

# 3b.

## SHARED SPACES



The Sharing Economy has raised the profile of diverse space sharing, including short-term rentals, co-working, coliving, cohousing, cooperative housing, and the online trade in personal storage and parking space.

What do these forms of space sharing imply for sustainability, and how can local governments leverage them for greater gains?

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## Summary

Our review of the research and media coverage of these practices reveals that:

- **Short-term rentals (STRs)** bring tourist dollars into regional and local economies but require thoughtful regulation, especially in communities with low vacancy rates. Regulation can help cities safeguard equity and housing affordability, and mitigate possible impacts on neighbours, community character, city resources, and availability of rental housing. It is possible that if STRs are making travel accommodation more affordable, users are shifting accommodation spending to more frequent flying and/or vacation consumption of goods, which generates more emissions and environmental impacts.
- **Housing cooperatives** appear to offer a more reliable means of creating affordable, inclusive housing than co-living (which tends to be based on market-rate rents) and cohousing (which tends to be taken up by a limited, higher-end demographic and offer little in the way of housing subsidies). None of these options are inherently more conservative in their use of resources than similarly dense forms of housing, like rental apartments, condos, or shared homes. More significant sustainability gains can be made if these housing forms: 1) adopt greener or retrofit construction; 2) use a more conservative allocation of per-capita indoor and outdoor space; 3) select locations that reduce car-dependence; and 4) cultivate pro-sustainability behaviours amongst occupants.
- **Co-working** has yet to demonstrate significant sustainability advantages and appears to be thriving already without government support. But local governments may want to explore how to fuse its creative aspects with libraries and

business incubators, and prioritize support for co-working initiatives and client businesses that show transformative sustainability potential after careful evaluation.

- **Shared personal storage and shared parking spaces** offer little or no gains for sustainability—and there are indications that they are even counterproductive by supporting accumulation of goods, promoting car use, and compounding traffic problems.

### 3b.1 WHAT IS SHARED SPACE?

#### SHORT-TERM RENTALS

The term short-term rentals (STRs) refers to the renting out of rooms, suites, and entire homes or apartments to visitors for stays typically shorter than 30 days. Privately owned web platforms charge fees for individuals to advertise their spaces, make online payment easy, and enable short-term renters to quickly find suitable places to rent. Online rating systems allow renters and customers to publicly rate each other, which imparts a degree of accountability.

#### SHARED HOUSING

There are many other ways to share homes, including cooperative housing, cohousing, and coliving as described below.

Cooperative housing is a long-established housing form in which a building or set of buildings—owned by a cooperative—contains a number of self-contained, private units. Residents pay a modest share to become members (usually refundable when/if they leave) plus a monthly housing fee set by the cooperative to cover the actual cost of housing rather than to generate a profit. Coop members typically also enjoy access to some shared amenities, such

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as kitchen-equipped common rooms, guest suites, and yard / garden space. Members are expected to participate in democratic decision-making and contribute time and skills to building and site maintenance. Housing cooperatives often offer income-tested subsidies to some members. Because members are not tenants, they enjoy a higher level of security in stable, long-term housing.

Cohousing differs from cooperative housing in that participants purchase (and, subject to cohousing project rules, may sell, or rent out) private, self-contained units as well as a portion of commonly owned and shared facilities. Shared amenities are more extensive than those in most housing cooperatives and typically include things like garden space, kitchens, work spaces, living rooms, laundry rooms, gyms, and guest suites. In some projects, these amenities are financed partly by slightly reducing the size of private space. Cohousers develop cohousing projects together, which can take years as they require everyone to agree on governance, land purchase, and building design. As with coops, cohousing projects require members to participate in decision-making and contribute to maintenance. They also explicitly seek to create a stable, family-like community through regularly shared meals, frequently planned social events, and a strong culture of mutual aid.<sup>1</sup> Many cohousing organizations also strive to include a diverse range of ages. The cohousing movement is placing a higher emphasis on green construction techniques and a small minority of projects are incorporating at least a portion of subsidized housing to promote greater socioeconomic diversity. There are at least 114 cohousing projects in the US<sup>2</sup> and at least nine in Canada.<sup>3</sup>

Coliving is a new twist on unrelated adults renting an apartment or house together. The “new” elements here are the scale (very large houses, even mansions, rented at market rates), types of renters (young professionals),<sup>4</sup> and the degree and motives of sharing a large space. Coliving has been described by advocates as “the practice of bringing extraordinary people under one roof to live, work and change the world together”,<sup>5</sup> and as young professionals “building a new American dream in once empty suburban McMansions and luxury downtown digs” where residents are “carefully chosen for their ambitions and ideas”.<sup>6</sup> Criteria for choosing (or “curating”) participants vary, but often include things like ability to enrich the group’s social and professional networks, a commitment to personal

development, a spiritual path, entrepreneurialism, or a lower-footprint lifestyle. Many coliving houses develop mission statements and unique cultures, hosting events such as lectures, dance parties, and hackathons for entertainment and professional development.<sup>7</sup> Some use web technologies to assist communication on house issues, cost-splitting, expense-tracking, and carsharing,<sup>8</sup> and join networks of coliving houses that host each other’s members and other guests.<sup>9</sup> Coliving increases accommodation purchasing power and access to spaces that include a socially stimulating atmosphere and/or luxuries like music rooms, yoga studios, solarium, shared office space, and pools.<sup>10</sup> Businesses are emerging to develop and manage coliving arrangements,<sup>11</sup> and even to develop buildings designed for coliving.<sup>12</sup> Coliving arrangements may cheapen the cost of accommodation for some people thanks to economies of scale, but they do not control rent rates.

## CO-WORKING

Coworking sites are office workspaces shared by a range of people working on their own independent businesses or projects (e.g. Citizen Space and Hub Culture Pavilions). They are typically privately owned and include a shared room with wifi; shared and private work tables or desks; kitchens and bathrooms; office equipment with printing, faxing, scanning and copying capability; and spaces for meetings, consultations, and private phone calls. Some also offer options like personal storage space, dedicated (exclusive) desks, video-conferencing supports, and mailboxes.

Coworkers include well-established freelancers, entrepreneurs with or without employees, employees of large companies, and to a much smaller extent, people new to self-employment.<sup>13</sup> They rent these spaces by the month, day, or hour. Coworkers enjoy the potential of these sites to connect them with others who may or may not be in their fields, and as a source of inspiration, ideas, productive networking, mutual accountability support, and local knowledge. Many cowork spaces actively cultivate a sense of community amongst regular users through scheduled social events. The unique cultures and social interchange that develops in cowork spaces is highly valued by coworkers,<sup>14</sup> especially those who typically work alone.

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## 3b.2 SUSTAINABILITY

### PART 1: DO SHORT-TERM RENTALS ADVANCE SUSTAINABILITY?

**STRs help lower the costs of life-enriching travel and have become an attractive source of income for many people. What are they contributing to urban sustainability?**

#### LIVING WITHIN ECOLOGICAL MEANS:

**Do STRs support living within our ecological means and absolute reductions in energy and material throughput?**

One-planet living would require us to reduce our vehicle travel by 94% and air travel by 97%, and make the majority of our trips by transit, cycling, and walking.<sup>15</sup> We have found no evidence that people who use STRs fly or drive less than other people. STRs may well be helping to increase tourism—and with it, our travel-related impacts on the environment—by lowering the cost of the accommodation component of travel.<sup>16</sup> This would be consistent with frequent industry claims that STRs are not capturing existing demand for hotels but creating new demand.<sup>17</sup>

We have found no credible evidence that STRs are making more efficient use of existing buildings than would happen otherwise (for example, by owners or long-term renters), or that STRs are preventing construction of new hotels.

#### RESILIENCE:

**Do STRs enhance resilience and climate adaptation?**

We don't see evidence that STRs contribute significantly to adaptation. But we note that at least one STR platform (Airbnb) has developed a program with some local governments to pre-identify and activate STR operators willing to offer their services during local emergencies, such as: 1) accommodate people displaced by disasters and disaster service workers on an emergency basis; 2) distribute disaster preparedness materials to operators; 3) use its platform to notify operators about significant hazardous incidents; and 4) facilitate community emergency response training for STR operators. The company is also agreeing to waive its service fees for operators willing to accommodate displaced people for free. The government of Victoria, Australia has developed an agreement with Airbnb to help connect people in need of short-term emergency accommodation with STR operators

willing to accommodate them.<sup>18</sup> Assuming STR operators sign up to participate, this could be a useful complement to any community preparedness strategy, and one that could be scaled up by engaging other STR platforms.<sup>19</sup>

#### NATURAL SYSTEMS:

**Do STRs protect and restore natural systems?**

We found no indications that STRs contribute to the protection and restoration of natural systems, nor that they directly impact natural systems.

#### EQUITY:

**Do STRs advance equity and social inclusion and embrace diversity?**

STRs clearly spread tourism dollars beyond traditional hotel districts and into neighbourhoods,<sup>20</sup> which may disperse economic development benefits more widely. However, there is evidence that these benefits are concentrated in select neighbourhoods and among higher-income operators.

For example, a New York State Attorney General report found that 6% of operators — some managing hundreds of properties — accounted for 37% of Airbnb revenue.<sup>21</sup> In San Francisco a study concluded that about 14% of operators controlled 32% of its listings.<sup>22</sup> As well, a Los Angeles study concluded that:

- 6% of operators offering two or more whole-home / apartment rentals generated 35% of the revenue;
- that 38% of operators with a single listing of any type generated no income whatsoever;
- and that 73% of Airbnb revenue in that city is generated in nine of L.A.'s 95 neighbourhoods, where rents are already 20% higher than the city-wide median.<sup>23</sup>

All of these studies reported that listings tend to be concentrated in higher-income areas of these cities. In some popular Los Angeles neighbourhoods STRs accounted for up to 7% of all housing units.<sup>24</sup>

Evidence<sup>25</sup> is mounting that in housing markets with low vacancy rates, STRs are further reducing the supply of long-term rental housing as landlords and homeowners with secondary suites turn to more lucrative STRs. Even the supply of rooms in shared housing stands to be affected, as owners and renters opt to rent or sublet rooms on a part-time basis to visitors rather than on a full-time basis to long-term tenants. Rental housing supply constraints contribute

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to escalation of long-term rental housing prices, and concern about the link between this and STRs appears to be a primary driver of efforts to regulate STRs in communities around the world.

It is impossible to evaluate the argument that STRs are making a unique contribution to equity by helping “low- and medium-income hosts ... stay in their homes,”<sup>26</sup> for two reasons: 1) this statement can be made about virtually any economic activity, and 2) much of this appears to be based on anecdotal evidence only. The key assumptions and methodology underlying quoted statistics are not available for peer review.<sup>27</sup>

STR effects on rental supply and property values are likely to be experienced differently by diverse segments of society. The STR value of a property is more likely to be captured by people who can afford to purchase homes – either as STR income, or when its STR income-generating potential is factored into the selling price.<sup>28</sup> Because rent prices are affected by housing prices and rental housing supply, STR impacts on housing prices are more likely to be experienced as a negative by people with lower incomes, who are more likely to rent.

STRs undoubtedly spur many enriching new social and cross-cultural connections. There is also some evidence, however, that they enable subtle forms of discrimination. One study analyzed Airbnb and found evidence of a ‘digital discrimination’ effect, in which white STR operators were able to charge more than non-white hosts for comparable offerings.<sup>29</sup> Also, some disability advocates report<sup>30</sup> that many STR operators overstate the capacity of their premises to suitably accommodate people with disabilities, which may warrant stronger regulatory scrutiny.

#### **PROSPEROUS LOCAL ECONOMY:**

**Do STRs advance economic vitality and diversity, a level of self-reliance, a strong economy, and decent jobs?**

STRs are diversifying local economies in at least three ways: 1) providing a source of income and business opportunities for operators; 2) spreading tourist dollars beyond traditional hotel districts, which supports other businesses; and 3) spawning directly related businesses—such as KeyCafe.com, which simplifies key pickup and dropoff for STR operators and clients, and VacationRentalCompliance.com, which helps cities enforce STR regulations in six Southern California cities.<sup>31</sup>

We can't say for sure how STRs affect local jobs. It is likely that STR operators managing multiple properties (like the top 100 in New York that control more than 10 unique

Airbnb units each) hire workers to clean, cook, drive, do maintenance, and act as guides. Research is needed to compare the wages, job security, and working conditions for people in this unregulated sector to those performing similar work in the traditional hospitality sector.<sup>32</sup>

STR clients use public resources like roads, parking, public spaces, and communications infrastructure. Meanwhile, the STR industry exerts at least some downward pressure on hotel revenues, which reduces the amount of hotel tax revenue remitted to local and regional governments.<sup>33</sup> Whether this reduction in tax revenue significantly constrains government's ability to pay for basic services, or those that advance sustainability like affordable housing, healthy green spaces, or high-quality public transit, is uncertain and requires further research.

#### **QUALITY OF LIFE:**

**Do STRs ensure wellbeing for all and social connectivity?**

STRs provide lower-cost alternatives to hotels and provide many authentic and memorable visitor experiences. It is probably also cultivating business skills among STR operators, which increases community capacity.

Many communities are moving to regulate STRs in light of complaints by some neighbours that residential homes, condos, and even rented properties are now operating like illegal hotels with absent managers and a constant stream of clients whose behaviour violates community standards.<sup>34</sup>

We haven't found any evidence that STRs promote more sustainable, healthful, lower-footprint lifestyles for operators or clients.<sup>35</sup>

#### **Why should local governments care?**

Local governments protect access to affordable housing through planning, inclusionary zoning, and rent control. They help spread the benefits of tourism by collecting hotel taxes and reinvesting those in improvements for the public good.

For the most part, STRs have proliferated extra-legally — because they are not adequately described by pre-existing local laws<sup>36</sup> — or illegally, as residential rentals for less than 30 days are explicitly prohibited in most communities and because sellers of accommodation are usually required to pay tourism taxes to local and regional governments. Through a process of trial and error, local governments are learning how to respond to STR activities and to design workable regulatory systems that respond to city and sustainability priorities.

