Cabra Property Development Whenuapai Fast Track

Economics Assessment

Prepared for Cabra Property Development

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Executive Summary

Cabra Property Development ("Cabra") is proposing to develop four sites in Whenuapai which can be expected to produce positive benefits for the local community, both in terms of allowing households to purchase housing and by supporting local jobs. The development of Cabra's sites will generate employment which will, in turn, contribute to achieving the purpose of the COVID-19 Recovery (Fast-track Consenting) Act 2020 ("FTCA").

The economic assessment of the proposed development concludes that **the project will create an average of 154 direct FTE jobs over four years of the project lifetime**. The proposal is expected to generate approximately s 9(2)(b)(ii) in direct expenditure over the next five years. This would support total economic activity of $163.0 million in GDP and employment of 1,818 employment years[1] or 1,644 years in FTE terms (accounting for the limited proportion of the construction workforce that is engaged less than full-time) between 2022 and 2026 in the Auckland economy. Of those 1,644 FTE years, 615 FTE years would be direct employment on the Cabra sites, with the balance indirect and induced employment in related sectors off-site. Notwithstanding that some of this activity may not be net additional in the economy, and could occur on other projects if the proposed development did not proceed, the community and economy will benefit from additional economic activity that the proposed development will generate in the local area.

Cabra development is an appropriate location to enable higher density growth because it is close to the Upper Harbour Motorway and public transport, which is an ideal place for higher density residential activity to establish, and is adjacent to a large (and growing) established residential area to the south. The location of the proposed development therefore contributes to a well-functioning urban environment by providing dwellings in close proximity to major public transport links, which will also have positive effects in reducing greenhouse gas emissions. The proposal would also support efficient use of infrastructure, and more efficient access to infrastructure than in greenfields locations which require new networks to be constructed. These benefits should also be considered when assessing whether the development will achieve the purpose of the FTCA.

Based on project readiness and availability of funding, our understanding is that if the Cabra development is granted consent under the FTCA then it will be developed in the coming few years. This compares to the capacity that may be enabled by the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 ('EHA'), which is only at a preliminary stage and will take many years to be realised. While the EHA can be expected to increase residential intensity in many parts of Auckland, because the plan changes that are ultimately enabled will take some time to

[1] Total Employment Count, which is a count of employment and working proprietors.

play out, the Act is not a complete solution and does not detract from the urgent need for more "shovel-ready" development to occur in the intervening period.

In conclusion, the future development of Cabra sites, and the subsequent construction of housing on it, will create significant one-time boosts in regional and national GDP, jobs, and wages. Over a three- to four-year period, including flow-on effects, we estimate that the development could have the following regional impacts for Auckland:

- A one-time boost in Auckland regional GDP of $163.0 million.
- Employment for 1,818 people-years, the equivalent of 1,644 FTE jobs from 2022-2026.

The corresponding national economic impacts, which are higher because they include the Auckland impacts and flow-on effects to other regions, are:

- A one-time boost in national GDP of $220.6 million.
- Employment for 2,296 people-years, or 2,076 FTE jobs during the next five years.

While the proposed development alone cannot fix the economic damage caused by Covid-19, it will increase certainty of investment and provide a strong, short-term demand for labour, some of which can potentially be filled by workers that have lost their jobs to Covid-19. Further, the fast-track process will bring forward the construction timeline by more than a year compared to regular planning pathways, a significant acceleration for a project of this scale, and still achieve outcomes that are appropriate and desirable within the planning policy framework.

1 Introduction

Cabra Property Development ("Cabra") is lodging an application to become a referred project under the COVID-19 Recovery (Fast-track Consenting) Act 2020 ("FTCA") for four sites in Whenuapai, three of which will provide a mix of residential dwellings (to be developed by Cabra Developments Ltd), and the fourth which will provide industrial buildings and at-grade storage (to be developed by Cabra Investments Ltd). The proposed development will enable 227 dwellings and nine industrial lots to be developed on the sites.

Formative Limited has been commissioned by Cabra to provide economic research on whether the Whenuapai project will contribute to achieving the purpose of the FTCA and, in particular, whether it will generate employment and economic benefits to support New Zealand's recovery from the impacts of COVID-19.

1.1 Background

The Whenuapai-Hobsonville area[2] has experienced rapid population growth, from around 5,400 in 2001 to 15,430 in 2022, which is equivalent to 5.1% per annum, or over three times the growth rate of the Auckland region in that period.[3] The area immediately around the Cabra sites, Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe[4], has grown from 51,400 in 2001 to 90,330 in 2022, which is a growth of 2.7% per annum. Even with Covid-19 border restrictions, the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area was a fast-growing area in Auckland, both in quantum (+3700 people) and percentage (4.3%) terms. This compares to the rest of the Auckland Region which had a population that declined by -1.1% between 2020 and 2022, largely due to the cessation of international migrants entering New Zealand for much of this period due to Covid-19 border restrictions. This strong growth in the area indicates an ongoing need for additional dwelling stock in the area, and also contributes to an ongoing need (in addition to the drivers associated with Covid-19 uncertainties) for increased employment opportunities for local residents.

Accompanying this population growth, the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe economy has also experienced strong employment growth, up from around 13,100 jobs in 2001 to 24,380 in 2021.[5] Employment in the area has grown by 3.1% per annum, again much faster

[2] Defined as the following SA2s - Whenuapai, Hobsonville, and Hobsonville Point,
[3] Statistics New Zealand (2022) Subnational Population Estimates.
[4] Defined as the following SA2 - Whenuapai, Hobsonville, Hobsonville Point, West Harbour West, West Harbour Luckens Point, West Harbour Clearwater Cove, Kumeu-Huapai, Riverhead, Taupaki, Kumeu Rural East, Kumeu Rural West, Greenhithe West, Paremoremo West, Paremoremo East, Massey Central, Massey Royal Road West, Westgate South, Albany West, Westgate Central, Schnapper Rock, Greenhithe East, Greenhithe South, Birdwood West, Royal Heights North, Massey West, Royal Heights South, Massey East, Massey South.
[5] Formative (2021) Business and Employment Database – Total Employment Count which includes both working proprietors and employees.

than the rest of Auckland, and most districts in New Zealand. During the Covid-19 pandemic period local employment grew by 7.1%.

Auckland Council's projections show that the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe population is expected to continue growing strongly in the future, with the population projected to increase by 100% over the coming three decades, with an additional 89,517 people living in the area by 2051.[6] Importantly, Auckland Council is projecting that Whenuapai-Hobsonville is expected to grow from 15,430 to 65,520 which is over half of the growth in the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area. As in the past, the growth is expected to be driven by continued migration from other areas of Auckland. Also, the return of international migrants from 2022 onward will drive additional growth. This growth has important implications for Council planning, with most growth likely to be located around the existing urban areas.

1.2 Report Structure

This report provides an assessment of the proposed development and how it will contribute to achieving the purpose of the FTCA. The report is structured as follows:

- Section 2 provides an overview of the proposed development.
- Section 3 summarises the planning context from an economic perspective.
- Section 4 quantifies and provides commentary on recent residential demand and potential capacity options that are relevant to the Cabra development.
- Section 5 provides the economic assessment that quantifies the contribution the proposed development will make to the Auckland and national economies, including the jobs and other economic activity supported during the consenting, land development, build development and then completion phases of the proposed project.
- Section 7 summarises the wider economic benefits of the proposed development.

[6] Auckland Council (2020) I11 Version 11.6 Scenario Modified.

2 Proposed Development Overview

The proposed development consists of four discontiguous blocks of land in Whenuapai, which are located immediately north of the existing urban area. Figure 2.1 shows the three residential sites (A, B, and C) are north of the Upper Harbour Motorway, near Hobsonville and Hobsonville Point. The industrial site (D) is located two kilometres to the south-west and is close to existing industrial areas, and Westgate to the south.

Figure 2.1: Cabra Development Sites Location

2.1 Residential development site proposal

Cabra is proposing that sites A (15 Clarks Lane), B (10 Sinton Road), and C (16 Sinton Road) are developed for residential use, which will allow 227 dwellings to be built on the sites. These sites are currently surrounded by existing lifestyle blocks, with Waiarohia Inlet to the north. Also, there is the recently completed residential development (Ockleston Landing) which was developed under the Special Housing Accord providing 70 dwellings less than 200 metres to the east of Site A.

Figure 2.2: Cabra Development Residential Sites - Location

The development plans show that the proposed residential sites are expected to have the following key aspects:

- **A - 15 Clarks Lane**: total land area of 3.4ha, which is proposed to accommodate 84 dwellings with a mix of detached houses (19) and townhouses (65). The average lot size is 212m^2, an average density of 25 dwellings/ha.
- **B - 10 Sinton Road**: total land area of 2.4ha, which is proposed to accommodate 62 dwellings with a mix of detached houses (17) and townhouses (45). The average lot size is 237m^2, an average density of 25 dwellings/ha.
- **C - 16 Sinton Road**: total land area of 2.9ha, which is proposed to accommodate 81 dwellings with a mix of detached houses (31) and townhouses (50). The average lot size is 225m^2, an average density of 28 dwellings/ha.

For each site the dwelling typologies indicated have the detached (lower density) houses located along the edges of the sites, including the Waiarohia Inlet interface, with smaller lots located at the centre of the sites.

