

# Economic Linkages within Auckland Summary Report



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**Ministry of Business,  
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## Economic Linkages within Auckland

*Auckland is New Zealand's dominant economic centre, leading national population and productivity growth. However, there is little detailed analysis into the nature of the sub-regional economic roles and connections within the Auckland regional economy.*

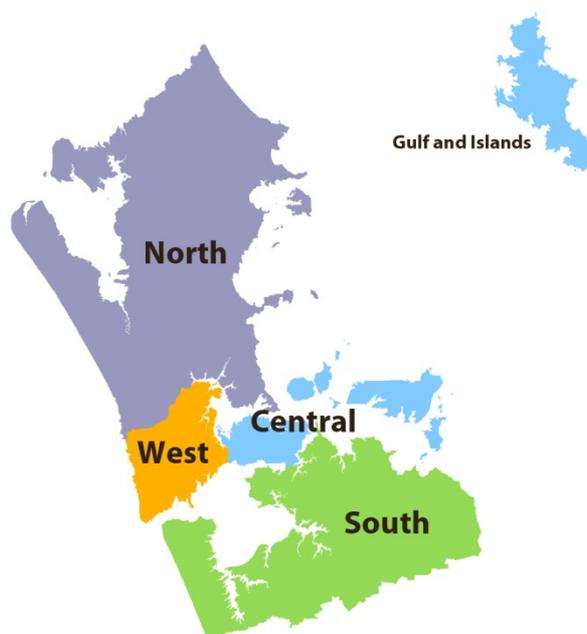
### **Introduction**

1. This research examines the main economic linkages (labour market, transport and firms linkages) within the Auckland city-system and identifies the different economic structures/roles in different parts of the city. It also examines where Auckland's key industries are located to provide a sense of the city's industrial geography.

### **Research process**

2. The research is about determining the economic linkages that exist within the Auckland city-system. It draws on quantitative data from censuses, business demography, regional transport models and Australia and New Zealand Standard Industrial Classification (ANZSIC) data, as well as qualitative material from interviews with a sample of firms in selected industries.
3. For the purpose of this project, Auckland was divided into the following areas, illustrated in the map below<sup>1</sup>.

**Figure One - Areas of analysis for *Economic Linkages within Auckland* research project**



<sup>1</sup> **North** covers the former areas of Rodney District and North Shore City (purple); **West** covers the former area of Waitakere City (orange); **Central** covers the former area of Auckland City (blue); and **South** covers the former areas of Manukau City, Papakura District and Franklin District (green).

### **Key points**

4. Auckland has been developing as a polycentric city, with central business district (CBD) growth being complemented by growth in key local employment centres such as Newmarket, Ellerslie/Penrose, Manukau and Albany.
5. The region is transforming from a manufacturing base toward a more 'knowledge driven' economy, led by the growth of higher value activities in the CBD.
6. Almost 40 per cent of Auckland's Gross Regional Product (GRP) is generated by finance and business service sector firms which are typically concentrated in the CBD, and in pockets in other main centres (such as Ellerslie/Penrose and Takapuna). These firms gain agglomeration benefits from the concentrations of skilled workers in these centres.
7. Manufacturing, distribution and wholesaling have shifted out from the Central area, particularly to the Southern area, reflecting a trend towards using larger sites and proximity to main transport routes; and a worldwide trend of urban transformation occurring in major cities' with central areas increasingly shifting to business services.
8. Though Auckland is not reliant on labour from outside the region, there are high levels of movement within several sub-regional labour markets. Employment in the Central area is supported by movements of workers from all parts of the region, whilst the workforces in the North, West and Southern areas are largely (75 per cent or more) drawn from workers living in those same areas.
9. The location trends of key industries have implications for central and local government provision of transport infrastructure, urban amenities, cost-effective business land and encouragement of interactions between industries.