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## CITY OF SAN DIEGO AND SHORT-TERM RENTALS

In August 2015, Judge Catriona Miller ruled a case in favour of the City of San Diego and fined Airbnb operator, Rachel Smith, nearly \$25,000 for not having a permit required for a Bed and Breakfast and for not paying the bed tax imposed on hoteliers.<sup>37</sup> Smith's actions came to the attention of the City when her neighbours complained about the noise and increased foot traffic in the neighbourhood due to Smith renting out two bedrooms in her large historical house on Airbnb on a regular basis. Smith's case is not unique and the City of San Diego is undertaking a broader effort to respond to short-term rentals such as Airbnb and VRBO. City staff released a memo in August 2015 outlining the framework for a proposed ordinance developed by the Development Services Department. This draft ordinance recommends rules limiting the amount of time operators can rent out an entire space to less than a month in residential areas; specifies the need for a designated parking space for visitors in home sharing exchanges; and requires permits for many bed and breakfasts. City Council remains divided on a number of issues including the number of guests and visits per month or whether secondary suites and other spaces on residential lots can be operated as vacation rentals.<sup>38</sup>

While STRs generate new business and income-earning opportunities for residents, they are coordinated almost entirely online. This makes STRs difficult to observe or regulate. That said, hundreds of communities are now moving to regulate STRs out of concern for their impact on long-term rental supply, neighbourhood character, quality of life, quality of visitor experiences, and the revenues of a taxpaying hospitality industry. For example, the Government of Québec in Canada established a Tourist Accommodation Classification system in order to 'respect tourist accommodation establishments' and actively regulate and tax short-term rentals.<sup>39</sup>

### Trends and growth

STRs are not new, but have grown exponentially since 2008 when Airbnb launched a web platform that made them especially easy to coordinate. As of June 2015, this one firm is valued at \$25.5 billion and operates in more than 34,000 cities in more than 190

countries. In mid-2014, hotel industry analysts indicated that Airbnb is growing by 20% per year and capturing 5% of New York City's tourist trade. Although Airbnb is the undisputed industry leader, there are dozens of other significant players, like Homeaway/VRBO, Flipkey, and OneFineStay.

The design of these web platforms makes it extremely challenging to quantify the different types of STRs (spare rooms, entire owners-occupied houses and apartments, or properties run strictly for STRs) that are listed or occurring. However, researchers using data-scraping software (and in the case of New York, court-ordered data about Airbnb's activities) have found that in tourist destinations, a significant component of STR listings<sup>40</sup> are for entire homes and suites that owners do not live in, with many operators<sup>41</sup> listing multiple properties. There are a growing number of people that are purchasing properties with the intention of listing them as STRs<sup>42</sup> as well as property management companies establishing to help owners manage these listings.<sup>43</sup> Some people are quitting their jobs to run Airbnb properties full-time.<sup>44</sup>

As a regulatory battle heats up, so does the war of words. STR companies claim they are greening travel<sup>45</sup> and strengthening local economies, while critics claim that unchecked proliferation of unregulated STRs in gentrifying neighbourhoods is helping to erode the supply of affordable rental housing<sup>46</sup> (which helps drive up rents) and deepening inequality. Businesses that operate STR platforms are funding lobby groups and mobilizing people who rent out their homes and suites to influence local governments.<sup>47</sup>

### Summary

STRs undoubtedly are a boon to the income-earning possibilities of local operators, to the accommodation offerings available to travellers, and to neighbourhoods that benefit from greater dispersion of tourist dollars. They provide lower-cost alternatives for travellers than hotels on average and yield many authentic and memorable visitor experiences. STRs also spawn directly related businesses such as KeyCafe.com and VacationRentalCompliance.com.

However, industry claims that STRs are reducing the construction of new hotels, using buildings more efficiently, and supporting greener travel cannot be verified due to a lack of transparency about industry-sponsored research, and gaps in independent research. We don't see STRs inherently



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promoting a less consumptive lifestyle or inducing more sustainable purchasing decisions by operators or by users.

While STRs provide income for local operators, it is impossible to evaluate the argument that STRs are making a unique or significant contribution to equity by helping low- and medium-income hosts stay in their homes. A growing body of evidence suggests STRs are further reducing the supply of affordable housing units in neighborhoods with low vacancy rates, which appears to be a driving factor behind regulatory efforts around the world. Meanwhile, the STR industry exerts at least some downward pressure on hotel revenues, which reduces the amount of hotel tax revenue remitted to local and regional governments thus constraining to some degree the ability to pay for basic services and sustainability efforts. Data gaps about the impacts of STRs on many city priorities are significant and addressing these will be key; see Chapter 5 on *Addressing Data Gaps* for a variety of recommendations.

## 3b.2

### SUSTAINABILITY

#### PART 2: DOES SHARED HOUSING ADVANCE SUSTAINABILITY?

Shared space is not just for short-term rentals. There are also options such as coliving, cohousing, and cooperative housing that provide for long-term rental and ownership. These can promote lower ecological footprints to the extent that they:

- Promote higher-density living, with less per-capita living space
- Extend energy and materials use through more intensive use of existing buildings
- Encourage lower consumption through sharing of household items, food, and transportation.
- Support low-emissions means of travel by locating in highly walkable communities
- Significantly reduce rates of car ownership and single-occupant vehicle trips through greater use of transit, active transportation, and car pooling
- Are built green and use renewable energy technologies
- Produce a substantial amount of food (more possible in suburban and rural cohousing)

*Cohousing and coliving are often promoted for their ability to make deep cuts to ecological footprints through shared use of resources.<sup>48</sup> But while resource savings are possible, they are neither the inevitable result of cohousing or coliving, nor that much different from other forms of higher-density living (like sharing an apartment or house).*

#### Cohousing: In Search of Sustainability

Williams<sup>49</sup> completed a sustainability assessment comparing differences in per-capita consumption of space, goods, and energy for one-person households in self-contained living spaces, one-person households in cohousing projects, and residents shared apartments/houses. Although complicated by several factors,<sup>50</sup> the study suggests:

- **Significant domestic resource savings can be achieved when adults trade self-contained accommodation for a shared apartment or house.** In the UK, moving in with one to three other adults can save 23-77 per cent electricity, 38-54 per cent gas, and 45-65 per cent space.<sup>51</sup>
- **It is not clear if resource savings by an adult in a cohousing project are deeper than those from simply sharing any apartment or home.** This is partly because cohousing density varies widely, with most cohousers preferring more spacious facilities. One-person households on the lower side of the income scale saved energy but used more living space than their counterparts in self-contained accommodation. In the Williams study, consumption among the majority of Californian one-person cohousers was far greater than either the state or national average for one-person households living in self-contained accommodation. Table 3b.1 summarizes average resource savings calculated by Williams for one person who trades self-contained accommodation for: A) A shared house or apartment; and B) A single-person suite in a cohousing project.<sup>52</sup>

## Table 3b.1

### SELECTED FINDINGS OF WILLIAMS (2003) ON RESOURCE USE SAVINGS IN SHARED APARTMENTS & HOMES AND COHOUSING

2050 ECOLOGICAL SUSTAINABILITY GOALS	A: AVERAGE % SAVINGS ACHIEVABLE BY ONE PERSON BY TRADING SOLO / SELF-CONTAINED ACCOMMODATION FOR A SHARED APARTMENT OR HOME.	B: AVERAGE % SAVINGS ACHIEVABLE BY ONE PERSON BY TRADING SOLO / SELF-CONTAINED ACCOMMODATION FOR ONE-PERSON SUITE IN A COHOUSING PROJECT.
Space (floor area) <sup>53</sup>	23	31
Electricity (kilowatt hours)	44	57 <sup>54</sup>
Gas (kilowatt hours)	40 <sup>55</sup>	? (not analyzed) <sup>56</sup>
Kitchen goods <sup>57</sup>	30	7.5
Entertainment goods	29	0
Office goods	30	0

\*See endnote for important notes on data calculations.<sup>58</sup>

- The key predictor of space, energy, and goods consumption is not housing type but income.<sup>59</sup> Cohousers in the US (including those in one-person households) typically earn much more than one-person households in self-contained accommodation. As in the UK, most cohousing participants in the US and Canada are fairly homogenous in terms of ethnicity (mostly white), education, and income (both higher than average). The cohousing movement has recognized this and is trying to address it, but lower-income housing opportunities in cohousing remain relatively rare. Most affordable cohousing efforts have been modest, with just one or two units subsidized at 80 – 100% of the median income.<sup>60</sup>
- Energy and goods savings of one-person cohousing households also depend on environmental attitudes and practices, as well as the extent of participation in shared facilities and activities. This partly depends on the values of those who start cohousing projects, the quality of relationships among cohousing members, and the context and structures that support sustainable behaviours. In the US, people who start cohousing projects typically already have pro-social and pro-environmental values. These values tend to be supported by cohousing lifestyles.
- Most of the ecological savings made by cohousing in the US during the 1980s and 1990s were achieved through space reduction in individual units, as well as sharing of communal space, goods, and chores. Eco-

design, smaller units, and higher density are getting a greater focus – particularly in Pacific Rim countries.

That said, forms of collective housing like coliving, cohousing, and cooperative housing (and projects like Berkeley's Sandbox in particular) should not be overlooked for their potential to promote social aspects of sustainability. They do this by:

- Cultivating an ethic of cooperation and resource-sharing;
- Making communities more inclusive by lowering the rental or ownership cost of safe, quality housing; and
- Familiarizing people with cooperative, non-profit approaches to organizing other aspects of life, like workers' cooperatives, travel (e.g. car pooling, carsharing), and asset-sharing (e.g. tool libraries, seed-sharing). For example, many residents of the new cohousing project<sup>61</sup> in Vancouver, B.C. are part of Share Vancouver, an organization that seeks to connect organizations, people, community groups, and partner organizations keen to share or to facilitate sharing.<sup>62</sup>

### Coliving: In Search of Sustainability

Some coliving projects consciously seek to achieve a lower footprint. Notable among these is the Sandbox in Berkeley, California, which has 3,600 square feet and nine bedrooms – two of which are guest rooms. The founders, graduates of Bainbridge Institute's MBA in Sustainable Systems, encourage car-sharing and shared resource use, and are developing applicable metrics to gauge their progress.<sup>63</sup>



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Is the Sandbox successful in lowering emissions? Assuming that non-guest bedrooms have one occupant each, the average space (private and shared) available to each resident ranges between 400 and 515 square feet. This would be considered large for a studio apartment, small for a one-bedroom inhabited by one person, and average-to-generous for a two-bedroom apartment inhabited by two people.<sup>64</sup>

It is entirely possible that some Sandbox members' footprints are getting smaller while others' are increasing. This depends on factors such as the number of occupants per room, and the amount of living space used prior to coliving. Carsharing is likely reducing car ownership and use among Sandbox members – who according to one report, all owned cars at one point<sup>65</sup> – and may also facilitate greater use of transit and active transport.

### BOX 3B.1 NONPROFIT HOME-SHARING

One program in Deventer, Netherlands offers free rent to pre-screened, qualified students who agree to temporarily take up residence in a nursing home in exchange for providing at least 30 hours a month offering companionship and assistance to the 160 seniors who live there full-time.<sup>66</sup> A similar program in Newfoundland, Canada – HomeShare NL – matches home-owning seniors with students who can help out with chores in return for reduced rent.<sup>67</sup>

Programs that facilitate sharing of homes for reasons other than profit are proliferating, and hold the potential for a range of sustainability benefits. Find out more about these in the program directory at <http://www.nationalsharedhousing.org>

## 3b.2 SUSTAINABILITY

### PART 3: DOES COWORKING ADVANCE SUSTAINABILITY?

For local governments, the question about whether to support the growth of coworking depends on whether it actually advances sustainability.

Relevant, peer-reviewed research on coworking is rare. Most widely quoted studies on the topic are based on self-selected samples of respondents and thus may not be representative.

The research that does exist suggests that the sustainability gains of cowork spaces are subtle or even negligible.

### Does coworking promote resilience and living within ecological means?

There is no convincing evidence that coworking is leading us away from the status quo and toward the absolute reductions in energy and materials use that we need to live within our ecological means.

Co-working spaces offer marginally less space per member than new office leases, but cowork spaces are getting bigger and maintain an increasing percentage of empty desks to accommodate drop-ins.

Cowork spaces offer about 178.15 square feet of space per member on average,<sup>68</sup> while the US national average per worker is 183 square feet on new leases.<sup>69</sup> One in two workers in Canada and the U.S. want the option to drop in and use desks at any time (known as “hot-desking”),<sup>70</sup> which means that cowork spaces must maintain a considerable proportion of empty desks to accommodate fluctuating demand. A 2012 study reports that desk utilization at any one time is about 55%.<sup>71</sup> According to the Global Coworking Survey, coworking spaces are getting bigger (the maximum capacity of most spaces is now over 41 people), and the empty-desk proportion seems to rise along with cowork space size.<sup>72</sup>

We found no clear evidence that cowork spaces are more conservative in their use of energy and equipment.

Questions also surround how the intensity of utilization of space in cowork spaces compares to that of more conventional office environments. Which type of office gets more overall use in a 24-hour period? Do cowork spaces replace or supplement more traditional office space? Does access to a shared office translate into a rebound effect, wherein members enjoy more generous per-person allotments of office space than they had previously? Do cowork spaces use energy and equipment more conservatively? If cowork spaces replace users' needs to individually own equipment like printers and copiers, they are conceivably saving energy. But if cowork spaces are only partly occupied for extended open hours, and / or offer equipment that merely complements individually owned equipment, they may be contributing to higher consumption of energy.

We found no evidence that coworking is facilitating a shift toward more sustainable modes of travel.

The fact that cowork spaces can be located almost anywhere (including former industrial areas)<sup>73</sup> means they

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have important potential to contribute to more complete communities, where people can walk or bike to work. But we haven't found any evidence that coworking is superior to any other office arrangements at conducting a shift to more sustainable modes of travel. Respondents to the Third Global Coworking Survey indicated that the proximity of a cowork space to one's home and "easy access to transport connections" is not a top priority the user's choice of coworking space: factors like social atmosphere, sense of community, and value for money placed much higher.<sup>74</sup>

[We found no clear evidence that coworking is greening employment.](#)

Some research<sup>75</sup> suggests people using cowork spaces tend to work in the creative industries: new media, such as web development, programming, and graphic design; communications; journalism; and architecture. But there is little evidence that most cowork spaces are driving any significant shift towards more environmentally sustainable business models, a less consumptive culture, climate change mitigation and resilience, or restoration of natural systems.

