Detailed analysis of SEIFA indexes: Understanding capacity to pay in CBCity

In order to best understand the impact on ratepayers across the community, Council dedicated significant resources to understanding the impact on ratepayers and capturing the views of the community. To achieve this, Council had to both understand the socio-economic position of its residents, and engage with the community in a meaningful and productive capacity, to both quantify and qualify their capacity to afford the special variation rate increase. Council's engagement strategy and process is detailed in Criteria 2 of this application. Council's method of analysis in regards to capacity to pay, is detailed below.

Council first assessed data from the Australian Bureau of Statistics to begin the process of quantifying the impact on ratepayers through first understanding their existing economic conditions. Without such an assessment, it would have been impossible for Council to determine the reasonableness of the increase, and meaningfully engage with the community on issues that concerned them about the special variation.

Council first began this process with an examination of the Socio-Economic Indexes for Areas (SEIFA). SEIFA indexes are based on information taken from the five-yearly Census of Population and Housing, and provide an insight into advantage, disadvantage, and the disparity between the two in a given location. Council utilised all four indexes provided by the ABS, with the data coming from the 2016 Census of Population and Housing: The Index of Relative Socio-economic Disadvantage (IRSD); The Index of Relative Socio-economic advantage and Disadvantage (IRSAD); The Index of Education and Occupation (IEO); and the index of Economic Resources (IER). Each index is comprised of a different subset of the 2016 Census data and addresses a different aspect of a populations and locations socio-economic position.

The following table contains a breakdown of the four SEIFA indexes with data taken from the 2016 Census. The table is broken down by State Suburb (SSC) and contains the typical population within that suburb. Discrepancies between suburb population and LGA population can be attributed to the borders of the LGA across suburbs, and any differences are minimal.

Suburb	IRSD Decile	ISRAD Decile	IER Decile	IEO Decile	Population
Villawood	1	1	1	1	6032
Lakemba	1	1	1	2	17023
Chester Hill	1	2	1	2	12814
Punchbowl	1	2	2	2	20236
Bankstown	1	2	1	3	32113
Wiley Park	1	2	1	3	10126
Belmore	2	3	1	3	12718
Yagoona	1	2	2	3	18013
Sefton	1	3	2	3	5808
Bass Hill	2	3	2	3	9069
Riverwood	1	2	1	4	2500
Birrong	2	3	2	4	3103
Greenacre	2	3	2	4	24373
Condell Park	2	4	4	4	11574
Campsie	2	3	1	5	25451
Mount Lewis	2	4	3	5	1195

Revesby	4	6	3	5	14176
Roselands	3	5	4	5	11579
Clemton Park	4	6	5	5	1666
Georges Hall	5	6	6	5	9038
Milperra	9	8	9	5	3952
Narwee	2	5	2	6	4000
Belfield	4	7	4	6	6322
East Hills	5	7	4	6	3206
Padstow	5	7	4	6	13306
Panania	6	7	5	6	12419
Canterbury	5	7	2	7	7233
Kingsgrove	5	7	5	7	6000
Padstow Heights	8	9	8	7	3540
Croydon Park	7	8	5	8	5000
Earlwood	7	9	7	8	17741
Picnic Point	9	10	9	8	6160
Hurlstone Park	7	9	5	9	4692
Potts Hill	7	10	9	9	893
Ashbury	9	10	9	9	3329
Revesby Heights	9	10	9	9	1667

In order to better understand the breakdown of each SEIFA index, Council calculated the percentage of each resident that fell in to the five quintiles of each index. Each table below represents the total population of Canterbury-Bankstown as measured in the 2016 Census, the population within the city that comprises each quintile of the Index, and the proportion of the city's population that category comprises. These values are discussed in detail below.

SEIFA uses a candidate variable list that is consistently produced over subsequent Census datasets to ensure continuity across the data. The candidate data variables fall into a multi-dimensional framework:

Income variables,

Education variables,

Employment variables,

Occupation variables,

Housing variables, and

Other miscellaneous indicators of relative advantage and disadvantage.