Figure 2.3: Cabra Development Site A – 15 Clarks Lane

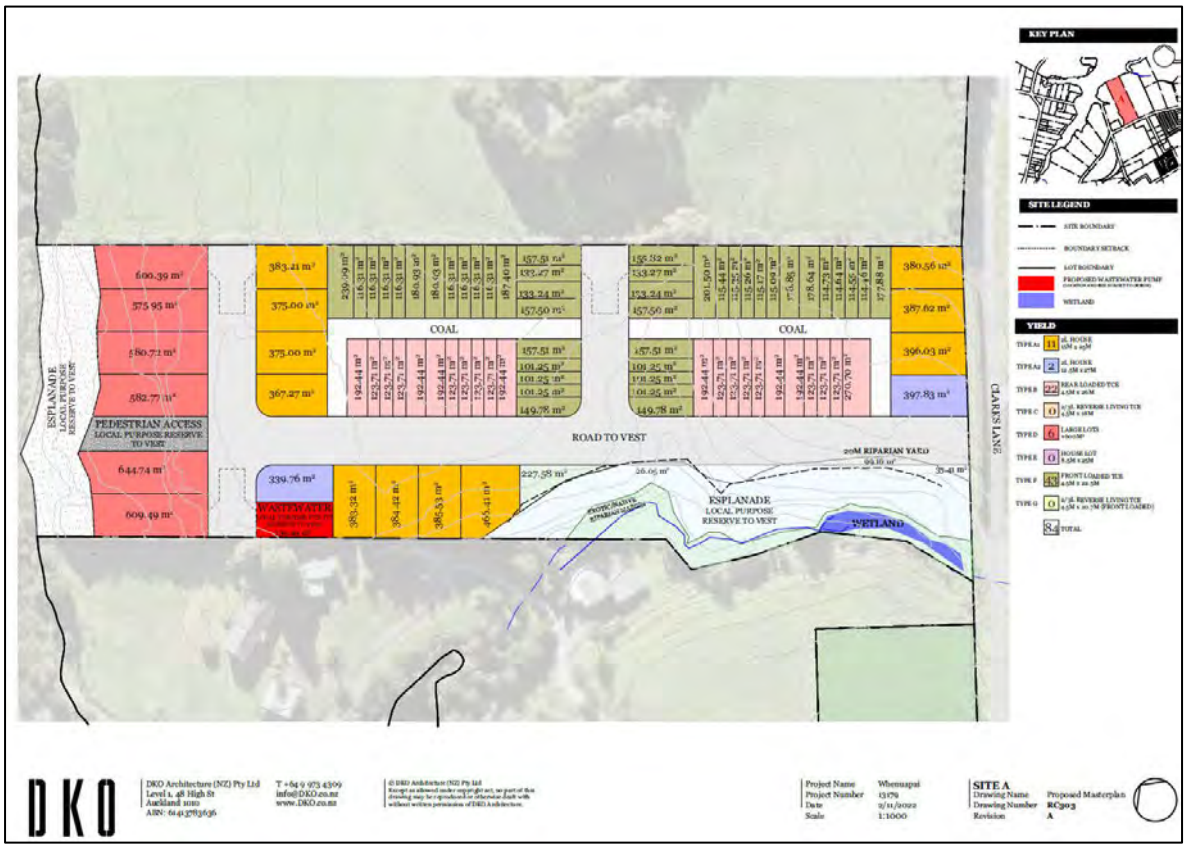


Figure 2.4: Cabra Development Site B – 10 Sinton Road

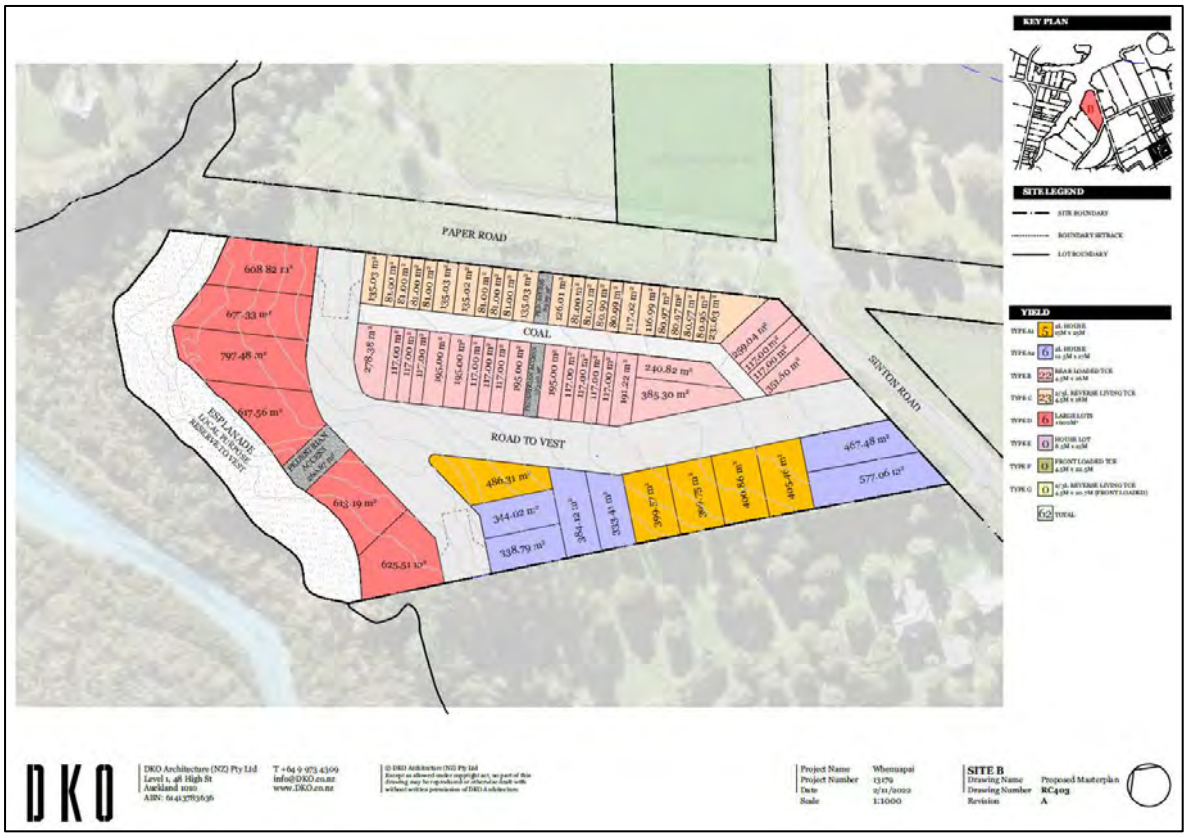
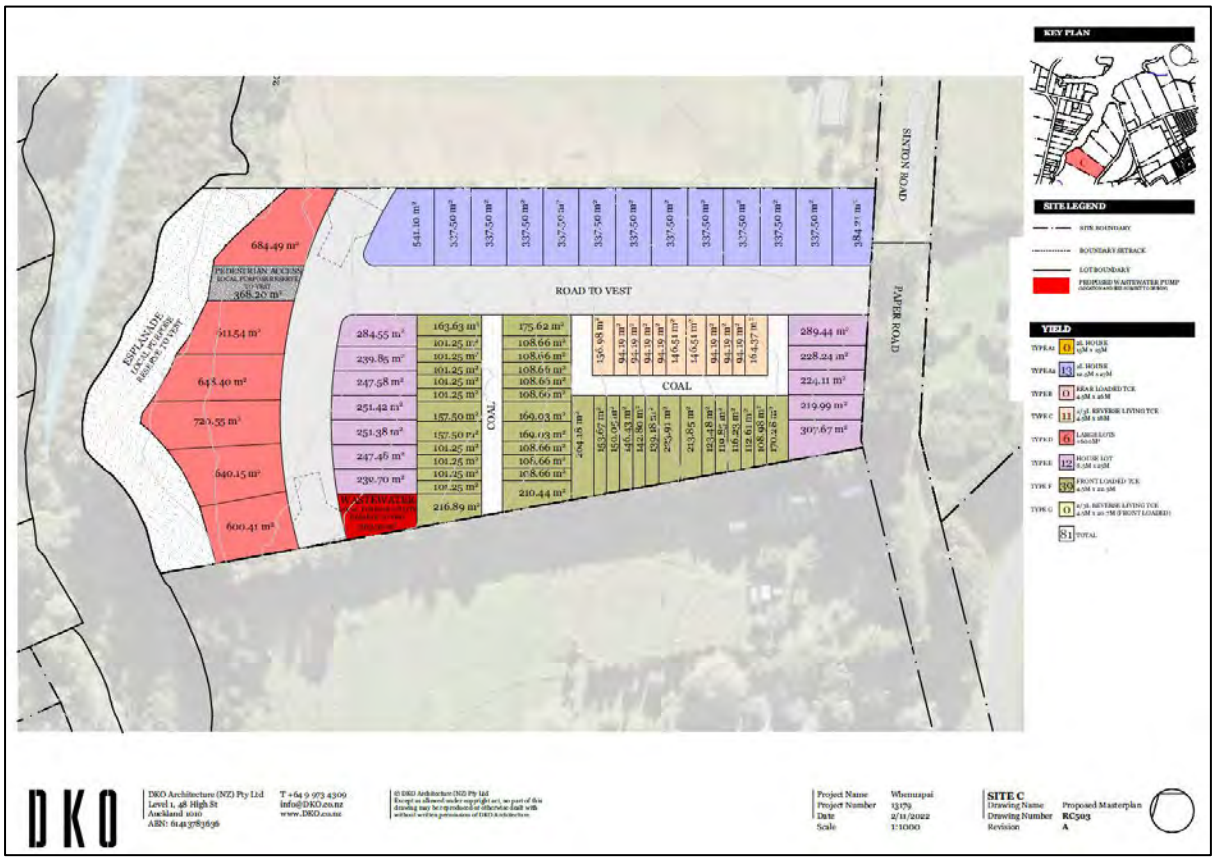


Figure 2.5: Cabra Development Site C – 16 Sinton Road



Cabra is proposing to provide seven different dwelling types which will mostly be two levels, with a small number of three level townhouses proposed at 16 Sinton Road site (12 units). The dwellings are a range of sizes, with 39 having 5 bedrooms, 16 having 4 bedrooms, 46 having 3 bedrooms, and 126 having 2 bedrooms.[7] All have parking space for one or two cars (either a garage or external space). Each of the dwelling types has a different number of living spaces, study areas, and bathrooms, and many have flexi spaces intended to be able to accommodate a home office or domestic uses, making a number of the units work-live compatible.

2.2 Industrial development site proposal

The fourth site (D) is 4.9ha and is located on the corner of Trig and Spedding Roads, at 90 Trig Road. Immediately to the west of the site there is existing rural industrial activity, with Container Nurseries, Bark and Soil Growing Media and Whenuapai Christmas Tree Farm. There is also industrial activity to the east of the site across Trig Road, with Just Sheds and Herman Brothers Transport Services. To the north and south of the site there are existing lifestyle blocks.

[7] DKO Architecture (2022) Dwelling Concept Designs.

Figure 2.6: Cabra Development Industrial Site - Location

Site D will include two main industrial uses: two industrial buildings on the west quarter of the Site (lots 8 and 9); and seven at-grade industrial lots on the remainder of the Site which would be used for light industrial yards (Figure 2.7). The two industrial buildings will have combined floorspace of 5,500m^2, which will mainly be used for warehousing (4,600m^2), with the remainder used for associated offices (900m^2). There will be seven lots that will be used for yard-type activities such as storage of equipment and materials, and range from 4,000m^2 to 5,000m^2 each.

Figure 2.7: Cabra Whenuapai industrial development, site D (90 Trig Road)

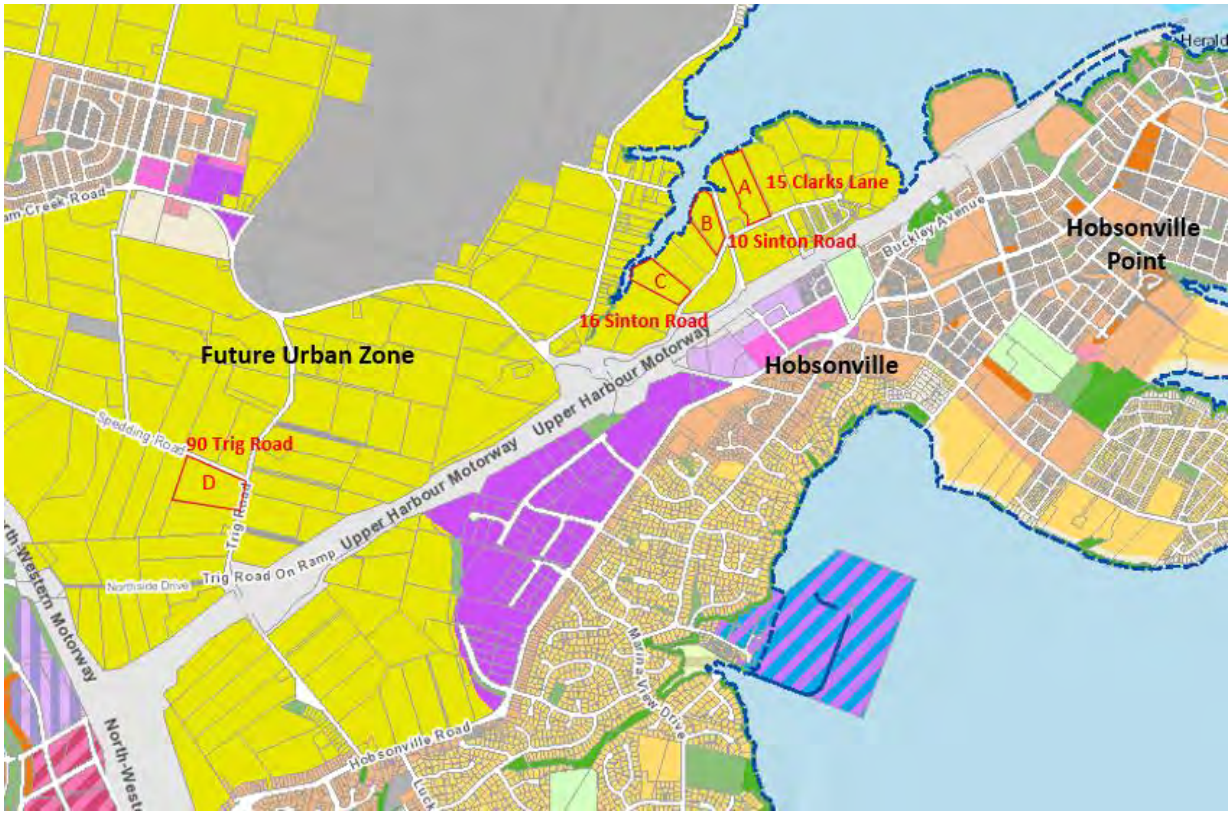
3 Planning Context

The following discussion covers the relevant parts of the Auckland Unitary Plan ("AUP"), Whenuapai Structure Plan and the National Policy Statement on Urban Development ("NPSUD") along with the Intensification Planning Instrument ("IPI") which has now been notified as Plan Change 78. The report also covers National Policy Statement for Highly Productive Land ("NPSHPL").

