

2023-05267

Short term rental accommodation: new directions, new debates

FINAL REPORT

Authors

Terry Burke

Liss Ralston

Wendy Stone

Zoe Goodall

For

NSW Independent Planning Commission

Date

April 2023

Recommended citation

Burke, T., Ralston, L., Stone, W. and Goodall, Z. (2023) *Short term rental accommodation: new directions, new debates*, report prepared by AHURI Professional Services for NSW Independent Planning Commission, Australian Housing and Urban Research Institute Limited, Melbourne.

Disclaimer

The opinions in this report reflect the views of the authors and do not necessarily reflect those of AHURI Limited, its Board, its funding organisations or Inquiry Panel members. No responsibility is accepted by AHURI Limited, its Board or funders for the accuracy or omission of any statement, opinion, advice or information in this publication.

Copyright

© Australian Housing and Urban Research Institute Limited 2023

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, see <http://creativecommons.org/licenses/by-nc/4.0/>.



Contents

List of tables	v
List of figures	vi
Acronyms and abbreviations used	vii
Executive summary	1
1 Introduction	3
1.1 Context and categorisation	4
2 Methodology	7
2.1 Analytical approach	7
2.2 Review of international and national evidence	7
2.3 Byron Shire statistical analysis	8
3 Recent STRA growth: the issues and challenges	10
3.1 The institutional context	10
3.2 The crisis in private rental: a rental problem has become a rental crisis	12
3.3 Evidencing the STRA impact	13
3.4 Dwelling price inflation and declining affordability	13
3.5 Rapid tourism growth post COVID-19	14
3.6 STRA: community resentment and policy push	15
3.7 Climate change and environmental disasters	16
3.8 Industry diversification and the policy challenge	16
3.9 Policy evaluation	17
3.10 Policy initiatives	18
3.11 Consultation with platforms	20
3.12 The national Australian context	21
3.12.1 Australian Capital Territory	21
3.12.2 New South Wales	22

3.12.3	Tasmania	23
3.12.4	Queensland	24
3.12.5	Victoria	24
3.12.6	Western Australia	25
4	Policy reflection and options	26
4.1	Strategic objectives	26
4.2	Defining STRA and associated day stays policy	26
4.3	Registration	27
4.3.1	What is STRA, for the purpose of registration?	27
4.3.2	Who is responsible for registration?	28
4.3.3	What is to be negotiated with platforms (e.g., Airbnb)?	28
4.3.4	What conditions attach to registration?	28
4.3.5	Type of property	29
4.3.6	What is to be achieved by registration?	29
4.3.7	Is centralised registration enough?	29
4.4	Scoping impacted areas	29
4.5	Taxes and rates	30
4.6	Compliance	31
5	Byron Bay case study	33
5.1	Context	33
5.2	The STRA institutional context	36
5.3	Housing outcomes post-2018	37
5.3.1	Tenure changes	37
5.3.2	Rental crisis	39
5.3.3	Blocked ownership aspirations	42
5.3.4	Labour market impacts	43
5.3.5	Dual occupancy	44

5.4	Policy implications	44
5.4.1	Analysis of STRA caps	45
6	Key findings in review	49
7	Policy options: Where to from here?	51
	References	56
	Appendix 1: The economics of hosting	62
	Appendix 2: Mapping the details of Airbnb	63
	Appendix 3: STRA Submarkets and possible options for interventions	64

List of tables

Table 1: Types of International STRA interventions for non-hosted STRA	18
Table 2: Property type of Airbnb in Byron Bay	35
Table 3: Change in housing tenure in Byron Bay and regional NSW	37
Table 4: Equivalised income distribution by tenure Byron Bay [SA2] 2011, 2016, 2021	38
Table 5: Affordable new rental lettings for low and moderate incomes	40
Table 6: Byron Bay (SA2) private rental vs Airbnb supply 2022	42
Table 7: Place of usual residence for people who work in Byron Bay [SA2]	44
Table 8: Landlord (rental provider) vs Airbnb Host – who gets the money – Byron Bay [SA2]	47
Table 9: Policy options for STRA issues	51
Table 10: STRA Submarkets and intervention options	64

List of figures

Figure 1: Airbnb numbers as proportion of total housing stock, Australian hotspots March 2022	4
Figure 2: Planning NSW STRA Planning Framework	22
Figure 3: Airbnb properties in Byron Bay/ Suffolk Park [Byron Bay SA2]	34
Figure 4: Number of available properties Active and Booked 2018 to 2022 Byron Bay (SA2)	35
Figure 5: Equivalised income distribution for Byron Bay [SA2] 2011,2016 2021	39
Figure 6: Equivalised income distribution for private renters Byron Bay [SA2] 2011,2016 2021	39
Figure 7: Median rent Byron Bay (SA2)	40
Figure 8: Affordable new rental lettings for low and moderate incomes	41
Figure 9: Median sales prices and number of dwellings sold Byron Bay (SA2)	43
Figure 10: Affordable dwelling purchase for low- and moderate-income households – Byron Shire	43
Figure 11: STRA cap scenarios	46
Figure 12: STRA likely hosting patterns	46
Figure 13: Landlord (rental provider) vs Airbnb Host – who gets the money – Byron Bay [SA2] December 2022	47
Figure 14: Economics of Airbnb	62
Figure 15: Mapping the details of Airbnb	63

Acronyms and abbreviations used

ABS	Australian Bureau of Statistics
AHURI	Australian Housing and Urban Research Institute Limited
LTR	Long term rental (accommodation)
STRA	Short Term Rental Accommodation

Executive summary

This report, commissioned by the NSW Independent Planning Commission, overviews the policy and planning context and issues in addressing the problems and potentials in short term rental accommodation (STRA) as it relates to New South Wales. It focuses on Byron Shire as a case study but locates the analysis in a national and international context, the latter being an overview of policy initiatives in other countries.

Throughout the report 'STRA' will be used as the generic term for the industry even though Airbnb is often seen as 'the industry' and is the only platform provider where there is ready data of the type used in this report. Other STRA providers include STAYZ, HomeToGo, Kayak.com as well some local area real estate agents. STRA has two broad forms. **Hosted** STRA is that where the host resides on the premises during the provision of the accommodation, while **non-hosted** means that provided where the host does not reside on the premises during the provision of the accommodation.

Key points:

- The problems that communities see as related to STRA – i.e., the lack of long-term rental (LTR), declining rental and purchase affordability, increased dwelling prices, loss of local amenity and community – have seriously worsened in the last five years, most notably in terms of affordability and vacancy. In some submarkets, such as Byron Shire, it is fair to call it a housing crisis.
- The housing problem is national to a large degree with causes that are contested but relate to the institutional attributes of the Australian housing system and the associated policy settings. STRA is thus a problem overlaid on a much larger set of problematic processes and we cannot expect STRA regulation to solve local housing problems, although they may mitigate them. In short, communities should not have false hope that greater regulation is the solution; any such regulation needs supporting by wider policy initiatives.
- While not the key cause of housing problems, STRA impacts will have greater weight in certain local contexts such as coastal communities like Byron Bay and inner-city tourist locations such as Bondi. Here policy interventions would be appropriate but need to be tailored to the specific attributes of a locality and the type of STRA accommodation.
- Internationally, community resentment and activism associated with STRA growth has become stronger in the last half decade, prompting governments at different levels (most notably at the local level) to initiate a large and diverse range of policy interventions. There are cautionary lessons here for Australia; some may have relevance, but some less so given our different housing system.
- By comparison, Australian regulation is minimal with variations across the different jurisdictions. However, there are growing concerns and signs of new interventions.

- It is clear from the international evidence that compliance is a problem largely related to no effective mechanism for identifying unregistered hosts and whether they are meeting the conditions of registration. This in part derives from inability, reluctance or failure of platforms to provide the data. This issue means any registration process that attaches conditions to achieve specific housing outcomes such as day caps or maximum visitor numbers must work through compliance issues. The European Union is, at time of writing, evolving a Union-wide framework, set of principles and practices and a consultation process with platforms to address this problem where possible. As a federal system with multiple jurisdictions, this model could give guidance to Australia as to future action.
- The limited evidence to date from international policy interventions do show benefits such as increased LTR stock, but the degree of increase is much less than anticipated although this depends on how the evidence is understood; a small increase compared to the total amount of advertised lettings may make a significant difference.
- Any STRA regulation by itself cannot solve the housing problems of any town, city, or suburb given the broad cause is the weaknesses in the Australian housing system and policy context. STRA regulation must be supported by a range of other policies options.
- Byron Bay town as a case study STRA town is in housing crisis with excessively high dwelling prices and rents and associated affordability problems. This is potentially impacting labour market function and the opportunity for income and household diversity. It is developing a skewed income distribution (high income weighted) at the same time as low to moderate income households, including families, are increasingly pushed out of the township and homelessness and housing stress are increasing.
- The Byron Shire Community is broadly opposed to STRA but much of the housing problem (issues about noise, congestion, community impacts are different) are localized manifestations of national housing problems with STRA accentuating the impact. This still suggests a need for some positive actions with one option being a time limited piloting of Byron Shire's STRA planning proposal **with appropriate monitoring of outcomes**. STRA is not going to go away and knowledge of how to best manage it through monitoring of a nuanced pilot project rather than one-size-fits-all would be a significant initiative.
- A cap on the number of days rented is a popular international option but 180 days is probably not going to have any impact given STRA, as exemplified by Byron Bay town, is profitable compared to Long Term Renting (LTR) within 90 days. Other locations may have different time periods.

1 Introduction

This report overviews the policy and planning context and issues in addressing the problem and potentials in short term rental accommodation (STRA) as it relates to New South Wales. It focuses on Byron Shire as a case study but locates the analysis in a national and international context, the latter being an overview of policy initiatives in other countries. Byron Shire is particularly impacted by STRA growth and is also the location of a community-led push for council intervention of a form hitherto not operative in Australia.

The specific requirements of this report were to:

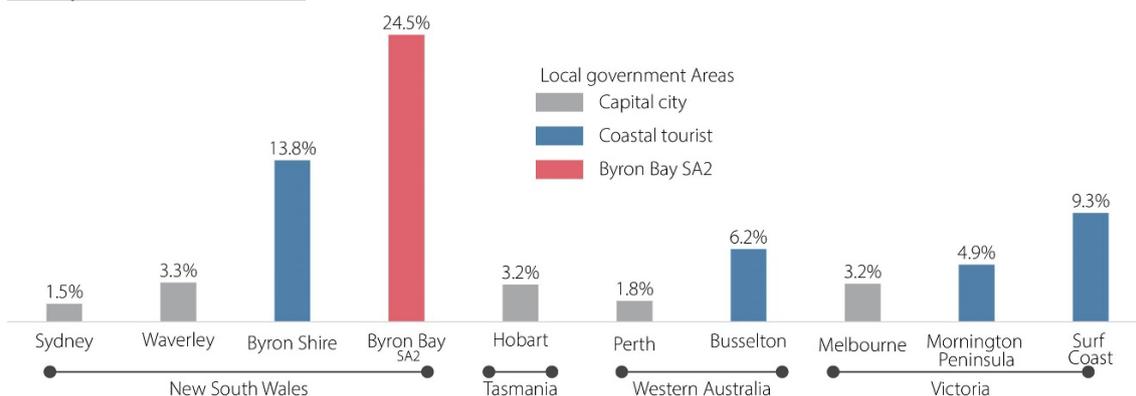
- conceptualise the different STRA market segments, which may require different policy interventions but with a focus on non-hosted STRA
- statistically identify trends in the extent and nature of STRA provision in Byron Shire and the issues and problems flowing from STRA provision, if any
- review STRA regulation in other states and internationally and, as part of this review, assess the degree to which regulatory tools deal with the scale and form of the housing affordability and supply problems faced by Australian cities and regions
- identify the tools are available to local governments (and Byron Shire in particular) to address STRA problems.

The term 'STRA' is used as the generic term for the entire industry. Airbnb is the largest provider and Airbnb will be used throughout the report, but as a separate organisational entity, often in a context where its practices are seen to be a key factor in the processes and politics of STRA provision or in the provision of data. **Hosted** STRA is that where the host resides on the premises during the provision of the accommodation, while **non-hosted** means that provided where the host does not reside on the premises during the provision of the accommodation.

The report complements the substantive Australian Coastal Councils Association report of 2018 (Gurran et al. 2018), and also makes reference to the NSW Department of Planning, Industry and Environment's short term accommodation economic impact assessment of STRA in Byron Shire (Urbis 2021). The report also draws some similar conclusions to Phibbs' analysis of STRA in Tasmania (Phibbs 2022).

As context, Figure 1 maps the distribution of relevant Airbnb properties as a percentage of total housing stock as of March 2023, where relevant means only those Airbnb properties that are appropriate for long-term rental (i.e., not including tents, caravans, etc.) The data is for STRA locations around Australia where there is concern with STRA and shows how dramatic the situation is in Byron Bay, with 24.5 percent of all dwellings now Airbnb. The next highest is Surf coast in Victoria, with Hobart seen as another problem location, although Airbnb is only 3.2 percent of all dwellings there.

Figure 1: Airbnb numbers as proportion of total housing stock, Australian hotspots March 2022



Source, Inside Airbnb 2023

1.1 Context and categorisation

It is often easy when researching a specific issue or problem to underplay the wider context. Focusing only on STRA may obscure the wider point that the housing market problems facing Australian cities, and many regional (notably coastal) areas, are structural or systemic in nature and are not resolvable by tinkering with STRA regulations. As concluded by an AHURI report on STRA, 'any regulatory response targeting [STRA] in isolation is likely to have a limited impact, as the issues affecting [...] markets are complex and interconnected, and deeply embedded in the housing system as a whole' (Crommelin et al. 2018).

Section 3.1 outlines that the STRA industry is part of a wider 'financialisation of property' process and a troubled housing system, with the problems flowing from these attributes being unable to be addressed by existing policy levers.

Spain may be a model of what is implied in the above discussion. With a housing crisis of a scale similar to Australia, but with STRA perceived to have a more significant causal role, the response has not only been targeted local area initiatives but a Right to Housing Bill (2022) which aims to establish a standardised regulation of the essential aspects of housing policies (not just at the local level) and provide local and regional governments and town councils with the instruments to promote affordable housing for the population. One of the most noteworthy features, given that Spain, like Australia, has a tradition and ideology of home ownership, is to reorientate policy to focus on rental housing, not home ownership, in recognition that this is now the area of greatest affordability hardship.

This is not to recommend a minimalist STRA strategy; there are local area housing and community issues strongly impacted by STRA, as outlined by Gurrán et al. (2018) and Urbis (2020), and which **accentuate** the existing structural weakness in the Australian housing system. These need appropriate policy and planning interventions, and we hope that this study goes some way in clarifying the issues and informing advice as a way forward. A reading of the international experience provides some direction but, given so many of the initiatives are very recent and that the Australian urban context is, in many cases, different, there are still grounds for uncertainty.

In addition to the hosted and non-hosted categories, the term STRA sweeps up a diverse range of what might be called 'STRA submarkets' with each having distinctive characteristics suggesting the need for tailored interventions. Before creating a categorisation of STRA submarkets, it is important to outline the three broad types of negative externalities that STRA accommodation is seen to create both internationally and nationally. These are:

Local amenity impacts including noise from partying, vehicle congestion, street parking problems, overuse of property or local facilities e.g., pools and gymnasiums.

Weakening of community. If more and more occupants of a street, neighbourhood or town/suburb are tourists rather than permanent, then local community can be weakened as measured by neighbourliness, volunteerism, local employment, and public participation.

Housing Market impacts including lack of LTR accommodation and associated increased rents, as well as price pressures on the wider market with implications for home purchase affordability.

These externalities will be different depending on the local STRA context and submarket. Three factors are important in delimiting types of STRA submarkets: location, property type, and STRA density.

Location is not just about where (e.g., Randwick vs. Byron Bay), but the nature of that location to the form and scale of tourism. Some areas are quite seasonal in tourism while others are year-round tourist locations. This has implications for the STRA income stream of providers.

Property type refers to whether the property is a separate dwelling or multi-unit apartment, with the latter of two types, smallish units with no common amenities (often built in the 1930s to 1980s), and higher rise largish apartment complexes many with common amenities such as pools and gymnasium. The distinction is important as they tend to attract different clients with associated different problems. Associated with the multi-unit property type are issues around the Body Corporate management. The large-scale multi-units tend to have large professionally managed body corporations while smaller units often have fewer professional ones and residents may be less involved in body corporate issues.

STRA Density means the proportion of STRA providers in a given location or building, with greater density suggesting more potential problems.

The broad categories of STRA submarkets (acknowledging grey areas around their boundaries) are:

All season coastal locations such as Byron Shire, and Batemans Bay in the Eurobodalla Shire in NSW, where the bulk of provision is in separate dwellings. This type of STRA is likely to experience all three externalities and with some of these concentrated at the very local level e.g., streets and neighbourhoods. The all-season attraction means the potential for a steady income stream for providers and the financial incentive to switch to STRA provision. Such areas will historically have a large stock of holiday homes with the problem that it is

difficult therefore to determine the origins of any STRA accommodation; does it come from a holiday house conversion or ex-LTR?

Seasonal coastal locations such as the coastal areas of Victoria, South Australia and Bega Valley Shire in NSW. These areas will be less impacted by local amenity and community issues except in peak seasons but still may experience loss of LTR.

All-season inner-city locations with larger scale higher rise multi-unit apartments. These are inner city suburbs with a largish stock of relatively recently constructed apartments. The issues here are twofold: loss of what might have been LTR and amenity issues within the apartment, an issue experienced by the other residents but not necessarily the external community. The latter can be dealt with by the type of legislation provided by NSW Fair Trading whereby owners corporations can adopt by-laws that limit short-term rental accommodation in their strata scheme, by banning it in lots that are not the host's principal place of residence. Given that these are professional body corporations and have had to deal with past amenity issues, a number will likely restrict STRA and indirectly facilitate return to LTR or stop loss to STRA.

All-season inner-city locations with small apartments. These are inner-city suburbs, e.g., Randwick council, with a largish stock of older constructed apartments and high density STRA provision. Much of the STRA stock in these is likely to come at the expense of LTR. Most of these are small one- and two-bedroom dwellings mainly catering to holidaying smaller households, not a weekend party crowd. Given that these are predominantly amateur body corporations and mostly will have experienced few amenity issues with STRA visitors one suspects few will use the Fair-Trading provisions to restrict STRA. Little STRA stock can be expected to be returned to LTR via Body Corporate provisions.

Regional towns and city suburban locations with limited tourism. These are locations with largely separate dwellings and low density STRA. Providers here are predominantly catering to peoples passing through or staying to visit family or friends. Outside of issues that relate to a specific STRA provider this submarket type would have few issues with STRA provision and probably require little policy intervention.