Each of these variables can relate to persons, families or dwellings.

Income variables were the most important consideration in Council's quantification of the data, and the ABS concurs with their importance, assigning income variables to all but the IEO Index. The SEIFA income variable uses equivalised household income, in which income is adjusted by an 'equivalence scale', based on the number of adults and children in a household. The low income variable was of particular to interest to Council in its assessment, as it measures the potential challenge of a given resident to afford a rate increase when on a low income. For the 2016 Indexes, the ABS defines low income as an equivalised household income of \$1 to \$499 per week (\$1 to \$25,999 per year). A strong

representation of a low decile or quintile is strongly associated with incomes in this range in a given area.

Education was another area of significant consideration for Council in assessing the capacity for ratepayers to afford the special variation rate increase. Education represents an important domain in relative advantage and disadvantage, because it represents the skills people obtain at school and during post-school education, and is significantly correlated with standard of living later in life, as well as the condition of the community at large. Education not beyond Year 12, or below a Certificate III is considered low education in the Indexes.

Understanding the conditions of the COVID-19 pandemic on meaningful employment, Council also utilised the employment indicators within the Indexes to establish important metrics for employment as a source of income for residents. Employment can also be understood as more than income, in that it contributes to social participation and self-esteem, each of which contribute to the social community and the condition of the local area. Importantly, the SEIFA Indexes differentiate between unemployed and those not in the work force, where the latter are found to have significantly higher average wealth.

Occupation variables can be understood within the context of educational, employment, and income variables, where the level of skill and profession attained can be both correlated with those variables and attributed to some of them. A person with lower educational levels, is less likely to be employment, less likely to earn a higher income, and will typically have a lower occupation skill level. Understanding these variables is important for Council to understand the capacity for its residents to afford the special variation, not only at the present level presented in the SEIFA Indexes, but understanding the forward trends suggested within the data.

The final component of the SEIFA Index variables is housing related, and refers to the size, condition of a dwelling, its suitability based on the number of occupants, and the rental and ownership status of properties in a given area. Owning a house, with or without a mortgage is considered an advantage. It implies security of tenure, and is strongly correlated to greater levels of self-esteem, education, income, and employment. Owning a house with a mortgage also implies financial security, where the ability to make repayments is indicative of the capacity to earn a meaningful income, and indicates the potential future possession of a significant asset. In contrast, renting represents disadvantage, and is correlated with a poorer condition of housing, overcrowding of dwellings, lower bed counts in dwellings, and can signify a lower capacity to make payments related to housing as a result of lower income or one's status as unemployed. Each of these variables are invaluable to Council's assessment of residents' capacity to pay, and are discussed in reference to their relative Indexes in greater detail below.

Index of Relative Socio-economic Disadvantage (IRSD)

The IRSD is a summary of variables that indicate relative disadvantage. A low score in this Index signifies a relatively high proportion of disadvantaged people living in that area. It exists on a continuum, from the highest amount of disadvantage, to the lowest amount of disadvantage. We cannot deduce that an area has lots of advantage from this Index, only that it has low disadvantage. The data managed in this Index weights most heavily variables related to low income, families with children and no parents working, unemployed people, single parent households, and those without education beyond year 12.

SEIFA IRSD Sta	ate Total Po	pulationPopulation	Overall S	EIFA Overall	SEIFA
Rank (29)	2016	Percentage	Quintile 2016	Percentile	2016
CBCity	346,302	100%	2	24	

Q1	216,148	62%	
Q2	33,743	10%	
Q3	51,202	15%	
Q4	31,866	9%	
Q5	15,108	4%	

As the table above demonstrates, CBCity has a large population of residents who comprise the lowest quartile of the IRSD Index. More than 200,000 residents of the Local Government area can be considered in the lowest 20 percent of the national population in terms of disadvantage. This figure represents more than 60 percent of the entire population of CBCity. Further to this, when the IRSD is aggregated at the Local Government Area, Canterbury-Bankstown falls into the second quintile, and sits in the 26th percentile in New South Wales rankings.