## Does coworking advance equity, quality of life, social connectivity, and prosperous local economies?

[Coworking enhances connection and collaboration among coworkers.](#)

Anecdotes abound about how coworking improves work lives by enhancing social connections and relationships. About 26% of respondents to a 2012 survey indicated that they were often "working on common projects" with fellow coworkers.<sup>76</sup> These opportunities for personal and professional connection among coworkers that are freelancers, independent entrepreneurs, or contractors may be increasingly important as this sector of the economy grows. Coworkers gain from each other's insights, relieve isolation, and are relieve communities of mutual accountability that support independent workers achieving their goals and deadlines.<sup>77</sup>

[We found limited evidence that coworking plays a critical role in creating new jobs or enterprises or raising incomes.](#)

While coworking frequently leads to productive collaborations, these aren't necessarily playing a critical role in creating new jobs or enterprises. Early (2010) research indicated that just 4% of coworkers are actually just starting businesses.<sup>78</sup> We have also found no solid evidence that suggests coworking is a unique contributor to raising of incomes.

[Coworking spaces have some accessibility barriers – primarily cost.](#)

Prices of coworking packages range widely, with the average member in the US paying about \$353 per person per month.<sup>79</sup> A 2013/14 survey found that people who left cowork spaces cited cost of access as the top reason for leaving, after moving away or starting a job in another office space.<sup>80</sup> The ability to pay isn't the only qualifier to access many cowork spaces. About 75% of cowork spaces are open to anyone who can afford them; others require an application and/or involvement with specific industries.<sup>81</sup> Presumably, those who can afford coworking either buy full-time packages (typically about \$500/month), buy part-time access and rely on additional space somewhere else (e.g., at home), or only need a part-time office to begin with.

[The gender imbalance in cowork spaces mirrors societal statistics; efforts to address this are rare.](#)

Some research suggests that cowork spaces are characterized by a gender imbalance (two-thirds are men), which is seen to generally mirror the imbalance found in the wider entrepreneurial and small business statistics across Europe and the U.S.<sup>82</sup> Is this because of the difficulty of juggling entrepreneurial activity and childcare? If so, at least one cowork space is confronting that head on: Cubes and Crayons in California offers childcare as part of its office space package.<sup>83</sup> These solutions appear to be rare.

[Group purchasing has potential to reduce business costs and demand for new goods.](#)

Cowork spaces offer one potential boon to people who use them: by partnering with other cowork spaces, members can use their group purchasing power for mutual benefit, such as car-sharing memberships. According to one international survey, there is considerable appetite for this among cowork space users, and for forming local or regional associations. A collective of cowork spaces in Ontario, Canada uses its group purchasing power to offer its members discounted packages of extended health insurance.<sup>84</sup> Depending on what is purchased by coworking groups, there could be the potential to reduce not only business costs but also the demand for the production of new business goods. For example, if a collective of cowork spaces were to purchase new (or even better) upcycled multi-purpose printers collectively, this could reduce coworkers' desire to have additional printers at home.

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## Why Should Local Governments Care About This?

- Cowork spaces have potential to spawn creative new connections among diverse local business owners and build capacity among emergent businesses. Proponents say coworking fosters multidisciplinary, collaboration across sectors, access to formal and informal training, and supports for self-employed people.<sup>85</sup>
- Cowork spaces can be located almost anywhere (including former industrial areas).<sup>86</sup> They cause few production-related impacts and range in size. This suggests at least some potential to contribute to more complete communities where people can walk or bike to work.
- Because they accommodate more flexible schedules of independent workers, cowork spaces could enable more intensive, efficient use of office space.
- As cowork spaces grow, they may affect times and modes that people choose to travel. Cowork spaces could reduce auto-dependency or increase it – depending on how users travel to get to them.

## Trends and Growth

Although independent businesses have long engaged in shared-office/rent situations, the term coworking was not coined until 2005. The business model of hosting a shared, wi-fi equipped space for multiple independent workers and businesses has since spread rapidly. In December 2014, Deskmag.com counted 5,780 coworking spaces around the globe.<sup>87</sup> This growth has been attributed to the rise of online collaboration thanks to cloud workspace and broader access to state-of-the-art software that enables this.<sup>88</sup>

Currently, coworking includes a tiny fraction of workers (an estimated 295,000 worldwide),<sup>89</sup> but this is likely to change. The US Bureau of Labour Statistics estimates that by 2020, 40 percent of the U.S. workforce will be freelancers, temps, independent contractors, and entrepreneurs who single-handedly run their own businesses.<sup>90</sup>

Coworking businesses and organizations are successfully using social media, social events, and international conferences to help develop a coworking “movement”. About 27% of cowork spaces are members of networks, franchises, or associations — even across borders — to allow members to drop in and work at each other’s spaces.<sup>91</sup>

Industry consolidation is also occurring, with coworking spaces increasing in size and franchises emerging.<sup>92</sup> There is also a push from within this sector to convene regional, national and international associations to advance their interests—for example, in improving visibility, increasing connections with other cowork spaces, and using group purchasing power to access benefits like health insurance and car-sharing memberships.<sup>93</sup>

Coworking proponents are invoking innovation, economic development, and sustainability arguments to press local governments to support the growth of coworking by:<sup>94</sup>

- leasing old, empty, publicly-owned buildings to coworking space organizers at discounted rates for limited time periods;
- providing grants and rewards to businesses that use cowork spaces;
- removing loopholes that allow land owners to reduce tax bills by keeping space empty;
- simplifying taxation and visa requirements for businesses that inhabit or get started in cowork spaces;
- financing the start-up and expansion of cowork spaces through grants and loans;<sup>95</sup>
- subsidizing memberships of people trying cowork spaces;
- funding research about cowork spaces and training people who start and run cowork spaces; and
- using local government networks and promotional resources to raise the profile of coworking.

## Sustainability Summary

The sustainable ecological and economic benefits of coworking appear subtle, mixed and relatively limited at this point in time. From a social perspective, co-working has gains in terms of increasing social connectivity but also challenges including access barriers – primarily cost – and gender imbalance.

The most promising aspects of coworking for sustainability include enhanced connections among isolated freelancers and entrepreneurs, and resource savings from group purchasing and sharing of equipment and transportation.

## BOX 3B.2 SHARED STORAGE SPACES AND SHARED PARKING

### SHARED STORAGE SPACES

Personal storage space has been billed a “new frontier” of the Sharing Economy.<sup>96</sup> New startups, like San Francisco’s Roost, are introducing web platforms that help connect people with space in their attics and garages with those needing a place to stow extra stuff – for a day, month, a year – for a less than the cost of commercial storage lockers.

The economic benefits for both parties are obvious. But does it help advance sustainability, and do local governments need to get involved?

CBC Radio’s Terry O’Reilly on the Sharing Economy:<sup>97</sup>

*“Because we are a society of consumers, we have now become a society of storage renters. Nearly one in ten households in the U.S. rents a storage unit. That represents a 65% increase since the year 2000. 60% of those renters already own a garage, 47% have an attic, and 33% have a basement – yet they still feel the need to rent additional space.”<sup>98</sup>*

Considering that living within ecological means requires scaling back consumption substantially, cheaper shared storage is not a promising development.

The self storage industry has been one of the fastest-growing sectors of the US commercial real estate industry over the past 40 years, with almost 9% of all American households now renting extra storage space<sup>99</sup> Logic suggests that cheaper, more plentiful storage produce rebound effects (over time people investing in more stuff because of additional storage) similar to those that are found when highways are widened (resulting over time in more people travelling by private vehicle because of the real and perceived additional road capacity) and when travel accommodations are

cheaper (travellers invest more money in flights and vehicle miles because accommodation costs are lower). If there is a benefit to cities, it is a potential reduction in demand for commercial storage lockers, which might allow repurposing of the light-industrial properties.

### SHARED PARKING

Businesses are also emerging to help people who own unused or partially used parking spots to rent them to people who need them. Will this relieve cities of the expectation to provide free or low-cost street parking? We think it likely that this option increases our parking resources and encourages more people to drive, and perhaps can lead to decisions to pave over private green space to extract more value from land.

In a sustainable sharing economy, local governments who seek to advance sustainability would not be encouraging trade that encourages people to accumulate and store more, or to drive more.

## 3b.3

### SHARED SPACES: A STRATEGIC OPPORTUNITY FOR SUSTAINABILITY

#### Local Governments Enabling Short-Term Rentals for Sustainability

Regulatory approaches vary widely as communities begin regulating short-term rentals (STRs) to address their multiple impacts on: neighbours, civic infrastructure, renters, rental housing supply, visitors, traditional accommodation providers wanting a more “level playing field”, and local government tax revenues.<sup>100</sup> Regulations are currently being invented and adjusted.

We've noted the following key elements in regulatory schemes:

#### KEY ELEMENTS IN STR REGULATION

##### Contextual statements about:

- The purpose of the legislation
- Establishing local government right to place conditions on STRs deemed necessary to mitigate adverse impacts

##### Definitions of STRs typically include:

- STRs as a type of land use
- Types of operators: property owner, renter, or another party contracted to act on behalf of the owner or renter
- Type of rental: Whether STR is operator's primary residence; whether operator lives in residence most of the year; whether operator is present during rental
- Type of dwelling: for example, single-family detached, multi-family, or accessory to single-family detached

##### Typical requirements of operators include:

- Permits / licenses: one-time or renewable
- Permits / permit numbers to be posted (e.g. in unit, on all advertising)
- Safety inspections
- Insurance
- Notification of neighbours
- Quiet hours
- Parking policies
- Waste / trash disposal
- Operator / client agreements that spell out responsibilities / accountabilities to neighbours, government
- Conditions to ensure operators (or representatives) are quickly reachable in event of a problem
- Restrictions on size of functions at STR properties

- Detailed record keeping, for review by local governments on request
- Maximum number of clients at any one time
- Allowance only in operators' primary residences (operators required to provide proof)

##### Taxation rules define:

- Percentages of taxes to collect
- Local and/or state taxes
- Who collects / remits taxes (STR operator and/or STR platform)
- How often to remit

##### Complaint processes may include:

- A complaint line for neighbours / guests
- Dispute resolution process for neighbours / guests
- Typically graduated sanctions, with warnings, fines, temporary / permanent revocation of license

##### STR impacts contained by restrictions on:

- Number of nights per property per year
- Proportion of property to be used for STR
- Number of STRs per unit of area (e.g. census tract)
- Proportion of units in multi-family housing
- Percentage of dwellings allowed for STRs
- Ratio of STRs per unit of area relative to number of long-term rental properties
- Distance away from any other STR or hotel
- Zone (e.g. only in single-family residential, resort area, or high-density commercial)
- Cap on the total number of STR permits allowed at any one time (in some cases, established by the number of STRs in existence when the law is passed)

**Note:** Some communities are reportedly considering waiving restrictions during short seasonal events that bring in a massive influx of visitors.

We found no examples of local governments regulating STRs in order to significantly reduce ecological footprints, prepare cities and their residents for climate change, protect and restore natural systems, or promote greater equity inclusiveness and less consumptive lifestyles. For this reason our case studies<sup>101</sup> focus on communities that are seeking to address social and economic aspects of sustainability. The potential for local governments to leverage STRs for key ecological dimensions of sustainability is addressed later in Getting Ahead of the Curve.



## CITY CASE SHORT-TERM RENTAL ACCOMODATION (STR)

### 1. CITY OF PORTLAND, OREGON AND SHORT-TERM RENTALS

Portland's experience is instructive. The city's active real estate market<sup>102</sup> and 3.1% vacancy rate<sup>103</sup> provides motivation to protect long-term rental housing by regulating its 2,000+ STRs.<sup>104</sup>

#### LIMITED LEGALIZATION, PERMITTING, AND TAXATION

The City of Portland defined STRs as a new category of housing in its planning code<sup>105</sup> and passed a law in 2014 that allows STRs in suites and homes where the operator lives nine months out of the year and for no more than five guestrooms in any single-family dwelling. In January 2015, this was conditionally extended to units in multi-family housing, where STR units can be no more than one unit or a maximum of 25% of the total number of units (whichever is greater). STR operators are also obligated by local law to:

- register in the City's Transient Lodging Tax program
- collect and remit 11.5% (state and local) taxes from clients
- keep detailed records of client stays for City inspection upon request
- complete safety inspections
- notify neighbours
- purchase permits biennially
- display permits in the STR unit and permit numbers in all advertising
- limit STRs to 90 nights per year
- undergo a Land Use Conditional Use Review where there are three to five bedrooms.

#### AIRBNB AGREEMENT

The City also negotiated a private, separate agreement with Airbnb<sup>106</sup> to collect and remit city and state taxes on behalf of STR operators, and to remind operators of their obligations to comply with local regulations before posting an advertisement.<sup>107</sup>

Portland city staff reportedly suggested during negotiations that Airbnb lock listings of non-compliant operators, but the company did not agree to this.<sup>108</sup> However, it did create a field in its web advertisement forms that prompts STR operators to enter permit numbers once they have obtained

these. During negotiations, Airbnb announced it would open a 160-employee customer-service center in Portland. It then promoted Portland as its first "Shared City". As part of this initiative, Airbnb has agreed to offer free smoke detectors and carbon monoxide detectors to operators who request this, work with the City to train STR operators on how to help with disaster relief, and make it easier for STR operators to donate earnings to local charities.<sup>109</sup>

#### RESULTS

The City plans to complete an analysis of its regulatory effort next year.

Airbnb has since remitted millions in taxes to the City in lump sums, but its agreement with the City offers no effective way to identify operators who otherwise violate local laws (e.g. by operating without a permit, failing to post permit numbers in advertising, listing multiple properties, and renting out places they don't live in).<sup>110</sup> Airbnb argues that routine disclosure of STR operator names and addresses would violate STR operator privacy;<sup>111</sup> the Portland Commissioner has argued that routine disclosure of STR operator names and addresses to meet tax obligations and safety requirements is no less than what is required of any other local business.<sup>112</sup>

Rentals of entire homes and apartments by STR operators who do not live in them continue to be widely advertised. If recent independent analysis of Airbnb listings<sup>113</sup> is any indication, whole-home rentals constitute more than 56% of listed properties and multiple listings per STR operator are common.<sup>114</sup> As of February 2015, media reported that the City has not enforced restrictions on whole-home rentals. A Portland vacation rental management company representative was quoted as saying that the law is unenforceable "unless you have someone sitting outside the door to check the box that 'Yes, they stay here 270 days out of the year.'"<sup>115</sup>

The threat of a \$500 fine for not displaying permit numbers does not appear to be motivating many STR operators. As of February 2015, 95+% of STR operators on Airbnb were not displaying permit numbers after the City-posted deadline for doing so,<sup>116</sup> and STR platforms continue to let them advertise without them. Recent media reports suggest the City is not aware of how many STR platforms have modified their websites to include a field to list permit numbers.<sup>117</sup>

Many researchers are using software to analyze the

distribution and types of STRs by neighbourhood. Here is one customizable, open-source example:<sup>118</sup> <https://github.com/tomslee/Airbnb> plus a roundup of data on Airbnb in several cities, produced using the same code: <http://insideAirbnb.com/get-the-data.html>

According to the City's Bureau of Development Services, STRs are only investigated when there is a complaint, and complaints don't actually result in fines—just an admonishment to apply for the appropriate permit. This system appears to do little to prevent emergence and operation of unpermitted STRs.

