of local connections in firm operations – and they largely stem from the workforce itself. And fourth, in terms of the geography of recruitment, it can be seen that where firms adopt formal methods such as recruitment firms or labour hire agencies, these services, like so many other examples we have seen of the industrial system, are drawn from outside Whittlesea and in this sense, are not contributing to the local economy and therefore, not drawing on potential local networks.

Even when we examine in detail the responses of those managers who used formal sources based outside Whittlesea, they seem to do so reluctantly. There is some indication that their ‘natural preference’ is for local labour:

Up until [recently]…we have not used a labour hire firm… I didn’t believe in the use of labour hire firms. I believed that we had a brand that was strong and we had a society around us that had ample skilled people that we could get at when we need to… But the growth that we’ve been experiencing, we can’t get and retain sufficient skilled staff. So we have to depend on someone else to do that for us. We put ads in the papers and we’d get 150 applicants. It’s a long time to go through 150 applicants when there are only two roles or three roles (Fruits 160).

There was no such ‘natural preference’ expressed for local connections in any other aspect of the industrial system reported elsewhere in the research.

Bakery 90 told a similar story:

…you’ll put an ad in the paper, you might get 50 phone calls, then the production manager is… stressed, he’s flat out, he rushes up and puts the first guy on, doesn’t do any checking. Then he finds out the guy is a dud… (Bakery 90).

When formal methods were used, firms were conscious of the need to monitor and control the ‘quality’ of labour procured:
…we started using one of those casual agencies and it was a disaster…you’d have good and bad employees. They couldn’t ‘step up to the plate’, they wouldn’t come to work dressed properly…you really didn’t know who you were getting. They [the agency] were supposed to have done all the checking, but they really hadn’t…you bring in a casual that doesn’t know the place, doesn’t know the other employees, you’re taking a pretty big risk really (Bakery 90).

The stance of Confectionery 180 was similar:

We tend to work closely with one casual agency in particular…We have a structure in place that sees us managing our casual bank and we try to manage our staff as closely as possible. I recall when it started becoming quite the fad of using casual agencies…And it was a use and abuse introduction of labour…‘if I don’t like them they’re not my responsibility. If they hurt themselves they’re not my responsibility. I don’t have to train them, I just bring them in, bark at them, who cares what happens to them’…So I’ve never made a permanent commitment. And the level to which that staffing pool was could potentially be quite poor… (Confectionery 180).

These views are very similar to those of Expert A, the industry skills specialist who gave evidence on the use of labour hire agencies in Victoria:

Of those [Victorian food and beverage firms] that said [to me] they were moving away from it [labour hire agencies], a big issue for them was corporate identification and company commitment [of the workforce]…A number of them were questioning whether they actually got any value out of that in practice. It would be very difficult for a company outside of the workplace environment to adequately prepare someone to understand the risks they are going to face in that particular workplace (Economic Development Committee, 2005: 275-276).

These comments suggest firms adopt formal, non-local methods reluctantly, as they have not been as effective as might have been hoped, and the quality issue is a concern. What they also hint at is the attachment to the local labour force – even for casuals, in the case of Confectionery 180, which begins to explain the strong local connection between local firms and local labour.
As will be seen below, some of the concerns regarding formal approaches were addressed by firms benefiting from the more traditional local networks of family, neighbourhood and ethnic group contacts of the workforce itself. This provides a galvanising local connection. Having said that, surveyed firms used local networks of their own volition to acquire staff on only two occasions. As noted in Chapter 6, Confectionery 11 recruited staff that had been retrenched from a food firm in the neighbouring LGA of Hume that had closed and this contact was arranged by the Plenty Food Group. The manager of Antipasto 11 used his own contacts, which were both within and outside Whittlesea. There was no instance specified of employers acquiring staff or even gaining information about the availability of staff from other local firms, nor any firms, for that matter, still in operation. Nor were there any instances of staff being acquired from a university or TAFE college. For the workforce, and what might be termed more broadly the local community, it was an entirely different matter: informal networks were used to gain employment at seven firms. These methods were word of mouth from the workplace (this occurred at five firms) and ‘cold calling’ from the street (two firms).

Informal network contacts instigated by the workforce or the broader community proved to be an efficient method of recruitment as far as management was concerned:

The word-of-mouth is quite good because sometimes it’s somebody’s friend…we’ve got Muslims, Vietnamese, we’ve had Afghani’s, they’ve gone at the moment, a little bit of Italian, Greek, Macedonian, and Yugoslav…you'll get a couple in and then they’ll say my sister needs a job or the lady next door and that's not too bad in a way, because they sort of know what the job entails. They know whether their sister or their cousin or the next door neighbour can do the job. Whereas if I get you in and you've come through an employment agency you say ‘oh yeah it sounds good’, when you get here you go ‘oh no it’s not really for me’ (Bakery 35).

Look I don't even ask for a referral, there's not much of an interview. Can I trust you by bringing someone with you that you can recommend? Yes. Bring them in and we’ll give them a go, it is as simple as that (Convenience 14).

Every year we have people that would bring other members of their family, especially in school holidays, to work. So we have whole families that work here (Fruits 160).
In these examples, there is clearly a large element of trust between employer and employees, as the employer is happy for staff to make recommendations, including of their own family members.

It is not surprising that in a location such as Whittlesea, and in a sector such as food and beverage manufacturing, that local ethnic affiliation would come into play in this process. This is noted explicitly by Bakery 35 above and is supported by TAFE Trainer A: ‘…we know that [work entry through one’s local ethnic affiliation] happens for everybody…’

Broader, anecdotal descriptions of the strength and depth of local ethnic affiliation in Whittlesea, were brought up often in interviews. The Council’s migrant liaison officer recalled how the Greek community located to Whittlesea from the inner suburbs, but that it was difficult to tell whether the industry or the people arrived first. He felt, however, that there was little doubt that the low cost of housing was an attractive factor. He remembered growing up in Whittlesea in the 1970s, and highly-localised, ethnic-specific communities were common; everyone in his street was Greek; as the community established, so it attracted more from the same country. A firm owner had a similar story:

…when you bring in a village individual from any country in the world and you dump him in suburban Melbourne, I can assure you that you need to cushion the impact…usually these people do have many, many things in common… coming from rural and village environments, the open space is really keeping in touch with your comfort-zone back home. That’s exactly what it did to me as a young fifteen-year-old [when the respondent moved to then rural Epping, a northern suburb of Whittlesea, in the mid- to late-1960s]… (Dairy 9).

Hence, the complex and significant relationships between ethnicity, housing location and job location together reinforce the local expression of this industry sector. Informal network methods of introducing staff are largely dependent on local geography and, in turn, underpin the self-containment that connects the industrial system to its local base. In effect, it is through the labour market, specifically via recruitment, that local networks find their expression. Indeed, these networks are labour networks and a labour geography, reminiscent of the work of Herod (1997), where labour ‘takes the lead’ - in most cases, instigated by either the existing workforce from the factory floor or by would-be workers, literally from the street.
**Favoured staff qualities**

To pursue the question of the local dimension of labour at a deeper level, firms were asked what qualities they looked for when hiring staff. Eighteen firms provided relevant information on this interview theme, and Table 8.7 summarises the responses.

**Table 8.7. Favoured staff qualities**

<table>
<thead>
<tr>
<th>Firm</th>
<th>Qualities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages 4</td>
<td>Customer people skills, communication skills, knows the job, efficient, very friendly, patience with customers</td>
</tr>
<tr>
<td>Beverages 5</td>
<td>All that's required is that they do the job</td>
</tr>
<tr>
<td>Beverages 6</td>
<td>Someone who is prepared to do eight hours work, commitment, honesty</td>
</tr>
<tr>
<td>Dairy 9</td>
<td>A person that we can bring in and build up, temperament of a personality</td>
</tr>
<tr>
<td>Confectionery 11</td>
<td>Past experience in the industry, reliability</td>
</tr>
<tr>
<td>Antipasto 11</td>
<td>Workers that are prepared to do basic tasks</td>
</tr>
<tr>
<td>Antipasto 12</td>
<td>Trustworthiness</td>
</tr>
<tr>
<td>Bakery 12</td>
<td>Customer service, personality, politeness, efficiency</td>
</tr>
<tr>
<td>Antipasto 12</td>
<td>Reliability, punctuality, initiative, pro-activeness</td>
</tr>
<tr>
<td>Convenience 14</td>
<td>Willingness to work as a team, happy to take instructions, blend into a multicultural workforce</td>
</tr>
<tr>
<td>Beverages 15</td>
<td>Clean and decent</td>
</tr>
<tr>
<td>Oil 20</td>
<td>The right person with the right attitude</td>
</tr>
<tr>
<td>Meats 60</td>
<td>Reliability and a willingness to comply with food safety regulations</td>
</tr>
<tr>
<td>Bakery 90</td>
<td>Reliability, honesty, integrity, willing worker, initiative</td>
</tr>
<tr>
<td>Poultry 140</td>
<td>Multi-attitude: prepared to entertain minor change to their routine; regular timely attendance, reasonable effort, getting on with fellow team members, respecting authority</td>
</tr>
<tr>
<td>Fruits 160</td>
<td>Effective communicator, integrity, achieving targets, leadership, team work</td>
</tr>
<tr>
<td>Confectionery 180</td>
<td>Ethnic balance</td>
</tr>
<tr>
<td>Meats 240</td>
<td>Physical attributes</td>
</tr>
</tbody>
</table>

*Source: Interviews with firms, 2008.*
What is remarkable about these responses is the almost complete absence of reference to codified skills, such as qualifications, or even reference to previous experience in the sector. Rather, most responses are a variation on the theme of the ‘character’ of the individual. Expectations can be high:

…the person should be an effective communicator… with some integrity; they have got to have very strong commitments to achieving targets. So in other words they’re goal-setting…just because they’re a process worker doesn’t mean to say that in a situation, their leadership doesn’t come out …We look for people who can demonstrate effective team-working skills…There’s little psych tests we’ve got to pick the right people…as to whether or not these people have got integrity and commitment (Fruits 160).

We’re not after experts here, we’re not after people with experience, it’s about making an assessment on the temperament of a personality that I feel, that it’s my job to just build people up and nine times out of ten you do it (Dairy 9).

I don’t think you’re looking so much for multi-skilled, you’re looking for multi-attitude…we’re really looking for people who are prepared to entertain minor change to their routine and the tasks that they do. The core skill-base we’re looking for is the common sense disciplines of coming to work everyday, coming on time, putting in a reasonable effort, getting on with their fellow team-members and respecting authority…And most of the time you can find it (Poultry 140).

Here again can be seen the paradox of a local sector which does not generally require particular skills but which is very particular in its requirements of, as Dairy 9 put it, ‘the temperament of the personality’. This behaviour resembles the local labour market model, which seeks to explain the influence of labour through taking account of its local characteristics, for example, local ethnic affiliation.

8.4 Summary

After finding in previous chapters that the various components of the industrial system were generally not expressed through relationships at the local level, this chapter has turned attention to the labour market. We began by establishing empirically the local presence of the labour market. The customised Census data showed the market was increasingly self-contained over
time. It also showed a tendency, over time, towards an ‘hourglass’ effect for jobs within Whittlesea: the highest and lowest-skilled levels saw an increase in proportion; the middle ranking trades workers saw a clear decline. But for those Whittlesea residents occupying those jobs, the converse was true. Their share of Skill Level 1 and Skill Level 5 positions had declined, while Skill Level 3 had slightly increased in proportion.

Interviews with firm managers, who of course keep tabs on the ebb and flow of labour right throughout the year, indicated that self-containment was in fact higher than the Census data indicated. To put it another way, the labour market was far more ‘local’ than first appears. Regarding methods and geography of recruitment, the research found two differing nexus – informal/network/local labour-instigated and formal/non-network/dispersed management-instigated. Regarding the preference for local labour, as many firms explicitly indicated that it was preferred as were ‘uncommitted’, while only one firm indicated they did not prefer it. Transport access was the main attraction, although one firm pursued a more sophisticated policy, attempting to align the community’s interests with its own. Delving deeper into the relationship between firms and local labour, the research then examined responses on qualities looked for in staff. Codified skills and past experience were almost entirely absent, and it was responses based on good character which predominated. What links this finding to the local geography of labour and the prominent role that the existing workforce had in recruiting new members, is that it is dependent on trust, which implies familiarity – the familiarity, that is, of existing workers with prospective workers. Figure 8.3 draws together the findings of this chapter to show that the thesis hypothesis has considerable weight.
Figure 8.3. The ‘diamond’ of local labour links

Figure 8.3 shows how labour links to firms have strong, interrelated local dimensions. The extent of *self-containment* shows that the geography of labour is far more local than any other aspect of the industrial system and is strengthening. *Community links*, as reflected in housing markets and community affiliations provide a local ‘anchor’. The *personal qualities looked for in staff* reflects the personal relationships between those already working in the sector and local contacts in the community. And finally, the *preference for local labour* shows that the local strength of the labour market is encouraged by firms.

The fourth key finding of the thesis stands at variance to the previous three. For the first time, we have established a significant local connection and influence on firms’ operations - something that was not apparent in the industrial system analysis in Chapters 5, 6 and 7. That connection is the local labour market, and indeed, it is the workforce and the local community...
itself which plays a central role in forging that connection. Therefore, industrial development
depends very strongly on these local connections; the impact of industrial development flows
out through labour market connections, but those connections, in turn, can act as an influence
on the level and pace of that development.

But what of the role of policy and institutions in the local impact of industrial development?
As we saw in Chapter 4, there is evidence of significant potential engagement at these levels.
While we have already touched on this, in, for example, the discussion of locational decisions
(Chapter 5), how deep that engagement goes and its local impact requires further investigation,
and it is to this we turn in the next chapter.
Chapter 9. The Institutional Context and the Geography of Industrial Policy

9.1 Introduction

This chapter examines the local impact on firm and labour market operations of key institutions and of an important local industrial policy. The first section of the chapter focuses on the firms, and examines the policy impacts of a local economic development body directed at the food and beverage sector. The chapter then turns to the links between RMIT University, specifically, its Food Technology department, and local firms. These elements, policy and institutions, are key features of the industrial cluster model in the understanding of local impacts of economic development. The second section assesses the impact of these policies and institutions on the labour market, adding two very specific labour-focused measures: trade unions and English language and workplace-training services.

9.2 Local industrial policy, local institutions and the industrial system

9.2.1 The local economic development body: The Plenty Food Group

**Genesis and driving forces**

The Plenty Food Group was formed in 2004 and covers food and beverage manufacturing firms in Whittlesea and the neighbouring municipality of Hume. The Group was formed as the result of the efforts of two key individuals. In 2004, Whittlesea had recently appointed a new Director of Economic Development. He was keen to exploit opportunities for further development of prominent or promising sectors. In 2002, a Queensland-based company took over a local firm that had been established in the area since 1990. The Queensland firm saw advantages in maintaining identification with the local area apparently enjoyed by the original Whittlesea firm. Hence, developing local manufacturing generally was part of its strategy, and its Whittlesea branch manager pursued this approach (interview with Fruits 160). More generally, with the climate of interest in Melbourne’s North in general, encouraged by Northlink/NEITL and the NACC, a positive policy environment existed for the creation of the Group. The coupling of Hume and Whittlesea was based on good pre-existing relations between the two councils; there was no pre-existing collaboration between firms which influenced the choice of sector. Collaboration between councils also made it easier to apply for
funding from the State Government’s Regional Innovation Cluster Program (Interview, PFG Convenor).

