

Advice on the Issues of the Inner Region Affordable Housing Overlay



Prepared for the Inner Affordable Housing Working Group comprised of representatives from
City of Melbourne
City of Port Phillip
City of Stonnington
City of Yarra

16 June 2008

Version 7.2

TABLE OF CONTENTS

1	INTRODUCTION	4
1.1	Purpose of the Report	4
1.2	Objectives	4
1.3	Scope	4
1.4	Methodology	5
2	REVIEW OF SGS'S MARCH 2004 REPORT	7
3	ANALYSIS OF SGS'S MARCH 2007 REPORT	9
3.1	Conceptual and Analytical Robustness	9
3.2	Modeling Modifications	9
4	TARGETED HOUSEHOLD INCOME RANGE	10
5	TARGETED AFFORDABLE DWELLING YIELD	11
5.1	Projected Private Dwelling Construction	11
5.2	Projected Commercial Construction Activity	14
5.3	Social Housing Construction Activity	14
5.4	Critical Assumptions	15
6	DEVELOPMENT ACTIVITY ESTIMATES	16
6.1	Methodology	16
6.2	Existing 2006 stock	16
6.3	Churn within the existing 2006 stock	18
6.4	New housing stock added	19
6.5	New non-housing stock added	19
6.6	Total development activity	20
7	INCLUSIONARY ZONING ESTIMATIONS	20
8	ISSUES OF BROADENING ACCESS TO AFFORDABLE RENTAL HOUSING	23
8.1	Environmental Standard	24
8.2	Permanence	24
8.3	Availability versus Ownership	24
8.4	Problems with using an IZ to address housing ownership	25
9	IMPACT – CASE STUDIES	25
9.1	Option 1 – 5000m2 commercial office development with pre-commitment to tenant on cleared site	26
9.2	Option 2 – demolition of a 2000m2 building requiring a permit	27
9.3	Option 3 – demolition of 1000m2 warehouse and construction of 15 new 2BR apartments (90m2 each)	28
10	PRACTICAL ISSUES	30
10.1	IZ Collection Point	30
11	IMPLEMENTATION	31
11.1	Implementation Issues	31
11.2	South Sydney Affordable Housing Development Control Plan	31
11.3	Implementation Risks	32
11.4	Recommendations	32

Version Control (internal)

Version	Issue Date	Comment
Draft V1	15 April 2008	internal draft
Draft V2	17 April 2008	Internal draft
Draft V3	21 April 2008	Internal draft
Draft V4	29 April 2008	Working draft
Draft V5	20 May 2008	Working draft
Draft v6.1	21 May 2008	Issue to G. Spivak
Ver 7.1	26 May 2008	Exclude stand alone dwellings in calcs and exclude residential renovations
Ver 7.2	16 June 2008	Minor edits, new table aect 1.4, IZ calcs @ \$50 added

Prepared by

Biruu Australia Pty Ltd

Level 14
15 Collins Street,
Melbourne 3000

t 03 9639 0456
f 03 9639 0436
w www.biruu.com

Biruu.**Important Notice**

This report is a confidential document that has been prepared by Biruu Australia Pty Ltd ("Biruu") and the City of Port Phillip. The report has been prepared by Biruu in its capacity as advisor in accordance with the scope and terms associated with the City of Port Phillip's request for proposal and Biruu's offer.

In preparing this report, Biruu has relied upon information supplied by the City of Port Phillip, its sibling agencies and its advisors, private sector parties, and public sources. Biruu has not attempted to verify the accuracy or completeness of the information provided.

Early stage investigations such as this, by their very nature being early in a project development process, cannot and do not have all the facts and answers that emerge as projects progress. They use incomplete and sometimes erroneous data, assumptions, estimates, forecasts, and allowances. Neither Biruu nor their respective officers and employees take any responsibility arising in any way whatsoever to any person or organization, in respect of the information set out in this report, including any errors or omissions therein through negligence or otherwise howsoever caused, except as provided for under Biruu's terms of engagement. This report is provided to assist the City of Port Phillip in considering its options in relation to the Inner Region Affordable housing Overlay.

The information contained in this report is strictly confidential and must not be copied, reproduced, disseminated or used, in whole or in part without the City of Port Phillip's authority.

1 INTRODUCTION

1.1 Purpose of the Report

Early in 2008, the Inner Region Affordable Housing Working Group commissioned Biruu Advisory (Biruu) to provide advice on the issues of the Inner Region Affordable Housing Overlay. Biruu has also been asked to assess reports completed by SGS Economics and Planning in June 2004 and March 2007 for the Working Group on implementing an Inclusionary Zoning mechanism (IZ) for the Inner Region. For the purposes of this report the Inner Region Study Area is comprised of:

- Melbourne [C] – Local Government Area,
- Yarra [C] - Local Government Area,
- Port Phillip [C] – Local Government Area, and
- Stonnington [C]- Prahran – Local Government Area

These four local government areas correspond with Australian Bureau of Statistics (ABS) Census data collection areas. ABS Census data for these localities are used in estimating dwelling numbers and income levels in this report for the Inner Region Study Area.

1.2 Objectives

The four main objectives of this report are to:

1. Provide advice on the desirable household income range that should be targeted by any IZ that may be implemented in Melbourne's Inner Region,
2. Provide advice on the number of affordable dwellings that should be targeted by any IZ,
3. Assess the potential impact of any IZ, and
4. Provide an analysis of the advantages and disadvantages associated with any IZ.

1.3 Scope

In addition to completing the objectives of this report and subject to qualifications made in our proposal, this report also attempts to discuss the following issues:

- Review SGS's March 2004 report in the light of more recent Census and property market information to assess any changes in the character of the affordable housing issue in the Inner Region;
- Assess the conceptual and analytical robustness of SGS's March 2007 report;
- Identify any additional administration, monitoring and enforcement costs that may be attached to broadening the groups eligible for affordable housing in the Inner Region;
- Identify a range of case study projects across the region (excluding single dwelling projects) to test the impact of the cash in lieu rate arrived at in the IZ based on two scenarios
 1. immediate introduction and enforcement of in the IZ provision, and
 2. immediate introduction of the IZ but enforcement after a two year lag to permit developers to clear current projects and factor the IZS into their feasibility studies for future projects; and
- Recommend preferred method of implementing IZ in the Inner Region.

1.4 Methodology

The methodology used in this report to estimate dwelling yields and social housing needs for the next 25 years broadly follows the methodology used by SGS in its 2004 and 2007 reports.

Affordable rental housing is defined as dwellings with weekly rents less than or equal to 30% of gross weekly household income. Rental and Income data for the Inner Region Study Area are sourced from ABS Census data.

The targeted household income groups analyzed for the IZ for the study area in this report are:

- Very low income – defined as less than 50% of gross Australian median household income;
- Low income – defined as 50-80% of gross Australian median household income; and
- Moderate household income – defined as 80-120% of gross Australian median household income.

The definitions of the targeted household income groups in this report correspond to the household definitions used by the South Sydney City Council Affordable Housing Development Control Plan report. These definitions are also consistent with the definitions used by the Department of Human Services report *Towards an Integrated Victorian Housing Strategy*¹. These definitions are broadly in line with Centrelink family payment thresholds and Commonwealth Rent Assistance thresholds. The South Sydney City Council used the median household income of the Sydney Statistical Division instead of the Australian median household income. Biruu has chosen to use the Australian Median Household Income based on reinforcing the principal of reflecting broad Australian demographics in the Study Area.

The table below indicates Australian decile income data for 2005-06.

ABS Income Deciles		
Household decile income data are sourced from the ABS Household Wealth and Wealth Distribution Data, Australia, 2005-06.		
ABS Deciles, Value at top of selected percentiles	Annual Household Income	Biruu's Income Aggregated Group
P10	\$ 14,664	Very Low Income
P20	\$ 23,400	
P30	\$ 31,928	Low Income
P40	\$ 42,796	
P50	\$ 54,080	Moderate Income
P60	\$ 67,496	
P70	\$ 82,732	
P80	\$ 100,776	
P90	\$ 131,820	

As can be seen in the table above, the Very Low Income Group corresponds with the lowest two income deciles, the Low Income Group corresponds with the 3rd and 4th income deciles, and the Moderate Income Group corresponds with the 5th and 6th income deciles.

We understand that Public & Community Housing Providers target the first 4 deciles (ie the Very Low and Low groups).

¹ Department of Human Services, *Towards an Integrated Victorian Housing Strategy*, September 2006, p.19.

The Registered Housing Associations target the first 6 deciles (ie the Very Low, Low and Moderate groups)

To estimate the cash in lieu of affordable rental housing contribution that may be implemented via an IZ in the Study Area, the following inputs need to be estimated and projected for the next 25 years:

- Estimate of private and commercial development in the Study Area for 2006-33;
- Estimate of social housing dwelling needs in 2033;
- Average size of dwelling developed in the Study Area, and
- Average cost per square meter of building dwellings

In this report, 2006 data is the most recent Census data available which is projected to 2033, 25 years from 2008.

2 REVIEW OF SGS'S MARCH 2004 REPORT

Recent Census data confirms that affordable rental housing has diminished in the Inner Region Study Area as the SGS 2004 paper reported. The table below presents 1996-2006 data on affordable rental housing rents and yields for the Study Area.

Affordable rental housing Data (Median Income)	1996	2001	2006
Australian Median Household Weekly Income ²	\$600	\$782	\$1027
Affordable Weekly Rent ³	\$180	\$235	\$308
Dwellings in Study Area for Rent ⁴	53,241	58,424	66,826
Affordable Dwellings for Rent in Study Area ⁵	35,428	30,761	33,697
Proportion of Affordable Dwellings for Rent in Study Area ⁶	67%	53%	50%

Note: Ownership versus Availability

For the avoidance of confusion, it needs to be made clear that the analysis herein (consistent with SGS) is based on dwelling **availability** opportunities of affordable rental housing rather than **ownership** opportunities.

