

Queensland's Cost Indexation for Government Purchasing of Human Services

David Gilchrist and Clare Feenan
Centre for Public Value
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Contact Information:

Professor David Gilchrist
Director, Centre for Public Value
UWA Business School

E: david.gilchrist@uwa.edu.au
M: +61 404 515 270
W: <https://www.uwa.edu.au/schools/Research/Centre-for-Public-Value>

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Statement of Interests:

Professor David Gilchrist is Director of the Centre for Public Value at the University of Western Australia. He has received funding from governments, peak bodies and individual organisations for various research projects and consulting support predominantly related to the Not-for-profit human services industry, not-for-profit financial and performance reporting, sustainability and outcomes reporting, and policy and practice related to those areas. He has been a director and chair of a number of human services and policy organisations over past years and is currently chair of two policy-focused Not-for-profits operating nationally in the education sector.

Ms Clare Feenan is Research Manager of Centre for Public Value. She holds a Bachelor of Science (Statistics) from RMIT, Postgraduate Certificate of Business (Economics and Econometrics) from Monash University and is undertaking Master of Economics at University of Western Australia. Clare has extensive business operations and analytical experience including auditing, compliance, and profitability. Clare is passionate about the non-profit sector and achieving sustainable operations through data analytics.

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Key Findings

Current indexation levels are inadequate to maintain the sustainability of Queensland's human service delivery

→ The current indexation arrangements are not appropriately transparent and do not allow the Queensland human services industry to keep pace with increasing costs. For instance, state government indexation for 2019 and 2020 was 2.81% and 2.38% for each year while the reported change in expenditure for the median social service organisation (SSO) contributing their data to this study was 6.73% and 15.73% respectively.

Indexation does not appear to be passed on uniformly in all sub-sectors

→ Anecdotal evidence suggests not all government departments pass on the indexation value to all SSOs.

This reduces sustainability

→ While indexation constitutes one element building sustainability for SSOs¹, a failure to appropriately index prices paid reduces sustainability and significantly increases risk to vulnerable individuals and communities that need services and supports. This finding aligns with our recent examination of the Queensland social service industry, where we identified that the service mix is likely contracting as a result of increasing financial pressure.²

Traditional measures used in other Australian jurisdictions are also inadequate

→ A number of other Australian jurisdictions use a combination of CPI and the Wage Price Index (WPI) as a proxy for calculating the actual cost change experienced by the industry. The chart below demonstrates that both CPI and WPI are materially deficient in terms of the cost change experienced by the median SSO.

Reductions in profitability of the industry over many years confirms the findings here

→ A significant reduction in profitability of the median SSO was reported for 2019 and 2021 (down 12.29% and 50.3% respectively year-on-year)— lack of profitability is likely an embedded issue that was emphasised by COVID rather than caused by COVID.

Evidence gathered demonstrates current indexation levels are likely significantly under providing for cost increases

→ The table below shows the significant shortfall between the indexation provision for the 2020 and 2021 financial years and the median SSO's change in expenditure.

¹ There are three elements required to be met in order to achieve sustainability in human services delivery. These are demonstrated in figure 1. However, they are: (1) regular comprehensive re-contracting to reset funding requirements; (2) the allocation of capital injections in order to meet crisis funding needs or changes in government policy; and (3) appropriate indexation.

² See: Gilchrist, D. J. & Perks, B., (2022), The Challenge of Sustainability: Not-for-profit Sector and the Impact of Growing Financial Pressure, a report of the UWA Not-for-profits Research Team for the Queensland Council of Social Service, Brisbane, Australia. Available here: <https://www.uwa.edu.au/schools/Research/Centre-for-Public-Value/Publications>



Summary of Comparative Results

	2019—2020	2020—2021
Queensland Government Indexation	2.81%	2.38%
Aggregate Change in Expenditure SSOs	19.9%	14.49%
Median Change in Expenditure SSO	6.73%	15.73%
Median Change Total Expenses ACNC Data	3.76%	-
Wage Price Index - Queensland ³	1.5%	2.0%
Wage Price Index - Health Care and Social Assistance-Australia ⁴	3.2%	1.9%
Median SSO Labour Cost Increase (Adjusted for Service Change)	7.36%	11.91%
Median Change Employee Expenses ACNC Data	7.28%	-
Consumer Price Index - Brisbane ⁵	0.6%	3.9%
Consumer Price Index - Health - Brisbane ⁶	1.1%	5.6%
Producer Price Index – Other Allied Health Services - Australia ⁷	2.2%	3.2%
Aggregate Change in SSOs Profit/Loss Reported	-45.85%	121.89% ⁸
Median Change in SSOs Profit/Loss Reported	-12.29%	-50.30%

³Australian Bureau of Statistics "Wage Price Index" Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?fs\[0\]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df\[ds\]=ECONOMY_TOPICS&df\[id\]=WPI&df\[ag\]=ABS&df\[vs\]=1.0.0&pd=2019-Q1%2C2021-Q3&dq=3.THRPEB..TOT..6.Q&ly\[rw\]=TIME_PERIOD&ly\[rs\]=SECTOR](https://explore.data.abs.gov.au/vis?fs[0]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df[ds]=ECONOMY_TOPICS&df[id]=WPI&df[ag]=ABS&df[vs]=1.0.0&pd=2019-Q1%2C2021-Q3&dq=3.THRPEB..TOT..6.Q&ly[rw]=TIME_PERIOD&ly[rs]=SECTOR)

⁴ Australian Bureau of Statistics "Wage Price Index" Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?fs\[0\]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df\[ds\]=ECONOMY_TOPICS&df\[id\]=WPI&df\[ag\]=ABS&df\[vs\]=1.0.0&pd=2017-Q1%2C&dq=.THRPEB..Q%2BTOT...Q&ly\[cl\]=MEASURE&ly\[rw\]=TIME_PERIOD&ly\[rs\]=SECTOR](https://explore.data.abs.gov.au/vis?fs[0]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df[ds]=ECONOMY_TOPICS&df[id]=WPI&df[ag]=ABS&df[vs]=1.0.0&pd=2017-Q1%2C&dq=.THRPEB..Q%2BTOT...Q&ly[cl]=MEASURE&ly[rw]=TIME_PERIOD&ly[rs]=SECTOR)

⁵Australian Bureau of Statistics "Consumer Price Index (CPI) 17th Series." Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?fs\[0\]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df\[ds\]=ECONOMY_TOPICS&df\[id\]=CPI&df\[ag\]=ABS&df\[vs\]=1.1.0&pd=2018-Q3%2C2021-Q3&dq=1%2B2%2B3.10001%2B20001%2B20002%2B20003%2B20004%2B20005%2B20006%2B115486%2B115488%2B115489%2B115493%2B126670%2B999901%2B999902%2B999903.10%2B20.3%2B50.Q&ly\[cl\]=REGION&ly\[rw\]=MEASURE%2CTIME_PERIOD&ly\[rs\]=TSEST%2CINDEX](https://explore.data.abs.gov.au/vis?fs[0]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df[ds]=ECONOMY_TOPICS&df[id]=CPI&df[ag]=ABS&df[vs]=1.1.0&pd=2018-Q3%2C2021-Q3&dq=1%2B2%2B3.10001%2B20001%2B20002%2B20003%2B20004%2B20005%2B20006%2B115486%2B115488%2B115489%2B115493%2B126670%2B999901%2B999902%2B999903.10%2B20.3%2B50.Q&ly[cl]=REGION&ly[rw]=MEASURE%2CTIME_PERIOD&ly[rs]=TSEST%2CINDEX)

⁶ Australian Bureau of Statistics "Consumer Price Index (CPI) 17th Series." Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?fs\[0\]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df\[ds\]=ECONOMY_TOPICS&df\[id\]=CPI&df\[ag\]=ABS&df\[vs\]=1.1.0&pd=2018-Q3%2C2021-Q3&dq=1%2B2%2B3.10001%2B20001%2B20002%2B20003%2B20004%2B20005%2B20006%2B115486%2B115488%2B115489%2B115493%2B126670%2B999901%2B999902%2B999903.10%2B20.3%2B50.Q&ly\[cl\]=REGION&ly\[rw\]=MEASURE%2CTIME_PERIOD&ly\[rs\]=TSEST%2CINDEX](https://explore.data.abs.gov.au/vis?fs[0]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df[ds]=ECONOMY_TOPICS&df[id]=CPI&df[ag]=ABS&df[vs]=1.1.0&pd=2018-Q3%2C2021-Q3&dq=1%2B2%2B3.10001%2B20001%2B20002%2B20003%2B20004%2B20005%2B20006%2B115486%2B115488%2B115489%2B115493%2B126670%2B999901%2B999902%2B999903.10%2B20.3%2B50.Q&ly[cl]=REGION&ly[rw]=MEASURE%2CTIME_PERIOD&ly[rs]=TSEST%2CINDEX)

⁷ Australian Bureau of Statistics "Producer Price Indexes by Industry." Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?tm=producer%20price%20index&pg=0&hc\[dimensions\]=Index&df\[ds\]=ECONOMY_TOPICS&df\[id\]=PPI&df\[ag\]=ABS&df\[vs\]=1.0.0&pd=2018-Q3%2C2021-Q3&dq=1%2B4.8193755..Q&ly\[cl\]=TIME_PERIOD](https://explore.data.abs.gov.au/vis?tm=producer%20price%20index&pg=0&hc[dimensions]=Index&df[ds]=ECONOMY_TOPICS&df[id]=PPI&df[ag]=ABS&df[vs]=1.0.0&pd=2018-Q3%2C2021-Q3&dq=1%2B4.8193755..Q&ly[cl]=TIME_PERIOD)

⁸ Aggregate profit increase seen in 2021 represents new project funding received and not yet spent.