Membership is open to any food and beverage manufacturer, as represented by firm management in Whittlesea or Hume, and is also open to ‘alliance’ members from anywhere in Melbourne who have a direct connection with local firms – for example, suppliers. Seed-funding of $50,000 was provided by the Victorian Employers Chamber of Commerce (VECC) (Zampetakis, 2006). Subsequent funding of $100,000 per annum was provided by the state government’s Regional Innovation Cluster Program (State Government of Victoria, 2008). In 2008, the Group became partly self-funded through membership costing $400 a year, per firm and $500 annual fee for ‘alliance’ members.

A Convenor was appointed in 2005 and was based at the City of Whittlesea. One of his first tasks was to administer a basic survey of local firms on their characteristics and needs. This information formed the basis of subsequent seminars, training and workshops (NACC, 2006). The Group has three overriding objectives: reduction of supply-chain costs; development of export potential; and enhanced marketing. The main strategy to achieve these objectives is to pool the resources of the Group to, for example, bulk purchase electricity and share transport, with the objective of enhancing the competitiveness of SMEs in particular (interviews with Fruits 160, PFG Convenor). These more specific objectives and strategies were influenced by a later survey of a small proportion of local firms (Dalrymple, 2007). 24

The broader objectives, as laid out by the City of Whittlesea’s Economic Development Unit, are quite ambitious:

We already have a strong local industry and this is set to expand with the relocation of the Melbourne Wholesale Fruit, Vegetable and Flower Market to Epping in

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24 John Dalrymple is a Professor within the School of Property Construction and Project Management at the city campus of RMIT University, Melbourne. The survey was requested by Whittlesea City Council and funded by the Commonwealth Department of Transport and Regional Services with the support of the NACC and received a 10% response rate. It asked questions on a range of issues, including the geography of firms’ supply chains. While not providing exact figures, the overall findings were that Melbourne’s North (and other locations, without identifying Whittlesea specifically) was a source of packaging, plant and equipment (along with locations beyond Melbourne’s North). Distribution of goods occurred ‘locally’ (and non-locally). Maintenance of plant and equipment was sourced ‘locally’.
We want to make sure that local companies are in the best possible position to take advantage of the opportunities available. We are also aiming to become recognised as a ‘food hub’ that incorporates manufacturing, wholesaling and their supply chains as well as research and development linkages with RMIT and other academic institutions—a total ‘package’ for the sector (Director, Economic Development, City of Whittlesea, quoted in NACC 2006, n.p.).

**Activities**

The achievements listed on the Group’s website are far ranging (PFG, 2008). These include advocacy, export contracts worth $6 million, ‘skill development for the food companies to deal with major food buyers in the Australian market’, supply chain cost reductions, ‘new trust and relationships established between members’, development with RMIT University and others of a water saving ‘ready reckoner’, information about an international halal brand and ‘a tremendous resource available’ in the form of RMIT University’s Food Science division.

The cornerstone of the Group’s network is a monthly newsletter which disseminates a wide range of information. During 2008, this included availability of council services (e.g., environmental audits, business plans), notice of summits, conferences and exhibitions, including visiting foreign importers, speeches by employer groups (for example, the impact of industrial relations’ law changes), business breakfasts, a request for food science and technology students to tour factory premises and supplier expos. Figure 9.1 and Table 9.1 categorise the information, including the activities of the group as disseminated through its newsletter over a twelve month period in 2007-08.
It can be seen from Table 9.1 that in total, around two-thirds of the Group’s activity was devoted to developing the industrial system: marketing, suppliers and business services and networking opportunities/information sharing. The term ‘innovation’, however, was used on only two occasions during the survey period (‘promote your innovative products’ and ‘Food Innovation Grants Program’). The terms ‘ideas’ or ‘knowledge’ were not used in any promotional or information-dissemination publications.
Table 9.1. PFG: examples of activities and information

<table>
<thead>
<tr>
<th>Suppliers/business services</th>
<th>Research Institute Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plenty Food Group Supplier Expo</td>
<td>Foreign Investment Seminar (Latrobe University)</td>
</tr>
<tr>
<td>Plenty Food Group Supplier Database</td>
<td>Water Toolkit (RMIT)</td>
</tr>
<tr>
<td>Food Innovation Grants Program</td>
<td>Food Science Student Tours (RMIT)</td>
</tr>
<tr>
<td>Food Waste Required</td>
<td>Supply Chain Research (RMIT)</td>
</tr>
<tr>
<td>Food Solutions Expo 2008</td>
<td>Linking with Academic Researchers</td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td><strong>General information</strong></td>
</tr>
<tr>
<td>Brunei Halal Brand Launch</td>
<td>PFG Information</td>
</tr>
<tr>
<td>Fine Food Australia Exhibition</td>
<td>New Website</td>
</tr>
<tr>
<td>Food and Hotel Asia Exhibition</td>
<td>Victorian Family Business of the Year</td>
</tr>
<tr>
<td>Whittlesea Country Music Festival</td>
<td>Worksafe - Safety Blitz on Food Industry</td>
</tr>
<tr>
<td>NMIT Food and Wine Expo</td>
<td>Melbourne Food Market Update</td>
</tr>
<tr>
<td><strong>Networking/info sharing</strong></td>
<td><strong>Labour market related</strong></td>
</tr>
<tr>
<td>Business Breakfast</td>
<td>List Your Jobs Vacancies for Free</td>
</tr>
<tr>
<td>Promote Your Innovative Products</td>
<td>Jobwise Network for Mature Workers</td>
</tr>
<tr>
<td>National Packaging Covenant</td>
<td>Job Fair for School Leavers</td>
</tr>
<tr>
<td>Role of Melbourne Airport</td>
<td>Multicultural Centre for Womens' Health</td>
</tr>
<tr>
<td>Business Efficiency Network Forum</td>
<td>Seminar on Australian Labour Market Trends</td>
</tr>
</tbody>
</table>

*Source: PFG, 2008.*

Figure 9.1 and Table 9.1 show considerable commitment to a range of activities, which includes, at face value, ideas generation through research-related activity and development of the labour market. However, as has been seen in the analysis to date, these sources have not been cited by surveyed firms as a source of ideas. This suggests that in spite of the activities offered above, they have not been taken up by surveyed firms, or are regarded as insignificant in firms’ own assessments of local impact, a theme we will now investigate in detail.

**Plenty Food Group: local impact**

What influence has local industrial policy, in the form of the *Plenty Food Group*, had on developing local links and consequently a local impact? There are several measures which can be applied in such an assessment.

**Policy intent**

Is the PFG intended to establish local links? Based on examination of its activities, the answer is undoubtedly, ‘yes’. This observation needs to be qualified by the fact that this does not, in any sustained way, extend to an attempt to facilitate ideas-generation and ideas-sharing through
collaboration. There were no specific ‘ideas-generation’ sessions, but there were ‘information sessions’.

**Participation levels**

In October, 2008, the fee introduction saw out of a total of 47 firms, 20, or 43%, taking out membership. There was, to this point, only one ‘alliance’ member (a packager based in the south-eastern suburbs). The question is how to judge this outcome? Compared with the negligible level of firm-to-firm contact reported in Chapter 6, membership of over a third is a strong result. Table 9.2 provides a breakdown of all Whittlesea firms (not just those surveyed) who chose to take up membership, by firm size where this information was available.

<table>
<thead>
<tr>
<th>Firm size</th>
<th>No. of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>4</td>
</tr>
<tr>
<td>Medium</td>
<td>3</td>
</tr>
<tr>
<td>Large</td>
<td>8</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Source:** PFG, 2008

It can be seen that over half of the Whittlesea PFG member firms for whom employment numbers were available were large firms. Perhaps then the strength of the SME orientation of the Group is doubtful.

**Influence on the operation of firms**

Figure 9.2 reports responses of surveyed firms when asked about the role and significance of the Group for their firm.
As indicated in Figure 9.2, only a small number of firms saw the organisation in a clearly positive light. Not all positive assessments subsequently translated into financial membership. This was the case with Beverages 6 and Antipasto 11. Poultry 140 has been assigned a ‘positive’ response on the basis of its financial membership, although at interview no firm opinion was forthcoming on the value of the Group. Responses do not seem to accord with any pattern based on firm size or date of arrival – there is an even spread (Table 13, Appendix B refers). On balance, then, the organisation seems to have had little impact upon surveyed firms.

Positive assessments included networking or collaboration of some form, particularly pooled resources such as shared transport and materials purchase, information of some form, including exhibitions and trade shows, and the development of export potential:

‘…we get a lot of contacts so we feed off each other which is good. We’re pretty niche, so in that arena, we don’t have people that manufacture the same things as us. But we do talk to other companies that manufacture cookies and biscuits which is good and we get feedback from them as well. It’s general knowledge [ideas acquired from the PFG], although there is the network side of it. There have been
some ideas that we try to start up, for arguments sake chemicals, between all the manufacturers so we can get better rates and so forth – [also] things like…electricity, tariffs…(Confectionery 11).

It will also be recalled that in Chapter 5, Convenience 14 was assisted by the Plenty Food Group to find a suitable food processing factory: ‘…I made phone calls to the City of Whittlesea and spoke to the Convenor…Having a dedicated department for new businesses entering the area was extremely advantageous’.

On the negative side of the ledger, lack of time for ‘hands-on’ owner-operators, disappointment over poor attendance and lack of relevance to their particular operation were all mentioned:

There are trade shows, there are interesting seminars and whatever, but I think one of the things you've got to be careful of is…you've got to actually do your work and you can go to the Whittlesea food group and they’ve got guest speakers on, but not every guest speaker suits your business…It’s alright if…you just take time off and you get paid a salary and whatever. [But] it tends to be here there's a lot of owner-operators… (Bakery 35).

Yes I've kept an eye on that [the Plenty Food Group]. They’ve got an interesting programme there, I've gone to a few things they’ve done, some things are quite informative. I think there's only so much they can assist me with because I don’t share a common product with the other food manufacturers (Oil 20).

My son’s been to a couple of them [PFG seminars], but we’ve just been so busy. We’ve been so busy building a new factory, designing it and once we've settled down and we've got all the plan up and running, maybe…some days you might work 12 hours or some days 14 hours…I don’t think people understand what's involved running a business in terms of the time…So that’s why I basically can't go to the Plenty Good Group (Bakery 90).

Another negative assessment (contrary to the positive view of one of the other firms) was that the export development approach was ‘…a bit naive…It’s very, very difficult to establish an export market’ (Beverages 5).
Other respondents gave qualified responses and this extended to committee members who, while perhaps more likely to provide a more favourable impression, were also, of course, the most informed about the Group’s performance. **Fruits 160**, for example, expressed this with a clear idea of the different value of the Group for different firms, which reflects an awareness of the difficulty smaller firms in particular have in fully participating:

What do we get out of it? Probably not much because we are one of the larger organisations, but we can see a lot of value in being involved...Definitely the export has been the greatest success. In the region...50% of those probably have less than 20 employees and turnover less than $1 million. So they are small organisations...they don’t have the time...I think it [the level of participation] waxes and wanes, I think that leading into summer we struggle a bit. We would get maybe eight to ten people, but there are some functions, and we have functions every month, which have attracted 50...I think... [innovation and exchange of ideas] happens as the cluster matures. We’ve been at it for a little over three years. Maturity comes with time. So yeah sure, I think that innovation in an environment where the clusters exists is bound to happen (**Fruits 160**).

To clarify further the link between PFG membership and actual local contacts, Table 9.3 correlates membership with the data associated with other key areas of the industrial system investigated in Chapters 5 to 7.

**Table 9.3. PFG members: local connections**

<table>
<thead>
<tr>
<th>PFG member firm</th>
<th>Locational decision a</th>
<th>Other sector firms</th>
<th>Suppliers and bus. Serv.</th>
<th>Customers and markets</th>
<th>Competitors</th>
<th>Source of ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy 9</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Confectionary 11</td>
<td>n.a.</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Bakery 12</td>
<td>n.a.</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Bakery 35</td>
<td>n.a.</td>
<td>Yes</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
<td>No</td>
</tr>
<tr>
<td>Dairy 40</td>
<td>n.a.</td>
<td>Yes</td>
<td>No</td>
<td>No data</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Poultry 140</td>
<td>n.a.</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Fruits 160</td>
<td>n.a.</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

a. Locational decisions of some current PFG members could not be influenced by the Group as they located in Whittlesea before the Group was founded in 2004.

Table 9.3 shows that the results of Chapters 5 to 7 – a lack of local linkages – does not change when we separate out PFG members. Curiously, two members (Bakery 12, Poultry 140) reported no contact with other local sector firms – and therefore, had no contact via the PFG. We can only assume that they were members, but never attended meetings. On the other hand, it could be that PFG activities were ‘taken-for-granted’ contact opportunities. As can be seen in the second column, most PFG members did in fact report contact with other local firms. The problem is that as we saw in Chapter 6, this contact is superficial. It did not, for example, result in a source of ideas.

**Success of strategic objectives**

The following assessments were provided by the Convenor, based on the situation at the end of 2008.

*A collective marketing strategy.* This had been successful in terms of establishing regular marketing opportunities, such as food fairs, both locally and overseas. An example of the latter is the Hong Kong Convention and Exhibition Centre (HOFEX) Food Exhibition in Hong Kong. Participation in exhibitions such as these has made strong steps towards fulfilling the objective of enhanced exports. 25

While the importance of these achievements should not be underestimated, the number of firms that benefit from the broader marketing strategy is unclear. **Fruits 160** had referred to a marketing plan which it shared with smaller firms in the cluster, saving the latter considerable costs. However, **Fruits 160** did not know how many firms had taken it up. While there is no explanation for this, the respondent referred the author to the Convenor. The latter was not aware of the plan. It seems to have been in operation before his position was established in 2007.

**Shared purchasing of plastic packaging.** There did not seem to be any firms within the study area that participated in this scheme. The issue was simply that different firms had different packaging requirements, to the extent that common purchase was impracticable.

**Shared transport.** **Fruits 160** had expressed a willingness to share his firm’s transport with other firms. Again, there did not seem to be any firms that had taken up this offer.

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25 At HOFEX 2007, for example, ‘…thousands of orders were placed for locally made products’ (Anon., 2007:5).
Collective purchase of electricity. This scheme showed initial promise. Sixteen firms initially participated, of which about half were Whittlesea firms. However, ultimately, only three persevered, of which one was a Whittlesea firm. The issue was that different firms had different peak electricity requirements, again rendering a collective purchasing strategy unworkable.

Collective purchase of chemicals. This strategy proved more resilient. Sixteen firms were participating in this scheme, half of which were Whittlesea firms. Clearly, firms have common requirements for this particular resource.

The overarching impression of the PFG is then of a small core of dedicated instigators and participants combined, however, with a low level of sustained, broader participation. Though the Group provides a potentially useful framework for shared local networking, the richer and deeper activity associated with the latter is still at an early stage of development. The Group did not have a particularly strong focus on ‘ideas generation’, a crucial local process as understood in the cluster literature. Efforts were directed at developing a local industrial system in the broader sense. It would seem that the struggle to establish collective approaches to reduce costs and improve supplies is a sign that the differences between firms are greater than their similarities, thus militating against the development of collaboration between firms in an industrial system at the local scale. As the industrial system remains steadfastly focussed at the regional scale and beyond, so the work of this organisation, or perhaps a more well-resourced alternative, may need to engage a larger spatial unit for its activities.

It is clear from the specification of the activities of this organisation that it does not, and given resources, perhaps cannot, consider issues in the labour market. So for example, it has not pursued activities such as training programs. Nonetheless, given the significance that firms attach to local networks in labour supply, and given the strength of local ties in the labour market, as shown in the previous chapter, this is a surprising omission from the organisation’s charter.