Recent news reports indicate that the City is now fining two STR companies who are not requiring operators to obtain permits and complete safety inspections.<sup>119</sup>

On the other hand, Portland's success in getting Airbnb to begin collecting taxes has broken new ground. Other cities (including Chicago, Washington, San Francisco, and Malibu) and at least one state (North Carolina) have since developed tax collection agreements with Airbnb.<sup>120</sup>

#### FOR MORE INFORMATION:

- Portland's Accessory Short-Term Rental ordinance: <https://www.portlandonline.com/auditor/index.cfm?c=28197&a=501886>
- FAQ about Portland's short-term rental taxation and its agreement with Airbnb <http://www.portlandoregon.gov/revenue/article/415034?#AgreementbetweenAirbnbandCoP>
- Airbnb's (redacted) agreement with the City of Portland: <http://www.documentcloud.org/documents/1223398-lodging-tax-agreement-between-Airbnb-and-the.html#document/p10/a167057>
- Local media story archive: <http://www.wweek.com/portland/tag-0-1-Airbnb.html> See also this roundup of recent Portland of STR regulation developments: <http://the-Airbnb-analyst.com/?s=Portland>
- Independent quantitative analysis of STR listings in Portland (Airbnb only) <http://insideAirbnb.com/portland/#> and of Airbnb: <http://insideAirbnb.com/>
- Some suggestions for getting compliance, based on Portland's experience: <http://the-Airbnb-analyst.com/encouraging-registration-outreach-compliance/>

## 2. CITY OF AUSTIN, TEXAS AND SHORT-TERM RENTALS

Austin's response to short-term rentals is equally instructive.

### LEGALIZE, LICENCE, TAX, AND CAP

In 2012, the City of Austin, Texas began requiring all STR operators to purchase licenses (\$285), which must be renewed annually, and to collect and remit a 9% hotel occupancy tax to the city from clients. Austin divides STRs into three types: 1) owner-occupied where the owner is "generally present" (this includes structures associated with the owner-occupied home, e.g. secondary suites); 2) not-owner occupied single-family residences and duplexes; and 3) not-owner occupied/ part of multi-family building (e.g. condos, apartments). STR types 2 and 3 are subject to area-based caps. For example, no more than 3% of the single-family detached homes within each census tract can be used for STRs.<sup>121</sup> STR operators also require proof of property insurance and a certificate of occupancy or of a certified inspection.

### RESULTS

By May 2014, the City had identified and contacted 1,089 local STR listings that were not complying with the new regulations by getting permits. Of those 1,089, approximately 72% led to a lodging provider either removing their posting or going through the licensing process. As of August 2014, there were 1,048 licensed STRs in Austin. Most of the licensed STRs (59%) are Type 1 (owner-occupied); 41% came from residences that are not owner-occupied.<sup>122</sup> To date, just 5% of the City's census tracts have reached their caps.<sup>123</sup> STR licence holders now receive regular reminders from the city for taxes and as of August 2014 were generating over \$2 million in licensing fees and taxes for the City.<sup>124</sup>

There remain some challenges to the existing system:

- Some 28% of the listings investigated did not come into compliance with the City's registration requirements. A December 2014 audit found that when STR operators ignore letters warning of non-compliance, the investigations stall and documented results of investigations do not undergo a supervisory review. The City had not finalized any process for citing non-compliant STR operators because they are concerned that evidence may not be successful in court.<sup>125</sup>

- It is not clear what percentage of Austin STRs (estimated at about 3,000 by one group)<sup>126</sup> are now licensed.
- The law requires that licensed STRs include their license numbers in all advertising,<sup>127</sup> but a quick scan of Austin listings on STR sites suggest most operators aren't doing this. This complicates enforcement.
- As of January 2015, the Austin Code Department was refining its enforcement process for identified, unregistered STRs.

**FOR MORE INFORMATION:**

- Austin STR Ordinance No. 20130926-144: <http://www.austintexas.gov/edims/document.cfm?id=199458>

- Austin's STR program summarized: <http://www.austintexas.gov/str>
- Chart that allows residents to look up the number of available permits in a census tract: <http://www.austintexas.gov/page/percent-strs-issued-census-tract>
- Results of December 2015 audit of Austin STRs: <http://austintexas.gov/sites/default/files/files/Auditor/AU14116.pdf>
- Insight on regulation weaknesses: <http://republicofaustin.com/2013/02/19/5-ways-to-beat-austins-short-term-rental-licensing-ordinance-during-sxsw/>

## 3b.4 GETTING AHEAD OF THE CURVE

### PART 1: LEVERAGING SHORT-TERM RENTALS FOR URBAN SUSTAINABILITY

Ensuring that Shared Space advances urban sustainability is an evolving challenge for cities. The following are some recommendations for local governments to discuss and explore further in the context of unique local priorities and circumstances.

# Q1.

**What can local governments do to maximize the positive impacts of STRs, like tourism dollars and local economic diversification, while mitigating possibly negative effects on sustainability?**

#### RECOMMENDATION:

**Use clear terminology.** We strongly recommend that local governments promote clear thinking about Short-Term Rentals (STRs) by using terms that reflect the fact that these are economic activities with implications for broader communities.

For example:

- The term **short-term rentals** makes this clearer than **home-sharing**. It also distinguishes STRs from private social activities that are not reasonably regulated, as well as from long-term rentals. It is more accurate than vacation rentals, as STRs also relate to travel for reasons other than vacations.
- Similarly, terms like **resident, operator, client, customer,** and **short-term renter** are more accurate than **host** and **guest** considering that money does not typically change hands in host/ guest relationships and that in many STRs, operators have little or no contact with clients.

#### RECOMMENDATION:

Move beyond narratives concerned with “levelling the playing field”.

Productive discussion about sustainability and STRs also suggests that local government move beyond the narrow frames of media narratives about “levelling the playing field” between “innovators” (STRs) and “outdated businesses” (the

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established hospitality industry). Local government exists not to protect any particular business model or innovation for its own sake, but to promote the public interest. Innovation should be welcomed not as an end in itself, but as a means to ensure equity and to help communities thrive and people sustainably raise and maintain quality of life.

### Monitoring STR growth and impacts.

As with other significant economic activities, local governments need reliable, standardized data about STRs to understand how they relate to community progress toward sustainability. Data about STR locations, activity, and growth<sup>128</sup> can be analyzed and compared with data on:

- use of public infrastructure,
- supply and demand of both rooms and suites for long-term rental,
- real estate values to support local planning,
- policy development, and
- public safety.

Businesses that coordinate STR transactions are in the best position to make this information (in anonymized, aggregated, auditable form at the very least) available to local government, as other economic actors do as a matter of course. Unfortunately, STR platform owners have proven extremely resistant to doing so, with some contesting demands for data in the courts and coalescing groups of STR operators to resist regulation.

This is why we recommend that all communities officially legalize STRs (which currently exist in a legal grey area in many cities) but do so with a permit system, both to collect information to aid planning, and to support regulatory efforts that may be necessary now or in the future.

### RECOMMENDATION:

Legalize STRs with a straightforward permit system both to collect information for planning, and to support regulatory efforts.

### A well-designed system would:

- Clearly define the different types of STRs, including those which may be desirable to encourage, control, or prohibit.<sup>129</sup> Most regulations appear to make distinctions on the basis of whether the STR takes place at the operator's primary residence or not, and on whether the

operator is present during the rental.

- Articulate the purpose of your permit system and how it will help meet your community's goals. Laws that do this have been found to be more resistant to court challenge.<sup>130</sup>
- Require all STR operators to be permitted, and all STR permit holders to display the permit number prominently on all advertising.<sup>131</sup>
- Make all STR permits time-limited and renewable, based on proven compliance with regulations reflective of changing city priorities.
- Collect sufficient data to enable year-over-year analysis and reporting on the spread and impact of STRs.
- Use transparent, objective, and readily verifiable indicators (for example, *the number of permitted STRs or whether the operator is on the premises during the STR rental* are more practical indicators than 'the number of nights an STR is rented out annually or the income earned by an STR operator' because municipalities can not verify these).
- Require STR operators to keep complete records for a reasonable period of time and report activity in a timely manner and in standard electronic formats (ideally, online) to streamline compliance monitoring and enforcement.<sup>132</sup>
- Assign primary compliance responsibility to operators rather than platforms that coordinate transactions
- Ensure the regulatory system pays for itself (e.g. through permit fees, inspection costs, and/or graduated sanctions for non-compliance).<sup>133</sup>
- Incentivize reporting of non-compliant STRs.
- Build in periodic reviews of permit system effectiveness and, if needed, adjustment.
- Generate publicly available reports on STR activity, analyzed in relation to community development and sustainability priorities.<sup>134</sup>

### RECOMMENDATION:

Local governments can align with other communities to share information about current developments around STRs. They can publicly press STR platform owners to support monitoring and regulatory efforts.

STR platform owners have already shown some willingness to support efforts by:

- Modifying web platforms so that anyone posting an ad

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must acknowledge a local government-supplied page that displays local STR regulations,<sup>135</sup> and

- Providing an online prompt that enables owners to enter their permit numbers (as Airbnb agreed to do in Portland) so that they can be displayed prominently on the STR advertisement.

This campaign can also press STR companies to support community development priorities and demonstrate good corporate citizenship by:

- Collecting any applicable taxes at the point of purchase and remitting it, with information sufficient to support effective compliance auditing by regulators.<sup>136</sup> Airbnb already collects and remits tourism taxes at city- and state- wide levels,<sup>137</sup> albeit without associated data
- Providing a means by which government regulators can readily contact a noncompliant operator through the STR platform website without being blocked (as has happened on at least one STR platform)<sup>138</sup>
- Disabling listings that do not post a permit number (or otherwise advertise in violation of local regulations)

Equipped with sufficient information to design an effective regulatory system, local governments will be more able to consider whether and how STRs fit with their unique sustainability and city goals.

### To promote living within our ecological means, local governments can:

- Prioritize permits for STR operators that supply proof that their customers purchased transit day passes or rented bikes, that serve more regional than international travellers, and/or that show outstanding effort in waste reduction.<sup>139</sup>
- Avoid issuing permits where STRs appear to be displacing scarce rental housing in residential neighbourhoods that favour walking, biking, or transit, to protect opportunities for locals to avoid vehicle ownership and use.
- Promote the message that vacations closer to home and spending on experiences rather than goods are more effective ways to support sustainability than using money saved by staying in STRs to travel, fly, and shop more.
- Tax STRs and direct revenues into endowment funds and other initiatives that support land trusts, modifications for energy efficiency, and other sustainability initiatives.

- Ask sources of industry-funded studies on STRs (for example, on emissions implications) to offer more information on key assumptions, data collection, and analysis methods behind these studies so that they can be independently evaluated.

### To enhance resilience and climate adaptation,

- Look for ways to use Short-Term Rentals as a complement to preparedness strategies, like the Government of Victoria, Australia's agreement with Airbnb to help connect people in need of short-term emergency accommodation with STR operators willing to accommodate them.<sup>140</sup>

### To protect and restore natural systems,

- Invest a portion of STR tax revenues into urban greening, park acquisition, and conservation initiatives.

### To advance equity and embrace diversity,

Local governments should be alert to the possible impacts of STRs on rental housing supply and on land speculation. As well, governments should be aware that highly averaged numbers about city-wide impacts on rents<sup>141</sup> may obscure deep impacts on the neighbourhoods where Short-Term Rentals tend to be concentrated. In communities with stressed housing markets, we suggest including these measures into city permitting system:

- Establish caps on STRs to levels that preserve a healthy vacancy rate (e.g. 5%). You may need to establish STR caps at community-wide scale or a smaller (e.g. neighbourhood or census tract) scale. A waiting list could be developed for neighbourhoods that have already met their caps.<sup>142</sup>
- Use a lottery to distribute a capped number of permits<sup>143</sup> to qualified applicants to promote fairness and to ensure that STR value cannot be reliably factored into housing and real estate prices. A phased-in decline in STRs might be required to re-establish sustainable levels.
- Limit STRs (of entire suites/homes, and of rooms) to primary residences where a renter or owner lives for the majority of the year.<sup>144</sup>
- Permit renewal could be made contingent on a minimum level of use to lower the burden of administering the system and to encourage STRs to provide great service to visitors.
- Promote the message that STR operators are as accountable to neighbours, clients, and their surrounding



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community as any other business, and that accountability includes adherence to local laws, compliance with safety regulations, and disclosure of earnings to taxing authorities.

- Require STR permit applicants to prove they have lived at their primary address for at least a year before using it for STRs.<sup>145</sup>
- Invest a portion of STR tax revenue into affordable housing initiatives or an endowment fund for sustainable community development.

### To strengthen local economies and decent jobs,

- Encourage STRs in areas where they are most needed. Do this by establishing baseline caps on STRs for all neighbourhoods or census tracts, and then clear criteria for selectively raising these caps in areas where jobs and income-generating opportunities would be of greatest benefit.<sup>146</sup>
- Use local government purchasing power to reinforce ethical business practices. City employee business travel policy could require that government employees on city business use accommodation that complies with local laws. Encourage counterparts in other cities to commit to doing the same.
- Create jobs by contracting out the work of ensuring STR compliance, as has been done by several communities in Southern California's Coachella Valley.<sup>147</sup>

### To ensure wellbeing for all and community capacity,

- Consider the social and economic implications of proliferating STRs for neighbourhood residents and businesses, and use a transparent formula to establish a sustainable level of STRs for your community.
- Create an accessible, low-barrier process for clients, neighbours, and other stakeholders to register and resolve concerns about nuisance behaviour, health, safety risks.<sup>148</sup> Note: do not rely on complaint-driven systems to reduce the proliferation of unpermitted STRs, as the experiences of New York and Portland suggest this is not effective.<sup>149</sup>
- Require STR permit applicants prove that they have notified adjacent neighbours of STR plans, and/or post a publicly available list of permitted addresses alongside information about the type of permit.