3.1 Auckland Unitary Plan

In the operative AUP all four of the Cabra sites are within the Future Urban Zone ("FUZ") around Whenuapai (yellow in Figure 3.1). Currently, much of the land to the south of the Cabra residential sites (A, B, and C) is zoned Residential Mixed Housing Urban Zone (orange), and is developing as part of the wider Hobsonville Point residential subdivision, including a large number of now occupied dwellings. There is also business zoning at Hobsonville centre with Local Centre (pink) and Mixed Use (lavender) zones. There are large areas of Light Industrial (purple) and General Business (pink/purple crosshatch) zone to the east and west of site D.

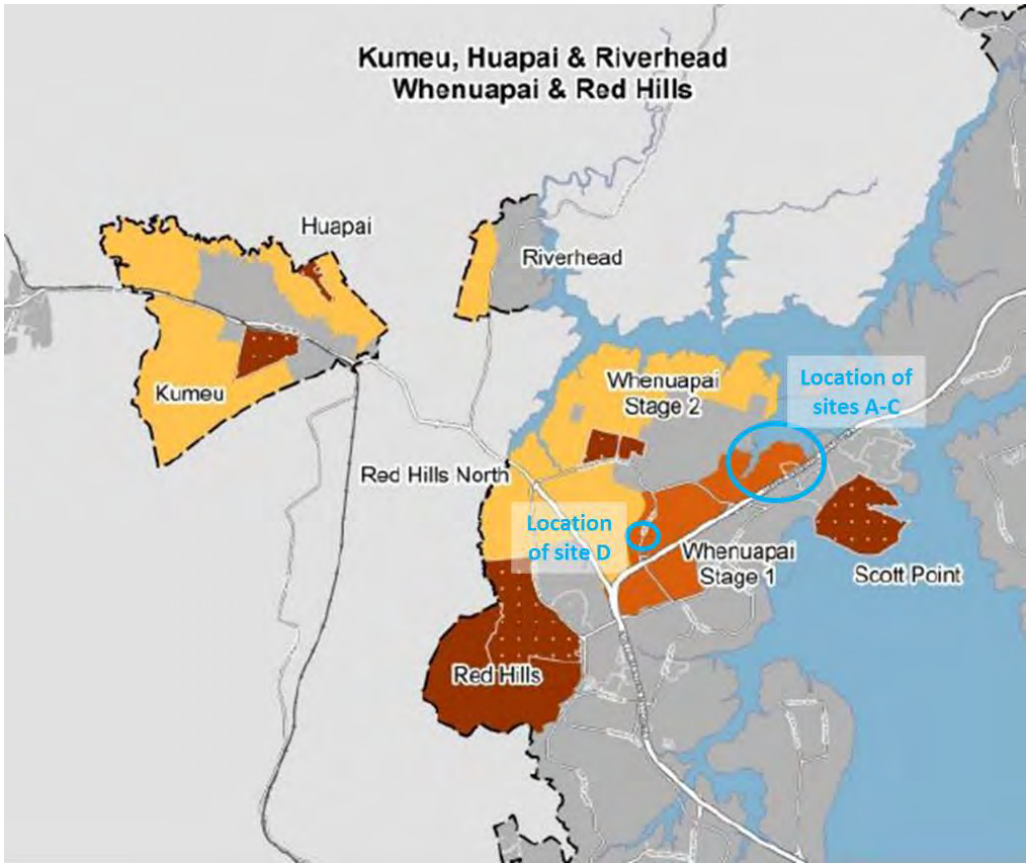
Figure 3.1: Location of the Sites within the proposed development – Auckland Unitary Plan



The Auckland Council has planned for the FUZ area in Whenuapai to be developed in stages two stages. The proposed development sites are all located within "Whenuapai Stage 1" of the Auckland

Future Urban Land Supply Strategy[8], ("FULSS") which showed this area was planned to be developed in "Decade one 1st half 2018-2022" (Figure 3.2).

Figure 3.2: FULSS future urban areas sequencing for Whenuapai

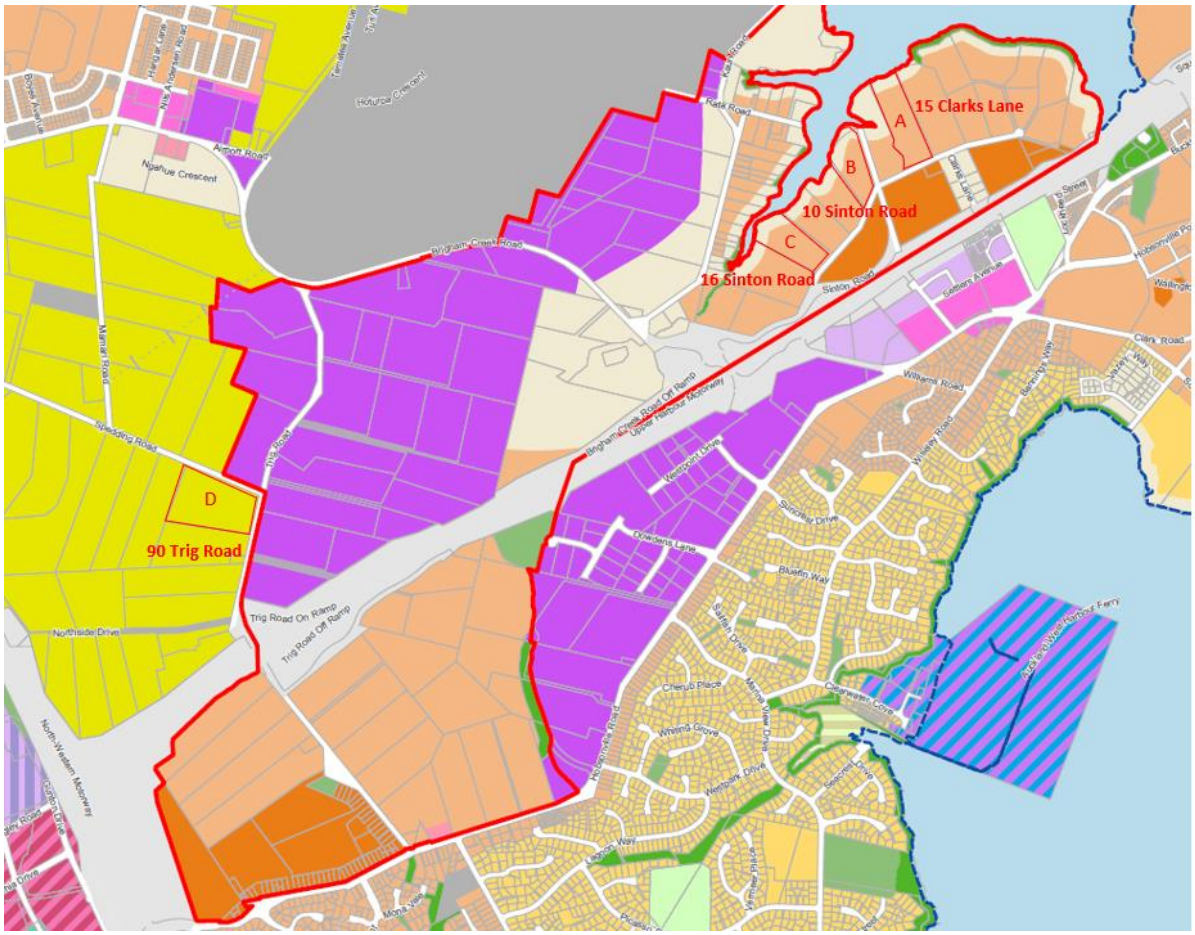


The Whenuapai Structure Plan shows that sites A, B and C are located within the area that is proposed for Low Density residential development and site D is located within the centre of a large area that is proposed for business (industrial) development.[9] The Structure Plan showed all four sites as being developed in the Stage 1 and being development ready in the next 2-10 years.

In 2017 the Council-initiated proposed Plan Change 5 ("PC5") which was notified to implement most of Stage 1 of the Whenuapai Structure Plan, which included Cabra sites A, B and C.[10] These sites were identified as being Single House zone along the coast and otherwise Mixed Housing Urban zone (Figure 3.3), PC5 did not extend to include development site D. In June 2022 the Council withdrew PC5 because there was insufficient funding to cover the infrastructure that was required to allow urban development.[11]

[8] Auckland Council (2017) Auckland Future Urban Land Supply Strategy.
[9] Auckland Council (2016) Whenuapai Structure Plan.
[10] Auckland Council (2017) Plan Change 5.
[11] Auckland Council (2022) Plan Change 5 – Public Notice – Withdrawal.

Figure 3.3: Whenuapai Structure Plan – Plan Change 5



3.2 National Policy Statement on Urban Development

The NPSUD includes a set of reporting requirements relating to urban development capacity, for both residential and business activity. A key part of the requirements is that Tier 1 councils must investigate how much capacity is enabled within their planning frameworks and the extent to which this capacity may be developed by the market. Councils are also required to assess the potential future demands of the community and businesses.

The comparison of the developable supply enabled within the council planning framework and the demand forecasts provide an indication of whether there is at least sufficient urban development capacity to meet the expected demand for housing in the short, medium and long term[12]. In the case that there is deemed to be insufficient supply, councils must act to increase development capacity as soon as practicable.

[12] NPSUD defines short term as within the next three years, medium term as three to ten years and long term as between 10 and 30 years.

In response to these requirements, in 2021 Auckland Council conducted research into the quantum of urban land demanded and supplied, across the region.[13] That research found that:

- The AUP has enabled a vast amount of plan-enabled housing development capacity within the existing urban area and much of the capacity is commercially viable under the current market conditions.
- Given the current pandemic situation, the prolonged border closure, as well as uncertainties of upcoming government policies, there is no sound reason or robust assumption to determine which growth scenario will be the most likely. However, if a scenario must be selected to meet the NPSUD requirements, then i11v6 would be the preferred choice as it is the overarching land use scenario adopted for the 2021/2023 LTP that aligns with the Council's strategic goals and funding capabilities.
- The research then shows that on a yearly basis, the capacity reasonably expected to be realised could be negligible. The realisation of the commercially viable capacity that is affordable becomes uncertain because of the discrepancy (or incompatibility) between the high sales prices of dwellings that the market can be expected to provide and the purchasing power of households. That is, a dwelling may not be realised unless there is someone who can pay for it.
- While not stated explicitly, the 2021 Housing Assessment showed that for most areas, including Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe, there is not enough potential for development to meet the expected demands. While in theory there is enough plan-enabled capacity which could be commercially viable, this would require sales prices to be higher than would be affordable to many within the community.

While we have not peer reviewed the methods adopted in the Auckland Council housing assessment, the outcomes presented align with our expectations. Broadly, there needs to be a shift to higher density development to achieve lower prices per dwelling. This would mean that more dwellings can be realised and the potential shortage that is identified in the Auckland Council report can be avoided. This is consistent with the underlying drivers of the need for the new Medium Density Residential Standards, that were incorporated in August 2022, as discussed in section 3.3.

Cabra is proposing to undertake higher density development in its residential developments, which can be expected to provide dwellings that are relatively more affordable than what is available in the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe areas.

[13] Auckland Council, Fernandez, M. A., C. Hu, J. L. R. Joynt, S. L. Martin and I. Jennings (2021) Housing assessment for the Auckland region.