9.2.2 The local research institute: RMIT University

We need to consider another possible source of local knowledge linkages and ‘spillover’ to firms. This involves the relationship between the industrial system and a local research institute. This, as noted previously, is identified by the PFG as ‘a tremendous resource’:
RMIT University Food Science division have the facilities to assist you with your food research and development needs. Small and large scale projects are welcome and can be cost-effective with Government funding available to suitable projects (Plenty Food Group, 2008).

RMIT University has a campus at Bundoora close to the majority of food and beverage firms in Whittlesea (see Figure 4.4). Effort was applied to gain insight into its influence. The first question to be addressed was a general one: what is the relationship between RMIT University as a whole and the northern region? The research found a number of connections. The first of these was the ‘stakeholder’ status of the University with Northlink/NIETL, which means that university representatives have input into its policies and activities (City of Whittlesea, 2009). Second, was membership of an RMIT academic on the board of the former NACC. Third, was the range of research on economic issues conducted by RMIT academics commissioned by the NACC (NACC, 2007). In addition, RMIT had also targeted Melbourne’s North for the delivery of community education programs (RMIT, 2010). RMIT is then an ostensibly ‘northern region’ university.

The second question was whether there was in fact training and research conducted, either at the Bundoora campus or across RMIT, related to the industrial sector. In this case, it was established through the university website and subsequent discussion with staff that the University offered degrees in food science and technology from the diploma level through to PhD. Most of these courses were run from RMIT’s CBD-based campuses. However, some staff and one Masters Degree were based at the Bundoora campus.

To understand further the relationship between the academic and industrial sectors, informal discussions were conducted with four academics from within the Food Science division at RMIT University. Responses of academic staff confirmed an absence of links with the local food and beverage sector. Some of the specific issues or concerns raised were: the idea that RMIT University should forge connections with the northern industries is a strategy to encourage development of the Bundoora campus per se rather than to develop the industrial sector or connections between the two; the research culture across the unit, whether at the city campus or at its smaller presence at Bundoora, is emergent rather than established - therefore, its research capacity is limited; having said, that, the geographic focus of the unit’s research and development is with firms in the south east area of Melbourne, although there does not seem to be any particular strategic reason for this (and although this focus might be explained
by the larger concentration of activity there, as was shown in Section 4.4, Whittlesea is the growth area for the sector in Melbourne); and, expansion of courses at the Bundoora campus specifically was problematic because of the attraction of the city campus for students and therefore enrolment levels.

Another source of insight on the significance of the linkages with the university was the Plenty Food Group. The PFG Convenor confirmed that links between firms and the University were yet to develop. He observed that there seemed to be a communication problem between academics and the local industry. In the language of the cluster literature, this perhaps can best be elaborated by describing it as a failure to establish an ‘epistemic community’ of common values, norms and expectations (Lisoni, 2001).

This part of the research shows that the level of engagement of RMIT Bundoora with the local sector is at a developmental stage. There is no fundamental engagement between an industry-focused research effort and the local industry cluster.

9.3 Local industrial policy, institutions and the labour market

Plenty Food Group

In this section, we begin my maintaining focus on the PFG, on this occasion from the perspective of its impact on the local labour market. In Figure 9.1 and Table 9.1, we saw that only a small proportion of PFG activity was related to the labour market. To recall, this included ‘list your jobs vacancies for free’, ‘jobs fair for school leavers’, ‘multicultural centre for women’s health’ and ‘seminar on Australian labour market trends’. A more direct strategy was the several entries advising of employment vacancies with a dedicated site via the Group’s homepage. The research monitored the employment website over 2007 and early 2008 and noted that there was only one position advertised. The most direct and successful example of intervention was that provided to Confectionery 11 on the availability of ex-Kraft Broadmeadows staff after its closure in 2007. This shows that when the circumstances arise, the Group could potentially prove a valuable potential source of labour networking. It is perhaps the fortunate fact that there have been no factory closures in Whittlesea during the study period that the PFG’s involvement along the lines of finding work for those retrenched has not arisen.
A further innovative, but ultimately disappointing attempt at intervention was the *Skilled Apprentice and Trainee Program* which was advertised on the website and raised by PFG committee members. The idea was to employ eight apprentices through *Skilled*, a private labour supply firm. Apprentice fitters and turners, machinists and electricians were to be rotated among PFG members *a la* the mobile, skilled labour of the cluster literature variety. The rotation principle proved to be unworkable, given the diversity within the sector. Even though the apprentices in question would seem to have skills of generic value, there still seemed to be a reluctance on the part of employers to take on such apprentices.

These examples show that the role of the PFG is not generally intended to make extensive interventions in the local labour market and therefore it is not to be judged as a ‘failure’ in this respect. In the case of the successful reassignment of Kraft workers, its potential role as a labour networking institution is shown. Nonetheless, the fundamental point still stands: the Group’s central focus is at the firm management level.

*RMIT University*

Neither academics nor the PFG Convenor were aware of RMIT graduates working in the local industry. However, unit academics advised that lack of resources meant that data on graduate destination was not collected. The fact that academics did not even have anecdotal evidence of local employment of graduates indicates that, indeed, it is unlikely to have occurred. An explanation may lie in the fact that as noted above, academics reported that expansion of courses at the Bundoora campus, specifically, was problematic because of the attraction of the city campus for students noted above. Possibly, this translates to poor enrolment from the local area.

*Trade unions*

We now examine the impact of trade unions on the local labour market. Table 9.4 displays the activities of unions at the local level.
Table 9.4. Local coverage and activity of trade unions: all local firms

<table>
<thead>
<tr>
<th>Union</th>
<th>Organiser's area of responsibility</th>
<th>Firms covered</th>
<th>Workers covered</th>
<th>Delegates on site</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMWU</td>
<td>Ballarat, Hume, Whittlesea</td>
<td>Fruits 160</td>
<td>50%</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Antipasto 90</td>
<td>2%</td>
<td>No</td>
</tr>
<tr>
<td>NUW</td>
<td>Northern suburbs</td>
<td>Confectionery 180</td>
<td>40%</td>
<td>Yes</td>
</tr>
<tr>
<td>AMIEU</td>
<td>Single firm</td>
<td>Poultry 290</td>
<td>98%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

a. Ballarat is a major regional town in Victoria, 100 kms north west of Melbourne
b. Antipasto 90 declined an interview.


Table 9.4 shows that the area that organisers for the AMWU and the NUW must cover is considerable – disparate parts of Melbourne and Victoria and the entire northern suburbs, respectively. The NUW had members at only one firm and the AMWU at two. Conversely, the AMIEU had a site-specific organiser at one firm. This may explain the very high rate of union membership. Of a total of 47 firms, with an estimated combined workforce of 1,107, only four firms, 9% of the total, can be confirmed as having a union presence. The quantitative data shown above are now supplemented by selected interview transcripts with trade union organisers.

For the NUW area organiser who covered Confectionery 180, union-management relations seemed to be entirely non-problematic:

Q. Can you tell me about recent or current disputes or issues?
A. None. No issues.

Q. No issues at all?
A. No. In terms of union coverage, it has been steady over time, although I am now campaigning for more members. There seems to be a low motivation to join the union. The production manager treats workers well. He’s not a hard-line manager.

For the AMWU organiser (Fruits 160, Antipasto 90), given the extent of the geographical area that the organiser had to cover, it was not surprising that knowledge of the local sector was limited: It was ‘…quite alarming that there are all these [work] places that I’d never, ever heard
of. This, in itself, is an indication that union involvement in the local labour market is restricted. Union influence within the workplace certainly had its limitations:

…I was [called] out there during an investigation. Someone had been putting cigarette butts in the juice and all hell had broken loose. They had some very, very hard-nosed investigators come down from New South Wales 26… they were not friendly, affable people at all. They were very hardline and you know, ‘These are your rights, you will answer our questions…’ On first impressions, they seemed to have their reasonably smooth upper management and then…They have a production manager there… She treated the workers absolutely shocking… Speaking to workers essentially with no respect, watching how long they might take to get from the interview back to work, if they stopped to talk to someone along the way… if that’s the type of person they’ve got out on the shop floor, they’re going to have a very miserable workforce… the interviews… went on for days (AMWU/Fruits 160).

The near 100% membership at Poultry 290 suggests an influence on the local labour market. But in exploring this further, the union organiser felt that in general, the union had little influence over the firm’s labour market policies. He gave as an example a recent decision to employ foreign, temporary workers:

What I have found is, the company is basically going now where they’re employing people on temporary visas… I don’t know why they’re doing this or whatever, because there’s a lot of people out there that are out of jobs, and they’re not getting a look in… Realistically, we’ve got problems here where it’s starting to become where people that can’t read or write English are getting their interpreters to come in and do it for them, and it’s becoming a health and safety issue where they can’t read the signs if there’s emergencies or whatever… We’ve got no control whatsoever. We can put our view across, but basically it’s like hitting a brick wall (AMIEU/Poultry 290).

There are, then, several indications which suggest that trade unions do not have a significant local impact. First, there are the low proportion of firms covered; second, are the large tasks assigned to organisers based on a broad geography; and third is what seems to be a

26 The respondent probably means Queensland, not New South Wales – Queensland is where the firm’s head office is located.
powerlessness of the union in relation to key workplace events in use of foreign labour and a central investigation of alleged misconduct.

**Local trainers**

Another avenue of training apart from universities and one that is more likely to be applicable to the bulk of the workforce is TAFE and private provider training. In this section we are concerned, then, with the question of the local impact of non-tertiary training organisations. Three measures, assessed through interviews with local trainers, were used to measure the impact on the local labour market - the catchment area per se, the level of resources available to service that catchment area and the incidence of engagement with food and beverage workers.

The first perspective we examine is that of the local industry trainer from a TAFE college. **Trainer A** worked between two TAFE colleges, both of which were in the northern region of Melbourne, but outside Whittlesea. The catchment area was reported as being the entire northern suburbs. In strictly geographical terms, then, this was a *regional* organisation. The breadth of this setting is reflected in a weak local impact: training had been conducted with just one Whittlesea firm, **Fruits 160**, between 2005 and 2007. **Trainer A** could not make an assessment on resources, only to say that there was never any shortage of work.

The second perspective is that of a private, English language service-provider, **Trainer B**. This respondent was based in Whittlesea and estimated the ‘vast majority’ of her clients were from there. **Trainer B** did not keep specific records on the workplace of clients, or if unemployed, where they eventually found work, but anecdotally could confirm that ‘many’ worked in the local sector. **Trainer B** also regarded resources as inadequate:

> I desperately need more space… The problem is that we’ve grown so much. 1300 weekly contacts… It’s increased from 900 in 12 months. There’s more people coming to the area, there’s greater consciousness about the need, there’s demographic changes…

The final perspective is that of the TAFE English language trainer, **Trainer C**. The provider was also based in Whittlesea. The organisation’s catchment area was State-wide, although the respondent suggested that due to the number of large firms employing migrant workers,
Melbourne’s North, in particular, would always receive substantial training from her organisation. Again, resources were regarded as inadequate:

…we’re… hav[ing] a difficulty with newly-arrived migrants…because you often have more women who have got…young children. And that creates a real settlement issue, especially when you’re talking about your refugee settlement… work experience programs are important…but nobody really funds us to do that anymore…

This observation may be particularly pertinent to the Whittlesea food and beverage sector, due to the higher proportion of Whittlesea female residents working in the sector, as shown in Table 4.10. Trainer C had provided on-site training to only one Whittlesea firm (Mushrooms 500) between 2004 and 2007.

We have then three different perspectives on the significance of local links of training institutions. What all three have in common is a view that they are under resourced and this may be related to the result that coverage of the local sector is in fact quite limited. They are in this sense, similar to trade unions: their geographical coverage is overstretched; their local impact is minimal.

9.4 Summary

In this chapter, we have examined the local influence of industrial policy and key local institutions on the industrial side. In examining the influence of local and regional economic development bodies and the local university, it was found that the local impact was weak. While regionally-based development bodies seemed to have a role, particularly through research, in setting an agenda for Melbourne’s North as a whole, the research has not been able to establish a tangible impact at the local level. Ostensibly, this role falls to the Plenty Food Group. This organisation, of undoubtedly good intentions, received mixed reactions from surveyed firms as an influence on productive capabilities and from the perspective of the analytical framework of the research, it did not shift the focus of the industrial system to the local level.

27 Mushrooms 500 declined an interview
Connections between the local university and the industrial sector could not be identified statistically, as RMIT University did not keep adequate records. Nor could they be confirmed by academics from its Food Technology department or the PFG Convenor. The nature of the relationship which emerged through interviews with academics and the Convenor rendered results that were very similar to the findings of Beer and Cooper (2007), where in metropolitan South Australia, a ‘confounded’ relationship between the academy and regional actors resulted from ‘…differences in focus and communication styles’ (Beer and Cooper 2007: 1064). While it is tempting to conclude that the low level of technology and innovation in the sector in general renders it an unlikely partner with a research or tertiary teaching institute, the very existence of a Food Technology Department shows that technology development and teaching is occurring, and is occurring nearby. However, the reference by one academic to the research focus on the south east of Melbourne points to a non-local scale of operations. The point is that ‘institutional thickness’ is of a low level and consequently, the local impact of institutions likewise.

The application of policy and institutions to labour was even weaker. The local economic development body lacked substantial engagement with the local labour market. This is not a failure to fulfil its objectives, as these are, in the main, directed at the firm level. However, this leaves an obvious gap in the provision of services to labour at the local level. This is accentuated by the circumstances of training bodies. The regional catchments of two of the three training organisations and a lack of resources for all three seem to have resulted, through no fault of their own, in a lack of local focus. The research detected a similar scenario for trade unions. Wide geographical areas of responsibility mean that resources are stretched to the limit. This, in turn, may partly explain why only a handful of workplaces had union representation.

The fifth major finding of the thesis is, therefore, that that industry policy and the institutional context have not generated substantial local connections and are thus a weak local impact. In the following final chapter, the thesis synthesises the results and draws out the implications.
Chapter 10. Conclusion: Analysis and Implications

10.1 Introduction

This final chapter discusses and considers the implications of the research. After presenting the main finding, the chapter then proceeds as follows. The results are schematised against the theory; the implications of the research in terms of the local impact of first, the industrial system and second, the labour market are examined; methodological issues are considered in light of the thesis results; the implications for industrial policy and institutional responses are drawn out; the implications for local economic development are considered; and, a future research agenda and associated issues are sketched. The chapter ends with brief concluding comments.

10.2 Main finding

The thesis set out to explore whether the local impacts of industrial development were felt through the connections of industry via its production and institutional networks, or the through the labour market. The hypothesis was that the strongest local knowledge and connections between industry and a local community are likely to be found in the labour market, as in that dimension the scope for non-local contacts is considerably less. In essence, local knowledge essentially resides, not in local firm-to-firm or institutional interaction, but within the local workforce. The research found that this was the case. The labour market was the sphere of local connections and local impacts; the ties of most production networks, in contrast, lay outside the local area and spread well into the metropolitan area and beyond. The friction of distance, then, is far more relevant for the labour market than it is for any other aspect of the industrial system. Hence, to facilitate local economic development, the most important focus should be on the workings of the labour market.

10.3 Schematising the results against the theory

Figures 10.1 and 10.2 illustrate conceptually, in stark terms, the shift in understanding that is required to account for the findings of this thesis. Figure 10.1 is the schematic representation of the test of the hypothesis.
Figure 10.1. Overall model for the research: overview of interview themes and hypothesis

**The hypothesis:** The strongest local knowledge and connections between industry and a local community are likely to be found in the labour market, as in that dimension the scope for non-local contacts is considerably less. In essence, local knowledge essentially resides, not in local firm-to-firm or institutional interaction, but within the local workforce.