- Work with other communities to share information on best practices for regulating STRs to meet your community's goals.
- Invest STR tax revenue into public spaces, amenities, and infrastructure (e.g. transit) that benefit locals and visitors.

### Ideas for a bolder, more creative approach:

- The Sustainable Economies Law Center (SELC) suggests communities partner with each other to develop a robust, non-profit short-term rental platform that allows registration, listing, booking, reporting, tax remittance, and permit renewal for STRs. The platform could be owned by a cooperative of local governments and financed either by fees from coop members or by levying a small percentage of each transaction. Cities could then require that residents use the municipal platform to book STR clients. This could simplify registration, support analysis and compliance, and redirect the 10% to 20% fees currently collected by platform owners to a city trust fund<sup>150</sup> that serves clearly articulated social goals. Fees could be raised or lowered as needed to respond to fluctuations in housing supply, creating incentives for STR operators to moderate engagement in STRs accordingly. Trust funds could be shared in the form of loans to affordable housing developments, redistributed back to residents (perhaps through an online system, as is used in Alaska to distribute income from the oil and gas revenue trust fund), or some combination of both. Eligibility requirements (such as having lived in the city for at least a year, as in Alaska) could be set for receiving dividends.
- A less ambitious alternative to a non-profit rental platform is to simply develop an online system that requires STR operators to speedily file readily verifiable client booking data (e.g. within 2 days of making a booking). This system could include random audits to promote accurate reporting; and reward participation by making it easier for operators to calculate their own tax bills, prioritizing participants for permit renewal, lowering permit renewal fees, and/or offering a partial tax rebate. Most importantly for cities, it could generate valuable, accurate data on STRs in real time.

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## 3b.4

### GETTING AHEAD OF THE CURVE:

#### PART 2: LEVERAGING SHARED HOUSING FOR SUSTAINABILITY

# Q2:

## How can local governments enable the sustainability benefits of shared housing arrangements?

### RECOMMENDATION:

Local governments can support cooperative housing directly, change burdensome legislation, and / or lobby higher-level governments.

Many cooperative housing initiatives in the U.S. and Canada were created with the help of federal and regional government grants to subsidize low-income members. But despite the value of coops to affordable housing strategies, these grants and subsidies are markedly decreasing in both countries. Therefore, local governments can:

- Continue to lobby higher-level governments for continued support, and look for ways to support these initiatives directly (see specific measures below).
- Change legislation that places unnecessary burdens on housing cooperatives.

**EXAMPLE:** With help drafting a bill by the Sustainable Economies Law Center, the State of California made it easier for cooperatives to get mortgages, exempted coops from costly public report requirements, and made governance procedures more flexible with the passage of bill AB 569 in September 2014.<sup>151</sup>

Local governments can encourage cohousing development that:

- Is located close to transit nodes and / or that can demonstrate carpooling where these are not close by.
- Helps achieve deep and measurable cuts in emissions through higher-density living as well as additional systems such as passive solar, superior insulation, rainwater harvesting, greywater re-use and / or onsite water treatment, district heating, composting systems, substantial food production for members, substantial renewable energy use, retrofit existing buildings, and preservation of adjacent natural spaces.

**EXAMPLES:** Daybreak Cohousing in Portland<sup>152</sup> and Milagro Cohousing<sup>153</sup> in Tucson.

### RECOMMENDATION:

Ensure that cohousing helps create more inclusive and democratically governed communities.

Build on (rather than simply substituting for) ecological footprint benefits by ensuring that cohousing helps create more inclusive, democratically governed communities by:

- Extending the benefits of cohousing to a broader demographic by allocating a substantial portion of below-market units for households that earn significantly below area median income, and
- Educating the broader community on the benefits of cohousing and disseminating knowledge on its development by actively engaging with the surrounding community through regular open-houses, workshops, and the like.

Encouragement can take the form of:

- Increasing allowable density;
- Reducing the amount of parking that the development must provide for residents;
- Reducing possible impact on street parking (e.g. requiring the development include transit passes for residents, a car-share program, higher fees for street-parking permits for building residents,<sup>154</sup> bicycle storage and workshop space);
- Modifying laws and zoning that effectively prohibit emergence of collective living forms. Many cities restrict the number of unrelated adults that legally share a residence

(often originating in desire to prevent emergence of brothels) and/or the number of units on a parcel.

**EXAMPLE:** The City of Vancouver, Canada changed its rezoning bylaw in 2013 to enable development of cohousing.<sup>155</sup> New zoning codes were developed to accommodate “ecovillages” (cohousing projects with a strong sustainability mission) in Bloomington, Illinois and in the B.C. communities of Yarrow and the Cowichan Valley.

- Using density bonuses, community land trusts, and grants to promote creation of below-market housing.

**EXAMPLES:** This has been done in Madison, Wisconsin (Troy Gardens), Sebastapol, California (Petaluma Avenue Homes), and Boulder, Colorado (the Silver Sage and Wild Sage projects).<sup>156</sup>

## RECOMMENDATION:

Promote financial instruments that permit co-ownership.

- Know about (and promote) financial instruments that permit co-ownership among unrelated adults: for example, Vancouver City Savings Credit Union provides a Mixer Mortgage.<sup>157</sup>

## RECOMMENDATION:

Strategically monitor developments in coliving for evaluation and planning.

- Monitor developments in coliving to consider:
  - Are they promoting higher-density living, or simply increasing space purchasing power?
  - Is there solid evidence of per-capita cuts in use of electricity and non-renewable resources (like gas for heating) and / or shifts among members towards lower-emissions travel?
  - Are new developments for coliving setting and achieving ambitious energy conservation goals?
  - Are coliving arrangements changing norms and producing significant change in the way participants consume (even after participants leave these arrangements), or do rebound effects of saving money on housing and household goods translate into

increased spending on travel or other goods beyond basic needs?

- How do coliving houses relate to neighbours and community character?
- Do coliving houses represent more intensive use of these homes than would otherwise occur (for example, by a family)?

### BOX 3B.3

#### SHARED LIVING & AFFORDABILITY

##### IS COLIVING AN EFFECTIVE SUBSTITUTE FOR AFFORDABLE HOUSING STRATEGIES?

In San Francisco, where dozens of coliving houses have emerged in the past few years, a developer is hoping to cater to this new market with a new building that includes 23m<sup>2</sup> (250ft<sup>2</sup>), upscale studios (to rent for about \$2,000/month) and group kitchens. This had raised concerns that loopholes in the city’s planning code would allow the developer to skirt the city’s inclusionary zoning law<sup>160</sup> that requires developers to either pay fees to support affordable housing or build a portion of affordable units on site (12%) or off site (20%). Affordable housing advocates have also expressed concern about the price of these units for their size. According to the *San Francisco Business Times*, the debate around how to modify the planning code in a city with a housing crisis is now on: “Does relaxing rules let developers brew up innovations to address the housing crisis, or does it let them skate away from affordable housing obligations?”<sup>158</sup>

Read more at <http://www.bizjournals.com/sanfrancisco/blog/real-estate/2015/04/affordable-housing-sf-bay-area-communal-living.html?page=all>

For more information:

- Amendment to State of California legislation to reduce burdens on cooperative housing: [tinyurl.com/qb6fqax](http://tinyurl.com/qb6fqax)
- Sustainable Economies Law Center (SELC) on how local government can enable or support different forms of shared housing: [communityenterpriselaw.org/real-estate/](http://communityenterpriselaw.org/real-estate/) and [communityenterpriselaw.org/zoning-and-housing/#fnref-8666-5](http://communityenterpriselaw.org/zoning-and-housing/#fnref-8666-5)
- SELC also offers an e-book on legal principles for new sharing economy organizations (including

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cooperatives): [theselc.org/book](http://theselc.org/book)

- Several case studies that discuss roles of government in helping cohousing incorporate below-market units:
- Jerome L. Garciano. *Affordable Cohousing: Challenges and Opportunities for Supportive Relational Networks in Mixed-Income Housing*. Journal of Affordable Housing & Community Development Law, (2011): [www.jstor.org/stable/41429168](http://www.jstor.org/stable/41429168)
- Examples of affordable, green cohousing projects that benefitted from local government help: <http://www.affordablecohousing.org/existing-communities>
- Zoning code developed by O.U.R. ecovillage in Cowichan Valley, BC: <http://www.ourecoovillage.org/about/projects-research/our-rezoning-work/>
- Articles introducing the coliving phenomenon:
  - <http://www.shareable.net/blog/hacking-home-coliving-reinvents-the-commune-for-a-networked-age>
  - <http://www.sfgate.com/bayarea/article/Tech-entrepreneurs-revive-communal-living-4988388.php>
  - <http://www.grist.org/living/hacker-houses-offer-shared-living-for-the-young-green-and-tech-obsessed/>
  - Jo Williams. *Homes For The Future: A Means For Managing The Singletons' Consumption Crisis?* Ethos, (2003). <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.406315>

## 3b.4 GETTING AHEAD OF THE CURVE

### PART 3: LEVERAGING COWORKING FOR SUSTAINABILITY

Coworking spaces are frequently promoted for their innovative use of space, economic development benefits, and association with the sharing economy. This has attracted some support from local governments.<sup>159</sup> For example:

- In 2013 the city of Milan and the local chamber of commerce created a €300,000 program to promote coworking as a means of stimulating entrepreneurship and the sharing economy. The program gives eligible individuals vouchers of up to €1500 to cover 50% of a year's worth of access to cowork spaces.<sup>160</sup>

- In Belgium, the government is supporting the development of eight cowork spaces through CoWallonia, which offers €3150 coworking scholarships to small tech-sector start-ups.<sup>161</sup>
- In Paris, the growth of the coworking "movement" has been supported by networking, promotion, and conference support by a local government organization.<sup>162</sup> The French Ministry of Industry has partnered with the private sector to create coworking spaces that include free events, tech sector training, and space for collaboration, production and testing of new projects.<sup>163</sup>
- The New Jersey Economic Development Authority recently approved nearly \$1 million in low-interest loans for coworking space development and expansion to support entrepreneurship and technology start-ups.<sup>164</sup>

Further evaluation is needed to ensure these programs provide a satisfactory return on investment for local governments given existing and potential sustainability benefits, and the growth trends of the coworking industry. The case for government support is questionable if private sector cowork spaces deliver few or no documented ecological benefits, often show little or no impact on the broader community, and contribute little evidence of supporting start-up of businesses with high potential for transformative change.

#### To consider:

- Cowork spaces are spreading rapidly, but presently account for a fraction of workplace activity — even among freelancers.<sup>165</sup>
- More than two-thirds of respondents to the latest version of an annual global survey of coworkers felt that the current supply of coworking spaces is either meeting or exceeding demand for them.<sup>166</sup>
- More than half of respondents to this survey indicated that finding new members is their biggest challenge by far. Only 13% reported not being able to provide enough workspace as a problem.<sup>167</sup>
- The same analysis also finds the sector is poised for growth,<sup>168</sup> with more than 75% indicating they are either profitable or "neither profitable nor not profitable",<sup>169</sup> which we assume means "breaking even".
- Not all of the private sector organizations want local government support. Some private-sector operations feel

these publicly funded fusions of private-sector initiatives with social goals compete with their operations or incur a cost in terms of workspace independence and creativity.<sup>170</sup>

This analysis is preliminary as it is based on a survey of self-selected participants; however we can make some initial recommendations. Local government support of cowork spaces should be tied to evidence that they are actually delivering clear sustainability benefits.

Websites like sharedesk.net and neardesk.com help workers find office space to rent by the hour in established cowork spaces, but new sites like sparechair.me are also connecting workers to temporary office space in people's homes. This could be a great use of existing space, or one more addition

to the short-term-rental phenomenon that is creating challenges in the residential market.

Some local governments are exploring ways to apply the best aspects of cowork spaces to libraries,<sup>171</sup> traditional new-business incubators, and social enterprise development. These efforts seek to reproduce the energizing social interchange and innovation that can happen when people confer with others outside of otherwise siloed fields or occupations. Moreover, this provides opportunities for sharing of contacts and capacity-building through sharing professional tips. Although some cowork businesses are quick to distinguish these fusion arrangements from "genuine" cowork spaces, the potential of these hybrids to make valuable contributions to sustainability is exciting.

## CASE STUDY: GANGPLANK – CHANDLER, AZ

Gangplank is a non-profit cowork space that seeks to build communities by bringing tech-sector mentors and start-ups together. Founded by Jade Meskill and Derek Neighbors in 2007 with considerable assistance from the private sector (including \$400,000 for building renovation), and later, the City of Chandler, Arizona, Gangplank defies easy categorization. Part community centre, cowork space, and tech business incubator, it admittedly does not look as glamorous as many private-sector cowork spaces<sup>172</sup> but users don't have to pay a fee to access it. "It's not about the space," Meskill told local media.<sup>173</sup>

*"Our vision of being a free space and having true collaboration where people are potentially making world-changing projects are parallel goals," said Katie Charland, Gangplank director of operations. "We're working toward projects that will change the community as well as grow businesses."*<sup>174</sup>

Gangplank is "anchored" by several tech-related businesses, who occupy the space rent-free but provide the City with

consulting and community services and contribute to local schools and charities.<sup>175</sup> Established and emerging users of Gangplank include engineers, programmers, photographers, videographers, podcasters, painters, illustrators, and all manner of artists. All users who come in and use the free wifi are encouraged to "pay back" in social capital, by learning and sharing skills, mentoring, helping in the computer lab, or organizing and volunteering at events.<sup>176</sup> Engagement of youth figures prominently in the organization's ethic, and the site's computer lab is welcoming to kids of the people working there.<sup>177</sup> Chandler's downtown redevelopment manager has lauded them in local media for bringing a "whole new segment of business to the downtown" and credited them for having brought in a:

*"whole new genre of people ... and interesting new connections with the outreach events they have done."*<sup>178</sup>

While Gangplank does not appear to be promoting significant reductions in terms of our impact on natural systems, it is unique in its recognition of the need for cowork spaces that are more inclusive and where social capital is the preferred currency.