The IZ policy relies on an underlying premise that a wide demographic creates social inclusion, greater fairness, a better social mix and a better environment.

Therefore it is the mix of income groups that is being analysed here, not whether they own or rent which is immaterial to this assessment.

Housing (purchase) affordability, while another important and topical issue, is not considered in this analysis.

As can be seen, the proportion of affordable rental housing in the Study Area for the median household has fallen from 67% rented dwellings in 1996 to 50% in 2006. The tables below indicate housing affordability for very low to moderate income households.

² Australian median household income sourced from ABS Census data. The 1996 median household income of \$600 is the mid-point of the \$500-699 range published on the website [http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/D6674CD4D36D31FACA256AB6001B94CE/\\$File/Australia.xls](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/D6674CD4D36D31FACA256AB6001B94CE/$File/Australia.xls). This mid-point corresponds with the \$603 median household income published by the Australian Taxation Office Report on the website http://www.daff.gov.au/_data/assets/pdf_file/0009/37629/Social_household_income_and_seifa.pdf.

³ 30% of median household weekly income.

⁴ ABS Census Data, Rent (weekly) by Landlord Type for Time Series, count of occupied private dwellings being rented, by location on Census night.

⁵ In 1996, the number of dwellings that rented for less than \$180/week. In 2001, the number of dwellings that rented for less than \$225/week. In 2006, the number of dwellings that rented for less than \$275/week. These weekly rents correspond with the ranges published by the ABS and are closest available to the estimated affordable weekly rents based on median weekly income levels.

⁶ Affordable dwellings for rent divided by total dwellings for rent in the Study Area

Affordable Rental Housing Data (Very Low Income)	1996	2001	2006
Australian Very Low Household Weekly Income	\$300	\$391	\$514
Affordable Weekly Rent	\$90	\$117	\$154
Affordable Dwellings for Rent in Study Area ⁷	14,345	8,902	9,874
Proportion of Affordable Dwellings for Rent in Study Area	27%	15%	15%

Affordable Rental Housing Data (Low Income)	1996	2001	2006
Australian Low Household Weekly Income	\$300-480	\$391-626	\$514-822
Affordable Weekly Rent	\$90-144	\$117-188	\$154-247
Affordable Dwellings for Rent in Study Area ⁸	12,083	13,059	14,038
Proportion of Affordable Dwellings for Rent in Study Area	23%	22%	21%

Affordable Rental Housing Data (Moderate Income)	1996	2001	2006
Australian Moderate Household Weekly Income	\$480-720	\$626-938	\$822-1232
Affordable Weekly Rent	\$144-216	\$188-282	\$247-370
Affordable Dwellings for Rent in Study Area ⁹	16,030	17,044	24,035
Proportion of Affordable Dwellings for Rent in Study Area	30%	29%	36%

While affordable rental housing has fallen in the Study Area from 1996-2006, the tables above indicate that it is the households on very low income levels that have borne the brunt of the decline in affordable rental housing. The proportion of dwellings for rent for low to moderate household incomes have declined slightly over the ten years to 2006, and the proportion of dwellings for rent for moderate income households has actually increased.

It is the dramatic fall in affordable rental housing for very low income households from 27% in 1996 to 15% in 2006 of rental dwellings that accounts for the housing affordability stresses in the Study Area. It is also evident that the decline occurred between 1996-2001, with the proportion of affordable rental housing for very low income households remaining stable at 15% between 2001-06.

We may speculate that the housing boom over the past decade has led to the deterioration of affordability for very low income housing availability. It is possible that increased property values results in houses with low income streams being sold to realize capital values and

⁷ In 1996, the number of dwellings that rented for less than \$100/week. In 2001, the number of dwellings that rented for less than \$100/week. In 2006, the number of dwellings that rented for less than \$140/week. These weekly rents correspond with the ranges published by the ABS and are closest available to the estimated affordable weekly rents based on very low weekly income levels.

⁸ In 1996, the number of dwellings that rented between \$100-139/week. In 2001, the number of dwellings that rented between \$100-179/week. In 2006, the number of dwellings that rented between \$140-224/week. These weekly rents correspond with the ranges published by the ABS and are closest available to the estimated affordable weekly rents based on low weekly income levels.

⁹ In 1996, the number of dwellings that rented between \$140-224/week. In 2001, the number of dwellings that rented between \$180-274/week. In 2006, the number of dwellings that rented between \$225-349/week. These weekly rents correspond with the ranges published by the ABS and are closest available to the estimated affordable weekly rents based on moderate weekly income levels.

capital gains. However, this is speculation only as reasons for fewer dwellings with low rents being available in the Study Area are not captured in the Census data.

3 ANALYSIS OF SGS'S MARCH 2007 REPORT

Broadly, Biruu has followed the methodology used by SGS in its 2007 Report to estimate the IZ cash in lieu rate that may be applied to development activity in the Study Area over the next 25 years. The 2007 SGS report estimates the following components to assess the IZ cash in lieu rate:

- housing and commercial building activity in the Study Area over 25 years,
- the gap between the amount of social housing dwellings that will be needed under various policy regimes and the amount that will be available if no Inclusionary Zoning policy is implemented,
- average size of affordable rental housing,
- average cost of providing an affordable rental housing dwelling , and
- the proportion of affordable rental housing funded by the IZ cash in lieu rate.

3.1 Conceptual and Analytical Robustness

While noting that we are not policy experts, social planners or economists, the issue of social inclusion and ensuring a wide range of income types being an integral and uniform part of society is sound. We find that the evidence supports the premise that the poorer people are being pushed out of the study areas due to housing cost.

This brings issues of social inclusion and ensuring that, as far as practical, people get reasonable access to opportunities and infrastructure.

Another argument is that the lower income groups often supply many of the services jobs for the higher income groups and there are cost/time/energy/congestion issues if these groups cannot find accommodation close to their place of work.

It seems evident that the market alone is not going to solve these inclusionary issues, indeed we believe that left alone the market will act in a way to continue to exclude these groups from the inner regions.

Assuming the case for policy intervention is accepted, a key issue to us is whether an IZ is an appropriate way of implementing the policy.

We believe that it would, on the condition that the State doesn't use the funds as replacement to the funding it supplies separately. Also the funds collected need to be applied to acquire and hold in perpetuity (save for stock rotation) housing by properly managed and audited not-for-profit housing associations that have this as their main goal.

The housing created by an IZ needs to be held for the long term ('perpetual') in order to remain captured and applied for the purpose to which it was collected originally – ie to improve the environment through more balanced social diversity.

Biruu believes that the methodology used to estimate an IZ cash in lieu rate per square meter of building activity is conceptually satisfactory.

It needs to be noted that any projections of 25 years (ie a whole human generation) will at best be rudimentary. It would be a mistake to think there is more accuracy in the numbers than really is possible.

3.2 Modeling Modifications

Biruu has made the following modifications to the SGS 2007 model for estimating the IZ cash in lieu rate:

- The number of available social housing dwellings is projected to decline by an average annual decrease of 0.2% per annum, not remain unchanged as estimated by SGS (See Section 5.3).
- Biruu has defined social housing as the number of dwellings rented by the State/Territory Housing Authority and Housing Co-operative/community/church group, Count of occupied private dwellings by location on Census Night. Data sourced from Tenure Type and Landlord Type by Dwelling Structure for Time Series. SGS social housing data corresponds to the number of dwellings rented by the State/Territory Housing Authority, Count of occupied private dwellings by Place of Usual Residence. Data sourced from Tenure Type and Landlord Type by Dwelling Structure by Indigenous Status of Household for 2001. Biruu has chosen this definition of social housing because there is a time series available from 1996-2006 Census data and because it includes Housing Co-operatives/community/church groups as well as the State/Territory Housing Authority.
- As per directions from the Study Group, projections of new single dwelling developments have been excluded from 2033 dwelling stock. Also, projections of residential renovations have been excluded from estimates of lifecycle replacement (churn) within the 2006 residential and commercial floorspace calculations.

4 TARGETED HOUSEHOLD INCOME RANGE

The table below indicates the targeted household income range for affordable rental housing in the Study Area in 2006:

Household Group	Definition	Gross Annual Household Income (2006)		Gross Weekly Household Income (2006)		Affordable weekly rent (30% of income)		Percent of Affordable Houses for Rent in Study Area	Definition of Affordable Housing Rent
Very Low Income	less than 50% of Australian Median Income	\$0	\$26,702	\$0	\$514	\$0	\$154	15%	<\$140/wk
Low Income	50-80% of Australian Median Income	\$26,702	\$42,723	\$514	\$822	\$154	\$246	21%	\$140-224/wk
Moderate Income	80-120% of Australian Median Income	\$42,723	\$64,085	\$822	\$1,232	\$246	\$370	36%	\$225-349/wk
Australian Median Household Income			\$53,404		\$1,027		\$308	50%	<\$275/wk

Source: 2006 Census Data

These definitions of very low to moderate income groups corresponds to the household definitions used by the South Sydney City Council Affordable Housing Development Control Plan report. We understand that their scheme is regarded as a good example of this type of arrangement in Australia.

These definitions are also consistent with the definitions used by the Department of Human Services report *Towards an Integrated Victorian Housing Strategy*¹⁰. These definitions are broadly in line with Centrelink family payment thresholds and Commonwealth Rent Assistance thresholds. The South Sydney City Council used the median household income of the Sydney Statistical Division instead of the Australian median household income. Biruu has chosen to use the Australian Median Household Income based on reinforcing the principal of reflecting broad Australian demographics in the Study Area.