Figure 10.2, below, conceptualises what the research has found. Here it can be seen that key dimensions of the industrial system, in locational decisions, suppliers, customers, competitors, ideas and institutional settings, are based at the regional level and beyond, and therefore that is where their impact is found. Policy, most obvious at the local level in the form of the *Plenty Food Group*, clearly has a local intent, but its actual local impact is questionable. Labour, meanwhile, represents the unambiguously local dimension.
Figure 10.2. The local impact of industrial development: results of the research

Figure 10.3 takes this schematic approach to a further level, plotting the geography of connections for the respective components of industrial development examined in the thesis.
Here, it can be seen that the presence of labour is strongest in the local area; locational decisions are based on partly regional and metropolitan factors; firm-to-firm connections of the industrial system span the regional through to the global and ideas are predominantly global and national in origin. In this schema, policy has a strong local intent but never quite ‘materialises’.
10.4 Implications of the Research

10.4.1 The ‘local’ in industry links?

A strong theme in the research has been the lack of relevance of the vast industrial cluster literature for the example of industrial development in the local area under study. The research shows a lack of local linkages of the cluster variety, an outcome which conforms with results now being found in a range of other studies. The industrial system, with the notable exception of the labour market, operates predominately at regional, metropolitan, national and international scales.

**Locational decisions**

Obviously, food and beverage firms have indeed located in Whittlesea, bringing a local impact in the form of jobs. The point is, the benefits for these firms and the broader spread of jobs which comes with them – such as, for example, higher level business services and a range of other suppliers – are derived from elsewhere, at the regional level and beyond.

Clearly then, the cluster approach does not seem an effective explanation of the outcomes here. It emphasises locals networks as a source of local industrial development, expressed through new firm arrivals, either through start ups or relocations. The research found it was *regional* factors, described, *in toto*, as *traditional* factors such as the Western Ring Road, which really shaped location decisions. ‘Personalised’ or ‘subjective’ reasons, such as proximity to the firm owner’s home, were also prominent.

**Knowledge spillovers**

As for the cluster idea of ‘spillovers’, this can be read at two levels. In terms of ‘knowledge spillovers’ from particular firms, there was little evidence. As noted, there was only one surveyed firm with a coherent innovation strategy: *Fruits 160* expressed a willingness to share resources, for example, truck deliveries (although it is unclear from the statements of the PFG Convenor whether this or other shared initiatives actually eventuated or were sustained). But there was no evidence that this extended to sharing company knowledge – in spite of the pivotal position of *Fruits 160* in the PFG. In general, the knowledge-base of firms was built from dispersed sources, including overseas, and according to firm managers, their own ingenuity. At the very least, dispersed sources do conform with the idea in the cluster literature that resilient
clusters should not be too ‘inward-looking’. The problem, however, is that there was no evidence of the other part of this equation, that knowledge gained elsewhere translates into ‘local buzz’.

In a broader understanding of ‘spillover’, that a vibrant industrial cluster has flow-on effects for the local community as a whole, the situation is somewhat ambiguous. Beneficial spillovers had occurred, because as noted, the local sector was taking on more employees. This ‘spilt over’ into networks within the local labour market as a means of securing employment. But what the cluster literature apparently has in mind is the idea that the overall socio-economic profile of the local area is improved significantly. So the question is, to which we will return: does providing employment \textit{per se}, while leaving to one side the \textit{quality} of that employment in terms of job security, income and career prospects, constitute a satisfactory level of local profile improvement?

\textit{Successful clusters}

The research also finds little evidence for the idea that local connections involving several components of the industrial system are necessary for employment growth and innovation. In fact, innovation in the sector took some unexpected turns, reflecting deep and (in power terms), disproportionate relationships with the ‘centralised’ regime of the supermarket duopoly. A significant innovative force, then, is an unlikely one – the demands of the supermarkets for volume and standardisation led to the introduction of new machinery. According to the cluster literature, the link should be quite different: the demand for small-batch, non-standard products from ‘flexible production’ should lead to new machinery. Moreover, as \textit{Bakery 35} pointed out, the influence of supermarkets cut both ways as far as innovation was concerned. It encouraged new machinery – process innovation – while suppressing new products – product innovation, encouraging ‘A bit of the McDonalds philosophy…’ (\textit{Bakery 35}), that is, \textit{standardisation}. Another driver of innovation is centralised regulation associated with food safety. Again, this scenario does not ‘fit the bill’: in the cluster literature, centralised regulation is an unlikely ‘prompt’ for innovation, as it does not stem from interaction between local industrial or institutional actors.

More generally, in the light of this research, the cluster literature underestimates the individuality (or perhaps egoism) of the small entrepreneur and for that matter his or hers individual innovative capacities. Innovation, the literature holds, is supposed to occur through interaction, typically locally, and the research found this did not occur in Whittlesea.
Trust and interdependencies

Perhaps behind this individuality was the question of trust, that is, its absence. In the case of Bakery 35, past experience with outsourcing packaging was that delays and poor standards were the order of the day. In general, suppliers, other local firms and once again, the supermarket duopoly were viewed with suspicion. Trust was apparent as extended by employers towards the workforce, where friends, relatives and family members were recommended for recruitment. In short, the scepticism of Hudson (1999) and Hadjimichalis (2006) as to how realistic the cluster literature’s idea of trust really is, would seem to be confirmed. Relatedly, this leads us to question the idea of ‘untraded interdependency’. Not only were relations between firms non-local, that is, the industrial system was set at the regional level and beyond, but they were overwhelmingly commercial, that is, traded interdependencies. Evidence of a cooperative, benign ethos was hard to find in the research. There was no evidence of a shift away from traditional, metropolitan-scale agglomeration factors and relationships. It was, in spite of the enormous energy directed at explaining industrial clusters in terms of local connections and impacts, ‘business as usual’.

SMEs and their common properties

The cluster literature places great faith in SMEs as beneficiaries and participants in an ideal type cluster. The case study certainly has a number of SMEs. However, the results problematise the central logic that SMEs necessarily rely on outsourced services, so that a tangible local industrial system might develop. In some cases, these operations were just too small and ‘simple’ to require a range of services. Again, the literature does not take account of this. Moreover, there was no evidence of a ‘logic’ of an emergent SME sector. For example, none of the surveyed firms were the result of spin-offs from larger firms. The opposite was more the case, as Confectionery 180 located in Whittlesea as a result of mergers between several firms and Fruits 160 had been taken over by a large interstate firm. The research did find in some cases that SMEs and larger firms pursued a risk-reduction strategy by outsourcing, but this was not common. Therefore, the limited extent of outsourcing was such that it did not provide an impetus that may have contributed to a local industrial system by encouraging local groupings of specialised firms.

It also seems that the cluster literature has exaggerated the commonality of characteristics among geographically clustered firms, SMEs or otherwise, as if this was necessarily the reason such firms were co-located. Disparities in firm requirements created problems for the Plenty Food
Group in its attempts to organise collective purchasing of electricity, packaging, transport and even in rotating apprentices through the Skilled employment program.

10.4.2 Recognising the limits to a local industrial study

These critical perspectives do, however, need to be seen in the context of two significant and interrelated factors. First, the results may reflect the fact that the size of the sector is too small to encourage the interdependencies that the industrial cluster literature emphasises. It is possible that an analysis in a location with more food and beverage firms, such as are found in the south east of Melbourne, or another large international production location, might exhibit more cluster characteristics. More generally, if the benefits of a localised industrial system were to be achieved, considerably more diversity in a larger ‘local’ economy is required. But how much larger? There would seem to be a regional dimension to the diversity problem. The neighbouring LGA of Hume, in spite of its much larger industrial zone, was not a source of many components of the industrial system for Whittlesea firms either. It too, it would seem, lacks diversity in its local economy. The ‘size effect’ also influences the potential for local links for business services. These are strongly focussed on the CBD, and have a very weak presence in the City of Whittlesea. In part, this is because Whittlesea is a small economy, but also, those activities are simply more likely to be located in the CBD. In these ways, the potential for the local linkages envisaged in the industrial cluster literature is undermined by pre-existing arrangements with firms in particular (non-local) areas.

Second, it is also important to consider the nature of the sector. The research showed how features such as the highly specialised nature of the products, or conversely, their commonality, the need for raw materials and the strong influence of metropolitan and nation-wide purchasers, in particular, supermarkets, resulted in dispersed locations. Some firms reported that their competitors (and customers) were large manufacturers and packagers. The cluster literature might regard such entities as ‘Fordist relics’ (for example, Carlton and United Breweries, Visy Packaging) not conducive to the sharing of knowledge at the local level. It can be argued that it is difficult for smaller firms to emulate competitors if the latter are so different in scale and operation. In some cases, these larger competitors were perceived as genuinely threatening, as in the legal case in which Beverages 4 was engaged with its national competitor. Oil 20 reflected on some of these issues – similar firms are competitors; they may ‘steal’ your ideas if you discuss them (without a sense that you, in turn, may be able to ‘lift’ ideas or be inspired by them); tight time-schedules, especially for owner-manager SMEs, mean there is no time for ‘chat’. More generally, distinctions, even within sub-sectors, are such that dissimilarities
outweigh commonalities and therefore, the potential for a common purpose. Hence, much of the inter-firm dynamic that relies on competitor-collaborator links did not apply in this industry, in this location.

The reliance on raw materials also creates some special conditions. The source of agricultural and meat products is based partly on environmental conditions (for example, that lower rainfall had rendered the Whittlesea hinterland no longer productive for dairy products) or is determined by the agglomeration patterns of the producers of the raw produce (for example, that poultry is sourced from the Mornington Peninsula, due to the concentration of producers there). So ironically, although there is such a strong dependence on raw produce, it is a factor of production over which firms have little or no influence on its location. Hence, one significant set of inter-industry linkages that could underpin cluster behaviour does not provide a local opportunity. Given these observations, it is not surprising that some deep-seated characteristics of the sector and its small scale within Whittlesea discourage horizontal and vertical linkages at the local level.

10.4.3 The ‘local’ in labour?

The stand-out result in the analysis was that local connections within the labour market were a significant consideration for firms. Indeed, the strength of the preference for local labour, and the actual proportion of labour employed from the local area, stood in stark contrast to the lack of local connections in the rest of the industrial system. It would seem firms can operate with a geographically dispersed industrial system, but by their own accounts, they cannot operate without a labour market that has easy proximity to the workplace, in two intractably interrelated senses: by proximity and through conduits of knowledge, driven particularly by labour itself. It would also seem that a force behind this local connection is an increasingly strong link between local housing and labour markets.

**Recruitment, labour and networks**

In terms of the geography and method of recruitment, the research uncovered different ‘nexus’: *informal-network-local*, which was labour-initiated, and *formal-non-network-dispersed*, which was management-instigated. Thus, where firms adopted formal methods such as recruitment firms or labour hire agencies, we find, in line with the geography of the non-labour side of the industrial system, the same non-local sources and the benefits accrue to firms outside Whittlesea. This again reinforces the fact that where labour takes the lead, local
networks come directly into play, contributing to the high levels of self-containment and a local impact. Further, these networks are based on the social groupings to which individuals belong, the specifics of which the cluster approach largely ignores – gender, age and more directly, given the scope of this research, family ties, ethnicity and neighbourhood.

The local labour market model, then, aligns with the results of the research. The latter confirms that in a ‘world of ubiquities,’ labour remains essentially place-bound and also shows the uniquely complex local nature of labour markets compared with other markets. It shows that labour is a ‘special market form’ and that ‘…local employers and employees adjust to the impact of demand, supply, technological change, and other shocks’ (Martin, 2000: 461). This is demonstrated, for example, by the ‘marshalling of forces’ by both employers and the labour market, in light of ostensibly seasonal employment demands. It is also shown by the continuing reliance by employers on local workers and the increasing likelihood that local workers are local residents. This is in spite of the regional scope provided by the Western Ring Road and the larger industrial area of the adjacent LGA of Hume. And like Hanson and Pratt (1992: 373), this research found that employers, ‘…as astute social geographers… rely on strategies, such as advertisements in local newspapers and word of mouth, to ensure a localized labour force’.

Thus, reliance on local networks is no accident; nor is it simply a matter of convenience. It is far stronger than that, for in allowing the workforce to connect with local ethnic affiliations, family and neighbourhood, managers are of course, ‘disadvantaging’ those from the broader regional or metropolitan labour-shed and ensuring a ‘reliable’ supply of labour. We find, therefore, the local connection reinforced. Unsurprisingly then, this research, like Blackburn and Mann (1979) before it, found criteria of character, not skills, as the basis of assessment of new staff. This set of results present a very different picture of the character of labour markets to that posited by the cluster literature, with its emphasis on mobility, flexibility and skills, and of what constitutes local networks. They suggest that reliance on (apparently subjective) criterion, in character traits, may be a more reliable method of ensuring the supply of labour than one based on skills. After all, the more skilled the worker, the more likely is he or she to have more choice of employment.

However, the research also uncovered an unexpected expression of one of the key concepts of the industrial cluster model: tacit knowledge. Essentially it resides, not in local firms’ production processes, or in inter-firm or local institutional interaction, but within the local workforce. It is the non-codified, unadvertised spread of information about job opportunities
that defines the strength and character of the local network. This style of tacit knowledge leads not to innovation, but rather, forms the basis of a *de facto* recruitment agency.

**‘Inward looking’ networks**

However, as we saw in Atkinson and Kintrea (2001), local labour networks do not necessarily result in positive outcomes. Strong as internal connections may be, they may ‘lead nowhere’ in the sense that, like the idea of ‘inward-looking clusters’, access to a range of possible job opportunities, including those in other locations, is weak. This observation highlights the age-old intellectual question of structure-versus-agency. While the research shows how local networks lie within the local labour market, whether this is a genuinely empowering result for either the individuals concerned, or the local area more generally, should be a question for further research. Although at face value, it certainly does appear through the research that workers are ‘geographical agents’ (Herod, 1997: 2), where this ‘power’ leads them, exactly, is to a workplace of fairly mundane, low-skilled and often casualised employment. Further, the research has found this low-skilled labour market to be the *only* tangible local connection, and therefore local impact, stemming from this group of firms. The benefits that may accrue from a broader array of local jobs is denied at two levels. First, there are less employment options *per se*. Second, the networking benefits said to characterise a local industrial system, with positive spillover effects, are not available.

**10.4.4 Recognising the limits to a local labour market study**

Nor would it seem, are labour networks ‘all local’. While clearly acknowledging the strength of labour links, the point should not be overstated. Not surprisingly, not all Whittlesea workers were Whittlesea residents. There is indeed a strong regional dimension to the labour-shed. In fact, if we were to rely solely on the Census data, the impression would be that around two-thirds of Whittlesea residents who worked in the sector somewhere in Melbourne worked outside Whittlesea and around 60% of workers within Whittlesea lived outside it. Moreover, the disaggregated Census data on occupations showed that there was an increasing divergence in residential location based on occupational strata, as the proportion of Whittlesea residents who held the most skilled and senior positions fell over time. However, there are important qualifying points. First is the clear trend towards greater self-containment of the labour market for Whittlesea residents who work in the sector. There was no evidence of a similar trend for the rest of the industrial system. Second, these Census figures may significantly understate self-containment, as many firms indicated a proportion of local labour at 50% and often far higher.
The research also indicated that only particular types of local labour networks were apparent. Although further study is required to firmly determine the case, little evidence of workers moving from firm to firm as a form of ‘knowledge spillover’ was detected. If anything, this would seem unlikely, given firms’ desire to hire on the basis of likelihood to stay for the long term. The cluster model suggests that this form of spillover, in relation to labour markets, is reflected in a labour force that is ‘mobile’ (its members are willing and able to move between firms), ‘flexible’ (they can be assigned to a variety of tasks) and skilled (they have transferable aptitudes in demand across the sector). If owners or managers were not looking for the ‘mobile’ quality, nor would it seem, were they concerned with ‘flexibility’, nor skills. When it came to preferred qualities, more modest ideas associated with ‘good character’ predominated. This may well be a reflection of the low level of technology and standardisation encouraged by large contracts with supermarkets and possibly others.