Auckland Council demand projections were developed when Covid-19 impacts were still very unclear. There was much concern about the negative impacts of the pandemic, which may have been a driver behind why Auckland Council picked a I11 projection, which predicts slow growth for the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe.

The impacts of Covid-19 have not been as severe as anticipated, with development of new dwellings in Auckland increasing since 2020 from 15,500 per annum to 19,900 in 2021 and further to a record level of 22,000 in 2022, as explained in more detail in section 4.2.[14] In Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe the number of new dwellings consented increased to 1,840 in 2021 and 2,130 in 2022. Further, the reopening of the border to migrants is likely to result in a return to pre-Covid growth rates, which was considerably less certain when the Auckland Council demand projections were being derived. While the adverse economic impacts of Covid-19 generally were not as bad as anticipated, there is still significant uncertainty in the economy and the existence of "shovel ready" construction projects such as the proposed development are an opportunity to provide further certainty and economic stimulus as the Covid recovery continues, and to mitigate the effects of what appears to be an emerging slowdown in the construction sector.

This growth outcome compares to Auckland Council's projections which predicted growth of fewer than 1,410 households per annum between 2020 and 2022 for the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area. In the two years since the report was completed, there have been almost 4,000 new dwellings consented, which is almost 40% higher than the level of demand that was projected by Auckland Council. If that rate continues, consents will continue to exceed projected growth by a large margin.

In summary, Auckland Council's demand projections have underestimated demand for new dwellings in the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe. That appears to be at least partly the result of projections being set in the wake of Covid, whereas demand for dwellings in Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe has not abated, and has in fact increased over the last two years. While Auckland Council's assessments show that there is in theory a vast supply at the regional level, and there is expected to be a shortage of dwelling supply of more affordable dwelling types, which is likely to be significant.

A similarly strong growth environment in Auckland's Urban North has been observed recently in respect to industrial land. Since Auckland Council's 2017 research into business land supply and demand (undertaken for the National Policy Statement on Urban Development Capacity)[15], demand for industrial land has exceeded projections by more than 80%. That has been influenced in large part

[14] Statistics New Zealand (2022) New Dwellings Consented by statistical area 2 – September 2022.
[15] Yeoman. R, Gordon. M and Akehurst, G. (2017) Auckland Business Land Demand and Supply NPS-UDC.

by increased demand for warehouses after Covid-related supply disruptions, and will bring forward the point at which additional industrial land is required in the future.

3.3 Intensification Planning Instrument

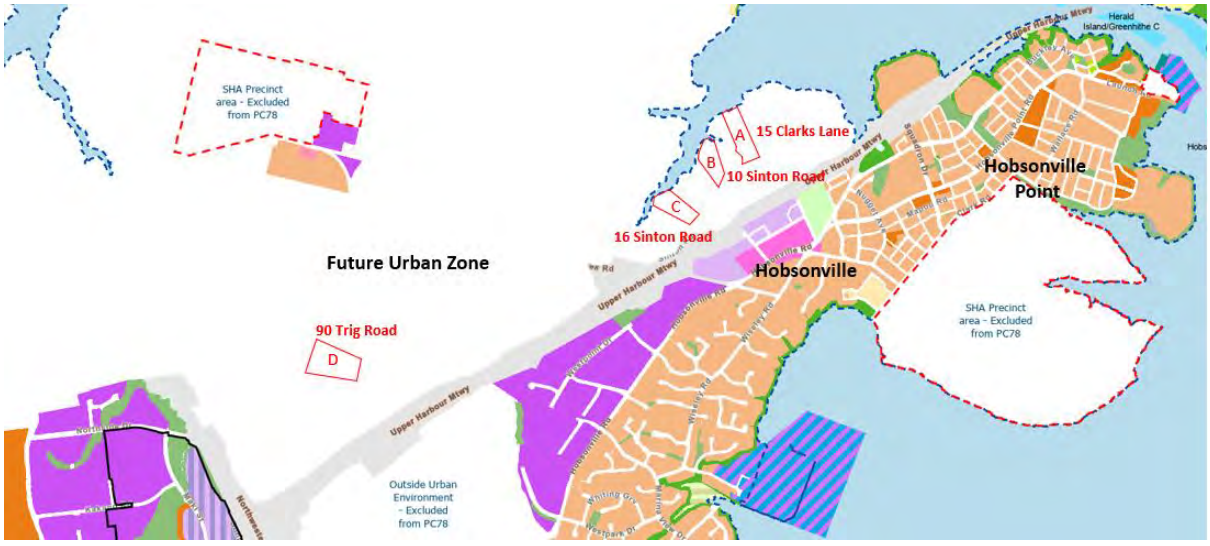
As part of a wider initiative to increase housing supply, the government has passed the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 ("EHA"), an amendment to the RMA that seeks to increase the density of housing in most residential zones (and some centre zones) in all Tier 1 urban areas.

The EHA is suggesting two key changes which can be expected to increase the quantum of residential capacity in the urban areas of Auckland. The first is the introduction of the Medium Density Residential Standard ("MDRS"). The second is the requirement to develop an Intensification Planning Instrument ("IPI") which expedites the intensification in Policy 3 of the NPSUD (in and around centre zones). In summary, this will mean that potential "plan enabled" capacity within the urban areas of Auckland can be expected to increase and that this will occur in the coming years.

Auckland Council has notified proposed Plan Change 78 ("PC78"), which is Auckland's IPI. The IPI enables significantly increased residential densities across much of Auckland, through the application of MDRS in most of the residential zones throughout Auckland. As a result, the proposed IPI would increase the amount of plan enabled supply within the urban area by a considerable amount.

For the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area, the preliminary IPI would result in much of the residential land being up-zoned from low-density Single House zone to high-density Residential Mixed Urban zone (see Figure 3.4, and compare against the operative zones in Figure 3.1).

Figure 3.4: Plan Change 78 IPI Zones



These changes enabled by the EHA are likely to significantly increase residential capacity on the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe, and throughout urban Auckland. However, there is a lengthy process required to give effect to the EHA, with the submission period recently closed, further submissions yet to be made, hearings undertaken in 2023 and decisions then made. This means that there is sometime before the proposed changes in PC78 become operative.

The EHA has not changed the status of residential activity on FUZ land, however Cabra has recognised the need for additional residential capacity and supply to provide for demand in Auckland now, and is seeking FTCA approval to expedite delivery of additional supply prior to the EHA-based capacity being realised, and in a location where residential activity is appropriate for the reasons set out in detail in the application.

PC78 also provides some indication of the anticipated intensity when the FUZ land is rezoned in the future. While the sites are located outside the area covered by Auckland Council's proposed PC78, that plan change also indicates a preference for higher rather than lower dwelling densities is likely for the Cabra residential lots.

In our opinion the EHA will not result in any material reduction in demand or increase in realisable supply for the residential development proposed, for two main reasons. First, because much of Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe residential housing stock is relatively new, and built on smaller lots, it will be uneconomic, for many years, to redevelop those lots. This means that extra development potential on most lots within the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area will not be realisable in the coming decade or more.

Second, the Cabra development will be developed in the coming few years, before capacity enabled by the EHA is realised. That means that if the proposed development is expedited through FTCA approval, it can occur prior to the development that will ultimately be enabled in residential zones by the EHA, easing (albeit only to a small degree) pressure in the housing market in the short term.

As discussed above, we consider that there are several reasons why the capacity that may be enabled by EHA in the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area is unlikely to be developed to any material extent over the coming decade, and that this capacity would not be "feasible" or "reasonably expected to be realised" as defined in the NPSUD s3.25(1). This means that the EHA will have minimal positive impact on housing supply on the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe until well after the Cabra development is expected to be complete. Therefore, the EHA capacity is theoretical in nature and should not be relied upon to provide for housing demands for the coming few years.

3.4 National Policy Statement for Highly Productive Land

The National Policy Statement for Highly Productive Land ("NPSHPL") which came into effect in September 2022 has the objective of protecting highly productive land for use in land-based primary production, both now and for future generations.[16] This includes avoiding urban development of highly productive land that has a Land Use Capability ('LUC') of 1, 2 and 3. However, the NPSHPL includes an exclusion in s3.4(2) that "future urban development must not be mapped as highly productive land."

The Site and most of the land around Whenuapai have soils that are classified as LUC 2 which is 'good land with slight limitations' and some LUC 3.[17] Our understanding is that the s3.4(2) exclusion applies, as the Auckland Council FUZ would meet the definition of "future urban development".

Notwithstanding the likely application of the "future urban development" exclusion, we provide some discussion of potential implications of the development of the Cabra sites for land based primary production, both now and for future generations.

First, the three residential sites A, B, and C are unsuited to rural farming, being located on a small peninsula which is boarded by inner harbour to the north, two inlets to the east and west, and the Upper Harbour Motorway to the south. Most the land on the peninsula has been subdivided into small lots of less than 4ha each or into urban residential lots. It is very unlikely that the sites could be viably utilised on their own for productive rural activities, and limited opportunity for them to be amalgamated with other land to enable productive rural activities.

The industrial site D is also unsuited for rural farming. It is isolated from other rural land being located on the corner of two important link roads, with Trig Road to the east and Spedding Road to the north. The land to the west of site D is used for rural-industrial (nursery, etc) and the land to south is occupied as lifestyle blocks. It is very unlikely that the site could be utilised by itself for productive rural activities, and limited opportunity it to be amalgamated with other land to enable productive rural activities.

Development of the Sites for urban uses will not, therefore, adversely affect land-based primary production within the area or Auckland, both now and for future generations. Even in the case that the "future urban development" exclusion is not applicable, the development would not be inconsistent with the objective of the NPSHPL.

[16] Ministry for the Environment (2022) National Policy Statement for Highly Productive Land (Sept).
[17] Highly productive land is protected for use in land-based primary production, both now and for future generations.

3.5 Findings – Planning Context

In theory, there is a large amount of supply within Auckland to accommodate the development of new houses, arising out of the recent proposed IPI (PC78). However, Auckland Council's assessment indicates that much of this theoretical capacity would provide dwellings that are unaffordable and hence will not be developable or realisable. Based on the budget constraints of households, much of the demand for housing will not be satisfied.

Also combined with this outcome, Auckland Council's planning has been based on projections that have been lower than growth actually realised in recent years in the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area. Since these projections were developed, the impact of Covid-19 on housing demand has been shown to be much less dramatic than was predicted. The amount of development within the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area over the last two years was almost 40% higher than the Council's projections, indicating an ongoing need for new dwellings in the area, and for new employment opportunities to accommodate local residents.

Development of the Cabra sites for residential dwellings will not adversely affect the land-based primary production in Auckland, because the parcels are relatively small, and isolated from other rural activities, constraining the ability for them to be combined with other farms to allow productive rural activities to occur. Regardless of the rural productivity potential of the land in the Cabra development, the land is all within the FUZ, which we understand means it is captured by the NPSHPL's exclusion in s3.4(2)

While the EHA and IPI indicate that significant new residential capacity is likely to be created in Auckland's residential zones, much of the supply will not be realisable in the period that Cabra is expecting to develop the sites, and so this development helps to fill a short-term gap in residential supply that the EHA-based changes will ultimately alleviate on a larger scale.