¹⁰ Department of Human Services, *Towards an Integrated Victorian Housing Strategy*, September 2006, p. 19.

The table below indicates the percentage of Australian and Study Area households with very low, low and moderate weekly incomes and the percent of affordable houses for rent in the Study Area for these income groups in 2006.

Household Group	Percentage of Total Australian Households	Percentage of Total Study Area Households	Percent of Affordable Houses for Rent in Study Area	Definition of Affordable Housing Rent
Household Income less than \$500/wk (Very Low)	19%	18%	15%	< \$140/wk
Household Income between \$500-800/wk (Low)	17%	12%	21%	\$140-224/wk
Household Income between \$800-1200/wk (Moderate)	18%	16%	36%	\$225-349/wk

Source: 2006 Census Data

As can be seen from the table above, it is within the very low income level that households in the Study Area are facing a shortage of affordable rental housing, i.e. 18% of households are very low income but only 15% of the houses for rent are affordable for these households. Also evident from the table above is that there are plenty of affordable houses for rent for low and moderate income households in the Study Area in 2006.

However, it is also evident in the table above that the Study Area has far fewer low income households than the Australian distribution, 12% vs 17%. While there appears to be plenty of affordable rental housing available for the low income group, it appears that this group chooses not to reside in this area. It is possible that this group has the capacity to purchase dwellings in lower cost areas and choose not to rent. If the Study Group wants to increase the number of low income households in the Study Area, it may want to consider providing housing purchase schemes directed to this income group. It is worth noting to attract an additional 5% low income households, approximately 6,000 dwellings would be needed in an affordable housing purchase scheme to achieve the objective of reflecting Australian income demographics in the Study Area for low income households.¹¹

Because it is the very low income households that are facing an affordable **rental** housing shortage, it would appear that the Study Group could focus on providing additional social housing for these disadvantaged households.

5 TARGETED AFFORDABLE DWELLING YIELD

5.1 Projected Private Dwelling Construction

The table below indicates the growth in dwellings in the Study Area from 1996-2006 based on Census Data¹².

Census Dwelling Numbers for the Study area	1996 (a)	2001	2006	Average annual Percent Change		
	Total dwellings	Total dwellings	Total dwellings	1996-2001	2001-2006	1996-2006
	Total Dwellings					
Melbourne (C)	18,221	26,982	40,958	8.2%	8.7%	8.4%
Yarra (C)	30,313	32,782	34,667	1.6%	1.1%	1.4%
Stonnington (C) - Prahran*	23,915	25,197	25,647	1.0%	0.4%	0.7%
Port Phillip (C)	39,656	44,470	49,068	2.3%	2.0%	2.2%
Study Area	112,105	129,431	150,340	2.9%	3.0%	3.0%

* estimated for 1996

(a) In 1996, Serviced Apartments were treated as Non-private dwellings.

¹¹ In the income data series available from the 2006 Census, Gross Household Income (Weekly) by Household Composition, count of occupied private dwellings, by location on Census night, the Study Area contained 119,477 households.

¹² These dwelling numbers contain the count of occupied and unoccupied private dwellings by location on Census night.

Over the 10 years to 2006, average annual growth in dwellings was stable at about 3% per annum. If dwellings continued to increase at 3% per annum, by 2033, the number of dwellings in the Study Area would be about 332,000. This number is much larger than the 25 year projected dwelling number in the SGS March 2007 Report of 240,000, which estimated that private dwellings would increase by about 1.84% per annum on average over the next 25 years.

The population of the Study area has not been growing as fast as the number of dwellings over this period. The table below indicates the average annual population growth for the Study area from 1996-2006.

Census Population Numbers for the Study area	1996	2001	2006	Average annual Percent Change		
				1996-2001	2001-2006	1996-2006
Melbourne (C)	48,560	67,784	93,746	6.9%	6.7%	6.8%
Yarra (C)	65,148	68,018	70,177	0.9%	0.6%	0.7%
Stonnington (C) - Prahran	42,191	44,261	45,808	1.0%	0.7%	0.8%
Port Phillip (C)	73,092	80,157	86,883	1.9%	1.6%	1.7%
Study Area	228,991	260,220	296,614	2.6%	2.7%	2.6%

Average annual population growth in the Study Area from 1996-2006 was stable at about 2.6% per annum. If the population of the study area continued to increase at 2.6% per annum, by 2033, the population of the Study Area would be approximately 596,000. Conversations with the Department of Sustainability and Environment (DSE) have suggested that while continuing the average annual increase from 1996-2006 into the future is “not a bad way of doing it”¹³, this method does not consider the aging and increased death rates associated with the baby boom population expected to impact from about 2015. If migration rates do not increase to compensate for the higher death rates (an assumption that is impossible to know currently), the population is expected to decline. Thus, an average annual population growth rate of 1.7% over the next 25 years would take into account higher growth rates early in the period and potential population declines later in the projected time horizon. If the Study Area’s population increased at an annual average growth rate of 1.7% over the next 25 years, the projected population in 2033 would be approximately 470,000.

The table below indicates the number of persons per dwelling in the Study Area for 1996-2006.

Persons per dwelling from Census Data for the Study area	Persons per Dwelling		
	1996 Census	2001 Census	2006 Census
Melbourne (C)	2.7	2.5	2.3
Yarra (C)	2.1	2.1	2.0
Stonnington (C) - Prahran	1.8	1.8	1.8
Port Phillip (C)	1.8	1.8	1.8
Study Area	2.0	2.0	2.0

As can be seen, the number of persons per dwelling in the study area has been stable at 2 people per dwelling from 1996-2006.

While it is possible for dwelling construction to increase faster than population growth over short to medium term timeframes, it is unlikely that this is sustainable over a longer term timeframe of 25 years. If dwelling construction increased at the same rate as population growth and maintained the ratio of 2 people per dwelling over the next 25 years, in 2033 the

¹³ Telephone conversation with DSE representative, 14 May 2008. The updated 2004 Population Report has not been released to date. The DSE representative indicated that the projected average annual population increase for the Melbourne Statistical Area is 1.7% to 2033. Between 1996-2006, the Melbourne Statistical Area had an average annual growth rate of 1.3%, well below the growth rate of the Study Area. Biruu believes that 1.7% population growth rate is a lower boundary for population growth estimates for the Study Area over the next 25 years while 2.6% represents an upper boundary for estimating annual average population growth rates for the Study Area.

projected number of dwelling would be approximately 300,000 in the Study Area. Biruu has used the projected 300,000 private dwellings in the Study Area in 2033 as an estimate of private dwelling stock in the Study Area. This represents an increase of 150,000 private dwellings over the next 25 years.¹⁴ Using the DSE estimate of 1.7% for metropolitan Melbourne would give a projected private dwelling stock of 235,000 in 2033, about the same as the SGS estimate of 240,000.

If single residential dwelling unit development is excluded from the projected private dwelling development, private dwelling developments subject to an IZ is projected to be 138,000 instead of 150,000.¹⁵

The average Australian house is 200 m².¹⁶ However, based on an industry rule of thumb, average new dwelling building size in the Study Area is assumed to be approximately 100 m², as also assumed in the 2007 SGS Report. Thus, the estimated dwelling construction activity in the Study Area is projected to be an additional 13.8 million m² over the next 25 years, excluding single dwelling developments.

¹⁴ Telephone conversations with DSE representatives about projected population changes for the Study Area over the next 25 years suggested using the average annual increase of 2.6% per annum to approximate population growth given that the Department was unable to provide up to date population projections for the Study Area at this time.

¹⁵ Australian Bureau of Statistics, Building Approvals for Victorian SLA Excel Datacube, 2006-07. New houses represented 8% of total dwelling approvals in 2006-07 for the Study Area.

¹⁶ According to data on the website <http://australia.emigratenz.org/market-strength.html>, March 2008.

5.2 Projected Commercial Construction Activity

The table below indicates the amount of commercial floorspace in Melbourne [C] from 2002-06.

Floorspace (sq m) Trends by Space Use*	Floorspace (sq m)			Average annual Percent Change		
	2002	2004	2006	2002-04	2004-06	2002-06
Region: Entire City of Melbourne						
Office	4,240,732	4,406,821	4,872,533	1.9%	5.2%	3.5%
Retail/Wholesale	910,537	957,539	1,034,964	2.5%	4.0%	3.3%
Industrial	5,235,401	5,343,047	5,210,269	1.0%	-1.3%	-0.1%
Educational	1,238,363	1,335,514	1,436,935	3.8%	3.7%	3.8%
Medical	889,899	875,713	787,364	-0.8%	-5.2%	-3.0%
Entertainment/Recreation	2,640,876	2,701,964	2,547,132	1.1%	-2.9%	-0.9%
Commercial Accommodation	803,212	893,452	969,533	5.5%	4.2%	4.8%
Parking - Private	1,352,823	1,457,063	1,647,536	3.8%	6.3%	5.1%
Parking - Commercial	1,484,851	1,564,791	1,711,305	2.7%	4.6%	3.6%
Performances, Conferences, Ceremonies	318,038	343,350	345,975	3.9%	0.4%	2.1%
Total Commercial Floorspace	19,114,732	19,879,254	20,563,546	2.0%	1.7%	1.8%

Source: Census of Land Use and Employment (CLUE) 2006
 Note: Started collecting data for entire municipality from 2002
 * Space Use - Actual use of the floorspace at census time (one per floor per establishment)

From 2002-06, commercial floorspace in Melbourne [C] on average increased by 1.8% per annum. If the commercial floorspace in the Study Area continues to increase at an average annual growth rate of 1.8% over the next 25 years as it did in the Melbourne [C] area from 2002-06, in 2033 the Study Area will have approximately 46 million m² of commercial floorspace. This represents an additional 18 million m² of commercial floorspace in the Study Area over the next 25 years.

