

Waikato Economic Projections 2023 to 2073 – by Territorial Local Authority and Statistical Area 2

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2025 Update

4th March 2026

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1 Introduction

Employment¹ and value added² are the key economic indicators projected in this report. Annual employment and value added projections are developed at the Statistical Area 2 (SA2) level from 2023 to 2073. The 2006 Australian New Zealand Industry Classification (ANZSIC) at the 1-Digit industry level is used for the industrial classification of the projections. This level of detail equates to a very large database of 275,831 projection datapoints each for employment and value added. This was to allow investigation of patterns of industry and spatial change across the whole region, as along with changes in economic structure within the SA2s themselves. Additionally, three sets of projections are produced covering low, medium, and high economic growth futures.

The projections are computed based on least squares regression. The regression is carried out based on (1) change in future land use patterns as derived from the Waikato Integrated Scenarios Explorer (WISE) Spatial Decisions Support System³, (2) historical employment trends taken from StatsNZ's Business Directory, and (3) independent population projections produced by Prof. Michael Cameron at the University of Waikato.


It should be noted that the projections are only an estimate based on the available data. The relatively smooth growth projections of the region mask the changes that can be significantly volatile within smaller SA2 areas, as industries evolve, respond to local conditions (particularly land use change), and move between areas or elsewhere. For this reason, it is important to acknowledge that the results presented are projections and *not* predictions – it is not possible to predict the future. The medium, high, and low projections give a range of projections that are plausible, having been developed under a set of assumptions. The projections produced have a higher degree of uncertainty in the long run than in the short run. In this report, we use the high growth projection series as an exemplar for reporting. This series is based on both high population and economic growth. Looking back at the previous WISE projections, the high growth projection series has performed best in describing growth over the preceding 10 years, which includes the unparalleled growth period of the mid-2010s, the 2019 through 2023 COVID-19 pandemic period, and recessional period since 2023.

It should be noted that these projections have been developed through the collaborative effort of several organisations. This includes Waikato Regional Council, the Territorial Authorities (TAs) of the Waikato Region, the University of Waikato, and independent GIS and economic consultants. The projections are fully compatible with those produced at the regional level by WISE. As a spatial planning tool, WISE is unique in its depth of coverage of land use, socio-economic and environmental impacts

¹ Employment is measured by Modified Employee Counts (MECs). A MEC job year is the employment of one person, measured as one Modified Employment Count, for one year. StatsNZ, under the Business Frame (which matches businesses almost exactly with their employees), collect annual data on employment by SA1 at the 6-digit ANZSIC industry level, one employee is termed an 'EC' or Employee Count. ECs are head counts of people employed in an industry. Thus, if a person is employed in more than one industry then they are counted twice. ECs also do not account for self-employed or business proprietors. For this reason, Market Economics Ltd has created modified employment counts (MECs) based on the EC data, which includes estimates of the numbers of working proprietors for each industry type.

² All value added figures are presented in constant NZ\$₂₀₂₃ million dollars.

³ WISE simulates demographic, economic, land-use, and environmental change across space (for a 100m x 100m spatial grid) and through time (yearly time steps for 2023 to 2073) for the Waikato Region. It was developed through a policy-science collaboration under New Zealand Government Foundation of Research, Science and Technology (FRST) funding. Full documentation of the underlying integrated models and how they interact is available in the WISE Technical Specification document.



through an integration of existing land use, demographic, economic, and environmental models. This integrated systems-based approach provides unique insights into the key trade-offs faced within the Waikato region.

2 Projections of economic outcomes by SA2

This section outlines the methodology to generate the economic projections below in five steps. This is followed by more detailed information on the selection of regression models and underpinning data applied as a part of the methodology.

2.1 Methodology

Step 1: Update the WISE economic model final demand projections

A key driver of the WISE economic model is final demand projections covering domestic consumption, international exports, interregional exports, gross fixed capital formation, and net changes in stocks. The following methods and data were used for updating:

- *Domestic consumption projections:* These are derived from Prof. Michael Cameron's population model by age-sex projections at a regional level. Adjustments, as outlined in the WISE technical specifications report, are made for the different consumption characteristics of different age-sex cohorts.
- *International exports, Gross Fixed Capital Formation, and Net Changes in Stocks.* These are derived econometrically from time series data supplied by StatsNZ for international trade and capital expenditure. Particular attention was given to ensuring that these projections reflect prevailing dynamics in key Waikato agriculture and aligned processing industries.
- *Update of the Waikato Region multi-regional input-output table to 2023.* This table, which is based on StatsNZ's inter-industry study for the New Zealand economy for 2020, underpins the WISE economic model.

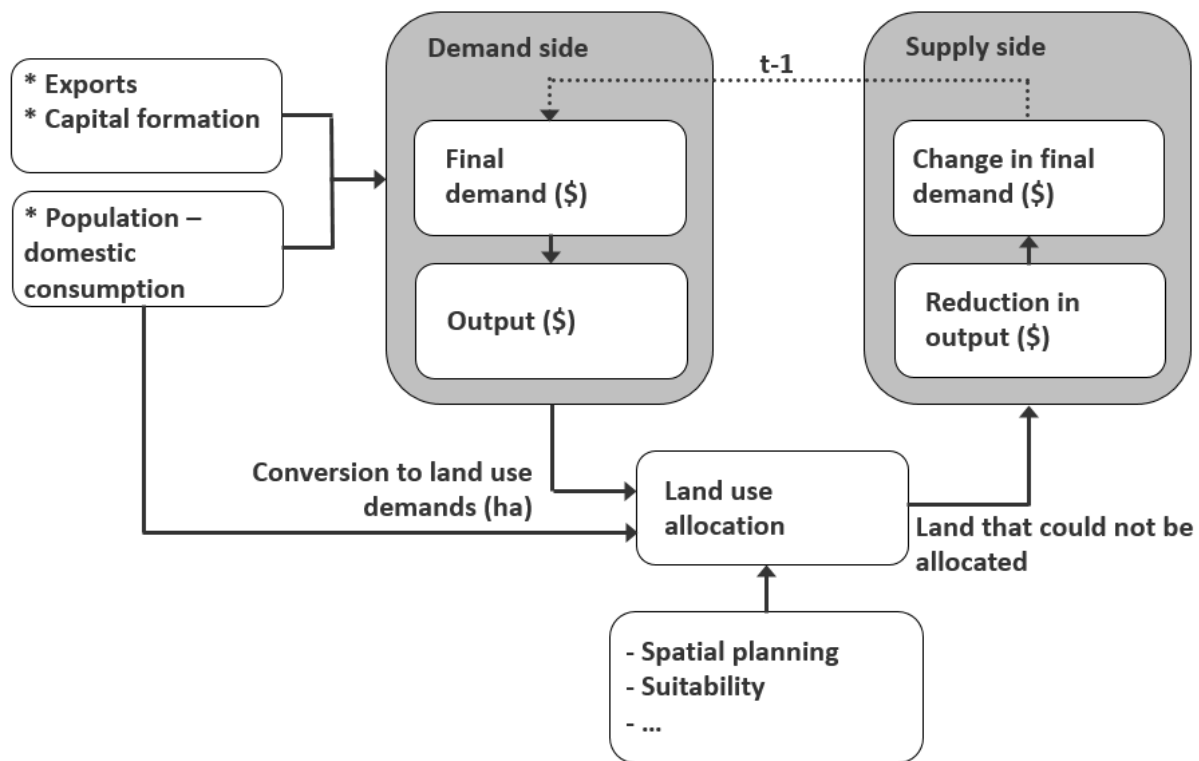
Step 2: Update the WISE economic model – for land use aspirations

Workshops with local government GIS, policy advisors and analysts were held to determine likely major land use changes over the next 30-40 years. This ensured that land use aspirations were captured in WISE geographically (through road network additions and zoning areas and rules) through time. The economic changes associated with land use change aspirations are captured through coupling of the land use change and economics models within WISE. **Step 3: Run the WISE model – producing land use estimates for the SA2 modelling**

Under this step, the WISE model was run. Figure 1 illustrates how WISE final demand projections are used to drive WISE. Specifically, these projections along with the multi-regional input-output model contained within WISE, sets *demand* for primarily non-residential land use types contained within WISE. The WISE land use model then allocated this demand (based on zoning, suitability, accessibility, and spatial interactions rules) to land use types at a 100m x 100m grid cell resolution. Since land is a scarce resource, with many competing uses, the WISE land use model may not sufficiently allocate land to fulfil demand. This only happens under a high growth scenario and only for competing agricultural land use types such as livestock farming, dairy farming, forestry, other farming, and horticulture. The WISE

economic model, in turn, accounts for this lack of land *supply* in these sectors and reduces the economic output accordingly, along with key down-stream industries, using the impacted land use types. The land requirements in all other sectors can be met – as noted above zoning, suitability, accessibility and spatial interaction rules determine where these activities will be located spatially.

Figure 1 WISE Economic Model




Step 5: SA2 Economic projections

This step of the methodology involves deriving employment and value added projections using least squares regression, initially for 48 Input-Output industries, for each SA2 within Waikato Region – further details are provided in Sections 2.2 and 2.3 below. These projections provide a *bottom-up* estimate of employment by SA2 geo-statistical areas. We, in turn, scale these, at an industry level, to the annual (*top-down*) projection estimates generated from the WISE model. This ensures that the *bottom up* SA2 estimates at the industry level sum to their *top-down* regional equivalents. The economic regression models produce estimates of total employment by 48 industries, which are, in turn, aggregated to the final 1 Digit ANZSIC level (19 industries) for each SA2. The estimates of employment are then converted to estimates of value added, by applying the appropriate value added-to-employment ratio for each industry and adjusting for estimated growth in productivity (i.e., value added per worker) over time.

2.2 Data for the SA2 Projections

For the least-squares regression model, both historical and projection data was utilised in the estimation in the estimation of dependent variables. Specifically, we create a set of parameters that



enables unknown dependent variables to be derived, based on estimates of future independent variables. Below is a brief description of the historic and future datasets.

- (1) *Employment* – Historical employment data (2006 to 2023) was obtained from StatsNZ’s Business Frame (Business Directory). This data, measured in Employment Counts (ECs), is translated to Modified Employment Counts (MECs) measure. MECs account for not only Employment Counts (ECs) but also working proprietors, providing an improved measure of employment.
- (2) *Land Use* – Land use projections by land use type are obtained by running WISE from the 2023 base year through to 2073 under each growth scenario (low, medium and high). Specifically, land use data in each SA2 is disaggregated by 24 land use types
- (3) *Population* – Historical population data by SA2 was obtained from the StatsNZ’s Census of Population and Dwellings (for 2001, 2006, 2013, 2018, and 2023 – estimates for the years in between are generated through interpolation) and projections (2023 to 2073) as supplied by Prof. Michael Cameron at the University of Waikato.

2.3 Model Specification

Employment projections for each Statistical Area 2 were generated using partial least-squares regression models fitted to the historical employment data (2006-2023), projected land use data, and population projections described in Section 2.2.

Three main regression specifications were tested for every SA2-industry series:


1. **No-lag model:** Employment each year is explained by a linear time trend, current land-use area in relevant categories, and current population.
2. **Lagged model:** The same variables plus employment in the previous year. This autoregressive term captures short-term momentum and persistence in employment patterns.
3. **No-zero fallback model:** A modified version of the lagged model that always selects the statistically strongest available specification (lowest p-value), even when standard models perform poorly. This ensures every series receives a plausible projection.

A key challenge when fitting regression models is separating relationships from random “noise” in the data. To do this, we calculate p-values for each regression coefficient. The p-value tells us how likely it is that we would see a coefficient as large as the one estimated (or larger) if the independent variable had no effect on employment (the “null hypothesis”).

- A **low p-value** (commonly below 0.05 or 0.10) means the relationship is statistically significant – the data provide strong evidence that the variable (e.g. land use or population) really does help explain employment changes, rather than the result being due to chance.
- A **high p-value** suggests the variable adds little explanatory power beyond random variation.

For 87.97% of the SA2-industry series, one of the three regression models provided an acceptable fit. For the remaining 12.03% of series (typically those with highly volatile or sparse historical employment data) the regression models performed poorly. In these cases, one of four ad-hoc rules was applied:

1. Hold employment at the last observed year (2023) (0.09% of series),

- 
2. Hold employment at the average of the last four observed years (2019 – 2023) (0.49% of series),
 3. Grow employment in line with the Territorial Authority’s overall population growth rate (4.90% of series), or
 4. Grow employment in line with the regional industry growth rate projected by the WISE model (6.55% of series).

Additional safeguards were applied to ensure realistic long-term behaviour. In the lagged models, the autoregressive coefficient was capped where necessary to prevent unrealistic exponential growth or collapse over the 50-year horizon. Senior team members also conducted a detailed manual review using manual inspection of trendlines, average annual growth rates, minimum and maximum values, and rankings across all SA2–industry combinations to confirm that projections were reasonable at both SA2 and Territorial Authority levels. Model-selection choices were cross-checked against the method used in the previous WISE 1.6 (2018-based) projections for consistency. This included statistical testing use of (1) correlations, and (2) mean squared error (MSE) to compared 2023 against 2018 results.

Once the preferred employment projections were selected, they were scaled at the 48-industry level so that the sum across all SA2s exactly matches the independent regional employment totals generated by the WISE model. This “bottom-up to top-down” scaling step guarantees full consistency between the detailed SA2 results and the official regional forecasts. The scaled 48-industry projections were then aggregated to the 19 1-digit ANZSIC industries.

Finally, value added projections were derived by applying industry-specific value added-to-employment ratios (taken from the WISE multi-regional input-output table) and adjusting these ratios forward in time to reflect projected productivity growth (again taken from WISE).

3 Regional Level Commentary

In this section, we discuss the regional level economic projections under a high growth scenario (ie. as based on high population and employment growth). We use the high growth projection as an exemplar. Looking back at previous projections, the high projection series has performed best in describing growth over the preceding 10 years. We note however that this was a period of extraordinary growth in population and economic growth terms in New Zealand's history, but also includes the 2019-2023 COVID-19 pandemic, and post 2023 recession.

3.1 Employment

In 2023, there were 251,321 people employed in the Waikato Region. This is projected to increase to 344,462 MECs by 2043. By 2073, the figure is projected to reach 453,209 MECs. From 2023, this represents an addition of 201,888 MECs, or an 80.3% overall growth.

Employment projections across the nineteen ANZSIC industries (excluding Owner Occupied Dwellings⁴ (OODs)) for the Waikato Region are shown in Figure 2. In 2023, Health Care and Social Assistance was the dominant industry in terms of employment, accounting for 28,864 MECs, or 11.5% of the Waikato Region workforce.

Long-term projections indicate a structural shift in the regional economy. By 2073, Construction is forecast to experience the largest overall growth of any industry, overtaking Health Care and Social Assistance to become the largest employer. By the end of the 50-year period, Construction is projected to contribute 63,326 MECs, accounting for 14.0% of total regional employment. Health Care and Social Assistance will shift to the second-largest industry, with a projected 49,827 MECs (11.0% of those employed regionally).


3.2 Value Added

Value added for the Waikato Region was estimated at \$28,670 million in 2023⁵, and is projected to reach \$42,729 million in 2043 and \$63,592 million in 2073 (including OODs). This represents an increase of approximately 121.8% by 2073, from 2023 levels.

Value added projections across the nineteen ANZSIC industries (excluding OODs) are presented in Figure 3. Manufacturing is projected to be the largest industry by 2073, contributing 15.2% of the region's total value added (excluding OODs). The value added of this sector is projected to more than double, growing from \$4,365 million in 2023 to \$9,674 million over the 50-year period.

⁴ This industry represents the imputed rental value of homeowners. The industry has no employees.

⁵ All value added estimates are expressed in 2023 New Zealand dollars as at the year ending March 2023.



The second largest industry by 2073 is projected to be Construction. Demonstrating large growth, Construction starts at \$2,426 million in 2023 and is projected to reach \$7,378 million, securing 11.6% of the region's total value added (excluding OODs). Rental, Hiring and Real Estate Services is projected to be the third largest industry in value added terms by 2073, growing from \$2,478 million in 2023 to \$5,440 million, contributing 8.6% of the regional total (excluding OODs). It should be noted that the value added of all industries is projected to grow over this period.