4 Residential Demand Context

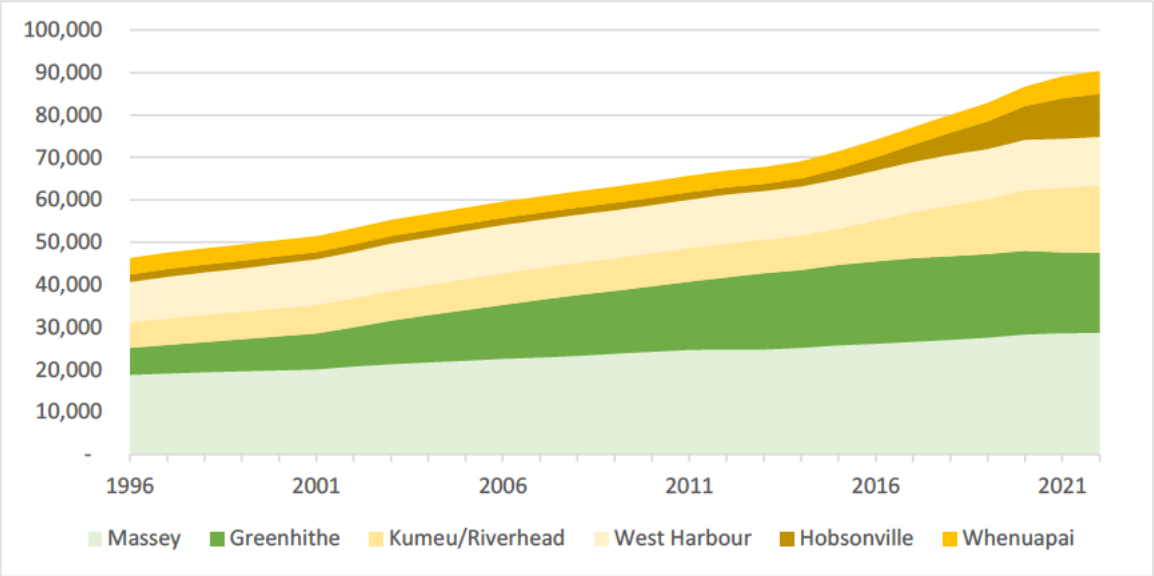
Cabra is proposing that sites A (15 Clarks Lane), B (10 Sinton Road), and C (16 Sinton Road) are developed for residential uses, which will allow 227 dwellings to be built on the sites. This section considers the residential demand context in which the sites will be developed.

The Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe has long been recognised as an attractive coastal area, and has transitioned from being primarily a rural area to becoming part of the main Auckland urban area. While much of Massey and has been a residential area for many decades, the area around West Harbour has been developed more recently, and development in Whenuapai, Hobsonville and areas around Kumeu/Riverhead has occurred mostly within the last decade, and is continuing. Recent development has been facilitated by the area's good accessibility to the rest of Auckland, with transport links via the newly completed Upper Harbour Motorway, the extension of the Northwestern Motorway, and new ferry service, allowing the area to become a commuter suburb for people working in North Shore City, West Auckland, and central Auckland. Development is likely to continue, given the large area of FUZ throughout the area.

4.1 Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe Population

Since 1996 the population of the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area has grown by almost 3% per annum, from just over 46,200 residents to 90,300 in 2022. Almost a half of the growth in the area over the last decade was in Whenuapai, Hobsonville, West Harbour, Kumeu, and Riverhead.

Figure 4.1: Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe Population growth



During this period, the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe population's age structure has not changed significantly, with the retirement aged population remaining at around 10% of the total population and children under 15 remained relatively stable at around 20%.[18] However, the demographics of the population in the area around Whenuapai and Hobsonville are different to the wider Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe population. The Whenuapai and Hobsonville area has a larger share of children (25%) and working aged residents (67%) than the broader Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area.

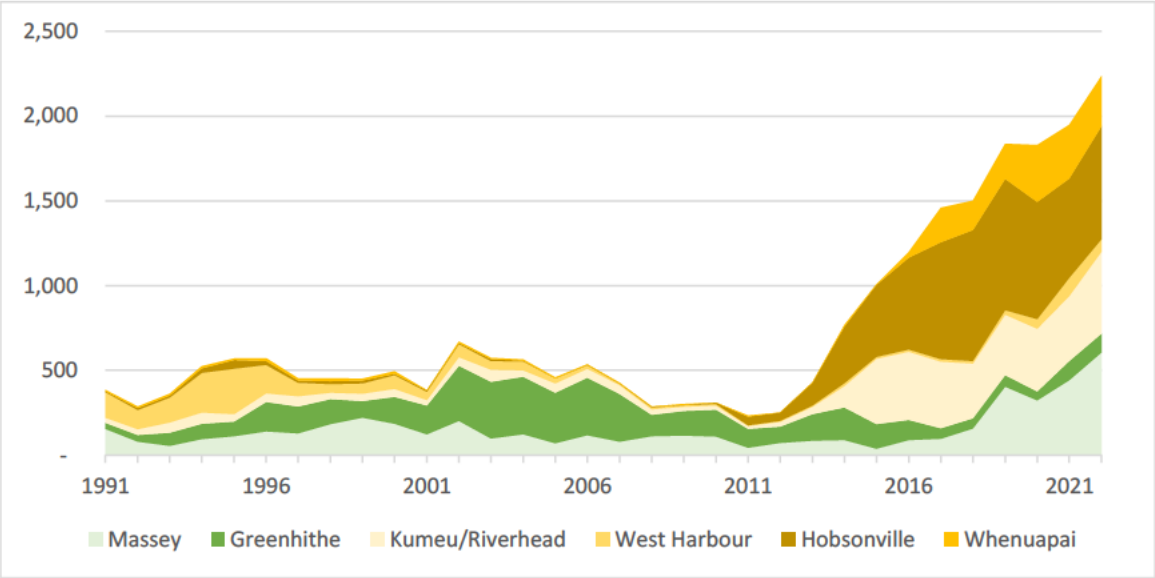
The difference in demographics between the wider Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe and the Whenuapai and Hobsonville suggests that the population that can be expected to live within the Cabra development is likely to be similar to the area's newer residential developments and more family orientated, which will tend to demand dwellings with more bedrooms and living areas. This outcome is consistent with the types of dwellings that are being proposed for the Cabra development.

4.2 Dwelling Demand

Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe's role as a growth location has increased significantly over the decades. In the 1990s the area accounted for less than 5% of the new dwellings in Auckland, at its peak accommodating 14% of all building consents in Auckland in 2017.[19] This role has declined over the decade, reducing to 10% of all new dwelling building consents in Auckland in 2022. However, this changing role seems to be driven by the overall increase in development in the wider Auckland market, rather than a drop in development activity in the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area which has recently been at record levels (see Figure 4.2).

[18] Statistics New Zealand (2022) Population demographics.
[19] Statistics New Zealand (2022) New Dwellings Consented by statistical area 2 – September 2022.

Figure 4.2: Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe Dwelling Consents 1996 to 2022



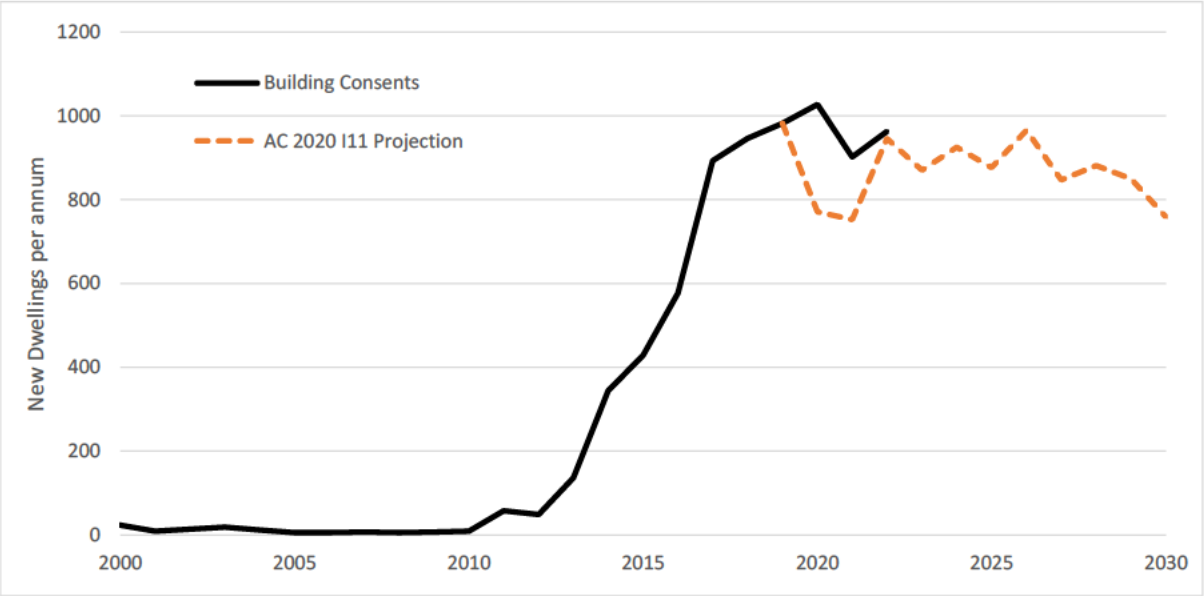
Notwithstanding the smaller share of regional growth being directed to Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area, Whenuapai and Hobsonville have seen increasing shares of growth. These two areas had a total of 9 new dwellings consented in 2010, which increased to 429 by 2015 and further again to 963 dwellings in 2022. Over the last 12 months, those two areas accommodated 4.4% of all new dwelling consents in Auckland.

The growth in Whenuapai and Hobsonville has outpaced the projections used to underpin Auckland Council's housing capacity assessments for 2018, or 2021. In particular, Auckland Council's 2020 assessment projected there to be demand for approximately 760 households per annum.[20] By comparison, in the last three years the number of new dwelling consents issued averaged 960 dwellings per annum, or around 20% more than the projected growth rate.

Figure 4.3 shows the significant increase in the number of new dwelling consents issued between 2000 and 2022 in Whenuapai and Hobsonville. Even with the impact of Covid-19 over the last three years, the number of consents has continued to see development activity that is much higher than in the past. The Auckland Council projections for the coming decade suggest that development is expected to remain high.

[20] Auckland Council (2020) I11 Projections.

Figure 4.3: Whenuapai and Hobsonville New Dwellings Building Consents and Auckland Council Household Projections



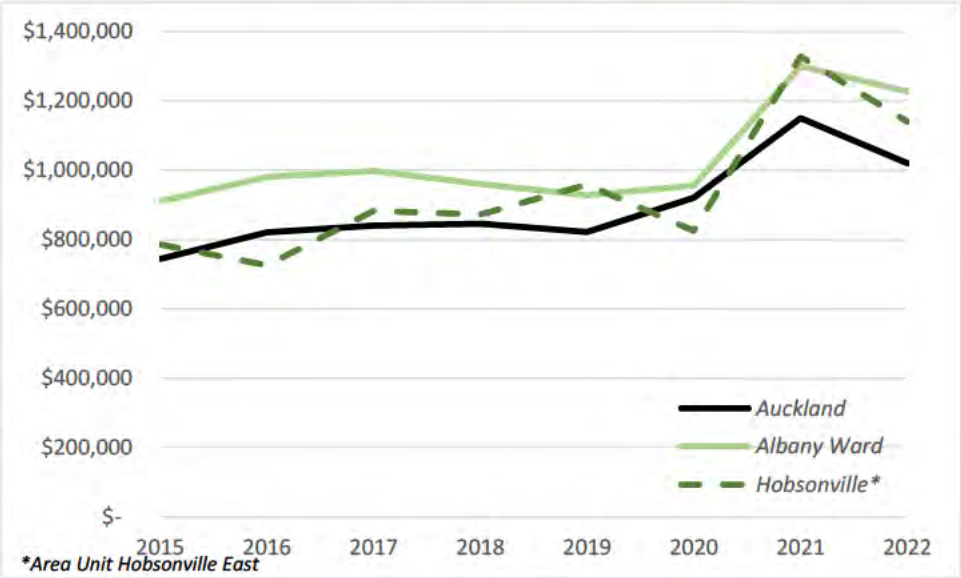
4.3 Housing Market

The average house price in Auckland, Albany Ward, and Hobsonville has increased significantly over the last decade. Most significantly, in the last three years the average house price in the Auckland Region increased from approximately $921,000 to $1,020,000[21] (+24%), while the average price in the Albany Ward increased from approximately $928,000 to $1,227,000 (+32%), and the Hobsonville average increased from $958,000 to $1,140,000 (+19%). Most of the recent price escalation occurred in 2021, as prices in both the wider region and local area have become increasingly unaffordable.