While on the surface this may be understood as a demonstrated inability to afford the rate rise of a special variation, a deeper understanding of the data reveals the opposite. As discussed above, there is a strong correlation between low education, unemployment, low-income households and by extension home ownership. ABS data indicates that single-parent households, low-income households, and unemployed people are significantly less likely to own homes. Given that rate increases are applied only to those who are ratepayers, that is landowners and not renters, the rate rise would not be applied to the most disadvantaged communities in the city. Council also drew on the proportion of residents in the city who comprise the top two quartiles of the Index, representing the least disadvantage. Residents in these categories are understood to have a higher capacity to pay the rate increase, showing significantly lower levels of unemployment, single-parent households, living with a disability under 70 years of age, and unskilled labour work. As such, Council considers this data as representative of ratepayers capacity to afford the proposed rate increase.

Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD)

The IRSAD is comprised of variables that are designed to measure relative advantage in conjunction with disadvantage, spanning a continuum from most disadvantaged to most advantaged. Unlike the IRSD, a Local Government area measured in this Index can have a substantially disadvantaged population balanced by a population with more advantage. While a certain area may have a low IRSD score, it can score a higher IRSAD where the advantaged population boosts the score of the area. In this way, the IRSAD can be understood to measure the wider spectrum of a city, but can also mask pockets of intense disadvantage in an area.

SEIFA IRSAD State	•	•		Overall SEIFA
Rank (72)	2016	Percentage	Quintile 2016	Percentile 2016
CBCity	346,302	100%	3	52
Q1	118,857	34%		
Q2	93,291	27%		
Q3	40,459	12%		
Q4	57,438	17%		
Q5	38,022	11%		

In the above table, CBCity has a much greater spread of population across the five quintiles. As opposed to the IRSD table, CBCity has only 118,000 residents in the lowest quartile, representing only one-third of Canterbury-Bankstown's population. When the IRSAD is aggregated at the Local Government Area it falls in to the third quartile, and sits almost squarely in the middle of the New South Wales rankings in the 52nd percentile. This data demonstrates that the spread of advantage

and disadvantage across Canterbury-Bankstown is much greater than represented by the IRSD. It shows both a large swathe of disadvantage, but also substantial average in some portions of the city.

The data presented in the IRSAD is congruent with the conclusions drawn from the IRSD data. CBCity is a diverse city with a spread of residents from very disadvantaged, to very advantaged. Given that the IRSAD uses similar variables to those contained in the IRSD Index, one can understand the correlation between the two. Again, this data shows that a significant proportion of residents in the city comprise the top 40 percent of the Index ranking. A strong showing in these quintiles represents a significant proportion of residents in the city who hold professional employment positions, higher levels of education, live in houses that are not crowded and have more beds, and are significantly more likely to have mortgages.

In total there are 38 percent of residents who comprise this category, and they together represent almost 100,000 residents across the city. In line the with the above conclusions drawn from the ABS demonstrating the connection between advantage and home ownership, Council asserts that this data represents a significant proportion of home ownership among the top two quintiles of the IRSAD Index in Canterbury-Bankstown. Understanding that there are roughly 120,000 ratepayers across the city, we can deduce that those who make up the top two quintiles are more likely to be landowners and by extension ratepayers. In light of this, Council maintains the position that again this data reflects a demonstrated capacity to afford the proposed rate increase.

Index of Economic Resources (IER)

The IER is drawn from data variables that are exclusively concerned with income and wealth in relation to advantage and disadvantage. Unlike the IRSD and IRSAD, the IED is constructed to represent the level of income and wealth, be it high or low, in a given area. As above, the Index exists on a continuum, from those with the lowest income and level of wealth, to those with the highest income and a greater level of economic success.