What we have done

This report provided information and findings related to the indexation arrangements established in funding social services in Queensland. Our aim was to examine the extent to which current arrangements are appropriate. To do this, we:

- 1) Described why the current arrangements for indexation in Queensland are inappropriate
- 2) Examined the indexation methodology used by the Queensland government in its procurement of social services
- 3) Collected data from social services organisations that allowed us to assess the extent to which the economic sustainability of the sector is improving or weakening over time
- 4) Compared our assessment of the change in sustainability over time with the indexation methodology used
- 5) Examined indexation methods used by the Australian Bureau of Statistics (ABS) in order to identify alternative existing indexation methods that can be efficiently implanted immediately
- 6) Compared those indexation calculations made by the ABS and used them to develop a proxy for indexation by combining and/or adjusting their components in order to align with the cost increases identified in the analysis of industry data.



Industry Response

The community services sector is the beating heart of Queensland's economy. The sector employs approximately 120,000 Queenslanders and 324,000 volunteers. Our sector's workforce includes a high proportion of women and provides support and assistance to some of the most disadvantaged people in our community.

Community services are currently facing significant challenges. As the demand for services continues to grow and outstrip the capacity to respond, it is also becoming increasingly difficult to attract and retain the workforce we need.

Our sector's potential can only be realised when our services are adequately funded. Adequate funding will result in a greater capacity to meet the growing demand for services. It will also lead to improved "job quality" for women, which relates to the number of regular hours offered, the pay rate, as well as the surety of employment. Industries with high job quality are likely to attract and retain better, more experienced staff than those with lower job quality.

As outlined in this paper, funding sustainability relies on the terms under which services are procured (for example, length and quantum of contract), injections of funding when significant policy changes or disruptions occur and indexation.

Indexation is applied to community services funding in acknowledgement that the costs of delivering services will change over time. Currently, indexation is calculated by reference to wage price index (WPI) and the consumer price index (CPI).

This report demonstrates that the current method of calculating indexation is not fit for purpose for the community services sector. The method used does not correspond to the costs incurred by community services and continues to result in inadequate levels of indexation being applied to community sector funding.

The costs of delivering community services are increasing. Costs related to labour, audit, accounting and marketing have all seen significant increases. As these expenses are not discretionary, they must be met in order to continue to deliver essential frontline services to our communities.

This important report is the result of the collective efforts of the Queensland Network of Alcohol and Other Drug Agencies (QNADA), Queensland Alliance for Mental Health (QAMH), Volunteering Queensland (VQ), PeakCare, Financial Counsellors Association of Queensland (FCAQ), Community Legal Centres Queensland, The Centre for Women & Co., Queensland Meals on Wheels and Queensland Council of Social Service (QCOSS). It would not have been possible without the participation of the 32 Queensland community service organisations that provided their financial information. We extend our gratitude to these organisations for sharing their data to make this project possible.

We would also like to extend our thanks to Professor David Gilchrist and Clare Feenan at the Centre for Public Value, UWA Business School for this excellent report.

It is the right time for governments to address the sustainability of the community services sector and transform the way services are procured. One element of this is ensuring indexation properly reflects the increased costs of delivering essential services to the community.

The Queensland Government has an opportunity to demonstrate national leadership in working with the sector to address sustainability concerns and this important report provides a roadmap to overcome the issue of the current inadequacy of indexation.



Aimee McVeigh
Chief Executive Officer
Queensland Council of Social Service

Evan Hill
Chief Executive
Meals on Wheels Queensland

Rebecca Lang
Chief Executive Officer
Queensland Network of Alcohol
and Other Drug Agencies

Stacey Ross
Chief Executive Officer
The Centre for Women & Co.

Jennifer Black
Chief Executive Officer
Queensland Alliance for Mental Health

Rosslyn Monro
Director
Community Legal Centres Queensland

Mara Basanovic
Chief Executive Officer
Volunteering Queensland

Jon O'Mally
Executive Officer
Financial Counsellors' Association
of Queensland Inc

Thomas Allsop
Executive Director
PeakCare Queensland Inc



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Reading this Report

Largely, governments in Australia meet their social policy commitments by procuring human services from non-profit organisations. The price paid for these services—often termed ‘funding’—is decided by governments via a range of mechanisms usually at the initial contracting stage. Subsequent cost increases borne by non-profit service providers are then usually supplemented on an annual basis using an indexation formula that is intended to cover those cost increases and to maintain service sustainability. However, funding shortfalls can be exacerbated by economic shocks (e.g. COVID) and changes in government policy and funding also needs to be supplemented using capital injections in order to ensure ongoing sustainability in these circumstances.

This research project is focused on examining the appropriateness of the indexation arrangements put in place by the Queensland Government. It was funded by a partnership of Queensland peak bodies, including the Queensland Council of Social Service (QCOSS), Queensland Network of Alcohol and Other Drug Agencies (QNADA), Queensland Alliance for Mental Health (QAMH), Volunteering Queensland (VQ), PeakCare, Financial Counsellors Association of Queensland (FCAQ), Community Legal Centres Queensland, The Centre for Women & Co. and Queensland Meals on Wheels.

The purpose of this paper is to compile and present our findings from our analysis of data provided by selected social service organisations (SSOs) based in Queensland. The aim and method of the study is described in more detail below. Essentially, we examined the results of our data collection in the context of determining the appropriateness of current indexation calculation methods and prospective models.

This report has been developed using two data sources:

- 1) Data collected from Queensland SSOs in multiple waves of data collection undertaken in 2022. These sample organisations were members of Queensland peak organisations representing Queensland's human services industry. This data was collected for the financial years ending in 2019, 2020 and 2021 and comprised financial, activity, and human resources components collected via a template MS Excel spreadsheet; and
- 2) The Australian Charities and Not-for-profits Commission (ACNC) data cube populated by registered charities with head offices located in Queensland and collected from Annual Information Statements (AIS). The data used was for the 2019 and 2020 financial years and comprised financial data only.

We then compared this data to indexes compiled by the Australian Bureau of Statistics (ABS) on economic and labour indicators for geographic and industry relevant classifications.

We have also considered commonly applied indexation formulae and readers interested in a deeper analysis and understanding of this aspect of the study should review our report titled ‘Human Services and Cost Indexation Methods in Australia’ where we examine the processes, calculation, and challenges of indexation more thoroughly, including in technical terms.⁹

Suffice to say here, as part of this study, the research team considered two indexes commonly used to calculate indexed change:

- **Chain Weighted Fisher Index** (Fisher Index): this is statistically the best formula for calculating changes in costs for the social service industry. However, it is a more complex formula and difficult to collect sufficient appropriate data for.

⁹ Gilchrist, D. J. and Feenan, C., (2023), Human Services and Cost Indexation Methodologies in Australia, a report by the UWA Centre for Public Value, UWA Business School, Perth. Available here: <https://www.uwa.edu.au/schools/Research/Centre-for-Public-Value/Publications>



- **Laspeyres Index Formula** (Laspeyres Index): this formula is a less complex method of calculating changes in expenses. It has the added advantage that the Australian Bureau of Statistics (ABS) uses this method.

Additionally, we have published a report focusing on why current indexation methods used in Australia are not appropriate— 'Challenging the Framework for Price Indexation in Australian Human Services Procurement'.¹⁰ This report supports our findings provided herein but will provide the reader with greater detail with respect to the shortcomings of current practice across Australia.

This document also reinforces findings reported in the UWA Centre for Public Value's recent study of Queensland's social services industry where an examination of the state's charitable sector found, amongst other things, that services procured by government were materially under-priced and that it cost this sector about \$196m to deliver additional services to the community in 2018.¹¹ It also reinforced the economic contribution of the charitable sector, showing that Queensland's health care and social assistance industry (the sector to which the social services industry belongs) contributed 8% to Gross State Product (GSP) and remains the highest employer by headcount in Queensland (16.1% of the state's workforce in 2022).¹²

Research Aim - Sustainability & Indexation

Government purchasing of human services is a challenging policy area. All parties—governments, the human services industry, and the community as service recipients and/or taxpayers—have the expectation that government will be efficient and responsible in the use of public funds. Indeed, there is no advantage to anyone if governments are not. However, in order to be efficient, the purchase price paid by governments for human services must support the financial sustainability of the not-for-profit organisations that make up the industry.