10.5 Methodological issues and the thesis results

10.5.1 The results in the broader context of economic geography

An interesting debate appeared in *Regional Studies* in the late 1990s and early 2000s (Markusen, 1999; Markusen, 2003; Peck, 2003). Markusen (1999) argued that ‘fuzzy’, undefined concepts in economic geography had rendered empirical validation difficult, if not impossible. It had become increasingly difficult to answer the question ‘how would I know it when I see it?’ (p. 871) –‘it’, being, in Markusen’s examples, flexible specialisation and agglomeration, world-cities and inter-firm links in industrial districts. Markusen took aim, *inter alia*, at the case study approach: ‘…often published without reflection on choice, representation or generalizability’ (p.880). Peck (2003) responded that if the concepts about the world seemed fuzzy, that is because it is indeed a ‘fuzzy old world’ of uncertainty and ambiguity. As for case studies, in Peck’s view, ‘…The quality of case-study research should be judged on the veracity of the claims made, not on the spurious grounds of typicality or representativeness’ (p.735). Markusen (2003) came back with something of a consensus:

…(The) distinction between quantitative and qualitative research…(is) trivial…Most case studies…employ quantitative adjectives such as large, greater, many and most, and verbs such as increase, grow and exceed…Why wouldn’t one want to include numbers if they are available? (Markusen, 2003: 750).
Similar issues and attempts at resolution have concerned Australian scholars in human geography (Hay, 2000). Winchester (2000), for example, describes recent attempts at drawing a distinction between qualitative and quantitative research as ‘…the resurrection of a dinosaur in the shape of a false dichotomy…’ (p3).

In similar vein, Malmberg and Maskell grapple with idea of ‘the local’, with specific reference to industrial clusters:

> It has turned out to be extremely difficult to identify empirically the mechanisms that are supposed to account for [the]…existence [of a cluster]…One problem relates to the issue of spatial scale. The notions of local and regional, which are often central in analyses of spatial clustering, are extremely elastic (Malmberg and Maskell, 2002: 442).

What methodological issues have arisen in this research which might contribute to the somewhat vexed considerations described above? The following two sections trace the possibilities.

### 10.5.2 Local area case studies: themes and issues

Given the central question of this thesis - what is the local impact of industrial development? - the question of to what extent the results can, or should, be generalised is important and the expectation that case studies should be representative of a broader picture, becomes a complex issue. This complexity is underscored in the following discussion.

There are two levels at which the value of the case study approach adopted in this research can be considered. First, in terms of the geography, results reflecting the location have a general application, because Whittlesea shares characteristics with other outer suburbs as one of several LGAs with both residential and industrial growth. However, we should exercise caution in drawing conclusions about the location ‘as a whole’. While the research has led to doubts over how diverse the local economy is, nonetheless, there is much more to Whittlesea than the food and beverage sector, with areas of new residential growth and greenfield sites, as well as older suburbs of manufacturing migrant workers and industrial estates.

Second, in terms of the sector, it is a prominent employer in other locations in Melbourne (as shown by its absolute and proportional share of manufacturing employment). But the research
raises some doubts on the extent of shared characteristics between these local firms, let alone between the firms ‘as a sector’ and the sector in other locations. As has been noted, the attempts by the PFG to introduce collective purchasing proved difficult, because of the differences in firms’ production regimes. More generally, there was a lack of contact between local firms and in some cases, suspicion.

If the case study approach has resulted in issues similarly complex to those found in the wider field of economic geography, what can be said about labour, where the research found the key local connections? In terms of the sector, one common theme is process work, often casual. In terms of the geography, it suggests an alternative research approach in regard to ‘the local’. It is probable that some residents from the ‘ring LGAs’, as defined in the methodology, live closer to their place of employment (for example, the Thomastown Industrial Estate, which straddles Whittlesea’s southern border) than some Whittlesea residents. An alternative way then, would be to understand a local area as a grouping of several LGAs together, in a regional frame. The question is, which LGAs and which region? This decision would certainly impact on the results. This is because if we were to interpret the region to which Whittlesea belongs as ‘Melbourne’s North’ (as defined in the methodology) we would find increasingly strange bedfellows due to shifts in the labour market shown by the customised Census data and strong possibility that arises from it: shifts in the housing market. Judging by this data, in terms of where it draws its workforce from, housing types and prices and industries, Whittlesea has decreasing affinity with LGAs closer to inner Melbourne and more affinity with Hume and Brimbank to the west. In light of these questions of the ‘integrity’ of both place and sector as ‘meaningful wholes’, and the fact that the case study presents both ‘typical’ and ‘atypical’ characteristics, the question of conceptualising ‘the local’ remains problematic.

A second approach would be more theoretical, by focussing on the intersection between place (Whittlesea) and activity (sector). Whittlesea is a growth area; its food and beverage manufacturing is a growth sector. A large part of explaining this growth, in this location, stems from the ongoing arrival of new migrants. Thus, while the results of this thesis strongly point to the idea that it is the local labour market which is, to use Peck’s term, ‘locally embedded’ (Peck, 1996: 148) and hence, the basis of a local economy, perhaps future research can dig deeper again, by examining whether it is the local links based on common association embedded within this market that are more locally tied still. This is because these associations are based on the interrelated social processes of face-to-face contact, familiarity and highly localised forms of association such as ethnic affiliation, family and neighbourhood and housing
markets. This points to a tangible entity which we can, to paraphrase Markusen (1999), ‘…know it when we see it.’ Figure 10.4 presents a schematic representation of this idea.

**Figure 10.4. The ‘local’ in a case study: local community links**

![Diagram showing local community links](image)

Here it can be seen that a case study can be only partly representative of the ‘whole’ from which it is derived. Thus, while the food and beverage sector in Whittlesea is certainly significant, obviously, it cannot be representative of Whittlesea in its entirety. Similarly, the local sector, while inevitably sharing characteristics with the sector elsewhere, has its own character, and differences within it. Labour, for its part, is partly derived from the local area and partly from outside. The most likely local intersection of all three, as portrayed here, are local community links, in the form of family, neighbourhood and ethnic connections.

### 10.5.3 Re-evaluating the semi-structured interview approach

As discussed in Chapter 3, positives and negatives can be expected from the semi-structured interview approach (or from any research approach for that matter). An issue was that absolutely consistent numbers of responses for each interview theme was not possible. However, a ‘critical mass’ of responses ensured that themes could be discerned and analysed.
An outstanding question is would there have been a significant difference in results if those firms that declined to be interviewed had accepted? Did they have different characteristics? We can only speculate here, but it is possible that the firms which declined an interview were not as confident about the state of their business and therefore not as willing to discuss it. Perhaps, for example, they had difficulty in acquiring staff, which would cast a different light on the idea of local labour networks as the strongest local impact? As for those firms who did participate, but from whom useful information on all interview themes was not forthcoming, the ‘weakest’ level of responses related to the questions of the geography of firms’ suppliers and business services and competitors. As for the possibility of different results from this angle, one clue may be whether there was a correlation between the variables of firm size, date of arrival, sub-sector and non-responses. Perhaps, for example, if non-responses from smaller firms were prevalent, we may have missed a reliance on local connections which the cluster literature suggests is required for the success of such firms. What the research found, however, was an even spread of non-responses across firm size, date of arrival and sub-sector, as shown in Table 1, Appendix B.

The approach of allowing the respondents latitude in interpreting interview themes also raised some methodological issues. This can be seen, for example, in keeping the concept of ‘ideas’ flexible (Chapter 7). If the questions were more specific, so too may have been the answers, affecting the results. In asking owners of a manufacturing firm ‘where they got ideas for running their firm’, is it very surprising, in hindsight, that they would immediately think of themselves, particularly in a sector of ‘low-brow’ innovation where incremental improvements are the likely form of innovation? And of course these ‘hands-on’ managers (who in the case of SMEs were usually the owners) would be ‘right in the thick of’ any incremental improvements - hence, perhaps, the tendency to ascribe ideas to themselves. An example of a more specific question might be: ‘have you introduced new plant or equipment into the workplace in the last two years and if so, whose idea was it?’ Of course the answer, we can quite safely guess, would be the same – the owner/manager. A dilemma is that low technology sectors are unlikely to throw up easily codified measures of ideas generation such as patents.

Embedding more specific time-frames in the questions may have also more clearly identified the periods to which answers referred, for example, of peak production and therefore employment of casual staff. As noted in Section 3.4, interviews with firm managers were conducted in the months of September, October and November, and the latter month, in particular, should have captured the beginnings of the peak Christmas period and therefore the
taking on of more casual staff. However, a more direct question would have been, ‘when is your peak period and how many staff do you have at that point’. Similarly, the interview theme ‘do you have contact with other local food and beverage firms?’ may have been ‘pinned down’ if a more precise question had been asked, such as, ‘have you had contact with another local food and beverage firm in the last six months and did any collaboration result from it?’

Another alternative again could have been to limit the ground covered in the research. Rather than attempting a broad sweep of the geography of the industrial system and the labour market, it is just as legitimate a research exercise to focus on one aspect and refine questioning accordingly. Possibly, a questionnaire approach may have been more likely to be successful in dealing with a single issue. For example, the engagement of firms with the Plenty Food Group could have been focused on, and all firms would be asked to identify, more precisely, their level of engagement – for example, the number of meetings they attended per year, or the annual cost savings through participation in the various collective purchasing schemes. Of course, detail would have been provided at the expense of breadth. This type of dilemma is one which lies at the heart of economic geography and is usually expressed in terms of a choice between intensive and extensive research (Jenkins, 2006). But from the beginning, the research was intellectually embedded in the idea of an industrial system. This has been the approach of the literature the research deemed to be the most relevant and contemporary in understanding the local impacts of industrial development, and it necessarily requires a broad purview. Notwithstanding this observation, the more ‘intensive’ and possibly, more quantitative-based approaches such as the possibility identified above are, of course, ‘grist for the mill’ in pursuing a future research agenda.

This reminds us of another alternative understanding of local impacts – which lack local connections. As was made clear in the conceptual approach and consequently the methodology, economic impacts were understood as felt through connections; but a local firm without local industrial connections can still employ local people. And this, indeed, is what the research has found. But the point is that as the only tangible local connection is low-skilled local labour, the ‘value-added’ local multiplier benefits that a local industrial system would provide (including a broader range of jobs) is denied.
Overview

What recent developments in the discipline of economic geography point to is that both qualitative and quantitative approaches are of value and can, in fact, be applied in combination. Further, a case study can be interpreted as an example of general patterns, as unusual, or both. The methodology adopted in this research is an example of these ‘synthesising’ approaches. It has also engaged with complex issues in the semi-structured interview approach, which engenders, for example, a tension between the licence to ‘run with’ issues and the possibility that results could be interpreted in more than one way. However, it has shown that qualitative and quantitative approaches can be combined to produce meaningful outcomes.

10.6 Implications for industrial policy and institutional responses

The Plenty Food Group

In research and in policy, there may be an assumption that a geographically tightly-clustered group of similar firms should similarly exhibit a geographically-bounded industrial system. In other words, local economic development departments may still think of, or favour, their local government area as some sort of ‘stand alone town’, with weak links to the broader metropolitan economy. Not only is this unrealistic in the case of Whittlesea; the policy that might flow from it is mistaken. That perspective may be influential in one particular aspect of policy, the Plenty Food Group, a well-intentioned local creation that seems to draw some of its inspiration from the industrial cluster model. The thesis, however, has questioned the local impact of the PFG to this point in time, based on both the views of surveyed firms and the geography of the industrial system, which has not shifted – even for those firms who were financial members or who arrived post-implementation of the Group.

From the perspective of the cluster literature, at least, the PFG may not have a comprehensive enough approach. For example, if we were to comprehensively assess its activities against the Porter (1990) ‘diamond of competitiveness’, we would find it orientated towards encouraging agglomeration, true, but not orientated enough to developing the complete ‘diamond’ – particularly competitiveness, ideas’ generation and exchange and particularly, developing the capabilities of the local labour market. That these issues may be resolved as the Group further develops is possible. But there is also an additional danger: the task of building a local industrial system would require a reversal of well established trends, and an expectation that an
outer suburb such as Whittlesea, with an industrial area small by the standards of say, neighbouring Hume, was capable of developing it. Of course, the PFG is devoted to both Whittlesea and Hume. It is possible that the Group is aware of the small capacity of the Whittlesea economy (although this was not explicitly picked up in interviews with firms or the PFG Convenor). Yet even Hume, as we have seen, did not offer Whittlesea firms a substantial portion of the industrial system.

The significant finding, however, is that this particular step in local policy paid little attention to the labour market. PFG interventions in the local labour market were on the whole, piecemeal and unsuccessful. The Skilled apprenticeship rotation scheme was one example. Further, the handful of information sessions and schemes skirted around the reality for the vast majority of workers in the sector, who were unskilled, often casual and from migrant backgrounds. The PFG did not see its role as intervening to directly ‘improve the lot’ of these workers. Of course, it is quite reasonable that with limited resources, it needed to circumscribe its activities.

Other institutions

In the case of trade unions and trainers, a correlation was found between lack of resources and a wide catchment area. The precise link between the two and whether, in fact, this is the cause of a weak local impact is an open question requiring further investigation, but what these institutions and the industrial system of firms have in common is that their scope is set at the regional scale and beyond, rather than strongly focussed on the local area.

What is focussed on the local area is the labour market. Hence, a policy that should be considered is more concentration on local labour issues as a more effective focus for local economic development policy. How to develop such policy is by no means straightforward. There are a number of possible approaches, and deciding on these very much depends on what is perceived to be the issue. This, in turn, will influence the scale and mechanism likely to be successful. The following section considers potential approaches.

Labour markets and policy options

The first approach is place-based and enhances existing trends. This approach would recognise that essentially, the local labour market is operating smoothly ‘as it is’ and that local
community groups, through their own creativity, are functioning well as conduits into local employment. There may be scope for enhancing these networks by, for example, supporting local ethnic and neighbourhood associations. However, it is important to follow the logical conclusion of such an approach. What this would essentially be proposing is that networks leading to highly casualised, low-skilled employment should be encouraged – and therefore, so should the casualised, low-skilled employment. This reminds us of the paradox of Whittlesea’s socio-economic status and the place of the food and beverage sector within it. Although local networks work in terms of finding employment and therefore keeping levels of unemployment in check, Whittlesea’s poor ABS Index of Disadvantage ranking shows that low unemployment contends with other important indicators, such as income, educational attainment and skills to provide a more comprehensive (and in Whittlesea’s case, a somewhat negative) picture of the socio-economic status of a local population.