**What are the economic roles and functions of different parts of the city?**

10. The economic structures of these different areas of the city are:

<p><b>Central</b></p> <p><b><i>Increasingly Auckland's high value, high wage service industrial centre.</i></b></p> <p>Dominates Auckland's Gross Regional Product (GRP) (52 per cent (2010)) and employment (48 per cent (2010)).</p> <p>Accounts for almost half (48 per cent) of Auckland's total employment.</p> <p>Highest concentration of Auckland's largest employing sectors: Advanced Business Services, Finance &amp; Insurance and Wholesaling. Employment growth in Government, Health and Education.</p> <p>Highest average incomes across all industries (especially in the CBD).</p> <p>Key centres: CBD, Newmarket, Ellerslie/Penrose (significant employment growth area).</p>	<p><b>North</b></p> <p><b><i>Broad industrial mix, but fast developing new centres of employment growth.</i></b></p> <p>Employment shares in different industries reflect the regional average but clearly higher shares in Agriculture &amp; Mining, Utilities &amp; Construction, Retailing and Government, Health and Education.</p> <p>Employment growth focussed in Government, Health and Education, Advanced Business Services and Retailing (more than half of Auckland's retail employment growth 2000-2010).</p> <p>Key centres: Albany (significant employment growth area); Takapuna.</p>
<p><b>South</b></p> <p><b><i>Increasing concentrations of manufacturing, transport and logistics as these industries are squeezed out of the Central area by service sector activity and take advantage of the availability of suitable land for development.</i></b></p> <p>High employment in Manufacturing, and Transport &amp; Storage (28 per cent).</p> <p>Highest employment growth in Government, Health and Education, and Basic Services (driven largely by growth in Transport &amp; Storage).</p> <p>Significant contributor to Auckland's GRP (23 per cent, second to Central area), mainly due to the high concentration of Manufacturing.</p> <p>Key centres: Manukau/Wiri, Auckland Airport, East Tamaki.</p>	<p><b>West</b></p> <p><b><i>Lower levels of employment across an evenly spread range of industries - seems to lack a clear role/specialisation.</i></b></p> <p>Lowest average incomes across all industries (\$36,300 versus \$49,000 for Central area (2006)).</p> <p>Highest employing industries are Government related activities and retailing. No clearly dominant employing industries (as is more evident in the Central, North and South areas). Government, Health and Education is the fastest growing employer (70 per cent of employment growth).</p> <p>Key centres: Henderson, New Lynn.</p>

11. Parts of Auckland show clear signs of specialisation (e.g. the Central area's predominance of Advanced Business Services, strong pockets in Newmarket and Ellerslie/Penrose); the Southern area as a centre of manufacturing and logistics; and the Northern area with a predominance of retail, and a significant business services presence). West Auckland lacks a clear role/specialisation, with a smaller representation of a number of industries.

12. Government, Health and Education has emerged as a key employer and gross regional output contributor across all areas of Auckland. This industry, along with Advanced Services<sup>2</sup> and Basic Services<sup>3</sup>, leads employment growth in Auckland (2001-2010). Primary and Manufacturing<sup>4</sup> sector employment declined in Auckland over the same period.
13. These changes reflect the continuing transformation of Auckland towards a service based economy, with a particularly strong pattern in the Central area and within this area, an increasing move to high value activities (such as finance and insurance) in the CBD. The value generated by those activities is significant - 52 per cent of Auckland's GRP is generated by activities in the Central area. This compares with 7 per cent in the Western area where employment is much lower and where lower value activities, and lower wage rates, predominate. Auckland also remains an important manufacturing centre, particularly concentrated in South Auckland.

**Table One - Relative contributions of Individual Areas within the Auckland Region to Gross Regional Output**

Area	High Shares	Low Shares
North	Utilities and Construction	Transport and Storage Other Advanced Business Services
West	Manufacturing Utilities and Construction Retailing Government, Health and Education	Wholesaling Transport and Storage Finance and Insurance Other Advanced Business Services
Central	Finance and Insurance Other Advanced Business Services	Manufacturing
South	Manufacturing Transport	Finance and Insurance Other Advanced Business Services

***What are the main linkages that exist within Auckland? Are there complementarities (or otherwise) that exist spatially within the city?***

14. There are a wide range of linkages between the different constituent areas and between the activities undertaken within the Auckland region.
15. Labour market movements suggest Auckland's labour market is largely self-sufficient but is made up of a number of fairly well linked sub-regional labour markets. Despite a low reliance on labour from outside the region,

<sup>2</sup> Advanced Services comprises Information Media and Telecommunications, Finance and Insurance Services, Rental Hiring and Real Estate Services, Professional, Scientific and Technical Services and Administrative and Support Services. In some instances Finance and Insurance Services are considered separately and these are excluded from Other Advanced Business Services.