To be sustainable, three components of resourcing must be considered and maintained. These are reflected in figure 1 and described as:

- 1) the regular realignment of prices to costs by establishing new contracts with the real cost of delivering services built into the new price (for example, a 5-yearly tendering process);
- 2) the capitalisation of the service industry to allow timely and effective responses to economic, social and policy changes in an ad hoc manner (the recent JobKeeper payment responding to COVID is a good example here but any change in policy is likely to require an injection of capital to allow service providers to respond in a timely and effective manner); and
- 3) the establishment of a sound annual indexation calculation process that allows the industry to respond to iterative changes in the cost of production over the life of a multi-year contract (i.e., in between resetting the base through the re-contracting process). It is this aspect of the pricing/funding arrangements in Queensland that this report is focused upon.

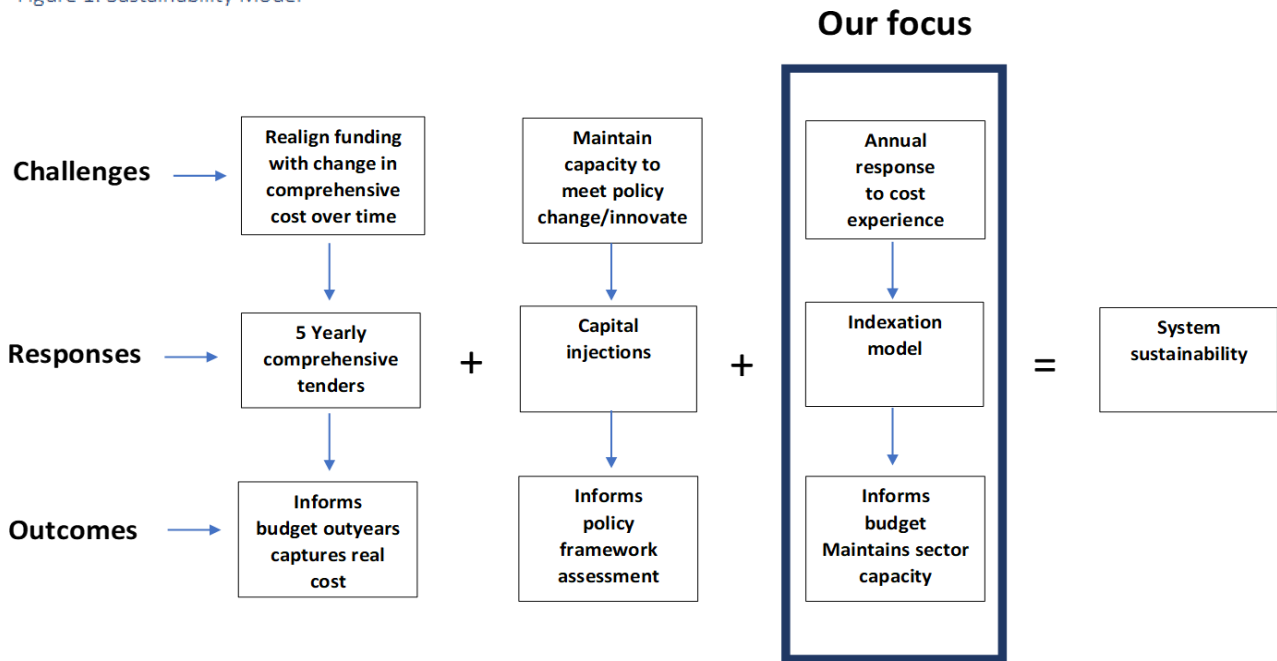
¹⁰ Gilchrist, D. J. and Feenan, C., (2023), Challenging the Framework for Price Indexation in Australian Human Services Procurement", a report by the Centre for Public Value, UWA Business School, Perth. Available at: <https://www.uwa.edu.au/schools/Research/Centre-for-Public-Value/Publications>

¹¹ Gilchrist, D. J. & Emery, T., (2021), The Challenge of Sustainability: Queensland's Not-for-profit Sector and the Impact of Growing Financial Pressure, a report of the UWA Not-for-profits Research Team for the Queensland Council of Social Service, Brisbane, Australia. Available here: <https://www.uwa.edu.au/schools/Research/Centre-for-Public-Value/Publications>

¹² Queensland Government Statistician's Office, (2022), Employment by Industry, September quarter 2022, Available at: <https://www.qgso.qld.gov.au/issues/3401/employment-industry-202209.pdf>



Figure 1: Sustainability Model



Getting indexation right is critical to maintaining industry sustainability and reducing, as far as possible, the risk to people relying on these services. The identification of the correct indexation rate can be difficult, and it costs time and money to get right, impacting both the human services industry and the governments that purchase human services from that industry.

If indexation is calculated appropriately, it can:

- insulate against unexpected service failure;
- maintain the service mix; and
- inform governments' budgets and outyears.

However, indexation is always retrospective as its formulas are based on actual events. It cannot:

- meet cumulative inaccurate/ inadequate indexation gaps;
- meet significant cost increases in real time;
- mitigate capital shortfalls which result from government policy change; nor
- support human services providers to respond to changes in need.

Therefore, getting indexation as right as possible is a critical element in the maintenance and the sustainability of human service delivery— but it cannot resolve everything. However, getting it wrong increases the threat to sustainability on a cumulative basis. Iterative indexation calculations are effectively carried forward until the next opportunity to reset contracts and re-base the indexation calculation. Therefore, poor indexation in one period has accumulative impacts on sustainability in subsequent periods.

Recent economic events prior to this research – COVID, price rises – have accelerated already existing gaps in funding caused by poor indexation methodologies. Economic shocks and market changes have altered trajectories of the costs of many goods and services and impact the level of service that can be provided. These changes not only impact service providers, but service users and workforce personnel are impacted so



that poor indexation has a contamination effect, reducing sustainability by reducing job quality and leaving people without services and supports, thus further reducing service delivery and so on iteratively.

Importantly, the increasing financial stress faced by the human services industry as reported anecdotally has reinforced concerns raised over many years as to the veracity of the state government's indexation policy and calculation methodology.

Sustainable practises require financial arrangements that are both transparent and long-term. Planning and delivery of operations in public and private spheres both have these conditions which they can thrive under. This program of research is examining this issue with the intention of identifying a more relevant, efficient, and effective indexation methodology.

Where indexation is used

An index measures change in the cost of maintaining a level of output in terms of quantity, quality and timing. In ever-changing economic, social and technological environments, the amount spent to maintain productivity differs from year to year. In state government contracts for multi-year agreements, indexation is required to support the ongoing provision of the quantity, quality and timing of services as input costs increase over time. This ensures purchasing power and delivery of services remains consistent for the level of community services and supports needed in contractual agreement.¹³

Numerous types of indexes are calculated for a variety of functions. Public and private decision makers consider indexes as economic estimates of inflation. There are many different types of indexes as they are created for specific purposes. It is very rare that one or a combination of indexes created for one purpose are able to be effectively and legitimately applied to another purpose. Import and export, lending and borrowing, building and buying all require long term planning and responding to feedback of changes in value and costs and change in these activities is estimated using specific-purpose indexes. Further, indexes are often used for policy purposes and for this reason alone, indexes have to "...be objective, transparent, reliable and credible".¹⁴

An index is usually represented as changes in percentage point terms based on the year prior. For instance, if Queensland's CPI increased by 7.9% for the year to September 2023, the quarterly increase may only be 1.8% as these amounts are the increase from their reference period.¹⁵ September expenditure was therefore 107.9% of September 2022 and 101.8% of June 2023. The ABS calculates its most referred index – the CPI– in intervals at yearly, quarterly, and monthly iterations.

Significant amounts of data are required to calculate an index. There needs to be established a sample that is intended to represent the entire population and of the goods and services being pursued for price changes. We refer to these goods and services as a 'market basket' because the entire market cannot be measured so representative items are selected and monitored.¹⁶ As new products enter the market and others become irrelevant, market baskets are updated to ensure their continued relevance.¹⁷

Data must be tracked meticulously to understand expenditure changes. An index is not just an estimate of the increase in the price of the basket of goods but also of the amount of that good purchased. That is, the price

¹³ Shrestha, K. J., Jeong, H. D., and Gransberg, D. D., (2017), "Multidimensional highway construction cost indexes using dynamic item basket." *Journal of Construction Engineering and Management* 143, no. 8 (2017): 04017036.