This recent price escalation is high when compared to changes observed in the past. In the Albany Ward and Hobsonville, the average house price increased by less than 5% per annum between 2015 and 2020. However, the house price escalation over this period was still greater than general inflation rates (of 1.25% per annum)[22], income increases (of 2.6% per annum)[23] or house values (of 3.7% per annum) in the rest of the country. The proposed development will provide additional capacity for housing supply, which could contribute to reducing further price escalations.

[21] Ministry of Housing and Urban Development (2022) Dwelling sales prices (actual).
[22] Statistics New Zealand (2022) Consumer Price Index.
[23] Statistics New Zealand (2022) Labour Cost Index (Salary and Wages).

Figure 4.4: CoreLogic Dwelling Sales Prices Actual - Average 2015- 2022



4.4 Findings – Residential Demand Context

Residential demand growth in the next decade is likely to continue to exceed the level shown in the Auckland Council projections, driven by the continued attractiveness of Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area as a place to live and work. Because there is high demand for new dwellings in the area now, and that remained high during Covid-19, it is probable that the Cabra development will be developed over the next few years, particularly in the context that almost 1,000 additional new dwellings were consented in the local Whenuapai and Hobsonville area[24] over the last 12 months. Viewed another way, the proposed development would constitute less than three months of new residential supply for the area.

[24] Based on Statistics New Zealand Census 2018 and building consents.

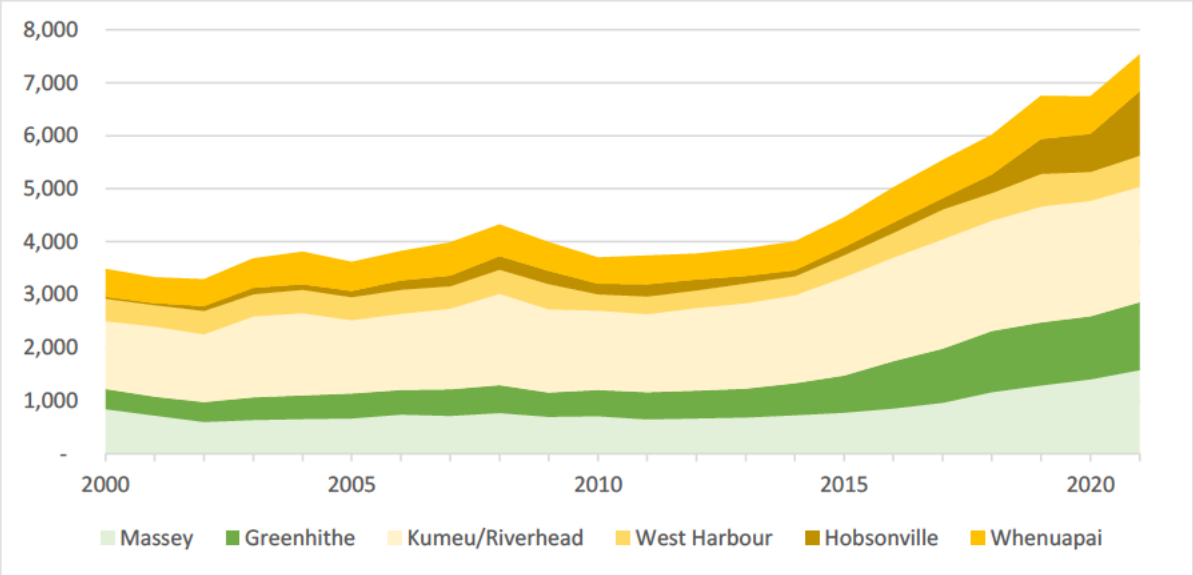
5 Industrial Demand Context

The fourth site (D, 4.9ha) is located on the corner of Trig and Spedding Roads, and is proposed to be developed for industrial uses. Site D will include two main industrial uses, industrial buildings on the western side of the Site (lots 8 and 9) and seven at-grade industrial lots on the remainder of the site which would be used for light industrial yards. This section considers the residential demand context in which the site will be developed.

5.1 Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe Industrial Activity

Since 2000 the employment in industries that predominantly locate in industrial zoned land has grown in Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe by almost 4% per annum, from just over 3,500 jobs to 7,500 in 2021.[25]

Figure 5.1: Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe Industrial Employment 2000 to 2021



During this period, the structure of the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe economy has changed significantly, with the most substantial shift being in the industries that tend to locate in industrial zones (31% of 2021 employment), followed by a significant increase in employment in retail, hospitality and community services, which will have been driven by the rapid growth in population in the area.

[25] Defined as employment in Manufacturing, Wholesale Trade, Transport, Postal and Warehousing, Construction, and Electricity, Gas, Water and Waste Services.

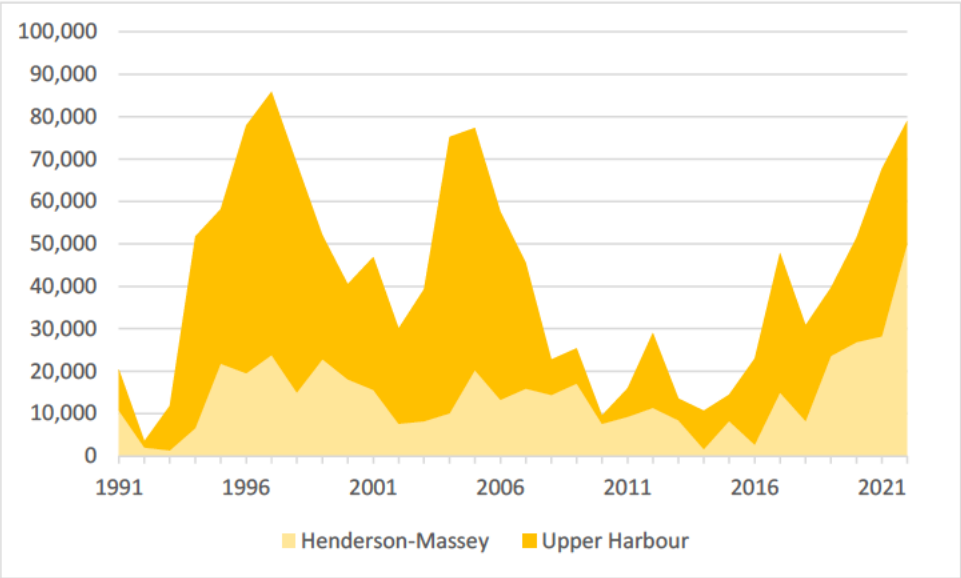
However, the shift in the structure of the economy in the area around Whenuapai and Hobsonville has been more pronounced than wider Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe economy. The Whenuapai and Hobsonville area has seen a shift towards industrial jobs (from 18% in 2020 to 33% in 2021) and slower growth in population-driven industries than the broader Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area.

The difference in the economic structure between the wider Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe and the Whenuapai and Hobsonville suggests that the Cabra development proposed for site D is consistent with the market trends that have been observed in the area.

5.2 Industrial Building Demand

Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe's role as a growth location for industrial activity has been significant over the decades. In the 1990s the area accounted for less than 19% of the new industrial building floorspace in Auckland, peaking at 26% in 1994.[26] This role has declined over the decade, reducing to 12% of all new industrial building floorspace consents in Auckland in 2000s and 9% in the 2010s. Even with the impact of Covid-19 over the last three years, growth in that period has rebounded to 16% of all Auckland industrial building consents. Over the last decade, new industrial floorspace consents have increased significantly, from less than 10,000m^2 in 2010 to almost 80,000m^2 in 2022 (Figure 5.2: Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe Industrial Consents Floorspace (m^2)Figure 5.2).

Figure 5.2: Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe Industrial Consents Floorspace (m^2)



[26] Statistics New Zealand (2022) New Dwellings Consented by statistical area 2 – September 2022.

5.3 Industrial Market

The industrial market in Auckland is showing signs of shortages, with low vacancy rates and significant rental increases. The high levels of demand have contributed to an escalation of industrial land sales prices and a rapid increase in industrial buildings under construction, according to recent research which shows that vacancy rates are at record low of 1.8%.[27] Importantly the situation is even more tight for prime space, which has a vacancy of 0.6%, and is much lower than vacancy rates of 4% in the early parts of last decade.

Generally, when vacancy rates are very low, as they are now, it becomes hard for tenants to find suitable premises, resulting in increased rents. Over the last year the rental rates for warehousing increased by almost 10%, and, if unresolved, this tight market situation could result in negative impacts on businesses and economic activity.

The price of industrial land in most parts of Auckland has now increased to over $1,000/m^2. The proposed development will provide additional industrial capacity, which will provided much needed additional supply, and could contribute, albeit only to a small degree, to reducing further rental price escalation, particularly because Cabra site D can be expected to provide land that is relatively more affordable than in other parts of Auckland.

5.4 Findings – Industrial Demand Context

We consider that the growth in industrial demand is in Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area is likely to increase in the coming as this location has excellent transport links and the potential supply of land that is relatively affordable compared to other locations in Auckland.

Because there is high demand for new industrial land in the area now that that has shown no signs of abating, even as a result of Covid-19, it is probable that the Cabra development will be developed over the next few years, particularly in the context that almost 80,000m^2 of new industrial floorspace was consented in the local area over the last 12 months. Viewed another way, the proposed development would constitute less than one month of new industrial floorspace for the area.

[27] Colliers New Zealand (2022) Colliers Essentials - Auckland Industrial 2H.

6 Economic role of Cabra Development

The economic activity associated with the proposed development will change throughout the development phases, with different levels of activity supported during consenting, land development, build development and then by residents spending once the development is completed.

The economic role of the proposed development is measured in terms of the direct economic activity, the potential demands of the households that will live in dwellings, and the wider role in terms of indirect and induced activities. The expected role of the Cabra development was estimated using a proprietary subnational economic model, the Economic Linkages Model ("ELM").[28]

6.1 Approach

The ELM is a proprietary model that has been developed to quantify and measure the economic activity and relationships within the New Zealand economy. In summary, the ELM measures the flows of money and goods through the economy, at a sector and sub-national level. The model records the interactions and relationships between actors in the economy, including businesses, households, government, exporters, and importers. The interactions in the model describe how each industry responds to changes in the economy, which ripples out to influence a range of other outcomes (e.g. household decisions).

The ELM measures the economy using a range of standard economic metrics, which includes gross output[29], GDP[30], value-added, employment[31], incomes[32], consumption[33], tax[34], and trade. The model uses a subnational Input-Output Table that has been regionalised by Formative. The appendix outlines the nature of the Input-Output table, the underlying assumptions within the ELM and the key modelling steps.

[28] Formative (2021) Economic Linkages Model.
[29] Similar to company revenue.
[30] There is a key difference between GDP and value added. The value added of a sector is measured net of taxes (for instance GST) and subsidies on products. In the GDP in the national accounts for New Zealand product taxes (minus subsidies) are recorded for the economy as a whole and includes as part of the value added.
[31] Formative uses BED measure of Total Employment Count (TEC) which includes both employment count and working proprietors.
[32] Includes salaries, wages and profits.
[33] Including household and government.
[34] Including income taxes, GST, government transfers and subsidies.

The first step in the estimation of the economic role of Cabra development was to estimate the direct expenditure that will occur in each phase of the development. The following data has been used for each phase to estimate the likely direct expenditure:

- **Consenting and Land Development**: we have estimated the consenting and land development costs based on industry knowledge from similar developments, adapting them to the scale and locational characteristics of the Cabra development.
- **Dwelling Development**: the Cabra dwelling design concepts have been combined with build cost data, and construction costings to estimate the likely construction expenditure that could occur during the build development phase.
- **Industrial building Development**: the assessment has drawn on the Cabra development design, building consent data[35] and construction cost data from Quotable Value[36] to estimate costs of industrial building construction.
- **Resident Demands**: there will be on-going expenditure by residents that live in dwellings on sites A, B, and C. We have detailed retail expenditure data which has been developed into a retail demand model, which has been used to provide an estimate of the quantum of retail demand from the sites households after dwellings are occupied.[37] For this assessment, we have assumed the new residents will have similar spend characteristics to the residents that live nearby to the south of State Highway 18.