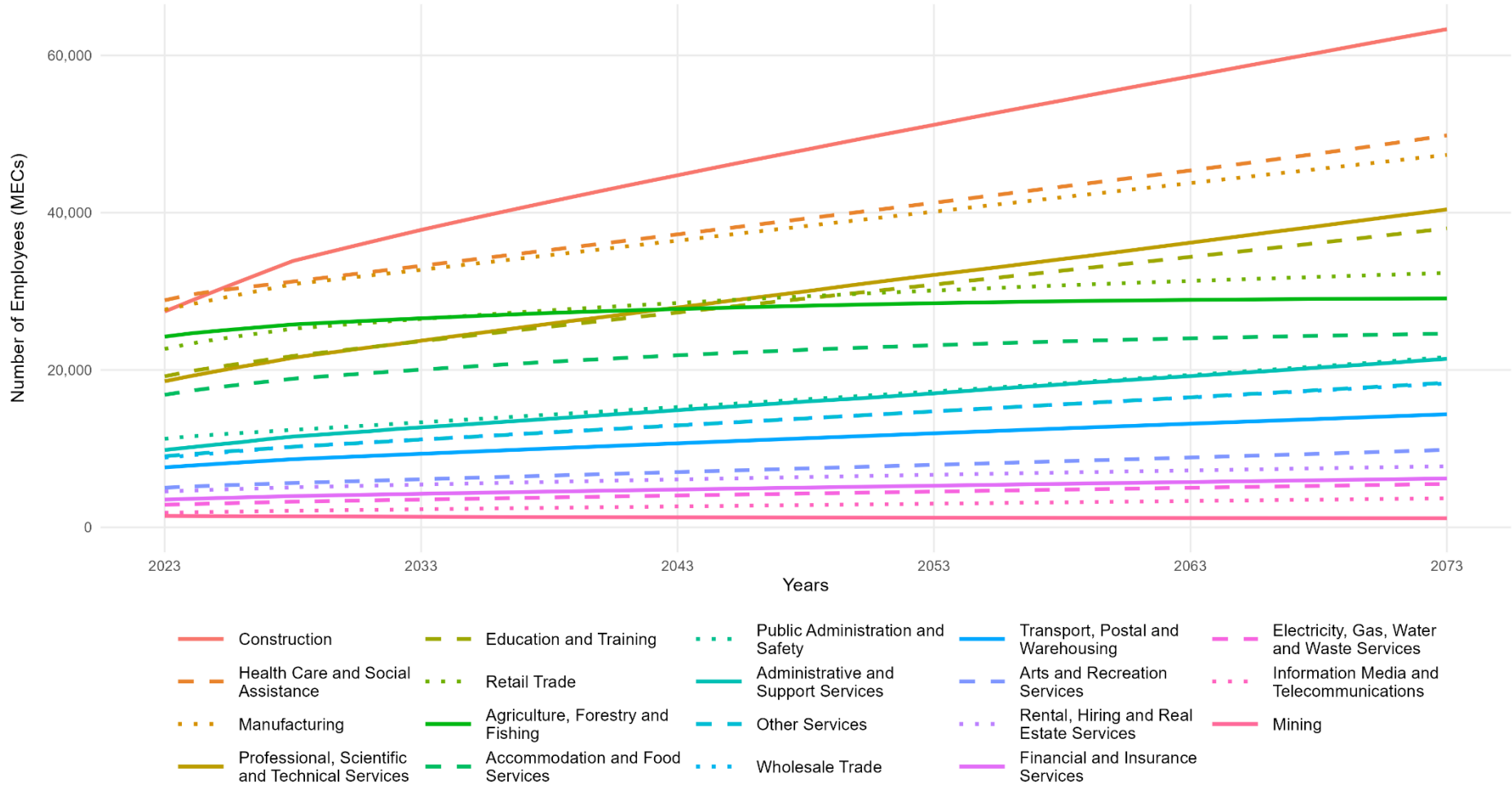


Figure 2 Waikato Region Employment under a High Growth Scenario, 2023 to 2073

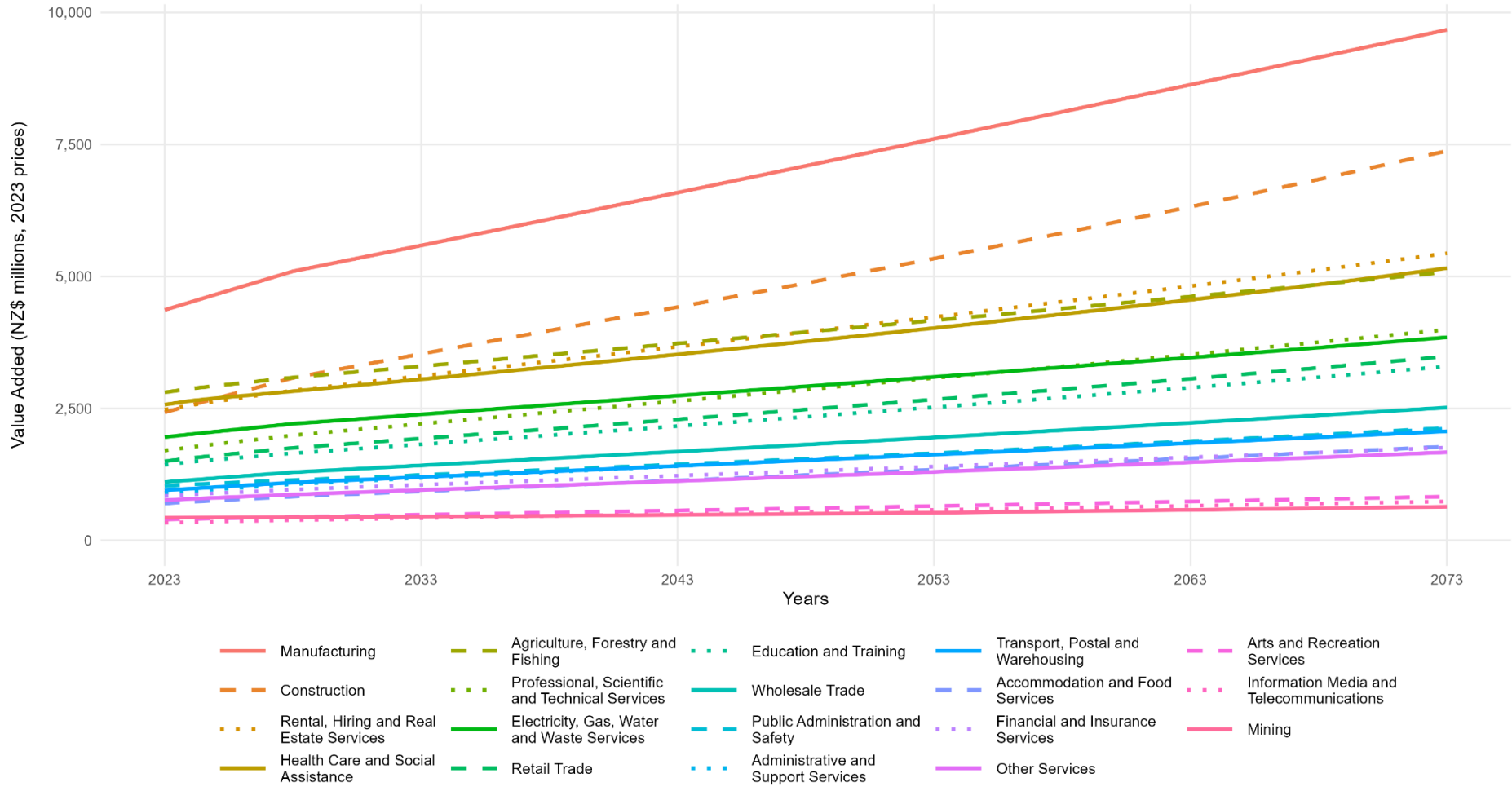


Figure 3 Waikato Region Value Added \$₂₀₂₃million under a High Growth Scenario, 2023 to 2073



4 Territorial Local Authority Level Commentary

In this section, we discuss the Territorial Local Authority (TA) level economic projections. We also present some projections at the NZStat's Statistical Area 2 (SA2) level as an illustration of the level of detail for which the results are available. The Waikato Regional Council, along with all of its constituent TAs, have been provided with a spreadsheet version of the results which may be queried in detail.

4.1 Employment

Table 1 shows the numbers of MECs in each TA, with projected changes from 2023 to 2043 and 2073, and the compounded annual growth rate for those periods 2023-2043 and 2023-2073. Hamilton City is the dominant centre of employment for the region, holding 46.3% of the region's employment (MECs) in 2023. In terms of employment, Hamilton City is 4.3 times larger than Waikato District and 4.4 times larger than Waipa District, which are the second and third largest TAs, respectively. Hamilton City is projected to have the highest absolute growth in MECs by 2073, with an increase of 116,344 MECs. Of the more rural districts, Waikato District is projected to have the biggest growth in employment out to 2073, with an increase of 22,780 MECs.

Table 1: Total Growth in Employment by Territorial Authority Under a High Growth Scenario, 2023 to 2043, and 2023 to 2073

Territorial Authority	Actual MECs in 2023	Projected MECs in 2043	Compounded Annual Growth Rate (2023-2043)	Projected MECs in 2073	Compounded Annual Growth Rate (2023-2073)
Hamilton City	116,412	167,622	1.84%	232,756	1.40%
Waipa District	26,185	35,469	1.53%	46,269	1.15%
Waikato District	27,137	37,116	1.58%	49,917	1.23%
Taupo District	20,769	27,999	1.50%	33,850	0.98%
Matamata-Piako District	18,963	24,111	1.21%	28,736	0.83%
Thames-Coromandel District	13,206	17,033	1.28%	20,209	0.85%
South Waikato District	9,650	11,997	1.09%	14,450	0.81%
Hauraki District	7,604	8,942	0.81%	10,138	0.58%
Waitomo District	4,756	6,017	1.18%	7,025	0.78%
Otorohanga District	4,528	5,781	1.23%	7,104	0.91%
Rotorua District	2,112	2,376	0.59%	2,754	0.53%
Total	251,321	344,462	1.59%	453,209	1.19%

Notes: MECs = Modified Employment Counts. This is a measure of the number of employees within an industry based on Statistic New Zealand's Employment Count measure but modified to take account estimates of the number of working proprietors within each industry.

For many TAs in the Waikato Region, Agriculture, Forestry and Fishing ranks among the top three industries in employment terms: Hauraki District, Matamata-Piako District, Ōtorohanga District, Rotorua District (part), South Waikato District, Taupō District, Waikato District, Waipa District, and Waitomo District. There are only two TAs in which Agriculture, Forestry and Fishing is not one of the top three industries. These TAs are Hamilton City, which employs most of its workforce in Health Care and Social Assistance, and Thames-Coromandel District, where Retail Trade is the dominant industry.

The employment by industry projections in the ten Waikato Region TAs⁶ are presented in Figure 4. This enables a comparison of the main employment trends in each TA and projected changes. This comparable graphic clearly shows the TAs where there is a heavily dominant industry employing over 20% of workers (e.g., Matamata-Piako District and South Waikato District driven by Manufacturing; alongside Ōtorohanga District and Waitomo District driven by Agriculture, Forestry and Fishing), and those with more diversified industry employment bases where no single industry exceeds a 15% share (e.g., Taupō District, Thames-Coromandel District, and Waipa District). We refer to Section 3.3 for a more detailed discussion on the TA-level projections.

⁶ Excludes Rotorua District (part in Waikato Region).

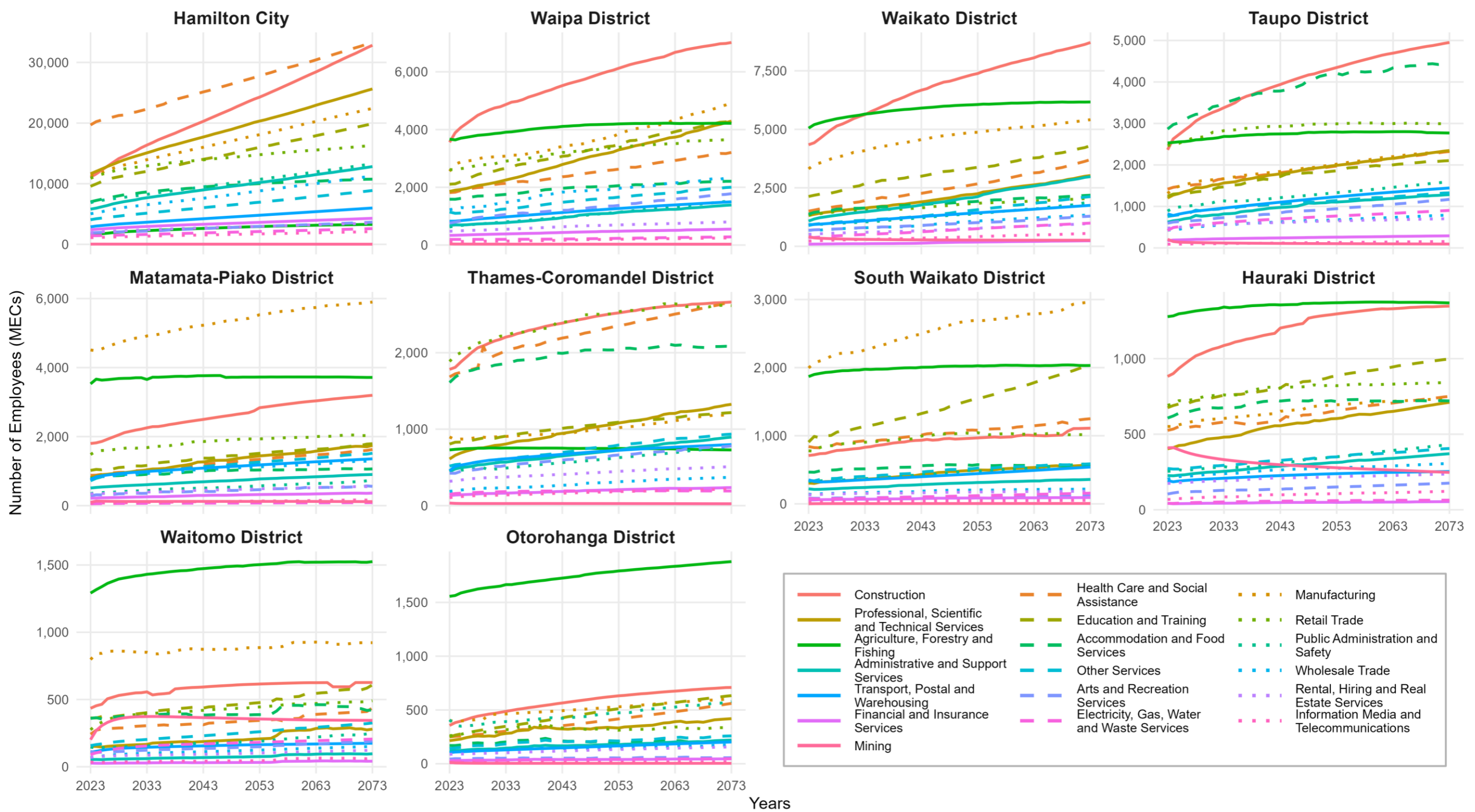


Figure 4 Projected Employment by Industry in Waikato Region’s Territorial Local Authorities under a High Growth Scenario, 2023 to 2073

4.2 Value Added

Table 2 shows the relative size of each TA in terms of value added contribution in 2023, 2043, and 2073. It also shows the compound annual growth rates for each TA between 2023 and 2043, and then between 2023 and 2073. There is higher growth rates in value added within the next twenty years across the TAs, in comparison to the extended period from 2023 to 2073. Table 2 shows that Hamilton City now has the highest compounded annual growth rate (1.76%), while Rotorua District (for the part that is within the Waikato Region) has the lowest (1.02%).

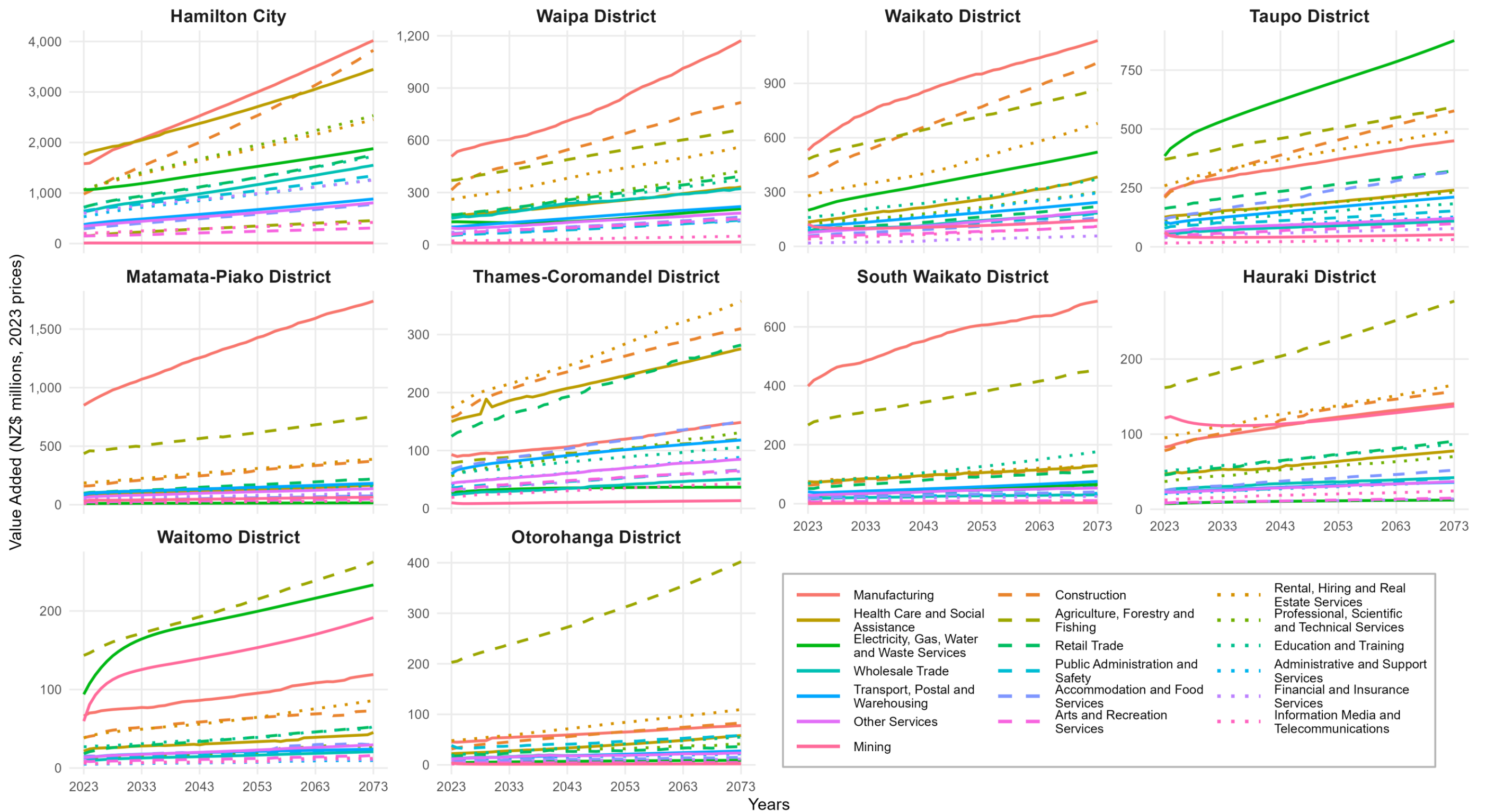
Table 2: Total Growth in Value Added by Territorial Authority Under a High Growth Scenario, 2023 to 2043, and 2023 to 2073

Territorial Authority	Actual VA in 2023 (\$2023m)	Projected VA in 2043 (\$2023m)	Compounded Annual Growth Rate (2023-2043)	Projected VA in 2073 (\$2023m)	Compounded Annual Growth Rate (2023-2073)
Hamilton City	12,848	19,820	2.19%	30,707	1.76%
Waipa District	2,943	4,282	1.89%	6,460	1.58%
Waikato District	3,120	4,693	2.06%	7,164	1.68%
Taupo District	2,557	3,767	1.96%	5,223	1.44%
Matamata-Piako District	2,429	3,542	1.90%	4,965	1.44%
Thames-Coromandel District	1,282	1,820	1.77%	2,513	1.36%
South Waikato District	1,233	1,695	1.60%	2,279	1.24%
Hauraki District	896	1,145	1.23%	1,513	1.05%
Waitomo District	591	929	2.29%	1,281	1.56%
Otorohanga District	516	729	1.75%	1,064	1.46%
Rotorua District	255	307	0.94%	423	1.02%
Total	28,670	42,729	2.02%	63,592	1.61%

Note: The estimates of value added in this table exclude the contribution of Owner-Occupied Dwellings.

The value added projections for each industry (excluding OODs) in the ten Waikato Region TAs⁷ are presented in Figure 5. This enables a comparison of the main value added trends in each TA and their projected changes. Note that the scales (in monetary terms) differ for each TA and, as can also be seen from Table 2 above, the overall level of economic activity across the region's TAs spans a wide range: from Hamilton City with a value added of \$12,848 million down to Rotorua District with \$255 million.

⁷ Excludes Rotorua District (part in Waikato Region).



Note: The vertical scale on each line chart varies.

Figure 5 Projected Value Added by Industry in each of Waikato Region's Territorial Local Authorities under a High Growth Scenario, 2023 to 2073

4.3 Projected within each TA

4.3.1 Hamilton City

Hamilton City is the dominant TA in terms of economic activity in the Waikato Region. With a value added contribution of \$12,848 million (excluding OODs) in 2023 and a workforce of 116,412 MECs, it dwarfs the other TA economies. Unsurprisingly with its relative size, it has a diversified industry structure.