This leads us to consider a second, more radical ‘people-based’ approach. Networks should be developed to enable the local workforce to access a broader regional and possibly metropolitan catchment of job availability and therefore, a broader choice of jobs. A key action here would be more English language courses and TAFE College-type training. The research showed that these services, mostly, are currently ‘thinly spread’. This approach is generally more in line with the overall picture of how local labour markets operate, which as we saw in Chapter 2, involve a broad range of ‘socially constituted institutions’ (Martin, 2000: 461), both ‘soft’ (social networks) and ‘hard’ (housing provision, child care, public and private transport infrastructure and management). All, of course, are interrelated approaches, with the policy implication that the horizons of job availability can be expanded – beyond the local area. Indeed, Australian research has found that unemployment persists in locations where jobs and job growth occurs, including growth in low-skilled occupations (Maher, 1994; O’Connor and Healy, 2002; Dodson and Berry, 2003; Fagan et al., 2004). Therefore, the provision of local jobs through encouraging local investment (again, the ‘growth pole’ approach) may not result in significantly expanding employment opportunities. It is at the level of the metropolitan or regional labour market that attention should be directed. Further, it is reasonable to assume – although further research would need to confirm this - that where unemployment is persistent in a particular location, so too is a high rate of casualisation. Therefore, the policy to broaden the area of job access could be seen as a means to reduce reliance on casual jobs. The irony, then, is that ultimately, to improve employment opportunities for the local population may mean facilitating access to more dispersed employment opportunities. Here too, can be seen
the need to re-think the emphasis on ‘local’ areas. Relatedly, the research highlights the need to equip individuals and community groups, not firms, with a variety of skills and services.

This leads to a third policy perspective. What is proposed in option two can be read as quite an optimistic ‘view of the world’. It implies that job prospects can be improved significantly by the provision of such local education and training via services and infrastructure, so broadening the geography of job opportunities. However, this approach may ignore broader structural realities. One of these is the vulnerability of some firms in the economy in general to global economic downturns. Of course, during the course of this research, it is clear that in the case of the food and beverage sector, the vulnerability lies not at the firm level, but at the labour market level, in the form of the vulnerability which inevitably comes with low-skilled and casual employment. This draws our attention again to a ‘non-local’ approach, and it may involve at least a metropolitan, and perhaps a national, approach to the circumstances involved in getting a job, even going so far as being expressed as rights of the citizen and the responsibility of higher levels of government in a ‘job guarantee’ pact between state and citizen (Mitchell and Mosler, 2002). This could provide an avenue for improved job prospects wherever one is located; more positive local impacts would be felt where the job supply side kept pace.

10.7 Implications for local economic development

The discussion above implies that local (and perhaps regional) -scale actions can be effective responses to local economic development issues, providing they are a ‘base’ for broadening the geographical scale of opportunities. But who is to administer such responses? In Australia, the role of local government in economic development is problematic. Beer et al (2003) note that local and regional economic development (L&RED) ‘…is characterised by a large number of small-scale agencies, with most dependent on either state government or local government funding’ (p.8), although in Victoria, ‘… L&RED is almost exclusively the responsibility of local government…’ (p.8). But as Tonts (2005) observes, such responsibilities of local government have grown in the context of:

…higher tiers of government…(attempting) to reduce spending by devolving certain aspects of service and infrastructure delivery to the local level…This helps explain the growing financial pressures facing local government…often dependent
on the stocks of locally available human, social and economic capital… (Tonts, 2005: 208-209).

Jones (2008), in a recent study of three large Australian councils, similarly found ‘…a range of barriers and impediments…’ (p32), such as a lack of constitutional power, which inhibited the development of economic development policies, let alone their implementation.

These local approaches, of course, need to be understood in the context of the metropolitan plan. In the Melbourne case, the spatial centrepiece is ‘Activity Centres’, a policy that proposes focusing a range of jobs and services in a confined area, supposedly accessible from a larger surrounding region (DSE, 2005). This involves provision of local services and institutions connected to the transport-linked Activity Centres. Theoretically, individual workers would be equipped with the ability to move across a widened regional labour market. Whether that labour market can provide the jobs is an open question, but issues with the Activity Centre approach centre on whether industrial estates and business park-style workplaces can literally ‘fit into’ medium density, mixed use centres and whether those higher-level producer services firms, wedded for some time to the face-to-face interaction that the CBD affords and the inner urban locations its workforce prefers, would be enticed to such suburban locations (Birrell et al, 2005).

Although the research has identified labour as a strong local component, in drawing together these ideas on policy and local economic development, consideration of labour market policy would seem to involve results that are multi-scalar – notwithstanding the fact that the platform from which regional and metropolitan opportunities may be launched will still involve local services and institutions – and it is this later point which preserves the enduring distinction between labour and the rest of the industrial system. The latter, after all, does not seem to require local connections for its successful operation.

10.8 Toward further theory and research

10.8.1 Ideas from labour process theory

One matter that needs to be further explored is the local impact of casualisation. There may be a complex relationship between the profile of local labour - for example, the significant proportion of workers from migrant backgrounds - and the generally non-unionised and in
some cases, family-run SMEs. It is possible that a paternalistic ‘family’ approach to employment relations, both in the form of family-run businesses and family-based networks of employment, inhibit the kind of worker activism that may address levels of skills and casualisation.

Further, does ‘easy entry’ into a workplace present ambiguous outcomes for the workforce itself? The absence of codified skills as a prerequisite for employment – skills that may be transferable to another firm or sector - could be interpreted as ‘bonding’ labour to the firm, perhaps discouraging a look beyond what is, after all, the relatively low-paid and monotonous activity of process work. If further research can show, for example, that low-level internal training, customised to some extent to particular workplaces, takes precedence over more obviously codified external training – skills which are perhaps more easily transferable – workers’ bargaining power is lessened, as they are subjected to a paternalistic internal discipline, inspired, both literally and metaphorically, by the family.

These considerations suggests that an exploration of the labour process literature, with its idea of manufacturing or manipulating consent of the workforce, and deskilling, would be pertinent (Burawoy, 1982). Deskilling in the sector through new machinery was referred to by several respondents (as Bakery 35 put it, ‘…you’ve got to automate to take out the idiot’). The challenge would be how best to apply the labour process approach. The research question would be, ‘how is the labour process expressed at the local level?’ Labour process theory is essentially concerned with exposing, and understanding, the manipulation of labour to advance profits (Braverman, 1974). It has not concerned us in the body of thesis, because it is generally an aspatial perspective. But if a comparative study were developed, it could be shown that the labour process is harsher in one location than another, with, for example, more precarious, lower paid work.

10.8.2 Ideas from regulation theory

Another way of viewing the operation of the local labour market in general, and casualisation in particular, is suggested by employers’ strategy of seasonal use of casual labour as a form of regulation par excellence to maintain a profitable balance book. What we have is an ‘ordered equilibrium’, where casual labour is easily found; through local networks, labour itself finds employment without, as far as can be gleamed, great difficulty. Therefore, the ‘local regulation school’ is another intellectual avenue worth pursuing in the light of this research. Steps have already been taken in this direction, through thinking on the operation of local labour markets,
local economies and the social arrangements in which both are embedded (Peck, 1996; Goodwin, 2001). The main point is that given the primacy of labour as the local influence, and given the prevalence of casual labour, it does appear that it is the reduction of labour costs which is the key to the sector’s vitality, rather than firm interaction or innovation. Therefore, in regulation school terms, we find a ‘balance’ between labour costs and profits. The system, then, is ‘well-regulated’. Also, the idea of regulation at the local level could be applied in alliance with the idea of social embeddedness, drawing on the ideas of Granovetter (1992) and applied by Martin (2000) to understand labour markets. From this perspective, the utilisation of local networks to find employment is part of the local regulation ‘deal’, a highly efficient supply of local labour.

Perhaps the ‘success’, then, of regulation at the local level can be seen in the meeting of ethnic, family and neighbourhood ties – the ‘deep local’ dimension portrayed in Figure 10.4 - and ‘easy entry’ workplaces, which avoid severe, concentrated disadvantage seen in other locations in Australian cities with the same broadly similar characteristics. In the latter cases, ‘…entire families are at risk of falling into increasing rounds of social disadvantage through the impacts of weakened social networks and intergenerational transfers of disadvantage’ (Baum et al, 2006: 1574). In the case of Whittlesea, it would seem a regulation school argument could be applied, which illustrates that the system never quite gets to the point where legitimacy collapses, where a paradigm shift – or in political terms, civil unrest – would occur.

From one angle, local regulation theory not only applies to the strict ‘capitalist equilibrium’ model proposed by the original French thinkers (Boyer and Saillard, 2002), but is a tool of labour and here can be seen a neighbouring intellectual approach, the proactive labour geographies articulated by Herod (2001). Herod argues labour, far from being a passive victim of the decisions of the firm, influences those decisions, by, for example, trade union activity. Ultimately, however, whatever the typology, the end result may be the same. ‘The system’ not only avoids the worst excesses, it maintains a smoothly running ‘machine’ – in this case, the smooth regulation of compliant labour into the workplace. The unequal relationship between capital and labour is no more obvious than in the expectations that employers have for the workforce. The latter are assessed for employment, and are therefore expected to provide ‘character’ attributes, in some cases combined with more specific non-skill based requirements. For example, the expectation of Fruits 160, is that ‘Everyday process workers [should be]…good people that can understand the total business and really add value… just because
they’re a process worker doesn’t mean to say that in a situation, their leadership doesn’t come out’.

10.8.3 Comparisons with other places, other industries

To further investigate the distinctiveness of a local economy calls for a comparative study. Whittlesea’s neighbouring LGA in Hume provides a good example of a possible comparison. Hume is of course, like Whittlesea, one of the residential-industrial growth areas in Melbourne and it was firms from these two LGAs that comprised the membership of the PFG. Further, as we saw in the customised Census data, (Chapter 8), after Whittlesea, Hume is the residential location of choice for workers in the Whittlesea food and beverage sector and unlike LGAs closer to the inner area, this proportion has increased slightly between 1996 and 2006. As has been suggested at several points in the thesis, the implication of this latter point is that the status of housing markets interrelate with labour markets. Hume, like Whittlesea, is similar in so far as its housing market seems to have remained within reach of low-skilled manufacturing workers.

Conversely, there were characteristics of Whittlesea firms that were quite distinct from Hume and a comparison may provide empirical and theoretical insights into this. Unlike Hume, there were no transnational corporations and no firm closures (apart from the unusual case of Matisse Small Goods, which was not related to local conditions). Further, the great variation in increases in employment growth between Hume and Whittlesea, which was touched on in Section 4.4, really is quite remarkable and requires explanation. In Whittlesea, the introduction of new machinery, referred to by several respondents, has not coincided with job loss. There have been no closures of food and beverage firms in Whittlesea apart from Matisse; there most certainly has been in Hume, with the recent closure of Kraft resulting in retrenchments. A comparative analysis may well reveal Hume to have more of the ‘Fordist relic’ style of large, unionised, multinational enterprises – rather than family-run SMEs of casualised labour. There is some evidence this may well be the case. Hume is home to large branch plants of multinationals in Nestle, Goodyear and as it so happens – Ford. The complex question would be: how do these broader structural differences translate into differing local expressions, especially of the labour market? Here could be employed the approach of labour process and regulation theories. A comparison could be made of occupational grades and the level of casualisation of food and beverage firms in Whittlesea and elsewhere. Of course, the comparison LGA need not necessarily be Hume; but the example does show how comparison
studies might serve the purpose of both generalising from, and distinguishing, different locations.

Another approach would be to compare the sector with other industries. Manufacturing is becoming increasingly complex, with divisions within it emerging between ‘new economy’ manufacturing (such as photographic equipment, with high levels of technical input) and old economy manufacturing – such as the food and beverage sector (O’Connor and Healy, 2002). Relatedly, manufacturing is also integrating a wider variety of functions beyond the actual production line process so that marketing, research and development, and logistics are increasingly drawn upon, to the extent that some researchers now also speak of a ‘new manufacturing’ (Houghton et al., 1999). And finally, there is the hierarchical division of products, ranging from the ‘simply’ to the ‘elaborately transformed’.

Given the level of technical skill involved, the higher levels of specialisation entailed and the drawing on a greater range of producer services, it is not too difficult to envisage that the ‘new’ and the ‘elaborate’ are more likely to add value to local economies and command access to the global market place (Freestone and Murphy, 1998). However, two issues require further exploration in the Australian context. First, the geography of such advanced manufacturing and its impact on local communities in Melbourne and other Australian cities is yet to be fully understood, either empirically or theoretically. Second, what exactly is the basis of the emerging division of the ‘elaborate’ and the ‘new’ on the one hand, and the ‘simple’ and the ‘old’ on the other? An example which illustrates the idea that the apparent division requires further investigation by economic geographers is the mere existence of food technology research. So, to relate the discussion back to the research, a further question is: why has such an obvious opportunity for ‘knowledge spillover’ not eventuated for Whittlesea food and beverage firms when other more valorised forms of manufacturing seem to take on technological developments more easily? More directly, why do the south east suburbs benefit from the research of an institution so close to Whittlesea firms while the latter do not? The answer, we can rightly suspect, may lie in the nature of local networks (or in Whittlesea’s case, lack thereof), in particular industries, in particular locations - hence, the impetus for a comparison between different manufacturing sub-sectors and the networks associated with them.
Housing and labour market links

What the research has also touched on is the link between housing and labour markets. Here is another style of possible ‘comparative study’. Several respondents alluded to this link. The Census data used by the research also strongly implies strengthening links. The ‘old chestnut’ question of whether jobs follow people or vice versa has some very important intellectual considerations – and of course, policy considerations, which require further examination. Given the strong sense of anchorage of the labour market uncovered by this research, the calibre of the local housing market most likely plays a role. There is a strong vein of research to be tapped that might uncover links between changes in housing costs and changes in the composition and operation of local labour markets.

10.8.4 The role and geography of a broader array of institutions

The research has uncovered a number of features that broaden our understanding of the operation of the labour market. These provide fertile ground for further research. Assuming the data were available, to pursue further understanding, ‘local intermediaries’ could be illustrated by catchment maps of, for example, local employment agencies, settlement services, education facilities, child care centres and research engagement and student enrolments at research institutes and training centres.

However, this quantitative approach would be greatly enriched by a study not only of the labour market, but with it, with interviews with the local workforce being a central part of the methodology. In this way, the institutional breadth said to constitute labour markets could be empirically fleshed out and a number of issues and questions that have arisen in this research, either implicitly or explicitly, could be addressed. Not only would this provide further information on the use of local services and institutions, it could re-examine networks within the labour market, not only in terms of social networks providing access to employment, but of networks in the sense of workers who move from firm-to-firm in the local area, if that is indeed what they do. This would even reorientate the prospective research back to the cluster literature fold. It could examine whether there is in fact any evidence that technical or (more likely) tacit knowledge is spread by the workforce and into firms and that this, therefore, is a local network of knowledge more in line with the approach of the cluster literature. It would also address the important unanswered question of whether, given firm managers reported far higher rates of self-containment than the Census figures, casual workers are more likely to be drawn from the local area.
Part of this approach may help resolve a tension in the research on the agency of labour. Reflecting back on the observation above, that at face value, by utilising their own networks, workers are ‘geographical agents’ (Herod 1997: 2), where this ‘power’ leads them, exactly, is to a workplace of limited opportunities. The question, therefore, is if the workers in this case study are ‘masters’ of their own geography, why does this result in low-paid, precarious employment? But a more fundamental question is, how does the workforce itself evaluate the proposition that ‘any job is better than no job’ vis a vis the quality of the jobs in terms of security, income and possibilities for advancement? In other words, how positive is the local impact in terms of job provision per se, as far as the holders of those jobs are concerned?