There will also be on-going economic activity and employment expected within the industrial units and at-grade storage on site D. For this assessment we have not measured the additional downstream economic activity that would be associated with the activity that is accommodated on site D of the Cabra Development.

Once identified, the direct expenditure impact was run through the ELM which allows the calculation of all flow-on effects associated with the Cabra development. The ELM calculates three types of economic impact:

- Direct impacts are the initial changes in the economy due to an economic shock (often new expenditure). The direct GDP effect is calculated based on the value of the shock and the direct employment effect is the number of jobs created by the shock itself.
- Indirect impacts arise as the firms that initially change their output as a result of an economic shock (i.e. the direct effects), purchase required inputs from their supply

[35] Statistics New Zealand (2022) Building Consent Value and Floorspace - Factories, industrial, and storage buildings for Upper Harbour, Henderson-Massey and Rodney Local board areas.
[36] Quotable Value (2022) QV Cost Builder.
[37] Formative (2022) Retail Demand Model.

chain. These business-to-business transaction changes are known as the indirect impacts.

- Induced impacts flow from the direct and indirect impacts which generate wages, salaries, and profits for the households. The changed household incomes will generate more spending on goods and services. This household-to-business interaction is called induced activity.

6.2 Direct Economic Impacts

The direct impacts associated with the Cabra development were estimated for each year, for 65 types of spending (summarised in Figure 6.1). The consenting phase is estimated to cost s 9(2)(b)(ii) and occur in 2022, which includes the developer's internal management time, expert research and planning costs. The development of the land is estimated to cost s 9(2)(b)(ii) in total, which will occur in 2023 with all sites being developed concurrently. The direct spend associated with the construction activity in Cabra can be expected to exceed s 9(2)(b)(ii), which is estimated to peak in 2024 at almost s 9(2)(b)(ii) and be completed in two years.

Based on the modelled land development and building development costs it is expected that the average dwelling could sell for over $900,000, which is lower than the current average dwelling price in the Albany Ward ($1.2 million) or the Hobsonville area ($1.1 million).[38] Applying a conservative and current construction cost (rather than a higher or future inflated value) and sale price makes the impacts assessed here conservative.

Finally, the direct impacts associated with the households that will live in the new dwellings are expected to spend a total of $6.8 million in the local economy over the first three years, with retail spending reaching almost $2.6 million per annum by 2026.

In total, the Cabra development will generate approximately s 9(2)(b)(ii) in direct expenditure between 2022 and 2026. The direct expenditure will peak in 2024, with s 9(2)(b)(ii) being spent in total in that year.

Figure 6.1: Direct Expenditure Cabra Development ($m)

Direct Impacts ($m)	2022	2023	2024	2025	2026	Total
Consenting	s 9(2)(b)(ii)					
Land Development						
Build Develompment						
Residents						
Total						

[38] Ministry of Housing and Urban Development (2022) Dwelling sales prices (actual).

6.3 Total Economic Impacts

The direct expenditure that is generated by the Cabra development will flow through the economy, and result in additional economic activity and employment in supporting industries. These are the indirect and induced impacts. Together the direct, indirect and induced economic impact of the Cabra development would support:

- $163.0 million in GDP and approximately 1,818 employment years[39] (equivalent to 1,644 FTE employment years) over the development period in the Auckland economy.[40] The peak of activity will be in 2024, with $80.3 million in GDP and employment of 902 for that year.
- As the development is completed the impact will stabilise at around $2.8 million in GDP per annum and approximately 39 jobs in the Auckland economy.

Figure 6.2: Economic Impact of Cabra Development

Total Impacts	2022	2023	2024	2025	2026	Total
Value Added (GDP, $m)						
Auckland	$0.8	$38.8	$80.3	$40.3	$2.8	$163.0
Rest of NZ	$0.2	$13.1	$29.1	$14.4	$0.8	$57.6
Total	**$0.9**	**$51.8**	**$109.5**	**$54.8**	**$3.6**	**$220.6**
Employment (Jobs)						
Auckland	7	413	902	458	39	1,818
Rest of NZ	1	106	244	121	6	478
Total	**8**	**518**	**1,146**	**579**	**44**	**2,296**

6.4 Employment by Sector

Employment associated with the project is estimated to be a total of 1,644 FTE employment years in Auckland, which includes employment associated with all aspects of the development including direct, indirect and induced. That 1,644 FTE years is employment on a full-time basis, and in practice, accounting for the small proportion of the construction sector that works on less than a full-time basis, total employment would be 1,818 employment years, of which a small share of workers would be engaged less than full-time. The direct on-site employment is expected to be around 615 FTE employment years between 2022 and 2026, with peak employment in 2024 of 294 FTEs.

[39] Total Employment Count, which is equal to the count of employees and working proprietors.
[40] The employment recorded in this assessment is measured in terms of Total Employment Count (TEC), which includes part-time, casual, and full-time positions. While this type of measure of employment is the standard used in New Zealand for economic data and economic modelling, there are some instances where Full-Time-Equivalent (FTE) metric is used. For the purposes of the FTCA application we have estimated the FTE that the proposed development will generate in the Auckland economy.

The remaining 1,029 FTEs will be located off-site as a result of the indirect activity (businesses off-site that supply goods and services to on-site) and induced activity (retailers and services businesses that are off-site that meet the demands of workers and residents).

Figure 6.3: Employment Impact of the proposed development

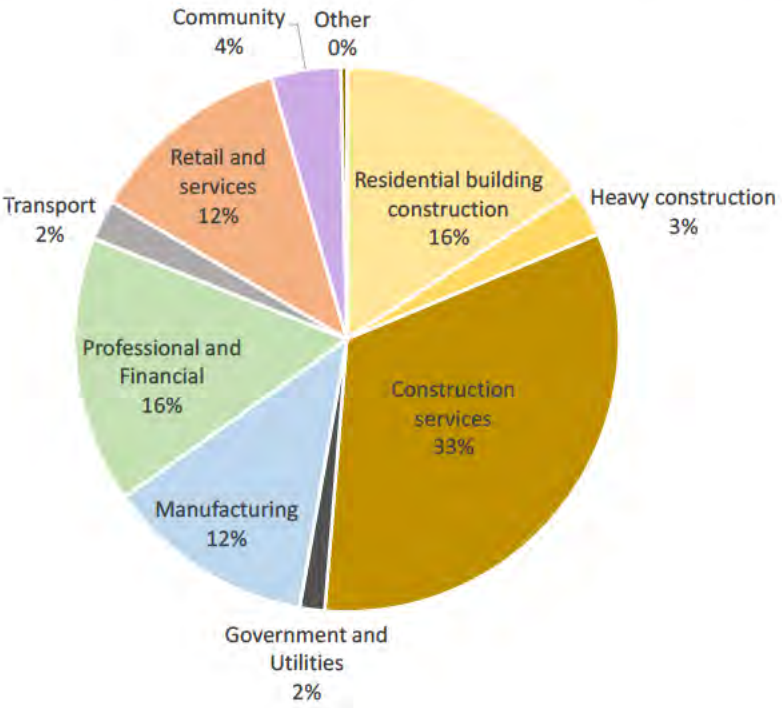
Auckland FTE	2022	2023	2024	2025	2026
Direct*	5	175	294	141	-
Indirect and Induced	-	198	522	274	35
Total	5	373	816	414	35

**Activity that occurs directly on site, excludes residential demands.*

For the purposes of this assessment we have considered "direct" employment to be employment that occurs on-site. Employment supported off-site, such as factory-assembled framing, window fabrication, and transporting materials to site is categorised as indirect employment. This off-site employment is very strongly linked to the economic activity located on-site, and could be considered to be direct.

In terms of sectors, as would be expected, more than half the jobs associated with the project are related to construction sectors (residential building, heavy construction and services). Just under a third of the employment is in sectors that support development (government, utilities, professional, financial, and manufacturing), and nearly 20% relates to other sectors that mostly accommodate the induced activity (retail, services, community and other).

Figure 5.3: Auckland Direct, Indirect, Induced Employment 2022-2026 by Sector



Also, once the industrial units and at-grade storage lots are completed they will be occupied by businesses, and support employment. Based on our research of industrial activity in Auckland, industrial units tend to have an average workspace ratio of 90m^2 per employee and at-grade storage lots can be a much as 400m^2 of land per employee.[41] Therefore, the industrial units and at-grade storage lots of the size proposed would be expected to yield an ongoing employment of around 140 workers, including working proprietors.

6.5 Findings – Economic Contribution of Proposed Development

The proposed development would produce positive benefits for the local community, both in terms of providing additional and much-needed housing supply and the generation of employment and economic benefits for the local community.

In short, the assessment finds that the development proposed is expected to generate approximately s 9(2)(b)(ii) in direct expenditure over the coming decade supporting total economic activity in the Auckland economy between 2022 and 2026 of $160.3 million in GDP and employment of 1,818 employment years,[42] or 1,644 FTE years. Of those 1,644 FTE years, 615 FTE years would be directly employed on the proposed development sites, and the balance in related industries off-site. **The project will create an average of 154 direct FTE jobs over four years of the project lifetime**. Some of this employment may occur in the absence of the proposed development by transferring the activity away from other developments, however the community and economy will benefit from additional economic activity that the proposed development will generate in the local area.

The impact on employment is split across a range of sectors, with approximately half of the total FTEs generated being directly related to on-site construction, with the other half providing support roles throughout the wider Auckland economy.

[41] Rodney Yeoman, Michael Gordon and Greg Akehurst (2017) Auckland Business Land Demand and Supply NPS-UDC.

[42] Total Employment Count, which is equal to the count of employees and working proprietors, and includes allowance for part of the workforce to not be engaged on a full-time basis. That proportion is relatively small in the construction industry.

7 Wider Economic Benefits

There will also be public benefits associated with the development of sites A, B, C, and D that will contribute to achieving the purpose of the FTCA 2020, and which will generate public benefits for the local community and the wider economy. In this section we provide a brief qualitative discussion of these benefits, which are also addressed by other experts from their perspectives.

In general, the wider economic benefits of the proposed development are driven by its location adjacent to existing urban areas, and in a location that is planned to be serviced by infrastructure. Households that live within the area will have good links to road and public transport networks and access to goods and services in the local area. These aspects of the proposed development can be expected to generate benefits for the local community and the wider economy, and are explained below.

7.1 Infrastructure

While we have not assessed the relative infrastructure costs associated with servicing the proposed development, we consider that it is likely that there will be economic benefits from the fact that the Site is adjacent to an existing established urban development containing both residential and commercial activities. This location means that it is probable that infrastructure costs will be lower than other comparable developments located further from the urban edge, which would result in superior economic outcomes relative to accommodating growth in less accessible areas that are not as well served by existing infrastructure.

The infrastructure costs associated with servicing the quantum of development proposed on sites A, B, C, and D is likely to be lower compared to an equivalent amount in a more remote greenfield location, it is likely that there will be public benefits from the fact that the sites are located very near existing urban development, and therefore infrastructure costs will be lower than comparably-sized developments in greenfields locations that are not yet serviced by water and wastewater. This outcome would improve the productivity of the economy, by reducing the amount of resources needed to accommodate new growth.

7.2 Transport

The second notable public benefit arises because sites A, B, C, and D are close to major transport infrastructure (including State Highways 16 and 18) and to significant and established retail, commercial and employment areas within 4km of the Site (Whenuapai centre, Hobsonville, and Westgate). This means that households establishing on sites A, B, and C will be able to travel more efficiently and better access their needs locally than will residents of comparably sized developments in more remote greenfields locations. This superior access to local businesses will contribute to

mitigating transport costs and emissions, relative to development in many alternative locations, resulting in better transport outcomes and associated public benefits.