In the absence of data on commercial floorspace for Yarra [C], Port Phillip [C] and Stonnington [C]-Prahran, Biruu has assumed that the total Study Area commercial floorspace will grow at the same rate as commercial floorspace in Melbourne [C] increased from 2002-06. This assumption has been made for modeling purposes given that historical commercial floorspace data are unavailable for the whole of the Study Area.

The SGS 2007 report implies an average annual growth rate of 1.1% for commercial floorspace in the Study Area over the next 25 years based on projected employment growth rates in the Study Area. Given the uncertainty surrounding growth rates over a 25 year time horizon, Biruu does not consider that the assumption of 1.8% pa vs 1.1% pa to be material. Biruu has calculated an average estimate of projected commercial floorspace for SGS and Biruu estimates to take into account the different methodologies used to estimate long term future growth rates and development activity.

5.3 Social Housing Construction Activity

The table below indicates the change in social housing available in the Study Area from 1996-2006

Number of Social Housing Dwellings Rented in Study Area, Census Data						
	1996	2001	2006	1996-2001	2001-06	1996-2006
Social Housing	Total	Total	Total	Average annual percent increase	Average annual percent increase	Average annual percent increase
Melbourne (C) - Total	1,902	1,915	1,913	0.1%	0.0%	0.1%
Port Phillip (C)	2,112	2,157	2,175	0.4%	0.2%	0.3%
Yarra (C)	3,752	3,630	3,539	-0.7%	-0.5%	-0.6%
Stonnington (C) - Prahran	1,196	1,279	1,191	1.4%	-1.4%	0.0%
Study Area	8962	8981	8,818	0.0%	-0.4%	-0.2%

Note: Number of dwellings rented by the State/Territory Housing Authority and Housing Co-operative/community/church group. Count of occupied private dwellings by location on Census Night. Data sourced from Tenure Type and Landlord Type by Dwelling Structure for Time Series.

As can be seen, the amount of social housing available in the Study Area in 2006 was 8,818 dwellings, representing 5.9% of total dwellings in the Study Area. The number of social housing dwellings fell at an average annual pace of -0.2% from 1996-2006. If social housing

continued to decrease at -0.2% per annum over the next 25 years, in 2033 the Study Area would have approximately 8,441 social housing dwellings, which represents approximately 2.8% of the projected total 300,000 dwellings¹⁷.

The table below indicates SGS, Biruu and the average of SGS and Biruu estimates for social housing stock in 2006 in 2033.

Social Housing Stock	SGS Estimate	Biruu estimate	Average estimate
2006 Social Housing Stock	7,997	8,818 (2006 Census Data)	8,818 (2006 Census Data)
2006 Total Housing Stock	152,290	150,340 (2006 Census Data)	150,340 (2006 Census Data)
Social housing stock as a proportion of total housing stock in 2006	5.3%	5.9%	5.9%
2033 Stock	7,997	8,441	8,219
2033 Total Housing Stock	239,551	300,000	269,776
Social housing stock as a proportion of total housing stock in 2033	3.3%	2.8%	3.0%
Additional Number of Social Housing dwellings needed to maintain 2006 proportion of total dwellings in 2033	4,699	9,259	7,698

If the Study Group wants to maintain the amount of social housing in the Study Area at 5.9% of total dwellings, Biruu estimates an additional 9,259 dwellings will be needed in 2033.

5.4 Critical Assumptions

Biruu notes the assessed IZ cash in lieu rate per square meter is sensitive to the following inputs:

- Dwelling and commercial floorspace development activity from 2006-33. The model below projects 38.8 million m² of building activity over the period, an average of 1.6 million m² per annum over 25 years.
- Single residential dwelling construction is estimated to be 8% of total new residential dwelling development, based on ABS building approvals data for the Study Area in 2006-07. Dwelling stock development over 25 years has been reduced by 8% to exclude single dwelling construction.
- Residential renovations have been excluded from churn within the 2006 residential and commercial floorspace estimates.
- Average size of new dwelling construction from 2006-33. The model below assumes an average new dwelling size of 100 m².
- Cost of building social housing. The model below estimates a cost of \$250,000 (2008\$) to build one social housing dwelling. Biruu believes that this estimate is an industry accepted "rule of thumb" benchmark used for purchasing social housing units.

¹⁷ It is possible that housing associations have enhanced their growth capacity since 2006 and over the 25 years period to 2033 may provide increasing proportions of social housing to total dwellings in the study area. At some point this may be documented and when the modeling is adjusted in the future can be incorporated into revised estimates of projected social housing needs.

- Number of social housing dwellings to be built over the 25 year horizon.
- Proportion of cost of building social housing that the IZ cash in lieu rate is expected to fund. The model below assumes that the IZ cash in lieu rate funds 50% of the cost of providing additional social housing.

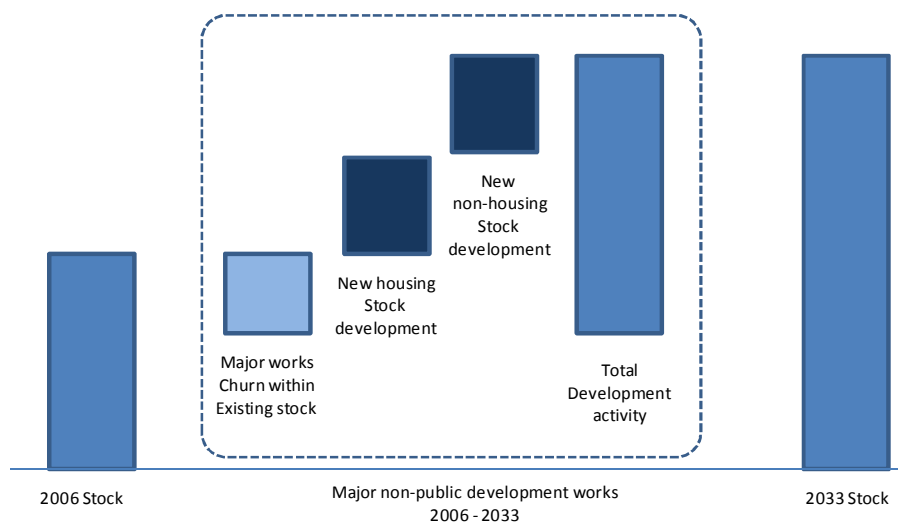
Changes in these critical assumptions will result in different IZ cash in lieu payment rates.

6 DEVELOPMENT ACTIVITY ESTIMATES

6.1 Methodology

The estimation of the total development activity is a key input into the calculations used by SGS in determining the appropriate IZ levels needed to achieve certain targeted outcomes.

In assessing the reasonableness of these estimates we have developed the following methodology:



The estimate of total development activity within the period 2006-2033 equals the total estimates of:

- Churn within the existing 2006 stock (ie major refurbishments and upgrade works)
- New housing stock added
- New non-housing stock added

We have addressed each of these in turn.

6.2 Existing 2006 stock

6.2.1 SGS estimate

SGS have estimated housing stock floorspace in 2006 as **15.2 million m²**¹⁸, This is based on an estimate of 152,290 dwellings with an average floorspace of 100 m².

¹⁸ *An Affordable rental housing Overlay in the Victoria Planning Provisions*, SGS Economics & Planning, March 2007, page 11.

SGS estimated commercial floorspace in 2006 as **40.4 million m²**.¹⁹

Thus, SGS estimated total floorspace in 2006 as **55.6 million m²**.

6.2.2 Biruu estimate

Based on 2006 Census data, the number of private dwellings in the Study Area was 150,340 with an estimated average floorspace of 200 m².²⁰ Thus, Biruu estimates housing stock floorspace in 2006 was **30.1 million m²**.

Biruu estimates commercial floorspace in 2006 as **28.0 million m²**. The commercial floorspace in Melbourne [C] in 2006 is estimated to be 20.5 million m², not 29.8 million m² as estimated by SGS (See the table below).

The table below supplies the raw Census of Land Use and Employment (CLUE) data for floorspace in Melbourne [C] for 2002-06.

CLUE Data	Floorspace (sq m)		
Space Use	2002	2004	2006
Office	4,240,732	4,406,821	4,872,533
Retail/Wholesale	910,537	957,539	1,034,964
Industrial	5,235,401	5,343,047	5,210,269
Educational	1,238,363	1,335,514	1,436,935
Medical	889,899	875,713	787,364
Entertainment/Recreation	2,640,876	2,701,964	2,547,132
Community Use	37,497	48,702	49,316
Private Accommodation	3,197,469	3,700,179	4,322,295
Commercial Accommodation	803,212	893,452	969,533
Parking - Private	1,352,823	1,457,063	1,647,536
Parking - Commercial	1,484,851	1,564,791	1,711,305
Performances, Conferences, Ceremonies	318,038	343,350	345,975
Public Display Area	146,830	214,872	308,961
Unoccupied - Under Construction	679,728	673,566	553,082
Unoccupied - Under Renovation	513,176	359,934	329,406
Unoccupied - Under Demolition/Condemned	103,215	92,099	18,655
Unoccupied - Unused	1,121,394	1,241,740	1,292,906
Unoccupied - Undeveloped Site	1,199,905	1,043,342	1,193,332
Open space	11,472,786	11,608,113	12,306,807
Common Area	2,792,430	3,157,773	3,724,089
Total	40,379,162	42,019,574	44,662,395

Biruu has adjusted this data to remove the non-commercial floorspace categories in this data. The adjusted data used to determine commercial floorspace in Melbourne [C] is shown in the table below:

¹⁹ Ibid, page 13.