<sup>3</sup> Basic Services comprise Wholesaling, Retailing, Accommodation Cafes and Restaurants, and Transport and Storage.

<sup>4</sup> Primary and Manufacturing comprises Agriculture, Mining, Manufacturing, Utilities and Construction.

there are substantial flows of labour between different areas within the region. Employment in the Northern, Western and Southern areas is largely (75 per cent or more) composed of workers living within the same areas. The Central area has the highest dependency on workers living outside (only 55 per cent of those working there live there), drawing on a wide regional labour catchment area.

16. The research suggests that workers in industries with higher incomes in which the Central area dominates are more likely to commute longer distances. Employees in those industries with lower wage rates (such as retail and accommodation) are more likely to work in the areas in which they live and not commute so far. Freight data, though limited, suggests strong north-south flows, linking the CBD and port in the Central area to the main manufacturing and distribution hubs in Penrose/Mt Wellington and Auckland Airport via SH1 and SH20.
17. Flows of new migrants around the city were also considered as a potential indicator of economic linkage. Whilst migration flows into Auckland are larger than into any other city in New Zealand, patterns of migration within and into the region show the majority of residents lived in the same area they lived in five years ago.

#### ***Did clear inter-firm linkages emerge?***

18. Inter-firm and intra-firm linkages were harder to identify. However, the linkages underpinning some industries appear stronger than others. For manufacturing, the linkages between similar firms are typically much less pronounced than other sectors. The key determinant of location is typically the availability of suitable land for development and proximity to transport routes, rather than clustering near similar or supporting firms.
19. More linkages are found in industries in the Advanced Business Services sector (including other business services, and finance & insurance) which has grown rapidly and which is likely to be at the forefront of the future growth and globalisation of the Auckland economy. This sector benefits from the agglomeration benefits arising from the linkages between concentrations of workers at key central locations who, because of the range of skills required, tend to be drawn from wide catchment areas. Face to face contact with other industry players is also important, so clustering is seen as more advantageous than in manufacturing.

#### ***Where are key industries/sectors located and why?***

20. Previous research on why firms choose to locate in Auckland has shown that access to a deep and broad labour pool is the main advantage firms claimed they get from being located in New Zealand's largest city<sup>5</sup>.
21. A large share of Auckland's GRP is generated by higher value, specialised service sector firms in the Central area, concentrated in the

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<sup>5</sup> See Ascari, Strateg.Ease, PWC for Auckland Policy Office (2011) *Drivers of Firm Location, Firm Success and Industry Success in the Auckland Region*, available at <http://www.apo.govt.nz/ViewPublication.aspx?id=3>.