The different submarket categories suggest the need for different intervention options tailored to the specific circumstances, a point returned to in Section 5.

2 Methodology

The research that informs this brief report involved three methods:

- 1 Articulation of a simple framework for directing the analysis,
- 2 A desk-based review of international and national policy directions and issues, and
- 3 Secondary data analyses of the Byron Shire case study with housing data

2.1 Analytical approach

The report is framed by an institutional framework which focuses on the notion that all housing markets, including the local, are shaped by the institutional context of a society i.e., the demographic, social and economic structures, and values of that society, including the specific nature of policy and regulatory settings, interventions and responses, as well as governmental and/or community activism. This shapes how we understand and interpret the STRA problem.

Of particular importance in guiding the national analysis is the aforementioned Australian Coastal Councils Association report of 2018 (Gurran et al. 2018), and the NSW Department of Planning, Industry and Environment's short term accommodation economic impact assessment (Urbis 2021). The latter is built around a qualitative methodology, involving a survey of 800 resident owners (some of whom are potential STRA providers) and actual STRA owners, and offers a substantial amount of data on the housing market and STRA provision in the municipality and Byron Bay township.

2.2 Review of international and national evidence

This included a literature and document search to identify what policy and planning initiatives nationally and internationally have emerged in the last half decade and what lessons there might be for New South Wales. This review unfortunately could not make as much use of peer reviewed academic material as would be desired, as the time between academic research and publication can be years, and this is problematic in a fast-changing environment. Academic publishing is not ignored but is supplemented by the grey literature of newspaper reporting, private sector research institutes and government reports. Sources were found through internet searches of various permutations of 'STRA regulation/impacts' or 'Airbnb regulation/impacts' plus names of various cities, countries, states and territories. The scale of the material available highlight the concern with the industry's growth.

The Australian material came from a search of relevant governments departments and agencies both state and local. In some cases this included on going parliamentary enquiries.

2.3 Byron Shire statistical analysis

Statistical analysis using a variety of sources focused on the municipality of Byron Shire in NSW, with a more fine-grained analysis of the town of Byron Bay itself, with this identified statistically by the ABS census statistical areas (SA2) covering the Byron Bay post code 2481. As much of the STRA literature (Gurran et al. 2018, Crommelin et al. 2018, Phibbs 2022) concludes with the observation that any policy must be tailored to the housing system of the local community, this analysis focuses on getting a richer understanding of one community and its housing system, but with an emphasis on where STRA fits and the implications for policy. The Byron Shire Residential Strategy (2020), which includes a substantial section on STRA, was important for context. Data used in the report was:

- ABS Census of Population and Housing notable small area data for Byron Bay, which is covered by SA2.
- NSW Government Rental Bond Board data. This provides data on rental bonds lodged on take up of new leases and provides data on rents paid and dwelling size. Provided on a quarterly basis, it provides an up-to-date measure of actual rents paid, rather than advertised rents.
- *NSW STRA Register*. This is the site on which all STRA properties (non-hosted STRA) must register and thus provides data on all registered properties.
- *Airbnb data for 2022*. Data for the number, rents and other attributes for Airbnb comes from two sources: AirDNA, and Inside Airbnb 2023 with most of the data in section 5 using Inside Airbnb as one of the problems with AirDNA is the methodology of collection is hidden.

Given part of the focus on STRA in Byron Shire is on long term rental (LTR) displacement, Airbnb properties that could not be considered as appropriate LTR accommodation were 'stripped out' of the data. These include caravans, tents, cabins, and commercial premises such as motels. Airbnb data will understate the actual STRA numbers as it obviously is only for Airbnb and does not include other providers such as STAYZ. This is because there is no data source for other providers. However, the scale of Airbnb is such that its data would be representative of trends for the whole industry.

There may also be minor understatement of all STRA as some properties might be on Airbnb as well as other sites and a booking (the source of data) will not be recorded if advertised and booked elsewhere.

Much of the existing research on Airbnb (e.g., Gurran et al. 2018) has utilised InsideAirbnb, who 'scrape' listings from Airbnb's website, but this has limitations as the level of detail of data it can collect about booking history is not publicly accessible data on the Airbnb website, but the actual stock numbers are reasonably good subject to the qualifications below. Inside Airbnb was in the form of a calendar file containing 2,429,805 records showing availability and unavailability of Airbnb properties until 19 December 2023. This data showed when the property was listed as available for booking, price for the specific night, minimum and maximum potential booking nights. It should be made clear that unavailability could be for 3 reasons: the property was reserved for a guest, booked through another platform, or the host advised that it not to be listed on that day.

AirDNA also scrapes Airbnb listings each month, and reports on both availability and occupancy of each listing. These attributes have been derived based on an algorithm AirDNA has developed and InsideAirbnb data is obtained using a similar web scraping method, it does not offer these additional time dimension or availability estimates. InsideAirbnb is therefore the key data sources for most of this report.

The data was geocoded to locate those which fell in Byron Shire, and those which fell within the boundary of Byron Bay SA2 – Byron Bay and Suffolk Park. The listing file provided information on the property (type, bedrooms, bathrooms, etc.). Four timeframes of scrapings from the above file were used for 2022: March 29, June 10, September 14, and December 20.

Each scraped listing comes with a set of geographic coordinates that are listed on the public facing part of the Airbnb website, which have been randomised up to 450 feet (approximately 130 metres). Data points have been matched to ABS Statistical Area Level 2 (SA2) boundaries, which vary in geographic size. However, SA2 areas have dimensions much larger than this randomisation factor and, as a consequence, counts based on SA2 boundaries will have small margins of error. Care must be taken not to overcount the number of Airbnb properties as the count can include:

- Properties that had no availability over the following 90 days, and,
- Airbnb properties that have not had a review for 12 months, or have never had a review, and therefore are not likely to be operative, and,
- Not a new host in the previous 6 months.

It is assumed all three are likely to be properties that are not available for STRA.

3 Recent STRA growth: the issues and challenges

The last half decade has seen significant growth and community concern with STRA with implications for the industry and its regulation. However, before outlining these changes, it is important to give context to this analysis.

3.1 The institutional context

What happens in any local housing market tends to be a playing-out of national and international processes, with those processes shaped and directed by the institutional attributes of that society. Thus, attributes such as the nature of the economy, demographic processes, national and urban history, and the nature of governance combine to give direction to the housing demand and supply factors both nationally and locally. Australia has disproportionately high household growth compared to equivalent countries, a belief in free markets, a tradition of an open economy, a federal system of governance, and a strong belief in property rights. 'Market liberalism' is the shorthand for this institutional structure.

In terms of housing, this has manifested in a specific housing system characterised by a tradition of home ownership and detached housing, particularly outside inner-city areas, a small social housing sector, and a set of policy practices which, some would argue, are now part of the housing problem (not solutions) including negative gearing, first home owner assistance, Commonwealth rent assistance (CRA), and the National housing and homelessness assistance (NHHA) program. Thus, another characteristic is a poorly performing market system as measured by a major affordability issue, shortages of stock, increasing homelessness, contracting home ownership, and high rental insecurity.

This is not an academic point but an important policy understanding as these institutional arrangements and the housing system direct housing market outcomes and set parameters around policy interventions. It raises the question as to what degree local area housing problems derive from the growth of STRA or are a local variation of institutional weaknesses in the housing system?

Related to the market liberal structure, and indeed part of it, is what has been called 'the financialisation of property'. This is not a recent phenomenon, but one directly related to STRA growth and how we evaluate its future. The 'financialisation of housing' is:

... the structural changes in housing and financial markets and global investment whereby housing is treated as a commodity, a means of accumulating wealth and often as security for financial instruments that are traded and sold on global markets. (Farha 2017)

This essentially means the financial system penetrates and increasingly influences market behaviour and practices in the performance of the housing

system (Aalbers 2016; Ryan-Collins et al. 2017). Financialisation means (a) that property and housing, including STRA, are now seen as a source for substantial economic gains, (b) property investment is an international process, as investors (both small scale and corporate) seek out the best property returns world-wide, and (c) a culture of 'a house as a home' has been replaced by 'a house as in investment'.

The financialisation of property has been driven by financial deregulation, relatively cheap interest rates, accommodative tax instruments (e.g., in the Australian context, negative gearing), positive returns on property relative to other investment options, and the emergence of new housing products (e.g., build to rent and STRA) offering new investment opportunities.

The implication here for STRA is that, if it can provide better returns than other housing products, such as long-term rental (LTR), the institutional arrangements exist for money to flow into it and accelerate its growth. This has meant that STRA has been diverted by financialisation from a peer-to-peer tourism service to a de facto, but largely unregulated, buy or build-to-rent program. The key point is that STRA operates in the context of the wider financialisation of the property system and for solutions we must look at better management of this system, not just its sub-parts.

It is important also to draw attention to two other key institutional features of the Australian housing system. The first is the prevalence of a contract rather than a speculative system of housing construction. This means only as many dwellings will be built as are contracted. As the affordability problem worsens, fewer households will be likely to contract a new dwelling. Therefore, zoning more land and relaxing the regulatory environment will not help much if households are not able to express their demand for a new dwelling.

A second attribute, the separation of the land development industry and the residential building industry, means there is a sector (the development industry) that has a specific interest in higher land prices, as that is where they must generate their income stream. The building industry then must take the land component as a given (typically purchased by an individual household) and through marketing, such as a display village, will contract with a household to build a dwelling. This split between land development and housing construction means there is often a lack of cohesive and cost-effective development because developers, builders, and households tend to have competing objectives. The form and scale of a residential development might not therefore generate the best outcomes in terms of dwelling numbers, diversity, affordability, sustainability or even aesthetics.

Institutional differences are not just between countries, but submarkets within a country, as the categorisation of STRA submarkets in section 1.1 illustrated. Thus, impacts of STRA on local submarkets could reflect difference in size of the private rental stock, the size of a 'holiday house' market, dwelling composition (e.g., detached housing or apartments), the scale and type of tourism (i.e., domestic or international, all-year or seasonal), and the relationship to adjacent locations in terms of housing availability.

In terms of potential regulation, this dictates a need to be clear as to what outcomes are possible within the institutional constraints and what is required of policy interventions, and how they may work through the complexities of a

local housing system. This perspective is consistent with previous AHURI research that states, 'it is critical that local policy responses are informed by contextual, place-specific analysis of Airbnb's impact' (Crommelin 2018).

The importance of the concept of institutional difference can be observed when comparing Byron Bay or Barcelona with Berlin. In Berlin, with a very different housing system, 85 percent of all housing stock is private rental (Deutze Bank Research 2020), while in Barcelona (Spanish Statitica 2023) and Byron Bay private rental accounts for around 30 percent of housing. Cities and regions with a less rental stock are going to be more impacted by STRA displacing LTR than one with a large and more regulated rental stock. Similarly, city locations such as Hobart, Randwick NSW, Bondi NSW, and St Kilda in Melbourne, may be more impacted than most coastal regions as they have virtually no holiday housing. In such locations virtually all STRA accommodation must come from the same stock as long-term rental whereas in coastal locations some of the demand is met by holiday house conversion.

3.2 The crisis in private rental: a rental problem has become a rental crisis

Before the Covid pandemic, the private rental sector was already problematic for lower to moderate income Australians, with rents at levels creating financial stress and the lower end of the rental market exhibiting significant supply shortfalls (Hulse et 2019).

Post-Covid the rental sector is arguably in a more general crisis. Rents have been increasing at rates which bear no relationship to rates of income increases, and rental vacancy rates, particularly in several regional areas, are at record low levels. There are several factors contributing to this crisis, including substantial population movement to regional areas in the wake of Covid, floods and fires removing thousands of dwellings from the total stock, a weakening in rental investment as yields contract because of rising capital (dwelling) costs, and, related to the latter point, fewer households able to exit rental by becoming homeowners (AHURI 2022, Sweeney 2023).

In some locations, there is a perception that a growth of STRA has accentuated or even caused the rental crisis. There is little to suggest that there will be any release from these pressures soon. Consider the investor climate for a new landlord entrant: Given very high house prices, the rental yield is likely to be less than 3 or 4 percent gross, mortgage payments compared to the recent past are higher, there can be little confidence in short term capital gain, and there are always risks associated with maintenance and the stability of tenants. Alternative investments such as fixed deposits or STRA may be more attractive, with the qualification that the latter could also have risks by oversupply.

The degree to which STRA accentuates these problems will vary between localities, with certain inner-city areas and coastal tourist areas likely to have greater STRA effects. Determining the degree of STRA effects would depend on having knowledge of how much STRA growth came from conversion of existing LTR to STRA, how much (in relation to coastal areas) came from conversion of existing holiday housing (no effects therefore on LTR), and how much is new build specifically for STRA (again, with limited effects on LTR, although this may push up dwelling prices with affordability impacts).

It is important to recognise, however, that the trends observed in relation to the displacement of housing supply by STRA sectors are reversible. Important natural experiment data can be gleaned from travel and tourism restrictions associated with lock down and other mobility limitations in year one and two of the Covid pandemic. Buckle, et al. (2020) investigated the relationship between marginal and low rent housing and factors such as STRA dwelling use in relation to pandemic responses. They conclude that there is evidence of a link between falling demand for STRA properties in 2020 with an increase in housing supply during the same period, in focused investigation markets of Hobart and Sydney (Buckle et al. 2020: 11).

3.3 Evidencing the STRA impact

There is a growing empirical, as distinct from anecdotal literature, on the impact of STRA on housing rents. Franco & Santos (2021) and Horn and Merante (2017) found that a 1% increase in Airbnb listings is associated with 2.26% and 0.4% increase in rents in Portugal and in Boston USA, respectively, with the highest rates of increase in areas with high concentrations of Airbnb. Barron et al. (2018), using the entire Airbnb data base listings for the USA, found that a 1% increase in Airbnb listings leads to a 0.018% increase in rents and a 0.026% increase in house prices, but this was much higher in larger cities and particularly those with a tourist focus, such as Miami (Barron et al 2018).

Another US study claimed STRA accounted for about 20 percent of the increase in rents in US cities (Beckerman 2020-21). Other cities where a relationship between a loss of rental stock and increases in rents has been empirically established include Barcelona (UAB Divulga 2021), Thessalanki (Katsinas 2021), Athens (Balampanidis et al. 2021), Berlin (Duso et al. 2021, DIW Berlin 2021), and London (Shabrina et al. 2021) Illustrating the localised effect, the UAB Divulga Barcelona study, for example, found that effects were close to zero in the less central neighbourhoods of Barcelona with fewer tourist apartments but, in the central areas with Airbnb, rents and housing prices increased by 7% and 20%.

Lisbon has experienced substantial community resistance to Airbnb, perhaps not surprising given substantial rent increases in the last half decade (Franco & Santos (2021) and worse in Airbnb areas (Vicente and Demony 2023). Illustrating the importance of institutional settings, much of that STRA growth is a product of national governments encouraging of both tourism and foreign investment in property—a case of ‘be careful what you wish for’ but also illustrating the point that local areas often carry the cost of national policy (Politica 2003).

3.4 Dwelling price inflation and declining affordability

Post-Covid, there has been a dwelling price boom, which higher interest rates have mitigated but not returned prices to pre-Covid levels (ANZ Core Logic 2022). In many regional areas dwelling price growth has been greater than the general trends for much the same reason as the increase in rents. This has been a trend shared across the richest countries, fuelled largely by the excessively low interest rates that central banks implemented as part of

sustaining economies through Covid. It has been accentuated by the belief of property as a haven, given a culture of housing as an investment.

In Australia, price inflation has been reinforced by institutional settings that have long been pro-ownership, even if some of these settings, e.g., first homeowner's grants, may weaken ownership by being a demand side incentive without an accompanying supply side balance. The inherent weaknesses of the institutional context shaping Australian housing markets suggest, in the absence of policy reform (most importantly at the Commonwealth level), there will be no turnaround in the slow decline of home ownership (Burke et al. 2020).

The point about specific local STRA effects needs to be reaffirmed here. To what degree price movements can be causally connected to STRA depends on how much the overall demand and supply relationship for dwellings and land is impacted by STRA. Is STRA responding to a demand for more tourist accommodation at the expense of permanent resident demand (a displacement effect) or is an increase of STRA stock coming through new supply generating its own demand? Both will create pressures on the residential market but the latter less so than the former.

3.5 Rapid tourism growth post COVID-19

Covid has generated change within the tourist industry which suggests, in the absence of regulation, further rapid STRA expansion. Covid has made more tourists conscious of the need for more space, control over health and cleanliness and capacity for self-catering, which conventional tourist accommodation (hotels and motels) are poorly equipped for. Moreover, tourist industry analysts believe tourists are now looking for longer stays and a more authentic experience in a visited community (Allen 2019, World Economic Forum 2022, Makkar et al. 2021). With more space and self-catering capacity, in most cases STRA is a more attractive longer-term accommodation option than hotels and motels. Until the latter adapt, STRA will meet this need, particularly in regional locations where adaptation is likely to be slower. Building apartment hotels is more attractive in cities but less likely to occur in coastal areas given community resistance to this building form. An issue to be confronted in any such tourist industry adaptation is the emergence of 'aparthotels', self-catering short terms hotels now becoming popular in some European cities such as Berlin. Are they to be treated differently from STRA or are they part of that industry?

Covid has also increased a focus on domestic travel given that Covid has, or is perceived to have, made international travel more tiresome and expensive. The challenges for tourist focused municipalities are firstly, to determine the degree to which they want to accommodate tourism growth, mindful of the potential cost to local community well-being, and second, to decide what is the best way to deal with tourist growth.

There is also a question around whether we have, or will soon, achieve 'peak STRA'. This concept has been created to capture the notion that STRA supply in some locations may increase beyond the capacity of tourism growth, meaning shortfalls of demand and, for an increasing number of hosts, diminishing income streams. For example, tourism growth in Byron Bay is forecast to be of

the order of 4 percent per annum to 2030 (Tourism Research Australia) a rate greatly lower than the growth of STRA, the latter of course from a relatively low base. Continued high STRA growth is not sustainable and must ultimately impact future STRA investment. We suspect this time is close. If so, the problem becomes one of better management of existing STRA stock, with a focus on noise, congestion, and community well-being, rather than on managing growth to avoid rental displacement or price escalation.

3.6 STRA: community resentment and policy push

In many western cities, there has been growing community concern with STRA and growing political pressure on governments to act on the perceived problems associated with it (Von Briel & Dolnicar 2021, Garay et al., 2020). An Internet search of any major Western city, using the search terms 'Airbnb' and 'regulation', or 'Airbnb' and 'community protest', will illustrate that the last few years have seen a major increase of pressure on governments to restrict STRA. The experience of Covid and subsequent housing impacts appear to have accentuated such activism. Cities and regions with high tourist attraction have been at the forefront of both problems and policy reform, often fuelled by understandable moral outrage over increases local homelessness, tent and caravan living, displaced workers, local employment constraints, and partying and noise at all hours (e.g., Cheng et al. 2022, Richards et al. 2020).