10.9 Concluding comments

This thesis has adopted a research agenda directed at identifying the role of the local labour market in the impact of economic development. It shows that this approach provides a potentially rich and extensive project, capable of drawing on a range of theoretical and methodological approaches. The thesis has ‘rephrased’ the idea of ‘the local’, by drawing attention to and exploring what does seem to be the most ‘sticky’ dimension of industrial development - labour. In a world of ‘ubiquities’, people, it seems, remain the basis of local impacts. It therefore follows that it is with the local population that the idea of local development will find a sense of theoretical and practical purpose, clarity and impact that has hitherto been underestimated.
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Appendices
Appendix A. Detail of Metropolitan Melbourne LGAs

Figure 1. LGAs of Melbourne’s metropolitan area and key locations cited
Appendix B. Disaggregated Interview Data

Table 1. Non-respondents to questions on industrial system *

<table>
<thead>
<tr>
<th>Suppliers &amp; bus. serv.</th>
<th>Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meats 240 (1994)</td>
</tr>
</tbody>
</table>

* Date of arrival in brackets


Table 2. Interview themes - Proportion of firms identifying a local connection

<table>
<thead>
<tr>
<th>Research theme</th>
<th>Relevant responses</th>
<th>No. of firms citing local connection</th>
<th>% of firms citing local connection</th>
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</thead>
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<tr>
<td>Basis of locational decision</td>
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<td>3</td>
<td>17%</td>
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<td>Industrial System</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Contact with other local sector firms</td>
<td>18</td>
<td>9</td>
<td>50%</td>
</tr>
<tr>
<td>Geography of suppliers and business services</td>
<td>13</td>
<td>1</td>
<td>8%</td>
</tr>
<tr>
<td>Geography of customers and markets</td>
<td>15</td>
<td>2</td>
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<td>Labour</td>
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<tr>
<td>Residence of workforce</td>
<td>17</td>
<td>8a</td>
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<tr>
<td>Preference for local labour</td>
<td>18</td>
<td>7</td>
<td>39%</td>
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<tr>
<td>Method &amp; geog. of recruitment – labour instigated</td>
<td>20</td>
<td>7</td>
<td>35%</td>
</tr>
<tr>
<td>Method &amp; geog. of recruitment – management instigated</td>
<td>20</td>
<td>2</td>
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<tr>
<td>Institutions</td>
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<tr>
<td>Positive assessment of Plenty Food Group</td>
<td>19</td>
<td>4</td>
<td>21%</td>
</tr>
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</table>

Total firms surveyed: 20
Total number of firms: 47

a. This figure represents the number of firms estimating at least 50% of their workforce were from the City of Whittlesea

Source: Interviews with firms and AMIEU delegate at Poultry 290, 2008
Table 3. Basis of locational decision

<table>
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<tr>
<th>Year of location</th>
<th>BE 4</th>
<th>BE 5</th>
<th>BE 6</th>
<th>D 9</th>
<th>C 11</th>
<th>AP 11</th>
<th>AP 12</th>
<th>B 12</th>
<th>CV 14</th>
<th>B 16</th>
<th>O 20</th>
<th>B 35</th>
<th>D 40</th>
<th>M 60</th>
<th>B 90</th>
<th>P 140</th>
<th>F 160</th>
<th>C 180</th>
<th>M 240</th>
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<td>Traditional</td>
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<td>Space – general operational</td>
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Legend: Letter (sub-sector) Numeral (no. of employees)

BE – Beverage; AP – Antipasto; B – Bakery; D- Dairy; M – Meat Processing; P – Poultry processing; C – Confectionary; F – Fruit processing; CV – Convenience foods
O- Cooking Oil

Table 4. Firms reporting contact within other local FBE firms

<table>
<thead>
<tr>
<th>Contact with other local firms reported</th>
<th>No contact reported with other local firms</th>
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<tr>
<td>Beverages 16 (1960s)</td>
<td>Bakery 90 (1998)</td>
</tr>
<tr>
<td>Oils 20/early (1980s)</td>
<td>Poultry 140 (1975)</td>
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</table>

a. Year of arrival in Whittlesea is in brackets.


Table 5. Geography of suppliers and services *

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<th>Global</th>
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<td>Poultry 140 (1975)</td>
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<td>Fruits 160 (1990)</td>
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<td>Dairy 40 (1996)</td>
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<td>Beverages 5 (1997)</td>
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<td>Bakery 90 (1998)</td>
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<td>Confectionery 180 (2001)</td>
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<td>Confectionery 11 (2001)</td>
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<td>Bakery 12 (2002)</td>
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<td>Beverages 4 (2005)</td>
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<td>Beverages 6 (2006)</td>
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* Date of establishment in Whittlesea in brackets

Table 6. Geography of customers and markets *

<table>
<thead>
<tr>
<th>Firm</th>
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<th>Melbs. North</th>
<th>Rest of Melbourne</th>
<th>National</th>
<th>Global</th>
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<tbody>
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<td>Beverages 16 (1960s)</td>
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<td>Meats 60 (1983)</td>
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<td>Convenience 14 (2007)</td>
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* Date of establishment in Whittlesea in brackets


Table 7 Geography of competitors *

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<th>Rest of Melb.</th>
<th>National</th>
<th>Global</th>
<th>No competitors</th>
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<td>Bakery 12 (2002)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Beverages 4 (2005)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Conv. 14 (2007)</td>
<td></td>
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</tbody>
</table>

* Date of establishment in Whittlesea in brackets

Table 8. Geography of ideas *

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Bev. 16 (1960s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poultry 140 (1975)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meats 60 (1983)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Oil 20 (1980s)</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AP 12 (1989)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy 40 (1996)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bev. 5 (1997)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 35 (1997)</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 90 (1998)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Fruits 160 (1990)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Conft. 11 (2001)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Confect. 180 (2001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP 11 (2002)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery 12 (2002)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bev. 4 (2005)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bev. 6 (2006)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Conv. 14 (2007)</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Date of establishment in Whittlesea in brackets

Table 9. Sources of ideas for surveyed firms

<table>
<thead>
<tr>
<th>Firm</th>
<th>Located Whittlesea</th>
<th>Source of innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages 4</td>
<td>2005</td>
<td>Owner</td>
</tr>
<tr>
<td>Beverages 5</td>
<td>1997</td>
<td>Owner</td>
</tr>
<tr>
<td>Beverages 6</td>
<td>2006</td>
<td>Owner’s previous occupation</td>
</tr>
<tr>
<td>Dairy 9</td>
<td>2004</td>
<td>Customers (local ethnic community - historical), owner’s country of origin; owner’s ideas</td>
</tr>
<tr>
<td>Confectionary 11</td>
<td>2001</td>
<td>Owner, customers, adjacent food firm.</td>
</tr>
<tr>
<td>Antipasto 11</td>
<td>2002</td>
<td>Owner’s previous occupation, internet</td>
</tr>
<tr>
<td>Antipasto 12</td>
<td>1989</td>
<td>Magazines, overseas exhibitions</td>
</tr>
<tr>
<td>Bakery 12</td>
<td>2002</td>
<td>Menus, pastry chefs' previous occupation</td>
</tr>
<tr>
<td>Convenience 14</td>
<td>2007</td>
<td>Customers, internet</td>
</tr>
<tr>
<td>Beverages 16</td>
<td>1960s</td>
<td>Food industry regulations; owner’s previous occupation</td>
</tr>
<tr>
<td>Oils 20</td>
<td>1980s</td>
<td>Customers (chefs), customers (local ethnic community - historical), European food books, country of origin, suppliers, Australian financial newspaper, parents at children's school</td>
</tr>
<tr>
<td>Bakery 35</td>
<td>1997</td>
<td>Internet, overseas exhibitions, food industry regulations, supermarkets</td>
</tr>
<tr>
<td>Dairy 40</td>
<td>1996</td>
<td>Owner</td>
</tr>
<tr>
<td>Meat 60</td>
<td>1983</td>
<td>Food industry regulations, general workforce</td>
</tr>
<tr>
<td>Bakery 90</td>
<td>1998</td>
<td>Overseas exhibitions, internet, industry association, food industry regulations, supermarkets, customers</td>
</tr>
<tr>
<td>Poultry 140</td>
<td>1975</td>
<td>Overseas trade fairs, customers (local ethnic community – historical), competitors, electricity and water costs &amp; restrictions</td>
</tr>
<tr>
<td>Fruits 160</td>
<td>1990</td>
<td>Suppliers, management team, customers</td>
</tr>
<tr>
<td>Confectionary 180</td>
<td>2001</td>
<td>Supermarkets</td>
</tr>
</tbody>
</table>

*Source: Interviews with firms, 2008.*
## Table 10. Managers’ assessments of residential location of labour force

<table>
<thead>
<tr>
<th>Firm</th>
<th>Located Whittlesea</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages 5</td>
<td>1997</td>
<td>‘None live in Whittlesea’</td>
</tr>
<tr>
<td>Beverages 6</td>
<td>2006</td>
<td>‘Only one of the four Whittlesea-based staff lives in Whittlesea. The others live in Darebin Nillumbik’</td>
</tr>
<tr>
<td>Dairy 9</td>
<td>2004</td>
<td>‘100% live in Whittlesea’</td>
</tr>
<tr>
<td>Antipasto 11</td>
<td>2002</td>
<td>‘Over 50% live in Whittlesea’</td>
</tr>
<tr>
<td>Confectionary 12</td>
<td>2001</td>
<td>‘Some are local others are in a different municipality’</td>
</tr>
<tr>
<td>Bakery 12</td>
<td>2002</td>
<td>‘100% live in Whittlesea’</td>
</tr>
<tr>
<td>Convenience 14</td>
<td>2007</td>
<td>‘100% live in Whittlesea’</td>
</tr>
<tr>
<td>Beverages 15</td>
<td>1960s</td>
<td>‘90% live in Whittlesea’</td>
</tr>
<tr>
<td>Oils 20</td>
<td>early 1980s</td>
<td>‘There's probably three or four that actually live within the city of Whittlesea all the rest are northern suburbs predominantly’</td>
</tr>
<tr>
<td>Dairy 40</td>
<td>1996</td>
<td>‘100% from Whittlesea’</td>
</tr>
<tr>
<td>Meats 60</td>
<td>1983</td>
<td>‘Less than 25% live in Whittlesea’</td>
</tr>
<tr>
<td>Bakery 90</td>
<td>1998</td>
<td>‘Pretty well all around the area, a lot from Thomastown, a lot from Lalor [both Whittlesea], Broadmeadows. Some of our management are more eastern suburbs, but most of the workforce is from around this area… I would say 80% of our staff are from Whittlesea, or Hume.</td>
</tr>
<tr>
<td>Poultry 140</td>
<td>1975</td>
<td>‘Keilor, St Albans [Brimbank]…not just strictly Thomastown, Whittlesea, Darebin, it’ll go out a little bit further. You’re not going to get anyone from the other side of town’.</td>
</tr>
<tr>
<td>Fruits 160</td>
<td>1990</td>
<td>‘In terms of process workers, in two suburb directions around, 70-80% would be living in Whittlesea’</td>
</tr>
<tr>
<td>Confectionary 180</td>
<td>2001</td>
<td>‘A high proportion of the staff within the northern suburbs’</td>
</tr>
<tr>
<td>Meats 250</td>
<td>1994</td>
<td>‘25% from Whittlesea, ‘…but we do get people from St Albans, Deer Park [Brimbank].’</td>
</tr>
<tr>
<td>AMIEU/Poultry 290</td>
<td>1980s</td>
<td>‘Around 85% from Whittlesea’</td>
</tr>
</tbody>
</table>

Source: Interviews with firms, and AMIEU/Poultry 290, 2008.
Table 11. Managers’ preference for Whittlesea labour

<table>
<thead>
<tr>
<th>Prefer labour from Whittlesea</th>
<th>No particular preference</th>
<th>Prefer labour from northern suburbs</th>
<th>Prefer labour from outside Whittlesea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages 15 (1960s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oils 20 (early 1980s)</td>
<td>Poultry 140 (1975)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12. Method and geography of recruitment

<table>
<thead>
<tr>
<th>Firm</th>
<th>Method and Year</th>
<th>Method/Location Details</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages 4</td>
<td>2005</td>
<td>Herald Sun newspaper, Internet</td>
<td>State-wide</td>
</tr>
<tr>
<td>Beverages 5</td>
<td>1997</td>
<td>Employment consultant</td>
<td>Queensland</td>
</tr>
<tr>
<td>Beverages 6</td>
<td>2006</td>
<td>Recruitment Agency</td>
<td>CBD</td>
</tr>
<tr>
<td>Dairy 9</td>
<td>2004</td>
<td>Local newspaper</td>
<td>Whittlesea</td>
</tr>
<tr>
<td>Antipasto 11</td>
<td>2002</td>
<td>Recruitment agency, Manager's contacts</td>
<td>Hume, Whittlesea</td>
</tr>
<tr>
<td>Confectionary 11</td>
<td>2001</td>
<td>Word of mouth (Plenty Food Group)</td>
<td>Whittlesea</td>
</tr>
<tr>
<td>Bakery 12</td>
<td>2002</td>
<td>Labour hire firm</td>
<td>Whittlesea</td>
</tr>
<tr>
<td>Antipasto 12</td>
<td>1989</td>
<td>Internet</td>
<td>Internet</td>
</tr>
<tr>
<td>Convenience 14</td>
<td>2007</td>
<td>Local newspaper, Word of mouth from the workplace</td>
<td>Whittlesea, Whittlesea</td>
</tr>
<tr>
<td>Beverages 16</td>
<td>1960s</td>
<td>Recruitment Agency</td>
<td>CBD</td>
</tr>
<tr>
<td>Oils 20</td>
<td>early 1980s</td>
<td>Herald Sun newspaper, Internet</td>
<td>State-wide</td>
</tr>
<tr>
<td>Bakery 35</td>
<td>1997</td>
<td>Recruitment agency, Word of mouth from the workplace</td>
<td>Whittlesea, Darebin</td>
</tr>
<tr>
<td>Dairy 40</td>
<td>1996</td>
<td>People applying from off the street, Local Newspaper, Telephone 'cold calls'</td>
<td>Whittlesea, Whittlesea, Unspecified</td>
</tr>
<tr>
<td>Meats 60</td>
<td>1983</td>
<td>Herald Sun, Word of mouth from the workplace</td>
<td>State-wide, Whittlesea</td>
</tr>
<tr>
<td>Bakery 90</td>
<td>1998</td>
<td>Employment consultant</td>
<td>CBD</td>
</tr>
<tr>
<td>Poultry 140</td>
<td>1975</td>
<td>Labour hire firm, People applying from off the street</td>
<td>Outside Whittlesea, Whittlesea</td>
</tr>
<tr>
<td>Fruits 160</td>
<td>1990</td>
<td>Labour hire firm, Word of mouth from the workplace</td>
<td>National firm with a branch in Darebin</td>
</tr>
<tr>
<td>Confectionary 180</td>
<td>2001</td>
<td>Labour Hire Firm, Word of mouth from workplace</td>
<td>Moonee Valley</td>
</tr>
<tr>
<td>Meats 240</td>
<td>1994</td>
<td>457 Visas</td>
<td>International</td>
</tr>
<tr>
<td>AMEU/Poultry 290</td>
<td>1980s</td>
<td>Temporary visas</td>
<td>China</td>
</tr>
</tbody>
</table>

The *Herald Sun* is the sole daily tabloid newspaper in the State of Victoria. It has a daily circulation of around half a million.