²⁰ According to data on the website <http://australia.emigratenz.org/market-strength.html>, March 2008.

CLUE Data	Floorspace (sq m)		
Space Use	2002	2004	2006
Office	4,240,732	4,406,821	4,872,533
Retail/Wholesale	910,537	957,539	1,034,964
Industrial	5,235,401	5,343,047	5,210,269
Educational	1,238,363	1,335,514	1,436,935
Medical	889,899	875,713	787,364
Entertainment/Recreation	2,640,876	2,701,964	2,547,132
Commercial Accommodation	803,212	893,452	969,533
Parking - Private	1,352,823	1,457,063	1,647,536
Parking - Commercial	1,484,851	1,564,791	1,711,305
Performances, Conferences, Ceremonies	318,038	343,350	345,975
Total Commercial Floorspace	19,114,732	19,879,254	20,563,546

As can be seen, commercial floorspace (m²) in Melbourne [C] in 2006 was 20.5million m².

The SGS March 2007 provided the following estimates of commercial floorspace for the Study Area in 2006²¹.

Commercial Floorspace (m2) (SGS 2007 Report)	2,006	Percent
Melbourne (C) - Total	29,758,073	74%
Port Phillip (C)	5,169,869	13%
Yarra (C)	3,987,713	10%
Stonnington (C) - Prahran	1,513,901	4%
Total	40,429,556	100%

While Biruu estimates the commercial floorspace in Melbourne [C] as 20.5 million m² (not 29.8 million m²), the percentages of commercial floorspace in the four regions of the Study Area provided in the SGS 2007 Report have been retained. These percentages have been retained because they provide the only available estimate of floorspace for the individual regions in the Study Area.

The commercial floorspace available in the Study Area in 2006 is, therefore, estimated to be approximately 28 million m², as can be seen in the table below.

Commercial Floorspace (m2) (uses proportions from SGS 2007 Report)	2,006	Percent
Melbourne (C) - Total	20,563,546	74%
Port Phillip (C)	3,572,504	13%
Yarra (C)	2,755,606	10%
Stonnington (C) - Prahran	1,046,142	4%
Total	27,937,798	100%

Thus, Biruu estimates total floorspace in 2006 as **58.1 million m²**.

6.3 Churn within the existing 2006 stock

6.3.1 SGS estimate

SGS have estimated this as **16.0 million m²**.²²

²¹ *An Affordable Housing Overlay in the Victoria Planning Provisions*, SGS Economics and Planning, March 2007, p. 13.

²² SGS 2007 Report, page 12.

6.3.2 Biruu estimate

Biruu has assumed that one quarter of commercial floorspace will have a major refurbishment within the 25 year study period, based loosely on a structure life of 100 years. Thus, Biruu estimates the churn within the 2006 stock to be **7.0 million m²**. As per instructions from the Study Group, residential renovations have been excluded from estimates of churn within the 2006 floorspace estimates.

6.4 New housing stock added

6.4.1 SGS estimate

SGS have estimated additional housing stock as **8.7 million m²**.²³ This estimate is based on adding 87,261 new dwellings over 25 years with an average floorspace of 100 m².

6.4.2 Biruu estimate

Biruu estimates an additional 138,000 private dwellings will be developed over the next 25 years (see Section 5.1) with an average floorspace of 100 m². Thus, additional new housing stock is estimated to be **13.8 million m²**. This estimate excludes single residential dwelling developments. Total dwellings are projected to increase by 150,000 over the next 25 years.

Biruu projects the growth rate in dwelling numbers of the Study Area to increase at an average annual rate of 2.6% per annum, not 1.84% as implied by SGS²⁴ projections.

6.5 New non-housing stock added

6.5.1 SGS estimate

SGS have estimated that **13.2 million m²**²⁵ of new commercial floorspace will be developed over 25 years, which implies an annual average increase of 1.1%.

6.5.2 Biruu estimate

Biruu estimates that **18.0 million m²** of new commercial floorspace will be developed over the next 25 years.

From 2002-06, commercial floorspace in Melbourne [C] on average increased by 1.8% per annum. If the commercial floorspace in the Study Area continues to increase at an average annual growth rate of 1.8% over the next 25 years as it did in the Melbourne [C] area from 2002-06, in 2033 the Study Area will have approximately 46 million m² of commercial floorspace. This represents an additional 18 million m² of commercial floorspace in the Study Area over the next 25 years.

²³ Ibid, page 11.

²⁴ Telephone conversations with DSE representatives about projected population changes for the Study Area over the next 25 years suggested using the average annual increase of 2.6% per annum to approximate population growth given that the Department was unable to provide up to date population projections for the Study Area at this time.

²⁵ Ibid, page 13.

6.6 Total development activity

6.6.1 Summary Table

The following table summarizes these estimates.

Floorspace (millions of m ²)	SGS Estimate	Biruu estimate	Average estimate
2006 Stock	55.6	58.1	56.9
Churn within existing stock	16.0	7.0	11.5
New housing stock added	8.7	13.8	11.3
New non-housing stock added	13.2	18.0	15.6
Development activity	37.9	38.8	38.4
Stock in 25 years	77.5	89.9	83.8

7 INCLUSIONARY ZONING ESTIMATIONS

7.1.1 SGS calculation

The table below presents SGS estimates of various IZ cash in lieu rates per m² for various social housing mix targets/outcomes over 25 years given projected development activity in the Study Area and additional social housing needs required to achieve targets.²⁶

	2006 Stocks	2031 Stocks	Demolition & Replacement	Total Development Activity 2006 - 2031
Housing Stock (units)	152,290	239,551	5,413	92,674
Housing Stock (floorspace, sqm)	15,229,000	23,955,100	541,300	9,267,400
Non-Housing Development activity (floorspace, sqm)	40,429,556	53,587,887	15,474,198	28,632,529

Variables/inputs	Scenario 1 - Base Case with no Inclusionary Zoning	Scenario 2	Scenario 3 - Maintaining Current Social Housing Mix	Scenario 4
Current Social Housing Mix (2006)	6.2%	6.2%	6.2%	6.2%
Current Social Housing Stock (2006)	9,499	9,499	9,499	9,499
% Social Housing Mix Target / Outcome in 2031	4.0%	5.0%	6.2%	10.0%
% Funding Mix	NA	50%	50%	50%
Equivalence ratio	NA	1	1	1
Housing acquisition cost per unit	NA	\$250,000	\$250,000	\$250,000
Additional Social Housing Units Required to Meet Target	NA	2,479	5,353	14,456
Cost of Additional Social Housing Stock	NA	\$619,637,500	\$1,338,290,500	\$3,614,025,000
Development Activity (sq. m)	37,899,929	37,899,929	37,899,929	37,899,929
Cash in lieu rate per sq. m.	NA	\$8.17	\$17.66	\$47.68

However, the table above appears to contain a typo in the estimated social housing stock in 2006. The number of social housing dwellings should be 7,997, not 9,499²⁷. When this is corrected, the IZ payment rates are changed as the following table illustrates.

²⁶ SGS 2007 Report, Table 5 page 17.

²⁷ Ibid, Table 4 page 14.

	2006 Stocks	2031 Stocks	Demolition & Replacement	Total Development Activity 2006 - 2031
Housing Stock (units)	152,290	239,551	5,413	92,674
Housing Stock (floorspace, sqm)	15,229,000	23,955,100	541,300	9,267,400
Non-Housing Development activity (floorspace, sqm)	40,429,556	53,587,887	15,474,198	28,632,529

Variables/inputs	Scenario 1 - Base Case with no Inclusionary Zoning	Scenario 2	Scenario 3 - Maintaining Current Social Housing Mix	Scenario 4
Current Social Housing Mix (2006)	5.3%	5.3%	5.3%	5.3%
Current Social Housing Stock (2006)	7,997	7,997	7,997	7,997
% Social Housing Mix Target / Outcome in 2031	3.3%	5.0%	5.3%	10.0%
% Funding Mix	NA	50%	50%	50%
Equivalence ratio	NA	1	1	1
Housing acquisition cost per unit	NA	\$250,000	\$250,000	\$250,000
Additional Social Housing Units Required to Meet Target	NA	3,981	4,699	15,958
Cost of Additional Social Housing Stock	NA	\$995,137,500	\$1,174,800,750	\$3,989,525,000
Development Activity (sq. m)	37,899,929	37,899,929	37,899,929	37,899,929
Cash in lieu rate per sq. m.	NA	\$13.13	\$15.50	\$52.63

7.1.2 Biruu estimate

The table below presents Biruu estimates of various IZ cash in lieu rates per m² for various social housing mix targets/outcomes over 25 years given projected development activity in the Study Area and additional social housing needs required to achieve targets.