However, the specific problems often differ in focus from city to city, and region to region, and are broadly one of three major concerns: noise and anti-social behaviour, housing market impacts (e.g., rental stock and household displacement and/or increased purchase prices), and threats to the sustainability of community by loss of permanent populations.

As a result, in recent years an increasingly diverse range of policy instruments has emerged and been implemented in different forms and with different attributes across jurisdictions. It is not surprising that the push for reform has been a bottom up one; local populations are affected directly by issues of affordability, noise, and loss of community cohesion and look to their local government for solutions.

The issue here is that many of the cities and regions that blame STRA for their **affordability and supply problems** appear not to recognize that what is occurring in their cities is also occurring in most other Western cities, some of which have minimal STRA accommodation. Wider processes are operating here, and local initiatives need parallel support from higher levels of government, since local areas cannot be expected to solve problems which are the localised impacts of national or even international processes or policies.

However, some cities and some regions are dealing with a form and scale of problem at the local level which is very much STRA related. This is the issue of excessive concentrations of STRA, with impacts on the supply of housing for permanent residents and flow-on effects for community well-being and sustainability. In doing so they are trying to balance two dichotomies: property rights vs citizenship rights, and housing and community costs vs tourism benefits. Where any government, city or region comes down in addressing these dichotomies is a political trade off in which evidenced based research may have only a minor role to play.

While intervention responses have been diverse, two stand out. The first is a requirement to register as a STRA provider and specifically for those who are non-resident hosts. The second is a maximum cap on days let, whether this be 60, 90, 120, or 180 days. There is no consensus on the appropriate number of days, and choices made appear driven by the form and scale of the STRA issue, the level of community activism, and the political response (for comparative studies see Hübscher & Kallert 2023, von Briel & Dolnicar 2021, Nieuwland & van Melik 2020). Although it is difficult to find hard evidence to support one approach over the other, section 6.3 offers a method to suggest answers.

Community resentment and policy action over STRA also appear to have a wider driver than specific local problems seen to be directly related to it, in that it is experienced as another manifestation of the widening income and wealth inequalities of societies (see Cocola-Gant et al. 2019, Biven 2019). While the original Airbnb platform was a limited provider-to-provider model, it has evolved into a corporate giant that increasingly has become, via the processes of financialisation, a mechanism for wealthier individuals with multiple properties to displace low- to moderate-income households. In short, the STRA industry is likely to accentuate already worsening wealth and income inequalities and this is as much, if not more, a policy issue for higher levels of government than the local.

Australian jurisdictions to date have also been pushed to implement policy initiatives but to a more limited degree than the international experience, and with variation across jurisdictions (see section 3.12). The moral outrage exhibited in several other countries does not appear to have grabbed local or national sentiment to the same degree, Byron Bay perhaps being the local exception.

3.7 Climate change and environmental disasters

In specific locations, the bushfires of 2019-2020 and floods of 2022 have raised new concerns about STRA. There is no formal research on the topic, but a scanning of local social and print media in affected areas suggest the problem that long term rental accommodation, which could have been used for emergency support for flood and fire victims, is being used for STRA instead and that some of the new residential construction in disaster affected areas is for STRA rather than permanent resident—the latter seen essential for rebuilding communities.

Bega Shire on the south coast of NSW is one the local government areas affected by both Summer Fires in 2019-2020 and subsequent floods, in which many residents are waiting to rebuild homes and/or relocate. There, Council debated but decided against moves to cap the number of nights STRA can be let per annum, as a short stay rather than long-term housing tenancy. In an unusual subsequent action, the Council reportedly wrote to around 3,000 individual holiday home owners within the shire to request that they consider letting their properties to community members in need of secure housing.

3.8 Industry diversification and the policy challenge

An industry that started out with one provider (Airbnb) and one product (short term stays in a host's home) and labelled a peer-to-peer transaction has now

matured into an industry with multiple providers and with a range of different accommodation products, each of which may have different implications for policy or community outcomes. It has also meant that there is a greater diversity of interests involved in the sector and for many jurisdictions around the world, this has complicated the introduction of policy reforms.

One of the major challenges is what represents a **balanced** approach between the now many multiple interests embracing hosts, visitors, the provider platforms (e.g., Airbnb), other tourist providers (e.g., hotel and motels), the local community, STRA management companies (those providing services to hosts, e.g., cleaning) and the property development industry. Moreover, terms such a 'hosts' assume a commonality of interests which is not necessarily the case. Hosts can range from a single person offering a room in their own home (the origins of Airbnb) to large corporate owners of multiple properties.

Crommelin (2018) in the AHURI report on Airbnb identified emergent lobby groups in Australia such as the NSW-based 'Neighbours Not Strangers' and 'Our Strata Community, Our Choice', and the Victorian-based 'We Live Here'. The anti-STRA position of these groups is complemented by that of the commercial accommodation sector (e.g., Tourism Accommodation Australia) and housing activists like Inside Airbnb, which see STRA as threat to their business model. On the other hand, Airbnb is active in directly lobbying government (as it is in other countries) and supporting other lobbyists, e.g., hosts and STRA management companies, in support of STRA. These politics play out at all levels of government but can be more problematic at the local level, where the various players are often known to each other.

3.9 Policy evaluation

Because of the recent nature of most policy initiatives relating to STRA in Australia, and the inability to remove the 'Covid effect' on housing markets, there has been, in most cases, limited ability to evaluate outcomes. Hübscher and Kallert (2023) have undertaken a systematic review of regulation actions and types for several European cities but also specific outcome for cities that have had interventions in place for some time, notably Berlin and Amsterdam, and with London as a 'permissive' policy control.

Their broad conclusion is that regulation does have positive outcomes. Over the study period 2015 to 2020, STRA in London, with its permissive policy, continued to grow, while in the two intervention cities it contracted and LTR increased, although with locality differences. Amsterdam's contraction was greatest in areas of highest intervention while Berlin did not show the same locality differences. This was related to the fact that regulations in Berlin were generic across the city while Amsterdam has locality specific regulations. The findings, however, caution that regulation will solve the rental problems of such cities. Regulation will put properties back into LTR but not in a substantial way.

In the case of Berlin, another paper (Research Germany 2023) stated that the regulations put something of the order of 2,500 dwellings back into the long-term rental market in the first year of regulation (2016), which, based on estimates of a 2015 stock of 12000 to 20000 dwellings on Airbnb (Beck 2018), represents around 12 to 20 percent of STRA stock. These figures may sound low because not all STRA accommodation is of a form readily convertible to LTR

accommodation; some may be ex holiday houses (limited in Berlin) and go back to that function, some may be dwelling types not appropriate for conversion e.g., property purpose build for STRA, or luxury units which are more likely to be sold for higher end ownership than used for rental. Interestingly, the percentage of stock put back into LTR in Berlin post regulation (between 12 to 20%) is not greatly different to that indicated in the Urbis survey interviews with STRA providers.

Turning to the USA, Beckerman et al. (2021), in a large study of 15 US cities comparing more regulated with less regulated cities found that those with greater regulation had property value reduced by \$2.8 billion (other factors constant) compared to the less regulated. While this has implications for tax revenue in the respective cities (less an issue in Australia) it did mean that regulated cities were more affordable, although the paper does not identify to what degree.

Gonçalves et al. (2022) estimates the causal impact of a 2018 zoning reform that banned new short-term rental registries in some parts of Lisbon decreased real estate prices by 8%, mostly in two-bedroom dwellings, for which the price drops 20%.

Another study of STRA regulation in the German cities of Berlin, Hamburg, and Munich (Gaul 2002) found that strong regulation decreased the stock of STRA but failed to abolish it (an issue of compliance, reviewed in section 4.6). Listing days related to STRA (Airbnb) dropped by 20-32% higher than that recorded by Beck (see above) and many commercial hosts remained in the market even if this violated regulations. The study also found that regulation only redirected relatively few STRA to LTR and with no indication of a drop in long-term rental prices. As mentioned earlier, this relatively benign impact maybe because of the very large size of the German rental stock, so that returns of say 10,000 dwellings might not be that important, while the same number in a smaller rental market might be more significant.

In summary, the limited evidence does suggest that interventions do bring properties back onto the market and reduce prices and rents, but with the scale of changes greatly different across cities. In the absence of much comparative research, it is difficult to determine what makes the difference.

3.10 Policy initiatives

The range of STRA focused policy initiatives to emerge, particularly in the last few years, is substantial. These are summarised in Table 1.

Table 1: Types of International STRA interventions for non-hosted STRA

Type of intervention	Forms of intervention
Total Bans	All, hosted, non-hosted, some with specific licenses (e.g., Paris)
Caps on days	Can be 60, 90, 120, 180, or unlimited. Caps can be for all STRA, or non-hosted only

Type of intervention	Forms of intervention
Caps in minimum stays	Jurisdictions could be requiring a minimum 4 or 5 days stay, particularly for non-hosted stays where the objective is to eliminate the 'hit and run' weekend visits and create a more immersive tourist experience (planned for Amsterdam)
Caps on number or percentage of non-registered properties	Caps on number of STRA in area or subzones of area. This can be done by limiting hosted rentals to a % of a home, either by number of guests, rooms, or floor space. For example, San Francisco, California, caps the number of non-hosted short-term rental properties at 25% of local housing stock.
Registration requirements	Registration can be for all STRA, or non-hosted only (most European and many US cities) Registration can be linked to taxes and charges Registration can be linked to safety certificate (fire and building regulations) Registration can be locally administered or through a STRA platform e.g., Airbnb
Taxes and charges	Range of different taxes and charges either for revenue raising (funding of infrastructure), administrative costs, or competitive neutrality i.e., with other tourism providers (most US cities; Christchurch, NZ)
Zoning specific policy	Range of instruments targeted at specifically zoned locations where noise, rental displacement, community impacts are seen to be greatest (many US cities)
Spatial Distance between STRA building	Might prevent additional entrants into the Airbnb market and may overcome sense of loss of local community
Limits on number of STRA in buildings	Designed for multi-unit apartments this can range from no STRA at all, some (numbers nominated) with agreement with body corporate, what floors STRA can operate
Caps on number of STRA users	Normally related to number of bedrooms or can be simple maximum (e.g., 4 in Amsterdam)
Requirements on car parking	Number of off-street car parks and number of visitor cars on street (many US cities)
Restrictions on subleasing by tenants	Tenants can or cannot be allowed to sublease depending on circumstances, e.g., agreement from landlord
Caps on multiple owner hosts	Limits on number of properties owned and hosted by one host (e.g., only two properties allowed in Santa Monica and Seattle USA)
Notification of neighbours	New short-term-rental license registrants must notify neighbours (many US cities)

Type of intervention	Forms of intervention
Stock Replacement	Where threat of loss of LTR, STRA provider must fund replacement dwelling (e.g., Paris)

Source: Compiled by authors from the research literature. Countries or cities reviewed were multiple jurisdictions USA, Barcelona, Madrid, Berlin, Paris, Christchurch New Zealand, Amsterdam, Lisbon

3.11 Consultation with platforms

As corporate giants supporting many other businesses, not just the hosts within STRA, the platforms principally are resistant to interventions and engage in (as commented on in 3.6) considerable politicking and lobbying to defend their position. They do not have a generic international position but adapt their lobbying to the country, city, and regional circumstances. One explanation put forward for the relative lack of regulation in many cities pre-covid was the legal power of Airbnb and other STR platforms, including capacity to sue, making them hesitant to draft strict regulations (Benner 2016; Cox & Haar 2020). However, the scale of community grievance in the last five years could not be ignored by the platforms and they have become less combative, particularly in Europe where the 2022 formation of a European STRA Commission is forcing STRA platforms, notably Airbnb, to be more cooperative and supportive. It is harder to pick off individual cities or towns than the entire European Union. As it sits at the moment, there is a patchwork of different national laws across the 27-country zone regulating Airbnb and its peers and with locational differences within.

It is clear from the literature that cooperation from the platforms is necessary for some interventions to work, particularly around registration and the conditions that may attach to registration. Moreover, the much-documented failure of compliance in part derives from lack of past cooperation from Airbnb.

Emerging out of the European STRA Commission process (European Commission 2022) is a set of proposals summarized below.

- Harmonise registration requirements for hosts and their short-term rental properties when introduced by national authorities: registration schemes will have to be fully on-line and user-friendly.
- Clarify rules to ensure registration numbers are displayed and checked: online platforms will have to facilitate hosts to display registration numbers on their platforms. They will also have to randomly check whether hosts register and display the correct numbers.
- Public authorities will be able to suspend registration numbers and ask platforms to delist non-compliant hosts.
- Streamline data-sharing between online platforms and public authorities: online platforms will have to share data about the number of rented nights and of guests with public authorities, once a month, in an automated way.

- Allow the re-use of data, in aggregate form: the data generated under this proposal will, in aggregate form, contribute to tourism statistics produced by Eurostat and feed into the upcoming European data space for tourism.

To what degree these are legislated is being worked through as this report is being written but already (22 February 2023) agreement has been reached as to all European countries having to establish single digital entry points, a freely accessible national centralised system, and data to be machine-readable to allow the platforms to conduct the random checks of the registration numbers. Each country also must establish a competent agency who can interrogate the data regularly provided by the STRA platforms, with the data enabling regular checks on registration and compliance but also policy and market monitoring.

3.12 The national Australian context

The various factors, regulatory and intervention proposals and impacts described above have obvious Australian relevance. Indeed, one of the main changes that has occurred since Gurran, et al. (2018) reported on STRA challenges, has been the widespread scale and impact of reporting of STRA and their impact in the national context.

All Australian states and territories now appear to have been widely affected by the growth of the STRA sector, with some post-2018 intensification occurring immediately prior to the COVID-19 pandemic, notably Hobart and Tasmania gained wide media coverage at that time, or since (see Verdouw & Eccleston, 2022). There is, however, no national approach to using nationally available levers to intervene in the STRA sector nor to curtail the adverse impacts or promote coordinated and nationally regulated practices in the sector.

In a political and policy context in which there is widespread cooperation across states and territories in working with the Australian Government toward a new National Housing Supply strategy and Plan, it is timely for a national approach to addressing the unfettered growth of STRAs and their widespread impacts. As a federal system with multiple jurisdictions, it would be logical for Australia to establish a harmonised framework for Australia and a set of shared practices. It would also enhance the ability to get the cooperation of platforms.

In the absence of a national approach, various states and territories have begun to address STRA growth and impact in a jurisdiction-by-jurisdiction approach, including some nuanced responses in particularly popular tourist locations that are most adversely affected by STRA expansion. In addition to the Byron Bay and NSW focus of this report, are various interventions being considered across states and territories. At the time of writing, there is considerable variation in the extent to which state and territory governments have acted to regulate STRA sectors within their jurisdictions. Where states have not yet acted to regulate STRA activity, actions to address the growth and impact of STRA sectors are undertaken within local government areas alone.

3.12.1 Australian Capital Territory

The ACT is one of the most recent jurisdictions in which proposals geared toward curtailing the scale and impacts of STRAs have been suggested. Media reports from late March 2023 indicate that members of the Greens party brought forward a motion in the ACT Legislative Assembly to address what they

indicated were the approximately 1,000 STRAs in the Canberra region that could potentially be used for long-term rather than short-let accommodation. Citing high rental costs and low vacancy rates, the proposal has been put forward as part of a response to the overall housing crisis facing the Territory. The Greens have suggested that a cap on both the number of short let properties and cap on total number of days per property that can be used for tourism must be considered.

3.12.2 New South Wales

In the state of New South Wales, in which the Byron Bay case study is located, a range of planning-based provisions and interventions have been introduced that are geared toward increased regulatory oversight of the STRA sector. Broadly, these sit within a dedicated STRA planning framework and include the introduction of fire safety standards, some limits to letting, as well as a mandatory government-run STRA Register for the state, that all owners must pay to register on. Registration costs for owners are \$65 for a new registration, with \$25 costs for renewal of registrations. The Register is not publicly available.

The planning framework came into effect on 1 November 2021 and is presented as a balanced approach to owner opportunities and 'visitors':

Figure 2: Planning NSW STRA Planning Framework¹

A balanced approach for homeowners and visitors

The STRA planning policy framework comprises standard provisions for short-term rental accommodation including:

- a definition for STRA, hosted STRA and non-hosted STRA
- an exempt development pathway for hosted and non-hosted STRA, including an annual 180-day limit for non-hosted STRA based on location
- an exemption of bookings of 21 consecutive days or more from the day limits for non-hosted STRA
- fire safety standards for dwellings used for STRA and associated penalty notice offences for non-compliance
- a government-run [STRA Register](#) that will ensure compliance with the new fire safety standards, as well as tracking day limits of each STRA dwelling and provide details to assist local councils with monitoring STRA in their local government areas (LGA).

The Framework identifies certain property types and property rights arrangements as not able to be used for purposes of STRA. These are: boarding houses; seniors' housing; rural workers' dwellings; group homes; hostels; refuge or crisis accommodation; build-to-rent housing; co-living housing; moveable dwellings.

¹ <https://www.planning.nsw.gov.au/Policy-and-Legislation/Housing/Short-term-rental-accommodation>

Importantly, and consistent with Gurrán, et al. (2018), the 2021 NSW STRA Framework distinguishes between 'hosted' and 'non-hosted' STRA properties and sets out a compliance strategy. The compliance strategy refers to individual local councils as playing an active role in enforcement, as well as the role of local police for enforcement of issues such as undue noise and other disturbances or illegality. It is, yet, too early for any evaluation of the new Framework to have been conducted nor any impacts of its enforcement known.

Independent of the STRA planning framework is Section 137A Strata Schemes Management Act which commenced on Good Friday 2020, which permits an Owners Corporation to pass by special resolution, a By-Law to prohibit a lot from being used for short-term rental accommodation if the lot is not the principal place of residence for the person that normally resides there. This is much stronger than the equivalent Victorian legislation which does not ban but provides for fines for unreasonable noise or damage.

3.12.3 Tasmania

Rental crises affecting both metropolitan and regional Tasmania led to considerable state government attention on Tasmania's STRA sector prior to the start of the 2020 COVID-19 pandemic (Verdouw & Eccleston, 2022). Tasmania is unusual in the Australian context in that aspects of short-let information are now required to be reported on regularly and on the public record. The Tasmanian Short Stay Accommodation Act 2019 mandates that booking platform providers (including but not limited to AirBnB) report quarterly on certain details of properties used for short stays. The effect of this is that publicly available information regarding overall numbers of short-let properties and trends in these data are available to Tasmanian communities and regulators.