The proposed development is proximate to major transport infrastructure, both road and public transport (the Upper Harbour Motorway and Hobsonville Point ferry) and there is a wide range of services and retail already provided in the local area. This means that households in the proposed development should be able to travel efficiently and access their needs locally which may contribute to mitigating transport costs and emissions, relative to greenfields locations in less accessible areas. Encouraging housing supply in this location will result in better transport outcomes and associated economic benefits than in many alternative locations.

7.3 Well-functioning Urban Environment

We consider that development of sites A, B, C, and D will contribute to a well-functioning urban environment. The proposed development is an appropriate location in which to enable higher density residential growth and industrial activity because it is adjacent an established residential and business area, and is close to the key infrastructure networks, and other services. Locations with those characteristics are an appropriate place for higher density residential activity to establish and for business activity to be accommodated.

The proposed development would contribute to a well-functioning urban environment, as the sites are appropriate locations on which to enable higher density growth, being close to the Upper Harbour Motorway and public transport, and adjacent to a large (and growing) established residential area to the south. This location is an ideal place for higher density residential activity to establish.

The development of the Cabra sites can be expected to positively impact local businesses in the area and contribute to the efficient and profitable functioning of the Whenuapai, Hobsonville, and Westgate centres. Members of the additional households within the proposed development can be expected to shop and visit services within the local area, which will improve the viability of existing business and also potentially attract more businesses and community services to the area. This additional activity can be expected to improve the level of amenity in these centres, which will positively contribute to a well-functioning urban environment, and increase local spend retention, therefore reducing the need for local residents to leave the area to access goods and services. Overall, the proposed development will positively contribute to a well-functioning urban environment.

7.4 Findings – Wider Economic Benefits

The proposed development will result in a range of wider benefits in addition to the direct economic and employment outcomes resulting from construction on the Site. These wider economic benefits will assist in efficiently accommodating growth and contribute to the creation of a well-functioning

urban environment. These benefits should be considered when assessing whether the development will achieve the purpose of the FTCA.

8 Outcomes

The development of the Cabra sites would produce positive benefits for the local community, both in terms of allowing households to purchase housing and by supporting local jobs. The development of Cabra sites will generate employment, providing income for workers and supporting Auckland households in their Covid recovery, which will contribute to achieving the purpose of the FTCA.

Under the existing planning framework, even with the additional supply that will be enabled in EHA-induced changes to the AUP, there is potential for a shortage of residential dwellings on the Whenuapai-Hobsonville-Kumeu-West Harbour-Massey-Greenhithe area in the short-term. Additional new supply is required quickly to provide for short-term demand, and FTCA approval of the proposed development would contribute to providing the required supply. If the proposed development were consented in 2022, Cabra expects first dwellings to be complete by 2025 and the overall development to be completed by 2026. This would contribute to more readily available housing in the short term, helping to ease upwards pressure on house prices and rents.

The assessment concludes that the project will create an average of 154 direct FTE jobs over four years of the project lifetime. The proposed development suggests that the proposal is expected to generate approximately s 9(2)(b)(ii) in direct expenditure over the coming decade. This would support total economic activity of $16.3.0 million in GDP and employment of 1,818 employment years[43] between 2022 and 2026 in the Auckland economy. For the FTCA application, we have estimated that the proposed development will generate approximately 1,644 FTE employment years over the five years in the economy. Of those 1,644 FTE years, 615 FTE years would be direct employment on the Cabra sites, with the balance indirect and induced employment in related sectors off-site. Notwithstanding the likely transfer effects, the community and economy will benefit from additional economic activity that the proposed development will generate in the local area, including supporting local retail and service provision in the Hobsonville local centre and Westgate metropolitan centre, and assisting the Covid-recovery of those sectors.

The proposed development is an appropriate location to enable higher density growth because it is close to the Upper Harbour Motorway and public transport, which is an ideal place for higher density residential activity to establish, and is adjacent to a large (and growing) established residential area to the south. The location of the Cabra sites, and the proposal assessed in this report, therefore contributes to a well-functioning urban environment by providing dwellings in close proximity to major public transport links, which will also have positive effects in reducing greenhouse gas emissions. The proposal would support efficient use of infrastructure, certainly much more efficient than for residential developments in greenfields locations which require new networks to be

[43] Total Employment Count, which is equal to count of employment and working proprietors.

constructed. These benefits should also be considered when assessing whether the development will achieve the purpose of the FTCA.

The FTCA route is preferred by Cabra due to the economic certainty it presents. Without FTCA approval, construction and dwelling occupation would be delayed by several years, and potentially two or more, depending on the outcomes of Council-run plan change process. Under the FTCA that timeframe is significantly accelerated, with works anticipated to begin in October 2023, if the consents are granted.

Appendix 1 Economic-Linkages-Model

The Economic Linkages Model ("ELM") is a proprietary model that has been developed to quantify and measure the economic activity and relationships within the New Zealand economy. In summary, the ELM measures the flows of money and goods through the economy, at a sector and sub-national level.

The model records the interactions and relationships between actors in the economy, including businesses, households, government, exporters, and importers. At its essence, the interactions in the model describe how each industry responds to changes in the economy, which ripples out to influence a range of other outcomes (e.g. household decisions).

The ELM measures the economy using a range of standard economic metrics, which includes gross output[44], GDP[45], value-added, employment[46], incomes[47], consumption[48], tax[49], and trade. The model uses a subnational Input-Output Table that has been regionalised by Formative. This appendix outlines the nature of the Input-Output table, the underlying assumptions within the ELM and the key modelling steps.

A1.1 Input-Output Table

The Subnational Input-Output Table ("SIOT") has been developed by Formative to provide detail on the economic linkages between sectors and geographies within New Zealand. The table has been defined to include 65 economic sectors and 39 geographies.

The 65 "sectors" have been defined using standard industry classification (ANZSIC06), with each sector being defined by a grouping of industries based on cluster analysis of their supply chains and economic rationale. The 39 "geographies" have been defined according to either territorial or regional authority boundaries, with more disaggregation provided where there is more economic activity (e.g. upper North Island) and aggregation where there is less economic activity (e.g. West Coast of the South Island).

The SIOT has the base year of 2019. All transactions in the table are in 2019 dollars, and all economic impacts (for instance GDP, gross output, consumption, taxes) are also in 2019 dollars. The SIOT is

[44] Similar to company revenue.
[45] There is a key difference between GDP and value added. The value added of a sector is measured net of taxes (for instance GST) and subsidies on products. In the GDP in the national accounts for New Zealand product taxes (minus subsidies) are recorded for the economy as a whole and includes as part of the value added.
[46] Formative uses BED measure of Total Employment Count (TEC) which includes both employment count and working proprietors.
[47] Includes salaries, wages and profits.
[48] Including household and government.
[49] Including income taxes, GST, government transfers and subsidies.

based on a national level 2013 Input-Output table released by Statistics New Zealand which has been converted to 2019 based on Statistics New Zealand national account data for 2019[50]

The national-level table has been regionalised using a hybrid approach. The hybrid approach of combining survey and non-survey (i.e. modelled) methods to regionalise an IO table which is considered the gold standard when an official SIOT is not available. The survey data sources used in the generation of the SIOT include a range of customised datasets that Formative has purchased and developed:

- **Total Employment**: Formative maintains a detailed database of employment, by geographies and industry (Business Employment Database - BED), which records the total employment in each of 506 ANZISC06 industry classes and for Statistics New Zealand's Statistical Areas, including both employees and working proprietors.[51]
- **Electronic Card Transactions**: Formative has purchased detailed electronic card transaction data from Marketview, which records the origin and destination of four retail and services spend types by the 39 geographies. [52]
- **Subnational Economic Data**: a range of information that provides valuable insight into the scale of economic activity that is located within each geography. This includes regional GDP, Gross Output and household income.

The above datasets have been combined along with non-survey regionalisation techniques to allocate the national economic activity into each of the geographies. The key method used to accomplish this is the Industry-Specific Flegg's Location Quotient ("SFLQ")[53]. This method employs location quotients (LQ) to understand the specialisations and structure of regional economies compared to the national economy. The use of LQs has been known to understate the amount of regional trade, however, the SFLQ approach combats this by allowing for industry-specific rates of cross hauling (where regions both import and export a product or service).

This approach has been shown to create accurate estimations of regional multipliers and outperforms other non-survey approaches[54]. The SFLQ method was supplemented by a gravity model to help

[50] This includes gross output by sector, and national subsidies, exports, imports, change in inventories, gross fixed capital formation, consumption spending (includes households, local and central government and non-profit expenditure), compensation of employees, taxes, consumption of fixed capital and operating surplus.
[51] Formative (2021) Business and Employment Database – Employment Count, Working Proprietors, Total Employment.
[52] Marketview (2021) Card transaction data – four spend types and 39 geographies for the 2019 calendar year.
[53] Julia Kowalewksi (2015) Regionalization of National Input–Output Tables: Empirical Evidence on the Use of the FLQ Formula, Regional Studies, 49:2, 240-250.
[54] Anthony T. Flegg, Leonardo J. Mastronardi & Carlos A. Romero (2016) Evaluating the FLQ and AFLQ formulae for estimating regional input coefficients: empirical evidence for the province of Córdoba, Argentina, Economic Systems Research, 28:1, 21-37.; Zhao, X., Choi, SG. On the regionalization of input–output tables with an industry-specific location quotient. Ann Reg Sci 54, 901–926 (2015).

inform regional flows. The SIOT has been calibrated to better match the relationships in the national Input-Output table and has been balanced using an iterative proportional fitting procedure to ensure that the table reflects regional gross-out and input. The resulting SIOT table provides a modelled estimate of the relationships within the economy. This means that the economic linkages between sector-geography combinations as of 2019 are captured in the SIOT.

The ELM uses the SIOT to estimate the potential economic activity that can be expected from changes in the economy. All economic models apply assumptions because an economy and community are too complex to replicate exactly in a mathematical system. The structure of the ELM utilises the following assumptions:

- Leontief production function, which assumes linear relationships between the production and inputs. This means a change in the output for the industry will translate into a proportional change in demands for inputs.
- No supply constraints assume that businesses can source sufficient resources (labour, capital, land, etc) to meet new demands.
- Constant returns to scale, which means that there are no economics of scale or diminishing returns in the model.
- Static prices, which assume that prices remain at 2019 values. The model does not account for substitution effect or dynamic feedback from changes in demand and prices.

A1.2 Key Modelling Steps

The first step in the ELM is to establish the direct economic activity that will be generated or influenced by the proposed policy, investment, or activity. This estimation of the direct economic activity is generally conducted using financial information or developed via a first-principles understanding of how businesses or households may change their behaviour or be impacted as a result of the proposed policy, investment or activity.

The next step is to map this activity into the 65 economic sectors and 39 geographies. In most cases the direct economic activity will occur across a range of economic sectors, commonly this can be drawn from either operational or capital budgets. Similarly, in most cases, direct economic activity will accrue across multiple geographies. Therefore, the activity must be mapped into each geography to ensure that the modelling reflects the likely pattern of activity.

Finally, the mapped activity is then fed into the ELM which measures the additional economic activity that can be expected to occur within the economy as a result of the new activity. In summary, other businesses and households in the community will respond to the changes in the economy.

There are three types of economic impact the ELM calculates, direct, indirect, and induced:

- Direct impacts are the initial changes in the economy due to an economic shock (often new expenditure). The direct GDP effect is calculated based on the value of the shock and the direct employment effect is the number of jobs created by the shock itself.
- Indirect impacts arise as the firms that initially change their output as a result of an economic shock (i.e. the direct effects), purchase required inputs from their supply chain. These business-to-business transaction changes are known as the indirect impacts.
- Induced impacts flow from the direct and indirect impacts which generate wages, salaries, and profits for the households. The changed household incomes will generate more spending on goods and services. This household-to-business interaction is called induced activity.

The ELM quantifies the economic activity in each geography and sector, which includes the direct, indirect, and induced activity. The associated employment impacts are calculated assuming constant productivity – that is, each sector-geography combination produces the same amount of output per employee.