¹⁴ Diewert, E. W., Greenlees, J., and Hulten, E. C., (2010) eds. *Price index concepts and measurement*. Vol. 70. University of Chicago Press

¹⁵ Queensland Government Statistician's Office (2022). *Consumer Price Index, September 2022*, Queensland Government, Available at: <https://www.qgso.qld.gov.au/issues/3441/consumer-price-index-202209.pdf>

¹⁶ Australian Bureau of Statistics, (2020). "Consumer Price Index, Australia methodology", <https://www.abs.gov.au/methodologies/consumer-price-index-australia-methodology/mar-2020>.

¹⁷ Australian Bureau of Statistics, (2021). "Consumer Price Index, Australia methodology", <https://www.abs.gov.au/methodologies/consumer-price-index-australia-methodology/mar-2021>.



itself may change and the quantity of a particular item purchased may change as a result because people demand different things as a result of a change in what they may see as their economic priorities. Therefore, calculating an index is costly and time consuming for both those providing data and analysing it.

Indexes can provide insight into economic preferences—what choices do people make when a price increases? Decreases? What impact does that change have on people's purchase preferences and then on a producer's activities? Generally, people will decide how to react to a price increase based on their sense of value in that item— they may continue to purchase it, replace it with another item or save their money. However, in human services, service users are not in a position to forego services because of price differentials and so appropriate levels of indexation are critical to ensuring sustainability of services and supports that vulnerable people and communities rely upon.

An appropriate index is important in human services, not just because it indicates needed changes in funding levels, but also because it can indicate the level of risk being faced by services users by being a proxy for sustainability assessment.

How indexation in human services impacts service delivery

In the context of human services, an index does not measure changes in demand for services or mandatory policy changes. Although needs for services may fluctuate through changes in broader circumstances, including in the economy, indexation may only represent the changes in costs for the same standard, quality and timing of services delivered.

The Queensland Government currently applies an indexation model that is a combination of the Consumer Price Index (CPI) for Brisbane and the Wage Price Index (WPI) for Queensland as calculated by the Australian Bureau of Statistics (ABS). The formula is:

$$\text{Indexation Rate} = \text{CPI} \times 0.25 + \text{WPI} \times 0.75$$

All states and territories in Australia use some form of indexation on multi-year human services contracts. They use these proxies for indexation because the collection of data and its analysis in support of a fit-for-purpose indexation model is time consuming and expensive for the sector and for the government. Indeed, Queensland is not alone in the use of a formula combining CPI and WPI, and although they are effective indicators for the broader economy, this is not an appropriate solution.

In practice, there is a lack of transparency and consistency in the application of these policies. Anecdotal evidence from organisations informs us that not every contractual agreement spanning multiple years receives the above indexation, and some may not receive the appropriate index as the policy calculation. This may be by design in contract, or by nature of the service purchased by government although the value of a dollar changes year to year regardless of contract. The reporting around current and future indexation figures is opaque and leaves organisations unsure of the amounts indexed by percentage and dollar value which further challenges reporting and operations.



Why the current indexation policy is inappropriate

The use of the CPI and WPI to estimate human services indexation is inappropriate. These indexes are both technically sound and insightful when used appropriately. However, when used out of context from their represented population, both in terms of people sample and data input, these indexes inspire misunderstanding of underlying economic realities.

In turn, poor indexation leads to a reduction in sustainability, increased risk to service users and governments and a reduction in service quantity. As such, the inappropriate implementation of an index can have detrimental impacts on what is believed to be informed decision making.

Misrepresentation and misuse of cost indexes may arise because time periods, reference groups, calculations, the market basket, data collection, and weighting are individually or collectively unrelated to the item sought to be measured. These are known as biases and any decisions made based on them are likely to be incorrect if used outside of the context of their intended use.

While it is understandable that those without statistical backgrounds may consider CPI and WPI to be relevant to assessing the extent of cost change in the delivery of human services, these two indexes are not actually highly relevant to the sector.

The CPI, as presented by the ABS, is based on the household's average expenditure calculated for the capital city of each state/territory in Australia.¹⁸ Hence, for the CPI representing Queensland's human services, the sample of respondents are households. The market basket consists of household purchases using Brisbane prices as the measure. The types of goods and services purchased by private households and their quantities differ significantly from human services organisations' cost bases and activity levels.

Further, the market basket is a combination of discretionary (optional) and non-discretionary (essential) goods and services which vary in elasticity—that is, some goods must be consumed regardless of the price (non-discretionary) while some are able to be foregone when the price gets too high (discretionary). Because producers do not have to worry as much about the price effects on purchase decisions where their goods are non-discretionary, the prices for those goods increase greater than the prices of discretionary goods. The CPI calculation essentially strikes a value between the higher non-discretionary costs and the lower discretionary costs.

While some goods purchased by households are also purchased by human services providers, the goods purchased by human services providers are far more likely to fall into the non-discretionary category as they are essential for service delivery. Therefore, because these goods are more significantly impacted by inflation, human services providers are effectively impacted by a higher level of inflation than the CPI suggests. As such, even though some components of CPI are related to the cost changes in human service delivery, the price increases experienced by this sector are likely to be higher than the reported CPI figure making indexation formulae that include a component of CPI even less relevant.

Expenditure weighting in CPI calculations represent the quantity of products purchased at the prices which are monitored for change. This calculation allows the ABS to determine the weighting of relevant goods in the CPI calculation. Up to date weighting is essential to capture relevant changes as new products and behaviours arise.

¹⁸ Australian Bureau of Statistics. (2022). "Consumer Price Index FAQs".
<https://www.abs.gov.au/websitedbs/d3310114.nsf/home/consumer+price+index+faqs#:~:text=The%20CPI%20measures%20the%20changes%20in%20price%20of%20a%20fixed,any%20specific%20family%20or%20individual>.



Reweightings for CPI calculations has been conducted annually since 2019 based on the Household Final Consumption Expenditure (HFCE) data.¹⁹ Prior to this, reweighting was based on the Household Expenditure Survey (HES) conducted every six years and is still the preferred source being a benchmark to the HFCE. Reweighting is recommended for CPI at least every 5 years,²⁰ and the last HES and its reweighting was 2017.²¹

The WPI is calculated by state rather than capital city and weighted for a national figure. It can be industry specific and is intended to represent changes in the hourly base pay of the jobs it includes. A number of variations exist of the WPI and the one used for human services indexation is the *Total hourly rates of pay excluding bonuses by public and private sectors and all industries* by the state it represents. In doing this, the represented industry of human services is compiled with and represented by all other industries in the representative state.

This representative sample and equivalent market basket of paid work hours is also inadequate for assessing the change in human services employee expenses. Human services organisations often operate outside of business hours and pay penalty rates, employ casual workers, and are historically low paying. As a female-dominated industry,²² there are numerous other factors impacting workforce cost and risk which are not captured by the WPI including expenses such as maternity or carer's leave which impact costs in backfilling, recruitment, and training. Further, penalty rates, workers compensation, recruitment, supervision, and training are all outside of the scope of this index.²³

Additionally, WPI does not include estimates of the change in on-costs associated with employee wages. Hence, recent increases in superannuation guarantee levy and the introduction of Queensland specific portable long service leave²⁴ are not included in the WPI calculation leaving a considerable gap in the appropriate assessment of cost change. As human services organisations are often required to adhere to quality standards, things such as NDIS compliance measures and training are additional expenses incurred and not captured by either the WPI or CPI.

¹⁹ Australian Bureau of Statistics, (2017) "An implementation plan to annually re-weight the Australian CPI".

<https://www.abs.gov.au/statistics/research/implementation-plan-annually-re-weight-australian-cpi>

²⁰ Australian Bureau of Statistics, (2016) "Information Paper: Increasing the Frequency of CPI Expenditure Class Weight Updates". <https://www.abs.gov.au/ausstats/abs@.nsf/mf/6401.0.60.002>

²¹ Australian Bureau of Statistics, (2018) "Consumer Price Index: Historical Weighting Patterns, 1948 – 2017".

<https://www.abs.gov.au/ausstats/abs@.nsf/mf/6431.0>

²² Workplace Gender Equality Agency. (2019) "Gender segregation in Australia's workforce". <https://www.wgea.gov.au/publications/gender-segregation-in-australias-workforce>

²³ Australian Bureau of Statistics, (2012) "Labour Price Index".

<https://www.abs.gov.au/ausstats/abs@.nsf/DOSsbyTopic/1D2B5BA917555B84CA25706E0074D0B9?OpenDocument>

²⁴ More information here: <https://www.qleave.qld.gov.au/community-services/workers/how-portable-long-service-leave-works>



Methodology

The research team selected a representative sample of SSOs which were members of Queensland social services peak bodies²⁵ to support, as far as possible, the potential of the extrapolability of the findings across the whole of Queensland's social services industry. In all, 32 SSO members of peak bodies were invited to participate in waves of data collection undertaken in 2022. These organisations used their own resources to collect and report financial, activity and human resources data relevant to three financial years: 2019, 2020, and 2021.