Drawing on these data and underpinned by ongoing concerns about the growth of STRAs and adverse impacts of short-lets, Shelter Tasmania commissioned an ongoing series of monitoring reporting and a methodology to support this developed by Phibbs (2022). It is intended that reporting and analysis will be conducted on a 3-yearly basis. The Phibbs (2022) baseline report and its underpinning methodology is one of the most comprehensive reporting and analysis initiatives undertaken so far in the national context.

The public reporting of STRAs in Tasmania appears to underpin the ability of community groups and various arms of government to coordinate or respond to perceived negative impacts of STRA growth in the state. In a motion passed by Hobart City Council in March 2022, a regulatory amendment was passed through which new limits were placed on new 'whole house' dwellings seeking to be listed as STRA accommodation options within particular residential and mixed-use zones in and around Hobart city.

The move to restrict 'non-hosted' properties to enter the Hobart STRA sector is consistent with the Shelter Tasmania commissioned independent research (Phibbs 2022), June 2022 analysis of STRA figures in the housing market context, that showed a majority of the then STRA dwellings had previously been used for long-term rental accommodation (Phibbs 2022).

3.12.4 Queensland

In late 2022 the Queensland Government announced that it was commissioning an expert inquiry into the impacts of STRA on the supply of housing in that state. The media release accompanying the announcement indicated that the investigation would consider wide effects of the STRA sector, inputs and viewpoints of multiple actors and communities, as well as the options available to regulate and monitor the STRA sector and its impacts in the state of Queensland.

Ahead of the state-wide review, several local councils have acted to provide policy information at the local area level for STRA owners or those affected by STRAs within their local area:

- Brisbane City Council enacted a rate rise of 50% for owners of properties that used their non-hosted dwellings for short letting for more than 60 days of each year.
- Toowoomba Region Council provided up to date policy information for operators of STRA, with an emphasis on responsible use.
- Noosa Council policy information also provides guidance for STRA owners as well as an indication of restricted areas within Noosa local areas that are limited from STRA use.

3.12.5 Victoria

In the state of Victoria there is currently no planning or equivalent framework in place to limit or regulate the STRA sector, such as found in Tasmania or New South Wales. In early 2023 the Greens launched a campaign to restrict and more tightly regulate and limit the STRA sector as a state-wide strategy. This, according to currently available public information about the Greens' proposal, would include: a 90-day cap on how many nights a property can be let out per year as a short stay accommodation option, new rules to allow owners' corporations to regulate (non-hosted) STRAs in their building, and a new mandatory public register of STRA operators.

The only legislation in Victoria is a soft one targeting owners' corporations, the Owners Corporation Amendment (Short-stay Accommodation) Act 2018, which grants the Victorian Civil and Administrative Tribunal (VCAT) the power to issue fines to guests of up to \$1,100 for making unreasonable noise, causing a health security hazard, damaging common property or obstructing a resident from using their property. Owners hosting these short-term stays could also be forced to pay their Owners Corporation up to \$2,000 in compensation.

In the absence of a state-wide approach to STRA regulation beyond usual planning and neighbourhood settings, several local councils across Victoria have moved to take a range of actions to address regulation and impacts of STRA in their municipalities:

- Warnambool City Council has introduced an annual registration fee of \$400 per STRA dwelling, a cost that is relatively high compared with other states.
- Yarra Ranges Council has introduced a provision around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or

other unwanted behaviours that result in multiple complaints to Council within an annual period.

- The City of Frankston has introduced an annual registration fee of \$150 per STRA dwelling, along with information that promotes the STRA to be operated in a way that does not impact usual enjoyment of residences in local neighbourhoods – consistent with existing and usual by-laws.
- Mornington Peninsula Shire, similar to the above councils, has introduced an annual registration fee of \$311 per STRA dwelling and also made explicit owner responsibilities regarding compliance with existing local laws.

3.12.6 Western Australia

Western Australia is relatively advanced in its responsiveness to STRA sectors compared to other states and territories. The Western Australian Government undertook a state-wide inquiry into STRA and its impacts, resulting in a 2019 Report 'Levelling the Playing Field: Managing the impact of the rapid increase of Short-Term Rentals in Western Australia'. The Report and results of the Parliamentary Inquiry are now informing Western Australian actions to respond to the growth of the STRA sector and to reduce its real and perceived negative impacts on local housing markets and communities. The Government has committed to implement a response that includes registration, compliance, and wide-ranging consultation. At the time of writing this Report, the office of Consumer Protection WA is undertaking community consultation and design of implementation strategies to be used in the WA context.

In the meantime, a couple of highly publicised local council responses to STRA growth and impacts have been undertaken, including in the Margaret River area (involving approvals and permit usage) and the City of Busselton local area, following similar approaches.

4 Policy reflection and options

The Gurran report (Gurran et al. 2018: 46-48) has an excellent overview of potential policy and planning tools. Rather than remake the wheel this report modifies or expands on these tools with documentation of examples of actual implementation since that report. It also outlines some of the issues associated with policy initiatives. An assumption here is that, given the broader housing system context that STRA markets are operating in, the light-handed NSW innovations of 2022 may need to be supplemented by further intervention at some future date, given growing national and international concerns with the industry.

4.1 Strategic objectives

The key question facing governments around any social, economic, and environmental issue, particularly at local government, is what is the strategic direction and objective of government and how, in relation to housing, will that shape strategy? Should, for example, tourism be seen as a never-ending growth objective or, alternatively, could an LGA say, enough is enough! —too much tourism can not only destroy the very reason why tourists come but also undermine liveability for permanent residents.

Amsterdam in the Netherlands (City of Amsterdam Policy 2022) and Barcelona in Spain (Ajuntament Barcelona 2022) appear to have decided that this is the case, with important implications for STRA. Both have decided to focus on the quality of tourism (what it adds to the city) rather than the amount, with a large range of accompanying programs but including harsher STRA regulation, in the case of Amsterdam. This means for STRA an outright ban on non-hosted STRA accommodation in three districts of Amsterdam and a cap of 30 days for the rest of the city. However, and discussed later, a court appeal had the former overruled and now it is a flat 60 days. There is also a registration requirement with conditions attached. Illustrating the earlier point about accompanying STRA policy with other interventions, the City of Amsterdam also announced in 2022 a policy of 40 percent of new construction being social housing—unimaginable in the Australia context.

In Barcelona, in recognition that tourism has become excessive with substantial community costs, all STRA accommodation (hosted and non-hosted) has been banned, with the exceptions of certain types of apartments with a specific license (Ajuntament Barcelona 2022).

4.2 Defining STRA and associated day stays policy

Which STRA should have interventions, and which should not, if any? Looking at the international approaches it is clear Australian jurisdictions employ a relatively very light touch. The key delineation for many jurisdictions in Europe and the USA is between hosted and non-hosted dwellings, the former being treated with a lighter touch the latter more heavily regulated.

In virtually all US and European cases (Barcelona excepted) hosted, place-of-residence accommodation (visitor in hosts dwelling) has a soft touch approach

but with requirements for registration and certain conditions attached to registration. Non-hosted is seen to be much more problematic with policies ranging from bans to implementation of many of the conditions summarized in Table 1.

More generally there are occupancy day caps ranging from 180 days through 120 and 90 in higher risk jurisdictions down to 0 in some specific locations or 60 days city-wide, as in the case of Amsterdam. However, post-Covid a growing number of cities and tourist locations are moving to 90-day caps, including Washington DC, London, Lucerne, Berlin, Munich, Madrid, Long Beach and San Diego California. Some places, such as the Netherlands, have different caps for different locations, ranging from 60 upwards, and Christchurch New Zealand is proposing 60 to 180 days depending on Zoning (Christchurch City Council 2022).

4.3 Registration

In the last five years the number of international jurisdictions requiring registration has greatly increased, to the degree this can almost be considered standard practice. New South Wales, from 1 November 2021, created the conditions for such via the Environmental Planning and Assessment Amendment (Short-term Rental Accommodation) Regulation 2021 (STRA Regulation), and the State Environmental Planning Policy (Affordable Rental Housing) Amendment (Short-term Rental Accommodation) 2021 (STRA SEPP).

In setting up a registration process several issues must be addressed. These include:

4.3.1 What is STRA, for the purpose of registration?

Registration requires clear definition of what STRA is, and these typically are now categorized as a hosted or non-hosted stay, where the visitors are accommodated for less than 30 days. Decisions are then made about whether registration is required for all hosted and non-hosted or just non-hosted.

Hosted accommodation

Jurisdictions that are perceived to be at risk of STRA impacts generally require hosted accommodation to register as STRA and to be fire and safety compliant. They vary in the number of days that STRA can be occupied, from all year round to (most commonly) 120 days, although some allow all year round on the basis it is not impacting local housing supply. A hosted accommodation is one where the hosts live in or have the hosted property as part of but separate from the hosts' own accommodation.

In terms of registration of hosted accommodation, a decision must be made about whether the STRA must be hosted accommodation all year round i.e., potentially host occupied for all the year. For example, some jurisdictions e.g., Paris define hosting as being occupied for 8 months, allowing the property to be vacant and rented while on a long break.

Non-hosted accommodation

Non-Hosted Accommodation is more complex. Some jurisdictions allow no non-hosted accommodation while others do, but often with several provisions

related to the type of perceived issue or problem with STRA. In Paris, potential non-hosted STRA must apply to local authorities for permission to change the registered use of the space from the previous use. They are then required to buy a commercial property of an equivalent or larger size and convert it into housing as compensation. This means no net loss of LTR accommodation.

Registration also requires identifying properties which cannot be defined as STRA and cannot or will not be registered e.g., boarding houses, caravan parks. As the mainstream tourist sector adapts to STRA competition, but also changing tourist demand, and starts providing more apartment hotels as are emerging overseas, it will beg the question of what the boundary between such accommodation and STRA accommodation is, also raising issues of competitive neutrality. Is non-hosted accommodation about self-catering, in which case apartment hotels might be STRA accommodation rather than hotels?

4.3.2 Who is responsible for registration?

In most countries, it is a regional, local or city administration that requires and manages registration of STRA, although potentially new European Regulations suggest this could become a national process (see 3.10). The problems are that the former imposes an administrative burden at each level of government where efficiency would suggest a single agency. The reason registration is administered locally is that jurisdictions may attach different conditions to it, depending on the objectives to be achieved. In NSW, the 2021 STRA Regulation requires registration of the STRA dwellings on a NSW Planning Portal, with registration subject to minor registration and annual renewal fees, and failure to comply attracts a maximum penalty of 20 penalty units. In addition, each registration must include a description of how a STRA dwelling complies with the fire safety standards. The state portal offers efficiency but perhaps limits ability for local areas to attach local conditions.

4.3.3 What is to be negotiated with platforms (e.g., Airbnb)?

Will platforms be asked (required) to post registration number on the advertisement enabling potential monitoring or is the registration to be independent of the platform perhaps, because more information is required than can be collected by the Platforms? If the former, can the platform be required to provide a systematic data download on a regular basis, allowing for regular monitoring and assessment of market trends and possible impacts?

4.3.4 What conditions attach to registration?

Registration may have a variety of conditions attached to it: details as to hosted and non-hosted (i.e., resident address of home), requirements to meet fire and safety standards, provision of information for neighbours and guests, including contact information, parking restrictions, and, where appropriate, hazards information. In turn, some of these could require an administrative fee for an inspection to assess compliance with such; host; a registry of names and number of all guests and dates of stay (the latter the case of Miami, Florida). In Christchurch in New Zealand and common in the USA registration process it is an opportunity to attach a fee to registration either to cover the administrative cost or to raise local revenue. However, more information may be required as part of registration for this. It is notable that NSW must include a description of how a STRA dwelling complies with the fire safety standard but does not require

actual inspection with an accompanying fee. This may be a potential compliance issue.

4.3.5 Type of property

A different form of registration requirement relates to the type of property, with assumptions made about risks associated with different types. Thus, Portland Oregon has two levels of registration relating to size of property: Type A permits are for when the resident rents no more than 2 bedrooms to 5 overnight guests while Type B are for when the resident rents between 3 and 5 bedrooms to overnight guests. The latter is more likely to create risk of anti-social behaviour, parking congestion, etc., and thus has more rigid compliance procedures. Other jurisdictions have similar categorisation between apartments and detached dwellings and in the case of the former as to height.

4.3.6 What is to be achieved by registration?

Jurisdictions appear to have different and sometimes mixed motives in registration. Motives include sending signals about whether to become a provider or not i.e., controlling numbers or visitor behaviours, ability to charge fees and taxes, either as a revenue generation exercise (tourists use local infrastructure but do not pay for it) or as a competitive neutrality exercise to ensure they have the same cost structures as the mainstream tourist sector, such as hotels and motels, and finally as a data harvesting exercise to be able to monitor growth and assess local impact rather than rely on anecdotal evidence and community activism.

4.3.7 Is centralised registration enough?

Particularly in circumstances, such as in NSW, where there is a central registration portal, local governments might determine that is not enough to meet their objectives. For example, for designated STRA zones, a land use permit with additional information about the host and property attributes may be required or, more generally, data required relating to STRA impacts on the local community and economy.

4.4 Scoping impacted areas

As this limited detailed research has documented, many regions or cities may not be impacted disproportionately by STRA, or at all. Only certain areas or neighbourhoods will be so affected; therefore, any state-wide planning laws should only establish a broad policy framework, leaving local municipalities to determine the spatial boundaries of any regulation (i.e., an area that requires special STRA zoning for planning and policy purposes). Australia has not gone down that route to date, so the Byron Bay municipality planning proposal is the first such initiative. Christchurch in New Zealand is in the process of implementing zoning along the lines desired by Byron Bay, with a change to the planning act enabling different residential zones categorised by 'discretionary' and 'controlled' activity, with most residential areas being controlled. Controlled zones cap stays at 60 days per STRA property per year, while in discretionary areas this is 180 days (Christchurch City Council 2022).

The problem here is that there is still insufficient research or conceptual tools to clearly identify such areas. What measure do we use for sustainability of community? What is an excessive number of STRA properties? What degree of

financial impact on other tourist accommodation represents an unfair impact? How much of the STRA stock would need to be reduced to improved local area rental or housing affordability? Gurran and Phibbs (2020) offer probably the clearest guidelines to the planning issues and principles relating to STRA and these do not need repeating here. However, it is useful to document what are some of the practices for areas scoped or zoned as high risk. These include:

- Controls relating to new applications: for example, these may not be located on a lot that is within a specified distance of another lot on which an existing short-term rental is located.
- Delineating a designated maximum number of STRA permits per zone, with no further registrations to be granted over and above this number.
- Designating the number of off-street carparks for a registered property and placing a cap on the number of visitor cars on-street.
- Differential fees or taxes for areas deemed to be at higher risk of STRA issues.

4.5 Taxes and rates

STRA has several revenue issues. Firstly, growth in tourism underpinned by STRA can mean local area infrastructure, both social and physical, cannot keep pace with demands with residents carrying the impacts of this. Secondly, the mainstream tourist sector does have associated fees and charges related to its tourist category, which STRA does not have, creating a problems of unfair business treatment and competitive neutrality and, if STRA displaces growth in this sector, of lost revenue.

The standard way of dealing with this to impose some form of tax or levy on STRA visitors. This is common in the USA, where there is a tradition of local governments, under their federal system, having greater funding powers than equivalent Australian local governments.

International examples include San Francisco and Santa Monica imposing a Transient Occupancy Tax (TOT) of 14 percent and 15 percent respectively on all STRA stays. In Aspen USA, voters approved a ballot measure in November 2022 that imposes a pair of new taxes on short-term and vacation rental properties, a 5 percent tax on nightly room rates for all short-term rentals and a 10 percent tax on what are seen as 'investment properties', basically non-hosted STRA. Atlanta requires hosts to pay a \$150 annual fee for a permit and a tax of 8 percent, the same as hotels in Atlanta. Airbnb help centre US (2023) provides occupancy tax rates for the above plus other relevant Jurisdictions. In Toronto, operators are required to collect and remit a 4 percent Municipal Accommodation Tax (MAT) on all rentals. Closer to home, Christchurch City Council New Zealand (2022) requires resource consent for all short-term accommodation providers, with more rigorous regulations for houses that host over six guests for more than 60 nights a year. The consent costs at least \$1000 but will not expire.

Significantly, after initial pushback to US taxes by Airbnb, there is recognition of their inevitability and appropriateness and Airbnb now collects city, country

and state STRA occupancy taxes for those jurisdictions that have them (Avalara 2023).

Recent analysis of the scale and impact of STRA in the Scottish context (Dateline 2023) appears to be leading to the implementation of a licensing system involving a sliding scale of days of short letting per annum, linked to differential licensing fee costs. It is expected that the licensing fee introduction will both reduce the overall amount of STRA within local areas as well as act as a revenue stream for government. The Dateline (2023) investigation of STRA in international contexts also indicates that while a large majority of STRA dwellings are owned by persons with only one STRA dwelling, some are owners of multiple STRA dwellings, with a 'housing business' model operating at the upper end in which organisations own multiple dwellings.

In Australia, property rates are the major income revenue raising function of local governments and this seems the only possibility for local governments to address the financial issues raised by STRA. Here, a 2021 decision of the Queensland Court of Appeal (2021) confirmed that local governments have the power to levy differential rates for properties depending on whether the land is used for permanent or itinerant accommodation, with STRA being itinerant accommodation.

Other than Gold Coast and Brisbane, who have a 50 percent higher rate for non-hosted STRA dwellings (more than 60 days), there has been little initiative here, but it is still early days. One of the challenges for any local government will be determining which properties should be subject to a different rating category and this depends on policy objectives. If the objective is to provide a supply deterrent in specific locations, the amount of the differential rates might be different to that of a revenue raising rate for infrastructure funding.

Another complicating factor would be if the property is only used for STRA purposes for 90 days but offers permanent accommodation for much of the remaining time. Is this to be defined as tourist or permanent housing and therefore what is the appropriate rate? Moreover, could the same logic be applied to holiday homes—can they be seen as tourist or itinerant accommodation and therefore also potentially subject to a differential rate?

In short, the possibility is there for local governments in Australia to go down this direction, so long as definitional issues and what are the objectives of policy are addressed.

4.6 Compliance

One of the clear problems with public and planning policy is compliance. Good policy can be undermined if there is weak compliance allowing participants and actors to get away with practices that the policy and planning was meant to avoid. Without an effective compliance regime, the best-intentioned policy can be undermined.

For STRA there are two issues around compliance. One is simply getting people to register where a registration system is in place. The second is ensuring any requirements attached to registration (e.g., taxation, fire and safety regulations, hosting arrangements, etc.) are being met.