Study Area	2006 Stocks	Total Development Activity 2006 - 2033 (a)	2033 Stocks
Total Dwellings (Number)	150,340	138,000	300,000
Social Housing Stock (Number)	8,818		8,441
% Social Housing of Total Dwellings	5.9%		2.8%
Rented Dwellings (Number)	66,826		134,000
Rented Dwellings Affordable to Very Low Income Households	9,874		9,484
% Rented Dwellings Affordable to Very Low Income Households	15%		7%
% Social Housing of Rented Affordable Dwellings	89%		89%
Housing Stock Development (floorspace m ²)	30,068,000	13,800,000	43,868,000
Non-Housing Development activity (floorspace m ²)	28,000,000	18,000,000	46,000,000
Lifecycle Replacement Activity (floorspace m ²)		7,000,000	
Total Development activity (floorspace m ²)		38,800,000	

(a) excludes single dwelling development

Variables/inputs	Scenario 1 - Base Case with no Inclusionary Zoning	Scenario 2 - Maintaining Current Social Housing Ratio	Scenario 3 - 15% of Projected Rented Dwellings Affordable to Very Low Income Households	Scenario 4 - 20% of Projected Rented Dwellings Affordable to Very Low Income Households
% Social Housing Mix Target in 2033	2.8%	5.9%	6.4%	8.6%
% Funding Mix	NA	50%	50%	50%
Social Housing acquisition cost per unit	NA	\$250,000	\$250,000	\$250,000
Additional Social Housing Units Required to Meet Target	NA	9,259	10,616	17,316
Cost of Additional Social Housing Stock	NA	\$2,314,750,000	\$2,653,932,584	\$4,328,932,584
Development Activity (sqm)	38,800,000	38,800,000	38,800,000	38,800,000
Cash in lieu rate per sqm.	NA	\$29.83	\$34.20	\$55.79

As can be seen from the table, the more social housing that is desired in the Study Area, the more expensive the Inclusionary Zoning cash in lieu rate psm is for builders. The four scenarios chosen by Biruu are as follows:

- Scenario 1: Social housing dwellings continue to decline by 0.2% per annum over the next 25 years as has been evident from 1996-2006. Social housing decreases from 5.9% of total housing stock in 2006 to 2.8% of estimated total housing stock in 2033. Base case with no IZ cash in lieu rate payment levied on future development activity in the Study Area.
- Scenario 2: Maintain social housing dwellings in 2033 at 5.9% of estimated total dwellings as was evident in the 2006 Census data.

- Scenario 3: Maintain affordable rented housing in 2033 at 15% of estimated total dwellings as was evident in the 2006 Census data. This has the effect of increasing projected social housing dwellings to 6.4% of estimated 2033 total dwellings.
- Scenario 4: Increase affordable rented housing to 20% of estimated total dwellings to bring affordable rental housing proportion in line with 2006 percentage of Australian households on very low incomes. This scenario appears to be consistent with alleviating the affordable rental housing crisis in the Study Area evident in 2006 Census data. Increasing affordable rented housing to 20% of total dwellings has the effect of increasing projected social housing dwellings to 8.6% of estimated 2033 total dwellings.

Please note that consistent with SGS the IZ cash in lieu rate also assumes that 50% of the cost of providing the additional dwellings will be contributed by another entity, presumably the State or Federal Government. We think that this is a reasonable assumption because:

- An IZ is meant to supplement rather than replace other schemes
- The development market is likely to want the public sector to share in the funding of the issue, rather than have the full impost put on the private sector
- It is reasonably consistent with other public funding sources that are being applied now
- The IZ should be seen as a 'top up' to 'base load' funding for particular geographic areas of concern

The calculation of the IZ cash in lieu rate also assumes that approximately 38.8 million square meters of floorspace will be constructed over the 25 year timeframe, approximately 1.6 million m² per annum.

If the Inclusionary Zoning cash in lieu rate psm is not established, it is projected that social housing will decline from 5.9% of total dwellings in the Study Area in 2006 to 2.8% in 2033.

If the Study Group wants to maintain projected social housing at 5.9% of total dwellings in 2033, an additional 9,259 dwellings will be needed. If builders construct 38.8 million square meters of commercial and private floorspace, an IZ cash in lieu rate of approximately \$30/m² will need to be collected to construct the additional dwellings.

There were 9,874 dwellings in the Study Area that rented for less than \$140 per week in 2006 (affordable for households on very low incomes), representing 6.6% of total dwellings in the Study Area (15% of rented dwellings).

The number of rented dwellings in the Study Area (66,826 in 2006) had an average annual growth rate of 2.7% from 2001-2006, in line with the annual average increase in population in the Study Area during the same period. If the number of rented dwellings in the Study Area continues to increase at the same rate as the projected population increase of 2.6% per annum over the next 25 years, in 2033 there will be approximately 134,000 rented dwellings in the Study Area.

Biruu estimates that in 25 years there will be approximately 9,484 dwelling for rent that are affordable to very low income households. This estimate is based on total rented dwellings in the Study area growing at an average annual rate of 2.6% per annum over the next 25 years, based on the assumed population average annual growth rate. The estimate also assumes that social housing dwellings continue to comprise 89% of affordable rented dwellings available in the Study Area as was evident in 2006 (8,818/9,874).

If there are 8,441 social housing dwellings, Biruu estimates that there will be 9,484 total affordable rented dwellings (8,441/0.89) in the Study Area in 25 years. This represents 7% of estimated total rented dwellings (9,484/134,000).

To achieve a target of 15% of total rented dwellings being affordable for very low income households (which maintains the 2006 proportion of rented dwellings affordable to very low income households in the Study Area), an additional 10,616 dwellings will be needed. This increases the projected social housing mix to 6.4% of total projected dwellings $[(10,616 + 8,441)/300,000]$ in 25 years. If builders construct 38.8 million square meters of commercial and private floorspace, an IZ cash in lieu rate of approximately \$34/m² will need to be collected to construct the additional dwellings.

To achieve a target of 20% of total rented dwellings being affordable for very low income households, an additional 17,316 dwellings will be needed. This increases the social housing mix to 8.6% of total projected dwellings $[(17,316 + 8,441)/300,000]$. If builders construct 38.8 million square meters of commercial and private floorspace, an IZ cash in lieu rate of approximately \$56/m² will need to be collected to construct the additional dwellings.

7.1.3 Average calculation

The table below presents the average of SGS and Biruu estimates of various IZ cash in lieu rates per m² for various social housing mix targets/outcomes over 25 years given projected development activity in the Study Area and additional social housing needs required to achieve targets.

Study Area	2006 Stocks	Total Development Activity 2006 - 2033 (a)	2033 Stocks
Total Dwellings (Number)	150,340	113,000	270,000
Social Housing Stock (Number)	8,818		8,200
% Social Housing of Total Dwellings	5.9%		3.0%
Rented Dwellings (Number)	66,826		125,000
Rented Dwellings Affordable to Very Low Income Households	9,874		9,213
% Rented Dwellings Affordable to Very Low Income Households	15%		7%
% Social Housing of Rented Affordable Dwellings	89%		89%
Housing Stock Development (floorspace m ²)	30,068,000	11,300,000	41,368,000
Non-Housing Development activity (floorspace m ²)	28,000,000	15,600,000	43,600,000
Lifecycle Replacement Activity (floorspace m ²)		11,500,000	
Total Development activity (floorspace m ²)		38,400,000	

(a) Biruu estimates exclude single dwelling developments and residential renovations in lifecycle replacement activity

Variables/inputs	Scenario 1 - Base Case with no Inclusionary Zoning	Scenario 2 - Maintaining Current Social Housing Ratio	Scenario 3 - 15% of Projected Rented Dwellings Affordable to Very Low Income Households	Scenario 4 - 20% of Projected Rented Dwellings Affordable to Very Low Income Households
% Social Housing of Total Dwellings in 2033	3.0%	5.9%	6.6%	8.9%
% Funding Mix	NA	50%	50%	50%
Social Housing acquisition cost per unit	NA	\$250,000	\$250,000	\$250,000
Additional Social Housing Units Required to Meet Target	NA	7,730	9,537	15,787
Cost of Additional Social Housing Stock	NA	\$1,932,500,000	\$2,384,129,213	\$3,946,629,213
Development Activity (sqm)	38,400,000	38,400,000	38,400,000	38,400,000
Cash in lieu rate per sqm.	NA	\$25.16	\$31.04	\$51.39

8 ISSUES OF BROADENING ACCESS TO AFFORDABLE RENTAL HOUSING

We understand that this issue revolves around the targeted recipients of any IZ scheme and whether the scheme could be extended to allow Councils to help other income groups have access to affordable rental housing.

8.1 Environmental Standard

The underlying premise of SGS's earlier work on IZ is that this mechanism must be understood as an environmental standard, not as a redistributive intervention in the housing market per se.

As an environmental standard, IZ is akin to other conventional planning and building regulations pertaining to say solar access, incorporation of sufficient parking, incorporation of adequate landscaping and open space and on-site stormwater retention. The environmental outcome or 'value' being sought via IZ is an adequate social mix to maintain social cohesion, cultural vibrancy and an efficient labour market (where lower paid workers can be sourced locally).

8.2 Permanence

This environmental value needs to be **permanently** embedded in successive developments (or their surroundings) in the same way as solar access, car parking, open space and stormwater retention must be permanently embedded in the fabric of urban development to maintain adequate environmental performance.

Permanence of affordable availability is the key here.

It is difficult if not impossible to imagine how one would maintain a permanent stock of affordable home **ownership** opportunities in the target locations. Highly complex, expensive and unwieldy arrangements would need to be put in place to ensure that the first generation of buyers in these areas does not simply capture a windfall upon their sale of the properties.

Even if these sales and windfall gains did not occur, the households in (assisted) ownership tenure could be expected to improve their income and wealth positions over time, so that the underlying requirement to maintain a social mix through IZ would be lost.

Based on the rationale for the IZ as developed by SGS we would have to conclude that, to us anyway, a policy conflict would have to occur if the IZ was used for any purpose other than what this premise is based on.

Our understanding is that this is *'rental properties to be made available to lower income groups to ensure a wide demographic is maintained within the areas'*

We cannot see how entities other than the not-for-profit sector – ie Housing Associations (or Government) could hold such properties for their intended purpose, in perpetuity, to ensure that the mix is maintained over a long time frame.