The employment projections of each of the nineteen ANZSIC industries are presented in Figure 6. The biggest industry in 2023 employment terms is, and is projected to continue to be, Health Care and Social Assistance. With 19,695 MECs in 2023, 16.9% of Hamilton City's employees are in this industry. Professional, Scientific and Technical Services is the second biggest (11,634 MECs or 10.0%), followed closely by Manufacturing (11,421 MECs or 9.8%) and Construction (11,087 MECs or 9.5%).

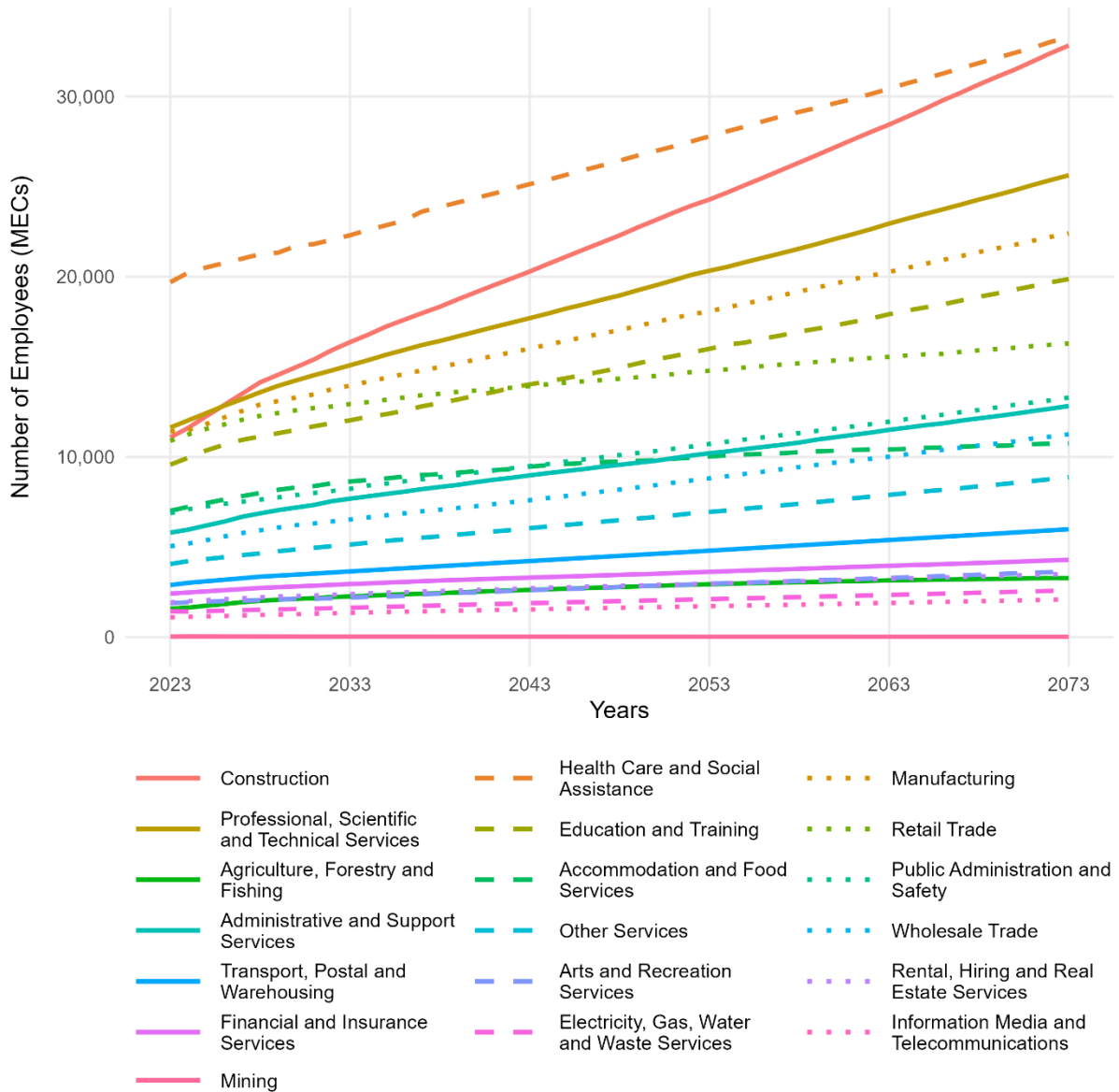


Figure 6 Hamilton City Employment under a High Growth Scenario, 2023 to 2073

The projections for each TA can be explored by SA2. We extracted an example of the Hamilton East urban centre SA2 within Hamilton City for illustrative purposes. This is shown in Figure 7. As can be observed, there are significant jumps in Professional, Scientific and Technical Services, Health Care and Social Assistance, Education and Training, and Public Administration and Safety. These step changes, particularly evident with smaller SA2s, are driven by land use changes where the land use change model can simulate the development of one more hectare of relatively dense urban land use within a single timestep.

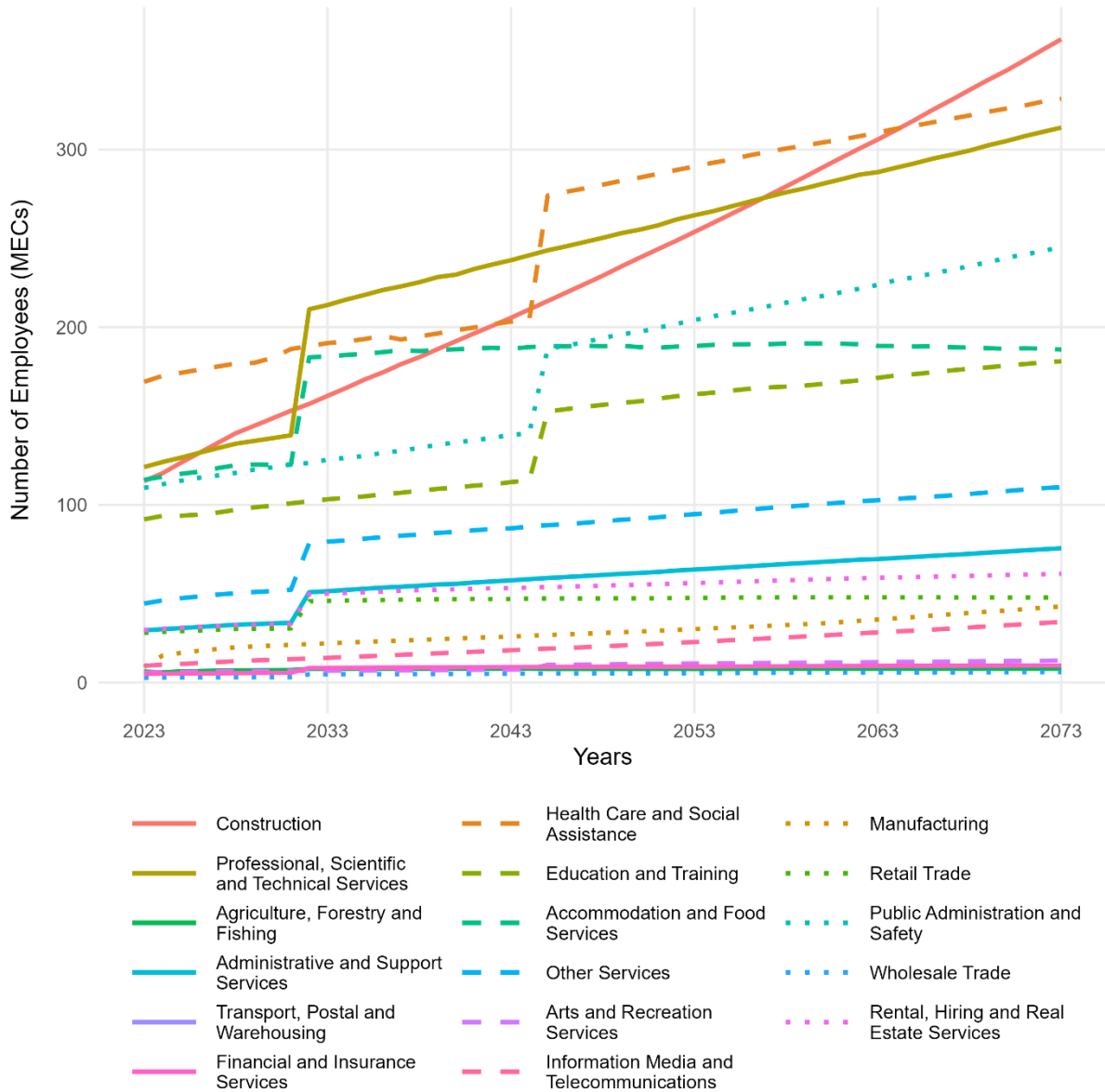


Figure 7 Hamilton East SA2 Employment under a High Growth Scenario, 2023 to 2073

The value added projections of each of the nineteen ANZSIC industries are presented in Figure 8. In terms of value added, Manufacturing is the dominant industry for most of the period between 2023 and 2073. While Manufacturing starts as the third biggest industry in 2023 employment terms behind Health Care and Social Assistance and Professional, Scientific and Technical Services, it leads in economic output, growing from \$1,580 million in 2023 to \$4,018 million in 2073, contributing 13.1% of the TA's total value added (excluding OODs) by the end of the projection period.

In 2023, Manufacturing is followed by Construction, which starts with a value added of \$980 million and is projected to grow significantly to \$3,825 million by 2073. The value added of all industries in Hamilton City is projected to increase out to 2073, indicating a persistently growing economy.

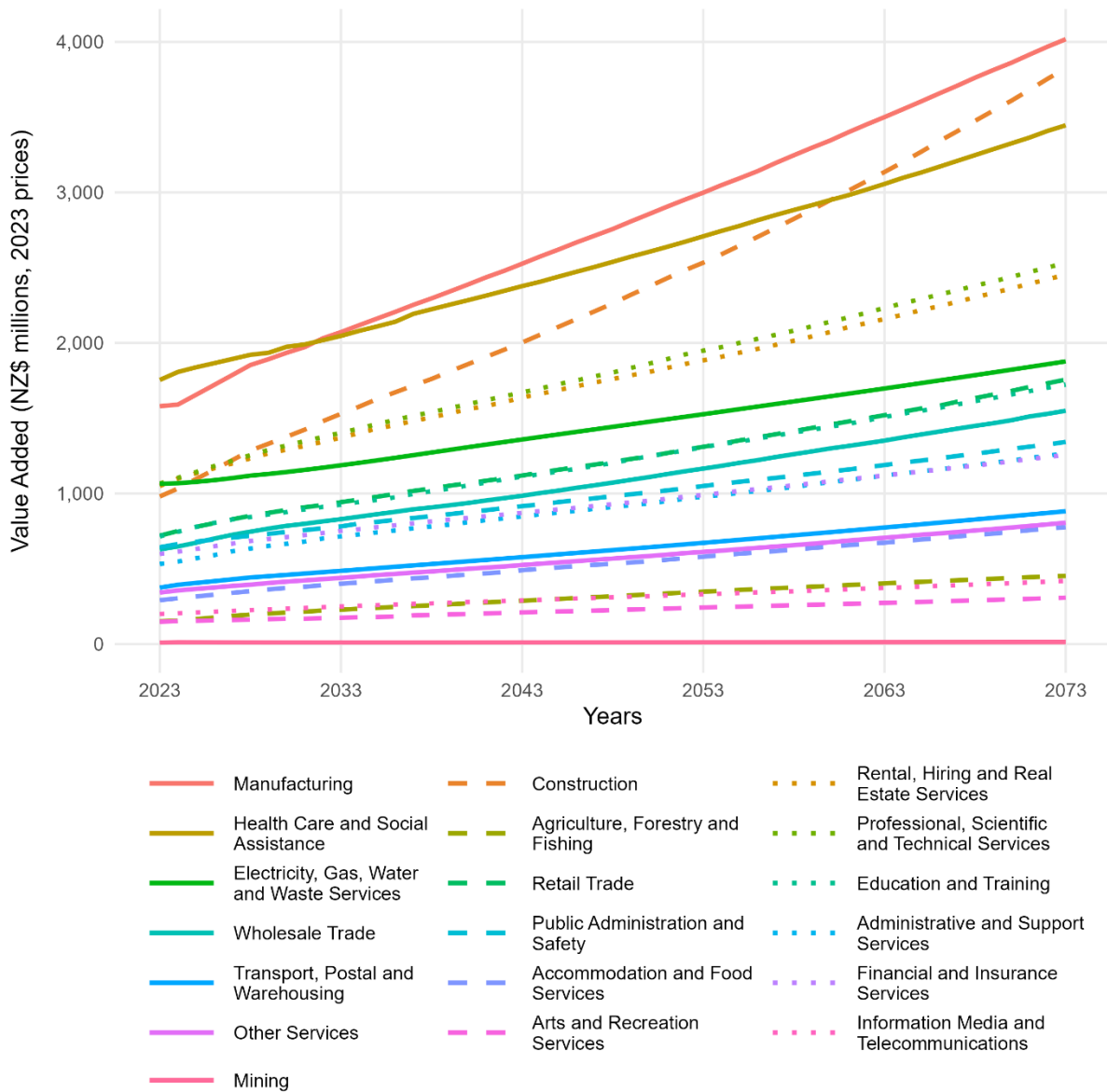


Figure 8 Hamilton City Value Added under a High Growth Scenario, 2023 to 2073

4.3.2 Waipa District

Waipa District is the third largest TA in the Waikato Region in terms of economic activity (as measured in value added terms), just behind Waikato District.

The employment projections for each of the nineteen ANZSIC industries in the Waipa District are presented in Figure 9. Waipa District is initially dominated by Agriculture, Forestry and Fishing, with 3,666 MECs out of a 26,185 MEC total (14.0%) in 2023. Construction is the industry that employs the second greatest number of people (3,560 MECs in 2023, or 13.6% of total employed), followed by Retail Trade (2,612 MECs or 10.0%). The MECs in Construction surpass Agriculture, Forestry and Fishing. By

2073, it is projected that the top three industries (Construction, Manufacturing, and Education and Training) will account for 15.2%, 10.7%, and 9.3% of the district's total employment, respectively. Manufacturing, Education and Training, Professional, Scientific and Technical Services, and Health Care and Social Assistance are also some of the considerable industries in the district in terms of initial 2023 employment.

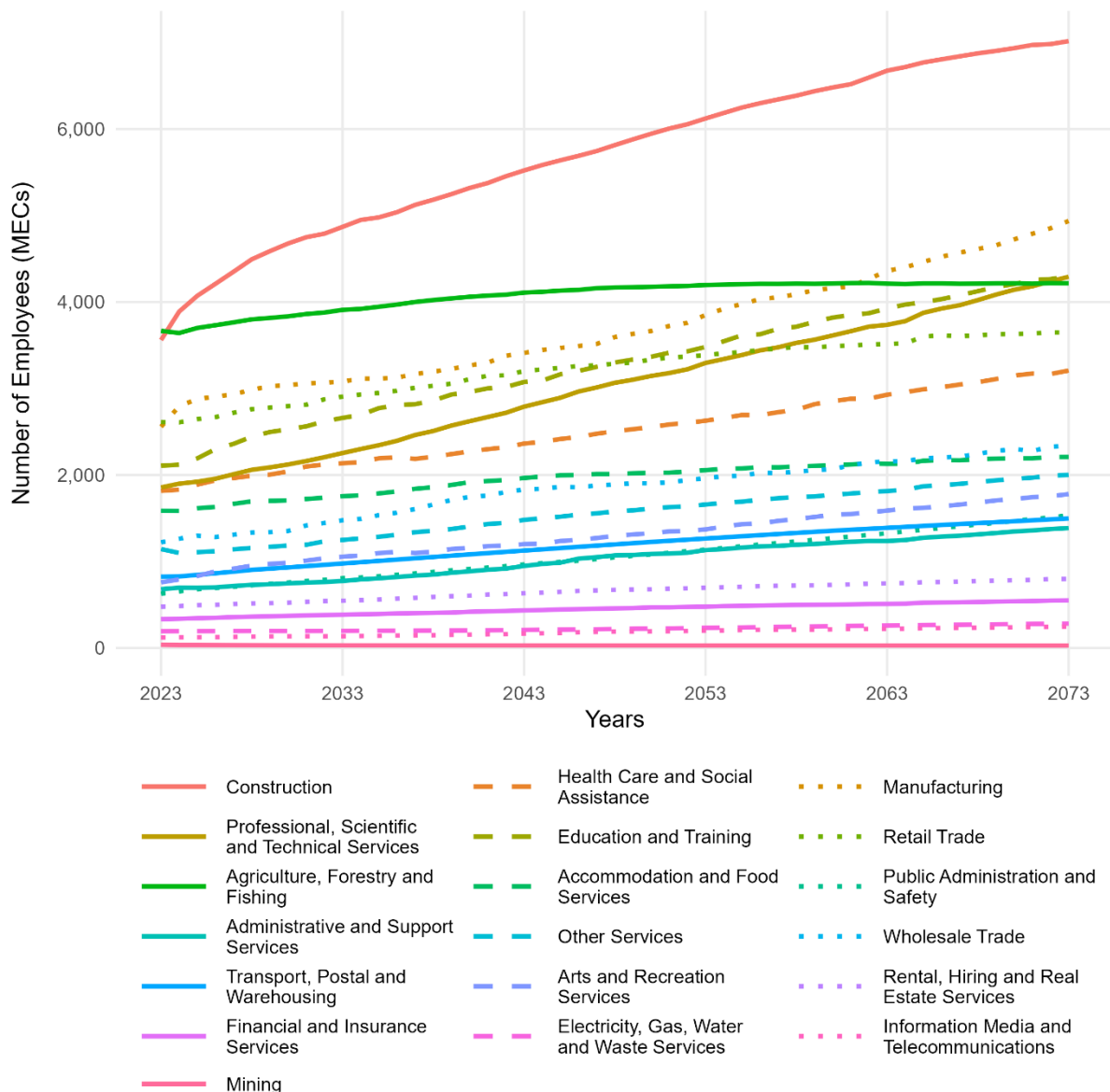


Figure 9 Waipa District Employment under a High Growth Scenario, 2023 to 2073

The somewhat smooth growth rates at a TA level mask more volatile projections at the SA2 level, with projected changes to the industry structure. We include employment projections for the Fencourt SA2, an example of a quite diversified SA2, with numerous industries. The projections are shown in Figure 10.