Illustrating the problem with the first point is the fact that in Hong Kong, where Airbnb is not legal, there were some 6000 active Airbnb units listed in March 2023 with a similar situation holding in Singapore (also not legal) where it is easy to find sites showing hosts how to get around the law. In Berlin, which in 2016 effectively banned STRA providers except in certain circumstances, there were still tens of thousands operating in 2021, despite the potential of heavy fines. Even in Byron Shire, the NSW Registration portal indicates a not small number of non-complying STRA hosts.

Reasons for lack of compliance in part depend on the attributes of the registration system. A government registration portal can only know the number of unregistered hosts if the STRA platform is required to show the registration number at time of advertising. Checking of registration numbers against all advertised properties, registered or unregistered, can give a measure of the number of non-registered properties. However, as the platform does not show the actual address at time of advertisement, identifying non-compliant hosts is not an easy process. And the international experience suggests that fines still do not overcome the problem that some hosts appear happy to take the risk of being caught.

This makes the second problem, i.e., ensuring registration requirements are met, also difficult. This is why some municipalities require actual site visits e.g., fire and safety inspections, as a condition of registration with an accompanying administrative charge.

5 Byron Bay case study

5.1 Context

Byron Shire is a municipality located in the northeast corner of New South Wales, in an area of high population and tourism growth, with these growth pressures coming from both within NSW (households moving north for lifestyle living) and from Brisbane and the Queensland Gold Coast, the latter only half an hour drive away. The current population of the shire is around 36,000, while Byron Bay is just on 9000.

Climate and scenic attractions make it highly attractive for all-year-round permanent lifestyle residence as well as tourism, creating challenges for the municipality in how to manage both, including the conflicts between them. The all-year-round attractiveness is an important contextual point, whereas in many other parts of Australia where STRA is growing, tourism is more seasonal and often confined to holiday periods, such as the summer break, Easter and school holidays. The difference is between the potential for high occupancy rates year-round versus high occupancy rates for only 12 weeks, and lower occupancy for the remaining weeks. This is important for how we understand financial viability, visitor usage, investment potential and the effect of any policy interventions. For issues such as noise from partying households, year-round occupation could be a nightmare for neighbouring households. While there might be regulation, compliance becomes the issue.

The shire has a Residential Strategy dealing with the housing and related land use and social and physical infrastructure issues (Byron Shire 2020). The strategy was underpinned by a Housing Needs Report, Housing Summit, targeted community engagement, a Housing Roundtable, and a Housing Charrette. Participants clearly expressed strong views about the need for a housing strategy, predominantly about the liveability for residents, and protecting community. Emerging out of the strategy was a Planning Proposal to minimise the impacts of STRA on long term rental housing supply, residential amenity, local character, and community, while still allowing for diversity in the type and tenure of visitor accommodation options in Byron Bay LGA.

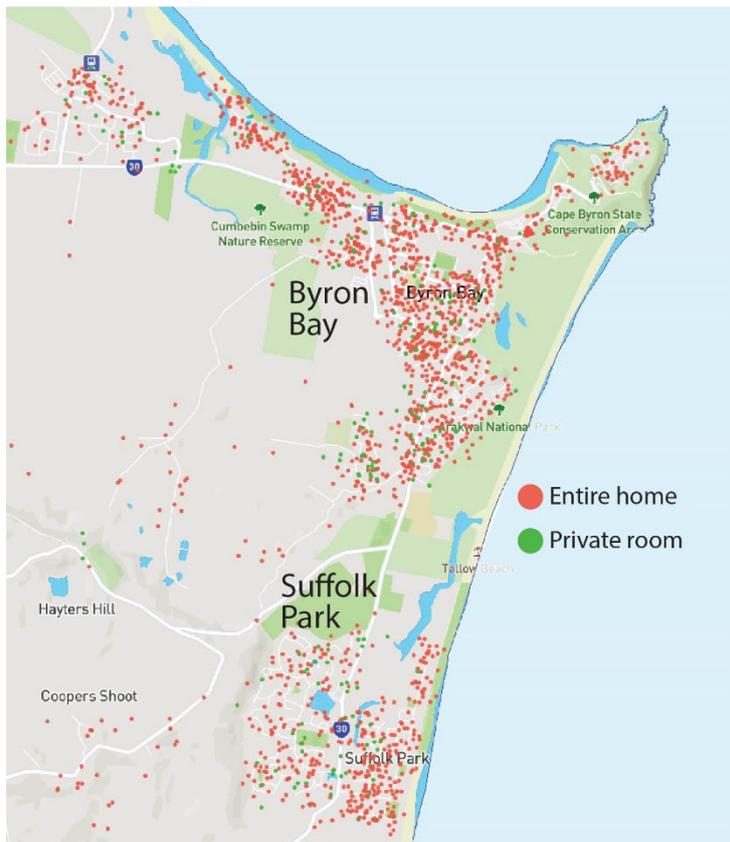
The strategy aims to make good use of the most suitable land with policy for residential development in both infill and new release urban growth areas that:

- Maintains community diversity and social cohesion by providing a good supply of housing for a range of lifestyle choices, household types and life stages, including:
 - young people
 - older residents
 - diverse families
- respects local character while supporting a housing shift away from detached dwellings towards more diverse housing types
- manages tourism in a way that has a positive impact for locals.

In Byron Bay, as distinct from the wider Shire, these aims appear enormously constrained by the high house prices, rents and lack of LTR. The very demographic groups targeted are those least likely to be able to locate in Byron Bay. Dealing with STRA becomes an important part of the housing strategy.

Figure 3 shows the location and intensity of STRA hosts in Byron Bay township and it's easy to see the scale and in some areas the concentration; not surprising as Figure 1 showed this represent 27 percent of all housing stock. No wonder there is community concern. Providing further detail as to the nature of STRA accommodation, Appendix 1 maps properties with nightly lettings in different price ranges, business-run properties, such as serviced apartments, hosted accommodation, and unregistered or exempt properties.

Figure 3: Airbnb properties in Byron Bay/ Suffolk Park [Byron Bay SA2]



Source: Inside Airbnb 2023

Figure 4 shows the available number of Airbnb properties using AirDNA data from March 2018 to December 2022, and for March 2022 to December 2022 (one year only) using Inside Airbnb Data. The difference between AirDNA and Inside Airbnb Data, even just for the one year, highlights the problem of determining exactly what is happening, as there are quite large differences. The one year one data set (Inside Airbnb Data) shows a steady increase in numbers while the AirDNA data is flat for three quarters and then shows a rapid increase but not to the same numbers as Inside Airbnb Data. As of December 2022, depending on sources, there is something of the order of 1,540 to 1,630 active STRA (Airbnb) hosts.

Looking at the active properties for 2018 to 2022, there may be evidence of 'peak STRA' being reached, as the numbers for December 2022 are almost the same as for December 2018.

Figure 4: Number of available properties Active and Booked 2018 to 2022
Byron Bay (SA2)



Source: AirDNA, Inside Airbnb 2023

However, as Table 2 shows, some of these are of a type that cannot be considered as LTR replacements. If we remove cabins, tents, recreational vehicles, outhouses, private share (hosted), and businesses such as hotels (which also advertise on Airbnb), the 1810 (AirDNA) comes down to 1307 which might be considered as potential LTR.

Table 2: Property type of Airbnb in Byron Bay

	House/ Flat	Cabin/ Outhouse	Whole property	Private share	Business		Tent/RV	Total Properties
					Hotel/ Hostel	Serviced Apt		
Mar-22	990	199	1,189	90	49	5	11	1,344
Jun-22	992	222	1,214	104	48	6	9	1,381
Sep-22	1,040	212	1,252	98	49	13	9	1,421
Dec-22	1,171	228	1,399	117	58	16	12	1,602

Source, Inside Airbnb 2023

This compares with the total holdings (as measured through NSW bond data) of 1558 in December, meaning that Airbnb is equivalent to 83 percent of the total rental stock. A proportion of this scale suggests some STRA properties are likely to have come from displacement of LTR.

The major lever suggested for the achievement of the range of objectives in the housing strategy was a cap on maximum rental days of 90 for designated residential zones, outside the 180 days required in the 2021 State-wide STRA planning policy framework in conjunction with designated precincts with no cap restrictions. The State government acknowledged that STRA is particularly problematic for the local government and deferred the application of the new rules for Byron Shire subject to a review by the NSW Independent Planning

Commission, which was preceded by the commissioning of a consultancy (URBIS 2022) to assess the economic impacts of a 90-day rule.

Despite 90 days not being uncommon in other jurisdiction in the USA and Europe, the pushback from STRA platforms, mainly Airbnb and other industry participants, has been substantial, and a review of print media outlet reveals dozens of pro-STRA anti-regulation stories, with few counter ones emphasising the negatives for the community.

5.2 The STRA institutional context

Coastal locations in Australia raise some issues about STRA that are not covered in the international literature, mainly because of our different institutional structures. Coastal tourist hotspots in Europe tend to be dominated by apartments and associated with that, high population density. By contrast, Australian coastal towns have an historical tradition of dominance of detached dwellings, many in the form of holiday homes, and virtually all being Australian owned, compared to high rates of foreign ownership in Europe.

This feature makes coastal towns potentially different in impacts to say Hobart in Tasmania where, as a city, it does not have a sizeable stock of holiday homes. The dynamics of STRA could therefore be completely different, with Byron Bay having the possibility of much of the STRA coming from holiday homes while in Hobart and other inner-city pressure points e.g., Randwick in Sydney or St Kilda in Melbourne, STRA growth can largely only come from existing rental stock.

Related to the status of the detached dwelling in coastal communities in Australia, certain areas excepted (e.g., Gold Coast and Sunshine Coast), is a resistance to multi-unit apartments that dominate tourist locations in much of the rest of the world. This is largely because they do not fit the low-rise streetscapes of coast towns and the laid-back image associated with detached holiday houses. However, an inability to supply more accommodation in multi-unit accommodation, including apartment hotels, means that STRA detached housing inevitably becomes the alternative and easier path.

It is important to draw attention to one of the key institutional features of the Australian housing system, briefly outlined in section 3.1, the characteristics of the contract building system. Overall housing supply can largely increase only by the number of households with the income to commission the construction of a new dwelling. As dwelling and land prices rise, particularly to the levels of Byron Bay, there will be fewer households that can afford to commission a dwelling. It does not matter how much land is zoned for new supply; this may not create supply consistent with needs or the objectives of the Byron Shire residential strategy. Byron Shire, chiefly in respect to Byron Bay, now faces the unintended side effect that the excessively high property prices will constrain the ability to meet the supply intentions of the housing strategy. This is a regional dimension of a national problem.

Perhaps another institutional attribute of Australia is an historical acceptance that tourism is a good thing, generating employment and facilitating the development of cultural and recreational services for the wider community. To some extent this is because the negatives associated with tourism in some

other countries have never emerged. But they have in Byron Bay and this creates a tension for the Shire; will it be tourism 'business as usual' or do some limits need to be put in place?

5.3 Housing outcomes post-2018

This section overviews the changes in housing circumstances in **Byron Bay Township** over the last decade.

5.3.1 Tenure changes

Table 3 looks at the change in tenure, benchmarked to the rest of NSW, and potentially illustrates something of the housing market changes in Byron Bay that are of concern. The most interesting feature is the relative stability of tenure, including for private rental for which there is so much concern. Digging deeper into this data suggests a different story as subsequent tables and figures show.

Table 3: Change in housing tenure in Byron Bay and regional NSW

	2011		2016		2021	
	Byron Bay	Rest NSW	Byron Bay	Rest NSW	Byron Bay	Rest NSW
Owned outright	34.3%	40.1%	36.7%	39.9%	37.5%	40.2%
Owned with a mortgage	27.9%	33.0%	28.1%	32.6%	26.3%	33.0%
<i>Home Ownership</i>	62.2%	73.2%	64.8%	72.5%	63.8%	73.1%
Rented: Real estate agent	18.6%	14.6%	18.1%	16.1%	19.1%	16.9%
Rented: Person not in same household	14.7%	6.9%	12.8%	6.6%	13.4%	5.7%
<i>Private renting</i>	33.3%	21.5%	30.9%	22.7%	32.5%	22.6%
Rented: State/Community	4.5%	5.3%	4.3%	4.8%	3.7%	4.3%
Total	100%	100%	100%	100%	100%	100%

Source: Census 2011, 2016 & 2021 Australian Bureau of Statistics, authors calculations

Table 4 shows tenure by household income distribution, using equivalised incomes. Equivalised incomes is a statistical technique to control for changes in the composition of households. If, over time, there are more singles (who on average have lower income than households with multiple income earners) than there once was, the median household income for any area would be dragged down; equivalisation controls for this. Table 4 suggests substantial gentrification of Byron Bay, with higher income renters and outright owners driving that gentrification.

Table 4: Equivalised income distribution by tenure Byron Bay [SA2] 2011, 2016, 2021

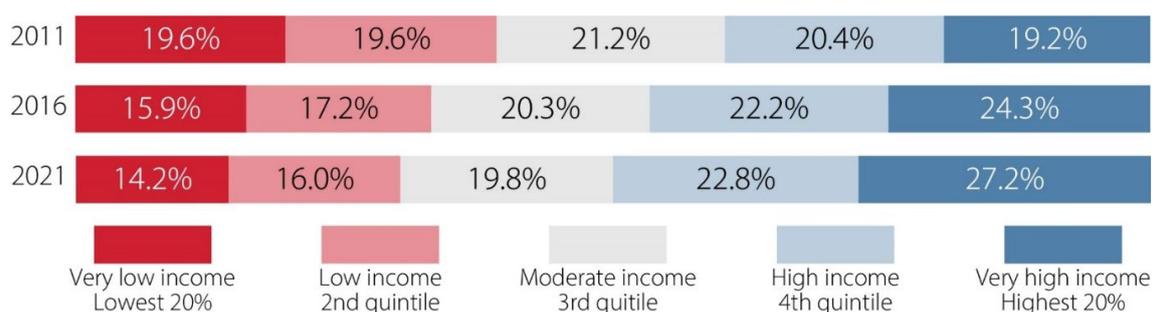
	All households			Private Renters		
	2011	2016	2021	2011	2016	2021
Very low income	19.6%	15.9%	14.2%	18.5%	14.7%	8.5%
Low income	19.6%	17.2%	16.0%	19.9%	16.2%	13.5%
Moderate income	21.2%	20.3%	19.8%	23.9%	20.3%	21.1%
High income	20.4%	22.2%	22.8%	21.7%	26.0%	28.5%
Very high income	19.2%	24.3%	27.2%	16.0%	22.8%	28.4%
	100%	100%	100%	100%	100%	100%
Very low and low income (lowest 40%)	39.2%	33.1%	30.2%	38.4%	30.9%	22.0%
High and very high income (highest 40%)	39.6%	46.6%	50.0%	37.7%	48.8%	56.9%
	Outright owner			Purchaser		
	2011	2016	2021	2011	2016	2021
Very low income	20.6%	17.6%	20.3%	10.8%	7.0%	6.3%
Low income	21.6%	21.4%	19.4%	13.8%	8.9%	9.3%
Moderate income	20.8%	21.6%	19.6%	19.1%	19.7%	19.1%
High income	19.4%	17.4%	18.7%	24.6%	29.7%	24.4%
Very high income	17.6%	22.0%	22.0%	31.7%	34.7%	40.9%
	100%	100%	100%	100%	100%	100%
	2011	2016	2021	2011	2016	2021
Very low and low income (lowest 40%)	42.2%	38.9%	39.7%	24.6%	15.9%	15.6%
High and very hi income (highest 40%)	37.0%	39.5%	40.7%	56.3%	64.4%	65.3%

Source: Census 2011, 2016 & 2021 Australian Bureau of Statistics, authors calculations

As Table 4 shows, in 2011 40 percent of all households were high- or very high-income households but by 2021 this had increased to 50 percent, a remarkable and rapid change clearly driven by market forces. Private rental moderate to lower income households are being constrained to reside elsewhere: accounting for 62 percent of renters in 2011 but only 43 percent in 2021. While there is overall stability there are, however, large differences in the composition. The increase in purchasers overall has been almost totally in the very high-income category, up from 32 percent to 41 percent. By contrast, very low- to low-income purchasers dropped away rapidly, and those remaining would almost certainly be households who purchased many years ago.

In terms of Byron Shire's objective of facilitating greater diversity of households – notably moderate-income earners – it is clear this is not being realised in Byron Bay so other areas in the shire will have to be looked to for this aim.

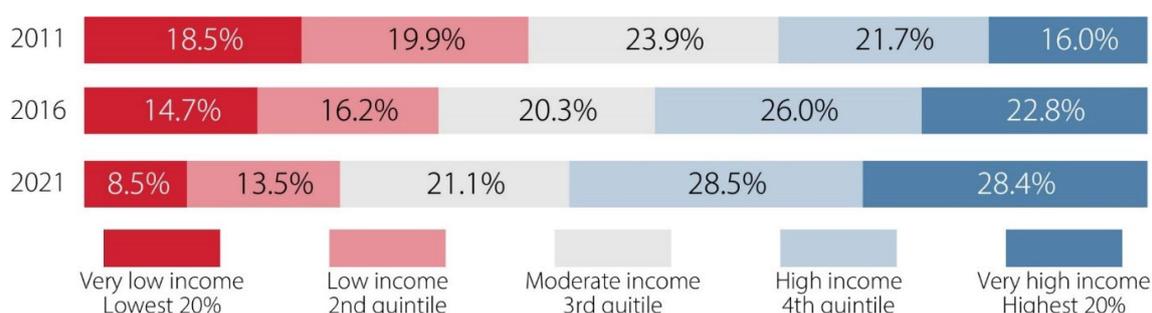
Figure 5: Equivalised income distribution for Byron Bay [SA2] 2011,2016 2021



Source: Census 2011, 2016 & 2021 Australian Bureau of Statistics, authors calculations

Overall, Figure 5 reveals that Byron Bay is taking on the attributes of an affluent and gentrifying inner Sydney or inner Melbourne location. How we evaluate this is difficult. Some may have no concerns with such an area being characterised by high inequalities of income and wealth, but others will. One concern is impacts on the local labour market. Low-income but essential workers (e.g., cleaners, hospitality, retail, and personal care workers) and moderate-income professionals (e.g., teachers, police, nurses) will be increasingly unable to live and work in the township, potentially contributing to labour market shortages in the essential service sectors of the town. However, as several submissions to the NSW Independent Planning Commission have argued, this can be addressed by lower- and moderate-income households living in the rest of the Shire and, although they might have longer commutes, so do many capital city residents. But this negates the attractiveness of Byron Shire as a lifestyle location. Figure 6, with a focus on private rental, shows the marked changes in income categories for Byron Bay, paralleling the broad change in the local housing system as a whole.