This data was compiled in an MS excel template developed and provided by the research team. The data collected was based on financial, operational, and business information to be analysed for deeper comprehension of activity changes, cost drivers, and further qualitative insights into the SSOs' sustainability experiences and trajectory.

Secondary indexation information and data was also compiled and compared to the SSO data. These data included ABS publicly available indexes and data obtained from the Australian Charities and Not-for-profits Commission (ACNC) Annual Information Statement data cube. The ABS calculates and publishes most of its indexes on a quarterly basis for either capital city, state, or a nationally weighted figure.

The ACNC AIS statement data is released sometime after the reported years have concluded and the most recent AIS dataset available to us for evaluation in the context of this project was that of the 2020 financial year. Of the relevant sample of charities registered with the ACNC for Queensland at this time, 1,850 were deemed relevant to the population of the research.

The data collected from SSOs was compiled and processed to represent the cost changes experienced by SSOs by using summary statistics of aggregate and median changes. Individual client numbers as reported by organisations were used as a proxy for activity change. This is a significant part of the analysis—not all expense increases are caused by changes in pricing, activity changes impact aggregate changes in expenses as well. That is, the more clients served, the higher costs are for an organisation.

Of the organisations who contributed, there was significant diversity in cost changes, size of organisation, and type of services provided which alters types and proportions of costs incurred. Therefore, we used the median change to underpin our descriptive analysis.

Data retrieved from the ACNC was compiled and compared to support our analysis and to allow for a deeper understanding of the current state of the sector and our findings.

As indicated above, and as part of the analysis process, we attempted to populate the Ideal Fisher Index and Laspeyres Index. Due to the nature of the data received and the detail required to populate the indexes, the analysis team were unsuccessful in producing appropriate results. This further cemented the intent of using the median results for our descriptive analysis.

Outliers were significant in the sample as the heterogeneity of the sector provides diverse datasets by way of operational size, activity, and cost. Using typical statistical methods of identifying outliers classified a considerable amount of data. Hence, using the median for representation was further supported. Readers should contact the authors if they have queries or require further information regarding the statistical analysis of the data or the data itself.

²⁵ Queensland Council of Social Service (QCOSS), Queensland Network of Alcohol and Other Drug Agencies (QNADA), Queensland Alliance for Mental Health (QAMH), Volunteering Queensland (VQ), PeakCare, Financial Counsellors Association of Queensland (FCAQ), Community Legal Centres Queensland, The Centre for Women & Co. and Queensland Meals on Wheels



Data & Analysis

The quality and quantity of data available for the analysis of the social services industry in Queensland are, like that of other jurisdictions in the Commonwealth, limited. This impacts the extent to which the analysis can be said to be representative of the entire industry in the state. This is a well-known phenomenon and has been well documented.²⁶

The data used was limited to the financial years 2019, 2020 and 2021 due to the varying balance dates used by contributors and the availability of data from the ACNC (charities registered with the ACNC and which have their head office in Queensland) at the time of analysis which we use to triangulate our findings. Collecting more detailed retrospective data would have cost the SSOs considerably in time and money while the value of the data was unlikely to change the outcome of the research.

Data cleaning ensured that representative data from the ACNC records remained relevant to this research: Basic Religious Charities (BRCs), charities that did not receive any financial resources via government grants or government procurement, and any charities operating outside of the scope of social services were removed from the data set.

In all, while we were able to identify relevant data from 6,608, 6,622 and 6,607 registered charities for the 2018, 2019 and 2020 financial years respectively, we were only able to use the data from 1,850 ACNC registered charities because they were the only organisations that fell into the pool of analysed charities with continuous registration for the three years relevant to the study (see Table 1).

Table 1: Non-applicable charities removed from the ACNC Sample

	2018		2019		2020	
Total Charities registered - Queensland	6,608		6,622		6,607	
Basic Religious Charities	1,302	(19.7%)	1,308	(19.8%)	1,301	(19.7%)
Non-recipients of government funding	2,805	(42.5%)	2,812	(42.5%)	2,360	(35.7%)
Remainder of charities	2,383 (36.1%)		2,502 (37.8%)		2,946 (45.0%)	
Charities registered for all three years	1,850	(28.0%)	1,850	(27.9%)	1,850	(28.0%)
Total relevant charities not included	533	(23.4%)	652	(26.0%)	1,096	(37.2%)

It is likely that there are additional organisations relevant to this study which we cannot capture. For instance, the ACNC withholds reporting on some charities for numerous reasons.²⁷ Additionally, there are registered charities that operate in Queensland which are not able to be captured because their head office is located in another state, or their head office has not been listed in the AIS. Finally, not all recipients of government financial resources for social services are considered charities nor registered as charities. Therefore, these figures are likely to be understated.

Cost indexes incorporate the prices and quantity of goods purchased (including labour) to support the comparison of costs across time periods. This creates difficulties in relation to data collection because SSOs do not usually maintain their data in a way that supports the requirements of an indexation calculation. For instance, to calculate an index, it is necessary to understand the cost increases and activity increases for all elements over time.

²⁶ For instance, please see Gilchrist, D. J., P. A. Knight & T. Emery, 2020, "Green Paper 1: Data Assets, Efficiency and the NDIS", A Report of Not-for-profits UWA, Perth, Australia available at: <https://www.uwa.edu.au/schools/Research/Centre-for-Public-Value/Publications>

²⁷ Australian Charities and Non-Profits Commission, "Information on the Charity Register: Withheld Information", Available at: <https://www.acnc.gov.au/charity/about-acnc-charity-register/information-charity-register/information-charity-register-withheld-information>



Outlier data points by way of significant bequests, errors, or mergers were also removed. Outlier detection and removal from such formulas—a common method of data management and cleaning in statistical operations—may not be appropriate as the outliers may be relevant to the picture being presented. This is an additional reason as to why we are primarily reporting on the median SSO only rather than the aggregate.

Self-reported data from SSOs was contributed by 32 organisations. This means many organisations were not able to contribute, while, of those organisations who were able, some provided truncated data due to capacity constraints. Unfortunately, this impacted both the quantity of data received and the quality of that data.

Limitations

As outlined above, availability, access and detail of data were restricted. Therefore, readers should be aware of the following limitations when interpreting the results:

- The data provided by SSOs is not extrapolatable across the industry though the findings are likely representative of the general sustainability pressure the industry is under.
- The results published are specific primarily to the median organisation and evidence the change in the cost of operation experienced by that organisation.
- It is likely that the quantum of the cost of operation expressed herein is not representative of the industry. However, our assessment of the data provided suggests that the causes, magnitudes and impacts of these changes are likely reflective of the experience of Queensland SSOs though the magnitude of impact may be differently experienced by individual organisations.
- Using the median SSO as the primary analytical reference confirms that half of the SSOs submitting data were impacted **more detrimentally** and half **less detrimentally** than the median organisation.
- Although Queensland showed impacts of COVID-19 responses in the data collection period, short-term and long-term impacts are yet to be fully understood. Likewise, any change in trajectory from pre-COVID to post-COVID operations cannot yet be assessed with the data available. We only report on what we were able to verify.
- The data collection process likely indicates further under-representation in the results. As the data collection was, ultimately, a self-reporting process, organisations who were able to contribute were those that had available resources to do so. Therefore, organisations that may be impacted more severely by financial pressure were unable to contribute for those very reasons and hence are not represented. Thus, it is likely that the financial pressure impacting the sector is more substantial than represented herein.

Ultimately, we are comfortable that the analysis and commentary presented are of significance and should inform policy development in the short, medium and longer-term.



Findings

We have outlined above why the current indexation model is inappropriate. Further information pertaining to this, and other technical issues is contained in our independent report focusing on indexation and human services in Australia.²⁸ In this section we describe our findings resulting from this research.

Table 2: Headline results – SSO median data adjusted for activity growth²⁹

	2019—2020	2020—2021
Queensland Government Indexation	2.81%	2.38%
Aggregate Change in Expenditure SSOs	19.9%	14.49%
Median Change in Expenditure SSO	6.73%	15.73%
Median Change Total Expenses ACNC Data	3.76%	-
Wage Price Index - Queensland ³⁰	1.5%	2.0%
Wage Price Index - Health Care and Social Assistance-Australia ³¹	3.2%	1.9%
Median SSO Labour Cost Increase (Adjusted for Service Change)	7.36%	11.91%
Median Change Employee Expenses ACNC Data	7.28%	-
Consumer Price Index - Brisbane ³²	0.6%	3.9%
Consumer Price Index - Health - Brisbane ³³	1.1%	5.6%
Producer Price Index – Other Allied Health Services - Australia ³⁴	2.2%	3.2%
Aggregate Change in SSOs Profit/Loss Reported	-45.85%	121.89%
Median Change in SSOs Profit/Loss Reported	-12.29%	-50.30%

²⁸ Gilchrist, D. J. & Feenan, C., (2023), Human Services and Cost Indexation Methodologies in Australia, a report developed by the Centre for Public Value, UWA Business School, Perth, Australia. See also: Gilchrist, D. J. and Feenan, C., (2023), Challenging the Framework for Price Indexation in Australian Human Services Procurement”, a report by the Centre for Public Value, UWA Business School, Perth. Both available at:

<https://www.uwa.edu.au/schools/Research/Centre-for-Public-Value/Publications>

²⁹ ABS indexes reported are on the quarters used by treasury for indexation of that year. Treasury uses data from Q3 to the previous year so it may close confirm budgets by the start of the financial year. Hence, these numbers do not reflect calendar nor financial year time periods.