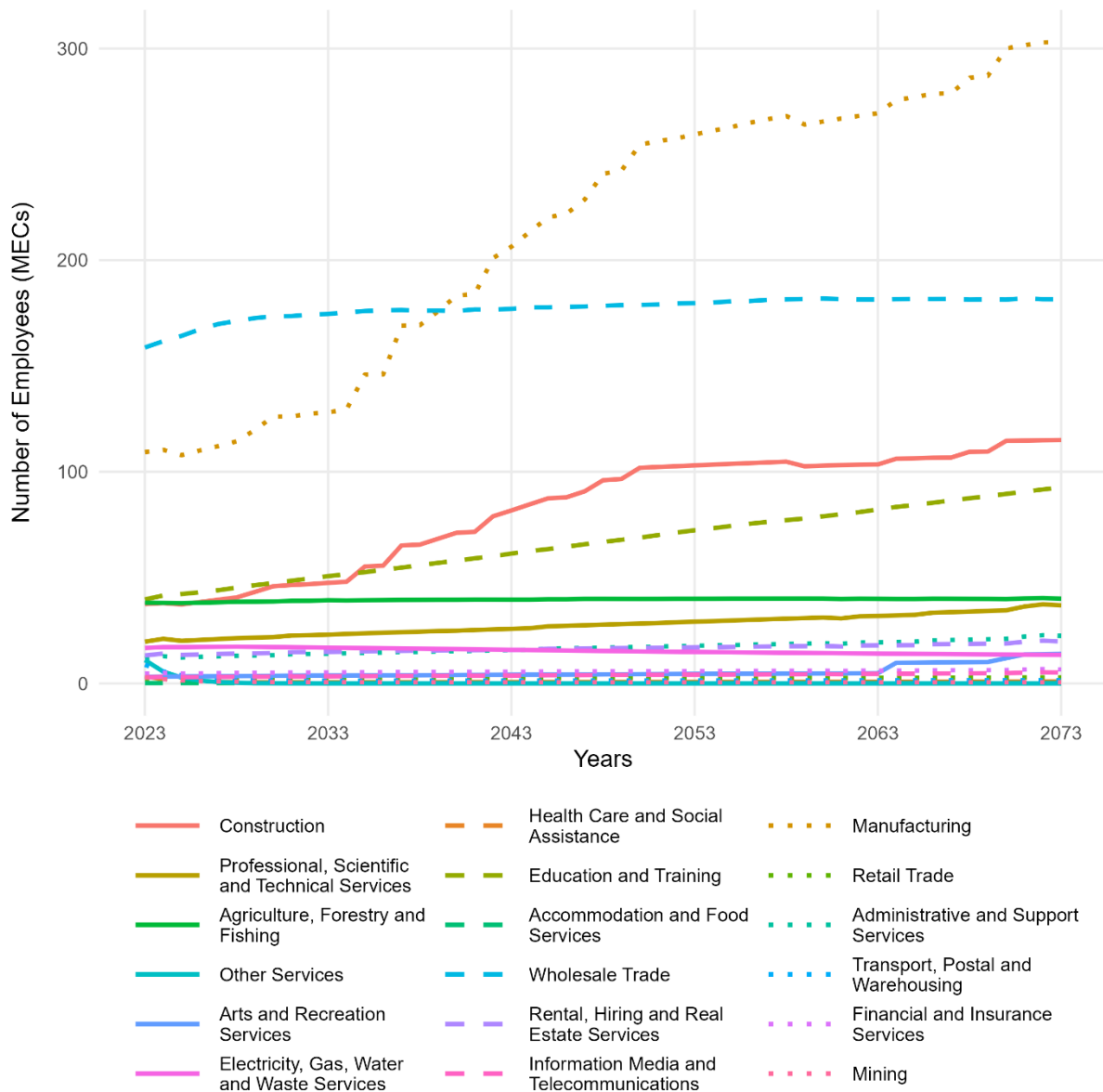


Figure 10 Fencourt SA2 Employment under a High Growth Scenario, 2023 to 2073

In terms of economic contribution to the district’s value added, Manufacturing is the greatest contributor, with \$507 million in 2023. Agriculture, Forestry and Fishing is the second largest value added industry in the district in 2023 (\$370 million). Construction contributed \$315 million in 2023, followed by Rental, Hiring and Real Estate Services contributing \$261 million.

The projected changes to industry value added out to 2073 are presented in Figure 11. All the industries are showing positive projections. Manufacturing remains a stand-out, with its value added projected to more than double from \$507 million in 2023 to \$1,173 million by 2073, further cementing its position as the largest value added industry in the district.

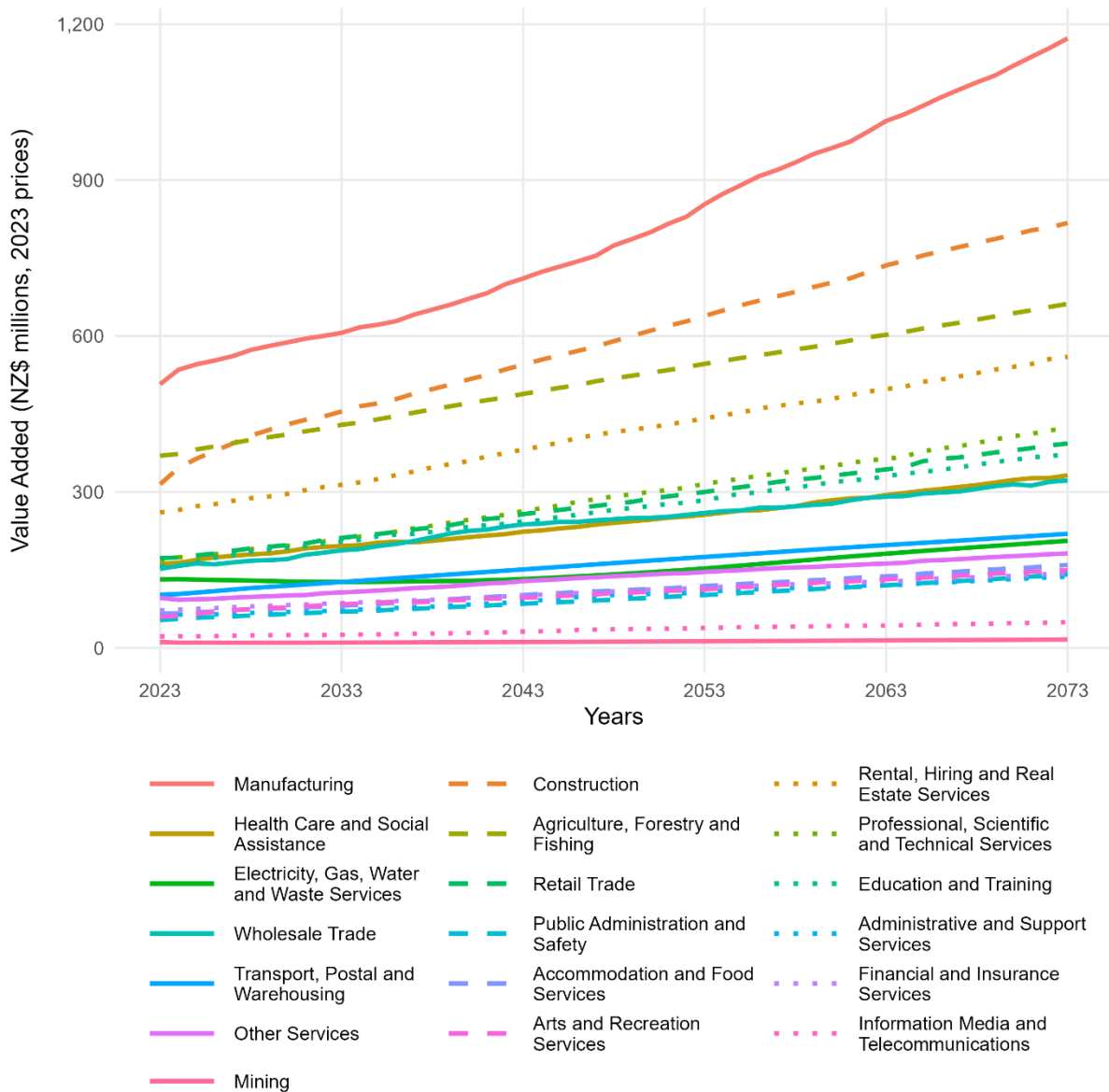


Figure 11 Waipa District Value Added under a High Growth Scenario, 2023 to 2073

4.3.3 Waikato District

The employment projections for each of the nineteen ANZSIC industries are presented in Figure 12. Waikato District is dominated by Agriculture, Forestry and Fishing, with 5,050 of the 27,137 people employed situated in this sector in 2023. This represents 18.6% of the district’s MECs. Agriculture, Forestry and Fishing is projected to grow to 6,169 MECs by 2073. Construction is the second largest in terms of employment, with 4,341 MECs employed in 2023. Manufacturing and Education and Training are the third and fourth largest industries in terms of employment in 2023, with 3,312 and 2,129 MECs respectively.

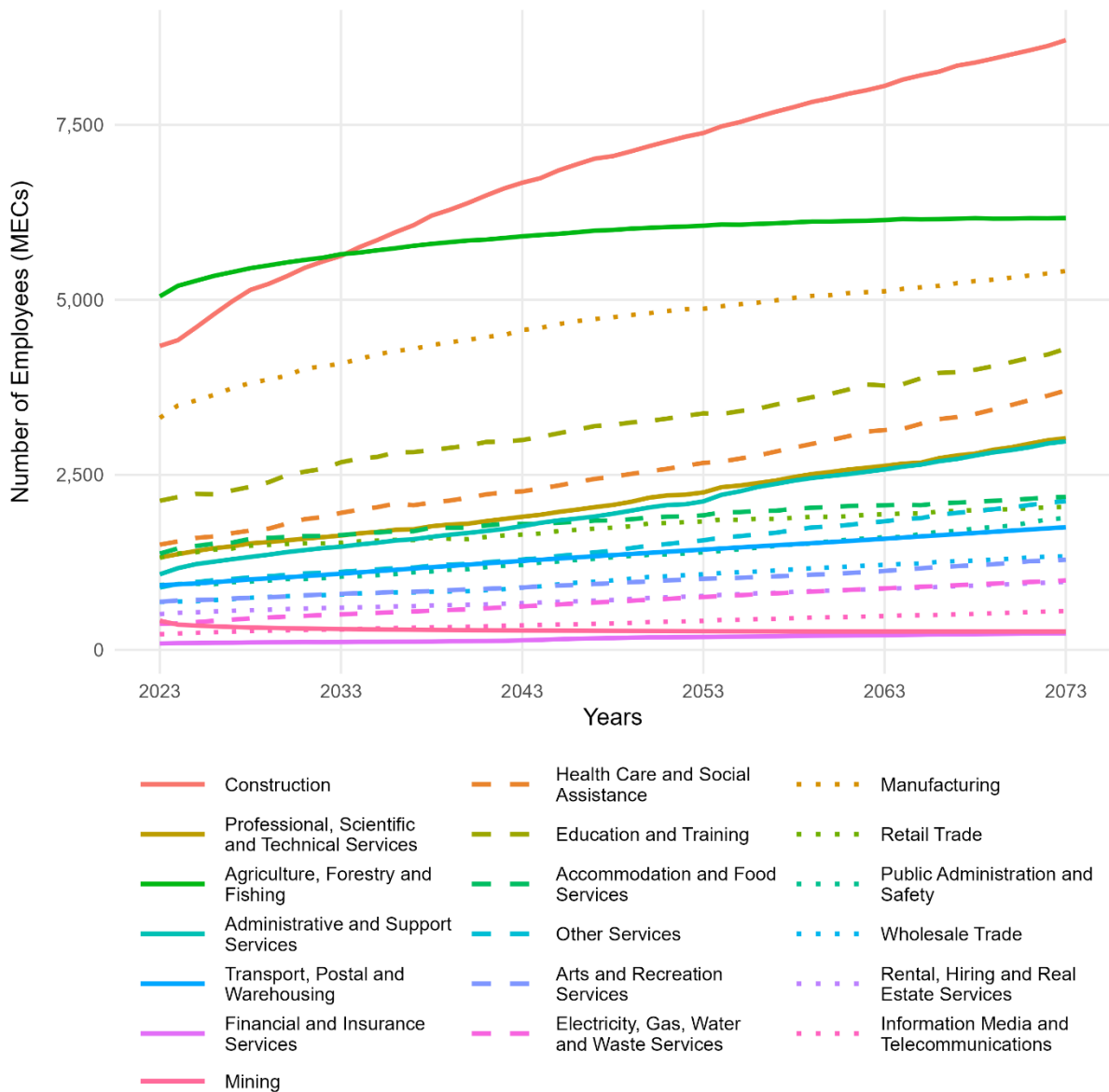


Figure 12 Waikato District Employment under a High Growth Scenario, 2023 to 2073

We selected an SA2 within the Waikato District that is highly dependent on one industry. In this case, Pōkeno South which is clearly dependent on Manufacturing. This is shown in the employment projections presented in Figure 13. The modelled projection returns a steep increase in employment initially before stabilising. However, caution is warranted in reporting at a SA2 level, as there is much uncertainty at the level of accuracy of projections at this resolution – particularly in the case of this example as employment is dominated by one industry.

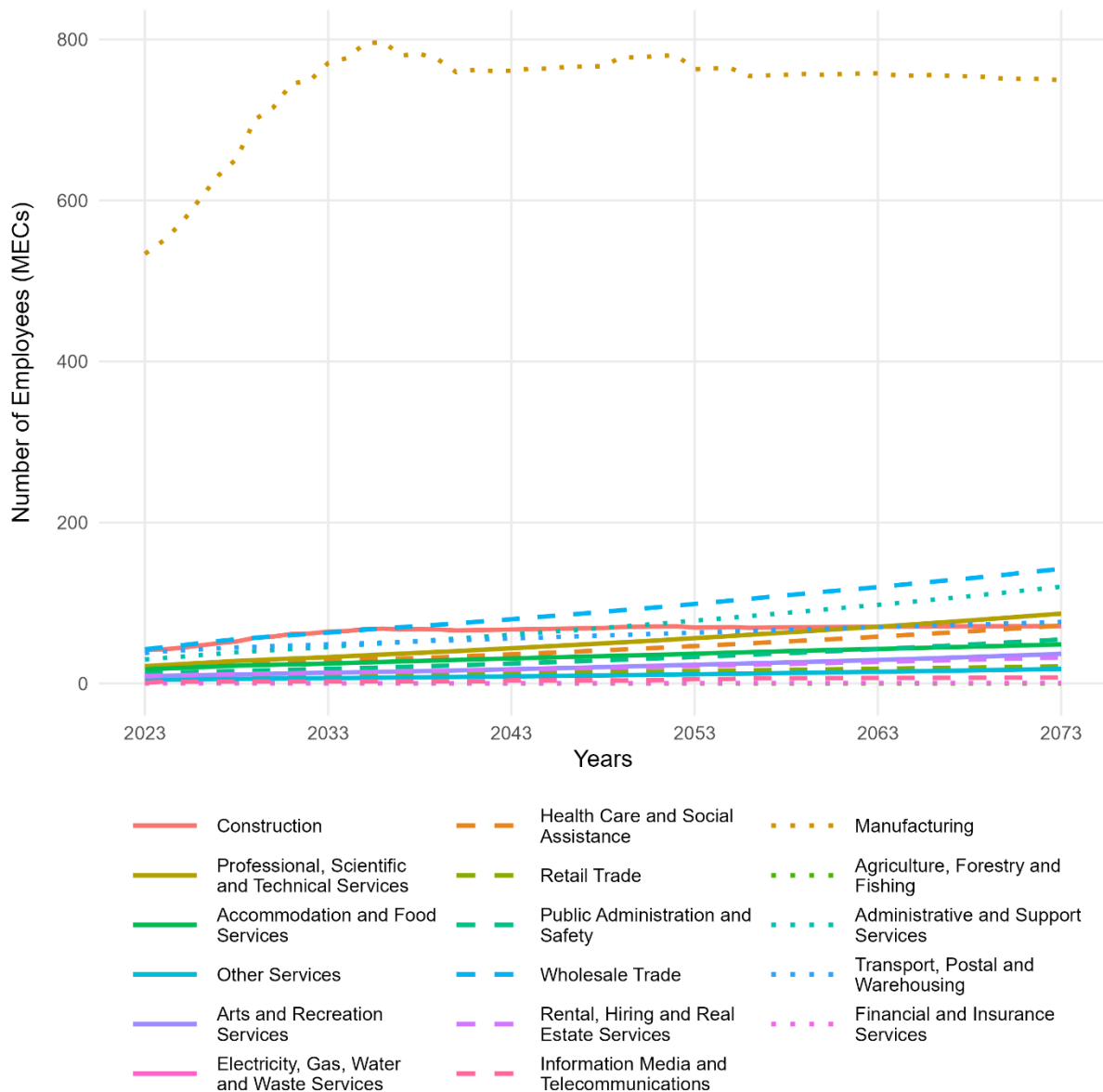


Figure 13 Pōkeno South SA2 Employment under a High Growth Scenario, 2023 to 2073

The value added projections of each of the nineteen ANZSIC industries are presented in Figure 14. Manufacturing is estimated to have contributed \$531 million to the Waikato District, or 17.0% of the \$3,120 million total (excluding OODs) in 2023. The contribution of Manufacturing to the district's economy also shows significant projected total growth, increasing by 114.2% to reach \$1,137 million by 2073.

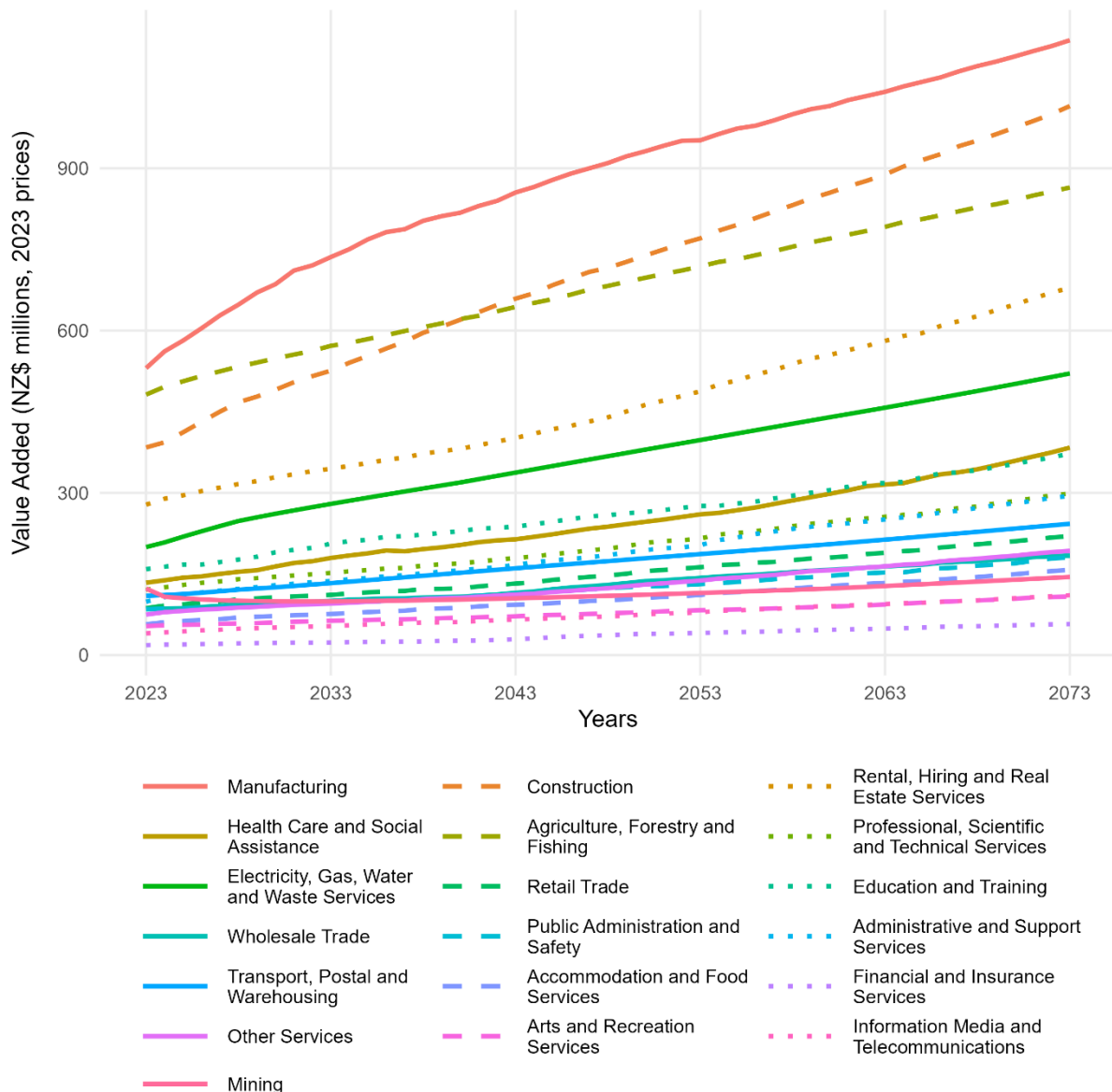


Figure 14 Waikato District Value Added under a High Growth Scenario, 2023 to 2073

4.3.4 Taupō District

Taupō District ranks as the fourth-largest economy in the Waikato Region. In 2023, the district generated a value added contribution of \$2.57 billion (excluding OODs) and supported a workforce of 20,884 Modified Employee Counts (MECs).