Figure 6: Equivalised income distribution for private renters Byron Bay [SA2] 2011,2016 2021



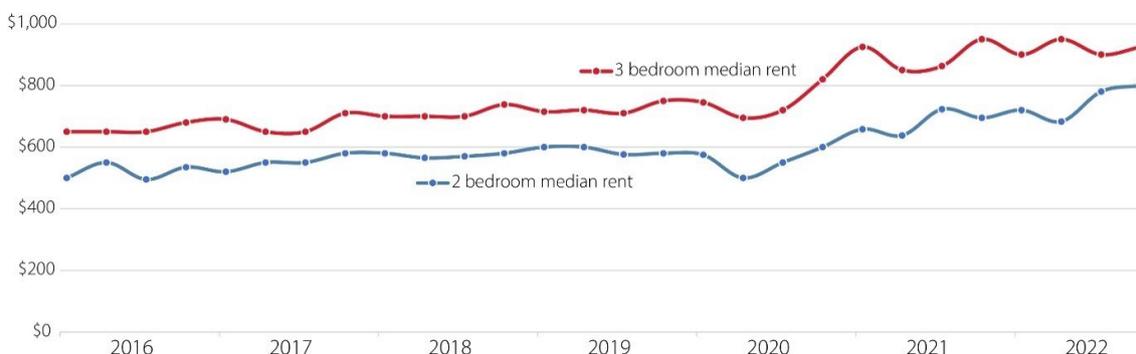
Source: Census 2011, 2016 & 2021 Australian Bureau of Statistics, authors calculations

5.3.2 Rental crisis

A rental **problem** in Byron Shire in 2018 has arguably become a housing **crisis**. Figure 7 shows the long-term trend in rents for 2- and 3-bedroom rental properties and demonstrates a steady increase, intensifying following the worst

of Covid. In a context of household incomes only increasing by about fifteen percent over the last 7 years, rents in Byron Bay increased by 57 percent between 2017 and end 2022. The effect on affordability is severe.

Figure 7: Median rent Byron Bay (SA2)



Source: Rental Bond Data, Fair Training New South Wales (unit records) 2016- 2022 (postcode 2481 – Byron Bay, Suffolk Park)

Using the NSW government gazetted moderate income for a couple and two children (\$126,500), Table 5 and Figure 8 show the steady decline in affordability over the last half decade and the very low levels for 2022. For what many people would see as a reasonable income (the income of professionals such as teachers, police, or nurses) only 11.3 percent of dwellings of an appropriate size (three or more bedrooms) was affordable in 2022. In 2016, the time of the Gurran report, which recommended interventions back then, it was 42.3 percent availability, a dramatic change and hence a problem becoming a crisis! For childless couples on a moderate income (\$90,300) the equivalent percentage of affordable properties was 20 percent.

Table 5: Affordable new rental lettings for low and moderate incomes

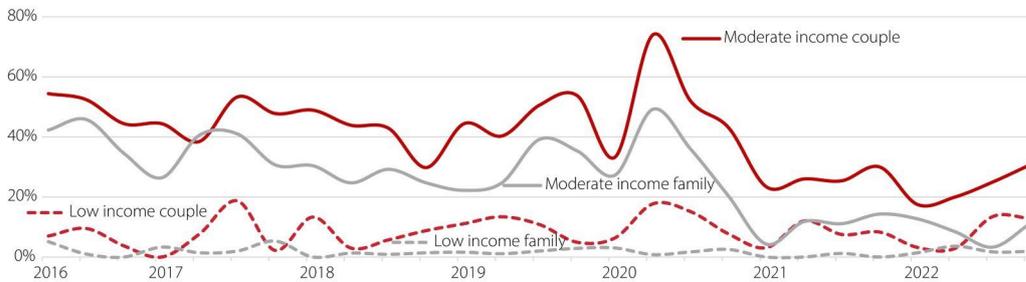
	Couple 1 – 2 bedrooms			Couple + 2 -3 and above		
	Dwellings	Low income	Moderate income	Dwellings	Low income	Moderate income
Dec-16	27	3.7%	44.4%	84	0.0%	34.5%
Dec-17	46	2.2%	47.8%	75	5.3%	30.7%
Dec-18	57	8.8%	29.8%	73	1.4%	24.7%
Dec-19	82	4.9%	53.7%	68	2.9%	35.3%
Dec-20	65	7.7%	43.1%	79	2.5%	20.3%
Dec-21	60	8.3%	30.0%	63	0.0%	14.3%
Dec-22	39	12.8%	30.8%	53	1.9%	11.3%

Rental Bond Data, Fair Training New South Wales (unit records) 2016- 2022 (postcode 2481 – Byron Bay, Suffolk Park), Community and Justice- New South Wales Government (various years)

The sharp drop-off in available affordable rental dwellings probably relates to the pressures of lifestyle-seeking permanent residents moving to Byron Shire post-Covid, on top of the return of tourism and a growing number of STRA

properties being provided to meet that need, some of these (although difficult to quantify) coming from the LTR sector. That the progressive decline in rental affordability was paralleled by a rapid increase in STRA suggests a causal relationship, but to what degree it is difficult to say given all the other underlying structural processes over the same period.

Figure 8: Affordable new rental lettings for low and moderate incomes



The problem of rental availability and rent increases is a national and state problem, but not to the scale seen in Byron Bay. This is vividly illustrated by benchmarking Byron Bay against all regional NSW. While there has been a steady erosion of affordability for regional NSW it has only been from 97 percent affordability to 90 percent for a four-person moderate income household, compared to Byron Bay’s 42 percent down to 11.3 percent; the differential between Byron Bay and regional NSW is now enormous. The processes occurring in Byron Bay are now very different from much of the rest of regional NSW.

Illustrating the challenges for those seeking private rental in Byron Bay township, Table 6 shows the number of properties available for the LTR and STRA markets in 2022, the former represented by new bond listings and the latter by advertised Airbnb properties. The number of the latter is much greater and, more significantly, continued to grow as the year proceeded, while new LTR listings declined—down 34 percent for two-bedroom private rental but by contrast up 19 percent for Airbnb for the same property type. Whether this is because of more LTR becoming STRA is not clear. What is of interest is the quarterly availability of advertised Airbnb; more Airbnb’s come on to the market in the December quarter, with reduced numbers in other quarters. This suggest a proportion of Airbnb providers are seasonal in their provision of STRA and may have limited or no provision during the rest of the year, perhaps reverting to a holiday house role for that time. No such seasonality exists in the LTR market.

Table 6: Byron Bay (SA2) private rental vs Airbnb supply 2022

		Private rent New listings	Available Airbnb properties	Net additions in advertise Airbnb
2br	Mar 22	33	233	
	Jun 22	36	256	23
	Sep 22	22	254	-2
	Dec 22	22	286	32
3br	Mar 22	46	348	
	Jun 22	52	346	-2
	Sep 22	40	356	10
	Dec 22	35	413	57
4br	Mar 22	23	216	
	Jun 22	26	217	1
	Sep 22	16	232	15
	Dec 22	16	265	33

Rental Bond Data, Fair Training New South Wales (unit records) 2022 (postcode 2481 – Byron Bay, Suffolk Park), Inside Airbnb.

5.3.3 Blocked ownership aspirations

As suggested in 5.3.2, the problem for renters also exists for purchasers. Figure 9 shows the long-term trend in median sale prices and the number of dwellings sold from June 2017 to June 2022. The median sale price remained flat until Covid hit and then traced a rapid upward climb to a median of \$1.6 million by June 2022. Perhaps puzzlingly, dwelling prices from the end of 2020 bear no relationship to the rate of sales. A downturn in sales normally reflects a fall in demand and hits prices. The big increase in demand during Covid was only sustained for a short period and by June 2022 property turnover was much the same as 2017. Prices have contracted somewhat but still effectively represent a doubling of price, with the obvious point that the ability to purchase at these prices constrains affordability options for large numbers of households. It is no surprise that the increase in purchasing shown by 2021 census data was disproportionately high-income earners. Linking this to a STRA impacts is difficult, however, over the same time there was not a large increase in the amount of STRA.

There are two other important points about dwelling prices being ratcheted up to these heights. The first is about long-term rental investment: relating these dwelling costs (capital values) to the typical rents for Byron Bay suggests a rental yield of less than 2 percent (Real Estate Investa 2023) and, in the present context, no immediate signs of capital growth to compensate for the low yields. This a worrying position when the only solution to the rental crisis is more investment in new supply. The second relates to the problem of new housing supply. In a contract-based residential building system (see 5.2), high

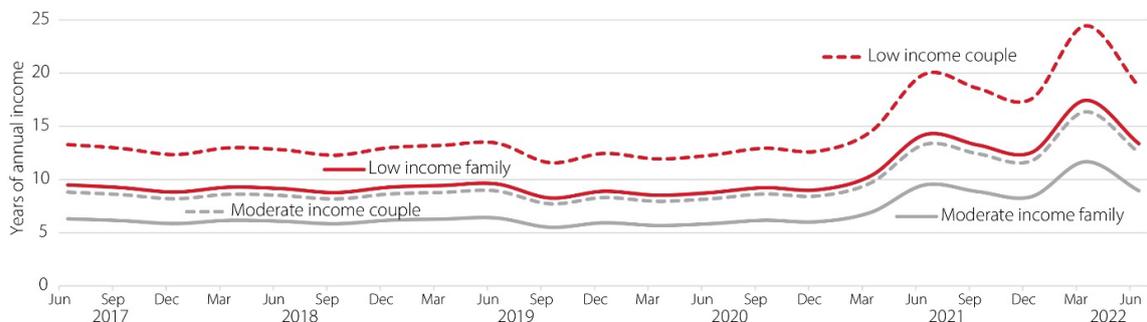
affordability problems simply mean fewer households are able to afford the commissioning of new construction, creating a long-term supply problem.

Figure 9: Median sales prices and number of dwellings sold Byron Bay (SA2)



The affordability constraint is further illustrated in Figure 10, which shows the ability to purchase of household in various income ranges, from June 2017 to June 2022. Figure 10 shows the same post-Covid erosion of purchase affordability as Figure 8. Rapid increases in dwelling prices to March 2022 occurred, with a downturn in June 2022 (probably sustained into 2023) but for moderate income households this still represented the equivalent of 13.7 years income to purchase compared to around 8 years in 2017.

Figure 10: Affordable dwelling purchase for low- and moderate-income households – Byron Shire



Sales Report Community and Justice- New South Wales Government (various years)

5.3.4 Labour market impacts

One of the community concerns about high house prices is the inability to attract and retain labour and how it is forcing people to move elsewhere and either seek work there or commute. This is certainly a reasonable proposition but there is no evidence in the ABS journey to work data from the Census that this is occurring. Table 7 shows there has been a growth of people working in Byron Bay, but the proportion of people commuting into Byron Bay, from surrounding townships within the Shire, and neighbouring ones, remains stable from 2011 through to 2021. However, the last Census was in 2021 just as the effect of rising rents and house prices started so it possible that the labour

market effects of the housing crisis were not manifest at the time but are playing out now.

Table 7: Place of usual residence for people who work in Byron Bay [SA2]

		2011		2016		2021	
		Workers	%	Workers	%	Workers	%
	Live and work Byron Bay	2,559	49.5%	2,784	46.6%	3,542	46.9%
Other areas of Byron Shire	Bangalow	498	9.6%	573	9.6%	680	9.0%
	Brunswick Heads - Ocean Shores	471	9.1%	539	9.0%	696	9.2%
	Mullumbimby	365	7.1%	441	7.4%	476	6.3%
Surrounding local government areas	Ballina	814	15.7%	995	16.7%	1,320	17.5%
	Lismore	231	4.5%	239	4.0%	295	3.9%
	Tweed	236	4.6%	403	6.7%	547	7.2%
Total		5,174	100%	5,974	100%	7,556	100%

Source: Census 2011, 2016 & 2021 Australian Bureau of Statistics, authors calculations

5.3.5 Dual occupancy

In Byron Shire there also appears to be an issue associated with 'as of right' dual occupancy development, allowed between 2012 and 2017. This program was initiated to increase affordable rental supply, but it is unknown the degree to which such stock has switched to STRA. As the Urbis report documented (Urbis 2012: 50) over 400 secondary dwellings were added to the LGA's housing supply, but a review of the program in 2019 found most of these dwellings were used for STRA and there was no impact on the rate of increase of median rents for single bedroom dwellings. This raises the question of the ability of any policy to bring them back to long term rental?

5.4 Policy implications

STRA is seen as both an opportunity and a problem internationally, with the focus on problems rather than opportunities getting greater prominence in the last half decade (hence the policy initiatives listed in Table 1).

This is certainly the case for Byron Shire. It has a home purchase affordability problem for any households on less than a moderate income and for rental it is beyond a problem; we can call it a crisis both in terms of affordability and availability.

In addition to a housing problem, there is a community concern that the rate of STRA growth is affecting the character, liveability and even functioning of the township. The former is reflected in amenity concerns around noise, parking, congestion and perceived loss of community, the latter in terms of the functioning of labour markets (availability and skills of labour) and again congestion and ease of mobility.

The policy issue is how much of this change can be attributed to the growth of STRA. Despite all the data, reports, and submissions we still do not have enough information about what is driving the housing market generally, and the decision making of key players in relation to STRA, holiday homes, LTR and owner-occupied housing to be confident as to any causal relationship to rental

and house price increases. Local amenity impacts are probably easier to attribute to STRA but mostly at specific neighbourhood or street level. Here, the lived experience of residents can identify the problems better than any data as it is at this local level that noise, parking, and congestion problems can be a source of grievance.

The housing market effects, however, as argued elsewhere, are local manifestations of a national problem accentuated by local issues, including STRA. City and regional locations Australia-wide have been experiencing an erosion of affordability for some time, with changes in household growth and tourism post-Covid making an underlying problem worse. Without being able to put numbers on it, the authors would conclude a large proportion of Byron's problems derive from processes wider than STRA.

Byron Bay township is to some extent a small-scale version of the issues evident in larger tourist cities like Amsterdam and Barcelona. Despite an emphasis on sustainability in the Shire's tourist plan (Byron Shire 2020), the municipality and Byron Bay township appear committed to strong tourist growth, while at the same time attracting a residential population seeking lifestyle living. The section of the plan about housing tourists mainly focuses on STRA, hence the desire for a 90-day cap. But given the acceptance of 4 percent tourist growth, and the rejection of so-called 'high hotels' (Byron Shire 2020:50) it is difficult to see how such growth can be met without further STRA housing and with doubts (see the next section) about whether a 90-day cap would constrain growth.

Beyond the issue of tourism policy, there is a lack of funding and willingness by higher levels of government to facilitate the provision of much needed social and affordable housing (essential for moderate- to low-income households) and of taxation and housing assistance provisions that stimulate new housing supply. Sitting behind all this is the institutional structure of the housing industry, creating an inherent capacity to undersupply as affordability worsens.

This is not to say nothing can be done and Byron Bay has a set of proposals to deal with a subset of their housing problems: the STRA regulation and especially the 90-day cap in designated residential zones.

5.4.1 Analysis of STRA caps

Figures 11 and 12 provide a behavioural context for policy decision-making i.e., how a host might act in terms of renting out a property when a policy is applied limiting the total number of days per annum the property can be let as STRA. Figure 11 represents the total year and how 90 and 120 days would operate as time blocks, and how a typical 'investor host' may interpret the day cap requirement. However, the logical behaviour for any host, as captured by Figure 12 is to focus on Queensland, New South Wales, and Victorian school holidays (21 days x 3 =63), then the mid-December to end of Jan holiday period (another 40 days). These periods represent 100 days at optimal letting, with the hope of additional letting in the intervening time.

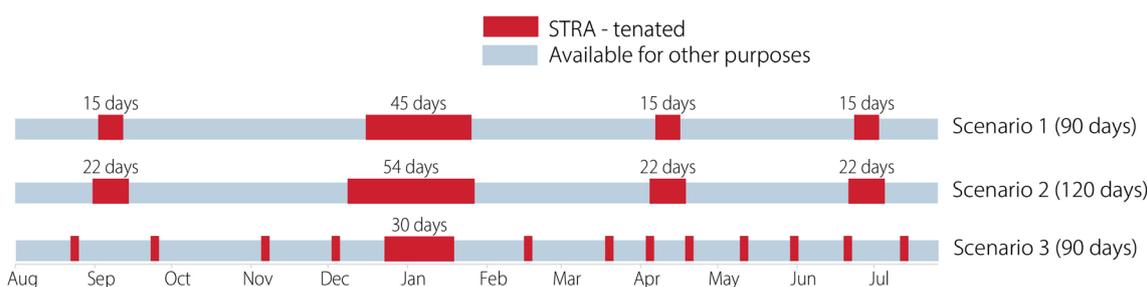
The Host income (Figure 13) uses December 2022 (peak season) and is based on 97% of listing price, due to Airbnb fees. Annual landlord income is based on the December quarter 2022 and is reduced to 92% of median rent, due to real estate fees.

Figure 11: STRA cap scenarios



Source: Authors

Figure 12: STRA likely hosting patterns



Source: Authors

This can then be translated into an economic analysis of hosting, shown in Table 8, using the method summarised in Appendix 1. This shows for three time periods: 90, 120, and 180 days, and three property types: 2-, 3-, and 4-bedroom homes, the potential income earned and how many days are required to be financially viable. It uses the median LTR rent for Bryon Bay township (2022) compared to Airbnb median incomes (adjusted for hosts' costs). Some things to note are Airbnb income jumps substantially in the December quarter, and notably for 4-bedroom properties, which means a relatively short hosting period can generate quite a lot of income. In this example, Airbnb median incomes have been used and these can be seen as proxy for STRA incomes provided by other platforms.

As Table 8 shows, financial viability is met within 90 days for 3- and 4-bedroom properties and in less than 120 days for 2-bedroom properties, and without the risks of LTR. All other factors being constant, this would suggest a 180-day cap would have little impact on returning property to the LTR market. It would effectively be a non-policy. But even 90 days is marginal for larger (multiple bedroom) properties, as profits can be made in less than that time. It would likely cause hosts of two-bedroom properties to consider returning these to long-term rental and, contrary to views that the LTR is all luxury accommodation, this is less likely to be the case with 2-bedroom dwellings.

Given there are over 200 2-bedroom properties, returning a small number of these, e.g., 20-30 to the rental market would greatly increase vacancies and subdue rents. Comparisons of the effects of addition to the total rental stock are meaningless. New stock additions must relate to the how many new listings are available for rent as measured by bond lodgements i.e., recently advertised and taken-up properties. In 2022 there were only a total of 81 new two-

bedroom listings and in December only 22. A small increase, such as 20, would have a meaningful impact.