Is Gangplank scalable? Yes, and no. What makes this project unique, and potentially difficult to scale, is that it is animated by people in the tech sector who favour social capital rather than money as its main currency.<sup>179</sup>



*"It takes a very specific group of people, and I'm not sure if this would catch on everywhere," said Stephanie Leibold of Tempe, who brings her Bold Ave. graphic design business to Gangplank twice a week. "You've got people here with a passion for this who are making it happen. Without someone that committed, it wouldn't happen. Most coworking spaces you hear about are a for-profit thing. Not everybody has that kind of vision. This is not for everybody. It's not supposed to be. It's a long-range, let's-make-a-change type of thing."<sup>180</sup>*

And yet, it is scaling, as local governments and some nonprofit donors see Gangplank delivering value in terms of mentorship and less formalized type of small business development than is typical of business incubators. A city façade grant helped Gangplank purchase its current location in converted downtown retail space. It now has two other locations in Chandler, Arizona; one in Richmond, Virginia; and one under development in Sault Ste. Marie, Ontario, Canada.

Its offerings now include conference rooms, computer labs, and a recording studio. Incubators in its Arizona locations have professional services agreements with the cities which obligate Gangplank to provide free services, event hosting, and advertising to city businesses. In return, the cities cover Gangplank's operating costs, including electricity and internet. Gangplank's Avondale, Arizona location is in a city-owned building, and that city budgets as much as \$60,000 annually for Gangplank.<sup>181</sup>

Gangplank's evolution continues as it expands to an international level, hoping to create an organization where people are available 24-7. Part of its Tucson operation has amicably reorganized as CoLab and aligned with another non-profit organization, due in part to "monetary differences as well as philosophical ones". CoLab intends to function as a business incubator with a primarily local focus.<sup>182</sup>

## CASE STUDY: THE CENTRE FOR SOCIAL INNOVATION – TORONTO, ON

The Centre for Social Innovation, founded in 2004 in Toronto, provides a variety of capacity and resource supports for social mission-driven organizations. There are now four locations in Toronto and one in New York City.<sup>183</sup> The backbone of the Centre is the co-working space, ranging from private offices to meeting rooms, lounges and mixed-use work floors. The Centre works to catalyze innovation by fostering community entrepreneurship and cross-sectoral collaboration. It offers a variety of workshops and programs to help its members explore new ideas and accelerate change, including TechSoup Canada,<sup>184</sup> Agents of Change: City Builders,<sup>185</sup> and the Desk Exchange Community Animator.<sup>186</sup>

### Recommendations: Leveraging Coworking For Urban Sustainability

- Provide support to non-profit or social enterprise cowork spaces with a clear mission to support the development of transformative organizations and businesses.
- If supporting private cowork spaces for their presumed economic development benefits, consider prioritizing support for those that:
  - meaningfully quantify these benefits and the role those cowork spaces played,
  - make demonstrably more efficient use of energy and materials in construction and use: for example, through smaller per-person allotments of space; a mix of businesses that use the space at complementary times of day; a desk reservation system to ensure that the space is used efficiently; rate systems that reward people who walk or bike to work,
  - use greener materials and equipment, designed for durability and reuse,
  - involve a set proportion of businesses that promote less consumptive lifestyles (for example, through local purchasing or re-use), fairer distribution of opportunities (e.g. through fair trade), and local purchasing and markets,
  - provide childcare or scaled rates that make it easier for female participants to attend,
  - mix a wide range of socioeconomic classes and actively

recruit women entrepreneurs as members,<sup>187</sup>

- utilize partnerships with other cowork spaces to leverage group buying power for transit, car-sharing among workers for whom transit is not an option, purchase of local food, and energy production,
- provide professional development opportunities to under-engaged segments of the work force, and
- are (or become) cooperatively owned and managed, to increase community capacity to develop more inclusive work environments.

### For More Information:

- Find Canadian cowork spaces at Coworking Canada: <http://www.coworkingcanada.ca>
- A resource on the culture of private-sector coworking: <http://www.deskmag.com>
- Article: “Can Coworking and City Governments Partner?” [www.shareable.net/blog/can-coworking-and-city-governments-partner](http://www.shareable.net/blog/can-coworking-and-city-governments-partner)
- Gangplank website: <http://www.gangplankhq.com>
  - Users’ perspectives on Gangplank: <http://www.yelp.ca/biz/gangplank-chandler>
  - Press coverage of Gangplank: <http://www.gangplankhq.com/press-room/>
- The Centre for Social Innovation: <http://www.socialinnovation.ca>
- The HiVE Vancouver is a non-profit cowork space in Vancouver, BC: <http://www.hivevancouver.com>
- Ideas for combining cowork spaces with libraries: [pcworld.com/article/241574/coworking\\_at\\_the\\_public\\_library.html](http://pcworld.com/article/241574/coworking_at_the_public_library.html)

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- 1 <http://www.livewellcohousing.ca/discover-cohousing/six-characteristics-of-cohousing/>  
Cohousing has existed in Northern Europe since the 1960s. The concept of cohousing was introduced to the US by Charles Durrett, and Kathryn McCamant in their book *Cohousing: A Contemporary Approach to Housing Ourselves* (1988, New Society Press).
  - 2 <http://www.grist.org/cities/cohousing-the-secret-to-sustainable-urban-living/> and <http://www.former.vancouver.ca/ctyclerk/cclerk/20130212/documents/p3.pdf>
  - 3 <http://www.former.vancouver.ca/ctyclerk/cclerk/20130212/documents/p3.pdf>
  - 4 An interesting subculture among young professionals that has been identified with coliving is “digital nomads”: freelancers in high-tech whose “location-independent” work allows them to move frequently to cities around the world: see <https://www.techinasia.com/coliving-spaces-digital-nomads/>
  - 5 <http://www.shareable.net/blog/hacking-home-coliving-reinvents-the-commune-for-a-networked-age>
  - 6 Ibid.
  - 7 Ibid.
  - 8 <http://www.sfgate.com/bayarea/article/Tech-entrepreneurs-revive-communal-living-4988388.php>
  - 9 <https://embassynetwork.com/>
  - 10 <http://www.sfgate.com/bayarea/article/Tech-entrepreneurs-revive-communal-living-4988388.php>
  - 11 For example, see <http://www.buildcampus.com/>
  - 12 <http://www.bizjournals.com/sanfrancisco/blog/real-estate/2015/04/affordable-housing-sf-bay-area-communal-living.html>
  - 13 A 2012 survey of coworkers found that 53% are freelancers, while the remainder are entrepreneurs with employees, 6% big company employees, and 8% who describe themselves as none of the above (the proportion of “other” respondents has increased from 5% two years ago to 8%, while entrepreneurs has fallen from 18% to 14%). The proportion of female coworkers is growing, up from 32% in 2010 to 38% today.  
<http://www.deskmag.com/en/1st-results-of-the-3rd-global-coworking-survey-2012>  
See also <http://www.slideshare.net/deskwanted/global-coworking-survey-2012?ref=http://blog.deskwanted.com/>
  - 14 <http://www.theatlantic.com/business/archive/2015/02/as-coworking-spaces-scale-can-they-keep-their-communal-vibe/385653/>
  - 15 Moore, Jennie. 2015. *Ecological footprints and lifestyle archetypes: Exploring dimensions of consumption and the transformation needed to achieve urban sustainability*. *Sustainability* 7, (4): 4747-4763
  - 16 See <http://www.priceonomics.com/hotels/> and <http://www.tandfonline.com.proxy.lib.sfu.ca/doi/full/10.1080/13683500.2013.827159> - abstract
  - 17 According to <http://techcrunch.com/2012/11/09/airbnb-research-data-dump/> (Airbnb public policy head Molly Turner argues that the data shows Airbnb is a complement to the traditional hotel or tourist industry.” *The Economist* cites Airbnb as saying that “it does not displace existing lodging but is creating new demand”:  
<http://www.economist.com/news/business/21601259-there-are-signs-sharing-site-starting-threaten-budget-hotels-room-all>  
See also <http://skift.com/2015/06/01/hyatt-invests-in-onefinestay-to-figure-out-sharing-economy-appeal/>
  - 18 <http://www.theguardian.com/australia-news/2014/oct/29/airbnb-agrees-to-help-find-shelter-for-displaced-disaster-victims-in-victoria>
  - 19 <http://www.emergencymgmt.com/disaster/Airbnb-Partners-San-Francisco-Portland-Disaster-Relief.html>
  - 20 <http://blog.airbnb.com/economic-impact-airbnb/> and <http://www.sfchronicle.com/business/item/Window-into-Airbnb-s-hidden-impact-on-S-F-30110.php>
  - 21 New York State Attorney General report here: <http://www.ag.ny.gov/pdfs/Airbnb%20report.pdf>
  - 22 See: <http://www.sfchronicle.com/business/item/Window-into-Airbnb-s-hidden-impact-on-S-F-30110.php>  
<http://www.sfbos.org/Modules/ShowDocument.aspx?documentid=52601> and <http://www.laane.org/wp-content/uploads/2015/03/AirBnB-Final.pdf>
  - 23 See this study: <http://www.laane.org/wp-content/uploads/2015/03/AirBnB-Final.pdf> and [http://la.curbed.com/archives/2015/03/airbnb\\_neighborhoods\\_los\\_angeles.php](http://la.curbed.com/archives/2015/03/airbnb_neighborhoods_los_angeles.php)
  - 24 From a *Los Angeles Times* analysis here: <http://www.latimes.com/business/realstate/la-fi-airbnb-housing-market-20150311-story.html> - page=1
  - 25 News reports about an Airbnb-commissioned study from economist Thomas Davidoff indicate that STRs increases the average price of a one-bedroom unit by about \$6 a month in New York, and \$19 a month in San Francisco. See: <http://blogs.wsj.com/developments/2015/03/30/airbnb-pushes-up-apartment-rents-slightly-study-says/?mod=WSJBlog>  
However, the averaging of numbers over many neighbourhoods obscures magnitude of impacts at the neighbourhood level. Given researcher findings that STRs tend to be concentrated in neighbourhoods that are rich in amenities, it is very likely that the effect of STRs on rental supply in some neighbourhoods (see InsideAirbnb.com) is considerably higher than these averages. We cannot verify this because Airbnb has not made the Davidoff study public. A new study from the City of San Francisco (<http://www.sfbos.org/Modules/ShowDocument.aspx?documentid=52601>) indicates that in some San Francisco neighborhoods, Airbnb units could comprise as much as 40 percent of potential rentals, or up to 23.2 percent of the total citywide vacant units—and these numbers are considered conservative because the study only examined one STR company’s listings.
  - 26 See <https://www.airbnbsf.com/> and <https://www.airbnbsf.com/making-san-francisco-affordable>
  - 27 For example, see <http://www.blog.airbnb.com/economic-impact-airbnb/> Were respondents to the Airbnb survey representative of all of the operators who list on Airbnb? How does the percentage that Airbnb operators spend on “important household expenses” compare to people working in any other occupation? How is “low or middle income” defined (does “income” refer to earnings from STRs, or earnings in general) by Airbnb? How are STR earnings distributed among low, medium, and high-income earners in studies like <https://www.airbnbsf.com/making-san-francisco-affordable/>