The employment projections across the nineteen ANZSIC industries, presented in Figure 15, highlight Taupō District's role as a major service centre. The local economy is heavily oriented toward tourism and visitor support, evidenced by the prominence of Accommodation and Food Services. This sector was the district's largest employer in 2023, accounting for 2,865 MECs, or 13.7% of the total workforce. However, long-term projections indicate a major shift in the district's economic landscape. By 2073,

Construction is forecast to experience a massive boom, overtaking Accommodation and Food Services to become the largest employer, reaching 4,952 MECs compared to 4,462 MECs for the hospitality sector.

While service and visitor-facing industries are primary economic drivers, the district is supported by other substantial sectors. Agriculture, Forestry and Fishing ranked as the second-largest employer in 2023 (2,530 MECs), followed by Retail Trade and Construction in third and fourth places, providing 2,466 and 2,365 MECs respectively. Additionally, while the overall economy is growing, current projections indicate that employment in at least one industry will decline over the 2023 to 2073 period.

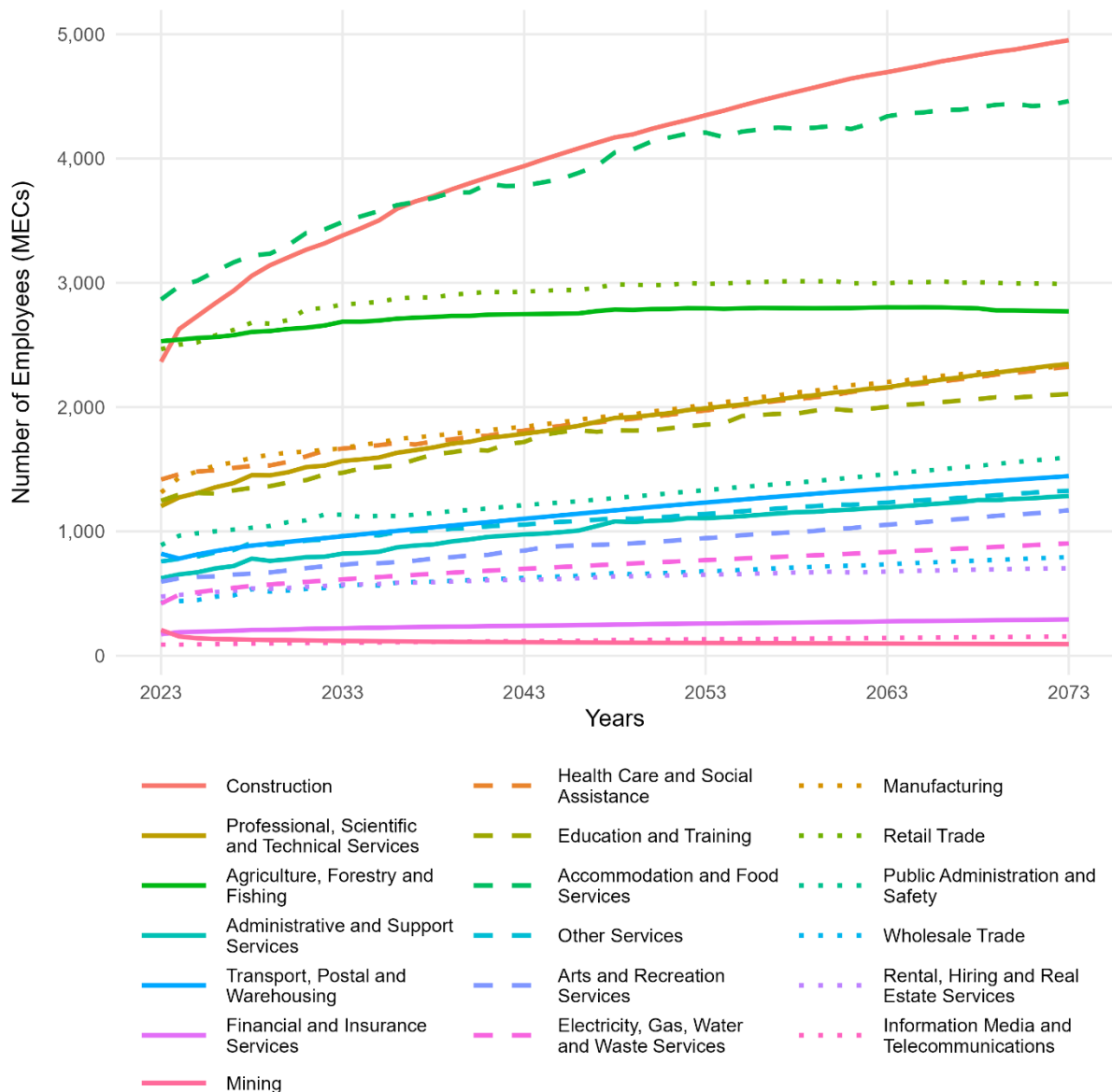


Figure 15 Taupō District Employment under a High Growth Scenario, 2023 to 2073

As with the broader regional analysis, economic activities can be tracked at a localised level. Acacia Bay has been selected as an example SA2 to illustrate these localised trends, with its specific employment projections detailed in Figure 16.

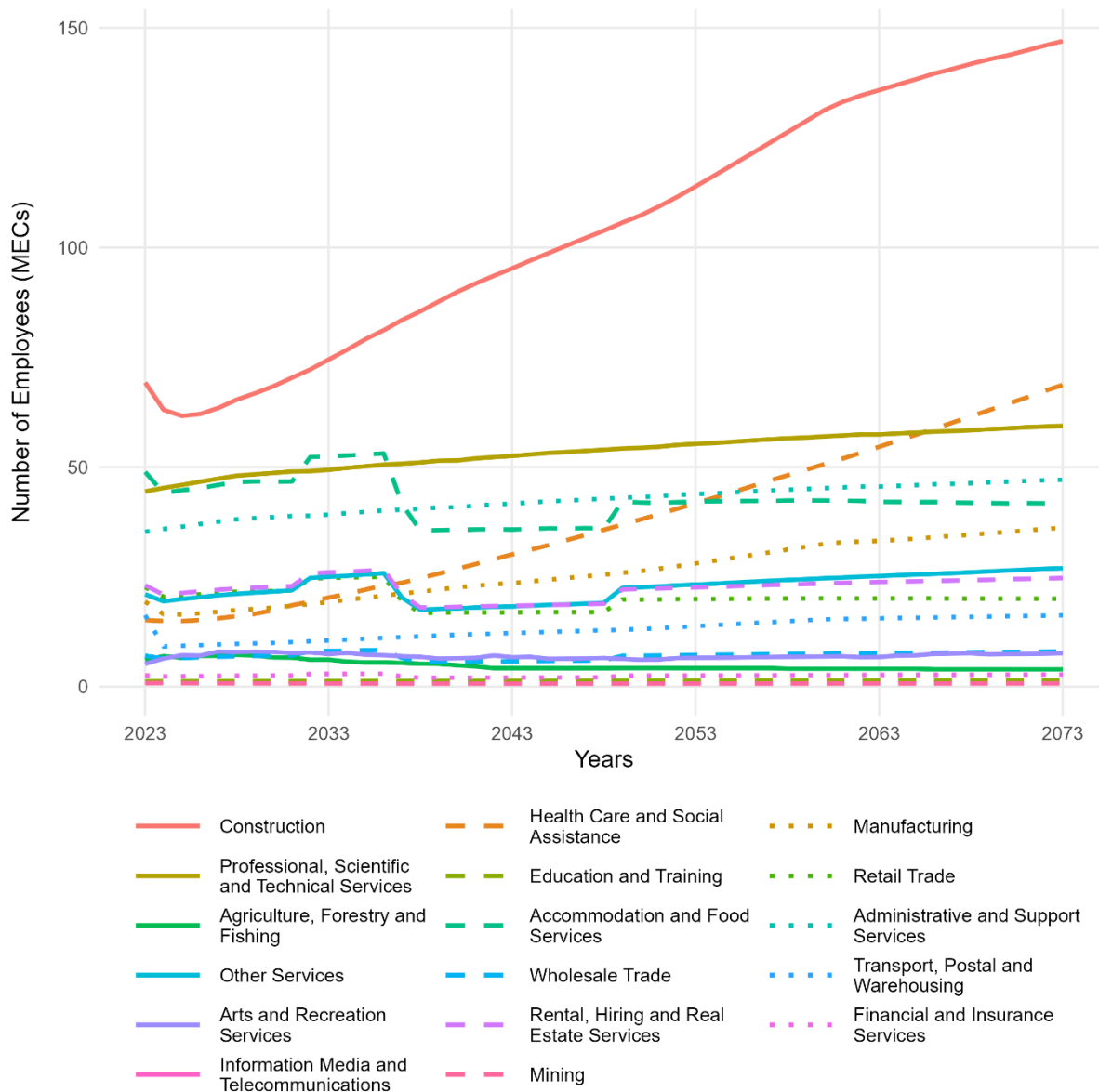


Figure 16 Acacia Bay SA2 Employment under a High Growth Scenario, 2023 to 2073

The value added projections of each of the nineteen ANZSIC industries are presented in Figure 17. The industry rankings for economic contribution have shifted, with Electricity, Gas, Water and Waste Services now standing as the largest contributor to the Taupō District economy. This sector contributed \$386 million in 2023, followed closely by Agriculture, Forestry and Fishing (\$371 million) and Rental, Hiring and Real Estate Services (\$259 million). These top three industries are all projected to experience significant growth, reaching \$875 million, \$594 million, and \$491 million, respectively, by 2073.

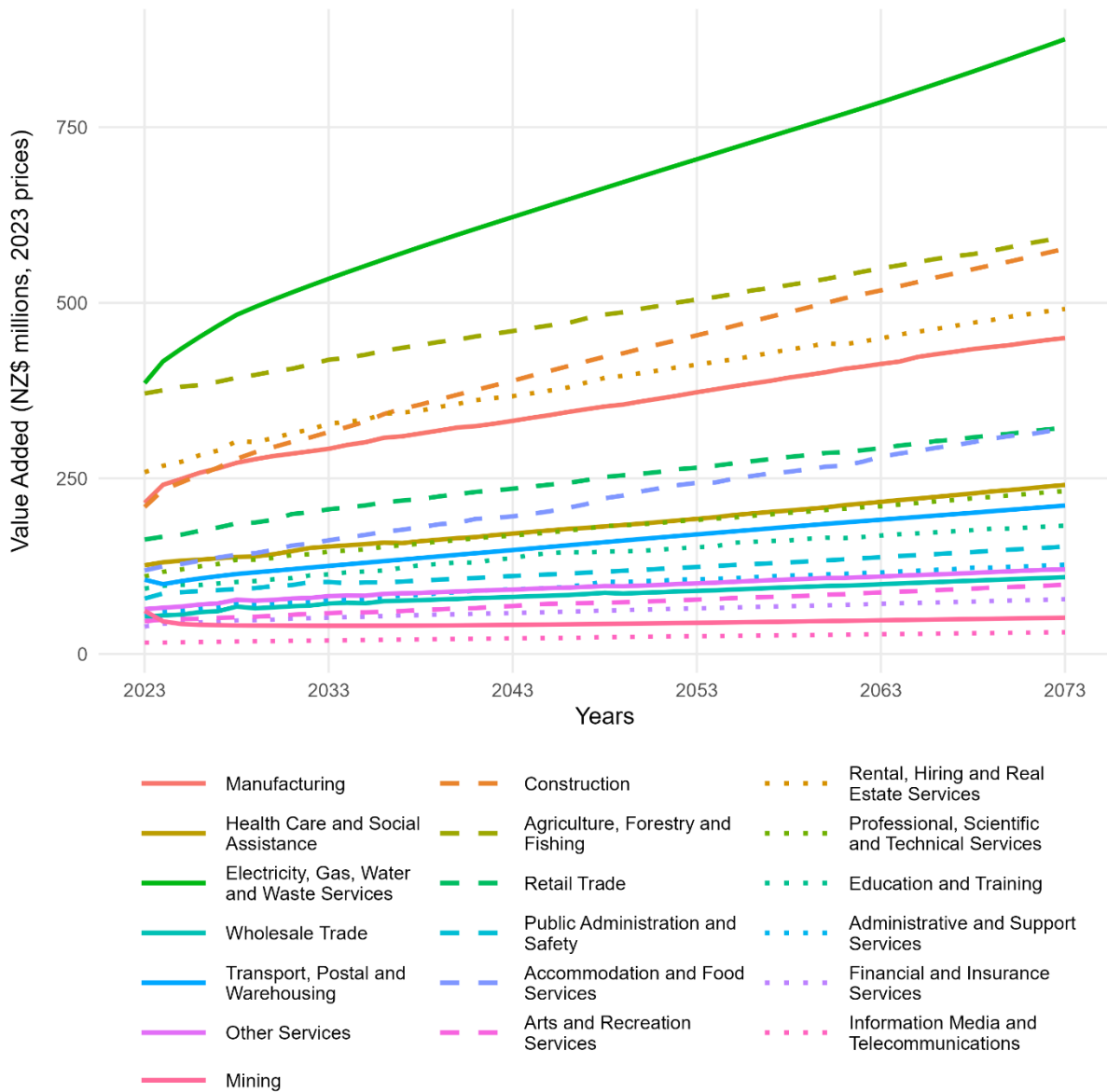


Figure 17 Taupō Value Added under a High Growth Scenario, 2023 to 2073

4.3.5 Matamata-Piako District

Matamata-Piako District is one of the more rural districts in the Waikato Region of which the economy is not dominated by Agriculture, Forestry and Fishing. Manufacturing is the dominant industry in the district and is projected to remain the largest industry in employment over the 50-year period.

The employment projections of each of the nineteen ANZSIC industries are presented in Figure 18. It should also be noted that a considerable amount of manufacturing within the Waikato Region is however linked directly to agricultural production, in the form of meat, dairy, and food processing. In 2023, there were 4,510 MECs in Manufacturing and 3,528 MECs in Agriculture, Forestry and Fishing, Page | 29

out of the district’s total of 18,963 employees. These two industries employ just under half (42.4%) of Matamata-Piako’s workforce.

Construction is the third largest industry in terms of numbers employed, with 1,800 MECs in 2023. This industry is projected to increase to 3,197 MECs by 2073. Retail Trade was the fourth largest employer in 2023, starting with 1,482 MECs and projected to increase to 2,061 by 2073.

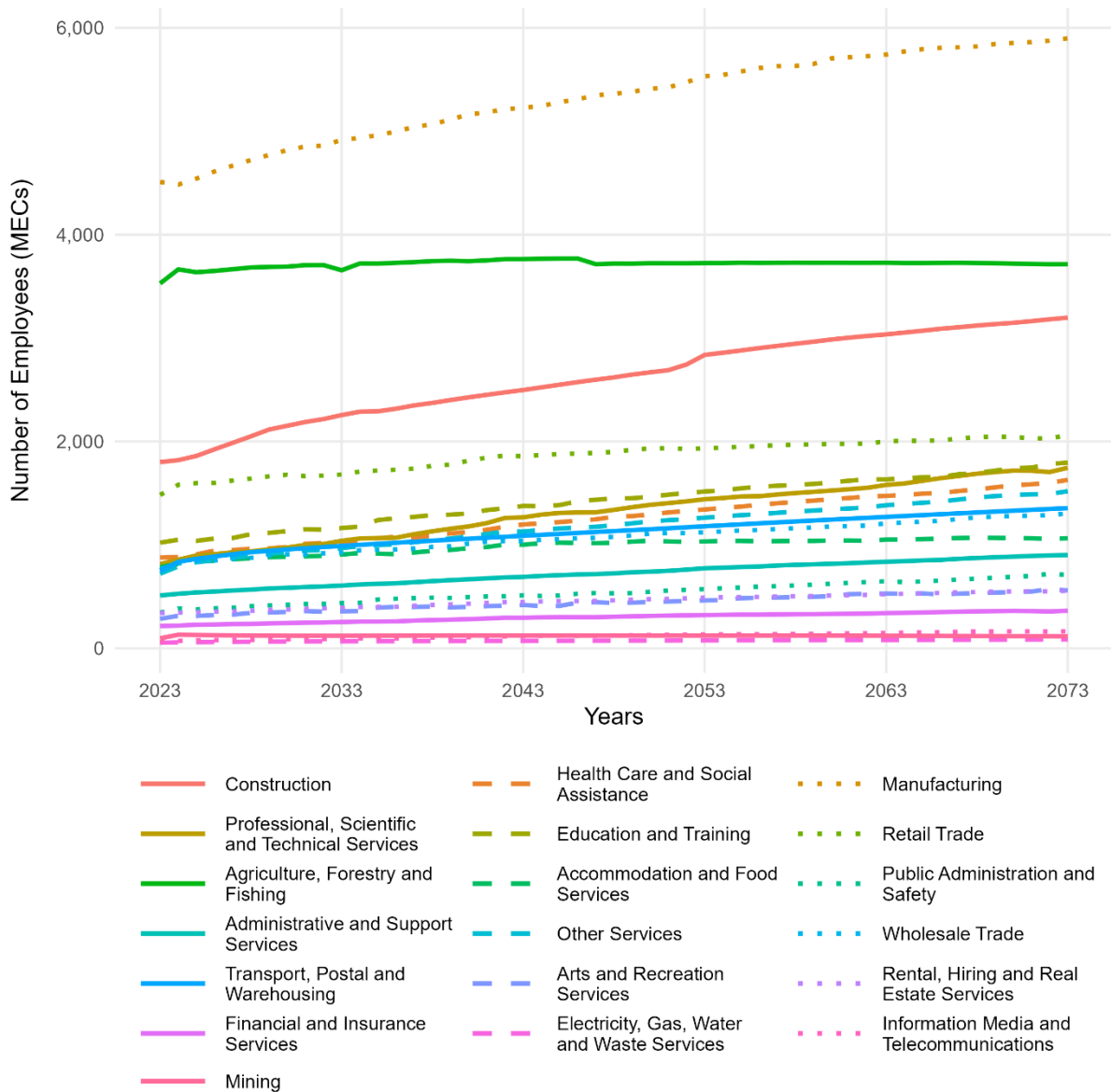


Figure 18 Matamata-Piako District Employment under a High Growth Scenario, 2023 to 2073

The value added projections of each of the nineteen ANZSIC industries are presented in Figure 19. The contribution of Manufacturing to the value added of the district is on a strong upward trend. Manufacturing contributed \$849 million to the economy in 2023 (35.0% of the district’s total value added excluding OODs) and is projected to more than double, reaching \$1,739 million by 2073. The

Agriculture, Forestry and Fishing contribution to the district's value added was \$436 million in 2023, and this is projected to increase to \$754 million by 2073.