³⁰ Australian Bureau of Statistics “Wage Price Index” Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?fs\[0\]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df\[ds\]=ECONOMY_TOPICS&df\[id\]=WPI&df\[ag\]=ABS&df\[vs\]=1.0.0&pd=2019-Q1%2C2021-Q3&dq=3.THRPEB..TOT..6.Q&ly\[rw\]=TIME_PERIOD&ly\[rs\]=SECTOR](https://explore.data.abs.gov.au/vis?fs[0]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df[ds]=ECONOMY_TOPICS&df[id]=WPI&df[ag]=ABS&df[vs]=1.0.0&pd=2019-Q1%2C2021-Q3&dq=3.THRPEB..TOT..6.Q&ly[rw]=TIME_PERIOD&ly[rs]=SECTOR)

³¹ Australian Bureau of Statistics “Wage Price Index” Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?fs\[0\]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df\[ds\]=ECONOMY_TOPICS&df\[id\]=WPI&df\[ag\]=ABS&df\[vs\]=1.0.0&pd=2017-Q1%2C&dq=.THRPEB..Q%2BTOT...Q&ly\[cl\]=MEASURE&ly\[rw\]=TIME_PERIOD&ly\[rs\]=SECTOR](https://explore.data.abs.gov.au/vis?fs[0]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df[ds]=ECONOMY_TOPICS&df[id]=WPI&df[ag]=ABS&df[vs]=1.0.0&pd=2017-Q1%2C&dq=.THRPEB..Q%2BTOT...Q&ly[cl]=MEASURE&ly[rw]=TIME_PERIOD&ly[rs]=SECTOR)

³² Australian Bureau of Statistics “Consumer Price Index (CPI) 17th Series.” Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?fs\[0\]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df\[ds\]=ECONOMY_TOPICS&df\[id\]=CPI&df\[ag\]=ABS&df\[vs\]=1.1.0&pd=2018-Q3%2C2021-Q3&dq=1%2B2%2B3.10001%2B20001%2B20002%2B20003%2B20004%2B20005%2B20006%2B115486%2B115488%2B115489%2B115493%2B126670%2B999901%2B999902%2B999903.10%2B20.3%2B50.Q&ly\[cl\]=REGION&ly\[rw\]=MEASURE%2CTIME_PERIOD&ly\[rs\]=TSEST%2CINDEX](https://explore.data.abs.gov.au/vis?fs[0]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df[ds]=ECONOMY_TOPICS&df[id]=CPI&df[ag]=ABS&df[vs]=1.1.0&pd=2018-Q3%2C2021-Q3&dq=1%2B2%2B3.10001%2B20001%2B20002%2B20003%2B20004%2B20005%2B20006%2B115486%2B115488%2B115489%2B115493%2B126670%2B999901%2B999902%2B999903.10%2B20.3%2B50.Q&ly[cl]=REGION&ly[rw]=MEASURE%2CTIME_PERIOD&ly[rs]=TSEST%2CINDEX)

³³ Australian Bureau of Statistics “Consumer Price Index (CPI) 17th Series.” Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?fs\[0\]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df\[ds\]=ECONOMY_TOPICS&df\[id\]=CPI&df\[ag\]=ABS&df\[vs\]=1.1.0&pd=2018-Q3%2C2021-Q3&dq=1%2B2%2B3.10001%2B20001%2B20002%2B20003%2B20004%2B20005%2B20006%2B115486%2B115488%2B115489%2B115493%2B126670%2B999901%2B999902%2B999903.10%2B20.3%2B50.Q&ly\[cl\]=REGION&ly\[rw\]=MEASURE%2CTIME_PERIOD&ly\[rs\]=TSEST%2CINDEX](https://explore.data.abs.gov.au/vis?fs[0]=Economy%2C0%7CPrice%20indexes%20and%20inflation%23PRICE_INDEX_INFLATION%23&pg=0&fc=Economy&df[ds]=ECONOMY_TOPICS&df[id]=CPI&df[ag]=ABS&df[vs]=1.1.0&pd=2018-Q3%2C2021-Q3&dq=1%2B2%2B3.10001%2B20001%2B20002%2B20003%2B20004%2B20005%2B20006%2B115486%2B115488%2B115489%2B115493%2B126670%2B999901%2B999902%2B999903.10%2B20.3%2B50.Q&ly[cl]=REGION&ly[rw]=MEASURE%2CTIME_PERIOD&ly[rs]=TSEST%2CINDEX)

³⁴ Australian Bureau of Statistics “Producer Price Indexes by Industry.” Explore.data.abs.gov.au. Available at:

[https://explore.data.abs.gov.au/vis?tm=producer%20price%20index&pg=0&hc\(dimensions\)=Index&df\[ds\]=ECONOMY_TOPICS&df\[id\]=PPI&df\[ag\]=ABS&df\[vs\]=1.0.0&pd=2018-Q3%2C2021-Q3&dq=1%2B4.8193755..Q&ly\[cl\]=TIME_PERIOD](https://explore.data.abs.gov.au/vis?tm=producer%20price%20index&pg=0&hc(dimensions)=Index&df[ds]=ECONOMY_TOPICS&df[id]=PPI&df[ag]=ABS&df[vs]=1.0.0&pd=2018-Q3%2C2021-Q3&dq=1%2B4.8193755..Q&ly[cl]=TIME_PERIOD)



Disappointingly, and as reported above, we were unable to identify a suitable existing indexation proxy for the industry that is currently calculated by the ABS. All identified likely candidates for being a proxy result in a materially different indexation value as compared to the median cost changes reported herein and that of the ACNC registered entities. Table 2 provides a comparison of key data headline results.

Table 2 shows that the Queensland Government's indexation calculation for the relevant years is over 2.25 times less than the experienced cost increase reported by the median SSO for 2019-20 and over 6.5 times less for 2020-21. It is also over 7 and 6 times less than the aggregate change in experienced costs reported by all SSOs in those years respectively.

Activity-sensitive costs were adjusted using reported individual client numbers by the SSOs as a proxy for activity change (increase in net service year-on-year). This can then be used to compare the Labour costs to ABS WPI for both Queensland and Australia's Health Care and Social Assistance indexes.

The SSO data reports cost changes of 4.9 times greater than the Queensland WPI and 2.3 times that of the Health Care and Social Assistance-Australia index for 2019 and is supported by similar ACNC data. For 2020 data, the Health Care and Social Assistance WPI is closer to the Queensland WPI, although SSO data is 6 times that amount.

These increases in expenditure are not supported by the same rates of income changes and this is reflected in the Profit/Loss lines reported by SSOs. Both years' median results show reduced profit year-on-year by way of negative indexes and each are clearly considerably less than the comparative CPI calculated by the ABS.

It is worth noting that aggregate profit increase in 2021 represents multiple organisations which received the first instalments of funding for multi-year agreements, but the activities associated were yet to be reflected in expenditure. The specific amounts were not able to be identified by the time of publication of this report. Hence, the median figure is deemed the best representation.

Activity-sensitive costs are shown in Table 3 below, alongside the aggregate portion of expenditure per cost line. Median labour and labour-related costs have all been reported as increasing year-on-year at a rate which is significantly more than the indexation value applied by the state government as a combination of CPI and WPI, or as compared to the WPI alone.