This financial analysis suggests that if maximum day caps are to be used to send market signals to encourage some retreat from STRA provision, careful consideration needs to be given to the implications of different dwelling forms. This is a very specific variation of the overall theme of policy relating to a particular context. Here, 3- and 4-bedroom STRA may require a 60-day cap while 2-bedrooms may be more suited to 90 days.

Table 8: Landlord (rental provider) vs Airbnb Host – who gets the money – Byron Bay [SA2]

		Private rent	Airbnb adjusted income to host			Time for host to meet PR income	
		Annual rent	90 days	120 days	180 days	Days	Months
2br	Mar 22	\$34,500	\$36,100	\$48,200	\$72,300	86	2.9
	Jun 22	\$32,800	\$34,000	\$45,300	\$67,900	87	2.9
	Sep 22	\$37,400	\$39,300	\$52,400	\$78,600	86	2.9
	Dec 22	\$38,400	\$45,200	\$60,200	\$90,400	76	2.5
3br	Mar 22	\$43,200	\$56,700	\$75,700	\$113,500	69	2.3
	Jun 22	\$45,600	\$49,900	\$66,500	\$99,800	82	2.7
	Sep 22	\$43,200	\$58,600	\$78,100	\$117,200	66	2.2
	Dec 22	\$44,400	\$77,600	\$103,500	\$155,200	51	1.7
4br	Mar 22	\$72,000	\$85,700	\$114,300	\$171,500	76	2.5
	Jun 22	\$58,800	\$85,300	\$113,700	\$170,600	62	2.1
	Sep 22	\$66,000	\$90,400	\$120,600	\$180,900	66	2.2
	Dec 22	\$63,600	\$122,700	\$163,500	\$245,300	47	1.6

Source: Rental Bond Data, Fair Training New South Wales (unit records) 2022 (postcode 2481 – Byron Bay, Suffolk Park), Inside Airbnb, Authors calculations

Figure 13: Landlord (rental provider) vs Airbnb Host – who gets the money – Byron Bay [SA2] December 2022



Note: Host income based on December 2022 (peak season) and based on 97% of listing price due to Airbnb fees. Annual landlord income is based on the December quarter 2022 and is reduced to 92% of median rent due to real estate fees.

However, caution is required for a 90- or 60-day policy. In the Australian and NSW context there is the risk (or opportunity depending on how viewed) that the adoption of a 90- or 60-day period may create a situation where a host becomes a STRA provider for a 90- or 60-day period and then switches to a short term LTR lease, with the tenant required to be out at the end of that lease. This may create a new housing problem where households are unable to find any dwellings to live in during key holiday periods (i.e., December quarter), the likely time their short-term leases would expire, and a switch back to STRA made. In the international literature search, no evidence of the 90- or 60-day cap producing such an outcome was identified, with the likely reason being much stronger residential tenancy legislation (Martin et al. 2017), which protects households from eviction and prevents the use of short-term leases that move lease holders on for the duration of a holiday period.

6 Key findings in review

The key findings of this STRA review are:

- The problems that communities see as related to STRA – i.e., the lack of long-term rental (LTR), declining rental and purchase affordability, increased dwelling prices, loss of local amenity and community – have seriously worsened in the last five years, most notably in terms of affordability and vacancy. In some submarkets, such as Byron Shire, it is fair to call it a housing crisis.
- The housing problem is national to a large degree, with causes that are contested but relate to the institutional attributes of the Australian housing system and the associated policy settings. STRA is thus a problem overlaid on a much larger set of problematic processes and we cannot expect STRA regulation to solve local housing problems, although they may mitigate them. In short, communities should not have false hope that greater regulation is the solution; any such regulation needs supporting by wider policy initiatives.
- While not the key cause of housing problems, STRA impacts will have greater weight in certain local contexts, such as coastal communities like Byron Shire and inner-city tourist locations such as Bondi. Here policy interventions would be appropriate but need to be tailored to the specific attributes of a locality and the type of STRA accommodation.
- Internationally, community resentment and activism associated with STRA growth has become stronger in the last half decade, prompting governments at different levels (most notably at the local level), to initiate a large and diverse range of policy interventions. There are cautionary lessons here for Australia; some may have relevance, but some less so given our different housing system.
- By comparison, Australian regulation is minimal with variations across the different jurisdictions. However, there are growing concerns and signs of new interventions.
- It is clear from the international evidence that compliance is a problem largely related to no effective mechanism for identifying unregistered hosts and whether they are meeting the conditions of registration. This in part derives from inability, reluctance, or failure of platforms to provide the data. This issue means any registration process that attaches conditions to achieve specific housing outcomes such as day caps or maximum visitor numbers must work through compliance issues. The European Union is, at time of writing, evolving a Union wide framework, set of principles and practices and a consultation process with platforms to address this problem where possible. As a federal system with multiple jurisdictions, this model could give guidance to Australia as to future action.
- The limited evidence to date from international policy interventions do show benefits such as increased LTR stock, but the degree of increase is much less than anticipated although this depends on how the evidence is understood; a

small increase compared to the total amount of advertised lettings may make and significant difference.

- Any STRA regulation by itself cannot solve the housing problems of any town, city, or suburb given the broad cause is the weaknesses in the Australian housing system and policy context. STRA regulation must be supported by a range of other policies options.
- Byron Bay town as a case study STRA town is in housing crisis with excessively high dwelling prices and rents and associated affordability problems. This is potentially impacting labour market function and the opportunity for income and household diversity. It is developing a skewed income distribution (high income weighted) at the same time as low to moderate income households including families are increasingly pushed out of the township and homelessness and housing stress are increasing.
- The Byron Shire Community is broadly opposed to STRA but much of the housing problem (issues about noise, congestion, community impacts are different) are localized manifestations of national housing problems, with STRA accentuating the impact. This still suggests a need for some positive actions with one option being a time limited piloting of Byron Shire's STRA planning proposal **with appropriate monitoring of outcomes**. STRA is not going to go away and knowledge of how to best manage it through monitoring of a nuanced pilot project rather than one- size-fits-all would be a significant initiative.
- A cap on number of days rented is a popular international option but 180 days is probably not going to have any impact, given STRA, as exemplified by Byron Bay town, is profitable compared to Long Term Renting (LTR) within 90 days. Other locations may have different time periods.

With these findings as context, what are the possible tools or options for mitigation of the STRA issues?

7 Policy options: Where to from here?

In many respects the growth of STRA highlights issues not just associated with potential housing market and community outcomes but also of fundamental ideological and value positions around policy making:

- Human rights vs property rights: i.e., should policy focus on the right to shelter or the freedom to use your property (and build wealth)?
- To what degree do we support programs and policies which accentuate income and wealth inequality and generational divides around housing?
- What are the responsibilities of respective levels of government in facilitating appropriate and affordable housing?
- Tourism growth and needs versus community sustainability and housing need.
- What is the key STRA issue to be addressed: amenity, community, or housing?

A continuing theme of this, and related studies, highlight how STRA policy options need to relate to the specific STRA submarkets. Table 9 therefore illustrates how the policy interventions of the type summarised in Table 1 can be linked to (a) the different STRA submarkets of Section 1.1 and (b) the three major issues associated with STRA.

In the case of Table 9, this is only for *High STRA density all season coastal locations*, with Appendix 3 documenting the options for the other STRA submarkets of Section 1.1.

Table 9: Policy options for STRA issues

STRA Submarket	Local Amenity	Community	Housing Market
High density, all-season STRA – Coastal	<ul style="list-style-type: none"> • Total ban • Bans/ limits in specifically zoned locations • Zoning/ precinct controls on number of guests, cars • Caps on minimum guest days 	<ul style="list-style-type: none"> • Total ban • Bans/ limits in specifically zoned locations • Zoning/ precinct controls on number of guests, cars • Caps on minimum guest days 	<ul style="list-style-type: none"> • Total ban of all existing STRA • Ban on new STRA only • Bans in specifically zoned locations • STRA differential rating to raise cost and deter STRA

STRA Submarket	Local Amenity	Community	Housing Market
	<p>e.g., three days</p> <ul style="list-style-type: none"> Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours. 	<p>e.g., three days</p> <ul style="list-style-type: none"> Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours. 	<ul style="list-style-type: none"> Limits on total rental days (90, 120, 180 etc.) Financial incentives to switch from STRA to LTR. Registration requirement with fee sufficient to deter some STRA Caps on multiple owners (investment deterrent).

These options are outlined in broad terms only and more work would need to be undertaken on how they would be specified and implemented.

If, for example, the objective was to bring more LTR back onto the market or slow the loss of LTR how would some of these work? Unfortunately, the international and national experience is of little help as most reforms of this type are so recent that there has been little time to evaluate them, other than some of the outcomes of tighter day limits, e.g., Amsterdam (Hübscher & Kallert, 2023) or qualified bans, e.g., Berlin (Research Germany 2023) and Paris.

The economics of caps on the number of days as discussed for Byron Shire in Section 5.4 may be different from submarket to submarket and, as 5.4 highlighted, for properties of different sizes. Thus, 90 days may be an option in Byron Shire if some return to LTR was the objective, but in others it may be more days depending on local LTR rents compared to those of STRA.

An alternative to maximum day caps as a form of 'market signal' is a financial incentive or disincentive. The latter, represented by a differential rate (tax) compared to that of a non-STRA dwelling, would require an estimate of what rate would make a financial difference. Differentials of a few thousand dollars in places like Byron Shire might not make much decision-making impact but it could in other submarkets.

The incentive alternative would be a payment to STRA providers (or holiday house owners) to bring their properties onto the LTR market. An example of such a program could be a two-year Regional Rental Assistance Program

(RRAG) supporting the provision of a targeted number of new leases e.g., 4000 state-wide via an \$8000 initial incentive payment to eligible regional properties, plus an 'occupant bonus' of \$5000 a year for the first 24-months. The program could be targeted to LGAs experiencing the most severe rental shortages, such as Byron Shire. Potential actors who might take up the offer would include holiday homeowners, any new-build properties that may be available, and STRA providers who, following the introduction of any 60- or 90-day cap, are weighing up their options. Conditions could be attached to the grants regarding lease-holder eligibility, e.g., key workers might have priority. The attraction here is there would be less political flak compared to differential rates, but it would have a cost to taxpayers and would have to be a state government initiative: rate differentials by comparison would not cost the taxpayer and would be administered by local government, who would then carry the political flak.

Attaching fees to registration (accompanied by appropriate penalties for non-registration) could also be used to weaken the growth of STRA provision but with levels of fees different for the different submarkets outlined in section 1.1.

Turning back to Byron Shire, while many of the housing issues documented above will derive from the broader institutional context, the scale of the STRA provision in the Shire and specifically Byron Bay suggests it is likely to be a major compounding problem.

Despite the fact, at this stage, we simply do not have the information to know with any precision whether different policies and programs can work and what the intended and unintended outcomes might be, we do not want a clear and significant problem to go unaddressed.

In the case of Byron Shire is a municipality the options are range from A 90-day cap through to 180 and with variations for specific precincts. Shorter caps are less likely to send signals to some STRA providers to switch to LTR but the degree to which the result would be substantial is not known; the Urbis research and the experience of other countries suggests the numbers are not large a proportion of all stock. **However, as a proportion of new lettings, small numbers could be significant.** Moreover, there is also the possibility of peak STRA in the short term, with potential for more hosts being willing to leave the sector because of falling viability due to excessive competition.

Australia is historically poor at policy experimentation, whereby policy can be trialled in some locations, circumstances, and time periods. The risk without this is one of embarking on a general and generic program at large expense and with no guarantee of ultimate success.

One policy option could be the enabling of Byron Shire council to trial, e.g., for a 2-year period, a 90-day cap in identified precincts **with an appropriate research monitoring program**, which would give Commonwealth, State, and local governments the knowledge for more informed policy delivery around an issue which is not going to go away.

The cap on the number of rental days deals with (and then only potentially) the problem of LTR stock availability, prices, and rents. Other issues about noise, congestion, loss of community, and lack of income and wealth diversity through high concentrations of STRA can also be addressed through actions in addition

to Codes of Conduct, as introduced by NSW Department of Fair Trading in 2020. These options include:

- Two-tiered non-host registration relating to the size of the property, with larger properties having caps on the number of vehicles that can be parked on the street or the number of occupants per dwelling (the latter could have different numbers of related and non-related)
- Caps on the number of non-hosted STRA for a designated area by only allowing registration (or licensing) of a given number for that area.
- Caps on the number of multiple ownership non-hosted properties, e.g., 2 properties, as per Seattle and Santa Monica in the USA.

Linking back to tourism strategies and the choice between quantity of tourists and quality of tourism, STRA regulation can also play a role here. Options for councils here include policies such as caps on the minimum days for guests in STRA e.g., three days to encourage longer stays and a more locally immersive experience.

The longer-term challenge is how to manage future tourism and associated dwelling growth. Given the reluctance of the Shire, reflecting community sentiment, for multi-unit holiday accommodation despite it being an objective in the residential strategy, the Shire will need some growth of STRA. Policy options for consideration include (1) only allowing registration of STRA properties where owners can demonstrate that they were previously holiday homes and not properties to be removed from the LTR. and (2) only registering future STRA properties that are new construction, and which therefore add to the stock, rather than converting existing stock.

As Section 4.5 indicated, there is also the potential to use taxes (rates in the case of local government) to send signals as to desired outcomes. For example, in the case of as-of-right dual occupancy, a rate waiver might be offered to encourage return to LTR, or higher rates could be used as a stick to discourage their use as STRA. Alternatively, and relating back to rating options new STRA providers could be required to pay a rate twice the normal amount, thus acting as barrier to entry while quarantining existing STRA providers. The objective here would be to keep a cap on growth.

A theme of this report is that STRA regulation, without any associated price signals, will only have limited impact on rental costs and availability if that is to be an objective to be addressed. Given the scale of the regional housing crisis, as manifested by inadequate and stressful living circumstances (e.g., tents and caravans), and potential issues of lack of social diversity and labour market difficulties, one option is for STRA regulation to be supplemented by other programs.

An important point to reaffirm here about any program that is linked to registration, or about registration itself, is the issue of compliance. Compliance issues range from simply not registering, to renting out more than the number of designated days. The review of the international literature (Section 4.6) indicates that compliance is a general problem and probably the only way to deal with it is to attach financial penalties.

Given a theme running through this report is that local area housing problems are as much local representations of national housing issues, policy options must also involve levels of government other than the local.

As Section 3.12 outlined, all states and territories are in the process (to different degrees) of evolving registration and policy processes. There is therefore a certain logic for the Commonwealth in conjunction with the states to develop a national approach to addressing the growth of STRAs and their widespread impacts. As a federal system with multiple jurisdictions, it would be logical for Australia to establish a harmonised framework for Australia and a set of shared practices. This would also enhance the ability to get the cooperation of provider platforms as in case on the European Union (see 3.11).

Also at the Commonwealth level, one option (but contestable as reform always is) might be to quarantine negative gearing for existing STRA accommodation and only allow it in the case of new dwelling supply, i.e., an actual additional dwelling to the total housing stock. This would change the financial expectations associated with removing existing dwelling stock to STRA from LTR where negative gearing would still apply.

Finally, the State Government needs to ensure that the NSW share of funds from the Commonwealth Housing Australia Future Fund for social and affordable housing is targeted to rental crisis areas such as Byron Shire.

References

- Aalbers, M. (2016) *The Financialization of Housing: A Political Economy Approach*, Routledge, London.
- AHURI (2022) Why does Australia have a rental crisis, and what can be done about it?
<https://www.ahuri.edu.au/research/brief/why-does-australia-have-rental-crisis-and-what-can-be-done-about-it>
- Airbnb Help Centre US (2023) <https://www.airbnb.com.au/help/article/2297>
- Ajuntament Barcelona (2022) Strategic Plan
<https://ajuntament.barcelona.cat/turisme/en/strategic-plan>
- Allen, P. (2019) How the sharing economy is transforming the short term rental industry. <https://knowledge.wharton.upenn.edu/article/short-term-rentals-the-transformation-in-real-estate-and-travel-set-to-check-in/>
- ANZ CoreLogic Housing Affordability report
- Avalara (2023) The Airbnb Host's Guide to Occupancy Tax Compliance (0)
<https://www.avalara.com/mylodgetax/en/resources/airbnb-occupancy-tax-guide.html>
- Balampanidis, D., Maloutas, T., Papatzani, E. (2021) Informal urban regeneration as a way out of the crisis? Airbnb in Athens and its effects on space and society. *Urban Research & Practice, Urban Research & Practice*, 14:3, 223-242, DOI: [10.1080/17535069.2019.1600009](https://doi.org/10.1080/17535069.2019.1600009)
- Barron, K., Kung, E. and Proserpio, D. (2018) The sharing economy and housing affordability: Evidence from Airbnb, retrieved on October 13, 2020 from <https://ssrn.com/abstract=3006832>
- Beck, L. (2018) Berlin had some of the world's most restrictive rules for Airbnb. *The Washington Post*, 28 March, 2018
- Beckerman, R., Cohen, M., Kun, E., Maiden, J. & Proserpio, D. (2021) Restricting Airbnb Rentals Reduces Development. *Harvard Business Review* No. 11. <https://hbr.org/2021/11/research-restricting-airbnb-rentals-reduces-development>
- Biven, J. (2019) The economic costs and benefits of Airbnb: No reason for local policymakers to let Airbnb bypass tax or regulatory obligations. *Economic Policy Institute*
<https://www.epi.org/publication/the-economic-costs-and-benefits-of-airbnb-no-reason-for-local-policymakers-to-let-airbnb-bypass-tax-or-regulatory-obligations/>
- Buckle, C., Gurran, N., Phibbs, P., Harris, P., Lea, T. & Shrivastava, R. (2020) Marginal housing during COVID-19, AHURI Final Report No. 348, Australian Housing and Urban Research Institute Limited, Melbourne

<https://www.ahuri.edu.au/research/final-reports/348>,
doi:10.18408/ahuri7325501.

Burke, T., Nygaard, C., and Ralston, L. (2020) *Australian home ownership: past reflections, future directions*, AHURI Final Report No. 328, Australian Housing and Urban Research Institute Limited, Melbourne,
<https://www.ahuri.edu.au/research/final-reports/328>, doi:10.18408/ahuri-5119801.