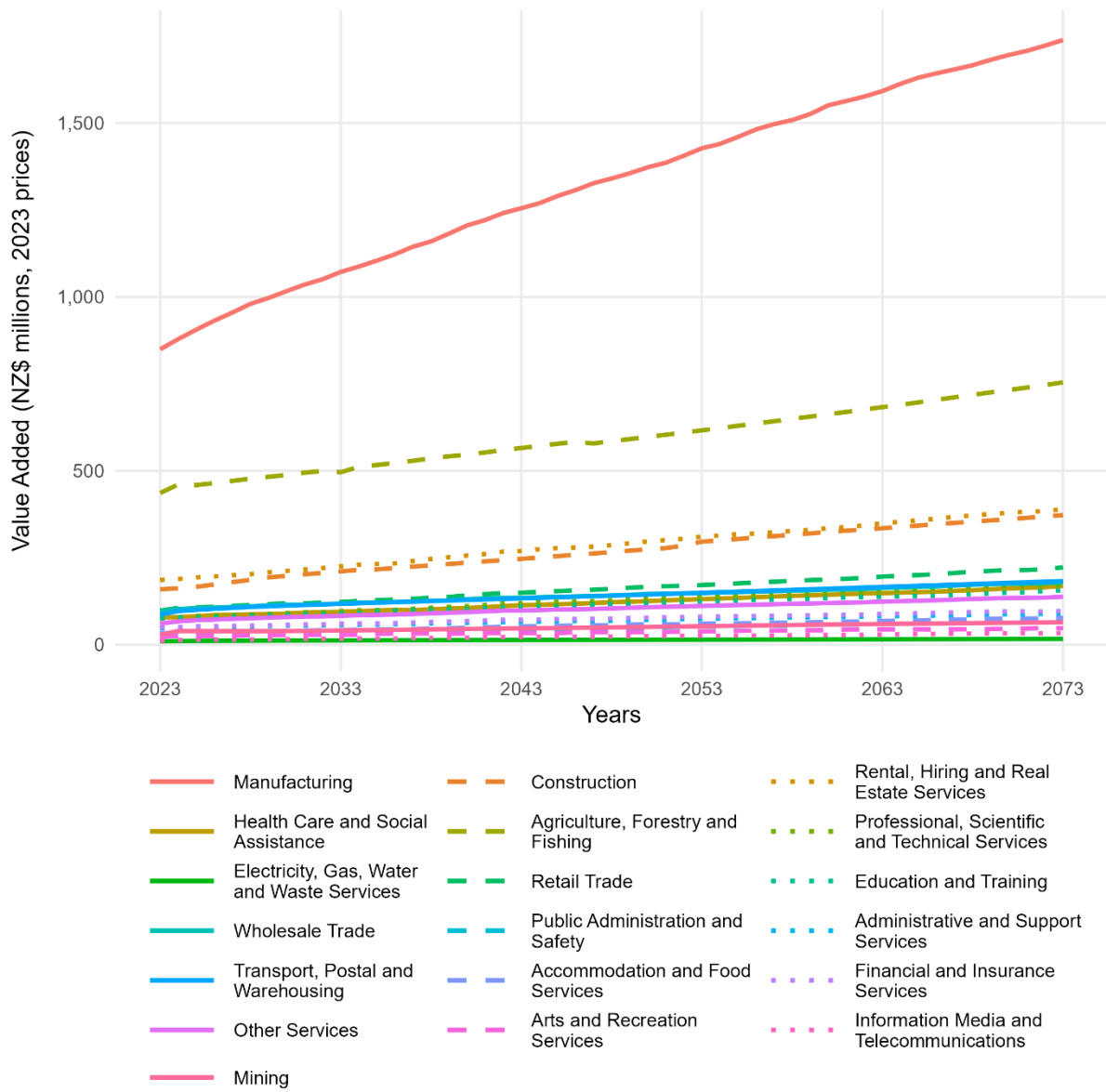


Figure 19 Matamata-Piako Value Added under a High Growth Scenario, 2023 to 2073

4.3.6 Thames-Coromandel District

Thames-Coromandel District has a diversified industry structure, with four industries employing over 1,000 MECs in 2023. The employment projections for each of the nineteen ANZSIC industries are presented in Figure 20. Retail Trade is the largest employer in the TA with 1,886 MECs and is projected to grow to 2,615 MECs by 2073. The second largest industry in 2023, Construction, is projected to grow to 2,615 MECs by 2073. The second largest industry in 2023, Construction, is projected to grow from 1,782 MECs to 2,662 MECs by 2073, notably overtaking Retail Trade as the largest employer by the end of the projection period. Professional, Scientific and Technical Services is projected to grow the most relatively, with a 117.1% growth rate over the 50-year period, increasing from 610 MECs to 1,325 MECs.

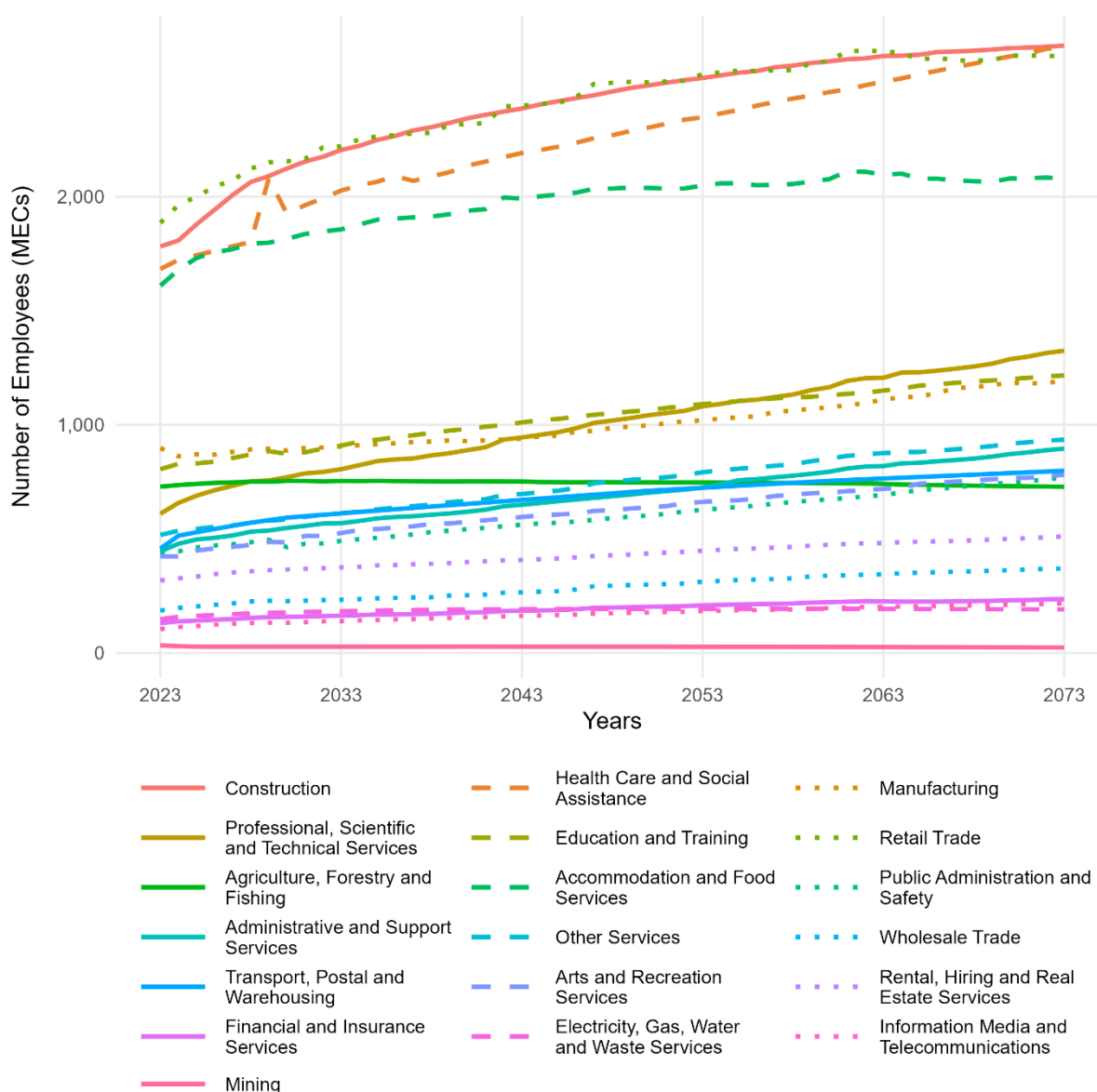


Figure 20 Thames-Coromandel District Employment under a High Growth Scenario, 2023 to 2073

The value added projections of each of the nineteen ANZSIC industries are presented in Figure 21. Although Rental, Hiring and Real Estate Services is not the greatest employer, it contributes the greatest dollar amount to the Thames-Coromandel District's economy with \$173 million in 2023. This trend is projected to remain consistent for the entirety of the 50-year period. Similarly, Construction, which ranks second in terms of employment in 2023, is also second in terms of contribution to value added (\$158 million in 2023), reflecting differences in labour intensities of production across sectors.

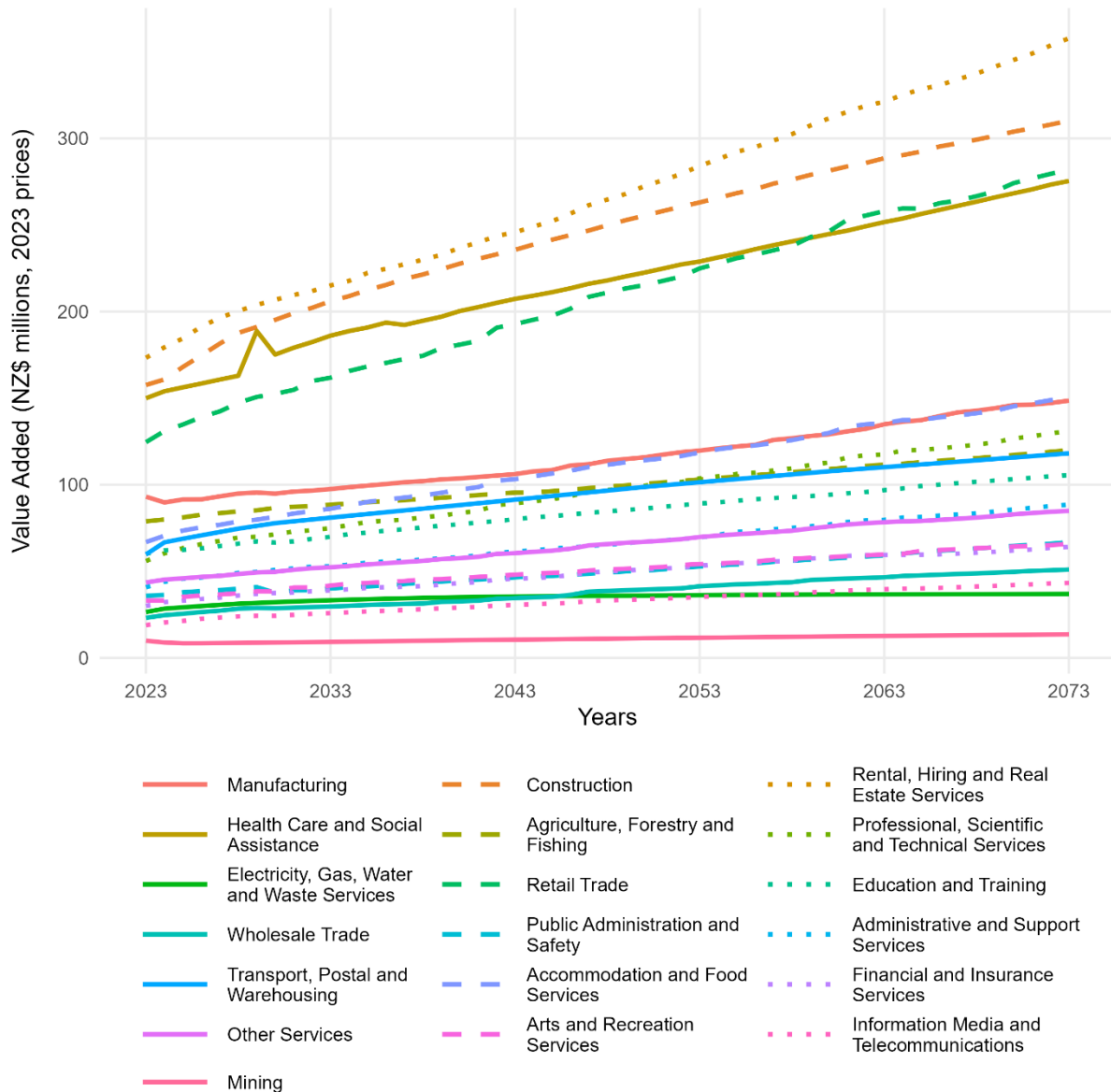


Figure 21 Thames-Coromandel District Value Added under a high Growth Scenario, 2023 to 2073

4.3.7 South Waikato District

The employment projections of each of the nineteen ANZSIC industries are presented in Figure 22. Being a rural district, the economy has traditionally been anchored by primary sectors; however, Manufacturing now dominates the economy in terms of employment, alongside Agriculture, Forestry and Fishing. In 2023, Manufacturing was the largest employer with 1,996 MECs, and it is projected to maintain its leading position, increasing to 2,963 MECs by 2073. Agriculture, Forestry and Fishing employed 1,869 MECs in 2023, with projected growth to 2,031 MECs by 2073. Education and Training was the third largest in terms of employment in 2023 with 906 MECs, followed by Health Care and Social Assistance with 841 MECs. Education and Training is projected to more than double to 2,037 MECs by 2073, while Health Care and Social Assistance increases by 48.6% to reach 1,250 MECs.

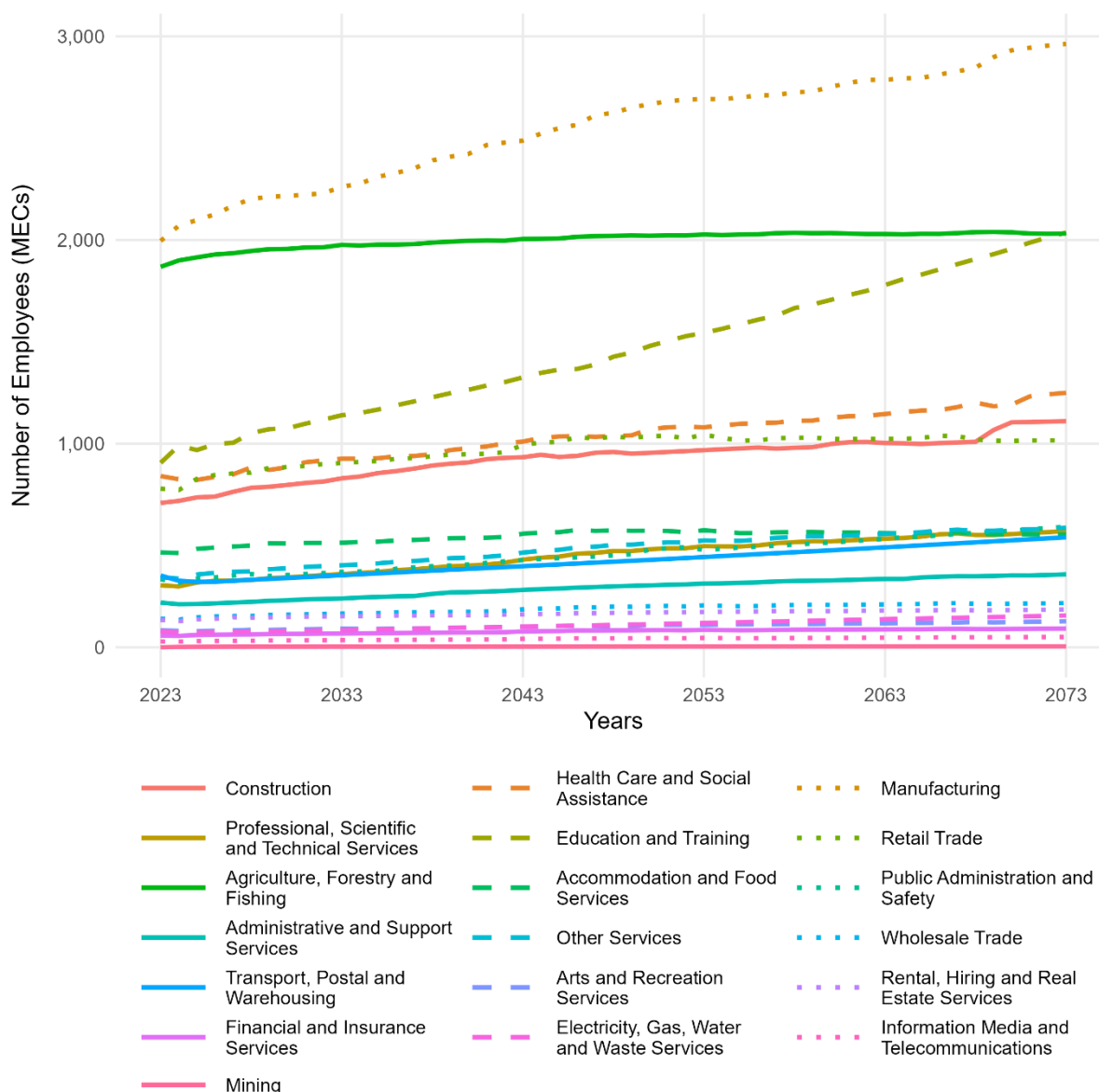


Figure 22 South Waikato District Employment under a High Growth Scenario, 2023 to 2073



The value added projections of each of the nineteen ANZSIC industries are presented in Figure 23. Reflecting the shift seen in employment, Manufacturing now contributes the most to the South Waikato District in terms of value added, overtaking Agriculture, Forestry and Fishing. This trend remains consistent across the 50-year period, with both key industries projected to increase their value added contributions. Manufacturing contributed \$399 million to the district economy in 2023, with Agriculture, Forestry and Fishing contributing \$267 million. These values are projected to increase to \$687 million and \$456 million, respectively, by 2073, reflecting increases in productivity and output over time. These two industries together contributed 54.0% of the district's value added (excluding OODs) in 2023.