Table 3: Key cost changes experienced by SSO median entity adjusted for activity growth

Cost Line	2019 – 2020			2020 – 2021		
	Changed based on Individual Clients	Portion of Expenditure		Changed based on Individual Clients	Portion of Expenditure	
Labour	↑	7.36%	61.01%	↑	11.91%	57.58%
Labour On-Costs	↑	8.22%	10.32%	↑	9.67%	8.06%
Agency Staff Costs	↑	22.31%	2.52%	↓	-40.74%	1.76%
Mandatory PD/Training	↓	-11.25%	0.21%	↑	23.98%	0.51%
Other PD/ Training	↓	-39.95%	0.23%	↑	28.55%	0.35%
Supervision	↓	-2.27%	4.97%	↑	11.22%	4.64%
Clinical Supervision	↑	7.92%	0.81%	↑	21.31%	1.61%
Milage/ Travel Costs - Paid to Staff	↓	-27.55%	0.47%	↑	2.41%	0.31%
Employee Recruitment Costs	↓	-15.59%	0.32%	↑	9.57%	0.16%
Clerical Support Costs	↑	1.13%	0.40%	↑	20.64%	5.32%
Quality Compliance Staff Costs	↑	2.74%	0.33%	↑	9.04%	2.13%
OH&S Compliance Costs - Labour Costs	↑	0.72%	0.10%	↑	3.67%	0.89%
Client Related Expenses	↑	26.68%	15.37%	↑	4.15%	19.81%



Importantly, the reported increase based on service change was 4.9 times the Wage Price Index for Queensland for 2019/20 and 6 times the Wage Price Index for 2020/21. State WPI for 2019/20 and 2020/21 were 1.5% and 2.0% respectively, while comparing SSO labour without accounting for service change grew by 19.8% and 17.9% respectively in the aggregate and by 12.2% and 13.6% respectively for the median SSO. An increase in 2019/20 of 7.28% was also reported for the ACNC median.

There are reported several cost elements that moved according to expectations. For instance, additional labour on-costs and clinical supervision have all increased corresponding to anecdotal evidence year-on-year. Importantly, quality compliance staff costs have also increased by a material amount during this period (2.74% and 9.04% year-on-year for the median SSO adjusted for service).

It cannot be said which changes were impacted by COVID-19. However, the 2019/20 year showed decreases in many cost lines while the 2020/21 year shows increases in all but agency staff costs. For the cost lines which reduced in 2019/20, increases in 2020/21 counteracted any gain and often resulted in a further increase.

Additionally, changes in operational arrangements (for instance, increases in quality assurance processes applied as a result of changes in government policy) also drove costs up as additional staff were required to meet obligations. Of course, superannuation increases represent a significant cost burden, but these are not represented in the ABS' WPI model. A commonly reported additional cost line was 'client related expenses' with almost 20% of organisations sharing this additional information. This cost line increased by 26.68% and 4.15% respectively when reflecting service change with expenditure weightings of 15.37% and 19.81% for those organisations.

Table 4: Key operational cost changes experienced by the median SSO

Cost Line	2019 — 2020		2020 — 2021	
	Change from previous Year	Portion of Expenditure	Change from previous Year	Portion of Expenditure
COVID Costs	↑ 84.0%	7.82%	↓ -37.0%	0.67%
Quality Control/Compliance	↑ 20.9%	0.17%	↑ 22.0%	0.26%
Marketing	↑ 16.7%	0.60%	↓ -8.7%	0.75%
HR Staff Costs	↑ 4.1%	1.66%	↑ 5.5%	2.41%
OH&S Compliance Costs - Exclude Labour	↓ -31.3%	0.15%	↑ 16.9%	0.14%
CALD-specific Costs	↓ -18.0%	6.35%	↓ -18.3%	5.37%
Volunteer Recruitment & Management	↓ -1.2%	0.08%	↑ 28.0%	0.08%
Volunteer Management Staff Costs	↑ 32.4%	1.87%	↑ 1.5%	1.61%
Volunteer Training Costs	↓ -27.8%	0.12%	↓ -11.9%	0.05%
Event Costs	↓ -32.8%	2.70%	↑ 42.6%	0.45%
Audit	↑ 12.2%	0.39%	↑ 6.7%	0.36%
External Accounting / Bookkeeping Costs	↑ 9.4%	0.14%	↑ 11.7%	0.13%
Legal Costs	↓ -51.9%	0.43%	↑ 2.1%	0.39%
Consultant Costs	↓ -1.0%	2.18%	↑ 10.7%	1.72%
Bank Fees & Charges	↑ 15.5%	0.05%	↓ -0.2%	0.05%
Interest Costs	↓ -36.3%	0.11%	↓ -17.8%	0.23%
Facilities	↓ -0.4%	7.06%	↑ 13.5%	4.75%
Motor Vehicles	↓ -6.4%	1.30%	↑ 0.1%	1.10%
Intra-State Travel Costs	↓ -24.2%	1.42%	↓ -11.8%	1.43%
Inter-State Travel Costs	↓ -30.8%	0.33%	↓ -74.7%	0.20%
General Insurance Costs	↑ 12.0%	0.58%	↑ 15.2%	1.22%
Bad Debts Costs	↓ -72.1%	0.31%	↓ -79.5%	0.22%
Provision for Bad Debts at Balance Date	↓ -94.2%	0.16%	↑ 850.0%	0.11%
All Other Costs	↑ 14.9%	11.94%	↑ 20.3%	8.75%
Depreciation Charged	↑ 9.0%	3.67%	↑ 3.9%	3.70%
Amortisation Charged	↑ 0.5%	1.44%	↑ 3.6%	0.74%
Employee Entitlement Accrual	↑ 11.7%	1.57%	↑ 4.1%	3.77%
Reserves as at Year End	↑ 1.7%	23.56%	↑ 18.7%	26.76%
Loss on Sale of Asset	- -100.0%	0.03%	↓ -100.0%	0.28%
IT Subscriptions	↑ 10.5%	0.79%	↑ 26.5%	0.97%



Table 4 provides evidence of cost increases incurred by the median SSO for non-labour related operational costs. It can be seen that overhead expenditure and administration costs have increased over time. For instance, HR Staff costs, Audit, and External Bookkeeping/Accounting costs have all increased in the periods recorded at rates above the published CPI.

There may also be impacts arising from the COVID shock. For instance, interstate Travel, and intra-state travel were significantly reduced across the period.

These findings are not extrapolatable for the entire industry. However, we have shown that the current indexation values do not characterise the cost impacts on the industry by a considerable margin. The flow on effects from these differences further impact organisations' operations resulting in decisions made that are more defensive and conservative as financial pressure mounts, impacting the service users and communities that are most vulnerable in the state as it results in a contraction of the service mix and reduced investment.

As shown in Table 5, expenditure of employee expenses for the ACNC median organisation has increased over the reported time with concomitant reductions in the median net surplus also reported—viz: ↓88.18% and ↓29.66% between 2018/19 and 2019/20 respectively. We note that the cause of financial distress is cumulative inadequate pricing while COVID has emphasised the financial pressure rather than being a root cause.

Table 5: Cost drivers - Median ACNC Data and modified z-score

	2018 — 2019		2019 — 2020	
Employee Expenses	↑	3.45% (0.74) ³⁵	↑	7.28% (0.09)
Interest Expenses	↓	-99.99% (0.00)	↓	-19.02% (0.34)
All Other Expenses	↑	6.05% (0.73)	↓	-1.07% (0.19)

The impacts of unsustainable funding and income structures for non-profits have often been raised over time.³⁶ While we can acknowledge these are realities for the industry, we can also see that the above empirical evidence shows that current indexation arrangements are contributing to unsustainable funding frameworks.

³⁵ the modified Z-Score (in parentheses) represents the adjusted standard deviation highlighting the movement on either side of the presented score.

³⁶ For instance, see: ³⁶ Gilchrist, D. J. & Emery, T., (2021), The Challenge of Sustainability: Queensland's Not-for-profit Sector and the Impact of Growing Financial Pressure, a report of the UWA Not-for-profits Research Team for the Queensland Council of Social Service, Brisbane, Australia. Available here: <https://www.uwa.edu.au/schools/Research/Centre-for-Public-Value/Publications>



Estimating indexation in the short term – an ABS calculated proxy

It is clear that the indexation formula used by the state government to arrive at the indexation rate does not reflect the real cost increases in material terms. We have estimated the accumulated indexation shortfall based on SSO expenditure and the results are provided in table 6 below. In that table it can be seen that the total shortfall is estimated at 17.80% over the two years using the median entity reported cost changes.

Therefore, a conservative estimate of the minimum boost of funding required for to rectify the difference between 2019 and 2020 is 17.80% in order to cover this gap. It is also critical that, given the accumulated gap, that a funding re-setting process be operationalised in order to reset the cost base to ensure sustainability of service delivery.

Table 6: SSO Cumulative Indexation Shortfall Year-on-Year

	2019 - 20	2020 - 21	2021 - 22	2022 - 23
State Government Indexation	2.81%	2.38%	1.50%	5.07%
<i>Cumulative</i>	-	5.26%	6.69%	11.76%
SSO Median Expenditure	6.73%	15.73%	-	-
<i>Cumulative</i>	-	23.52%	-	-
Difference	3.92%	13.35%	-	-
<i>Cumulative</i>	3.92%	17.80%	-	-

In the time since this data has been compiled and reported on, there have been significant additional economic shocks impacting Australia. Increases in fuel and energy costs, housing, and interest rates have impacted the whole country and, while these price changes impact direct and subsequent cost lines and accessibility, they also impact the complexity and demand for supports from SSOs.