SEIFA IER State Rank (25)	•	•	Overall SEIFA Quintle 2016	Overall SEIFA Percentile 2016
CBCity	346,302	100%	2	26
Q1	210,612	61%		
Q2	61,358	18%		
Q3	38,815	11%		
Q4	21,281	6%		
Q5	14,334	4%		

The above table paints a starker picture than any other SEIFA Index, demonstrating a majority of residents in CBCity as having both a low income, and little access to economic resources. More than 200,000 residents across Canterbury-Bankstown fall into the lowest quintile of economic resources, making up almost two-thirds of CBCity's population. Residents who comprise this proportion of the population can be understood to have an income below \$25,999 a year, no car, pay less than \$215 a week rent, live alone, be unemployed, and live in overcrowded or group accommodation. When aggregated at the Local Government Area, Canterbury-Bankstown is ranked in the 2nd quintile, and is placed in the 26th percentile in the New South Wales rankings. This represents a significant proportion of Canterbury-Bankstown residents comprising the poorest residents in the state.

However, as discussed in relation to both the IRSD and the IRSAD, the above data should not be understood as a demonstrated inability to afford the rate increase. ABS data clearly demonstrates a correlation between higher income, employment, mortgages, access to economic resources, and

home ownership. Given that there is a high proportion of residents in the bottom quintile, it can be deduced that these residents are unlikely to own land and therefore pay rates. Understanding this, and in concurrence with the above listed analysis, Council has determined that this data demonstrates a capacity for ratepayers to afford the proposed rate increase.

Index of Education and Occupation (IEO)

SEIFA IEO Stat	e Total Population	Population	Overall SEIFA Q	Overall SEIFA
Rank (76)	2016	Percentage	2016	Percentile 2016
CBCity	346,302	100%	3	58
Q1	210612	61%		
Q2	61358	18%		
Q3	15793	5%		
Q4	21281	6%		
Q5	14334	4%		

While Council did analyse the data in the IEO Index, it did not deem it relevant to the study of rate paying capacity among residents in Canterbury-Bankstown. As such, Council has included the data, but not used it to assess capacity to pay.

Other measures of capacity to pay

Council is particularly aware of the impact that COVID-19 has had on the local community, impacting the measures of social and economic prosperity that are measured in the above census data. While no census has been conducted yet for 2020, there is data available on some markers of the COVID-19 pandemic. Such indicators can give an insight into the changing economic and social profile of the city in 2021.

The most important measures that Council considered, were instances and rates of Jobseeker, Youth Allowance, and JobKeeper. Data gathered by the ABS found that the number of persons receiving the Jobseeker or Youth allowance payment in Canterbury-Bankstown, grew from 5.8 percent of the 15-64 age population in December 2019, to 12 percent of the same population group in December 2020. Such a rise equates to 14,000 more residents of the Local Government Area receiving these social welfare payments. The sudden increase over the year can almost exclusively be attributed to the COVID-19 pandemic and the subsequent economic and social downturn that followed. Such a growth in the receipt of financial assistance is indicative of a greater level of disadvantage in CBCity, and it correlates with the SEIFA data discussed above. However, as mentioned in the Index analysis, the level of disadvantage experienced in the city does not necessarily correlate with home ownership. Again, Council must draw attention to the strong evidence that demonstrates that those who pay rates in the city, are those least affect by disadvantage. Therefore, the rate increase is reasonable and within the capacity of residents in the Local Government Area to pay.