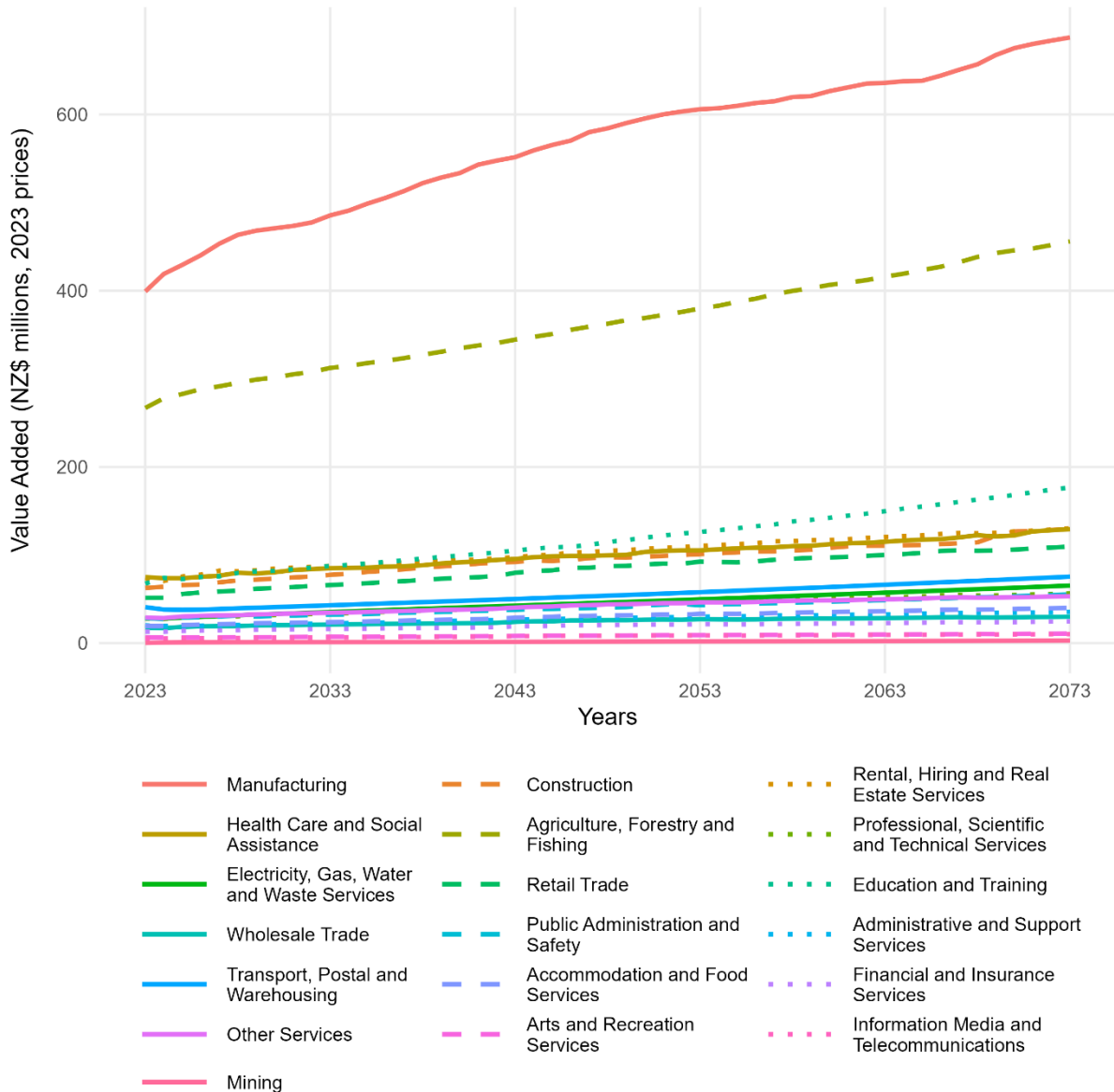


Figure 23 South Waikato District Value Added under a High Growth Scenario, 2023 to 2073

4.3.8 Hauraki District

The employment projections of each of the nineteen ANZSIC industries are presented in Figure 24. Hauraki District is currently heavily dependent on Agriculture, Forestry and Fishing, with 1,278 MECs in 2023, representing 16.8% of the district's total employment. Agriculture, Forestry and Fishing is projected to remain the dominant employer by 2073. Construction is the second largest industry in 2023 with 882 MECs and is projected to increase to 1,348 MECs by 2073. Unlike previous projections where it was overtaken by other sectors, Construction is now forecast to steadily maintain its position as the second largest employer through to 2073.

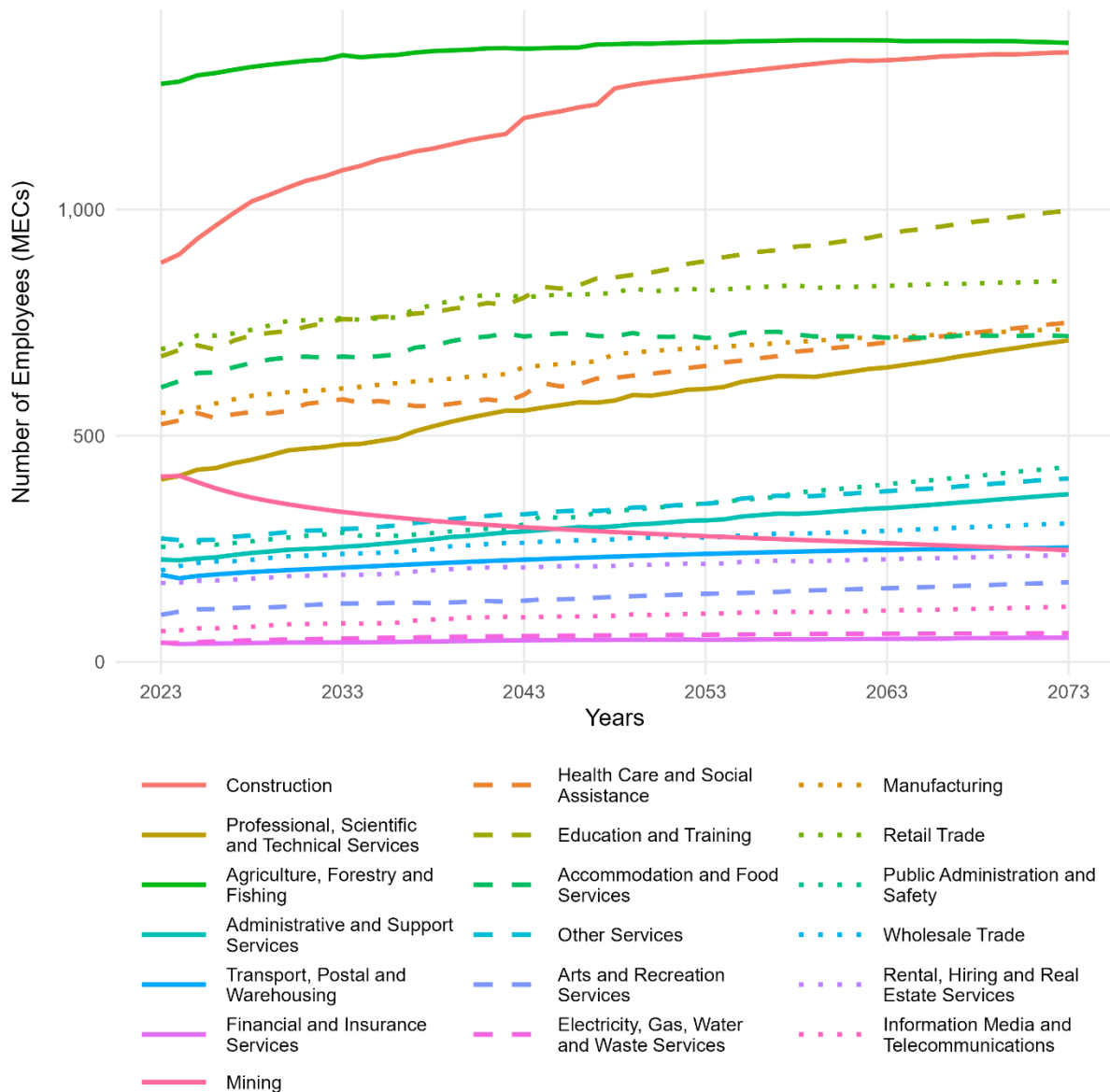


Figure 24 Hauraki District Employment under a High Growth Scenario, 2023 to 2073

The value added projections of each of the nineteen ANZSIC industries are presented in Figure 25. In terms of value added contribution to the economy, Agriculture, Forestry and Fishing is the largest, with \$162 million in 2023, projected to increase to \$277 million by 2073. The second largest contributor in value added terms in 2023 is Mining, with \$121 million. By 2073, however, due to economic structure shifts, and the second largest industry is projected to change to be Rental, Hiring and Real Estate Services, growing from \$95 million in 2023 to \$166 million over the 50-year period.

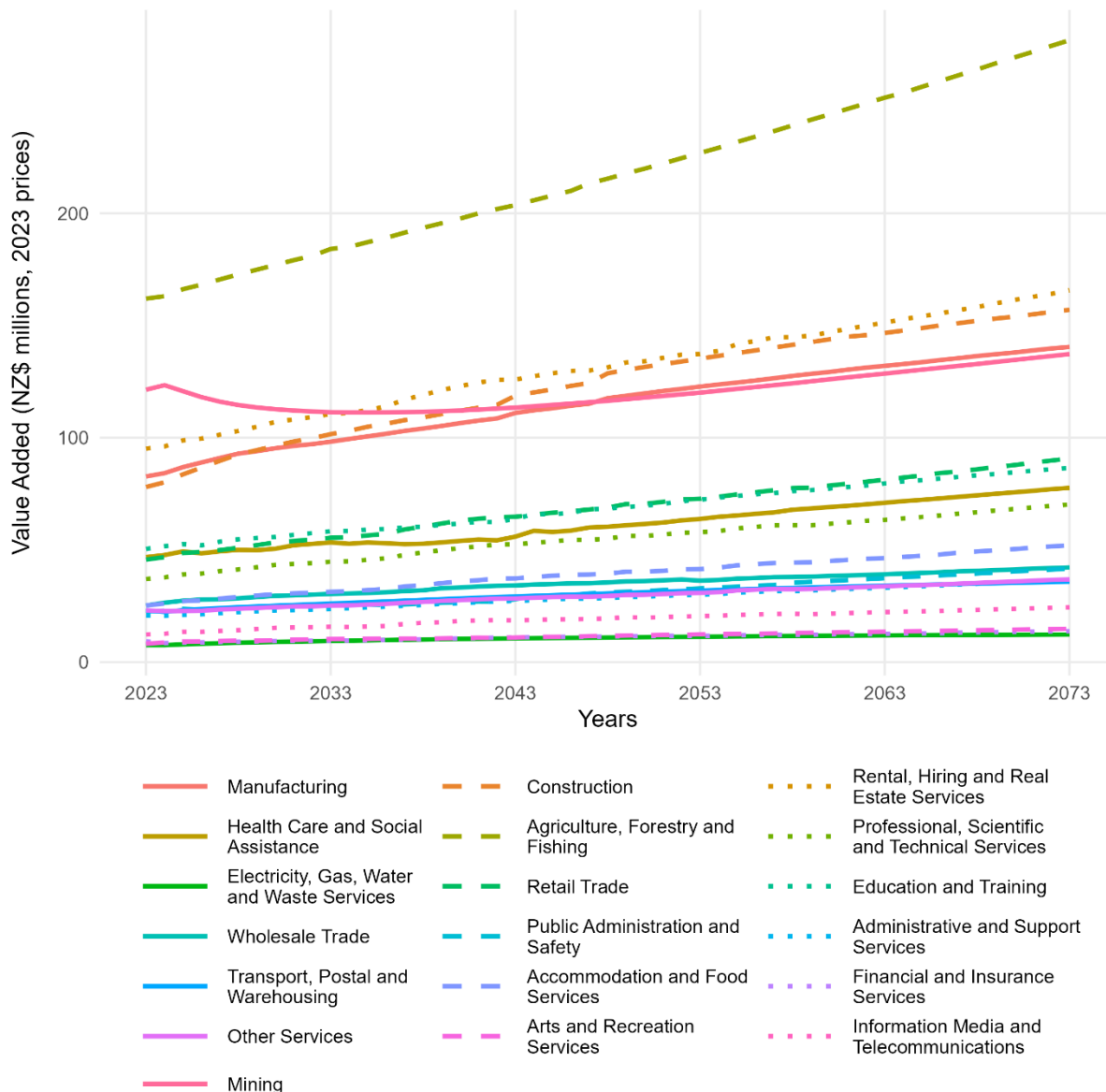


Figure 25 Hauraki District Value Added under a High Growth Scenario, 2023 to 2073

4.3.9 Waitomo District

The employment projections for each of the nineteen ANZSIC industries in the Waitomo District are presented in Figure 26. Agriculture, Forestry and Fishing, the most dominant industry in Waitomo District, is followed by Manufacturing. In 2023, 1,291 people were employed in Agriculture, Forestry and Fishing, and this is projected to increase to 1,525 MECs by 2073. Manufacturing had 797 MECs in 2023 and is projected to increase to 922 MECs by 2073. Construction is the third largest in terms of employment, with 435 MECs in 2023 increasing to 626 MECs over the 50-year period.

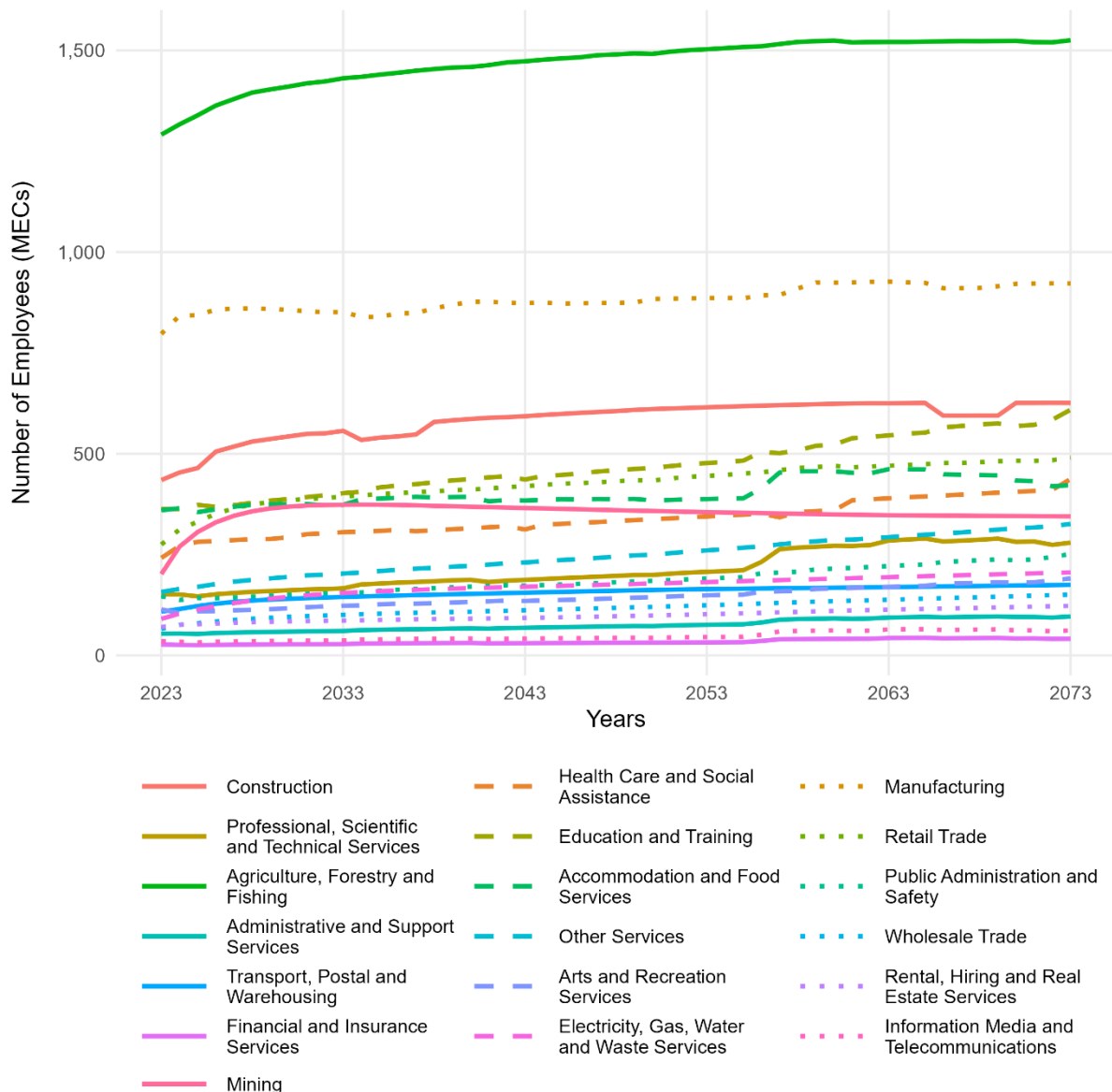


Figure 26 Waitomo District Employment under a High Growth Scenario, 2023 to 2073

As an example of projected employment changes at the SA2 level within Waitomo District, we extracted Herangi as an example. Herangi’s employment projections are presented in Figure 27. While this SA2 has historically been dependent on Agriculture, Forestry and Fishing, the projections reveal a dramatic structural shift. Employment in Agriculture, Forestry and Fishing remains perfectly stable at 203 MECs throughout the entire 2023 to 2073 period. In contrast, the Mining sector experiences a rapid boom early in the projection period, surging from 168 MECs in 2023 to quickly overtake Agriculture, finishing the 50-year period as the dominant employer in the area with 303 MECs.