8.3 Availability versus Ownership

We also note that the private rental market appears to be functioning reasonably well in central Melbourne in terms of providing housing availability to the middle income households that could be candidates for any form of assisted home ownership.

That is, while it is clear that low and very low income households continue to face serious availability problems in the inner city and are being squeezed out, it is not clear that the same applies to moderate income households, so long as they are happy to rent.

Thus there appears to be no environmental argument at this point to extend IZ to home **ownership** for moderate income households.

As far as housing availability goes, the bottom (very low income) group is getting squeezed out, as far as actual makeup of each group in the study area, compared to the average makeup the middle groups (low and moderate income) are underrepresented compared to the Australian average – although availability is presents.

This could be due to a variety of reasons. We could speculate that some of this group no longer wants to rent and wants to buy a house – this is a choice that leads them outside the study area.

We would argue that it is nigh on impossible to maintain social mix through a home ownership intervention; the beneficiary households will ultimately improve their income and wealth position, so any mix will be lost.

8.4 Problems with using an IZ to address housing ownership

The first point we would make is that the IZ is a particular mechanism, which fits within a much larger world of housing affordability generally.

There are also numerous other programs that exist or are being discussed each targetting their own particular part of the wider problem, these include:

- Zoning and planning to try to create more supply
- First Home buyer grants
- Shared equity schemes
- Tax incentives

Assuming that IZ funds were wanted to be applied to home ownership affordability problem, we would perceive that it would be difficult if not impossible to imagine how one would maintain a permanent stock of affordable home **ownership** opportunities in the target locations.

Highly complex, expensive and unwieldy arrangements would need to be put in place to ensure that the first generation of buyers in these areas does not simply capture a windfall upon their sale of the properties.

These arrangements would attempt to negate a powerful private motivation of getting around the rules to make a profit. They would need to include:

- Set up
- Enforcement
- Administration
- Dealing with capital improvements
- Valuation and buy out/back
- Interaction with the private sector funders
- Legal
- Public relations and communication issues

9 IMPACT - CASE STUDIES

Three desktop 'case studies' have been developed at a high level to demonstrate the effect of an IZ. Please note that they are hypothetical and very basic calculations to demonstrate possible effects.

We note that due to most of the inputs into these scenarios being \$ per area, the effects shown below would be similar for smaller and larger scenarios - the effects are reasonably

linear as they are area based (ie double the size, double the IZ, same effect. Ditto with half the size, half the IZ would be applicable etc)

9.1 Option 1 – 5000m2 commercial office development with pre-commitment to tenant on cleared site

In this scenario a developer is building a 5,000m2 commercial building on a cleared site, after signing a pre-lease with a prospective tenant.

Assumed IZ rate is \$10/m2

	before IZ		after IZ		
land cost	\$	2,000,000	\$	2,000,000	
design building cost (say 3200/m2 gross)	\$	16,000,000	\$	16,000,000	
dev costs (holding, finance, mktg, legal etc say 10%)	\$	1,600,000	\$	1,600,000	
IZ charge	\$	-	\$	50,000	
	S/T	\$	19,600,000	\$	19,650,000
finance/holding costs (say 18mth, 50%drawdown, 10%int)	\$	1,470,000	\$	1,473,750	
	S/T	\$	21,070,000	\$	21,123,750
developers profit (say 15%)	\$	3,160,500	\$	3,168,563	
Total Development Cost	\$	24,230,500	\$	24,292,313	
rent required pa to achieve 8% yield	\$	1,938,440	\$	1,943,385	
rent per m2 (over 5000m2) - net per annum per m2	\$	388	\$	389	

Assumed IZ rate at \$20/m2

	before IZ		after IZ	
land cost	\$	2,000,000	\$	2,000,000
design building cost (say 3200/m2 gross)	\$	16,000,000	\$	16,000,000
dev costs (holding, finance, mktg, legal etc say 10%)	\$	1,600,000	\$	1,600,000
IZ charge	\$	-	\$	100,000
	S/T	\$ 19,600,000	\$	19,700,000
finance/holding costs (say 18mth, 50%drawdown, 10%int)	\$	1,470,000	\$	1,477,500
	S/T	\$ 21,070,000	\$	21,177,500
developers profit (say 15%)	\$	3,160,500	\$	3,176,625
Total Development Cost	\$	24,230,500	\$	24,354,125
rent required pa to achieve 8% yield	\$	1,938,440	\$	1,948,330
rent per m2 (over 5000m2) - net per annum per m2	\$	388	\$	390

Assumed IZ rates at \$30/m2

	before IZ		after IZ		
land cost	\$	2,000,000	\$	2,000,000	
design building cost (say 3200/m2 gross)	\$	16,000,000	\$	16,000,000	
dev costs (holding, finance, mktg, legal etc say 10%)	\$	1,600,000	\$	1,600,000	
IZ charge	\$	-	\$	150,000	
	S/T	\$	19,600,000	\$	19,750,000
finance/holding costs (say 18mth, 50%drawdown, 10%int)	\$	1,470,000	\$	1,481,250	
	S/T	\$	21,070,000	\$	21,231,250
developers profit (say 15%)	\$	3,160,500	\$	3,184,688	
Total Development Cost	\$	24,230,500	\$	24,415,938	
rent required pa to achieve 8% yield	\$	1,938,440	\$	1,953,275	
rent per m2 (over 5000m2) - net per annum per m2	\$	388	\$	391	

Assumed IZ rates at \$50/m2

	before IZ		after IZ	
land cost	\$	2,000,000	\$	2,000,000
design building cost (say 3200/m2 gross)	\$	16,000,000	\$	16,000,000
dev costs (holding, finance, mktg, legal etc say 10%)	\$	1,600,000	\$	1,600,000
IZ charge	\$	-	\$	250,000
	S/T	\$	\$	
		19,600,000		19,850,000
finance/holding costs (say 18mth, 50%drawdown, 10%int)	\$	1,470,000	\$	1,488,750
	S/T	\$	\$	
		21,070,000		21,338,750
developers profit (say 15%)	\$	3,160,500	\$	3,200,813
Total Development Cost	\$	24,230,500	\$	24,539,563
rent required pa to achieve 8% yield	\$	1,938,440	\$	1,963,165
rent per m2 (over 5000m2) - net per annum per m2	\$	388	\$	393

Possible Consequence of Option 1

We do not consider that the any of these scenarios would be significant, or even detectable above the 'noise' in this scenario when a tenant has been pre-leased to the building.

For example there is less that a 1.3% change in the highest scenario.

9.2 Option 2 – demolition of a 2000m2 building requiring a permit

In this scenario a land owner is clearing a site for sale by the demolition of an old 2,000m2 building on site. The demolition requires a permit.

Assumed IZ rate is \$10/m2.

	before IZ		after IZ	
demolition cost (say 125/m2)	\$	250,000	\$	250,000
IZ charge	\$	-	\$	20,000
	S/T	\$	\$	
		250,000		270,000
	S/T	\$	\$	
		250,000		270,000
Total Development Cost	\$	250,000	\$	270,000

Assumed IZ rate of \$20/m2

	before IZ		after IZ	
demolition cost (say 125/m2)	\$	250,000	\$	250,000
IZ charge	\$	-	\$	40,000
	S/T	\$	\$	
		250,000		290,000
	S/T	\$	\$	
		250,000		290,000
Total Development Cost	\$	250,000	\$	290,000

Assumed IZ rate of \$30/m2

	before IZ		after IZ	
demolition cost (say 125/m2)	\$	250,000	\$	250,000
IZ charge	\$	-	\$	60,000
	S/T	\$ 250,000	\$	310,000
	S/T	\$ 250,000	\$	310,000
Total Development Cost	\$	250,000	\$	310,000

Assumed IZ rate of \$50/m2

	before IZ		after IZ	
demolition cost (say 125/m2)	\$	250,000	\$	250,000
IZ charge	\$	-	\$	100,000
	S/T	\$ 250,000	\$	350,000
	S/T	\$ 250,000	\$	350,000
Total Development Cost	\$	250,000	\$	350,000

Possible Consequence of Option 2

We think that the cost increase in this option is material to the works and likely to affect the market. Costs have increased significantly.

Consideration should be given to an IZ **not** being applied to demolition only permits. This is due to the fact that an increase in costs is in our opinion likely to materially affect this market, and may delay demolition in situations where it would have done. We note that SGS were not advocating the imposition of an IZ on demolition permits. We present the case study to support its exclusion from a possible IZ mechanism linked to Planning Permit issue.

9.3 Option 3 – demolition of 1000m2 warehouse and construction of 15 new 2BR apartments (90m2 each)

This scenario has a developer purchasing a small commercial warehouse, clearing this and building 15 two bedroom apartments after pre-sale.