*Source:* Interviews with firms and AMIEU/Poultry 290, 2008.
Table 13. Plenty Food Group: Assessment of value by surveyed firms

<table>
<thead>
<tr>
<th>Firm</th>
<th>Member</th>
<th>Attended meetings</th>
<th>Response</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beverages 4</td>
<td>N</td>
<td>N</td>
<td>Not useful</td>
<td>No perceived benefits</td>
</tr>
<tr>
<td>Beverages 5</td>
<td>N</td>
<td>N</td>
<td>Not useful</td>
<td>No time; emphasis on export development 'a bit naive'</td>
</tr>
<tr>
<td>Beverages 6</td>
<td>N</td>
<td>Y</td>
<td>Useful</td>
<td>Exhibitions, presence with similar firms</td>
</tr>
<tr>
<td>Dairy 9</td>
<td>Y</td>
<td>Y</td>
<td>Qualified/mixed</td>
<td>Positive: pooled resources - transport, raw material purchase, assistance from larger members; Negative: smaller members are hesitant to join; doesn't build on local customer base.</td>
</tr>
<tr>
<td>Antipasto 11</td>
<td>N</td>
<td>Y</td>
<td>Useful</td>
<td>Potential to develop export capacity; allows familiarisation with local area.</td>
</tr>
<tr>
<td>Confectionary 11</td>
<td>Y</td>
<td>Y</td>
<td>Useful</td>
<td>Contacts, feedback from similar firms, 'general knowledge' disseminated; pooled resources, labour supply.</td>
</tr>
<tr>
<td>Antipasto 12</td>
<td>N</td>
<td>N</td>
<td>No opinion</td>
<td>No opinion</td>
</tr>
<tr>
<td>Bakery 12</td>
<td>N</td>
<td>N</td>
<td>No opinion</td>
<td>No opinion</td>
</tr>
<tr>
<td>Convenience 14</td>
<td>N</td>
<td>Y</td>
<td>Qualified/mixed</td>
<td>Positive: Assisted finding premises, trade shows, seminars, dedicated dept. for new businesses, potential for networking. Negative: Low levels of attendance by others.</td>
</tr>
<tr>
<td>Beverages 16</td>
<td>N</td>
<td>N</td>
<td>No opinion</td>
<td>No opinion</td>
</tr>
<tr>
<td>Oils 20</td>
<td>N</td>
<td>Y</td>
<td>Qualified/mixed</td>
<td>Positive: Overall program. Negative: Not relevant to his sub-sector.</td>
</tr>
<tr>
<td>Bakery 35</td>
<td>Y</td>
<td>N</td>
<td>Qualified/mixed</td>
<td>Positive: Trade shows, seminars. Negative: Owner-operator, no time to attend.</td>
</tr>
<tr>
<td>Dairy 40</td>
<td>N</td>
<td>N</td>
<td>Not useful</td>
<td>Too busy as an owner-operator</td>
</tr>
<tr>
<td>Meats 60</td>
<td>N</td>
<td>N</td>
<td>No opinion</td>
<td>No opinion</td>
</tr>
<tr>
<td>Bakery 90</td>
<td>N</td>
<td>N</td>
<td>Not useful</td>
<td>Too busy</td>
</tr>
<tr>
<td>Poultry 140</td>
<td>Y</td>
<td>Y</td>
<td>Useful</td>
<td>No opinion (registered as 'positive response' due to membership)</td>
</tr>
<tr>
<td>Fruits 160</td>
<td>Y</td>
<td>Y</td>
<td>Qualified/mixed</td>
<td>Positive: Exports, packaging, supply networks. Negative: Large firm - does not require their services; low level of participation.</td>
</tr>
<tr>
<td>Confect. 180</td>
<td>N</td>
<td>N</td>
<td>Not useful</td>
<td>Do not want to mix with other firms</td>
</tr>
<tr>
<td>Meats 240</td>
<td>N</td>
<td>N</td>
<td>No opinion</td>
<td>No opinion</td>
</tr>
</tbody>
</table>

Appendix C. Interview Guides

Interview Guide – Firm Owners and Managers

Firm
Address
Date of Interview
Name of interviewee

1. Rundown of labour force, part-time workers, age, gender, ethnicity, skill levels, part-time workers.

2. Circumstances of locating in Whittlesea.

3. Communication with other food and beverage firm in Whittlesea and what sort of communication.

4. Involvement with the Plenty Food Group and impact on operations.

5. Ideas for running your enterprise.

6. Method of recruiting new staff, and from where (which location).

7. Preference for employing staff from the local area and reasons.

8. Qualities looked for in a worker.


10. Location (eg suburb, town) for each item listed below:
   a. Markets or customers
   b. Supplier of raw produce
   c. Supplier of machinery
   d. External business service (which service eg legal, accounting, advertising)
   e. Competitors
   f. Outsourced activities.

11. Form of workplace agreement.
**Interview Guide – Trade Unions**

Union:  
Address:  
Date of interview:  
Name of interviewee:  
Position:  

1. Worker profile – over time  
   a. Wages  
   b. Skill  
   c. Gender  
   d. Age  
   e. Migrant labour  
   f. Residential location.  

2. Firms covered.  

3. Level of union membership within firms.  

4. Estimation of the degree of influence of the union over a recent industrial issue on the shop floor.  

5. Attitude of workers towards unions in the workplace generally.  

6. The main issues that members raise either in your capacity as union official or in more general conversation.  

7. Type of employment contracts.  

Interview Guide – Local Council Officials

Name:
Organisation:
Role:
Date of interview:

1. How would you describe the local economy – composition, trends, resilience?

2. What are council’s key strategies in regard to the local economy?

3. What are the current land use issues in regard to employment?

Interview Guide – English as a Second Language (ESL) Local Trainers

Name:
Organisation:
Role:
Date of interview:

1. Tell me about what you do.

2. What is your catchment area?

3. How many clients do you have

4. Can you describe the type of clients

5. Where do they live?

6. Where do they work?

7. Are the resources available to you (personnel, finances) adequate for the demand?

8. Adequacy of resources for what you do.

9. Actual work in Whittlesea, when was it, for how long, which firm.

10. How much do your clients rely on personal networks in particular own ethnic community to find employment?

11. Housing affordability in the local area.
Interview Guide – Academics

Name:
Organisation:
Role:
Date of interview:

1. Proportion of food tech graduates from Bundoora are or have been employed by food and beverage firms in the City of Whittlesea in the last two years.

2. An example in the last two years, possibly earlier, where a postgraduate research student based at Bundoora has conducted a significant amount of research either on, or in collaboration with, the sector in Whittlesea.

3. An example, again in the last two years, possibly earlier, where a staff member has conducted research or consultancy work for the Whittlesea sector?

4. Do you have any further comments in relation to this topic?
Appendix D. Aggregated ABS Categories

_Industries_

1. Manufacturing

2. Mass Goods and Service Provision
   a. Electricity, gas and water supply
   b. Government administration and defence
   c. Education
   d. Health and community services
   e. Personal and other services

3. Construction

4. Distribution and Transport
   a. Wholesale trade
   b. Transport and storage

5. Mass Recreation
   a. Accommodation, cafes and restaurants
   b. Cultural and recreational services

6. New Economy
   a. Communication Services
   b. Finance and Insurance
   c. Property and business services

7. Retail Trade

8. Other
   a. Agriculture, forestry and fishing
   b. Mining
Appendix E. Australian Standard Classification of Occupations (McLelland, 1997)

MANAGERS AND ADMINISTRATORS

MANAGERS AND ADMINISTRATORS head government, legislative, industrial, commercial, agricultural and other establishments, or departments within these organisations. They determine the policy of the organisation or department, and direct its functioning, usually through other managers, and coordinate economic, social, technical, legal and other policies. Most occupations in this major group have a level of skill commensurate with a bachelor degree or higher qualification or at least 5 years relevant experience. In some instances relevant experience is required in addition to the formal qualification.

Tasks performed by Managers and Administrators typically include formulating, administering and reviewing the policy and legislation which determine the direction to be taken by the organisation they head; controlling, directing and participating in the activities of that organisation personally or through a hierarchy of managers and supervisors; establishing operational and administrative procedures; and controlling the selection of senior staff and the allocation of resources.

Occupations in this major group are classified into the following sub-major groups:
GENERALIST MANAGERS
SPECIALIST MANAGERS
FARMERS AND FARM MANAGERS

PROFESSIONALS

PROFESSIONALS perform analytical, conceptual and creative tasks through the application of theoretical knowledge and experience in the fields of science, engineering, business and information, health, education, social welfare and the arts. Most occupations in this major group have a level of skill commensurate with a bachelor degree or higher qualification.

In some instances relevant experience is required in addition to the formal qualification. Some occupations such as those in Sub-Major Group 25 Social, Arts and Miscellaneous Professionals may require high levels of creative talent or personal commitment and interest as well as, or in place of, formal qualifications or experience.

Tasks performed by Professionals typically include conducting and analysing research to extend the body of knowledge in their field; developing techniques to apply this knowledge; designing products, physical structures and engineering systems; identifying and treating, and advising on, health, social, and personal problems; advising clients on legal matters; teaching students in a range of educational institutions or in a private setting; developing and coordinating administrative and marketing programs; and communicating ideas through language, communications media and artistic media including the visual and performing arts. Occupations in this major group are classified into the following sub-major groups:

SCIENCE, BUILDING AND ENGINEERING PROFESSIONALS
BUSINESS AND INFORMATION PROFESSIONALS
HEALTH PROFESSIONALS
EDUCATION PROFESSIONALS
SOCIAL, ARTS AND MISCELLANEOUS PROFESSIONALS
ASSOCIATE PROFESSIONALS

ASSOCIATE PROFESSIONALS perform complex technical and administrative support functions which require an understanding of the underlying theories and methods of a particular field and significant practical skills. Tasks are often performed in support of professionals. Most occupations in this major group have a level of skill commensurate with an AQF 28 Diploma or higher qualification or at least 3 years relevant experience. In some instances relevant experience is required in addition to the formal qualification.

Tasks performed by Associate typically include conducting scientific tests and experiments; administering the operational activities of an office or financial institution; organising the operations of retail, hospitality and accommodation establishments; assisting health and welfare professionals in the provision of support and advice to clients; maintaining public order and safety; inspecting establishments to ensure conformity with government and industry standards; and coordinating sports training and participating in sporting events.

Occupations in this major group are classified into the following sub-major groups:

SCIENCE, ENGINEERING AND RELATED ASSOCIATE PROFESSIONALS
BUSINESS AND ADMINISTRATION ASSOCIATE PROFESSIONALS
MANAGING SUPERVISORS (SALES AND SERVICE)
HEALTH AND WELFARE ASSOCIATE PROFESSIONALS
OTHER ASSOCIATE PROFESSIONALS

TRADESPERSONS AND RELATED WORKERS

TRADESPERSONS AND RELATED WORKERS perform a variety of tasks, applying a body of trade or industry specific technical knowledge and operate a wide variety of complex precision machinery or plant to complete several stages in the fabrication and maintenance of products. Most occupations in this major group have a level of skill commensurate with an AQF Certificate III or higher qualification. In some instances relevant experience is required in addition to the formal qualification.

Tasks performed by Tradespersons and Related Workers typically include fabricating, repairing and maintaining individual metal, wood, glass and textile products; repairing and maintaining motor vehicles and electrical and electronic machinery and equipment; constructing buildings, ships and boats; applying protective and decorative finishes to surfaces; operating printing and binding equipment; preparing and cooking food; propagating and cultivating plants; hairdressing; operating chemical, petroleum, gas and power generation plant and equipment; and providing technical and other assistance for the production, recording and broadcasting of artistic performances.

Occupations in this major group are classified into the following sub-major groups:

MECHANICAL AND FABRICATION ENGINEERING TRADESPERSONS
AUTOMOTIVE TRADESPERSONS
ELECTRICAL AND ELECTRONICS TRADESPERSONS
CONSTRUCTION TRADESPERSONS
FOOD TRADESPERSONS
SKILLED AGRICULTURAL AND HORTICULTURAL WORKERS

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OTHER TRADESPERSONS AND RELATED WORKERS

ADVANCED CLERICAL AND SERVICE WORKERS

ADVANCED CLERICAL AND SERVICE WORKERS perform a range of complex organisational, administrative, service and liaison tasks requiring a degree of independence, discretion, and judgement. Most occupations in this major group have a level of skill commensurate with an AQF Certificate III or higher qualification or at least 3 years relevant experience. In some instances relevant experience is required in addition to the formal qualification. Tasks performed by Advanced Clerical and Service Workers typically include performing secretarial and other administrative tasks; recording and maintaining financial, credit and insurance information; recording proceedings of meetings and hearings; compiling and preparing documents, texts and technical information for distribution and publication; providing liaison and communication services and sales support.

Occupations in this major group are classified into the following sub-major groups:
SECRETARIES AND PERSONAL ASSISTANTS
OTHER ADVANCED CLERICAL AND SERVICE WORKERS

Tasks performed by Intermediate Clerical, Sales and Service Workers typically include operating a keyboard; providing information; producing and recording basic financial and statistical information; recording details of production, transportation, storage and purchase of goods; selling goods to wholesale and retail establishments and supervising retail staff; organising travel and accommodation; assisting teachers; providing child care, personal and basic nursing services; and providing services to patrons in hospitality establishments.

Occupations in this major group are classified into the following sub-major groups:
INTERMEDIATE CLERICAL WORKERS
INTERMEDIATE SALES AND RELATED WORKERS
INTERMEDIATE SERVICE WORKERS
INTERMEDIATE PRODUCTION AND TRANSPORT WORKERS

INTERMEDIATE PRODUCTION AND TRANSPORT WORKERS

INTERMEDIATE PRODUCTION AND TRANSPORT WORKERS operate plant, machinery, vehicles and other equipment to transport passengers and goods, to move materials, to generate power and to perform various agricultural, manufacturing and construction functions. Most occupations in this major group have a level of skill commensurate with an AQF Certificate II or higher qualification or at least 1 years relevant experience. In some instances relevant experience is required in addition to the formal qualification. Tasks performed by Intermediate Production and Transport Workers typically include setting up, controlling and monitoring the operation of mechanical equipment either directly or by remote control; driving road and rail transport vehicles to scheduled destinations; driving mobile plant to worksites; cleaning equipment and performing minor repairs; and maintaining production records.

Occupations in this major group are classified into the following sub-major groups:
INTERMEDIATE PLANT OPERATORS
INTERMEDIATE MACHINE OPERATORS
ROAD AND RAIL TRANSPORT DRIVERS
OTHER INTERMEDIATE PRODUCTION AND TRANSPORT WORKERS
ELEMENTARY CLERICAL, SALES AND SERVICE WORKERS

ELEMENTARY CLERICAL, SALES AND SERVICE WORKERS perform a range of clerical, sales and service tasks, usually under supervision, within established routines and procedures. Most occupations in this major group have a level of skill commensurate with completion of compulsory secondary education or higher qualification. Tasks performed by Elementary Clerical, Sales and Service Workers typically include receiving, processing and despatching information, mail and other documents; providing telecommunication services to customers; taking bets from customers; selling goods and services in retail and wholesale establishments; and providing basic services in relation to information, entertainment, security, personal and domestic needs.

Occupations in this major group are classified into the following sub-major groups:
ELEMENTARY CLERKS
ELEMENTARY SALES WORKERS
ELEMENTARY SERVICE WORKERS

LABOURERS AND RELATED WORKERS

LABOURERS AND RELATED WORKERS perform routine tasks usually working under close supervision. Most occupations in this major group have a level of skill commensurate with completion of compulsory secondary education or higher qualification. Tasks performed by Labourers and Related Workers typically include cleaning various types of premises and machinery; assisting tradespersons; loading, moving, unloading and packing tools, materials, freight, and manufactured articles; assembling components and performing other manual manufacturing and construction tasks; assisting in the cultivation and production of plants and animals; and collecting garbage.

Occupations in this major group are classified into the following sub-major groups:
CLEANERS
FACTORY LABOURERS
OTHER LABOURERS AND RELATED WORKERS