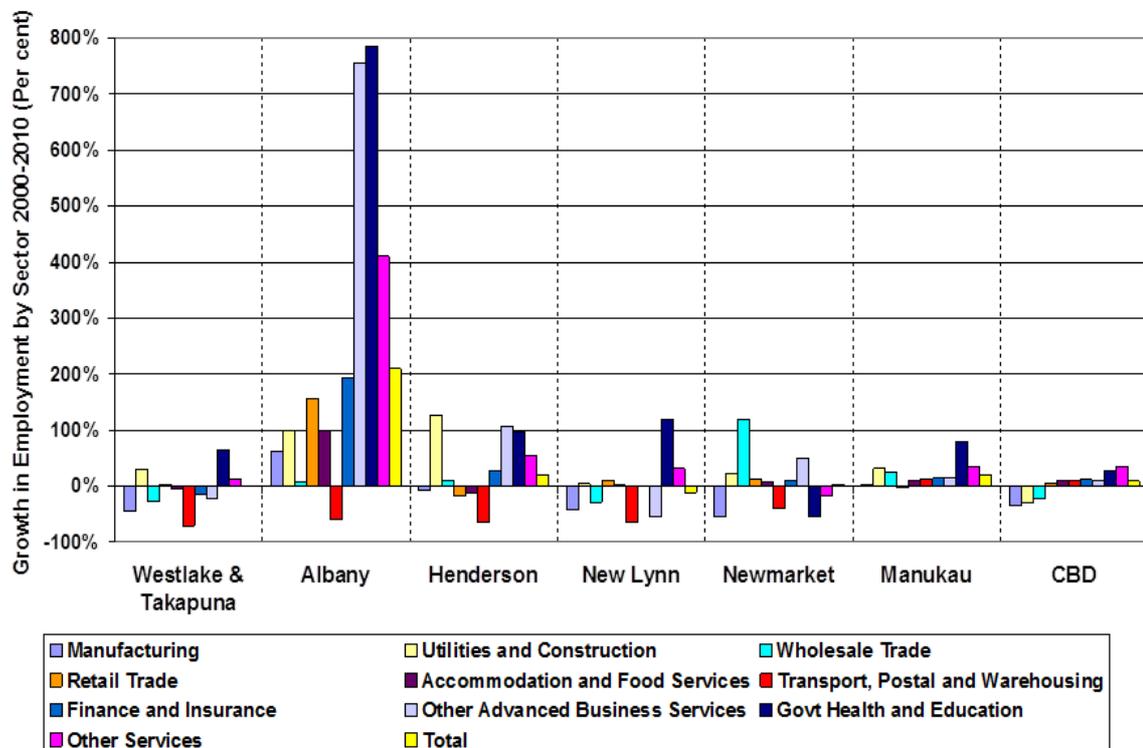
CBD. Distribution and wholesaling has shifted out from the centre predominantly to areas in South Auckland (e.g. Lion Breweries relocation from Newmarket to East Tamaki), reflecting a trend towards a need for larger sites and a transformation of core areas to business services.

22. Auckland's Central core area has an increasing concentration of activities, which gain from agglomeration benefits (e.g. being able to draw on a wide labour catchment area through high levels of accessibility). In contrast, Primary, Manufacturing and Basic services are being increasingly located away from the more congested Central area. These activities rely on a less skilled labour force, and more on the availability of affordable land and good transport access.

23. Signs of increasing spatial specialisation are emerging within the region including:-

- a) Centres within the Northern area increasingly providing business services and retailing;
- b) Centres within the Southern area providing manufacturing, retail and distribution;
- c) Centres within the Western area providing retail and distribution; and
- d) Centres within the Central area providing advanced business services.

**Figure Two - Growth in Employment by Broad Industrial Sector for the Major Regional Centres within Auckland 2000-2010 (%age of total growth in each area)**



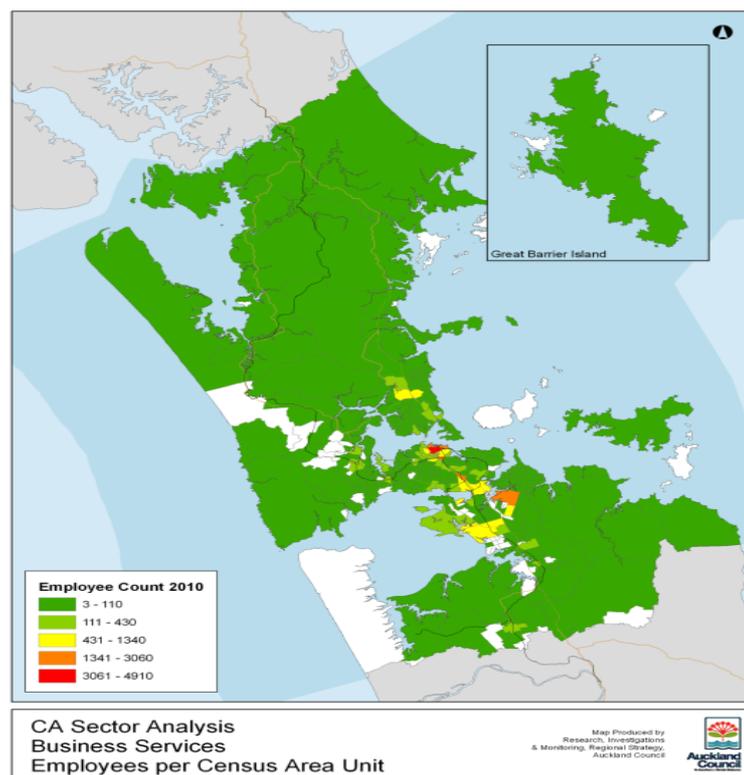
24. Previous research has identified Auckland has a competitive advantage in eleven sectors<sup>6</sup>. This research showed there had been considerable employment growth in these sectors in Auckland, led by Business Services<sup>7</sup>, Health<sup>8</sup> and Technical Services<sup>9</sup>.