Queensland has faced further economic and social impacts in addition to the rest of Australia. For instance, destructive flooding has been recorded year-on-year since this data collection. This is noted as the report findings are likely to be understated for the cohort by amount of service users, and costs to SSOs operating in and near these regions, including food, accommodation, housing, insurance premiums, etc.

The nature of indexation is that accurate estimates cannot be provided for time periods without relevant data. Table 7 provides estimates of the cumulative indexation shortfall experienced by the industry. Significant changes in inflation and labour costs have occurred since the time of the data collection of SSOs, which alters the trajectory of indexation.

Taking all these factors into account, we have produced theoretical and conservative estimates for years 2021 and 2022 with a final cumulative figure to be rectified of 29.44%. These are shown in table 7 with estimates and Table 8 with considered impacts to 2022/23 budget. If this figure is to be considered it requires the acceptance of several assumptions in addition to the indisputable figure of mandatory super increase of 0.5% and modern award wage increase of 4.6%.

These assumptions include the use of a proxy index formulated by using current ABS indexes, and labour cost component. This proxy is theoretically reflective of the current policy but uses combinations of WPI and CPI relevant to the Queensland human services sector and actual weightings produced by analysis. This proxy does not disregard that the WPI excludes labour-on-costs but would require updates by manual intervention for ongoing relevance.



Table 7: Estimated Indexation Shortfall Year-on-Year

	2019 - 20	2020 - 21	2021 - 22	2022 - 23
SSO Median – Non-Labour Costs	2.80%	6.41%	-	-
Median SSO Non-Labour Cost Weight of Expenditure	38.99%	42.42%	-	-
<i>Estimated</i>	-	-	40%	40%
CPI – Brisbane	1.90%	0.60%	3.90%	-
CPI – Health – Brisbane	1.10%	5.60%	3.40%	-
Non-Discretionary CPI – Australia	-4.80%	2.90%	9.86%	-
SSO Median – Labour Costs	9.10%	13.63%	-	-
Median SSO Labour Cost Weight of Expenditure	61.01%	57.58%	-	-
<i>Estimated</i>	-	-	60%	60%
WPI – Queensland	1.50%	2.00%	3.40%	-
Health & Social Assistance WPI – Private Sector – Queensland	2.30%	2.50%	3.40%	-
Proxy 2 x (Health Care & Social Assistance CPI Brisbane + Health Care and Social Assistance Private WPI Queensland)³⁷	6.80%	16.20%	13.60%	-
Difference from Proxy and SSO Median	0.07%	0.47%	-	-
<i>Cumulative</i>	0.07%	0.53%	-	-
Difference from Proxy and State Government	3.99%	13.82%	12.10%	-

Until there is an appropriate index for human services organisations in Queensland, the combined use of Health Care and Social Assistance CPI Brisbane and Health Care and Social Assistance- Private- Queensland WPI appears to be an appropriate proxy. The identified proxy shows conservative figures which produce a cumulative difference of 0.53% from actual SSO median expenditure over years 2019-2021. This indicates that although a theoretical proxy, the difference from real expenditure is justifiable.

Table 8 provides the compilation of cumulative shortfalls of the government index as shown in tables 6 and 7. This includes the minimum amount of additional expected expenditure for labour costs due to minimum mandatory increases in this area.

In the below table, the right-hand column is populated with new information and the bottom row takes information from tables 6 and 7 above. Information for years 2019/20 and 2020/21 are derived from table 6, the SSO difference to government indexation and 2021/22 from table 7 as the difference from the theoretical ABS proxy to the indexation amount provided by the state government.

³⁷ We note here that the total expenditure proxy is an index of 4. The CPI is compiled by discretionary and non-discretionary indexes with non-discretionary spending increasing greater than discretionary. Theoretical economic concepts show that in times of limited resources, non-discretionary spending increases in proportion of expenditure.



Table 8: Cumulative and Estimated Indexation Shortfall Year-on-Year

	2019 - 20	2020 - 21	2021 - 22	2022 - 23
Mandatory Super Increase				0.50%
Award Wage Increase				4.60%
Labour Cost Increase				5.10%
a) 0.75 Labour Cost Increase + 0.25 Brisbane CPI				5.80%
b) 0.6 Labour Cost Increase + 0.4 Brisbane CPI				6.22%
c) 0.6 Labour Cost Increase + 0.4 Non-Discretionary CPI- Australia				7.02%
d) 0.6 Labour Cost Increase + 0.4 non-Labour Proxy				5.78%
Difference from conservative index proxy b) and State Government				1.15%
Difference from proposed proxy d) and State Government				0.71%
Government Indexation Recommendation				
Identified shortfalls	3.92%	13.35%	12.10%	1.15%
<i>Cumulative</i>	<i>3.92%</i>	<i>17.80%</i>	<i>29.44%</i>	<i>30.53%</i>

Table 8 shows the mandatory changes in award rate and superannuation for labour costs only for 2022/23 as non-labour costs are not known for prospective indexation. Using 60% of total index component of labour costs as seen above, an increase of 5.10% and combinations of CPI, including the current state government indexation formula of 0.75* Queensland WPI and 0.25* Brisbane CPI are also shown.

Due to inflation of 2022, the state government's raise to 5.07% indexation doesn't cover the increases for mandatory labour costs. Whichever combination of CPI and labour component used above shows differences from 0.60% to 1.95% from the state government indexation as released for 2022/23.

Without knowing increases in non-labour costs, using the proxy defined in table 7, an estimate of 5.78% is represented using 60% labour component and non-labour component as previously discussed. However, estimates of using indexes previously used by state government or other theoretical options are all higher than the allocated 5.07%. The table below uses this proxy difference with differences from previous years to compute a cumulate conservative number 30.53% difference from 2019.

Concluding Comments and Recommendations

The examination of the evidence gathered via SSOs and the ACNC data cube reinforces concerns over the appropriateness of the current indexation model applied by the Queensland government. The ever-increasing financial pressure being experienced by SSOs will have a significant impact on their sustainability and, therefore, on the sustainability of service delivery with the people relying on the services and supports bearing the ultimate impact of service mix changes.

The indexation determined for the 2022/23 financial year was 5.07%. This indexation only covers the mandatory labour cost increases such as superannuation. It does not cover any other cost increases. We have estimated the cumulative indexation gap from 2019 to 2022 to be 30.53%.

On these figures our estimates are that the following are required:

- one-off payment of 14.72% indexation to halve the cumulative indexation gap from 2019 to 2022 only
- indexation for the 2022/23 financial year be raised to 6.22%.



Directors and executives of SSOs have no choice but to respond to increasing pressures and reducing organisational sustainability by changing their service mix, including in relation to the quantity, quality, timing and location of service delivery. Such changes may occur with limited notice or capacity for countermeasures and the impacts on the community can be devastating.

Finally, we confirm that there currently does not exist a suitable proxy indexation model calculated by the ABS that would be effective in replacing the current inappropriate model.

There are three major responses possible here in order to rectify the indexation arrangements and we would suggest pursuing them concurrently given the need for immediate rectification and the prospects for achieving savings in the future:

- 1) Adopt a total indexation requirement for 2022/23 at 6.22%.

AND

- 2) The ABS already calculates a Health Care and Social Assistance Industry Index. The combined index is not adequate for the purposes of indexation in Queensland as it does not reflect the social service industry. As a priority, the Queensland Government and the industry peaks should collaborate to advocate for change in the approach taken by the ABS toward the development of a specific-purpose industry cost index. This would reduce the cost to the state government and the industry while also ensuring the ABS contribution is as relevant as possible.

OR

- 3) If point 2 above is not able to be pursued, adopt a suitable industry index and collect data needed to calculate at least annually. Statistically speaking, and as reported by us, the Laspeyres Index is the most efficient of the relevant indexes available to us.³⁸ As reported above, the ABS uses this index in its industry indexation calculations and there is a real opportunity for the method to be applied in the Queensland context. The industry peak bodies and the Queensland government should collaborate to confirm the relevance of the Laspeyres model and undertake the indexation calculation using that model on an annual basis. This would require:
 - a. The identification and allocation of resources from government in order to support the implementation process and the on-going operation of the scheme, including in relation to financial support to SSOs chosen as part of the panel to contribute their data
 - b. The industry and state government to agree a panel of SSOs from which data will be collected with panel members being selected based on the need to represent the industry in Queensland
 - c. The industry and state government agree the data attributes required
 - d. The establishment of a data collection process (preferably automatic and direct)
 - e. The establishment of an analysis and reporting process, including the identification of a body to undertake these processes.

Rectifying the indexation methodology will help ensure sustainability, efficiency and effectiveness in the delivery of social services in Queensland into the future.

³⁸ Gilchrist, D. J. & Feenan, C., (2022), Human Services and Cost Indexation Methodologies in Australia, a report developed by the Centre for Public Value, UWA Business School, Perth, Australia.