Relation to other local Council areas

In relation to other Councils in the surrounding Local Government Areas, CBCity is considered on the lower spectrum of advantage and disadvantage. This is confirmed when measured against the SEIFA criteria, and as measured by instances and rates of JobKeeper, JobSeeker, and Youth allowance in surrounding Local Government Areas. Below, is a table measuring rates of each aggregated in Local Government Area:

Local Government Area			
Percentile	SEIFA IRSD	SEIFA IRSAD	SEIFA IER

Caratania Danilata	24	F3	26
Canterbury-Bankstown	24	52	26
Burwood	68	88	19
Georges River	80	88	66
Sutherland Shire	96	94	97
Fairfield	8	12	18
Strathfield	82	92	44
Bayside	70	84	42
Liverpool	35	60	72
Cumberland	22	50	18

As the above data bears out, Canterbury-Bankstown is significantly lower than a majority of surrounding Councils when measured against SEIFA Indexes across advantage, disadvantage and economic resources. This reflects the trends discussed in the detailed Indexes for CBCity above. While such data might lend credence to the position that residents are incapable of affording rates charged in surrounding Council areas, there are two important considerations to be discussed.

First and foremost, as discussed at length above, there is a wealth of data and information linking advantage with home ownership, and disadvantage with the opposite. As such, while surrounding Councils may have higher levels of advantage and lower levels of disadvantage, they also see a requisite rise in home ownership rates. As the ability to afford rates is firstly predicated on owning rateable property, considerations of difference between SEIFA Indexes across Local Government Areas is in line with home ownership and demonstrated capacity to pay. Where Canterbury-Bankstown sees lower levels of home ownership in line with its greater disadvantage, it also understands those residents will not need to pay the rate increase because they do not own rateable land. In other surrounding Local Government Areas, where levels of advantage are higher, there is greater home ownership, and that represents a greater capacity for those residents to own rateable land, and by extension afford higher rates. As such, there is significant evidence to draw the conclusion that there is a strong correlation between the real level of home ownership across Local Government Areas, the capacity to afford rate increases, and the nature of home ownership levels and capacity to pay rates in CBCity.

How the rate increase will differ across the city

As Canterbury-Bankstown is a merged Council, the product of the former Bankstown and former Canterbury Councils, there is a need to address the difference in rates that will result from harmonisation and the special variation. Set out below is a summary of the differences in rates that would result from the successful passage of both harmonisation and the special variation, carried out over a period of five years:

The table indicates the marginal difference that existed before the process of harmonisation between the two former councils. Council has endeavoured to offset the burden of the rate increase by ensuring that the process will be conducted in a staged manner, hoping to alleviate as much of the burden on ratepayers in the Local Government Area as possible. As demonstrated in the above table, and detailed in the Delivery Program and Long-Term Financial Plan, Council at every stage has worked to provide the most reasonable increase to ratepayers across the process of harmonisation and special variation. Council considered resident's ability to withstand a single-year increase from harmonisation, or a shorter window for special variation, but deemed both of these options unsuitable for the community to bear. The table below shows the percentage increase across all rating categories in CBCity in relation to the special variation:

Year	IPART %	SRV %	Total %	IPART \$M	SRV \$M	SRV \$M Cumulative
2021/22	2.00	-	2.00	3.49	-	-
2022/23	2.50	5.30	7.80	4.45	9.43	9.43
2023/24	2.50	5.30	7.80	4.80	10.16	19.59
2024/25	2.50	4.90	7.40	5.17	10.13	29.72
2025/26	2.50	4.60	7.10	5.55	10.21	39.93
Cumulative	12.60	21.60	36.34	23.45	39.93	-

Understanding that a percentage increase at a higher land valuation will lead to a larger actual dollar amount increase to rates paid, Council has developed a proposal that applies the rate increase in percentage terms in a uniform fashion across all categories. By applying a flat percentage increase to all categories, Council is taking in to consideration the differing capacity to pay that some ratepayers will experience. As is borne out in the SEIFA Index data above, there is a strong correlation between advantage and wealth, that is both linked to higher levels of home ownership and greater land valuations. Thereby the higher dollar rate increased experienced by a flat percentage across all categories, takes in to account the higher capacity to pay the increase that is linked with higher land valuation and greater economic resources. Inversely, the same can be applied to properties with a lower land valuation. Where the percentage increase is the same for these properties, their actual dollar increase will be low, and thus more in line with their slightly lower level of wealth and access to economic resources.