



**Benje
Patterson**
People & Places

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Nelson-Tasman Productivity Gap – 2022 supplementary update



Prepared for: Nelson Regional Development
Agency

Prepared by: Benje Patterson
Benje Patterson | People & Places
www.benjepatterson.co.nz
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2. Productivity Gap – 2022 estimates

This document provides a supplementary update to a 2021 report by Benje Patterson entitled “Understanding Productivity in Nelson-Tasman”. It is designed to update calculations contained in the original report with more recent data. The original productivity report contained calculations of Nelson-Tasman’s productivity gap with the rest of New Zealand using data from 2020, while 2022 data is now available. All calculations in this report are based around labour productivity as the key metric of interest. Labour productivity is defined as the ratio of real GDP to labour and captures the amount of output produced per worker. This choice is primarily because of data availability in the Nelson-Tasman context.

2.1. What is productivity currently in Nelson-Tasman?

Nelson-Tasman generated \$105,070 of GDP per filled job in 2022, according to estimates from Infometrics. This level of productivity is 21% below the New Zealand average of \$132,815.

Table 1 – Comparing productivity between Nelson-Tasman and New Zealand

Comparing productivity between Nelson-Tasman and New Zealand	
<i>GDP per filled job (2022 pricing) during March 2022 year, source: Infometrics</i>	
	Productivity (GDP/job)
Nelson-Tasman	\$105,070
New Zealand	\$132,815
Productivity gap to New Zealand (%)	-20.9%

2.2. How has productivity evolved?

Nelson-Tasman’s productivity has risen from \$94,455 in 2012 to \$105,070 in 2022, at an average annual growth rate of 1.1%pa over this 10-year period. This growth rate is marginally above the growth rate experienced nationally (0.9%pa) over the same 10 years, which has caused Nelson-Tasman’s productivity gap to narrow slightly. A decade ago in 2012, productivity in Nelson-Tasman sat 22% below New Zealand, while by 2022 this gap had closed slightly to 21%¹.

Table 2 – Comparing productivity growth over the past 10 years

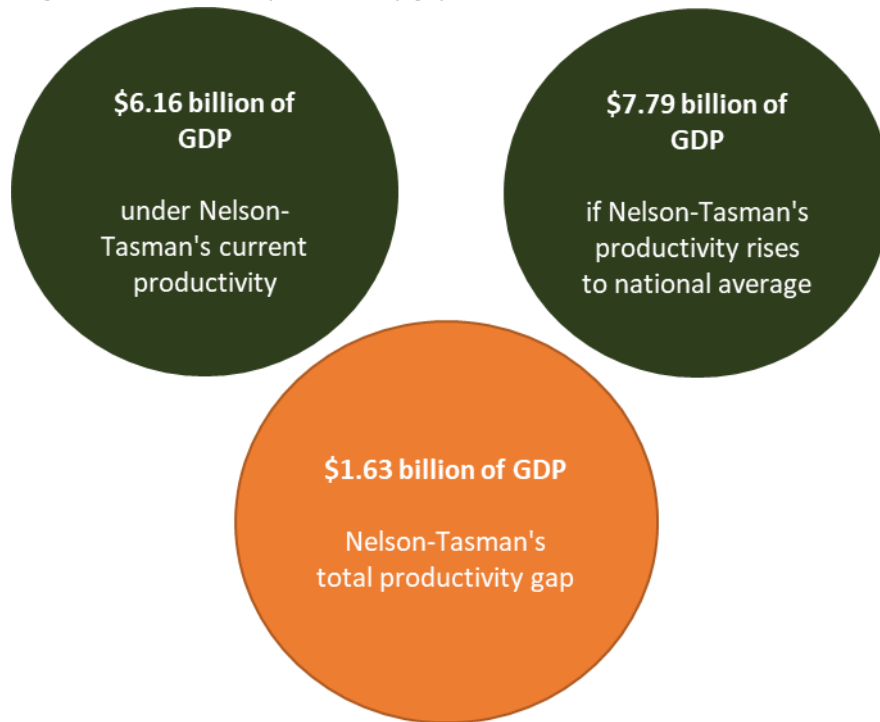
Comparing productivity changes over the past 10 years			
<i>Changes in GDP per filled job (2022 pricing) between 2012 and 2022 (March year), source: Infometrics</i>			
	Productivity (GDP/job)		Average 10 year growth
	2012	2022	(% pa)
Nelson-Tasman	\$94,455	\$105,070	1.1%
New Zealand	\$121,701	\$132,815	0.9%
Productivity gap to New Zealand (%)	-22.4%	-20.9%	

2.3. Valuing Nelson-Tasman’s productivity gap

Nelson-Tasman’s economy generated \$6.16 billion of GDP in the March 2022 year. If productivity in Nelson-Tasman were to improve to the national average, from its current level of \$105,070 of GDP per job to \$132,815 of GDP per job, then total GDP of the region would instead be \$7.79 billion.

¹ The current gap is slightly smaller than the 24% productivity gap estimated in 2020 within the previous productivity report.

Figure 1 – Valuing Nelson-Tasman’s ‘productivity gap’ with New Zealand in 2022



This \$1.63 billion gap² between current GDP and what it could be with higher productivity in line with the national average can be thought of as Nelson-Tasman’s ‘productivity gap’. The gap is the ‘size of the prize’ from taking steps to improve productivity outcomes in the region.

2.4. How long might it take to close the productivity gap?

Closing such a large productivity gap will take a long time if the region continues along current trends. Growth in Nelson-Tasman’s productivity has averaged 1.1%pa over the past 10 years, compared to 0.9%pa productivity growth nationally. If these same relative growth trends continue, then it will take another 123 years for Nelson-Tasman to close its productivity gap with New Zealand³!

The data shows that Nelson-Tasman’s productivity growth would have to accelerate to twice the current average trajectory of New Zealand for the productivity gap to close within 20 years or less⁴.

Table 3 – Measuring how long it could take to close Nelson-Tasman’s productivity gap with New Zealand

How quickly does the productivity gap close at different growth rates?		
Years until Nelson-Tasman and New Zealand productivity levels converge at different growth rates		
Time until productivity gap closes (years)	Productivity growth rate (%pa)	
	Nelson-Tasman	New Zealand
10	3.3%	0.9%
20	2.1%	0.9%
30	1.7%	0.9%
123	1.1%	0.9%

* Average growth rates from past 10 years in Nelson-Tasman and New Zealand.

² This value of the productivity gap is similar to the \$1.67 billion gap estimated in the previous report.

³ This is similar to the previous report which showed at current rates it would take 145 years to close the gap.

⁴ In each scenario, it has been assumed that New Zealand maintains its current productivity growth trajectory. If instead, New Zealand’s productivity growth rate increases then the growth rates needed in Nelson-Tasman to close the gap would need to be higher than what is shown.