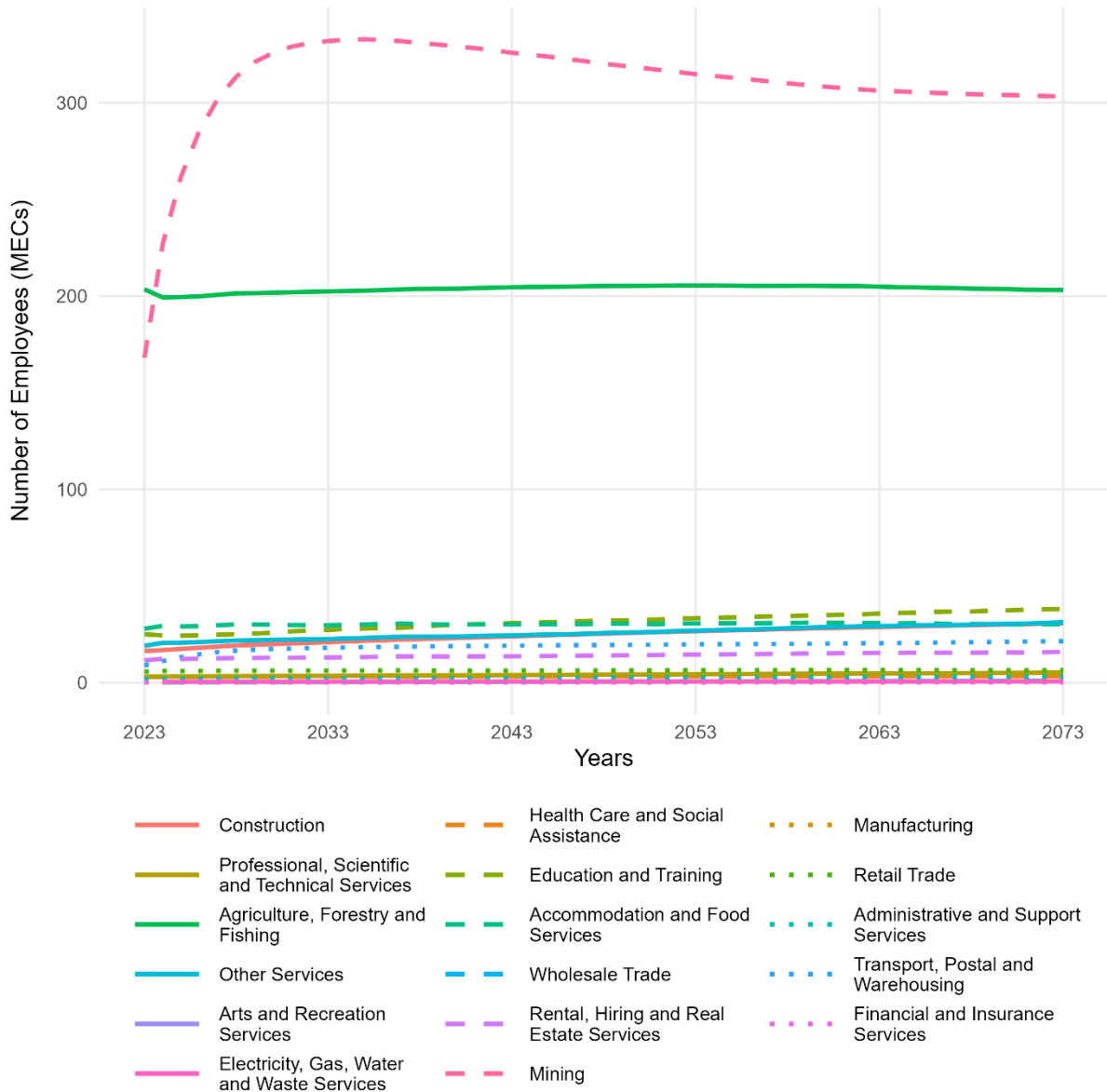


Figure 27 Herangi SA2 Employment under a High Growth Scenario, 2023 to 2073

The value added projections of each of the nineteen ANZSIC industries are presented in Figure 28. Total value added for Waitomo District was \$609 million in 2023 (excluding OODs). This is expected to more than double, rising to \$1,322 million by 2073. Agriculture, Forestry and Fishing contributed the most to the district's economy in 2023 with \$143 million, and it is projected to increase to \$263 million by 2073. Electricity, Gas, Water and Waste Services is the second-largest contributor, starting at \$94 million in 2023 and projected to reach \$233 million. Manufacturing was the third-largest contributor in 2023 with \$66 million, projected to reach \$119 million by 2073. Furthermore, driven by the localised employment boom, the Mining industry experiences substantial value added growth over the 50-year period to emerge as another major economic driver for the wider district.

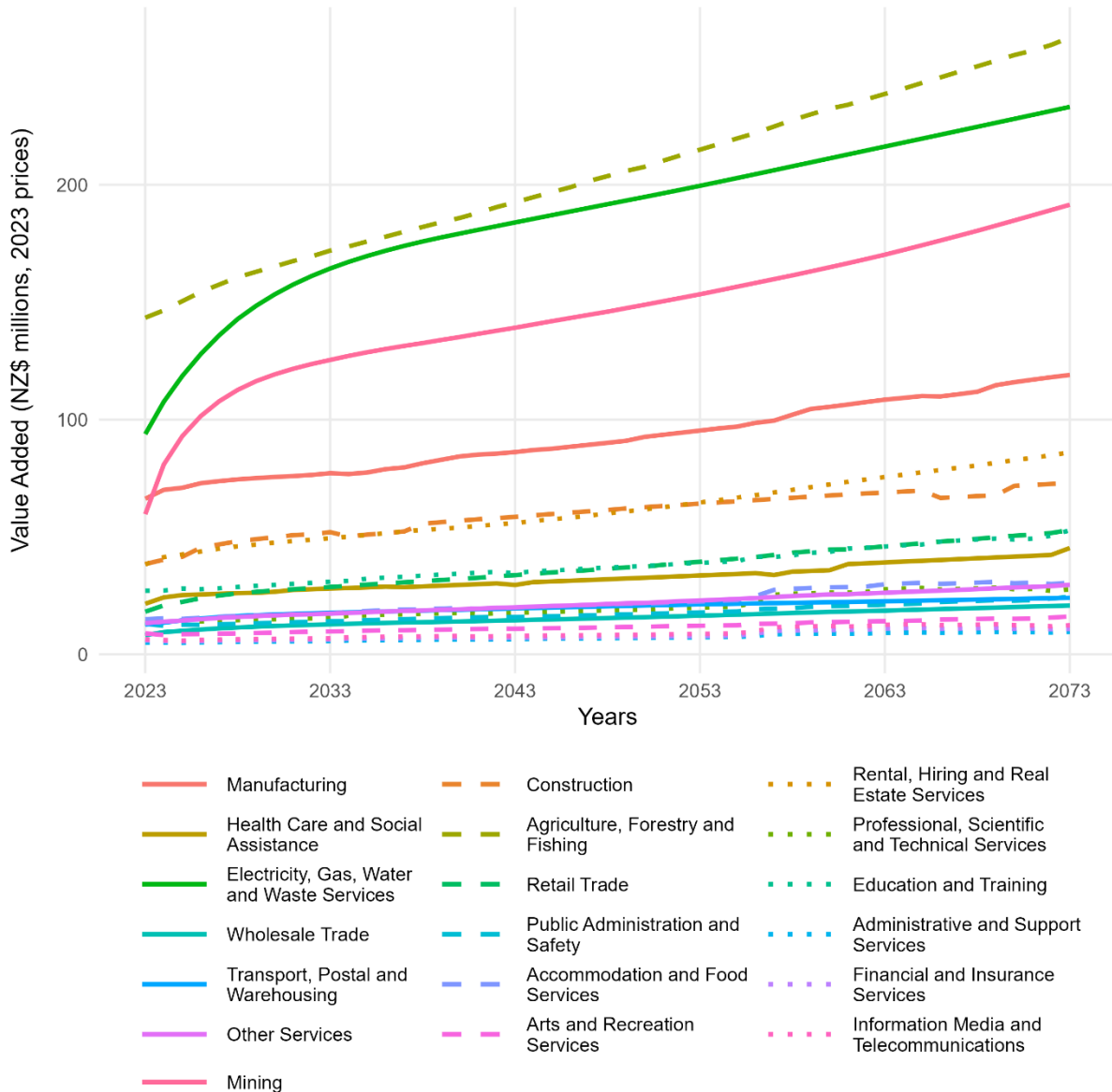


Figure 28 Waitomo District Value Added under a High Growth Scenario, 2023 to 2073

4.3.10 Ōtorohanga District

Ōtorohanga District is the smallest district in the Waikato Region in terms of economic activity (excluding the Rotorua District, which is only partly within the Waikato Region).

The employment projections for each of the nineteen ANZSIC industries are presented in Figure 29. The district's economy is heavily dominated by Agriculture, Forestry and Fishing. In 2023, 1,556 people (or 34.4% of the district's MECs) were employed in this industry, out of a total of 4,528 MECs. Public Administration and Safety was the second-largest industry by employment in 2023 with 408 MECs, followed closely by Manufacturing with 402 MECs. All other industries in the district employed fewer than 357 MECs in 2023.

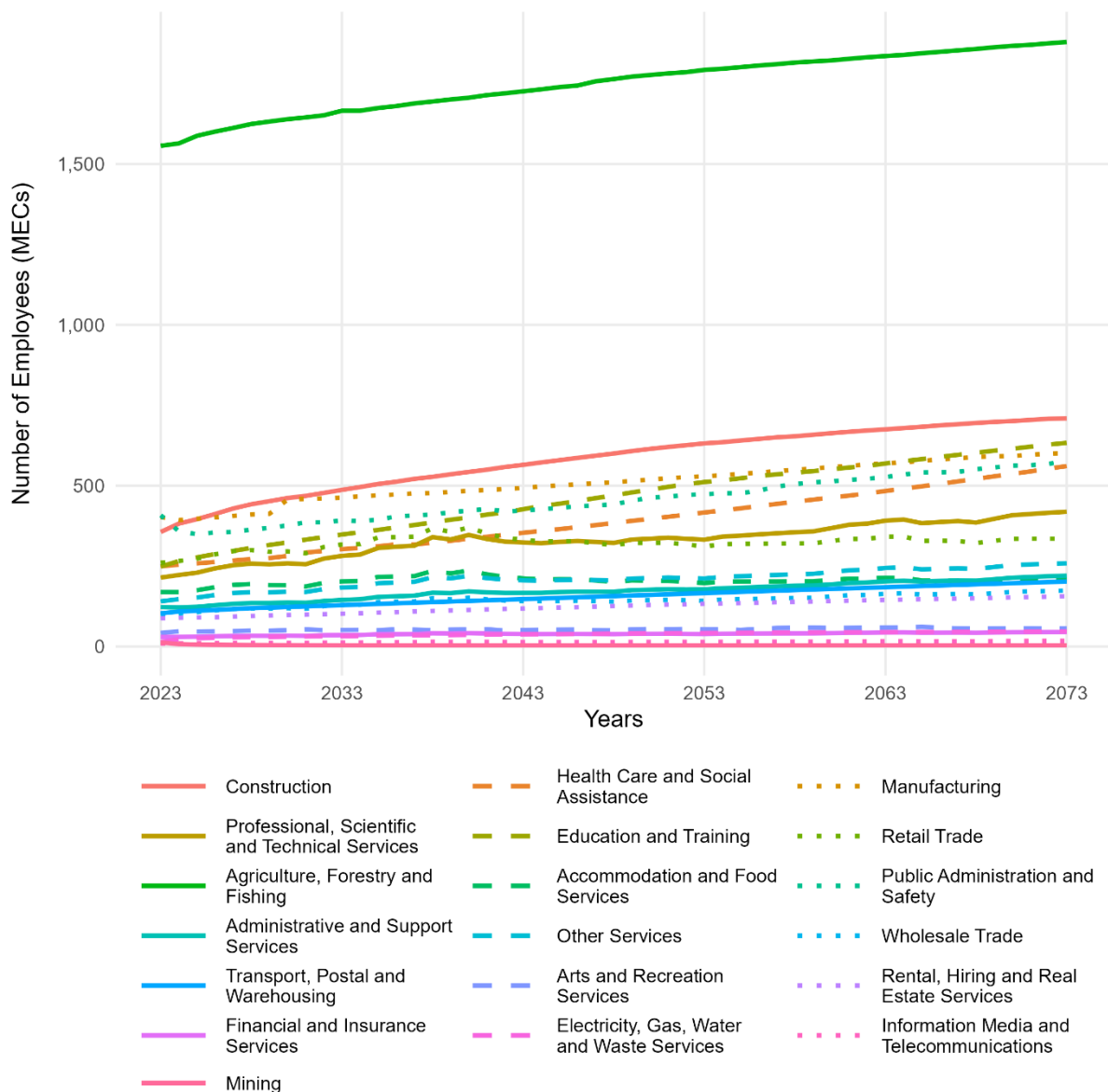


Figure 29 Ōtorohanga District Employment under a High Growth Scenario, 2023 to 2073

The value added projections of each of the nineteen ANZSIC industries are presented in Figure 30. Given the dominance of Agriculture, Forestry and Fishing, it is not surprising that it contributes the greatest amount of value added to the district. In 2023, the value added of Agriculture, Forestry and Fishing was \$203 million, or 39.4% of the district’s total value added (excluding OODs) of \$516 million. Agriculture, Forestry and Fishing is projected to increase to \$402 million by 2073 in value added terms, which would constitute 37.8% of the district’s projected total value added of \$1,064 million (excluding OODs).

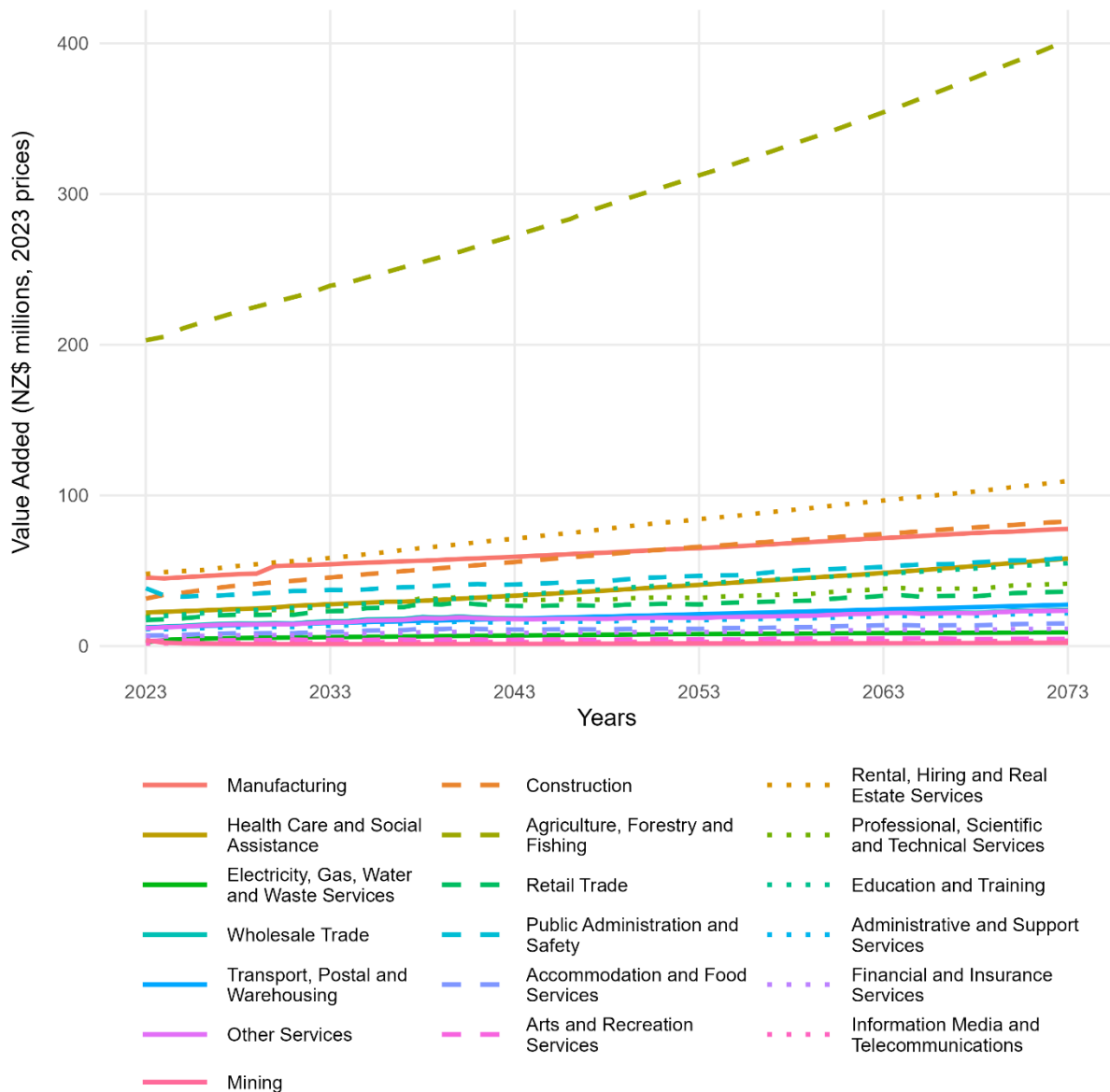



Figure 30 Ōtorohanga District Value Added under a High Growth Scenario, 2023 to 2073

4.4 Projections within each Statistical Area 2

As we analyse 259 SA2s in the Waikato Region, it is impractical to go over every SA2 projection in this document. However, we wish to direct readers to the level of economic detail that is now available for use in planning and decision-making. For illustrative purposes, we have already reported on selected SA2s in the above sections detailing projected changes to Territorial Authorities (TAs).

Caution is warranted in using the reported projections. These results are indicative of how the SA2s could transition into the future but are in no way definitive predictions of what will occur. A decision to either relocate an industry or establish a new/emerging industry in a particular area can have



transformative effects on that locality (and possibly the entire district). Because we are certain that such localised decisions will occur, the precise accuracy of the projections at the SA2 level over a 50-year horizon is subject to uncertainty. The Statistical Area projections can be seen to be accurate in as much as the SA2s follow recent trends and operate within the land use constraints that were identified through the WISE modelling.

We have undertaken a cursory analysis of the trends in the projected SA2 data. For example, in terms of concentration of employment, five SA2s within the Waikato Region capture significant proportions of the region's employees, all of which are located within Hamilton City. The latest projections indicate a reshuffling of the top employment hubs over the projection period. By 2073, Te Rapa South is projected to take over as the SA2 with the highest share, reaching 6.54% of total MECs. This is followed closely by Te Rapa North with 6.37%. Hamilton Central emerges as the third largest with 5.95%, while the previously dominant Frankton Junction moves to fourth with 5.65%. Hamilton Lake South rounds out the top five, capturing 2.80% of the total share and replacing Hamilton West. Together, these five SA2s make up 27.3% of the Waikato Region's total employment. By 2073, six SA2s will have more than 2% of the region's MECs, eight SA2s will have between 1% and 2%, and the remaining 245 SA2s will each have less than 1% of the region's MECs. Unsurprisingly, this reinforces the overall dominance of employment within Hamilton City.

Further analysis of the changes within each SA2 is required to enable an understanding of the industries which are projected to lose employees. Although it is too detailed to present each SA2 in this report, it is worth noting that the projected changes by industry can be explored at the SA2 level, giving valuable insight into how industry is likely to—or could—change within a TA. We stress that this is only one projected pathway, and there are an infinite number of alternative pathways.



5 Conclusion

This modelling exercise has projected changes in key economic indicators—specifically employment and value added—across the Waikato Region over a 50-year horizon. By generating granular trajectories for 259 Statistical Area 2s (SA2s) across 19 ANZSIC industries, this report provides a robust dataset for the exploration of the region's economic future. These projections enable analysts and decision-makers to investigate patterns of spatial and industrial change across the wider region, while also revealing the shifting economic structures within individual SA2s. Crucially, the detailed spatial resolution highlights significant projected changes to the structure of local economies that would otherwise be masked by broader regional trends.