25. The findings from the competitive advantage sectors mirror the emerging specialisations in the broader industry analysis above. Employment in these competitive advantage sectors was focused in four main areas of Auckland (the CBD, the southern industrial corridor between Onehunga and Highbrook, Auckland Airport/Manukau and the North Harbour Estate).

26. Analysis of employment growth suggests an increasing degree of specialisation on the following lines:

- a) Business Services growth in the Central area, particularly the CBD, Ellersie and Newmarket and the developing Highbrook area.

**Figure Three - Competitive Advantage sector 'Business Services' employment in Auckland**



<sup>6</sup> Based on the definitions used in the Ministry of Economic Development's *Auckland's Competitive Advantage and Distinctiveness* (2010), available here - <http://www.apo.govt.nz/ViewPublication.aspx?id=3>.

<sup>7</sup> Business Services include Accounting Services, Advertising Services, Business Administrative Services, Business Management Services, Business Services not elsewhere classified (nec), and Legal Services.

<sup>8</sup> Health includes Medical and Surgical Equipment manufacturing, Medicinal and Pharmaceutical Product Manufacturing, and Pharmaceutical and Toiletry Wholesaling.

<sup>9</sup> Technical services includes Computer Consultancy Services, Consultants Engineering Services, Scientific Research, Market Research Services, Technical Services nec, Professional Equipment Wholesaling, Computer Wholesaling and Telecommunication Services.

- b) Manufacturing (e.g. food and beverage, metals and metal resources, machinery and equipment) experienced the biggest growth in the Southern area, reflecting a general shift away from the Central area to other areas (though substantial manufacturing remains in the Central area);
- c) Transport Services<sup>10</sup> focused in the Southern area (close to manufacturing); and
- d) Boatbuilding and Paper Products show lower levels of dispersal, and more concentration in a smaller number of distinct places (e.g. Mt Wellington for paper; CBD, Henderson, and Hobsonville for marine).

### **Policy implications**

27. The research suggests a number of actions central and local government could support to improve current linkages with Auckland, and to provide high quality urban environments. Specific suggestions from the report include:

- a) provision of appropriate transport infrastructure and connections, linking workers with potential employment areas, especially to support further growth in high value, high wage industries such as business services;
- b) provision of other public infrastructure to support high levels of urban amenity in the major service sector employment areas;
- c) provision of cost-effective industrial land to allow manufacturing activities and other activities requiring large sites to develop and relocate from the less suitable Central area; and
- d) encouraging greater interaction and linkages between industries, such as joint operational and research facilities (e.g. The FoodBowl Auckland), and educating firms on the benefits of inter-firm collaboration, although recognising that for many firms this does not require them to be in close proximity.

### **Further information**

28. This summary is based on the *Economic Linkages within Auckland* report by Ascari Partners and Richard Paling Consulting for the Ministry of Business, Innovation and Employment (previously the Ministry of Economic Development). The full report is available at <http://www.med.govt.nz/sectors-industries/cities>.

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<sup>10</sup> Transport Services includes Road Freight Forwarding, Road Freight Transport, International Sea Transport, Courier Services, Freight Forwarding (except Road), Services to Transport nec, Services to Water Transport nec.