Assumed IZ rate of \$10/m2.

	before IZ	after IZ
land cost	\$ 1,000,000	\$ 1,000,000
demolition cost	\$ 125,000	\$ 125,000
design building cost (say 15apt @ 90m2 gross @ 3500)	\$ 4,725,000	\$ 4,725,000
dev costs (holding, finance, mktg, legal etc say 10%)	\$ 472,500	\$ 472,500
IZ charge	\$ -	\$ 13,500
S/T	\$ 6,322,500	\$ 6,336,000
finance/holding costs (say 18mth, 50%drawdown, 10%int)	\$ 474,188	\$ 475,200
S/T	\$ 6,796,688	\$ 6,811,200
developers profit (say 15%)	\$ 1,019,503	\$ 1,021,680
Total Development Cost	\$ 7,816,191	\$ 7,832,880
unit sales commission (say 3%)	\$ 234,486	\$ 234,986
Total Sales proceeds required	\$ 8,050,676	\$ 8,067,866
average cost per unit over 15 units (excl GST)	\$ 536,712	\$ 537,858

Assumed IZ rate of \$20/m2

	before IZ	after IZ
land cost	\$ 1,000,000	\$ 1,000,000
demolition cost	\$ 125,000	\$ 125,000
design building cost (say 15apt @ 90m2 gross @ 3500)	\$ 4,725,000	\$ 4,725,000
dev costs (holding, finance, mktg, legal etc say 10%)	\$ 472,500	\$ 472,500
IZ charge	\$ -	\$ 27,000
S/T	\$ 6,322,500	\$ 6,349,500
finance/holding costs (say 18mth, 50%drawdown, 10%int)	\$ 474,188	\$ 476,213
S/T	\$ 6,796,688	\$ 6,825,713
developers profit (say 15%)	\$ 1,019,503	\$ 1,023,857
Total Development Cost	\$ 7,816,191	\$ 7,849,569
unit sales commission (say 3%)	\$ 234,486	\$ 235,487
Total Sales proceeds required	\$ 8,050,676	\$ 8,085,056
average cost per unit over 15 units (excl GST)	\$ 536,712	\$ 539,004

Assumed IZ rate of \$30/m2

	before IZ	after IZ
land cost	\$ 1,000,000	\$ 1,000,000
demolition cost	\$ 125,000	\$ 125,000
design building cost (say 15apt @ 90m2 gross @ 3500)	\$ 4,725,000	\$ 4,725,000
dev costs (holding, finance, mktg, legal etc say 10%)	\$ 472,500	\$ 472,500
IZ charge	\$ -	\$ 40,500
S/T	\$ 6,322,500	\$ 6,363,000
finance/holding costs (say 18mth, 50%drawdown, 10%int)	\$ 474,188	\$ 477,225
S/T	\$ 6,796,688	\$ 6,840,225
developers profit (say 15%)	\$ 1,019,503	\$ 1,026,034
Total Development Cost	\$ 7,816,191	\$ 7,866,259
unit sales commission (say 3%)	\$ 234,486	\$ 235,988
Total Sales proceeds required	\$ 8,050,676	\$ 8,102,247
average cost per unit over 15 units (excl GST)	\$ 536,712	\$ 540,150

Assumed IZ rate of \$50/m2

	before IZ	after IZ
land cost	\$ 1,000,000	\$ 1,000,000
demolition cost	\$ 125,000	\$ 125,000
design building cost (say 15apt @ 90m2 gross @ 3500)	\$ 4,725,000	\$ 4,725,000
dev costs (holding, finance, mktg, legal etc say 10%)	\$ 472,500	\$ 472,500
IZ charge	\$ -	\$ 67,500
S/T	\$ 6,322,500	\$ 6,390,000
finance/holding costs (say 18mth, 50%drawdown, 10%int)	\$ 474,188	\$ 479,250
S/T	\$ 6,796,688	\$ 6,869,250
developers profit (say 15%)	\$ 1,019,503	\$ 1,030,388
Total Development Cost	\$ 7,816,191	\$ 7,899,638
unit sales commission (say 3%)	\$ 234,486	\$ 236,989
Total Sales proceeds required	\$ 8,050,676	\$ 8,136,627
average cost per unit over 15 units (excl GST)	\$ 536,712	\$ 542,442

Possible Consequence of Option 3–

We do not consider that the increase in purchase cost of approximately \$3000 per unit would be material in the market as it represents less than 1.1% of the units value (in the highest scenario) and likely to be swamped by other unrelated factors (ie inflation, land costs, building costs, location, taxes).

10 PRACTICAL ISSUES

10.1 IZ Collection Point

The obvious collection point for the IZ would be with the planning permit process, as the infrastructure, systems and knowledge of the process is widely known throughout the development market.

A slight complicating factor could be that the IZ payment should not be made until a successful planning permit is issued, rather than when it is lodged. Perhaps it could be a condition on the permit?

Advice from the council statutory planners and legal advisors should be sought to determine the best payment point. Issues that we think would warrant assessment would include:

- What types of development works would be included (public buildings?)
- What types of development works would be exempt (ie minor vs major refurbishment, private dwelling extensions etc)
- Appeal rights and processes. Avoiding the risk of retrospective legal issues with a challenge creating legal precedent
- How subsequent planning permit variations would be handled
- What happens to projects where the Min Planning 'steps in' as Responsible Authority?"

Developers are likely to want any IZ charge to be paid as late as possible, as early payments will likely need to come from their equity contribution.

11 IMPLEMENTATION

11.1 Implementation Issues

We understand that in order to be implemented an IZ would likely require the four Councils to signoff and then each lodge a Planning Scheme Amendment (or similar) to the Minister for Planning, who's endorsement would be required for the IZ scheme to be put in place.

In determining his position on the matter the Minister for Planning will likely take advice from:

- Staff from the Department of Planning and Community Development, who would brief him
- His political office and staff
- Potentially also from central agencies (Department of Treasury and Finance (DTF) and Department of Premier and Cabinet (DPC))

The Minister for Planning may also want to take this matter to an appropriate Cabinet sub-committee which would open the issue up further for other Departments to assess and brief their Ministers. He could also decide to refer it to a panel for assessment.

Assuming the four Councils want to implement the scheme, obtaining the State Governments endorsement will be a critical success factor. There are likely to be many conflicting views on IZ issues that will need to be resolved.

11.2 South Sydney Affordable Housing Development Control Plan

In 2000, The South Sydney City Council implemented an Inclusionary Zoning contribution to achieve the planning principles outlined in the South Sydney Local Environment Plan 1998. The development plan requires that the equivalent of 3% of total residential floorspace and 1% of total commercial floorspace developed in Green Square over the next 20-30 years be designated as affordable rental housing for very low, low and moderate income households.²⁸

The *Affordable Housing Development Control Plan* 2002 report contained the following calculation of the IZ cash in lieu payment established by South Sydney City Council in 2000.²⁹

Table 2. Calculation of contributions

Average size of 1 unit of affordable rental housing	100m ²
Average cost of providing 1 unit of affordable rental housing	\$220,000
Estimated total floor area residential	1,100,000 m ²

Residential development

A. On site contribution

	m ² total floor area required for
On site contribution =	$\frac{330 \text{ units of affordable rental housing}}{\text{m}^2 \text{ total floor area of residential uses in Green Square}}$
On site contribution =	$\frac{33,000}{1,100,000} = 3\% \text{ of total floor area}$

B. In lieu contribution

²⁸ *Affordable Housing Development Control Plan*, South Sydney City Council, October 2002, p. 11.

²⁹ *Ibid.*, p. 12.

In lieu contribution = $\frac{\text{total cost for 330 units of affordable rental housing}}{\text{m}^2 \text{ total floor area of residential in Green Square}}$

In lieu contribution = $\frac{\$72,600,000}{1,100,00} = \text{approx } \$66/\text{m}^2 \text{ of total floor area}$

Non-residential Development

A. On site contribution

On site contribution = $\frac{\text{m}^2 \text{ total floor area required for 30 units of affordable rental housing}}{\text{m}^2 \text{ total floor area of non-residential uses in Green Square}}$

On site contribution = $\frac{3,000}{300,000} = 1\% \text{ of total floor area}$

B. In lieu contribution

In lieu contribution = $\frac{\text{total cost for 30 units of affordable rental housing}}{\text{m}^2 \text{ total floor area of non-residential in Green Square}}$

In lieu contribution = $\frac{\$6,600,000}{300,000} = \text{approx } \$22/\text{m}^2 \text{ of total floor area}$

The IZ cash in lieu contribution is currently \$119/m² for residential development and \$39/m² for non-residential development. The cash in lieu contribution is reviewed annually in March and is indexed to the Housing Price Index. From 2000-08, 80 social housing units have been provided in the Green Square of South Sydney.³⁰

Given the IZ cash in lieu contribution rates provided by developers in South Sydney, it seems likely that an IZ cash in lieu contribution for the Study Area of at least \$25-30/m² (with an additional \$25-30/ to be provided by other sources) will be needed to maintain social housing proportions evident in 2006.

This rate could be more slowly introduced (say y1,2 \$15/m², y3,4 \$20/m², y5 \$25/m² and then indexed) as an implementation feature.

11.3 Implementation Risks

From the Councils perspective one of the key risks is that if implemented the IZ starts to replace the State funding contribution for affordable/social/public housing over time, as funds are being sourced from elsewhere. Equally the Councils could be at risk of the current public funding being redirected to other non IZ localities.

11.4 Recommendations

Successful implementation is likely to require a high level of buy-in from Government, especially from senior officers of DPCD who at the end of the day will prepare the formal briefs to the Minister for Planning in response to a formal request by Council.

This is likely to require some formal governance arrangements to deal with the issues and the process of assessment and endorsement.

We would recommend that the following steps be considered to take the initiative forward:

- Councils 'in principle' endorsement of the concept based on the SGS work

³⁰ Telephone conversation with South Sydney City Council representative, 28 April 2008.

- Formal approach to the State Government (via DPCD) to set up a governance framework to jointly manage a potential formal proposal development
- Assessment of the States initial feedback to the idea
- This would likely include the formation of a Project Control Group comprising 4 representatives of Council, senior DPDC representatives, senior DPC representative
- This group would assess the work done to date and what additional form and quantity of work it required in order to reach respective conclusions (this may include a business case being prepared on the initiative, how the IZ would be collected and how it would be spent)