Byron Shire (2020) Residential Strategy.
<https://www.byron.nsw.gov.au/Services/Building-and-development/Building-and-Development-Plans-Strategies-and-Publications/Residential-Strategy>
https://byron.infocouncil.biz/Open/2020/03/PLAN_19032020_AGN_1154_files/PLAN_19032020_AGN_1154_Attachment_7291_1.PDF

Byron Shire (2020) Byron Shire Sustainable Visitation Strategy 2020-2030
https://byron.infocouncil.biz/Open/2020/03/PLAN_19032020_AGN_1154_files/PLAN_19032020_AGN_1154_Attachment_7291_1.PDF

Cheng, M., Houge Mackenzie, S. & Degarege, G. (2022) Airbnb impacts on host communities in a tourism destination: an exploratory study of stakeholder perspectives in Queenstown, New Zealand. *Journal of Sustainable Tourism*, 30(5), 1122-1140. doi:10.1080/09669582.2020.1802469

Christchurch City Council (2022) Proposed Plan Change 4 – Short-term accommodation <https://ccc.govt.nz/the-council/plans-strategies-policies-and-bylaws/plans/christchurch-district-plan/changes-to-the-district-plan/proposed-changes-to-the-district-plan/planchange4>

City of Santa Monica (2019) Settlement with Airbnb Guarantees Compliance with Home-Sharing Ordinance
<https://www.santamonica.gov/press/2019/12/10/settlement-with-airbnb-guarantees-compliance-with-home-sharing-ordinance>

Cocola-Gant, A., Hof, A. & Yrigoy, I. (2019) Airbnb, buy-to-let investment and tourism-driven displacement: A case study in Lisbon *Environment and Planning A: Economy and Space*, Aug 2019

Cox, M., and Haar, K. (2020) Platform Failures. How short-term rental platforms like Airbnb fail to cooperate with cities and the need for strong regulations to protect housing. [http://insideairbnb.com/reports/Platform - Failures-FINAL-VERSION.pdf](http://insideairbnb.com/reports/Platform-Failures-FINAL-VERSION.pdf) [22.01.2021].

Crommelin, L., Troy, L., Martin, C. & Parkinson, S. (2018) Technological disruption in private housing markets: the case of Airbnb, AHURI Final Report 305, Australian Housing and Urban Research Institute Limited, Melbourne,
<http://www.ahuri.edu.au/research/finalreports/305>, doi:10.18408/ahuri-7115201.

Dateline (2023) 'Scotland's AirBnB Crackdown', Dateline 2023 Season, Episode 5, SBS Television, Australia

Duso, T., Michelsen, C., Schäfer, M. & Tran, K. (2021) Airbnb and Rental Markets: Evidence from Berlin. CEPR Discussion Paper No. DP16150, Available

at SSRN: <https://ssrn.com/abstract=3846265>
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3846265

Deutze Bank Research (2020) Berlin Housing Market
https://www.google.com/search?q=housing+tenure+Berlin&rlz=1C1GCEA_enAU966AU967&oq=housing+tenure+Berlin&aqs=chrome..69i57j33l2.9975j0j8&sourceid=chrome&ie=UTF-8

DIW Berlin (2021) Airbnb rental are increasing rents in Berlin. DIW weekly Report 7/2021 p 95/102,
https://www.diw.de/de/diw_01.c.810832.de/publikationen/wochenberichte/2021_07_1/durch-airbnb-vermietungen-steigen-in-berlin-die-mieten.htm

Duso, T., Michelsen, C., Schäfer, M., and Ducbao Tran, K., (2021) Airbnb and Rental Markets: Evidence from Berlin *CEPR Discussion Paper No. DP16150*,
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3846265

European Commission (2022) Commission acts to promote transparency in the short-term rental sector to the benefit of all players
https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6493

Farha, L. (2017) *Statement by the Special Rapporteur on the right to adequate housing*, Leilani Farha, during the Interactive Dialogue at the Human Rights Council,
<https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=21264&LangID=E>.

Franco, S. & Santos, C. (2021) The impact of Airbnb on residential property values and rents: Evidence from Portugal, *Regional Science and Urban Economics*, Elsevier, vol. 88(C).

Garay, L., Morales, S. & Wilson, J. (2020) Tweeting the right to the city: digital protest and resistance surrounding the Airbnb effect. *Scandinavian Journal of Hospitality and Tourism*, 20(3), 246-267.
doi:10.1080/15022250.2020.1772867

Gonçalves, D., Peralta, S. & Pereira dos Santos, J. (2022) Short-Term Rental Bans and Housing Prices: Quasi-Experimental Evidence from Lisbon. IZA Discussion Paper No. 15706, Available at SSRN: <https://ssrn.com/abstract=4281261> or <http://dx.doi.org/10.2139/ssrn.4281261>

Gurran, N., Zhang, Y., Shrestha, P. & Gilbert, C., (2018), Planning responses to online short-term holiday rental platforms, Research report for the Australian Coastal Councils Association, The University of Sydney, Sydney.

Gurran, N. & Phibbs, P. (2017) When Tourists Move In: How Should Urban Planners Respond to Airbnb? *Journal of the American Planning Association* 83(1):80-92, DOI:10.1080/01944363.2016.1249011

Horn, K., & Merante, M. (2017) Is home sharing driving up rents? Evidence from Airbnb in Boston. *Journal of Housing Economics*, 38, 14-24.
doi:<https://doi.org/10.1016/j.jhe.2017.08.002>

Hübscher, M. & Kallert, T. (2023) Taming Airbnb Locally: Analysing Regulations in Amsterdam, Berlin and London. *Journal of economic and Human Geography* Vol 1114 issue 1 February 2023 <https://doi.org/10.1111/tesg.12537>

Hulse, K., Reynolds, M., Nygaard, C., Parkinson, S., and Yates, J. (2019) The supply of affordable private rental housing in Australian cities: short-term and longer-term changes, AHURI Final Report No. 323, Australian Housing and Urban Research Institute Limited, Melbourne, <https://www.ahuri.edu.au/research/final-reports/323>, doi:10.18408/ahuri-5120101

Katsinas, P. (2021). Professionalisation of short-term rentals and emergent tourism gentrification in post-crisis Thessaloniki. *Environment and Planning A: Economy and Space*, 53(7), 1652–1670. <https://doi.org/10.1177/0308518X21988940>

Makkar, M., Spry, A. & Vredenburg, J. (2021) Lessons learned from Airbnb about tourism recovery post-pandemic.

Martin, C., Hulse, K. & Pawson, H., with Hayden, A., Kofner, S., Schwartz, A. & Stephens, M. (2017) The changing institutions of private rental housing: an international review, AHURI Final Report No. 292, Australian Housing and Urban Research Institute Limited, Melbourne, <http://www.ahuri.edu.au/research/final-reports/292>, doi: 10.18408/ahuri7112201

Nieuwland, S. & van Melik, R. (2020) Regulating Airbnb: how cities deal with perceived negative externalities of short-term rentals, *Current Issues in Tourism*, 23:7, 811-825, DOI: 10.1080/13683500.2018.1504899

Parliament of Western Australia, Economics and Industry Standing Committee (2019) *Levelling the Playing Field; Managing the impact of the rapid increase of Short-Term Rentals in Western Australia*. Perth: Parliament of Western Australia. Accessed at: [https://www.parliament.wa.gov.au/Parliament/commit.nsf/\(ReportsAndEvidence\)/42EE6EB7C8AF9C454825847E000FDA9D?opendocument](https://www.parliament.wa.gov.au/Parliament/commit.nsf/(ReportsAndEvidence)/42EE6EB7C8AF9C454825847E000FDA9D?opendocument)

Phibbs, P. (2022) Impact of short-term rentals on Tasmanian housing markets evidenced in new report, Shelter Tasmania https://shelertas.org.au/wp-content/uploads/2022/06/EMBARGOED-STR-Baseline-Report-June-2022_FINAL-combined-files.pdf

Politica (2003) Portugal's digital nomad bubble poised to pop, <https://www.politico.eu/article/portugal-digital-nomads-bubble-gentrification/>

Ryan-Collins, J., Lloyd, T. and Macfarlane, L. (2017) *Rethinking Economics of Land and Housing*, Zed Books, London.

Queensland Court of Appeal, *Island Resorts (Apartments) Pty Ltd v Gold Coast City Council* [2021] QCA 19

Real Estate investa (2023) Investment Property Bryon Bay <https://www.realestateinvestar.com.au/Property/byron+bay>

Research Germany (2023) Three implications of Berlin's canceled Airbnb ban
research.germany.com/three-implications-of-berlins-canceled-airbnb-ban/

Richards, S., Brown, L. & Dilettuso, A. (2020) The Airbnb phenomenon: the resident's perspective. *International Journal of Tourism Cities*, 6(1), 8-26.
doi:10.1108/IJTC-06-2019-0084

Shabrina, Z., Arcaute, E. & Batty, M. (2021) Airbnb and its potential impact on the London housing market. *Urban Studies*,
<https://doi.org/10.1177/0042098020970865>

Shabrina, Z., & Morphet, R. (2022). Understanding patterns and competitions of short- and long-term rental markets: Evidence from London. *Transactions in GIS*, 26, 2914– 2931. <https://doi.org/10.1111/tgis.12989>

Spanish Statistica (2023) Housing tenure in Spain Catalonia 2019, by type
<https://www.statista.com/statistics/1185207/housing-tenure-in-spain-by-type-catalonia/>

Sweeney, N. (2023) 'Blown away by demand: Why rents are only going higher'
Australian Financial Review, 3 Feb. 2023
<https://www.afr.com/property/residential/blown-away-by-demand-rental-crisis-only-getting-worse-20230201-p5ch3u>

The Left in the European Parliament (2020) Platform Failures (2020)
<http://insideairbnb.com/reports/platform-failures-how-short-term-rental-platforms-like-airbnb-fail-cities-en.pdf>

Tourism Research Australia (2030) Byron Shire Council Draft Sustainable Visitation Strategy 2020-2030

Toronto (2023) Short term rentals, City of Toronto
[https://www.toronto.ca/community-people/housing-shelter/short-term-rentals/#:%7E:text=Short%2Dterm%20rental%20operators%20are,\(MAT\)%20on%20all%20rentals.](https://www.toronto.ca/community-people/housing-shelter/short-term-rentals/#:%7E:text=Short%2Dterm%20rental%20operators%20are,(MAT)%20on%20all%20rentals.)

UAB Divulga: Barcelona Research and Innovation (2021) How do tourist rentals affect the housing market in Barcelona? <https://www.uab.cat/web/news-detail/how-do-tourist-rentals-affect-the-housing-market-in-barcelona-1345680342044.html?noticiaid=1345846603173>

Vicente Rua, P. and Demony, C. (2023) Portugal ends Golden Visas, curtails Airbnb rentals to address housing crisis, Reuters
<https://www.reuters.com/markets/europe/portugal-ends-golden-visas-curtails-airbnb-rentals-address-housing-crisis-2023-02-16/>

Verdouw, J. & Eccleston, R. (2022) Airbnb and the Hidden Barriers to Effective Regulation: A Case Study of Short-Term Rentals in Tasmania. *Urban policy and research*, 1-15. doi:10.1080/08111146.2022.2076213

Von Briel, D. & Dolnicar, S. (2021) The evolution of Airbnb regulations, in S. Dolnicar (Ed.) *Airbnb before, during and after COVID-19*, University of Queensland, DOI: 10.6084/ m9.figshare.14195972

World Economic Forum (2022) What next for travel and tourism? Here's what the experts say, <https://www.weforum.org/agenda/2022/06/what-next-for-travel-and-tourism-industry-experts-explain/>

Appendix 1: The economics of hosting

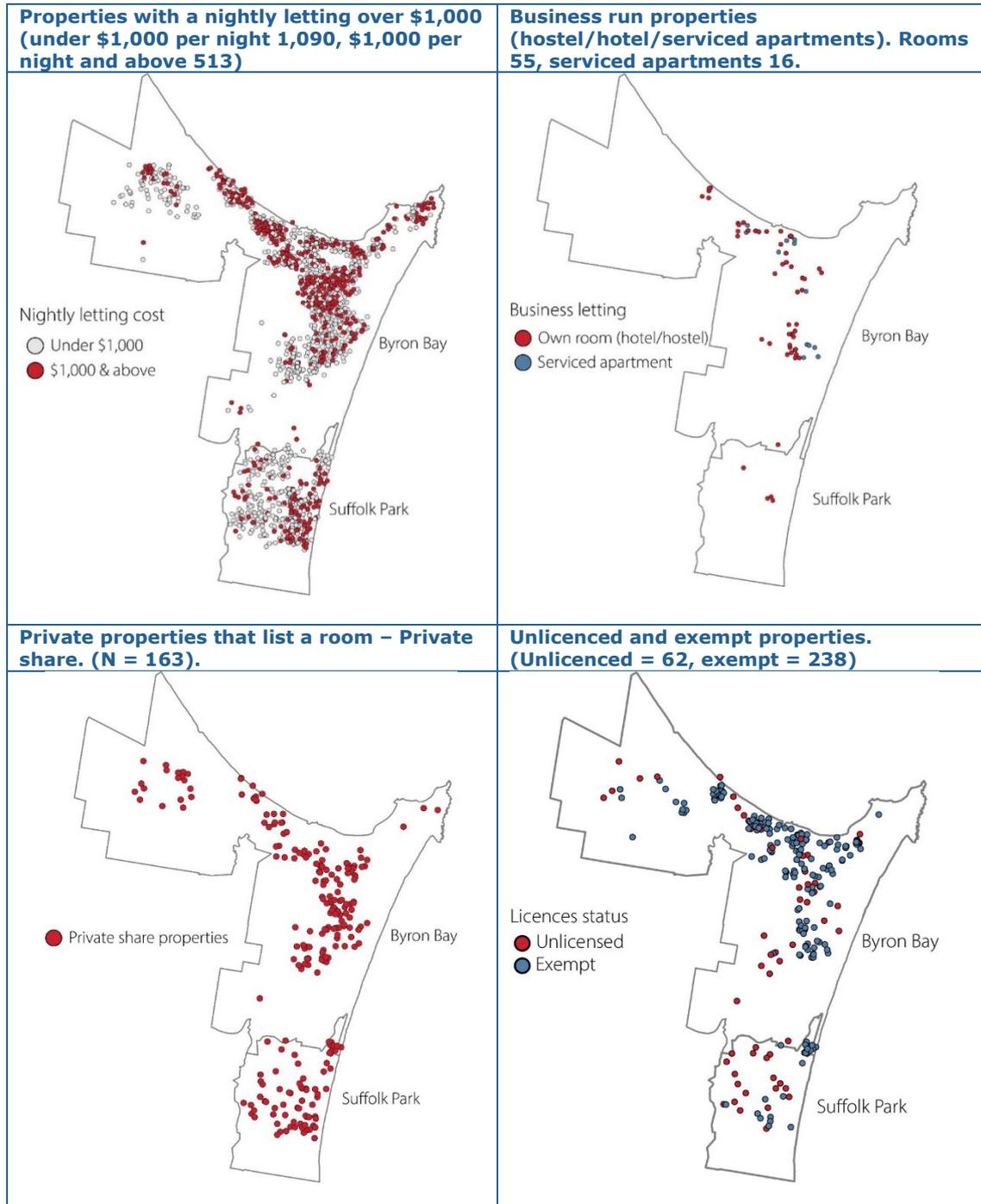
The economics of Airbnb summarises the economics of Airbnb and shows how the costings developed in working out the number of days to be viable were calculated. On the right-hand side is the total cost advertised and paid by a tourist (\$1,311) for four nights, while the left-hand side illustrates how much the host (whether in their own dwelling or a non-resident host) will receive after deducting cleaning costs and Airbnb charges (on both host and tourist). The host gets around 85 percent of the advertised price.

Figure 14: Economics of Airbnb



Appendix 2: Mapping the details of Airbnb

Figure 15: Mapping the details of Airbnb



Appendix 3: STRA Submarkets and possible options for interventions

Table 10: STRA Submarkets and intervention options

Submarket	Local Amenity	Community	Housing Market
High density, all-season, coastal STRA	<ul style="list-style-type: none"> • Total ban • Bans in specifically zoned locations • Zoning controls on number of guests, cars • Caps on minimum guest days, e.g. three day • Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours • Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours 	<ul style="list-style-type: none"> • Total ban • Bans in specifically zoned locations • Zoning controls on number of guests, cars • Caps on minimum guest days, e.g. three days • Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours • Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours 	<ul style="list-style-type: none"> • Total Ban of all existing STRA • Ban on new STRA only • Bans in specifically zoned locations • STRA differential rating to rise cost and deter STRA • Limits on total rental days, e.g. 90, 120, 180, etc. • Financial incentives to switch from STRA to LTR • Registration requirement with fee sufficient to deter some STRA • Caps on multiple owners (investment deterrent)

Submarket	Local Amenity	Community	Housing Market
Moderate density, seasonal, coastal STRA	<ul style="list-style-type: none"> Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours 	<ul style="list-style-type: none"> Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours 	<ul style="list-style-type: none"> Total ban of all existing STRA Ban on new STRA only Bans in specifically zoned locations STRA differential rating to rise cost and deter STRA Limits on total rental days, e.g. 90, 120, 180, etc. Financial incentives to switch from STRA to LTR Registration requirement with fee sufficient to deter some STRA Caps on multiple owners (investment deterrent)
High density STRA, inner-city, large multi-unit	<ul style="list-style-type: none"> Restrictive Body Corporate legislation Provisions around anti-social behaviour, indicating that owners of STRA are liable 	<ul style="list-style-type: none"> Restrictive Body Corporate legislation Provisions around anti-social behaviour, indicating that owners of STRA are liable 	<ul style="list-style-type: none"> Restrictive Body Corporate legislation Total ban of all existing STRA Ban on new STRA only STRA differential rating to raise

Submarket	Local Amenity	Community	Housing Market
	for some of the noise or other unwanted behaviours	for some of the noise or other unwanted behaviours	cost and deter STRA <ul style="list-style-type: none"> • Limits on total rental days, e.g. 90, 120, 180, etc. • Financial incentives to switch from STRA to LTR • Registration requirement with fees sufficient to deter some STRA • Caps on multiple owners (investment deterrent)
High density STRA, inner-city, small apartment complexes	<ul style="list-style-type: none"> • Restrictive Body Corporate legislation • Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours 	<ul style="list-style-type: none"> • Restrictive Body Corporate legislation • Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours 	<ul style="list-style-type: none"> • Total ban of all existing STRA • Ban on new STRA only • Bans in specifically zoned locations • STRA differential rating to rise cost and deter STRA • Limits on total rental days, e.g. 90, 120, 180, etc. • Financial incentives to switch from STRA to LTR

Submarket	Local Amenity	Community	Housing Market
			<ul style="list-style-type: none"> • Registration requirement with fee sufficient to deter some STRA • Caps on multiple owners (investment deterrent).
Other regional and suburban	<ul style="list-style-type: none"> • Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours 	<ul style="list-style-type: none"> • Provisions around anti-social behaviour, indicating that owners of STRA are liable for some of the noise or other unwanted behaviours 	<ul style="list-style-type: none"> • Probably not necessary