  - 28 Discussions like this <https://community.homeaway.com/thread/47892> suggest these calculations are being made.
  - 29 <http://hbswk.hbs.edu/item/7429.html>
  - 30 See <http://nypost.com/2014/11/03/airbnb-spots-dupe-the-disabled-on-accessibility-advocates/>
  - 31 <http://www.techpresident.com/news/24059/how-cities-adapt-age-airbnb>
  - 32 <http://www.mobile.nytimes.com/comments/blogs/bits/2014/02/05/sharing-is-caring-unless-it-costs-you-your-job/>
  - 33 Georgios Zervas, Davide Proserpio, & John W. Byers. *The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry*. Boston University, 14 December 2013.  
<http://www.people.bu.edu/zg/publications/airbnb.pdf>  
In a study of the effect of Airbnb in Texas this report estimates that each 10% increase in Airbnb supply results in a 35% decrease in monthly hotel room revenue, with lower-priced hotels and those not catering to business travel being the most affected. In New Orleans, STRs have been estimated to cost the city \$1.4 million annually in lost revenue from taxes and licensing fees that would otherwise be paid by customers of licensed hotels, motels, inns and bed-and-breakfasts ([http://www.nola.com/politics/index.ssf/2013/03/new\\_orleans\\_residents\\_slam\\_ill.html](http://www.nola.com/politics/index.ssf/2013/03/new_orleans_residents_slam_ill.html)).
  - 34 Charles Gottlieb: *Residential Short-Term Rentals: Should Local Governments Regulate the ‘Industry?’* in *Planning & Environmental Law* Vol. 65, Iss. 2, 2013.
  - 35 Highlights of an Airbnb-funded study (<https://www.airbnb.ca/press/news/new-study-reveals-a-greener-way-to-travel-airbnb-community-shows-environmental-benefits-of-home-sharing>) claim that STRs offer a greener way to travel. This conclusion is based on a “comparison of the top 5th percentile hotels (in terms of energy use) from an Energy Star report to residential energy data for the 40-50th percentile of homes”. Airbnb has not publicly released the study or enough methodological detail to determine whether this is an appropriate comparison, whether its “more than 8,000 survey responses from hosts and guests worldwide” are representative of the population studied, or whether emissions calculations considered rebound effects on consumer goods, vehicle use, and flying. The Cleantech study highlights are critiqued here: <http://www.blog.wtmresponsibletourism.com/2014/09/02/airbnb-homesharing-sustainability/>
  - 36 For example, see <http://www.latimes.com/local/california/la-me-adv-illegal-rentals-20150208-story.html#page=2>
  - 37 <http://www.sandiegoreader.com/news/2015/aug/10/ticker-airbnb-rachel-smith-fined/#>
  - 38 <http://www.voiceofsandiego.org/topics/government/city-clears-a-path-for-airbnb/>; Proposed Ordinance: <http://www.scribd.com/doc/274357266/Prospective-San-Diego-Short-Term-Vacation-Rental-Home-Sharing-Regulations>
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- 39 Government of Québec - Tourist Accommodation Classification - <http://citq.qc.ca/en/classification.php>; An Act Respecting Tourist Accommodation Establishments (Sept 2015) -[http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/E\\_14\\_2/E14\\_2\\_A.html](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/E_14_2/E14_2_A.html)
- 40 Note that although we use the term 'hosts', 'operators' and 'STR operators' interchangeably at times, we prefer the latter two terms, because money is not typically changing hands in a host-guest relationship. Also, in STRs, "hosts" are not necessarily even people who own, live in, or have ever lived in, the suites for rent. Many of these rentals take place without hosts ever meeting guests, and many of these transactions are managed by intermediaries.
- 41 Ibid.
- 42 <http://greatergreaterwashington.org/post/25030/the-rise-of-the-airbnb-investment-property/>; <http://fortune.com/2013/11/07/profitting-13k-a-year-on-an-airbnb-rental-maybe/>; <http://www.fastcompany.com/3021179/secrets-of-running-a-six-figure-airbnb-business>; <http://needwant.com/p/buying-apartment-airbnb/>;
- 43 <http://www.sfgate.com/business/article/Airbnb-spawns-array-of-companies-to-aid-hosts-5282838.php>
- 44 <http://www.seattleweekly.com/home/960313-129/airbnb-is-soaring-in-seattle-is>
- 45 Airbnb has published selected findings from a study it commissioned from Cleantech: <https://www.airbnb.ca/press/news/new-study-reveals-a-greener-way-to-travel-airbnb-community-shows-environmental-benefits-of-home-sharing,> but has not made the actual study public.
- 46 For example, see: <http://www.sfbos.org/Modules/ShowDocument.aspx?documentid=52601> and
- 47 <http://www.laane.org/wp-content/uploads/2015/03/AirBnB-Final.pdf>  
For example, see <http://www.stradvocacy.org>. Example of mobilizing here: <https://www.community.homeaway.com/thread/21457> and <http://www.bizjournals.com/sacramento/news/2015/05/13/airbnb-channeling-uber-mobilizes-customers-in.html>.
- 48 For example, the submission of Cedar Cottage Cohousing (Appendix G to the City of Vancouver report at <http://www.former.vancouver.ca/ctyclerk/cclerk/20130212/documents/p3.pdf>) indicates that "those living in cohousing consume nearly 60 percent less energy in the home."
- 49 Jo Williams. *Homes For The Future: A Means For Managing The Singletons' Consumption Crisis?* Doctoral thesis from University of London. 2003. <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.406315>
- 50 Note also that when controlled for income, the sample of low-income cohousers (those earning less than \$20,000 annually) was reduced to 3 cases.
- 51 Jo Williams. *Homes For The Future: A Means For Managing The Singletons' Consumption Crisis?* Doctoral thesis from University of London. 2003. <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.406315> and, Jo Williams. "Homes for the Future: A Sustainable Way to Accommodate One-person Households. High Beam Research. 1 April 2005. (<http://www.highbeam.com/doc/1G1-133606456.html>).
- 52 Jo Williams. *Homes For The Future: A Means For Managing The Singletons' Consumption Crisis?* Doctoral thesis from University of London. 2003. <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.406315>
- 53 Note that floor area is not the same as volume, which makes it a less precise measure of use of resources for heating.
- 54 This figure was quoted on p. 198, appears to be an average of 47% savings achieved by units of 500-1000 square feet and 69% of all units above 1000 square feet. Baseline data was sourced from state or national electricity data from 1997 and 2001 and compared with Williams' cohousing resource audit.
- 55 This figure deduced from Williams (2003) statement on p. 44 that there is a -0.4 correlation between gas consumption and number of persons in a household. Chart near this statement shows a decline for 1-4 persons. However, discussion on p. 191 suggests that gas savings per person tend to flatten once income reaches a certain level.
- 56 Gas information was apparently collected by Williams' cohousing resource audit survey but analysis of these figures in cohousing relative to state or national averages was not included in her study.
- 57 Kitchen goods, entertainment goods, and office goods figures are based on a sum of ownership of a specific basket of goods.
- 58 Apartment / home sharing resource savings calculations are based on secondary data sourced from government sources in the UK. Shared housing statistics used may include residences with children and thus may understate some of the resource savings of moving in with adults. Cohousing resource savings data are based on 51 self-selected one-person cohousing households compared with California and in some cases US-wide data about consumption by one-person households. Consumption patterns in these two countries are quite different: Americans consume considerably more space, energy, and goods. The highest savings in energy use in cohousing is linked by Williams to much higher (relative to UK) per capita baseline consumption of space and energy of Americans. Baseline energy and goods data in both countries predated the proliferation of devices like cell phones (considered a luxury item in this study), laptops and other personal computing devices. Transportation habits (a key element of ecological footprint calculation) were not considered or compared.
- 59 A majority of one-person cohousers in the study earned between \$50,000 and \$69,000 annually--almost seven times more than the California state average of \$10,000 to \$15,000 of the California state average of one-person households.
- 60 Jerome L. Garciano, *Journal of Affordable Housing & Community Development Law*, Vol. 20, No. 2 (Winter 2011), pp. 169-192, Published by American Bar Association, Stable URL: <http://www.jstor.org/stable/41429168>
- 61 <http://vancouvercohousing.com>
- 62 <http://www.vancourier.com/community/vancouver-special/kensington-cedar-cottage-cohousing-coming-to-the-neighbourhood-1.590107>
- 63 <http://www.shareable.net/blog/the-sandbox-interview-a-co-living-lab-for-sharing-everything>
- 64 Some coliving places in San Francisco have considerably more space, like the Embassy, a 7,500-square-foot, eight-bedroom mansion near Alamo Square.
- 65 <http://www.shareable.net/blog/the-sandbox-interview-a-co-living-lab-for-sharing-everything>
- 66 Find out more at <http://www.thejournal.ie/help-the-aged-1814698-Dec2014/>
- 67 <http://www.homesharenl.ca/>
- 68 See this 2014 Deskmag study, at 1:02: shows average square foot per member of office space as about 178 square feet / 16.5 square meter per member: <https://www.youtube.com/watch?v=hutCeXQ9Z6Y>
- 69 [http://www.normmiller.net/wp-content/uploads/2014/04/Estimating\\_Office\\_Space\\_Requirements-Feb-17-2014.pdf](http://www.normmiller.net/wp-content/uploads/2014/04/Estimating_Office_Space_Requirements-Feb-17-2014.pdf)
- 70 <http://www.deskmag.com/en/coworking-europe-vs-north-america-spaces-187>
- 71 <http://www.deskmag.com/en/1st-results-of-the-3rd-global-coworking-survey-2012>
- 72 <http://www.deskmag.com/en/global-study-coworking-spaces-169> See also information about members per coworking space: [https://prezi.com/epoe0ogs-wzq/coworking-europe-2014/?utm\\_campaign=share&utm\\_medium=copy](https://prezi.com/epoe0ogs-wzq/coworking-europe-2014/?utm_campaign=share&utm_medium=copy)
- 73 The Hub Brussels is located in a former chocolate factory in Ixelles, Belgium.
- 74 <http://www.slideshare.net/deskwanted/global-coworking-survey-2012?ref=http://blog.deskwanted.com/> See also slides 12 and 13 at <http://www.slideshare.net/deskwanted/global-coworking-survey-2012>
- 75 Note that this research (2010) is already somewhat dated and represents a self-selected sample of 661 people from 24 countries: <http://www.deskmag.com/en/the-coworkers-global-coworking-survey-168>
- 76 <http://www.slideshare.net/deskwanted/global-coworking-survey-2012?ref=http://blog.deskwanted.com/>
- 77 <http://www.shareable.net/blog/cotivation-helps-freelancers-succeed-through-mutual-accountability>
- 78 <http://www.entrepriseglobale.biz/wp-content/uploads/2010/11/CoworkingEUropeSurveyFinal.pdf> See also <http://www.slideshare.net/deskwanted/global-coworking-survey-2012> slides 12 and 13
- 79 [https://prezi.com/epoe0ogs-wzq/coworking-europe-2014/?utm\\_campaign=share&utm\\_medium=copy](https://prezi.com/epoe0ogs-wzq/coworking-europe-2014/?utm_campaign=share&utm_medium=copy)

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- 80 Ibid.
- 81 <https://prezi.com/8uepdp7bstfo/the-preliminary-results-of-the-4th-global-coworking-survey/>
- 82 From the first global coworking survey, at <http://www.deskmag.com/en/the-coworkers-global-coworking-survey-168>
- 83 <http://www.entrepriseglobale.biz/wp-content/uploads/2010/11/CoworkingEUropeSurveyFinal.pdf>
- 84 See <http://coworkingontario.ca/cohip/> and <http://www.deskmag.com/en/do-coworking-spaces-need-a-coworking-lobby-888>
- 85 This information came from an early (2010) survey of 47 European cowork spaces (self-selected), and thus may not be representative. <http://www.entrepriseglobale.biz/wp-content/uploads/2010/11/CoworkingEUropeSurveyFinal.pdf>
- 86 The Hub Brussels is located in a former chocolate factory in Ixelles, Belgium.
- 87 From latest analysis of Deskmag's annual global coworking survey, shown here: <https://www.youtube.com/watch?v=hutCeXQ9Z6Y> See also <http://www.nytimes.com/2014/02/18/business/at-the-next-stop-an-office-and-coworkers.html>
- 88 <http://www.entrepriseglobale.biz/wp-content/uploads/2010/11/CoworkingEUropeSurveyFinal.pdf>
- 89 From latest analysis of Deskmag's annual global coworking survey, shown here: <https://www.youtube.com/watch?v=hutCeXQ9Z6Y> This 2011 Freelance Industry Report from the International Freelancers Academy surveyed more than 1,200 freelancers in almost two dozen different fields and professions, and found that only 3% of freelancers are currently using shared work spaces outside of their homes: <http://web.archive.org/web/20130811144955/http://d3go1ztdjeprc.cloudfront.net/ffd2011/FreelanceIndustryReport2011.pdf>
- 90 <http://www.bls.gov/opub/mlr/2012/01/art4full.pdf>
- 91 According to this source <http://www.deskmag.com/en/1st-results-of-the-3rd-global-coworking-survey-2012>, 79% are independent, while 5% are in a franchise, 6% are part of an association, and 10% are in a network of spaces. See also <https://www.youtube.com/watch?v=hutCeXQ9Z6Y> at 1:58.
- 92 <http://www.deskmag.com/en/the-future-of-coworking-882>
- 93 This survey (probably not based on a representative sample of coworkers) suggests that at least 60% of respondents support the idea of forming associations at levels ranging from local to international: <http://www.deskmag.com/en/do-coworking-spaces-need-a-coworking-lobby-888>
- 94 For example, see <http://www.deskmag.com/en/ten-things-to-tell-the-government-about-coworking-173>
- 95 See for example <http://njslom.org/grants/article/2015/coworking.html>
- 96 <http://www.cultofmac.com/287126/roost-sharing-economy-storage/>
- 97 <http://www.cbc.ca/radio/undertheinfluence/the-sharing-economy-1.2983680>
- 98 Ibid.
- 99 Fact sheet on US personal storage trends here: <http://www.selfstorage.org/ssa/Content/NavigationMenu/AboutSSA/FactSheet/default.htm>
- 100 At the more extreme ends of approaches to regulation: some communities have no regulation of STRs at all, while Santa Monica, California just passed what is regarded as the most aggressive approach taken by any community yet: a law that effectively bans all types of STRs except those which take place in the operator's primary residence with the host present. See <http://www.forbes.com/sites/andrewbender/2015/06/15/new-regulations-to-wipe-out-80-of-airbnb-rentals-in-californias-santa-monica/> and Tim Logan, "Plan targets short-term rental units; Santa Monica weighs a ban on most of the vacation lodging listed on Airbnb, other sites", *Los Angeles Times*, April 28, 2015.
- 101 Please note that all of these cases are evolving daily and therefore should be seen as instructive (but possibly already dated) snapshots.
- 102 [http://www.oregonlive.com/front-porch/index.ssf/2015/03/portland-area\\_home\\_prices\\_gain.html](http://www.oregonlive.com/front-porch/index.ssf/2015/03/portland-area_home_prices_gain.html)
- 103 <https://onedrive.live.com/view.aspx?cid=F4B5488CC7EBEC99&resid=f4b5488cc7ebec99!3008&wacqt=sharedby&app=Excel>
- 104 See: <http://www.insideairbnb.com/portland/#> and [http://www.wweek.com/portland/article-22785-city\\_for\\_rent.html](http://www.wweek.com/portland/article-22785-city_for_rent.html)  
Note that while Airbnb figures prominently in the Portland discussion, STRs are coordinated on at least 11 web-based platforms: [http://www.wweek.com/portland/blog-32979-city\\_of\\_portland\\_threatens\\_airbnb\\_and\\_rivals\\_with\\_.html](http://www.wweek.com/portland/blog-32979-city_of_portland_threatens_airbnb_and_rivals_with_.html). The bulk of those are likely to be with Airbnb, as its agreement with the City [discussed below] specifies that the company wants to be treated as a hotel with 1,600 rooms.  
[http://www.oregonlive.com/front-porch/index.ssf/2014/07/airbnb\\_acting\\_as\\_portlands\\_lod.html](http://www.oregonlive.com/front-porch/index.ssf/2014/07/airbnb_acting_as_portlands_lod.html)
- 105 These are called "Accessory Short-Term Rentals".
- 106 Note that while Airbnb figures prominently in these cases, the challenges discussed relate to all short-term rental platforms. Airbnb gets our attention because it is so powerful in the marketplace. Its evolving relationship to regulation is keenly watched as an indicator of the industry's direction.
- 107 STR operators must still register with the Transient Lodging Tax program regardless of which platform they use, and collect and remit taxes on all STRs that are not made through Airbnb.
- 108 <http://skift.com/2015/02/23/airbnb-faces-big-fines-in-portland-if-hosts-dont-get-city-permits/>
- 109 <http://www.bizjournals.com/portland/blog/2014/03/airbnb-launches-shared-city-initiative-in-portland.html>  
<http://fortune.com/2014/03/26/airbnb-cozies-up-to-cities/>
- 110 According to [http://www.oregonlive.com/front-porch/index.ssf/2014/07/airbnb\\_acting\\_as\\_portlands\\_lod.html](http://www.oregonlive.com/front-porch/index.ssf/2014/07/airbnb_acting_as_portlands_lod.html), "Airbnb would turn over some information — potentially anonymous ID numbers — during a tax division audit, which Williams says it conducts for most hotels every three years. For Airbnb, the equivalent of a hotel more than twice the size of Portland's largest, those audits would be more frequent. But the city uses sampling, so only a small amount of data would be turned over — one day's worth, perhaps."
- 111 Some sources (e.g. <http://www.statesman.com/news/news/local-govt-politics/austin-broadens-short-term-rental-rules/nWdHG/>) indicate that the reason STR companies don't want to share this data is because it would make properties more subject to burglaries when unoccupied. It is not clear why STR properties would be more subject to burglaries than any other local residence.
- 112 Mesh, Aaron: "Video: City Commissioner Nick Fish Berates Airbnb Lobbyist." *Willamette Week*. 22 Dec. 2014. [http://www.wweek.com/portland/blog-32614-video\\_city\\_commissioner\\_nick\\_fish\\_berates\\_airbnb\\_l.html](http://www.wweek.com/portland/blog-32614-video_city_commissioner_nick_fish_berates_airbnb_l.html) 19 Feb. 2015.
- 113 <http://insideairbnb.com/portland/>
- 114 For example, a *Willamette Week* analysis identified 88 rentals offered by 16 hosts—some of whom live out of state. See [http://www.wweek.com/portland/article-23993-hotel\\_california.html](http://www.wweek.com/portland/article-23993-hotel_california.html)
- 115 Quoted in [http://www.wweek.com/portland/article-23993-hotel\\_california.html](http://www.wweek.com/portland/article-23993-hotel_california.html)
- 116 [http://www.wweek.com/portland/blog-32871-portlands\\_deadline\\_for\\_airbnb\\_safety\\_permits\\_passe.html](http://www.wweek.com/portland/blog-32871-portlands_deadline_for_airbnb_safety_permits_passe.html)  
We do not have comparable data for other STR companies.
- 117 Ibid.
- 118 We have not tested this code.
- 119 [http://www.wweek.com/portland/blog-33282-city\\_of\\_portland\\_fines\\_homeaway\\_326500\\_in\\_short\\_term\\_rental\\_crackdown.html](http://www.wweek.com/portland/blog-33282-city_of_portland_fines_homeaway_326500_in_short_term_rental_crackdown.html)  
Fined companies are Homeway and Vacation Home Rentals of Newburyport, Massachusetts. Other companies have received warning letters.
- 120 <http://www.latimes.com/local/lanow/la-me-ln-airbnb-to-begin-charging-hotel-taxes--20150406-story.html>
- 121 [http://www.austintexas.gov/sites/default/files/files/Code\\_Compliance/STRs/STR\\_FAQ\\_Packet\\_2-20-2015.pdf](http://www.austintexas.gov/sites/default/files/files/Code_Compliance/STRs/STR_FAQ_Packet_2-20-2015.pdf)
- 122 The results of an audit of Austin's program are available here: <http://www.austintexas.gov/sites/default/files/files/Auditor/AU14116.pdf>
- 123 Austin displays current and available licences per census tract at <https://austintexas.gov/page/percent-strs-issued-census-tract>
- 124 <http://www.austintexas.gov/sites/default/files/files/Auditor/AU14116.pdf>
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- 125 Ibid.
- 126 <https://www.change.org/p/city-of-austin-code-compliance-require-type-ii-and-type-iii-str-licensees-to-include-their-license-number-in-all-advertisements-and-enforce-compliance-for-those-operating-in-violation-of-the-existing-ordinance>
- 127 <http://www.austintexas.gov/edims/document.cfm?id=199458>
- 128 This is an example of tracking the prevalence and spread: <http://insideairbnb.com/portland/#>
- 129 This piece about Burlington, Vermont emphasizes the need for clear definitions of short-term rentals in law: <http://www.burlingtonfreepress.com/story/news/local/2014/08/16/burlington-puzzled-airbnb-rentals/14124667/>We recommend differentiating these types based on how present the host is during the period of the short-term rental, and whether the host actually lives in the unit. The Sustainable Economies Law Center suggests Hosted Primary Residences, Un-Hosted Primary Residences, and Vacation Rentals. [https://www.scribd.com/document\\_downloads/direct/258500755?extension=pdf&ft=1430611888&lt=1430615498&user\\_id=248517073&uahk=TfxzYJLVfiNc3AHGT27nWgpgvEs](https://www.scribd.com/document_downloads/direct/258500755?extension=pdf&ft=1430611888&lt=1430615498&user_id=248517073&uahk=TfxzYJLVfiNc3AHGT27nWgpgvEs)
- 130 See: Charles Gottlieb. *Residential Short-Term Rentals: Should Local Governments Regulate the 'Industry'*. Planning & Environmental Law, Vol. 65, Iss. 2, 2013.
- 131 For example, permit numbers could be placed in the first 50 words of a listing, or on the sub-title of the property listing.
- 132 The Sustainable Economies Law Center recommends that, to assist enforcement, cities may want to require hosts to keep records of guest names, guest contact information, dates of stay, indication of the host's presence or absence during the stay, and revenue earned. This level of detail in recordkeeping is already required of STR operators in Madison, Wisconsin and Portland, Oregon. Portland also requires hosts to maintain guests' license plate numbers (if traveling by car) and a record of the room assigned to each guest.
- 133 These might include fines, revocation of permit, and publication of names of non-compliant hosts.
- 134 This would be analogous to the way regulators manage other activities that put common-pool resources at risk by over-use, like fishing, hunting, or and backcountry recreation in protected areas.
- 135 According to a draft report on short-term rentals by the Sustainable Economies Law Center, this is the case in Maui County, HI. See: [http://www.theselc.org/draft\\_short\\_term\\_rental\\_recommendations](http://www.theselc.org/draft_short_term_rental_recommendations)
- 136 Such platforms are in the best position to know who is hosting and how much revenue was earned. Additionally, because these platforms transfer payments from guests to hosts, the platforms are in a good position to withhold and remit the tax. San Francisco's ordinance is the first to require STR platforms and services to collect the 14% TOT from guest fees and remit the tax to the city. The City of Portland and Multnomah County have also required STR intermediaries to collect the 11.5% TOT. As far as we are aware, STR companies have begun remitting taxes but have not agreed to conditions that would enable communities to effectively audit compliance.
- 137 Airbnb has agreed to collect and remit taxes in Amsterdam, Chicago, Malibu, San Jose, Washington D.C., the State of North Carolina. Los Angeles and France may be next. See <http://publicpolicy.airbnb.com/working-together-north-carolina-make-tax-rules-simple/>
- 138 According to this April 8, 2015 media report, a Burlington tax collector that used Airbnb's site to approach local hosts who appeared to be out of compliance was actually blocked by Airbnb from using the site: <http://www.sevendaysvt.com/vermont/fair-share-officials-struggle-to-regulate-vermonts-sharing-economy/Content?oid=2550497>
- 139 Scope for improvement on waste management is suggested by Airbnb's research, which indicates that "less than half" of Airbnb STR operators in North America and Europe provide single-use toiletry products for their guests. <https://www.airbnb.ca/press/news/new-study-reveals-a-greener-way-to-travel-airbnb-community-shows-environmental-benefits-of-home-sharing>
- 140 <http://www.theguardian.com/australia-news/2014/oct/29/airbnb-agrees-to-help-find-shelter-for-displaced-disaster-victims-in-victoria>
- 141 <http://blogs.wsj.com/developments/2015/03/30/airbnb-pushes-up-apartment-rents-slightly-study-says?mod=WJBlog>
- 142 This has been done in Austin Texas. See <http://www.statesman.com/news/news/local-govt-politics/austin-broadens-short-term-rental-rules/nWdHG/>
- 143 Again, this resembles the way access to other precious resources is allocated in a way that recognizes that over-use puts them at risk, like fishing, hunting, or backcountry recreation permits in protected areas.
- 144 This is required in Portland.
- 145 Sustainable Economies Law Center: [http://www.theselc.org/draft\\_short\\_term\\_rental\\_recommendations](http://www.theselc.org/draft_short_term_rental_recommendations)
- 146 Ibid.
- 147 See VacationRentalCompliance.com and coverage of this here: <http://www.techpresident.com/news/24059/how-cities-adapt-age-airbnb>
- 148 Charles Gottlieb: *Residential Short-Term Rentals: Should Local Governments Regulate the 'Industry'?* in Planning & Environmental Law Vol. 65, Iss. 2, 2013 DOI: 10.1080/15480755.2013.766496
- 149 Experiences of New York and Portland show that complaint systems do little to stem growth of unpermitted STRs.
- 150 This is suggested by the Sustainable Economies Law Center (SELC) in a draft paper on policy recommendations for short-term rentals. SELC draws a parallel to the Alaska Permanent Fund, which pays all eligible Alaska residents annual dividends from mineral, gas, and oil revenues. More at [http://www.theselc.org/draft\\_short\\_term\\_rental\\_recommendations](http://www.theselc.org/draft_short_term_rental_recommendations)
- 151 See: [http://www.theselc.org/rethinking\\_home\\_policy\\_advocacy](http://www.theselc.org/rethinking_home_policy_advocacy) and the legislation itself: <https://www.d3n8a8pro7vhmx.cloudfront.net/theselc/pages/108/attachments/original/1412098276/20130AB56993CHP.pdf?1412098276>
- 152 <http://www.daybreakcohousing.org/>
- 153 <http://www.milagrocohousing.org/>
- 154 This and other ideas available at: <http://communityenterpriselaw.org/zoning-and-housing/>
- 155 Detailed report at: <http://www.mayorofvancouver.ca/cohousing>
- 156 <http://communityenterpriselaw.org/zoning-and-housing/#fnref-8666-5>
- 157 Read more at: <http://www.affordablecohousing.org/existing-communities> and <http://www.jstor.org/stable/41429168>
- 158 <https://www.vancity.com/Mortgages/TypesOfMortgages/MixerMortgage/>
- 159 San Francisco's Inclusionary Housing Program explained here: <http://www.sf-moh.org/index.aspx?page=295>
- 160 Article in *San Francisco Business Times* on coliving development and inclusionary zoning: <http://www.bizjournals.com/sanfrancisco/blog/real-estate/2015/04/affordable-housing-sf-bay-area-communal-living.html?page=all>
- 161 According to this 2010 survey of European cowork spaces (may not be representative as sample is self-selected), 25% of cowork spaces benefitted from some public funding, 13% are nonprofit, and 2% are operated by public agencies. None counted subsidies among their revenue streams: <http://www.entrepriseglobale.biz/wp-content/uploads/2010/11/CoworkingEUropeSurveyFinal.pdf> See also <http://www.deskmag.com/en/public-sector-fund-coworking>
- 162 <http://www.ilgiorno.it/milano/cronaca/2013/08/18/936026-coworking-lavoro-condivisione-voucher-rete-progettazione.shtml>
- 163 <http://www.startups.be/content/3-month-coworking-scholarship-startup-teams>
- 164 <http://www.deskmag.com/en/public-support-of-coworking-spaces-the-example-of-france-la-cantine-mutinerie-676>
- 165 Ibid.
- 166 <http://njslom.org/grants/article/2015/coworking.html>
- 167 <https://prezi.com/8uepdp7bstfo/the-preliminary-results-of-the-4th-global-coworking-survey/>
- 168 Ibid.
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- 169 According to the 4th Global Coworking Survey of 2706 people Nov 6 and Dec 31, 2013 (<http://www.deskmag.com/en/the-coworking-market-report-forecast-2014>), "Nine out of ten coworking spaces are expected to increase their number of memberships this year, with one quarter forecasting a significant increase. The same applies to revenue – by comparison to last year, strong profit outlooks showed minimal fluctuation." This survey does not appear to be based on a representative sample of cowork space users.
- 170 See Deskmag's 2014 4th annual global survey results presentation, 1:47, at <https://www.youtube.com/watch?v=hutCeXQ9Z6Y>
- 171 <http://www.deskmag.com/en/the-future-of-coworking-882/2>
- 172 See <http://librarylinknj.org/content/coworking-and-libraries-support-and-services-self-employed-and-new-entrepreneurs>. Learnings from an experiment in combining coworking with an academic library here: <http://www.tandfonline.com/doi/abs/10.1080/13614533.2013.850101>
- 173 For example, see <http://aztechbeat.com/2015/04/gangplank-coworking-expands-queen-creek/>
- 174 [http://www.eastvalleytribune.com/local/chandler/article\\_58f911d8-54d8-11e0-ac94-001cc4c002e0.html](http://www.eastvalleytribune.com/local/chandler/article_58f911d8-54d8-11e0-ac94-001cc4c002e0.html)
- 175 Ibid.
- 176 Ibid.
- 177 <http://www.azcentral.com/story/news/local/chandler/2014/11/19/gangplank-chandler-collaborative-working-space/19280949/>
- 178 Ibid.
- 179 [http://www.eastvalleytribune.com/mobile/article\\_651ade90-a1a2-11df-b7a2-001cc4c002e0.html](http://www.eastvalleytribune.com/mobile/article_651ade90-a1a2-11df-b7a2-001cc4c002e0.html)
- 180 See <http://gangplankhq.com/values/money/> and <http://gangplankhq.com/vision/manifesto/>
- 181 See note 179
- 182 <http://cronkitenewsonline.com/2012/09/cities-align-with-gangplank-to-spur-small-business-growth/>
- 183 [http://www.tucsonsentinel.com/local/report/012114\\_co\\_lab/colab-relaunches-workspace-walks-from-gangplank/](http://www.tucsonsentinel.com/local/report/012114_co_lab/colab-relaunches-workspace-walks-from-gangplank/)
- 184 "About the Centre for Social Innovation." <http://socialinnovation.ca/about>.
- 185 "TechSoup Canada – Technology for Nonprofits and Charities." <http://techsoupcanada.ca/>.
- 186 "Agents of Change: City Builders." <http://socialinnovation.ca/agents-of-change>.
- 187 "CSI's Desk Exchange Community Animator Program." <http://socialinnovation.ca/timeforspace>.
- 188 A study billed as the "first global coworking survey, which involved 661 participants from 24 countries" (<http://www.deskmag.com/en/the-coworkers-global-coworking-survey-168>) from 2010 suggests coworkers are mostly in their mid-twenties to late thirties; two-thirds are men; 54% are freelancers; almost 20% are entrepreneurs who employ others; one in five works as a permanent employee; most are in very small companies with less than five workers; and 80% are university-educated. The "overwhelming majority" work in the field of creative industries and new media; most are web developers or programmers (one in nine is a graphic designer or web designer; a similar proportion are consultants to the creative industries; PR, journalism, architects, and writers are also well represented). Many specialize in more than one field. The study also reports (here: <http://www.deskmag.com/en/the-strength-of-small-and-big-coworking-spaces-205>) that different sizes of cowork spaces are correlated with different qualities of social contact. However, this (somewhat dated) evidence is hard to evaluate because sampling methodology has not been published. It appears to be based on a self-selected sample of respondents who read an online publication about coworking rather than a representative sample of people with experience of coworking.